

Primer Independence Regression

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June 22, 2016

Summary of Dataset and Purpose

We have approximately 170 samples per sequencing batch, and for each sample we have 260 counts, one for each of the unique combinations of V and J primers. The primers have different amplification rates, which we need to characterize. In order to do this most accurately, we need to determine if the forward (V) primer and the reverse (J) primer act independently to influence spike amplification, or if their interaction is important as well.

For this analysis, we are using 20 samples that contain only spike-ins and no DNA. They are samples 1-20 from the batch DNA160609LC, found at `/home/exacloud/lustre1/CompBio/data/tcrseq/dhaarini/DNA160609LC/spike_counts/25b`

Variables

1. Independent variables
 - Forward (V) primer identity - 20 total (categorical)
 - Reverse (J) primer identity - 13 total (categorical)
 - Primer combination - 260 (categorical)
2. Dependent variable
 - Spike Count

Each sample has an individual file containing the 260 counts. These need to be combined into a single data frame prior to the analysis. In addition, we need to create dummy variables for each VJ combination to use as identifiers during our step functions.

```
# List spike count files, and sort by sample number  
# Combine files into a data frame with 260 rows and 1 column per sample  
# Melt data frame to get 1 row for each VJ + sample combination  
# Take the log2 of spike counts.  
DNA160609 <- read.data("/Volumes/DNA160609LC/spike_counts/25bp/spike_only_counts/")
```

Linear Regression Model

Our question is whether or not forward and reverse primers amplify independently of one another, or dependently. We can create two linear models, one for each scenario, and compare the results.

```
# Make models for with and without primer interaction  
DNA160609.models <- make.models(DNA160609)
```

```
## [1] "Log2 Without Interaction R^2: 0.3753"  
## [1] "Log2 With Interaction R^2: 0.8584"
```

```
DNA160609.models$log2.wo.int$call
```

```
## lm(formula = value ~ V + J, data = batch$log2)
```

```
DNA160609.models$log2.with.int$call
```

```
## lm(formula = value ~ V * J, data = batch$log2)
```

Preliminary Results

A quick comparison of R^2 values suggests that the model which includes interaction between primers is a better fit. That model has an R^2 value of 0.8584 vs. the non-interaction model's R^2 of 0.3753. Although this suggests that it is important to include interaction effects in our model, not all of them may be giving us useful information. We can iteratively add and remove different interactions and see the effect of individual combinations of primers on our model's fit.

All 260 primer combinations

```
vj.combos <- colnames(DNA160609$log2)[6:265]
DNA160609.steps <- steps(DNA160609, vj.combos)
```

```
## [1] "Both: "
## Start: AIC=3574.45
## value ~ 1
##
##           Df Sum of Sq    RSS    AIC
## + V       19  2311.95  8015.2 2382.6
## + J       12  1601.80  8725.4 2777.6
## + V26_J2_3    1    373.19  9954.0 3389.7
## + V16_J2_2    1    336.87  9990.3 3408.6
## + V20_J2_2    1    327.17 10000.0 3413.7
## + V5_J2_4     1    315.89 10011.3 3419.5
## + V5_J2_5     1    283.05 10044.1 3436.6
## + V26_J2_5    1    225.45 10101.7 3466.3
## + V26_J2_4    1    221.98 10105.2 3468.1
## + V30_J1_3    1    166.81 10160.3 3496.4
## + V17_J1_3    1    153.80 10173.3 3503.1
## + V2_J1_3     1    152.65 10174.5 3503.6
## + V5_J1_5     1    151.10 10176.0 3504.4
## + V26_J2_1    1    147.97 10179.2 3506.0
## + V19_J1_4    1    145.80 10181.4 3507.1
## + V4_J2_4     1    142.35 10184.8 3508.9
## + V3_J2_4     1    135.01 10192.1 3512.7
## + V30_J2_2    1    119.24 10207.9 3520.7
## + V19_J1_5    1    114.24 10212.9 3523.2
## + V23_J1_3    1    104.15 10223.0 3528.4
## + V3_J2_3     1    103.32 10223.8 3528.8
## + V12_1_2_J1_2 1    102.18 10225.0 3529.4
## + V12_1_2_J2_2 1    100.62 10226.5 3530.2
## + V15_J1_5    1    100.50 10226.7 3530.2
## + V4_J2_5     1     96.79 10230.4 3532.1
## + V14_J1_2    1     94.08 10233.1 3533.5
```

## + V1_J1_2	1	91.95	10235.2	3534.6
## + V4_J2_1	1	91.16	10236.0	3535.0
## + V15_J1_4	1	84.31	10242.8	3538.5
## + V3_J2_5	1	83.17	10244.0	3539.0
## + V26_J1_4	1	82.68	10244.5	3539.3
## + V16_J1_3	1	78.82	10248.3	3541.2
## + V4_J2_3	1	77.04	10250.1	3542.1
## + V17_J2_7	1	74.08	10253.1	3543.6
## + V12_1_2_J1_4	1	73.68	10253.5	3543.8
## + V30_J1_2	1	73.66	10253.5	3543.9
## + V1_J1_7	1	70.23	10256.9	3545.6
## + V24_J2_3	1	65.98	10261.2	3547.8
## + V29_J2_3	1	65.64	10261.5	3547.9
## + V3_J1_4	1	63.93	10263.2	3548.8
## + V19_J1_2	1	62.26	10264.9	3549.6
## + V3_J1_2	1	62.08	10265.1	3549.7
## + V13_1_J2_3	1	60.07	10267.1	3550.7
## + V23_J2_1	1	58.61	10268.5	3551.5
## + V26_J1_5	1	57.51	10269.6	3552.0
## + V13_1_J2_4	1	55.23	10271.9	3553.2
## + V13_1_J2_1	1	54.69	10272.5	3553.5
## + V24_J1_7	1	54.61	10272.5	3553.5
## + V15_J2_5	1	53.45	10273.7	3554.1
## + V1_J2_3	1	53.20	10274.0	3554.2
## + V1_J1_5	1	51.70	10275.5	3555.0
## + V3_J2_1	1	51.38	10275.8	3555.1
## + V15_J2_2	1	51.11	10276.0	3555.3
## + V1_J2_1	1	50.46	10276.7	3555.6
## + V23_J2_3	1	50.22	10276.9	3555.7
## + V29_J2_1	1	48.88	10278.3	3556.4
## + V14_J2_2	1	47.78	10279.4	3557.0
## + V4_J1_4	1	47.70	10279.5	3557.0
## + V23_J1_2	1	47.34	10279.8	3557.2
## + V1_J2_4	1	46.80	10280.4	3557.5
## + V5_J1_4	1	45.94	10281.2	3557.9
## + V12_1_2_J1_3	1	45.86	10281.3	3557.9
## + V14_J1_5	1	45.16	10282.0	3558.3
## + V29_J2_2	1	44.87	10282.3	3558.4
## + V30_J1_1	1	44.62	10282.5	3558.6
## + V14_J1_4	1	44.31	10282.8	3558.7
## + V13_1_J2_5	1	43.32	10283.8	3559.2
## + V1_J1_3	1	43.32	10283.8	3559.2
## + V17_J2_2	1	41.88	10285.3	3560.0
## + V26_J1_3	1	41.84	10285.3	3560.0
## + V12_1_2_J2_3	1	40.07	10287.1	3560.9
## + V4_J2_7	1	39.35	10287.8	3561.2
## + V15_J2_4	1	38.61	10288.5	3561.6
## + V24_J1_2	1	38.46	10288.7	3561.7
## + V4_J1_3	1	38.43	10288.7	3561.7
## + V5_J2_3	1	37.04	10290.1	3562.4
## + V4_J1_5	1	36.54	10290.6	3562.7
## + V24_J1_6	1	33.47	10293.7	3564.2
## + V29_J1_2	1	33.14	10294.0	3564.4
## + V19_J2_2	1	33.12	10294.0	3564.4

## + V29_J1_5	1	32.66	10294.5	3564.6
## + V14_J1_7	1	31.99	10295.2	3564.9
## + V1_J2_7	1	31.47	10295.7	3565.2
## + V13_2_J2_2	1	31.37	10295.8	3565.3
## + V2_J2_7	1	30.28	10296.9	3565.8
## + V1_J1_4	1	29.54	10297.6	3566.2
## + V5_J2_1	1	29.39	10297.8	3566.3
## + V19_J1_7	1	28.30	10298.9	3566.8
## + V16_J2_4	1	28.21	10298.9	3566.9
## + V16_J1_2	1	27.85	10299.3	3567.0
## + V4_J1_2	1	26.87	10300.3	3567.5
## + V16_J1_7	1	25.77	10301.4	3568.1
## + V1_J1_6	1	24.66	10302.5	3568.7
## + V29_J1_3	1	24.51	10302.6	3568.7
## + V2_J1_2	1	24.27	10302.9	3568.8
## + V12_1_2_J2_5	1	24.27	10302.9	3568.8
## + V13_1_J1_1	1	24.12	10303.0	3568.9
## + V17_J1_2	1	24.01	10303.1	3569.0
## + V24_J2_2	1	23.76	10303.4	3569.1
## + V30_J1_6	1	23.40	10303.8	3569.3
## + V13_1_J2_2	1	23.13	10304.0	3569.4
## + V12_1_2_J2_1	1	22.94	10304.2	3569.5
## + V14_J1_1	1	22.83	10304.3	3569.6
## + V24_J2_1	1	22.47	10304.7	3569.8
## + V13_2_J2_3	1	20.64	10306.5	3570.7
## + V13_1_J1_3	1	20.39	10306.8	3570.8
## + V13_2_J1_4	1	20.29	10306.9	3570.9
## + V23_J2_4	1	20.25	10306.9	3570.9
## + V13_1_J1_2	1	20.18	10307.0	3570.9
## + V23_J2_5	1	20.16	10307.0	3570.9
## + V3_J2_2	1	20.13	10307.0	3570.9
## + V13_2_J1_6	1	19.97	10307.2	3571.0
## + V13_3_J2_5	1	19.84	10307.3	3571.1
## + V13_1_J1_6	1	19.83	10307.3	3571.1
## + V19_J2_3	1	19.71	10307.4	3571.2
## + V3_J1_5	1	19.71	10307.4	3571.2
## + V24_J2_4	1	19.55	10307.6	3571.2
## + V13_2_J2_1	1	19.47	10307.7	3571.3
## + V16_J2_7	1	19.38	10307.8	3571.3
## + V13_2_J1_2	1	19.29	10307.9	3571.4
## + V13_1_J1_4	1	19.13	10308.0	3571.4
## + V20_J1_6	1	18.82	10308.3	3571.6
## + V12_1_2_J2_4	1	18.16	10309.0	3571.9
## + V30_J2_7	1	18.04	10309.1	3572.0
## + V29_J1_4	1	17.65	10309.5	3572.2
## + V20_J2_1	1	17.62	10309.5	3572.2
## + V1_J1_1	1	17.52	10309.6	3572.3
## + V15_J2_7	1	17.22	10309.9	3572.4
## + V29_J2_5	1	16.88	10310.3	3572.6
## + V16_J1_1	1	16.72	10310.4	3572.7
## + V30_J2_5	1	15.78	10311.4	3573.1
## + V16_J2_5	1	15.60	10311.6	3573.2
## + V13_3_J2_3	1	15.50	10311.6	3573.3
## + V17_J2_3	1	14.93	10312.2	3573.6

## + V20_J2_3	1	14.91	10312.2	3573.6
## + V30_J1_4	1	14.40	10312.7	3573.8
## + V19_J1_6	1	14.04	10313.1	3574.0
## + V3_J1_7	1	13.54	10313.6	3574.3
## + V20_J1_3	1	13.50	10313.7	3574.3
## <none>			10327.2	3574.4
## + V2_J2_1	1	12.55	10314.6	3574.8
## + V12_1_2_J2_7	1	12.31	10314.8	3574.9
## + V3_J1_1	1	11.98	10315.2	3575.0
## + V16_J2_1	1	11.83	10315.3	3575.1
## + V23_J2_7	1	11.72	10315.4	3575.2
## + V2_J2_2	1	11.58	10315.6	3575.2
## + V29_J2_4	1	11.51	10315.6	3575.3
## + V13_2_J2_4	1	11.21	10315.9	3575.4
## + V17_J1_7	1	11.09	10316.1	3575.5
## + V1_J2_5	1	10.94	10316.2	3575.6
## + V16_J1_6	1	10.47	10316.7	3575.8
## + V23_J2_2	1	10.37	10316.8	3575.9
## + V13_2_J2_7	1	10.33	10316.8	3575.9
## + V17_J1_5	1	10.17	10317.0	3576.0
## + V13_2_J1_7	1	10.15	10317.0	3576.0
## + V12_1_2_J1_5	1	10.13	10317.0	3576.0
## + V5_J1_7	1	9.59	10317.6	3576.3
## + V13_3_J2_1	1	9.47	10317.7	3576.3
## + V2_J2_3	1	9.27	10317.9	3576.4
## + V5_J1_2	1	9.22	10317.9	3576.4
## + V14_J1_6	1	9.18	10318.0	3576.5
## + V23_J1_7	1	8.84	10318.3	3576.6
## + V13_1_J2_7	1	8.80	10318.4	3576.7
## + V19_J2_7	1	8.61	10318.5	3576.7
## + V4_J2_2	1	8.38	10318.8	3576.9
## + V23_J1_1	1	8.19	10319.0	3577.0
## + V24_J2_7	1	7.68	10319.5	3577.2
## + V13_2_J1_1	1	7.54	10319.6	3577.3
## + V4_J1_7	1	7.42	10319.7	3577.3
## + V15_J1_7	1	7.08	10320.1	3577.5
## + V30_J2_3	1	6.92	10320.2	3577.6
## + V13_3_J1_2	1	6.39	10320.8	3577.9
## + V13_3_J1_7	1	6.32	10320.8	3577.9
## + V2_J2_5	1	6.14	10321.0	3578.0
## + V12_1_2_J1_1	1	6.11	10321.0	3578.0
## + V29_J2_7	1	5.91	10321.2	3578.1
## + V2_J1_5	1	5.83	10321.3	3578.1
## + V15_J2_3	1	5.81	10321.3	3578.2
## + V13_3_J1_1	1	5.74	10321.4	3578.2
## + V19_J2_1	1	5.34	10321.8	3578.4
## + V24_J1_4	1	5.30	10321.9	3578.4
## + V3_J1_6	1	5.29	10321.9	3578.4
## + V19_J1_1	1	5.25	10321.9	3578.4
## + V13_1_J1_7	1	5.17	10322.0	3578.5
## + V20_J1_5	1	5.11	10322.0	3578.5
## + V15_J2_1	1	5.10	10322.1	3578.5
## + V26_J1_2	1	5.01	10322.1	3578.6
## + V30_J2_4	1	4.91	10322.2	3578.6

## + V19_J2_5	1	4.84	10322.3	3578.6
## + V3_J2_7	1	4.53	10322.6	3578.8
## + V13_3_J2_2	1	4.46	10322.7	3578.8
## + V14_J2_7	1	4.43	10322.7	3578.8
## + V19_J2_4	1	4.43	10322.7	3578.9
## + V5_J2_2	1	4.31	10322.8	3578.9
## + V12_1_2_J1_6	1	4.24	10322.9	3578.9
## + V20_J2_4	1	4.00	10323.1	3579.1
## + V14_J2_3	1	3.91	10323.2	3579.1
## + V15_J1_2	1	3.73	10323.4	3579.2
## + V2_J1_6	1	3.68	10323.5	3579.2
## + V20_J2_7	1	3.60	10323.6	3579.3
## + V23_J1_6	1	3.54	10323.6	3579.3
## + V16_J1_5	1	3.49	10323.7	3579.3
## + V26_J2_7	1	3.46	10323.7	3579.3
## + V14_J2_4	1	3.30	10323.9	3579.4
## + V13_2_J2_5	1	3.22	10323.9	3579.5
## + V16_J2_3	1	3.10	10324.1	3579.5
## + V1_J2_2	1	3.09	10324.1	3579.5
## + V16_J1_4	1	2.98	10324.2	3579.6
## + V24_J1_1	1	2.90	10324.3	3579.6
## + V29_J1_7	1	2.86	10324.3	3579.6
## + V2_J2_4	1	2.71	10324.4	3579.7
## + V5_J1_3	1	2.58	10324.6	3579.8
## + V13_3_J1_3	1	2.54	10324.6	3579.8
## + V15_J1_1	1	2.49	10324.7	3579.8
## + V5_J1_6	1	2.47	10324.7	3579.8
## + V20_J1_7	1	2.45	10324.7	3579.8
## + V30_J1_5	1	2.39	10324.8	3579.9
## + V17_J2_1	1	2.26	10324.9	3579.9
## + V29_J1_1	1	2.19	10325.0	3580.0
## + V5_J1_1	1	2.14	10325.0	3580.0
## + V24_J1_3	1	2.10	10325.1	3580.0
## + V2_J1_7	1	1.89	10325.3	3580.1
## + V23_J1_5	1	1.82	10325.3	3580.2
## + V4_J1_6	1	1.72	10325.4	3580.2
## + V20_J1_4	1	1.67	10325.5	3580.2
## + V17_J2_5	1	1.64	10325.5	3580.3
## + V17_J1_1	1	1.58	10325.6	3580.3
## + V26_J1_1	1	1.56	10325.6	3580.3
## + V4_J1_1	1	1.52	10325.6	3580.3
## + V26_J1_7	1	1.40	10325.8	3580.4
## + V15_J1_3	1	1.39	10325.8	3580.4
## + V19_J1_3	1	1.33	10325.8	3580.4
## + V20_J2_5	1	1.33	10325.8	3580.4
## + V29_J1_6	1	1.20	10326.0	3580.5
## + V17_J2_4	1	1.12	10326.0	3580.5
## + V20_J1_2	1	1.12	10326.0	3580.5
## + V5_J2_7	1	1.05	10326.1	3580.6
## + V13_3_J2_7	1	0.89	10326.3	3580.6
## + V13_2_J1_5	1	0.83	10326.3	3580.7
## + V26_J1_6	1	0.73	10326.4	3580.7
## + V13_3_J1_4	1	0.72	10326.4	3580.7
## + V13_3_J2_4	1	0.68	10326.5	3580.7

```

## + V13_1_J1_5      1      0.67 10326.5 3580.7
## + V13_3_J1_6      1      0.63 10326.5 3580.8
## + V13_2_J1_3      1      0.58 10326.6 3580.8
## + V2_J1_1         1      0.46 10326.7 3580.9
## + V20_J1_1        1      0.44 10326.7 3580.9
## + V17_J1_4        1      0.42 10326.7 3580.9
## + V14_J2_1        1      0.40 10326.8 3580.9
## + V14_J1_3        1      0.35 10326.8 3580.9
## + V12_1_2_J1_7    1      0.34 10326.8 3580.9
## + V26_J2_2        1      0.30 10326.9 3580.9
## + V2_J1_4         1      0.29 10326.9 3580.9
## + V23_J1_4        1      0.16 10327.0 3581.0
## + V15_J1_6        1      0.13 10327.0 3581.0
## + V24_J2_5        1      0.07 10327.1 3581.0
## + V30_J2_1        1      0.05 10327.1 3581.1
## + V30_J1_7        1      0.04 10327.1 3581.1
## + V24_J1_5        1      0.03 10327.1 3581.1
## + V14_J2_5        1      0.02 10327.1 3581.1
## + V13_3_J1_5      1      0.01 10327.1 3581.1
## + V17_J1_6        1      0.00 10327.2 3581.1
## + V3_J1_3         1      0.00 10327.2 3581.1
##
## Step:  AIC=2382.64
## value ~ V
##
##           Df Sum of Sq    RSS    AIC
## + J       12  1601.80  6413.4 1302.9
## + V16_J2_2    1   376.14  7639.1 2139.3
## + V20_J2_2    1   228.33  7786.9 2239.0
## + V5_J2_4     1   191.99  7823.2 2263.2
## + V26_J2_3    1   183.92  7831.3 2268.6
## + V2_J1_3     1   167.41  7847.8 2279.5
## + V23_J1_3    1   166.63  7848.6 2280.0
## + V5_J2_5     1   165.64  7849.6 2280.7
## + V17_J1_3    1   152.90  7862.3 2289.1
## + V30_J1_3    1   147.45  7867.8 2292.7
## + V19_J1_4    1   143.55  7871.7 2295.3
## + V1_J1_3     1   117.94  7897.3 2312.2
## + V12_1_2_J2_2 1   116.26  7898.9 2313.3
## + V19_J1_5    1   111.12  7904.1 2316.7
## + V3_J1_2     1   106.25  7909.0 2319.9
## + V30_J1_2    1   103.83  7911.4 2321.5
## + V12_1_2_J1_2 1   102.79  7912.4 2322.2
## + V30_J2_2    1   101.39  7913.8 2323.1
## + V3_J2_4     1    98.96  7916.2 2324.7
## + V1_J2_7     1    97.02  7918.2 2325.9
## + V4_J1_2     1    91.28  7923.9 2329.7
## + V16_J1_3    1    91.20  7924.0 2329.8
## + V15_J2_2    1    88.26  7926.9 2331.7
## + V12_1_2_J1_4 1    86.11  7929.1 2333.1
## + V26_J2_5    1    82.66  7932.5 2335.4
## + V26_J2_4    1    80.48  7934.7 2336.8
## + V29_J1_3    1    78.77  7936.4 2337.9
## + V14_J1_2    1    78.54  7936.7 2338.1

```

## + V26_J1_2	1	77.99	7937.2	2338.4
## + V19_J1_2	1	76.72	7938.5	2339.3
## + V15_J1_5	1	71.33	7943.9	2342.8
## + V3_J2_3	1	71.18	7944.0	2342.9
## + V17_J2_7	1	70.95	7944.3	2343.0
## + V4_J2_4	1	67.66	7947.5	2345.2
## + V30_J1_1	1	67.46	7947.7	2345.3
## + V14_J1_5	1	67.16	7948.0	2345.5
## + V5_J1_5	1	66.63	7948.6	2345.9
## + V14_J1_4	1	66.08	7949.1	2346.2
## + V5_J1_7	1	61.22	7954.0	2349.4
## + V26_J1_1	1	60.93	7954.3	2349.6
## + V5_J1_2	1	60.24	7955.0	2350.0
## + V26_J1_7	1	59.84	7955.4	2350.3
## + V15_J1_4	1	57.31	7957.9	2352.0
## + V12_1_2_J1_3	1	54.72	7960.5	2353.7
## + V26_J1_6	1	54.69	7960.5	2353.7
## + V3_J2_5	1	54.04	7961.2	2354.1
## + V4_J2_2	1	51.50	7963.7	2355.8
## + V4_J1_7	1	48.98	7966.2	2357.4
## + V3_J2_2	1	46.02	7969.2	2359.3
## + V5_J2_2	1	45.75	7969.5	2359.5
## + V19_J2_2	1	42.78	7972.4	2361.4
## + V15_J2_7	1	39.43	7975.8	2363.6
## + V12_1_2_J2_3	1	38.61	7976.6	2364.2
## + V17_J2_2	1	38.50	7976.7	2364.2
## + V3_J1_4	1	38.24	7977.0	2364.4
## + V13_2_J1_7	1	37.97	7977.2	2364.6
## + V26_J2_1	1	37.58	7977.6	2364.8
## + V5_J1_1	1	37.54	7977.7	2364.9
## + V19_J1_7	1	37.07	7978.1	2365.2
## + V4_J2_5	1	36.61	7978.6	2365.5
## + V14_J2_2	1	35.61	7979.6	2366.1
## + V3_J1_7	1	35.35	7979.9	2366.3
## + V1_J1_2	1	35.26	7979.9	2366.3
## + V26_J2_2	1	35.25	7979.9	2366.4
## + V23_J2_7	1	34.38	7980.8	2366.9
## + V1_J2_2	1	34.21	7981.0	2367.0
## + V2_J2_7	1	33.87	7981.3	2367.3
## + V4_J2_1	1	33.06	7982.1	2367.8
## + V3_J1_1	1	32.70	7982.5	2368.0
## + V5_J2_7	1	32.19	7983.0	2368.4
## + V23_J2_1	1	31.88	7983.3	2368.6
## + V15_J2_5	1	31.66	7983.5	2368.7
## + V17_J1_2	1	31.46	7983.7	2368.8
## + V4_J1_6	1	30.60	7984.6	2369.4
## + V4_J1_1	1	29.69	7985.5	2370.0
## + V30_J2_5	1	29.17	7986.0	2370.3
## + V3_J2_1	1	28.34	7986.9	2370.9
## + V24_J1_3	1	27.91	7987.3	2371.1
## + V16_J2_4	1	26.94	7988.3	2371.8
## + V16_J1_2	1	26.57	7988.6	2372.0
## + V23_J2_3	1	25.56	7989.6	2372.7
## + V2_J1_2	1	25.14	7990.1	2372.9

## + V4_J2_3	1	24.49	7990.7	2373.4
## + V16_J1_7	1	24.46	7990.7	2373.4
## + V16_J2_7	1	24.02	7991.2	2373.7
## + V23_J1_2	1	23.44	7991.8	2374.1
## + V12_1_2_J2_5	1	22.62	7992.6	2374.6
## + V15_J1_7	1	22.40	7992.8	2374.7
## + V29_J2_3	1	21.94	7993.3	2375.0
## + V1_J1_7	1	21.93	7993.3	2375.0
## + V14_J1_7	1	21.73	7993.5	2375.2
## + V24_J2_3	1	21.70	7993.5	2375.2
## + V12_1_2_J2_1	1	21.28	7993.9	2375.5
## + V26_J2_7	1	20.93	7994.3	2375.7
## + V17_J2_3	1	20.55	7994.7	2375.9
## + V3_J1_6	1	20.36	7994.8	2376.1
## + V15_J2_4	1	20.13	7995.1	2376.2
## + V19_J1_6	1	19.85	7995.4	2376.4
## + V3_J2_7	1	18.79	7996.4	2377.1
## + V13_1_J1_5	1	17.34	7997.9	2378.0
## + V12_1_2_J2_4	1	16.52	7998.7	2378.5
## + V19_J2_3	1	16.40	7998.8	2378.6
## + V12_1_2_J2_7	1	16.05	7999.2	2378.9
## + V30_J2_3	1	16.05	7999.2	2378.9
## + V17_J1_7	1	15.82	7999.4	2379.0
## + V15_J1_2	1	15.79	7999.4	2379.0
## + V16_J1_1	1	15.37	7999.8	2379.3
## + V24_J1_7	1	15.19	8000.0	2379.4
## + V17_J1_5	1	14.67	8000.5	2379.7
## + V13_2_J1_5	1	14.44	8000.8	2379.9
## + V16_J2_5	1	14.26	8000.9	2380.0
## + V30_J1_6	1	14.07	8001.1	2380.1
## + V14_J1_1	1	14.06	8001.1	2380.1
## + V2_J2_2	1	13.24	8002.0	2380.7
## + V19_J2_7	1	13.03	8002.2	2380.8
## + V24_J1_5	1	12.97	8002.2	2380.9
## + V2_J2_1	1	12.79	8002.4	2381.0
## + V1_J2_3	1	12.63	8002.6	2381.1
## + V29_J2_1	1	12.46	8002.7	2381.2
## + V24_J2_5	1	12.32	8002.9	2381.3
## + V1_J1_5	1	11.88	8003.3	2381.6
## + V1_J2_1	1	11.27	8003.9	2382.0
## + V13_3_J1_3	1	11.20	8004.0	2382.0
## + V14_J2_3	1	10.68	8004.5	2382.3
## + V16_J2_1	1	10.53	8004.7	2382.4
## + V29_J2_2	1	10.41	8004.8	2382.5
## <none>			8015.2	2382.6
## + V30_J2_7	1	9.84	8005.4	2382.9
## + V14_J2_4	1	9.61	8005.6	2383.0
## + V1_J2_4	1	9.51	8005.7	2383.1
## + V2_J2_3	1	9.35	8005.9	2383.2
## + V13_1_J2_3	1	9.22	8006.0	2383.3
## + V16_J1_6	1	9.20	8006.0	2383.3
## + V4_J1_4	1	9.03	8006.2	2383.4
## + V20_J1_1	1	8.96	8006.2	2383.5
## + V5_J1_6	1	8.85	8006.4	2383.5

## + V13_2_J2_2	1	8.80	8006.4	2383.6
## + V12_1_2_J1_5	1	8.66	8006.5	2383.7
## + V19_J1_1	1	8.66	8006.5	2383.7
## + V26_J1_4	1	8.64	8006.6	2383.7
## + V5_J1_3	1	8.64	8006.6	2383.7
## + V13_3_J2_5	1	8.62	8006.6	2383.7
## + V30_J1_5	1	8.29	8006.9	2383.9
## + V23_J1_4	1	7.44	8007.8	2384.4
## + V13_1_J2_4	1	7.31	8007.9	2384.5
## + V30_J1_4	1	7.12	8008.1	2384.7
## + V13_1_J2_1	1	7.11	8008.1	2384.7
## + V24_J1_2	1	7.09	8008.1	2384.7
## + V13_1_J1_7	1	7.05	8008.2	2384.7
## + V29_J1_6	1	6.74	8008.5	2384.9
## + V20_J1_2	1	6.65	8008.6	2385.0
## + V13_3_J1_6	1	6.34	8008.9	2385.2
## + V12_1_2_J1_6	1	6.25	8009.0	2385.2
## + V3_J1_5	1	6.19	8009.0	2385.3
## + V20_J2_5	1	6.17	8009.0	2385.3
## + V2_J2_5	1	6.10	8009.1	2385.3
## + V5_J1_4	1	5.93	8009.3	2385.4
## + V2_J1_5	1	5.78	8009.4	2385.5
## + V13_3_J2_3	1	5.76	8009.4	2385.5
## + V23_J2_4	1	5.61	8009.6	2385.6
## + V23_J2_5	1	5.56	8009.6	2385.7
## + V4_J2_7	1	5.51	8009.7	2385.7
## + V20_J1_4	1	5.46	8009.7	2385.7
## + V4_J1_3	1	5.16	8010.0	2385.9
## + V29_J1_2	1	5.05	8010.2	2386.0
## + V24_J1_6	1	4.97	8010.2	2386.0
## + V12_1_2_J1_1	1	4.87	8010.3	2386.1
## + V29_J1_5	1	4.86	8010.3	2386.1
## + V29_J1_1	1	4.81	8010.4	2386.2
## + V3_J1_3	1	4.53	8010.7	2386.3
## + V4_J1_5	1	4.45	8010.8	2386.4
## + V17_J2_1	1	4.33	8010.9	2386.5
## + V13_2_J1_3	1	4.24	8011.0	2386.5
## + V20_J1_7	1	4.21	8011.0	2386.5
## + V24_J1_1	1	4.04	8011.2	2386.7
## + V29_J1_7	1	3.91	8011.3	2386.7
## + V13_1_J2_7	1	3.74	8011.5	2386.8
## + V14_J1_6	1	3.74	8011.5	2386.9
## + V2_J1_6	1	3.57	8011.6	2387.0
## + V13_2_J2_3	1	3.49	8011.7	2387.0
## + V17_J2_5	1	3.41	8011.8	2387.1
## + V19_J2_1	1	3.38	8011.8	2387.1
## + V14_J1_3	1	3.34	8011.9	2387.1
## + V13_2_J1_4	1	3.34	8011.9	2387.1
## + V17_J1_1	1	3.33	8011.9	2387.1
## + V13_1_J2_5	1	3.32	8011.9	2387.1
## + V13_2_J1_6	1	3.21	8012.0	2387.2
## + V13_3_J1_5	1	3.18	8012.0	2387.2
## + V13_2_J2_1	1	3.00	8012.2	2387.3
## + V19_J2_5	1	2.97	8012.2	2387.4

## + V5_J2_3	1	2.94	8012.3	2387.4
## + V13_2_J1_2	1	2.93	8012.3	2387.4
## + V20_J2_7	1	2.92	8012.3	2387.4
## + V19_J2_4	1	2.64	8012.6	2387.6
## + V1_J1_4	1	2.64	8012.6	2387.6
## + V17_J2_4	1	2.62	8012.6	2387.6
## + V16_J1_5	1	2.60	8012.6	2387.6
## + V2_J2_4	1	2.58	8012.6	2387.6
## + V20_J2_4	1	2.56	8012.6	2387.6
## + V15_J1_6	1	2.52	8012.7	2387.6
## + V13_3_J2_1	1	2.27	8012.9	2387.8
## + V16_J2_3	1	2.25	8013.0	2387.8
## + V16_J1_4	1	2.15	8013.1	2387.9
## + V24_J1_4	1	1.92	8013.3	2388.0
## + V26_J1_5	1	1.88	8013.3	2388.1
## + V20_J1_5	1	1.77	8013.4	2388.1
## + V2_J1_7	1	1.75	8013.5	2388.1
## + V24_J2_2	1	1.65	8013.6	2388.2
## + V29_J2_7	1	1.46	8013.7	2388.3
## + V17_J1_4	1	1.42	8013.8	2388.4
## + V24_J2_1	1	1.31	8013.9	2388.4
## + V1_J1_6	1	1.29	8013.9	2388.4
## + V14_J2_5	1	1.14	8014.1	2388.5
## + V30_J1_7	1	1.12	8014.1	2388.6
## + V30_J2_1	1	1.11	8014.1	2388.6
## + V23_J2_2	1	1.08	8014.1	2388.6
## + V30_J2_4	1	1.06	8014.1	2388.6
## + V5_J2_1	1	1.05	8014.2	2388.6
## + V13_2_J2_5	1	0.98	8014.2	2388.6
## + V14_J2_7	1	0.95	8014.3	2388.7
## + V12_1_2_J1_7	1	0.94	8014.3	2388.7
## + V13_3_J1_2	1	0.87	8014.3	2388.7
## + V13_3_J1_7	1	0.85	8014.4	2388.7
## + V23_J1_5	1	0.82	8014.4	2388.7
## + V24_J2_7	1	0.81	8014.4	2388.8
## + V13_3_J2_4	1	0.69	8014.5	2388.8
## + V20_J1_6	1	0.68	8014.5	2388.8
## + V24_J2_4	1	0.66	8014.5	2388.8
## + V13_3_J1_4	1	0.65	8014.6	2388.9
## + V13_3_J1_1	1	0.64	8014.6	2388.9
## + V23_J1_7	1	0.61	8014.6	2388.9
## + V15_J1_3	1	0.56	8014.6	2388.9
## + V13_3_J2_7	1	0.51	8014.7	2388.9
## + V20_J2_1	1	0.46	8014.7	2389.0
## + V23_J1_1	1	0.44	8014.8	2389.0
## + V19_J1_3	1	0.41	8014.8	2389.0
## + V29_J1_4	1	0.40	8014.8	2389.0
## + V13_2_J2_4	1	0.39	8014.8	2389.0
## + V2_J1_1	1	0.36	8014.8	2389.0
## + V1_J2_5	1	0.34	8014.9	2389.1
## + V14_J2_1	1	0.31	8014.9	2389.1
## + V29_J2_5	1	0.29	8014.9	2389.1
## + V15_J2_3	1	0.29	8014.9	2389.1
## + V13_3_J2_2	1	0.25	8015.0	2389.1

```

## + V13_2_J2_7      1      0.24  8015.0 2389.1
## + V17_J1_6        1      0.23  8015.0 2389.1
## + V13_1_J1_4      1      0.22  8015.0 2389.1
## + V2_J1_4         1      0.21  8015.0 2389.1
## + V13_1_J1_6      1      0.15  8015.1 2389.2
## + V15_J2_1        1      0.14  8015.1 2389.2
## + V23_J1_6        1      0.12  8015.1 2389.2
## + V13_1_J1_2      1      0.12  8015.1 2389.2
## + V20_J2_3        1      0.11  8015.1 2389.2
## + V15_J1_1        1      0.11  8015.1 2389.2
## + V13_1_J1_3      1      0.11  8015.1 2389.2
## + V1_J1_1         1      0.11  8015.1 2389.2
## + V26_J1_3        1      0.05  8015.2 2389.2
## + V29_J2_4        1      0.04  8015.2 2389.2
## + V20_J1_3        1      0.02  8015.2 2389.3
## + V13_1_J1_1      1      0.01  8015.2 2389.3
## + V13_1_J2_2      1      0.00  8015.2 2389.3
## + V13_2_J1_1      1      0.00  8015.2 2389.3
## - V               19 2311.95 10327.2 3574.4
##
## Step: AIC=1302.92
## value ~ V + J
##
##           Df Sum of Sq  RSS   AIC
## + V16_J2_2      1    368.88 6044.5 1001.5
## + V20_J2_2      1    219.37 6194.0 1128.6
## + V26_J2_3      1    204.78 6208.6 1140.8
## + V5_J2_4       1    162.53 6250.9 1176.1
## + V5_J2_5       1    147.71 6265.7 1188.4
## + V12_1_2_J2_2  1    107.56 6305.9 1221.6
## + V15_J2_2      1    106.72 6306.7 1222.3
## + V19_J1_4      1     94.57 6318.8 1232.3
## + V30_J2_2      1     92.91 6320.5 1233.7
## + V13_2_J1_7    1     84.41 6329.0 1240.7
## + V3_J2_3       1     81.94 6331.5 1242.7
## + V19_J1_5      1     81.43 6332.0 1243.1
## + V1_J2_7       1     81.09 6332.3 1243.4
## + V3_J2_4       1     76.37 6337.0 1247.3
## + V2_J1_3       1     68.60 6344.8 1253.6
## + V26_J2_5      1     68.51 6344.9 1253.7
## + V23_J1_3      1     68.08 6345.3 1254.1
## + V4_J2_2       1     64.88 6348.5 1256.7
## + V5_J1_3       1     64.13 6349.3 1257.3
## + V26_J2_4      1     59.86 6353.5 1260.8
## + V17_J1_3      1     59.19 6354.2 1261.3
## + V3_J2_2       1     58.55 6354.9 1261.9
## + V5_J2_2       1     58.24 6355.2 1262.1
## + V15_J2_7      1     56.90 6356.5 1263.2
## + V17_J2_7      1     56.86 6356.5 1263.2
## + V30_J1_3      1     55.74 6357.7 1264.2
## + V19_J2_2      1     54.80 6358.6 1264.9
## + V3_J1_3       1     51.52 6361.9 1267.6
## + V4_J2_4       1     48.61 6364.8 1270.0
## + V12_1_2_J1_4  1     48.34 6365.1 1270.2

```

## + V26_J2_1	1	48.01	6365.4	1270.5
## + V5_J2_7	1	47.91	6365.5	1270.6
## + V15_J1_5	1	47.25	6366.2	1271.1
## + V14_J2_2	1	46.43	6367.0	1271.8
## + V16_J2_4	1	46.13	6367.3	1272.0
## + V26_J2_2	1	46.02	6367.4	1272.1
## + V14_J1_5	1	43.78	6369.6	1273.9
## + V30_J2_5	1	43.46	6369.9	1274.2
## + V5_J1_5	1	43.34	6370.1	1274.3
## + V4_J2_1	1	42.75	6370.7	1274.8
## + V3_J2_5	1	42.14	6371.3	1275.3
## + V26_J1_6	1	39.10	6374.3	1277.8
## + V13_1_J1_2	1	38.99	6374.4	1277.8
## + V1_J1_3	1	37.81	6375.6	1278.8
## + V3_J2_1	1	37.23	6376.2	1279.3
## + V12_1_2_J2_3	1	35.75	6377.7	1280.5
## + V12_1_2_J2_5	1	35.17	6378.2	1281.0
## + V30_J1_1	1	34.63	6378.8	1281.4
## + V26_J2_7	1	33.57	6379.8	1282.3
## + V14_J1_4	1	33.32	6380.1	1282.5
## + V15_J1_3	1	33.15	6380.3	1282.6
## + V17_J1_5	1	32.73	6380.7	1283.0
## + V17_J2_2	1	32.20	6381.2	1283.4
## + V12_1_2_J2_4	1	31.78	6381.6	1283.7
## + V13_1_J1_7	1	31.24	6382.2	1284.2
## + V3_J2_7	1	30.78	6382.6	1284.5
## + V4_J2_3	1	29.96	6383.4	1285.2
## + V26_J1_1	1	29.89	6383.5	1285.3
## + V1_J1_5	1	28.38	6385.0	1286.5
## + V1_J2_2	1	28.18	6385.2	1286.7
## + V15_J1_4	1	27.03	6386.4	1287.6
## + V30_J1_6	1	26.86	6386.5	1287.7
## + V5_J1_7	1	26.64	6386.8	1287.9
## + V4_J2_5	1	26.60	6386.8	1288.0
## + V23_J2_1	1	26.56	6386.9	1288.0
## + V26_J1_7	1	25.71	6387.7	1288.7
## + V20_J1_4	1	24.65	6388.8	1289.5
## + V13_3_J1_2	1	24.26	6389.1	1289.8
## + V16_J2_5	1	24.25	6389.2	1289.9
## + V23_J2_7	1	24.15	6389.3	1289.9
## + V29_J1_7	1	23.95	6389.5	1290.1
## + V2_J2_7	1	23.72	6389.7	1290.3
## + V20_J1_3	1	23.54	6389.9	1290.4
## + V12_1_2_J1_5	1	23.15	6390.3	1290.8
## + V16_J1_3	1	23.09	6390.3	1290.8
## + V19_J2_7	1	23.08	6390.3	1290.8
## + V29_J1_1	1	22.97	6390.4	1290.9
## + V23_J2_3	1	22.95	6390.5	1290.9
## + V26_J1_3	1	22.79	6390.6	1291.0
## + V30_J1_5	1	22.52	6390.9	1291.3
## + V15_J2_5	1	22.30	6391.1	1291.5
## + V3_J1_2	1	22.00	6391.4	1291.7
## + V13_1_J1_3	1	21.71	6391.7	1291.9
## + V1_J2_4	1	21.45	6392.0	1292.1

## + V24_J1_1	1	21.21	6392.2	1292.3
## + V30_J1_2	1	20.88	6392.5	1292.6
## + V19_J2_3	1	20.71	6392.7	1292.7
## + V12_1_2_J1_2	1	20.40	6393.0	1293.0
## + V13_2_J1_4	1	19.74	6393.7	1293.5
## + V29_J2_3	1	19.44	6394.0	1293.8
## + V24_J2_3	1	19.22	6394.2	1294.0
## + V4_J1_6	1	18.84	6394.6	1294.3
## + V19_J1_3	1	18.82	6394.6	1294.3
## + V4_J1_7	1	18.62	6394.8	1294.4
## + V2_J1_5	1	18.13	6395.3	1294.8
## + V17_J2_3	1	18.10	6395.3	1294.9
## + V13_1_J2_4	1	17.99	6395.4	1295.0
## + V1_J1_4	1	17.92	6395.5	1295.0
## + V13_2_J1_2	1	17.06	6396.3	1295.7
## + V29_J1_3	1	16.92	6396.5	1295.8
## + V12_1_2_J2_1	1	16.76	6396.7	1296.0
## + V16_J1_4	1	16.57	6396.8	1296.1
## + V13_3_J2_5	1	16.51	6396.9	1296.2
## + V29_J1_5	1	16.42	6397.0	1296.2
## + V29_J2_2	1	16.01	6397.4	1296.6
## + V29_J1_6	1	15.98	6397.4	1296.6
## + V16_J2_7	1	15.42	6398.0	1297.0
## + V13_3_J1_6	1	15.35	6398.1	1297.1
## + V4_J1_2	1	15.34	6398.1	1297.1
## + V12_1_2_J1_6	1	15.21	6398.2	1297.2
## + V23_J2_4	1	15.19	6398.2	1297.2
## + V12_1_2_J1_7	1	14.89	6398.5	1297.5
## + V17_J1_4	1	14.37	6399.0	1297.9
## + V3_J1_4	1	14.26	6399.1	1298.0
## + V14_J2_3	1	14.06	6399.3	1298.2
## + V5_J1_1	1	14.02	6399.4	1298.2
## + V13_2_J2_2	1	13.95	6399.5	1298.2
## + V30_J2_3	1	13.79	6399.6	1298.4
## + V20_J2_5	1	12.95	6400.5	1299.0
## + V2_J2_5	1	12.85	6400.6	1299.1
## + V29_J1_2	1	12.81	6400.6	1299.2
## + V23_J2_5	1	12.04	6401.4	1299.8
## + V16_J1_5	1	11.88	6401.5	1299.9
## + V19_J1_7	1	11.43	6402.0	1300.3
## + V3_J1_1	1	11.06	6402.4	1300.6
## + V3_J1_6	1	10.86	6402.6	1300.8
## + V1_J2_3	1	10.57	6402.8	1301.0
## + V20_J1_2	1	10.49	6402.9	1301.0
## + V19_J1_6	1	10.48	6402.9	1301.1
## + V3_J1_7	1	10.46	6402.9	1301.1
## + V29_J1_4	1	10.34	6403.1	1301.2
## + V14_J1_2	1	10.29	6403.1	1301.2
## + V26_J1_2	1	10.09	6403.3	1301.4
## + V20_J1_5	1	9.97	6403.4	1301.5
## + V24_J1_2	1	9.94	6403.5	1301.5
## + V15_J2_4	1	9.83	6403.6	1301.6
## + V17_J2_4	1	9.79	6403.6	1301.6
## + V14_J1_3	1	9.72	6403.7	1301.7

## + V2_J2_4	1	9.71	6403.7	1301.7
## + V20_J2_4	1	9.67	6403.7	1301.7
## + V19_J1_2	1	9.62	6403.8	1301.8
## + V4_J1_1	1	9.29	6404.1	1302.0
## + V2_J2_2	1	9.25	6404.2	1302.0
## + V2_J1_4	1	9.23	6404.2	1302.1
## + V2_J2_1	1	9.18	6404.2	1302.1
## + V12_1_2_J2_7	1	9.06	6404.3	1302.2
## + V29_J2_1	1	8.89	6404.5	1302.3
## + V17_J2_5	1	8.68	6404.7	1302.5
## + V13_1_J2_5	1	8.52	6404.9	1302.6
## + V13_2_J1_3	1	8.29	6405.1	1302.8
## <none>			6413.4	1302.9
## + V20_J2_7	1	8.15	6405.3	1303.0
## + V1_J2_1	1	7.86	6405.5	1303.2
## + V2_J2_3	1	7.52	6405.9	1303.5
## + V13_1_J2_3	1	7.39	6406.0	1303.6
## + V16_J2_1	1	7.24	6406.2	1303.7
## + V4_J1_3	1	7.09	6406.3	1303.8
## + V12_1_2_J1_3	1	6.74	6406.7	1304.1
## + V24_J2_5	1	6.50	6406.9	1304.3
## + V13_2_J1_1	1	6.45	6407.0	1304.3
## + V19_J2_1	1	6.38	6407.0	1304.4
## + V13_1_J1_5	1	6.16	6407.2	1304.6
## + V13_1_J1_1	1	6.02	6407.4	1304.7
## + V24_J2_4	1	5.30	6408.1	1305.3
## + V1_J1_1	1	4.88	6408.5	1305.6
## + V16_J1_7	1	4.88	6408.5	1305.6
## + V15_J1_1	1	4.85	6408.6	1305.6
## + V20_J1_6	1	4.77	6408.6	1305.7
## + V5_J2_3	1	4.65	6408.8	1305.8
## + V30_J2_7	1	4.49	6408.9	1305.9
## + V13_2_J2_4	1	4.45	6409.0	1306.0
## + V13_2_J1_5	1	4.44	6409.0	1306.0
## + V14_J2_7	1	4.41	6409.0	1306.0
## + V13_1_J2_1	1	4.39	6409.0	1306.0
## + V13_1_J1_4	1	4.34	6409.1	1306.0
## + V5_J1_2	1	4.32	6409.1	1306.1
## + V13_3_J2_3	1	4.27	6409.1	1306.1
## + V23_J1_7	1	4.26	6409.2	1306.1
## + V24_J2_2	1	4.04	6409.4	1306.3
## + V15_J1_7	1	3.96	6409.4	1306.3
## + V1_J1_7	1	3.76	6409.6	1306.5
## + V2_J1_1	1	3.72	6409.7	1306.5
## + V13_3_J1_7	1	3.69	6409.7	1306.6
## + V14_J1_7	1	3.68	6409.7	1306.6
## + V24_J1_5	1	3.62	6409.8	1306.6
## + V23_J1_1	1	3.45	6410.0	1306.8
## + V15_J1_2	1	3.27	6410.1	1306.9
## + V30_J1_7	1	3.17	6410.2	1307.0
## + V16_J1_6	1	3.16	6410.2	1307.0
## + V23_J2_2	1	3.09	6410.3	1307.0
## + V13_3_J1_4	1	3.02	6410.4	1307.1
## + V13_1_J1_6	1	3.01	6410.4	1307.1

## + V13_3_J1_1	1	2.97	6410.4	1307.2
## + V5_J1_6	1	2.95	6410.5	1307.2
## + V14_J2_4	1	2.94	6410.5	1307.2
## + V23_J1_6	1	2.87	6410.5	1307.2
## + V5_J2_1	1	2.86	6410.5	1307.2
## + V13_2_J2_7	1	2.56	6410.8	1307.5
## + V29_J2_5	1	2.56	6410.8	1307.5
## + V13_3_J1_3	1	2.43	6411.0	1307.6
## + V13_2_J2_3	1	2.31	6411.1	1307.7
## + V2_J1_7	1	2.28	6411.1	1307.7
## + V17_J2_1	1	2.23	6411.2	1307.8
## + V16_J1_1	1	2.19	6411.2	1307.8
## + V20_J2_1	1	1.79	6411.6	1308.1
## + V4_J2_7	1	1.71	6411.7	1308.2
## + V14_J1_1	1	1.70	6411.7	1308.2
## + V29_J2_4	1	1.57	6411.8	1308.3
## + V17_J1_7	1	1.48	6411.9	1308.4
## + V14_J2_1	1	1.47	6411.9	1308.4
## + V13_3_J2_2	1	1.46	6411.9	1308.4
## + V16_J2_3	1	1.31	6412.1	1308.5
## + V24_J1_4	1	1.31	6412.1	1308.5
## + V13_2_J2_1	1	1.29	6412.1	1308.5
## + V24_J1_7	1	1.28	6412.1	1308.5
## + V15_J2_1	1	1.05	6412.4	1308.7
## + V24_J1_6	1	0.91	6412.5	1308.8
## + V15_J2_3	1	0.89	6412.5	1308.8
## + V23_J1_2	1	0.84	6412.6	1308.9
## + V13_3_J2_1	1	0.82	6412.6	1308.9
## + V13_1_J2_7	1	0.78	6412.6	1308.9
## + V23_J1_5	1	0.74	6412.7	1309.0
## + V17_J1_6	1	0.71	6412.7	1309.0
## + V3_J1_5	1	0.58	6412.8	1309.1
## + V20_J1_7	1	0.58	6412.8	1309.1
## + V2_J1_2	1	0.55	6412.9	1309.1
## + V20_J2_3	1	0.54	6412.9	1309.1
## + V19_J2_5	1	0.51	6412.9	1309.1
## + V17_J1_1	1	0.45	6413.0	1309.2
## + V13_1_J2_2	1	0.45	6413.0	1309.2
## + V14_J1_6	1	0.42	6413.0	1309.2
## + V13_3_J2_4	1	0.37	6413.0	1309.2
## + V2_J1_6	1	0.36	6413.0	1309.3
## + V16_J1_2	1	0.36	6413.1	1309.3
## + V24_J2_1	1	0.29	6413.1	1309.3
## + V20_J1_1	1	0.28	6413.1	1309.3
## + V4_J1_4	1	0.27	6413.1	1309.3
## + V13_2_J1_6	1	0.25	6413.2	1309.3
## + V19_J1_1	1	0.23	6413.2	1309.4
## + V26_J1_4	1	0.20	6413.2	1309.4
## + V1_J2_5	1	0.20	6413.2	1309.4
## + V30_J2_1	1	0.19	6413.2	1309.4
## + V24_J1_3	1	0.18	6413.2	1309.4
## + V30_J2_4	1	0.17	6413.2	1309.4
## + V26_J1_5	1	0.15	6413.3	1309.4
## + V4_J1_5	1	0.14	6413.3	1309.4


```

## + V13_3_J2_7      1      0.14 6413.3 1309.5
## + V15_J1_6        1      0.09 6413.3 1309.5
## + V12_1_2_J1_1    1      0.08 6413.3 1309.5
## + V23_J1_4        1      0.05 6413.4 1309.5
## + V1_J1_2         1      0.04 6413.4 1309.5
## + V19_J2_4        1      0.04 6413.4 1309.5
## + V24_J2_7        1      0.03 6413.4 1309.5
## + V30_J1_4        1      0.03 6413.4 1309.5
## + V1_J1_6         1      0.03 6413.4 1309.5
## + V29_J2_7        1      0.02 6413.4 1309.5
## + V17_J1_2        1      0.02 6413.4 1309.5
## + V5_J1_4         1      0.00 6413.4 1309.5
## + V14_J2_5        1      0.00 6413.4 1309.6
## + V13_3_J1_5      1      0.00 6413.4 1309.6
## + V13_2_J2_5      1      0.00 6413.4 1309.6
## - J               12    1601.80 8015.2 2382.6
## - V               19    2311.95 8725.4 2777.6
##
## Step:  AIC=1001.53
## value ~ V + J + V16_J2_2
##
##           Df Sum of Sq  RSS    AIC
## + V20_J2_2    1    251.03 5793.5  787.59
## + V26_J2_3    1    202.38 5842.1  831.07
## + V5_J2_4     1    160.39 5884.1  868.31
## + V5_J2_5     1    145.68 5898.9  881.30
## + V12_1_2_J2_2 1    129.90 5914.6  895.19
## + V30_J2_2    1    113.74 5930.8  909.38
## + V19_J1_4    1     92.94 5951.6  927.58
## + V15_J2_2    1     87.10 5957.4  932.68
## + V13_2_J1_7  1     82.87 5961.7  936.37
## + V3_J2_3     1     80.42 5964.1  938.51
## + V19_J1_5    1     79.92 5964.6  938.95
## + V1_J2_7     1     79.58 5964.9  939.24
## + V3_J2_4     1     74.90 5969.6  943.32
## + V2_J1_3     1     67.21 5977.3  950.02
## + V26_J2_5    1     67.12 5977.4  950.09
## + V23_J1_3    1     66.70 5977.8  950.46
## + V5_J1_3     1     65.49 5979.0  951.51
## + V26_J2_4    1     58.57 5986.0  957.53
## + V15_J2_7    1     58.18 5986.3  957.87
## + V17_J1_3    1     57.91 5986.6  958.10
## + V17_J2_7    1     55.60 5988.9  960.11
## + V30_J1_3    1     54.49 5990.0  961.07
## + V3_J1_3     1     52.73 5991.8  962.59
## + V4_J2_2     1     49.75 5994.8  965.18
## + V5_J2_7     1     49.09 5995.4  965.76
## + V4_J2_4     1     47.44 5997.1  967.19
## + V12_1_2_J1_4 1     47.18 5997.4  967.41
## + V26_J2_1    1     46.85 5997.7  967.70
## + V15_J1_5    1     46.10 5998.4  968.35
## + V17_J2_2    1     44.82 5999.7  969.46
## + V30_J2_5    1     44.58 6000.0  969.67
## + V3_J2_2     1     44.23 6000.3  969.97

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## + V5_J2_2	1	43.95	6000.6	970.21
## + V14_J1_5	1	42.68	6001.9	971.32
## + V5_J1_5	1	42.24	6002.3	971.69
## + V4_J2_1	1	41.66	6002.9	972.20
## + V16_J1_3	1	41.32	6003.2	972.49
## + V3_J2_5	1	41.05	6003.5	972.72
## + V19_J2_2	1	40.97	6003.6	972.80
## + V26_J1_6	1	40.16	6004.4	973.50
## + V1_J2_2	1	40.05	6004.5	973.59
## + V13_1_J1_2	1	37.94	6006.6	975.41
## + V1_J1_3	1	36.79	6007.7	976.42
## + V12_1_2_J2_3	1	36.76	6007.8	976.44
## + V3_J2_1	1	36.21	6008.3	976.92
## + V12_1_2_J2_5	1	36.17	6008.4	976.95
## + V30_J1_1	1	35.63	6008.9	977.42
## + V26_J2_7	1	34.56	6010.0	978.34
## + V15_J1_3	1	34.13	6010.4	978.72
## + V14_J2_2	1	33.77	6010.8	979.03
## + V17_J1_5	1	33.71	6010.8	979.08
## + V26_J2_2	1	33.42	6011.1	979.33
## + V12_1_2_J2_4	1	32.74	6011.8	979.92
## + V14_J1_4	1	32.36	6012.2	980.25
## + V3_J2_7	1	31.72	6012.8	980.80
## + V26_J1_1	1	30.81	6013.7	981.58
## + V16_J2_7	1	30.77	6013.8	981.63
## + V13_1_J1_7	1	30.31	6014.2	982.02
## + V1_J1_5	1	29.28	6015.2	982.91
## + V4_J2_3	1	29.04	6015.5	983.11
## + V5_J1_7	1	27.52	6017.0	984.43
## + V23_J2_1	1	27.43	6017.1	984.51
## + V16_J2_4	1	27.14	6017.4	984.76
## + V26_J1_7	1	26.57	6018.0	985.25
## + V15_J1_4	1	26.16	6018.4	985.60
## + V30_J1_6	1	25.99	6018.5	985.75
## + V4_J2_5	1	25.74	6018.8	985.97
## + V20_J1_4	1	25.49	6019.0	986.18
## + V20_J1_3	1	24.37	6020.2	987.15
## + V12_1_2_J1_5	1	23.96	6020.6	987.50
## + V19_J2_7	1	23.90	6020.6	987.56
## + V23_J2_3	1	23.77	6020.8	987.67
## + V26_J1_3	1	23.60	6020.9	987.82
## + V13_3_J1_2	1	23.44	6021.1	987.95
## + V23_J2_7	1	23.33	6021.2	988.05
## + V30_J1_5	1	23.33	6021.2	988.05
## + V29_J1_7	1	23.13	6021.4	988.22
## + V2_J2_7	1	22.91	6021.6	988.42
## + V3_J1_2	1	22.80	6021.7	988.51
## + V13_1_J1_3	1	22.50	6022.0	988.76
## + V1_J2_4	1	22.24	6022.3	988.99
## + V29_J1_1	1	22.17	6022.4	989.05
## + V30_J1_2	1	21.66	6022.9	989.50
## + V15_J2_5	1	21.51	6023.0	989.62
## + V12_1_2_J1_2	1	21.17	6023.4	989.91
## + V13_2_J1_4	1	20.49	6024.0	990.50

## + V24_J1_1	1	20.44	6024.1	990.55
## + V29_J2_3	1	20.19	6024.3	990.76
## + V24_J2_3	1	19.96	6024.6	990.96
## + V19_J2_3	1	19.95	6024.6	990.97
## + V4_J1_6	1	19.58	6024.9	991.29
## + V19_J1_3	1	19.56	6025.0	991.30
## + V4_J1_7	1	19.35	6025.2	991.49
## + V2_J1_5	1	18.85	6025.7	991.91
## + V17_J2_3	1	18.82	6025.7	991.94
## + V13_1_J2_4	1	18.71	6025.8	992.04
## + V1_J1_4	1	18.64	6025.9	992.10
## + V12_1_2_J2_1	1	17.45	6027.1	993.12
## + V13_3_J2_5	1	17.21	6027.3	993.34
## + V29_J1_5	1	17.11	6027.4	993.42
## + V2_J2_2	1	16.47	6028.1	993.97
## + V13_2_J1_2	1	16.37	6028.2	994.06
## + V29_J1_3	1	16.23	6028.3	994.18
## + V4_J1_2	1	16.01	6028.5	994.37
## + V23_J2_4	1	15.85	6028.7	994.51
## + V29_J1_6	1	15.31	6029.2	994.97
## + V17_J1_4	1	15.02	6029.5	995.22
## + V13_3_J1_6	1	14.70	6029.8	995.50
## + V5_J1_1	1	14.66	6029.9	995.54
## + V12_1_2_J1_6	1	14.56	6030.0	995.62
## + V30_J2_3	1	14.43	6030.1	995.74
## + V12_1_2_J1_7	1	14.25	6030.3	995.89
## + V3_J1_4	1	13.63	6030.9	996.42
## + V20_J2_5	1	13.57	6031.0	996.47
## + V2_J2_5	1	13.46	6031.1	996.57
## + V14_J2_3	1	13.44	6031.1	996.59
## + V23_J2_5	1	12.63	6031.9	997.28
## + V29_J1_2	1	12.21	6032.3	997.64
## + V19_J1_7	1	12.01	6032.5	997.82
## + V3_J1_1	1	11.62	6032.9	998.15
## + V3_J1_6	1	11.42	6033.1	998.33
## + V16_J2_5	1	11.13	6033.4	998.58
## + V1_J2_3	1	11.12	6033.4	998.58
## + V19_J1_6	1	11.03	6033.5	998.66
## + V3_J1_7	1	11.01	6033.5	998.68
## + V29_J1_4	1	10.89	6033.6	998.78
## + V14_J1_2	1	10.84	6033.7	998.83
## + V26_J1_2	1	10.63	6033.9	999.01
## + V20_J1_5	1	10.51	6034.0	999.11
## + V17_J2_4	1	10.33	6034.2	999.27
## + V14_J1_3	1	10.25	6034.3	999.33
## + V2_J2_4	1	10.25	6034.3	999.34
## + V20_J2_4	1	10.20	6034.3	999.37
## + V19_J1_2	1	10.15	6034.4	999.42
## + V20_J1_2	1	9.95	6034.6	999.59
## + V4_J1_1	1	9.81	6034.7	999.71
## + V2_J1_4	1	9.74	6034.8	999.77
## + V2_J2_1	1	9.70	6034.8	999.81
## + V24_J1_2	1	9.42	6035.1	1000.05
## + V29_J2_1	1	9.40	6035.1	1000.06

## + V15_J2_4	1	9.31	6035.2	1000.14
## + V17_J2_5	1	9.19	6035.3	1000.25
## + V13_1_J2_5	1	9.02	6035.5	1000.39
## + V29_J2_2	1	8.97	6035.6	1000.44
## + V13_2_J1_3	1	8.78	6035.7	1000.60
## + V20_J2_7	1	8.63	6035.9	1000.73
## + V12_1_2_J2_7	1	8.56	6036.0	1000.79
## + V1_J2_1	1	8.34	6036.2	1000.98
## + V2_J2_3	1	7.99	6036.5	1001.29
## + V13_1_J2_3	1	7.86	6036.7	1001.40
## <none>			6044.5	1001.53
## + V4_J1_3	1	7.54	6037.0	1001.67
## + V13_2_J2_2	1	7.44	6037.1	1001.75
## + V12_1_2_J1_3	1	6.31	6038.2	1002.73
## + V16_J1_4	1	6.14	6038.4	1002.87
## + V24_J2_5	1	6.08	6038.4	1002.93
## + V13_2_J1_1	1	6.03	6038.5	1002.97
## + V19_J2_1	1	5.97	6038.6	1003.03
## + V13_1_J1_5	1	5.75	6038.8	1003.21
## + V24_J2_4	1	5.69	6038.8	1003.26
## + V13_1_J1_1	1	5.62	6038.9	1003.33
## + V16_J1_2	1	4.86	6039.7	1003.98
## + V13_2_J2_4	1	4.81	6039.7	1004.02
## + V14_J2_7	1	4.77	6039.8	1004.05
## + V13_1_J2_1	1	4.76	6039.8	1004.07
## + V13_1_J1_4	1	4.70	6039.8	1004.12
## + V5_J1_2	1	4.68	6039.9	1004.14
## + V13_3_J2_3	1	4.63	6039.9	1004.18
## + V1_J1_1	1	4.51	6040.0	1004.28
## + V15_J1_1	1	4.49	6040.0	1004.30
## + V20_J1_6	1	4.41	6040.1	1004.37
## + V15_J1_7	1	4.30	6040.2	1004.46
## + V5_J2_3	1	4.29	6040.2	1004.47
## + V30_J2_7	1	4.14	6040.4	1004.60
## + V13_2_J1_5	1	4.09	6040.4	1004.64
## + V1_J1_7	1	4.09	6040.4	1004.64
## + V14_J1_7	1	4.01	6040.5	1004.71
## + V23_J1_7	1	3.91	6040.6	1004.79
## + V16_J1_5	1	3.43	6041.1	1005.21
## + V2_J1_1	1	3.40	6041.1	1005.24
## + V13_3_J1_7	1	3.38	6041.2	1005.26
## + V13_3_J1_4	1	3.32	6041.2	1005.30
## + V24_J1_5	1	3.31	6041.2	1005.31
## + V5_J1_6	1	3.25	6041.3	1005.37
## + V23_J1_1	1	3.15	6041.4	1005.45
## + V15_J1_2	1	2.97	6041.6	1005.60
## + V30_J1_7	1	2.88	6041.6	1005.68
## + V13_2_J2_7	1	2.84	6041.7	1005.72
## + V29_J2_5	1	2.84	6041.7	1005.72
## + V13_1_J1_6	1	2.73	6041.8	1005.82
## + V13_3_J1_3	1	2.70	6041.8	1005.84
## + V13_3_J1_1	1	2.68	6041.8	1005.85
## + V14_J2_4	1	2.66	6041.9	1005.88
## + V23_J1_6	1	2.59	6041.9	1005.93

## + V5_J2_1	1	2.58	6041.9	1005.94
## + V13_2_J2_3	1	2.58	6042.0	1005.94
## + V17_J2_1	1	2.49	6042.0	1006.02
## + V2_J1_7	1	2.03	6042.5	1006.41
## + V14_J1_1	1	1.93	6042.6	1006.50
## + V29_J2_4	1	1.79	6042.7	1006.62
## + V17_J1_7	1	1.69	6042.8	1006.71
## + V20_J2_1	1	1.57	6043.0	1006.81
## + V24_J1_4	1	1.51	6043.0	1006.86
## + V4_J2_7	1	1.50	6043.0	1006.87
## + V13_2_J2_1	1	1.49	6043.0	1006.87
## + V24_J1_7	1	1.48	6043.0	1006.89
## + V14_J2_1	1	1.27	6043.3	1007.07
## + V16_J2_1	1	1.20	6043.3	1007.13
## + V24_J1_6	1	1.08	6043.5	1007.23
## + V24_J2_2	1	1.00	6043.5	1007.30
## + V13_3_J2_1	1	0.98	6043.5	1007.32
## + V23_J1_5	1	0.89	6043.6	1007.39
## + V15_J2_1	1	0.89	6043.6	1007.40
## + V15_J2_3	1	0.74	6043.8	1007.52
## + V23_J1_2	1	0.70	6043.8	1007.56
## + V13_1_J2_7	1	0.64	6043.9	1007.61
## + V17_J1_6	1	0.58	6044.0	1007.67
## + V23_J2_2	1	0.56	6044.0	1007.68
## + V14_J1_6	1	0.54	6044.0	1007.70
## + V13_3_J2_4	1	0.48	6044.0	1007.74
## + V2_J1_6	1	0.47	6044.1	1007.75
## + V3_J1_5	1	0.46	6044.1	1007.76
## + V20_J1_7	1	0.46	6044.1	1007.77
## + V2_J1_2	1	0.43	6044.1	1007.79
## + V20_J2_3	1	0.43	6044.1	1007.79
## + V19_J2_5	1	0.40	6044.1	1007.82
## + V24_J2_1	1	0.38	6044.1	1007.83
## + V20_J1_1	1	0.38	6044.2	1007.84
## + V16_J1_7	1	0.37	6044.2	1007.84
## + V13_2_J1_6	1	0.34	6044.2	1007.86
## + V17_J1_1	1	0.34	6044.2	1007.86
## + V19_J1_1	1	0.32	6044.2	1007.89
## + V1_J2_5	1	0.28	6044.2	1007.92
## + V30_J2_1	1	0.27	6044.3	1007.92
## + V30_J2_4	1	0.25	6044.3	1007.95
## + V26_J1_5	1	0.22	6044.3	1007.97
## + V16_J2_3	1	0.21	6044.3	1007.98
## + V13_3_J2_7	1	0.21	6044.3	1007.98
## + V4_J1_4	1	0.19	6044.3	1008.00
## + V15_J1_6	1	0.14	6044.4	1008.04
## + V26_J1_4	1	0.13	6044.4	1008.05
## + V24_J1_3	1	0.12	6044.4	1008.06
## + V13_1_J2_2	1	0.12	6044.4	1008.06
## + V1_J1_2	1	0.09	6044.4	1008.09
## + V4_J1_5	1	0.08	6044.4	1008.09
## + V24_J2_7	1	0.07	6044.5	1008.10
## + V13_3_J2_2	1	0.04	6044.5	1008.13
## + V12_1_2_J1_1	1	0.04	6044.5	1008.13

```

## + V16_J1_6      1      0.03 6044.5 1008.13
## + V5_J1_4       1      0.02 6044.5 1008.14
## + V23_J1_4      1      0.02 6044.5 1008.14
## + V13_2_J2_5    1      0.01 6044.5 1008.15
## + V16_J1_1      1      0.01 6044.5 1008.15
## + V19_J2_4      1      0.01 6044.5 1008.15
## + V30_J1_4      1      0.01 6044.5 1008.15
## + V1_J1_6       1      0.01 6044.5 1008.15
## + V29_J2_7      1      0.00 6044.5 1008.16
## + V13_3_J1_5    1      0.00 6044.5 1008.16
## + V17_J1_2      1      0.00 6044.5 1008.16
## + V14_J2_5      1      0.00 6044.5 1008.16
## - V16_J2_2      1    368.88 6413.4 1302.92
## - J             12   1594.54 7639.1 2139.34
## - V             19   2352.14 8396.7 2584.60
##
## Step:  AIC=787.59
## value ~ V + J + V16_J2_2 + V20_J2_2
##
##           Df Sum of Sq    RSS    AIC
## + V26_J2_3      1    200.31 5593.2  611.25
## + V5_J2_4       1    158.55 5634.9  649.93
## + V12_1_2_J2_2  1    151.21 5642.3  656.70
## + V5_J2_5       1    143.92 5649.6  663.42
## + V30_J2_2      1    133.70 5659.8  672.81
## + V19_J1_4      1     91.54 5702.0  711.41
## + V13_2_J1_7    1     81.55 5711.9  720.51
## + V3_J2_3       1     79.11 5714.4  722.73
## + V19_J1_5      1     78.62 5714.9  723.18
## + V1_J2_7       1     78.28 5715.2  723.48
## + V3_J2_4       1     73.64 5719.9  727.70
## + V15_J2_2      1     71.67 5721.8  729.50
## + V5_J1_3       1     66.68 5726.8  734.02
## + V2_J1_3       1     66.01 5727.5  734.63
## + V26_J2_5      1     65.93 5727.6  734.71
## + V23_J1_3      1     65.51 5728.0  735.09
## + V15_J2_7      1     59.31 5734.2  740.72
## + V17_J2_2      1     57.55 5735.9  742.31
## + V26_J2_4      1     57.45 5736.0  742.40
## + V17_J1_3      1     56.80 5736.7  742.99
## + V17_J2_7      1     54.52 5739.0  745.06
## + V3_J1_3       1     53.80 5739.7  745.70
## + V30_J1_3      1     53.41 5740.1  746.06
## + V1_J2_2       1     52.13 5741.4  747.22
## + V5_J2_7       1     50.12 5743.4  749.04
## + V4_J2_4       1     46.44 5747.1  752.38
## + V12_1_2_J1_4  1     46.18 5747.3  752.61
## + V26_J2_1      1     45.86 5747.6  752.90
## + V30_J2_5      1     45.56 5747.9  753.17
## + V15_J1_5      1     45.12 5748.4  753.57
## + V14_J1_5      1     41.72 5751.8  756.64
## + V16_J1_3      1     41.32 5752.2  757.00
## + V5_J1_5       1     41.30 5752.2  757.02
## + V26_J1_6      1     41.10 5752.4  757.21

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## + V4_J2_1	1	40.72	5752.8	757.55
## + V3_J2_5	1	40.12	5753.4	758.09
## + V4_J2_2	1	38.23	5755.3	759.80
## + V12_1_2_J2_3	1	37.66	5755.8	760.31
## + V12_1_2_J2_5	1	37.06	5756.4	760.85
## + V13_1_J1_2	1	37.05	5756.4	760.86
## + V30_J1_1	1	36.51	5757.0	761.35
## + V1_J1_3	1	35.90	5757.6	761.90
## + V26_J2_7	1	35.43	5758.1	762.33
## + V3_J2_1	1	35.33	5758.2	762.41
## + V15_J1_3	1	34.99	5758.5	762.72
## + V17_J1_5	1	34.56	5758.9	763.11
## + V12_1_2_J2_4	1	33.59	5759.9	763.99
## + V3_J2_2	1	33.40	5760.1	764.16
## + V5_J2_2	1	33.16	5760.3	764.37
## + V3_J2_7	1	32.55	5760.9	764.92
## + V26_J1_1	1	31.63	5761.9	765.75
## + V14_J1_4	1	31.53	5762.0	765.85
## + V16_J2_7	1	30.77	5762.7	766.54
## + V19_J2_2	1	30.57	5762.9	766.71
## + V1_J1_5	1	30.08	5763.4	767.15
## + V13_1_J1_7	1	29.51	5764.0	767.67
## + V5_J1_7	1	28.29	5765.2	768.76
## + V4_J2_3	1	28.26	5765.2	768.80
## + V23_J2_1	1	28.21	5765.3	768.84
## + V26_J1_7	1	27.33	5766.2	769.63
## + V16_J2_4	1	27.14	5766.4	769.80
## + V15_J1_4	1	25.42	5768.1	771.36
## + V30_J1_6	1	25.25	5768.2	771.51
## + V4_J2_5	1	25.00	5768.5	771.74
## + V12_1_2_J1_5	1	24.69	5768.8	772.02
## + V19_J2_7	1	24.62	5768.9	772.07
## + V23_J2_3	1	24.49	5769.0	772.20
## + V2_J2_2	1	24.46	5769.0	772.22
## + V14_J2_2	1	24.39	5769.1	772.28
## + V26_J1_3	1	24.32	5769.2	772.35
## + V26_J2_2	1	24.09	5769.4	772.56
## + V30_J1_5	1	24.04	5769.5	772.60
## + V3_J1_2	1	23.51	5770.0	773.08
## + V13_1_J1_3	1	23.20	5770.3	773.35
## + V1_J2_4	1	22.93	5770.6	773.60
## + V13_3_J1_2	1	22.74	5770.8	773.77
## + V23_J2_7	1	22.63	5770.9	773.87
## + V29_J1_7	1	22.43	5771.1	774.05
## + V30_J1_2	1	22.34	5771.2	774.13
## + V2_J2_7	1	22.21	5771.3	774.25
## + V12_1_2_J1_2	1	21.85	5771.6	774.57
## + V29_J1_1	1	21.49	5772.0	774.90
## + V13_2_J1_4	1	21.16	5772.3	775.19
## + V29_J2_3	1	20.86	5772.6	775.47
## + V15_J2_5	1	20.84	5772.7	775.49
## + V24_J2_3	1	20.62	5772.9	775.68
## + V4_J1_6	1	20.23	5773.3	776.03
## + V19_J1_3	1	20.22	5773.3	776.05

## + V20_J1_2	1	20.15	5773.4	776.11
## + V4_J1_7	1	20.00	5773.5	776.24
## + V24_J1_1	1	19.78	5773.7	776.44
## + V2_J1_5	1	19.50	5774.0	776.69
## + V17_J2_3	1	19.47	5774.0	776.72
## + V13_1_J2_4	1	19.35	5774.1	776.82
## + V19_J2_3	1	19.30	5774.2	776.87
## + V1_J1_4	1	19.28	5774.2	776.89
## + V12_1_2_J2_1	1	18.07	5775.4	777.98
## + V13_3_J2_5	1	17.82	5775.7	778.20
## + V29_J1_5	1	17.72	5775.8	778.29
## + V4_J1_2	1	16.60	5776.9	779.30
## + V23_J2_4	1	16.44	5777.1	779.45
## + V13_2_J1_2	1	15.78	5777.7	780.04
## + V29_J1_3	1	15.65	5777.8	780.16
## + V17_J1_4	1	15.59	5777.9	780.21
## + V5_J1_1	1	15.22	5778.3	780.54
## + V30_J2_3	1	14.99	5778.5	780.75
## + V29_J1_6	1	14.74	5778.8	780.97
## + V13_3_J1_6	1	14.14	5779.4	781.52
## + V20_J1_4	1	14.01	5779.5	781.63
## + V12_1_2_J1_6	1	14.01	5779.5	781.64
## + V2_J2_5	1	14.00	5779.5	781.64
## + V12_1_2_J1_7	1	13.70	5779.8	781.91
## + V20_J1_3	1	13.18	5780.3	782.38
## + V23_J2_5	1	13.16	5780.3	782.40
## + V3_J1_4	1	13.10	5780.4	782.45
## + V14_J2_3	1	12.90	5780.6	782.63
## + V19_J1_7	1	12.52	5781.0	782.97
## + V3_J1_1	1	12.13	5781.4	783.32
## + V3_J1_6	1	11.92	5781.6	783.51
## + V20_J1_6	1	11.76	5781.7	783.66
## + V29_J1_2	1	11.71	5781.8	783.70
## + V1_J2_3	1	11.61	5781.9	783.79
## + V19_J1_6	1	11.52	5782.0	783.87
## + V3_J1_7	1	11.51	5782.0	783.89
## + V29_J1_4	1	11.38	5782.1	784.00
## + V14_J1_2	1	11.32	5782.2	784.05
## + V16_J2_5	1	11.13	5782.4	784.23
## + V26_J1_2	1	11.11	5782.4	784.24
## + V17_J2_4	1	10.80	5782.7	784.52
## + V14_J1_3	1	10.73	5782.8	784.59
## + V2_J2_4	1	10.72	5782.8	784.59
## + V19_J1_2	1	10.62	5782.9	784.68
## + V4_J1_1	1	10.28	5783.2	784.99
## + V2_J1_4	1	10.21	5783.3	785.05
## + V2_J2_1	1	10.16	5783.3	785.10
## + V29_J2_1	1	9.86	5783.6	785.37
## + V17_J2_5	1	9.64	5783.9	785.57
## + V13_1_J2_5	1	9.47	5784.0	785.72
## + V13_2_J1_3	1	9.22	5784.3	785.94
## + V24_J1_2	1	8.97	5784.5	786.16
## + V15_J2_4	1	8.87	5784.6	786.25
## + V1_J2_1	1	8.77	5784.7	786.34

## + V2_J2_3	1	8.41	5785.1	786.67
## + V13_1_J2_3	1	8.27	5785.2	786.79
## + V12_1_2_J2_7	1	8.14	5785.4	786.92
## + V4_J1_3	1	7.95	5785.5	787.08
## <none>			5793.5	787.59
## + V20_J2_1	1	6.66	5786.8	788.24
## + V16_J1_4	1	6.14	5787.4	788.71
## + V24_J2_4	1	6.05	5787.4	788.79
## + V12_1_2_J1_3	1	5.95	5787.5	788.88
## + V24_J2_5	1	5.72	5787.8	789.08
## + V13_2_J1_1	1	5.68	5787.8	789.12
## + V20_J2_5	1	5.63	5787.9	789.17
## + V19_J2_1	1	5.61	5787.9	789.18
## + V13_1_J1_5	1	5.40	5788.1	789.37
## + V13_1_J1_1	1	5.27	5788.2	789.49
## + V13_2_J2_4	1	5.14	5788.4	789.61
## + V14_J2_7	1	5.10	5788.4	789.65
## + V13_1_J2_1	1	5.08	5788.4	789.66
## + V13_1_J1_4	1	5.02	5788.5	789.72
## + V5_J1_2	1	5.00	5788.5	789.73
## + V13_3_J2_3	1	4.95	5788.5	789.78
## + V16_J1_2	1	4.86	5788.6	789.86
## + V15_J1_7	1	4.61	5788.9	790.08
## + V29_J2_2	1	4.49	5789.0	790.20
## + V1_J1_7	1	4.39	5789.1	790.28
## + V14_J1_7	1	4.31	5789.2	790.36
## + V1_J1_1	1	4.21	5789.3	790.44
## + V15_J1_1	1	4.18	5789.3	790.47
## + V20_J1_7	1	4.01	5789.5	790.63
## + V5_J2_3	1	3.99	5789.5	790.64
## + V20_J2_3	1	3.91	5789.6	790.71
## + V30_J2_7	1	3.84	5789.7	790.77
## + V13_2_J1_5	1	3.80	5789.7	790.81
## + V20_J1_5	1	3.72	5789.8	790.88
## + V23_J1_7	1	3.63	5789.9	790.96
## + V13_3_J1_4	1	3.59	5789.9	791.00
## + V20_J2_4	1	3.54	5790.0	791.04
## + V5_J1_6	1	3.52	5790.0	791.07
## + V16_J1_5	1	3.43	5790.1	791.14
## + V13_2_J2_2	1	3.43	5790.1	791.15
## + V2_J1_1	1	3.13	5790.4	791.41
## + V13_3_J1_7	1	3.11	5790.4	791.43
## + V13_2_J2_7	1	3.09	5790.4	791.45
## + V29_J2_5	1	3.09	5790.4	791.45
## + V24_J1_5	1	3.05	5790.4	791.49
## + V13_3_J1_3	1	2.95	5790.5	791.58
## + V23_J1_1	1	2.89	5790.6	791.63
## + V13_2_J2_3	1	2.82	5790.7	791.69
## + V17_J2_1	1	2.73	5790.8	791.77
## + V15_J1_2	1	2.73	5790.8	791.78
## + V20_J2_7	1	2.64	5790.9	791.85
## + V30_J1_7	1	2.64	5790.9	791.85
## + V13_1_J1_6	1	2.49	5791.0	791.99
## + V13_3_J1_1	1	2.45	5791.0	792.02

## + V14_J2_4	1	2.42	5791.1	792.05
## + V23_J1_6	1	2.36	5791.1	792.10
## + V5_J2_1	1	2.35	5791.1	792.11
## + V14_J1_1	1	2.14	5791.4	792.30
## + V29_J2_4	1	1.99	5791.5	792.43
## + V17_J1_7	1	1.89	5791.6	792.53
## + V2_J1_7	1	1.83	5791.7	792.58
## + V24_J1_4	1	1.70	5791.8	792.70
## + V13_2_J2_1	1	1.68	5791.8	792.72
## + V24_J1_7	1	1.67	5791.8	792.73
## + V13_1_J2_2	1	1.49	5792.0	792.88
## + V4_J2_7	1	1.32	5792.2	793.04
## + V24_J1_6	1	1.23	5792.3	793.11
## + V16_J2_1	1	1.20	5792.3	793.15
## + V13_3_J2_1	1	1.13	5792.4	793.21
## + V14_J2_1	1	1.11	5792.4	793.23
## + V23_J1_5	1	1.04	5792.5	793.29
## + V15_J2_1	1	0.76	5792.7	793.54
## + V14_J1_6	1	0.65	5792.8	793.64
## + V15_J2_3	1	0.62	5792.9	793.67
## + V13_3_J2_4	1	0.59	5792.9	793.69
## + V23_J1_2	1	0.58	5792.9	793.70
## + V2_J1_6	1	0.58	5792.9	793.70
## + V13_1_J2_7	1	0.53	5793.0	793.75
## + V20_J1_1	1	0.50	5793.0	793.77
## + V24_J2_1	1	0.48	5793.0	793.79
## + V17_J1_6	1	0.47	5793.0	793.80
## + V13_3_J2_2	1	0.47	5793.0	793.80
## + V13_2_J1_6	1	0.44	5793.1	793.83
## + V19_J1_1	1	0.40	5793.1	793.86
## + V16_J1_7	1	0.37	5793.1	793.89
## + V1_J2_5	1	0.37	5793.1	793.89
## + V3_J1_5	1	0.37	5793.1	793.89
## + V30_J2_1	1	0.36	5793.1	793.90
## + V2_J1_2	1	0.34	5793.2	793.92
## + V30_J2_4	1	0.32	5793.2	793.93
## + V19_J2_5	1	0.31	5793.2	793.94
## + V26_J1_5	1	0.29	5793.2	793.96
## + V13_3_J2_7	1	0.28	5793.2	793.97
## + V17_J1_1	1	0.26	5793.2	793.99
## + V16_J2_3	1	0.21	5793.3	794.03
## + V15_J1_6	1	0.20	5793.3	794.04
## + V1_J1_2	1	0.13	5793.4	794.10
## + V4_J1_4	1	0.13	5793.4	794.11
## + V24_J2_7	1	0.11	5793.4	794.12
## + V26_J1_4	1	0.08	5793.4	794.15
## + V24_J1_3	1	0.07	5793.4	794.16
## + V5_J1_4	1	0.05	5793.4	794.18
## + V4_J1_5	1	0.05	5793.4	794.18
## + V13_2_J2_5	1	0.04	5793.5	794.19
## + V16_J1_6	1	0.03	5793.5	794.19
## + V23_J2_2	1	0.02	5793.5	794.21
## + V12_1_2_J1_1	1	0.01	5793.5	794.21
## + V16_J1_1	1	0.01	5793.5	794.21

```

## + V24_J2_2      1      0.01 5793.5 794.21
## + V13_3_J1_5    1      0.01 5793.5 794.21
## + V14_J2_5      1      0.01 5793.5 794.21
## + V23_J1_4      1      0.01 5793.5 794.22
## + V19_J2_4      1      0.00 5793.5 794.22
## + V17_J1_2      1      0.00 5793.5 794.22
## + V29_J2_7      1      0.00 5793.5 794.22
## + V30_J1_4      1      0.00 5793.5 794.22
## + V1_J1_6       1      0.00 5793.5 794.22
## - V20_J2_2      1     251.03 6044.5 1001.53
## - V16_J2_2      1     400.54 6194.0 1128.58
## - J             12    1617.25 7410.7 1988.18
## - V            19    2248.31 8041.8 2366.70
##
## Step:  AIC=611.25
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3
##
##           Df Sum of Sq    RSS    AIC
## + V5_J2_4      1     157.01 5436.2 469.83
## + V12_1_2_J2_2 1     149.52 5443.7 476.99
## + V5_J2_5      1     142.45 5450.7 483.74
## + V30_J2_2     1     132.11 5461.1 493.59
## + V3_J2_3      1      93.19 5500.0 530.52
## + V19_J1_4     1      90.37 5502.8 533.19
## + V26_J2_5     1      87.09 5506.1 536.28
## + V13_2_J1_7   1      80.44 5512.7 542.56
## + V19_J1_5     1      77.53 5515.7 545.30
## + V26_J2_4     1      77.27 5515.9 545.55
## + V1_J2_7      1      77.20 5516.0 545.62
## + V15_J2_2     1      72.85 5520.3 549.72
## + V3_J2_4      1      72.59 5520.6 549.96
## + V5_J1_3      1      67.69 5525.5 554.57
## + V2_J1_3      1      65.02 5528.2 557.08
## + V23_J1_3     1      64.52 5528.7 557.55
## + V26_J2_1     1      63.67 5529.5 558.35
## + V15_J2_7     1      60.26 5532.9 561.56
## + V17_J2_2     1      56.51 5536.7 565.08
## + V17_J1_3     1      55.88 5537.3 565.68
## + V3_J1_3      1      54.71 5538.5 566.77
## + V17_J2_7     1      53.61 5539.6 567.80
## + V30_J1_3     1      52.52 5540.7 568.83
## + V1_J2_2      1      51.13 5542.1 570.13
## + V5_J2_7      1      50.99 5542.2 570.26
## + V30_J2_5     1      46.40 5546.8 574.57
## + V4_J2_4      1      45.60 5547.6 575.32
## + V12_1_2_J1_4 1      45.35 5547.8 575.56
## + V15_J1_5     1      44.29 5548.9 576.54
## + V14_J1_5     1      40.93 5552.3 579.69
## + V5_J1_5      1      40.51 5552.7 580.09
## + V16_J1_3     1      40.46 5552.7 580.13
## + V4_J2_1      1      39.94 5553.2 580.62
## + V3_J2_5      1      39.34 5553.8 581.18
## + V4_J2_2      1      39.09 5554.1 581.42
## + V12_1_2_J2_5 1      37.81 5555.4 582.61

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## + V30_J1_1	1	37.26	5555.9	583.13
## + V4_J2_3	1	36.84	5556.3	583.52
## + V13_1_J1_2	1	36.30	5556.9	584.03
## + V15_J1_3	1	35.72	5557.5	584.57
## + V17_J1_5	1	35.29	5557.9	584.97
## + V1_J1_3	1	35.17	5558.0	585.08
## + V3_J2_1	1	34.60	5558.6	585.62
## + V12_1_2_J2_4	1	34.30	5558.9	585.90
## + V3_J2_2	1	34.20	5559.0	585.99
## + V5_J2_2	1	33.96	5559.2	586.22
## + V3_J2_7	1	33.26	5559.9	586.87
## + V19_J2_2	1	31.34	5561.8	588.67
## + V14_J1_4	1	30.84	5562.3	589.13
## + V1_J1_5	1	30.76	5562.4	589.21
## + V16_J2_7	1	30.02	5563.2	589.90
## + V12_1_2_J2_3	1	29.14	5564.0	590.72
## + V5_J1_7	1	28.95	5564.2	590.90
## + V23_J2_1	1	28.86	5564.3	590.98
## + V13_1_J1_7	1	28.85	5564.3	591.00
## + V16_J2_4	1	27.85	5565.3	591.93
## + V26_J1_6	1	27.55	5565.6	592.21
## + V19_J2_3	1	26.48	5566.7	593.21
## + V12_1_2_J1_5	1	25.30	5567.9	594.31
## + V19_J2_7	1	25.24	5567.9	594.37
## + V14_J2_2	1	25.08	5568.1	594.52
## + V15_J1_4	1	24.80	5568.4	594.77
## + V30_J1_5	1	24.65	5568.5	594.92
## + V30_J1_6	1	24.64	5568.5	594.93
## + V4_J2_5	1	24.39	5568.8	595.16
## + V3_J1_2	1	24.11	5569.1	595.43
## + V13_1_J1_3	1	23.80	5569.4	595.71
## + V2_J2_2	1	23.78	5569.4	595.73
## + V1_J2_4	1	23.53	5569.7	595.97
## + V26_J2_7	1	22.93	5570.3	596.52
## + V30_J1_2	1	22.93	5570.3	596.53
## + V12_1_2_J1_2	1	22.43	5570.8	596.99
## + V13_3_J1_2	1	22.16	5571.0	597.25
## + V23_J2_7	1	22.05	5571.1	597.35
## + V29_J1_7	1	21.86	5571.3	597.53
## + V13_2_J1_4	1	21.73	5571.5	597.64
## + V2_J2_7	1	21.63	5571.6	597.73
## + V29_J1_1	1	20.92	5572.3	598.40
## + V4_J1_6	1	20.79	5572.4	598.52
## + V19_J1_3	1	20.77	5572.4	598.54
## + V4_J1_7	1	20.56	5572.6	598.74
## + V15_J2_5	1	20.28	5572.9	599.00
## + V2_J1_5	1	20.04	5573.1	599.22
## + V13_1_J2_4	1	19.90	5573.3	599.35
## + V26_J1_1	1	19.89	5573.3	599.36
## + V1_J1_4	1	19.83	5573.4	599.42
## + V20_J1_2	1	19.54	5573.6	599.69
## + V24_J1_1	1	19.24	5573.9	599.97
## + V14_J2_3	1	18.87	5574.3	600.32
## + V12_1_2_J2_1	1	18.60	5574.6	600.57

## + V13_3_J2_5	1	18.34	5574.8	600.81
## + V29_J1_5	1	18.24	5574.9	600.90
## + V23_J2_3	1	17.71	5575.5	601.39
## + V4_J1_2	1	17.11	5576.1	601.96
## + V23_J2_4	1	16.94	5576.2	602.11
## + V26_J1_7	1	16.50	5576.7	602.52
## + V17_J1_4	1	16.08	5577.1	602.91
## + V5_J1_1	1	15.71	5577.5	603.26
## + V13_2_J1_2	1	15.30	5577.9	603.65
## + V29_J1_3	1	15.17	5578.0	603.77
## + V29_J2_3	1	14.65	5578.5	604.25
## + V20_J1_4	1	14.52	5578.7	604.37
## + V2_J2_5	1	14.47	5578.7	604.42
## + V24_J2_3	1	14.45	5578.7	604.44
## + V29_J1_6	1	14.28	5578.9	604.60
## + V26_J1_3	1	14.17	5579.0	604.70
## + V26_J2_2	1	14.03	5579.2	604.83
## + V13_3_J1_6	1	13.68	5579.5	605.15
## + V20_J1_3	1	13.68	5579.5	605.16
## + V23_J2_5	1	13.61	5579.6	605.22
## + V12_1_2_J1_6	1	13.55	5579.6	605.27
## + V17_J2_3	1	13.48	5579.7	605.34
## + V12_1_2_J1_7	1	13.25	5579.9	605.55
## + V19_J1_7	1	12.96	5580.2	605.82
## + V3_J1_4	1	12.66	5580.5	606.11
## + V3_J1_1	1	12.56	5580.6	606.20
## + V3_J1_6	1	12.35	5580.8	606.39
## + V19_J1_6	1	11.94	5581.2	606.77
## + V3_J1_7	1	11.93	5581.3	606.79
## + V29_J1_4	1	11.80	5581.4	606.91
## + V14_J1_2	1	11.74	5581.4	606.96
## + V16_J2_5	1	11.58	5581.6	607.11
## + V20_J1_6	1	11.30	5581.9	607.37
## + V29_J1_2	1	11.29	5581.9	607.38
## + V17_J2_4	1	11.21	5582.0	607.45
## + V14_J1_3	1	11.13	5582.1	607.53
## + V2_J2_4	1	11.13	5582.1	607.53
## + V19_J1_2	1	11.03	5582.2	607.63
## + V4_J1_1	1	10.68	5582.5	607.95
## + V2_J1_4	1	10.60	5582.6	608.02
## + V2_J2_1	1	10.56	5582.6	608.06
## + V29_J2_1	1	10.25	5582.9	608.35
## + V17_J2_5	1	10.02	5583.2	608.56
## + V13_1_J2_5	1	9.85	5583.3	608.72
## + V30_J2_3	1	9.80	5583.4	608.77
## + V13_2_J1_3	1	9.60	5583.6	608.96
## + V1_J2_1	1	9.14	5584.0	609.38
## + V24_J1_2	1	8.61	5584.6	609.88
## + V15_J2_4	1	8.51	5584.7	609.97
## + V4_J1_3	1	8.30	5584.9	610.16
## + V12_1_2_J2_7	1	7.79	5585.4	610.64
## + V5_J2_3	1	7.55	5585.6	610.86
## + V20_J2_3	1	7.42	5585.8	610.99
## <none>			5593.2	611.25

## + V1_J2_3	1	7.11	5586.1	611.27
## + V16_J1_4	1	6.48	5586.7	611.86
## + V24_J2_4	1	6.36	5586.8	611.97
## + V20_J2_1	1	6.32	5586.9	612.01
## + V20_J2_5	1	5.96	5587.2	612.35
## + V12_1_2_J1_3	1	5.66	5587.5	612.63
## + V24_J2_5	1	5.43	5587.8	612.83
## + V13_2_J2_4	1	5.42	5587.8	612.84
## + V13_2_J1_1	1	5.39	5587.8	612.87
## + V14_J2_7	1	5.38	5587.8	612.88
## + V13_1_J2_1	1	5.36	5587.8	612.90
## + V19_J2_1	1	5.33	5587.9	612.93
## + V13_1_J1_4	1	5.30	5587.9	612.96
## + V5_J1_2	1	5.28	5587.9	612.98
## + V13_1_J1_5	1	5.12	5588.1	613.12
## + V13_1_J1_1	1	5.00	5588.2	613.24
## + V15_J1_7	1	4.88	5588.3	613.35
## + V29_J2_2	1	4.78	5588.4	613.44
## + V26_J1_2	1	4.67	5588.5	613.54
## + V1_J1_7	1	4.66	5588.5	613.56
## + V2_J2_3	1	4.65	5588.5	613.56
## + V16_J1_2	1	4.57	5588.6	613.64
## + V14_J1_7	1	4.56	5588.6	613.64
## + V13_1_J2_3	1	4.55	5588.6	613.65
## + V20_J1_5	1	3.99	5589.2	614.18
## + V1_J1_1	1	3.96	5589.2	614.20
## + V15_J1_1	1	3.94	5589.3	614.23
## + V13_3_J1_4	1	3.83	5589.4	614.32
## + V20_J2_4	1	3.80	5589.4	614.35
## + V5_J1_6	1	3.75	5589.4	614.40
## + V20_J1_7	1	3.74	5589.4	614.41
## + V16_J1_5	1	3.69	5589.5	614.46
## + V13_2_J2_2	1	3.69	5589.5	614.46
## + V30_J2_7	1	3.61	5589.6	614.53
## + V13_2_J1_5	1	3.57	5589.6	614.57
## + V23_J1_7	1	3.40	5589.8	614.73
## + V13_2_J2_7	1	3.31	5589.9	614.81
## + V29_J2_5	1	3.31	5589.9	614.81
## + V13_3_J1_3	1	3.16	5590.0	614.95
## + V17_J2_1	1	2.94	5590.3	615.16
## + V2_J1_1	1	2.92	5590.3	615.17
## + V13_3_J1_7	1	2.90	5590.3	615.19
## + V20_J2_7	1	2.87	5590.3	615.22
## + V24_J1_5	1	2.84	5590.3	615.25
## + V23_J1_1	1	2.69	5590.5	615.39
## + V15_J1_2	1	2.53	5590.7	615.54
## + V30_J1_7	1	2.44	5590.7	615.62
## + V15_J2_3	1	2.36	5590.8	615.70
## + V14_J1_1	1	2.32	5590.9	615.73
## + V13_1_J1_6	1	2.30	5590.9	615.75
## + V13_3_J1_1	1	2.26	5590.9	615.78
## + V14_J2_4	1	2.23	5591.0	615.81
## + V13_3_J2_3	1	2.19	5591.0	615.85
## + V26_J1_4	1	2.18	5591.0	615.86

## + V23_J1_6	1	2.18	5591.0	615.86
## + V29_J2_4	1	2.17	5591.0	615.87
## + V5_J2_1	1	2.17	5591.0	615.87
## + V17_J1_7	1	2.06	5591.1	615.97
## + V24_J1_4	1	1.86	5591.3	616.16
## + V13_2_J2_1	1	1.84	5591.3	616.18
## + V24_J1_7	1	1.83	5591.4	616.19
## + V2_J1_7	1	1.66	5591.5	616.34
## + V16_J2_3	1	1.44	5591.7	616.54
## + V24_J1_6	1	1.38	5591.8	616.61
## + V16_J2_1	1	1.35	5591.8	616.63
## + V13_1_J2_2	1	1.33	5591.9	616.65
## + V13_3_J2_1	1	1.27	5591.9	616.71
## + V4_J2_7	1	1.18	5592.0	616.79
## + V23_J1_5	1	1.17	5592.0	616.80
## + V14_J2_1	1	0.99	5592.2	616.97
## + V13_2_J2_3	1	0.87	5592.3	617.08
## + V14_J1_6	1	0.75	5592.4	617.19
## + V13_3_J2_4	1	0.69	5592.5	617.25
## + V2_J1_6	1	0.68	5592.5	617.26
## + V15_J2_1	1	0.65	5592.5	617.28
## + V24_J2_1	1	0.57	5592.6	617.36
## + V13_2_J1_6	1	0.52	5592.7	617.40
## + V23_J1_2	1	0.49	5592.7	617.43
## + V19_J1_1	1	0.49	5592.7	617.44
## + V16_J1_7	1	0.46	5592.7	617.46
## + V1_J2_5	1	0.45	5592.7	617.47
## + V13_1_J2_7	1	0.44	5592.7	617.48
## + V30_J2_1	1	0.43	5592.8	617.48
## + V26_J1_5	1	0.41	5592.8	617.51
## + V20_J1_1	1	0.41	5592.8	617.51
## + V30_J2_4	1	0.40	5592.8	617.52
## + V17_J1_6	1	0.39	5592.8	617.53
## + V13_3_J2_2	1	0.38	5592.8	617.54
## + V13_3_J2_7	1	0.35	5592.8	617.56
## + V3_J1_5	1	0.30	5592.9	617.61
## + V2_J1_2	1	0.27	5592.9	617.63
## + V15_J1_6	1	0.26	5592.9	617.64
## + V19_J2_5	1	0.25	5592.9	617.66
## + V17_J1_1	1	0.20	5593.0	617.70
## + V1_J1_2	1	0.18	5593.0	617.72
## + V24_J2_7	1	0.16	5593.0	617.74
## + V4_J1_4	1	0.09	5593.1	617.81
## + V5_J1_4	1	0.08	5593.1	617.81
## + V13_2_J2_5	1	0.07	5593.1	617.83
## + V16_J1_6	1	0.06	5593.1	617.83
## + V24_J1_3	1	0.04	5593.1	617.85
## + V24_J2_2	1	0.04	5593.2	617.85
## + V13_3_J1_5	1	0.03	5593.2	617.86
## + V14_J2_5	1	0.03	5593.2	617.86
## + V4_J1_5	1	0.02	5593.2	617.87
## + V17_J1_2	1	0.01	5593.2	617.88
## + V29_J2_7	1	0.01	5593.2	617.88
## + V23_J2_2	1	0.00	5593.2	617.88

```

## + V12_1_2_J1_1 1 0.00 5593.2 617.88
## + V16_J1_1 1 0.00 5593.2 617.88
## + V1_J1_6 1 0.00 5593.2 617.89
## + V30_J1_4 1 0.00 5593.2 617.89
## + V19_J2_4 1 0.00 5593.2 617.89
## + V23_J1_4 1 0.00 5593.2 617.89
## - V26_J2_3 1 200.31 5793.5 787.59
## - V20_J2_2 1 248.96 5842.1 831.07
## - V16_J2_2 1 397.92 5991.1 961.99
## - J 12 1633.63 7226.8 1864.13
## - V 19 2042.10 7635.3 2103.59
##
## Step: AIC=469.83
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4
##
## Df Sum of Sq RSS AIC
## + V5_J2_5 1 169.66 5266.5 311.59
## + V12_1_2_J2_2 1 148.03 5288.1 332.90
## + V30_J2_2 1 130.72 5305.5 349.90
## + V3_J2_3 1 92.09 5344.1 387.63
## + V26_J2_4 1 89.51 5346.7 390.13
## + V19_J1_4 1 89.34 5346.8 390.30
## + V26_J2_5 1 85.99 5350.2 393.55
## + V3_J2_4 1 84.51 5351.7 394.99
## + V13_2_J1_7 1 79.47 5356.7 399.88
## + V19_J1_5 1 76.58 5359.6 402.69
## + V1_J2_7 1 76.25 5359.9 403.01
## + V15_J2_2 1 73.89 5362.3 405.30
## + V2_J1_3 1 64.15 5372.0 414.74
## + V23_J1_3 1 63.65 5372.5 415.22
## + V26_J2_1 1 62.73 5373.4 416.11
## + V15_J2_7 1 61.10 5375.1 417.69
## + V17_J2_2 1 55.60 5380.6 423.01
## + V3_J1_3 1 55.52 5380.7 423.09
## + V5_J1_5 1 55.29 5380.9 423.31
## + V4_J2_4 1 55.11 5381.1 423.48
## + V17_J1_3 1 55.07 5381.1 423.52
## + V17_J2_7 1 52.82 5383.4 425.69
## + V5_J1_3 1 51.95 5384.2 426.53
## + V30_J1_3 1 51.74 5384.4 426.74
## + V1_J2_2 1 50.27 5385.9 428.16
## + V30_J2_5 1 47.14 5389.0 431.18
## + V12_1_2_J1_4 1 44.62 5391.6 433.61
## + V15_J1_5 1 43.58 5392.6 434.61
## + V14_J1_5 1 40.24 5395.9 437.83
## + V4_J2_2 1 39.86 5396.3 438.20
## + V16_J1_3 1 39.71 5396.5 438.34
## + V4_J2_1 1 39.26 5396.9 438.78
## + V3_J2_5 1 38.67 5397.5 439.34
## + V12_1_2_J2_5 1 38.48 5397.7 439.52
## + V30_J1_1 1 37.92 5398.3 440.06
## + V5_J2_7 1 37.42 5398.8 440.55
## + V15_J1_3 1 36.37 5399.8 441.56
## + V4_J2_3 1 36.15 5400.0 441.77

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## + V17_J1_5	1	35.94	5400.2	441.97
## + V13_1_J1_2	1	35.65	5400.5	442.25
## + V3_J2_2	1	34.92	5401.3	442.96
## + V1_J1_3	1	34.53	5401.6	443.33
## + V3_J2_1	1	33.97	5402.2	443.87
## + V3_J2_7	1	33.89	5402.3	443.95
## + V19_J2_2	1	32.03	5404.2	445.74
## + V1_J1_5	1	31.37	5404.8	446.37
## + V14_J1_4	1	30.24	5405.9	447.45
## + V12_1_2_J2_3	1	29.77	5406.4	447.91
## + V23_J2_1	1	29.45	5406.7	448.22
## + V16_J2_7	1	29.37	5406.8	448.29
## + V13_1_J1_7	1	28.27	5407.9	449.36
## + V26_J1_6	1	28.18	5408.0	449.44
## + V12_1_2_J2_4	1	27.08	5409.1	450.50
## + V19_J2_3	1	25.89	5410.3	451.64
## + V12_1_2_J1_5	1	25.85	5410.3	451.68
## + V19_J2_7	1	25.79	5410.4	451.74
## + V14_J2_2	1	25.70	5410.5	451.83
## + V30_J1_5	1	25.19	5411.0	452.31
## + V3_J1_2	1	24.64	5411.5	452.84
## + V13_1_J1_3	1	24.33	5411.8	453.14
## + V15_J1_4	1	24.27	5411.9	453.20
## + V30_J1_6	1	24.10	5412.1	453.36
## + V4_J2_5	1	23.86	5412.3	453.60
## + V26_J2_7	1	23.50	5412.7	453.94
## + V30_J1_2	1	23.45	5412.7	453.98
## + V2_J2_2	1	23.19	5413.0	454.23
## + V5_J2_2	1	23.07	5413.1	454.35
## + V12_1_2_J1_2	1	22.95	5413.2	454.47
## + V13_2_J1_4	1	22.24	5413.9	455.15
## + V13_3_J1_2	1	21.65	5414.5	455.72
## + V23_J2_7	1	21.54	5414.6	455.82
## + V16_J2_4	1	21.40	5414.8	455.95
## + V29_J1_7	1	21.35	5414.8	456.00
## + V4_J1_6	1	21.29	5414.9	456.06
## + V19_J1_3	1	21.27	5414.9	456.08
## + V2_J2_7	1	21.13	5415.0	456.21
## + V4_J1_7	1	21.05	5415.1	456.29
## + V2_J1_5	1	20.53	5415.6	456.79
## + V29_J1_1	1	20.43	5415.7	456.88
## + V26_J1_1	1	20.42	5415.8	456.89
## + V1_J1_4	1	20.31	5415.9	457.00
## + V15_J2_5	1	19.79	5416.4	457.50
## + V12_1_2_J2_1	1	19.07	5417.1	458.19
## + V20_J1_2	1	19.02	5417.2	458.24
## + V5_J1_7	1	18.93	5417.2	458.32
## + V13_3_J2_5	1	18.81	5417.4	458.44
## + V24_J1_1	1	18.77	5417.4	458.48
## + V29_J1_5	1	18.71	5417.5	458.54
## + V14_J2_3	1	18.37	5417.8	458.86
## + V23_J2_3	1	18.20	5418.0	459.03
## + V1_J2_4	1	17.61	5418.6	459.60
## + V4_J1_2	1	17.56	5418.6	459.64

## + V26_J1_7	1	16.99	5419.2	460.19
## + V17_J1_4	1	16.52	5419.7	460.64
## + V29_J2_3	1	15.09	5421.1	462.01
## + V20_J1_4	1	14.98	5421.2	462.12
## + V24_J2_3	1	14.89	5421.3	462.21
## + V2_J2_5	1	14.88	5421.3	462.21
## + V13_2_J1_2	1	14.88	5421.3	462.21
## + V29_J1_3	1	14.75	5421.4	462.34
## + V26_J1_3	1	14.62	5421.6	462.46
## + V26_J2_2	1	14.53	5421.7	462.55
## + V13_1_J2_4	1	14.48	5421.7	462.59
## + V5_J2_3	1	14.47	5421.7	462.60
## + V20_J1_3	1	14.12	5422.1	462.94
## + V23_J2_5	1	14.01	5422.2	463.05
## + V17_J2_3	1	13.91	5422.3	463.15
## + V29_J1_6	1	13.87	5422.3	463.18
## + V19_J1_7	1	13.35	5422.8	463.68
## + V13_3_J1_6	1	13.28	5422.9	463.74
## + V12_1_2_J1_6	1	13.15	5423.0	463.87
## + V3_J1_1	1	12.95	5423.2	464.06
## + V12_1_2_J1_7	1	12.86	5423.3	464.15
## + V15_J2_4	1	12.83	5423.3	464.18
## + V3_J1_6	1	12.73	5423.4	464.27
## + V19_J1_6	1	12.32	5423.9	464.67
## + V3_J1_7	1	12.30	5423.9	464.68
## + V3_J1_4	1	12.27	5423.9	464.71
## + V29_J1_4	1	12.17	5424.0	464.81
## + V14_J1_2	1	12.12	5424.1	464.86
## + V16_J2_5	1	11.99	5424.2	464.98
## + V23_J2_4	1	11.98	5424.2	465.00
## + V14_J1_3	1	11.50	5424.7	465.45
## + V19_J1_2	1	11.39	5424.8	465.56
## + V4_J1_1	1	11.04	5425.1	465.90
## + V2_J1_4	1	10.96	5425.2	465.97
## + V29_J1_2	1	10.93	5425.3	466.00
## + V2_J2_1	1	10.91	5425.3	466.02
## + V20_J1_6	1	10.91	5425.3	466.02
## + V29_J2_1	1	10.60	5425.6	466.32
## + V17_J2_5	1	10.37	5425.8	466.54
## + V13_1_J2_5	1	10.19	5426.0	466.71
## + V30_J2_3	1	10.16	5426.0	466.74
## + V13_2_J1_3	1	9.94	5426.2	466.95
## + V1_J2_1	1	9.47	5426.7	467.40
## + V4_J1_3	1	8.62	5427.6	468.21
## + V5_J1_1	1	8.58	5427.6	468.25
## + V24_J1_2	1	8.29	5427.9	468.53
## + V12_1_2_J2_7	1	7.49	5428.7	469.30
## + V1_J2_3	1	7.42	5428.8	469.36
## + V17_J2_4	1	7.25	5428.9	469.53
## + V2_J2_4	1	7.18	5429.0	469.59
## + V20_J2_3	1	7.08	5429.1	469.69
## <none>			5436.2	469.83
## + V16_J1_4	1	6.79	5429.4	469.97
## + V5_J2_1	1	6.38	5429.8	470.36

## + V20_J2_5	1	6.25	5429.9	470.48
## + V20_J2_1	1	6.02	5430.2	470.70
## + V14_J2_7	1	5.63	5430.5	471.07
## + V13_1_J2_1	1	5.62	5430.6	471.09
## + V13_1_J1_4	1	5.55	5430.6	471.15
## + V12_1_2_J1_3	1	5.40	5430.8	471.30
## + V24_J2_5	1	5.18	5431.0	471.50
## + V13_2_J1_1	1	5.14	5431.0	471.54
## + V15_J1_7	1	5.12	5431.1	471.56
## + V19_J2_1	1	5.08	5431.1	471.61
## + V29_J2_2	1	5.05	5431.1	471.63
## + V26_J1_2	1	4.93	5431.3	471.75
## + V2_J2_3	1	4.90	5431.3	471.77
## + V1_J1_7	1	4.89	5431.3	471.78
## + V13_1_J1_5	1	4.88	5431.3	471.80
## + V13_1_J2_3	1	4.80	5431.4	471.87
## + V14_J1_7	1	4.80	5431.4	471.87
## + V13_1_J1_1	1	4.76	5431.4	471.91
## + V14_J2_4	1	4.66	5431.5	472.01
## + V16_J1_2	1	4.32	5431.9	472.33
## + V20_J1_5	1	4.23	5432.0	472.42
## + V13_3_J1_4	1	4.05	5432.1	472.59
## + V13_2_J2_2	1	3.93	5432.3	472.71
## + V16_J1_5	1	3.92	5432.3	472.71
## + V1_J1_1	1	3.75	5432.4	472.88
## + V15_J1_1	1	3.72	5432.5	472.90
## + V20_J1_7	1	3.51	5432.7	473.10
## + V13_2_J2_7	1	3.51	5432.7	473.11
## + V29_J2_5	1	3.51	5432.7	473.11
## + V24_J2_4	1	3.47	5432.7	473.14
## + V30_J2_7	1	3.40	5432.8	473.21
## + V13_2_J1_5	1	3.36	5432.8	473.25
## + V13_3_J1_3	1	3.36	5432.8	473.25
## + V23_J1_7	1	3.20	5433.0	473.40
## + V17_J2_1	1	3.12	5433.1	473.48
## + V20_J2_7	1	3.07	5433.1	473.53
## + V13_2_J2_4	1	2.79	5433.4	473.79
## + V2_J1_1	1	2.74	5433.4	473.85
## + V13_3_J1_7	1	2.72	5433.5	473.87
## + V24_J1_5	1	2.66	5433.5	473.92
## + V23_J1_1	1	2.51	5433.7	474.06
## + V14_J1_1	1	2.49	5433.7	474.08
## + V13_3_J2_3	1	2.37	5433.8	474.20
## + V15_J1_2	1	2.36	5433.8	474.21
## + V30_J1_7	1	2.28	5433.9	474.29
## + V17_J1_7	1	2.22	5434.0	474.34
## + V15_J2_3	1	2.18	5434.0	474.38
## + V13_1_J1_6	1	2.14	5434.0	474.42
## + V13_3_J1_1	1	2.10	5434.1	474.46
## + V23_J1_6	1	2.02	5434.2	474.53
## + V24_J1_4	1	2.01	5434.2	474.54
## + V26_J1_4	1	2.01	5434.2	474.54
## + V13_2_J2_1	1	1.99	5434.2	474.56
## + V24_J1_7	1	1.98	5434.2	474.57

## + V20_J2_4	1	1.68	5434.5	474.86
## + V5_J1_2	1	1.58	5434.6	474.95
## + V2_J1_7	1	1.53	5434.7	475.00
## + V24_J1_6	1	1.51	5434.7	475.03
## + V16_J2_1	1	1.49	5434.7	475.04
## + V13_3_J2_1	1	1.39	5434.8	475.13
## + V16_J2_3	1	1.30	5434.9	475.22
## + V23_J1_5	1	1.29	5434.9	475.23
## + V13_1_J2_2	1	1.19	5435.0	475.32
## + V4_J2_7	1	1.07	5435.1	475.44
## + V13_2_J2_3	1	0.98	5435.2	475.53
## + V14_J2_1	1	0.88	5435.3	475.62
## + V14_J1_6	1	0.85	5435.3	475.65
## + V5_J1_6	1	0.80	5435.4	475.70
## + V2_J1_6	1	0.77	5435.4	475.73
## + V29_J2_4	1	0.66	5435.5	475.83
## + V24_J2_1	1	0.65	5435.5	475.84
## + V13_2_J1_6	1	0.60	5435.6	475.89
## + V5_J1_4	1	0.58	5435.6	475.91
## + V15_J2_1	1	0.57	5435.6	475.92
## + V19_J1_1	1	0.56	5435.6	475.93
## + V16_J1_7	1	0.54	5435.6	475.95
## + V1_J2_5	1	0.52	5435.7	475.97
## + V30_J2_1	1	0.51	5435.7	475.98
## + V23_J1_2	1	0.42	5435.8	476.07
## + V13_3_J2_7	1	0.42	5435.8	476.07
## + V19_J2_4	1	0.41	5435.8	476.07
## + V13_1_J2_7	1	0.37	5435.8	476.11
## + V26_J1_5	1	0.34	5435.8	476.14
## + V20_J1_1	1	0.34	5435.8	476.14
## + V17_J1_6	1	0.32	5435.9	476.16
## + V15_J1_6	1	0.32	5435.9	476.16
## + V13_3_J2_2	1	0.31	5435.9	476.17
## + V3_J1_5	1	0.24	5435.9	476.24
## + V1_J1_2	1	0.23	5435.9	476.24
## + V2_J1_2	1	0.22	5436.0	476.26
## + V24_J2_7	1	0.20	5436.0	476.27
## + V19_J2_5	1	0.20	5436.0	476.28
## + V17_J1_1	1	0.16	5436.0	476.31
## + V13_2_J2_5	1	0.10	5436.1	476.37
## + V16_J1_6	1	0.09	5436.1	476.38
## + V24_J2_2	1	0.06	5436.1	476.41
## + V4_J1_4	1	0.06	5436.1	476.41
## + V13_3_J1_5	1	0.06	5436.1	476.41
## + V14_J2_5	1	0.05	5436.1	476.42
## + V13_3_J2_4	1	0.03	5436.2	476.44
## + V24_J1_3	1	0.02	5436.2	476.44
## + V17_J1_2	1	0.02	5436.2	476.45
## + V29_J2_7	1	0.02	5436.2	476.45
## + V1_J1_6	1	0.01	5436.2	476.45
## + V30_J1_4	1	0.01	5436.2	476.46
## + V4_J1_5	1	0.01	5436.2	476.46
## + V23_J1_4	1	0.00	5436.2	476.46
## + V30_J2_4	1	0.00	5436.2	476.46

```

## + V16_J1_1      1      0.00 5436.2 476.47
## + V12_1_2_J1_1  1      0.00 5436.2 476.47
## + V23_J2_2      1      0.00 5436.2 476.47
## - V5_J2_4       1     157.01 5593.2 611.25
## - V26_J2_3      1     198.77 5634.9 649.93
## - V20_J2_2      1     247.14 5683.3 694.38
## - V16_J2_2      1     395.61 5831.8 828.48
## - J             12    1598.64 7034.8 1730.75
## - V             19    1917.20 7353.4 1914.60
##
## Step:  AIC=311.59
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5
##
##           Df Sum of Sq  RSS    AIC
## + V12_1_2_J2_2  1     146.36 5120.2  171.66
## + V30_J2_2      1     129.15 5137.4  189.12
## + V26_J2_5      1      99.36 5167.2  219.18
## + V3_J2_3       1      90.85 5175.7  227.74
## + V26_J2_4      1      89.43 5177.1  229.17
## + V19_J1_4      1      88.19 5178.3  230.41
## + V3_J2_4       1      84.53 5182.0  234.08
## + V13_2_J1_7    1      78.39 5188.1  240.24
## + V19_J1_5      1      75.52 5191.0  243.12
## + V1_J2_7       1      75.18 5191.3  243.45
## + V15_J2_2      1      75.08 5191.4  243.55
## + V5_J1_5       1      74.94 5191.6  243.70
## + V2_J1_3       1      63.17 5203.3  255.47
## + V23_J1_3      1      62.68 5203.8  255.96
## + V15_J2_7      1      62.07 5204.5  256.58
## + V26_J2_1      1      61.68 5204.8  256.96
## + V3_J1_3       1      56.44 5210.1  262.20
## + V4_J2_4       1      55.12 5211.4  263.51
## + V17_J2_2      1      54.58 5211.9  264.05
## + V17_J1_3      1      54.16 5212.4  264.46
## + V17_J2_7      1      51.94 5214.6  266.69
## + V30_J1_3      1      50.86 5215.7  267.76
## + V1_J2_2       1      49.30 5217.2  269.32
## + V3_J2_5       1      47.78 5218.7  270.83
## + V12_1_2_J1_4  1      43.81 5222.7  274.79
## + V15_J1_5      1      42.77 5223.7  275.82
## + V4_J2_2       1      40.73 5225.8  277.85
## + V14_J1_5      1      39.47 5227.0  279.10
## + V16_J1_3      1      38.87 5227.6  279.70
## + V30_J1_1      1      38.68 5227.8  279.89
## + V4_J2_1       1      38.49 5228.0  280.07
## + V30_J2_5      1      38.32 5228.2  280.25
## + V15_J1_3      1      37.12 5229.4  281.44
## + V17_J1_5      1      36.68 5229.8  281.88
## + V5_J1_3       1      36.57 5229.9  281.98
## + V3_J2_2       1      35.74 5230.8  282.81
## + V4_J2_3       1      35.38 5231.1  283.17
## + V13_1_J1_2    1      34.93 5231.6  283.62
## + V3_J2_7       1      34.61 5231.9  283.94
## + V1_J1_3       1      33.82 5232.7  284.72

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## + V3_J2_1	1	33.26	5233.3	285.28
## + V19_J2_2	1	32.81	5233.7	285.72
## + V1_J1_5	1	32.06	5234.5	286.47
## + V4_J2_5	1	31.09	5235.4	287.43
## + V12_1_2_J2_5	1	30.55	5236.0	287.97
## + V12_1_2_J2_3	1	30.48	5236.0	288.04
## + V23_J2_1	1	30.12	5236.4	288.40
## + V14_J1_4	1	29.58	5236.9	288.94
## + V26_J1_6	1	28.89	5237.6	289.62
## + V16_J2_7	1	28.65	5237.9	289.86
## + V13_1_J1_7	1	27.62	5238.9	290.88
## + V12_1_2_J2_4	1	27.07	5239.4	291.42
## + V12_1_2_J1_5	1	26.48	5240.0	292.01
## + V15_J2_5	1	26.42	5240.1	292.07
## + V19_J2_7	1	26.41	5240.1	292.08
## + V14_J2_2	1	26.40	5240.1	292.09
## + V30_J1_5	1	25.81	5240.7	292.68
## + V3_J1_2	1	25.25	5241.3	293.23
## + V19_J2_3	1	25.24	5241.3	293.24
## + V5_J2_3	1	25.08	5241.4	293.40
## + V13_1_J1_3	1	24.94	5241.6	293.54
## + V5_J2_7	1	24.53	5242.0	293.95
## + V26_J2_7	1	24.16	5242.4	294.32
## + V30_J1_2	1	24.05	5242.5	294.42
## + V15_J1_4	1	23.67	5242.8	294.80
## + V12_1_2_J1_2	1	23.54	5243.0	294.93
## + V30_J1_6	1	23.51	5243.0	294.96
## + V13_2_J1_4	1	22.82	5243.7	295.64
## + V2_J2_2	1	22.54	5244.0	295.92
## + V4_J1_6	1	21.86	5244.7	296.59
## + V19_J1_3	1	21.84	5244.7	296.61
## + V4_J1_7	1	21.62	5244.9	296.83
## + V16_J2_4	1	21.45	5245.1	297.00
## + V2_J1_5	1	21.09	5245.4	297.35
## + V13_3_J1_2	1	21.08	5245.4	297.36
## + V26_J1_1	1	21.03	5245.5	297.41
## + V23_J2_7	1	20.98	5245.5	297.47
## + V1_J1_4	1	20.87	5245.6	297.58
## + V29_J1_7	1	20.79	5245.7	297.65
## + V2_J2_7	1	20.57	5245.9	297.87
## + V29_J1_1	1	19.88	5246.6	298.55
## + V12_1_2_J2_1	1	19.61	5246.9	298.83
## + V29_J1_5	1	19.24	5247.3	299.19
## + V23_J2_3	1	18.76	5247.8	299.67
## + V20_J1_2	1	18.44	5248.1	299.98
## + V24_J1_1	1	18.24	5248.3	300.18
## + V4_J1_2	1	18.08	5248.4	300.34
## + V14_J2_3	1	17.82	5248.7	300.60
## + V1_J2_4	1	17.60	5248.9	300.82
## + V26_J1_7	1	17.54	5249.0	300.87
## + V17_J1_4	1	17.02	5249.5	301.39
## + V29_J2_3	1	15.60	5250.9	302.80
## + V20_J1_4	1	15.51	5251.0	302.89
## + V24_J2_3	1	15.39	5251.1	303.00

## + V26_J1_3	1	15.14	5251.4	303.25
## + V26_J2_2	1	15.10	5251.4	303.29
## + V20_J1_3	1	14.63	5251.9	303.76
## + V13_1_J2_4	1	14.48	5252.0	303.91
## + V13_2_J1_2	1	14.41	5252.1	303.98
## + V17_J2_3	1	14.39	5252.1	303.99
## + V29_J1_3	1	14.28	5252.2	304.10
## + V5_J2_1	1	13.89	5252.6	304.49
## + V19_J1_7	1	13.81	5252.7	304.57
## + V29_J1_6	1	13.42	5253.1	304.96
## + V3_J1_1	1	13.39	5253.1	304.98
## + V13_3_J2_5	1	13.38	5253.1	304.99
## + V5_J2_2	1	13.23	5253.3	305.15
## + V3_J1_6	1	13.17	5253.3	305.20
## + V13_3_J1_6	1	12.84	5253.7	305.53
## + V15_J2_4	1	12.84	5253.7	305.53
## + V19_J1_6	1	12.75	5253.8	305.61
## + V3_J1_7	1	12.74	5253.8	305.63
## + V12_1_2_J1_6	1	12.71	5253.8	305.65
## + V29_J1_4	1	12.60	5253.9	305.76
## + V14_J1_2	1	12.55	5254.0	305.82
## + V12_1_2_J1_7	1	12.42	5254.1	305.94
## + V23_J2_4	1	11.97	5254.5	306.39
## + V14_J1_3	1	11.92	5254.6	306.44
## + V3_J1_4	1	11.85	5254.7	306.51
## + V19_J1_2	1	11.81	5254.7	306.55
## + V4_J1_1	1	11.45	5255.1	306.91
## + V2_J1_4	1	11.37	5255.1	306.98
## + V2_J2_1	1	11.32	5255.2	307.03
## + V29_J2_1	1	11.00	5255.5	307.35
## + V30_J2_3	1	10.58	5255.9	307.77
## + V29_J1_2	1	10.53	5256.0	307.82
## + V20_J1_6	1	10.47	5256.1	307.88
## + V13_2_J1_3	1	10.33	5256.2	308.02
## + V5_J1_7	1	10.11	5256.4	308.23
## + V2_J2_5	1	10.10	5256.4	308.24
## + V1_J2_1	1	9.85	5256.7	308.48
## + V23_J2_5	1	9.38	5257.1	308.95
## + V4_J1_3	1	8.98	5257.5	309.35
## + V24_J2_5	1	8.79	5257.7	309.53
## + V24_J1_2	1	7.94	5258.6	310.37
## + V1_J2_3	1	7.78	5258.7	310.54
## + V16_J2_5	1	7.76	5258.8	310.55
## + V17_J2_4	1	7.24	5259.3	311.07
## + V2_J2_4	1	7.17	5259.3	311.13
## + V12_1_2_J2_7	1	7.16	5259.4	311.15
## + V16_J1_4	1	7.14	5259.4	311.16
## <none>			5266.5	311.59
## + V20_J2_3	1	6.71	5259.8	311.59
## + V17_J2_5	1	6.45	5260.1	311.85
## + V13_1_J2_5	1	6.31	5260.2	311.99
## + V14_J2_7	1	5.93	5260.6	312.36
## + V13_1_J2_1	1	5.91	5260.6	312.38
## + V13_1_J1_4	1	5.84	5260.7	312.45

## + V20_J2_1	1	5.70	5260.8	312.59
## + V15_J1_7	1	5.40	5261.1	312.88
## + V29_J2_2	1	5.37	5261.1	312.92
## + V26_J1_2	1	5.23	5261.3	313.05
## + V2_J2_3	1	5.19	5261.3	313.09
## + V1_J1_7	1	5.17	5261.4	313.12
## + V12_1_2_J1_3	1	5.12	5261.4	313.16
## + V13_1_J2_3	1	5.09	5261.4	313.19
## + V14_J1_7	1	5.07	5261.4	313.21
## + V13_2_J1_1	1	4.87	5261.7	313.41
## + V19_J2_1	1	4.81	5261.7	313.47
## + V14_J2_4	1	4.66	5261.9	313.62
## + V13_1_J1_5	1	4.61	5261.9	313.67
## + V20_J1_5	1	4.51	5262.0	313.77
## + V13_1_J1_1	1	4.49	5262.0	313.78
## + V13_3_J1_4	1	4.30	5262.2	313.98
## + V13_2_J2_2	1	4.20	5262.3	314.07
## + V16_J1_5	1	4.19	5262.3	314.08
## + V16_J1_2	1	4.04	5262.5	314.23
## + V5_J1_4	1	3.81	5262.7	314.46
## + V13_2_J2_7	1	3.74	5262.8	314.52
## + V13_3_J1_3	1	3.59	5262.9	314.68
## + V1_J1_1	1	3.51	5263.0	314.75
## + V15_J1_1	1	3.49	5263.0	314.77
## + V24_J2_4	1	3.47	5263.0	314.80
## + V17_J2_1	1	3.35	5263.2	314.92
## + V20_J2_5	1	3.32	5263.2	314.94
## + V20_J2_7	1	3.31	5263.2	314.95
## + V20_J1_7	1	3.27	5263.3	315.00
## + V30_J2_7	1	3.18	5263.3	315.08
## + V13_2_J1_5	1	3.14	5263.4	315.12
## + V5_J1_1	1	3.06	5263.5	315.19
## + V23_J1_7	1	2.99	5263.5	315.27
## + V13_2_J2_4	1	2.79	5263.7	315.47
## + V14_J1_1	1	2.69	5263.8	315.56
## + V13_3_J2_3	1	2.57	5263.9	315.68
## + V2_J1_1	1	2.54	5264.0	315.71
## + V13_3_J1_7	1	2.52	5264.0	315.73
## + V24_J1_5	1	2.46	5264.1	315.79
## + V17_J1_7	1	2.40	5264.1	315.85
## + V23_J1_1	1	2.32	5264.2	315.93
## + V24_J1_4	1	2.19	5264.3	316.06
## + V15_J1_2	1	2.17	5264.3	316.08
## + V13_2_J2_1	1	2.17	5264.3	316.08
## + V24_J1_7	1	2.15	5264.4	316.09
## + V30_J1_7	1	2.09	5264.4	316.15
## + V15_J2_3	1	2.00	5264.5	316.25
## + V13_1_J1_6	1	1.96	5264.6	316.28
## + V13_3_J1_1	1	1.93	5264.6	316.32
## + V23_J1_6	1	1.85	5264.7	316.39
## + V26_J1_4	1	1.82	5264.7	316.42
## + V20_J2_4	1	1.69	5264.8	316.55
## + V24_J1_6	1	1.66	5264.9	316.58
## + V16_J2_1	1	1.66	5264.9	316.58

## + V13_3_J2_1	1	1.54	5265.0	316.70
## + V23_J1_5	1	1.43	5265.1	316.81
## + V29_J2_5	1	1.42	5265.1	316.82
## + V2_J1_7	1	1.38	5265.1	316.86
## + V19_J2_5	1	1.28	5265.2	316.96
## + V16_J2_3	1	1.14	5265.4	317.10
## + V13_2_J2_3	1	1.12	5265.4	317.12
## + V13_1_J2_2	1	1.05	5265.5	317.19
## + V14_J1_6	1	0.97	5265.6	317.27
## + V4_J2_7	1	0.95	5265.6	317.29
## + V2_J1_6	1	0.88	5265.6	317.35
## + V14_J2_1	1	0.77	5265.7	317.46
## + V24_J2_1	1	0.76	5265.8	317.48
## + V13_2_J1_6	1	0.70	5265.8	317.53
## + V29_J2_4	1	0.66	5265.9	317.57
## + V19_J1_1	1	0.66	5265.9	317.57
## + V16_J1_7	1	0.65	5265.9	317.58
## + V30_J2_1	1	0.60	5265.9	317.63
## + V13_3_J2_7	1	0.50	5266.0	317.73
## + V15_J2_1	1	0.48	5266.0	317.75
## + V19_J2_4	1	0.41	5266.1	317.81
## + V15_J1_6	1	0.39	5266.1	317.83
## + V23_J1_2	1	0.34	5266.2	317.89
## + V13_1_J2_7	1	0.30	5266.2	317.92
## + V1_J1_2	1	0.29	5266.2	317.93
## + V26_J1_5	1	0.27	5266.3	317.96
## + V20_J1_1	1	0.26	5266.3	317.96
## + V24_J2_7	1	0.26	5266.3	317.96
## + V17_J1_6	1	0.26	5266.3	317.97
## + V13_3_J2_2	1	0.24	5266.3	317.99
## + V14_J2_5	1	0.21	5266.3	318.01
## + V3_J1_5	1	0.18	5266.3	318.04
## + V2_J1_2	1	0.17	5266.4	318.06
## + V13_2_J2_5	1	0.14	5266.4	318.08
## + V16_J1_6	1	0.14	5266.4	318.08
## + V17_J1_1	1	0.11	5266.4	318.11
## + V24_J2_2	1	0.10	5266.4	318.12
## + V13_3_J1_5	1	0.09	5266.4	318.13
## + V5_J1_6	1	0.09	5266.4	318.14
## + V17_J1_2	1	0.04	5266.5	318.18
## + V29_J2_7	1	0.04	5266.5	318.18
## + V4_J1_4	1	0.03	5266.5	318.19
## + V13_3_J2_4	1	0.03	5266.5	318.19
## + V1_J1_6	1	0.03	5266.5	318.19
## + V30_J1_4	1	0.03	5266.5	318.20
## + V23_J1_4	1	0.01	5266.5	318.21
## + V24_J1_3	1	0.01	5266.5	318.21
## + V16_J1_1	1	0.01	5266.5	318.22
## + V5_J1_2	1	0.01	5266.5	318.22
## + V23_J2_2	1	0.00	5266.5	318.22
## + V12_1_2_J1_1	1	0.00	5266.5	318.22
## + V4_J1_5	1	0.00	5266.5	318.22
## + V1_J2_5	1	0.00	5266.5	318.22
## + V30_J2_4	1	0.00	5266.5	318.22

```

## - V5_J2_5      1      169.66 5436.2 469.83
## - V5_J2_4      1      184.22 5450.7 483.74
## - V26_J2_3     1      197.03 5463.5 495.94
## - V20_J2_2     1      245.09 5511.6 541.48
## - V16_J2_2     1      393.01 5659.5 679.20
## - J            12     1570.23 6836.7 1588.87
## - V            19     1823.83 7090.3 1731.82
##
## Step:  AIC=171.66
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##       V12_1_2_J2_2
##
##           Df Sum of Sq  RSS    AIC
## + V30_J2_2      1    146.36 4973.8   27.49
## + V26_J2_5      1     98.02 5022.1   77.78
## + V3_J2_3       1     89.68 5030.5   86.41
## + V26_J2_4      1     88.16 5032.0   87.98
## + V19_J1_4      1     87.10 5033.1   89.08
## + V3_J2_4       1     83.40 5036.8   92.90
## + V13_2_J1_7    1     77.36 5042.8   99.13
## + V19_J1_5      1     74.51 5045.6  102.07
## + V1_J2_7       1     74.18 5046.0  102.41
## + V5_J1_5       1     73.73 5046.4  102.87
## + V17_J2_2      1     65.84 5054.3  110.99
## + V15_J2_2      1     63.46 5056.7  113.44
## + V15_J2_7      1     62.99 5057.2  113.93
## + V2_J1_3       1     62.25 5057.9  114.68
## + V23_J1_3      1     61.76 5058.4  115.19
## + V26_J2_1      1     60.69 5059.5  116.29
## + V1_J2_2       1     60.02 5060.1  116.98
## + V12_1_2_J1_4  1     58.54 5061.6  118.50
## + V3_J1_3       1     57.32 5062.8  119.76
## + V4_J2_4       1     54.21 5065.9  122.95
## + V17_J1_3      1     53.31 5066.8  123.87
## + V17_J2_7      1     51.10 5069.1  126.14
## + V30_J1_3      1     50.03 5070.1  127.23
## + V3_J2_5       1     46.92 5073.2  130.42
## + V15_J1_5      1     42.01 5078.1  135.45
## + V30_J1_1      1     39.41 5080.7  138.11
## + V30_J2_5      1     39.09 5081.1  138.44
## + V16_J1_3      1     38.88 5081.3  138.66
## + V14_J1_5      1     38.74 5081.4  138.80
## + V15_J1_3      1     37.83 5082.3  139.73
## + V4_J2_1       1     37.77 5082.4  139.79
## + V5_J1_3       1     37.43 5082.7  140.14
## + V17_J1_5      1     37.39 5082.8  140.18
## + V3_J2_7       1     35.30 5084.9  142.32
## + V4_J2_3       1     34.65 5085.5  142.99
## + V13_1_J1_2    1     34.24 5085.9  143.40
## + V1_J1_3       1     33.14 5087.0  144.53
## + V1_J1_5       1     32.72 5087.4  144.95
## + V3_J2_1       1     32.59 5087.6  145.09
## + V4_J2_2       1     32.26 5087.9  145.43
## + V23_J2_1      1     30.76 5089.4  146.96

```

## + V4_J2_5	1	30.40	5089.7	147.32
## + V2_J2_2	1	29.91	5090.2	147.83
## + V26_J1_6	1	29.58	5090.6	148.17
## + V14_J1_4	1	28.94	5091.2	148.81
## + V16_J2_7	1	28.66	5091.5	149.10
## + V3_J2_2	1	27.82	5092.3	149.96
## + V19_J2_7	1	27.02	5093.1	150.78
## + V13_1_J1_7	1	27.01	5093.1	150.79
## + V30_J1_5	1	26.41	5093.7	151.41
## + V3_J1_2	1	25.84	5094.3	151.98
## + V15_J2_5	1	25.79	5094.4	152.04
## + V13_1_J1_3	1	25.53	5094.6	152.30
## + V19_J2_2	1	25.24	5094.9	152.59
## + V5_J2_7	1	25.23	5094.9	152.61
## + V26_J2_7	1	24.79	5095.4	153.06
## + V30_J1_2	1	24.63	5095.5	153.22
## + V19_J2_3	1	24.62	5095.5	153.23
## + V5_J2_3	1	24.35	5095.8	153.50
## + V13_2_J1_4	1	23.38	5096.8	154.49
## + V15_J1_4	1	23.11	5097.0	154.78
## + V30_J1_6	1	22.94	5097.2	154.94
## + V4_J1_6	1	22.41	5097.7	155.49
## + V19_J1_3	1	22.39	5097.8	155.50
## + V4_J1_7	1	22.16	5098.0	155.74
## + V2_J1_5	1	21.63	5098.5	156.28
## + V26_J1_1	1	21.62	5098.5	156.29
## + V16_J2_4	1	21.47	5098.7	156.44
## + V1_J1_4	1	21.40	5098.7	156.51
## + V12_1_2_J1_6	1	21.05	5099.1	156.87
## + V12_1_2_J1_7	1	20.67	5099.5	157.26
## + V12_1_2_J2_5	1	20.60	5099.6	157.33
## + V13_3_J1_2	1	20.55	5099.6	157.38
## + V12_1_2_J2_3	1	20.54	5099.6	157.39
## + V23_J2_7	1	20.45	5099.7	157.48
## + V29_J1_7	1	20.26	5099.9	157.68
## + V2_J2_7	1	20.05	5100.1	157.89
## + V29_J1_5	1	19.76	5100.4	158.19
## + V14_J2_2	1	19.65	5100.5	158.30
## + V29_J1_1	1	19.37	5100.8	158.59
## + V23_J2_3	1	19.30	5100.9	158.66
## + V4_J1_2	1	18.58	5101.6	159.39
## + V20_J1_2	1	18.45	5101.7	159.52
## + V1_J2_4	1	18.12	5102.0	159.85
## + V26_J1_7	1	18.08	5102.1	159.90
## + V12_1_2_J2_4	1	17.75	5102.4	160.23
## + V24_J1_1	1	17.74	5102.4	160.24
## + V17_J1_4	1	17.51	5102.6	160.48
## + V14_J2_3	1	17.30	5102.8	160.69
## + V12_1_2_J1_5	1	17.26	5102.9	160.74
## + V29_J2_3	1	16.09	5104.1	161.93
## + V24_J2_3	1	15.88	5104.3	162.14
## + V26_J1_3	1	15.64	5104.5	162.39
## + V20_J1_4	1	15.50	5104.7	162.53
## + V13_1_J2_4	1	14.95	5105.2	163.08

## + V12_1_2_J1_2	1	14.89	5105.3	163.15
## + V17_J2_3	1	14.87	5105.3	163.17
## + V20_J1_3	1	14.62	5105.5	163.42
## + V19_J1_7	1	14.24	5105.9	163.81
## + V13_2_J1_2	1	13.97	5106.2	164.09
## + V29_J1_3	1	13.84	5106.3	164.22
## + V13_3_J2_5	1	13.84	5106.3	164.22
## + V3_J1_1	1	13.82	5106.3	164.23
## + V12_1_2_J2_7	1	13.65	5106.5	164.42
## + V3_J1_6	1	13.60	5106.6	164.46
## + V5_J2_1	1	13.37	5106.8	164.70
## + V19_J1_6	1	13.18	5107.0	164.90
## + V3_J1_7	1	13.16	5107.0	164.91
## + V29_J1_4	1	13.02	5107.1	165.05
## + V29_J1_6	1	12.99	5107.2	165.08
## + V14_J1_2	1	12.96	5107.2	165.11
## + V13_3_J1_6	1	12.43	5107.7	165.66
## + V23_J2_4	1	12.40	5107.7	165.68
## + V15_J2_4	1	12.40	5107.8	165.69
## + V14_J1_3	1	12.32	5107.8	165.76
## + V19_J1_2	1	12.21	5107.9	165.88
## + V4_J1_1	1	11.84	5108.3	166.25
## + V12_1_2_J2_1	1	11.79	5108.4	166.31
## + V2_J1_4	1	11.77	5108.4	166.33
## + V2_J2_1	1	11.72	5108.4	166.38
## + V3_J1_4	1	11.45	5108.7	166.65
## + V29_J2_1	1	11.39	5108.8	166.71
## + V30_J2_3	1	10.99	5109.2	167.13
## + V12_1_2_J1_3	1	10.76	5109.4	167.36
## + V13_2_J1_3	1	10.71	5109.4	167.41
## + V5_J1_7	1	10.56	5109.6	167.56
## + V2_J2_5	1	10.50	5109.7	167.62
## + V20_J1_6	1	10.47	5109.7	167.65
## + V1_J2_1	1	10.22	5109.9	167.90
## + V29_J1_2	1	10.15	5110.0	167.97
## + V26_J2_2	1	10.12	5110.0	168.00
## + V23_J2_5	1	9.77	5110.4	168.36
## + V4_J1_3	1	9.34	5110.8	168.80
## + V5_J2_2	1	8.62	5111.5	169.54
## + V24_J2_5	1	8.43	5111.7	169.73
## + V1_J2_3	1	8.12	5112.0	170.04
## + V16_J2_5	1	7.78	5112.4	170.39
## + V24_J1_2	1	7.62	5112.5	170.55
## + V17_J2_4	1	7.58	5112.6	170.59
## + V2_J2_4	1	7.51	5112.6	170.66
## + V16_J1_4	1	7.14	5113.0	171.04
## + V17_J2_5	1	6.77	5113.4	171.42
## + V20_J2_3	1	6.70	5113.5	171.49
## + V13_1_J2_5	1	6.63	5113.5	171.56
## <none>			5120.2	171.66
## + V14_J2_7	1	6.22	5113.9	171.98
## + V13_1_J2_1	1	6.20	5114.0	172.00
## + V13_1_J1_4	1	6.13	5114.0	172.07
## + V20_J2_1	1	5.70	5114.5	172.50

## + V15_J1_7	1	5.68	5114.5	172.53
## + V26_J1_2	1	5.53	5114.6	172.68
## + V2_J2_3	1	5.48	5114.7	172.73
## + V1_J1_7	1	5.44	5114.7	172.77
## + V13_1_J2_3	1	5.37	5114.8	172.84
## + V14_J1_7	1	5.34	5114.8	172.87
## + V13_2_J1_1	1	4.61	5115.5	173.61
## + V19_J2_1	1	4.55	5115.6	173.67
## + V13_3_J1_4	1	4.54	5115.6	173.68
## + V20_J1_5	1	4.51	5115.6	173.71
## + V14_J2_4	1	4.40	5115.8	173.83
## + V13_1_J1_5	1	4.36	5115.8	173.86
## + V13_1_J1_1	1	4.25	5115.9	173.98
## + V16_J1_5	1	4.19	5116.0	174.04
## + V16_J1_2	1	4.05	5116.1	174.18
## + V13_2_J2_7	1	3.97	5116.2	174.26
## + V13_3_J1_3	1	3.81	5116.3	174.42
## + V24_J2_4	1	3.70	5116.4	174.53
## + V17_J2_1	1	3.56	5116.6	174.68
## + V5_J1_4	1	3.54	5116.6	174.70
## + V20_J2_5	1	3.33	5116.8	174.91
## + V5_J1_1	1	3.32	5116.8	174.93
## + V20_J2_7	1	3.31	5116.8	174.93
## + V1_J1_1	1	3.30	5116.9	174.94
## + V15_J1_1	1	3.28	5116.9	174.97
## + V20_J1_7	1	3.27	5116.9	174.97
## + V13_1_J2_2	1	3.02	5117.1	175.22
## + V13_2_J2_4	1	3.00	5117.2	175.25
## + V30_J2_7	1	2.98	5117.2	175.27
## + V13_2_J1_5	1	2.94	5117.2	175.31
## + V14_J1_1	1	2.88	5117.3	175.36
## + V23_J1_7	1	2.79	5117.4	175.46
## + V13_3_J2_3	1	2.77	5117.4	175.48
## + V17_J1_7	1	2.59	5117.6	175.67
## + V29_J2_2	1	2.58	5117.6	175.67
## + V24_J1_4	1	2.36	5117.8	175.89
## + V2_J1_1	1	2.36	5117.8	175.90
## + V13_2_J2_1	1	2.34	5117.8	175.91
## + V13_3_J1_7	1	2.34	5117.8	175.92
## + V24_J1_7	1	2.33	5117.8	175.93
## + V24_J1_5	1	2.28	5117.9	175.98
## + V23_J1_1	1	2.15	5118.0	176.11
## + V15_J1_2	1	2.00	5118.1	176.26
## + V30_J1_7	1	1.93	5118.2	176.33
## + V15_J2_3	1	1.83	5118.3	176.44
## + V24_J1_6	1	1.81	5118.3	176.45
## + V13_1_J1_6	1	1.80	5118.4	176.46
## + V13_2_J2_2	1	1.80	5118.4	176.47
## + V13_3_J1_1	1	1.77	5118.4	176.50
## + V23_J1_6	1	1.70	5118.5	176.57
## + V20_J2_4	1	1.70	5118.5	176.57
## + V13_3_J2_1	1	1.69	5118.5	176.58
## + V16_J2_1	1	1.66	5118.5	176.61
## + V26_J1_4	1	1.65	5118.5	176.61

## + V23_J1_5	1	1.57	5118.6	176.70
## + V29_J2_5	1	1.57	5118.6	176.70
## + V13_3_J2_2	1	1.44	5118.7	176.83
## + V13_2_J2_3	1	1.25	5118.9	177.02
## + V2_J1_7	1	1.25	5118.9	177.03
## + V19_J2_5	1	1.14	5119.0	177.14
## + V16_J2_3	1	1.14	5119.0	177.14
## + V14_J1_6	1	1.09	5119.1	177.19
## + V2_J1_6	1	0.99	5119.2	177.29
## + V12_1_2_J1_1	1	0.91	5119.2	177.37
## + V24_J2_1	1	0.86	5119.3	177.42
## + V4_J2_7	1	0.84	5119.3	177.44
## + V13_2_J1_6	1	0.80	5119.4	177.48
## + V29_J2_4	1	0.77	5119.4	177.52
## + V19_J1_1	1	0.76	5119.4	177.52
## + V30_J2_1	1	0.69	5119.5	177.59
## + V14_J2_1	1	0.67	5119.5	177.61
## + V16_J1_7	1	0.65	5119.5	177.64
## + V13_3_J2_7	1	0.58	5119.6	177.70
## + V15_J1_6	1	0.47	5119.7	177.82
## + V23_J2_2	1	0.42	5119.7	177.87
## + V15_J2_1	1	0.40	5119.8	177.89
## + V1_J1_2	1	0.36	5119.8	177.93
## + V19_J2_4	1	0.34	5119.8	177.95
## + V24_J2_7	1	0.33	5119.8	177.96
## + V23_J1_2	1	0.28	5119.9	178.01
## + V20_J1_1	1	0.26	5119.9	178.03
## + V13_1_J2_7	1	0.24	5119.9	178.05
## + V26_J1_5	1	0.20	5119.9	178.09
## + V17_J1_6	1	0.20	5120.0	178.09
## + V14_J2_5	1	0.16	5120.0	178.13
## + V24_J2_2	1	0.16	5120.0	178.14
## + V16_J1_6	1	0.14	5120.0	178.15
## + V3_J1_5	1	0.14	5120.0	178.16
## + V13_3_J1_5	1	0.13	5120.0	178.17
## + V2_J1_2	1	0.12	5120.0	178.17
## + V13_2_J2_5	1	0.10	5120.1	178.20
## + V17_J1_1	1	0.08	5120.1	178.22
## + V17_J1_2	1	0.07	5120.1	178.22
## + V29_J2_7	1	0.06	5120.1	178.23
## + V13_3_J2_4	1	0.05	5120.1	178.24
## + V1_J1_6	1	0.05	5120.1	178.24
## + V30_J1_4	1	0.05	5120.1	178.24
## + V5_J1_6	1	0.05	5120.1	178.24
## + V23_J1_4	1	0.03	5120.1	178.27
## + V5_J1_2	1	0.02	5120.1	178.27
## + V4_J1_4	1	0.02	5120.1	178.28
## + V1_J2_5	1	0.01	5120.1	178.28
## + V16_J1_1	1	0.01	5120.1	178.29
## + V24_J1_3	1	0.00	5120.2	178.29
## + V30_J2_4	1	0.00	5120.2	178.29
## + V4_J1_5	1	0.00	5120.2	178.29
## - V12_1_2_J2_2	1	146.36	5266.5	311.59
## - V5_J2_5	1	167.99	5288.1	332.90

```

## - V5_J2_4      1      182.48 5302.6 347.13
## - V26_J2_3     1      195.39 5315.5 359.76
## - V20_J2_2     1      265.82 5386.0 428.21
## - V16_J2_2     1      418.89 5539.0 573.94
## - J            12     1600.33 6720.5 1506.31
## - V            19     1834.70 6954.9 1638.12
##
## Step:  AIC=27.49
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##       V12_1_2_J2_2 + V30_J2_2
##
##
##           Df Sum of Sq    RSS      AIC
## + V26_J2_5      1      96.61 4877.2  -67.88
## + V3_J2_3       1      88.44 4885.4  -59.18
## + V26_J2_4      1      86.82 4887.0  -57.45
## + V19_J1_4      1      85.95 4887.8  -56.52
## + V3_J2_4       1      82.20 4891.6  -52.54
## + V17_J2_2      1      79.01 4894.8  -49.15
## + V13_2_J1_7    1      76.28 4897.5  -46.24
## + V19_J1_5      1      73.44 4900.3  -43.24
## + V1_J2_7       1      73.12 4900.7  -42.89
## + V1_J2_2       1      72.61 4901.2  -42.35
## + V5_J1_5       1      72.46 4901.3  -42.20
## + V30_J1_3      1      65.71 4908.1  -35.03
## + V15_J2_7      1      63.98 4909.8  -33.20
## + V2_J1_3       1      61.28 4912.5  -30.35
## + V23_J1_3      1      60.80 4913.0  -29.83
## + V26_J2_1      1      59.64 4914.2  -28.61
## + V12_1_2_J1_4  1      58.56 4915.2  -27.46
## + V3_J1_3       1      58.26 4915.5  -27.15
## + V4_J2_4       1      53.24 4920.6  -21.84
## + V17_J1_3      1      52.41 4921.4  -20.97
## + V15_J2_2      1      52.17 4921.6  -20.72
## + V17_J2_7      1      50.22 4923.6  -18.65
## + V3_J2_5       1      46.03 4927.8  -14.22
## + V15_J1_5      1      41.22 4932.6   -9.15
## + V2_J2_2       1      38.92 4934.9   -6.73
## + V16_J1_3      1      38.89 4934.9   -6.70
## + V15_J1_3      1      38.60 4935.2   -6.39
## + V5_J1_3       1      38.35 4935.4   -6.12
## + V17_J1_5      1      38.15 4935.6   -5.92
## + V14_J1_5      1      37.98 4935.8   -5.74
## + V4_J2_1       1      37.02 4936.8   -4.73
## + V3_J2_7       1      36.04 4937.8   -3.69
## + V4_J2_3       1      33.88 4939.9   -1.42
## + V30_J1_6      1      33.81 4940.0   -1.35
## + V13_1_J1_2    1      33.52 4940.3   -1.04
## + V1_J1_5       1      33.44 4940.4   -0.95
## + V1_J1_3       1      32.43 4941.4    0.10
## + V3_J2_1       1      31.89 4941.9    0.67
## + V23_J2_1      1      31.45 4942.3    1.13
## + V26_J1_6      1      30.32 4943.5    2.32
## + V4_J2_5       1      29.68 4944.1    2.99
## + V16_J2_7      1      28.67 4945.1    4.06

```

## + V14_J1_4	1	28.28	4945.5	4.47
## + V30_J1_1	1	28.00	4945.8	4.76
## + V30_J2_5	1	27.76	4946.0	5.02
## + V19_J2_7	1	27.66	4946.1	5.12
## + V3_J1_2	1	26.48	4947.3	6.36
## + V13_1_J1_7	1	26.37	4947.4	6.48
## + V13_1_J1_3	1	26.16	4947.6	6.70
## + V5_J2_7	1	25.98	4947.8	6.88
## + V26_J2_7	1	25.46	4948.3	7.43
## + V15_J2_5	1	25.12	4948.7	7.79
## + V4_J2_2	1	24.32	4949.5	8.63
## + V13_2_J1_4	1	23.99	4949.8	8.98
## + V19_J2_3	1	23.98	4949.8	8.99
## + V5_J2_3	1	23.59	4950.2	9.40
## + V4_J1_6	1	23.00	4950.8	10.02
## + V19_J1_3	1	22.98	4950.8	10.04
## + V4_J1_7	1	22.75	4951.0	10.28
## + V15_J1_4	1	22.51	4951.3	10.53
## + V26_J1_1	1	22.25	4951.5	10.80
## + V2_J1_5	1	22.21	4951.6	10.85
## + V1_J1_4	1	21.98	4951.8	11.09
## + V16_J2_4	1	21.50	4952.3	11.59
## + V12_1_2_J1_6	1	21.06	4952.7	12.06
## + V12_1_2_J1_7	1	20.68	4953.1	12.45
## + V12_1_2_J2_5	1	20.63	4953.2	12.51
## + V12_1_2_J2_3	1	20.57	4953.2	12.57
## + V3_J2_2	1	20.49	4953.3	12.66
## + V29_J1_5	1	20.31	4953.5	12.84
## + V13_3_J1_2	1	19.99	4953.8	13.17
## + V23_J2_7	1	19.89	4953.9	13.28
## + V23_J2_3	1	19.88	4953.9	13.30
## + V29_J1_7	1	19.71	4954.1	13.47
## + V2_J2_7	1	19.50	4954.3	13.69
## + V4_J1_2	1	19.12	4954.7	14.10
## + V29_J1_1	1	18.83	4955.0	14.40
## + V1_J2_4	1	18.69	4955.1	14.54
## + V26_J1_7	1	18.66	4955.1	14.57
## + V20_J1_2	1	18.46	4955.3	14.79
## + V19_J2_2	1	18.28	4955.5	14.97
## + V17_J1_4	1	18.03	4955.8	15.24
## + V12_1_2_J2_4	1	17.78	4956.0	15.50
## + V12_1_2_J1_5	1	17.25	4956.5	16.06
## + V24_J1_1	1	17.23	4956.6	16.08
## + V30_J1_5	1	17.21	4956.6	16.10
## + V14_J2_3	1	16.76	4957.0	16.56
## + V29_J2_3	1	16.62	4957.2	16.72
## + V24_J2_3	1	16.41	4957.4	16.94
## + V26_J1_3	1	16.18	4957.6	17.18
## + V30_J1_2	1	15.77	4958.0	17.60
## + V20_J1_4	1	15.49	4958.3	17.90
## + V13_1_J2_4	1	15.47	4958.3	17.92
## + V17_J2_3	1	15.38	4958.4	18.02
## + V12_1_2_J1_2	1	14.89	4958.9	18.54
## + V19_J1_7	1	14.71	4959.1	18.71

## + V20_J1_3	1	14.62	4959.2	18.82
## + V13_3_J2_5	1	14.34	4959.5	19.11
## + V3_J1_1	1	14.29	4959.5	19.16
## + V3_J1_6	1	14.06	4959.7	19.40
## + V12_1_2_J2_7	1	13.65	4960.1	19.83
## + V19_J1_6	1	13.63	4960.2	19.85
## + V3_J1_7	1	13.61	4960.2	19.87
## + V14_J2_2	1	13.57	4960.2	19.92
## + V13_2_J1_2	1	13.51	4960.3	19.98
## + V29_J1_4	1	13.47	4960.3	20.02
## + V14_J1_2	1	13.41	4960.4	20.08
## + V29_J1_3	1	13.39	4960.4	20.11
## + V23_J2_4	1	12.87	4960.9	20.65
## + V5_J2_1	1	12.83	4961.0	20.69
## + V14_J1_3	1	12.76	4961.0	20.76
## + V19_J1_2	1	12.65	4961.1	20.88
## + V29_J1_6	1	12.55	4961.2	20.98
## + V4_J1_1	1	12.27	4961.5	21.27
## + V2_J1_4	1	12.20	4961.6	21.35
## + V2_J2_1	1	12.14	4961.6	21.41
## + V13_3_J1_6	1	11.99	4961.8	21.57
## + V15_J2_4	1	11.94	4961.9	21.62
## + V29_J2_1	1	11.82	4962.0	21.75
## + V12_1_2_J2_1	1	11.78	4962.0	21.79
## + V13_2_J1_3	1	11.11	4962.7	22.49
## + V5_J1_7	1	11.05	4962.7	22.56
## + V3_J1_4	1	11.04	4962.8	22.57
## + V2_J2_5	1	10.93	4962.9	22.68
## + V12_1_2_J1_3	1	10.77	4963.0	22.85
## + V1_J2_1	1	10.62	4963.2	23.00
## + V20_J1_6	1	10.48	4963.3	23.15
## + V23_J2_5	1	10.18	4963.6	23.46
## + V29_J1_2	1	9.76	4964.0	23.90
## + V4_J1_3	1	9.72	4964.1	23.95
## + V1_J2_3	1	8.50	4965.3	25.22
## + V24_J2_5	1	8.05	4965.7	25.70
## + V17_J2_4	1	7.95	4965.8	25.81
## + V2_J2_4	1	7.88	4965.9	25.88
## + V16_J2_5	1	7.79	4966.0	25.97
## + V30_J2_7	1	7.50	4966.3	26.27
## + V24_J1_2	1	7.28	4966.5	26.50
## + V16_J1_4	1	7.13	4966.7	26.66
## + V17_J2_5	1	7.11	4966.7	26.68
## + V13_1_J2_5	1	6.97	4966.8	26.83
## + V20_J2_3	1	6.68	4967.1	27.13
## + V14_J2_7	1	6.53	4967.3	27.29
## + V13_1_J2_1	1	6.51	4967.3	27.31
## + V13_1_J1_4	1	6.44	4967.4	27.38
## <none>			4973.8	27.49
## + V13_1_J2_2	1	6.26	4967.5	27.58
## + V15_J1_7	1	5.98	4967.8	27.87
## + V26_J2_2	1	5.91	4967.9	27.93
## + V26_J1_2	1	5.85	4967.9	28.00
## + V2_J2_3	1	5.79	4968.0	28.06

## + V30_J1_7	1	5.77	4968.0	28.09
## + V1_J1_7	1	5.73	4968.1	28.13
## + V20_J2_1	1	5.71	4968.1	28.15
## + V13_1_J2_3	1	5.68	4968.1	28.18
## + V14_J1_7	1	5.63	4968.2	28.23
## + V30_J2_3	1	5.38	4968.4	28.49
## + V13_3_J1_4	1	4.81	4969.0	29.09
## + V5_J2_2	1	4.79	4969.0	29.11
## + V20_J1_5	1	4.50	4969.3	29.41
## + V13_2_J1_1	1	4.35	4969.4	29.57
## + V19_J2_1	1	4.29	4969.5	29.63
## + V13_2_J2_7	1	4.22	4969.6	29.70
## + V16_J1_5	1	4.18	4969.6	29.75
## + V14_J2_4	1	4.13	4969.7	29.81
## + V13_1_J1_5	1	4.11	4969.7	29.82
## + V13_3_J1_3	1	4.06	4969.7	29.88
## + V16_J1_2	1	4.05	4969.7	29.89
## + V13_1_J1_1	1	4.00	4969.8	29.94
## + V24_J2_4	1	3.96	4969.8	29.98
## + V13_3_J2_2	1	3.85	4969.9	30.10
## + V17_J2_1	1	3.80	4970.0	30.15
## + V5_J1_1	1	3.59	4970.2	30.36
## + V20_J2_5	1	3.34	4970.5	30.63
## + V20_J2_7	1	3.30	4970.5	30.66
## + V20_J1_7	1	3.27	4970.5	30.70
## + V5_J1_4	1	3.27	4970.5	30.70
## + V13_2_J2_4	1	3.23	4970.6	30.74
## + V14_J1_1	1	3.10	4970.7	30.88
## + V1_J1_1	1	3.08	4970.7	30.90
## + V15_J1_1	1	3.06	4970.7	30.92
## + V13_3_J2_3	1	2.99	4970.8	30.99
## + V17_J1_7	1	2.79	4971.0	31.20
## + V13_2_J1_5	1	2.73	4971.1	31.26
## + V23_J1_7	1	2.59	4971.2	31.42
## + V24_J1_4	1	2.56	4971.2	31.45
## + V13_2_J2_1	1	2.54	4971.3	31.47
## + V24_J1_7	1	2.52	4971.3	31.48
## + V2_J1_1	1	2.17	4971.6	31.85
## + V13_3_J1_7	1	2.15	4971.6	31.87
## + V24_J1_5	1	2.10	4971.7	31.93
## + V24_J1_6	1	1.98	4971.8	32.05
## + V23_J2_2	1	1.98	4971.8	32.05
## + V23_J1_1	1	1.97	4971.8	32.06
## + V13_3_J2_1	1	1.85	4971.9	32.18
## + V15_J1_2	1	1.83	4972.0	32.20
## + V29_J2_5	1	1.74	4972.1	32.30
## + V23_J1_5	1	1.73	4972.1	32.31
## + V20_J2_4	1	1.70	4972.1	32.34
## + V16_J2_1	1	1.65	4972.1	32.39
## + V15_J2_3	1	1.65	4972.1	32.39
## + V13_1_J1_6	1	1.64	4972.2	32.41
## + V13_3_J1_1	1	1.61	4972.2	32.44
## + V23_J1_6	1	1.54	4972.3	32.51
## + V26_J1_4	1	1.49	4972.3	32.57

## + V13_2_J2_3	1	1.40	4972.4	32.66
## + V24_J2_2	1	1.33	4972.5	32.73
## + V14_J1_6	1	1.22	4972.6	32.85
## + V16_J2_3	1	1.13	4972.7	32.94
## + V2_J1_6	1	1.12	4972.7	32.95
## + V2_J1_7	1	1.11	4972.7	32.96
## + V19_J2_5	1	1.00	4972.8	33.07
## + V24_J2_1	1	0.98	4972.8	33.10
## + V30_J2_4	1	0.95	4972.8	33.13
## + V13_2_J1_6	1	0.92	4972.9	33.16
## + V12_1_2_J1_1	1	0.91	4972.9	33.17
## + V29_J2_4	1	0.88	4972.9	33.20
## + V19_J1_1	1	0.87	4972.9	33.21
## + V4_J2_7	1	0.73	4973.1	33.36
## + V29_J2_2	1	0.73	4973.1	33.36
## + V13_3_J2_7	1	0.68	4973.1	33.41
## + V16_J1_7	1	0.64	4973.1	33.45
## + V30_J1_4	1	0.62	4973.2	33.48
## + V14_J2_1	1	0.57	4973.2	33.52
## + V15_J1_6	1	0.56	4973.2	33.54
## + V1_J1_2	1	0.44	4973.4	33.66
## + V24_J2_7	1	0.40	4973.4	33.70
## + V13_2_J2_2	1	0.34	4973.5	33.76
## + V15_J2_1	1	0.33	4973.5	33.78
## + V20_J1_1	1	0.27	4973.5	33.84
## + V19_J2_4	1	0.26	4973.5	33.84
## + V23_J1_2	1	0.21	4973.6	33.90
## + V13_1_J2_7	1	0.18	4973.6	33.93
## + V13_3_J1_5	1	0.17	4973.6	33.94
## + V17_J1_6	1	0.15	4973.6	33.96
## + V26_J1_5	1	0.15	4973.6	33.97
## + V16_J1_6	1	0.14	4973.7	33.98
## + V14_J2_5	1	0.11	4973.7	34.01
## + V17_J1_2	1	0.11	4973.7	34.01
## + V29_J2_7	1	0.10	4973.7	34.02
## + V3_J1_5	1	0.09	4973.7	34.02
## + V13_3_J2_4	1	0.09	4973.7	34.03
## + V2_J1_2	1	0.08	4973.7	34.04
## + V1_J1_6	1	0.08	4973.7	34.04
## + V13_2_J2_5	1	0.06	4973.7	34.06
## + V23_J1_4	1	0.05	4973.7	34.07
## + V17_J1_1	1	0.05	4973.7	34.07
## + V5_J1_2	1	0.05	4973.7	34.07
## + V30_J2_1	1	0.03	4973.8	34.09
## + V1_J2_5	1	0.03	4973.8	34.09
## + V5_J1_6	1	0.02	4973.8	34.10
## + V4_J1_5	1	0.01	4973.8	34.11
## + V16_J1_1	1	0.01	4973.8	34.12
## + V4_J1_4	1	0.00	4973.8	34.12
## + V24_J1_3	1	0.00	4973.8	34.12
## - V30_J2_2	1	146.36	5120.2	171.66
## - V12_1_2_J2_2	1	163.58	5137.4	189.12
## - V5_J2_5	1	166.23	5140.0	191.80
## - V5_J2_4	1	180.65	5154.4	206.37

```

## - V26_J2_3      1      193.65 5167.4 219.46
## - V20_J2_2      1      288.60 5262.4 314.15
## - V16_J2_2      1      447.06 5420.9 468.42
## - J             12     1645.30 6619.1 1433.90
## - V             19     1805.21 6779.0 1511.59
##
## Step:  AIC=-67.88
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##       V12_1_2_J2_2 + V30_J2_2 + V26_J2_5
##
##           Df Sum of Sq    RSS    AIC
## + V26_J2_4      1      105.17 4772.0 -174.60
## + V3_J2_3       1       88.42 4788.8 -156.38
## + V19_J1_4      1       85.06 4792.1 -152.74
## + V3_J2_4       1       81.33 4795.9 -148.69
## + V17_J2_2      1       77.92 4799.3 -144.99
## + V13_2_J1_7    1       75.44 4801.7 -142.31
## + V26_J2_1      1       74.86 4802.3 -141.68
## + V19_J1_5      1       72.62 4804.6 -139.26
## + V5_J1_5       1       72.41 4804.8 -139.03
## + V1_J2_7       1       72.30 4804.9 -138.91
## + V1_J2_2       1       71.56 4805.6 -138.11
## + V30_J1_3      1       64.84 4812.3 -130.85
## + V15_J2_7      1       64.75 4812.4 -130.75
## + V2_J1_3       1       60.53 4816.6 -126.19
## + V23_J1_3      1       60.05 4817.1 -125.67
## + V3_J1_3       1       59.00 4818.2 -124.53
## + V12_1_2_J1_4  1       57.74 4819.4 -123.18
## + V3_J2_5       1       53.89 4823.3 -119.02
## + V15_J2_2      1       53.07 4824.1 -118.14
## + V4_J2_4       1       52.54 4824.6 -117.57
## + V17_J1_3      1       51.72 4825.5 -116.68
## + V17_J2_7      1       49.54 4827.6 -114.34
## + V15_J1_5      1       40.60 4836.6 -104.72
## + V15_J1_3      1       39.20 4838.0 -103.21
## + V17_J1_5      1       38.75 4838.4 -102.72
## + V5_J1_3       1       38.38 4838.8 -102.33
## + V16_J1_3      1       38.23 4839.0 -102.16
## + V2_J2_2       1       38.15 4839.0 -102.08
## + V14_J1_5      1       37.39 4839.8 -101.26
## + V3_J2_7       1       36.62 4840.6 -100.43
## + V4_J2_1       1       36.44 4840.7 -100.24
## + V4_J2_5       1       36.03 4841.1 -99.81
## + V1_J1_5       1       34.00 4843.2 -97.62
## + V4_J2_3       1       33.87 4843.3 -97.48
## + V30_J1_6      1       33.19 4844.0 -96.75
## + V13_1_J1_2    1       32.97 4844.2 -96.51
## + V23_J2_1      1       32.00 4845.2 -95.47
## + V1_J1_3       1       31.89 4845.3 -95.36
## + V3_J2_1       1       31.35 4845.8 -94.78
## + V15_J2_5      1       30.98 4846.2 -94.39
## + V30_J1_1      1       28.57 4848.6 -91.80
## + V19_J2_7      1       28.17 4849.0 -91.37
## + V16_J2_7      1       28.10 4849.1 -91.29

```

## + V14_J1_4	1	27.77	4849.4	-90.94
## + V3_J1_2	1	26.98	4850.2	-90.09
## + V13_1_J1_3	1	26.65	4850.5	-89.74
## + V5_J2_7	1	26.02	4851.2	-89.06
## + V13_1_J1_7	1	25.88	4851.3	-88.91
## + V4_J2_2	1	24.94	4852.2	-87.90
## + V13_2_J1_4	1	24.46	4852.7	-87.39
## + V5_J2_3	1	24.02	4853.2	-86.92
## + V19_J2_3	1	23.96	4853.2	-86.86
## + V4_J1_6	1	23.46	4853.7	-86.32
## + V19_J1_3	1	23.44	4853.7	-86.30
## + V4_J1_7	1	23.21	4854.0	-86.05
## + V2_J1_5	1	22.67	4854.5	-85.47
## + V1_J1_4	1	22.44	4854.7	-85.22
## + V30_J2_5	1	22.41	4854.8	-85.19
## + V15_J1_4	1	22.06	4855.1	-84.82
## + V16_J2_4	1	22.00	4855.2	-84.76
## + V26_J1_6	1	21.46	4855.7	-84.17
## + V3_J2_2	1	21.05	4856.1	-83.74
## + V29_J1_5	1	20.75	4856.4	-83.42
## + V12_1_2_J2_3	1	20.62	4856.6	-83.28
## + V12_1_2_J1_6	1	20.57	4856.6	-83.22
## + V12_1_2_J1_7	1	20.20	4857.0	-82.83
## + V23_J2_3	1	19.89	4857.3	-82.49
## + V13_3_J1_2	1	19.57	4857.6	-82.15
## + V4_J1_2	1	19.54	4857.6	-82.12
## + V23_J2_7	1	19.47	4857.7	-82.04
## + V29_J1_7	1	19.28	4857.9	-81.85
## + V1_J2_4	1	19.11	4858.1	-81.66
## + V2_J2_7	1	19.08	4858.1	-81.62
## + V19_J2_2	1	18.81	4858.4	-81.34
## + V17_J1_4	1	18.44	4858.7	-80.95
## + V29_J1_1	1	18.41	4858.8	-80.91
## + V12_1_2_J2_4	1	18.24	4858.9	-80.72
## + V20_J1_2	1	18.00	4859.2	-80.47
## + V12_1_2_J1_5	1	17.70	4859.5	-80.15
## + V30_J1_5	1	17.66	4859.5	-80.11
## + V26_J2_7	1	17.39	4859.8	-79.82
## + V24_J1_1	1	16.83	4860.3	-79.22
## + V14_J2_3	1	16.75	4860.4	-79.14
## + V29_J2_3	1	16.63	4860.5	-79.01
## + V24_J2_3	1	16.42	4860.8	-78.78
## + V30_J1_2	1	16.20	4861.0	-78.55
## + V12_1_2_J2_5	1	16.05	4861.1	-78.38
## + V20_J1_4	1	15.92	4861.3	-78.24
## + V13_1_J2_4	1	15.85	4861.3	-78.17
## + V17_J2_3	1	15.39	4861.8	-77.68
## + V12_1_2_J1_2	1	15.30	4861.9	-77.59
## + V19_J1_7	1	15.09	4862.1	-77.35
## + V20_J1_3	1	15.03	4862.2	-77.29
## + V26_J1_1	1	14.74	4862.4	-76.99
## + V3_J1_1	1	14.66	4862.5	-76.89
## + V3_J1_6	1	14.42	4862.8	-76.65
## + V14_J2_2	1	14.03	4863.2	-76.22

## + V19_J1_6	1	13.99	4863.2	-76.18
## + V3_J1_7	1	13.97	4863.2	-76.16
## + V29_J1_4	1	13.83	4863.4	-76.01
## + V14_J1_2	1	13.77	4863.4	-75.95
## + V12_1_2_J2_7	1	13.26	4863.9	-75.41
## + V23_J2_4	1	13.22	4864.0	-75.36
## + V13_2_J1_2	1	13.16	4864.0	-75.30
## + V14_J1_3	1	13.11	4864.1	-75.24
## + V29_J1_3	1	13.04	4864.1	-75.16
## + V19_J1_2	1	12.99	4864.2	-75.12
## + V5_J2_1	1	12.81	4864.4	-74.92
## + V4_J1_1	1	12.61	4864.6	-74.71
## + V2_J1_4	1	12.54	4864.6	-74.63
## + V2_J2_1	1	12.48	4864.7	-74.57
## + V29_J1_6	1	12.21	4865.0	-74.28
## + V12_1_2_J2_1	1	12.16	4865.0	-74.22
## + V29_J2_1	1	12.15	4865.0	-74.21
## + V26_J1_7	1	11.84	4865.3	-73.88
## + V13_3_J1_6	1	11.66	4865.5	-73.70
## + V15_J2_4	1	11.61	4865.6	-73.64
## + V24_J2_5	1	11.48	4865.7	-73.50
## + V13_2_J1_3	1	11.44	4865.7	-73.45
## + V5_J1_7	1	11.07	4866.1	-73.06
## + V1_J2_1	1	10.94	4866.2	-72.92
## + V3_J1_4	1	10.72	4866.5	-72.69
## + V13_3_J2_5	1	10.54	4866.6	-72.49
## + V12_1_2_J1_3	1	10.42	4866.8	-72.37
## + V20_J1_6	1	10.14	4867.0	-72.06
## + V4_J1_3	1	10.02	4867.2	-71.94
## + V26_J1_3	1	9.87	4867.3	-71.78
## + V29_J1_2	1	9.47	4867.7	-71.35
## + V1_J2_3	1	8.51	4868.7	-70.33
## + V17_J2_4	1	8.22	4869.0	-70.02
## + V2_J2_4	1	8.15	4869.0	-69.94
## + V2_J2_5	1	7.65	4869.5	-69.41
## + V16_J1_4	1	7.42	4869.8	-69.17
## + V30_J2_7	1	7.21	4870.0	-68.94
## + V24_J1_2	1	7.02	4870.2	-68.74
## + V23_J2_5	1	7.02	4870.2	-68.74
## + V14_J2_7	1	6.78	4870.4	-68.48
## + V13_1_J2_1	1	6.76	4870.4	-68.45
## + V13_1_J1_4	1	6.69	4870.5	-68.38
## + V20_J2_3	1	6.65	4870.5	-68.34
## <none>			4877.2	-67.88
## + V15_J1_7	1	6.21	4871.0	-67.87
## + V1_J1_7	1	5.96	4871.2	-67.61
## + V13_1_J2_2	1	5.95	4871.2	-67.59
## + V14_J1_7	1	5.86	4871.3	-67.50
## + V2_J2_3	1	5.80	4871.4	-67.43
## + V13_1_J2_3	1	5.69	4871.5	-67.31
## + V30_J1_7	1	5.51	4871.7	-67.13
## + V20_J2_1	1	5.45	4871.7	-67.06
## + V30_J2_3	1	5.41	4871.8	-67.02
## + V16_J2_5	1	5.08	4872.1	-66.66

## + V13_3_J1_4	1	5.02	4872.2	-66.60
## + V5_J2_2	1	4.86	4872.3	-66.43
## + V20_J1_5	1	4.73	4872.4	-66.29
## + V17_J2_5	1	4.52	4872.7	-66.06
## + V26_J1_4	1	4.50	4872.7	-66.04
## + V13_2_J2_7	1	4.42	4872.8	-65.96
## + V16_J1_5	1	4.41	4872.8	-65.94
## + V13_1_J2_5	1	4.40	4872.8	-65.94
## + V13_3_J1_3	1	4.25	4872.9	-65.78
## + V24_J2_4	1	4.16	4873.0	-65.68
## + V13_2_J1_1	1	4.15	4873.0	-65.68
## + V19_J2_1	1	4.10	4873.1	-65.61
## + V17_J2_1	1	3.99	4873.2	-65.50
## + V14_J2_4	1	3.93	4873.2	-65.44
## + V13_1_J1_5	1	3.92	4873.3	-65.42
## + V16_J1_2	1	3.84	4873.3	-65.34
## + V13_1_J1_1	1	3.81	4873.4	-65.31
## + V13_3_J2_2	1	3.61	4873.6	-65.09
## + V5_J1_1	1	3.60	4873.6	-65.09
## + V20_J2_7	1	3.50	4873.7	-64.98
## + V13_2_J2_4	1	3.41	4873.8	-64.88
## + V14_J1_1	1	3.27	4873.9	-64.73
## + V5_J1_4	1	3.26	4873.9	-64.72
## + V20_J1_7	1	3.08	4874.1	-64.53
## + V13_3_J2_3	1	3.00	4874.2	-64.44
## + V17_J1_7	1	2.95	4874.2	-64.40
## + V1_J1_1	1	2.91	4874.3	-64.35
## + V15_J1_1	1	2.89	4874.3	-64.33
## + V24_J1_4	1	2.71	4874.5	-64.14
## + V13_2_J2_1	1	2.69	4874.5	-64.12
## + V24_J1_7	1	2.68	4874.5	-64.10
## + V13_2_J1_5	1	2.57	4874.6	-63.99
## + V23_J1_7	1	2.43	4874.7	-63.84
## + V26_J2_2	1	2.41	4874.8	-63.81
## + V19_J2_5	1	2.40	4874.8	-63.81
## + V26_J1_2	1	2.34	4874.8	-63.75
## + V24_J1_6	1	2.12	4875.1	-63.51
## + V2_J1_1	1	2.03	4875.1	-63.41
## + V13_3_J1_7	1	2.01	4875.2	-63.39
## + V13_3_J2_1	1	1.99	4875.2	-63.36
## + V24_J1_5	1	1.96	4875.2	-63.34
## + V23_J1_5	1	1.86	4875.3	-63.23
## + V20_J2_4	1	1.85	4875.3	-63.21
## + V23_J1_1	1	1.84	4875.3	-63.20
## + V23_J2_2	1	1.81	4875.4	-63.17
## + V16_J2_1	1	1.79	4875.4	-63.16
## + V15_J1_2	1	1.71	4875.5	-63.06
## + V20_J2_5	1	1.66	4875.5	-63.01
## + V15_J2_3	1	1.65	4875.5	-63.00
## + V26_J1_5	1	1.65	4875.5	-63.00
## + V13_1_J1_6	1	1.52	4875.7	-62.86
## + V13_3_J1_1	1	1.49	4875.7	-62.83
## + V23_J1_6	1	1.42	4875.8	-62.76
## + V13_2_J2_3	1	1.40	4875.8	-62.74

## + V14_J1_6	1	1.33	4875.9	-62.66
## + V2_J1_6	1	1.22	4876.0	-62.55
## + V24_J2_2	1	1.19	4876.0	-62.52
## + V16_J2_3	1	1.12	4876.1	-62.44
## + V24_J2_1	1	1.08	4876.1	-62.39
## + V2_J1_7	1	1.01	4876.2	-62.32
## + V13_2_J1_6	1	1.01	4876.2	-62.32
## + V29_J2_4	1	0.98	4876.2	-62.29
## + V19_J1_1	1	0.96	4876.2	-62.27
## + V30_J2_4	1	0.85	4876.3	-62.15
## + V29_J2_2	1	0.83	4876.3	-62.14
## + V12_1_2_J1_1	1	0.81	4876.4	-62.11
## + V14_J2_5	1	0.77	4876.4	-62.07
## + V13_3_J2_7	1	0.76	4876.4	-62.06
## + V16_J1_7	1	0.73	4876.4	-62.03
## + V4_J2_7	1	0.65	4876.5	-61.94
## + V15_J1_6	1	0.63	4876.5	-61.92
## + V13_2_J2_5	1	0.63	4876.6	-61.92
## + V29_J2_5	1	0.60	4876.6	-61.89
## + V30_J1_4	1	0.53	4876.6	-61.82
## + V1_J1_2	1	0.50	4876.7	-61.78
## + V14_J2_1	1	0.50	4876.7	-61.78
## + V24_J2_7	1	0.46	4876.7	-61.74
## + V13_2_J2_2	1	0.42	4876.8	-61.69
## + V15_J2_1	1	0.27	4876.9	-61.54
## + V19_J2_4	1	0.22	4877.0	-61.48
## + V13_3_J1_5	1	0.22	4877.0	-61.48
## + V20_J1_1	1	0.21	4877.0	-61.47
## + V16_J1_6	1	0.18	4877.0	-61.44
## + V23_J1_2	1	0.17	4877.0	-61.43
## + V13_1_J2_7	1	0.15	4877.0	-61.40
## + V1_J2_5	1	0.14	4877.0	-61.40
## + V17_J1_2	1	0.14	4877.0	-61.39
## + V29_J2_7	1	0.13	4877.0	-61.39
## + V13_3_J2_4	1	0.12	4877.1	-61.37
## + V17_J1_6	1	0.12	4877.1	-61.37
## + V1_J1_6	1	0.11	4877.1	-61.36
## + V23_J1_4	1	0.07	4877.1	-61.32
## + V3_J1_5	1	0.07	4877.1	-61.32
## + V2_J1_2	1	0.06	4877.1	-61.31
## + V5_J1_2	1	0.05	4877.1	-61.30
## + V17_J1_1	1	0.03	4877.2	-61.28
## + V5_J1_6	1	0.02	4877.2	-61.27
## + V4_J1_5	1	0.02	4877.2	-61.26
## + V16_J1_1	1	0.02	4877.2	-61.26
## + V30_J2_1	1	0.01	4877.2	-61.26
## + V24_J1_3	1	0.01	4877.2	-61.25
## + V4_J1_4	1	0.00	4877.2	-61.25
## - V26_J2_5	1	96.61	4973.8	27.49
## - V30_J2_2	1	144.95	5022.1	77.78
## - V12_1_2_J2_2	1	162.09	5039.3	95.49
## - V5_J2_5	1	179.29	5056.5	113.22
## - V5_J2_4	1	180.57	5057.8	114.53
## - V26_J2_3	1	215.69	5092.9	150.51


```

## - V20_J2_2      1      286.62 5163.8 222.43
## - V16_J2_2      1      444.59 5321.8 379.13
## - V             19     1669.55 6546.7 1336.93
## - J             12     1636.69 6513.9 1357.21
##
## Step:  AIC=-174.6
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##       V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4
##
##           Df Sum of Sq  RSS    AIC
## + V26_J2_1      1      94.60 4677.4 -272.09
## + V3_J2_4       1      92.15 4679.9 -269.36
## + V3_J2_3       1      88.39 4683.6 -265.19
## + V19_J1_4      1      84.05 4688.0 -260.37
## + V17_J2_2      1      76.68 4695.3 -252.20
## + V13_2_J1_7    1      74.49 4697.5 -249.77
## + V5_J1_5       1      72.35 4699.7 -247.41
## + V19_J1_5      1      71.69 4700.3 -246.68
## + V1_J2_7       1      71.37 4700.6 -246.32
## + V1_J2_2       1      70.37 4701.6 -245.22
## + V15_J2_7      1      65.64 4706.4 -239.99
## + V30_J1_3      1      63.87 4708.1 -238.03
## + V4_J2_4       1      61.26 4710.7 -235.16
## + V3_J1_3       1      59.85 4712.2 -233.59
## + V2_J1_3       1      59.68 4712.3 -233.41
## + V23_J1_3      1      59.20 4712.8 -232.88
## + V12_1_2_J1_4  1      56.82 4715.2 -230.25
## + V15_J2_2      1      54.11 4717.9 -227.27
## + V3_J2_5       1      53.91 4718.1 -227.04
## + V17_J1_3      1      50.93 4721.1 -223.76
## + V17_J2_7      1      48.77 4723.2 -221.38
## + V15_J1_5      1      39.90 4732.1 -211.63
## + V15_J1_3      1      39.89 4732.1 -211.62
## + V17_J1_5      1      39.44 4732.6 -211.12
## + V5_J1_3       1      38.43 4733.6 -210.01
## + V16_J1_3      1      37.48 4734.5 -208.97
## + V3_J2_7       1      37.29 4734.7 -208.76
## + V2_J2_2       1      37.29 4734.7 -208.76
## + V14_J1_5      1      36.72 4735.3 -208.13
## + V4_J2_5       1      36.05 4736.0 -207.40
## + V4_J2_1       1      35.78 4736.2 -207.10
## + V1_J1_5       1      34.64 4737.4 -205.85
## + V4_J2_3       1      33.85 4738.2 -204.98
## + V23_J2_1      1      32.62 4739.4 -203.64
## + V30_J1_6      1      32.49 4739.5 -203.49
## + V13_1_J1_2    1      32.34 4739.7 -203.32
## + V1_J1_3       1      31.27 4740.7 -202.15
## + V15_J2_5      1      31.00 4741.0 -201.85
## + V3_J2_1       1      30.74 4741.3 -201.57
## + V30_J1_1      1      29.23 4742.8 -199.92
## + V19_J2_7      1      28.76 4743.3 -199.40
## + V3_J1_2       1      27.55 4744.5 -198.08
## + V16_J2_7      1      27.46 4744.6 -197.97
## + V13_1_J1_3    1      27.23 4744.8 -197.72

```

## + V14_J1_4	1	27.20	4744.8	-197.69
## + V5_J2_7	1	26.05	4746.0	-196.43
## + V4_J2_2	1	25.65	4746.4	-195.99
## + V13_1_J1_7	1	25.32	4746.7	-195.63
## + V13_2_J1_4	1	25.01	4747.0	-195.29
## + V5_J2_3	1	24.52	4747.5	-194.75
## + V4_J1_6	1	24.00	4748.0	-194.18
## + V19_J1_3	1	23.98	4748.0	-194.16
## + V19_J2_3	1	23.95	4748.1	-194.13
## + V4_J1_7	1	23.75	4748.3	-193.91
## + V2_J1_5	1	23.20	4748.8	-193.30
## + V1_J1_4	1	22.96	4749.1	-193.05
## + V30_J2_5	1	22.45	4749.6	-192.49
## + V3_J2_2	1	21.71	4750.3	-191.68
## + V15_J1_4	1	21.55	4750.5	-191.50
## + V29_J1_5	1	21.26	4750.8	-191.18
## + V12_1_2_J2_3	1	20.69	4751.3	-190.56
## + V4_J1_2	1	20.03	4752.0	-189.84
## + V12_1_2_J1_6	1	20.02	4752.0	-189.83
## + V23_J2_3	1	19.90	4752.1	-189.70
## + V12_1_2_J1_7	1	19.65	4752.4	-189.43
## + V19_J2_2	1	19.43	4752.6	-189.19
## + V13_3_J1_2	1	19.08	4752.9	-188.80
## + V23_J2_7	1	18.99	4753.0	-188.69
## + V17_J1_4	1	18.92	4753.1	-188.62
## + V29_J1_7	1	18.80	4753.2	-188.50
## + V2_J2_7	1	18.60	4753.4	-188.27
## + V12_1_2_J1_5	1	18.21	4753.8	-187.85
## + V30_J1_5	1	18.18	4753.8	-187.81
## + V29_J1_1	1	17.94	4754.1	-187.55
## + V20_J1_2	1	17.49	4754.5	-187.06
## + V16_J2_4	1	17.09	4754.9	-186.62
## + V14_J2_3	1	16.74	4755.3	-186.24
## + V30_J1_2	1	16.70	4755.3	-186.19
## + V29_J2_3	1	16.64	4755.4	-186.13
## + V24_J2_3	1	16.43	4755.6	-185.90
## + V20_J1_4	1	16.41	4755.6	-185.87
## + V24_J1_1	1	16.38	4755.6	-185.85
## + V12_1_2_J2_5	1	16.08	4755.9	-185.52
## + V15_J2_4	1	15.84	4756.2	-185.25
## + V12_1_2_J1_2	1	15.78	4756.2	-185.19
## + V19_J1_7	1	15.52	4756.5	-184.90
## + V20_J1_3	1	15.51	4756.5	-184.89
## + V17_J2_3	1	15.40	4756.6	-184.77
## + V3_J1_1	1	15.08	4756.9	-184.42
## + V3_J1_6	1	14.85	4757.2	-184.17
## + V14_J2_2	1	14.56	4757.5	-183.86
## + V1_J2_4	1	14.52	4757.5	-183.81
## + V19_J1_6	1	14.40	4757.6	-183.68
## + V3_J1_7	1	14.38	4757.6	-183.66
## + V29_J1_4	1	14.24	4757.8	-183.51
## + V14_J1_2	1	14.18	4757.8	-183.44
## + V12_1_2_J2_4	1	13.79	4758.2	-183.01
## + V14_J1_3	1	13.51	4758.5	-182.71

## + V19_J1_2	1	13.39	4758.6	-182.58
## + V26_J1_6	1	13.14	4758.9	-182.30
## + V4_J1_1	1	13.01	4759.0	-182.16
## + V2_J1_4	1	12.93	4759.1	-182.07
## + V2_J2_1	1	12.87	4759.1	-182.01
## + V12_1_2_J2_7	1	12.82	4759.2	-181.96
## + V5_J2_1	1	12.79	4759.2	-181.92
## + V13_2_J1_2	1	12.76	4759.2	-181.89
## + V29_J1_3	1	12.64	4759.4	-181.76
## + V12_1_2_J2_1	1	12.59	4759.4	-181.70
## + V29_J2_1	1	12.54	4759.5	-181.64
## + V29_J1_6	1	11.83	4760.2	-180.87
## + V13_2_J1_3	1	11.81	4760.2	-180.85
## + V13_1_J2_4	1	11.70	4760.3	-180.73
## + V24_J2_5	1	11.49	4760.5	-180.50
## + V1_J2_1	1	11.31	4760.7	-180.30
## + V13_3_J1_6	1	11.29	4760.7	-180.28
## + V5_J1_7	1	11.09	4760.9	-180.06
## + V13_3_J2_5	1	10.53	4761.5	-179.45
## + V4_J1_3	1	10.37	4761.6	-179.28
## + V3_J1_4	1	10.36	4761.7	-179.27
## + V12_1_2_J1_3	1	10.03	4762.0	-178.90
## + V26_J1_4	1	10.00	4762.0	-178.88
## + V26_J2_7	1	9.99	4762.0	-178.86
## + V20_J1_6	1	9.75	4762.3	-178.60
## + V23_J2_4	1	9.45	4762.6	-178.27
## + V29_J1_2	1	9.13	4762.9	-177.92
## + V1_J2_3	1	8.52	4763.5	-177.26
## + V26_J1_1	1	8.00	4764.0	-176.69
## + V16_J1_4	1	7.76	4764.3	-176.43
## + V2_J2_5	1	7.64	4764.4	-176.30
## + V14_J2_7	1	7.07	4764.9	-175.67
## + V13_1_J2_1	1	7.05	4765.0	-175.65
## + V23_J2_5	1	7.02	4765.0	-175.62
## + V13_1_J1_4	1	6.97	4765.0	-175.57
## + V30_J2_7	1	6.89	4765.1	-175.48
## + V24_J1_2	1	6.74	4765.3	-175.31
## + V20_J2_3	1	6.61	4765.4	-175.18
## + V14_J2_4	1	6.52	4765.5	-175.07
## + V15_J1_7	1	6.49	4765.5	-175.04
## + V1_J1_7	1	6.23	4765.8	-174.76
## + V14_J1_7	1	6.13	4765.9	-174.65
## <none>			4772.0	-174.60
## + V26_J1_7	1	5.89	4766.1	-174.39
## + V2_J2_3	1	5.80	4766.2	-174.29
## + V13_1_J2_3	1	5.69	4766.3	-174.17
## + V13_1_J2_2	1	5.61	4766.4	-174.08
## + V30_J2_3	1	5.45	4766.6	-173.90
## + V26_J1_5	1	5.38	4766.6	-173.83
## + V17_J2_4	1	5.31	4766.7	-173.75
## + V13_3_J1_4	1	5.27	4766.7	-173.71
## + V2_J2_4	1	5.25	4766.8	-173.69
## + V30_J1_7	1	5.23	4766.8	-173.67
## + V20_J2_1	1	5.17	4766.8	-173.60

## + V16_J2_5	1	5.10	4766.9	-173.52
## + V20_J1_5	1	5.00	4767.0	-173.42
## + V5_J2_2	1	4.95	4767.1	-173.36
## + V16_J1_5	1	4.67	4767.3	-173.05
## + V13_2_J2_7	1	4.66	4767.4	-173.04
## + V26_J1_3	1	4.52	4767.5	-172.90
## + V17_J2_5	1	4.51	4767.5	-172.88
## + V13_3_J1_3	1	4.48	4767.5	-172.85
## + V13_1_J2_5	1	4.40	4767.6	-172.76
## + V17_J2_1	1	4.21	4767.8	-172.56
## + V13_2_J1_1	1	3.93	4768.1	-172.25
## + V19_J2_1	1	3.88	4768.1	-172.19
## + V20_J2_7	1	3.73	4768.3	-172.04
## + V13_1_J1_5	1	3.70	4768.3	-172.00
## + V5_J1_1	1	3.62	4768.4	-171.91
## + V16_J1_2	1	3.60	4768.4	-171.89
## + V13_1_J1_1	1	3.60	4768.4	-171.89
## + V14_J1_1	1	3.47	4768.5	-171.75
## + V13_3_J2_2	1	3.34	4768.7	-171.61
## + V5_J1_4	1	3.24	4768.8	-171.50
## + V17_J1_7	1	3.15	4768.9	-171.39
## + V13_3_J2_3	1	3.00	4769.0	-171.24
## + V24_J1_4	1	2.90	4769.1	-171.12
## + V13_2_J2_1	1	2.88	4769.1	-171.10
## + V20_J1_7	1	2.87	4769.1	-171.10
## + V24_J1_7	1	2.86	4769.2	-171.08
## + V1_J1_1	1	2.73	4769.3	-170.94
## + V15_J1_1	1	2.71	4769.3	-170.92
## + V19_J2_5	1	2.41	4769.6	-170.59
## + V13_2_J1_5	1	2.40	4769.6	-170.58
## + V24_J1_6	1	2.29	4769.7	-170.46
## + V23_J1_7	1	2.27	4769.7	-170.43
## + V30_J2_4	1	2.20	4769.8	-170.37
## + V24_J2_4	1	2.17	4769.8	-170.33
## + V13_3_J2_1	1	2.14	4769.9	-170.30
## + V23_J1_5	1	2.01	4770.0	-170.16
## + V16_J2_1	1	1.96	4770.1	-170.10
## + V2_J1_1	1	1.88	4770.1	-170.01
## + V13_3_J1_7	1	1.86	4770.2	-169.99
## + V24_J1_5	1	1.81	4770.2	-169.94
## + V23_J1_1	1	1.69	4770.3	-169.81
## + V20_J2_5	1	1.67	4770.3	-169.79
## + V15_J2_3	1	1.65	4770.4	-169.76
## + V13_2_J2_4	1	1.64	4770.4	-169.75
## + V23_J2_2	1	1.62	4770.4	-169.73
## + V15_J1_2	1	1.56	4770.4	-169.67
## + V14_J1_6	1	1.46	4770.6	-169.55
## + V13_2_J2_3	1	1.41	4770.6	-169.50
## + V13_1_J1_6	1	1.39	4770.6	-169.48
## + V13_3_J1_1	1	1.36	4770.7	-169.44
## + V2_J1_6	1	1.35	4770.7	-169.43
## + V23_J1_6	1	1.29	4770.7	-169.37
## + V24_J2_1	1	1.19	4770.8	-169.27
## + V13_2_J1_6	1	1.12	4770.9	-169.19

## + V16_J2_3	1	1.10	4770.9	-169.16
## + V19_J1_1	1	1.07	4770.9	-169.13
## + V19_J2_4	1	1.07	4770.9	-169.13
## + V24_J2_2	1	1.04	4771.0	-169.10
## + V29_J2_2	1	0.97	4771.0	-169.02
## + V2_J1_7	1	0.90	4771.1	-168.95
## + V13_3_J2_7	1	0.86	4771.1	-168.91
## + V16_J1_7	1	0.84	4771.2	-168.88
## + V14_J2_5	1	0.77	4771.2	-168.81
## + V15_J1_6	1	0.72	4771.3	-168.76
## + V12_1_2_J1_1	1	0.71	4771.3	-168.73
## + V20_J2_4	1	0.64	4771.4	-168.66
## + V13_2_J2_5	1	0.63	4771.4	-168.65
## + V29_J2_5	1	0.60	4771.4	-168.62
## + V1_J1_2	1	0.59	4771.4	-168.60
## + V4_J2_7	1	0.56	4771.5	-168.58
## + V24_J2_7	1	0.54	4771.5	-168.55
## + V13_2_J2_2	1	0.51	4771.5	-168.52
## + V30_J1_4	1	0.45	4771.6	-168.45
## + V14_J2_1	1	0.43	4771.6	-168.43
## + V26_J2_2	1	0.29	4771.7	-168.28
## + V13_3_J1_5	1	0.27	4771.7	-168.26
## + V26_J1_2	1	0.26	4771.8	-168.25
## + V16_J1_6	1	0.24	4771.8	-168.22
## + V15_J2_1	1	0.22	4771.8	-168.21
## + V17_J1_2	1	0.18	4771.8	-168.16
## + V29_J2_4	1	0.18	4771.8	-168.16
## + V29_J2_7	1	0.18	4771.8	-168.16
## + V20_J1_1	1	0.16	4771.9	-168.14
## + V1_J1_6	1	0.15	4771.9	-168.13
## + V1_J2_5	1	0.15	4771.9	-168.12
## + V23_J1_2	1	0.13	4771.9	-168.11
## + V23_J1_4	1	0.11	4771.9	-168.08
## + V13_1_J2_7	1	0.11	4771.9	-168.08
## + V17_J1_6	1	0.08	4771.9	-168.05
## + V5_J1_2	1	0.05	4772.0	-168.02
## + V13_3_J2_4	1	0.05	4772.0	-168.02
## + V3_J1_5	1	0.04	4772.0	-168.01
## + V16_J1_1	1	0.03	4772.0	-168.00
## + V4_J1_5	1	0.03	4772.0	-168.00
## + V2_J1_2	1	0.03	4772.0	-168.00
## + V5_J1_6	1	0.02	4772.0	-167.99
## + V24_J1_3	1	0.02	4772.0	-167.98
## + V17_J1_1	1	0.01	4772.0	-167.98
## + V30_J2_1	1	0.00	4772.0	-167.97
## + V4_J1_4	1	0.00	4772.0	-167.97
## - V26_J2_4	1	105.17	4877.2	-67.88
## - V26_J2_5	1	114.96	4887.0	-57.45
## - V30_J2_2	1	143.35	4915.4	-27.33
## - V12_1_2_J2_2	1	160.39	4932.4	-9.33
## - V5_J2_5	1	180.53	4952.5	11.85
## - V5_J2_4	1	194.82	4966.8	26.84
## - V26_J2_3	1	242.04	5014.1	76.05
## - V20_J2_2	1	284.36	5056.4	119.75

```

## - V16_J2_2      1      441.78 5213.8 279.17
## - V              19     1557.12 6329.1 1167.79
## - J              12     1618.31 6390.3 1264.27
##
## Step:  AIC=-272.09
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##       V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1
##
##           Df Sum of Sq    RSS    AIC
## + V3_J2_4      1      92.18 4585.2 -368.95
## + V3_J2_3      1      88.41 4589.0 -364.69
## + V19_J1_4      1      83.05 4594.4 -358.61
## + V17_J2_2      1      75.45 4602.0 -350.02
## + V13_2_J1_7    1      73.54 4603.9 -347.87
## + V5_J1_5       1      71.42 4606.0 -345.46
## + V19_J1_5      1      70.76 4606.6 -344.73
## + V1_J2_7       1      70.44 4607.0 -344.36
## + V1_J2_2       1      69.19 4608.2 -342.96
## + V15_J2_7      1      66.54 4610.9 -339.96
## + V30_J1_3      1      62.90 4614.5 -335.85
## + V4_J2_4       1      61.28 4616.1 -334.04
## + V3_J1_3       1      60.70 4616.7 -333.38
## + V2_J1_3       1      58.83 4618.6 -331.28
## + V23_J1_3      1      58.36 4619.1 -330.74
## + V12_1_2_J1_4  1      55.90 4621.5 -327.98
## + V15_J2_2      1      55.16 4622.2 -327.14
## + V3_J2_5       1      53.93 4623.5 -325.76
## + V17_J1_3      1      50.15 4627.3 -321.51
## + V17_J2_7      1      48.01 4629.4 -319.10
## + V4_J2_1       1      42.21 4635.2 -312.59
## + V15_J1_3      1      40.59 4636.8 -310.78
## + V17_J1_5      1      40.13 4637.3 -310.26
## + V15_J1_5      1      39.21 4638.2 -309.23
## + V5_J1_3       1      39.12 4638.3 -309.12
## + V3_J2_7       1      37.96 4639.4 -307.83
## + V16_J1_3      1      36.73 4640.7 -306.46
## + V3_J2_1       1      36.71 4640.7 -306.43
## + V2_J2_2       1      36.43 4641.0 -306.11
## + V4_J2_5       1      36.07 4641.3 -305.71
## + V14_J1_5      1      36.06 4641.4 -305.69
## + V1_J1_5       1      35.29 4642.1 -304.84
## + V4_J2_3       1      33.86 4643.5 -303.24
## + V30_J1_6      1      31.80 4645.6 -300.93
## + V13_1_J1_2    1      31.72 4645.7 -300.84
## + V15_J2_5      1      31.01 4646.4 -300.05
## + V1_J1_3       1      30.66 4646.7 -299.65
## + V30_J1_1      1      29.90 4647.5 -298.80
## + V19_J2_7      1      29.36 4648.1 -298.19
## + V3_J1_2       1      28.13 4649.3 -296.83
## + V13_1_J1_3    1      27.80 4649.6 -296.46
## + V23_J2_1      1      27.17 4650.2 -295.74
## + V16_J2_7      1      26.82 4650.6 -295.36
## + V14_J1_4      1      26.63 4650.8 -295.14
## + V5_J2_7       1      26.62 4650.8 -295.13

```

## + V4_J2_2	1	26.37	4651.0	-294.86
## + V13_2_J1_4	1	25.56	4651.8	-293.95
## + V13_1_J1_7	1	24.77	4652.6	-293.07
## + V4_J1_6	1	24.54	4652.9	-292.81
## + V5_J2_3	1	24.54	4652.9	-292.80
## + V19_J1_3	1	24.52	4652.9	-292.79
## + V4_J1_7	1	24.29	4653.1	-292.53
## + V19_J2_3	1	23.96	4653.4	-292.16
## + V2_J1_5	1	23.73	4653.7	-291.90
## + V1_J1_4	1	23.49	4653.9	-291.64
## + V30_J2_5	1	22.50	4654.9	-290.52
## + V3_J2_2	1	22.37	4655.0	-290.39
## + V29_J1_5	1	21.77	4655.6	-289.71
## + V15_J1_4	1	21.04	4656.4	-288.90
## + V12_1_2_J2_3	1	20.73	4656.7	-288.56
## + V4_J1_2	1	20.53	4656.9	-288.32
## + V19_J2_2	1	20.06	4657.3	-287.81
## + V23_J2_3	1	19.89	4657.5	-287.62
## + V12_1_2_J1_6	1	19.48	4657.9	-287.15
## + V17_J1_4	1	19.40	4658.0	-287.07
## + V12_1_2_J1_7	1	19.12	4658.3	-286.75
## + V12_1_2_J1_5	1	18.74	4658.7	-286.33
## + V30_J1_5	1	18.70	4658.7	-286.29
## + V13_3_J1_2	1	18.61	4658.8	-286.18
## + V23_J2_7	1	18.51	4658.9	-286.07
## + V29_J1_7	1	18.33	4659.1	-285.87
## + V26_J1_4	1	18.25	4659.2	-285.78
## + V2_J2_7	1	18.13	4659.3	-285.65
## + V29_J1_1	1	17.48	4659.9	-284.92
## + V30_J1_2	1	17.20	4660.2	-284.61
## + V16_J2_4	1	17.13	4660.3	-284.53
## + V20_J1_2	1	16.98	4660.4	-284.37
## + V20_J1_4	1	16.91	4660.5	-284.28
## + V14_J2_3	1	16.75	4660.7	-284.11
## + V5_J2_1	1	16.75	4660.7	-284.11
## + V29_J2_3	1	16.63	4660.8	-283.98
## + V24_J2_3	1	16.42	4661.0	-283.74
## + V12_1_2_J1_2	1	16.27	4661.1	-283.58
## + V12_1_2_J2_5	1	16.12	4661.3	-283.41
## + V20_J1_3	1	15.99	4661.4	-283.27
## + V19_J1_7	1	15.95	4661.5	-283.22
## + V24_J1_1	1	15.94	4661.5	-283.21
## + V15_J2_4	1	15.85	4661.6	-283.10
## + V3_J1_1	1	15.51	4661.9	-282.73
## + V17_J2_3	1	15.39	4662.0	-282.59
## + V3_J1_6	1	15.27	4662.1	-282.46
## + V14_J2_2	1	15.11	4662.3	-282.28
## + V19_J1_6	1	14.82	4662.6	-281.96
## + V3_J1_7	1	14.81	4662.6	-281.94
## + V29_J1_4	1	14.66	4662.7	-281.78
## + V14_J1_2	1	14.60	4662.8	-281.71
## + V1_J2_4	1	14.51	4662.9	-281.61
## + V14_J1_3	1	13.92	4663.5	-280.95
## + V12_1_2_J2_4	1	13.82	4663.6	-280.84

## + V19_J1_2	1	13.80	4663.6	-280.82
## + V4_J1_1	1	13.41	4664.0	-280.38
## + V2_J1_4	1	13.33	4664.1	-280.29
## + V12_1_2_J2_7	1	12.39	4665.0	-279.25
## + V13_2_J1_2	1	12.37	4665.0	-279.23
## + V29_J1_3	1	12.26	4665.2	-279.10
## + V13_2_J1_3	1	12.20	4665.2	-279.03
## + V26_J1_5	1	11.72	4665.7	-278.50
## + V13_1_J2_4	1	11.69	4665.7	-278.46
## + V24_J2_5	1	11.50	4665.9	-278.25
## + V5_J1_7	1	11.46	4665.9	-278.21
## + V29_J1_6	1	11.46	4666.0	-278.21
## + V13_3_J1_6	1	10.92	4666.5	-277.61
## + V4_J1_3	1	10.73	4666.7	-277.40
## + V13_3_J2_5	1	10.52	4666.9	-277.16
## + V3_J1_4	1	10.01	4667.4	-276.60
## + V12_1_2_J1_3	1	9.64	4667.8	-276.19
## + V2_J2_1	1	9.52	4667.9	-276.05
## + V23_J2_4	1	9.44	4668.0	-275.96
## + V20_J1_6	1	9.37	4668.0	-275.89
## + V12_1_2_J2_1	1	9.30	4668.1	-275.80
## + V29_J2_1	1	9.23	4668.2	-275.73
## + V29_J1_2	1	8.80	4668.6	-275.25
## + V1_J2_3	1	8.51	4668.9	-274.93
## + V1_J2_1	1	8.18	4669.2	-274.56
## + V16_J1_4	1	8.10	4669.3	-274.47
## + V20_J2_1	1	7.73	4669.7	-274.06
## + V2_J2_5	1	7.63	4669.8	-273.95
## + V14_J2_7	1	7.36	4670.0	-273.65
## + V13_1_J1_4	1	7.27	4670.1	-273.54
## + V23_J2_5	1	7.01	4670.4	-273.25
## + V15_J1_7	1	6.78	4670.6	-272.99
## + V20_J2_3	1	6.59	4670.8	-272.78
## + V30_J2_7	1	6.57	4670.8	-272.77
## + V26_J1_6	1	6.54	4670.9	-272.73
## + V14_J2_4	1	6.53	4670.9	-272.72
## + V1_J1_7	1	6.51	4670.9	-272.70
## + V24_J1_2	1	6.45	4671.0	-272.63
## + V14_J1_7	1	6.40	4671.0	-272.58
## + V19_J2_1	1	6.15	4671.3	-272.29
## <none>			4677.4	-272.09
## + V2_J2_3	1	5.80	4671.6	-271.91
## + V13_1_J2_3	1	5.69	4671.7	-271.78
## + V13_3_J1_4	1	5.53	4671.9	-271.61
## + V30_J2_3	1	5.47	4671.9	-271.54
## + V17_J2_4	1	5.30	4672.1	-271.35
## + V13_1_J2_2	1	5.28	4672.1	-271.33
## + V20_J1_5	1	5.28	4672.1	-271.33
## + V5_J2_2	1	5.27	4672.1	-271.32
## + V2_J2_4	1	5.25	4672.2	-271.29
## + V16_J2_5	1	5.12	4672.3	-271.15
## + V30_J1_7	1	4.96	4672.5	-270.97
## + V16_J1_5	1	4.93	4672.5	-270.94
## + V13_2_J2_7	1	4.90	4672.5	-270.91

## + V13_3_J1_3	1	4.72	4672.7	-270.70
## + V13_1_J2_1	1	4.63	4672.8	-270.60
## + V17_J2_5	1	4.51	4672.9	-270.47
## + V13_1_J2_5	1	4.39	4673.0	-270.34
## + V26_J2_7	1	4.37	4673.0	-270.32
## + V20_J2_7	1	3.98	4673.4	-269.88
## + V5_J1_1	1	3.83	4673.6	-269.72
## + V13_2_J1_1	1	3.72	4673.7	-269.59
## + V14_J1_1	1	3.68	4673.7	-269.55
## + V13_1_J1_5	1	3.49	4673.9	-269.34
## + V13_1_J1_1	1	3.39	4674.0	-269.23
## + V16_J1_2	1	3.37	4674.0	-269.21
## + V17_J1_7	1	3.34	4674.1	-269.17
## + V13_3_J2_2	1	3.09	4674.3	-268.89
## + V24_J1_4	1	3.09	4674.3	-268.89
## + V26_J1_1	1	3.09	4674.3	-268.89
## + V24_J1_7	1	3.05	4674.4	-268.85
## + V5_J1_4	1	3.05	4674.4	-268.84
## + V13_3_J2_3	1	3.00	4674.4	-268.79
## + V20_J1_7	1	2.67	4674.7	-268.42
## + V1_J1_1	1	2.55	4674.9	-268.29
## + V15_J1_1	1	2.53	4674.9	-268.27
## + V24_J1_6	1	2.45	4675.0	-268.19
## + V19_J2_5	1	2.41	4675.0	-268.14
## + V17_J2_1	1	2.40	4675.0	-268.12
## + V13_2_J1_5	1	2.23	4675.2	-267.94
## + V30_J2_4	1	2.19	4675.2	-267.89
## + V23_J1_5	1	2.17	4675.2	-267.87
## + V24_J2_4	1	2.17	4675.2	-267.87
## + V23_J1_7	1	2.10	4675.3	-267.79
## + V26_J1_7	1	1.83	4675.6	-267.49
## + V2_J1_1	1	1.73	4675.7	-267.38
## + V13_3_J1_7	1	1.71	4675.7	-267.36
## + V20_J2_5	1	1.68	4675.7	-267.33
## + V24_J1_5	1	1.67	4675.7	-267.31
## + V15_J2_3	1	1.65	4675.8	-267.29
## + V13_2_J2_4	1	1.64	4675.8	-267.28
## + V14_J1_6	1	1.59	4675.8	-267.23
## + V23_J1_1	1	1.55	4675.9	-267.18
## + V2_J1_6	1	1.48	4675.9	-267.10
## + V23_J2_2	1	1.45	4676.0	-267.07
## + V15_J1_2	1	1.43	4676.0	-267.05
## + V13_2_J2_1	1	1.42	4676.0	-267.03
## + V13_2_J2_3	1	1.40	4676.0	-267.02
## + V14_J2_1	1	1.35	4676.1	-266.96
## + V13_1_J1_6	1	1.26	4676.1	-266.86
## + V13_2_J1_6	1	1.24	4676.2	-266.84
## + V13_3_J1_1	1	1.23	4676.2	-266.82
## + V19_J1_1	1	1.19	4676.2	-266.78
## + V23_J1_6	1	1.17	4676.2	-266.76
## + V29_J2_2	1	1.11	4676.3	-266.69
## + V26_J1_3	1	1.10	4676.3	-266.68
## + V16_J2_3	1	1.09	4676.3	-266.67
## + V19_J2_4	1	1.07	4676.3	-266.65

## + V13_3_J2_7	1	0.97	4676.4	-266.53
## + V16_J1_7	1	0.96	4676.5	-266.52
## + V15_J2_1	1	0.95	4676.5	-266.52
## + V13_3_J2_1	1	0.92	4676.5	-266.48
## + V24_J2_2	1	0.90	4676.5	-266.46
## + V15_J1_6	1	0.82	4676.6	-266.37
## + V16_J2_1	1	0.81	4676.6	-266.35
## + V2_J1_7	1	0.80	4676.6	-266.35
## + V14_J2_5	1	0.77	4676.6	-266.32
## + V1_J1_2	1	0.67	4676.7	-266.20
## + V20_J2_4	1	0.64	4676.8	-266.17
## + V13_2_J2_5	1	0.63	4676.8	-266.16
## + V24_J2_7	1	0.62	4676.8	-266.15
## + V13_2_J2_2	1	0.62	4676.8	-266.14
## + V12_1_2_J1_1	1	0.61	4676.8	-266.13
## + V29_J2_5	1	0.60	4676.8	-266.12
## + V4_J2_7	1	0.48	4676.9	-265.99
## + V30_J1_4	1	0.37	4677.0	-265.87
## + V24_J2_1	1	0.34	4677.1	-265.84
## + V26_J1_2	1	0.33	4677.1	-265.83
## + V13_3_J1_5	1	0.33	4677.1	-265.82
## + V30_J2_1	1	0.32	4677.1	-265.81
## + V16_J1_6	1	0.30	4677.1	-265.79
## + V26_J2_2	1	0.29	4677.1	-265.78
## + V17_J1_2	1	0.23	4677.2	-265.71
## + V29_J2_7	1	0.23	4677.2	-265.71
## + V1_J1_6	1	0.20	4677.2	-265.67
## + V29_J2_4	1	0.18	4677.2	-265.65
## + V1_J2_5	1	0.15	4677.3	-265.62
## + V23_J1_4	1	0.15	4677.3	-265.62
## + V20_J1_1	1	0.12	4677.3	-265.58
## + V23_J1_2	1	0.09	4677.3	-265.56
## + V5_J1_2	1	0.08	4677.3	-265.54
## + V13_1_J2_7	1	0.07	4677.3	-265.54
## + V16_J1_1	1	0.06	4677.3	-265.52
## + V4_J1_5	1	0.06	4677.4	-265.52
## + V17_J1_6	1	0.05	4677.4	-265.51
## + V13_3_J2_4	1	0.05	4677.4	-265.51
## + V24_J1_3	1	0.03	4677.4	-265.49
## + V3_J1_5	1	0.02	4677.4	-265.48
## + V2_J1_2	1	0.02	4677.4	-265.47
## + V4_J1_4	1	0.01	4677.4	-265.47
## + V5_J1_6	1	0.01	4677.4	-265.46
## + V17_J1_1	1	0.00	4677.4	-265.46
## - V26_J2_1	1	94.60	4772.0	-174.60
## - V26_J2_4	1	124.91	4802.3	-141.68
## - V26_J2_5	1	135.51	4812.9	-130.22
## - V30_J2_2	1	141.76	4819.2	-123.47
## - V12_1_2_J2_2	1	158.71	4836.1	-105.21
## - V5_J2_5	1	180.56	4858.0	-81.77
## - V5_J2_4	1	194.86	4872.3	-66.48
## - V26_J2_3	1	270.72	4948.1	13.86
## - V20_J2_2	1	282.11	4959.5	25.81
## - V16_J2_2	1	438.97	5116.4	187.73

```

## - V          19   1480.88 6158.3 1032.13
## - J          12   1624.34 6301.8 1198.32
##
## Step:  AIC=-368.95
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##          V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##          V3_J2_4
##
##           Df Sum of Sq  RSS    AIC
## + V3_J2_3      1    104.82 4480.4 -482.58
## + V19_J1_4      1     82.21 4503.0 -456.40
## + V17_J2_2      1     74.43 4510.8 -447.42
## + V13_2_J1_7     1     72.76 4512.5 -445.49
## + V5_J1_5        1     71.44 4513.8 -443.97
## + V4_J2_4        1     70.71 4514.5 -443.13
## + V19_J1_5       1     69.99 4515.2 -442.31
## + V1_J2_7        1     69.67 4515.6 -441.94
## + V1_J2_2        1     68.22 4517.0 -440.26
## + V15_J2_7       1     67.29 4517.9 -439.20
## + V3_J2_5        1     66.80 4518.4 -438.63
## + V30_J1_3       1     62.09 4523.1 -433.21
## + V2_J1_3        1     58.13 4527.1 -428.66
## + V23_J1_3       1     57.66 4527.6 -428.12
## + V15_J2_2       1     56.05 4529.2 -426.27
## + V12_1_2_J1_4   1     55.15 4530.1 -425.24
## + V17_J1_3       1     49.50 4535.7 -418.76
## + V3_J1_3        1     49.24 4536.0 -418.46
## + V3_J2_1        1     47.37 4537.9 -416.32
## + V17_J2_7       1     47.37 4537.9 -416.32
## + V4_J2_1        1     41.61 4543.6 -409.73
## + V15_J1_3       1     41.18 4544.1 -409.23
## + V17_J1_5       1     40.72 4544.5 -408.70
## + V5_J1_3        1     39.10 4546.1 -406.85
## + V15_J1_5       1     38.64 4546.6 -406.32
## + V16_J1_3       1     36.12 4549.1 -403.44
## + V1_J1_5        1     35.84 4549.4 -403.13
## + V2_J2_2        1     35.72 4549.5 -402.99
## + V4_J2_5        1     35.52 4549.7 -402.75
## + V14_J1_5       1     35.51 4549.7 -402.74
## + V4_J2_3        1     33.33 4551.9 -400.26
## + V30_J1_6       1     31.23 4554.0 -397.85
## + V13_1_J1_2     1     31.20 4554.0 -397.82
## + V15_J2_5       1     30.50 4554.7 -397.03
## + V30_J1_1       1     30.46 4554.8 -396.98
## + V1_J1_3        1     30.15 4555.1 -396.63
## + V19_J2_7       1     29.86 4555.4 -396.29
## + V3_J2_7        1     28.96 4556.3 -395.26
## + V13_1_J1_3     1     28.29 4556.9 -394.50
## + V23_J2_1       1     27.65 4557.6 -393.77
## + V4_J2_2        1     26.99 4558.2 -393.01
## + V5_J2_7        1     26.61 4558.6 -392.58
## + V16_J2_7       1     26.30 4558.9 -392.23
## + V14_J1_4       1     26.16 4559.1 -392.07
## + V13_2_J1_4     1     26.03 4559.2 -391.92

```

## + V4_J1_6	1	25.00	4560.2	-390.75
## + V19_J1_3	1	24.98	4560.2	-390.73
## + V4_J1_7	1	24.74	4560.5	-390.46
## + V5_J2_3	1	24.55	4560.7	-390.23
## + V13_1_J1_7	1	24.32	4560.9	-389.97
## + V2_J1_5	1	24.18	4561.1	-389.81
## + V1_J1_4	1	23.94	4561.3	-389.54
## + V19_J2_3	1	23.51	4561.7	-389.05
## + V30_J2_5	1	22.98	4562.2	-388.45
## + V29_J1_5	1	22.20	4563.0	-387.55
## + V12_1_2_J2_3	1	21.20	4564.0	-386.42
## + V4_J1_2	1	20.95	4564.3	-386.13
## + V15_J2_4	1	20.75	4564.5	-385.90
## + V15_J1_4	1	20.62	4564.6	-385.76
## + V19_J2_2	1	20.60	4564.6	-385.73
## + V3_J1_2	1	20.44	4564.8	-385.55
## + V23_J2_3	1	20.30	4564.9	-385.39
## + V17_J1_4	1	19.81	4565.4	-384.83
## + V12_1_2_J1_5	1	19.19	4566.0	-384.12
## + V30_J1_5	1	19.15	4566.1	-384.08
## + V12_1_2_J1_6	1	19.03	4566.2	-383.94
## + V12_1_2_J1_7	1	18.67	4566.6	-383.54
## + V26_J1_4	1	18.26	4567.0	-383.07
## + V13_3_J1_2	1	18.21	4567.0	-383.01
## + V23_J2_7	1	18.12	4567.1	-382.90
## + V29_J1_7	1	17.94	4567.3	-382.70
## + V2_J2_7	1	17.74	4567.5	-382.47
## + V30_J1_2	1	17.63	4567.6	-382.35
## + V20_J1_4	1	17.33	4567.9	-382.01
## + V29_J1_1	1	17.10	4568.1	-381.74
## + V29_J2_3	1	17.01	4568.2	-381.64
## + V24_J2_3	1	16.80	4568.4	-381.40
## + V5_J2_1	1	16.76	4568.5	-381.36
## + V12_1_2_J1_2	1	16.69	4568.5	-381.28
## + V20_J1_2	1	16.56	4568.7	-381.13
## + V12_1_2_J2_5	1	16.53	4568.7	-381.10
## + V20_J1_3	1	16.40	4568.8	-380.95
## + V14_J2_3	1	16.38	4568.9	-380.92
## + V19_J1_7	1	16.32	4568.9	-380.86
## + V3_J1_4	1	15.81	4569.4	-380.28
## + V17_J2_3	1	15.75	4569.5	-380.21
## + V3_J2_2	1	15.62	4569.6	-380.06
## + V24_J1_1	1	15.58	4569.7	-380.01
## + V14_J2_2	1	15.57	4569.7	-380.01
## + V19_J1_6	1	15.18	4570.1	-379.56
## + V29_J1_4	1	15.01	4570.2	-379.37
## + V14_J1_2	1	14.95	4570.3	-379.30
## + V14_J1_3	1	14.27	4571.0	-378.52
## + V19_J1_2	1	14.14	4571.1	-378.38
## + V4_J1_1	1	13.75	4571.5	-377.93
## + V2_J1_4	1	13.67	4571.6	-377.84
## + V16_J2_4	1	12.83	4572.4	-376.89
## + V13_2_J1_3	1	12.52	4572.7	-376.54
## + V13_2_J1_2	1	12.05	4573.2	-376.00

## + V12_1_2_J2_7	1	12.03	4573.2	-375.98
## + V29_J1_3	1	11.94	4573.3	-375.87
## + V26_J1_5	1	11.73	4573.5	-375.64
## + V5_J1_7	1	11.45	4573.8	-375.32
## + V24_J2_5	1	11.19	4574.0	-375.02
## + V29_J1_6	1	11.15	4574.1	-374.97
## + V4_J1_3	1	11.03	4574.2	-374.85
## + V13_3_J2_5	1	10.82	4574.4	-374.60
## + V13_3_J1_6	1	10.62	4574.6	-374.38
## + V1_J2_4	1	10.56	4574.7	-374.30
## + V12_1_2_J2_4	1	9.99	4575.2	-373.66
## + V3_J1_1	1	9.93	4575.3	-373.59
## + V2_J2_1	1	9.81	4575.4	-373.45
## + V14_J2_4	1	9.77	4575.5	-373.41
## + V3_J1_6	1	9.74	4575.5	-373.37
## + V12_1_2_J2_1	1	9.61	4575.6	-373.23
## + V29_J2_1	1	9.51	4575.7	-373.12
## + V3_J1_7	1	9.36	4575.9	-372.94
## + V12_1_2_J1_3	1	9.33	4575.9	-372.91
## + V20_J1_6	1	9.06	4576.2	-372.61
## + V1_J2_3	1	8.78	4576.4	-372.29
## + V29_J1_2	1	8.53	4576.7	-372.00
## + V1_J2_1	1	8.44	4576.8	-371.90
## + V16_J1_4	1	8.40	4576.8	-371.85
## + V13_1_J2_4	1	8.17	4577.1	-371.59
## + V2_J2_5	1	7.89	4577.3	-371.27
## + V14_J2_7	1	7.62	4577.6	-370.96
## + V13_1_J1_4	1	7.52	4577.7	-370.85
## + V20_J2_1	1	7.45	4577.8	-370.77
## + V23_J2_5	1	7.25	4578.0	-370.55
## + V15_J1_7	1	7.02	4578.2	-370.28
## + V1_J1_7	1	6.75	4578.5	-369.98
## + V14_J1_7	1	6.64	4578.6	-369.85
## + V26_J1_6	1	6.54	4578.7	-369.74
## + V20_J2_3	1	6.33	4578.9	-369.50
## + V30_J2_7	1	6.31	4578.9	-369.48
## + V23_J2_4	1	6.31	4578.9	-369.47
## + V24_J1_2	1	6.22	4579.0	-369.38
## + V2_J2_3	1	6.02	4579.2	-369.15
## + V19_J2_1	1	5.92	4579.3	-369.04
## + V13_1_J2_3	1	5.91	4579.3	-369.02
## <none>			4585.2	-368.95
## + V13_3_J1_4	1	5.75	4579.5	-368.84
## + V30_J2_3	1	5.71	4579.5	-368.80
## + V20_J1_5	1	5.52	4579.7	-368.58
## + V16_J2_5	1	5.35	4579.9	-368.39
## + V5_J2_2	1	5.32	4579.9	-368.36
## + V16_J1_5	1	5.16	4580.1	-368.18
## + V13_2_J2_7	1	5.11	4580.1	-368.11
## + V13_1_J2_2	1	5.01	4580.2	-368.01
## + V13_3_J1_3	1	4.92	4580.3	-367.90
## + V13_1_J2_1	1	4.83	4580.4	-367.79
## + V30_J1_7	1	4.73	4580.5	-367.69
## + V17_J2_5	1	4.70	4580.5	-367.65

## + V13_1_J2_5	1	4.59	4580.6	-367.52
## + V26_J2_7	1	4.36	4580.9	-367.27
## + V30_J2_4	1	4.19	4581.0	-367.07
## + V20_J2_7	1	4.18	4581.1	-367.06
## + V14_J1_1	1	3.86	4581.4	-366.70
## + V5_J1_1	1	3.83	4581.4	-366.66
## + V13_2_J1_1	1	3.54	4581.7	-366.34
## + V17_J1_7	1	3.51	4581.7	-366.31
## + V13_1_J1_5	1	3.32	4581.9	-366.09
## + V24_J1_4	1	3.25	4582.0	-366.01
## + V13_1_J1_1	1	3.22	4582.0	-365.97
## + V24_J1_7	1	3.21	4582.0	-365.96
## + V16_J1_2	1	3.19	4582.0	-365.94
## + V13_3_J2_3	1	3.16	4582.1	-365.90
## + V26_J1_1	1	3.08	4582.2	-365.81
## + V5_J1_4	1	3.05	4582.2	-365.78
## + V17_J2_4	1	3.03	4582.2	-365.75
## + V2_J2_4	1	2.98	4582.2	-365.70
## + V13_3_J2_2	1	2.89	4582.3	-365.59
## + V24_J1_6	1	2.60	4582.6	-365.27
## + V19_J2_4	1	2.57	4582.7	-365.24
## + V17_J2_1	1	2.54	4582.7	-365.20
## + V20_J1_7	1	2.50	4582.7	-365.16
## + V1_J1_1	1	2.40	4582.8	-365.04
## + V15_J1_1	1	2.38	4582.8	-365.02
## + V23_J1_5	1	2.31	4582.9	-364.94
## + V19_J2_5	1	2.27	4583.0	-364.89
## + V13_2_J1_5	1	2.10	4583.1	-364.70
## + V23_J1_7	1	1.97	4583.3	-364.55
## + V26_J1_7	1	1.83	4583.4	-364.39
## + V20_J2_5	1	1.82	4583.4	-364.38
## + V14_J1_6	1	1.71	4583.5	-364.26
## + V2_J1_1	1	1.61	4583.6	-364.14
## + V13_3_J1_7	1	1.59	4583.6	-364.13
## + V2_J1_6	1	1.59	4583.6	-364.12
## + V24_J1_5	1	1.55	4583.7	-364.08
## + V15_J2_3	1	1.53	4583.7	-364.06
## + V13_2_J2_1	1	1.53	4583.7	-364.05
## + V13_2_J2_3	1	1.52	4583.7	-364.04
## + V23_J1_1	1	1.44	4583.8	-363.95
## + V13_2_J1_6	1	1.35	4583.9	-363.85
## + V15_J1_2	1	1.32	4583.9	-363.82
## + V23_J2_2	1	1.31	4583.9	-363.80
## + V19_J1_1	1	1.29	4583.9	-363.78
## + V14_J2_1	1	1.25	4584.0	-363.73
## + V29_J2_2	1	1.24	4584.0	-363.73
## + V13_1_J1_6	1	1.16	4584.1	-363.63
## + V13_3_J1_1	1	1.13	4584.1	-363.60
## + V26_J1_3	1	1.10	4584.1	-363.57
## + V23_J1_6	1	1.07	4584.2	-363.54
## + V13_3_J2_7	1	1.06	4584.2	-363.52
## + V16_J1_7	1	1.06	4584.2	-363.52
## + V13_3_J2_1	1	1.01	4584.2	-363.46
## + V16_J2_3	1	0.99	4584.2	-363.44

## + V15_J1_6	1	0.91	4584.3	-363.35
## + V3_J1_5	1	0.91	4584.3	-363.35
## + V16_J2_1	1	0.90	4584.3	-363.34
## + V15_J2_1	1	0.87	4584.4	-363.30
## + V24_J2_4	1	0.83	4584.4	-363.25
## + V24_J2_2	1	0.79	4584.4	-363.22
## + V1_J1_2	1	0.75	4584.5	-363.17
## + V2_J1_7	1	0.72	4584.5	-363.14
## + V13_2_J2_2	1	0.72	4584.5	-363.13
## + V24_J2_7	1	0.70	4584.5	-363.11
## + V14_J2_5	1	0.70	4584.5	-363.11
## + V29_J2_5	1	0.67	4584.6	-363.08
## + V13_3_J2_4	1	0.62	4584.6	-363.02
## + V13_2_J2_5	1	0.56	4584.7	-362.95
## + V12_1_2_J1_1	1	0.53	4584.7	-362.92
## + V13_2_J2_4	1	0.51	4584.7	-362.90
## + V4_J2_7	1	0.42	4584.8	-362.80
## + V24_J2_1	1	0.40	4584.8	-362.77
## + V13_3_J1_5	1	0.39	4584.8	-362.76
## + V16_J1_6	1	0.36	4584.9	-362.72
## + V26_J1_2	1	0.34	4584.9	-362.70
## + V30_J1_4	1	0.31	4584.9	-362.67
## + V17_J1_2	1	0.28	4585.0	-362.63
## + V26_J2_2	1	0.28	4585.0	-362.63
## + V29_J2_7	1	0.27	4585.0	-362.63
## + V30_J2_1	1	0.26	4585.0	-362.61
## + V1_J1_6	1	0.24	4585.0	-362.59
## + V23_J1_4	1	0.18	4585.0	-362.53
## + V1_J2_5	1	0.11	4585.1	-362.45
## + V16_J1_1	1	0.09	4585.1	-362.42
## + V20_J1_1	1	0.08	4585.1	-362.41
## + V4_J1_5	1	0.08	4585.2	-362.41
## + V5_J1_2	1	0.08	4585.2	-362.41
## + V23_J1_2	1	0.07	4585.2	-362.39
## + V20_J2_4	1	0.06	4585.2	-362.38
## + V24_J1_3	1	0.05	4585.2	-362.38
## + V13_1_J2_7	1	0.05	4585.2	-362.38
## + V17_J1_6	1	0.03	4585.2	-362.36
## + V29_J2_4	1	0.02	4585.2	-362.34
## + V4_J1_4	1	0.02	4585.2	-362.34
## + V5_J1_6	1	0.01	4585.2	-362.33
## + V2_J1_2	1	0.01	4585.2	-362.33
## + V17_J1_1	1	0.00	4585.2	-362.32
## - V3_J2_4	1	92.18	4677.4	-272.09
## - V26_J2_1	1	94.63	4679.9	-269.36
## - V26_J2_5	1	135.54	4720.8	-224.10
## - V26_J2_4	1	136.60	4721.8	-222.94
## - V30_J2_2	1	140.43	4725.7	-218.71
## - V12_1_2_J2_2	1	157.31	4742.5	-200.18
## - V5_J2_5	1	180.59	4765.8	-174.71
## - V5_J2_4	1	209.39	4794.6	-143.38
## - V26_J2_3	1	270.76	4856.0	-77.25
## - V20_J2_2	1	280.24	4865.5	-67.11
## - V16_J2_2	1	436.63	5021.9	97.41

```

## - V          19    1423.57 6008.8  910.98
## - J          12    1617.56 6202.8 1122.65
##
## Step:  AIC=-482.58
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##      V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##      V3_J2_4 + V3_J2_3
##
##           Df Sum of Sq    RSS    AIC
## + V3_J2_5      1      83.57 4396.8 -573.85
## + V19_J1_4      1      81.31 4399.1 -571.17
## + V17_J2_2      1      73.32 4407.1 -561.75
## + V13_2_J1_7     1      71.91 4408.5 -560.07
## + V4_J2_4       1      70.73 4409.7 -558.69
## + V5_J1_5       1      70.51 4409.9 -558.42
## + V19_J1_5      1      69.16 4411.2 -556.83
## + V1_J2_7       1      68.84 4411.6 -556.46
## + V15_J2_7      1      68.12 4412.3 -555.61
## + V1_J2_2       1      67.16 4413.2 -554.48
## + V3_J2_1       1      61.59 4418.8 -547.92
## + V30_J1_3      1      61.22 4419.2 -547.48
## + V2_J1_3       1      57.37 4423.0 -542.96
## + V15_J2_2      1      57.02 4423.4 -542.54
## + V23_J1_3      1      56.90 4423.5 -542.40
## + V12_1_2_J1_4  1      54.32 4426.1 -539.37
## + V17_J1_3      1      48.80 4431.6 -532.89
## + V17_J2_7      1      46.69 4433.7 -530.41
## + V15_J1_3      1      41.83 4438.6 -524.72
## + V17_J1_5      1      41.36 4439.0 -524.17
## + V4_J2_1       1      40.97 4439.4 -523.71
## + V4_J2_3       1      40.34 4440.1 -522.97
## + V5_J1_3       1      39.80 4440.6 -522.34
## + V15_J1_5      1      38.02 4442.4 -520.26
## + V3_J1_3       1      37.35 4443.1 -519.47
## + V1_J1_5       1      36.45 4444.0 -518.42
## + V16_J1_3      1      35.45 4445.0 -517.25
## + V2_J2_2       1      34.96 4445.5 -516.67
## + V14_J1_5      1      34.91 4445.5 -516.62
## + V4_J2_5       1      34.88 4445.5 -516.59
## + V30_J1_1      1      31.08 4449.3 -512.14
## + V13_1_J1_2    1      30.64 4449.8 -511.63
## + V30_J1_6      1      30.61 4449.8 -511.59
## + V5_J2_3       1      30.59 4449.8 -511.57
## + V19_J2_7      1      30.41 4450.0 -511.35
## + V15_J2_5      1      29.92 4450.5 -510.78
## + V1_J1_3       1      29.61 4450.8 -510.42
## + V19_J2_3      1      29.44 4451.0 -510.22
## + V13_1_J1_3    1      28.83 4451.6 -509.51
## + V23_J2_1      1      28.18 4452.2 -508.75
## + V4_J2_2       1      27.66 4452.7 -508.14
## + V5_J2_7       1      27.18 4453.2 -507.58
## + V13_2_J1_4    1      26.55 4453.9 -506.84
## + V16_J2_7      1      25.73 4454.7 -505.89
## + V14_J1_4      1      25.65 4454.8 -505.79

```


## + V4_J1_6	1	25.51	4454.9	-505.63
## + V19_J1_3	1	25.49	4454.9	-505.61
## + V4_J1_7	1	25.25	4455.2	-505.33
## + V2_J1_5	1	24.68	4455.7	-504.66
## + V1_J1_4	1	24.43	4456.0	-504.38
## + V3_J1_4	1	24.29	4456.1	-504.20
## + V13_1_J1_7	1	23.83	4456.6	-503.67
## + V30_J2_5	1	23.55	4456.9	-503.35
## + V29_J1_5	1	22.67	4457.7	-502.32
## + V4_J1_2	1	21.41	4459.0	-500.85
## + V14_J2_3	1	21.37	4459.0	-500.80
## + V19_J2_2	1	21.19	4459.2	-500.59
## + V15_J2_4	1	20.76	4459.6	-500.09
## + V17_J1_4	1	20.26	4460.1	-499.51
## + V15_J1_4	1	20.17	4460.2	-499.40
## + V3_J2_7	1	19.97	4460.4	-499.17
## + V12_1_2_J1_5	1	19.68	4460.7	-498.83
## + V30_J1_5	1	19.64	4460.8	-498.78
## + V12_1_2_J1_6	1	18.55	4461.9	-497.51
## + V26_J1_4	1	18.27	4462.1	-497.19
## + V12_1_2_J1_7	1	18.19	4462.2	-497.10
## + V30_J1_2	1	18.10	4462.3	-496.99
## + V20_J1_4	1	17.80	4462.6	-496.64
## + V13_3_J1_2	1	17.79	4462.6	-496.63
## + V23_J2_7	1	17.69	4462.7	-496.52
## + V29_J1_7	1	17.52	4462.9	-496.31
## + V2_J2_7	1	17.32	4463.1	-496.08
## + V12_1_2_J1_2	1	17.15	4463.3	-495.88
## + V12_1_2_J2_5	1	17.02	4463.4	-495.73
## + V20_J1_3	1	16.86	4463.5	-495.55
## + V19_J1_7	1	16.73	4463.7	-495.40
## + V29_J1_1	1	16.68	4463.7	-495.34
## + V12_1_2_J2_3	1	16.37	4464.0	-494.97
## + V5_J2_1	1	16.31	4464.1	-494.90
## + V20_J1_2	1	16.11	4464.3	-494.68
## + V14_J2_2	1	16.08	4464.3	-494.64
## + V19_J1_6	1	15.57	4464.8	-494.05
## + V23_J2_3	1	15.55	4464.9	-494.02
## + V29_J1_4	1	15.41	4465.0	-493.85
## + V14_J1_2	1	15.34	4465.1	-493.78
## + V24_J1_1	1	15.18	4465.2	-493.59
## + V14_J1_3	1	14.65	4465.8	-492.97
## + V19_J1_2	1	14.52	4465.9	-492.83
## + V4_J1_1	1	14.12	4466.3	-492.36
## + V2_J1_4	1	14.04	4466.4	-492.26
## + V3_J1_2	1	13.00	4467.4	-491.05
## + V13_2_J1_3	1	12.88	4467.5	-490.91
## + V16_J2_4	1	12.86	4467.5	-490.89
## + V29_J2_3	1	12.68	4467.7	-490.68
## + V24_J2_3	1	12.50	4467.9	-490.47
## + V5_J1_7	1	11.83	4468.6	-489.69
## + V26_J1_5	1	11.74	4468.7	-489.59
## + V13_2_J1_2	1	11.71	4468.7	-489.55
## + V12_1_2_J2_7	1	11.65	4468.8	-489.48

## + V17_J2_3	1	11.60	4468.8	-489.42
## + V29_J1_3	1	11.59	4468.8	-489.41
## + V4_J1_3	1	11.37	4469.0	-489.15
## + V13_3_J2_5	1	11.17	4469.2	-488.93
## + V24_J2_5	1	10.83	4469.6	-488.53
## + V29_J1_6	1	10.81	4469.6	-488.51
## + V1_J2_4	1	10.55	4469.9	-488.20
## + V13_3_J1_6	1	10.30	4470.1	-487.91
## + V2_J2_1	1	10.12	4470.3	-487.70
## + V12_1_2_J2_4	1	10.01	4470.4	-487.58
## + V12_1_2_J2_1	1	9.96	4470.4	-487.51
## + V29_J2_1	1	9.82	4470.6	-487.36
## + V14_J2_4	1	9.78	4470.6	-487.30
## + V20_J2_3	1	9.52	4470.9	-487.00
## + V3_J2_2	1	9.25	4471.2	-486.69
## + V12_1_2_J1_3	1	8.99	4471.4	-486.39
## + V1_J2_1	1	8.74	4471.7	-486.09
## + V20_J1_6	1	8.73	4471.7	-486.09
## + V16_J1_4	1	8.72	4471.7	-486.08
## + V29_J1_2	1	8.24	4472.2	-485.51
## + V2_J2_5	1	8.19	4472.2	-485.46
## + V13_1_J2_4	1	8.16	4472.2	-485.42
## + V14_J2_7	1	7.89	4472.5	-485.11
## + V13_1_J1_4	1	7.80	4472.6	-485.00
## + V23_J2_5	1	7.54	4472.9	-484.71
## + V15_J1_7	1	7.29	4473.1	-484.40
## + V20_J2_1	1	7.15	4473.3	-484.25
## + V1_J1_7	1	7.01	4473.4	-484.09
## + V14_J1_7	1	6.90	4473.5	-483.96
## + V26_J1_6	1	6.53	4473.9	-483.52
## + V23_J2_4	1	6.30	4474.1	-483.26
## + V30_J2_7	1	6.04	4474.4	-482.95
## + V13_3_J1_4	1	5.99	4474.4	-482.90
## + V24_J1_2	1	5.97	4474.4	-482.88
## + V20_J1_5	1	5.78	4474.6	-482.66
## + V1_J2_3	1	5.75	4474.7	-482.63
## <none>			4480.4	-482.58
## + V19_J2_1	1	5.68	4474.7	-482.54
## + V5_J2_2	1	5.65	4474.8	-482.50
## + V16_J2_5	1	5.63	4474.8	-482.48
## + V16_J1_5	1	5.42	4475.0	-482.24
## + V13_2_J2_7	1	5.34	4475.1	-482.14
## + V13_3_J1_3	1	5.15	4475.3	-481.92
## + V13_1_J2_1	1	5.05	4475.4	-481.80
## + V3_J1_1	1	4.97	4475.4	-481.71
## + V17_J2_5	1	4.94	4475.5	-481.68
## + V3_J1_6	1	4.83	4475.6	-481.55
## + V13_1_J2_5	1	4.82	4475.6	-481.53
## + V13_1_J2_2	1	4.73	4475.7	-481.43
## + V3_J1_7	1	4.57	4475.8	-481.25
## + V30_J1_7	1	4.49	4475.9	-481.16
## + V20_J2_7	1	4.41	4476.0	-481.07
## + V26_J2_7	1	4.36	4476.0	-481.00
## + V30_J2_4	1	4.17	4476.2	-480.79

## + V14_J1_1	1	4.06	4476.3	-480.66
## + V5_J1_1	1	4.05	4476.4	-480.64
## + V17_J1_7	1	3.71	4476.7	-480.24
## + V3_J1_5	1	3.57	4476.8	-480.09
## + V2_J2_3	1	3.57	4476.8	-480.08
## + V13_1_J2_3	1	3.48	4476.9	-479.98
## + V24_J1_4	1	3.44	4477.0	-479.93
## + V24_J1_7	1	3.39	4477.0	-479.88
## + V13_2_J1_1	1	3.36	4477.1	-479.84
## + V30_J2_3	1	3.34	4477.1	-479.82
## + V15_J2_3	1	3.27	4477.1	-479.74
## + V13_1_J1_5	1	3.14	4477.3	-479.59
## + V26_J1_1	1	3.08	4477.3	-479.51
## + V13_1_J1_1	1	3.05	4477.4	-479.48
## + V17_J2_4	1	3.02	4477.4	-479.45
## + V16_J1_2	1	2.99	4477.4	-479.42
## + V2_J2_4	1	2.98	4477.4	-479.40
## + V5_J1_4	1	2.86	4477.5	-479.26
## + V24_J1_6	1	2.77	4477.6	-479.15
## + V17_J2_1	1	2.70	4477.7	-479.08
## + V13_3_J2_2	1	2.67	4477.7	-479.04
## + V19_J2_4	1	2.58	4477.8	-478.94
## + V23_J1_5	1	2.47	4477.9	-478.81
## + V16_J2_3	1	2.44	4478.0	-478.77
## + V20_J1_7	1	2.33	4478.1	-478.65
## + V1_J1_1	1	2.25	4478.2	-478.55
## + V15_J1_1	1	2.23	4478.2	-478.53
## + V19_J2_5	1	2.11	4478.3	-478.39
## + V20_J2_5	1	1.98	4478.4	-478.24
## + V13_2_J1_5	1	1.96	4478.5	-478.21
## + V14_J1_6	1	1.84	4478.6	-478.08
## + V23_J1_7	1	1.83	4478.6	-478.07
## + V26_J1_7	1	1.82	4478.6	-478.06
## + V2_J1_6	1	1.72	4478.7	-477.94
## + V13_2_J2_1	1	1.66	4478.8	-477.86
## + V2_J1_1	1	1.49	4478.9	-477.67
## + V13_3_J1_7	1	1.47	4478.9	-477.65
## + V13_2_J1_6	1	1.47	4478.9	-477.65
## + V13_3_J2_3	1	1.47	4478.9	-477.64
## + V24_J1_5	1	1.43	4479.0	-477.60
## + V19_J1_1	1	1.41	4479.0	-477.58
## + V29_J2_2	1	1.39	4479.0	-477.55
## + V23_J1_1	1	1.32	4479.1	-477.47
## + V15_J1_2	1	1.21	4479.2	-477.35
## + V16_J1_7	1	1.18	4479.2	-477.31
## + V13_3_J2_7	1	1.17	4479.2	-477.30
## + V23_J2_2	1	1.17	4479.2	-477.30
## + V14_J2_1	1	1.14	4479.3	-477.26
## + V13_3_J2_1	1	1.11	4479.3	-477.23
## + V26_J1_3	1	1.10	4479.3	-477.22
## + V13_1_J1_6	1	1.05	4479.4	-477.16
## + V13_3_J1_1	1	1.03	4479.4	-477.13
## + V16_J2_1	1	1.01	4479.4	-477.12
## + V15_J1_6	1	1.01	4479.4	-477.11

## + V23_J1_6	1	0.97	4479.4	-477.07
## + V1_J1_2	1	0.84	4479.6	-476.92
## + V13_2_J2_2	1	0.83	4479.6	-476.90
## + V24_J2_4	1	0.82	4479.6	-476.90
## + V24_J2_7	1	0.79	4479.6	-476.85
## + V15_J2_1	1	0.78	4479.6	-476.84
## + V29_J2_5	1	0.76	4479.6	-476.82
## + V24_J2_2	1	0.68	4479.7	-476.73
## + V2_J1_7	1	0.64	4479.8	-476.68
## + V13_3_J2_4	1	0.62	4479.8	-476.67
## + V14_J2_5	1	0.61	4479.8	-476.65
## + V13_2_J2_4	1	0.51	4479.9	-476.53
## + V13_2_J2_5	1	0.48	4479.9	-476.50
## + V24_J2_1	1	0.47	4479.9	-476.48
## + V12_1_2_J1_1	1	0.45	4480.0	-476.47
## + V13_3_J1_5	1	0.45	4480.0	-476.47
## + V13_2_J2_3	1	0.44	4480.0	-476.45
## + V16_J1_6	1	0.43	4480.0	-476.44
## + V4_J2_7	1	0.36	4480.0	-476.36
## + V26_J1_2	1	0.34	4480.1	-476.33
## + V17_J1_2	1	0.33	4480.1	-476.33
## + V29_J2_7	1	0.33	4480.1	-476.32
## + V1_J1_6	1	0.29	4480.1	-476.28
## + V26_J2_2	1	0.27	4480.1	-476.25
## + V30_J1_4	1	0.25	4480.2	-476.23
## + V23_J1_4	1	0.23	4480.2	-476.21
## + V30_J2_1	1	0.21	4480.2	-476.18
## + V16_J1_1	1	0.13	4480.3	-476.09
## + V4_J1_5	1	0.11	4480.3	-476.07
## + V5_J1_2	1	0.11	4480.3	-476.07
## + V1_J2_5	1	0.08	4480.3	-476.04
## + V24_J1_3	1	0.08	4480.3	-476.03
## + V20_J2_4	1	0.06	4480.3	-476.01
## + V20_J1_1	1	0.05	4480.4	-476.00
## + V23_J1_2	1	0.04	4480.4	-475.99
## + V4_J1_4	1	0.04	4480.4	-475.99
## + V13_1_J2_7	1	0.03	4480.4	-475.98
## + V29_J2_4	1	0.02	4480.4	-475.97
## + V17_J1_6	1	0.02	4480.4	-475.96
## + V17_J1_1	1	0.00	4480.4	-475.94
## + V2_J1_2	1	0.00	4480.4	-475.94
## + V5_J1_6	1	0.00	4480.4	-475.94
## - V26_J2_1	1	94.66	4575.1	-380.50
## - V3_J2_3	1	104.82	4585.2	-368.95
## - V3_J2_4	1	108.59	4589.0	-364.69
## - V26_J2_5	1	135.51	4615.9	-334.27
## - V26_J2_4	1	137.67	4618.1	-331.84
## - V30_J2_2	1	139.00	4619.4	-330.34
## - V12_1_2_J2_2	1	155.79	4636.2	-311.48
## - V5_J2_5	1	179.23	4659.6	-285.24
## - V5_J2_4	1	209.31	4689.7	-251.79
## - V20_J2_2	1	278.21	4758.6	-175.95
## - V26_J2_3	1	287.90	4768.3	-165.36
## - V16_J2_2	1	434.09	4914.5	-8.34

```

## - V          19   1387.57 5868.0  794.30
## - J          12   1635.93 6116.3 1056.30
##
## Step:  AIC=-573.85
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##       V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##       V3_J2_4 + V3_J2_3 + V3_J2_5
##
##
##      Df Sum of Sq  RSS    AIC
## + V19_J1_4      1    80.38 4316.5 -663.16
## + V3_J2_1       1    77.55 4319.3 -659.76
## + V17_J2_2      1    72.19 4324.6 -653.30
## + V13_2_J1_7    1    71.03 4325.8 -651.91
## + V4_J2_4       1    70.75 4326.1 -651.58
## + V5_J1_5       1    70.45 4326.4 -651.21
## + V15_J2_7      1    68.98 4327.9 -649.45
## + V19_J1_5      1    68.30 4328.5 -648.63
## + V1_J2_7       1    67.99 4328.8 -648.25
## + V1_J2_2       1    66.07 4330.8 -645.96
## + V30_J1_3      1    60.32 4336.5 -639.05
## + V15_J2_2      1    58.03 4338.8 -636.31
## + V2_J1_3       1    56.59 4340.2 -634.58
## + V23_J1_3      1    56.12 4340.7 -634.02
## + V12_1_2_J1_4  1    53.48 4343.4 -630.85
## + V17_J1_3      1    48.08 4348.8 -624.39
## + V17_J2_7      1    45.98 4350.9 -621.89
## + V15_J1_3      1    42.50 4354.3 -617.73
## + V17_J1_5      1    42.03 4354.8 -617.17
## + V4_J2_5       1    41.63 4355.2 -616.69
## + V4_J2_3       1    40.32 4356.5 -615.13
## + V4_J2_1       1    40.31 4356.5 -615.11
## + V5_J1_3       1    39.84 4357.0 -614.55
## + V15_J1_5      1    37.38 4359.5 -611.62
## + V1_J1_5       1    37.08 4359.8 -611.26
## + V15_J2_5      1    36.18 4360.7 -610.19
## + V16_J1_3      1    34.77 4362.1 -608.51
## + V3_J1_4       1    34.46 4362.4 -608.14
## + V14_J1_5      1    34.30 4362.5 -607.95
## + V2_J2_2       1    34.17 4362.7 -607.79
## + V30_J1_1      1    31.72 4365.1 -604.88
## + V5_J2_3       1    31.12 4365.7 -604.16
## + V19_J2_7      1    30.98 4365.8 -603.99
## + V13_1_J1_2    1    30.07 4366.8 -602.91
## + V30_J1_6      1    29.98 4366.9 -602.79
## + V19_J2_3      1    29.42 4367.4 -602.13
## + V13_1_J1_3    1    29.39 4367.4 -602.09
## + V1_J1_3       1    29.04 4367.8 -601.68
## + V23_J2_1      1    28.73 4368.1 -601.31
## + V4_J2_2       1    28.37 4368.5 -600.88
## + V3_J1_3       1    27.29 4369.5 -599.60
## + V5_J2_7       1    27.22 4369.6 -599.51
## + V13_2_J1_4    1    27.09 4369.7 -599.35
## + V4_J1_6       1    26.03 4370.8 -598.10
## + V19_J1_3      1    26.01 4370.8 -598.08

```

## + V4_J1_7	1	25.77	4371.1	-597.79
## + V2_J1_5	1	25.20	4371.6	-597.10
## + V16_J2_7	1	25.15	4371.7	-597.05
## + V14_J1_4	1	25.12	4371.7	-597.02
## + V1_J1_4	1	24.95	4371.9	-596.81
## + V13_1_J1_7	1	23.32	4373.5	-594.88
## + V29_J1_5	1	23.17	4373.7	-594.70
## + V4_J1_2	1	21.89	4374.9	-593.17
## + V19_J2_2	1	21.81	4375.0	-593.07
## + V14_J2_3	1	21.35	4375.5	-592.53
## + V15_J2_4	1	20.77	4376.1	-591.84
## + V17_J1_4	1	20.73	4376.1	-591.79
## + V12_1_2_J1_5	1	20.19	4376.6	-591.16
## + V30_J1_5	1	20.15	4376.7	-591.11
## + V15_J1_4	1	19.71	4377.1	-590.58
## + V30_J2_5	1	18.74	4378.1	-589.43
## + V30_J1_2	1	18.59	4378.2	-589.26
## + V20_J1_4	1	18.29	4378.5	-588.89
## + V26_J1_4	1	18.29	4378.5	-588.89
## + V12_1_2_J1_6	1	18.05	4378.8	-588.62
## + V12_1_2_J1_7	1	17.71	4379.1	-588.20
## + V12_1_2_J1_2	1	17.63	4379.2	-588.11
## + V13_3_J1_2	1	17.35	4379.5	-587.78
## + V20_J1_3	1	17.34	4379.5	-587.76
## + V23_J2_7	1	17.26	4379.6	-587.67
## + V19_J1_7	1	17.16	4379.7	-587.55
## + V29_J1_7	1	17.09	4379.7	-587.47
## + V2_J2_7	1	16.89	4379.9	-587.23
## + V14_J2_2	1	16.62	4380.2	-586.92
## + V12_1_2_J2_3	1	16.43	4380.4	-586.68
## + V5_J2_1	1	16.28	4380.6	-586.51
## + V29_J1_1	1	16.26	4380.6	-586.49
## + V19_J1_6	1	15.99	4380.8	-586.16
## + V29_J1_4	1	15.82	4381.0	-585.96
## + V14_J1_2	1	15.75	4381.1	-585.88
## + V20_J1_2	1	15.65	4381.2	-585.77
## + V23_J2_3	1	15.56	4381.3	-585.66
## + V14_J1_3	1	15.05	4381.8	-585.05
## + V19_J1_2	1	14.92	4381.9	-584.90
## + V24_J1_1	1	14.78	4382.1	-584.73
## + V24_J2_5	1	14.69	4382.1	-584.62
## + V4_J1_1	1	14.52	4382.3	-584.42
## + V2_J1_4	1	14.43	4382.4	-584.32
## + V13_2_J1_3	1	13.25	4383.6	-582.92
## + V12_1_2_J2_5	1	12.96	4383.9	-582.57
## + V16_J2_4	1	12.89	4383.9	-582.49
## + V3_J2_7	1	12.77	4384.1	-582.35
## + V29_J2_3	1	12.69	4384.1	-582.25
## + V24_J2_3	1	12.51	4384.3	-582.04
## + V5_J1_7	1	11.85	4385.0	-581.26
## + V26_J1_5	1	11.75	4385.1	-581.14
## + V4_J1_3	1	11.72	4385.1	-581.10
## + V17_J2_3	1	11.61	4385.2	-580.97
## + V13_2_J1_2	1	11.36	4385.5	-580.67

## + V12_1_2_J2_7	1	11.26	4385.6	-580.55
## + V29_J1_3	1	11.24	4385.6	-580.53
## + V1_J2_4	1	10.54	4386.3	-579.70
## + V29_J1_6	1	10.48	4386.4	-579.62
## + V2_J2_1	1	10.46	4386.4	-579.60
## + V12_1_2_J2_1	1	10.33	4386.5	-579.45
## + V29_J2_1	1	10.15	4386.7	-579.24
## + V12_1_2_J2_4	1	10.04	4386.8	-579.11
## + V13_3_J1_6	1	9.97	4386.9	-579.02
## + V14_J2_4	1	9.79	4387.0	-578.81
## + V20_J2_3	1	9.48	4387.4	-578.44
## + V16_J1_4	1	9.07	4387.8	-577.96
## + V1_J2_1	1	9.05	4387.8	-577.93
## + V12_1_2_J1_3	1	8.65	4388.2	-577.46
## + V20_J1_6	1	8.39	4388.4	-577.16
## + V14_J2_7	1	8.19	4388.6	-576.91
## + V13_1_J2_4	1	8.15	4388.7	-576.87
## + V13_1_J1_4	1	8.09	4388.7	-576.79
## + V29_J1_2	1	7.94	4388.9	-576.62
## + V3_J1_5	1	7.94	4388.9	-576.62
## + V13_3_J2_5	1	7.91	4388.9	-576.58
## + V15_J1_7	1	7.57	4389.3	-576.18
## + V3_J1_2	1	7.32	4389.5	-575.88
## + V1_J1_7	1	7.29	4389.5	-575.85
## + V14_J1_7	1	7.18	4389.7	-575.71
## + V20_J2_1	1	6.84	4390.0	-575.32
## + V26_J1_6	1	6.52	4390.3	-574.94
## + V23_J2_4	1	6.29	4390.5	-574.67
## + V13_3_J1_4	1	6.25	4390.6	-574.61
## + V20_J1_5	1	6.06	4390.8	-574.39
## + V1_J2_3	1	5.76	4391.1	-574.04
## + V30_J2_7	1	5.76	4391.1	-574.03
## + V5_J2_2	1	5.73	4391.1	-574.01
## + V24_J1_2	1	5.72	4391.1	-573.99
## + V16_J1_5	1	5.69	4391.1	-573.95
## <none>			4396.8	-573.85
## + V13_2_J2_7	1	5.58	4391.3	-573.82
## + V2_J2_5	1	5.43	4391.4	-573.65
## + V19_J2_1	1	5.43	4391.4	-573.65
## + V13_3_J1_3	1	5.39	4391.4	-573.59
## + V13_1_J2_1	1	5.28	4391.5	-573.47
## + V23_J2_5	1	4.91	4391.9	-573.03
## + V20_J2_7	1	4.66	4392.2	-572.73
## + V3_J2_2	1	4.61	4392.2	-572.68
## + V13_1_J2_2	1	4.44	4392.4	-572.48
## + V26_J2_7	1	4.35	4392.5	-572.37
## + V14_J1_1	1	4.27	4392.6	-572.27
## + V30_J1_7	1	4.25	4392.6	-572.25
## + V30_J2_4	1	4.15	4392.7	-572.13
## + V5_J1_1	1	4.06	4392.8	-572.02
## + V19_J2_5	1	3.97	4392.9	-571.91
## + V17_J1_7	1	3.91	4392.9	-571.84
## + V24_J1_4	1	3.63	4393.2	-571.52
## + V24_J1_7	1	3.59	4393.2	-571.46

## + V2_J2_3	1	3.57	4393.3	-571.45
## + V13_1_J2_3	1	3.48	4393.3	-571.34
## + V16_J2_5	1	3.40	4393.4	-571.24
## + V30_J2_3	1	3.37	4393.5	-571.20
## + V15_J2_3	1	3.27	4393.6	-571.09
## + V13_2_J1_1	1	3.17	4393.7	-570.97
## + V26_J1_1	1	3.07	4393.8	-570.85
## + V17_J2_4	1	3.02	4393.8	-570.79
## + V2_J2_4	1	2.98	4393.9	-570.74
## + V13_1_J1_5	1	2.96	4393.9	-570.72
## + V24_J1_6	1	2.94	4393.9	-570.70
## + V17_J2_1	1	2.88	4394.0	-570.62
## + V13_1_J1_1	1	2.87	4394.0	-570.61
## + V17_J2_5	1	2.86	4394.0	-570.60
## + V5_J1_4	1	2.85	4394.0	-570.59
## + V16_J1_2	1	2.80	4394.0	-570.53
## + V13_1_J2_5	1	2.76	4394.1	-570.49
## + V23_J1_5	1	2.63	4394.2	-570.33
## + V19_J2_4	1	2.58	4394.3	-570.27
## + V13_3_J2_2	1	2.46	4394.4	-570.13
## + V16_J2_3	1	2.41	4394.4	-570.07
## + V20_J1_7	1	2.16	4394.7	-569.77
## + V1_J1_1	1	2.10	4394.7	-569.70
## + V15_J1_1	1	2.08	4394.8	-569.68
## + V14_J1_6	1	1.99	4394.8	-569.57
## + V2_J1_6	1	1.86	4395.0	-569.42
## + V26_J1_7	1	1.82	4395.0	-569.37
## + V13_2_J1_5	1	1.81	4395.0	-569.36
## + V13_2_J2_1	1	1.79	4395.0	-569.34
## + V3_J1_1	1	1.75	4395.1	-569.29
## + V14_J2_5	1	1.74	4395.1	-569.27
## + V23_J1_7	1	1.70	4395.1	-569.22
## + V3_J1_6	1	1.67	4395.2	-569.19
## + V13_2_J1_6	1	1.60	4395.2	-569.11
## + V29_J2_2	1	1.55	4395.3	-569.05
## + V19_J1_1	1	1.53	4395.3	-569.03
## + V13_2_J2_5	1	1.52	4395.3	-569.02
## + V3_J1_7	1	1.51	4395.3	-569.01
## + V13_3_J2_3	1	1.47	4395.4	-568.96
## + V2_J1_1	1	1.36	4395.5	-568.83
## + V13_3_J1_7	1	1.35	4395.5	-568.81
## + V24_J1_5	1	1.31	4395.5	-568.76
## + V16_J1_7	1	1.31	4395.5	-568.76
## + V13_3_J2_7	1	1.28	4395.6	-568.74
## + V13_3_J2_1	1	1.23	4395.6	-568.67
## + V23_J1_1	1	1.20	4395.6	-568.64
## + V16_J2_1	1	1.13	4395.7	-568.56
## + V15_J1_6	1	1.11	4395.7	-568.53
## + V15_J1_2	1	1.10	4395.7	-568.52
## + V26_J1_3	1	1.09	4395.7	-568.51
## + V14_J2_1	1	1.03	4395.8	-568.44
## + V23_J2_2	1	1.03	4395.8	-568.43
## + V13_2_J2_2	1	0.96	4395.9	-568.35
## + V13_1_J1_6	1	0.95	4395.9	-568.34

## + V1_J1_2	1	0.94	4395.9	-568.33
## + V13_3_J1_1	1	0.93	4395.9	-568.31
## + V24_J2_7	1	0.88	4396.0	-568.26
## + V23_J1_6	1	0.87	4396.0	-568.25
## + V24_J2_4	1	0.82	4396.0	-568.19
## + V20_J2_5	1	0.77	4396.1	-568.13
## + V15_J2_1	1	0.69	4396.1	-568.03
## + V1_J2_5	1	0.67	4396.2	-568.01
## + V13_3_J2_4	1	0.63	4396.2	-567.96
## + V24_J2_2	1	0.58	4396.3	-567.90
## + V2_J1_7	1	0.56	4396.3	-567.88
## + V24_J2_1	1	0.54	4396.3	-567.86
## + V13_3_J1_5	1	0.52	4396.3	-567.84
## + V13_2_J2_4	1	0.51	4396.3	-567.82
## + V16_J1_6	1	0.50	4396.3	-567.82
## + V13_2_J2_3	1	0.44	4396.4	-567.74
## + V17_J1_2	1	0.40	4396.4	-567.69
## + V29_J2_7	1	0.39	4396.4	-567.68
## + V12_1_2_J1_1	1	0.38	4396.5	-567.67
## + V1_J1_6	1	0.35	4396.5	-567.63
## + V26_J1_2	1	0.34	4396.5	-567.62
## + V4_J2_7	1	0.30	4396.5	-567.57
## + V23_J1_4	1	0.28	4396.6	-567.55
## + V26_J2_2	1	0.25	4396.6	-567.52
## + V30_J1_4	1	0.20	4396.6	-567.45
## + V16_J1_1	1	0.17	4396.7	-567.42
## + V30_J2_1	1	0.16	4396.7	-567.41
## + V4_J1_5	1	0.15	4396.7	-567.40
## + V29_J2_5	1	0.11	4396.7	-567.35
## + V5_J1_2	1	0.11	4396.7	-567.35
## + V24_J1_3	1	0.11	4396.7	-567.35
## + V20_J2_4	1	0.06	4396.8	-567.29
## + V4_J1_4	1	0.06	4396.8	-567.29
## + V20_J1_1	1	0.03	4396.8	-567.26
## + V23_J1_2	1	0.02	4396.8	-567.25
## + V29_J2_4	1	0.02	4396.8	-567.24
## + V13_1_J2_7	1	0.02	4396.8	-567.24
## + V17_J1_1	1	0.01	4396.8	-567.23
## + V17_J1_6	1	0.01	4396.8	-567.23
## + V5_J1_6	1	0.00	4396.8	-567.22
## + V2_J1_2	1	0.00	4396.8	-567.22
## - V3_J2_5	1	83.57	4480.4	-482.58
## - V26_J2_1	1	94.69	4491.5	-469.70
## - V3_J2_3	1	121.60	4518.4	-438.63
## - V3_J2_4	1	125.65	4522.5	-433.97
## - V30_J2_2	1	137.52	4534.4	-420.34
## - V26_J2_4	1	138.78	4535.6	-418.90
## - V26_J2_5	1	147.13	4544.0	-409.33
## - V12_1_2_J2_2	1	154.22	4551.1	-401.22
## - V5_J2_5	1	192.50	4589.3	-357.67
## - V5_J2_4	1	210.56	4607.4	-337.24
## - V20_J2_2	1	276.11	4672.9	-263.79
## - V26_J2_3	1	289.43	4686.3	-248.99
## - V16_J2_2	1	431.46	4828.3	-93.72

```

## - V          19    1369.99 5766.8  710.52
## - J          12    1636.85 6033.7  992.18
##
## Step:  AIC=-663.16
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##      V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##      V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4
##
##           Df Sum of Sq    RSS      AIC
## + V19_J1_5      1      81.83 4234.6 -756.05
## + V3_J2_1        1      76.62 4239.8 -749.65
## + V17_J2_2        1      71.40 4245.1 -743.25
## + V13_2_J1_7      1      70.42 4246.0 -742.06
## + V4_J2_4         1      69.99 4246.5 -741.53
## + V5_J1_5         1      69.70 4246.8 -741.17
## + V15_J2_7        1      69.59 4246.9 -741.04
## + V1_J2_7         1      67.39 4249.1 -738.34
## + V1_J2_2         1      65.32 4251.1 -735.81
## + V12_1_2_J1_4    1      60.78 4255.7 -730.27
## + V30_J1_3        1      59.69 4256.8 -728.94
## + V15_J2_2        1      58.75 4257.7 -727.79
## + V2_J1_3         1      56.04 4260.4 -724.48
## + V23_J1_3        1      55.58 4260.9 -723.91
## + V17_J1_3        1      47.57 4268.9 -714.15
## + V17_J2_7        1      45.49 4271.0 -711.61
## + V15_J1_3        1      42.98 4273.5 -708.56
## + V17_J1_5        1      42.51 4273.9 -707.99
## + V4_J2_5         1      41.05 4275.4 -706.21
## + V5_J1_3         1      40.41 4276.0 -705.44
## + V3_J1_4         1      40.28 4276.2 -705.27
## + V4_J2_1         1      39.81 4276.6 -704.71
## + V4_J2_3         1      39.78 4276.7 -704.67
## + V19_J2_3        1      38.34 4278.1 -702.92
## + V1_J1_5         1      37.52 4278.9 -701.93
## + V15_J1_5        1      36.94 4279.5 -701.21
## + V15_J2_5        1      35.64 4280.8 -699.63
## + V16_J1_3        1      34.30 4282.2 -698.00
## + V14_J1_5        1      33.88 4282.6 -697.49
## + V2_J2_2         1      33.63 4282.8 -697.19
## + V30_J1_1        1      32.18 4284.3 -695.44
## + V5_J2_3         1      30.55 4285.9 -693.46
## + V14_J1_4        1      30.19 4286.3 -693.02
## + V13_1_J1_3      1      29.79 4286.7 -692.53
## + V13_1_J1_2      1      29.68 4286.8 -692.40
## + V30_J1_6        1      29.53 4286.9 -692.23
## + V23_J2_1        1      29.16 4287.3 -691.77
## + V4_J2_2         1      28.87 4287.6 -691.42
## + V1_J1_3         1      28.65 4287.8 -691.16
## + V3_J1_3         1      27.82 4288.6 -690.15
## + V5_J2_7         1      27.69 4288.8 -689.99
## + V4_J1_6         1      26.41 4290.0 -688.44
## + V4_J1_7         1      26.14 4290.3 -688.11
## + V2_J1_5         1      25.56 4290.9 -687.41
## + V16_J2_7        1      24.75 4291.7 -686.42

```

## + V15_J1_4	1	24.21	4292.2	-685.78
## + V29_J1_5	1	23.53	4292.9	-684.94
## + V19_J2_7	1	23.36	4293.1	-684.74
## + V13_1_J1_7	1	22.97	4293.5	-684.27
## + V26_J1_4	1	22.53	4293.9	-683.74
## + V13_2_J1_4	1	22.43	4294.0	-683.62
## + V4_J1_2	1	22.23	4294.2	-683.38
## + V14_J2_3	1	20.96	4295.5	-681.84
## + V12_1_2_J1_5	1	20.56	4295.9	-681.35
## + V30_J1_5	1	20.52	4295.9	-681.30
## + V1_J1_4	1	20.49	4296.0	-681.27
## + V15_J2_4	1	20.36	4296.1	-681.10
## + V30_J2_5	1	19.17	4297.3	-679.67
## + V19_J1_3	1	19.06	4297.4	-679.53
## + V30_J1_2	1	18.95	4297.5	-679.40
## + V12_1_2_J1_2	1	17.97	4298.5	-678.22
## + V12_1_2_J1_6	1	17.71	4298.7	-677.90
## + V20_J1_3	1	17.68	4298.8	-677.86
## + V12_1_2_J1_7	1	17.37	4299.1	-677.49
## + V13_3_J1_2	1	17.05	4299.4	-677.10
## + V14_J2_2	1	17.01	4299.4	-677.05
## + V23_J2_7	1	16.96	4299.5	-676.99
## + V12_1_2_J2_3	1	16.81	4299.7	-676.81
## + V29_J1_7	1	16.79	4299.7	-676.78
## + V17_J1_4	1	16.68	4299.8	-676.65
## + V2_J2_7	1	16.59	4299.9	-676.55
## + V14_J1_2	1	16.04	4300.4	-675.89
## + V29_J1_1	1	15.97	4300.5	-675.80
## + V23_J2_3	1	15.90	4300.6	-675.72
## + V5_J2_1	1	15.90	4300.6	-675.71
## + V19_J2_2	1	15.51	4300.9	-675.24
## + V20_J1_2	1	15.33	4301.1	-675.03
## + V14_J1_3	1	15.33	4301.1	-675.03
## + V4_J1_1	1	14.80	4301.7	-674.38
## + V20_J1_4	1	14.51	4301.9	-674.03
## + V24_J1_1	1	14.50	4302.0	-674.02
## + V24_J2_5	1	14.34	4302.1	-673.83
## + V13_2_J1_3	1	13.52	4302.9	-672.84
## + V12_1_2_J2_5	1	13.32	4303.1	-672.59
## + V16_J2_4	1	13.25	4303.2	-672.51
## + V3_J2_7	1	13.13	4303.3	-672.37
## + V29_J2_3	1	13.00	4303.5	-672.21
## + V24_J2_3	1	12.81	4303.6	-671.98
## + V29_J1_4	1	12.30	4304.2	-671.36
## + V5_J1_7	1	12.17	4304.3	-671.20
## + V4_J1_3	1	11.97	4304.5	-670.97
## + V17_J2_3	1	11.90	4304.6	-670.88
## + V19_J1_7	1	11.59	4304.9	-670.50
## + V26_J1_5	1	11.37	4305.1	-670.24
## + V13_2_J1_2	1	11.11	4305.3	-669.93
## + V2_J1_4	1	11.08	4305.4	-669.89
## + V29_J1_3	1	11.00	4305.5	-669.79
## + V12_1_2_J2_7	1	10.99	4305.5	-669.78
## + V1_J2_4	1	10.84	4305.6	-669.60

## + V2_J2_1	1	10.71	4305.7	-669.45
## + V19_J1_6	1	10.62	4305.8	-669.34
## + V12_1_2_J2_1	1	10.61	4305.8	-669.32
## + V29_J2_1	1	10.41	4306.1	-669.07
## + V12_1_2_J2_4	1	10.36	4306.1	-669.02
## + V29_J1_6	1	10.24	4306.2	-668.88
## + V19_J1_2	1	9.76	4306.7	-668.29
## + V13_3_J1_6	1	9.74	4306.7	-668.27
## + V19_J2_1	1	9.55	4306.9	-668.04
## + V14_J2_4	1	9.50	4307.0	-667.99
## + V1_J2_1	1	9.29	4307.2	-667.72
## + V20_J2_3	1	9.19	4307.3	-667.61
## + V12_1_2_J1_3	1	8.42	4308.0	-666.67
## + V13_1_J2_4	1	8.41	4308.0	-666.67
## + V14_J2_7	1	8.40	4308.1	-666.65
## + V13_3_J2_5	1	8.17	4308.3	-666.37
## + V20_J1_6	1	8.16	4308.3	-666.36
## + V15_J1_7	1	7.77	4308.7	-665.89
## + V29_J1_2	1	7.74	4308.7	-665.86
## + V3_J1_5	1	7.66	4308.8	-665.76
## + V3_J1_2	1	7.60	4308.9	-665.68
## + V19_J2_5	1	7.54	4308.9	-665.61
## + V1_J1_7	1	7.49	4309.0	-665.55
## + V14_J1_7	1	7.37	4309.1	-665.41
## + V26_J1_6	1	6.81	4309.6	-664.74
## + V20_J2_1	1	6.62	4309.8	-664.50
## + V23_J2_4	1	6.52	4309.9	-664.39
## + V16_J1_4	1	6.46	4310.0	-664.32
## + V20_J1_5	1	6.26	4310.2	-664.08
## + V5_J2_2	1	6.00	4310.5	-663.76
## + V1_J2_3	1	5.97	4310.5	-663.72
## + V16_J1_5	1	5.89	4310.6	-663.62
## + V13_2_J2_7	1	5.75	4310.7	-663.46
## + V2_J2_5	1	5.65	4310.8	-663.33
## + V13_1_J1_4	1	5.63	4310.8	-663.31
## + V19_J2_4	1	5.57	4310.9	-663.24
## + V30_J2_7	1	5.56	4310.9	-663.23
## + V13_3_J1_3	1	5.56	4310.9	-663.22
## + V24_J1_2	1	5.55	4310.9	-663.21
## <none>			4316.5	-663.16
## + V13_1_J2_1	1	5.47	4311.0	-663.11
## + V23_J2_5	1	5.11	4311.3	-662.69
## + V3_J2_2	1	4.88	4311.6	-662.40
## + V20_J2_7	1	4.83	4311.6	-662.35
## + V5_J1_4	1	4.67	4311.8	-662.15
## + V26_J2_7	1	4.59	4311.9	-662.06
## + V14_J1_1	1	4.42	4312.0	-661.86
## + V13_1_J2_2	1	4.25	4312.2	-661.64
## + V5_J1_1	1	4.24	4312.2	-661.64
## + V13_3_J1_4	1	4.11	4312.3	-661.48
## + V30_J1_7	1	4.09	4312.4	-661.45
## + V17_J1_7	1	4.05	4312.4	-661.41
## + V30_J2_4	1	3.95	4312.5	-661.29
## + V2_J2_3	1	3.73	4312.7	-661.02

## + V24_J1_7	1	3.73	4312.7	-661.02
## + V13_1_J2_3	1	3.65	4312.8	-660.92
## + V16_J2_5	1	3.59	4312.9	-660.84
## + V30_J2_3	1	3.54	4312.9	-660.79
## + V26_J1_1	1	3.27	4313.2	-660.47
## + V17_J2_4	1	3.18	4313.3	-660.35
## + V2_J2_4	1	3.13	4313.3	-660.30
## + V15_J2_3	1	3.12	4313.3	-660.28
## + V24_J1_6	1	3.07	4313.4	-660.22
## + V13_2_J1_1	1	3.04	4313.4	-660.19
## + V17_J2_1	1	3.01	4313.4	-660.15
## + V17_J2_5	1	3.01	4313.4	-660.15
## + V13_1_J2_5	1	2.92	4313.5	-660.04
## + V13_1_J1_5	1	2.84	4313.6	-659.94
## + V23_J1_5	1	2.75	4313.7	-659.84
## + V13_1_J1_1	1	2.75	4313.7	-659.83
## + V16_J1_2	1	2.66	4313.8	-659.73
## + V13_3_J2_2	1	2.31	4314.1	-659.31
## + V16_J2_3	1	2.27	4314.2	-659.26
## + V14_J1_6	1	2.09	4314.4	-659.04
## + V24_J1_4	1	2.05	4314.4	-659.00
## + V20_J1_7	1	2.04	4314.4	-658.98
## + V1_J1_1	1	1.99	4314.5	-658.92
## + V15_J1_1	1	1.98	4314.5	-658.90
## + V26_J1_7	1	1.97	4314.5	-658.90
## + V2_J1_6	1	1.96	4314.5	-658.89
## + V13_2_J2_1	1	1.90	4314.6	-658.81
## + V3_J1_1	1	1.88	4314.6	-658.79
## + V3_J1_6	1	1.80	4314.7	-658.69
## + V13_2_J1_5	1	1.72	4314.7	-658.59
## + V13_2_J1_6	1	1.69	4314.8	-658.56
## + V29_J2_2	1	1.67	4314.8	-658.54
## + V3_J1_7	1	1.64	4314.8	-658.50
## + V14_J2_5	1	1.62	4314.8	-658.47
## + V23_J1_7	1	1.60	4314.9	-658.45
## + V13_3_J2_3	1	1.58	4314.9	-658.42
## + V13_2_J2_5	1	1.41	4315.0	-658.22
## + V16_J1_7	1	1.40	4315.1	-658.21
## + V13_3_J2_7	1	1.37	4315.1	-658.17
## + V13_3_J2_1	1	1.31	4315.1	-658.11
## + V2_J1_1	1	1.28	4315.2	-658.06
## + V13_3_J1_7	1	1.26	4315.2	-658.05
## + V16_J2_1	1	1.23	4315.2	-658.00
## + V24_J1_5	1	1.22	4315.2	-658.00
## + V26_J1_3	1	1.22	4315.2	-657.99
## + V15_J1_6	1	1.19	4315.3	-657.96
## + V23_J1_1	1	1.13	4315.3	-657.88
## + V13_2_J2_2	1	1.05	4315.4	-657.79
## + V15_J1_2	1	1.02	4315.4	-657.76
## + V1_J1_2	1	1.01	4315.4	-657.74
## + V24_J2_7	1	0.95	4315.5	-657.67
## + V14_J2_1	1	0.95	4315.5	-657.67
## + V23_J2_2	1	0.93	4315.5	-657.65
## + V24_J2_4	1	0.91	4315.6	-657.61

## + V13_1_J1_6	1	0.88	4315.6	-657.58
## + V20_J2_5	1	0.86	4315.6	-657.56
## + V13_3_J1_1	1	0.86	4315.6	-657.55
## + V30_J1_4	1	0.84	4315.6	-657.54
## + V23_J1_6	1	0.81	4315.7	-657.49
## + V15_J2_1	1	0.62	4315.8	-657.27
## + V1_J2_5	1	0.60	4315.9	-657.25
## + V24_J2_1	1	0.60	4315.9	-657.25
## + V13_3_J1_5	1	0.58	4315.9	-657.22
## + V13_2_J2_4	1	0.58	4315.9	-657.22
## + V16_J1_6	1	0.56	4315.9	-657.20
## + V13_3_J2_4	1	0.56	4315.9	-657.19
## + V24_J2_2	1	0.51	4315.9	-657.14
## + V2_J1_7	1	0.51	4316.0	-657.13
## + V13_2_J2_3	1	0.50	4316.0	-657.13
## + V17_J1_2	1	0.44	4316.0	-657.06
## + V29_J2_7	1	0.43	4316.0	-657.05
## + V1_J1_6	1	0.39	4316.1	-657.00
## + V12_1_2_J1_1	1	0.33	4316.1	-656.92
## + V26_J1_2	1	0.28	4316.2	-656.86
## + V4_J2_7	1	0.26	4316.2	-656.84
## + V19_J1_1	1	0.24	4316.2	-656.81
## + V16_J1_1	1	0.20	4316.3	-656.77
## + V26_J2_2	1	0.19	4316.3	-656.75
## + V4_J1_5	1	0.18	4316.3	-656.74
## + V29_J2_5	1	0.15	4316.3	-656.70
## + V5_J1_2	1	0.14	4316.3	-656.70
## + V24_J1_3	1	0.14	4316.3	-656.69
## + V30_J2_1	1	0.12	4316.3	-656.67
## + V20_J2_4	1	0.09	4316.4	-656.63
## + V4_J1_4	1	0.05	4316.4	-656.59
## + V20_J1_1	1	0.02	4316.4	-656.54
## + V17_J1_1	1	0.02	4316.4	-656.54
## + V23_J1_2	1	0.01	4316.4	-656.54
## + V29_J2_4	1	0.01	4316.4	-656.54
## + V13_1_J2_7	1	0.01	4316.4	-656.53
## + V2_J1_2	1	0.00	4316.5	-656.53
## + V23_J1_4	1	0.00	4316.5	-656.53
## + V17_J1_6	1	0.00	4316.5	-656.53
## + V5_J1_6	1	0.00	4316.5	-656.52
## - V19_J1_4	1	80.38	4396.8	-573.85
## - V3_J2_5	1	82.64	4399.1	-571.17
## - V26_J2_1	1	93.70	4410.2	-558.12
## - V3_J2_3	1	120.53	4437.0	-526.58
## - V3_J2_4	1	124.51	4441.0	-521.92
## - V30_J2_2	1	136.48	4452.9	-507.92
## - V26_J2_4	1	137.46	4453.9	-506.78
## - V26_J2_5	1	145.78	4462.2	-497.08
## - V12_1_2_J2_2	1	153.12	4469.6	-488.52
## - V5_J2_5	1	191.20	4507.7	-444.42
## - V5_J2_4	1	209.20	4525.7	-423.68
## - V20_J2_2	1	274.64	4591.1	-349.03
## - V26_J2_3	1	287.61	4604.1	-334.37
## - V16_J2_2	1	429.62	4746.1	-176.40

```

## - V          19   1352.41 5668.9  628.06
## - J          12   1573.67 5890.1  873.61
##
## Step:  AIC=-756.05
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##      V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##      V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5
##
##           Df Sum of Sq   RSS   AIC
## + V5_J1_5      1    78.02 4156.6 -846.12
## + V3_J2_1      1    75.59 4159.0 -843.09
## + V17_J2_2     1    70.53 4164.1 -836.76
## + V15_J2_7     1    70.26 4164.4 -836.43
## + V13_2_J1_7   1    69.75 4164.9 -835.78
## + V4_J2_4      1    69.16 4165.5 -835.05
## + V1_J2_7      1    66.73 4167.9 -832.02
## + V1_J2_2      1    64.49 4170.1 -829.22
## + V12_1_2_J1_4 1    60.77 4173.9 -824.58
## + V15_J2_2     1    59.54 4175.1 -823.06
## + V30_J1_3     1    59.01 4175.6 -822.39
## + V2_J1_3      1    55.44 4179.2 -817.95
## + V23_J1_3     1    54.98 4179.6 -817.38
## + V19_J2_3     1    49.61 4185.0 -810.70
## + V17_J1_3     1    47.02 4187.6 -807.49
## + V17_J2_7     1    44.95 4189.7 -804.91
## + V15_J1_3     1    43.51 4191.1 -803.13
## + V15_J1_5     1    43.09 4191.5 -802.61
## + V5_J1_3      1    41.04 4193.6 -800.07
## + V4_J2_5      1    40.41 4194.2 -799.28
## + V3_J1_4      1    40.13 4194.5 -798.93
## + V14_J1_5     1    39.78 4194.8 -798.49
## + V4_J2_1      1    39.27 4195.4 -797.86
## + V4_J2_3      1    39.20 4195.4 -797.78
## + V17_J1_5     1    36.61 4198.0 -794.57
## + V15_J2_5     1    35.04 4199.6 -792.63
## + V16_J1_3     1    33.78 4200.8 -791.07
## + V2_J2_2      1    33.03 4201.6 -790.14
## + V30_J1_1     1    32.69 4201.9 -789.72
## + V1_J1_5      1    31.99 4202.6 -788.85
## + V14_J1_4     1    30.23 4204.4 -786.67
## + V13_1_J1_3   1    30.23 4204.4 -786.67
## + V5_J2_3      1    29.94 4204.7 -786.31
## + V23_J2_1     1    29.63 4205.0 -785.93
## + V4_J2_2      1    29.43 4205.2 -785.68
## + V13_1_J1_2   1    29.24 4205.4 -785.45
## + V30_J1_6     1    29.05 4205.6 -785.22
## + V3_J1_3      1    28.41 4206.2 -784.43
## + V1_J1_3      1    28.23 4206.4 -784.20
## + V5_J2_7      1    28.21 4206.4 -784.18
## + V4_J1_6      1    26.82 4207.8 -782.46
## + V4_J1_7      1    26.56 4208.1 -782.13
## + V16_J2_7     1    24.31 4210.3 -779.35
## + V15_J1_4     1    24.25 4210.4 -779.28
## + V4_J1_2      1    22.61 4212.0 -777.26

```

## + V13_1_J1_7	1	22.59	4212.0	-777.24
## + V13_2_J1_4	1	22.40	4212.2	-777.00
## + V26_J1_4	1	22.36	4212.3	-776.95
## + V2_J1_5	1	21.02	4213.6	-775.30
## + V14_J2_3	1	20.54	4214.1	-774.70
## + V1_J1_4	1	20.46	4214.2	-774.61
## + V15_J2_4	1	19.91	4214.7	-773.92
## + V30_J2_5	1	19.65	4215.0	-773.61
## + V30_J1_2	1	19.34	4215.3	-773.22
## + V29_J1_5	1	19.17	4215.4	-773.02
## + V12_1_2_J1_2	1	18.35	4216.3	-772.00
## + V20_J1_3	1	18.05	4216.6	-771.63
## + V14_J2_2	1	17.44	4217.2	-770.88
## + V12_1_2_J1_6	1	17.34	4217.3	-770.76
## + V12_1_2_J2_3	1	17.23	4217.4	-770.62
## + V12_1_2_J1_7	1	17.00	4217.6	-770.34
## + V13_3_J1_2	1	16.72	4217.9	-769.99
## + V17_J1_4	1	16.65	4218.0	-769.91
## + V23_J2_7	1	16.63	4218.0	-769.88
## + V12_1_2_J1_5	1	16.52	4218.1	-769.75
## + V30_J1_5	1	16.49	4218.1	-769.70
## + V29_J1_7	1	16.46	4218.2	-769.67
## + V14_J1_2	1	16.37	4218.3	-769.56
## + V23_J2_3	1	16.28	4218.3	-769.45
## + V2_J2_7	1	16.27	4218.4	-769.43
## + V19_J2_7	1	16.19	4218.4	-769.34
## + V29_J1_1	1	15.65	4219.0	-768.68
## + V14_J1_3	1	15.65	4219.0	-768.67
## + V5_J2_1	1	15.48	4219.1	-768.46
## + V19_J2_1	1	15.45	4219.2	-768.42
## + V4_J1_1	1	15.11	4219.5	-768.00
## + V20_J1_2	1	14.99	4219.6	-767.86
## + V26_J1_5	1	14.76	4219.9	-767.58
## + V20_J1_4	1	14.52	4220.1	-767.28
## + V24_J1_1	1	14.20	4220.4	-766.88
## + V24_J2_5	1	13.97	4220.7	-766.60
## + V13_2_J1_3	1	13.82	4220.8	-766.41
## + V12_1_2_J2_5	1	13.72	4220.9	-766.30
## + V16_J2_4	1	13.65	4221.0	-766.21
## + V3_J2_7	1	13.54	4221.1	-766.07
## + V29_J2_3	1	13.34	4221.3	-765.82
## + V24_J2_3	1	13.15	4221.5	-765.59
## + V19_J2_5	1	12.82	4221.8	-765.19
## + V19_J1_3	1	12.63	4222.0	-764.96
## + V5_J1_7	1	12.52	4222.1	-764.81
## + V29_J1_4	1	12.28	4222.3	-764.52
## + V4_J1_3	1	12.25	4222.4	-764.49
## + V17_J2_3	1	12.23	4222.4	-764.45
## + V1_J2_4	1	11.17	4223.5	-763.16
## + V2_J1_4	1	11.06	4223.6	-763.02
## + V2_J2_1	1	11.00	4223.6	-762.94
## + V12_1_2_J2_1	1	10.92	4223.7	-762.85
## + V13_2_J1_2	1	10.85	4223.8	-762.75
## + V29_J1_3	1	10.73	4223.9	-762.62

## + V12_1_2_J2_4	1	10.71	4223.9	-762.59
## + V12_1_2_J2_7	1	10.70	4223.9	-762.57
## + V29_J2_1	1	10.69	4223.9	-762.56
## + V3_J1_5	1	10.50	4224.1	-762.33
## + V19_J2_4	1	10.20	4224.4	-761.96
## + V29_J1_6	1	9.99	4224.6	-761.70
## + V19_J2_2	1	9.80	4224.8	-761.47
## + V1_J2_1	1	9.55	4225.1	-761.16
## + V13_3_J1_6	1	9.49	4225.1	-761.09
## + V14_J2_4	1	9.20	4225.4	-760.73
## + V20_J2_3	1	8.88	4225.7	-760.34
## + V13_1_J2_4	1	8.71	4225.9	-760.12
## + V14_J2_7	1	8.63	4226.0	-760.03
## + V13_3_J2_5	1	8.46	4226.2	-759.82
## + V12_1_2_J1_3	1	8.16	4226.5	-759.45
## + V15_J1_7	1	8.00	4226.6	-759.25
## + V20_J1_6	1	7.91	4226.7	-759.14
## + V3_J1_2	1	7.90	4226.7	-759.13
## + V1_J1_7	1	7.71	4226.9	-758.90
## + V14_J1_7	1	7.59	4227.0	-758.75
## + V29_J1_2	1	7.52	4227.1	-758.66
## + V26_J1_6	1	7.14	4227.5	-758.20
## + V23_J2_4	1	6.78	4227.8	-757.76
## + V19_J1_7	1	6.70	4227.9	-757.66
## + V16_J1_4	1	6.47	4228.2	-757.37
## + V20_J2_1	1	6.38	4228.2	-757.25
## + V5_J2_2	1	6.31	4228.3	-757.17
## + V1_J2_3	1	6.20	4228.4	-757.04
## + V19_J1_6	1	5.97	4228.7	-756.76
## + V13_2_J2_7	1	5.95	4228.7	-756.73
## + V2_J2_5	1	5.89	4228.7	-756.66
## + V13_3_J1_3	1	5.75	4228.9	-756.48
## + V13_1_J2_1	1	5.67	4228.9	-756.39
## + V13_1_J1_4	1	5.61	4229.0	-756.32
## <none>			4234.6	-756.05
## + V24_J1_2	1	5.36	4229.3	-756.01
## + V30_J2_7	1	5.36	4229.3	-756.00
## + V23_J2_5	1	5.34	4229.3	-755.98
## + V19_J1_2	1	5.32	4229.3	-755.96
## + V3_J2_2	1	5.18	4229.4	-755.78
## + V20_J2_7	1	5.03	4229.6	-755.60
## + V26_J2_7	1	4.86	4229.8	-755.39
## + V13_1_J1_5	1	4.69	4229.9	-755.18
## + V5_J1_4	1	4.65	4230.0	-755.13
## + V14_J1_1	1	4.59	4230.0	-755.06
## + V5_J1_1	1	4.45	4230.2	-754.89
## + V17_J1_7	1	4.22	4230.4	-754.60
## + V20_J1_5	1	4.12	4230.5	-754.49
## + V13_3_J1_4	1	4.10	4230.5	-754.45
## + V13_1_J2_2	1	4.04	4230.6	-754.38
## + V2_J2_3	1	3.92	4230.7	-754.23
## + V30_J1_7	1	3.91	4230.7	-754.22
## + V24_J1_7	1	3.88	4230.7	-754.19
## + V13_1_J2_3	1	3.83	4230.8	-754.12

## + V16_J1_5	1	3.82	4230.8	-754.11
## + V16_J2_5	1	3.80	4230.8	-754.08
## + V30_J2_4	1	3.74	4230.9	-754.02
## + V30_J2_3	1	3.73	4230.9	-754.01
## + V26_J1_1	1	3.50	4231.1	-753.72
## + V17_J2_4	1	3.36	4231.3	-753.55
## + V2_J2_4	1	3.31	4231.3	-753.49
## + V24_J1_6	1	3.21	4231.4	-753.36
## + V13_2_J1_5	1	3.20	4231.4	-753.36
## + V17_J2_5	1	3.19	4231.4	-753.34
## + V17_J2_1	1	3.16	4231.5	-753.31
## + V13_1_J2_5	1	3.09	4231.5	-753.22
## + V15_J2_3	1	2.95	4231.7	-753.05
## + V13_2_J1_1	1	2.90	4231.7	-752.98
## + V13_1_J1_1	1	2.61	4232.0	-752.63
## + V16_J1_2	1	2.52	4232.1	-752.52
## + V24_J1_5	1	2.52	4232.1	-752.51
## + V14_J1_6	1	2.21	4232.4	-752.13
## + V13_3_J2_2	1	2.16	4232.5	-752.07
## + V26_J1_7	1	2.15	4232.5	-752.07
## + V16_J2_3	1	2.12	4232.5	-752.02
## + V2_J1_6	1	2.08	4232.5	-751.97
## + V24_J1_4	1	2.04	4232.6	-751.93
## + V3_J1_1	1	2.04	4232.6	-751.93
## + V13_2_J2_1	1	2.02	4232.6	-751.90
## + V3_J1_6	1	1.95	4232.7	-751.82
## + V20_J1_7	1	1.92	4232.7	-751.77
## + V1_J1_1	1	1.88	4232.7	-751.73
## + V15_J1_1	1	1.86	4232.8	-751.71
## + V29_J2_2	1	1.81	4232.8	-751.64
## + V13_2_J1_6	1	1.80	4232.8	-751.63
## + V3_J1_7	1	1.79	4232.8	-751.61
## + V13_3_J2_3	1	1.69	4232.9	-751.50
## + V16_J1_7	1	1.51	4233.1	-751.27
## + V23_J1_7	1	1.50	4233.1	-751.26
## + V14_J2_5	1	1.49	4233.1	-751.25
## + V13_3_J2_7	1	1.46	4233.2	-751.22
## + V13_3_J2_1	1	1.42	4233.2	-751.16
## + V23_J1_5	1	1.40	4233.2	-751.14
## + V26_J1_3	1	1.36	4233.3	-751.09
## + V16_J2_1	1	1.33	4233.3	-751.06
## + V13_2_J2_5	1	1.29	4233.3	-751.01
## + V15_J1_6	1	1.28	4233.3	-750.99
## + V2_J1_1	1	1.19	4233.4	-750.88
## + V13_3_J1_7	1	1.18	4233.4	-750.86
## + V13_2_J2_2	1	1.16	4233.5	-750.84
## + V1_J1_2	1	1.09	4233.5	-750.76
## + V23_J1_1	1	1.04	4233.6	-750.70
## + V24_J2_7	1	1.03	4233.6	-750.69
## + V24_J2_4	1	1.00	4233.6	-750.65
## + V20_J2_5	1	0.96	4233.7	-750.60
## + V15_J1_2	1	0.94	4233.7	-750.58
## + V14_J2_1	1	0.87	4233.8	-750.49
## + V30_J1_4	1	0.84	4233.8	-750.45

## + V23_J2_2	1	0.84	4233.8	-750.45
## + V13_1_J1_6	1	0.81	4233.8	-750.41
## + V13_3_J1_1	1	0.78	4233.8	-750.38
## + V23_J1_6	1	0.74	4233.9	-750.32
## + V24_J2_1	1	0.67	4234.0	-750.24
## + V13_2_J2_4	1	0.65	4234.0	-750.22
## + V16_J1_6	1	0.63	4234.0	-750.20
## + V13_2_J2_3	1	0.57	4234.1	-750.12
## + V15_J2_1	1	0.56	4234.1	-750.10
## + V1_J2_5	1	0.53	4234.1	-750.06
## + V17_J1_2	1	0.50	4234.1	-750.03
## + V29_J2_7	1	0.49	4234.1	-750.02
## + V13_3_J2_4	1	0.48	4234.1	-750.02
## + V2_J1_7	1	0.45	4234.2	-749.97
## + V1_J1_6	1	0.45	4234.2	-749.97
## + V24_J2_2	1	0.44	4234.2	-749.96
## + V12_1_2_J1_1	1	0.28	4234.3	-749.76
## + V16_J1_1	1	0.25	4234.4	-749.72
## + V4_J2_7	1	0.22	4234.4	-749.69
## + V26_J1_2	1	0.22	4234.4	-749.68
## + V29_J2_5	1	0.19	4234.4	-749.65
## + V5_J1_2	1	0.19	4234.4	-749.65
## + V24_J1_3	1	0.17	4234.5	-749.63
## + V26_J2_2	1	0.13	4234.5	-749.58
## + V20_J2_4	1	0.12	4234.5	-749.57
## + V19_J1_1	1	0.11	4234.5	-749.56
## + V30_J2_1	1	0.09	4234.5	-749.53
## + V13_3_J1_5	1	0.08	4234.5	-749.52
## + V4_J1_4	1	0.05	4234.6	-749.49
## + V17_J1_1	1	0.03	4234.6	-749.45
## + V2_J1_2	1	0.01	4234.6	-749.43
## + V20_J1_1	1	0.01	4234.6	-749.43
## + V23_J1_2	1	0.01	4234.6	-749.43
## + V5_J1_6	1	0.00	4234.6	-749.43
## + V4_J1_5	1	0.00	4234.6	-749.42
## + V23_J1_4	1	0.00	4234.6	-749.42
## + V29_J2_4	1	0.00	4234.6	-749.42
## + V13_1_J2_7	1	0.00	4234.6	-749.42
## + V17_J1_6	1	0.00	4234.6	-749.42
## - V3_J2_5	1	81.63	4316.2	-663.41
## - V19_J1_5	1	81.83	4316.5	-663.16
## - V26_J2_1	1	92.62	4327.2	-650.18
## - V19_J1_4	1	93.91	4328.5	-648.63
## - V3_J2_3	1	119.36	4354.0	-618.15
## - V3_J2_4	1	123.26	4357.9	-613.49
## - V30_J2_2	1	135.35	4370.0	-599.08
## - V26_J2_4	1	136.03	4370.6	-598.28
## - V26_J2_5	1	144.30	4378.9	-588.45
## - V12_1_2_J2_2	1	151.93	4386.5	-579.40
## - V5_J2_5	1	189.78	4424.4	-534.72
## - V5_J2_4	1	207.72	4442.3	-513.68
## - V20_J2_2	1	273.03	4507.7	-437.78
## - V26_J2_3	1	285.62	4520.2	-423.28
## - V16_J2_2	1	427.61	4662.2	-262.45

```

## - V          19   1349.16 5583.8  556.05
## - J          12   1521.41 5756.0  760.49
##
## Step:  AIC=-846.12
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##      V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##      V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5
##
##           Df Sum of Sq    RSS    AIC
## + V3_J2_1      1      74.63 4082.0 -933.70
## + V15_J2_7      1      71.04 4085.6 -929.13
## + V17_J2_2      1      69.54 4087.1 -927.21
## + V4_J2_4       1      69.14 4087.5 -926.70
## + V13_2_J1_7    1      68.98 4087.6 -926.50
## + V1_J2_7       1      65.98 4090.6 -922.68
## + V1_J2_2       1      63.54 4093.1 -919.58
## + V15_J2_2      1      60.47 4096.1 -915.69
## + V12_1_2_J1_4  1      59.96 4096.6 -915.04
## + V30_J1_3      1      58.22 4098.4 -912.84
## + V2_J1_3       1      54.76 4101.8 -908.44
## + V23_J1_3      1      54.30 4102.3 -907.86
## + V15_J1_5      1      49.91 4106.7 -902.30
## + V19_J2_3      1      49.43 4107.2 -901.69
## + V17_J1_3      1      46.39 4110.2 -897.85
## + V14_J1_5      1      46.33 4110.3 -897.76
## + V17_J2_7      1      44.33 4112.3 -895.24
## + V15_J1_3      1      44.13 4112.5 -894.98
## + V5_J2_3       1      40.76 4115.8 -890.72
## + V4_J2_5       1      40.40 4116.2 -890.27
## + V3_J1_4       1      39.46 4117.1 -889.09
## + V4_J2_1       1      38.65 4118.0 -888.06
## + V4_J2_3       1      38.54 4118.1 -887.93
## + V15_J2_5      1      35.03 4121.6 -883.49
## + V30_J1_1      1      33.28 4123.3 -881.29
## + V16_J1_3      1      33.18 4123.4 -881.16
## + V2_J2_2       1      32.35 4124.2 -880.12
## + V17_J1_5      1      31.03 4125.6 -878.44
## + V5_J1_3       1      30.80 4125.8 -878.16
## + V13_1_J1_3    1      30.74 4125.9 -878.08
## + V23_J2_1      1      30.17 4126.4 -877.37
## + V4_J2_2       1      30.08 4126.5 -877.25
## + V14_J1_4      1      29.72 4126.9 -876.79
## + V3_J1_3       1      28.98 4127.6 -875.86
## + V13_1_J1_2    1      28.74 4127.9 -875.56
## + V30_J1_6      1      28.50 4128.1 -875.26
## + V1_J1_3       1      27.74 4128.9 -874.30
## + V4_J1_6       1      27.31 4129.3 -873.76
## + V4_J1_7       1      27.04 4129.6 -873.42
## + V1_J1_5       1      26.78 4129.8 -873.09
## + V16_J2_7      1      23.80 4132.8 -869.34
## + V15_J1_4      1      23.79 4132.8 -869.33
## + V5_J2_1       1      23.43 4133.2 -868.88
## + V4_J1_2       1      23.06 4133.5 -868.41
## + V13_2_J1_4    1      22.85 4133.8 -868.14

```

## + V13_1_J1_7	1	22.15	4134.5	-867.27
## + V26_J1_4	1	21.80	4134.8	-866.83
## + V1_J1_4	1	20.89	4135.7	-865.68
## + V14_J2_3	1	20.06	4136.5	-864.64
## + V15_J2_4	1	19.90	4136.7	-864.44
## + V5_J2_7	1	19.80	4136.8	-864.31
## + V30_J1_2	1	19.79	4136.8	-864.30
## + V30_J2_5	1	19.71	4136.9	-864.20
## + V12_1_2_J1_2	1	18.79	4137.8	-863.05
## + V26_J1_5	1	18.79	4137.8	-863.05
## + V20_J1_3	1	18.49	4138.1	-862.67
## + V14_J2_2	1	17.94	4138.7	-861.97
## + V12_1_2_J2_3	1	17.71	4138.9	-861.69
## + V17_J1_4	1	17.04	4139.6	-860.84
## + V12_1_2_J1_6	1	16.91	4139.7	-860.69
## + V2_J1_5	1	16.83	4139.8	-860.58
## + V14_J1_2	1	16.74	4139.9	-860.47
## + V23_J2_3	1	16.70	4139.9	-860.42
## + V12_1_2_J1_7	1	16.58	4140.0	-860.26
## + V13_3_J1_2	1	16.34	4140.3	-859.97
## + V23_J2_7	1	16.25	4140.4	-859.86
## + V19_J2_7	1	16.24	4140.4	-859.84
## + V29_J1_7	1	16.09	4140.5	-859.65
## + V14_J1_3	1	16.02	4140.6	-859.56
## + V2_J2_7	1	15.90	4140.7	-859.41
## + V4_J1_1	1	15.47	4141.1	-858.87
## + V19_J2_1	1	15.37	4141.2	-858.75
## + V29_J1_1	1	15.29	4141.3	-858.64
## + V29_J1_5	1	15.18	4141.4	-858.50
## + V20_J1_4	1	14.92	4141.7	-858.18
## + V20_J1_2	1	14.59	4142.0	-857.77
## + V13_2_J1_3	1	14.16	4142.4	-857.23
## + V24_J2_5	1	13.96	4142.6	-856.97
## + V3_J1_5	1	13.96	4142.6	-856.97
## + V3_J2_7	1	13.93	4142.7	-856.94
## + V24_J1_1	1	13.85	4142.8	-856.84
## + V12_1_2_J2_5	1	13.77	4142.8	-856.73
## + V29_J2_3	1	13.73	4142.9	-856.68
## + V16_J2_4	1	13.69	4142.9	-856.64
## + V24_J2_3	1	13.53	4143.1	-856.44
## + V19_J2_5	1	13.10	4143.5	-855.90
## + V12_1_2_J1_5	1	12.85	4143.8	-855.58
## + V30_J1_5	1	12.82	4143.8	-855.54
## + V19_J1_3	1	12.68	4143.9	-855.37
## + V29_J1_4	1	12.61	4144.0	-855.28
## + V17_J2_3	1	12.60	4144.0	-855.27
## + V4_J1_3	1	12.58	4144.0	-855.25
## + V2_J1_4	1	11.37	4145.2	-853.73
## + V2_J2_1	1	11.33	4145.3	-853.68
## + V12_1_2_J2_1	1	11.29	4145.3	-853.62
## + V1_J2_4	1	11.18	4145.4	-853.49
## + V29_J2_1	1	11.01	4145.6	-853.28
## + V12_1_2_J2_4	1	10.75	4145.9	-852.95
## + V13_2_J1_2	1	10.54	4146.1	-852.69

## + V19_J2_4	1	10.45	4146.2	-852.57
## + V29_J1_3	1	10.43	4146.2	-852.55
## + V12_1_2_J2_7	1	10.36	4146.2	-852.46
## + V19_J2_2	1	9.92	4146.7	-851.91
## + V1_J2_1	1	9.86	4146.7	-851.83
## + V29_J1_6	1	9.70	4146.9	-851.63
## + V5_J1_4	1	9.34	4147.3	-851.18
## + V13_3_J1_6	1	9.21	4147.4	-851.01
## + V14_J2_4	1	9.19	4147.4	-850.99
## + V14_J2_7	1	8.91	4147.7	-850.64
## + V13_1_J2_4	1	8.71	4147.9	-850.40
## + V20_J2_3	1	8.54	4148.1	-850.18
## + V13_3_J2_5	1	8.46	4148.1	-850.08
## + V15_J1_7	1	8.26	4148.3	-849.83
## + V3_J1_2	1	8.20	4148.4	-849.75
## + V1_J1_7	1	7.97	4148.6	-849.46
## + V12_1_2_J1_3	1	7.87	4148.7	-849.34
## + V14_J1_7	1	7.85	4148.8	-849.31
## + V20_J1_6	1	7.62	4149.0	-849.03
## + V26_J1_6	1	7.46	4149.1	-848.83
## + V29_J1_2	1	7.27	4149.3	-848.58
## + V5_J1_7	1	7.11	4149.5	-848.39
## + V13_1_J1_5	1	7.07	4149.5	-848.33
## + V23_J2_4	1	6.79	4149.8	-847.98
## + V16_J1_4	1	6.74	4149.9	-847.92
## + V19_J1_7	1	6.74	4149.9	-847.92
## + V1_J2_3	1	6.46	4150.1	-847.57
## + V13_2_J2_7	1	6.17	4150.4	-847.21
## + V20_J2_1	1	6.10	4150.5	-847.12
## + V19_J1_6	1	6.00	4150.6	-847.00
## + V13_3_J1_3	1	5.97	4150.6	-846.96
## + V13_1_J2_1	1	5.91	4150.7	-846.88
## + V2_J2_5	1	5.89	4150.7	-846.86
## + V13_1_J1_4	1	5.84	4150.8	-846.79
## + V3_J2_2	1	5.48	4151.1	-846.35
## + V19_J1_2	1	5.35	4151.3	-846.18
## + V23_J2_5	1	5.35	4151.3	-846.18
## <none>			4156.6	-846.12
## + V20_J2_7	1	5.27	4151.3	-846.08
## + V13_2_J1_5	1	5.21	4151.4	-846.01
## + V24_J1_2	1	5.15	4151.5	-845.93
## + V26_J2_7	1	5.13	4151.5	-845.90
## + V30_J2_7	1	5.12	4151.5	-845.89
## + V14_J1_1	1	4.80	4151.8	-845.49
## + V17_J1_7	1	4.41	4152.2	-845.00
## + V24_J1_5	1	4.32	4152.3	-844.89
## + V13_3_J1_4	1	4.29	4152.3	-844.85
## + V2_J2_3	1	4.13	4152.5	-844.65
## + V24_J1_7	1	4.07	4152.5	-844.58
## + V13_1_J2_3	1	4.03	4152.6	-844.53
## + V30_J2_3	1	3.96	4152.6	-844.44
## + V16_J2_5	1	3.82	4152.8	-844.26
## + V13_1_J2_2	1	3.80	4152.8	-844.24
## + V26_J1_1	1	3.73	4152.9	-844.15

## + V30_J2_4	1	3.72	4152.9	-844.13
## + V30_J1_7	1	3.71	4152.9	-844.12
## + V24_J1_6	1	3.38	4153.2	-843.71
## + V17_J2_4	1	3.36	4153.2	-843.69
## + V17_J2_1	1	3.34	4153.3	-843.67
## + V2_J2_4	1	3.32	4153.3	-843.64
## + V17_J2_5	1	3.19	4153.4	-843.48
## + V13_1_J2_5	1	3.10	4153.5	-843.36
## + V15_J2_3	1	2.78	4153.8	-842.96
## + V13_2_J1_1	1	2.75	4153.9	-842.92
## + V5_J2_2	1	2.70	4153.9	-842.86
## + V13_1_J1_1	1	2.47	4154.1	-842.57
## + V20_J1_5	1	2.39	4154.2	-842.48
## + V16_J1_2	1	2.36	4154.2	-842.43
## + V14_J1_6	1	2.35	4154.3	-842.42
## + V26_J1_7	1	2.33	4154.3	-842.40
## + V2_J1_6	1	2.21	4154.4	-842.25
## + V3_J1_1	1	2.19	4154.4	-842.23
## + V24_J1_4	1	2.18	4154.4	-842.21
## + V13_2_J2_1	1	2.16	4154.4	-842.19
## + V16_J1_5	1	2.16	4154.4	-842.19
## + V3_J1_6	1	2.10	4154.5	-842.11
## + V13_3_J2_2	1	1.99	4154.6	-841.97
## + V29_J2_2	1	1.97	4154.6	-841.95
## + V16_J2_3	1	1.96	4154.6	-841.93
## + V3_J1_7	1	1.93	4154.7	-841.90
## + V13_2_J1_6	1	1.92	4154.7	-841.89
## + V13_3_J2_3	1	1.83	4154.8	-841.78
## + V20_J1_7	1	1.78	4154.8	-841.71
## + V1_J1_1	1	1.76	4154.8	-841.68
## + V15_J1_1	1	1.74	4154.9	-841.66
## + V16_J1_7	1	1.64	4155.0	-841.53
## + V13_3_J2_7	1	1.58	4155.0	-841.45
## + V13_3_J2_1	1	1.54	4155.1	-841.41
## + V5_J1_1	1	1.52	4155.1	-841.38
## + V26_J1_3	1	1.50	4155.1	-841.36
## + V14_J2_5	1	1.49	4155.1	-841.35
## + V16_J2_1	1	1.46	4155.1	-841.31
## + V23_J1_7	1	1.39	4155.2	-841.22
## + V15_J1_6	1	1.39	4155.2	-841.22
## + V13_2_J2_5	1	1.29	4155.3	-841.10
## + V13_2_J2_2	1	1.29	4155.3	-841.10
## + V1_J1_2	1	1.19	4155.4	-840.97
## + V24_J2_7	1	1.13	4155.5	-840.89
## + V2_J1_1	1	1.09	4155.5	-840.85
## + V13_3_J1_7	1	1.08	4155.5	-840.83
## + V24_J2_4	1	1.01	4155.6	-840.74
## + V20_J2_5	1	0.97	4155.6	-840.70
## + V23_J1_1	1	0.95	4155.7	-840.67
## + V15_J1_2	1	0.86	4155.7	-840.55
## + V14_J2_1	1	0.78	4155.8	-840.46
## + V24_J2_1	1	0.75	4155.9	-840.42
## + V30_J1_4	1	0.75	4155.9	-840.42
## + V23_J2_2	1	0.73	4155.9	-840.40

## + V13_1_J1_6	1	0.72	4155.9	-840.39
## + V16_J1_6	1	0.72	4155.9	-840.38
## + V13_3_J1_1	1	0.70	4155.9	-840.36
## + V5_J1_6	1	0.68	4155.9	-840.33
## + V23_J1_6	1	0.66	4155.9	-840.31
## + V13_2_J2_4	1	0.66	4155.9	-840.30
## + V13_2_J2_3	1	0.65	4156.0	-840.30
## + V17_J1_2	1	0.57	4156.0	-840.19
## + V29_J2_7	1	0.56	4156.0	-840.18
## + V1_J2_5	1	0.52	4156.1	-840.14
## + V1_J1_6	1	0.51	4156.1	-840.12
## + V15_J2_1	1	0.49	4156.1	-840.09
## + V23_J1_5	1	0.48	4156.1	-840.09
## + V13_3_J2_4	1	0.48	4156.1	-840.09
## + V2_J1_7	1	0.39	4156.2	-839.97
## + V24_J2_2	1	0.36	4156.2	-839.94
## + V16_J1_1	1	0.30	4156.3	-839.86
## + V4_J1_5	1	0.30	4156.3	-839.85
## + V12_1_2_J1_1	1	0.23	4156.4	-839.77
## + V5_J1_2	1	0.21	4156.4	-839.74
## + V24_J1_3	1	0.21	4156.4	-839.74
## + V29_J2_5	1	0.19	4156.4	-839.72
## + V4_J2_7	1	0.18	4156.4	-839.71
## + V26_J1_2	1	0.16	4156.4	-839.69
## + V20_J2_4	1	0.13	4156.5	-839.64
## + V19_J1_1	1	0.11	4156.5	-839.62
## + V26_J2_2	1	0.08	4156.5	-839.59
## + V30_J2_1	1	0.06	4156.5	-839.56
## + V17_J1_1	1	0.05	4156.6	-839.54
## + V13_3_J1_5	1	0.04	4156.6	-839.54
## + V4_J1_4	1	0.03	4156.6	-839.53
## + V2_J1_2	1	0.02	4156.6	-839.51
## + V23_J1_4	1	0.01	4156.6	-839.50
## + V29_J2_4	1	0.00	4156.6	-839.49
## + V17_J1_6	1	0.00	4156.6	-839.48
## + V20_J1_1	1	0.00	4156.6	-839.48
## + V23_J1_2	1	0.00	4156.6	-839.48
## + V13_1_J2_7	1	0.00	4156.6	-839.48
## - V5_J1_5	1	78.02	4234.6	-756.05
## - V3_J2_5	1	81.52	4238.1	-751.75
## - V19_J1_5	1	90.15	4246.8	-741.17
## - V26_J2_1	1	91.60	4248.2	-739.40
## - V19_J1_4	1	93.80	4250.4	-736.71
## - V3_J2_3	1	118.26	4274.9	-706.87
## - V3_J2_4	1	123.13	4279.7	-700.95
## - V30_J2_2	1	134.05	4290.7	-687.70
## - V26_J2_4	1	135.77	4292.4	-685.62
## - V26_J2_5	1	144.03	4300.6	-675.62
## - V12_1_2_J2_2	1	150.54	4307.1	-667.75
## - V5_J2_5	1	210.82	4367.4	-595.48
## - V5_J2_4	1	229.63	4386.2	-573.13
## - V20_J2_2	1	271.18	4427.8	-524.11
## - V26_J2_3	1	283.74	4440.3	-509.38
## - V16_J2_2	1	425.28	4581.9	-346.21


```

## - V          19   1297.95 5454.5  440.93
## - J          12   1485.50 5642.1  663.17
##
## Step:  AIC=-933.7
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##          V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##          V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##          V3_J2_1
##
##          Df Sum of Sq  RSS      AIC
## + V15_J2_7      1    71.91 4010.1 -1019.48
## + V4_J2_4        1    69.17 4012.8 -1015.93
## + V17_J2_2        1    68.46 4013.5 -1015.01
## + V13_2_J1_7      1    68.14 4013.8 -1014.60
## + V1_J2_7         1    65.16 4016.8 -1010.73
## + V1_J2_2         1    62.50 4019.5 -1007.30
## + V15_J2_2        1    61.49 4020.5 -1006.00
## + V12_1_2_J1_4    1    59.04 4022.9 -1002.83
## + V30_J1_3        1    57.37 4024.6 -1000.66
## + V2_J1_3         1    54.01 4028.0 -996.32
## + V23_J1_3        1    53.55 4028.4 -995.74
## + V3_J1_4         1    53.09 4028.9 -995.14
## + V19_J2_3        1    49.32 4032.7 -990.27
## + V15_J1_5        1    49.10 4032.9 -989.99
## + V17_J1_3        1    45.70 4036.3 -985.61
## + V14_J1_5        1    45.55 4036.4 -985.41
## + V4_J2_1         1    44.93 4037.0 -984.62
## + V15_J1_3        1    44.80 4037.2 -984.45
## + V17_J2_7        1    43.66 4038.3 -982.98
## + V5_J2_3         1    40.71 4041.3 -979.19
## + V4_J2_5         1    40.42 4041.6 -978.81
## + V4_J2_3         1    38.57 4043.4 -976.43
## + V15_J2_5        1    35.05 4046.9 -971.91
## + V30_J1_1        1    33.94 4048.0 -970.48
## + V16_J1_3        1    32.54 4049.4 -968.68
## + V17_J1_5        1    31.67 4050.3 -967.57
## + V2_J2_2         1    31.62 4050.4 -967.50
## + V5_J1_3         1    31.44 4050.5 -967.27
## + V13_1_J1_3      1    31.31 4050.7 -967.10
## + V4_J2_2         1    30.80 4051.2 -966.45
## + V14_J1_4        1    29.13 4052.8 -964.31
## + V5_J2_1         1    28.36 4053.6 -963.32
## + V13_1_J1_2      1    28.20 4053.8 -963.11
## + V30_J1_6        1    27.90 4054.1 -962.73
## + V4_J1_6         1    27.84 4054.1 -962.65
## + V4_J1_7         1    27.57 4054.4 -962.30
## + V1_J1_5         1    27.38 4054.6 -962.06
## + V1_J1_3         1    27.20 4054.8 -961.83
## + V23_J2_1        1    25.25 4056.7 -959.32
## + V4_J1_2         1    23.55 4058.4 -957.15
## + V13_2_J1_4      1    23.37 4058.6 -956.92
## + V15_J1_4        1    23.26 4058.7 -956.78
## + V16_J2_7        1    23.25 4058.7 -956.77
## + V3_J1_5         1    22.30 4059.7 -955.55

```

## + V26_J1_4	1	21.80	4060.2	-954.91
## + V13_1_J1_7	1	21.68	4060.3	-954.75
## + V1_J1_4	1	21.39	4060.6	-954.38
## + V5_J2_7	1	20.31	4061.7	-953.00
## + V30_J1_2	1	20.30	4061.7	-952.99
## + V14_J2_3	1	20.08	4061.9	-952.71
## + V15_J2_4	1	19.91	4062.1	-952.49
## + V3_J1_3	1	19.80	4062.2	-952.34
## + V30_J2_5	1	19.74	4062.2	-952.27
## + V19_J2_1	1	19.33	4062.6	-951.75
## + V12_1_2_J1_2	1	19.29	4062.7	-951.69
## + V20_J1_3	1	18.98	4063.0	-951.30
## + V26_J1_5	1	18.76	4063.2	-951.01
## + V14_J2_2	1	18.50	4063.5	-950.68
## + V12_1_2_J2_3	1	17.74	4064.2	-949.71
## + V17_J1_4	1	17.49	4064.5	-949.39
## + V2_J1_5	1	17.30	4064.7	-949.15
## + V14_J1_2	1	17.16	4064.8	-948.97
## + V19_J2_7	1	16.74	4065.2	-948.43
## + V23_J2_3	1	16.69	4065.3	-948.37
## + V12_1_2_J1_6	1	16.45	4065.5	-948.07
## + V14_J1_3	1	16.43	4065.5	-948.03
## + V12_1_2_J1_7	1	16.12	4065.8	-947.64
## + V13_3_J1_2	1	15.94	4066.0	-947.40
## + V4_J1_1	1	15.87	4066.1	-947.32
## + V23_J2_7	1	15.85	4066.1	-947.29
## + V29_J1_7	1	15.68	4066.3	-947.08
## + V29_J1_5	1	15.63	4066.3	-947.01
## + V2_J2_7	1	15.49	4066.5	-946.84
## + V20_J1_4	1	15.38	4066.6	-946.69
## + V29_J1_1	1	14.89	4067.1	-946.07
## + V13_2_J1_3	1	14.55	4067.4	-945.63
## + V20_J1_2	1	14.17	4067.8	-945.14
## + V24_J2_5	1	13.97	4068.0	-944.89
## + V12_1_2_J2_5	1	13.79	4068.2	-944.66
## + V16_J2_4	1	13.72	4068.3	-944.57
## + V29_J2_3	1	13.71	4068.3	-944.56
## + V24_J2_3	1	13.52	4068.5	-944.31
## + V24_J1_1	1	13.48	4068.5	-944.26
## + V12_1_2_J1_5	1	13.30	4068.7	-944.04
## + V30_J1_5	1	13.27	4068.7	-944.00
## + V19_J1_3	1	13.12	4068.9	-943.80
## + V19_J2_5	1	13.04	4068.9	-943.71
## + V29_J1_4	1	13.00	4069.0	-943.64
## + V4_J1_3	1	12.94	4069.0	-943.58
## + V17_J2_3	1	12.58	4069.4	-943.12
## + V2_J1_4	1	11.74	4070.2	-942.04
## + V1_J2_4	1	11.17	4070.8	-941.31
## + V12_1_2_J2_4	1	10.78	4071.2	-940.81
## + V19_J2_2	1	10.41	4071.6	-940.34
## + V19_J2_4	1	10.40	4071.6	-940.32
## + V13_2_J1_2	1	10.22	4071.8	-940.09
## + V29_J1_3	1	10.11	4071.9	-939.95
## + V12_1_2_J2_7	1	10.00	4072.0	-939.82

## + V29_J1_6	1	9.38	4072.6	-939.03
## + V14_J2_7	1	9.22	4072.8	-938.82
## + V14_J2_4	1	9.20	4072.8	-938.80
## + V5_J1_4	1	8.97	4073.0	-938.51
## + V13_3_J1_6	1	8.90	4073.1	-938.42
## + V13_1_J2_4	1	8.70	4073.3	-938.16
## + V20_J2_1	1	8.68	4073.3	-938.14
## + V15_J1_7	1	8.56	4073.4	-937.97
## + V20_J2_3	1	8.52	4073.4	-937.93
## + V13_3_J2_5	1	8.45	4073.5	-937.84
## + V2_J2_1	1	8.38	4073.6	-937.75
## + V12_1_2_J2_1	1	8.36	4073.6	-937.73
## + V1_J1_7	1	8.26	4073.7	-937.59
## + V14_J1_7	1	8.14	4073.8	-937.44
## + V29_J2_1	1	8.11	4073.9	-937.40
## + V3_J2_7	1	7.77	4074.2	-936.98
## + V12_1_2_J1_3	1	7.55	4074.4	-936.70
## + V26_J1_6	1	7.45	4074.5	-936.56
## + V5_J1_7	1	7.42	4074.6	-936.52
## + V20_J1_6	1	7.31	4074.7	-936.39
## + V1_J2_1	1	7.12	4074.9	-936.14
## + V19_J1_7	1	7.06	4074.9	-936.06
## + V16_J1_4	1	7.05	4074.9	-936.05
## + V29_J1_2	1	7.00	4075.0	-935.98
## + V23_J2_4	1	6.78	4075.2	-935.71
## + V13_1_J1_5	1	6.76	4075.2	-935.69
## + V1_J2_3	1	6.45	4075.5	-935.29
## + V13_2_J2_7	1	6.43	4075.5	-935.26
## + V19_J1_6	1	6.31	4075.7	-935.10
## + V13_3_J1_3	1	6.22	4075.7	-935.00
## + V13_1_J1_4	1	6.10	4075.9	-934.84
## + V2_J2_5	1	5.89	4076.1	-934.57
## + V19_J1_2	1	5.64	4076.3	-934.25
## + V20_J2_7	1	5.53	4076.4	-934.11
## + V23_J2_5	1	5.34	4076.6	-933.87
## <none>			4082.0	-933.70
## + V26_J2_7	1	5.11	4076.9	-933.58
## + V14_J1_1	1	5.02	4077.0	-933.46
## + V13_2_J1_5	1	4.95	4077.0	-933.37
## + V24_J1_2	1	4.92	4077.0	-933.34
## + V30_J2_7	1	4.87	4077.1	-933.27
## + V17_J1_7	1	4.63	4077.3	-932.96
## + V13_3_J1_4	1	4.52	4077.5	-932.82
## + V24_J1_7	1	4.28	4077.7	-932.51
## + V2_J2_3	1	4.12	4077.9	-932.31
## + V24_J1_5	1	4.08	4077.9	-932.27
## + V13_1_J2_3	1	4.03	4077.9	-932.19
## + V30_J2_3	1	3.97	4078.0	-932.13
## + V13_1_J2_1	1	3.83	4078.1	-931.95
## + V16_J2_5	1	3.83	4078.1	-931.95
## + V26_J1_1	1	3.72	4078.3	-931.80
## + V30_J2_4	1	3.70	4078.3	-931.78
## + V3_J1_2	1	3.67	4078.3	-931.73
## + V24_J1_6	1	3.57	4078.4	-931.61

## + V13_1_J2_2	1	3.55	4078.4	-931.59
## + V30_J1_7	1	3.49	4078.5	-931.52
## + V17_J2_4	1	3.36	4078.6	-931.34
## + V2_J2_4	1	3.31	4078.7	-931.28
## + V17_J2_5	1	3.19	4078.8	-931.12
## + V13_1_J2_5	1	3.09	4078.9	-931.00
## + V5_J2_2	1	2.94	4079.0	-930.81
## + V15_J2_3	1	2.78	4079.2	-930.61
## + V20_J1_5	1	2.59	4079.4	-930.37
## + V13_2_J1_1	1	2.58	4079.4	-930.35
## + V14_J1_6	1	2.51	4079.5	-930.26
## + V2_J1_6	1	2.37	4079.6	-930.08
## + V16_J1_5	1	2.35	4079.6	-930.06
## + V24_J1_4	1	2.34	4079.6	-930.05
## + V26_J1_7	1	2.32	4079.6	-930.02
## + V13_1_J1_1	1	2.31	4079.7	-930.01
## + V16_J1_2	1	2.19	4079.8	-929.85
## + V29_J2_2	1	2.16	4079.8	-929.81
## + V13_2_J1_6	1	2.07	4079.9	-929.70
## + V3_J2_2	1	1.95	4080.0	-929.55
## + V16_J2_3	1	1.95	4080.0	-929.54
## + V14_J2_1	1	1.85	4080.1	-929.42
## + V17_J2_1	1	1.83	4080.1	-929.40
## + V13_3_J2_3	1	1.83	4080.1	-929.39
## + V13_3_J2_2	1	1.81	4080.2	-929.37
## + V16_J1_7	1	1.78	4080.2	-929.34
## + V13_3_J2_7	1	1.71	4080.3	-929.24
## + V5_J1_1	1	1.66	4080.3	-929.18
## + V20_J1_7	1	1.63	4080.3	-929.14
## + V1_J1_1	1	1.62	4080.3	-929.13
## + V15_J1_1	1	1.61	4080.4	-929.11
## + V15_J1_6	1	1.51	4080.5	-928.99
## + V14_J2_5	1	1.50	4080.5	-928.97
## + V26_J1_3	1	1.49	4080.5	-928.96
## + V13_2_J2_2	1	1.44	4080.5	-928.90
## + V15_J2_1	1	1.38	4080.6	-928.82
## + V1_J1_2	1	1.31	4080.7	-928.73
## + V13_2_J2_5	1	1.30	4080.7	-928.71
## + V23_J1_7	1	1.27	4080.7	-928.69
## + V24_J2_7	1	1.24	4080.7	-928.64
## + V24_J2_4	1	1.00	4081.0	-928.34
## + V13_2_J2_1	1	0.99	4081.0	-928.33
## + V2_J1_1	1	0.99	4081.0	-928.32
## + V20_J2_5	1	0.98	4081.0	-928.31
## + V13_3_J1_7	1	0.97	4081.0	-928.30
## + V23_J1_1	1	0.85	4081.1	-928.15
## + V16_J1_6	1	0.82	4081.2	-928.10
## + V15_J1_2	1	0.76	4081.2	-928.04
## + V13_2_J2_4	1	0.65	4081.3	-927.89
## + V30_J1_4	1	0.65	4081.3	-927.89
## + V13_2_J2_3	1	0.65	4081.3	-927.89
## + V17_J1_2	1	0.65	4081.3	-927.89
## + V13_1_J1_6	1	0.64	4081.3	-927.88
## + V29_J2_7	1	0.63	4081.3	-927.87

## + V23_J2_2	1	0.62	4081.3	-927.86
## + V13_3_J1_1	1	0.62	4081.4	-927.85
## + V1_J1_6	1	0.59	4081.4	-927.81
## + V13_3_J2_1	1	0.58	4081.4	-927.81
## + V5_J1_6	1	0.58	4081.4	-927.81
## + V23_J1_6	1	0.58	4081.4	-927.80
## + V23_J1_5	1	0.57	4081.4	-927.78
## + V16_J2_1	1	0.55	4081.4	-927.76
## + V1_J2_5	1	0.53	4081.4	-927.73
## + V30_J2_1	1	0.52	4081.4	-927.73
## + V13_3_J2_4	1	0.49	4081.5	-927.68
## + V16_J1_1	1	0.37	4081.6	-927.53
## + V2_J1_7	1	0.33	4081.6	-927.48
## + V24_J2_2	1	0.29	4081.7	-927.43
## + V3_J1_1	1	0.27	4081.7	-927.41
## + V24_J1_3	1	0.26	4081.7	-927.39
## + V3_J1_6	1	0.24	4081.7	-927.37
## + V4_J1_5	1	0.24	4081.7	-927.36
## + V29_J2_5	1	0.19	4081.8	-927.30
## + V3_J1_7	1	0.19	4081.8	-927.30
## + V12_1_2_J1_1	1	0.18	4081.8	-927.29
## + V26_J1_2	1	0.17	4081.8	-927.27
## + V5_J1_2	1	0.16	4081.8	-927.27
## + V24_J2_1	1	0.15	4081.8	-927.26
## + V4_J2_7	1	0.14	4081.8	-927.24
## + V20_J2_4	1	0.13	4081.8	-927.23
## + V26_J2_2	1	0.08	4081.9	-927.16
## + V19_J1_1	1	0.07	4081.9	-927.16
## + V17_J1_1	1	0.07	4081.9	-927.15
## + V2_J1_2	1	0.04	4081.9	-927.11
## + V23_J1_4	1	0.02	4081.9	-927.09
## + V13_3_J1_5	1	0.02	4081.9	-927.09
## + V4_J1_4	1	0.02	4082.0	-927.09
## + V17_J1_6	1	0.01	4082.0	-927.07
## + V29_J2_4	1	0.00	4082.0	-927.07
## + V13_1_J2_7	1	0.00	4082.0	-927.07
## + V20_J1_1	1	0.00	4082.0	-927.06
## + V23_J1_2	1	0.00	4082.0	-927.06
## - V3_J2_1	1	74.63	4156.6	-846.12
## - V5_J1_5	1	77.06	4159.0	-843.09
## - V19_J1_5	1	89.04	4171.0	-828.13
## - V19_J1_4	1	92.71	4174.7	-823.55
## - V3_J2_5	1	96.99	4179.0	-818.22
## - V26_J2_1	1	100.29	4182.3	-814.12
## - V30_J2_2	1	132.63	4214.6	-774.07
## - V3_J2_3	1	136.56	4218.5	-769.21
## - V26_J2_4	1	136.88	4218.9	-768.82
## - V3_J2_4	1	141.74	4223.7	-762.83
## - V26_J2_5	1	145.18	4227.1	-758.61
## - V12_1_2_J2_2	1	149.03	4231.0	-753.86
## - V5_J2_5	1	210.74	4292.7	-678.58
## - V5_J2_4	1	229.54	4311.5	-655.85
## - V20_J2_2	1	269.15	4351.1	-608.30
## - V26_J2_3	1	285.35	4367.3	-588.97

```

## - V16_J2_2      1      422.73 4504.7 -427.91
## - V             19     1297.68 5379.7   375.66
## - J             12     1496.17 5578.1   610.52
##
## Step:  AIC=-1019.48
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##      V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##      V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##      V3_J2_1 + V15_J2_7
##
##
##      Df Sum of Sq    RSS      AIC
## + V15_J2_2      1      73.57 3936.5 -1109.14
## + V4_J2_4       1      69.88 3940.2 -1104.27
## + V17_J2_2      1      69.18 3940.9 -1103.33
## + V13_2_J1_7    1      68.70 3941.4 -1102.70
## + V1_J2_2       1      63.19 3946.9 -1095.44
## + V12_1_2_J1_4  1      59.66 3950.4 -1090.78
## + V1_J2_7       1      58.26 3951.8 -1088.95
## + V30_J1_3      1      57.94 3952.1 -1088.52
## + V15_J1_3      1      55.21 3954.9 -1084.93
## + V2_J1_3       1      54.51 3955.6 -1084.01
## + V23_J1_3      1      54.05 3956.0 -1083.41
## + V3_J1_4       1      53.90 3956.2 -1083.21
## + V19_J2_3      1      49.98 3960.1 -1078.06
## + V17_J1_3      1      46.16 3963.9 -1073.05
## + V14_J1_5      1      46.07 3964.0 -1072.94
## + V4_J2_1       1      45.46 3964.6 -1072.14
## + V5_J2_3       1      41.39 3968.7 -1066.80
## + V4_J2_5       1      40.97 3969.1 -1066.24
## + V15_J1_5      1      39.96 3970.1 -1064.93
## + V4_J2_3       1      39.06 3971.0 -1063.75
## + V17_J2_7      1      38.02 3972.0 -1062.38
## + V30_J1_1      1      33.51 3976.6 -1056.48
## + V16_J1_3      1      32.97 3977.1 -1055.77
## + V2_J2_2       1      32.11 3978.0 -1054.65
## + V17_J1_5      1      31.24 3978.8 -1053.51
## + V13_1_J1_3    1      30.93 3979.1 -1053.11
## + V5_J1_3       1      30.92 3979.1 -1053.10
## + V4_J2_2       1      30.32 3979.7 -1052.32
## + V14_J1_4      1      29.52 3980.5 -1051.27
## + V5_J2_1       1      28.93 3981.1 -1050.49
## + V13_1_J1_2    1      28.56 3981.5 -1050.01
## + V30_J1_6      1      28.30 3981.8 -1049.68
## + V1_J1_3       1      27.56 3982.5 -1048.70
## + V4_J1_6       1      27.49 3982.6 -1048.61
## + V15_J2_5      1      27.39 3982.7 -1048.49
## + V4_J1_7       1      27.22 3982.8 -1048.26
## + V1_J1_5       1      26.98 3983.1 -1047.94
## + V23_J2_1      1      24.85 3985.2 -1045.17
## + V5_J2_7       1      24.57 3985.5 -1044.80
## + V4_J1_2       1      23.22 3986.8 -1043.05
## + V13_2_J1_4    1      23.02 3987.0 -1042.78
## + V3_J1_5       1      22.85 3987.2 -1042.56
## + V26_J1_4      1      22.32 3987.7 -1041.87

```

## + V13_1_J1_7	1	21.99	3988.1	-1041.44
## + V1_J1_4	1	21.06	3989.0	-1040.22
## + V19_J2_7	1	20.65	3989.4	-1039.70
## + V14_J2_3	1	20.44	3989.6	-1039.42
## + V30_J1_2	1	19.96	3990.1	-1038.80
## + V19_J2_1	1	19.75	3990.3	-1038.51
## + V30_J2_5	1	19.33	3990.7	-1037.97
## + V3_J1_3	1	19.33	3990.7	-1037.97
## + V26_J1_5	1	19.27	3990.8	-1037.89
## + V16_J2_7	1	19.19	3990.9	-1037.79
## + V12_1_2_J1_2	1	18.96	3991.1	-1037.49
## + V20_J1_3	1	18.66	3991.4	-1037.10
## + V14_J2_2	1	18.13	3991.9	-1036.41
## + V12_1_2_J2_3	1	17.38	3992.7	-1035.43
## + V17_J1_4	1	17.19	3992.9	-1035.18
## + V15_J1_4	1	17.04	3993.0	-1035.00
## + V2_J1_5	1	16.98	3993.1	-1034.92
## + V14_J1_2	1	16.89	3993.2	-1034.79
## + V12_1_2_J1_6	1	16.76	3993.3	-1034.62
## + V12_1_2_J1_7	1	16.43	3993.6	-1034.19
## + V23_J2_3	1	16.37	3993.7	-1034.11
## + V13_3_J1_2	1	16.21	3993.9	-1033.90
## + V14_J1_3	1	16.16	3993.9	-1033.84
## + V29_J1_7	1	15.95	3994.1	-1033.57
## + V4_J1_1	1	15.61	3994.5	-1033.12
## + V29_J1_5	1	15.32	3994.7	-1032.75
## + V29_J1_1	1	15.16	3994.9	-1032.54
## + V20_J1_4	1	15.07	3995.0	-1032.43
## + V20_J1_2	1	14.45	3995.6	-1031.62
## + V24_J2_5	1	14.29	3995.8	-1031.41
## + V13_2_J1_3	1	14.29	3995.8	-1031.41
## + V15_J2_4	1	14.22	3995.8	-1031.32
## + V24_J1_1	1	13.72	3996.3	-1030.67
## + V12_1_2_J2_5	1	13.45	3996.6	-1030.32
## + V29_J2_3	1	13.42	3996.6	-1030.28
## + V19_J2_5	1	13.41	3996.7	-1030.26
## + V16_J2_4	1	13.38	3996.7	-1030.22
## + V15_J1_7	1	13.31	3996.8	-1030.13
## + V24_J2_3	1	13.23	3996.8	-1030.03
## + V12_1_2_J1_5	1	13.00	3997.1	-1029.73
## + V30_J1_5	1	12.97	3997.1	-1029.69
## + V19_J1_3	1	12.83	3997.2	-1029.51
## + V29_J1_4	1	12.74	3997.3	-1029.39
## + V4_J1_3	1	12.70	3997.4	-1029.34
## + V23_J2_7	1	12.50	3997.6	-1029.08
## + V17_J2_3	1	12.30	3997.8	-1028.82
## + V2_J2_7	1	12.19	3997.9	-1028.67
## + V14_J2_7	1	12.18	3997.9	-1028.67
## + V2_J1_4	1	11.50	3998.6	-1027.78
## + V1_J2_4	1	10.88	3999.2	-1026.98
## + V19_J2_4	1	10.72	3999.3	-1026.77
## + V12_1_2_J2_4	1	10.47	3999.6	-1026.44
## + V3_J2_7	1	10.45	3999.6	-1026.41
## + V13_2_J1_2	1	10.43	3999.6	-1026.39

## + V29_J1_3	1	10.32	3999.7	-1026.25
## + V19_J2_2	1	10.09	4000.0	-1025.94
## + V29_J1_6	1	9.59	4000.5	-1025.30
## + V14_J2_4	1	9.46	4000.6	-1025.13
## + V5_J1_4	1	9.27	4000.8	-1024.88
## + V13_3_J1_6	1	9.10	4001.0	-1024.67
## + V20_J2_1	1	8.94	4001.1	-1024.45
## + V13_2_J2_7	1	8.94	4001.1	-1024.45
## + V20_J2_3	1	8.78	4001.3	-1024.24
## + V13_1_J2_4	1	8.45	4001.6	-1023.82
## + V13_3_J2_5	1	8.21	4001.9	-1023.50
## + V2_J2_1	1	8.15	4001.9	-1023.43
## + V12_1_2_J2_1	1	8.11	4002.0	-1023.38
## + V1_J1_7	1	8.07	4002.0	-1023.32
## + V14_J1_7	1	7.95	4002.1	-1023.16
## + V29_J2_1	1	7.88	4002.2	-1023.08
## + V20_J2_7	1	7.86	4002.2	-1023.05
## + V12_1_2_J1_3	1	7.76	4002.3	-1022.92
## + V20_J1_6	1	7.52	4002.5	-1022.60
## + V12_1_2_J2_7	1	7.39	4002.7	-1022.44
## + V26_J2_7	1	7.32	4002.7	-1022.34
## + V29_J1_2	1	7.18	4002.9	-1022.16
## + V5_J1_7	1	7.17	4002.9	-1022.15
## + V26_J1_6	1	7.16	4002.9	-1022.14
## + V13_1_J1_5	1	6.97	4003.1	-1021.89
## + V1_J2_1	1	6.91	4003.2	-1021.82
## + V19_J1_7	1	6.84	4003.2	-1021.73
## + V16_J1_4	1	6.84	4003.2	-1021.72
## + V23_J2_4	1	6.56	4003.5	-1021.36
## + V1_J2_3	1	6.25	4003.8	-1020.96
## + V19_J1_6	1	6.10	4004.0	-1020.77
## + V13_3_J1_3	1	6.06	4004.0	-1020.70
## + V13_1_J1_4	1	5.93	4004.1	-1020.54
## + V2_J2_5	1	5.68	4004.4	-1020.22
## + V19_J1_2	1	5.45	4004.6	-1019.92
## + V23_J2_5	1	5.14	4004.9	-1019.52
## + V13_2_J1_5	1	5.13	4004.9	-1019.50
## <none>		4010.1	-1019.48	
## + V24_J1_2	1	5.07	4005.0	-1019.43
## + V14_J1_1	1	4.87	4005.2	-1019.17
## + V17_J1_7	1	4.48	4005.6	-1018.66
## + V13_3_J1_4	1	4.37	4005.7	-1018.51
## + V24_J1_5	1	4.24	4005.8	-1018.35
## + V24_J1_7	1	4.14	4005.9	-1018.22
## + V2_J2_3	1	3.96	4006.1	-1017.98
## + V30_J2_4	1	3.88	4006.2	-1017.88
## + V13_1_J2_3	1	3.87	4006.2	-1017.87
## + V30_J2_3	1	3.80	4006.3	-1017.78
## + V15_J1_6	1	3.79	4006.3	-1017.76
## + V13_1_J2_2	1	3.72	4006.3	-1017.67
## + V13_1_J2_1	1	3.68	4006.4	-1017.62
## + V16_J2_5	1	3.65	4006.4	-1017.59
## + V30_J1_7	1	3.63	4006.4	-1017.56
## + V26_J1_1	1	3.51	4006.6	-1017.41

## + V3_J1_2	1	3.47	4006.6	-1017.34
## + V24_J1_6	1	3.44	4006.6	-1017.31
## + V17_J2_4	1	3.20	4006.9	-1017.00
## + V2_J2_4	1	3.16	4006.9	-1016.94
## + V30_J2_7	1	3.10	4007.0	-1016.87
## + V13_3_J2_7	1	3.09	4007.0	-1016.86
## + V17_J2_5	1	3.04	4007.0	-1016.78
## + V13_1_J2_5	1	2.94	4007.1	-1016.66
## + V5_J2_2	1	2.75	4007.3	-1016.41
## + V13_2_J1_1	1	2.69	4007.4	-1016.33
## + V20_J1_5	1	2.46	4007.6	-1016.03
## + V24_J2_7	1	2.45	4007.6	-1016.02
## + V13_1_J1_1	1	2.41	4007.7	-1015.98
## + V14_J1_6	1	2.40	4007.7	-1015.96
## + V16_J1_2	1	2.30	4007.8	-1015.83
## + V2_J1_6	1	2.26	4007.8	-1015.78
## + V24_J1_4	1	2.23	4007.8	-1015.74
## + V16_J1_5	1	2.22	4007.8	-1015.73
## + V26_J1_7	1	2.16	4007.9	-1015.65
## + V16_J2_3	1	2.07	4008.0	-1015.53
## + V29_J2_2	1	2.03	4008.0	-1015.48
## + V13_2_J1_6	1	1.97	4008.1	-1015.40
## + V14_J2_1	1	1.96	4008.1	-1015.39
## + V13_3_J2_2	1	1.93	4008.1	-1015.34
## + V3_J2_2	1	1.78	4008.3	-1015.16
## + V17_J2_1	1	1.73	4008.3	-1015.09
## + V20_J1_7	1	1.73	4008.3	-1015.08
## + V13_3_J2_3	1	1.72	4008.3	-1015.08
## + V1_J1_1	1	1.71	4008.4	-1015.07
## + V16_J1_7	1	1.69	4008.4	-1015.03
## + V14_J2_5	1	1.60	4008.5	-1014.92
## + V29_J2_7	1	1.56	4008.5	-1014.87
## + V5_J1_1	1	1.54	4008.5	-1014.84
## + V13_2_J2_5	1	1.39	4008.7	-1014.65
## + V26_J1_3	1	1.37	4008.7	-1014.62
## + V23_J1_7	1	1.35	4008.7	-1014.60
## + V13_2_J2_2	1	1.34	4008.7	-1014.58
## + V1_J1_2	1	1.23	4008.8	-1014.44
## + V2_J1_1	1	1.05	4009.0	-1014.21
## + V13_3_J1_7	1	1.04	4009.0	-1014.20
## + V15_J2_3	1	0.93	4009.1	-1014.05
## + V24_J2_4	1	0.92	4009.1	-1014.04
## + V13_2_J2_1	1	0.92	4009.1	-1014.03
## + V23_J1_1	1	0.92	4009.1	-1014.03
## + V20_J2_5	1	0.89	4009.2	-1014.00
## + V16_J1_6	1	0.75	4009.3	-1013.82
## + V30_J1_4	1	0.71	4009.4	-1013.77
## + V13_1_J1_6	1	0.70	4009.4	-1013.75
## + V23_J2_2	1	0.69	4009.4	-1013.75
## + V13_3_J1_1	1	0.68	4009.4	-1013.72
## + V5_J1_6	1	0.66	4009.4	-1013.70
## + V23_J1_6	1	0.63	4009.4	-1013.66
## + V17_J1_2	1	0.59	4009.5	-1013.62
## + V1_J2_5	1	0.59	4009.5	-1013.61

## + V30_J2_1	1	0.59	4009.5	-1013.61
## + V13_2_J2_3	1	0.59	4009.5	-1013.61
## + V13_2_J2_4	1	0.59	4009.5	-1013.60
## + V13_3_J2_4	1	0.55	4009.5	-1013.55
## + V1_J1_6	1	0.54	4009.5	-1013.54
## + V13_3_J2_1	1	0.53	4009.5	-1013.53
## + V23_J1_5	1	0.51	4009.6	-1013.51
## + V16_J2_1	1	0.48	4009.6	-1013.47
## + V2_J1_7	1	0.37	4009.7	-1013.32
## + V24_J2_2	1	0.34	4009.7	-1013.28
## + V16_J1_1	1	0.32	4009.7	-1013.26
## + V15_J1_1	1	0.31	4009.8	-1013.25
## + V4_J1_5	1	0.28	4009.8	-1013.20
## + V13_1_J2_7	1	0.25	4009.8	-1013.17
## + V24_J1_3	1	0.22	4009.8	-1013.14
## + V3_J1_1	1	0.22	4009.8	-1013.13
## + V15_J2_1	1	0.22	4009.8	-1013.13
## + V26_J1_2	1	0.21	4009.9	-1013.12
## + V12_1_2_J1_1	1	0.21	4009.9	-1013.12
## + V5_J1_2	1	0.20	4009.9	-1013.10
## + V3_J1_6	1	0.19	4009.9	-1013.10
## + V29_J2_5	1	0.15	4009.9	-1013.04
## + V3_J1_7	1	0.14	4009.9	-1013.03
## + V24_J2_1	1	0.12	4009.9	-1013.01
## + V26_J2_2	1	0.11	4010.0	-1012.99
## + V20_J2_4	1	0.10	4010.0	-1012.97
## + V19_J1_1	1	0.10	4010.0	-1012.97
## + V17_J1_1	1	0.05	4010.0	-1012.91
## + V13_3_J1_5	1	0.04	4010.0	-1012.89
## + V4_J1_4	1	0.03	4010.0	-1012.88
## + V15_J1_2	1	0.03	4010.0	-1012.88
## + V2_J1_2	1	0.03	4010.0	-1012.88
## + V23_J1_4	1	0.01	4010.1	-1012.86
## + V29_J2_4	1	0.01	4010.1	-1012.86
## + V4_J2_7	1	0.01	4010.1	-1012.85
## + V17_J1_6	1	0.00	4010.1	-1012.85
## + V20_J1_1	1	0.00	4010.1	-1012.85
## + V23_J1_2	1	0.00	4010.1	-1012.85
## - V15_J2_7	1	71.91	4082.0	-933.70
## - V3_J2_1	1	75.49	4085.6	-929.13
## - V5_J1_5	1	77.83	4087.9	-926.15
## - V19_J1_5	1	89.78	4099.8	-910.98
## - V19_J1_4	1	93.43	4103.5	-906.35
## - V3_J2_5	1	98.02	4108.1	-900.54
## - V26_J2_1	1	101.29	4111.4	-896.40
## - V30_J2_2	1	133.56	4143.6	-855.74
## - V3_J2_3	1	137.73	4147.8	-850.52
## - V26_J2_4	1	138.10	4148.2	-850.05
## - V3_J2_4	1	142.99	4153.1	-843.93
## - V26_J2_5	1	146.44	4156.5	-839.61
## - V12_1_2_J2_2	1	150.03	4160.1	-835.12
## - V5_J2_5	1	212.11	4222.2	-758.09
## - V5_J2_4	1	230.98	4241.0	-734.91
## - V20_J2_2	1	270.48	4280.5	-686.70

```

## - V26_J2_3      1      287.03 4297.1 -666.63
## - V16_J2_2      1      424.40 4434.5 -503.00
## - V              19     1341.42 5351.5   355.00
## - J              12     1528.65 5538.7   580.27
##
## Step:  AIC=-1109.14
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##      V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##      V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##      V3_J2_1 + V15_J2_7 + V15_J2_2
##
##
##      Df Sum of Sq    RSS      AIC
## + V4_J2_4      1      70.88 3865.6 -1196.99
## + V13_2_J1_7   1      69.48 3867.0 -1195.10
## + V15_J1_3      1      67.95 3868.5 -1193.05
## + V17_J2_2      1      60.21 3876.3 -1182.65
## + V12_1_2_J1_4 1      59.69 3876.8 -1181.95
## + V1_J2_7       1      58.35 3878.1 -1180.15
## + V30_J1_3      1      57.93 3878.6 -1179.59
## + V2_J1_3       1      55.20 3881.3 -1175.94
## + V3_J1_4       1      55.04 3881.5 -1175.71
## + V23_J1_3      1      54.74 3881.8 -1175.32
## + V1_J2_2       1      54.63 3881.9 -1175.17
## + V19_J2_3      1      50.90 3885.6 -1170.18
## + V14_J1_5      1      46.81 3889.7 -1164.70
## + V17_J1_3      1      46.80 3889.7 -1164.69
## + V4_J2_1       1      46.21 3890.3 -1163.91
## + V5_J2_3       1      42.34 3894.2 -1158.73
## + V4_J2_5       1      41.73 3894.8 -1157.92
## + V4_J2_3       1      39.76 3896.7 -1155.28
## + V17_J2_7      1      38.09 3898.4 -1153.07
## + V4_J2_2       1      37.15 3899.3 -1151.81
## + V30_J1_1      1      33.51 3903.0 -1146.96
## + V16_J1_3      1      32.96 3903.5 -1146.22
## + V15_J1_5      1      31.02 3905.5 -1143.64
## + V17_J1_5      1      30.64 3905.9 -1143.14
## + V13_1_J1_3    1      30.41 3906.1 -1142.83
## + V5_J1_3       1      30.21 3906.3 -1142.55
## + V14_J1_4      1      30.07 3906.4 -1142.37
## + V5_J2_1       1      29.72 3906.8 -1141.91
## + V13_1_J1_2    1      29.06 3907.4 -1141.04
## + V30_J1_6      1      28.29 3908.2 -1140.01
## + V1_J1_3       1      28.05 3908.4 -1139.69
## + V4_J1_6       1      27.00 3909.5 -1138.29
## + V4_J1_7       1      26.73 3909.8 -1137.93
## + V1_J1_5       1      26.42 3910.1 -1137.52
## + V2_J2_2       1      26.04 3910.5 -1137.01
## + V5_J2_7       1      24.34 3912.2 -1134.75
## + V23_J2_1      1      24.31 3912.2 -1134.71
## + V3_J1_5       1      23.63 3912.9 -1133.81
## + V14_J2_2      1      23.46 3913.0 -1133.58
## + V26_J1_4      1      23.05 3913.4 -1133.04
## + V4_J1_2       1      22.78 3913.7 -1132.67
## + V13_2_J1_4    1      22.55 3913.9 -1132.37

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## + V13_1_J1_7	1	22.44	3914.1	-1132.22
## + V14_J2_3	1	20.94	3915.6	-1130.24
## + V1_J1_4	1	20.60	3915.9	-1129.78
## + V19_J2_7	1	20.51	3916.0	-1129.67
## + V19_J2_1	1	20.33	3916.2	-1129.42
## + V15_J2_5	1	20.08	3916.4	-1129.10
## + V26_J1_5	1	19.98	3916.5	-1128.96
## + V30_J1_2	1	19.97	3916.5	-1128.95
## + V15_J1_7	1	19.77	3916.7	-1128.68
## + V30_J2_5	1	19.23	3917.3	-1127.96
## + V12_1_2_J1_2	1	18.97	3917.5	-1127.62
## + V16_J2_7	1	18.82	3917.7	-1127.43
## + V3_J1_3	1	18.69	3917.8	-1127.25
## + V20_J1_3	1	18.66	3917.8	-1127.21
## + V12_1_2_J2_3	1	17.32	3919.2	-1125.43
## + V17_J1_4	1	16.78	3919.7	-1124.71
## + V12_1_2_J1_6	1	16.75	3919.7	-1124.68
## + V13_3_J1_2	1	16.59	3919.9	-1124.46
## + V2_J1_5	1	16.54	3919.9	-1124.40
## + V14_J1_2	1	16.50	3920.0	-1124.35
## + V12_1_2_J1_7	1	16.42	3920.1	-1124.23
## + V29_J1_7	1	16.33	3920.2	-1124.11
## + V23_J2_3	1	15.93	3920.6	-1123.58
## + V14_J1_3	1	15.78	3920.7	-1123.39
## + V29_J1_1	1	15.52	3921.0	-1123.05
## + V4_J1_1	1	15.24	3921.3	-1122.67
## + V20_J1_4	1	15.06	3921.4	-1122.43
## + V29_J1_5	1	14.91	3921.6	-1122.23
## + V24_J2_5	1	14.75	3921.7	-1122.02
## + V20_J1_2	1	14.44	3922.1	-1121.61
## + V19_J2_2	1	14.09	3922.4	-1121.15
## + V24_J1_1	1	14.07	3922.4	-1121.13
## + V13_2_J1_3	1	13.94	3922.6	-1120.95
## + V19_J2_5	1	13.92	3922.6	-1120.92
## + V12_1_2_J2_5	1	13.37	3923.1	-1120.19
## + V16_J2_4	1	13.29	3923.2	-1120.09
## + V29_J2_3	1	13.02	3923.5	-1119.73
## + V12_1_2_J1_5	1	12.95	3923.5	-1119.64
## + V30_J1_5	1	12.92	3923.6	-1119.60
## + V24_J2_3	1	12.83	3923.7	-1119.48
## + V23_J2_7	1	12.54	3923.9	-1119.10
## + V19_J1_3	1	12.42	3924.1	-1118.94
## + V29_J1_4	1	12.38	3924.1	-1118.89
## + V4_J1_3	1	12.37	3924.1	-1118.87
## + V2_J2_7	1	12.23	3924.3	-1118.68
## + V14_J2_7	1	12.14	3924.4	-1118.56
## + V17_J2_3	1	11.92	3924.6	-1118.27
## + V15_J1_4	1	11.32	3925.2	-1117.48
## + V19_J2_4	1	11.18	3925.3	-1117.29
## + V2_J1_4	1	11.16	3925.3	-1117.27
## + V13_2_J1_2	1	10.74	3925.8	-1116.70
## + V29_J1_3	1	10.63	3925.9	-1116.56
## + V1_J2_4	1	10.50	3926.0	-1116.38
## + V12_1_2_J2_4	1	10.40	3926.1	-1116.25

## + V3_J2_7	1	10.24	3926.2	-1116.05
## + V29_J1_6	1	9.88	3926.6	-1115.57
## + V14_J2_4	1	9.83	3926.7	-1115.51
## + V5_J1_4	1	9.69	3926.8	-1115.31
## + V13_3_J1_6	1	9.39	3927.1	-1114.92
## + V15_J2_4	1	9.08	3927.4	-1114.50
## + V20_J2_1	1	8.99	3927.5	-1114.38
## + V13_2_J2_7	1	8.90	3927.6	-1114.27
## + V20_J2_3	1	8.82	3927.7	-1114.17
## + V13_1_J2_4	1	8.11	3928.4	-1113.23
## + V20_J2_7	1	8.09	3928.4	-1113.20
## + V12_1_2_J2_1	1	8.07	3928.4	-1113.17
## + V13_3_J2_5	1	7.87	3928.6	-1112.91
## + V2_J2_1	1	7.84	3928.7	-1112.87
## + V1_J1_7	1	7.80	3928.7	-1112.82
## + V12_1_2_J1_3	1	7.76	3928.7	-1112.76
## + V14_J1_7	1	7.68	3928.8	-1112.66
## + V29_J2_1	1	7.58	3928.9	-1112.52
## + V20_J1_6	1	7.51	3929.0	-1112.44
## + V15_J1_6	1	7.49	3929.0	-1112.40
## + V29_J1_2	1	7.43	3929.1	-1112.32
## + V13_1_J1_5	1	7.25	3929.2	-1112.09
## + V12_1_2_J2_7	1	7.17	3929.3	-1111.97
## + V26_J2_7	1	7.15	3929.3	-1111.95
## + V16_J1_4	1	6.83	3929.7	-1111.53
## + V5_J1_7	1	6.82	3929.7	-1111.52
## + V26_J1_6	1	6.77	3929.7	-1111.46
## + V1_J2_1	1	6.63	3929.9	-1111.26
## + V19_J1_7	1	6.55	3929.9	-1111.16
## + V23_J2_4	1	6.26	3930.2	-1110.77
## + V1_J2_3	1	5.98	3930.5	-1110.41
## + V19_J1_6	1	5.83	3930.7	-1110.20
## + V13_3_J1_3	1	5.83	3930.7	-1110.20
## + V13_1_J1_4	1	5.69	3930.8	-1110.02
## + V2_J2_5	1	5.40	3931.1	-1109.64
## + V13_2_J1_5	1	5.37	3931.1	-1109.60
## + V24_J1_2	1	5.29	3931.2	-1109.49
## + V19_J1_2	1	5.19	3931.3	-1109.36
## <none>			3936.5	-1109.14
## + V5_J2_2	1	4.96	3931.5	-1109.06
## + V23_J2_5	1	4.88	3931.6	-1108.95
## + V14_J1_1	1	4.67	3931.8	-1108.67
## + V24_J1_5	1	4.47	3932.0	-1108.40
## + V17_J1_7	1	4.29	3932.2	-1108.16
## + V13_3_J1_4	1	4.16	3932.3	-1108.00
## + V29_J2_2	1	4.02	3932.5	-1107.81
## + V24_J1_7	1	3.95	3932.5	-1107.72
## + V30_J2_4	1	3.93	3932.6	-1107.69
## + V30_J2_3	1	3.77	3932.7	-1107.49
## + V2_J2_3	1	3.75	3932.7	-1107.45
## + V13_1_J2_3	1	3.66	3932.8	-1107.33
## + V30_J1_7	1	3.63	3932.9	-1107.30
## + V16_J2_5	1	3.61	3932.9	-1107.27
## + V3_J2_2	1	3.60	3932.9	-1107.26

## + V13_1_J2_1	1	3.47	3933.0	-1107.09
## + V24_J1_6	1	3.27	3933.2	-1106.82
## + V26_J1_1	1	3.24	3933.2	-1106.79
## + V3_J1_2	1	3.20	3933.3	-1106.73
## + V13_3_J2_7	1	3.07	3933.4	-1106.56
## + V13_2_J2_2	1	3.02	3933.5	-1106.49
## + V17_J2_4	1	2.99	3933.5	-1106.46
## + V30_J2_7	1	2.96	3933.5	-1106.41
## + V2_J2_4	1	2.95	3933.5	-1106.40
## + V13_2_J1_1	1	2.85	3933.6	-1106.26
## + V17_J2_5	1	2.83	3933.7	-1106.24
## + V13_1_J2_5	1	2.74	3933.8	-1106.12
## + V13_1_J1_1	1	2.56	3933.9	-1105.88
## + V20_J1_5	1	2.44	3934.1	-1105.72
## + V24_J2_7	1	2.43	3934.1	-1105.71
## + V16_J1_2	1	2.30	3934.2	-1105.54
## + V14_J1_6	1	2.26	3934.2	-1105.49
## + V16_J1_5	1	2.21	3934.3	-1105.41
## + V2_J1_6	1	2.12	3934.4	-1105.31
## + V14_J2_1	1	2.12	3934.4	-1105.30
## + V16_J2_3	1	2.09	3934.4	-1105.26
## + V24_J1_4	1	2.09	3934.4	-1105.26
## + V26_J1_7	1	1.95	3934.5	-1105.08
## + V13_2_J1_6	1	1.84	3934.7	-1104.93
## + V13_1_J2_2	1	1.84	3934.7	-1104.93
## + V1_J1_1	1	1.84	3934.7	-1104.93
## + V14_J2_5	1	1.76	3934.7	-1104.82
## + V20_J1_7	1	1.72	3934.8	-1104.78
## + V16_J1_7	1	1.69	3934.8	-1104.73
## + V17_J2_1	1	1.59	3934.9	-1104.60
## + V13_3_J2_3	1	1.58	3934.9	-1104.59
## + V29_J2_7	1	1.54	3935.0	-1104.54
## + V13_2_J2_5	1	1.54	3935.0	-1104.53
## + V23_J1_7	1	1.46	3935.0	-1104.43
## + V5_J1_1	1	1.38	3935.1	-1104.33
## + V26_J1_3	1	1.20	3935.3	-1104.08
## + V2_J1_1	1	1.15	3935.3	-1104.02
## + V13_3_J1_7	1	1.14	3935.4	-1104.01
## + V1_J1_2	1	1.13	3935.4	-1103.99
## + V23_J1_1	1	1.01	3935.5	-1103.83
## + V20_J2_5	1	0.87	3935.6	-1103.65
## + V13_2_J2_1	1	0.81	3935.7	-1103.58
## + V24_J2_4	1	0.81	3935.7	-1103.57
## + V13_1_J1_6	1	0.78	3935.7	-1103.53
## + V5_J1_6	1	0.77	3935.7	-1103.51
## + V13_3_J1_1	1	0.75	3935.7	-1103.50
## + V16_J1_6	1	0.75	3935.7	-1103.49
## + V30_J1_4	1	0.72	3935.8	-1103.45
## + V23_J1_6	1	0.71	3935.8	-1103.43
## + V1_J2_5	1	0.68	3935.8	-1103.40
## + V13_3_J2_2	1	0.66	3935.8	-1103.38
## + V13_3_J2_4	1	0.64	3935.9	-1103.34
## + V30_J2_1	1	0.60	3935.9	-1103.29
## + V17_J1_2	1	0.52	3936.0	-1103.19

## + V13_2_J2_3	1	0.50	3936.0	-1103.17
## + V13_2_J2_4	1	0.50	3936.0	-1103.16
## + V16_J2_1	1	0.47	3936.0	-1103.12
## + V1_J1_6	1	0.47	3936.0	-1103.12
## + V13_3_J2_1	1	0.45	3936.0	-1103.09
## + V23_J1_5	1	0.44	3936.1	-1103.08
## + V2_J1_7	1	0.43	3936.1	-1103.07
## + V15_J1_2	1	0.38	3936.1	-1103.00
## + V4_J1_5	1	0.33	3936.2	-1102.94
## + V16_J1_1	1	0.32	3936.2	-1102.93
## + V26_J1_2	1	0.28	3936.2	-1102.88
## + V5_J1_2	1	0.26	3936.2	-1102.85
## + V13_1_J2_7	1	0.25	3936.2	-1102.82
## + V12_1_2_J1_1	1	0.21	3936.3	-1102.78
## + V24_J1_3	1	0.18	3936.3	-1102.74
## + V3_J1_1	1	0.16	3936.3	-1102.71
## + V19_J1_1	1	0.13	3936.4	-1102.68
## + V3_J1_6	1	0.13	3936.4	-1102.68
## + V29_J2_5	1	0.11	3936.4	-1102.64
## + V15_J2_1	1	0.09	3936.4	-1102.62
## + V3_J1_7	1	0.09	3936.4	-1102.62
## + V20_J2_4	1	0.09	3936.4	-1102.62
## + V24_J2_1	1	0.09	3936.4	-1102.62
## + V23_J2_2	1	0.07	3936.4	-1102.59
## + V13_3_J1_5	1	0.06	3936.4	-1102.58
## + V26_J2_2	1	0.05	3936.4	-1102.56
## + V15_J1_1	1	0.05	3936.4	-1102.56
## + V4_J1_4	1	0.05	3936.4	-1102.56
## + V15_J2_3	1	0.04	3936.5	-1102.55
## + V17_J1_1	1	0.03	3936.5	-1102.54
## + V29_J2_4	1	0.02	3936.5	-1102.53
## + V2_J1_2	1	0.01	3936.5	-1102.52
## + V4_J2_7	1	0.01	3936.5	-1102.51
## + V23_J1_4	1	0.00	3936.5	-1102.51
## + V23_J1_2	1	0.00	3936.5	-1102.51
## + V20_J1_1	1	0.00	3936.5	-1102.50
## + V17_J1_6	1	0.00	3936.5	-1102.50
## + V24_J2_2	1	0.00	3936.5	-1102.50
## - V15_J2_2	1	73.57	4010.1	-1019.48
## - V3_J2_1	1	76.70	4013.2	-1015.43
## - V5_J1_5	1	78.91	4015.4	-1012.56
## - V15_J2_7	1	83.98	4020.5	-1006.00
## - V19_J1_5	1	90.82	4027.3	-997.16
## - V19_J1_4	1	94.43	4030.9	-992.50
## - V3_J2_5	1	99.46	4036.0	-986.02
## - V26_J2_1	1	102.68	4039.2	-981.87
## - V30_J2_2	1	120.89	4057.4	-958.47
## - V12_1_2_J2_2	1	136.55	4073.0	-938.45
## - V3_J2_3	1	139.35	4075.8	-934.88
## - V26_J2_4	1	139.81	4076.3	-934.29
## - V3_J2_4	1	144.72	4081.2	-928.02
## - V26_J2_5	1	148.19	4084.7	-923.61
## - V5_J2_5	1	214.03	4150.5	-840.46
## - V5_J2_4	1	232.98	4169.5	-816.77

```

## - V20_J2_2      1      252.01 4188.5 -793.09
## - V26_J2_3      1      289.36 4225.9 -746.93
## - V16_J2_2      1      400.86 4337.4 -611.51
## - V              19     1394.66 5331.2  341.85
## - J              12     1503.16 5439.7  493.06
##
## Step:  AIC=-1196.99
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##      V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##      V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##      V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4
##
##
##      Df Sum of Sq  RSS      AIC
## + V15_J1_3      1      68.81 3796.8 -1283.75
## + V13_2_J1_7      1      68.78 3796.8 -1283.71
## + V17_J2_2      1      59.31 3806.3 -1270.76
## + V12_1_2_J1_4    1      58.93 3806.7 -1270.23
## + V1_J2_7        1      57.67 3807.9 -1268.51
## + V30_J1_3       1      57.22 3808.4 -1267.89
## + V4_J2_1        1      56.65 3809.0 -1267.13
## + V3_J1_4        1      55.04 3810.6 -1264.92
## + V2_J1_3        1      54.58 3811.0 -1264.30
## + V23_J1_3       1      54.12 3811.5 -1263.67
## + V1_J2_2        1      53.77 3811.8 -1263.19
## + V4_J2_5        1      51.68 3813.9 -1260.35
## + V19_J2_3       1      50.19 3815.4 -1258.31
## + V4_J2_3        1      49.45 3816.2 -1257.31
## + V17_J1_3       1      46.23 3819.4 -1252.92
## + V14_J1_5       1      46.20 3819.4 -1252.87
## + V5_J2_3        1      42.37 3823.2 -1247.66
## + V17_J2_7       1      37.55 3828.1 -1241.11
## + V30_J1_1       1      34.06 3831.5 -1236.37
## + V16_J1_3       1      32.42 3833.2 -1234.15
## + V17_J1_5       1      31.14 3834.5 -1232.41
## + V13_1_J1_3     1      30.88 3834.7 -1232.06
## + V15_J1_5       1      30.42 3835.2 -1231.43
## + V5_J1_3        1      30.18 3835.4 -1231.11
## + V5_J2_1        1      29.75 3835.9 -1230.52
## + V14_J1_4       1      29.58 3836.0 -1230.30
## + V4_J2_2        1      29.41 3836.2 -1230.07
## + V13_1_J1_2     1      28.61 3837.0 -1228.99
## + V30_J1_6       1      27.80 3837.8 -1227.88
## + V1_J1_3        1      27.61 3838.0 -1227.63
## + V1_J1_5        1      26.88 3838.7 -1226.64
## + V2_J2_2        1      25.45 3840.2 -1224.70
## + V23_J2_1       1      24.72 3840.9 -1223.71
## + V5_J2_7        1      24.34 3841.3 -1223.20
## + V14_J2_2       1      24.03 3841.6 -1222.78
## + V3_J1_5        1      23.63 3842.0 -1222.24
## + V26_J1_4       1      23.05 3842.6 -1221.45
## + V13_2_J1_4     1      22.97 3842.6 -1221.35
## + V13_1_J1_7     1      22.04 3843.6 -1220.09
## + V1_J1_4        1      21.01 3844.6 -1218.69
## + V19_J2_7       1      21.00 3844.6 -1218.68

```


## + V14_J2_3	1	20.56	3845.0	-1218.09
## + V30_J1_2	1	20.39	3845.2	-1217.86
## + V4_J1_6	1	20.35	3845.3	-1217.80
## + V15_J1_7	1	20.23	3845.4	-1217.63
## + V4_J1_7	1	20.12	3845.5	-1217.49
## + V26_J1_5	1	19.98	3845.6	-1217.30
## + V19_J2_1	1	19.88	3845.7	-1217.16
## + V30_J2_5	1	19.64	3846.0	-1216.84
## + V15_J2_5	1	19.63	3846.0	-1216.82
## + V12_1_2_J1_2	1	19.38	3846.2	-1216.49
## + V20_J1_3	1	19.07	3846.5	-1216.07
## + V3_J1_3	1	18.67	3846.9	-1215.52
## + V16_J2_7	1	18.40	3847.2	-1215.16
## + V12_1_2_J2_3	1	17.71	3847.9	-1214.23
## + V17_J1_4	1	17.15	3848.5	-1213.47
## + V2_J1_5	1	16.91	3848.7	-1213.15
## + V14_J1_2	1	16.85	3848.8	-1213.06
## + V4_J1_2	1	16.70	3848.9	-1212.86
## + V12_1_2_J1_6	1	16.37	3849.2	-1212.42
## + V23_J2_3	1	16.26	3849.4	-1212.27
## + V13_3_J1_2	1	16.25	3849.4	-1212.25
## + V14_J1_3	1	16.12	3849.5	-1212.08
## + V12_1_2_J1_7	1	16.04	3849.6	-1211.98
## + V29_J1_7	1	15.99	3849.6	-1211.91
## + V20_J1_4	1	15.44	3850.2	-1211.17
## + V29_J1_5	1	15.26	3850.4	-1210.91
## + V29_J1_1	1	15.19	3850.4	-1210.83
## + V19_J2_4	1	15.02	3850.6	-1210.60
## + V19_J2_2	1	14.60	3851.0	-1210.03
## + V24_J2_5	1	14.43	3851.2	-1209.80
## + V13_2_J1_3	1	14.26	3851.4	-1209.57
## + V20_J1_2	1	14.09	3851.5	-1209.34
## + V24_J1_1	1	13.76	3851.8	-1208.90
## + V12_1_2_J2_5	1	13.71	3851.9	-1208.83
## + V19_J2_5	1	13.55	3852.1	-1208.61
## + V14_J2_4	1	13.48	3852.1	-1208.52
## + V29_J2_3	1	13.32	3852.3	-1208.31
## + V12_1_2_J1_5	1	13.32	3852.3	-1208.30
## + V30_J1_5	1	13.28	3852.3	-1208.25
## + V24_J2_3	1	13.13	3852.5	-1208.05
## + V19_J1_3	1	12.78	3852.8	-1207.58
## + V29_J1_4	1	12.70	3852.9	-1207.47
## + V15_J2_4	1	12.55	3853.1	-1207.26
## + V14_J2_7	1	12.46	3853.2	-1207.14
## + V23_J2_7	1	12.23	3853.4	-1206.83
## + V17_J2_3	1	12.21	3853.4	-1206.81
## + V2_J2_7	1	11.92	3853.7	-1206.41
## + V2_J1_4	1	11.46	3854.1	-1205.79
## + V15_J1_4	1	10.96	3854.6	-1205.12
## + V13_2_J1_2	1	10.46	3855.1	-1204.45
## + V29_J1_3	1	10.35	3855.3	-1204.30
## + V4_J1_1	1	10.33	3855.3	-1204.27
## + V3_J2_7	1	10.24	3855.4	-1204.15
## + V16_J2_4	1	9.78	3855.8	-1203.52

## + V5_J1_4	1	9.68	3855.9	-1203.40
## + V29_J1_6	1	9.62	3856.0	-1203.31
## + V13_2_J2_7	1	9.17	3856.4	-1202.71
## + V13_3_J1_6	1	9.13	3856.5	-1202.66
## + V20_J2_1	1	8.71	3856.9	-1202.08
## + V20_J2_3	1	8.55	3857.1	-1201.86
## + V20_J2_7	1	8.38	3857.2	-1201.64
## + V12_1_2_J2_1	1	8.34	3857.3	-1201.59
## + V13_3_J2_5	1	8.11	3857.5	-1201.27
## + V2_J2_1	1	8.08	3857.5	-1201.23
## + V1_J1_7	1	8.04	3857.6	-1201.18
## + V4_J1_3	1	7.99	3857.6	-1201.11
## + V14_J1_7	1	7.92	3857.7	-1201.02
## + V29_J2_1	1	7.81	3857.8	-1200.87
## + V15_J1_6	1	7.77	3857.8	-1200.82
## + V12_1_2_J1_3	1	7.50	3858.1	-1200.45
## + V1_J2_4	1	7.38	3858.2	-1200.29
## + V12_1_2_J2_4	1	7.31	3858.3	-1200.20
## + V20_J1_6	1	7.26	3858.4	-1200.13
## + V29_J1_2	1	7.20	3858.4	-1200.05
## + V26_J2_7	1	7.15	3858.5	-1199.98
## + V16_J1_4	1	7.09	3858.5	-1199.90
## + V13_1_J1_5	1	7.02	3858.6	-1199.80
## + V12_1_2_J2_7	1	6.90	3858.7	-1199.65
## + V1_J2_1	1	6.84	3858.8	-1199.57
## + V5_J1_7	1	6.81	3858.8	-1199.53
## + V19_J1_7	1	6.81	3858.8	-1199.52
## + V26_J1_6	1	6.76	3858.9	-1199.45
## + V30_J2_4	1	6.31	3859.3	-1198.85
## + V1_J2_3	1	6.19	3859.4	-1198.68
## + V19_J1_6	1	6.07	3859.5	-1198.53
## + V13_3_J1_3	1	6.03	3859.6	-1198.47
## + V13_1_J1_4	1	5.90	3859.7	-1198.30
## + V2_J2_5	1	5.60	3860.0	-1197.89
## + V19_J1_2	1	5.42	3860.2	-1197.65
## + V13_1_J2_4	1	5.40	3860.2	-1197.62
## + V13_2_J1_5	1	5.17	3860.4	-1197.31
## + V24_J1_2	1	5.10	3860.5	-1197.21
## + V23_J2_5	1	5.06	3860.5	-1197.17
## + V5_J2_2	1	5.02	3860.6	-1197.12
## <none>			3865.6	-1196.99
## + V14_J1_1	1	4.85	3860.8	-1196.88
## + V17_J1_7	1	4.46	3861.1	-1196.36
## + V13_3_J1_4	1	4.34	3861.3	-1196.20
## + V24_J1_5	1	4.28	3861.3	-1196.11
## + V29_J2_2	1	4.26	3861.4	-1196.08
## + V24_J1_7	1	4.12	3861.5	-1195.90
## + V30_J2_3	1	3.96	3861.7	-1195.68
## + V23_J2_4	1	3.91	3861.7	-1195.61
## + V2_J2_3	1	3.91	3861.7	-1195.61
## + V13_1_J2_3	1	3.82	3861.8	-1195.49
## + V16_J2_5	1	3.79	3861.8	-1195.45
## + V3_J2_2	1	3.66	3862.0	-1195.27
## + V13_1_J2_1	1	3.63	3862.0	-1195.24

## + V30_J1_7	1	3.46	3862.2	-1195.00
## + V24_J1_6	1	3.42	3862.2	-1194.96
## + V26_J1_1	1	3.23	3862.4	-1194.71
## + V13_3_J2_7	1	3.23	3862.4	-1194.70
## + V13_2_J2_2	1	3.22	3862.4	-1194.69
## + V3_J1_2	1	3.19	3862.4	-1194.64
## + V17_J2_5	1	2.97	3862.6	-1194.36
## + V13_1_J2_5	1	2.88	3862.7	-1194.23
## + V30_J2_7	1	2.79	3862.8	-1194.10
## + V13_2_J1_1	1	2.71	3862.9	-1193.99
## + V20_J1_5	1	2.60	3863.0	-1193.85
## + V24_J2_7	1	2.57	3863.0	-1193.81
## + V13_1_J1_1	1	2.43	3863.2	-1193.62
## + V14_J1_6	1	2.39	3863.2	-1193.57
## + V16_J1_5	1	2.36	3863.3	-1193.52
## + V2_J1_6	1	2.25	3863.4	-1193.38
## + V24_J1_4	1	2.22	3863.4	-1193.34
## + V16_J1_2	1	2.16	3863.5	-1193.26
## + V14_J2_1	1	2.00	3863.6	-1193.04
## + V13_2_J1_6	1	1.96	3863.7	-1192.99
## + V16_J2_3	1	1.96	3863.7	-1192.99
## + V26_J1_7	1	1.95	3863.7	-1192.97
## + V16_J1_7	1	1.81	3863.8	-1192.79
## + V13_3_J2_4	1	1.77	3863.8	-1192.73
## + V1_J1_1	1	1.72	3863.9	-1192.67
## + V17_J2_1	1	1.69	3863.9	-1192.63
## + V13_3_J2_3	1	1.69	3863.9	-1192.63
## + V13_1_J2_2	1	1.68	3863.9	-1192.62
## + V29_J2_7	1	1.66	3864.0	-1192.58
## + V14_J2_5	1	1.65	3864.0	-1192.57
## + V4_J1_5	1	1.65	3864.0	-1192.57
## + V20_J1_7	1	1.60	3864.0	-1192.51
## + V17_J2_4	1	1.45	3864.2	-1192.30
## + V13_2_J2_5	1	1.44	3864.2	-1192.29
## + V2_J2_4	1	1.42	3864.2	-1192.26
## + V5_J1_1	1	1.38	3864.2	-1192.21
## + V23_J1_7	1	1.36	3864.2	-1192.19
## + V1_J1_2	1	1.22	3864.4	-1191.99
## + V26_J1_3	1	1.19	3864.4	-1191.96
## + V2_J1_1	1	1.06	3864.5	-1191.79
## + V13_3_J1_7	1	1.05	3864.6	-1191.77
## + V20_J2_5	1	0.96	3864.7	-1191.64
## + V23_J1_1	1	0.93	3864.7	-1191.60
## + V13_2_J2_1	1	0.89	3864.7	-1191.55
## + V4_J1_4	1	0.85	3864.8	-1191.49
## + V16_J1_6	1	0.84	3864.8	-1191.48
## + V5_J1_6	1	0.77	3864.8	-1191.39
## + V13_1_J1_6	1	0.70	3864.9	-1191.30
## + V13_3_J1_1	1	0.68	3864.9	-1191.27
## + V23_J1_6	1	0.64	3865.0	-1191.21
## + V30_J1_4	1	0.64	3865.0	-1191.21
## + V1_J2_5	1	0.62	3865.0	-1191.18
## + V17_J1_2	1	0.59	3865.0	-1191.14
## + V13_3_J2_2	1	0.57	3865.0	-1191.12

## + V13_2_J2_3	1	0.57	3865.0	-1191.11
## + V16_J2_1	1	0.54	3865.1	-1191.08
## + V30_J2_1	1	0.53	3865.1	-1191.07
## + V1_J1_6	1	0.53	3865.1	-1191.06
## + V13_3_J2_1	1	0.51	3865.1	-1191.03
## + V23_J1_5	1	0.50	3865.1	-1191.02
## + V29_J2_4	1	0.47	3865.1	-1190.98
## + V15_J1_2	1	0.45	3865.2	-1190.96
## + V4_J2_7	1	0.40	3865.2	-1190.89
## + V16_J1_1	1	0.38	3865.2	-1190.86
## + V2_J1_7	1	0.38	3865.2	-1190.86
## + V13_1_J2_7	1	0.29	3865.3	-1190.74
## + V26_J1_2	1	0.29	3865.3	-1190.74
## + V5_J1_2	1	0.26	3865.3	-1190.71
## + V24_J1_3	1	0.22	3865.4	-1190.65
## + V12_1_2_J1_1	1	0.17	3865.4	-1190.58
## + V3_J1_1	1	0.16	3865.5	-1190.56
## + V29_J2_5	1	0.14	3865.5	-1190.54
## + V24_J2_4	1	0.14	3865.5	-1190.54
## + V3_J1_6	1	0.13	3865.5	-1190.53
## + V15_J2_1	1	0.13	3865.5	-1190.52
## + V24_J2_1	1	0.12	3865.5	-1190.51
## + V19_J1_1	1	0.10	3865.5	-1190.49
## + V3_J1_7	1	0.09	3865.5	-1190.48
## + V15_J1_1	1	0.07	3865.5	-1190.45
## + V26_J2_2	1	0.06	3865.6	-1190.43
## + V17_J1_1	1	0.05	3865.6	-1190.42
## + V20_J2_4	1	0.05	3865.6	-1190.42
## + V23_J2_2	1	0.04	3865.6	-1190.41
## + V13_3_J1_5	1	0.04	3865.6	-1190.41
## + V13_2_J2_4	1	0.03	3865.6	-1190.40
## + V2_J1_2	1	0.02	3865.6	-1190.39
## + V15_J2_3	1	0.02	3865.6	-1190.38
## + V23_J1_4	1	0.01	3865.6	-1190.37
## + V17_J1_6	1	0.00	3865.6	-1190.36
## + V24_J2_2	1	0.00	3865.6	-1190.36
## + V20_J1_1	1	0.00	3865.6	-1190.35
## + V23_J1_2	1	0.00	3865.6	-1190.35
## - V4_J2_4	1	70.88	3936.5	-1109.14
## - V15_J2_2	1	74.57	3940.2	-1104.27
## - V3_J2_1	1	76.74	3942.4	-1101.40
## - V5_J1_5	1	78.91	3944.5	-1098.55
## - V15_J2_7	1	84.85	3950.5	-1090.72
## - V19_J1_5	1	89.94	3955.6	-1084.02
## - V19_J1_4	1	93.53	3959.1	-1079.30
## - V3_J2_5	1	99.52	3965.1	-1071.45
## - V26_J2_1	1	102.73	3968.3	-1067.23
## - V30_J2_2	1	119.69	3985.3	-1045.05
## - V12_1_2_J2_2	1	135.27	4000.9	-1024.76
## - V3_J2_3	1	139.41	4005.0	-1019.39
## - V26_J2_5	1	148.26	4013.9	-1007.92
## - V26_J2_4	1	151.18	4016.8	-1004.13
## - V3_J2_4	1	156.28	4021.9	-997.53
## - V5_J2_5	1	214.09	4079.7	-923.32

```

## - V5_J2_4      1      247.47 4113.1 -880.96
## - V20_J2_2     1      250.27 4115.9 -877.41
## - V26_J2_3     1      289.45 4155.1 -828.15
## - V16_J2_2     1      398.66 4264.3 -693.23
## - V            19     1288.96 5154.6  173.32
## - J            12     1506.39 5372.0  434.61
##
## Step:  AIC=-1283.75
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##          V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##          V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##          V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3
##
##
##          Df Sum of Sq    RSS      AIC
## + V13_2_J1_7      1      69.45 3727.4 -1373.11
## + V12_1_2_J1_4    1      59.58 3737.2 -1359.36
## + V17_J2_2        1      59.24 3737.6 -1358.89
## + V1_J2_7         1      57.61 3739.2 -1356.63
## + V4_J2_1         1      57.43 3739.4 -1356.38
## + V3_J1_4         1      56.02 3740.8 -1354.41
## + V1_J2_2         1      53.70 3743.1 -1351.19
## + V4_J2_5         1      52.48 3744.3 -1349.50
## + V19_J2_3        1      50.98 3745.8 -1347.41
## + V30_J1_3        1      50.91 3745.9 -1347.31
## + V4_J2_3         1      50.18 3746.6 -1346.31
## + V2_J1_3         1      48.45 3748.3 -1343.90
## + V23_J1_3        1      48.02 3748.8 -1343.30
## + V14_J1_5        1      46.82 3750.0 -1341.64
## + V5_J2_3         1      43.19 3753.6 -1336.61
## + V17_J1_3        1      40.59 3756.2 -1333.01
## + V17_J2_7        1      37.50 3759.3 -1328.73
## + V13_1_J1_3      1      36.03 3760.8 -1326.69
## + V5_J1_3         1      35.15 3761.6 -1325.49
## + V30_J1_1        1      33.60 3763.2 -1323.34
## + V17_J1_5        1      30.63 3766.2 -1319.24
## + V5_J2_1         1      30.44 3766.4 -1318.97
## + V14_J1_4        1      30.05 3766.8 -1318.43
## + V4_J2_2         1      29.41 3767.4 -1317.56
## + V13_1_J1_2      1      29.04 3767.8 -1317.05
## + V15_J1_7        1      28.72 3768.1 -1316.60
## + V30_J1_6        1      28.22 3768.6 -1315.91
## + V16_J1_3        1      27.70 3769.1 -1315.19
## + V1_J1_5         1      26.41 3770.4 -1313.42
## + V2_J2_2         1      25.40 3771.4 -1312.02
## + V3_J1_5         1      24.31 3772.5 -1310.52
## + V23_J2_1        1      24.26 3772.5 -1310.44
## + V5_J2_7         1      24.23 3772.6 -1310.41
## + V14_J2_2        1      24.08 3772.7 -1310.20
## + V26_J1_4        1      23.69 3773.1 -1309.66
## + V1_J1_3         1      23.27 3773.5 -1309.09
## + V20_J1_3        1      23.16 3773.6 -1308.94
## + V13_2_J1_4      1      22.57 3774.2 -1308.12
## + V3_J1_3         1      22.56 3774.2 -1308.10
## + V13_1_J1_7      1      22.42 3774.4 -1307.91

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## + V15_J1_5	1	22.17	3774.6	-1307.56
## + V14_J2_3	1	20.99	3775.8	-1305.94
## + V19_J2_7	1	20.96	3775.8	-1305.90
## + V1_J1_4	1	20.62	3776.2	-1305.44
## + V26_J1_5	1	20.60	3776.2	-1305.41
## + V19_J2_1	1	20.38	3776.4	-1305.10
## + V30_J1_2	1	20.04	3776.8	-1304.63
## + V4_J1_6	1	19.95	3776.8	-1304.52
## + V14_J1_3	1	19.87	3776.9	-1304.40
## + V4_J1_7	1	19.72	3777.1	-1304.20
## + V30_J2_5	1	19.20	3777.6	-1303.48
## + V12_1_2_J1_2	1	19.03	3777.8	-1303.25
## + V16_J2_7	1	18.36	3778.4	-1302.32
## + V13_2_J1_3	1	17.80	3779.0	-1301.55
## + V12_1_2_J2_3	1	17.32	3779.5	-1300.89
## + V17_J1_4	1	16.80	3780.0	-1300.17
## + V12_1_2_J1_6	1	16.69	3780.1	-1300.03
## + V13_3_J1_2	1	16.57	3780.2	-1299.86
## + V2_J1_5	1	16.54	3780.3	-1299.81
## + V14_J1_2	1	16.52	3780.3	-1299.79
## + V12_1_2_J1_7	1	16.36	3780.4	-1299.57
## + V4_J1_2	1	16.34	3780.5	-1299.54
## + V29_J1_7	1	16.31	3780.5	-1299.50
## + V19_J1_3	1	16.10	3780.7	-1299.22
## + V23_J2_3	1	15.89	3780.9	-1298.92
## + V19_J2_4	1	15.51	3781.3	-1298.40
## + V29_J1_1	1	15.51	3781.3	-1298.40
## + V20_J1_4	1	15.11	3781.7	-1297.86
## + V29_J1_5	1	14.90	3781.9	-1297.56
## + V24_J2_5	1	14.82	3782.0	-1297.45
## + V19_J2_2	1	14.58	3782.2	-1297.12
## + V20_J1_2	1	14.39	3782.4	-1296.86
## + V24_J1_1	1	14.06	3782.7	-1296.41
## + V19_J2_5	1	13.99	3782.8	-1296.31
## + V14_J2_4	1	13.88	3782.9	-1296.16
## + V12_1_2_J2_5	1	13.34	3783.5	-1295.42
## + V15_J1_6	1	13.25	3783.5	-1295.30
## + V15_J2_5	1	13.11	3783.7	-1295.10
## + V12_1_2_J1_5	1	12.99	3783.8	-1294.93
## + V29_J2_3	1	12.98	3783.8	-1294.93
## + V30_J1_5	1	12.95	3783.8	-1294.89
## + V24_J2_3	1	12.80	3784.0	-1294.67
## + V14_J2_7	1	12.48	3784.3	-1294.24
## + V29_J1_4	1	12.40	3784.4	-1294.13
## + V23_J2_7	1	12.20	3784.6	-1293.86
## + V2_J2_7	1	11.89	3784.9	-1293.43
## + V17_J2_3	1	11.89	3784.9	-1293.42
## + V2_J1_4	1	11.18	3785.6	-1292.45
## + V13_2_J1_2	1	10.72	3786.1	-1291.82
## + V4_J1_3	1	10.66	3786.1	-1291.74
## + V3_J2_7	1	10.13	3786.7	-1291.00
## + V5_J1_4	1	10.05	3786.7	-1290.90
## + V4_J1_1	1	10.05	3786.8	-1290.90
## + V29_J1_6	1	9.87	3786.9	-1290.65

## + V16_J2_4	1	9.44	3787.4	-1290.07
## + V13_3_J1_6	1	9.38	3787.4	-1289.97
## + V13_2_J2_7	1	9.19	3787.6	-1289.72
## + V20_J2_1	1	8.99	3787.8	-1289.44
## + V20_J2_3	1	8.82	3788.0	-1289.21
## + V20_J2_7	1	8.40	3788.4	-1288.64
## + V13_3_J1_3	1	8.39	3788.4	-1288.62
## + V12_1_2_J2_1	1	8.07	3788.7	-1288.19
## + V13_3_J2_5	1	7.82	3789.0	-1287.84
## + V1_J1_7	1	7.81	3789.0	-1287.83
## + V2_J2_1	1	7.81	3789.0	-1287.83
## + V29_J1_3	1	7.76	3789.0	-1287.75
## + V14_J1_7	1	7.70	3789.1	-1287.67
## + V29_J2_1	1	7.55	3789.3	-1287.46
## + V20_J1_6	1	7.47	3789.3	-1287.36
## + V15_J2_4	1	7.46	3789.3	-1287.34
## + V29_J1_2	1	7.42	3789.4	-1287.29
## + V13_1_J1_5	1	7.26	3789.5	-1287.07
## + V1_J2_4	1	7.09	3789.7	-1286.83
## + V26_J2_7	1	7.05	3789.8	-1286.78
## + V12_1_2_J2_4	1	7.03	3789.8	-1286.75
## + V12_1_2_J2_7	1	6.88	3789.9	-1286.55
## + V16_J1_4	1	6.87	3789.9	-1286.53
## + V1_J2_1	1	6.60	3790.2	-1286.16
## + V30_J2_4	1	6.59	3790.2	-1286.15
## + V19_J1_7	1	6.56	3790.2	-1286.11
## + V5_J1_7	1	6.53	3790.3	-1286.06
## + V26_J1_6	1	6.44	3790.4	-1285.94
## + V15_J1_4	1	6.20	3790.6	-1285.62
## + V1_J2_3	1	5.96	3790.8	-1285.28
## + V19_J1_6	1	5.84	3791.0	-1285.12
## + V13_1_J1_4	1	5.70	3791.1	-1284.92
## + V13_2_J1_5	1	5.38	3791.4	-1284.48
## + V2_J2_5	1	5.36	3791.4	-1284.46
## + V12_1_2_J1_3	1	5.30	3791.5	-1284.38
## + V24_J1_2	1	5.28	3791.5	-1284.35
## + V19_J1_2	1	5.20	3791.6	-1284.24
## + V13_1_J2_4	1	5.15	3791.6	-1284.18
## + V5_J2_2	1	4.98	3791.8	-1283.94
## <none>			3796.8	-1283.75
## + V23_J2_5	1	4.84	3792.0	-1283.75
## + V14_J1_1	1	4.68	3792.1	-1283.52
## + V24_J1_5	1	4.47	3792.3	-1283.24
## + V17_J1_7	1	4.29	3792.5	-1283.00
## + V29_J2_2	1	4.28	3792.5	-1282.98
## + V13_3_J1_4	1	4.17	3792.6	-1282.83
## + V24_J1_7	1	3.96	3792.8	-1282.54
## + V30_J2_3	1	3.78	3793.0	-1282.29
## + V2_J2_3	1	3.73	3793.1	-1282.22
## + V23_J2_4	1	3.70	3793.1	-1282.18
## + V13_1_J2_3	1	3.64	3793.2	-1282.10
## + V30_J1_7	1	3.60	3793.2	-1282.05
## + V16_J2_5	1	3.60	3793.2	-1282.04
## + V3_J2_2	1	3.59	3793.2	-1282.03

## + V13_1_J2_1	1	3.45	3793.3	-1281.85
## + V24_J1_6	1	3.28	3793.5	-1281.61
## + V13_3_J2_7	1	3.24	3793.6	-1281.56
## + V13_2_J2_2	1	3.24	3793.6	-1281.55
## + V26_J1_1	1	3.01	3793.8	-1281.24
## + V3_J1_2	1	2.97	3793.8	-1281.18
## + V13_2_J1_1	1	2.84	3794.0	-1281.01
## + V17_J2_5	1	2.80	3794.0	-1280.96
## + V30_J2_7	1	2.77	3794.0	-1280.92
## + V13_1_J2_5	1	2.71	3794.1	-1280.83
## + V24_J2_7	1	2.58	3794.2	-1280.65
## + V13_1_J1_1	1	2.55	3794.2	-1280.62
## + V20_J1_5	1	2.45	3794.3	-1280.48
## + V26_J1_3	1	2.30	3794.5	-1280.27
## + V15_J1_2	1	2.28	3794.5	-1280.24
## + V16_J1_2	1	2.28	3794.5	-1280.24
## + V14_J1_6	1	2.27	3794.5	-1280.22
## + V16_J1_5	1	2.22	3794.6	-1280.16
## + V14_J2_1	1	2.13	3794.7	-1280.04
## + V2_J1_6	1	2.13	3794.7	-1280.03
## + V24_J1_4	1	2.09	3794.7	-1279.98
## + V16_J2_3	1	2.09	3794.7	-1279.98
## + V13_3_J2_4	1	1.92	3794.9	-1279.74
## + V13_2_J1_6	1	1.85	3795.0	-1279.65
## + V1_J1_1	1	1.83	3795.0	-1279.62
## + V14_J2_5	1	1.78	3795.0	-1279.55
## + V4_J1_5	1	1.78	3795.0	-1279.55
## + V26_J1_7	1	1.77	3795.0	-1279.55
## + V16_J1_7	1	1.71	3795.1	-1279.45
## + V20_J1_7	1	1.70	3795.1	-1279.45
## + V13_1_J2_2	1	1.67	3795.1	-1279.41
## + V29_J2_7	1	1.67	3795.1	-1279.40
## + V17_J2_1	1	1.57	3795.2	-1279.27
## + V13_3_J2_3	1	1.57	3795.2	-1279.27
## + V13_2_J2_5	1	1.56	3795.2	-1279.25
## + V23_J1_7	1	1.46	3795.3	-1279.11
## + V15_J2_1	1	1.42	3795.4	-1279.06
## + V17_J2_4	1	1.32	3795.5	-1278.93
## + V2_J2_4	1	1.29	3795.5	-1278.89
## + V5_J1_1	1	1.25	3795.5	-1278.83
## + V15_J1_1	1	1.24	3795.6	-1278.81
## + V2_J1_1	1	1.15	3795.7	-1278.69
## + V13_3_J1_7	1	1.14	3795.7	-1278.67
## + V1_J1_2	1	1.13	3795.7	-1278.67
## + V23_J1_1	1	1.00	3795.8	-1278.49
## + V4_J1_4	1	0.94	3795.9	-1278.40
## + V5_J1_6	1	0.87	3795.9	-1278.31
## + V20_J2_5	1	0.86	3795.9	-1278.30
## + V24_J1_3	1	0.82	3796.0	-1278.24
## + V13_2_J2_1	1	0.80	3796.0	-1278.22
## + V13_1_J1_6	1	0.77	3796.0	-1278.17
## + V16_J1_6	1	0.76	3796.0	-1278.16
## + V13_3_J1_1	1	0.75	3796.0	-1278.14
## + V30_J1_4	1	0.71	3796.1	-1278.08

## + V23_J1_6	1	0.70	3796.1	-1278.08
## + V1_J2_5	1	0.70	3796.1	-1278.07
## + V30_J2_1	1	0.60	3796.2	-1277.94
## + V13_3_J2_2	1	0.57	3796.2	-1277.89
## + V29_J2_4	1	0.54	3796.3	-1277.86
## + V17_J1_2	1	0.53	3796.3	-1277.84
## + V13_2_J2_3	1	0.50	3796.3	-1277.80
## + V15_J2_3	1	0.48	3796.3	-1277.77
## + V16_J2_1	1	0.47	3796.3	-1277.76
## + V1_J1_6	1	0.47	3796.3	-1277.76
## + V13_3_J2_1	1	0.44	3796.4	-1277.72
## + V23_J1_5	1	0.43	3796.4	-1277.71
## + V2_J1_7	1	0.43	3796.4	-1277.70
## + V4_J2_7	1	0.40	3796.4	-1277.66
## + V26_J1_2	1	0.36	3796.4	-1277.61
## + V16_J1_1	1	0.33	3796.5	-1277.57
## + V5_J1_2	1	0.32	3796.5	-1277.56
## + V13_1_J2_7	1	0.30	3796.5	-1277.52
## + V12_1_2_J1_1	1	0.20	3796.6	-1277.39
## + V19_J1_1	1	0.13	3796.7	-1277.30
## + V3_J1_1	1	0.11	3796.7	-1277.27
## + V29_J2_5	1	0.10	3796.7	-1277.26
## + V24_J2_4	1	0.10	3796.7	-1277.25
## + V3_J1_6	1	0.09	3796.7	-1277.24
## + V24_J2_1	1	0.09	3796.7	-1277.23
## + V20_J2_4	1	0.08	3796.7	-1277.22
## + V13_3_J1_5	1	0.06	3796.7	-1277.20
## + V3_J1_7	1	0.06	3796.7	-1277.19
## + V26_J2_2	1	0.05	3796.8	-1277.18
## + V23_J2_2	1	0.04	3796.8	-1277.17
## + V17_J1_1	1	0.03	3796.8	-1277.16
## + V13_2_J2_4	1	0.02	3796.8	-1277.14
## + V2_J1_2	1	0.01	3796.8	-1277.13
## + V23_J1_4	1	0.00	3796.8	-1277.12
## + V23_J1_2	1	0.00	3796.8	-1277.12
## + V24_J2_2	1	0.00	3796.8	-1277.12
## + V17_J1_6	1	0.00	3796.8	-1277.12
## + V20_J1_1	1	0.00	3796.8	-1277.12
## - V15_J1_3	1	68.81	3865.6	-1196.99
## - V4_J2_4	1	71.74	3868.5	-1193.05
## - V3_J2_1	1	77.78	3874.6	-1184.93
## - V5_J1_5	1	79.84	3876.6	-1182.17
## - V15_J2_2	1	87.49	3884.3	-1171.92
## - V19_J1_5	1	90.83	3887.6	-1167.45
## - V19_J1_4	1	94.39	3891.2	-1162.70
## - V15_J2_7	1	98.62	3895.4	-1157.04
## - V3_J2_5	1	100.76	3897.6	-1154.19
## - V26_J2_1	1	103.94	3900.7	-1149.95
## - V30_J2_2	1	119.60	3916.4	-1129.12
## - V12_1_2_J2_2	1	135.17	3932.0	-1108.48
## - V3_J2_3	1	140.81	3937.6	-1101.03
## - V26_J2_5	1	149.77	3946.6	-1089.20
## - V26_J2_4	1	152.78	3949.6	-1085.24
## - V3_J2_4	1	157.91	3954.7	-1078.49

```

## - V5_J2_5      1      215.75 4012.5 -1002.99
## - V5_J2_4      1      249.33 4046.1 -959.65
## - V20_J2_2     1      250.13 4046.9 -958.63
## - V26_J2_3     1      291.46 4088.3 -905.79
## - V16_J2_2     1      398.48 4195.3 -771.42
## - V            19     1344.87 5141.7  166.92
## - J            12     1570.42 5367.2  436.62
##
## Step:  AIC=-1373.11
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##      V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##      V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##      V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7
##
##      Df Sum of Sq  RSS      AIC
## + V12_1_2_J1_4  1      58.99 3668.4 -1449.43
## + V17_J2_2      1      58.55 3668.8 -1448.80
## + V1_J2_7       1      57.09 3670.3 -1446.74
## + V4_J2_1       1      56.80 3670.5 -1446.33
## + V3_J1_4       1      55.23 3672.1 -1444.10
## + V1_J2_2       1      53.04 3674.3 -1441.00
## + V4_J2_5       1      51.84 3675.5 -1439.30
## + V30_J1_3      1      50.36 3677.0 -1437.22
## + V19_J2_3      1      50.34 3677.0 -1437.18
## + V4_J2_3       1      49.59 3677.8 -1436.13
## + V2_J1_3       1      47.97 3679.4 -1433.83
## + V23_J1_3      1      47.54 3679.8 -1433.22
## + V14_J1_5      1      46.32 3681.0 -1431.50
## + V5_J2_3       1      42.53 3684.8 -1426.15
## + V17_J1_3      1      40.15 3687.2 -1422.79
## + V17_J2_7      1      37.08 3690.3 -1418.46
## + V13_1_J1_3    1      36.44 3690.9 -1417.57
## + V5_J1_3       1      35.72 3691.6 -1416.55
## + V30_J1_1      1      34.02 3693.3 -1414.16
## + V17_J1_5      1      31.05 3696.3 -1409.97
## + V4_J2_2       1      29.95 3697.4 -1408.43
## + V5_J2_1       1      29.88 3697.5 -1408.33
## + V14_J1_4      1      29.67 3697.7 -1408.03
## + V13_1_J1_2    1      28.70 3698.7 -1406.66
## + V30_J1_6      1      27.83 3699.5 -1405.45
## + V16_J1_3      1      27.29 3700.1 -1404.69
## + V13_1_J1_7    1      26.88 3700.5 -1404.12
## + V1_J1_5       1      26.80 3700.6 -1403.99
## + V2_J2_2       1      24.95 3702.4 -1401.39
## + V5_J2_7       1      24.70 3702.7 -1401.05
## + V23_J2_1      1      24.63 3702.7 -1400.96
## + V14_J2_2      1      24.52 3702.8 -1400.80
## + V15_J1_7      1      24.29 3703.1 -1400.47
## + V3_J1_5       1      23.76 3703.6 -1399.73
## + V20_J1_3      1      23.54 3703.8 -1399.42
## + V26_J1_4      1      23.17 3704.2 -1398.90
## + V3_J1_3       1      23.07 3704.3 -1398.76
## + V1_J1_3       1      22.94 3704.4 -1398.58
## + V15_J1_5      1      21.71 3705.6 -1396.85

```

## + V19_J2_7	1	21.34	3706.0	-1396.34
## + V1_J1_4	1	20.94	3706.4	-1395.77
## + V14_J2_3	1	20.64	3706.7	-1395.35
## + V30_J1_2	1	20.36	3707.0	-1394.96
## + V4_J1_6	1	20.28	3707.1	-1394.84
## + V14_J1_3	1	20.18	3707.2	-1394.71
## + V12_1_2_J1_7	1	20.18	3707.2	-1394.70
## + V29_J1_7	1	20.14	3707.2	-1394.65
## + V26_J1_5	1	20.10	3707.3	-1394.59
## + V19_J2_1	1	19.97	3707.4	-1394.42
## + V30_J2_5	1	19.59	3707.8	-1393.88
## + V12_1_2_J1_2	1	19.35	3708.0	-1393.54
## + V16_J2_7	1	18.03	3709.3	-1391.69
## + V12_1_2_J2_3	1	17.67	3709.7	-1391.19
## + V17_J1_4	1	17.08	3710.3	-1390.36
## + V2_J1_5	1	16.84	3710.5	-1390.02
## + V14_J1_2	1	16.79	3710.6	-1389.95
## + V4_J1_2	1	16.63	3710.7	-1389.73
## + V13_2_J1_4	1	16.54	3710.8	-1389.60
## + V19_J1_3	1	16.44	3710.9	-1389.46
## + V12_1_2_J1_6	1	16.40	3711.0	-1389.41
## + V13_3_J1_2	1	16.31	3711.0	-1389.28
## + V23_J2_3	1	16.19	3711.2	-1389.11
## + V4_J1_7	1	16.04	3711.3	-1388.91
## + V13_2_J1_2	1	15.90	3711.4	-1388.71
## + V20_J1_4	1	15.41	3711.9	-1388.02
## + V29_J1_1	1	15.25	3712.1	-1387.80
## + V29_J1_5	1	15.19	3712.2	-1387.71
## + V19_J2_4	1	15.11	3712.2	-1387.60
## + V19_J2_2	1	14.98	3712.4	-1387.42
## + V24_J2_5	1	14.50	3712.8	-1386.75
## + V20_J1_2	1	14.12	3713.2	-1386.21
## + V24_J1_1	1	13.82	3713.5	-1385.79
## + V12_1_2_J2_5	1	13.67	3713.7	-1385.58
## + V19_J2_5	1	13.63	3713.7	-1385.53
## + V15_J1_6	1	13.58	3713.8	-1385.45
## + V14_J2_4	1	13.56	3713.8	-1385.42
## + V12_1_2_J1_5	1	13.28	3714.1	-1385.04
## + V29_J2_3	1	13.26	3714.1	-1385.01
## + V30_J1_5	1	13.25	3714.1	-1385.00
## + V24_J2_3	1	13.07	3714.3	-1384.74
## + V14_J2_7	1	12.73	3714.6	-1384.26
## + V15_J2_5	1	12.73	3714.6	-1384.26
## + V29_J1_4	1	12.64	3714.7	-1384.15
## + V13_2_J1_3	1	12.49	3714.9	-1383.92
## + V17_J2_3	1	12.15	3715.2	-1383.45
## + V23_J2_7	1	11.96	3715.4	-1383.19
## + V2_J2_7	1	11.66	3715.7	-1382.76
## + V2_J1_4	1	11.41	3715.9	-1382.42
## + V4_J1_3	1	10.92	3716.4	-1381.73
## + V3_J2_7	1	10.47	3716.9	-1381.10
## + V4_J1_1	1	10.28	3717.1	-1380.84
## + V5_J1_4	1	9.75	3717.6	-1380.10
## + V16_J2_4	1	9.74	3717.6	-1380.08

## + V29_J1_6	1	9.67	3717.7	-1379.98
## + V13_3_J1_6	1	9.18	3718.2	-1379.30
## + V13_2_J1_5	1	9.15	3718.2	-1379.26
## + V20_J2_1	1	8.74	3718.6	-1378.68
## + V20_J2_7	1	8.63	3718.7	-1378.53
## + V13_3_J1_3	1	8.59	3718.8	-1378.48
## + V20_J2_3	1	8.58	3718.8	-1378.45
## + V12_1_2_J2_1	1	8.31	3719.0	-1378.09
## + V13_3_J2_5	1	8.05	3719.3	-1377.72
## + V2_J2_1	1	8.03	3719.3	-1377.68
## + V29_J2_1	1	7.76	3719.6	-1377.31
## + V29_J1_3	1	7.56	3719.8	-1377.04
## + V26_J2_7	1	7.33	3720.0	-1376.72
## + V1_J2_4	1	7.32	3720.0	-1376.70
## + V12_1_2_J2_4	1	7.28	3720.1	-1376.64
## + V20_J1_6	1	7.28	3720.1	-1376.64
## + V29_J1_2	1	7.24	3720.1	-1376.59
## + V15_J2_4	1	7.15	3720.2	-1376.47
## + V16_J1_4	1	7.07	3720.3	-1376.35
## + V13_1_J1_5	1	7.06	3720.3	-1376.34
## + V1_J2_1	1	6.80	3720.6	-1375.97
## + V26_J1_6	1	6.70	3720.7	-1375.83
## + V12_1_2_J2_7	1	6.68	3720.7	-1375.80
## + V30_J2_4	1	6.35	3721.0	-1375.34
## + V1_J2_3	1	6.14	3721.2	-1375.05
## + V19_J1_6	1	6.03	3721.3	-1374.89
## + V15_J1_4	1	5.97	3721.4	-1374.82
## + V13_1_J1_4	1	5.86	3721.5	-1374.66
## + V13_2_J1_1	1	5.72	3721.6	-1374.47
## + V2_J2_5	1	5.55	3721.8	-1374.23
## + V1_J1_7	1	5.55	3721.8	-1374.22
## + V13_2_J2_7	1	5.49	3721.9	-1374.14
## + V30_J1_7	1	5.49	3721.9	-1374.14
## + V14_J1_7	1	5.45	3721.9	-1374.08
## + V19_J1_2	1	5.38	3722.0	-1373.99
## + V13_1_J2_4	1	5.35	3722.0	-1373.95
## + V5_J2_2	1	5.24	3722.1	-1373.79
## + V24_J1_2	1	5.13	3722.2	-1373.64
## + V12_1_2_J1_3	1	5.13	3722.2	-1373.63
## + V23_J2_5	1	5.02	3722.3	-1373.48
## + V14_J1_1	1	4.82	3722.5	-1373.20
## <none>			3727.4	-1373.11
## + V19_J1_7	1	4.51	3722.8	-1372.78
## + V5_J1_7	1	4.50	3722.9	-1372.76
## + V29_J2_2	1	4.47	3722.9	-1372.71
## + V24_J1_5	1	4.31	3723.0	-1372.50
## + V13_3_J1_4	1	4.31	3723.0	-1372.49
## + V30_J2_3	1	3.94	3723.4	-1371.98
## + V2_J2_3	1	3.87	3723.5	-1371.88
## + V23_J2_4	1	3.87	3723.5	-1371.88
## + V3_J2_2	1	3.84	3723.5	-1371.83
## + V13_2_J2_5	1	3.80	3723.6	-1371.78
## + V13_1_J2_3	1	3.78	3723.6	-1371.76
## + V16_J2_5	1	3.77	3723.6	-1371.74

## + V13_1_J2_1	1	3.60	3723.8	-1371.50
## + V24_J1_6	1	3.40	3724.0	-1371.22
## + V13_3_J2_7	1	3.37	3724.0	-1371.18
## + V26_J1_1	1	3.19	3724.2	-1370.93
## + V3_J1_2	1	3.15	3724.2	-1370.87
## + V20_J1_7	1	3.06	3724.3	-1370.75
## + V17_J2_5	1	2.94	3724.4	-1370.58
## + V13_1_J2_5	1	2.85	3724.5	-1370.45
## + V23_J1_7	1	2.73	3724.6	-1370.29
## + V24_J2_7	1	2.69	3724.7	-1370.24
## + V17_J1_7	1	2.66	3724.7	-1370.19
## + V30_J2_7	1	2.65	3724.7	-1370.17
## + V20_J1_5	1	2.58	3724.8	-1370.08
## + V26_J1_3	1	2.47	3724.9	-1369.92
## + V13_1_J1_1	1	2.45	3724.9	-1369.90
## + V15_J1_2	1	2.42	3724.9	-1369.85
## + V24_J1_7	1	2.40	3725.0	-1369.82
## + V14_J1_6	1	2.36	3725.0	-1369.78
## + V16_J1_5	1	2.34	3725.0	-1369.74
## + V13_3_J1_7	1	2.28	3725.1	-1369.66
## + V2_J1_6	1	2.23	3725.1	-1369.58
## + V24_J1_4	1	2.19	3725.2	-1369.54
## + V16_J1_2	1	2.17	3725.2	-1369.50
## + V14_J2_1	1	2.02	3725.3	-1369.30
## + V16_J2_3	1	1.97	3725.4	-1369.23
## + V13_3_J2_4	1	1.80	3725.6	-1368.98
## + V29_J2_7	1	1.76	3725.6	-1368.93
## + V1_J1_1	1	1.74	3725.6	-1368.91
## + V14_J2_5	1	1.67	3725.7	-1368.81
## + V17_J2_1	1	1.67	3725.7	-1368.81
## + V4_J1_5	1	1.67	3725.7	-1368.81
## + V13_3_J2_3	1	1.67	3725.7	-1368.80
## + V13_1_J2_2	1	1.56	3725.8	-1368.65
## + V15_J2_1	1	1.54	3725.8	-1368.63
## + V17_J2_4	1	1.43	3725.9	-1368.46
## + V2_J2_4	1	1.40	3726.0	-1368.42
## + V5_J1_1	1	1.36	3726.0	-1368.37
## + V15_J1_1	1	1.34	3726.0	-1368.34
## + V13_2_J2_2	1	1.23	3726.1	-1368.20
## + V2_J1_7	1	1.20	3726.1	-1368.16
## + V1_J1_2	1	1.20	3726.1	-1368.15
## + V2_J1_1	1	1.08	3726.3	-1367.98
## + V20_J2_5	1	0.95	3726.4	-1367.80
## + V23_J1_1	1	0.94	3726.4	-1367.79
## + V24_J1_3	1	0.89	3726.5	-1367.71
## + V4_J1_4	1	0.86	3726.5	-1367.68
## + V16_J1_6	1	0.83	3726.5	-1367.63
## + V26_J1_7	1	0.81	3726.5	-1367.60
## + V5_J1_6	1	0.79	3726.6	-1367.58
## + V16_J1_7	1	0.75	3726.6	-1367.52
## + V13_1_J1_6	1	0.72	3726.6	-1367.48
## + V13_3_J1_1	1	0.70	3726.7	-1367.45
## + V23_J1_6	1	0.65	3726.7	-1367.38
## + V30_J1_4	1	0.64	3726.7	-1367.37

## + V1_J2_5	1	0.63	3726.7	-1367.36
## + V17_J1_2	1	0.57	3726.8	-1367.28
## + V15_J2_3	1	0.55	3726.8	-1367.24
## + V30_J2_1	1	0.54	3726.8	-1367.23
## + V16_J2_1	1	0.53	3726.8	-1367.22
## + V1_J1_6	1	0.52	3726.8	-1367.20
## + V13_3_J2_2	1	0.50	3726.9	-1367.17
## + V13_3_J2_1	1	0.49	3726.9	-1367.17
## + V23_J1_5	1	0.48	3726.9	-1367.15
## + V29_J2_4	1	0.48	3726.9	-1367.15
## + V13_2_J1_6	1	0.44	3726.9	-1367.09
## + V16_J1_1	1	0.37	3727.0	-1367.00
## + V4_J2_7	1	0.35	3727.0	-1366.96
## + V13_1_J2_7	1	0.33	3727.0	-1366.94
## + V13_2_J2_4	1	0.33	3727.0	-1366.93
## + V26_J1_2	1	0.30	3727.1	-1366.90
## + V5_J1_2	1	0.27	3727.1	-1366.86
## + V12_1_2_J1_1	1	0.17	3727.2	-1366.72
## + V3_J1_1	1	0.15	3727.2	-1366.68
## + V29_J2_5	1	0.13	3727.2	-1366.66
## + V24_J2_4	1	0.13	3727.2	-1366.66
## + V3_J1_6	1	0.12	3727.2	-1366.65
## + V24_J2_1	1	0.11	3727.2	-1366.63
## + V19_J1_1	1	0.11	3727.2	-1366.62
## + V26_J2_2	1	0.08	3727.3	-1366.59
## + V20_J2_4	1	0.05	3727.3	-1366.55
## + V17_J1_1	1	0.05	3727.3	-1366.54
## + V13_3_J1_5	1	0.04	3727.3	-1366.53
## + V13_2_J2_1	1	0.04	3727.3	-1366.53
## + V3_J1_7	1	0.04	3727.3	-1366.53
## + V23_J2_2	1	0.02	3727.3	-1366.51
## + V2_J1_2	1	0.02	3727.3	-1366.51
## + V23_J1_4	1	0.01	3727.3	-1366.49
## + V24_J2_2	1	0.01	3727.3	-1366.49
## + V17_J1_6	1	0.00	3727.3	-1366.48
## + V23_J1_2	1	0.00	3727.4	-1366.48
## + V20_J1_1	1	0.00	3727.4	-1366.48
## + V13_2_J2_3	1	0.00	3727.4	-1366.48
## - V13_2_J1_7	1	69.45	3796.8	-1283.75
## - V15_J1_3	1	69.48	3796.8	-1283.71
## - V4_J2_4	1	71.04	3798.4	-1281.57
## - V3_J2_1	1	76.93	3804.3	-1273.51
## - V5_J1_5	1	79.08	3806.4	-1270.58
## - V15_J2_2	1	88.40	3815.8	-1257.86
## - V19_J1_5	1	90.11	3817.5	-1255.53
## - V19_J1_4	1	93.69	3821.0	-1250.65
## - V15_J2_7	1	99.41	3826.8	-1242.87
## - V3_J2_5	1	99.74	3827.1	-1242.43
## - V26_J2_1	1	102.95	3830.3	-1238.06
## - V30_J2_2	1	118.67	3846.0	-1216.77
## - V12_1_2_J2_2	1	134.18	3861.5	-1195.84
## - V3_J2_3	1	139.66	3867.0	-1188.46
## - V26_J2_5	1	148.53	3875.9	-1176.55
## - V26_J2_4	1	151.47	3878.8	-1172.61

```

## - V3_J2_4      1      156.57 3883.9 -1165.77
## - V5_J2_5      1      214.39 3941.7 -1088.93
## - V5_J2_4      1      247.80 3975.2 -1045.05
## - V20_J2_2     1      248.79 3976.1 -1043.76
## - V26_J2_3     1      289.80 4017.2 -990.39
## - V16_J2_2     1      396.78 4124.1 -853.72
## - V            19     1378.12 5105.5   136.82
## - J            12     1601.90 5329.3   406.34
##
## Step:  AIC=-1449.43
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##      V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##      V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##      V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
##      V12_1_2_J1_4
##
##      Df Sum of Sq  RSS      AIC
## + V3_J1_4      1      61.78 3606.6 -1531.12
## + V17_J2_2     1      58.57 3609.8 -1526.49
## + V1_J2_7      1      56.53 3611.8 -1523.55
## + V4_J2_1      1      56.12 3612.2 -1522.96
## + V1_J2_2      1      53.06 3615.3 -1518.56
## + V4_J2_5      1      51.14 3617.2 -1515.80
## + V19_J2_3     1      50.26 3618.1 -1514.53
## + V30_J1_3     1      49.83 3618.5 -1513.92
## + V4_J2_3      1      48.96 3619.4 -1512.66
## + V2_J1_3      1      47.45 3620.9 -1510.50
## + V23_J1_3     1      47.03 3621.3 -1509.89
## + V14_J1_5     1      45.80 3622.6 -1508.13
## + V5_J2_3      1      41.82 3626.5 -1502.41
## + V17_J1_3     1      39.68 3628.7 -1499.35
## + V13_1_J1_3   1      36.90 3631.5 -1495.37
## + V17_J2_7     1      36.62 3631.7 -1494.97
## + V5_J1_3      1      36.33 3632.0 -1494.56
## + V14_J1_4     1      34.63 3633.7 -1492.12
## + V30_J1_1     1      34.43 3633.9 -1491.84
## + V17_J1_5     1      31.47 3636.9 -1487.60
## + V4_J2_2      1      29.98 3638.4 -1485.46
## + V5_J2_1      1      29.28 3639.1 -1484.47
## + V13_1_J1_2   1      28.32 3640.0 -1483.10
## + V30_J1_6     1      27.47 3640.9 -1481.87
## + V26_J1_4     1      27.44 3640.9 -1481.84
## + V1_J1_5      1      27.19 3641.2 -1481.48
## + V12_1_2_J1_7 1      27.18 3641.2 -1481.47
## + V16_J1_3     1      26.90 3641.5 -1481.07
## + V13_1_J1_7   1      26.50 3641.9 -1480.50
## + V5_J2_7      1      25.21 3643.2 -1478.66
## + V23_J2_1     1      25.05 3643.3 -1478.42
## + V2_J2_2      1      24.96 3643.4 -1478.30
## + V15_J1_7     1      24.74 3643.6 -1477.98
## + V14_J2_2     1      24.51 3643.9 -1477.65
## + V20_J1_3     1      23.90 3644.5 -1476.79
## + V3_J1_3      1      23.63 3644.7 -1476.40
## + V3_J1_5      1      23.20 3645.2 -1475.78

```

## + V12_1_2_J1_6	1	22.76	3645.6	-1475.16
## + V1_J1_3	1	22.58	3645.8	-1474.91
## + V19_J2_7	1	21.36	3647.0	-1473.16
## + V15_J1_5	1	21.28	3647.1	-1473.05
## + V30_J1_2	1	20.68	3647.7	-1472.19
## + V4_J1_6	1	20.63	3647.7	-1472.13
## + V14_J1_3	1	20.52	3647.8	-1471.97
## + V14_J2_3	1	20.27	3648.1	-1471.61
## + V30_J2_5	1	19.99	3648.4	-1471.21
## + V19_J2_1	1	19.92	3648.4	-1471.11
## + V29_J1_7	1	19.81	3648.6	-1470.95
## + V26_J1_5	1	19.58	3648.8	-1470.62
## + V16_J2_7	1	17.72	3650.6	-1467.97
## + V1_J1_4	1	17.25	3651.1	-1467.30
## + V2_J1_5	1	17.15	3651.2	-1467.17
## + V14_J1_2	1	17.08	3651.3	-1467.06
## + V4_J1_2	1	16.95	3651.4	-1466.88
## + V23_J2_3	1	16.53	3651.8	-1466.27
## + V19_J1_3	1	16.46	3651.9	-1466.17
## + V4_J1_7	1	16.38	3652.0	-1466.06
## + V13_3_J1_2	1	16.03	3652.3	-1465.56
## + V13_2_J1_2	1	15.60	3652.8	-1464.95
## + V29_J1_5	1	15.49	3652.9	-1464.79
## + V19_J2_4	1	15.02	3653.3	-1464.13
## + V29_J1_1	1	14.98	3653.4	-1464.07
## + V19_J2_2	1	14.69	3653.7	-1463.66
## + V24_J2_5	1	14.17	3654.2	-1462.91
## + V15_J1_6	1	13.90	3654.5	-1462.53
## + V20_J1_2	1	13.85	3654.5	-1462.47
## + V12_1_2_J1_2	1	13.79	3654.6	-1462.38
## + V17_J1_4	1	13.76	3654.6	-1462.34
## + V19_J2_5	1	13.57	3654.8	-1462.06
## + V29_J2_3	1	13.56	3654.8	-1462.06
## + V24_J1_1	1	13.56	3654.8	-1462.05
## + V30_J1_5	1	13.53	3654.8	-1462.01
## + V24_J2_3	1	13.37	3655.0	-1461.78
## + V13_2_J1_4	1	13.29	3655.1	-1461.67
## + V14_J2_4	1	13.21	3655.2	-1461.55
## + V14_J2_7	1	13.00	3655.4	-1461.25
## + V13_2_J1_3	1	12.78	3655.6	-1460.94
## + V5_J1_4	1	12.60	3655.8	-1460.69
## + V17_J2_3	1	12.44	3655.9	-1460.46
## + V12_1_2_J2_3	1	12.40	3656.0	-1460.40
## + V15_J2_5	1	12.36	3656.0	-1460.34
## + V20_J1_4	1	12.26	3656.1	-1460.20
## + V23_J2_7	1	11.71	3656.7	-1459.41
## + V2_J2_7	1	11.40	3657.0	-1458.98
## + V4_J1_3	1	11.19	3657.2	-1458.68
## + V12_1_2_J2_7	1	10.88	3657.5	-1458.24
## + V3_J2_7	1	10.85	3657.5	-1458.20
## + V4_J1_1	1	10.53	3657.8	-1457.75
## + V16_J2_4	1	10.04	3658.3	-1457.05
## + V29_J1_4	1	9.81	3658.6	-1456.72
## + V29_J1_6	1	9.45	3658.9	-1456.21

## + V12_1_2_J2_5	1	9.09	3659.3	-1455.70
## + V13_3_J1_6	1	8.97	3659.4	-1455.52
## + V13_2_J1_5	1	8.91	3659.5	-1455.44
## + V12_1_2_J1_3	1	8.86	3659.5	-1455.37
## + V20_J2_7	1	8.85	3659.5	-1455.36
## + V13_3_J1_3	1	8.82	3659.5	-1455.31
## + V12_1_2_J1_5	1	8.74	3659.6	-1455.20
## + V2_J1_4	1	8.72	3659.6	-1455.17
## + V20_J2_1	1	8.49	3659.9	-1454.85
## + V20_J2_3	1	8.34	3660.0	-1454.62
## + V13_3_J2_5	1	8.31	3660.1	-1454.59
## + V15_J1_4	1	8.27	3660.1	-1454.53
## + V2_J2_1	1	8.26	3660.1	-1454.52
## + V29_J2_1	1	7.99	3660.4	-1454.14
## + V26_J2_7	1	7.65	3660.7	-1453.65
## + V1_J2_4	1	7.59	3660.8	-1453.56
## + V29_J1_3	1	7.36	3661.0	-1453.24
## + V20_J1_6	1	7.09	3661.3	-1452.85
## + V29_J1_2	1	7.05	3661.3	-1452.81
## + V1_J2_1	1	7.01	3661.3	-1452.75
## + V26_J1_6	1	6.99	3661.4	-1452.71
## + V13_1_J1_5	1	6.86	3661.5	-1452.53
## + V15_J2_4	1	6.86	3661.5	-1452.53
## + V1_J2_3	1	6.35	3662.0	-1451.81
## + V30_J2_4	1	6.11	3662.3	-1451.46
## + V19_J1_6	1	6.03	3662.3	-1451.35
## + V2_J2_5	1	5.76	3662.6	-1450.97
## + V1_J1_7	1	5.73	3662.6	-1450.92
## + V13_2_J2_7	1	5.68	3662.7	-1450.86
## + V14_J1_7	1	5.63	3662.7	-1450.78
## + V13_1_J2_4	1	5.58	3662.8	-1450.71
## + V13_2_J1_1	1	5.54	3662.8	-1450.66
## + V19_J1_2	1	5.38	3663.0	-1450.42
## + V30_J1_7	1	5.31	3663.0	-1450.33
## + V5_J2_2	1	5.29	3663.1	-1450.31
## + V23_J2_5	1	5.22	3663.1	-1450.20
## + V16_J1_4	1	4.98	3663.4	-1449.86
## + V14_J1_1	1	4.97	3663.4	-1449.85
## + V24_J1_2	1	4.97	3663.4	-1449.85
## + V12_1_2_J2_1	1	4.82	3663.5	-1449.63
## + V5_J1_7	1	4.72	3663.6	-1449.49
## <none>			3668.4	-1449.43
## + V19_J1_7	1	4.52	3663.8	-1449.21
## + V29_J2_2	1	4.46	3663.9	-1449.12
## + V24_J1_5	1	4.16	3664.2	-1448.69
## + V30_J2_3	1	4.11	3664.3	-1448.62
## + V23_J2_4	1	4.06	3664.3	-1448.55
## + V12_1_2_J2_4	1	4.05	3664.3	-1448.54
## + V2_J2_3	1	4.04	3664.3	-1448.52
## + V13_1_J1_4	1	3.98	3664.4	-1448.44
## + V13_1_J2_3	1	3.95	3664.4	-1448.39
## + V16_J2_5	1	3.94	3664.4	-1448.39
## + V3_J2_2	1	3.91	3664.5	-1448.34
## + V13_1_J2_1	1	3.76	3664.6	-1448.12

## + V13_2_J2_5	1	3.62	3664.7	-1447.93
## + V24_J1_6	1	3.53	3664.8	-1447.80
## + V13_3_J2_7	1	3.51	3664.9	-1447.77
## + V26_J1_1	1	3.39	3665.0	-1447.61
## + V3_J1_2	1	3.35	3665.0	-1447.54
## + V17_J2_5	1	3.10	3665.3	-1447.19
## + V13_1_J2_5	1	3.00	3665.4	-1447.05
## + V20_J1_7	1	2.93	3665.4	-1446.95
## + V24_J2_7	1	2.82	3665.5	-1446.79
## + V17_J1_7	1	2.79	3665.6	-1446.74
## + V13_3_J1_4	1	2.72	3665.6	-1446.66
## + V20_J1_5	1	2.71	3665.7	-1446.63
## + V26_J1_3	1	2.65	3665.7	-1446.56
## + V23_J1_7	1	2.61	3665.8	-1446.49
## + V15_J1_2	1	2.56	3665.8	-1446.42
## + V30_J2_7	1	2.53	3665.8	-1446.38
## + V24_J1_7	1	2.52	3665.8	-1446.36
## + V14_J1_6	1	2.47	3665.9	-1446.30
## + V16_J1_5	1	2.46	3665.9	-1446.28
## + V13_1_J1_1	1	2.34	3666.0	-1446.12
## + V2_J1_6	1	2.33	3666.0	-1446.10
## + V13_3_J1_7	1	2.17	3666.2	-1445.87
## + V16_J1_2	1	2.07	3666.3	-1445.73
## + V14_J2_1	1	1.91	3666.5	-1445.50
## + V29_J2_7	1	1.86	3666.5	-1445.43
## + V16_J2_3	1	1.86	3666.5	-1445.43
## + V4_J1_4	1	1.84	3666.5	-1445.41
## + V17_J2_1	1	1.78	3666.6	-1445.32
## + V13_3_J2_3	1	1.77	3666.6	-1445.31
## + V13_3_J2_4	1	1.67	3666.7	-1445.16
## + V15_J2_1	1	1.67	3666.7	-1445.16
## + V1_J1_1	1	1.65	3666.7	-1445.14
## + V4_J1_5	1	1.56	3666.8	-1445.01
## + V13_1_J2_2	1	1.56	3666.8	-1445.01
## + V14_J2_5	1	1.56	3666.8	-1445.00
## + V17_J2_4	1	1.54	3666.8	-1444.98
## + V30_J1_4	1	1.52	3666.8	-1444.96
## + V2_J2_4	1	1.51	3666.9	-1444.94
## + V5_J1_1	1	1.47	3666.9	-1444.88
## + V15_J1_1	1	1.44	3666.9	-1444.83
## + V1_J1_2	1	1.28	3667.1	-1444.61
## + V12_1_2_J1_1	1	1.26	3667.1	-1444.58
## + V13_2_J2_2	1	1.24	3667.1	-1444.55
## + V2_J1_7	1	1.12	3667.2	-1444.39
## + V24_J1_4	1	1.11	3667.3	-1444.37
## + V20_J2_5	1	1.04	3667.3	-1444.27
## + V2_J1_1	1	1.01	3667.4	-1444.22
## + V24_J1_3	1	0.96	3667.4	-1444.15
## + V26_J1_7	1	0.92	3667.4	-1444.10
## + V16_J1_6	1	0.89	3667.5	-1444.06
## + V23_J1_1	1	0.87	3667.5	-1444.03
## + V16_J1_7	1	0.82	3667.5	-1443.95
## + V5_J1_6	1	0.71	3667.7	-1443.80
## + V13_1_J1_6	1	0.66	3667.7	-1443.73

## + V13_3_J1_1	1	0.64	3667.7	-1443.70
## + V17_J1_2	1	0.63	3667.7	-1443.69
## + V15_J2_3	1	0.63	3667.7	-1443.68
## + V23_J1_6	1	0.59	3667.8	-1443.64
## + V16_J2_1	1	0.59	3667.8	-1443.64
## + V1_J1_6	1	0.57	3667.8	-1443.60
## + V1_J2_5	1	0.56	3667.8	-1443.59
## + V13_3_J2_1	1	0.55	3667.8	-1443.58
## + V23_J1_5	1	0.54	3667.8	-1443.56
## + V13_3_J2_2	1	0.50	3667.9	-1443.51
## + V13_2_J1_6	1	0.49	3667.9	-1443.49
## + V30_J2_1	1	0.48	3667.9	-1443.47
## + V29_J2_4	1	0.42	3667.9	-1443.39
## + V16_J1_1	1	0.42	3667.9	-1443.39
## + V13_1_J2_7	1	0.38	3668.0	-1443.33
## + V4_J2_7	1	0.30	3668.1	-1443.22
## + V13_2_J2_4	1	0.27	3668.1	-1443.18
## + V26_J1_2	1	0.24	3668.1	-1443.14
## + V5_J1_2	1	0.23	3668.1	-1443.12
## + V3_J1_1	1	0.19	3668.2	-1443.07
## + V24_J2_4	1	0.17	3668.2	-1443.03
## + V29_J2_5	1	0.17	3668.2	-1443.03
## + V3_J1_6	1	0.17	3668.2	-1443.03
## + V24_J2_1	1	0.14	3668.2	-1442.99
## + V19_J1_1	1	0.11	3668.3	-1442.95
## + V23_J1_4	1	0.11	3668.3	-1442.95
## + V26_J2_2	1	0.09	3668.3	-1442.92
## + V17_J1_1	1	0.06	3668.3	-1442.89
## + V13_2_J2_1	1	0.06	3668.3	-1442.88
## + V2_J1_2	1	0.03	3668.3	-1442.84
## + V20_J2_4	1	0.03	3668.3	-1442.84
## + V13_3_J1_5	1	0.03	3668.3	-1442.84
## + V23_J2_2	1	0.02	3668.3	-1442.83
## + V3_J1_7	1	0.02	3668.3	-1442.82
## + V24_J2_2	1	0.01	3668.4	-1442.81
## + V17_J1_6	1	0.01	3668.4	-1442.80
## + V20_J1_1	1	0.00	3668.4	-1442.80
## + V13_2_J2_3	1	0.00	3668.4	-1442.80
## + V23_J1_2	1	0.00	3668.4	-1442.80
## - V12_1_2_J1_4	1	58.99	3727.4	-1373.11
## - V13_2_J1_7	1	68.86	3737.2	-1359.36
## - V15_J1_3	1	70.12	3738.5	-1357.60
## - V4_J2_4	1	70.28	3738.6	-1357.38
## - V3_J2_1	1	76.01	3744.4	-1349.42
## - V5_J1_5	1	78.29	3746.7	-1346.25
## - V15_J2_2	1	88.49	3756.9	-1332.11
## - V19_J1_5	1	90.07	3758.4	-1329.93
## - V3_J2_5	1	98.64	3767.0	-1318.09
## - V15_J2_7	1	100.19	3768.6	-1315.95
## - V19_J1_4	1	101.41	3769.8	-1314.26
## - V26_J2_1	1	101.89	3770.2	-1313.61
## - V30_J2_2	1	118.70	3787.1	-1290.47
## - V3_J2_3	1	138.42	3806.8	-1263.46
## - V26_J2_5	1	147.19	3815.5	-1251.50

```

## - V12_1_2_J2_2  1    148.40 3816.8 -1249.85
## - V26_J2_4      1    150.05 3818.4 -1247.60
## - V3_J2_4       1    155.13 3823.5 -1240.69
## - V5_J2_5       1    212.93 3881.3 -1162.67
## - V5_J2_4       1    246.14 3914.5 -1118.36
## - V20_J2_2      1    248.83 3917.2 -1114.79
## - V26_J2_3      1    288.01 3956.4 -1063.04
## - V16_J2_2      1    396.84 4065.2  -921.93
## - V              19   1390.14 5058.5    95.40
## - J              12   1556.57 5224.9   310.17
##
## Step:  AIC=-1531.12
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##      V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##      V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##      V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
##      V12_1_2_J1_4 + V3_J1_4
##
##
##      Df Sum of Sq  RSS      AIC
## + V17_J2_2      1    57.51 3549.1 -1608.07
## + V4_J2_1       1    56.10 3550.5 -1606.01
## + V1_J2_7       1    55.69 3550.9 -1605.41
## + V1_J2_2       1    52.05 3554.5 -1600.08
## + V4_J2_5       1    51.11 3555.5 -1598.71
## + V19_J2_3      1    50.76 3555.8 -1598.19
## + V30_J1_3      1    48.97 3557.6 -1595.57
## + V4_J2_3       1    48.94 3557.6 -1595.53
## + V2_J1_3       1    46.69 3559.9 -1592.24
## + V23_J1_3      1    46.26 3560.3 -1591.62
## + V14_J1_5      1    45.05 3561.5 -1589.84
## + V5_J2_3       1    41.72 3564.9 -1584.99
## + V14_J1_4      1    40.35 3566.2 -1582.99
## + V17_J1_3      1    38.98 3567.6 -1581.00
## + V13_1_J1_3    1    37.58 3569.0 -1578.96
## + V5_J1_3       1    37.10 3569.5 -1578.25
## + V17_J2_7      1    35.95 3570.6 -1576.58
## + V30_J1_1      1    35.12 3571.5 -1575.37
## + V3_J1_5       1    34.16 3572.4 -1573.97
## + V26_J1_4      1    32.64 3573.9 -1571.76
## + V17_J1_5      1    32.11 3574.5 -1570.99
## + V4_J2_2       1    30.76 3575.8 -1569.02
## + V5_J2_1       1    29.20 3577.4 -1566.76
## + V1_J1_5       1    27.78 3578.8 -1564.70
## + V13_1_J1_2    1    27.77 3578.8 -1564.68
## + V12_1_2_J1_7  1    26.97 3579.6 -1563.52
## + V30_J1_6      1    26.86 3579.7 -1563.36
## + V16_J1_3      1    26.27 3580.3 -1562.50
## + V13_1_J1_7    1    25.94 3580.6 -1562.02
## + V5_J2_7       1    25.85 3580.7 -1561.89
## + V15_J1_7      1    25.48 3581.1 -1561.36
## + V14_J2_2      1    25.21 3581.4 -1560.96
## + V23_J2_1      1    25.06 3581.5 -1560.75
## + V20_J1_3      1    24.51 3582.1 -1559.95
## + V2_J2_2       1    24.27 3582.3 -1559.60

```

## + V12_1_2_J1_6	1	22.60	3584.0	-1557.17
## + V1_J1_3	1	22.06	3584.5	-1556.39
## + V19_J2_7	1	21.54	3585.0	-1555.64
## + V30_J1_2	1	21.21	3585.4	-1555.16
## + V4_J1_6	1	21.11	3585.5	-1555.02
## + V14_J1_3	1	21.03	3585.5	-1554.90
## + V15_J1_5	1	20.59	3586.0	-1554.26
## + V14_J2_3	1	20.26	3586.3	-1553.78
## + V19_J2_1	1	20.24	3586.3	-1553.75
## + V30_J2_5	1	20.06	3586.5	-1553.49
## + V29_J1_7	1	19.32	3587.3	-1552.42
## + V26_J1_5	1	19.07	3587.5	-1552.05
## + V2_J1_5	1	17.63	3589.0	-1549.96
## + V14_J1_2	1	17.51	3589.1	-1549.79
## + V4_J1_2	1	17.39	3589.2	-1549.62
## + V16_J2_7	1	17.20	3589.4	-1549.35
## + V4_J1_7	1	16.83	3589.7	-1548.81
## + V19_J1_3	1	16.62	3590.0	-1548.50
## + V23_J2_3	1	16.54	3590.0	-1548.38
## + V5_J1_4	1	16.10	3590.5	-1547.76
## + V29_J1_5	1	15.93	3590.6	-1547.51
## + V13_3_J1_2	1	15.61	3591.0	-1547.05
## + V3_J1_3	1	15.29	3591.3	-1546.58
## + V19_J2_4	1	15.29	3591.3	-1546.58
## + V13_2_J1_2	1	15.15	3591.4	-1546.38
## + V19_J2_2	1	14.95	3591.6	-1546.09
## + V29_J1_1	1	14.58	3592.0	-1545.55
## + V15_J1_6	1	14.43	3592.1	-1545.34
## + V24_J2_5	1	14.15	3592.4	-1544.93
## + V30_J1_5	1	13.99	3592.6	-1544.70
## + V12_1_2_J1_2	1	13.92	3592.7	-1544.59
## + V19_J2_5	1	13.82	3592.8	-1544.46
## + V1_J1_4	1	13.71	3592.9	-1544.29
## + V29_J2_3	1	13.57	3593.0	-1544.09
## + V20_J1_2	1	13.42	3593.2	-1543.88
## + V14_J2_7	1	13.40	3593.2	-1543.85
## + V24_J2_3	1	13.38	3593.2	-1543.82
## + V13_2_J1_3	1	13.21	3593.4	-1543.57
## + V14_J2_4	1	13.19	3593.4	-1543.54
## + V24_J1_1	1	13.18	3593.4	-1543.52
## + V17_J2_3	1	12.45	3594.1	-1542.47
## + V15_J2_5	1	12.21	3594.4	-1542.13
## + V12_1_2_J2_3	1	12.16	3594.4	-1542.05
## + V4_J1_3	1	11.57	3595.0	-1541.20
## + V23_J2_7	1	11.33	3595.3	-1540.84
## + V15_J1_4	1	11.05	3595.5	-1540.45
## + V2_J2_7	1	11.03	3595.5	-1540.41
## + V4_J1_1	1	10.88	3595.7	-1540.19
## + V12_1_2_J2_7	1	10.74	3595.8	-1540.00
## + V17_J1_4	1	10.62	3596.0	-1539.82
## + V13_2_J1_4	1	10.22	3596.4	-1539.25
## + V16_J2_4	1	10.09	3596.5	-1539.06
## + V20_J1_4	1	9.33	3597.3	-1537.95
## + V20_J2_7	1	9.22	3597.4	-1537.80

## + V13_3_J1_3	1	9.15	3597.4	-1537.70
## + V29_J1_6	1	9.13	3597.4	-1537.67
## + V12_1_2_J2_5	1	8.89	3597.7	-1537.32
## + V12_1_2_J1_5	1	8.87	3597.7	-1537.29
## + V12_1_2_J1_3	1	8.74	3597.8	-1537.10
## + V13_3_J1_6	1	8.66	3597.9	-1536.99
## + V13_2_J1_5	1	8.55	3598.0	-1536.82
## + V20_J2_1	1	8.45	3598.1	-1536.69
## + V13_3_J2_5	1	8.32	3598.3	-1536.50
## + V20_J2_3	1	8.29	3598.3	-1536.46
## + V2_J2_1	1	8.27	3598.3	-1536.43
## + V29_J2_1	1	8.00	3598.6	-1536.03
## + V26_J2_7	1	7.98	3598.6	-1536.00
## + V1_J2_4	1	7.60	3599.0	-1535.45
## + V26_J1_6	1	7.28	3599.3	-1534.99
## + V29_J1_4	1	7.18	3599.4	-1534.85
## + V29_J1_3	1	7.06	3599.5	-1534.68
## + V1_J2_1	1	7.02	3599.6	-1534.62
## + V20_J1_6	1	6.78	3599.8	-1534.28
## + V29_J1_2	1	6.78	3599.8	-1534.27
## + V15_J2_4	1	6.75	3599.8	-1534.23
## + V13_1_J1_5	1	6.57	3600.0	-1533.97
## + V1_J2_3	1	6.36	3600.2	-1533.66
## + V2_J1_4	1	6.25	3600.3	-1533.51
## + V19_J1_6	1	6.11	3600.5	-1533.30
## + V30_J2_4	1	6.07	3600.5	-1533.24
## + V1_J1_7	1	5.99	3600.6	-1533.14
## + V13_2_J2_7	1	5.97	3600.6	-1533.11
## + V14_J1_7	1	5.89	3600.7	-1532.99
## + V2_J2_5	1	5.77	3600.8	-1532.82
## + V5_J2_2	1	5.66	3600.9	-1532.65
## + V13_1_J2_4	1	5.59	3601.0	-1532.55
## + V19_J1_2	1	5.45	3601.1	-1532.35
## + V3_J2_7	1	5.43	3601.1	-1532.32
## + V13_2_J1_1	1	5.28	3601.3	-1532.10
## + V23_J2_5	1	5.23	3601.3	-1532.04
## + V14_J1_1	1	5.21	3601.4	-1532.00
## + V30_J1_7	1	5.04	3601.5	-1531.75
## + V5_J1_7	1	4.99	3601.6	-1531.69
## + V29_J2_2	1	4.76	3601.8	-1531.36
## + V24_J1_2	1	4.74	3601.8	-1531.33
## + V12_1_2_J2_1	1	4.67	3601.9	-1531.23
## + V19_J1_7	1	4.60	3602.0	-1531.13
## <none>			3606.6	-1531.12
## + V30_J2_3	1	4.14	3602.4	-1530.45
## + V23_J2_4	1	4.07	3602.5	-1530.35
## + V2_J2_3	1	4.04	3602.5	-1530.32
## + V16_J2_5	1	3.97	3602.6	-1530.22
## + V13_1_J2_3	1	3.95	3602.6	-1530.19
## + V24_J1_5	1	3.93	3602.6	-1530.16
## + V12_1_2_J2_4	1	3.92	3602.7	-1530.14
## + V13_1_J2_1	1	3.76	3602.8	-1529.91
## + V24_J1_6	1	3.73	3602.9	-1529.86
## + V13_3_J2_7	1	3.72	3602.9	-1529.86

## + V26_J1_1	1	3.60	3603.0	-1529.67
## + V13_2_J2_5	1	3.59	3603.0	-1529.67
## + V4_J1_4	1	3.31	3603.3	-1529.26
## + V16_J1_4	1	3.18	3603.4	-1529.07
## + V17_J2_5	1	3.10	3603.5	-1528.96
## + V24_J2_7	1	3.01	3603.6	-1528.83
## + V13_1_J2_5	1	3.01	3603.6	-1528.83
## + V17_J1_7	1	2.97	3603.6	-1528.77
## + V20_J1_5	1	2.92	3603.7	-1528.69
## + V30_J1_4	1	2.85	3603.7	-1528.60
## + V26_J1_3	1	2.84	3603.7	-1528.59
## + V15_J1_2	1	2.79	3603.8	-1528.51
## + V20_J1_7	1	2.72	3603.9	-1528.42
## + V24_J1_7	1	2.69	3603.9	-1528.37
## + V16_J1_5	1	2.66	3603.9	-1528.32
## + V14_J1_6	1	2.64	3603.9	-1528.30
## + V2_J1_6	1	2.49	3604.1	-1528.08
## + V23_J1_7	1	2.43	3604.1	-1528.00
## + V13_1_J1_4	1	2.38	3604.2	-1527.91
## + V30_J2_7	1	2.33	3604.2	-1527.85
## + V13_1_J1_1	1	2.19	3604.4	-1527.64
## + V29_J2_7	1	2.01	3604.6	-1527.39
## + V13_3_J1_7	1	2.01	3604.6	-1527.39
## + V16_J1_2	1	1.90	3604.7	-1527.23
## + V14_J2_1	1	1.90	3604.7	-1527.23
## + V16_J2_3	1	1.84	3604.7	-1527.14
## + V17_J2_1	1	1.78	3604.8	-1527.06
## + V13_3_J2_3	1	1.78	3604.8	-1527.05
## + V15_J2_1	1	1.72	3604.9	-1526.97
## + V13_3_J2_4	1	1.67	3604.9	-1526.89
## + V5_J1_1	1	1.62	3605.0	-1526.82
## + V15_J1_1	1	1.61	3605.0	-1526.81
## + V14_J2_5	1	1.55	3605.0	-1526.73
## + V17_J2_4	1	1.55	3605.0	-1526.72
## + V1_J1_1	1	1.52	3605.1	-1526.68
## + V2_J2_4	1	1.52	3605.1	-1526.67
## + V13_3_J1_4	1	1.43	3605.1	-1526.55
## + V4_J1_5	1	1.42	3605.2	-1526.54
## + V13_2_J2_2	1	1.41	3605.2	-1526.52
## + V1_J1_2	1	1.40	3605.2	-1526.51
## + V13_1_J2_2	1	1.39	3605.2	-1526.49
## + V3_J1_7	1	1.27	3605.3	-1526.32
## + V12_1_2_J1_1	1	1.22	3605.4	-1526.24
## + V24_J1_3	1	1.07	3605.5	-1526.03
## + V20_J2_5	1	1.05	3605.5	-1526.01
## + V26_J1_7	1	1.03	3605.5	-1525.97
## + V3_J2_2	1	1.02	3605.6	-1525.96
## + V2_J1_7	1	1.01	3605.6	-1525.94
## + V16_J1_6	1	1.01	3605.6	-1525.94
## + V16_J1_7	1	0.93	3605.6	-1525.83
## + V2_J1_1	1	0.91	3605.7	-1525.79
## + V23_J1_1	1	0.78	3605.8	-1525.61
## + V3_J1_2	1	0.73	3605.9	-1525.53
## + V17_J1_2	1	0.71	3605.9	-1525.52

## + V15_J2_3	1	0.66	3605.9	-1525.44
## + V1_J1_6	1	0.65	3605.9	-1525.43
## + V23_J1_5	1	0.63	3606.0	-1525.39
## + V23_J1_4	1	0.61	3606.0	-1525.37
## + V5_J1_6	1	0.61	3606.0	-1525.37
## + V16_J2_1	1	0.61	3606.0	-1525.36
## + V13_1_J1_6	1	0.58	3606.0	-1525.32
## + V13_2_J1_6	1	0.57	3606.0	-1525.32
## + V1_J2_5	1	0.56	3606.0	-1525.30
## + V13_3_J1_1	1	0.56	3606.0	-1525.29
## + V13_3_J2_1	1	0.56	3606.0	-1525.29
## + V23_J1_6	1	0.52	3606.1	-1525.23
## + V16_J1_1	1	0.50	3606.1	-1525.20
## + V30_J2_1	1	0.47	3606.1	-1525.16
## + V13_1_J2_7	1	0.45	3606.1	-1525.14
## + V29_J2_4	1	0.42	3606.2	-1525.09
## + V13_3_J2_2	1	0.41	3606.2	-1525.07
## + V24_J1_4	1	0.36	3606.2	-1525.00
## + V3_J1_6	1	0.34	3606.2	-1524.98
## + V3_J1_1	1	0.30	3606.3	-1524.92
## + V13_2_J2_4	1	0.26	3606.3	-1524.87
## + V4_J2_7	1	0.24	3606.3	-1524.84
## + V26_J1_2	1	0.19	3606.4	-1524.77
## + V5_J1_2	1	0.17	3606.4	-1524.74
## + V24_J2_4	1	0.17	3606.4	-1524.73
## + V29_J2_5	1	0.17	3606.4	-1524.73
## + V24_J2_1	1	0.14	3606.4	-1524.69
## + V26_J2_2	1	0.14	3606.4	-1524.69
## + V19_J1_1	1	0.10	3606.5	-1524.63
## + V17_J1_1	1	0.09	3606.5	-1524.62
## + V13_2_J2_1	1	0.06	3606.5	-1524.58
## + V2_J1_2	1	0.06	3606.5	-1524.57
## + V20_J2_4	1	0.03	3606.5	-1524.53
## + V24_J2_2	1	0.03	3606.5	-1524.53
## + V17_J1_6	1	0.02	3606.6	-1524.51
## + V20_J1_1	1	0.01	3606.6	-1524.51
## + V13_3_J1_5	1	0.01	3606.6	-1524.51
## + V23_J2_2	1	0.01	3606.6	-1524.50
## + V13_2_J2_3	1	0.00	3606.6	-1524.49
## + V23_J1_2	1	0.00	3606.6	-1524.49
## - V3_J1_4	1	61.78	3668.4	-1449.43
## - V12_1_2_J1_4	1	65.55	3672.1	-1444.10
## - V13_2_J1_7	1	67.99	3674.6	-1440.64
## - V4_J2_4	1	70.25	3676.8	-1437.44
## - V15_J1_3	1	71.20	3677.8	-1436.10
## - V5_J1_5	1	77.33	3683.9	-1427.43
## - V19_J1_5	1	89.74	3696.3	-1409.96
## - V15_J2_2	1	89.91	3696.5	-1409.71
## - V3_J2_1	1	90.96	3697.5	-1408.23
## - V15_J2_7	1	101.47	3708.1	-1393.47
## - V26_J2_1	1	101.85	3708.4	-1392.94
## - V19_J1_4	1	109.91	3716.5	-1381.66
## - V3_J2_5	1	115.38	3722.0	-1374.00
## - V30_J2_2	1	117.27	3723.8	-1371.37


```

## - V26_J2_5      1      147.13 3753.7 -1329.83
## - V12_1_2_J2_2  1      147.67 3754.2 -1329.09
## - V26_J2_4      1      149.99 3756.6 -1325.87
## - V3_J2_3       1      157.89 3764.5 -1314.96
## - V3_J2_4       1      175.51 3782.1 -1290.67
## - V5_J2_5       1      212.73 3819.3 -1239.75
## - V5_J2_4       1      245.93 3852.5 -1194.74
## - V20_J2_2      1      246.75 3853.3 -1193.63
## - V26_J2_3      1      287.95 3894.5 -1138.33
## - V16_J2_2      1      394.21 4000.8 -998.36
## - V              19     1407.82 5014.4   56.49
## - J              12     1521.96 5128.5   219.98
##
## Step:  AIC=-1608.07
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##      V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##      V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##      V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
##      V12_1_2_J1_4 + V3_J1_4 + V17_J2_2
##
##
##      Df Sum of Sq    RSS      AIC
## + V1_J2_2      1      60.57 3488.5 -1690.95
## + V4_J2_1      1      55.31 3493.8 -1683.11
## + V1_J2_7      1      55.09 3494.0 -1682.79
## + V4_J2_5      1      50.30 3498.8 -1675.66
## + V19_J2_3     1      49.95 3499.1 -1675.14
## + V30_J1_3     1      49.04 3500.0 -1673.78
## + V4_J2_3      1      48.20 3500.9 -1672.54
## + V17_J1_3     1      47.60 3501.5 -1671.65
## + V2_J1_3      1      46.14 3502.9 -1669.48
## + V23_J1_3     1      45.72 3503.4 -1668.85
## + V14_J1_5     1      44.42 3504.6 -1666.93
## + V17_J2_7     1      44.24 3504.8 -1666.66
## + V5_J2_3      1      40.89 3508.2 -1661.70
## + V14_J1_4     1      39.75 3509.3 -1660.00
## + V13_1_J1_3   1      38.08 3511.0 -1657.53
## + V5_J1_3      1      37.79 3511.3 -1657.10
## + V30_J1_1     1      35.07 3514.0 -1653.07
## + V3_J1_5      1      33.23 3515.8 -1650.35
## + V26_J1_4     1      31.83 3517.2 -1648.28
## + V2_J2_2      1      30.12 3518.9 -1645.76
## + V5_J2_1      1      28.51 3520.6 -1643.37
## + V1_J1_5      1      28.28 3520.8 -1643.03
## + V13_1_J1_2   1      27.34 3521.7 -1641.65
## + V12_1_2_J1_7 1      27.00 3522.1 -1641.14
## + V30_J1_6     1      26.91 3522.2 -1641.01
## + V5_J2_7      1      26.43 3522.6 -1640.30
## + V16_J1_3     1      26.32 3522.8 -1640.14
## + V17_J1_5     1      25.57 3523.5 -1639.04
## + V23_J2_1     1      25.55 3523.5 -1639.00
## + V13_1_J1_7   1      25.50 3523.6 -1638.93
## + V15_J1_7     1      25.45 3523.6 -1638.86
## + V4_J2_2      1      25.14 3523.9 -1638.40
## + V20_J1_3     1      24.46 3524.6 -1637.40

```

## + V12_1_2_J1_6	1	22.64	3526.4	-1634.71
## + V19_J2_7	1	22.00	3527.1	-1633.77
## + V1_J1_3	1	21.68	3527.4	-1633.30
## + V4_J1_6	1	21.53	3527.5	-1633.08
## + V14_J1_3	1	21.40	3527.7	-1632.89
## + V30_J1_2	1	21.17	3527.9	-1632.55
## + V15_J1_5	1	20.59	3528.5	-1631.69
## + V30_J2_5	1	20.12	3528.9	-1631.00
## + V14_J2_2	1	20.11	3529.0	-1630.99
## + V14_J2_3	1	19.82	3529.2	-1630.56
## + V19_J2_1	1	19.73	3529.3	-1630.42
## + V29_J1_7	1	18.95	3530.1	-1629.27
## + V26_J1_5	1	18.46	3530.6	-1628.55
## + V2_J1_5	1	18.02	3531.1	-1627.90
## + V14_J1_2	1	17.85	3531.2	-1627.66
## + V4_J1_2	1	17.77	3531.3	-1627.53
## + V16_J2_7	1	17.24	3531.8	-1626.76
## + V4_J1_7	1	17.23	3531.8	-1626.74
## + V19_J1_3	1	17.02	3532.0	-1626.43
## + V23_J2_3	1	16.93	3532.1	-1626.30
## + V29_J1_5	1	16.31	3532.8	-1625.38
## + V3_J1_3	1	15.87	3533.2	-1624.75
## + V5_J1_4	1	15.59	3533.5	-1624.33
## + V13_3_J1_2	1	15.29	3533.8	-1623.89
## + V13_2_J1_2	1	14.81	3534.3	-1623.18
## + V19_J2_4	1	14.79	3534.3	-1623.15
## + V15_J1_6	1	14.39	3534.7	-1622.56
## + V29_J1_1	1	14.27	3534.8	-1622.39
## + V1_J1_4	1	14.07	3535.0	-1622.09
## + V30_J1_5	1	14.00	3535.1	-1621.99
## + V29_J2_3	1	13.93	3535.1	-1621.89
## + V12_1_2_J1_2	1	13.88	3535.2	-1621.81
## + V24_J2_5	1	13.76	3535.3	-1621.64
## + V24_J2_3	1	13.74	3535.3	-1621.60
## + V14_J2_7	1	13.70	3535.4	-1621.55
## + V13_2_J1_3	1	13.54	3535.5	-1621.31
## + V20_J1_2	1	13.46	3535.6	-1621.19
## + V19_J2_5	1	13.37	3535.7	-1621.07
## + V24_J1_1	1	12.89	3536.2	-1620.35
## + V14_J2_4	1	12.79	3536.3	-1620.21
## + V12_1_2_J2_3	1	12.18	3536.9	-1619.31
## + V15_J2_5	1	12.17	3536.9	-1619.30
## + V4_J1_3	1	11.88	3537.2	-1618.87
## + V4_J1_1	1	11.18	3537.9	-1617.84
## + V19_J2_2	1	11.10	3538.0	-1617.72
## + V23_J2_7	1	11.06	3538.0	-1617.66
## + V15_J1_4	1	11.05	3538.0	-1617.64
## + V12_1_2_J2_7	1	10.77	3538.3	-1617.24
## + V2_J2_7	1	10.76	3538.3	-1617.23
## + V13_2_J1_4	1	10.55	3538.5	-1616.92
## + V16_J2_4	1	10.16	3538.9	-1616.34
## + V13_3_J1_3	1	9.40	3539.7	-1615.22
## + V20_J1_4	1	9.34	3539.7	-1615.14
## + V20_J2_7	1	9.19	3539.9	-1614.92

## + V12_1_2_J2_5	1	8.93	3540.1	-1614.53
## + V29_J1_6	1	8.89	3540.2	-1614.48
## + V12_1_2_J1_5	1	8.88	3540.2	-1614.46
## + V12_1_2_J1_3	1	8.76	3540.3	-1614.29
## + V13_3_J2_5	1	8.62	3540.4	-1614.08
## + V2_J2_1	1	8.55	3540.5	-1613.98
## + V17_J2_3	1	8.49	3540.6	-1613.88
## + V20_J2_1	1	8.44	3540.6	-1613.81
## + V13_3_J1_6	1	8.42	3540.6	-1613.79
## + V26_J2_7	1	8.34	3540.7	-1613.67
## + V20_J2_3	1	8.28	3540.8	-1613.57
## + V29_J2_1	1	8.28	3540.8	-1613.57
## + V13_2_J1_5	1	8.25	3540.8	-1613.54
## + V1_J2_4	1	7.91	3541.2	-1613.03
## + V26_J1_6	1	7.63	3541.4	-1612.63
## + V29_J1_4	1	7.44	3541.6	-1612.35
## + V1_J2_1	1	7.28	3541.8	-1612.11
## + V17_J1_4	1	6.97	3542.1	-1611.66
## + V29_J1_3	1	6.85	3542.2	-1611.47
## + V20_J1_6	1	6.81	3542.3	-1611.42
## + V15_J2_4	1	6.70	3542.4	-1611.27
## + V1_J2_3	1	6.60	3542.5	-1611.12
## + V29_J1_2	1	6.57	3542.5	-1611.07
## + V2_J1_4	1	6.50	3542.6	-1610.96
## + V19_J1_6	1	6.35	3542.7	-1610.75
## + V13_1_J1_5	1	6.33	3542.7	-1610.72
## + V1_J1_7	1	6.21	3542.9	-1610.54
## + V13_2_J2_7	1	6.19	3542.9	-1610.52
## + V14_J1_7	1	6.10	3543.0	-1610.38
## + V2_J2_5	1	6.03	3543.0	-1610.27
## + V30_J2_4	1	6.02	3543.1	-1610.26
## + V13_1_J2_4	1	5.85	3543.2	-1610.02
## + V3_J2_7	1	5.78	3543.3	-1609.91
## + V19_J1_2	1	5.69	3543.4	-1609.77
## + V23_J2_5	1	5.47	3543.6	-1609.46
## + V14_J1_1	1	5.40	3543.7	-1609.34
## + V5_J1_7	1	5.26	3543.8	-1609.15
## + V13_2_J1_1	1	5.07	3544.0	-1608.87
## + V30_J1_7	1	5.05	3544.0	-1608.83
## + V19_J1_7	1	4.83	3544.2	-1608.51
## + V12_1_2_J2_1	1	4.69	3544.4	-1608.30
## + V24_J1_2	1	4.57	3544.5	-1608.13
## <none>			3549.1	-1608.07
## + V23_J2_4	1	4.30	3544.8	-1607.73
## + V2_J2_3	1	4.24	3544.8	-1607.65
## + V30_J2_3	1	4.15	3544.9	-1607.51
## + V13_1_J2_3	1	4.15	3544.9	-1607.51
## + V16_J2_5	1	4.00	3545.1	-1607.30
## + V12_1_2_J2_4	1	3.96	3545.1	-1607.24
## + V13_1_J2_1	1	3.95	3545.1	-1607.23
## + V24_J1_6	1	3.88	3545.2	-1607.13
## + V13_3_J2_7	1	3.88	3545.2	-1607.12
## + V26_J1_1	1	3.84	3545.2	-1607.07
## + V24_J1_5	1	3.75	3545.3	-1606.93

## + V5_J2_2	1	3.40	3545.7	-1606.42
## + V13_2_J2_5	1	3.38	3545.7	-1606.39
## + V13_1_J2_5	1	3.19	3545.9	-1606.11
## + V16_J1_4	1	3.19	3545.9	-1606.10
## + V24_J2_7	1	3.15	3545.9	-1606.05
## + V4_J1_4	1	3.12	3546.0	-1606.01
## + V26_J1_3	1	3.07	3546.0	-1605.93
## + V13_1_J2_2	1	3.00	3546.1	-1605.83
## + V20_J1_5	1	2.92	3546.2	-1605.72
## + V30_J1_4	1	2.85	3546.2	-1605.61
## + V24_J1_7	1	2.84	3546.2	-1605.59
## + V14_J1_6	1	2.77	3546.3	-1605.50
## + V15_J1_2	1	2.77	3546.3	-1605.49
## + V20_J1_7	1	2.73	3546.3	-1605.44
## + V29_J2_2	1	2.69	3546.4	-1605.37
## + V16_J1_5	1	2.66	3546.4	-1605.34
## + V2_J1_6	1	2.62	3546.4	-1605.28
## + V13_1_J1_4	1	2.53	3546.5	-1605.14
## + V30_J2_7	1	2.35	3546.7	-1604.88
## + V23_J1_7	1	2.30	3546.8	-1604.81
## + V29_J2_7	1	2.13	3546.9	-1604.55
## + V13_1_J1_1	1	2.07	3547.0	-1604.46
## + V16_J1_2	1	1.92	3547.2	-1604.24
## + V13_3_J2_3	1	1.91	3547.2	-1604.23
## + V13_3_J1_7	1	1.89	3547.2	-1604.21
## + V16_J2_3	1	1.83	3547.2	-1604.11
## + V14_J2_1	1	1.77	3547.3	-1604.03
## + V5_J1_1	1	1.76	3547.3	-1604.02
## + V15_J2_1	1	1.72	3547.3	-1603.96
## + V2_J2_4	1	1.66	3547.4	-1603.86
## + V15_J1_1	1	1.60	3547.5	-1603.78
## + V13_3_J1_4	1	1.55	3547.5	-1603.70
## + V13_3_J2_4	1	1.52	3547.5	-1603.67
## + V1_J1_2	1	1.50	3547.6	-1603.63
## + V14_J2_5	1	1.43	3547.6	-1603.52
## + V1_J1_1	1	1.42	3547.6	-1603.52
## + V13_3_J2_2	1	1.41	3547.7	-1603.51
## + V17_J2_5	1	1.31	3547.8	-1603.35
## + V4_J1_5	1	1.30	3547.8	-1603.35
## + V12_1_2_J1_1	1	1.23	3547.8	-1603.23
## + V17_J1_7	1	1.21	3547.9	-1603.20
## + V26_J1_7	1	1.17	3547.9	-1603.15
## + V24_J1_3	1	1.16	3547.9	-1603.13
## + V3_J1_7	1	1.11	3548.0	-1603.06
## + V20_J2_5	1	1.07	3548.0	-1603.00
## + V16_J1_6	1	1.00	3548.1	-1602.90
## + V16_J1_7	1	0.93	3548.1	-1602.79
## + V2_J1_7	1	0.93	3548.1	-1602.79
## + V3_J1_2	1	0.86	3548.2	-1602.69
## + V2_J1_1	1	0.83	3548.2	-1602.65
## + V1_J1_6	1	0.72	3548.4	-1602.49
## + V23_J1_1	1	0.71	3548.4	-1602.47
## + V23_J1_5	1	0.70	3548.4	-1602.46
## + V15_J2_3	1	0.66	3548.4	-1602.40

## + V13_2_J1_6	1	0.64	3548.4	-1602.38
## + V13_3_J2_1	1	0.63	3548.4	-1602.36
## + V16_J2_1	1	0.61	3548.5	-1602.33
## + V23_J1_4	1	0.54	3548.5	-1602.23
## + V5_J1_6	1	0.53	3548.5	-1602.20
## + V13_1_J1_6	1	0.52	3548.6	-1602.19
## + V17_J2_1	1	0.51	3548.6	-1602.18
## + V13_1_J2_7	1	0.51	3548.6	-1602.18
## + V13_3_J1_1	1	0.50	3548.6	-1602.17
## + V16_J1_1	1	0.49	3548.6	-1602.15
## + V1_J2_5	1	0.49	3548.6	-1602.15
## + V30_J2_1	1	0.46	3548.6	-1602.11
## + V23_J1_6	1	0.46	3548.6	-1602.11
## + V24_J1_4	1	0.42	3548.7	-1602.05
## + V13_2_J2_2	1	0.41	3548.7	-1602.04
## + V23_J2_2	1	0.40	3548.7	-1602.02
## + V17_J2_4	1	0.39	3548.7	-1602.01
## + V29_J2_4	1	0.35	3548.7	-1601.94
## + V3_J1_6	1	0.26	3548.8	-1601.81
## + V17_J1_6	1	0.25	3548.8	-1601.80
## + V3_J2_2	1	0.23	3548.8	-1601.77
## + V3_J1_1	1	0.23	3548.8	-1601.77
## + V24_J2_4	1	0.22	3548.9	-1601.75
## + V29_J2_5	1	0.21	3548.9	-1601.75
## + V13_2_J2_4	1	0.21	3548.9	-1601.74
## + V4_J2_7	1	0.20	3548.9	-1601.73
## + V24_J2_1	1	0.18	3548.9	-1601.69
## + V24_J2_2	1	0.14	3548.9	-1601.64
## + V26_J1_2	1	0.14	3548.9	-1601.64
## + V5_J1_2	1	0.13	3548.9	-1601.62
## + V17_J1_1	1	0.11	3549.0	-1601.59
## + V13_2_J2_1	1	0.09	3549.0	-1601.57
## + V2_J1_2	1	0.08	3549.0	-1601.55
## + V19_J1_1	1	0.07	3549.0	-1601.53
## + V17_J1_2	1	0.05	3549.0	-1601.50
## + V26_J2_2	1	0.03	3549.0	-1601.47
## + V20_J2_4	1	0.03	3549.0	-1601.47
## + V20_J1_1	1	0.01	3549.1	-1601.45
## + V13_2_J2_3	1	0.01	3549.1	-1601.45
## + V23_J1_2	1	0.01	3549.1	-1601.45
## + V13_3_J1_5	1	0.00	3549.1	-1601.44
## - V17_J2_2	1	57.51	3606.6	-1531.12
## - V3_J1_4	1	60.72	3609.8	-1526.49
## - V12_1_2_J1_4	1	65.51	3614.6	-1519.59
## - V13_2_J1_7	1	67.32	3616.4	-1517.00
## - V4_J2_4	1	69.37	3618.4	-1514.04
## - V15_J1_3	1	71.11	3620.2	-1511.54
## - V5_J1_5	1	76.39	3625.5	-1503.97
## - V15_J2_2	1	80.16	3629.2	-1498.56
## - V19_J1_5	1	88.83	3637.9	-1486.16
## - V3_J2_1	1	89.66	3638.7	-1484.97
## - V26_J2_1	1	100.61	3649.7	-1469.34
## - V15_J2_7	1	101.37	3650.4	-1468.26
## - V19_J1_4	1	108.88	3658.0	-1457.57

```

## - V3_J2_5      1      113.84 3662.9 -1450.52
## - V30_J2_2     1      128.04 3677.1 -1430.41
## - V26_J2_5     1      145.57 3694.6 -1405.68
## - V26_J2_4     1      148.34 3697.4 -1401.78
## - V3_J2_3      1      156.16 3705.2 -1390.79
## - V12_1_2_J2_2 1      159.61 3708.7 -1385.96
## - V3_J2_4      1      173.53 3722.6 -1366.47
## - V5_J2_5      1      211.02 3760.1 -1314.37
## - V5_J2_4      1      243.99 3793.1 -1268.97
## - V20_J2_2     1      261.91 3811.0 -1244.46
## - V26_J2_3     1      285.86 3834.9 -1211.89
## - V16_J2_2     1      412.92 3962.0 -1042.39
## - V            19     1379.72 4928.8  -26.41
## - J            12     1540.96 5090.0   187.43
##
## Step:  AIC=-1690.95
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##      V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##      V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##      V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
##      V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2
##
##
##      Df Sum of Sq  RSS      AIC
## + V1_J2_7      1      65.58 3422.9 -1782.99
## + V4_J2_1      1      54.44 3434.1 -1766.11
## + V4_J2_5      1      49.42 3439.1 -1758.50
## + V30_J1_3     1      49.11 3439.4 -1758.04
## + V19_J2_3     1      49.06 3439.4 -1757.97
## + V17_J1_3     1      47.68 3440.8 -1755.87
## + V4_J2_3      1      47.39 3441.1 -1755.44
## + V2_J1_3      1      45.54 3443.0 -1752.64
## + V23_J1_3     1      45.12 3443.4 -1752.01
## + V17_J2_7     1      44.31 3444.2 -1750.79
## + V14_J1_5     1      43.74 3444.8 -1749.93
## + V5_J2_3      1      39.99 3448.5 -1744.27
## + V14_J1_4     1      39.09 3449.4 -1742.91
## + V13_1_J1_3   1      38.63 3449.9 -1742.22
## + V5_J1_3      1      38.56 3449.9 -1742.11
## + V2_J2_2      1      37.37 3451.1 -1740.32
## + V30_J1_1     1      35.01 3453.5 -1736.76
## + V3_J1_5      1      32.22 3456.3 -1732.57
## + V26_J1_4     1      30.94 3457.6 -1730.64
## + V1_J1_3      1      28.32 3460.2 -1726.70
## + V5_J2_1      1      27.76 3460.7 -1725.85
## + V5_J2_7      1      27.07 3461.4 -1724.82
## + V12_1_2_J1_7 1      27.02 3461.5 -1724.75
## + V30_J1_6     1      26.96 3461.5 -1724.66
## + V13_1_J1_2   1      26.88 3461.6 -1724.53
## + V16_J1_3     1      26.37 3462.1 -1723.77
## + V23_J2_1     1      26.09 3462.4 -1723.35
## + V17_J1_5     1      25.59 3462.9 -1722.59
## + V15_J1_7     1      25.41 3463.1 -1722.33
## + V13_1_J1_7   1      25.03 3463.5 -1721.75
## + V20_J1_3     1      24.41 3464.1 -1720.83

```

## + V12_1_2_J1_6	1	22.69	3465.8	-1718.24
## + V19_J2_7	1	22.52	3466.0	-1717.99
## + V1_J1_5	1	22.02	3466.5	-1717.23
## + V4_J1_6	1	22.00	3466.5	-1717.21
## + V14_J1_3	1	21.82	3466.7	-1716.94
## + V30_J1_2	1	21.12	3467.4	-1715.90
## + V15_J1_5	1	20.59	3467.9	-1715.09
## + V30_J2_5	1	20.19	3468.3	-1714.49
## + V4_J2_2	1	19.57	3468.9	-1713.57
## + V14_J2_3	1	19.35	3469.1	-1713.24
## + V19_J2_1	1	19.17	3469.3	-1712.97
## + V29_J1_7	1	18.54	3470.0	-1712.02
## + V2_J1_5	1	18.46	3470.0	-1711.90
## + V14_J1_2	1	18.23	3470.3	-1711.56
## + V4_J1_2	1	18.19	3470.3	-1711.50
## + V26_J1_5	1	17.80	3470.7	-1710.91
## + V4_J1_7	1	17.67	3470.8	-1710.72
## + V19_J1_3	1	17.47	3471.0	-1710.43
## + V23_J2_3	1	17.37	3471.1	-1710.27
## + V16_J2_7	1	17.29	3471.2	-1710.14
## + V29_J1_5	1	16.73	3471.8	-1709.31
## + V3_J1_3	1	16.53	3472.0	-1709.01
## + V14_J2_2	1	15.14	3473.4	-1706.92
## + V5_J1_4	1	15.04	3473.5	-1706.78
## + V13_3_J1_2	1	14.94	3473.6	-1706.64
## + V13_2_J1_2	1	14.44	3474.1	-1705.88
## + V15_J1_6	1	14.34	3474.2	-1705.74
## + V29_J2_3	1	14.33	3474.2	-1705.72
## + V19_J2_4	1	14.24	3474.3	-1705.59
## + V24_J2_3	1	14.14	3474.4	-1705.43
## + V14_J2_7	1	14.03	3474.5	-1705.27
## + V30_J1_5	1	14.01	3474.5	-1705.24
## + V29_J1_1	1	13.94	3474.6	-1705.13
## + V13_2_J1_3	1	13.90	3474.6	-1705.07
## + V12_1_2_J1_2	1	13.85	3474.7	-1704.99
## + V20_J1_2	1	13.50	3475.0	-1704.47
## + V24_J2_5	1	13.34	3475.2	-1704.24
## + V19_J2_5	1	12.89	3475.6	-1703.55
## + V24_J1_1	1	12.57	3475.9	-1703.08
## + V14_J2_4	1	12.36	3476.1	-1702.76
## + V4_J1_3	1	12.23	3476.3	-1702.57
## + V12_1_2_J2_3	1	12.21	3476.3	-1702.54
## + V15_J2_5	1	12.13	3476.4	-1702.42
## + V4_J1_1	1	11.52	3477.0	-1701.51
## + V15_J1_4	1	11.04	3477.5	-1700.79
## + V13_2_J1_4	1	10.93	3477.6	-1700.63
## + V12_1_2_J2_7	1	10.81	3477.7	-1700.44
## + V23_J2_7	1	10.76	3477.7	-1700.38
## + V2_J2_7	1	10.47	3478.0	-1699.95
## + V16_J2_4	1	10.23	3478.3	-1699.58
## + V1_J1_4	1	9.73	3478.8	-1698.84
## + V13_3_J1_3	1	9.67	3478.8	-1698.75
## + V20_J1_4	1	9.35	3479.1	-1698.27
## + V20_J2_7	1	9.16	3479.3	-1697.98

## + V12_1_2_J2_5	1	8.97	3479.5	-1697.71
## + V13_3_J2_5	1	8.96	3479.5	-1697.69
## + V12_1_2_J1_5	1	8.89	3479.6	-1697.57
## + V2_J2_1	1	8.87	3479.6	-1697.54
## + V12_1_2_J1_3	1	8.79	3479.7	-1697.44
## + V26_J2_7	1	8.76	3479.7	-1697.38
## + V29_J1_6	1	8.62	3479.9	-1697.18
## + V29_J2_1	1	8.58	3479.9	-1697.12
## + V17_J2_3	1	8.51	3480.0	-1697.01
## + V20_J2_1	1	8.42	3480.1	-1696.87
## + V20_J2_3	1	8.26	3480.2	-1696.64
## + V13_3_J1_6	1	8.16	3480.3	-1696.50
## + V26_J1_6	1	8.03	3480.5	-1696.29
## + V13_2_J1_5	1	7.94	3480.6	-1696.16
## + V29_J1_4	1	7.73	3480.8	-1695.85
## + V19_J2_2	1	7.50	3481.0	-1695.51
## + V17_J1_4	1	6.99	3481.5	-1694.74
## + V20_J1_6	1	6.84	3481.7	-1694.51
## + V2_J1_4	1	6.77	3481.7	-1694.41
## + V15_J2_4	1	6.65	3481.8	-1694.23
## + V19_J1_6	1	6.63	3481.9	-1694.21
## + V29_J1_3	1	6.62	3481.9	-1694.18
## + V13_2_J2_7	1	6.44	3482.1	-1693.92
## + V29_J1_2	1	6.34	3482.2	-1693.78
## + V14_J1_7	1	6.34	3482.2	-1693.77
## + V2_J2_5	1	6.31	3482.2	-1693.73
## + V3_J2_7	1	6.18	3482.3	-1693.53
## + V13_1_J2_4	1	6.16	3482.3	-1693.50
## + V13_1_J1_5	1	6.08	3482.4	-1693.38
## + V30_J2_4	1	5.96	3482.5	-1693.21
## + V19_J1_2	1	5.95	3482.6	-1693.19
## + V23_J2_5	1	5.75	3482.8	-1692.88
## + V14_J1_1	1	5.61	3482.9	-1692.67
## + V5_J1_7	1	5.56	3482.9	-1692.61
## + V13_1_J2_2	1	5.50	3483.0	-1692.51
## + V19_J1_7	1	5.08	3483.4	-1691.90
## + V30_J1_7	1	5.06	3483.4	-1691.86
## + V13_2_J1_1	1	4.86	3483.6	-1691.56
## + V1_J2_4	1	4.78	3483.7	-1691.43
## + V12_1_2_J2_1	1	4.70	3483.8	-1691.32
## + V23_J2_4	1	4.55	3483.9	-1691.11
## + V2_J2_3	1	4.46	3484.0	-1690.97
## <none>			3488.5	-1690.95
## + V24_J1_2	1	4.38	3484.1	-1690.84
## + V13_1_J2_3	1	4.37	3484.1	-1690.82
## + V1_J2_1	1	4.27	3484.2	-1690.67
## + V13_1_J2_1	1	4.17	3484.3	-1690.53
## + V30_J2_3	1	4.16	3484.3	-1690.52
## + V26_J1_1	1	4.13	3484.4	-1690.47
## + V24_J1_6	1	4.06	3484.4	-1690.37
## + V13_3_J2_7	1	4.06	3484.4	-1690.36
## + V16_J2_5	1	4.03	3484.5	-1690.32
## + V12_1_2_J2_4	1	4.01	3484.5	-1690.29
## + V1_J2_3	1	3.75	3484.7	-1689.91

## + V24_J1_5	1	3.55	3484.9	-1689.61
## + V1_J1_7	1	3.43	3485.1	-1689.43
## + V1_J1_1	1	3.41	3485.1	-1689.39
## + V13_1_J2_5	1	3.40	3485.1	-1689.38
## + V26_J1_3	1	3.32	3485.2	-1689.26
## + V24_J2_7	1	3.31	3485.2	-1689.25
## + V13_3_J2_2	1	3.24	3485.3	-1689.15
## + V16_J1_4	1	3.20	3485.3	-1689.08
## + V13_2_J2_5	1	3.16	3485.3	-1689.03
## + V24_J1_7	1	3.00	3485.5	-1688.79
## + V14_J1_6	1	2.93	3485.6	-1688.68
## + V20_J1_5	1	2.93	3485.6	-1688.67
## + V4_J1_4	1	2.92	3485.6	-1688.66
## + V30_J1_4	1	2.84	3485.7	-1688.54
## + V2_J1_6	1	2.77	3485.7	-1688.44
## + V15_J1_2	1	2.75	3485.8	-1688.41
## + V20_J1_7	1	2.74	3485.8	-1688.40
## + V13_1_J1_4	1	2.70	3485.8	-1688.33
## + V16_J1_5	1	2.67	3485.8	-1688.29
## + V30_J2_7	1	2.37	3486.1	-1687.84
## + V29_J2_7	1	2.26	3486.2	-1687.68
## + V23_J1_7	1	2.16	3486.3	-1687.53
## + V13_3_J2_3	1	2.06	3486.4	-1687.38
## + V13_1_J1_1	1	1.94	3486.6	-1687.21
## + V5_J1_1	1	1.94	3486.6	-1687.20
## + V16_J1_2	1	1.93	3486.6	-1687.19
## + V16_J2_3	1	1.82	3486.7	-1687.03
## + V2_J2_4	1	1.82	3486.7	-1687.02
## + V1_J2_5	1	1.79	3486.7	-1686.98
## + V13_3_J1_7	1	1.76	3486.7	-1686.94
## + V15_J2_1	1	1.73	3486.8	-1686.89
## + V13_3_J1_4	1	1.68	3486.8	-1686.82
## + V14_J2_1	1	1.63	3486.9	-1686.75
## + V15_J1_1	1	1.58	3486.9	-1686.67
## + V5_J2_2	1	1.57	3486.9	-1686.65
## + V23_J2_2	1	1.54	3487.0	-1686.61
## + V13_3_J2_4	1	1.38	3487.1	-1686.36
## + V26_J1_7	1	1.33	3487.2	-1686.30
## + V17_J2_5	1	1.32	3487.2	-1686.28
## + V14_J2_5	1	1.29	3487.2	-1686.24
## + V24_J1_3	1	1.25	3487.2	-1686.18
## + V12_1_2_J1_1	1	1.24	3487.3	-1686.16
## + V17_J1_7	1	1.20	3487.3	-1686.10
## + V4_J1_5	1	1.18	3487.3	-1686.07
## + V20_J2_5	1	1.08	3487.4	-1685.93
## + V29_J2_2	1	1.07	3487.4	-1685.91
## + V3_J1_2	1	1.02	3487.5	-1685.83
## + V16_J1_6	1	0.99	3487.5	-1685.78
## + V24_J2_2	1	0.97	3487.5	-1685.76
## + V3_J1_7	1	0.94	3487.6	-1685.71
## + V16_J1_7	1	0.92	3487.6	-1685.69
## + V2_J1_7	1	0.84	3487.7	-1685.56
## + V23_J1_5	1	0.79	3487.7	-1685.49
## + V2_J1_1	1	0.75	3487.7	-1685.43

## + V13_2_J1_6	1	0.72	3487.8	-1685.39
## + V13_3_J2_1	1	0.72	3487.8	-1685.38
## + V15_J2_3	1	0.67	3487.8	-1685.30
## + V23_J1_1	1	0.64	3487.9	-1685.26
## + V16_J2_1	1	0.62	3487.9	-1685.23
## + V26_J2_2	1	0.57	3487.9	-1685.17
## + V13_1_J2_7	1	0.57	3487.9	-1685.17
## + V17_J2_1	1	0.51	3488.0	-1685.08
## + V24_J1_4	1	0.49	3488.0	-1685.04
## + V16_J1_1	1	0.48	3488.0	-1685.03
## + V23_J1_4	1	0.47	3488.0	-1685.01
## + V30_J2_1	1	0.46	3488.0	-1685.00
## + V13_1_J1_6	1	0.45	3488.0	-1684.99
## + V5_J1_6	1	0.44	3488.1	-1684.97
## + V13_3_J1_1	1	0.44	3488.1	-1684.96
## + V17_J2_4	1	0.41	3488.1	-1684.92
## + V23_J1_6	1	0.40	3488.1	-1684.91
## + V1_J1_2	1	0.34	3488.2	-1684.81
## + V24_J2_4	1	0.28	3488.2	-1684.73
## + V29_J2_4	1	0.28	3488.2	-1684.73
## + V29_J2_5	1	0.27	3488.2	-1684.71
## + V17_J1_6	1	0.25	3488.2	-1684.69
## + V24_J2_1	1	0.23	3488.3	-1684.65
## + V3_J1_6	1	0.18	3488.3	-1684.58
## + V4_J2_7	1	0.16	3488.3	-1684.55
## + V3_J1_1	1	0.16	3488.3	-1684.55
## + V13_2_J2_4	1	0.15	3488.3	-1684.54
## + V13_2_J2_1	1	0.13	3488.4	-1684.51
## + V17_J1_1	1	0.11	3488.4	-1684.48
## + V2_J1_2	1	0.10	3488.4	-1684.47
## + V26_J1_2	1	0.09	3488.4	-1684.45
## + V5_J1_2	1	0.09	3488.4	-1684.44
## + V17_J1_2	1	0.04	3488.5	-1684.38
## + V19_J1_1	1	0.04	3488.5	-1684.38
## + V1_J1_6	1	0.04	3488.5	-1684.37
## + V13_2_J2_3	1	0.03	3488.5	-1684.36
## + V20_J2_4	1	0.02	3488.5	-1684.35
## + V23_J1_2	1	0.02	3488.5	-1684.34
## + V20_J1_1	1	0.01	3488.5	-1684.33
## + V3_J2_2	1	0.01	3488.5	-1684.33
## + V13_2_J2_2	1	0.00	3488.5	-1684.31
## + V13_3_J1_5	1	0.00	3488.5	-1684.31
## - V3_J1_4	1	59.56	3548.1	-1609.55
## - V1_J2_2	1	60.57	3549.1	-1608.07
## - V12_1_2_J1_4	1	65.48	3554.0	-1600.89
## - V17_J2_2	1	66.03	3554.5	-1600.08
## - V13_2_J1_7	1	66.58	3555.1	-1599.27
## - V4_J2_4	1	68.41	3556.9	-1596.59
## - V15_J2_2	1	70.07	3558.6	-1594.16
## - V15_J1_3	1	71.02	3559.5	-1592.78
## - V5_J1_5	1	75.35	3563.9	-1586.46
## - V19_J1_5	1	87.83	3576.3	-1568.28
## - V3_J2_1	1	88.23	3576.7	-1567.70
## - V26_J2_1	1	99.26	3587.8	-1551.69

```

## - V15_J2_7      1      101.26 3589.8 -1548.80
## - V19_J1_4      1      107.75 3596.3 -1539.39
## - V3_J2_5       1      112.16 3600.7 -1533.03
## - V30_J2_2      1      140.38 3628.9 -1492.44
## - V26_J2_5      1      143.85 3632.3 -1487.46
## - V26_J2_4      1      146.52 3635.0 -1483.63
## - V3_J2_3       1      154.27 3642.8 -1472.56
## - V3_J2_4       1      171.36 3659.9 -1448.23
## - V12_1_2_J2_2  1      173.21 3661.7 -1445.60
## - V5_J2_5       1      209.14 3697.6 -1394.82
## - V5_J2_4       1      241.87 3730.4 -1349.00
## - V20_J2_2      1      279.01 3767.5 -1297.48
## - V26_J2_3      1      283.56 3772.1 -1291.21
## - V16_J2_2      1      433.87 3922.4 -1088.01
## - V              19     1414.73 4903.2  -46.82
## - J              12     1567.33 5055.8   158.99
##
## Step:  AIC=-1782.99
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##      V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##      V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##      V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
##      V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7
##
##
##      Df Sum of Sq    RSS      AIC
## + V4_J2_1      1      53.74 3369.2 -1858.64
## + V17_J2_7     1      50.74 3372.2 -1854.01
## + V4_J2_5      1      48.70 3374.2 -1850.87
## + V30_J1_3     1      48.61 3374.3 -1850.73
## + V19_J2_3     1      48.34 3374.6 -1850.31
## + V17_J1_3     1      47.18 3375.7 -1848.53
## + V4_J2_3      1      46.73 3376.2 -1847.84
## + V2_J1_3      1      45.05 3377.9 -1845.24
## + V23_J1_3     1      44.63 3378.3 -1844.60
## + V14_J1_5     1      43.19 3379.7 -1842.38
## + V5_J2_3      1      39.26 3383.7 -1836.34
## + V5_J1_3      1      39.20 3383.7 -1836.26
## + V13_1_J1_3   1      39.09 3383.8 -1836.08
## + V14_J1_4     1      38.52 3384.4 -1835.21
## + V2_J2_2      1      37.44 3385.5 -1833.55
## + V1_J1_3      1      37.08 3385.8 -1832.99
## + V30_J1_1     1      35.44 3387.5 -1830.48
## + V3_J1_5      1      31.40 3391.5 -1824.28
## + V26_J1_4     1      30.20 3392.7 -1822.43
## + V5_J2_1      1      27.14 3395.8 -1817.76
## + V30_J1_6     1      26.59 3396.3 -1816.90
## + V12_1_2_J1_7 1      26.58 3396.3 -1816.89
## + V23_J2_1     1      26.54 3396.4 -1816.83
## + V13_1_J1_2   1      26.50 3396.4 -1816.77
## + V17_J1_5     1      26.01 3396.9 -1816.02
## + V16_J1_3     1      26.00 3396.9 -1816.01
## + V15_J1_7     1      25.38 3397.5 -1815.06
## + V20_J1_3     1      24.77 3398.2 -1814.12
## + V13_1_J1_7   1      24.64 3398.3 -1813.92

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## + V5_J2_7	1	22.71	3400.2	-1810.98
## + V4_J1_6	1	22.39	3400.5	-1810.48
## + V12_1_2_J1_6	1	22.30	3400.6	-1810.35
## + V14_J1_3	1	22.16	3400.8	-1810.14
## + V30_J1_2	1	21.46	3401.5	-1809.06
## + V16_J2_7	1	21.34	3401.6	-1808.88
## + V30_J2_5	1	20.61	3402.3	-1807.76
## + V15_J1_5	1	20.59	3402.3	-1807.73
## + V4_J2_2	1	19.56	3403.4	-1806.15
## + V14_J2_3	1	18.97	3404.0	-1805.26
## + V2_J1_5	1	18.82	3404.1	-1805.03
## + V19_J2_1	1	18.72	3404.2	-1804.87
## + V14_J1_2	1	18.55	3404.4	-1804.61
## + V4_J1_2	1	18.55	3404.4	-1804.61
## + V19_J2_7	1	18.52	3404.4	-1804.57
## + V29_J1_7	1	18.20	3404.7	-1804.09
## + V4_J1_7	1	18.03	3404.9	-1803.83
## + V19_J1_3	1	17.85	3405.1	-1803.55
## + V23_J2_3	1	17.74	3405.2	-1803.38
## + V26_J1_5	1	17.26	3405.7	-1802.65
## + V3_J1_3	1	17.08	3405.8	-1802.37
## + V29_J1_5	1	17.08	3405.8	-1802.36
## + V1_J1_5	1	15.77	3407.1	-1800.38
## + V14_J2_2	1	15.09	3407.8	-1799.33
## + V29_J2_3	1	14.67	3408.3	-1798.69
## + V13_3_J1_2	1	14.66	3408.3	-1798.68
## + V5_J1_4	1	14.58	3408.3	-1798.55
## + V24_J2_3	1	14.47	3408.5	-1798.38
## + V30_J1_5	1	14.33	3408.6	-1798.17
## + V15_J1_6	1	14.30	3408.6	-1798.13
## + V13_2_J1_3	1	14.20	3408.7	-1797.97
## + V12_1_2_J1_2	1	14.15	3408.8	-1797.90
## + V13_2_J1_2	1	14.13	3408.8	-1797.87
## + V12_1_2_J2_7	1	14.03	3408.9	-1797.71
## + V23_J2_7	1	13.98	3408.9	-1797.64
## + V19_J2_4	1	13.80	3409.1	-1797.37
## + V29_J1_1	1	13.66	3409.3	-1797.15
## + V2_J2_7	1	13.65	3409.3	-1797.14
## + V20_J1_2	1	13.23	3409.7	-1796.49
## + V24_J2_5	1	13.00	3409.9	-1796.14
## + V12_1_2_J2_3	1	12.54	3410.4	-1795.44
## + V4_J1_3	1	12.52	3410.4	-1795.41
## + V19_J2_5	1	12.49	3410.4	-1795.36
## + V24_J1_1	1	12.31	3410.6	-1795.09
## + V15_J2_5	1	12.10	3410.8	-1794.76
## + V14_J2_4	1	12.00	3410.9	-1794.63
## + V4_J1_1	1	11.80	3411.1	-1794.31
## + V13_2_J1_4	1	11.26	3411.7	-1793.48
## + V15_J1_4	1	11.01	3411.9	-1793.11
## + V14_J2_7	1	10.88	3412.0	-1792.91
## + V16_J2_4	1	10.55	3412.4	-1792.41
## + V13_3_J1_3	1	9.90	3413.0	-1791.42
## + V20_J1_4	1	9.64	3413.3	-1791.01
## + V12_1_2_J2_5	1	9.28	3413.6	-1790.48

## + V13_3_J2_5	1	9.25	3413.7	-1790.43
## + V12_1_2_J1_5	1	9.16	3413.8	-1790.30
## + V2_J2_1	1	9.13	3413.8	-1790.24
## + V29_J2_1	1	8.84	3414.1	-1789.81
## + V17_J2_3	1	8.76	3414.2	-1789.68
## + V12_1_2_J1_3	1	8.56	3414.4	-1789.37
## + V29_J1_6	1	8.41	3414.5	-1789.15
## + V26_J1_6	1	8.36	3414.6	-1789.08
## + V20_J2_1	1	8.17	3414.8	-1788.78
## + V20_J2_3	1	8.01	3414.9	-1788.54
## + V29_J1_4	1	7.99	3414.9	-1788.51
## + V13_3_J1_6	1	7.96	3415.0	-1788.46
## + V13_2_J1_5	1	7.68	3415.2	-1788.04
## + V19_J2_2	1	7.51	3415.4	-1787.78
## + V17_J1_4	1	7.23	3415.7	-1787.35
## + V2_J1_4	1	7.01	3415.9	-1787.01
## + V19_J1_6	1	6.87	3416.1	-1786.80
## + V1_J1_1	1	6.74	3416.2	-1786.61
## + V20_J1_6	1	6.65	3416.3	-1786.46
## + V20_J2_7	1	6.63	3416.3	-1786.45
## + V15_J2_4	1	6.61	3416.3	-1786.40
## + V2_J2_5	1	6.55	3416.4	-1786.32
## + V14_J1_7	1	6.54	3416.4	-1786.30
## + V29_J1_3	1	6.43	3416.5	-1786.13
## + V13_1_J2_4	1	6.41	3416.5	-1786.10
## + V26_J2_7	1	6.36	3416.6	-1786.03
## + V19_J1_2	1	6.17	3416.8	-1785.74
## + V29_J1_2	1	6.16	3416.8	-1785.72
## + V23_J2_5	1	5.97	3416.9	-1785.44
## + V13_1_J1_5	1	5.87	3417.1	-1785.28
## + V5_J1_7	1	5.82	3417.1	-1785.21
## + V14_J1_1	1	5.78	3417.1	-1785.15
## + V1_J1_4	1	5.74	3417.2	-1785.08
## + V30_J2_4	1	5.72	3417.2	-1785.05
## + V13_1_J2_2	1	5.53	3417.4	-1784.76
## + V19_J1_7	1	5.30	3417.6	-1784.41
## + V12_1_2_J2_1	1	4.91	3418.0	-1783.82
## + V30_J1_7	1	4.89	3418.0	-1783.79
## + V23_J2_4	1	4.77	3418.2	-1783.61
## + V13_2_J1_1	1	4.68	3418.2	-1783.47
## + V2_J2_3	1	4.65	3418.3	-1783.43
## + V13_1_J2_3	1	4.55	3418.4	-1783.27
## + V26_J1_1	1	4.37	3418.6	-1783.00
## + V13_2_J2_7	1	4.37	3418.6	-1782.99
## <none>		3422.9	-1782.99	
## + V13_1_J2_1	1	4.35	3418.6	-1782.96
## + V30_J2_3	1	4.34	3418.6	-1782.95
## + V1_J2_5	1	4.32	3418.6	-1782.93
## + V12_1_2_J2_4	1	4.23	3418.7	-1782.79
## + V24_J1_2	1	4.23	3418.7	-1782.78
## + V16_J2_5	1	4.22	3418.7	-1782.77
## + V3_J2_7	1	4.22	3418.7	-1782.77
## + V24_J1_6	1	4.21	3418.7	-1782.76
## + V30_J2_7	1	3.98	3418.9	-1782.41

## + V13_1_J2_5	1	3.58	3419.3	-1781.79
## + V26_J1_3	1	3.53	3419.4	-1781.73
## + V24_J1_5	1	3.40	3419.5	-1781.52
## + V16_J1_4	1	3.36	3419.6	-1781.46
## + V13_3_J2_2	1	3.26	3419.7	-1781.32
## + V24_J1_7	1	3.14	3419.8	-1781.12
## + V20_J1_5	1	3.07	3419.9	-1781.02
## + V14_J1_6	1	3.05	3419.9	-1781.00
## + V13_2_J2_5	1	2.98	3419.9	-1780.89
## + V2_J1_6	1	2.90	3420.0	-1780.76
## + V13_1_J1_4	1	2.85	3420.1	-1780.69
## + V16_J1_5	1	2.81	3420.1	-1780.62
## + V4_J1_4	1	2.75	3420.2	-1780.53
## + V15_J1_2	1	2.73	3420.2	-1780.51
## + V30_J1_4	1	2.69	3420.2	-1780.44
## + V20_J1_7	1	2.61	3420.3	-1780.33
## + V13_3_J2_7	1	2.45	3420.5	-1780.07
## + V13_3_J2_3	1	2.19	3420.7	-1779.68
## + V1_J2_4	1	2.13	3420.8	-1779.60
## + V5_J1_1	1	2.08	3420.8	-1779.52
## + V23_J1_7	1	2.05	3420.9	-1779.47
## + V2_J2_4	1	1.96	3421.0	-1779.33
## + V24_J2_7	1	1.87	3421.0	-1779.21
## + V13_1_J1_1	1	1.84	3421.1	-1779.15
## + V16_J1_2	1	1.83	3421.1	-1779.14
## + V13_3_J1_4	1	1.80	3421.1	-1779.09
## + V1_J2_1	1	1.78	3421.1	-1779.07
## + V15_J2_1	1	1.73	3421.2	-1778.99
## + V16_J2_3	1	1.70	3421.2	-1778.95
## + V13_3_J1_7	1	1.66	3421.3	-1778.88
## + V5_J2_2	1	1.59	3421.3	-1778.77
## + V15_J1_1	1	1.57	3421.4	-1778.74
## + V23_J2_2	1	1.56	3421.4	-1778.72
## + V14_J2_1	1	1.52	3421.4	-1778.67
## + V26_J1_7	1	1.48	3421.4	-1778.60
## + V1_J2_3	1	1.46	3421.5	-1778.57
## + V17_J2_5	1	1.43	3421.5	-1778.53
## + V24_J1_3	1	1.34	3421.6	-1778.39
## + V17_J1_7	1	1.29	3421.6	-1778.31
## + V13_3_J2_4	1	1.26	3421.7	-1778.27
## + V1_J1_7	1	1.25	3421.7	-1778.26
## + V14_J2_5	1	1.19	3421.7	-1778.16
## + V20_J2_5	1	1.18	3421.7	-1778.15
## + V3_J1_2	1	1.16	3421.8	-1778.11
## + V12_1_2_J1_1	1	1.15	3421.8	-1778.10
## + V29_J2_7	1	1.11	3421.8	-1778.04
## + V4_J1_5	1	1.08	3421.8	-1778.00
## + V16_J1_6	1	1.06	3421.9	-1777.97
## + V29_J2_2	1	1.06	3421.9	-1777.97
## + V16_J1_7	1	1.00	3421.9	-1777.87
## + V24_J2_2	1	0.98	3421.9	-1777.85
## + V23_J1_5	1	0.87	3422.1	-1777.67
## + V3_J1_7	1	0.81	3422.1	-1777.58
## + V13_2_J1_6	1	0.79	3422.1	-1777.56

## + V13_3_J2_1	1	0.79	3422.1	-1777.56
## + V2_J1_7	1	0.77	3422.2	-1777.52
## + V4_J2_7	1	0.72	3422.2	-1777.46
## + V2_J1_1	1	0.69	3422.2	-1777.40
## + V16_J2_1	1	0.69	3422.2	-1777.40
## + V15_J2_3	1	0.67	3422.3	-1777.37
## + V23_J1_1	1	0.58	3422.3	-1777.23
## + V17_J2_1	1	0.58	3422.3	-1777.23
## + V24_J1_4	1	0.56	3422.4	-1777.20
## + V26_J2_2	1	0.55	3422.4	-1777.19
## + V16_J1_1	1	0.53	3422.4	-1777.17
## + V17_J2_4	1	0.47	3422.5	-1777.07
## + V13_1_J1_6	1	0.41	3422.5	-1776.97
## + V23_J1_4	1	0.41	3422.5	-1776.97
## + V30_J2_1	1	0.40	3422.5	-1776.97
## + V13_3_J1_1	1	0.39	3422.5	-1776.95
## + V5_J1_6	1	0.37	3422.6	-1776.92
## + V23_J1_6	1	0.36	3422.6	-1776.90
## + V24_J2_4	1	0.34	3422.6	-1776.87
## + V29_J2_5	1	0.32	3422.6	-1776.84
## + V1_J1_6	1	0.29	3422.6	-1776.80
## + V24_J2_1	1	0.27	3422.7	-1776.77
## + V29_J2_4	1	0.23	3422.7	-1776.70
## + V17_J1_6	1	0.22	3422.7	-1776.69
## + V13_2_J2_1	1	0.17	3422.8	-1776.61
## + V3_J1_6	1	0.13	3422.8	-1776.55
## + V2_J1_2	1	0.13	3422.8	-1776.55
## + V13_2_J2_4	1	0.11	3422.8	-1776.53
## + V3_J1_1	1	0.11	3422.8	-1776.52
## + V13_1_J2_7	1	0.09	3422.8	-1776.50
## + V17_J1_1	1	0.09	3422.8	-1776.49
## + V17_J1_2	1	0.06	3422.9	-1776.45
## + V5_J1_2	1	0.06	3422.9	-1776.45
## + V26_J1_2	1	0.06	3422.9	-1776.45
## + V13_2_J2_3	1	0.05	3422.9	-1776.43
## + V23_J1_2	1	0.03	3422.9	-1776.41
## + V19_J1_1	1	0.03	3422.9	-1776.40
## + V1_J1_2	1	0.03	3422.9	-1776.40
## + V20_J1_1	1	0.02	3422.9	-1776.39
## + V20_J2_4	1	0.01	3422.9	-1776.37
## + V3_J2_2	1	0.01	3422.9	-1776.37
## + V13_2_J2_2	1	0.00	3422.9	-1776.36
## + V13_3_J1_5	1	0.00	3422.9	-1776.36
## - V3_J1_4	1	58.57	3481.5	-1701.40
## - V12_1_2_J1_4	1	64.78	3487.7	-1692.13
## - V1_J2_7	1	65.58	3488.5	-1690.95
## - V13_2_J1_7	1	65.98	3488.9	-1690.35
## - V17_J2_2	1	66.12	3489.0	-1690.14
## - V4_J2_4	1	67.63	3490.6	-1687.89
## - V15_J2_2	1	69.38	3492.3	-1685.28
## - V15_J1_3	1	70.94	3493.9	-1682.96
## - V1_J2_2	1	71.06	3494.0	-1682.79
## - V5_J1_5	1	74.51	3497.4	-1677.65
## - V19_J1_5	1	87.01	3509.9	-1659.10

```

## - V3_J2_1      1      87.06 3510.0 -1659.02
## - V15_J2_7     1      92.53 3515.5 -1650.93
## - V26_J2_1     1      98.15 3521.1 -1642.62
## - V19_J1_4     1     106.78 3529.7 -1629.88
## - V3_J2_5      1     110.78 3533.7 -1624.00
## - V30_J2_2     1     140.51 3563.4 -1580.43
## - V26_J2_5     1     142.45 3565.4 -1577.61
## - V26_J2_4     1     145.05 3568.0 -1573.82
## - V3_J2_3      1     152.72 3575.6 -1562.65
## - V3_J2_4      1     169.58 3592.5 -1538.18
## - V12_1_2_J2_2 1     173.26 3596.2 -1532.85
## - V5_J2_5      1     207.60 3630.5 -1483.44
## - V5_J2_4      1     240.13 3663.1 -1437.06
## - V20_J2_2     1     279.20 3702.1 -1381.89
## - V26_J2_3     1     281.68 3704.6 -1378.40
## - V16_J2_2     1     434.11 3857.0 -1168.73
## - V            19    1460.83 4883.8  -60.88
## - J            12    1525.29 4948.2   53.75
##
## Step:  AIC=-1858.64
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##      V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##      V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##      V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
##      V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1
##
##
##      Df Sum of Sq  RSS      AIC
## + V4_J2_5      1    58.98 3310.2 -1943.85
## + V4_J2_3      1    56.83 3312.4 -1940.47
## + V17_J2_7     1    50.08 3319.1 -1929.88
## + V30_J1_3     1    48.01 3321.2 -1926.63
## + V19_J2_3     1    47.74 3321.4 -1926.22
## + V17_J1_3     1    46.59 3322.6 -1924.41
## + V2_J1_3      1    44.54 3324.7 -1921.20
## + V23_J1_3     1    44.12 3325.1 -1920.55
## + V14_J1_5     1    42.66 3326.5 -1918.26
## + V5_J1_3      1    39.79 3329.4 -1913.78
## + V13_1_J1_3   1    39.57 3329.6 -1913.44
## + V5_J2_3      1    38.72 3330.5 -1912.11
## + V14_J1_4     1    38.02 3331.2 -1911.01
## + V2_J2_2      1    36.72 3332.5 -1908.99
## + V1_J1_3      1    36.50 3332.7 -1908.64
## + V30_J1_1     1    35.93 3333.3 -1907.75
## + V5_J2_1      1    31.94 3337.2 -1901.54
## + V3_J1_5      1    31.40 3337.8 -1900.70
## + V26_J1_4     1    30.19 3339.0 -1898.82
## + V17_J1_5     1    26.48 3342.7 -1893.04
## + V30_J1_6     1    26.17 3343.0 -1892.55
## + V13_1_J1_2   1    26.13 3343.1 -1892.50
## + V12_1_2_J1_7 1    26.09 3343.1 -1892.43
## + V15_J1_7     1    25.91 3343.3 -1892.15
## + V16_J1_3     1    25.56 3343.6 -1891.61
## + V20_J1_3     1    25.20 3344.0 -1891.05
## + V13_1_J1_7   1    24.26 3344.9 -1889.59

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## + V5_J2_7	1	23.18	3346.0	-1887.91
## + V19_J2_1	1	22.70	3346.5	-1887.16
## + V14_J1_3	1	22.53	3346.7	-1886.89
## + V23_J2_1	1	22.34	3346.9	-1886.59
## + V12_1_2_J1_6	1	21.88	3347.3	-1885.88
## + V30_J1_2	1	21.84	3347.3	-1885.82
## + V30_J2_5	1	21.00	3348.2	-1884.52
## + V16_J2_7	1	20.92	3348.3	-1884.39
## + V15_J1_5	1	20.09	3349.1	-1883.11
## + V2_J1_5	1	19.18	3350.0	-1881.69
## + V19_J2_7	1	18.94	3350.2	-1881.33
## + V14_J1_2	1	18.86	3350.3	-1881.19
## + V14_J2_3	1	18.67	3350.5	-1880.89
## + V19_J1_3	1	18.24	3350.9	-1880.24
## + V23_J2_3	1	18.04	3351.1	-1879.92
## + V29_J1_7	1	17.88	3351.3	-1879.68
## + V29_J1_5	1	17.41	3351.8	-1878.95
## + V26_J1_5	1	17.26	3351.9	-1878.72
## + V3_J1_3	1	17.07	3352.1	-1878.41
## + V4_J1_6	1	16.65	3352.5	-1877.76
## + V1_J1_5	1	16.18	3353.0	-1877.03
## + V14_J2_2	1	15.56	3353.6	-1876.07
## + V29_J2_3	1	14.94	3354.2	-1875.11
## + V24_J2_3	1	14.74	3354.4	-1874.80
## + V15_J1_6	1	14.68	3354.5	-1874.72
## + V30_J1_5	1	14.68	3354.5	-1874.71
## + V13_2_J1_3	1	14.51	3354.7	-1874.45
## + V12_1_2_J1_2	1	14.49	3354.7	-1874.42
## + V13_3_J1_2	1	14.39	3354.8	-1874.26
## + V4_J2_2	1	14.31	3354.9	-1874.14
## + V5_J1_4	1	14.21	3355.0	-1873.98
## + V13_2_J1_2	1	13.84	3355.3	-1873.41
## + V19_J2_4	1	13.78	3355.4	-1873.31
## + V23_J2_7	1	13.68	3355.5	-1873.16
## + V12_1_2_J2_7	1	13.66	3355.5	-1873.12
## + V29_J1_1	1	13.40	3355.8	-1872.73
## + V2_J2_7	1	13.35	3355.8	-1872.65
## + V4_J1_2	1	13.35	3355.8	-1872.65
## + V20_J1_2	1	12.94	3356.3	-1872.01
## + V4_J1_7	1	12.92	3356.3	-1871.98
## + V12_1_2_J2_3	1	12.86	3356.3	-1871.89
## + V24_J2_5	1	12.73	3356.5	-1871.68
## + V19_J2_5	1	12.17	3357.0	-1870.82
## + V24_J1_1	1	12.06	3357.1	-1870.65
## + V14_J2_4	1	12.03	3357.2	-1870.61
## + V15_J2_5	1	11.73	3357.5	-1870.15
## + V13_2_J1_4	1	11.55	3357.6	-1869.87
## + V14_J2_7	1	11.15	3358.0	-1869.25
## + V20_J2_1	1	10.85	3358.3	-1868.78
## + V15_J1_4	1	10.65	3358.5	-1868.47
## + V16_J2_4	1	10.56	3358.6	-1868.33
## + V13_3_J1_3	1	10.15	3359.0	-1867.69
## + V20_J1_4	1	9.92	3359.3	-1867.34
## + V12_1_2_J2_5	1	9.58	3359.6	-1866.80

## + V13_3_J2_5	1	9.48	3359.7	-1866.66
## + V12_1_2_J1_5	1	9.47	3359.7	-1866.64
## + V17_J2_3	1	9.00	3360.2	-1865.92
## + V26_J1_6	1	8.34	3360.9	-1864.89
## + V4_J1_3	1	8.31	3360.9	-1864.85
## + V12_1_2_J1_3	1	8.28	3360.9	-1864.80
## + V29_J1_4	1	8.22	3361.0	-1864.71
## + V29_J1_6	1	8.20	3361.0	-1864.68
## + V19_J2_2	1	7.89	3361.3	-1864.20
## + V20_J2_3	1	7.78	3361.4	-1864.03
## + V13_3_J1_6	1	7.76	3361.4	-1863.99
## + V4_J1_1	1	7.72	3361.5	-1863.93
## + V17_J1_4	1	7.48	3361.7	-1863.56
## + V13_2_J1_5	1	7.44	3361.7	-1863.50
## + V2_J1_4	1	7.23	3362.0	-1863.17
## + V19_J1_6	1	7.10	3362.1	-1862.97
## + V20_J2_7	1	6.87	3362.3	-1862.63
## + V2_J2_5	1	6.75	3362.4	-1862.43
## + V14_J1_7	1	6.73	3362.5	-1862.40
## + V2_J2_1	1	6.72	3362.5	-1862.39
## + V15_J2_4	1	6.56	3362.6	-1862.13
## + V1_J1_1	1	6.51	3362.7	-1862.06
## + V29_J2_1	1	6.47	3362.7	-1862.01
## + V20_J1_6	1	6.44	3362.7	-1861.95
## + V13_1_J2_4	1	6.39	3362.8	-1861.88
## + V19_J1_2	1	6.39	3362.8	-1861.88
## + V26_J2_7	1	6.37	3362.8	-1861.84
## + V29_J1_3	1	6.24	3363.0	-1861.64
## + V23_J2_5	1	6.16	3363.0	-1861.52
## + V5_J1_7	1	6.04	3363.1	-1861.34
## + V29_J1_2	1	5.98	3363.2	-1861.25
## + V1_J1_4	1	5.98	3363.2	-1861.24
## + V14_J1_1	1	5.95	3363.2	-1861.20
## + V30_J2_4	1	5.71	3363.5	-1860.83
## + V13_1_J1_5	1	5.68	3363.5	-1860.77
## + V19_J1_7	1	5.51	3363.7	-1860.52
## + V4_J1_4	1	5.45	3363.7	-1860.42
## + V13_1_J2_2	1	5.25	3363.9	-1860.11
## + V2_J2_3	1	4.80	3364.4	-1859.42
## + V23_J2_4	1	4.76	3364.4	-1859.35
## + V13_1_J2_3	1	4.70	3364.5	-1859.27
## + V30_J1_7	1	4.70	3364.5	-1859.26
## + V13_2_J2_7	1	4.55	3364.6	-1859.04
## + V13_2_J1_1	1	4.51	3364.7	-1858.98
## + V30_J2_3	1	4.51	3364.7	-1858.97
## + V16_J2_5	1	4.40	3364.8	-1858.80
## + V24_J1_6	1	4.36	3364.8	-1858.74
## + V26_J1_1	1	4.35	3364.8	-1858.72
## <none>			3369.2	-1858.64
## + V12_1_2_J2_4	1	4.25	3364.9	-1858.57
## + V3_J2_7	1	4.22	3365.0	-1858.52
## + V1_J2_5	1	4.13	3365.1	-1858.38
## + V24_J1_2	1	4.08	3365.1	-1858.31
## + V30_J2_7	1	3.80	3365.4	-1857.88

## + V13_1_J2_5	1	3.72	3365.5	-1857.75
## + V16_J1_4	1	3.53	3365.7	-1857.46
## + V26_J1_3	1	3.53	3365.7	-1857.45
## + V24_J1_7	1	3.27	3365.9	-1857.06
## + V24_J1_5	1	3.25	3365.9	-1857.02
## + V20_J1_5	1	3.23	3366.0	-1857.00
## + V12_1_2_J2_1	1	3.21	3366.0	-1856.96
## + V14_J1_6	1	3.18	3366.0	-1856.91
## + V13_3_J2_2	1	3.05	3366.1	-1856.72
## + V2_J1_6	1	3.02	3366.2	-1856.66
## + V13_1_J1_4	1	2.99	3366.2	-1856.62
## + V16_J1_5	1	2.96	3366.2	-1856.58
## + V4_J1_5	1	2.93	3366.3	-1856.53
## + V15_J1_2	1	2.90	3366.3	-1856.48
## + V13_2_J2_5	1	2.84	3366.3	-1856.39
## + V14_J2_1	1	2.79	3366.4	-1856.31
## + V13_1_J2_1	1	2.74	3366.5	-1856.23
## + V13_3_J2_7	1	2.58	3366.6	-1855.98
## + V30_J1_4	1	2.54	3366.6	-1855.92
## + V20_J1_7	1	2.48	3366.7	-1855.83
## + V4_J2_7	1	2.32	3366.9	-1855.58
## + V13_3_J2_3	1	2.29	3366.9	-1855.55
## + V5_J1_1	1	2.21	3367.0	-1855.42
## + V1_J2_4	1	2.15	3367.0	-1855.32
## + V24_J2_7	1	1.99	3367.2	-1855.08
## + V2_J2_4	1	1.95	3367.2	-1855.01
## + V23_J1_7	1	1.94	3367.2	-1855.00
## + V13_3_J1_4	1	1.91	3367.3	-1854.96
## + V5_J2_2	1	1.76	3367.4	-1854.73
## + V13_1_J1_1	1	1.74	3367.4	-1854.70
## + V16_J1_2	1	1.72	3367.5	-1854.66
## + V15_J1_1	1	1.70	3367.5	-1854.63
## + V16_J2_3	1	1.60	3367.6	-1854.48
## + V13_3_J1_7	1	1.57	3367.6	-1854.42
## + V1_J2_3	1	1.57	3367.6	-1854.42
## + V17_J2_5	1	1.54	3367.6	-1854.38
## + V26_J1_7	1	1.47	3367.7	-1854.28
## + V24_J1_3	1	1.43	3367.8	-1854.21
## + V23_J2_2	1	1.41	3367.8	-1854.18
## + V17_J1_7	1	1.39	3367.8	-1854.14
## + V1_J1_7	1	1.36	3367.8	-1854.10
## + V20_J2_5	1	1.28	3367.9	-1853.98
## + V13_3_J2_4	1	1.27	3367.9	-1853.96
## + V29_J2_7	1	1.20	3368.0	-1853.85
## + V29_J2_2	1	1.19	3368.0	-1853.84
## + V16_J1_6	1	1.15	3368.0	-1853.78
## + V3_J1_2	1	1.15	3368.0	-1853.77
## + V30_J2_1	1	1.14	3368.0	-1853.76
## + V14_J2_5	1	1.11	3368.1	-1853.71
## + V16_J1_7	1	1.09	3368.1	-1853.68
## + V12_1_2_J1_1	1	1.06	3368.1	-1853.63
## + V23_J1_5	1	0.94	3368.2	-1853.46
## + V24_J2_2	1	0.87	3368.3	-1853.35
## + V13_2_J1_6	1	0.87	3368.3	-1853.34

## + V1_J2_1	1	0.83	3368.4	-1853.28
## + V3_J1_7	1	0.81	3368.4	-1853.26
## + V15_J2_1	1	0.80	3368.4	-1853.24
## + V15_J2_3	1	0.75	3368.4	-1853.16
## + V2_J1_7	1	0.70	3368.5	-1853.09
## + V2_J1_1	1	0.63	3368.6	-1852.98
## + V24_J1_4	1	0.62	3368.6	-1852.96
## + V16_J1_1	1	0.60	3368.6	-1852.92
## + V23_J1_1	1	0.52	3368.7	-1852.82
## + V26_J2_2	1	0.52	3368.7	-1852.81
## + V17_J2_4	1	0.47	3368.7	-1852.74
## + V29_J2_5	1	0.36	3368.8	-1852.57
## + V13_1_J1_6	1	0.36	3368.8	-1852.56
## + V23_J1_4	1	0.36	3368.8	-1852.55
## + V13_3_J1_1	1	0.35	3368.8	-1852.54
## + V24_J2_4	1	0.33	3368.9	-1852.52
## + V5_J1_6	1	0.32	3368.9	-1852.50
## + V23_J1_6	1	0.32	3368.9	-1852.49
## + V1_J1_6	1	0.25	3368.9	-1852.38
## + V29_J2_4	1	0.23	3369.0	-1852.36
## + V13_3_J2_1	1	0.21	3369.0	-1852.33
## + V17_J1_6	1	0.18	3369.0	-1852.29
## + V16_J2_1	1	0.16	3369.0	-1852.25
## + V2_J1_2	1	0.15	3369.0	-1852.24
## + V3_J1_6	1	0.13	3369.1	-1852.21
## + V13_1_J2_7	1	0.12	3369.1	-1852.19
## + V13_2_J2_4	1	0.11	3369.1	-1852.18
## + V3_J1_1	1	0.11	3369.1	-1852.18
## + V17_J2_1	1	0.11	3369.1	-1852.17
## + V17_J1_2	1	0.08	3369.1	-1852.13
## + V13_2_J2_3	1	0.07	3369.1	-1852.11
## + V17_J1_1	1	0.07	3369.1	-1852.11
## + V26_J1_2	1	0.06	3369.1	-1852.10
## + V23_J1_2	1	0.05	3369.1	-1852.08
## + V5_J1_2	1	0.04	3369.1	-1852.07
## + V20_J1_1	1	0.03	3369.2	-1852.06
## + V19_J1_1	1	0.01	3369.2	-1852.03
## + V1_J1_2	1	0.01	3369.2	-1852.03
## + V20_J2_4	1	0.01	3369.2	-1852.02
## + V13_2_J2_2	1	0.01	3369.2	-1852.02
## + V24_J2_1	1	0.01	3369.2	-1852.02
## + V13_3_J1_5	1	0.00	3369.2	-1852.01
## + V3_J2_2	1	0.00	3369.2	-1852.01
## + V13_2_J2_1	1	0.00	3369.2	-1852.01
## - V4_J2_1	1	53.74	3422.9	-1782.99
## - V3_J1_4	1	58.57	3427.8	-1775.65
## - V12_1_2_J1_4	1	64.09	3433.3	-1767.29
## - V1_J2_7	1	64.87	3434.1	-1766.11
## - V17_J2_2	1	65.22	3434.4	-1765.57
## - V13_2_J1_7	1	65.39	3434.6	-1765.31
## - V1_J2_2	1	70.07	3439.3	-1758.24
## - V15_J2_2	1	70.42	3439.6	-1757.71
## - V15_J1_3	1	71.70	3440.9	-1755.78
## - V5_J1_5	1	73.79	3443.0	-1752.62

```

## - V4_J2_4      1      77.58 3446.8 -1746.89
## - V19_J1_5     1      86.23 3455.4 -1733.86
## - V15_J2_7     1      93.44 3462.6 -1723.02
## - V3_J2_1      1      94.51 3463.7 -1721.41
## - V19_J1_4     1     105.92 3475.1 -1704.32
## - V26_J2_1     1     106.09 3475.3 -1704.07
## - V3_J2_5      1     110.83 3480.0 -1696.98
## - V30_J2_2     1     139.20 3508.4 -1654.76
## - V26_J2_5     1     142.50 3511.7 -1649.86
## - V26_J2_4     1     145.96 3515.1 -1644.74
## - V3_J2_3      1     152.83 3522.0 -1634.59
## - V3_J2_4      1     170.57 3539.8 -1608.47
## - V12_1_2_J2_2 1     171.72 3540.9 -1606.78
## - V5_J2_5      1     206.47 3575.7 -1555.99
## - V5_J2_4      1     240.03 3609.2 -1507.41
## - V20_J2_2     1     277.34 3646.5 -1453.93
## - V26_J2_3     1     281.84 3651.0 -1447.53
## - V16_J2_2     1     431.79 3801.0 -1238.23
## - V            19    1380.15 4749.3 -199.36
## - J            12    1537.33 4906.5   16.38
##
## Step:  AIC=-1943.85
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##      V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##      V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##      V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
##      V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
##      V4_J2_5
##
##
##      Df Sum of Sq  RSS      AIC
## + V4_J2_3      1      69.78 3240.4 -2048.00
## + V17_J2_7      1      49.29 3260.9 -2015.22
## + V30_J1_3      1      47.28 3262.9 -2012.01
## + V19_J2_3      1      47.03 3263.2 -2011.61
## + V17_J1_3      1      45.87 3264.3 -2009.77
## + V2_J1_3       1      43.91 3266.3 -2006.65
## + V23_J1_3      1      43.50 3266.7 -2006.00
## + V14_J1_5      1      42.05 3268.2 -2003.69
## + V13_1_J1_3    1      40.17 3270.0 -2000.69
## + V5_J1_3       1      39.83 3270.4 -2000.15
## + V5_J2_3       1      38.73 3271.5 -1998.40
## + V14_J1_4      1      37.41 3272.8 -1996.31
## + V30_J1_1      1      36.53 3273.7 -1994.91
## + V2_J2_2       1      35.84 3274.4 -1993.82
## + V1_J1_3       1      35.80 3274.4 -1993.75
## + V5_J2_1       1      32.47 3277.7 -1988.47
## + V3_J1_5       1      31.43 3278.8 -1986.82
## + V26_J1_4      1      30.19 3280.0 -1984.85
## + V17_J1_5      1      27.03 3283.2 -1979.84
## + V15_J1_7      1      26.57 3283.6 -1979.12
## + V20_J1_3      1      25.74 3284.5 -1977.81
## + V13_1_J1_2    1      25.69 3284.5 -1977.72
## + V30_J1_6      1      25.66 3284.5 -1977.68
## + V12_1_2_J1_7  1      25.51 3284.7 -1977.44

```

## + V16_J1_3	1	25.03	3285.2	-1976.68
## + V13_1_J1_7	1	23.81	3286.4	-1974.75
## + V5_J2_7	1	23.25	3287.0	-1973.86
## + V14_J1_3	1	22.97	3287.2	-1973.43
## + V19_J2_1	1	22.63	3287.6	-1972.88
## + V23_J2_1	1	22.32	3287.9	-1972.39
## + V30_J1_2	1	22.31	3287.9	-1972.38
## + V12_1_2_J1_6	1	21.37	3288.8	-1970.88
## + V16_J2_7	1	20.41	3289.8	-1969.37
## + V2_J1_5	1	19.59	3290.6	-1968.08
## + V15_J1_5	1	19.52	3290.7	-1967.97
## + V19_J2_7	1	19.47	3290.7	-1967.88
## + V14_J1_2	1	19.24	3291.0	-1967.52
## + V19_J1_3	1	18.73	3291.5	-1966.71
## + V23_J2_3	1	18.41	3291.8	-1966.21
## + V14_J2_3	1	18.30	3291.9	-1966.03
## + V29_J1_5	1	17.81	3292.4	-1965.26
## + V29_J1_7	1	17.50	3292.7	-1964.77
## + V26_J1_5	1	17.28	3292.9	-1964.43
## + V3_J1_3	1	17.05	3293.2	-1964.06
## + V30_J2_5	1	16.93	3293.3	-1963.87
## + V1_J1_5	1	16.65	3293.6	-1963.43
## + V24_J2_5	1	16.46	3293.7	-1963.12
## + V14_J2_2	1	16.14	3294.1	-1962.63
## + V19_J2_5	1	15.78	3294.4	-1962.05
## + V29_J2_3	1	15.27	3294.9	-1961.26
## + V15_J2_5	1	15.23	3295.0	-1961.19
## + V15_J1_6	1	15.16	3295.0	-1961.08
## + V30_J1_5	1	15.09	3295.1	-1960.96
## + V24_J2_3	1	15.07	3295.1	-1960.94
## + V12_1_2_J1_2	1	14.92	3295.3	-1960.70
## + V13_2_J1_3	1	14.90	3295.3	-1960.68
## + V5_J1_4	1	14.16	3296.0	-1959.50
## + V13_3_J1_2	1	14.06	3296.1	-1959.35
## + V19_J2_4	1	13.75	3296.5	-1958.85
## + V13_2_J1_2	1	13.49	3296.7	-1958.45
## + V23_J2_7	1	13.31	3296.9	-1958.16
## + V12_1_2_J2_3	1	13.26	3296.9	-1958.08
## + V12_1_2_J2_7	1	13.20	3297.0	-1957.99
## + V29_J1_1	1	13.08	3297.1	-1957.80
## + V2_J2_7	1	12.99	3297.2	-1957.65
## + V20_J1_2	1	12.58	3297.6	-1957.01
## + V14_J2_4	1	12.06	3298.1	-1956.20
## + V13_2_J1_4	1	11.92	3298.3	-1955.98
## + V24_J1_1	1	11.76	3298.4	-1955.71
## + V14_J2_7	1	11.49	3298.7	-1955.29
## + V4_J1_6	1	11.07	3299.1	-1954.63
## + V20_J2_1	1	10.82	3299.4	-1954.24
## + V16_J2_4	1	10.57	3299.6	-1953.84
## + V13_3_J1_3	1	10.45	3299.8	-1953.65
## + V20_J1_4	1	10.28	3299.9	-1953.38
## + V15_J1_4	1	10.21	3300.0	-1953.28
## + V12_1_2_J1_5	1	9.83	3300.4	-1952.68
## + V4_J1_4	1	9.71	3300.5	-1952.49

## + V17_J2_3	1	9.30	3300.9	-1951.84
## + V4_J2_2	1	9.28	3300.9	-1951.81
## + V29_J1_4	1	8.51	3301.7	-1950.59
## + V4_J1_2	1	8.40	3301.8	-1950.43
## + V19_J2_2	1	8.36	3301.8	-1950.36
## + V26_J1_6	1	8.30	3301.9	-1950.27
## + V4_J1_7	1	8.07	3302.1	-1949.90
## + V29_J1_6	1	7.96	3302.2	-1949.72
## + V12_1_2_J1_3	1	7.95	3302.3	-1949.71
## + V17_J1_4	1	7.79	3302.4	-1949.46
## + V13_3_J1_6	1	7.51	3302.7	-1949.03
## + V20_J2_3	1	7.51	3302.7	-1949.02
## + V2_J1_4	1	7.50	3302.7	-1949.00
## + V19_J1_6	1	7.38	3302.8	-1948.82
## + V20_J2_7	1	7.17	3303.0	-1948.49
## + V13_2_J1_5	1	7.17	3303.0	-1948.48
## + V14_J1_7	1	6.97	3303.2	-1948.18
## + V12_1_2_J2_5	1	6.90	3303.3	-1948.05
## + V13_3_J2_5	1	6.78	3303.4	-1947.87
## + V2_J2_1	1	6.71	3303.5	-1947.76
## + V19_J1_2	1	6.66	3303.5	-1947.68
## + V15_J2_4	1	6.49	3303.7	-1947.42
## + V29_J2_1	1	6.46	3303.7	-1947.38
## + V26_J2_7	1	6.37	3303.8	-1947.23
## + V13_1_J2_4	1	6.37	3303.8	-1947.22
## + V1_J2_5	1	6.30	3303.9	-1947.12
## + V1_J1_4	1	6.28	3303.9	-1947.09
## + V1_J1_1	1	6.23	3304.0	-1947.01
## + V4_J1_5	1	6.21	3304.0	-1946.98
## + V20_J1_6	1	6.19	3304.0	-1946.94
## + V14_J1_1	1	6.17	3304.0	-1946.91
## + V5_J1_7	1	6.06	3304.1	-1946.73
## + V29_J1_3	1	6.00	3304.2	-1946.65
## + V19_J1_7	1	5.78	3304.4	-1946.29
## + V29_J1_2	1	5.77	3304.4	-1946.29
## + V30_J2_4	1	5.71	3304.5	-1946.19
## + V13_1_J1_5	1	5.46	3304.7	-1945.79
## + V4_J2_7	1	5.28	3304.9	-1945.52
## + V2_J2_3	1	5.00	3305.2	-1945.06
## + V13_1_J2_2	1	4.92	3305.3	-1944.95
## + V13_1_J2_3	1	4.89	3305.3	-1944.90
## + V13_2_J2_7	1	4.79	3305.4	-1944.74
## + V23_J2_4	1	4.74	3305.5	-1944.65
## + V30_J2_3	1	4.72	3305.5	-1944.63
## + V13_2_J2_5	1	4.71	3305.5	-1944.61
## + V24_J1_6	1	4.54	3305.7	-1944.35
## + V4_J1_3	1	4.52	3305.7	-1944.32
## + V2_J2_5	1	4.50	3305.7	-1944.28
## + V30_J1_7	1	4.48	3305.7	-1944.24
## + V26_J1_1	1	4.33	3305.9	-1944.01
## + V13_2_J1_1	1	4.31	3305.9	-1943.99
## + V12_1_2_J2_4	1	4.28	3305.9	-1943.93
## + V3_J2_7	1	4.22	3306.0	-1943.85
## <none>			3310.2	-1943.85

## + V4_J1_1	1	4.07	3306.1	-1943.62
## + V23_J2_5	1	4.02	3306.2	-1943.53
## + V24_J1_2	1	3.91	3306.3	-1943.35
## + V16_J1_4	1	3.74	3306.5	-1943.10
## + V30_J2_7	1	3.59	3306.6	-1942.85
## + V26_J1_3	1	3.52	3306.7	-1942.74
## + V24_J1_7	1	3.44	3306.8	-1942.62
## + V20_J1_5	1	3.43	3306.8	-1942.59
## + V14_J1_6	1	3.34	3306.9	-1942.46
## + V12_1_2_J2_1	1	3.24	3307.0	-1942.30
## + V2_J1_6	1	3.17	3307.0	-1942.19
## + V13_1_J1_4	1	3.16	3307.0	-1942.18
## + V16_J1_5	1	3.15	3307.1	-1942.16
## + V15_J1_2	1	3.11	3307.1	-1942.10
## + V24_J1_5	1	3.08	3307.1	-1942.05
## + V13_3_J2_2	1	2.80	3307.4	-1941.61
## + V14_J2_1	1	2.80	3307.4	-1941.61
## + V13_3_J2_7	1	2.74	3307.5	-1941.52
## + V13_1_J2_1	1	2.73	3307.5	-1941.50
## + V16_J2_5	1	2.64	3307.6	-1941.35
## + V13_3_J2_3	1	2.43	3307.8	-1941.02
## + V30_J1_4	1	2.36	3307.8	-1940.92
## + V14_J2_5	1	2.36	3307.8	-1940.92
## + V20_J1_7	1	2.32	3307.9	-1940.85
## + V5_J1_1	1	2.21	3308.0	-1940.68
## + V1_J2_4	1	2.17	3308.0	-1940.61
## + V24_J2_7	1	2.13	3308.1	-1940.56
## + V13_1_J2_5	1	2.10	3308.1	-1940.52
## + V13_3_J1_4	1	2.05	3308.2	-1940.43
## + V2_J2_4	1	1.93	3308.3	-1940.25
## + V15_J1_1	1	1.86	3308.3	-1940.13
## + V5_J2_2	1	1.84	3308.4	-1940.10
## + V23_J1_7	1	1.81	3308.4	-1940.06
## + V1_J2_3	1	1.71	3308.5	-1939.89
## + V13_1_J1_1	1	1.63	3308.6	-1939.77
## + V16_J1_2	1	1.59	3308.6	-1939.71
## + V24_J1_3	1	1.54	3308.7	-1939.63
## + V17_J1_7	1	1.51	3308.7	-1939.59
## + V1_J1_7	1	1.50	3308.7	-1939.56
## + V16_J2_3	1	1.48	3308.7	-1939.53
## + V26_J1_7	1	1.46	3308.7	-1939.51
## + V13_3_J1_7	1	1.45	3308.8	-1939.49
## + V29_J2_2	1	1.35	3308.9	-1939.33
## + V29_J2_7	1	1.31	3308.9	-1939.27
## + V13_3_J2_4	1	1.28	3308.9	-1939.22
## + V16_J1_6	1	1.26	3308.9	-1939.18
## + V23_J2_2	1	1.24	3309.0	-1939.16
## + V16_J1_7	1	1.20	3309.0	-1939.09
## + V3_J1_2	1	1.13	3309.1	-1938.99
## + V30_J2_1	1	1.13	3309.1	-1938.99
## + V23_J1_5	1	1.04	3309.2	-1938.84
## + V13_2_J1_6	1	0.96	3309.2	-1938.71
## + V12_1_2_J1_1	1	0.95	3309.3	-1938.70
## + V15_J2_3	1	0.86	3309.3	-1938.56

## + V1_J2_1	1	0.84	3309.4	-1938.54
## + V15_J2_1	1	0.83	3309.4	-1938.51
## + V3_J1_7	1	0.82	3309.4	-1938.49
## + V24_J2_2	1	0.74	3309.5	-1938.37
## + V24_J1_4	1	0.70	3309.5	-1938.31
## + V16_J1_1	1	0.68	3309.5	-1938.27
## + V2_J1_7	1	0.63	3309.6	-1938.19
## + V17_J2_5	1	0.59	3309.6	-1938.13
## + V2_J1_1	1	0.56	3309.6	-1938.10
## + V26_J2_2	1	0.49	3309.7	-1937.98
## + V17_J2_4	1	0.48	3309.7	-1937.96
## + V23_J1_1	1	0.46	3309.7	-1937.94
## + V20_J2_5	1	0.43	3309.8	-1937.88
## + V24_J2_4	1	0.33	3309.9	-1937.72
## + V5_J1_6	1	0.32	3309.9	-1937.72
## + V13_1_J1_6	1	0.31	3309.9	-1937.70
## + V23_J1_4	1	0.30	3309.9	-1937.68
## + V13_3_J1_1	1	0.30	3309.9	-1937.68
## + V23_J1_6	1	0.27	3309.9	-1937.63
## + V29_J2_4	1	0.24	3310.0	-1937.58
## + V13_3_J2_1	1	0.21	3310.0	-1937.54
## + V1_J1_6	1	0.19	3310.0	-1937.51
## + V2_J1_2	1	0.19	3310.0	-1937.51
## + V16_J2_1	1	0.16	3310.0	-1937.46
## + V13_1_J2_7	1	0.16	3310.0	-1937.46
## + V17_J1_6	1	0.14	3310.1	-1937.43
## + V3_J1_6	1	0.14	3310.1	-1937.42
## + V3_J1_1	1	0.11	3310.1	-1937.39
## + V17_J1_2	1	0.11	3310.1	-1937.39
## + V13_2_J2_4	1	0.11	3310.1	-1937.39
## + V17_J2_1	1	0.11	3310.1	-1937.39
## + V13_2_J2_3	1	0.09	3310.1	-1937.35
## + V23_J1_2	1	0.07	3310.1	-1937.32
## + V26_J1_2	1	0.07	3310.1	-1937.31
## + V20_J1_1	1	0.06	3310.1	-1937.30
## + V17_J1_1	1	0.04	3310.2	-1937.28
## + V5_J1_2	1	0.04	3310.2	-1937.27
## + V13_2_J2_2	1	0.03	3310.2	-1937.26
## + V29_J2_5	1	0.02	3310.2	-1937.23
## + V13_3_J1_5	1	0.01	3310.2	-1937.23
## + V20_J2_4	1	0.01	3310.2	-1937.23
## + V24_J2_1	1	0.01	3310.2	-1937.22
## + V19_J1_1	1	0.00	3310.2	-1937.22
## + V1_J1_2	1	0.00	3310.2	-1937.22
## + V3_J2_2	1	0.00	3310.2	-1937.21
## + V13_2_J2_1	1	0.00	3310.2	-1937.21
## - V3_J1_4	1	58.56	3368.8	-1859.29
## - V4_J2_5	1	58.98	3369.2	-1858.64
## - V12_1_2_J1_4	1	63.24	3373.4	-1852.08
## - V1_J2_7	1	64.01	3374.2	-1850.89
## - V4_J2_1	1	64.02	3374.2	-1850.87
## - V17_J2_2	1	64.13	3374.3	-1850.70
## - V13_2_J1_7	1	64.69	3374.9	-1849.85
## - V1_J2_2	1	68.86	3379.1	-1843.41

```

## - V15_J2_2      1      71.70 3381.9 -1839.05
## - V15_J1_3      1      72.64 3382.8 -1837.61
## - V5_J1_5       1      73.75 3383.9 -1835.91
## - V19_J1_5      1      85.33 3395.5 -1818.13
## - V4_J2_4       1      89.76 3400.0 -1811.36
## - V15_J2_7      1      94.56 3404.8 -1804.01
## - V3_J2_1       1      95.36 3405.6 -1802.80
## - V19_J1_4      1     104.87 3415.1 -1788.29
## - V26_J2_1      1     106.99 3417.2 -1785.07
## - V3_J2_5       1     120.15 3430.4 -1765.09
## - V30_J2_2      1     137.60 3447.8 -1738.70
## - V26_J2_4      1     147.08 3457.3 -1724.42
## - V3_J2_3       1     152.96 3463.2 -1715.58
## - V26_J2_5      1     153.05 3463.3 -1715.45
## - V12_1_2_J2_2  1     169.83 3480.0 -1690.32
## - V3_J2_4       1     171.77 3482.0 -1687.42
## - V5_J2_5       1     218.94 3529.1 -1617.44
## - V5_J2_4       1     241.33 3551.5 -1584.56
## - V20_J2_2      1     275.07 3585.3 -1535.39
## - V26_J2_3      1     282.01 3592.2 -1525.33
## - V16_J2_2      1     428.95 3739.2 -1316.86
## - V              19    1309.02 4619.2 -337.17
## - J              12    1541.88 4852.1 -34.99
##
## Step:  AIC=-2048
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##      V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##      V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##      V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
##      V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
##      V4_J2_5 + V4_J2_3
##
##
##      Df Sum of Sq    RSS      AIC
## + V19_J2_3      1      54.08 3186.3 -2128.88
## + V17_J2_7      1      48.40 3192.0 -2119.61
## + V30_J1_3      1      46.45 3194.0 -2116.44
## + V5_J2_3       1      45.25 3195.2 -2114.49
## + V17_J1_3      1      45.06 3195.4 -2114.17
## + V2_J1_3       1      43.21 3197.2 -2111.17
## + V23_J1_3      1      42.80 3197.6 -2110.51
## + V14_J1_5      1      41.33 3199.1 -2108.11
## + V13_1_J1_3    1      40.85 3199.6 -2107.33
## + V5_J1_3       1      40.57 3199.9 -2106.88
## + V30_J1_1      1      37.22 3203.2 -2101.43
## + V14_J1_4      1      36.72 3203.7 -2100.62
## + V1_J1_3       1      35.01 3205.4 -2097.85
## + V2_J2_2       1      34.86 3205.6 -2097.60
## + V5_J2_1       1      32.48 3207.9 -2093.74
## + V3_J1_5       1      31.43 3209.0 -2092.05
## + V26_J1_4      1      30.19 3210.2 -2090.03
## + V17_J1_5      1      27.69 3212.7 -2085.99
## + V15_J1_7      1      27.32 3213.1 -2085.40
## + V20_J1_3      1      26.36 3214.1 -2083.83
## + V13_1_J1_2    1      25.19 3215.2 -2081.94

```

## + V30_J1_6	1	25.09	3215.3	-2081.79
## + V12_1_2_J1_7	1	24.85	3215.6	-2081.40
## + V16_J1_3	1	24.43	3216.0	-2080.71
## + V5_J2_7	1	23.85	3216.6	-2079.78
## + V14_J1_3	1	23.49	3216.9	-2079.19
## + V13_1_J1_7	1	23.30	3217.1	-2078.89
## + V30_J1_2	1	22.85	3217.6	-2078.16
## + V14_J2_3	1	22.81	3217.6	-2078.10
## + V19_J2_1	1	22.58	3217.8	-2077.73
## + V23_J2_1	1	22.27	3218.2	-2077.22
## + V12_1_2_J1_6	1	20.79	3219.6	-2074.83
## + V2_J1_5	1	20.09	3220.3	-2073.70
## + V19_J2_7	1	20.07	3220.4	-2073.67
## + V16_J2_7	1	19.83	3220.6	-2073.29
## + V14_J1_2	1	19.68	3220.7	-2073.04
## + V19_J1_3	1	19.29	3221.1	-2072.40
## + V15_J1_5	1	18.85	3221.6	-2071.71
## + V29_J1_5	1	18.28	3222.1	-2070.78
## + V26_J1_5	1	17.29	3223.1	-2069.18
## + V1_J1_5	1	17.22	3223.2	-2069.07
## + V29_J1_7	1	17.06	3223.4	-2068.81
## + V3_J1_3	1	17.02	3223.4	-2068.75
## + V30_J2_5	1	16.94	3223.5	-2068.62
## + V14_J2_2	1	16.82	3223.6	-2068.42
## + V4_J1_4	1	16.58	3223.9	-2068.03
## + V24_J2_5	1	16.50	3223.9	-2067.91
## + V19_J2_5	1	15.74	3224.7	-2066.68
## + V15_J1_6	1	15.71	3224.7	-2066.63
## + V30_J1_5	1	15.58	3224.8	-2066.42
## + V12_1_2_J1_2	1	15.40	3225.0	-2066.14
## + V13_2_J1_3	1	15.36	3225.1	-2066.06
## + V15_J2_5	1	15.12	3225.3	-2065.69
## + V23_J2_3	1	14.49	3225.9	-2064.67
## + V19_J2_4	1	13.71	3226.7	-2063.41
## + V5_J1_4	1	13.70	3226.7	-2063.39
## + V13_3_J1_2	1	13.69	3226.7	-2063.38
## + V13_2_J1_2	1	13.10	3227.3	-2062.42
## + V23_J2_7	1	12.90	3227.5	-2062.10
## + V29_J1_1	1	12.73	3227.7	-2061.83
## + V12_1_2_J2_7	1	12.70	3227.7	-2061.78
## + V2_J2_7	1	12.58	3227.8	-2061.59
## + V13_2_J1_4	1	12.35	3228.1	-2061.22
## + V20_J1_2	1	12.18	3228.2	-2060.95
## + V14_J2_4	1	12.10	3228.3	-2060.82
## + V14_J2_7	1	11.88	3228.5	-2060.46
## + V4_J1_5	1	11.85	3228.6	-2060.41
## + V29_J2_3	1	11.72	3228.7	-2060.20
## + V24_J2_3	1	11.54	3228.9	-2059.92
## + V24_J1_1	1	11.42	3229.0	-2059.72
## + V20_J2_1	1	10.81	3229.6	-2058.74
## + V13_3_J1_3	1	10.79	3229.6	-2058.71
## + V20_J1_4	1	10.69	3229.7	-2058.55
## + V16_J2_4	1	10.58	3229.8	-2058.36
## + V4_J2_7	1	10.54	3229.9	-2058.30

## + V20_J2_3	1	10.44	3230.0	-2058.15
## + V12_1_2_J1_5	1	10.27	3230.2	-2057.87
## + V12_1_2_J2_3	1	10.02	3230.4	-2057.46
## + V15_J1_4	1	9.73	3230.7	-2057.00
## + V19_J2_2	1	8.91	3231.5	-2055.69
## + V29_J1_4	1	8.84	3231.6	-2055.57
## + V26_J1_6	1	8.27	3232.2	-2054.64
## + V17_J1_4	1	8.15	3232.3	-2054.45
## + V2_J1_4	1	7.81	3232.6	-2053.91
## + V19_J1_6	1	7.71	3232.7	-2053.75
## + V29_J1_6	1	7.68	3232.7	-2053.70
## + V12_1_2_J1_3	1	7.58	3232.8	-2053.54
## + V20_J2_7	1	7.52	3232.9	-2053.45
## + V14_J1_7	1	7.25	3233.2	-2053.01
## + V13_3_J1_6	1	7.25	3233.2	-2053.00
## + V19_J1_2	1	6.97	3233.5	-2052.57
## + V12_1_2_J2_5	1	6.93	3233.5	-2052.50
## + V13_2_J1_5	1	6.85	3233.6	-2052.36
## + V13_3_J2_5	1	6.75	3233.7	-2052.20
## + V2_J2_1	1	6.68	3233.7	-2052.09
## + V1_J1_4	1	6.64	3233.8	-2052.03
## + V17_J2_3	1	6.60	3233.8	-2051.96
## + V29_J2_1	1	6.44	3234.0	-2051.70
## + V15_J2_4	1	6.42	3234.0	-2051.68
## + V14_J1_1	1	6.42	3234.0	-2051.67
## + V26_J2_7	1	6.37	3234.1	-2051.60
## + V5_J1_7	1	6.34	3234.1	-2051.55
## + V13_1_J2_4	1	6.34	3234.1	-2051.54
## + V1_J2_5	1	6.27	3234.2	-2051.43
## + V19_J1_7	1	6.08	3234.3	-2051.13
## + V1_J1_1	1	5.92	3234.5	-2050.87
## + V20_J1_6	1	5.91	3234.5	-2050.85
## + V4_J1_6	1	5.81	3234.6	-2050.70
## + V29_J1_3	1	5.75	3234.7	-2050.59
## + V30_J2_4	1	5.70	3234.7	-2050.52
## + V29_J1_2	1	5.54	3234.9	-2050.25
## + V13_1_J1_5	1	5.20	3235.2	-2049.71
## + V13_2_J2_7	1	5.06	3235.4	-2049.49
## + V24_J1_6	1	4.76	3235.7	-2049.00
## + V23_J2_4	1	4.71	3235.7	-2048.93
## + V13_2_J2_5	1	4.71	3235.7	-2048.93
## + V4_J2_2	1	4.61	3235.8	-2048.76
## + V13_1_J2_2	1	4.56	3235.9	-2048.68
## + V2_J2_5	1	4.47	3236.0	-2048.55
## + V12_1_2_J2_4	1	4.31	3236.1	-2048.28
## + V26_J1_1	1	4.30	3236.1	-2048.26
## + V30_J1_7	1	4.23	3236.2	-2048.15
## + V3_J2_7	1	4.23	3236.2	-2048.15
## <none>			3240.4	-2048.00
## + V13_2_J1_1	1	4.09	3236.3	-2047.93
## + V23_J2_5	1	4.00	3236.4	-2047.78
## + V16_J1_4	1	4.00	3236.4	-2047.78
## + V4_J1_2	1	3.92	3236.5	-2047.65
## + V24_J1_2	1	3.71	3236.7	-2047.32

## + V4_J1_7	1	3.69	3236.7	-2047.29
## + V20_J1_5	1	3.66	3236.8	-2047.24
## + V24_J1_7	1	3.64	3236.8	-2047.20
## + V14_J1_6	1	3.52	3236.9	-2047.01
## + V26_J1_3	1	3.51	3236.9	-2046.99
## + V16_J1_5	1	3.38	3237.1	-2046.78
## + V13_1_J1_4	1	3.37	3237.1	-2046.77
## + V15_J1_2	1	3.36	3237.1	-2046.76
## + V2_J1_6	1	3.35	3237.1	-2046.74
## + V30_J2_7	1	3.35	3237.1	-2046.74
## + V12_1_2_J2_1	1	3.27	3237.2	-2046.61
## + V2_J2_3	1	3.05	3237.4	-2046.26
## + V13_1_J2_3	1	2.97	3237.5	-2046.13
## + V13_3_J2_7	1	2.93	3237.5	-2046.07
## + V16_J2_3	1	2.90	3237.5	-2046.02
## + V24_J1_5	1	2.89	3237.5	-2046.00
## + V30_J2_3	1	2.86	3237.6	-2045.95
## + V14_J2_1	1	2.82	3237.6	-2045.88
## + V13_1_J2_1	1	2.71	3237.7	-2045.71
## + V16_J2_5	1	2.64	3237.8	-2045.60
## + V13_3_J2_2	1	2.53	3237.9	-2045.42
## + V14_J2_5	1	2.38	3238.1	-2045.18
## + V5_J1_1	1	2.37	3238.1	-2045.17
## + V24_J2_7	1	2.30	3238.1	-2045.06
## + V13_3_J1_4	1	2.22	3238.2	-2044.92
## + V1_J2_4	1	2.19	3238.2	-2044.87
## + V30_J1_4	1	2.17	3238.3	-2044.85
## + V20_J1_7	1	2.14	3238.3	-2044.79
## + V5_J2_2	1	2.09	3238.3	-2044.71
## + V13_1_J2_5	1	2.09	3238.3	-2044.71
## + V15_J1_1	1	2.06	3238.4	-2044.66
## + V2_J2_4	1	1.92	3238.5	-2044.44
## + V24_J1_3	1	1.68	3238.7	-2044.05
## + V23_J1_7	1	1.67	3238.8	-2044.05
## + V1_J1_7	1	1.66	3238.8	-2044.03
## + V17_J1_7	1	1.66	3238.8	-2044.03
## + V29_J2_2	1	1.55	3238.9	-2043.85
## + V13_1_J1_1	1	1.51	3238.9	-2043.78
## + V26_J1_7	1	1.46	3239.0	-2043.70
## + V16_J1_2	1	1.45	3239.0	-2043.69
## + V4_J1_3	1	1.45	3239.0	-2043.69
## + V29_J2_7	1	1.44	3239.0	-2043.68
## + V16_J1_6	1	1.39	3239.0	-2043.59
## + V16_J1_7	1	1.33	3239.1	-2043.50
## + V13_3_J1_7	1	1.33	3239.1	-2043.49
## + V13_3_J2_4	1	1.29	3239.1	-2043.44
## + V4_J1_1	1	1.20	3239.2	-2043.28
## + V23_J1_5	1	1.15	3239.3	-2043.21
## + V13_3_J2_3	1	1.14	3239.3	-2043.19
## + V30_J2_1	1	1.13	3239.3	-2043.17
## + V3_J1_2	1	1.12	3239.3	-2043.16
## + V13_2_J1_6	1	1.07	3239.4	-2043.07
## + V23_J2_2	1	1.06	3239.4	-2043.07
## + V1_J2_1	1	0.86	3239.6	-2042.74

## + V15_J2_1	1	0.85	3239.6	-2042.73
## + V12_1_2_J1_1	1	0.83	3239.6	-2042.69
## + V3_J1_7	1	0.82	3239.6	-2042.68
## + V24_J1_4	1	0.80	3239.6	-2042.64
## + V16_J1_1	1	0.77	3239.7	-2042.60
## + V1_J2_3	1	0.68	3239.7	-2042.46
## + V24_J2_2	1	0.60	3239.8	-2042.33
## + V17_J2_5	1	0.59	3239.8	-2042.30
## + V2_J1_7	1	0.55	3239.9	-2042.24
## + V2_J1_1	1	0.49	3239.9	-2042.15
## + V17_J2_4	1	0.48	3239.9	-2042.13
## + V26_J2_2	1	0.45	3240.0	-2042.09
## + V20_J2_5	1	0.43	3240.0	-2042.05
## + V23_J1_1	1	0.40	3240.0	-2042.00
## + V24_J2_4	1	0.32	3240.1	-2041.87
## + V5_J1_6	1	0.26	3240.2	-2041.78
## + V13_1_J1_6	1	0.26	3240.2	-2041.78
## + V13_3_J1_1	1	0.25	3240.2	-2041.76
## + V29_J2_4	1	0.24	3240.2	-2041.75
## + V23_J1_4	1	0.24	3240.2	-2041.75
## + V2_J1_2	1	0.24	3240.2	-2041.74
## + V23_J1_6	1	0.22	3240.2	-2041.71
## + V13_1_J2_7	1	0.20	3240.2	-2041.69
## + V15_J2_3	1	0.20	3240.2	-2041.69
## + V13_3_J2_1	1	0.20	3240.2	-2041.69
## + V16_J2_1	1	0.16	3240.3	-2041.62
## + V17_J1_2	1	0.16	3240.3	-2041.61
## + V1_J1_6	1	0.14	3240.3	-2041.59
## + V3_J1_6	1	0.14	3240.3	-2041.59
## + V3_J1_1	1	0.12	3240.3	-2041.55
## + V13_2_J2_4	1	0.11	3240.3	-2041.54
## + V17_J2_1	1	0.11	3240.3	-2041.54
## + V17_J1_6	1	0.10	3240.3	-2041.53
## + V23_J1_2	1	0.10	3240.3	-2041.51
## + V20_J1_1	1	0.09	3240.3	-2041.50
## + V13_2_J2_2	1	0.07	3240.4	-2041.47
## + V26_J1_2	1	0.07	3240.4	-2041.47
## + V13_2_J2_3	1	0.03	3240.4	-2041.42
## + V13_3_J1_5	1	0.03	3240.4	-2041.41
## + V17_J1_1	1	0.02	3240.4	-2041.40
## + V5_J1_2	1	0.02	3240.4	-2041.40
## + V29_J2_5	1	0.01	3240.4	-2041.38
## + V20_J2_4	1	0.01	3240.4	-2041.38
## + V24_J2_1	1	0.01	3240.4	-2041.37
## + V13_2_J2_1	1	0.00	3240.4	-2041.36
## + V3_J2_2	1	0.00	3240.4	-2041.36
## + V19_J1_1	1	0.00	3240.4	-2041.36
## + V1_J1_2	1	0.00	3240.4	-2041.36
## - V3_J1_4	1	58.56	3299.0	-1961.50
## - V12_1_2_J1_4	1	62.28	3302.7	-1955.63
## - V17_J2_2	1	62.90	3303.3	-1954.66
## - V1_J2_7	1	63.04	3303.5	-1954.44
## - V13_2_J1_7	1	63.89	3304.3	-1953.11
## - V1_J2_2	1	67.51	3307.9	-1947.41

```

## - V4_J2_3      1      69.78 3310.2 -1943.85
## - V4_J2_5      1      71.93 3312.4 -1940.47
## - V5_J1_5      1      72.84 3313.3 -1939.03
## - V15_J2_2     1      73.17 3313.6 -1938.52
## - V15_J1_3     1      73.71 3314.1 -1937.67
## - V4_J2_1      1      77.48 3317.9 -1931.76
## - V19_J1_5     1      84.27 3324.7 -1921.13
## - V15_J2_7     1      95.84 3336.3 -1903.06
## - V3_J2_1      1      96.39 3336.8 -1902.21
## - V19_J1_4     1     103.68 3344.1 -1890.86
## - V4_J2_4      1     105.39 3345.8 -1888.20
## - V26_J2_1     1     108.09 3348.5 -1884.01
## - V3_J2_5      1     121.30 3361.7 -1863.53
## - V30_J2_2     1     135.79 3376.2 -1841.17
## - V26_J2_4     1     148.36 3388.8 -1821.84
## - V26_J2_5     1     154.36 3394.8 -1812.65
## - V3_J2_3      1     164.24 3404.7 -1797.53
## - V12_1_2_J2_2 1     167.69 3408.1 -1792.26
## - V3_J2_4      1     173.14 3413.6 -1783.96
## - V5_J2_5      1     218.96 3459.4 -1714.62
## - V5_J2_4      1     241.35 3481.8 -1681.07
## - V20_J2_2     1     272.51 3512.9 -1634.74
## - V26_J2_3     1     297.11 3537.5 -1598.45
## - V16_J2_2     1     425.74 3666.2 -1412.73
## - V            19    1255.14 4495.6 -471.65
## - J            12    1562.10 4802.5  -81.74
##
## Step:  AIC=-2128.88
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##      V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##      V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##      V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
##      V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
##      V4_J2_5 + V4_J2_3 + V19_J2_3
##
##              Df Sum of Sq    RSS      AIC
## + V5_J2_3      1      51.81 3134.5 -2207.48
## + V17_J2_7      1      47.67 3138.7 -2200.62
## + V30_J1_3      1      45.78 3140.6 -2197.49
## + V17_J1_3      1      44.40 3142.0 -2195.20
## + V2_J1_3       1      42.64 3143.7 -2192.29
## + V23_J1_3      1      42.23 3144.1 -2191.62
## + V13_1_J1_3    1      41.41 3144.9 -2190.27
## + V14_J1_5      1      41.29 3145.1 -2190.06
## + V5_J1_3       1      41.26 3145.1 -2190.02
## + V30_J1_1      1      37.79 3148.6 -2184.28
## + V14_J1_4      1      36.71 3149.6 -2182.50
## + V1_J1_3       1      34.37 3152.0 -2178.63
## + V2_J2_2       1      34.06 3152.3 -2178.13
## + V5_J2_1       1      31.90 3154.5 -2174.55
## + V3_J1_5       1      31.87 3154.5 -2174.51
## + V26_J1_4      1      30.59 3155.8 -2172.40
## + V19_J2_1      1      30.47 3155.9 -2172.20
## + V15_J1_7      1      27.96 3158.4 -2168.06

```

## + V17_J1_5	1	27.78	3158.6	-2167.78
## + V14_J2_3	1	27.53	3158.8	-2167.36
## + V20_J1_3	1	26.87	3159.5	-2166.28
## + V13_1_J1_2	1	24.78	3161.6	-2162.84
## + V30_J1_6	1	24.63	3161.7	-2162.59
## + V5_J2_7	1	24.41	3161.9	-2162.24
## + V12_1_2_J1_7	1	24.36	3162.0	-2162.15
## + V16_J1_3	1	23.94	3162.4	-2161.46
## + V14_J1_3	1	23.92	3162.4	-2161.42
## + V30_J1_2	1	23.30	3163.0	-2160.40
## + V13_1_J1_7	1	22.89	3163.5	-2159.73
## + V23_J2_1	1	22.66	3163.7	-2159.36
## + V19_J2_5	1	22.36	3164.0	-2158.86
## + V12_1_2_J1_6	1	20.36	3166.0	-2155.58
## + V2_J1_5	1	20.12	3166.2	-2155.18
## + V14_J1_2	1	20.04	3166.3	-2155.05
## + V19_J2_4	1	19.92	3166.4	-2154.85
## + V16_J2_7	1	19.37	3167.0	-2153.94
## + V15_J1_5	1	18.69	3167.7	-2152.83
## + V29_J1_5	1	18.31	3168.0	-2152.21
## + V26_J1_5	1	17.57	3168.8	-2151.00
## + V14_J2_2	1	17.38	3169.0	-2150.68
## + V30_J2_5	1	17.36	3169.0	-2150.65
## + V1_J1_5	1	17.33	3169.0	-2150.60
## + V3_J1_3	1	17.05	3169.3	-2150.14
## + V4_J1_4	1	16.88	3169.5	-2149.85
## + V29_J1_7	1	16.70	3169.6	-2149.57
## + V15_J1_6	1	16.17	3170.2	-2148.69
## + V24_J2_5	1	16.14	3170.2	-2148.64
## + V12_1_2_J1_2	1	15.78	3170.6	-2148.06
## + V13_2_J1_3	1	15.73	3170.6	-2147.98
## + V30_J1_5	1	15.65	3170.7	-2147.84
## + V15_J2_5	1	14.65	3171.7	-2146.20
## + V19_J2_7	1	14.18	3172.2	-2145.44
## + V20_J2_3	1	13.65	3172.7	-2144.57
## + V5_J1_4	1	13.63	3172.7	-2144.52
## + V19_J1_3	1	13.51	3172.8	-2144.33
## + V13_3_J1_2	1	13.39	3173.0	-2144.14
## + V13_2_J1_2	1	12.78	3173.6	-2143.13
## + V23_J2_7	1	12.56	3173.8	-2142.78
## + V29_J1_1	1	12.44	3173.9	-2142.58
## + V13_2_J1_4	1	12.38	3174.0	-2142.49
## + V12_1_2_J2_7	1	12.32	3174.0	-2142.39
## + V2_J2_7	1	12.25	3174.1	-2142.27
## + V14_J2_7	1	12.21	3174.1	-2142.20
## + V4_J1_5	1	12.09	3174.3	-2142.00
## + V20_J1_2	1	11.86	3174.5	-2141.63
## + V14_J2_4	1	11.79	3174.6	-2141.52
## + V23_J2_3	1	11.24	3175.1	-2140.62
## + V24_J1_1	1	11.15	3175.2	-2140.46
## + V13_3_J1_3	1	11.09	3175.3	-2140.36
## + V16_J2_4	1	10.91	3175.4	-2140.08
## + V20_J1_4	1	10.73	3175.6	-2139.79
## + V20_J2_1	1	10.50	3175.8	-2139.41

## + V4_J2_7	1	10.47	3175.9	-2139.35
## + V12_1_2_J1_5	1	10.33	3176.0	-2139.13
## + V15_J1_4	1	9.62	3176.7	-2137.97
## + V29_J1_4	1	8.85	3177.5	-2136.70
## + V29_J2_3	1	8.82	3177.5	-2136.65
## + V24_J2_3	1	8.66	3177.7	-2136.39
## + V26_J1_6	1	8.29	3178.1	-2135.79
## + V17_J1_4	1	8.18	3178.2	-2135.62
## + V20_J2_7	1	7.81	3178.5	-2135.01
## + V2_J1_4	1	7.81	3178.5	-2135.01
## + V14_J1_7	1	7.49	3178.9	-2134.48
## + V29_J1_6	1	7.46	3178.9	-2134.42
## + V12_1_2_J2_3	1	7.36	3179.0	-2134.26
## + V12_1_2_J1_3	1	7.30	3179.0	-2134.17
## + V12_1_2_J2_5	1	7.21	3179.1	-2134.02
## + V13_3_J1_6	1	7.03	3179.3	-2133.72
## + V13_3_J2_5	1	6.98	3179.4	-2133.65
## + V2_J2_1	1	6.90	3179.4	-2133.51
## + V13_2_J1_5	1	6.81	3179.5	-2133.37
## + V1_J1_4	1	6.70	3179.6	-2133.18
## + V29_J2_1	1	6.65	3179.7	-2133.11
## + V14_J1_1	1	6.63	3179.7	-2133.07
## + V5_J1_7	1	6.61	3179.7	-2133.05
## + V13_1_J2_4	1	6.57	3179.8	-2132.97
## + V26_J2_7	1	6.43	3179.9	-2132.74
## + V15_J2_4	1	6.11	3180.2	-2132.23
## + V1_J2_5	1	5.99	3180.4	-2132.03
## + V4_J1_6	1	5.83	3180.5	-2131.77
## + V20_J1_6	1	5.69	3180.7	-2131.53
## + V1_J1_1	1	5.67	3180.7	-2131.51
## + V29_J1_3	1	5.54	3180.8	-2131.29
## + V30_J2_4	1	5.46	3180.9	-2131.16
## + V29_J1_2	1	5.35	3181.0	-2130.97
## + V13_2_J2_7	1	5.29	3181.1	-2130.89
## + V13_1_J1_5	1	5.18	3181.2	-2130.71
## + V19_J2_2	1	5.18	3181.2	-2130.70
## + V24_J1_6	1	4.94	3181.4	-2130.31
## + V23_J2_4	1	4.91	3181.4	-2130.26
## + V4_J2_2	1	4.75	3181.6	-2129.99
## + V16_J2_3	1	4.69	3181.7	-2129.89
## + V2_J2_5	1	4.67	3181.7	-2129.86
## + V12_1_2_J2_4	1	4.52	3181.8	-2129.63
## + V13_2_J2_5	1	4.50	3181.8	-2129.59
## + V17_J2_3	1	4.48	3181.9	-2129.56
## + V26_J1_1	1	4.32	3182.0	-2129.29
## + V13_1_J2_2	1	4.27	3182.1	-2129.22
## + V3_J2_7	1	4.25	3182.1	-2129.18
## + V19_J1_6	1	4.21	3182.1	-2129.11
## + V23_J2_5	1	4.18	3182.2	-2129.07
## <none>		3186.3	-2128.88	
## + V30_J1_7	1	4.03	3182.3	-2128.82
## + V16_J1_4	1	4.02	3182.3	-2128.81
## + V4_J1_2	1	3.93	3182.4	-2128.67
## + V13_2_J1_1	1	3.91	3182.4	-2128.63

## + V24_J1_7	1	3.81	3182.5	-2128.46
## + V4_J1_7	1	3.72	3182.6	-2128.32
## + V20_J1_5	1	3.70	3182.6	-2128.28
## + V14_J1_6	1	3.68	3182.7	-2128.24
## + V19_J1_2	1	3.66	3182.7	-2128.22
## + V15_J1_2	1	3.58	3182.8	-2128.08
## + V24_J1_2	1	3.56	3182.8	-2128.05
## + V26_J1_3	1	3.53	3182.8	-2128.01
## + V2_J1_6	1	3.50	3182.8	-2127.96
## + V12_1_2_J2_1	1	3.44	3182.9	-2127.86
## + V16_J1_5	1	3.41	3182.9	-2127.80
## + V13_1_J1_4	1	3.37	3183.0	-2127.74
## + V30_J2_7	1	3.16	3183.2	-2127.40
## + V13_3_J2_7	1	3.10	3183.3	-2127.29
## + V19_J1_7	1	3.03	3183.3	-2127.18
## + V24_J1_5	1	2.88	3183.5	-2126.94
## + V13_1_J2_1	1	2.85	3183.5	-2126.90
## + V16_J2_5	1	2.81	3183.5	-2126.83
## + V14_J2_1	1	2.68	3183.7	-2126.61
## + V5_J1_1	1	2.53	3183.8	-2126.38
## + V24_J2_7	1	2.45	3183.9	-2126.24
## + V1_J2_4	1	2.36	3184.0	-2126.09
## + V5_J2_2	1	2.32	3184.0	-2126.03
## + V13_3_J2_2	1	2.32	3184.0	-2126.03
## + V14_J2_5	1	2.24	3184.1	-2125.90
## + V15_J1_1	1	2.22	3184.1	-2125.87
## + V13_1_J2_5	1	2.22	3184.1	-2125.87
## + V13_3_J1_4	1	2.22	3184.1	-2125.86
## + V30_J1_4	1	2.15	3184.2	-2125.76
## + V2_J2_4	1	2.04	3184.3	-2125.58
## + V20_J1_7	1	2.00	3184.3	-2125.50
## + V1_J1_7	1	1.81	3184.5	-2125.19
## + V24_J1_3	1	1.79	3184.6	-2125.17
## + V17_J1_7	1	1.79	3184.6	-2125.16
## + V29_J2_2	1	1.73	3184.6	-2125.06
## + V2_J2_3	1	1.66	3184.7	-2124.96
## + V13_1_J2_3	1	1.60	3184.7	-2124.86
## + V23_J1_7	1	1.56	3184.8	-2124.79
## + V29_J2_7	1	1.56	3184.8	-2124.78
## + V30_J2_3	1	1.53	3184.8	-2124.74
## + V16_J1_6	1	1.50	3184.8	-2124.69
## + V26_J1_7	1	1.47	3184.9	-2124.64
## + V4_J1_3	1	1.47	3184.9	-2124.64
## + V16_J1_7	1	1.45	3184.9	-2124.60
## + V13_1_J1_1	1	1.41	3184.9	-2124.54
## + V16_J1_2	1	1.34	3185.0	-2124.43
## + V13_3_J1_7	1	1.23	3185.1	-2124.25
## + V4_J1_1	1	1.21	3185.1	-2124.21
## + V13_3_J2_4	1	1.19	3185.2	-2124.19
## + V23_J1_5	1	1.16	3185.2	-2124.14
## + V13_2_J1_6	1	1.16	3185.2	-2124.13
## + V3_J1_2	1	1.12	3185.2	-2124.07
## + V30_J2_1	1	1.03	3185.3	-2123.92
## + V15_J2_1	1	0.96	3185.4	-2123.81

## + V1_J2_1	1	0.96	3185.4	-2123.80
## + V23_J2_2	1	0.93	3185.4	-2123.76
## + V16_J1_1	1	0.86	3185.5	-2123.64
## + V3_J1_7	1	0.82	3185.5	-2123.58
## + V24_J1_4	1	0.80	3185.5	-2123.54
## + V12_1_2_J1_1	1	0.74	3185.6	-2123.45
## + V17_J2_5	1	0.67	3185.7	-2123.33
## + V19_J1_1	1	0.55	3185.8	-2123.15
## + V17_J2_4	1	0.55	3185.8	-2123.14
## + V24_J2_2	1	0.50	3185.8	-2123.06
## + V20_J2_5	1	0.50	3185.8	-2123.06
## + V2_J1_7	1	0.48	3185.9	-2123.03
## + V2_J1_1	1	0.44	3185.9	-2122.95
## + V13_2_J2_3	1	0.42	3185.9	-2122.92
## + V26_J2_2	1	0.41	3185.9	-2122.91
## + V13_3_J2_3	1	0.37	3186.0	-2122.85
## + V24_J2_4	1	0.37	3186.0	-2122.85
## + V23_J1_1	1	0.35	3186.0	-2122.81
## + V2_J1_2	1	0.28	3186.1	-2122.69
## + V13_1_J2_7	1	0.25	3186.1	-2122.65
## + V13_3_J2_1	1	0.24	3186.1	-2122.64
## + V23_J1_4	1	0.24	3186.1	-2122.63
## + V13_1_J1_6	1	0.22	3186.1	-2122.60
## + V5_J1_6	1	0.21	3186.1	-2122.59
## + V13_3_J1_1	1	0.21	3186.1	-2122.58
## + V16_J2_1	1	0.20	3186.1	-2122.57
## + V29_J2_4	1	0.20	3186.1	-2122.57
## + V17_J1_2	1	0.19	3186.2	-2122.56
## + V23_J1_6	1	0.18	3186.2	-2122.54
## + V17_J2_1	1	0.15	3186.2	-2122.48
## + V3_J1_6	1	0.14	3186.2	-2122.47
## + V1_J2_3	1	0.14	3186.2	-2122.47
## + V23_J1_2	1	0.12	3186.2	-2122.44
## + V3_J1_1	1	0.12	3186.2	-2122.43
## + V20_J1_1	1	0.11	3186.2	-2122.43
## + V13_2_J2_2	1	0.11	3186.2	-2122.43
## + V1_J1_6	1	0.11	3186.2	-2122.41
## + V13_2_J2_4	1	0.08	3186.3	-2122.38
## + V17_J1_6	1	0.08	3186.3	-2122.36
## + V26_J1_2	1	0.07	3186.3	-2122.35
## + V13_3_J1_5	1	0.03	3186.3	-2122.29
## + V29_J2_5	1	0.03	3186.3	-2122.28
## + V24_J2_1	1	0.01	3186.3	-2122.26
## + V17_J1_1	1	0.01	3186.3	-2122.26
## + V5_J1_2	1	0.01	3186.3	-2122.26
## + V1_J1_2	1	0.00	3186.3	-2122.25
## + V20_J2_4	1	0.00	3186.3	-2122.24
## + V13_2_J2_1	1	0.00	3186.3	-2122.24
## + V3_J2_2	1	0.00	3186.3	-2122.24
## + V15_J2_3	1	0.00	3186.3	-2122.24
## - V19_J2_3	1	54.08	3240.4	-2048.00
## - V3_J1_4	1	59.09	3245.4	-2039.97
## - V17_J2_2	1	61.90	3248.2	-2035.46
## - V12_1_2_J1_4	1	62.19	3248.5	-2035.00

```

## - V1_J2_7      1      62.25 3248.6 -2034.90
## - V13_2_J1_7   1      63.23 3249.6 -2033.33
## - V1_J2_2      1      66.41 3252.8 -2028.24
## - V4_J2_5      1      71.81 3258.2 -2019.62
## - V5_J1_5      1      72.66 3259.0 -2018.26
## - V15_J2_2     1      74.39 3260.7 -2015.51
## - V15_J1_3     1      74.60 3260.9 -2015.17
## - V4_J2_3      1      76.83 3263.2 -2011.61
## - V4_J2_1      1      77.40 3263.7 -2010.71
## - V19_J1_5     1      96.23 3282.6 -1980.80
## - V3_J2_1      1      96.38 3282.7 -1980.56
## - V15_J2_7     1      96.91 3283.3 -1979.72
## - V4_J2_4      1     105.24 3291.6 -1966.53
## - V26_J2_1     1     108.00 3294.3 -1962.18
## - V19_J1_4     1     116.83 3303.2 -1948.25
## - V3_J2_5      1     121.23 3307.6 -1941.34
## - V30_J2_2     1     134.32 3320.7 -1920.81
## - V26_J2_4     1     148.19 3334.5 -1899.13
## - V26_J2_5     1     154.18 3340.5 -1889.79
## - V12_1_2_J2_2 1     166.05 3352.4 -1871.35
## - V3_J2_4      1     173.06 3359.4 -1860.49
## - V3_J2_3      1     174.80 3361.1 -1857.79
## - V5_J2_5      1     217.58 3403.9 -1792.03
## - V5_J2_4      1     239.90 3426.2 -1758.05
## - V20_J2_2     1     270.41 3456.8 -1711.93
## - V26_J2_3     1     310.96 3497.3 -1651.30
## - V16_J2_2     1     423.11 3609.5 -1487.16
## - V            19    1255.46 4441.8 -527.57
## - J            12    1578.43 4764.8 -116.14
##
## Step:  AIC=-2207.48
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##      V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##      V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##      V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
##      V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
##      V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3
##
##      Df Sum of Sq    RSS      AIC
## + V17_J2_7      1      46.83 3087.7 -2279.12
## + V30_J1_3      1      45.00 3089.5 -2276.05
## + V17_J1_3      1      43.63 3090.9 -2273.74
## + V5_J2_1       1      42.14 3092.4 -2271.24
## + V13_1_J1_3    1      42.07 3092.5 -2271.12
## + V2_J1_3       1      41.97 3092.6 -2270.95
## + V23_J1_3      1      41.57 3093.0 -2270.27
## + V14_J1_5      1      41.24 3093.3 -2269.71
## + V30_J1_1      1      38.46 3096.1 -2265.05
## + V14_J1_4      1      36.09 3098.5 -2261.06
## + V1_J1_3       1      33.63 3100.9 -2256.93
## + V2_J2_2       1      33.14 3101.4 -2256.13
## + V14_J2_3      1      32.93 3101.6 -2255.76
## + V3_J1_5       1      32.38 3102.2 -2254.85
## + V5_J1_3       1      32.05 3102.5 -2254.28

```

## + V26_J1_4	1	30.55	3104.0	-2251.78
## + V19_J2_1	1	30.41	3104.1	-2251.54
## + V15_J1_7	1	28.70	3105.8	-2248.68
## + V17_J1_5	1	27.89	3106.6	-2247.33
## + V20_J1_3	1	27.48	3107.1	-2246.63
## + V14_J1_3	1	24.42	3110.1	-2241.52
## + V13_1_J1_2	1	24.31	3110.2	-2241.34
## + V30_J1_6	1	24.10	3110.4	-2240.97
## + V30_J1_2	1	23.83	3110.7	-2240.52
## + V12_1_2_J1_7	1	23.75	3110.8	-2240.39
## + V16_J1_3	1	23.38	3111.2	-2239.78
## + V23_J2_1	1	23.12	3111.4	-2239.34
## + V19_J2_5	1	22.79	3111.8	-2238.79
## + V13_1_J1_7	1	22.41	3112.1	-2238.16
## + V14_J1_2	1	20.47	3114.1	-2234.92
## + V5_J1_4	1	20.42	3114.1	-2234.83
## + V19_J2_4	1	20.32	3114.2	-2234.67
## + V2_J1_5	1	20.15	3114.4	-2234.39
## + V12_1_2_J1_6	1	19.83	3114.7	-2233.85
## + V16_J2_7	1	18.83	3115.7	-2232.18
## + V15_J1_5	1	18.49	3116.0	-2231.62
## + V29_J1_5	1	18.34	3116.2	-2231.37
## + V14_J2_2	1	18.05	3116.5	-2230.88
## + V26_J1_5	1	17.95	3116.6	-2230.71
## + V1_J1_5	1	17.47	3117.1	-2229.91
## + V20_J2_3	1	17.45	3117.1	-2229.88
## + V5_J2_7	1	17.40	3117.1	-2229.80
## + V30_J2_5	1	17.40	3117.1	-2229.79
## + V3_J1_3	1	17.08	3117.5	-2229.25
## + V4_J1_4	1	16.85	3117.7	-2228.87
## + V15_J1_6	1	16.71	3117.8	-2228.64
## + V29_J1_7	1	16.30	3118.2	-2227.95
## + V12_1_2_J1_2	1	16.26	3118.3	-2227.89
## + V13_2_J1_3	1	16.18	3118.4	-2227.75
## + V24_J2_5	1	16.15	3118.4	-2227.71
## + V30_J1_5	1	15.73	3118.8	-2227.01
## + V15_J2_5	1	14.52	3120.0	-2224.99
## + V19_J2_7	1	14.28	3120.3	-2224.59
## + V19_J1_3	1	13.58	3121.0	-2223.42
## + V13_3_J1_2	1	13.05	3121.5	-2222.54
## + V13_2_J1_4	1	12.78	3121.8	-2222.09
## + V14_J2_7	1	12.60	3121.9	-2221.78
## + V13_2_J1_2	1	12.41	3122.1	-2221.47
## + V4_J1_5	1	12.40	3122.1	-2221.46
## + V23_J2_7	1	12.18	3122.4	-2221.09
## + V29_J1_1	1	12.11	3122.4	-2220.97
## + V2_J2_7	1	11.87	3122.7	-2220.57
## + V12_1_2_J2_7	1	11.86	3122.7	-2220.55
## + V14_J2_4	1	11.81	3122.7	-2220.47
## + V20_J1_2	1	11.49	3123.1	-2219.94
## + V13_3_J1_3	1	11.43	3123.1	-2219.84
## + V20_J1_4	1	11.12	3123.4	-2219.33
## + V16_J2_4	1	10.94	3123.6	-2219.03
## + V24_J1_1	1	10.83	3123.7	-2218.85

## + V12_1_2_J1_5	1	10.43	3124.1	-2218.18
## + V4_J2_7	1	10.42	3124.1	-2218.17
## + V20_J2_1	1	10.15	3124.4	-2217.72
## + V15_J1_4	1	9.19	3125.4	-2216.12
## + V29_J1_4	1	9.16	3125.4	-2216.06
## + V17_J1_4	1	8.52	3126.0	-2215.00
## + V23_J2_3	1	8.30	3126.2	-2214.63
## + V26_J1_6	1	8.29	3126.3	-2214.62
## + V20_J2_7	1	8.16	3126.4	-2214.41
## + V2_J1_4	1	8.11	3126.4	-2214.31
## + V14_J1_7	1	7.77	3126.8	-2213.75
## + V12_1_2_J2_5	1	7.26	3127.3	-2212.91
## + V29_J1_6	1	7.20	3127.3	-2212.80
## + V2_J2_1	1	7.15	3127.4	-2212.72
## + V1_J1_4	1	7.03	3127.5	-2212.53
## + V16_J2_3	1	6.99	3127.5	-2212.46
## + V13_3_J2_5	1	6.97	3127.6	-2212.43
## + V12_1_2_J1_3	1	6.97	3127.6	-2212.42
## + V29_J2_1	1	6.90	3127.6	-2212.30
## + V14_J1_1	1	6.87	3127.7	-2212.26
## + V13_3_J1_6	1	6.78	3127.8	-2212.10
## + V13_2_J1_5	1	6.77	3127.8	-2212.09
## + V13_1_J2_4	1	6.56	3128.0	-2211.74
## + V26_J2_7	1	6.46	3128.1	-2211.58
## + V29_J2_3	1	6.23	3128.3	-2211.19
## + V24_J2_3	1	6.10	3128.4	-2210.98
## + V15_J2_4	1	6.03	3128.5	-2210.86
## + V1_J2_5	1	5.94	3128.6	-2210.71
## + V4_J1_6	1	5.83	3128.7	-2210.53
## + V13_2_J2_7	1	5.57	3129.0	-2210.09
## + V30_J2_4	1	5.44	3129.1	-2209.88
## + V20_J1_6	1	5.43	3129.1	-2209.86
## + V1_J1_1	1	5.39	3129.1	-2209.80
## + V19_J2_2	1	5.35	3129.2	-2209.73
## + V29_J1_3	1	5.30	3129.2	-2209.65
## + V13_1_J1_5	1	5.17	3129.4	-2209.42
## + V24_J1_6	1	5.15	3129.4	-2209.40
## + V29_J1_2	1	5.13	3129.4	-2209.36
## + V12_1_2_J2_3	1	5.05	3129.5	-2209.23
## + V23_J2_4	1	4.90	3129.6	-2208.98
## + V4_J2_2	1	4.88	3129.7	-2208.96
## + V2_J2_5	1	4.66	3129.9	-2208.58
## + V12_1_2_J2_4	1	4.57	3130.0	-2208.43
## + V13_2_J2_5	1	4.49	3130.0	-2208.30
## + V26_J1_1	1	4.32	3130.2	-2208.01
## + V3_J2_7	1	4.28	3130.3	-2207.95
## + V16_J1_4	1	4.26	3130.3	-2207.92
## + V19_J1_6	1	4.23	3130.3	-2207.87
## + V23_J2_5	1	4.17	3130.4	-2207.77
## + V24_J1_7	1	4.01	3130.5	-2207.50
## <none>			3134.5	-2207.48
## + V13_1_J2_2	1	3.95	3130.6	-2207.41
## + V4_J1_2	1	3.93	3130.6	-2207.37
## + V14_J1_6	1	3.86	3130.7	-2207.26

## + V15_J1_2	1	3.83	3130.7	-2207.21
## + V30_J1_7	1	3.80	3130.7	-2207.16
## + V20_J1_5	1	3.74	3130.8	-2207.05
## + V4_J1_7	1	3.73	3130.8	-2207.04
## + V13_2_J1_1	1	3.71	3130.8	-2207.01
## + V19_J1_2	1	3.68	3130.9	-2206.96
## + V2_J1_6	1	3.68	3130.9	-2206.96
## + V12_1_2_J2_1	1	3.67	3130.9	-2206.94
## + V13_1_J1_4	1	3.56	3131.0	-2206.76
## + V26_J1_3	1	3.55	3131.0	-2206.73
## + V16_J1_5	1	3.45	3131.1	-2206.57
## + V24_J1_2	1	3.38	3131.2	-2206.46
## + V13_3_J2_7	1	3.29	3131.2	-2206.31
## + V5_J1_7	1	3.19	3131.4	-2206.13
## + V19_J1_7	1	3.06	3131.5	-2205.92
## + V13_1_J2_1	1	3.01	3131.5	-2205.85
## + V30_J2_7	1	2.94	3131.6	-2205.73
## + V24_J1_5	1	2.86	3131.7	-2205.60
## + V16_J2_5	1	2.83	3131.7	-2205.54
## + V17_J2_3	1	2.71	3131.8	-2205.35
## + V24_J2_7	1	2.62	3131.9	-2205.20
## + V14_J2_1	1	2.52	3132.0	-2205.04
## + V15_J1_1	1	2.43	3132.1	-2204.88
## + V1_J2_4	1	2.39	3132.2	-2204.81
## + V13_3_J1_4	1	2.38	3132.2	-2204.79
## + V14_J2_5	1	2.25	3132.3	-2204.57
## + V13_1_J2_5	1	2.22	3132.3	-2204.52
## + V13_3_J2_2	1	2.08	3132.5	-2204.31
## + V2_J2_4	1	2.04	3132.5	-2204.23
## + V30_J1_4	1	1.99	3132.6	-2204.14
## + V1_J1_7	1	1.98	3132.6	-2204.13
## + V17_J1_7	1	1.95	3132.6	-2204.08
## + V29_J2_2	1	1.94	3132.6	-2204.07
## + V24_J1_3	1	1.93	3132.6	-2204.05
## + V20_J1_7	1	1.84	3132.7	-2203.90
## + V29_J2_7	1	1.70	3132.8	-2203.66
## + V16_J1_6	1	1.63	3132.9	-2203.56
## + V5_J1_6	1	1.61	3132.9	-2203.52
## + V16_J1_7	1	1.59	3133.0	-2203.48
## + V26_J1_7	1	1.48	3133.1	-2203.30
## + V4_J1_3	1	1.48	3133.1	-2203.30
## + V23_J1_7	1	1.44	3133.1	-2203.24
## + V13_1_J1_1	1	1.30	3133.2	-2203.00
## + V13_2_J1_6	1	1.27	3133.3	-2202.96
## + V13_2_J2_3	1	1.26	3133.3	-2202.94
## + V16_J1_2	1	1.22	3133.3	-2202.87
## + V4_J1_1	1	1.20	3133.3	-2202.85
## + V13_3_J2_4	1	1.20	3133.3	-2202.83
## + V23_J1_5	1	1.17	3133.4	-2202.79
## + V13_3_J1_7	1	1.12	3133.4	-2202.71
## + V3_J1_2	1	1.12	3133.4	-2202.70
## + V15_J2_1	1	1.10	3133.4	-2202.67
## + V1_J2_1	1	1.08	3133.5	-2202.64
## + V16_J1_1	1	0.96	3133.6	-2202.44

## + V30_J2_1	1	0.92	3133.6	-2202.37
## + V24_J1_4	1	0.89	3133.6	-2202.33
## + V3_J1_7	1	0.81	3133.7	-2202.20
## + V5_J1_2	1	0.81	3133.7	-2202.20
## + V23_J2_2	1	0.78	3133.8	-2202.14
## + V17_J2_5	1	0.68	3133.9	-2201.97
## + V2_J2_3	1	0.66	3133.9	-2201.94
## + V12_1_2_J1_1	1	0.64	3133.9	-2201.92
## + V5_J1_1	1	0.63	3133.9	-2201.90
## + V13_1_J2_3	1	0.62	3133.9	-2201.88
## + V30_J2_3	1	0.58	3134.0	-2201.82
## + V5_J2_2	1	0.56	3134.0	-2201.78
## + V17_J2_4	1	0.56	3134.0	-2201.77
## + V19_J1_1	1	0.55	3134.0	-2201.75
## + V20_J2_5	1	0.51	3134.0	-2201.69
## + V2_J1_7	1	0.42	3134.1	-2201.54
## + V24_J2_2	1	0.40	3134.1	-2201.50
## + V2_J1_1	1	0.38	3134.2	-2201.47
## + V26_J2_2	1	0.37	3134.2	-2201.46
## + V24_J2_4	1	0.37	3134.2	-2201.46
## + V2_J1_2	1	0.33	3134.2	-2201.40
## + V13_1_J2_7	1	0.31	3134.2	-2201.36
## + V23_J1_1	1	0.29	3134.2	-2201.34
## + V13_3_J2_1	1	0.29	3134.2	-2201.33
## + V16_J2_1	1	0.26	3134.3	-2201.27
## + V17_J1_2	1	0.24	3134.3	-2201.25
## + V15_J2_3	1	0.22	3134.3	-2201.21
## + V29_J2_4	1	0.20	3134.3	-2201.18
## + V23_J1_4	1	0.19	3134.3	-2201.16
## + V17_J2_1	1	0.19	3134.3	-2201.16
## + V13_2_J2_2	1	0.18	3134.4	-2201.14
## + V13_1_J1_6	1	0.18	3134.4	-2201.14
## + V13_3_J1_1	1	0.17	3134.4	-2201.12
## + V23_J1_2	1	0.16	3134.4	-2201.11
## + V20_J1_1	1	0.15	3134.4	-2201.10
## + V23_J1_6	1	0.14	3134.4	-2201.09
## + V3_J1_6	1	0.14	3134.4	-2201.08
## + V3_J1_1	1	0.12	3134.4	-2201.04
## + V13_2_J2_4	1	0.08	3134.5	-2200.98
## + V1_J1_6	1	0.07	3134.5	-2200.96
## + V26_J1_2	1	0.07	3134.5	-2200.96
## + V17_J1_6	1	0.05	3134.5	-2200.93
## + V13_3_J1_5	1	0.03	3134.5	-2200.90
## + V24_J2_1	1	0.03	3134.5	-2200.89
## + V29_J2_5	1	0.03	3134.5	-2200.89
## + V13_3_J2_3	1	0.02	3134.5	-2200.88
## + V1_J1_2	1	0.01	3134.5	-2200.87
## + V1_J2_3	1	0.01	3134.5	-2200.86
## + V13_2_J2_1	1	0.01	3134.5	-2200.86
## + V3_J2_2	1	0.00	3134.5	-2200.85
## + V17_J1_1	1	0.00	3134.5	-2200.85
## + V20_J2_4	1	0.00	3134.5	-2200.85
## - V5_J2_3	1	51.81	3186.3	-2128.88
## - V3_J1_4	1	59.04	3193.6	-2117.09


```

## - V19_J2_3      1      60.63 3195.2 -2114.49
## - V17_J2_2      1      60.74 3195.3 -2114.31
## - V12_1_2_J1_4  1      61.32 3195.9 -2113.37
## - V1_J2_7       1      61.33 3195.9 -2113.35
## - V13_2_J1_7    1      62.47 3197.0 -2111.50
## - V1_J2_2       1      65.14 3199.7 -2107.17
## - V4_J2_5       1      72.54 3207.1 -2095.16
## - V15_J1_3      1      75.64 3210.2 -2090.13
## - V15_J2_2      1      75.82 3210.4 -2089.83
## - V4_J2_1       1      77.41 3211.9 -2087.26
## - V4_J2_3       1      84.61 3219.1 -2075.62
## - V5_J1_5       1      84.67 3219.2 -2075.52
## - V3_J2_1       1      96.38 3230.9 -2056.64
## - V19_J1_5      1      96.87 3231.4 -2055.84
## - V15_J2_7      1      98.15 3232.7 -2053.79
## - V4_J2_4       1     106.12 3240.7 -2040.98
## - V26_J2_1      1     108.01 3242.5 -2037.96
## - V19_J1_4      1     116.66 3251.2 -2024.10
## - V3_J2_5       1     122.16 3256.7 -2015.31
## - V30_J2_2      1     132.60 3267.1 -1998.66
## - V26_J2_4      1     149.23 3283.8 -1972.26
## - V26_J2_5      1     155.24 3289.8 -1962.75
## - V12_1_2_J2_2  1     164.03 3298.6 -1948.89
## - V3_J2_4       1     174.17 3308.7 -1932.93
## - V3_J2_3       1     186.12 3320.7 -1914.17
## - V5_J2_5       1     237.12 3371.7 -1834.92
## - V5_J2_4       1     260.28 3394.8 -1799.33
## - V20_J2_2      1     267.97 3402.5 -1787.55
## - V26_J2_3      1     325.79 3460.3 -1699.94
## - V16_J2_2      1     420.05 3554.6 -1560.18
## - V              19    1216.95 4351.5 -627.76
## - J              12    1602.46 4737.0 -139.91
##
## Step:  AIC=-2279.12
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##      V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##      V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##      V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
##      V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
##      V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7
##
##
##      Df Sum of Sq  RSS      AIC
## + V17_J1_3      1      52.76 3035.0 -2362.10
## + V30_J1_3      1      44.59 3043.1 -2348.13
## + V13_1_J1_3    1      42.48 3045.2 -2344.52
## + V2_J1_3       1      41.57 3046.1 -2342.97
## + V5_J2_1       1      41.35 3046.4 -2342.59
## + V23_J1_3      1      41.17 3046.5 -2342.29
## + V14_J1_5      1      40.77 3046.9 -2341.59
## + V30_J1_1      1      38.85 3048.9 -2338.32
## + V14_J1_4      1      35.62 3052.1 -2332.81
## + V1_J1_3       1      33.70 3054.0 -2329.55
## + V2_J2_2       1      33.24 3054.5 -2328.76
## + V5_J1_3       1      32.63 3055.1 -2327.73

```

## + V14_J2_3	1	32.37	3055.3	-2327.28
## + V3_J1_5	1	31.64	3056.1	-2326.04
## + V26_J1_4	1	29.89	3057.8	-2323.06
## + V19_J2_1	1	29.81	3057.9	-2322.93
## + V15_J1_7	1	28.64	3059.1	-2320.95
## + V20_J1_3	1	27.80	3059.9	-2319.51
## + V14_J1_3	1	24.73	3063.0	-2314.30
## + V30_J1_2	1	24.13	3063.6	-2313.27
## + V13_1_J1_2	1	24.00	3063.7	-2313.06
## + V30_J1_6	1	23.79	3063.9	-2312.71
## + V23_J2_1	1	23.52	3064.2	-2312.24
## + V12_1_2_J1_7	1	23.39	3064.3	-2312.03
## + V16_J1_3	1	23.09	3064.6	-2311.51
## + V16_J2_7	1	22.63	3065.1	-2310.74
## + V19_J2_5	1	22.24	3065.5	-2310.06
## + V13_1_J1_7	1	22.10	3065.6	-2309.83
## + V17_J1_5	1	21.88	3065.8	-2309.47
## + V14_J1_2	1	20.76	3067.0	-2307.56
## + V2_J1_5	1	20.49	3067.2	-2307.10
## + V5_J1_4	1	19.88	3067.8	-2306.07
## + V19_J2_4	1	19.80	3067.9	-2305.93
## + V12_1_2_J1_6	1	19.52	3068.2	-2305.46
## + V29_J1_5	1	18.66	3069.1	-2304.00
## + V15_J1_5	1	18.51	3069.2	-2303.74
## + V14_J2_2	1	17.99	3069.7	-2302.86
## + V30_J2_5	1	17.77	3069.9	-2302.50
## + V3_J1_3	1	17.58	3070.1	-2302.17
## + V26_J1_5	1	17.47	3070.2	-2301.98
## + V1_J1_5	1	17.46	3070.3	-2301.97
## + V20_J2_3	1	17.05	3070.7	-2301.28
## + V15_J1_6	1	16.65	3071.1	-2300.60
## + V12_1_2_J1_2	1	16.54	3071.2	-2300.41
## + V13_2_J1_3	1	16.45	3071.3	-2300.26
## + V4_J1_4	1	16.35	3071.4	-2300.09
## + V29_J1_7	1	16.03	3071.7	-2299.55
## + V30_J1_5	1	16.02	3071.7	-2299.53
## + V24_J2_5	1	15.79	3071.9	-2299.15
## + V23_J2_7	1	15.24	3072.5	-2298.21
## + V2_J2_7	1	14.89	3072.8	-2297.62
## + V12_1_2_J2_7	1	14.88	3072.8	-2297.60
## + V15_J2_5	1	14.47	3073.2	-2296.91
## + V5_J2_7	1	14.31	3073.4	-2296.64
## + V19_J1_3	1	13.90	3073.8	-2295.95
## + V4_J2_7	1	13.17	3074.5	-2294.71
## + V13_2_J1_4	1	13.09	3074.6	-2294.57
## + V13_3_J1_2	1	12.82	3074.9	-2294.12
## + V13_2_J1_2	1	12.17	3075.5	-2293.01
## + V4_J1_5	1	12.00	3075.7	-2292.73
## + V29_J1_1	1	11.89	3075.8	-2292.54
## + V13_3_J1_3	1	11.64	3076.1	-2292.12
## + V14_J2_4	1	11.50	3076.2	-2291.88
## + V19_J2_7	1	11.46	3076.3	-2291.81
## + V20_J1_4	1	11.38	3076.3	-2291.69
## + V20_J1_2	1	11.28	3076.4	-2291.51

## + V16_J2_4	1	11.24	3076.5	-2291.44
## + V12_1_2_J1_5	1	10.69	3077.0	-2290.52
## + V24_J1_1	1	10.62	3077.1	-2290.40
## + V14_J2_7	1	9.91	3077.8	-2289.19
## + V20_J2_1	1	9.90	3077.8	-2289.17
## + V29_J1_4	1	9.40	3078.3	-2288.33
## + V15_J1_4	1	9.18	3078.5	-2287.97
## + V26_J1_6	1	8.59	3079.1	-2286.97
## + V23_J2_3	1	8.58	3079.1	-2286.95
## + V2_J1_4	1	8.33	3079.4	-2286.53
## + V14_J1_7	1	7.95	3079.8	-2285.89
## + V12_1_2_J2_5	1	7.52	3080.2	-2285.17
## + V2_J2_1	1	7.37	3080.3	-2284.91
## + V13_3_J2_5	1	7.21	3080.5	-2284.64
## + V29_J2_1	1	7.12	3080.6	-2284.48
## + V1_J1_4	1	7.04	3080.7	-2284.36
## + V14_J1_1	1	7.04	3080.7	-2284.35
## + V29_J1_6	1	7.03	3080.7	-2284.33
## + V13_1_J2_4	1	6.79	3080.9	-2283.93
## + V12_1_2_J1_3	1	6.79	3080.9	-2283.92
## + V16_J2_3	1	6.74	3081.0	-2283.84
## + V13_3_J1_6	1	6.62	3081.1	-2283.63
## + V13_2_J1_5	1	6.57	3081.1	-2283.55
## + V29_J2_3	1	6.48	3081.2	-2283.40
## + V24_J2_3	1	6.34	3081.4	-2283.18
## + V4_J1_6	1	6.09	3081.6	-2282.74
## + V20_J2_7	1	6.01	3081.7	-2282.62
## + V15_J2_4	1	6.00	3081.7	-2282.59
## + V1_J2_5	1	5.91	3081.8	-2282.43
## + V1_J1_1	1	5.42	3082.3	-2281.62
## + V19_J2_2	1	5.37	3082.3	-2281.54
## + V17_J1_4	1	5.33	3082.4	-2281.46
## + V24_J1_6	1	5.30	3082.4	-2281.41
## + V20_J1_6	1	5.29	3082.4	-2281.39
## + V12_1_2_J2_3	1	5.29	3082.4	-2281.39
## + V30_J2_4	1	5.24	3082.5	-2281.30
## + V29_J1_3	1	5.16	3082.6	-2281.17
## + V23_J2_4	1	5.10	3082.6	-2281.08
## + V13_1_J1_5	1	5.00	3082.7	-2280.91
## + V29_J1_2	1	4.99	3082.7	-2280.89
## + V4_J2_2	1	4.94	3082.8	-2280.80
## + V2_J2_5	1	4.86	3082.9	-2280.66
## + V12_1_2_J2_4	1	4.78	3082.9	-2280.53
## + V26_J2_7	1	4.63	3083.1	-2280.28
## + V26_J1_1	1	4.54	3083.2	-2280.13
## + V30_J2_7	1	4.53	3083.2	-2280.12
## + V16_J1_4	1	4.42	3083.3	-2279.93
## + V19_J1_6	1	4.41	3083.3	-2279.92
## + V23_J2_5	1	4.36	3083.4	-2279.83
## + V13_2_J2_5	1	4.29	3083.4	-2279.71
## + V4_J1_2	1	4.14	3083.6	-2279.46
## + V24_J1_7	1	4.14	3083.6	-2279.46
## + V14_J1_6	1	3.99	3083.7	-2279.20
## + V13_1_J2_2	1	3.98	3083.7	-2279.19

## + V4_J1_7	1	3.94	3083.8	-2279.12
## <none>			3087.7	-2279.12
## + V20_J1_5	1	3.88	3083.8	-2279.02
## + V19_J1_2	1	3.86	3083.9	-2278.98
## + V12_1_2_J2_1	1	3.84	3083.9	-2278.95
## + V13_2_J2_7	1	3.83	3083.9	-2278.94
## + V15_J1_2	1	3.81	3083.9	-2278.89
## + V2_J1_6	1	3.80	3083.9	-2278.89
## + V26_J1_3	1	3.75	3084.0	-2278.79
## + V13_1_J1_4	1	3.71	3084.0	-2278.74
## + V30_J1_7	1	3.68	3084.0	-2278.67
## + V16_J1_5	1	3.58	3084.1	-2278.52
## + V13_2_J1_1	1	3.58	3084.1	-2278.51
## + V5_J1_7	1	3.38	3084.3	-2278.18
## + V24_J1_2	1	3.27	3084.4	-2277.98
## + V19_J1_7	1	3.22	3084.5	-2277.91
## + V13_1_J2_1	1	3.16	3084.6	-2277.80
## + V16_J2_5	1	2.98	3084.7	-2277.50
## + V3_J2_7	1	2.83	3084.9	-2277.25
## + V24_J1_5	1	2.74	3085.0	-2277.10
## + V13_3_J1_4	1	2.50	3085.2	-2276.69
## + V1_J2_4	1	2.41	3085.3	-2276.54
## + V15_J1_1	1	2.41	3085.3	-2276.53
## + V14_J2_1	1	2.39	3085.3	-2276.51
## + V13_1_J2_5	1	2.35	3085.4	-2276.44
## + V2_J2_4	1	2.17	3085.5	-2276.14
## + V14_J2_5	1	2.11	3085.6	-2276.04
## + V13_3_J2_2	1	2.11	3085.6	-2276.03
## + V24_J1_3	1	2.02	3085.7	-2275.88
## + V13_3_J2_7	1	1.99	3085.7	-2275.83
## + V1_J1_7	1	1.97	3085.7	-2275.79
## + V29_J2_2	1	1.92	3085.8	-2275.71
## + V30_J1_4	1	1.88	3085.8	-2275.64
## + V20_J1_7	1	1.75	3086.0	-2275.43
## + V16_J1_6	1	1.71	3086.0	-2275.37
## + V16_J1_7	1	1.67	3086.0	-2275.30
## + V26_J1_7	1	1.61	3086.1	-2275.20
## + V4_J1_3	1	1.61	3086.1	-2275.18
## + V5_J1_6	1	1.48	3086.2	-2274.98
## + V24_J2_7	1	1.47	3086.2	-2274.96
## + V23_J1_7	1	1.36	3086.4	-2274.78
## + V13_2_J1_6	1	1.35	3086.4	-2274.76
## + V4_J1_1	1	1.32	3086.4	-2274.71
## + V3_J1_2	1	1.25	3086.5	-2274.59
## + V23_J1_5	1	1.25	3086.5	-2274.59
## + V13_1_J1_1	1	1.23	3086.5	-2274.55
## + V16_J1_2	1	1.15	3086.6	-2274.42
## + V13_2_J2_3	1	1.15	3086.6	-2274.41
## + V15_J2_1	1	1.10	3086.6	-2274.34
## + V13_3_J2_4	1	1.10	3086.6	-2274.33
## + V1_J2_1	1	1.09	3086.6	-2274.31
## + V17_J2_3	1	1.07	3086.6	-2274.29
## + V13_3_J1_7	1	1.05	3086.7	-2274.25
## + V16_J1_1	1	1.02	3086.7	-2274.20

## + V24_J1_4	1	0.97	3086.7	-2274.11
## + V30_J2_1	1	0.84	3086.9	-2273.90
## + V29_J2_7	1	0.80	3086.9	-2273.84
## + V23_J2_2	1	0.80	3086.9	-2273.82
## + V2_J2_3	1	0.74	3087.0	-2273.73
## + V17_J1_6	1	0.72	3087.0	-2273.70
## + V5_J1_2	1	0.72	3087.0	-2273.70
## + V5_J1_1	1	0.72	3087.0	-2273.69
## + V3_J1_7	1	0.71	3087.0	-2273.67
## + V13_1_J2_3	1	0.70	3087.0	-2273.66
## + V30_J2_3	1	0.66	3087.1	-2273.59
## + V17_J1_7	1	0.60	3087.1	-2273.49
## + V12_1_2_J1_1	1	0.59	3087.1	-2273.47
## + V5_J2_2	1	0.58	3087.1	-2273.46
## + V20_J2_5	1	0.57	3087.1	-2273.44
## + V19_J1_1	1	0.48	3087.2	-2273.29
## + V17_J1_1	1	0.46	3087.3	-2273.25
## + V24_J2_4	1	0.43	3087.3	-2273.20
## + V24_J2_2	1	0.41	3087.3	-2273.16
## + V2_J1_7	1	0.37	3087.3	-2273.11
## + V2_J1_2	1	0.37	3087.3	-2273.10
## + V26_J2_2	1	0.36	3087.4	-2273.08
## + V13_3_J2_1	1	0.34	3087.4	-2273.05
## + V2_J1_1	1	0.34	3087.4	-2273.05
## + V16_J2_1	1	0.30	3087.4	-2272.98
## + V23_J1_1	1	0.26	3087.5	-2272.92
## + V15_J2_3	1	0.21	3087.5	-2272.83
## + V23_J1_2	1	0.18	3087.5	-2272.79
## + V20_J1_1	1	0.18	3087.5	-2272.78
## + V13_2_J2_2	1	0.17	3087.5	-2272.77
## + V29_J2_4	1	0.16	3087.6	-2272.75
## + V23_J1_4	1	0.16	3087.6	-2272.75
## + V13_1_J1_6	1	0.15	3087.6	-2272.73
## + V13_3_J1_1	1	0.14	3087.6	-2272.72
## + V23_J1_6	1	0.12	3087.6	-2272.68
## + V3_J1_6	1	0.10	3087.6	-2272.65
## + V3_J1_1	1	0.08	3087.6	-2272.62
## + V1_J1_6	1	0.07	3087.6	-2272.60
## + V13_2_J2_4	1	0.06	3087.7	-2272.58
## + V13_3_J1_5	1	0.05	3087.7	-2272.56
## + V24_J2_1	1	0.04	3087.7	-2272.55
## + V26_J1_2	1	0.04	3087.7	-2272.55
## + V17_J2_5	1	0.04	3087.7	-2272.55
## + V29_J2_5	1	0.04	3087.7	-2272.55
## + V17_J2_1	1	0.03	3087.7	-2272.54
## + V13_3_J2_3	1	0.03	3087.7	-2272.54
## + V13_1_J2_7	1	0.02	3087.7	-2272.52
## + V17_J1_2	1	0.02	3087.7	-2272.51
## + V17_J2_4	1	0.02	3087.7	-2272.51
## + V13_2_J2_1	1	0.01	3087.7	-2272.50
## + V1_J1_2	1	0.01	3087.7	-2272.50
## + V1_J2_3	1	0.01	3087.7	-2272.49
## + V3_J2_2	1	0.00	3087.7	-2272.49
## + V20_J2_4	1	0.00	3087.7	-2272.48

```

## - V17_J2_7      1      46.83 3134.5 -2207.48
## - V5_J2_3       1      50.97 3138.7 -2200.62
## - V3_J1_4       1      58.16 3145.9 -2188.72
## - V19_J2_3      1      59.81 3147.5 -2185.98
## - V12_1_2_J1_4  1      60.74 3148.5 -2184.44
## - V13_2_J1_7    1      61.97 3149.7 -2182.42
## - V1_J2_2       1      65.77 3153.5 -2176.15
## - V1_J2_7       1      67.32 3155.0 -2173.59
## - V17_J2_2      1      69.54 3157.3 -2169.94
## - V4_J2_5       1      71.59 3159.3 -2166.57
## - V15_J2_2      1      75.13 3162.8 -2160.74
## - V15_J1_3      1      75.53 3163.2 -2160.08
## - V4_J2_1       1      76.48 3164.2 -2158.51
## - V4_J2_3       1      83.52 3171.2 -2146.96
## - V5_J1_5       1      83.77 3171.5 -2146.55
## - V15_J2_7      1      90.37 3178.1 -2135.74
## - V3_J2_1       1      95.23 3182.9 -2127.80
## - V19_J1_5      1      96.03 3183.7 -2126.49
## - V4_J2_4       1     104.97 3192.7 -2111.90
## - V26_J2_1      1     106.91 3194.6 -2108.75
## - V19_J1_4      1     115.68 3203.4 -2094.49
## - V3_J2_5       1     120.79 3208.5 -2086.21
## - V30_J2_2      1     132.77 3220.5 -2066.82
## - V26_J2_4      1     147.87 3235.6 -2042.51
## - V26_J2_5      1     153.85 3241.6 -2032.90
## - V12_1_2_J2_2  1     164.14 3251.9 -2016.42
## - V3_J2_4       1     172.53 3260.2 -2003.02
## - V3_J2_3       1     184.34 3272.1 -1984.21
## - V5_J2_5       1     235.41 3323.1 -1903.69
## - V5_J2_4       1     258.48 3346.2 -1867.71
## - V20_J2_2      1     268.21 3355.9 -1852.60
## - V26_J2_3      1     323.64 3411.4 -1767.42
## - V16_J2_2      1     420.35 3508.1 -1622.05
## - V              19    1203.81 4291.5 -693.28
## - J              12    1568.80 4656.5 -222.38
##
## Step:  AIC=-2362.1
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##      V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##      V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##      V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
##      V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
##      V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3
##
##
##      Df Sum of Sq    RSS      AIC
## + V30_J1_3      1      50.38 2984.6 -2442.51
## + V2_J1_3       1      47.13 2987.8 -2436.85
## + V23_J1_3      1      46.70 2988.3 -2436.11
## + V5_J2_1       1      40.48 2994.5 -2425.30
## + V14_J1_5      1      40.25 2994.7 -2424.90
## + V30_J1_1      1      39.27 2995.7 -2423.20
## + V1_J1_3       1      38.77 2996.2 -2422.32
## + V13_1_J1_3    1      37.46 2997.5 -2420.05
## + V14_J1_4      1      35.10 2999.9 -2415.95

```

## + V2_J2_2	1	33.34	3001.6	-2412.90
## + V14_J2_3	1	31.76	3003.2	-2410.17
## + V3_J1_5	1	30.83	3004.1	-2408.56
## + V19_J2_1	1	29.16	3005.8	-2405.68
## + V26_J1_4	1	29.16	3005.8	-2405.67
## + V15_J1_7	1	28.58	3006.4	-2404.68
## + V5_J1_3	1	28.39	3006.6	-2404.33
## + V16_J1_3	1	27.27	3007.7	-2402.40
## + V30_J1_2	1	24.46	3010.5	-2397.55
## + V23_J2_1	1	23.96	3011.0	-2396.68
## + V20_J1_3	1	23.73	3011.2	-2396.29
## + V13_1_J1_2	1	23.67	3011.3	-2396.18
## + V30_J1_6	1	23.46	3011.5	-2395.82
## + V12_1_2_J1_7	1	23.01	3011.9	-2395.04
## + V16_J2_7	1	22.70	3012.2	-2394.51
## + V13_1_J1_7	1	21.75	3013.2	-2392.87
## + V19_J2_5	1	21.64	3013.3	-2392.67
## + V14_J1_2	1	21.08	3013.9	-2391.70
## + V14_J1_3	1	20.92	3014.0	-2391.43
## + V2_J1_5	1	20.86	3014.1	-2391.33
## + V5_J1_4	1	19.29	3015.7	-2388.63
## + V19_J2_4	1	19.23	3015.7	-2388.53
## + V12_1_2_J1_6	1	19.19	3015.8	-2388.45
## + V29_J1_5	1	19.01	3015.9	-2388.15
## + V15_J1_5	1	18.52	3016.4	-2387.30
## + V30_J2_5	1	18.19	3016.8	-2386.73
## + V14_J2_2	1	17.91	3017.0	-2386.25
## + V1_J1_5	1	17.79	3017.2	-2386.04
## + V26_J1_5	1	16.94	3018.0	-2384.57
## + V12_1_2_J1_2	1	16.85	3018.1	-2384.42
## + V20_J2_3	1	16.61	3018.3	-2384.01
## + V15_J1_6	1	16.59	3018.4	-2383.97
## + V30_J1_5	1	16.34	3018.6	-2383.55
## + V4_J1_4	1	15.82	3019.1	-2382.64
## + V17_J1_5	1	15.75	3019.2	-2382.53
## + V29_J1_7	1	15.74	3019.2	-2382.50
## + V24_J2_5	1	15.40	3019.6	-2381.93
## + V23_J2_7	1	15.29	3019.7	-2381.73
## + V2_J2_7	1	14.94	3020.0	-2381.14
## + V12_1_2_J2_7	1	14.91	3020.0	-2381.07
## + V3_J1_3	1	14.53	3020.4	-2380.41
## + V5_J2_7	1	14.42	3020.5	-2380.24
## + V15_J2_5	1	14.42	3020.5	-2380.23
## + V13_2_J1_4	1	13.43	3021.5	-2378.53
## + V13_2_J1_3	1	13.37	3021.6	-2378.43
## + V4_J2_7	1	13.06	3021.9	-2377.89
## + V13_3_J1_2	1	12.57	3022.4	-2377.06
## + V13_2_J1_2	1	11.91	3023.0	-2375.91
## + V20_J1_4	1	11.68	3023.3	-2375.51
## + V29_J1_1	1	11.65	3023.3	-2375.47
## + V16_J2_4	1	11.57	3023.4	-2375.33
## + V4_J1_5	1	11.56	3023.4	-2375.32
## + V19_J2_7	1	11.51	3023.4	-2375.22
## + V14_J2_4	1	11.17	3023.8	-2374.63

## + V19_J1_3	1	11.13	3023.8	-2374.57
## + V20_J1_2	1	11.05	3023.9	-2374.44
## + V12_1_2_J1_5	1	10.98	3024.0	-2374.32
## + V24_J1_1	1	10.40	3024.6	-2373.32
## + V14_J2_7	1	9.86	3025.1	-2372.40
## + V29_J1_4	1	9.67	3025.3	-2372.06
## + V20_J2_1	1	9.62	3025.3	-2371.97
## + V15_J1_4	1	9.17	3025.8	-2371.21
## + V12_1_2_J1_3	1	9.10	3025.9	-2371.08
## + V13_3_J1_3	1	9.06	3025.9	-2371.01
## + V26_J1_6	1	8.93	3026.0	-2370.80
## + V23_J2_3	1	8.90	3026.1	-2370.74
## + V2_J1_4	1	8.59	3026.4	-2370.20
## + V14_J1_7	1	8.16	3026.8	-2369.47
## + V12_1_2_J2_5	1	7.82	3027.1	-2368.88
## + V2_J2_1	1	7.62	3027.3	-2368.54
## + V13_3_J2_5	1	7.48	3027.5	-2368.30
## + V29_J2_1	1	7.36	3027.6	-2368.09
## + V1_J1_4	1	7.27	3027.7	-2367.94
## + V14_J1_1	1	7.23	3027.7	-2367.86
## + V29_J1_3	1	7.19	3027.8	-2367.81
## + V13_1_J2_4	1	7.05	3027.9	-2367.56
## + V29_J1_6	1	6.85	3028.1	-2367.21
## + V29_J2_3	1	6.75	3028.2	-2367.05
## + V24_J2_3	1	6.62	3028.3	-2366.82
## + V16_J2_3	1	6.46	3028.5	-2366.55
## + V13_3_J1_6	1	6.44	3028.5	-2366.51
## + V4_J1_6	1	6.37	3028.6	-2366.40
## + V13_2_J1_5	1	6.34	3028.6	-2366.35
## + V20_J2_7	1	5.98	3029.0	-2365.72
## + V15_J2_4	1	5.96	3029.0	-2365.69
## + V1_J2_5	1	5.67	3029.3	-2365.19
## + V12_1_2_J2_3	1	5.55	3029.4	-2364.99
## + V24_J1_6	1	5.46	3029.5	-2364.83
## + V19_J2_2	1	5.40	3029.6	-2364.73
## + V23_J2_4	1	5.33	3029.6	-2364.60
## + V1_J1_1	1	5.27	3029.7	-2364.50
## + V20_J1_6	1	5.13	3029.8	-2364.27
## + V2_J2_5	1	5.08	3029.9	-2364.17
## + V30_J2_4	1	5.01	3029.9	-2364.07
## + V12_1_2_J2_4	1	5.01	3029.9	-2364.06
## + V4_J2_2	1	5.00	3030.0	-2364.04
## + V29_J1_2	1	4.83	3030.1	-2363.76
## + V13_1_J1_5	1	4.82	3030.1	-2363.73
## + V26_J1_1	1	4.79	3030.2	-2363.67
## + V26_J2_7	1	4.70	3030.3	-2363.52
## + V19_J1_6	1	4.62	3030.3	-2363.39
## + V16_J1_4	1	4.61	3030.3	-2363.36
## + V23_J2_5	1	4.57	3030.4	-2363.30
## + V30_J2_7	1	4.56	3030.4	-2363.29
## + V4_J1_2	1	4.38	3030.6	-2362.98
## + V24_J1_7	1	4.29	3030.7	-2362.82
## + V4_J1_7	1	4.18	3030.8	-2362.64
## + V14_J1_6	1	4.13	3030.8	-2362.54

## + V13_2_J2_5	1	4.08	3030.9	-2362.45
## + V19_J1_2	1	4.05	3030.9	-2362.42
## + V20_J1_5	1	4.04	3030.9	-2362.39
## + V12_1_2_J2_1	1	4.04	3030.9	-2362.39
## + V13_1_J2_2	1	4.02	3030.9	-2362.36
## + V2_J1_6	1	3.94	3031.0	-2362.22
## + V13_1_J1_4	1	3.88	3031.1	-2362.13
## <none>			3035.0	-2362.10
## + V13_2_J2_7	1	3.82	3031.1	-2362.01
## + V15_J1_2	1	3.78	3031.2	-2361.94
## + V16_J1_5	1	3.74	3031.2	-2361.87
## + V5_J1_7	1	3.60	3031.4	-2361.64
## + V30_J1_7	1	3.54	3031.4	-2361.53
## + V13_2_J1_1	1	3.44	3031.5	-2361.36
## + V19_J1_7	1	3.41	3031.5	-2361.31
## + V13_1_J2_1	1	3.32	3031.6	-2361.16
## + V16_J2_5	1	3.15	3031.8	-2360.86
## + V24_J1_2	1	3.14	3031.8	-2360.85
## + V3_J2_7	1	2.91	3032.0	-2360.46
## + V13_3_J1_4	1	2.64	3032.3	-2359.99
## + V24_J1_5	1	2.61	3032.3	-2359.94
## + V1_J2_4	1	2.56	3032.4	-2359.86
## + V17_J1_6	1	2.53	3032.4	-2359.81
## + V17_J1_4	1	2.52	3032.4	-2359.79
## + V13_1_J2_5	1	2.51	3032.4	-2359.76
## + V26_J1_3	1	2.39	3032.6	-2359.56
## + V15_J1_1	1	2.38	3032.6	-2359.55
## + V2_J2_4	1	2.32	3032.6	-2359.44
## + V14_J2_1	1	2.26	3032.7	-2359.34
## + V13_3_J2_2	1	2.13	3032.8	-2359.12
## + V1_J1_7	1	2.07	3032.9	-2359.01
## + V17_J1_1	1	2.01	3032.9	-2358.91
## + V14_J2_5	1	1.97	3033.0	-2358.85
## + V13_3_J2_7	1	1.97	3033.0	-2358.84
## + V29_J2_2	1	1.90	3033.1	-2358.72
## + V16_J1_6	1	1.80	3033.1	-2358.56
## + V26_J1_7	1	1.77	3033.2	-2358.50
## + V16_J1_7	1	1.77	3033.2	-2358.49
## + V30_J1_4	1	1.76	3033.2	-2358.48
## + V20_J1_7	1	1.66	3033.3	-2358.31
## + V24_J2_7	1	1.46	3033.5	-2357.97
## + V4_J1_1	1	1.46	3033.5	-2357.97
## + V13_2_J1_6	1	1.44	3033.5	-2357.94
## + V3_J1_2	1	1.40	3033.5	-2357.87
## + V5_J1_6	1	1.35	3033.6	-2357.78
## + V23_J1_5	1	1.34	3033.6	-2357.77
## + V23_J1_7	1	1.28	3033.7	-2357.66
## + V1_J2_1	1	1.18	3033.8	-2357.49
## + V13_1_J1_1	1	1.15	3033.8	-2357.44
## + V15_J2_1	1	1.11	3033.8	-2357.37
## + V16_J1_1	1	1.09	3033.9	-2357.34
## + V16_J1_2	1	1.08	3033.9	-2357.32
## + V24_J1_4	1	1.06	3033.9	-2357.28
## + V24_J1_3	1	1.03	3033.9	-2357.24

## + V13_2_J2_3	1	1.03	3033.9	-2357.23
## + V13_3_J2_4	1	1.00	3034.0	-2357.18
## + V13_3_J1_7	1	0.98	3034.0	-2357.14
## + V2_J2_3	1	0.84	3034.1	-2356.90
## + V17_J2_1	1	0.83	3034.1	-2356.90
## + V5_J1_1	1	0.82	3034.1	-2356.87
## + V23_J2_2	1	0.81	3034.1	-2356.86
## + V13_1_J2_3	1	0.80	3034.2	-2356.83
## + V29_J2_7	1	0.79	3034.2	-2356.83
## + V4_J1_3	1	0.77	3034.2	-2356.78
## + V30_J2_1	1	0.76	3034.2	-2356.78
## + V17_J1_2	1	0.76	3034.2	-2356.76
## + V30_J2_3	1	0.75	3034.2	-2356.75
## + V20_J2_5	1	0.65	3034.3	-2356.58
## + V5_J1_2	1	0.63	3034.3	-2356.54
## + V5_J2_2	1	0.60	3034.4	-2356.49
## + V3_J1_7	1	0.60	3034.4	-2356.49
## + V12_1_2_J1_1	1	0.53	3034.4	-2356.38
## + V24_J2_4	1	0.49	3034.5	-2356.31
## + V19_J1_1	1	0.42	3034.5	-2356.18
## + V24_J2_2	1	0.42	3034.5	-2356.18
## + V2_J1_2	1	0.41	3034.5	-2356.17
## + V13_3_J2_1	1	0.39	3034.6	-2356.14
## + V17_J2_4	1	0.36	3034.6	-2356.08
## + V16_J2_1	1	0.35	3034.6	-2356.07
## + V26_J2_2	1	0.34	3034.6	-2356.05
## + V2_J1_7	1	0.33	3034.6	-2356.03
## + V2_J1_1	1	0.30	3034.7	-2355.98
## + V17_J2_5	1	0.27	3034.7	-2355.93
## + V23_J1_1	1	0.23	3034.7	-2355.86
## + V23_J1_2	1	0.21	3034.7	-2355.84
## + V20_J1_1	1	0.21	3034.7	-2355.83
## + V15_J2_3	1	0.20	3034.8	-2355.80
## + V13_2_J2_2	1	0.17	3034.8	-2355.76
## + V23_J1_4	1	0.13	3034.8	-2355.68
## + V13_1_J1_6	1	0.13	3034.8	-2355.68
## + V29_J2_4	1	0.12	3034.8	-2355.68
## + V13_3_J1_1	1	0.12	3034.8	-2355.67
## + V17_J2_3	1	0.10	3034.9	-2355.64
## + V23_J1_6	1	0.10	3034.9	-2355.64
## + V13_3_J1_5	1	0.07	3034.9	-2355.58
## + V29_J2_5	1	0.06	3034.9	-2355.58
## + V24_J2_1	1	0.06	3034.9	-2355.58
## + V3_J1_6	1	0.06	3034.9	-2355.57
## + V1_J1_6	1	0.06	3034.9	-2355.56
## + V13_3_J2_3	1	0.05	3034.9	-2355.56
## + V3_J1_1	1	0.05	3034.9	-2355.55
## + V13_2_J2_4	1	0.03	3034.9	-2355.53
## + V13_2_J2_1	1	0.03	3034.9	-2355.52
## + V26_J1_2	1	0.02	3034.9	-2355.51
## + V1_J1_2	1	0.02	3034.9	-2355.50
## + V13_1_J2_7	1	0.02	3034.9	-2355.50
## + V3_J2_2	1	0.01	3034.9	-2355.48
## + V20_J2_4	1	0.00	3035.0	-2355.47

```

## + V17_J1_7      1      0.00 3035.0 -2355.47
## + V1_J2_3       1      0.00 3035.0 -2355.47
## - V5_J2_3       1     50.05 3085.0 -2283.69
## - V17_J1_3      1     52.76 3087.7 -2279.12
## - V17_J2_7      1     55.96 3090.9 -2273.74
## - V3_J1_4       1     57.19 3092.1 -2271.65
## - V19_J2_3      1     58.92 3093.9 -2268.76
## - V12_1_2_J1_4  1     60.11 3095.1 -2266.75
## - V13_2_J1_7    1     61.42 3096.4 -2264.55
## - V1_J2_2       1     65.91 3100.9 -2257.02
## - V1_J2_7       1     67.44 3102.4 -2254.45
## - V15_J1_3      1     68.71 3103.7 -2252.32
## - V4_J2_5       1     70.55 3105.5 -2249.24
## - V15_J2_2      1     74.37 3109.3 -2242.85
## - V4_J2_1       1     75.47 3110.4 -2241.01
## - V17_J2_2      1     80.40 3115.4 -2232.78
## - V4_J2_3       1     82.34 3117.3 -2229.54
## - V5_J1_5       1     82.79 3117.7 -2228.78
## - V15_J2_7      1     89.56 3124.5 -2217.50
## - V3_J2_1       1     93.97 3128.9 -2210.18
## - V19_J1_5      1     95.11 3130.1 -2208.28
## - V4_J2_4       1    103.72 3138.7 -2194.00
## - V26_J2_1      1    105.71 3140.7 -2190.69
## - V19_J1_4      1    114.61 3149.6 -2175.98
## - V3_J2_5       1    119.29 3154.2 -2168.26
## - V30_J2_2      1    132.96 3167.9 -2145.78
## - V26_J2_4      1    146.37 3181.3 -2123.81
## - V26_J2_5      1    152.32 3187.3 -2114.09
## - V12_1_2_J2_2  1    164.26 3199.2 -2094.66
## - V3_J2_4       1    170.74 3205.7 -2084.13
## - V3_J2_3       1    182.39 3217.3 -2065.26
## - V5_J2_5       1    233.53 3268.5 -1983.26
## - V5_J2_4       1    256.51 3291.5 -1946.83
## - V20_J2_2      1    268.48 3303.4 -1927.95
## - V26_J2_3      1    321.29 3356.2 -1845.48
## - V16_J2_2      1    420.68 3455.6 -1693.72
## - V              19   1196.91 4231.9 -759.45
## - J              12   1431.12 4466.1 -432.89
##
## Step:  AIC=-2442.51
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##      V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##      V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##      V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
##      V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
##      V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
##      V30_J1_3
##
##      Df Sum of Sq    RSS      AIC
## + V2_J1_3      1     53.30 2931.3 -2529.58
## + V23_J1_3     1     52.84 2931.7 -2528.77
## + V1_J1_3      1     44.38 2940.2 -2513.78
## + V14_J1_5     1     39.77 2944.8 -2505.64
## + V5_J2_1      1     39.68 2944.9 -2505.47

```

## + V14_J1_4	1	34.61	2950.0	-2496.54
## + V2_J2_2	1	33.43	2951.1	-2494.46
## + V13_1_J1_3	1	32.58	2952.0	-2492.96
## + V16_J1_3	1	32.00	2952.6	-2491.93
## + V30_J1_1	1	31.82	2952.8	-2491.61
## + V14_J2_3	1	31.19	2953.4	-2490.51
## + V30_J1_6	1	30.44	2954.1	-2489.18
## + V3_J1_5	1	30.08	2954.5	-2488.55
## + V19_J2_1	1	28.56	2956.0	-2485.88
## + V15_J1_7	1	28.53	2956.0	-2485.82
## + V26_J1_4	1	28.49	2956.1	-2485.75
## + V23_J2_1	1	24.38	2960.2	-2478.53
## + V5_J1_3	1	24.27	2960.3	-2478.33
## + V13_1_J1_2	1	23.35	2961.2	-2476.73
## + V12_1_2_J1_7	1	22.65	2961.9	-2475.49
## + V16_J2_7	1	22.39	2962.2	-2475.03
## + V13_1_J1_7	1	21.43	2963.1	-2473.36
## + V14_J1_2	1	21.38	2963.2	-2473.25
## + V2_J1_5	1	21.21	2963.4	-2472.96
## + V19_J2_5	1	21.08	2963.5	-2472.74
## + V20_J1_3	1	19.84	2964.7	-2470.57
## + V29_J1_5	1	19.35	2965.2	-2469.70
## + V12_1_2_J1_6	1	18.88	2965.7	-2468.87
## + V5_J1_4	1	18.75	2965.8	-2468.65
## + V19_J2_4	1	18.71	2965.9	-2468.58
## + V30_J1_2	1	18.61	2966.0	-2468.41
## + V15_J1_5	1	18.54	2966.0	-2468.27
## + V1_J1_5	1	18.14	2966.4	-2467.58
## + V14_J2_2	1	17.84	2966.7	-2467.06
## + V14_J1_3	1	17.29	2967.3	-2466.09
## + V12_1_2_J1_2	1	17.15	2967.4	-2465.84
## + V15_J1_6	1	16.53	2968.0	-2464.77
## + V26_J1_5	1	16.45	2968.1	-2464.62
## + V20_J2_3	1	16.21	2968.4	-2464.20
## + V17_J1_5	1	15.74	2968.8	-2463.37
## + V29_J1_7	1	15.47	2969.1	-2462.89
## + V4_J1_4	1	15.32	2969.2	-2462.65
## + V24_J2_5	1	15.04	2969.5	-2462.15
## + V23_J2_7	1	15.03	2969.5	-2462.13
## + V5_J2_7	1	14.85	2969.7	-2461.81
## + V2_J2_7	1	14.68	2969.9	-2461.53
## + V12_1_2_J2_7	1	14.62	2969.9	-2461.42
## + V15_J2_5	1	14.36	2970.2	-2460.97
## + V13_2_J1_4	1	13.75	2970.8	-2459.90
## + V30_J2_5	1	13.25	2971.3	-2459.01
## + V4_J2_7	1	12.66	2971.9	-2457.98
## + V13_3_J1_2	1	12.35	2972.2	-2457.43
## + V20_J1_4	1	11.96	2972.6	-2456.75
## + V16_J2_4	1	11.88	2972.7	-2456.63
## + V12_1_2_J1_3	1	11.87	2972.7	-2456.60
## + V19_J2_7	1	11.83	2972.7	-2456.53
## + V13_2_J1_2	1	11.66	2972.9	-2456.24
## + V3_J1_3	1	11.64	2972.9	-2456.20
## + V30_J1_5	1	11.63	2972.9	-2456.19

## + V29_J1_1	1	11.43	2973.1	-2455.83
## + V12_1_2_J1_5	1	11.26	2973.3	-2455.54
## + V4_J1_5	1	11.16	2973.4	-2455.36
## + V14_J2_4	1	10.86	2973.7	-2454.83
## + V20_J1_2	1	10.84	2973.7	-2454.81
## + V13_2_J1_3	1	10.51	2974.1	-2454.22
## + V24_J1_1	1	10.19	2974.4	-2453.67
## + V14_J2_7	1	10.08	2974.5	-2453.47
## + V29_J1_4	1	9.93	2974.6	-2453.20
## + V29_J1_3	1	9.67	2974.9	-2452.76
## + V20_J2_1	1	9.36	2975.2	-2452.21
## + V26_J1_6	1	9.26	2975.3	-2452.04
## + V23_J2_3	1	9.21	2975.4	-2451.94
## + V15_J1_4	1	9.17	2975.4	-2451.87
## + V2_J1_4	1	8.83	2975.7	-2451.29
## + V19_J1_3	1	8.56	2976.0	-2450.82
## + V14_J1_7	1	8.36	2976.2	-2450.47
## + V30_J2_4	1	8.36	2976.2	-2450.46
## + V12_1_2_J2_5	1	8.10	2976.5	-2450.01
## + V2_J2_1	1	7.86	2976.7	-2449.59
## + V30_J2_7	1	7.84	2976.7	-2449.55
## + V13_3_J2_5	1	7.74	2976.8	-2449.38
## + V29_J2_1	1	7.59	2977.0	-2449.13
## + V1_J1_4	1	7.51	2977.1	-2448.98
## + V14_J1_1	1	7.40	2977.2	-2448.79
## + V13_1_J2_4	1	7.30	2977.3	-2448.62
## + V29_J2_3	1	7.02	2977.6	-2448.12
## + V24_J2_3	1	6.88	2977.7	-2447.88
## + V13_3_J1_3	1	6.72	2977.9	-2447.60
## + V29_J1_6	1	6.68	2977.9	-2447.53
## + V4_J1_6	1	6.65	2977.9	-2447.48
## + V30_J1_7	1	6.46	2978.1	-2447.14
## + V13_3_J1_6	1	6.27	2978.3	-2446.82
## + V16_J2_3	1	6.21	2978.4	-2446.71
## + V20_J2_7	1	6.14	2978.4	-2446.59
## + V13_2_J1_5	1	6.14	2978.4	-2446.58
## + V15_J2_4	1	5.93	2978.6	-2446.22
## + V12_1_2_J2_3	1	5.81	2978.8	-2446.02
## + V24_J1_6	1	5.61	2979.0	-2445.66
## + V23_J2_4	1	5.55	2979.0	-2445.55
## + V1_J2_5	1	5.44	2979.1	-2445.37
## + V19_J2_2	1	5.42	2979.2	-2445.33
## + V2_J2_5	1	5.29	2979.3	-2445.10
## + V12_1_2_J2_4	1	5.24	2979.3	-2445.01
## + V1_J1_1	1	5.11	2979.5	-2444.78
## + V4_J2_2	1	5.06	2979.5	-2444.70
## + V26_J1_1	1	5.02	2979.5	-2444.64
## + V20_J1_6	1	4.99	2979.6	-2444.58
## + V26_J2_7	1	4.94	2979.6	-2444.49
## + V19_J1_6	1	4.82	2979.7	-2444.29
## + V16_J1_4	1	4.78	2979.8	-2444.21
## + V23_J2_5	1	4.77	2979.8	-2444.19
## + V29_J1_2	1	4.69	2979.9	-2444.06
## + V13_1_J1_5	1	4.65	2979.9	-2443.99

## + V4_J1_2	1	4.61	2980.0	-2443.92
## + V24_J1_7	1	4.43	2980.1	-2443.61
## + V4_J1_7	1	4.42	2980.2	-2443.58
## + V14_J1_6	1	4.26	2980.3	-2443.30
## + V19_J1_2	1	4.24	2980.3	-2443.27
## + V12_1_2_J2_1	1	4.22	2980.3	-2443.24
## + V20_J1_5	1	4.19	2980.4	-2443.19
## + V2_J1_6	1	4.07	2980.5	-2442.98
## + V13_1_J2_2	1	4.05	2980.5	-2442.94
## + V13_1_J1_4	1	4.05	2980.5	-2442.94
## + V13_2_J2_7	1	3.96	2980.6	-2442.79
## + V30_J1_4	1	3.92	2980.7	-2442.71
## + V16_J1_5	1	3.88	2980.7	-2442.65
## + V13_2_J2_5	1	3.88	2980.7	-2442.64
## + V5_J1_7	1	3.82	2980.8	-2442.53
## <none>		2984.6		-2442.51
## + V15_J1_2	1	3.75	2980.8	-2442.41
## + V19_J1_7	1	3.59	2981.0	-2442.13
## + V13_1_J2_1	1	3.48	2981.1	-2441.94
## + V16_J2_5	1	3.31	2981.3	-2441.66
## + V13_2_J1_1	1	3.31	2981.3	-2441.65
## + V3_J2_7	1	3.13	2981.4	-2441.34
## + V24_J1_2	1	3.03	2981.5	-2441.16
## + V13_3_J1_4	1	2.78	2981.8	-2440.72
## + V1_J2_4	1	2.72	2981.8	-2440.63
## + V13_1_J2_5	1	2.66	2981.9	-2440.51
## + V17_J1_6	1	2.55	2982.0	-2440.33
## + V17_J1_4	1	2.53	2982.0	-2440.28
## + V24_J1_5	1	2.49	2982.1	-2440.21
## + V2_J2_4	1	2.46	2982.1	-2440.17
## + V15_J1_1	1	2.36	2982.2	-2439.99
## + V30_J2_1	1	2.32	2982.3	-2439.92
## + V1_J1_7	1	2.18	2982.4	-2439.67
## + V13_3_J2_2	1	2.16	2982.4	-2439.64
## + V14_J2_1	1	2.13	2982.4	-2439.59
## + V13_3_J2_7	1	2.06	2982.5	-2439.48
## + V17_J1_1	1	2.03	2982.5	-2439.42
## + V26_J1_7	1	1.92	2982.7	-2439.23
## + V16_J1_6	1	1.89	2982.7	-2439.18
## + V29_J2_2	1	1.87	2982.7	-2439.14
## + V16_J1_7	1	1.86	2982.7	-2439.12
## + V14_J2_5	1	1.84	2982.7	-2439.09
## + V4_J1_1	1	1.59	2983.0	-2438.65
## + V20_J1_7	1	1.57	2983.0	-2438.62
## + V3_J1_2	1	1.56	2983.0	-2438.59
## + V24_J2_7	1	1.54	2983.0	-2438.57
## + V13_2_J1_6	1	1.53	2983.0	-2438.54
## + V23_J1_5	1	1.43	2983.1	-2438.38
## + V26_J1_3	1	1.29	2983.3	-2438.14
## + V1_J2_1	1	1.28	2983.3	-2438.11
## + V5_J1_6	1	1.23	2983.3	-2438.01
## + V23_J1_7	1	1.20	2983.4	-2437.97
## + V16_J1_1	1	1.16	2983.4	-2437.90
## + V24_J1_4	1	1.14	2983.4	-2437.87

## + V15_J2_1	1	1.12	2983.5	-2437.82
## + V13_1_J1_1	1	1.08	2983.5	-2437.77
## + V16_J1_2	1	1.02	2983.6	-2437.65
## + V2_J2_3	1	0.93	2983.6	-2437.51
## + V13_2_J2_3	1	0.92	2983.6	-2437.49
## + V5_J1_1	1	0.92	2983.7	-2437.48
## + V13_3_J1_7	1	0.91	2983.7	-2437.47
## + V13_3_J2_4	1	0.91	2983.7	-2437.46
## + V13_1_J2_3	1	0.89	2983.7	-2437.43
## + V29_J2_7	1	0.85	2983.7	-2437.37
## + V17_J2_1	1	0.83	2983.7	-2437.32
## + V23_J2_2	1	0.83	2983.7	-2437.32
## + V17_J1_2	1	0.77	2983.8	-2437.22
## + V20_J2_5	1	0.72	2983.8	-2437.14
## + V5_J2_2	1	0.62	2984.0	-2436.96
## + V24_J2_4	1	0.56	2984.0	-2436.86
## + V5_J1_2	1	0.55	2984.0	-2436.83
## + V3_J1_7	1	0.50	2984.1	-2436.75
## + V12_1_2_J1_1	1	0.48	2984.1	-2436.72
## + V2_J1_2	1	0.45	2984.1	-2436.67
## + V13_3_J2_1	1	0.45	2984.1	-2436.66
## + V24_J2_2	1	0.43	2984.1	-2436.62
## + V16_J2_1	1	0.40	2984.2	-2436.58
## + V19_J1_1	1	0.36	2984.2	-2436.51
## + V24_J1_3	1	0.35	2984.2	-2436.50
## + V17_J2_4	1	0.35	2984.2	-2436.48
## + V26_J2_2	1	0.33	2984.2	-2436.45
## + V2_J1_7	1	0.29	2984.3	-2436.39
## + V2_J1_1	1	0.26	2984.3	-2436.34
## + V17_J2_5	1	0.26	2984.3	-2436.34
## + V23_J1_2	1	0.25	2984.3	-2436.31
## + V20_J1_1	1	0.24	2984.3	-2436.30
## + V4_J1_3	1	0.22	2984.4	-2436.26
## + V23_J1_1	1	0.20	2984.4	-2436.22
## + V15_J2_3	1	0.19	2984.4	-2436.21
## + V13_2_J2_2	1	0.16	2984.4	-2436.16
## + V17_J2_3	1	0.11	2984.5	-2436.07
## + V13_1_J1_6	1	0.10	2984.5	-2436.06
## + V23_J1_4	1	0.10	2984.5	-2436.05
## + V13_3_J1_1	1	0.10	2984.5	-2436.05
## + V29_J2_4	1	0.09	2984.5	-2436.04
## + V29_J2_5	1	0.09	2984.5	-2436.04
## + V24_J2_1	1	0.09	2984.5	-2436.03
## + V13_3_J1_5	1	0.09	2984.5	-2436.03
## + V13_3_J2_3	1	0.08	2984.5	-2436.02
## + V23_J1_6	1	0.08	2984.5	-2436.02
## + V30_J2_3	1	0.05	2984.5	-2435.97
## + V13_2_J2_1	1	0.05	2984.5	-2435.96
## + V1_J1_6	1	0.04	2984.5	-2435.95
## + V3_J1_6	1	0.03	2984.5	-2435.94
## + V1_J1_2	1	0.03	2984.5	-2435.93
## + V13_1_J2_7	1	0.03	2984.5	-2435.93
## + V3_J1_1	1	0.02	2984.5	-2435.92
## + V13_2_J2_4	1	0.02	2984.6	-2435.91

```

## + V3_J2_2      1      0.01 2984.6 -2435.90
## + V20_J2_4     1      0.01 2984.6 -2435.90
## + V26_J1_2     1      0.01 2984.6 -2435.89
## + V17_J1_7     1      0.00 2984.6 -2435.88
## + V1_J2_3      1      0.00 2984.6 -2435.88
## - V5_J2_3      1     49.19 3033.8 -2364.14
## - V30_J1_3     1     50.38 3035.0 -2362.10
## - V17_J2_7     1     56.03 3040.6 -2352.43
## - V3_J1_4      1     56.30 3040.9 -2351.97
## - V19_J2_3     1     58.08 3042.7 -2348.93
## - V17_J1_3     1     58.55 3043.1 -2348.13
## - V12_1_2_J1_4 1     59.52 3044.1 -2346.47
## - V13_2_J1_7   1     60.91 3045.5 -2344.09
## - V15_J1_3     1     62.04 3046.6 -2342.16
## - V1_J2_2      1     65.99 3050.6 -2335.43
## - V1_J2_7      1     66.92 3051.5 -2333.84
## - V4_J2_5      1     69.58 3054.2 -2329.31
## - V15_J2_2     1     73.66 3058.2 -2322.36
## - V4_J2_1      1     74.53 3059.1 -2320.89
## - V17_J2_2     1     81.13 3065.7 -2309.68
## - V4_J2_3      1     81.23 3065.8 -2309.51
## - V5_J1_5      1     81.88 3066.5 -2308.41
## - V15_J2_7     1     89.47 3074.0 -2295.56
## - V3_J2_1      1     92.79 3077.4 -2289.94
## - V19_J1_5     1     94.25 3078.8 -2287.49
## - V4_J2_4      1    102.54 3087.1 -2273.49
## - V26_J2_1     1    104.60 3089.2 -2270.03
## - V19_J1_4     1    113.61 3098.2 -2254.88
## - V3_J2_5      1    117.90 3102.5 -2247.69
## - V26_J2_4     1    144.97 3129.5 -2202.51
## - V30_J2_2     1    146.03 3130.6 -2200.75
## - V26_J2_5     1    150.90 3135.5 -2192.67
## - V12_1_2_J2_2 1    164.37 3148.9 -2170.38
## - V3_J2_4      1    169.06 3153.6 -2162.63
## - V3_J2_3      1    180.57 3165.1 -2143.69
## - V5_J2_5      1    231.77 3216.3 -2060.24
## - V5_J2_4      1    254.67 3239.2 -2023.36
## - V20_J2_2     1    268.73 3253.3 -2000.84
## - V26_J2_3     1    319.09 3303.7 -1920.95
## - V16_J2_2     1    420.99 3405.6 -1762.99
## - V            19   1171.71 4156.3 -846.53
## - J            12   1311.79 4296.4 -627.71
##
## Step:  AIC=-2529.58
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##      V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##      V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##      V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
##      V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
##      V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
##      V30_J1_3 + V2_J1_3
##
##              Df Sum of Sq    RSS      AIC
## + V23_J1_3    1      60.05 2871.2 -2630.58

```


## + V1_J1_3	1	50.94	2880.3	-2614.10
## + V2_J2_2	1	41.16	2890.1	-2596.49
## + V14_J1_5	1	39.31	2892.0	-2593.14
## + V5_J2_1	1	38.90	2892.4	-2592.41
## + V16_J1_3	1	37.59	2893.7	-2590.07
## + V14_J1_4	1	34.14	2897.1	-2583.87
## + V30_J1_1	1	31.74	2899.5	-2579.57
## + V14_J2_3	1	30.64	2900.6	-2577.59
## + V30_J1_6	1	30.51	2900.8	-2577.35
## + V3_J1_5	1	29.36	2901.9	-2575.28
## + V15_J1_7	1	28.47	2902.8	-2573.70
## + V19_J2_1	1	27.98	2903.3	-2572.82
## + V26_J1_4	1	27.84	2903.4	-2572.56
## + V13_1_J1_3	1	27.61	2903.7	-2572.16
## + V23_J2_1	1	24.79	2906.5	-2567.11
## + V13_1_J1_2	1	23.05	2908.2	-2563.99
## + V12_1_2_J1_7	1	22.26	2909.0	-2562.58
## + V16_J2_7	1	22.04	2909.2	-2562.19
## + V14_J1_2	1	21.67	2909.6	-2561.53
## + V13_1_J1_7	1	21.12	2910.1	-2560.56
## + V19_J2_5	1	20.54	2910.7	-2559.52
## + V5_J1_3	1	20.09	2911.2	-2558.70
## + V2_J2_7	1	19.90	2911.4	-2558.38
## + V29_J1_5	1	19.68	2911.6	-2557.97
## + V30_J1_2	1	18.56	2912.7	-2555.97
## + V15_J1_5	1	18.55	2912.7	-2555.96
## + V12_1_2_J1_6	1	18.53	2912.7	-2555.93
## + V1_J1_5	1	18.52	2912.8	-2555.90
## + V5_J1_4	1	18.23	2913.0	-2555.38
## + V19_J2_4	1	18.20	2913.1	-2555.34
## + V14_J2_2	1	18.20	2913.1	-2555.33
## + V12_1_2_J1_2	1	17.48	2913.8	-2554.04
## + V15_J1_6	1	16.48	2914.8	-2552.26
## + V2_J1_5	1	16.08	2915.2	-2551.55
## + V20_J1_3	1	16.00	2915.3	-2551.41
## + V26_J1_5	1	15.98	2915.3	-2551.37
## + V20_J2_3	1	15.78	2915.5	-2551.02
## + V17_J1_5	1	15.73	2915.5	-2550.92
## + V12_1_2_J1_3	1	15.31	2916.0	-2550.18
## + V5_J2_7	1	15.27	2916.0	-2550.10
## + V29_J1_7	1	15.20	2916.1	-2549.98
## + V4_J1_4	1	14.84	2916.4	-2549.35
## + V23_J2_7	1	14.77	2916.5	-2549.22
## + V24_J2_5	1	14.69	2916.6	-2549.07
## + V15_J2_5	1	14.31	2917.0	-2548.40
## + V12_1_2_J2_7	1	14.31	2917.0	-2548.39
## + V13_2_J1_4	1	14.08	2917.2	-2547.98
## + V14_J1_3	1	13.70	2917.6	-2547.31
## + V30_J2_5	1	13.30	2918.0	-2546.59
## + V29_J1_3	1	12.83	2918.4	-2545.75
## + V4_J2_7	1	12.27	2919.0	-2544.77
## + V20_J1_4	1	12.26	2919.0	-2544.74
## + V16_J2_4	1	12.23	2919.0	-2544.68
## + V19_J2_7	1	12.15	2919.1	-2544.55

## + V13_3_J1_2	1	12.12	2919.1	-2544.50
## + V30_J1_5	1	11.63	2919.6	-2543.61
## + V12_1_2_J1_5	1	11.57	2919.7	-2543.50
## + V13_2_J1_2	1	11.43	2919.8	-2543.25
## + V29_J1_1	1	11.22	2920.1	-2542.88
## + V4_J1_5	1	10.77	2920.5	-2542.09
## + V20_J1_2	1	10.61	2920.7	-2541.80
## + V14_J2_4	1	10.56	2920.7	-2541.71
## + V14_J2_7	1	10.29	2921.0	-2541.23
## + V29_J1_4	1	10.18	2921.1	-2541.04
## + V24_J1_1	1	9.99	2921.3	-2540.70
## + V26_J1_6	1	9.59	2921.7	-2539.98
## + V23_J2_3	1	9.51	2921.8	-2539.84
## + V15_J1_4	1	9.16	2922.1	-2539.22
## + V20_J2_1	1	9.09	2922.2	-2539.09
## + V3_J1_3	1	8.82	2922.5	-2538.61
## + V14_J1_7	1	8.56	2922.7	-2538.15
## + V12_1_2_J2_5	1	8.41	2922.9	-2537.88
## + V30_J2_4	1	8.32	2923.0	-2537.72
## + V13_3_J2_5	1	8.00	2923.3	-2537.15
## + V30_J2_7	1	7.87	2923.4	-2536.92
## + V29_J2_1	1	7.82	2923.4	-2536.85
## + V1_J1_4	1	7.77	2923.5	-2536.76
## + V13_2_J1_3	1	7.75	2923.5	-2536.71
## + V14_J1_1	1	7.58	2923.7	-2536.40
## + V13_1_J2_4	1	7.55	2923.7	-2536.35
## + V29_J2_3	1	7.29	2924.0	-2535.89
## + V24_J2_3	1	7.14	2924.1	-2535.64
## + V4_J1_6	1	6.93	2924.3	-2535.25
## + V29_J1_6	1	6.52	2924.8	-2534.52
## + V30_J1_7	1	6.48	2924.8	-2534.45
## + V20_J2_7	1	6.33	2924.9	-2534.18
## + V19_J1_3	1	6.12	2925.2	-2533.81
## + V13_3_J1_6	1	6.12	2925.2	-2533.81
## + V12_1_2_J2_3	1	6.09	2925.2	-2533.76
## + V16_J2_3	1	5.95	2925.3	-2533.51
## + V13_2_J1_5	1	5.94	2925.3	-2533.50
## + V15_J2_4	1	5.90	2925.4	-2533.42
## + V23_J2_4	1	5.76	2925.5	-2533.18
## + V24_J1_6	1	5.76	2925.5	-2533.18
## + V19_J2_2	1	5.68	2925.6	-2533.04
## + V2_J1_4	1	5.63	2925.6	-2532.95
## + V12_1_2_J2_4	1	5.48	2925.8	-2532.68
## + V4_J2_2	1	5.35	2925.9	-2532.44
## + V26_J1_1	1	5.26	2926.0	-2532.29
## + V1_J2_5	1	5.20	2926.1	-2532.17
## + V26_J2_7	1	5.19	2926.1	-2532.15
## + V19_J1_6	1	5.02	2926.3	-2531.86
## + V16_J1_4	1	4.98	2926.3	-2531.78
## + V23_J2_5	1	4.97	2926.3	-2531.77
## + V1_J1_1	1	4.93	2926.3	-2531.70
## + V2_J2_1	1	4.86	2926.4	-2531.58
## + V4_J1_2	1	4.84	2926.4	-2531.54
## + V20_J1_6	1	4.83	2926.4	-2531.52

## + V4_J1_7	1	4.65	2926.6	-2531.20
## + V24_J1_7	1	4.58	2926.7	-2531.07
## + V29_J1_2	1	4.56	2926.7	-2531.03
## + V13_3_J1_3	1	4.55	2926.7	-2531.02
## + V13_1_J1_5	1	4.50	2926.8	-2530.93
## + V12_1_2_J2_1	1	4.43	2926.8	-2530.81
## + V19_J1_2	1	4.43	2926.8	-2530.81
## + V14_J1_6	1	4.39	2926.9	-2530.74
## + V20_J1_5	1	4.36	2926.9	-2530.69
## + V13_1_J1_4	1	4.21	2927.1	-2530.42
## + V13_2_J2_7	1	4.11	2927.2	-2530.24
## + V16_J1_5	1	4.04	2927.2	-2530.13
## + V5_J1_7	1	4.03	2927.2	-2530.10
## + V30_J1_4	1	3.91	2927.4	-2529.89
## + V13_1_J2_2	1	3.88	2927.4	-2529.84
## + V19_J1_7	1	3.77	2927.5	-2529.63
## <none>			2931.3	-2529.58
## + V15_J1_2	1	3.72	2927.6	-2529.55
## + V13_2_J2_5	1	3.69	2927.6	-2529.49
## + V13_1_J2_1	1	3.64	2927.6	-2529.40
## + V16_J2_5	1	3.50	2927.8	-2529.15
## + V3_J2_7	1	3.36	2927.9	-2528.91
## + V13_2_J1_1	1	3.18	2928.1	-2528.60
## + V24_J1_2	1	2.92	2928.4	-2528.12
## + V13_3_J1_4	1	2.91	2928.4	-2528.11
## + V1_J2_4	1	2.90	2928.4	-2528.09
## + V2_J2_5	1	2.90	2928.4	-2528.09
## + V13_1_J2_5	1	2.81	2928.5	-2527.93
## + V17_J1_6	1	2.58	2928.7	-2527.52
## + V17_J1_4	1	2.53	2928.7	-2527.44
## + V24_J1_5	1	2.37	2928.9	-2527.15
## + V15_J1_1	1	2.34	2928.9	-2527.10
## + V30_J2_1	1	2.31	2929.0	-2527.05
## + V1_J1_7	1	2.30	2929.0	-2527.02
## + V13_3_J2_7	1	2.16	2929.1	-2526.78
## + V26_J1_7	1	2.08	2929.2	-2526.63
## + V17_J1_1	1	2.05	2929.2	-2526.58
## + V13_3_J2_2	1	2.03	2929.2	-2526.56
## + V14_J2_1	1	2.01	2929.3	-2526.51
## + V16_J1_6	1	1.99	2929.3	-2526.48
## + V29_J2_2	1	1.99	2929.3	-2526.48
## + V2_J1_6	1	1.99	2929.3	-2526.48
## + V16_J1_7	1	1.96	2929.3	-2526.42
## + V4_J1_1	1	1.73	2929.5	-2526.01
## + V14_J2_5	1	1.72	2929.6	-2526.00
## + V3_J1_2	1	1.71	2929.6	-2525.98
## + V24_J2_7	1	1.63	2929.6	-2525.83
## + V13_2_J1_6	1	1.62	2929.7	-2525.81
## + V23_J1_5	1	1.52	2929.7	-2525.65
## + V20_J1_7	1	1.48	2929.8	-2525.57
## + V1_J2_1	1	1.39	2929.9	-2525.42
## + V2_J1_7	1	1.34	2929.9	-2525.32
## + V2_J1_1	1	1.28	2930.0	-2525.21
## + V16_J1_1	1	1.24	2930.0	-2525.14

## + V24_J1_4	1	1.23	2930.0	-2525.13
## + V23_J1_7	1	1.13	2930.1	-2524.95
## + V15_J2_1	1	1.12	2930.2	-2524.94
## + V5_J1_6	1	1.11	2930.2	-2524.92
## + V5_J1_1	1	1.02	2930.2	-2524.76
## + V13_1_J1_1	1	1.02	2930.3	-2524.75
## + V13_1_J2_3	1	0.98	2930.3	-2524.69
## + V16_J1_2	1	0.95	2930.3	-2524.62
## + V2_J2_4	1	0.94	2930.3	-2524.61
## + V29_J2_7	1	0.92	2930.4	-2524.57
## + V13_3_J1_7	1	0.85	2930.4	-2524.45
## + V13_2_J2_3	1	0.82	2930.4	-2524.41
## + V17_J2_1	1	0.82	2930.4	-2524.41
## + V13_3_J2_4	1	0.82	2930.4	-2524.41
## + V20_J2_5	1	0.81	2930.5	-2524.38
## + V17_J1_2	1	0.78	2930.5	-2524.33
## + V23_J2_2	1	0.75	2930.5	-2524.28
## + V5_J2_2	1	0.72	2930.6	-2524.23
## + V24_J2_4	1	0.63	2930.6	-2524.07
## + V13_3_J2_1	1	0.51	2930.8	-2523.84
## + V5_J1_2	1	0.47	2930.8	-2523.78
## + V26_J1_3	1	0.47	2930.8	-2523.78
## + V16_J2_1	1	0.46	2930.8	-2523.76
## + V12_1_2_J1_1	1	0.43	2930.8	-2523.71
## + V3_J1_7	1	0.42	2930.9	-2523.68
## + V24_J2_2	1	0.37	2930.9	-2523.61
## + V17_J2_4	1	0.34	2930.9	-2523.55
## + V19_J1_1	1	0.31	2931.0	-2523.49
## + V23_J1_2	1	0.28	2931.0	-2523.44
## + V20_J1_1	1	0.28	2931.0	-2523.44
## + V26_J2_2	1	0.26	2931.0	-2523.40
## + V17_J2_5	1	0.26	2931.0	-2523.40
## + V13_2_J2_2	1	0.20	2931.1	-2523.30
## + V15_J2_3	1	0.18	2931.1	-2523.26
## + V23_J1_1	1	0.17	2931.1	-2523.25
## + V2_J2_3	1	0.13	2931.1	-2523.18
## + V29_J2_5	1	0.12	2931.2	-2523.16
## + V17_J2_3	1	0.12	2931.2	-2523.15
## + V24_J2_1	1	0.11	2931.2	-2523.15
## + V13_3_J2_3	1	0.11	2931.2	-2523.14
## + V13_3_J1_5	1	0.11	2931.2	-2523.14
## + V13_1_J1_6	1	0.08	2931.2	-2523.09
## + V13_3_J1_1	1	0.08	2931.2	-2523.08
## + V23_J1_4	1	0.07	2931.2	-2523.08
## + V29_J2_4	1	0.07	2931.2	-2523.07
## + V13_2_J2_1	1	0.07	2931.2	-2523.06
## + V23_J1_6	1	0.06	2931.2	-2523.06
## + V30_J2_3	1	0.06	2931.2	-2523.05
## + V1_J1_2	1	0.05	2931.2	-2523.03
## + V13_1_J2_7	1	0.04	2931.2	-2523.02
## + V3_J2_2	1	0.03	2931.2	-2523.01
## + V1_J1_6	1	0.03	2931.2	-2522.99
## + V20_J2_4	1	0.02	2931.3	-2522.98
## + V24_J1_3	1	0.02	2931.3	-2522.98

```

## + V3_J1_6      1      0.02 2931.3 -2522.97
## + V3_J1_1      1      0.01 2931.3 -2522.96
## + V13_2_J2_4   1      0.01 2931.3 -2522.96
## + V1_J2_3      1      0.01 2931.3 -2522.96
## + V2_J1_2      1      0.00 2931.3 -2522.95
## + V26_J1_2     1      0.00 2931.3 -2522.95
## + V17_J1_7     1      0.00 2931.3 -2522.95
## + V4_J1_3      1      0.00 2931.3 -2522.95
## - V5_J2_3      1     48.37 2979.6 -2451.11
## - V2_J1_3      1     53.30 2984.6 -2442.51
## - V15_J1_3     1     55.20 2986.5 -2439.21
## - V3_J1_4      1     55.43 2986.7 -2438.81
## - V17_J2_7     1     56.10 2987.4 -2437.63
## - V30_J1_3     1     56.55 2987.8 -2436.85
## - V19_J2_3     1     57.27 2988.5 -2435.61
## - V12_1_2_J1_4 1     58.88 2990.2 -2432.80
## - V13_2_J1_7   1     60.41 2991.7 -2430.13
## - V17_J1_3     1     65.15 2996.4 -2421.91
## - V1_J2_2      1     65.31 2996.6 -2421.63
## - V1_J2_7      1     66.35 2997.6 -2419.82
## - V4_J2_5      1     68.64 2999.9 -2415.85
## - V4_J2_1      1     73.61 3004.9 -2407.24
## - V15_J2_2     1     73.71 3005.0 -2407.08
## - V4_J2_3      1     80.16 3011.4 -2395.93
## - V5_J1_5      1     80.99 3012.3 -2394.48
## - V17_J2_2     1     81.09 3012.4 -2394.32
## - V15_J2_7     1     89.38 3020.7 -2380.03
## - V3_J2_1      1     91.65 3022.9 -2376.12
## - V19_J1_5     1     93.41 3024.7 -2373.10
## - V4_J2_4      1    101.40 3032.7 -2359.38
## - V26_J2_1     1    103.51 3034.8 -2355.76
## - V19_J1_4     1    112.63 3043.9 -2340.15
## - V3_J2_5      1    116.54 3047.8 -2333.48
## - V26_J2_4     1    143.61 3074.9 -2287.49
## - V30_J2_2     1    145.96 3077.2 -2283.53
## - V26_J2_5     1    149.51 3080.8 -2277.53
## - V12_1_2_J2_2 1    163.28 3094.6 -2254.34
## - V3_J2_4      1    167.43 3098.7 -2247.36
## - V3_J2_3      1    178.80 3110.1 -2228.32
## - V5_J2_5      1    230.06 3161.3 -2143.31
## - V5_J2_4      1    252.88 3184.2 -2105.92
## - V20_J2_2     1    267.44 3198.7 -2082.19
## - V26_J2_3     1    316.95 3248.2 -2002.32
## - V16_J2_2     1    419.38 3350.7 -1840.88
## - V            19   1150.28 4081.6 -934.23
## - J            12   1197.68 4128.9 -827.75
##
## Step:  AIC=-2630.58
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##      V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##      V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##      V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
##      V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
##      V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +

```

```

##      V30_J1_3 + V2_J1_3 + V23_J1_3
##
##      Df Sum of Sq    RSS      AIC
## + V1_J1_3      1    58.93 2812.3 -2731.78
## + V16_J1_3     1    44.50 2826.7 -2705.16
## + V2_J2_2      1    41.12 2830.1 -2698.95
## + V14_J1_5     1    38.78 2832.4 -2694.65
## + V5_J2_1      1    38.02 2833.2 -2693.27
## + V14_J1_4     1    33.61 2837.6 -2685.17
## + V30_J1_1     1    31.66 2839.6 -2681.60
## + V30_J1_6     1    30.59 2840.6 -2679.64
## + V14_J2_3     1    30.03 2841.2 -2678.61
## + V3_J1_5      1    28.55 2842.7 -2675.90
## + V15_J1_7     1    28.41 2842.8 -2675.65
## + V19_J2_1     1    27.33 2843.9 -2673.67
## + V26_J1_4     1    27.11 2844.1 -2673.27
## + V13_1_J1_2   1    22.70 2848.5 -2665.22
## + V13_1_J1_3   1    22.46 2848.8 -2664.79
## + V14_J1_2     1    22.01 2849.2 -2663.95
## + V12_1_2_J1_7 1    21.82 2849.4 -2663.60
## + V16_J2_7     1    21.65 2849.6 -2663.30
## + V13_1_J1_7   1    20.78 2850.4 -2661.71
## + V23_J2_7     1    20.34 2850.9 -2660.91
## + V29_J1_5     1    20.05 2851.2 -2660.38
## + V2_J2_7      1    19.96 2851.3 -2660.21
## + V19_J2_5     1    19.95 2851.3 -2660.19
## + V12_1_2_J1_3 1    19.75 2851.5 -2659.84
## + V1_J1_5      1    18.95 2852.3 -2658.38
## + V23_J2_1     1    18.95 2852.3 -2658.37
## + V14_J2_2     1    18.61 2852.6 -2657.76
## + V15_J1_5     1    18.57 2852.7 -2657.67
## + V30_J1_2     1    18.50 2852.7 -2657.55
## + V12_1_2_J1_6 1    18.15 2853.1 -2656.92
## + V12_1_2_J1_2 1    17.85 2853.4 -2656.38
## + V5_J1_4      1    17.64 2853.6 -2655.99
## + V19_J2_4     1    17.64 2853.6 -2655.99
## + V29_J1_3     1    16.95 2854.3 -2654.73
## + V15_J1_6     1    16.41 2854.8 -2653.75
## + V2_J1_5      1    16.07 2855.2 -2653.13
## + V5_J1_3      1    15.82 2855.4 -2652.68
## + V5_J2_7      1    15.75 2855.5 -2652.54
## + V17_J1_5     1    15.71 2855.5 -2652.48
## + V26_J1_5     1    15.46 2855.8 -2652.01
## + V20_J2_3     1    15.31 2855.9 -2651.75
## + V29_J1_7     1    14.91 2856.3 -2651.01
## + V13_2_J1_4   1    14.45 2856.8 -2650.18
## + V4_J1_4      1    14.31 2856.9 -2649.93
## + V24_J2_5     1    14.30 2856.9 -2649.90
## + V15_J2_5     1    14.26 2857.0 -2649.83
## + V12_1_2_J2_7 1    13.96 2857.3 -2649.29
## + V30_J2_5     1    13.36 2857.9 -2648.19
## + V16_J2_4     1    12.62 2858.6 -2646.85
## + V20_J1_4     1    12.61 2858.6 -2646.84
## + V19_J2_7     1    12.53 2858.7 -2646.68

```

## + V20_J1_3	1	12.14	2859.1	-2645.98
## + V12_1_2_J1_5	1	11.91	2859.3	-2645.56
## + V13_3_J1_2	1	11.87	2859.3	-2645.49
## + V4_J2_7	1	11.85	2859.4	-2645.44
## + V30_J1_5	1	11.62	2859.6	-2645.02
## + V13_2_J1_2	1	11.16	2860.1	-2644.20
## + V29_J1_1	1	10.98	2860.2	-2643.86
## + V14_J2_7	1	10.54	2860.7	-2643.06
## + V29_J1_4	1	10.48	2860.7	-2642.95
## + V20_J1_2	1	10.35	2860.9	-2642.73
## + V4_J1_5	1	10.35	2860.9	-2642.71
## + V14_J2_4	1	10.23	2861.0	-2642.50
## + V14_J1_3	1	10.13	2861.1	-2642.32
## + V26_J1_6	1	9.96	2861.3	-2642.01
## + V24_J1_1	1	9.76	2861.5	-2641.66
## + V15_J1_4	1	9.15	2862.1	-2640.53
## + V14_J1_7	1	8.78	2862.4	-2639.87
## + V20_J2_1	1	8.78	2862.4	-2639.87
## + V12_1_2_J2_5	1	8.76	2862.5	-2639.84
## + V13_3_J2_5	1	8.29	2862.9	-2638.98
## + V30_J2_4	1	8.27	2863.0	-2638.94
## + V29_J2_1	1	8.09	2863.1	-2638.62
## + V1_J1_4	1	8.08	2863.1	-2638.59
## + V30_J2_7	1	7.90	2863.3	-2638.27
## + V13_1_J2_4	1	7.83	2863.4	-2638.15
## + V14_J1_1	1	7.78	2863.4	-2638.04
## + V29_J2_3	1	7.59	2863.6	-2637.71
## + V24_J2_3	1	7.45	2863.8	-2637.45
## + V4_J1_6	1	7.25	2864.0	-2637.08
## + V20_J2_7	1	6.54	2864.7	-2635.80
## + V30_J1_7	1	6.51	2864.7	-2635.74
## + V12_1_2_J2_3	1	6.42	2864.8	-2635.58
## + V29_J1_6	1	6.33	2864.9	-2635.43
## + V3_J1_3	1	6.09	2865.1	-2634.98
## + V23_J2_3	1	6.04	2865.2	-2634.89
## + V19_J2_2	1	5.99	2865.2	-2634.80
## + V13_3_J1_6	1	5.94	2865.3	-2634.71
## + V24_J1_6	1	5.94	2865.3	-2634.70
## + V15_J2_4	1	5.86	2865.4	-2634.57
## + V12_1_2_J2_4	1	5.77	2865.5	-2634.40
## + V13_2_J1_5	1	5.72	2865.5	-2634.31
## + V4_J2_2	1	5.69	2865.5	-2634.25
## + V16_J2_3	1	5.66	2865.6	-2634.20
## + V2_J1_4	1	5.64	2865.6	-2634.17
## + V26_J1_1	1	5.54	2865.7	-2633.99
## + V26_J2_7	1	5.47	2865.8	-2633.86
## + V19_J1_6	1	5.25	2866.0	-2633.46
## + V16_J1_4	1	5.20	2866.0	-2633.37
## + V13_2_J1_3	1	5.13	2866.1	-2633.24
## + V4_J1_2	1	5.11	2866.1	-2633.20
## + V1_J2_5	1	4.93	2866.3	-2632.88
## + V4_J1_7	1	4.92	2866.3	-2632.86
## + V2_J2_1	1	4.88	2866.3	-2632.79
## + V24_J1_7	1	4.74	2866.5	-2632.54

## + V1_J1_1	1	4.74	2866.5	-2632.53
## + V12_1_2_J2_1	1	4.67	2866.6	-2632.40
## + V20_J1_6	1	4.66	2866.6	-2632.38
## + V19_J1_2	1	4.64	2866.6	-2632.36
## + V20_J1_5	1	4.56	2866.7	-2632.20
## + V14_J1_6	1	4.54	2866.7	-2632.18
## + V29_J1_2	1	4.40	2866.8	-2631.92
## + V13_1_J1_4	1	4.40	2866.8	-2631.92
## + V13_1_J1_5	1	4.32	2866.9	-2631.77
## + V5_J1_7	1	4.28	2866.9	-2631.70
## + V13_2_J2_7	1	4.28	2866.9	-2631.69
## + V16_J1_5	1	4.23	2867.0	-2631.61
## + V19_J1_7	1	3.97	2867.2	-2631.15
## + V30_J1_4	1	3.90	2867.3	-2631.01
## + V19_J1_3	1	3.84	2867.4	-2630.91
## + V13_1_J2_1	1	3.82	2867.4	-2630.86
## + V16_J2_5	1	3.71	2867.5	-2630.66
## + V13_1_J2_2	1	3.70	2867.5	-2630.64
## + V15_J1_2	1	3.69	2867.5	-2630.63
## <none>			2871.2	-2630.58
## + V3_J2_7	1	3.63	2867.6	-2630.51
## + V13_2_J2_5	1	3.48	2867.7	-2630.25
## + V23_J2_4	1	3.13	2868.1	-2629.61
## + V1_J2_4	1	3.11	2868.1	-2629.57
## + V13_3_J1_4	1	3.07	2868.2	-2629.50
## + V13_2_J1_1	1	3.05	2868.2	-2629.46
## + V13_1_J2_5	1	2.98	2868.2	-2629.34
## + V23_J1_7	1	2.95	2868.3	-2629.28
## + V2_J2_5	1	2.93	2868.3	-2629.24
## + V24_J1_2	1	2.80	2868.4	-2629.01
## + V17_J1_6	1	2.60	2868.6	-2628.66
## + V13_3_J1_3	1	2.59	2868.6	-2628.64
## + V23_J2_5	1	2.55	2868.7	-2628.56
## + V17_J1_4	1	2.54	2868.7	-2628.54
## + V1_J1_7	1	2.44	2868.8	-2628.36
## + V15_J1_1	1	2.32	2868.9	-2628.14
## + V23_J2_2	1	2.31	2868.9	-2628.12
## + V30_J2_1	1	2.30	2868.9	-2628.11
## + V13_3_J2_7	1	2.27	2869.0	-2628.06
## + V26_J1_7	1	2.26	2869.0	-2628.03
## + V24_J1_5	1	2.24	2869.0	-2628.01
## + V29_J2_2	1	2.13	2869.1	-2627.80
## + V16_J1_6	1	2.11	2869.1	-2627.76
## + V16_J1_7	1	2.08	2869.1	-2627.71
## + V17_J1_1	1	2.07	2869.2	-2627.70
## + V2_J1_6	1	1.97	2869.3	-2627.51
## + V13_3_J2_2	1	1.90	2869.3	-2627.38
## + V3_J1_2	1	1.90	2869.3	-2627.38
## + V4_J1_1	1	1.89	2869.3	-2627.36
## + V14_J2_1	1	1.88	2869.3	-2627.35
## + V24_J2_7	1	1.72	2869.5	-2627.06
## + V13_2_J1_6	1	1.72	2869.5	-2627.05
## + V14_J2_5	1	1.59	2869.6	-2626.82
## + V1_J2_1	1	1.53	2869.7	-2626.71

## + V20_J1_7	1	1.38	2869.8	-2626.44
## + V2_J1_7	1	1.35	2869.9	-2626.39
## + V24_J1_4	1	1.33	2869.9	-2626.36
## + V16_J1_1	1	1.33	2869.9	-2626.34
## + V2_J1_1	1	1.29	2869.9	-2626.29
## + V5_J1_1	1	1.15	2870.1	-2626.02
## + V23_J1_1	1	1.13	2870.1	-2626.00
## + V15_J2_1	1	1.13	2870.1	-2625.99
## + V13_1_J2_3	1	1.10	2870.1	-2625.93
## + V29_J2_7	1	0.99	2870.2	-2625.74
## + V5_J1_6	1	0.99	2870.2	-2625.74
## + V2_J2_4	1	0.96	2870.3	-2625.67
## + V13_1_J1_1	1	0.95	2870.3	-2625.66
## + V20_J2_5	1	0.91	2870.3	-2625.60
## + V16_J1_2	1	0.87	2870.4	-2625.52
## + V5_J2_2	1	0.85	2870.4	-2625.48
## + V23_J1_4	1	0.84	2870.4	-2625.47
## + V17_J2_1	1	0.82	2870.4	-2625.42
## + V23_J1_6	1	0.81	2870.4	-2625.41
## + V17_J1_2	1	0.80	2870.4	-2625.38
## + V13_3_J1_7	1	0.78	2870.4	-2625.35
## + V13_3_J2_4	1	0.73	2870.5	-2625.27
## + V13_2_J2_3	1	0.72	2870.5	-2625.25
## + V24_J2_4	1	0.72	2870.5	-2625.24
## + V13_3_J2_1	1	0.57	2870.6	-2624.98
## + V16_J2_1	1	0.53	2870.7	-2624.91
## + V5_J1_2	1	0.39	2870.8	-2624.66
## + V12_1_2_J1_1	1	0.37	2870.9	-2624.62
## + V23_J1_5	1	0.35	2870.9	-2624.58
## + V17_J2_4	1	0.33	2870.9	-2624.54
## + V3_J1_7	1	0.33	2870.9	-2624.54
## + V20_J1_1	1	0.32	2870.9	-2624.52
## + V24_J2_2	1	0.32	2870.9	-2624.52
## + V19_J1_1	1	0.25	2871.0	-2624.40
## + V13_2_J2_2	1	0.25	2871.0	-2624.40
## + V17_J2_5	1	0.25	2871.0	-2624.39
## + V4_J1_3	1	0.25	2871.0	-2624.39
## + V26_J2_2	1	0.19	2871.0	-2624.28
## + V15_J2_3	1	0.17	2871.1	-2624.25
## + V29_J2_5	1	0.16	2871.1	-2624.23
## + V24_J1_3	1	0.16	2871.1	-2624.23
## + V13_3_J2_3	1	0.15	2871.1	-2624.22
## + V24_J2_1	1	0.15	2871.1	-2624.21
## + V2_J2_3	1	0.14	2871.1	-2624.20
## + V13_3_J1_5	1	0.14	2871.1	-2624.20
## + V17_J2_3	1	0.12	2871.1	-2624.17
## + V13_2_J2_1	1	0.10	2871.1	-2624.11
## + V3_J2_2	1	0.07	2871.2	-2624.07
## + V1_J1_2	1	0.07	2871.2	-2624.06
## + V13_1_J1_6	1	0.06	2871.2	-2624.06
## + V30_J2_3	1	0.06	2871.2	-2624.06
## + V13_1_J2_7	1	0.06	2871.2	-2624.05
## + V13_3_J1_1	1	0.06	2871.2	-2624.05
## + V29_J2_4	1	0.04	2871.2	-2624.02

```

## + V20_J2_4      1      0.04 2871.2 -2624.02
## + V26_J1_3      1      0.03 2871.2 -2624.00
## + V1_J2_3       1      0.02 2871.2 -2623.98
## + V23_J1_2      1      0.01 2871.2 -2623.97
## + V1_J1_6       1      0.01 2871.2 -2623.97
## + V3_J1_6       1      0.00 2871.2 -2623.95
## + V2_J1_2       1      0.00 2871.2 -2623.95
## + V13_2_J2_4    1      0.00 2871.2 -2623.94
## + V3_J1_1       1      0.00 2871.2 -2623.94
## + V17_J1_7      1      0.00 2871.2 -2623.94
## + V26_J1_2      1      0.00 2871.2 -2623.94
## - V5_J2_3       1     47.44 2918.7 -2552.00
## - V15_J1_3      1     47.96 2919.2 -2551.06
## - V3_J1_4       1     54.45 2925.7 -2539.53
## - V17_J2_7      1     56.18 2927.4 -2536.44
## - V19_J2_3      1     56.35 2927.6 -2536.14
## - V12_1_2_J1_4  1     58.16 2929.4 -2532.93
## - V13_2_J1_7    1     59.85 2931.1 -2529.93
## - V23_J1_3      1     60.05 2931.3 -2529.58
## - V2_J1_3       1     60.50 2931.7 -2528.77
## - V30_J1_3      1     63.93 2935.2 -2522.70
## - V1_J2_2       1     64.55 2935.8 -2521.61
## - V1_J2_7       1     65.71 2936.9 -2519.55
## - V4_J2_5       1     67.59 2938.8 -2516.22
## - V4_J2_1       1     72.58 2943.8 -2507.39
## - V17_J1_3      1     73.00 2944.2 -2506.65
## - V15_J2_2      1     73.76 2945.0 -2505.32
## - V4_J2_3       1     78.95 2950.2 -2496.15
## - V5_J1_5       1     79.99 2951.2 -2494.32
## - V17_J2_2      1     81.04 2952.3 -2492.48
## - V15_J2_7      1     89.28 2960.5 -2477.99
## - V3_J2_1       1     90.37 2961.6 -2476.07
## - V19_J1_5      1     92.46 2963.7 -2472.40
## - V4_J2_4       1    100.12 2971.3 -2458.98
## - V26_J2_1      1    102.29 2973.5 -2455.19
## - V19_J1_4      1    111.53 2982.8 -2439.04
## - V3_J2_5       1    115.01 2986.2 -2432.98
## - V26_J2_4      1    142.09 3013.3 -2386.05
## - V30_J2_2      1    145.88 3017.1 -2379.51
## - V26_J2_5      1    147.95 3019.2 -2375.94
## - V12_1_2_J2_2  1    162.05 3033.3 -2351.71
## - V3_J2_4       1    165.60 3036.8 -2345.63
## - V3_J2_3       1    176.81 3048.0 -2326.46
## - V5_J2_5       1    228.14 3099.4 -2239.63
## - V5_J2_4       1    250.86 3122.1 -2201.65
## - V20_J2_2      1    265.99 3137.2 -2176.51
## - V26_J2_3      1    314.54 3185.8 -2096.65
## - V16_J2_2      1    417.56 3288.8 -1931.16
## - J             12   1091.09 3962.3 -1035.32
## - V             19   1161.51 4032.7 -990.17
##
## Step:  AIC=-2731.78
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##       V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +

```

```

##      V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##      V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
##      V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
##      V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
##      V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3
##
##      Df Sum of Sq    RSS    AIC
## + V16_J1_3      1    52.52 2759.8 -2823.2
## + V2_J2_2       1    41.78 2770.5 -2803.0
## + V14_J1_5      1    38.12 2774.2 -2796.1
## + V5_J2_1       1    36.93 2775.4 -2793.9
## + V14_J1_4      1    32.95 2779.3 -2786.4
## + V30_J1_1      1    31.61 2780.7 -2783.9
## + V30_J1_6      1    30.64 2781.7 -2782.1
## + V14_J2_3      1    29.26 2783.0 -2779.5
## + V15_J1_7      1    28.33 2784.0 -2777.8
## + V3_J1_5       1    27.54 2784.8 -2776.3
## + V19_J2_1      1    26.51 2785.8 -2774.4
## + V26_J1_4      1    26.20 2786.1 -2773.8
## + V12_1_2_J1_3  1    25.12 2787.2 -2771.8
## + V14_J1_2      1    22.44 2789.9 -2766.8
## + V13_1_J1_2    1    22.27 2790.0 -2766.5
## + V29_J1_3      1    21.94 2790.4 -2765.9
## + V16_J2_7      1    21.66 2790.6 -2765.3
## + V12_1_2_J1_7  1    21.32 2791.0 -2764.7
## + V23_J2_7      1    20.76 2791.5 -2763.7
## + V29_J1_5      1    20.53 2791.8 -2763.2
## + V2_J2_7       1    20.38 2791.9 -2763.0
## + V13_1_J1_7    1    20.34 2792.0 -2762.9
## + V19_J2_5      1    19.20 2793.1 -2760.8
## + V23_J2_1      1    19.07 2793.2 -2760.5
## + V15_J1_5      1    18.59 2793.7 -2759.6
## + V14_J2_2      1    18.57 2793.7 -2759.6
## + V30_J1_2      1    18.45 2793.8 -2759.4
## + V12_1_2_J1_2  1    18.29 2794.0 -2759.1
## + V12_1_2_J1_6  1    17.72 2794.6 -2758.0
## + V13_1_J1_3    1    17.60 2794.7 -2757.8
## + V19_J2_4      1    16.94 2795.4 -2756.6
## + V5_J1_4       1    16.92 2795.4 -2756.5
## + V15_J1_6      1    16.33 2796.0 -2755.4
## + V2_J1_5       1    16.13 2796.2 -2755.1
## + V5_J2_7       1    15.97 2796.3 -2754.8
## + V17_J1_5      1    15.69 2796.6 -2754.2
## + V13_2_J1_4    1    14.92 2797.4 -2752.8
## + V26_J1_5      1    14.81 2797.5 -2752.6
## + V20_J2_3      1    14.76 2797.5 -2752.5
## + V29_J1_7      1    14.54 2797.8 -2752.1
## + V15_J2_5      1    14.19 2798.1 -2751.4
## + V12_1_2_J2_7  1    13.93 2798.4 -2751.0
## + V24_J2_5      1    13.81 2798.5 -2750.8
## + V4_J1_4       1    13.66 2798.6 -2750.5
## + V30_J2_5      1    13.46 2798.8 -2750.1
## + V16_J2_4      1    13.09 2799.2 -2749.4
## + V20_J1_4      1    13.03 2799.3 -2749.3

```

## + V1_J1_5	1	13.01	2799.3	-2749.2
## + V19_J2_7	1	12.65	2799.6	-2748.6
## + V12_1_2_J1_5	1	12.32	2800.0	-2748.0
## + V5_J1_3	1	11.90	2800.4	-2747.2
## + V4_J2_7	1	11.65	2800.6	-2746.7
## + V30_J1_5	1	11.64	2800.7	-2746.7
## + V13_3_J1_2	1	11.56	2800.7	-2746.6
## + V29_J1_4	1	10.85	2801.4	-2745.2
## + V13_2_J1_2	1	10.83	2801.5	-2745.2
## + V29_J1_1	1	10.68	2801.6	-2744.9
## + V14_J2_7	1	10.53	2801.8	-2744.7
## + V26_J1_6	1	10.45	2801.8	-2744.5
## + V20_J1_2	1	10.06	2802.2	-2743.8
## + V14_J2_4	1	9.82	2802.5	-2743.3
## + V4_J1_5	1	9.81	2802.5	-2743.3
## + V24_J1_1	1	9.48	2802.8	-2742.7
## + V12_1_2_J2_5	1	9.19	2803.1	-2742.2
## + V15_J1_4	1	9.14	2803.2	-2742.1
## + V14_J1_7	1	9.07	2803.2	-2741.9
## + V1_J2_5	1	8.94	2803.3	-2741.7
## + V1_J1_1	1	8.78	2803.5	-2741.4
## + V13_3_J2_5	1	8.67	2803.6	-2741.2
## + V20_J1_3	1	8.61	2803.7	-2741.1
## + V29_J2_1	1	8.43	2803.9	-2740.8
## + V20_J2_1	1	8.43	2803.9	-2740.8
## + V13_1_J2_4	1	8.21	2804.1	-2740.3
## + V30_J2_7	1	8.19	2804.1	-2740.3
## + V30_J2_4	1	8.19	2804.1	-2740.3
## + V14_J1_1	1	8.03	2804.3	-2740.0
## + V29_J2_3	1	7.99	2804.3	-2739.9
## + V24_J2_3	1	7.84	2804.5	-2739.7
## + V4_J1_6	1	7.66	2804.6	-2739.3
## + V14_J1_3	1	6.94	2805.4	-2738.0
## + V12_1_2_J2_3	1	6.81	2805.5	-2737.8
## + V20_J2_7	1	6.53	2805.8	-2737.2
## + V30_J1_7	1	6.52	2805.8	-2737.2
## + V24_J1_6	1	6.16	2806.1	-2736.6
## + V23_J2_3	1	6.16	2806.1	-2736.6
## + V12_1_2_J2_4	1	6.12	2806.2	-2736.5
## + V29_J1_6	1	6.11	2806.2	-2736.4
## + V19_J2_2	1	6.06	2806.2	-2736.4
## + V26_J1_1	1	5.91	2806.4	-2736.1
## + V15_J2_4	1	5.82	2806.5	-2735.9
## + V4_J2_2	1	5.81	2806.5	-2735.9
## + V13_3_J1_6	1	5.72	2806.6	-2735.7
## + V2_J1_4	1	5.70	2806.6	-2735.7
## + V26_J2_7	1	5.61	2806.7	-2735.5
## + V19_J1_6	1	5.55	2806.7	-2735.4
## + V16_J1_4	1	5.47	2806.8	-2735.3
## + V4_J1_2	1	5.46	2806.8	-2735.2
## + V13_2_J1_5	1	5.45	2806.8	-2735.2
## + V16_J2_3	1	5.33	2807.0	-2735.0
## + V4_J1_7	1	5.28	2807.0	-2734.9
## + V24_J1_7	1	4.95	2807.3	-2734.3

## + V12_1_2_J2_1	1	4.95	2807.3	-2734.3
## + V2_J2_1	1	4.94	2807.4	-2734.3
## + V19_J1_2	1	4.93	2807.4	-2734.3
## + V20_J1_5	1	4.79	2807.5	-2734.0
## + V14_J1_6	1	4.74	2807.6	-2733.9
## + V13_1_J1_4	1	4.65	2807.6	-2733.7
## + V5_J1_7	1	4.61	2807.7	-2733.7
## + V20_J1_6	1	4.46	2807.8	-2733.4
## + V16_J1_5	1	4.45	2807.8	-2733.4
## + V1_J1_4	1	4.37	2807.9	-2733.2
## + V13_2_J2_7	1	4.29	2808.0	-2733.1
## + V19_J1_7	1	4.25	2808.0	-2733.0
## + V29_J1_2	1	4.21	2808.1	-2732.9
## + V13_1_J1_5	1	4.10	2808.2	-2732.7
## + V13_1_J2_1	1	4.05	2808.2	-2732.7
## + V16_J2_5	1	3.96	2808.3	-2732.5
## + V30_J1_4	1	3.87	2808.4	-2732.3
## + V3_J2_7	1	3.78	2808.5	-2732.1
## + V3_J1_3	1	3.78	2808.5	-2732.1
## + V13_1_J2_2	1	3.71	2808.6	-2732.0
## + V15_J1_2	1	3.65	2808.6	-2731.9
## <none>			2812.3	-2731.8
## + V13_3_J1_4	1	3.27	2809.0	-2731.2
## + V13_2_J2_5	1	3.23	2809.1	-2731.1
## + V13_1_J2_5	1	3.21	2809.1	-2731.1
## + V23_J2_4	1	3.20	2809.1	-2731.1
## + V2_J2_5	1	2.99	2809.3	-2730.7
## + V13_2_J1_3	1	2.94	2809.3	-2730.6
## + V23_J1_7	1	2.94	2809.4	-2730.6
## + V13_2_J1_1	1	2.87	2809.4	-2730.5
## + V24_J1_2	1	2.65	2809.6	-2730.0
## + V17_J1_6	1	2.63	2809.7	-2730.0
## + V23_J2_5	1	2.61	2809.7	-2730.0
## + V17_J1_4	1	2.54	2809.8	-2729.8
## + V26_J1_7	1	2.50	2809.8	-2729.8
## + V23_J2_2	1	2.47	2809.8	-2729.7
## + V15_J1_1	1	2.28	2810.0	-2729.4
## + V30_J2_1	1	2.27	2810.0	-2729.3
## + V13_3_J2_7	1	2.27	2810.0	-2729.3
## + V16_J1_6	1	2.24	2810.1	-2729.3
## + V16_J1_7	1	2.22	2810.1	-2729.2
## + V3_J1_2	1	2.15	2810.1	-2729.1
## + V29_J2_2	1	2.11	2810.2	-2729.1
## + V4_J1_1	1	2.10	2810.2	-2729.0
## + V17_J1_1	1	2.10	2810.2	-2729.0
## + V24_J1_5	1	2.09	2810.2	-2729.0
## + V19_J1_3	1	2.02	2810.3	-2728.9
## + V2_J1_6	1	1.97	2810.3	-2728.8
## + V13_3_J2_2	1	1.91	2810.4	-2728.7
## + V13_2_J1_6	1	1.85	2810.4	-2728.6
## + V24_J2_7	1	1.72	2810.6	-2728.3
## + V14_J2_1	1	1.72	2810.6	-2728.3
## + V24_J1_4	1	1.47	2810.8	-2727.9
## + V16_J1_1	1	1.43	2810.9	-2727.8

## + V14_J2_5	1	1.43	2810.9	-2727.8
## + V2_J1_7	1	1.34	2810.9	-2727.6
## + V5_J1_1	1	1.31	2811.0	-2727.6
## + V2_J1_1	1	1.30	2811.0	-2727.5
## + V20_J1_7	1	1.27	2811.0	-2727.5
## + V13_1_J2_3	1	1.25	2811.0	-2727.5
## + V15_J2_1	1	1.14	2811.2	-2727.2
## + V23_J1_1	1	1.14	2811.2	-2727.2
## + V13_3_J1_3	1	1.12	2811.2	-2727.2
## + V4_J1_3	1	1.07	2811.2	-2727.1
## + V20_J2_5	1	1.04	2811.3	-2727.1
## + V1_J2_4	1	1.02	2811.3	-2727.0
## + V2_J2_4	1	0.99	2811.3	-2727.0
## + V29_J2_7	1	0.99	2811.3	-2727.0
## + V24_J1_3	1	0.91	2811.4	-2726.8
## + V5_J2_2	1	0.89	2811.4	-2726.8
## + V13_1_J1_1	1	0.86	2811.4	-2726.7
## + V5_J1_6	1	0.85	2811.4	-2726.7
## + V24_J2_4	1	0.83	2811.5	-2726.7
## + V23_J1_4	1	0.82	2811.5	-2726.7
## + V23_J1_6	1	0.81	2811.5	-2726.7
## + V17_J1_2	1	0.81	2811.5	-2726.7
## + V17_J2_1	1	0.81	2811.5	-2726.7
## + V1_J1_6	1	0.80	2811.5	-2726.6
## + V16_J1_2	1	0.79	2811.5	-2726.6
## + V13_3_J1_7	1	0.70	2811.6	-2726.4
## + V13_3_J2_1	1	0.67	2811.6	-2726.4
## + V1_J1_7	1	0.63	2811.7	-2726.3
## + V13_3_J2_4	1	0.63	2811.7	-2726.3
## + V16_J2_1	1	0.62	2811.7	-2726.3
## + V13_2_J2_3	1	0.60	2811.7	-2726.2
## + V1_J2_3	1	0.38	2811.9	-2725.8
## + V20_J1_1	1	0.37	2811.9	-2725.8
## + V23_J1_5	1	0.36	2811.9	-2725.8
## + V24_J2_2	1	0.32	2812.0	-2725.7
## + V17_J2_4	1	0.32	2812.0	-2725.7
## + V12_1_2_J1_1	1	0.31	2812.0	-2725.7
## + V5_J1_2	1	0.31	2812.0	-2725.7
## + V1_J1_2	1	0.26	2812.0	-2725.6
## + V13_2_J2_2	1	0.25	2812.0	-2725.6
## + V17_J2_5	1	0.24	2812.1	-2725.6
## + V3_J1_7	1	0.23	2812.1	-2725.6
## + V1_J2_1	1	0.23	2812.1	-2725.6
## + V29_J2_5	1	0.21	2812.1	-2725.5
## + V13_3_J2_3	1	0.21	2812.1	-2725.5
## + V24_J2_1	1	0.20	2812.1	-2725.5
## + V19_J1_1	1	0.19	2812.1	-2725.5
## + V13_3_J1_5	1	0.18	2812.1	-2725.5
## + V26_J2_2	1	0.17	2812.1	-2725.4
## + V2_J2_3	1	0.16	2812.1	-2725.4
## + V15_J2_3	1	0.16	2812.1	-2725.4
## + V13_2_J2_1	1	0.14	2812.2	-2725.4
## + V17_J2_3	1	0.13	2812.2	-2725.4
## + V26_J1_3	1	0.13	2812.2	-2725.4

## + V3_J2_2	1	0.09	2812.2	-2725.3
## + V30_J2_3	1	0.07	2812.2	-2725.3
## + V20_J2_4	1	0.07	2812.2	-2725.3
## + V13_1_J2_7	1	0.06	2812.2	-2725.3
## + V13_1_J1_6	1	0.04	2812.3	-2725.2
## + V13_3_J1_1	1	0.04	2812.3	-2725.2
## + V29_J2_4	1	0.02	2812.3	-2725.2
## + V23_J1_2	1	0.01	2812.3	-2725.2
## + V26_J1_2	1	0.01	2812.3	-2725.2
## + V3_J1_1	1	0.00	2812.3	-2725.2
## + V2_J1_2	1	0.00	2812.3	-2725.2
## + V13_2_J2_4	1	0.00	2812.3	-2725.2
## + V3_J1_6	1	0.00	2812.3	-2725.2
## + V17_J1_7	1	0.00	2812.3	-2725.2
## - V15_J1_3	1	40.81	2853.1	-2663.5
## - V5_J2_3	1	46.28	2858.6	-2653.6
## - V3_J1_4	1	53.22	2865.5	-2640.9
## - V19_J2_3	1	55.21	2867.5	-2637.3
## - V17_J2_7	1	56.91	2869.2	-2634.2
## - V12_1_2_J1_4	1	57.33	2869.6	-2633.5
## - V1_J1_3	1	58.93	2871.2	-2630.6
## - V13_2_J1_7	1	59.15	2871.4	-2630.2
## - V4_J2_5	1	66.26	2878.6	-2617.3
## - V23_J1_3	1	68.04	2880.3	-2614.1
## - V2_J1_3	1	68.53	2880.8	-2613.2
## - V4_J2_1	1	71.28	2883.6	-2608.2
## - V30_J1_3	1	72.19	2884.5	-2606.6
## - V15_J2_2	1	72.87	2885.2	-2605.4
## - V1_J2_2	1	75.70	2888.0	-2600.3
## - V1_J2_7	1	77.00	2889.3	-2597.9
## - V4_J2_3	1	77.44	2889.7	-2597.2
## - V5_J1_5	1	78.74	2891.0	-2594.8
## - V17_J1_3	1	81.83	2894.1	-2589.3
## - V17_J2_2	1	81.96	2894.3	-2589.0
## - V15_J2_7	1	88.36	2900.7	-2577.6
## - V3_J2_1	1	88.75	2901.0	-2576.8
## - V19_J1_5	1	91.27	2903.6	-2572.3
## - V4_J2_4	1	98.50	2910.8	-2559.4
## - V26_J2_1	1	100.74	2913.0	-2555.4
## - V19_J1_4	1	110.15	2922.4	-2538.6
## - V3_J2_5	1	113.09	2925.4	-2533.4
## - V26_J2_4	1	140.15	2952.4	-2485.5
## - V26_J2_5	1	145.98	2958.3	-2475.3
## - V30_J2_2	1	147.01	2959.3	-2473.4
## - V12_1_2_J2_2	1	162.04	2974.3	-2447.1
## - V3_J2_4	1	163.29	2975.6	-2444.9
## - V3_J2_3	1	174.30	2986.6	-2425.7
## - V5_J2_5	1	225.70	3038.0	-2337.0
## - V5_J2_4	1	248.30	3060.6	-2298.4
## - V20_J2_2	1	266.12	3078.4	-2268.3
## - V26_J2_3	1	311.49	3123.8	-2192.2
## - V16_J2_2	1	417.72	3230.0	-2018.3
## - J	12	996.73	3809.0	-1233.9
## - V	19	1206.56	4018.9	-1001.5

```

##
## Step: AIC=-2823.17
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3
##
##
## Df Sum of Sq RSS AIC
## + V2_J2_2 1 42.44 2717.3 -2897.1
## + V14_J1_5 1 37.50 2722.3 -2887.7
## + V5_J2_1 1 35.92 2723.9 -2884.7
## + V14_J1_4 1 32.33 2727.4 -2877.8
## + V30_J1_1 1 31.51 2728.3 -2876.3
## + V12_1_2_J1_3 1 31.31 2728.5 -2875.9
## + V30_J1_6 1 30.74 2729.0 -2874.8
## + V14_J2_3 1 28.54 2731.2 -2870.6
## + V16_J2_7 1 28.52 2731.3 -2870.6
## + V15_J1_7 1 28.26 2731.5 -2870.1
## + V29_J1_3 1 27.74 2732.0 -2869.1
## + V3_J1_5 1 26.61 2733.2 -2866.9
## + V19_J2_1 1 25.76 2734.0 -2865.3
## + V26_J1_4 1 25.36 2734.4 -2864.5
## + V14_J1_2 1 22.85 2736.9 -2859.8
## + V13_1_J1_2 1 21.87 2737.9 -2857.9
## + V29_J1_5 1 20.99 2738.8 -2856.2
## + V12_1_2_J1_7 1 20.86 2738.9 -2856.0
## + V23_J2_7 1 20.81 2739.0 -2855.9
## + V2_J2_7 1 20.43 2739.3 -2855.2
## + V13_1_J1_7 1 19.93 2739.8 -2854.2
## + V23_J2_1 1 19.15 2740.6 -2852.7
## + V12_1_2_J1_2 1 18.70 2741.1 -2851.9
## + V15_J1_5 1 18.60 2741.2 -2851.7
## + V14_J2_2 1 18.54 2741.2 -2851.6
## + V19_J2_5 1 18.51 2741.3 -2851.5
## + V30_J1_2 1 18.38 2741.4 -2851.3
## + V12_1_2_J1_6 1 17.32 2742.5 -2849.3
## + V5_J2_7 1 16.54 2743.2 -2847.8
## + V19_J2_4 1 16.29 2743.5 -2847.3
## + V15_J1_6 1 16.26 2743.5 -2847.3
## + V5_J1_4 1 16.25 2743.5 -2847.2
## + V2_J1_5 1 16.16 2743.6 -2847.1
## + V17_J1_5 1 15.68 2744.1 -2846.2
## + V13_2_J1_4 1 15.38 2744.4 -2845.6
## + V20_J2_3 1 14.26 2745.5 -2843.5
## + V26_J1_5 1 14.21 2745.6 -2843.4
## + V29_J1_7 1 14.19 2745.6 -2843.3
## + V15_J2_5 1 14.12 2745.7 -2843.2
## + V12_1_2_J2_7 1 13.58 2746.2 -2842.2
## + V30_J2_5 1 13.54 2746.2 -2842.1
## + V20_J1_4 1 13.42 2746.4 -2841.9
## + V24_J2_5 1 13.36 2746.4 -2841.8

```


## + V13_1_J1_3	1	13.25	2746.5	-2841.6
## + V19_J2_7	1	13.08	2746.7	-2841.2
## + V4_J1_4	1	13.05	2746.7	-2841.2
## + V1_J1_5	1	12.99	2746.8	-2841.1
## + V12_1_2_J1_5	1	12.72	2747.1	-2840.6
## + V30_J1_5	1	11.63	2748.1	-2838.5
## + V13_3_J1_2	1	11.27	2748.5	-2837.8
## + V29_J1_4	1	11.21	2748.6	-2837.7
## + V4_J2_7	1	11.18	2748.6	-2837.6
## + V26_J1_6	1	10.91	2748.9	-2837.1
## + V14_J2_7	1	10.80	2749.0	-2836.9
## + V13_2_J1_2	1	10.53	2749.2	-2836.4
## + V29_J1_1	1	10.40	2749.4	-2836.2
## + V20_J1_2	1	9.79	2750.0	-2835.0
## + V12_1_2_J2_5	1	9.59	2750.2	-2834.7
## + V14_J2_4	1	9.44	2750.3	-2834.3
## + V14_J1_7	1	9.35	2750.4	-2834.2
## + V4_J1_5	1	9.33	2750.4	-2834.1
## + V24_J1_1	1	9.22	2750.6	-2833.9
## + V15_J1_4	1	9.12	2750.6	-2833.8
## + V13_3_J2_5	1	9.04	2750.7	-2833.6
## + V16_J2_4	1	8.90	2750.9	-2833.3
## + V1_J2_5	1	8.89	2750.9	-2833.3
## + V1_J1_1	1	8.83	2750.9	-2833.2
## + V16_J2_3	1	8.77	2751.0	-2833.1
## + V29_J2_1	1	8.76	2751.0	-2833.1
## + V13_1_J2_4	1	8.56	2751.2	-2832.7
## + V5_J1_3	1	8.46	2751.3	-2832.5
## + V29_J2_3	1	8.37	2751.4	-2832.3
## + V14_J1_1	1	8.28	2751.5	-2832.2
## + V30_J2_7	1	8.25	2751.5	-2832.1
## + V24_J2_3	1	8.22	2751.6	-2832.1
## + V30_J2_4	1	8.13	2751.6	-2831.9
## + V20_J2_1	1	8.11	2751.7	-2831.8
## + V4_J1_6	1	8.06	2751.7	-2831.8
## + V12_1_2_J2_3	1	7.19	2752.6	-2830.1
## + V20_J2_7	1	6.75	2753.0	-2829.3
## + V30_J1_7	1	6.55	2753.2	-2828.9
## + V12_1_2_J2_4	1	6.45	2753.3	-2828.7
## + V24_J1_6	1	6.38	2753.4	-2828.6
## + V26_J1_1	1	6.26	2753.5	-2828.3
## + V23_J2_3	1	6.26	2753.5	-2828.3
## + V19_J2_2	1	6.13	2753.6	-2828.1
## + V26_J2_7	1	5.94	2753.8	-2827.8
## + V4_J2_2	1	5.93	2753.8	-2827.7
## + V29_J1_6	1	5.90	2753.9	-2827.7
## + V19_J1_6	1	5.84	2753.9	-2827.6
## + V4_J1_2	1	5.80	2754.0	-2827.5
## + V15_J2_4	1	5.77	2754.0	-2827.4
## + V2_J1_4	1	5.73	2754.0	-2827.3
## + V20_J1_3	1	5.63	2754.1	-2827.2
## + V4_J1_7	1	5.62	2754.2	-2827.1
## + V13_3_J1_6	1	5.52	2754.3	-2826.9
## + V12_1_2_J2_1	1	5.23	2754.5	-2826.4

## + V19_J1_2	1	5.20	2754.6	-2826.3
## + V13_2_J1_5	1	5.20	2754.6	-2826.3
## + V24_J1_7	1	5.16	2754.6	-2826.3
## + V20_J1_5	1	5.01	2754.8	-2826.0
## + V2_J2_1	1	4.98	2754.8	-2825.9
## + V5_J1_7	1	4.93	2754.8	-2825.8
## + V14_J1_6	1	4.93	2754.8	-2825.8
## + V13_1_J1_4	1	4.88	2754.9	-2825.8
## + V19_J1_7	1	4.51	2755.3	-2825.1
## + V13_2_J2_7	1	4.48	2755.3	-2825.0
## + V1_J1_4	1	4.38	2755.4	-2824.8
## + V14_J1_3	1	4.30	2755.5	-2824.7
## + V20_J1_6	1	4.28	2755.5	-2824.6
## + V13_1_J2_1	1	4.28	2755.5	-2824.6
## + V3_J2_7	1	4.10	2755.7	-2824.3
## + V29_J1_2	1	4.04	2755.7	-2824.2
## + V13_1_J1_5	1	3.90	2755.9	-2823.9
## + V30_J1_4	1	3.86	2755.9	-2823.8
## + V13_1_J2_2	1	3.73	2756.0	-2823.6
## + V15_J1_2	1	3.62	2756.2	-2823.4
## <none>			2759.8	-2823.2
## + V13_3_J1_4	1	3.47	2756.3	-2823.1
## + V13_1_J2_5	1	3.43	2756.3	-2823.0
## + V23_J2_4	1	3.25	2756.5	-2822.7
## + V2_J2_5	1	3.04	2756.7	-2822.3
## + V13_2_J2_5	1	3.00	2756.8	-2822.2
## + V23_J1_7	1	2.94	2756.8	-2822.1
## + V16_J1_4	1	2.87	2756.9	-2821.9
## + V26_J1_7	1	2.74	2757.0	-2821.7
## + V13_2_J1_1	1	2.72	2757.1	-2821.7
## + V17_J1_6	1	2.67	2757.1	-2821.6
## + V23_J2_5	1	2.66	2757.1	-2821.6
## + V23_J2_2	1	2.63	2757.1	-2821.5
## + V17_J1_4	1	2.55	2757.2	-2821.3
## + V4_J1_3	1	2.53	2757.2	-2821.3
## + V24_J1_2	1	2.51	2757.3	-2821.3
## + V16_J1_2	1	2.41	2757.4	-2821.1
## + V13_3_J2_7	1	2.40	2757.4	-2821.1
## + V3_J1_2	1	2.40	2757.4	-2821.1
## + V24_J1_3	1	2.33	2757.4	-2820.9
## + V4_J1_1	1	2.32	2757.5	-2820.9
## + V30_J2_1	1	2.26	2757.5	-2820.8
## + V15_J1_1	1	2.26	2757.5	-2820.8
## + V16_J1_5	1	2.14	2757.6	-2820.6
## + V17_J1_1	1	2.13	2757.6	-2820.6
## + V29_J2_2	1	2.10	2757.7	-2820.5
## + V13_2_J1_6	1	1.98	2757.8	-2820.3
## + V3_J1_3	1	1.97	2757.8	-2820.2
## + V2_J1_6	1	1.96	2757.8	-2820.2
## + V24_J1_5	1	1.94	2757.8	-2820.2
## + V13_3_J2_2	1	1.92	2757.9	-2820.2
## + V24_J2_7	1	1.83	2757.9	-2820.0
## + V16_J2_5	1	1.82	2758.0	-2820.0
## + V24_J1_4	1	1.61	2758.2	-2819.6

## + V14_J2_1	1	1.58	2758.2	-2819.5
## + V5_J1_1	1	1.48	2758.3	-2819.3
## + V13_1_J2_3	1	1.41	2758.4	-2819.2
## + V2_J1_7	1	1.35	2758.4	-2819.1
## + V13_2_J1_3	1	1.33	2758.4	-2819.1
## + V2_J1_1	1	1.30	2758.5	-2819.0
## + V14_J2_5	1	1.29	2758.5	-2819.0
## + V20_J2_5	1	1.17	2758.6	-2818.8
## + V20_J1_7	1	1.17	2758.6	-2818.7
## + V15_J2_1	1	1.14	2758.6	-2818.7
## + V23_J1_1	1	1.14	2758.6	-2818.7
## + V29_J2_7	1	1.07	2758.7	-2818.6
## + V1_J2_4	1	1.04	2758.7	-2818.5
## + V2_J2_4	1	1.02	2758.8	-2818.5
## + V24_J2_4	1	0.95	2758.8	-2818.3
## + V5_J2_2	1	0.94	2758.8	-2818.3
## + V26_J1_3	1	0.83	2758.9	-2818.1
## + V17_J1_2	1	0.83	2758.9	-2818.1
## + V23_J1_6	1	0.82	2759.0	-2818.1
## + V1_J1_6	1	0.82	2759.0	-2818.1
## + V23_J1_4	1	0.81	2759.0	-2818.1
## + V17_J2_1	1	0.80	2759.0	-2818.1
## + V13_1_J1_1	1	0.78	2759.0	-2818.0
## + V13_3_J2_1	1	0.76	2759.0	-2818.0
## + V19_J1_3	1	0.75	2759.0	-2817.9
## + V5_J1_6	1	0.72	2759.1	-2817.9
## + V16_J1_6	1	0.71	2759.1	-2817.9
## + V16_J1_7	1	0.70	2759.1	-2817.8
## + V1_J1_7	1	0.62	2759.2	-2817.7
## + V13_3_J1_7	1	0.62	2759.2	-2817.7
## + V13_3_J2_4	1	0.53	2759.2	-2817.5
## + V13_2_J2_3	1	0.49	2759.3	-2817.5
## + V20_J1_1	1	0.43	2759.3	-2817.3
## + V23_J1_5	1	0.36	2759.4	-2817.2
## + V1_J2_3	1	0.36	2759.4	-2817.2
## + V24_J2_2	1	0.33	2759.4	-2817.2
## + V17_J2_4	1	0.31	2759.5	-2817.1
## + V16_J1_1	1	0.29	2759.5	-2817.1
## + V13_3_J2_3	1	0.28	2759.5	-2817.1
## + V29_J2_5	1	0.28	2759.5	-2817.1
## + V1_J1_2	1	0.27	2759.5	-2817.1
## + V12_1_2_J1_1	1	0.26	2759.5	-2817.0
## + V13_2_J2_2	1	0.25	2759.5	-2817.0
## + V24_J2_1	1	0.25	2759.5	-2817.0
## + V13_3_J1_3	1	0.24	2759.5	-2817.0
## + V5_J1_2	1	0.23	2759.5	-2817.0
## + V1_J2_1	1	0.23	2759.5	-2817.0
## + V17_J2_5	1	0.23	2759.5	-2817.0
## + V13_3_J1_5	1	0.23	2759.5	-2817.0
## + V13_2_J2_1	1	0.19	2759.6	-2816.9
## + V2_J2_3	1	0.18	2759.6	-2816.9
## + V3_J1_7	1	0.16	2759.6	-2816.8
## + V26_J2_2	1	0.15	2759.6	-2816.8
## + V15_J2_3	1	0.15	2759.6	-2816.8

## + V17_J2_3	1	0.14	2759.6	-2816.8
## + V19_J1_1	1	0.14	2759.6	-2816.8
## + V3_J2_2	1	0.11	2759.7	-2816.8
## + V20_J2_4	1	0.11	2759.7	-2816.7
## + V30_J2_3	1	0.08	2759.7	-2816.7
## + V13_1_J2_7	1	0.08	2759.7	-2816.7
## + V26_J1_2	1	0.03	2759.7	-2816.6
## + V13_1_J1_6	1	0.03	2759.7	-2816.6
## + V13_3_J1_1	1	0.02	2759.8	-2816.6
## + V3_J1_1	1	0.02	2759.8	-2816.6
## + V16_J2_1	1	0.02	2759.8	-2816.6
## + V23_J1_2	1	0.02	2759.8	-2816.6
## + V3_J1_6	1	0.01	2759.8	-2816.6
## + V13_2_J2_4	1	0.01	2759.8	-2816.6
## + V29_J2_4	1	0.01	2759.8	-2816.6
## + V2_J1_2	1	0.00	2759.8	-2816.5
## + V17_J1_7	1	0.00	2759.8	-2816.5
## - V15_J1_3	1	34.16	2793.9	-2765.8
## - V5_J2_3	1	45.19	2805.0	-2745.3
## - V3_J1_4	1	52.08	2811.9	-2732.6
## - V16_J1_3	1	52.52	2812.3	-2731.8
## - V19_J2_3	1	54.14	2813.9	-2728.8
## - V12_1_2_J1_4	1	56.56	2816.3	-2724.3
## - V17_J2_7	1	57.05	2816.8	-2723.4
## - V13_2_J1_7	1	58.48	2818.3	-2720.8
## - V4_J2_5	1	65.03	2824.8	-2708.7
## - V1_J1_3	1	66.95	2826.7	-2705.2
## - V4_J2_1	1	70.07	2829.8	-2699.4
## - V15_J2_2	1	72.05	2831.8	-2695.8
## - V4_J2_3	1	76.02	2835.8	-2688.5
## - V1_J2_2	1	76.54	2836.3	-2687.6
## - V23_J1_3	1	76.61	2836.4	-2687.4
## - V2_J1_3	1	77.12	2836.9	-2686.5
## - V1_J2_7	1	77.17	2836.9	-2686.4
## - V5_J1_5	1	77.56	2837.3	-2685.7
## - V30_J1_3	1	81.03	2840.8	-2679.3
## - V17_J2_2	1	82.83	2842.6	-2676.0
## - V3_J2_1	1	87.24	2847.0	-2668.0
## - V15_J2_7	1	88.18	2848.0	-2666.3
## - V19_J1_5	1	90.15	2849.9	-2662.7
## - V17_J1_3	1	91.17	2850.9	-2660.8
## - V4_J2_4	1	96.99	2856.8	-2650.2
## - V26_J2_1	1	99.30	2859.1	-2646.0
## - V19_J1_4	1	108.85	2868.6	-2628.7
## - V3_J2_5	1	111.29	2871.1	-2624.2
## - V26_J2_4	1	138.35	2898.1	-2575.4
## - V26_J2_5	1	144.14	2903.9	-2565.1
## - V30_J2_2	1	148.16	2907.9	-2557.9
## - V3_J2_4	1	161.12	2920.9	-2534.8
## - V12_1_2_J2_2	1	162.02	2921.8	-2533.2
## - V3_J2_3	1	171.95	2931.7	-2515.5
## - V5_J2_5	1	223.42	2983.2	-2425.0
## - V5_J2_4	1	245.91	3005.7	-2386.0
## - V20_J2_2	1	266.23	3026.0	-2350.9

```

## - V26_J2_3      1      308.63 3068.4 -2278.6
## - V16_J2_2      1      439.89 3199.7 -2060.7
## - J             12      923.69 3683.5 -1401.5
## - V             19     1218.38 3978.1 -1047.8
##
## Step:  AIC=-2897.13
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##      V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##      V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##      V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
##      V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
##      V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
##      V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2
##
##
##      Df Sum of Sq    RSS      AIC
## + V14_J1_5      1      36.91 2680.4 -2961.6
## + V5_J2_1       1      34.94 2682.4 -2957.8
## + V12_1_2_J1_3  1      31.87 2685.5 -2951.8
## + V14_J1_4      1      31.77 2685.6 -2951.6
## + V30_J1_1      1      31.42 2685.9 -2951.0
## + V30_J1_6      1      30.82 2686.5 -2949.8
## + V16_J2_7      1      28.62 2688.7 -2945.6
## + V15_J1_7      1      28.19 2689.1 -2944.7
## + V14_J2_3      1      27.85 2689.5 -2944.1
## + V29_J1_3      1      27.78 2689.6 -2943.9
## + V2_J2_7       1      26.39 2690.9 -2941.2
## + V3_J1_5       1      25.72 2691.6 -2939.9
## + V19_J2_1      1      25.03 2692.3 -2938.6
## + V26_J1_4      1      24.58 2692.8 -2937.8
## + V14_J1_2      1      23.25 2694.1 -2935.2
## + V13_1_J1_2    1      21.48 2695.9 -2931.8
## + V29_J1_5      1      21.45 2695.9 -2931.7
## + V12_1_2_J1_7  1      20.86 2696.5 -2930.6
## + V23_J2_7      1      20.45 2696.9 -2929.8
## + V23_J2_1      1      19.63 2697.7 -2928.2
## + V13_1_J1_7    1      19.54 2697.8 -2928.0
## + V12_1_2_J1_2  1      18.67 2698.7 -2926.3
## + V15_J1_5      1      18.62 2698.7 -2926.2
## + V30_J1_2      1      18.31 2699.0 -2925.7
## + V19_J2_5      1      17.85 2699.5 -2924.8
## + V12_1_2_J1_6  1      17.35 2700.0 -2923.8
## + V5_J2_7       1      17.09 2700.2 -2923.3
## + V15_J1_6      1      16.18 2701.1 -2921.6
## + V13_2_J1_4    1      15.80 2701.5 -2920.8
## + V19_J2_4      1      15.68 2701.7 -2920.6
## + V17_J1_5      1      15.66 2701.7 -2920.6
## + V5_J1_4       1      15.63 2701.7 -2920.5
## + V14_J2_2      1      14.19 2703.1 -2917.7
## + V20_J2_3      1      14.11 2703.2 -2917.6
## + V15_J2_5      1      14.05 2703.3 -2917.4
## + V29_J1_7      1      13.86 2703.5 -2917.1
## + V26_J1_5      1      13.63 2703.7 -2916.7
## + V12_1_2_J2_7  1      13.62 2703.7 -2916.6
## + V30_J2_5      1      13.61 2703.7 -2916.6

```

## + V19_J2_7	1	13.50	2703.8	-2916.4
## + V20_J1_4	1	13.45	2703.9	-2916.3
## + V13_1_J1_3	1	13.22	2704.1	-2915.9
## + V1_J1_5	1	12.98	2704.4	-2915.4
## + V24_J2_5	1	12.93	2704.4	-2915.3
## + V12_1_2_J1_5	1	12.74	2704.6	-2914.9
## + V4_J1_4	1	12.49	2704.8	-2914.5
## + V2_J1_5	1	11.88	2705.4	-2913.3
## + V30_J1_5	1	11.62	2705.7	-2912.8
## + V29_J1_4	1	11.55	2705.8	-2912.7
## + V26_J1_6	1	11.38	2706.0	-2912.3
## + V14_J2_7	1	11.07	2706.3	-2911.7
## + V13_3_J1_2	1	10.99	2706.3	-2911.6
## + V4_J2_7	1	10.72	2706.6	-2911.1
## + V13_2_J1_2	1	10.23	2707.1	-2910.1
## + V29_J1_1	1	10.13	2707.2	-2909.9
## + V20_J1_2	1	9.82	2707.5	-2909.3
## + V12_1_2_J2_5	1	9.69	2707.6	-2909.1
## + V14_J1_7	1	9.62	2707.7	-2908.9
## + V13_3_J2_5	1	9.40	2707.9	-2908.5
## + V15_J1_4	1	9.13	2708.2	-2908.0
## + V29_J2_1	1	9.09	2708.2	-2907.9
## + V14_J2_4	1	9.07	2708.3	-2907.9
## + V24_J1_1	1	8.97	2708.4	-2907.7
## + V16_J2_4	1	8.96	2708.4	-2907.7
## + V13_1_J2_4	1	8.92	2708.4	-2907.6
## + V1_J1_1	1	8.89	2708.4	-2907.5
## + V4_J1_5	1	8.86	2708.5	-2907.5
## + V1_J2_5	1	8.84	2708.5	-2907.4
## + V29_J2_3	1	8.75	2708.6	-2907.3
## + V16_J2_3	1	8.68	2708.7	-2907.1
## + V24_J2_3	1	8.60	2708.7	-2907.0
## + V5_J1_3	1	8.59	2708.7	-2907.0
## + V14_J1_1	1	8.52	2708.8	-2906.8
## + V4_J1_6	1	8.46	2708.9	-2906.7
## + V30_J2_7	1	8.30	2709.0	-2906.4
## + V30_J2_4	1	8.07	2709.3	-2906.0
## + V20_J2_1	1	8.06	2709.3	-2905.9
## + V12_1_2_J2_3	1	7.30	2710.0	-2904.5
## + V20_J2_7	1	6.72	2710.6	-2903.4
## + V26_J1_1	1	6.61	2710.7	-2903.2
## + V24_J1_6	1	6.59	2710.7	-2903.1
## + V23_J2_3	1	6.59	2710.7	-2903.1
## + V30_J1_7	1	6.58	2710.8	-2903.1
## + V12_1_2_J2_4	1	6.53	2710.8	-2903.0
## + V26_J2_7	1	6.28	2711.1	-2902.5
## + V13_1_J2_2	1	6.21	2711.1	-2902.4
## + V4_J1_2	1	6.14	2711.2	-2902.2
## + V19_J1_6	1	6.13	2711.2	-2902.2
## + V4_J1_7	1	5.97	2711.4	-2901.9
## + V15_J2_4	1	5.73	2711.6	-2901.5
## + V29_J1_6	1	5.70	2711.6	-2901.4
## + V19_J1_2	1	5.47	2711.9	-2901.0
## + V20_J1_3	1	5.40	2711.9	-2900.8

## + V24_J1_7	1	5.36	2712.0	-2900.8
## + V13_3_J1_6	1	5.32	2712.0	-2900.7
## + V12_1_2_J2_1	1	5.27	2712.1	-2900.6
## + V5_J1_7	1	5.26	2712.1	-2900.6
## + V14_J1_6	1	5.12	2712.2	-2900.3
## + V13_1_J1_4	1	5.11	2712.2	-2900.3
## + V20_J1_5	1	5.02	2712.3	-2900.1
## + V13_2_J1_5	1	4.96	2712.4	-2900.0
## + V19_J1_7	1	4.78	2712.6	-2899.7
## + V23_J2_2	1	4.77	2712.6	-2899.6
## + V13_2_J2_7	1	4.67	2712.7	-2899.4
## + V13_1_J2_1	1	4.51	2712.8	-2899.1
## + V3_J2_7	1	4.43	2712.9	-2899.0
## + V1_J1_4	1	4.37	2713.0	-2898.9
## + V20_J1_6	1	4.30	2713.0	-2898.7
## + V14_J1_3	1	4.29	2713.0	-2898.7
## + V29_J1_2	1	3.87	2713.5	-2897.9
## + V30_J1_4	1	3.86	2713.5	-2897.9
## + V13_3_J2_2	1	3.79	2713.5	-2897.7
## + V19_J2_2	1	3.76	2713.6	-2897.7
## + V13_1_J1_5	1	3.71	2713.6	-2897.6
## + V13_3_J1_4	1	3.66	2713.7	-2897.5
## + V13_1_J2_5	1	3.66	2713.7	-2897.5
## + V4_J2_2	1	3.63	2713.7	-2897.4
## + V15_J1_2	1	3.58	2713.8	-2897.3
## + V23_J2_4	1	3.47	2713.9	-2897.1
## <none>			2717.3	-2897.1
## + V2_J1_4	1	3.29	2714.0	-2896.8
## + V2_J1_7	1	3.09	2714.2	-2896.4
## + V2_J1_1	1	3.03	2714.3	-2896.3
## + V26_J1_7	1	2.99	2714.3	-2896.2
## + V16_J1_4	1	2.87	2714.5	-2896.0
## + V23_J2_5	1	2.86	2714.5	-2896.0
## + V23_J1_7	1	2.79	2714.5	-2895.8
## + V13_2_J2_5	1	2.78	2714.6	-2895.8
## + V2_J2_1	1	2.75	2714.6	-2895.8
## + V17_J1_6	1	2.69	2714.6	-2895.7
## + V3_J1_2	1	2.65	2714.7	-2895.6
## + V13_2_J1_1	1	2.57	2714.8	-2895.4
## + V17_J1_4	1	2.55	2714.8	-2895.4
## + V4_J1_1	1	2.53	2714.8	-2895.3
## + V13_3_J2_7	1	2.53	2714.8	-2895.3
## + V4_J1_3	1	2.45	2714.9	-2895.2
## + V16_J1_2	1	2.44	2714.9	-2895.2
## + V24_J1_2	1	2.38	2715.0	-2895.0
## + V24_J1_3	1	2.34	2715.0	-2895.0
## + V30_J2_1	1	2.24	2715.1	-2894.8
## + V15_J1_1	1	2.23	2715.1	-2894.8
## + V17_J1_1	1	2.15	2715.2	-2894.6
## + V16_J1_5	1	2.14	2715.2	-2894.6
## + V13_2_J1_6	1	2.11	2715.2	-2894.5
## + V3_J1_3	1	2.07	2715.3	-2894.4
## + V24_J2_7	1	1.94	2715.4	-2894.2
## + V16_J2_5	1	1.85	2715.5	-2894.0

## + V24_J1_5	1	1.81	2715.5	-2894.0
## + V24_J1_4	1	1.73	2715.6	-2893.8
## + V5_J1_1	1	1.65	2715.7	-2893.7
## + V13_1_J2_3	1	1.57	2715.8	-2893.5
## + V14_J2_1	1	1.44	2715.9	-2893.2
## + V2_J2_5	1	1.37	2716.0	-2893.1
## + V13_2_J1_3	1	1.33	2716.0	-2893.1
## + V24_J2_2	1	1.27	2716.1	-2892.9
## + V20_J2_5	1	1.20	2716.1	-2892.8
## + V20_J1_7	1	1.17	2716.2	-2892.7
## + V29_J2_7	1	1.16	2716.2	-2892.7
## + V14_J2_5	1	1.15	2716.2	-2892.7
## + V15_J2_1	1	1.15	2716.2	-2892.7
## + V24_J2_4	1	1.07	2716.3	-2892.5
## + V1_J2_4	1	1.06	2716.3	-2892.5
## + V23_J1_1	1	1.06	2716.3	-2892.5
## + V13_3_J2_1	1	0.86	2716.5	-2892.1
## + V26_J2_2	1	0.85	2716.5	-2892.1
## + V17_J1_2	1	0.85	2716.5	-2892.1
## + V1_J1_6	1	0.84	2716.5	-2892.1
## + V29_J2_2	1	0.81	2716.5	-2892.1
## + V17_J2_1	1	0.80	2716.5	-2892.0
## + V26_J1_3	1	0.79	2716.5	-2892.0
## + V19_J1_3	1	0.77	2716.6	-2892.0
## + V23_J1_6	1	0.75	2716.6	-2891.9
## + V23_J1_4	1	0.72	2716.6	-2891.9
## + V13_1_J1_1	1	0.71	2716.6	-2891.8
## + V16_J1_6	1	0.69	2716.6	-2891.8
## + V16_J1_7	1	0.69	2716.6	-2891.8
## + V2_J1_6	1	0.66	2716.7	-2891.8
## + V1_J1_7	1	0.61	2716.7	-2891.7
## + V5_J1_6	1	0.61	2716.7	-2891.7
## + V13_3_J1_7	1	0.55	2716.8	-2891.6
## + V13_3_J2_4	1	0.45	2716.9	-2891.3
## + V23_J1_5	1	0.42	2716.9	-2891.3
## + V20_J1_1	1	0.42	2716.9	-2891.3
## + V13_2_J2_3	1	0.40	2716.9	-2891.3
## + V13_3_J2_3	1	0.35	2717.0	-2891.2
## + V1_J2_3	1	0.34	2717.0	-2891.2
## + V29_J2_5	1	0.34	2717.0	-2891.2
## + V24_J2_1	1	0.31	2717.0	-2891.1
## + V17_J2_4	1	0.30	2717.0	-2891.1
## + V2_J1_2	1	0.30	2717.0	-2891.1
## + V1_J1_2	1	0.28	2717.1	-2891.0
## + V16_J1_1	1	0.28	2717.1	-2891.0
## + V13_3_J1_5	1	0.28	2717.1	-2891.0
## + V12_1_2_J1_1	1	0.26	2717.1	-2891.0
## + V13_2_J2_1	1	0.24	2717.1	-2891.0
## + V13_3_J1_3	1	0.24	2717.1	-2890.9
## + V1_J2_1	1	0.24	2717.1	-2890.9
## + V17_J2_5	1	0.22	2717.1	-2890.9
## + V5_J2_2	1	0.19	2717.1	-2890.8
## + V2_J2_4	1	0.19	2717.1	-2890.8
## + V5_J1_2	1	0.17	2717.2	-2890.8

## + V17_J2_3	1	0.16	2717.2	-2890.8
## + V15_J2_3	1	0.13	2717.2	-2890.8
## + V20_J2_4	1	0.12	2717.2	-2890.7
## + V13_1_J2_7	1	0.11	2717.2	-2890.7
## + V19_J1_1	1	0.10	2717.2	-2890.7
## + V3_J1_7	1	0.10	2717.2	-2890.7
## + V30_J2_3	1	0.09	2717.2	-2890.7
## + V26_J1_2	1	0.06	2717.3	-2890.6
## + V3_J1_1	1	0.05	2717.3	-2890.6
## + V3_J1_6	1	0.04	2717.3	-2890.6
## + V3_J2_2	1	0.04	2717.3	-2890.6
## + V13_2_J2_4	1	0.03	2717.3	-2890.6
## + V2_J2_3	1	0.02	2717.3	-2890.5
## + V16_J2_1	1	0.02	2717.3	-2890.5
## + V13_1_J1_6	1	0.02	2717.3	-2890.5
## + V13_3_J1_1	1	0.01	2717.3	-2890.5
## + V23_J1_2	1	0.01	2717.3	-2890.5
## + V13_2_J2_2	1	0.00	2717.3	-2890.5
## + V29_J2_4	1	0.00	2717.3	-2890.5
## + V17_J1_7	1	0.00	2717.3	-2890.5
## - V15_J1_3	1	33.62	2751.0	-2839.8
## - V2_J2_2	1	42.44	2759.8	-2823.2
## - V5_J2_3	1	44.15	2761.5	-2820.0
## - V3_J1_4	1	51.02	2768.4	-2807.0
## - V19_J2_3	1	53.11	2770.4	-2803.1
## - V16_J1_3	1	53.18	2770.5	-2803.0
## - V12_1_2_J1_4	1	56.50	2773.8	-2796.8
## - V17_J2_7	1	57.19	2774.5	-2795.5
## - V13_2_J1_7	1	57.84	2775.2	-2794.2
## - V15_J2_2	1	63.25	2780.6	-2784.1
## - V4_J2_5	1	63.83	2781.2	-2783.0
## - V1_J1_3	1	67.71	2785.0	-2775.8
## - V4_J2_1	1	68.90	2786.2	-2773.6
## - V4_J2_3	1	74.65	2792.0	-2762.8
## - V5_J1_5	1	76.42	2793.8	-2759.5
## - V23_J1_3	1	76.66	2794.0	-2759.1
## - V1_J2_7	1	77.33	2794.7	-2757.8
## - V30_J1_3	1	81.85	2799.2	-2749.4
## - V1_J2_2	1	85.22	2802.6	-2743.2
## - V3_J2_1	1	85.79	2803.1	-2742.1
## - V2_J1_3	1	86.46	2803.8	-2740.9
## - V15_J2_7	1	88.01	2805.3	-2738.0
## - V19_J1_5	1	89.07	2806.4	-2736.1
## - V17_J2_2	1	91.83	2809.2	-2730.9
## - V17_J1_3	1	92.06	2809.4	-2730.5
## - V4_J2_4	1	95.52	2812.9	-2724.1
## - V26_J2_1	1	97.90	2815.2	-2719.7
## - V19_J1_4	1	107.65	2825.0	-2701.7
## - V3_J2_5	1	109.56	2826.9	-2698.2
## - V26_J2_4	1	136.59	2853.9	-2648.7
## - V26_J2_5	1	142.34	2859.7	-2638.3
## - V3_J2_4	1	159.03	2876.4	-2608.0
## - V30_J2_2	1	159.91	2877.2	-2606.4
## - V3_J2_3	1	169.67	2887.0	-2588.8

```

## - V12_1_2_J2_2  1    174.16 2891.5 -2580.7
## - V5_J2_5       1    221.20 2938.5 -2496.8
## - V5_J2_4       1    243.57 2960.9 -2457.4
## - V20_J2_2      1    281.42 2998.8 -2391.3
## - V26_J2_3      1    305.83 3023.2 -2349.2
## - V16_J2_2      1    458.82 3176.2 -2092.5
## - J             12    943.72 3661.1 -1426.6
## - V             19   1209.41 3926.7 -1108.8
##
## Step:  AIC=-2961.6
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##      V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##      V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##      V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
##      V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
##      V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
##      V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
##      V14_J1_5
##
##
##      Df Sum of Sq  RSS    AIC
## + V14_J1_4      1    38.04 2642.4 -3029.3
## + V5_J2_1       1    34.94 2645.5 -3023.2
## + V14_J2_3      1    33.72 2646.7 -3020.8
## + V30_J1_1      1    31.78 2648.6 -3017.0
## + V12_1_2_J1_3  1    31.32 2649.1 -3016.1
## + V30_J1_6      1    30.47 2650.0 -3014.4
## + V3_J1_5       1    29.54 2650.9 -3012.6
## + V15_J1_7      1    28.59 2651.8 -3010.7
## + V16_J2_7      1    28.22 2652.2 -3010.0
## + V29_J1_3      1    27.34 2653.1 -3008.3
## + V2_J2_7       1    26.00 2654.4 -3005.7
## + V19_J2_1      1    25.03 2655.4 -3003.8
## + V26_J1_4      1    24.17 2656.3 -3002.1
## + V15_J1_5      1    21.91 2658.5 -2997.6
## + V13_1_J1_2    1    21.26 2659.2 -2996.4
## + V12_1_2_J1_7  1    20.57 2659.9 -2995.0
## + V23_J2_7      1    20.14 2660.3 -2994.2
## + V23_J2_1      1    19.94 2660.5 -2993.8
## + V13_1_J1_7    1    19.32 2661.1 -2992.6
## + V12_1_2_J1_2  1    18.94 2661.5 -2991.8
## + V14_J1_2      1    18.71 2661.7 -2991.4
## + V30_J1_2      1    18.59 2661.8 -2991.2
## + V29_J1_5      1    18.27 2662.2 -2990.5
## + V19_J2_5      1    17.85 2662.6 -2989.7
## + V12_1_2_J1_6  1    17.09 2663.3 -2988.2
## + V5_J2_7       1    17.09 2663.3 -2988.2
## + V15_J1_6      1    16.47 2664.0 -2987.0
## + V26_J1_5      1    16.46 2664.0 -2987.0
## + V13_2_J1_4    1    16.04 2664.4 -2986.2
## + V19_J2_4      1    15.67 2664.8 -2985.5
## + V5_J1_4       1    15.65 2664.8 -2985.4
## + V30_J2_5      1    13.90 2666.5 -2982.0
## + V20_J2_3      1    13.85 2666.6 -2981.9
## + V15_J2_5      1    13.73 2666.7 -2981.7

```

## + V20_J1_4	1	13.69	2666.7	-2981.6
## + V29_J1_7	1	13.68	2666.8	-2981.6
## + V13_1_J1_3	1	13.53	2666.9	-2981.3
## + V19_J2_7	1	13.50	2666.9	-2981.2
## + V12_1_2_J2_7	1	13.35	2667.1	-2980.9
## + V17_J1_5	1	13.01	2667.4	-2980.3
## + V24_J2_5	1	12.70	2667.7	-2979.7
## + V14_J2_4	1	12.47	2668.0	-2979.2
## + V4_J1_4	1	12.20	2668.2	-2978.7
## + V29_J1_4	1	11.74	2668.7	-2977.8
## + V26_J1_6	1	11.64	2668.8	-2977.6
## + V4_J1_5	1	11.16	2669.3	-2976.7
## + V13_3_J1_2	1	10.84	2669.6	-2976.0
## + V14_J2_2	1	10.76	2669.7	-2975.9
## + V1_J1_5	1	10.57	2669.9	-2975.5
## + V4_J2_7	1	10.43	2670.0	-2975.2
## + V12_1_2_J1_5	1	10.34	2670.1	-2975.1
## + V13_2_J1_2	1	10.07	2670.4	-2974.5
## + V29_J1_1	1	9.98	2670.4	-2974.4
## + V12_1_2_J2_5	1	9.92	2670.5	-2974.3
## + V20_J1_2	1	9.64	2670.8	-2973.7
## + V13_3_J2_5	1	9.59	2670.8	-2973.6
## + V2_J1_5	1	9.57	2670.9	-2973.6
## + V30_J1_5	1	9.33	2671.1	-2973.1
## + V29_J2_1	1	9.28	2671.1	-2973.0
## + V16_J2_4	1	9.20	2671.2	-2972.8
## + V13_1_J2_4	1	9.10	2671.3	-2972.7
## + V29_J2_3	1	8.94	2671.5	-2972.3
## + V15_J1_4	1	8.89	2671.5	-2972.2
## + V24_J1_1	1	8.83	2671.6	-2972.1
## + V24_J2_3	1	8.78	2671.6	-2972.0
## + V4_J1_6	1	8.69	2671.7	-2971.8
## + V1_J1_1	1	8.67	2671.8	-2971.8
## + V5_J1_3	1	8.66	2671.8	-2971.8
## + V1_J2_5	1	8.58	2671.8	-2971.7
## + V16_J2_3	1	8.45	2672.0	-2971.4
## + V30_J2_7	1	8.08	2672.3	-2970.7
## + V14_J2_7	1	8.01	2672.4	-2970.5
## + V20_J2_1	1	7.86	2672.6	-2970.2
## + V30_J2_4	1	7.85	2672.6	-2970.2
## + V12_1_2_J2_3	1	7.51	2672.9	-2969.6
## + V20_J2_7	1	6.90	2673.5	-2968.4
## + V26_J1_1	1	6.81	2673.6	-2968.2
## + V23_J2_3	1	6.77	2673.7	-2968.1
## + V14_J1_7	1	6.76	2673.7	-2968.1
## + V13_2_J1_5	1	6.74	2673.7	-2968.1
## + V12_1_2_J2_4	1	6.72	2673.7	-2968.0
## + V24_J1_6	1	6.71	2673.7	-2968.0
## + V26_J2_7	1	6.51	2673.9	-2967.6
## + V30_J1_7	1	6.41	2674.0	-2967.4
## + V4_J1_2	1	6.33	2674.1	-2967.3
## + V4_J1_7	1	6.17	2674.3	-2966.9
## + V19_J1_6	1	6.10	2674.3	-2966.8
## + V13_1_J2_2	1	5.98	2674.4	-2966.6

## + V14_J1_1	1	5.84	2674.6	-2966.3
## + V20_J1_3	1	5.62	2674.8	-2965.9
## + V29_J1_6	1	5.58	2674.8	-2965.8
## + V15_J2_4	1	5.52	2674.9	-2965.7
## + V24_J1_7	1	5.48	2674.9	-2965.6
## + V12_1_2_J2_1	1	5.45	2675.0	-2965.6
## + V19_J1_2	1	5.44	2675.0	-2965.5
## + V13_1_J1_5	1	5.26	2675.2	-2965.2
## + V13_1_J1_4	1	5.23	2675.2	-2965.1
## + V5_J1_7	1	5.23	2675.2	-2965.1
## + V13_3_J1_6	1	5.21	2675.2	-2965.1
## + V13_2_J2_7	1	4.81	2675.6	-2964.3
## + V19_J1_7	1	4.75	2675.7	-2964.2
## + V13_1_J2_1	1	4.65	2675.8	-2964.0
## + V3_J2_7	1	4.64	2675.8	-2964.0
## + V23_J2_2	1	4.56	2675.9	-2963.8
## + V1_J1_4	1	4.54	2675.9	-2963.8
## + V20_J1_6	1	4.19	2676.2	-2963.1
## + V4_J2_2	1	3.87	2676.6	-2962.5
## + V19_J2_2	1	3.82	2676.6	-2962.4
## + V29_J1_2	1	3.78	2676.6	-2962.3
## + V13_1_J2_5	1	3.78	2676.6	-2962.3
## + V13_3_J1_4	1	3.77	2676.7	-2962.3
## + V30_J1_4	1	3.72	2676.7	-2962.2
## + V15_J1_2	1	3.72	2676.7	-2962.2
## + V13_3_J2_2	1	3.61	2676.8	-2962.0
## + V23_J2_4	1	3.60	2676.8	-2961.9
## + V20_J1_5	1	3.54	2676.9	-2961.8
## + V2_J1_4	1	3.43	2677.0	-2961.6
## <none>			2680.4	-2961.6
## + V26_J1_7	1	3.12	2677.3	-2961.0
## + V14_J1_6	1	3.09	2677.3	-2961.0
## + V16_J1_4	1	2.99	2677.4	-2960.8
## + V23_J2_5	1	2.98	2677.5	-2960.7
## + V2_J1_7	1	2.97	2677.5	-2960.7
## + V14_J2_1	1	2.94	2677.5	-2960.7
## + V24_J1_5	1	2.93	2677.5	-2960.7
## + V2_J1_1	1	2.92	2677.5	-2960.6
## + V2_J2_1	1	2.88	2677.6	-2960.6
## + V3_J1_2	1	2.79	2677.6	-2960.4
## + V23_J1_7	1	2.70	2677.7	-2960.2
## + V17_J1_4	1	2.68	2677.8	-2960.2
## + V13_2_J2_5	1	2.67	2677.8	-2960.2
## + V4_J1_1	1	2.66	2677.8	-2960.1
## + V13_3_J2_7	1	2.62	2677.8	-2960.1
## + V17_J1_6	1	2.58	2677.8	-2960.0
## + V14_J2_5	1	2.52	2677.9	-2959.9
## + V13_2_J1_1	1	2.49	2677.9	-2959.8
## + V14_J1_3	1	2.48	2677.9	-2959.8
## + V16_J1_2	1	2.34	2678.1	-2959.5
## + V15_J1_1	1	2.34	2678.1	-2959.5
## + V24_J1_2	1	2.30	2678.1	-2959.4
## + V4_J1_3	1	2.28	2678.1	-2959.4
## + V3_J1_3	1	2.25	2678.2	-2959.3

## + V24_J1_3	1	2.21	2678.2	-2959.3
## + V13_2_J1_6	1	2.19	2678.2	-2959.2
## + V30_J2_1	1	2.13	2678.3	-2959.1
## + V17_J1_1	1	2.05	2678.4	-2958.9
## + V24_J2_7	1	2.03	2678.4	-2958.9
## + V16_J2_5	1	1.96	2678.5	-2958.8
## + V24_J1_4	1	1.81	2678.6	-2958.5
## + V13_1_J2_3	1	1.64	2678.8	-2958.2
## + V5_J1_1	1	1.64	2678.8	-2958.2
## + V2_J2_5	1	1.46	2679.0	-2957.8
## + V13_2_J1_3	1	1.44	2679.0	-2957.8
## + V20_J2_5	1	1.28	2679.1	-2957.4
## + V15_J2_1	1	1.25	2679.2	-2957.4
## + V29_J2_7	1	1.23	2679.2	-2957.3
## + V16_J1_5	1	1.22	2679.2	-2957.3
## + V24_J2_2	1	1.17	2679.3	-2957.2
## + V1_J2_4	1	1.15	2679.3	-2957.2
## + V24_J2_4	1	1.13	2679.3	-2957.2
## + V20_J1_7	1	1.11	2679.3	-2957.1
## + V23_J1_1	1	1.00	2679.4	-2956.9
## + V13_3_J2_1	1	0.92	2679.5	-2956.8
## + V29_J2_2	1	0.90	2679.5	-2956.7
## + V19_J1_3	1	0.79	2679.6	-2956.5
## + V17_J1_2	1	0.78	2679.6	-2956.5
## + V1_J1_6	1	0.77	2679.7	-2956.5
## + V16_J1_6	1	0.75	2679.7	-2956.4
## + V16_J1_7	1	0.75	2679.7	-2956.4
## + V26_J2_2	1	0.74	2679.7	-2956.4
## + V17_J2_1	1	0.72	2679.7	-2956.4
## + V2_J1_6	1	0.71	2679.7	-2956.3
## + V23_J1_6	1	0.70	2679.7	-2956.3
## + V26_J1_3	1	0.69	2679.7	-2956.3
## + V1_J1_7	1	0.67	2679.8	-2956.3
## + V13_1_J1_1	1	0.67	2679.8	-2956.3
## + V23_J1_4	1	0.67	2679.8	-2956.3
## + V5_J1_6	1	0.62	2679.8	-2956.2
## + V13_3_J1_7	1	0.52	2679.9	-2956.0
## + V20_J1_1	1	0.46	2680.0	-2955.9
## + V13_3_J2_4	1	0.41	2680.0	-2955.8
## + V13_3_J2_3	1	0.39	2680.0	-2955.7
## + V29_J2_5	1	0.38	2680.0	-2955.7
## + V13_2_J2_3	1	0.36	2680.1	-2955.7
## + V24_J2_1	1	0.34	2680.1	-2955.6
## + V16_J1_1	1	0.32	2680.1	-2955.6
## + V1_J2_3	1	0.29	2680.1	-2955.5
## + V13_3_J1_3	1	0.28	2680.1	-2955.5
## + V1_J2_1	1	0.28	2680.1	-2955.5
## + V13_2_J2_1	1	0.28	2680.2	-2955.5
## + V2_J1_2	1	0.26	2680.2	-2955.5
## + V17_J2_4	1	0.25	2680.2	-2955.5
## + V1_J1_2	1	0.25	2680.2	-2955.4
## + V12_1_2_J1_1	1	0.23	2680.2	-2955.4
## + V2_J2_4	1	0.23	2680.2	-2955.4
## + V5_J2_2	1	0.20	2680.2	-2955.4

## + V17_J2_3	1	0.19	2680.2	-2955.3
## + V17_J2_5	1	0.18	2680.2	-2955.3
## + V5_J1_2	1	0.18	2680.3	-2955.3
## + V20_J2_4	1	0.14	2680.3	-2955.2
## + V13_1_J2_7	1	0.13	2680.3	-2955.2
## + V30_J2_3	1	0.12	2680.3	-2955.2
## + V19_J1_1	1	0.11	2680.3	-2955.2
## + V15_J2_3	1	0.10	2680.3	-2955.2
## + V23_J1_5	1	0.08	2680.3	-2955.1
## + V26_J1_2	1	0.07	2680.4	-2955.1
## + V3_J1_7	1	0.07	2680.4	-2955.1
## + V3_J1_1	1	0.07	2680.4	-2955.1
## + V3_J1_6	1	0.06	2680.4	-2955.1
## + V13_2_J2_4	1	0.04	2680.4	-2955.1
## + V16_J2_1	1	0.03	2680.4	-2955.0
## + V13_3_J1_5	1	0.03	2680.4	-2955.0
## + V3_J2_2	1	0.02	2680.4	-2955.0
## + V2_J2_3	1	0.01	2680.4	-2955.0
## + V13_1_J1_6	1	0.01	2680.4	-2955.0
## + V13_3_J1_1	1	0.01	2680.4	-2955.0
## + V23_J1_2	1	0.00	2680.4	-2955.0
## + V17_J1_7	1	0.00	2680.4	-2955.0
## + V29_J2_4	1	0.00	2680.4	-2955.0
## + V13_2_J2_2	1	0.00	2680.4	-2955.0
## - V15_J1_3	1	34.15	2714.6	-2902.4
## - V14_J1_5	1	36.91	2717.3	-2897.1
## - V2_J2_2	1	41.84	2722.3	-2887.7
## - V5_J2_3	1	44.14	2724.6	-2883.3
## - V3_J1_4	1	50.45	2730.9	-2871.3
## - V16_J1_3	1	52.56	2733.0	-2867.2
## - V19_J2_3	1	53.11	2733.5	-2866.2
## - V12_1_2_J1_4	1	56.05	2736.5	-2860.6
## - V17_J2_7	1	56.64	2737.1	-2859.5
## - V13_2_J1_7	1	57.48	2737.9	-2857.9
## - V4_J2_5	1	63.22	2743.6	-2847.0
## - V15_J2_2	1	64.02	2744.4	-2845.5
## - V1_J1_3	1	66.96	2747.4	-2839.9
## - V4_J2_1	1	68.27	2748.7	-2837.5
## - V4_J2_3	1	73.99	2754.4	-2826.6
## - V23_J1_3	1	75.98	2756.4	-2822.9
## - V1_J2_7	1	76.69	2757.1	-2821.6
## - V30_J1_3	1	81.08	2761.5	-2813.3
## - V5_J1_5	1	82.22	2762.6	-2811.1
## - V1_J2_2	1	84.31	2764.7	-2807.2
## - V3_J2_1	1	85.00	2765.4	-2805.9
## - V2_J1_3	1	85.67	2766.1	-2804.6
## - V15_J2_7	1	88.69	2769.1	-2799.0
## - V17_J2_2	1	90.89	2771.3	-2794.8
## - V17_J1_3	1	91.18	2771.6	-2794.3
## - V4_J2_4	1	94.77	2775.2	-2787.6
## - V19_J1_5	1	95.34	2775.8	-2786.5
## - V26_J2_1	1	97.14	2777.6	-2783.1
## - V19_J1_4	1	107.70	2788.1	-2763.4
## - V3_J2_5	1	108.67	2789.1	-2761.6

```

## - V26_J2_4      1      135.70 2816.1 -2711.4
## - V26_J2_5      1      141.43 2821.9 -2700.9
## - V3_J2_4       1      157.96 2838.4 -2670.5
## - V30_J2_2      1      158.74 2839.2 -2669.1
## - V3_J2_3       1      168.56 2849.0 -2651.1
## - V12_1_2_J2_2  1      172.97 2853.4 -2643.1
## - V5_J2_5       1      221.18 2901.6 -2555.9
## - V5_J2_4       1      243.56 2924.0 -2516.0
## - V20_J2_2      1      279.99 2960.4 -2451.6
## - V26_J2_3      1      304.49 2984.9 -2408.7
## - V16_J2_2      1      456.83 3137.3 -2149.9
## - J             12      913.47 3593.9 -1516.3
## - V             19     1206.68 3887.1 -1154.9
##
## Step:  AIC=-3029.29
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4
##
##
##           Df Sum of Sq    RSS      AIC
## + V14_J2_3      1      40.91 2601.5 -3103.8
## + V5_J2_1       1      34.39 2608.0 -3090.8
## + V30_J1_1      1      32.21 2610.2 -3086.4
## + V12_1_2_J1_3  1      31.11 2611.3 -3084.2
## + V30_J1_6      1      30.06 2612.3 -3082.2
## + V3_J1_5       1      29.93 2612.5 -3081.9
## + V15_J1_7      1      29.06 2613.3 -3080.2
## + V26_J1_4      1      28.19 2614.2 -3078.4
## + V16_J2_7      1      27.74 2614.6 -3077.5
## + V29_J1_3      1      26.82 2615.6 -3075.7
## + V2_J2_7       1      25.54 2616.8 -3073.2
## + V19_J2_1      1      25.05 2617.3 -3072.2
## + V15_J1_5      1      21.80 2620.6 -3065.8
## + V13_1_J1_2    1      21.00 2621.4 -3064.2
## + V12_1_2_J1_7  1      20.58 2621.8 -3063.3
## + V23_J2_1      1      20.28 2622.1 -3062.7
## + V23_J2_7      1      19.78 2622.6 -3061.7
## + V13_1_J1_7    1      19.06 2623.3 -3060.3
## + V5_J1_4       1      18.94 2623.4 -3060.1
## + V12_1_2_J1_2  1      18.92 2623.5 -3060.0
## + V30_J1_2      1      18.92 2623.5 -3060.0
## + V29_J1_5      1      18.24 2624.1 -3058.7
## + V19_J2_5      1      17.85 2624.5 -3057.9
## + V5_J2_7       1      17.50 2624.9 -3057.2
## + V12_1_2_J1_6  1      17.12 2625.3 -3056.4
## + V14_J2_4      1      16.89 2625.5 -3056.0
## + V15_J1_6      1      16.82 2625.6 -3055.9
## + V26_J1_5      1      16.35 2626.0 -3054.9
## + V19_J2_4      1      15.67 2626.7 -3053.6

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## + V4_J1_4	1	15.08	2627.3	-3052.4
## + V14_J1_2	1	14.26	2628.1	-3050.8
## + V30_J2_5	1	14.25	2628.1	-3050.8
## + V13_1_J1_3	1	13.90	2628.5	-3050.1
## + V20_J2_3	1	13.55	2628.8	-3049.4
## + V19_J2_7	1	13.50	2628.9	-3049.3
## + V29_J1_7	1	13.45	2628.9	-3049.2
## + V15_J2_5	1	13.36	2629.0	-3049.0
## + V12_1_2_J2_7	1	13.31	2629.1	-3048.9
## + V13_2_J1_4	1	13.12	2629.3	-3048.5
## + V17_J1_5	1	13.09	2629.3	-3048.5
## + V24_J2_5	1	12.45	2629.9	-3047.2
## + V26_J1_6	1	11.95	2630.4	-3046.2
## + V15_J1_4	1	11.36	2631.0	-3045.1
## + V4_J1_5	1	11.07	2631.3	-3044.5
## + V20_J1_4	1	11.00	2631.4	-3044.4
## + V13_3_J1_2	1	10.65	2631.7	-3043.7
## + V1_J1_5	1	10.64	2631.7	-3043.6
## + V12_1_2_J1_5	1	10.12	2632.3	-3042.6
## + V4_J2_7	1	10.10	2632.3	-3042.6
## + V12_1_2_J2_5	1	9.96	2632.4	-3042.3
## + V13_2_J1_2	1	9.87	2632.5	-3042.1
## + V13_3_J2_5	1	9.82	2632.6	-3042.0
## + V29_J1_1	1	9.80	2632.6	-3042.0
## + V2_J1_5	1	9.61	2632.8	-3041.6
## + V29_J2_1	1	9.48	2632.9	-3041.4
## + V16_J2_4	1	9.48	2632.9	-3041.3
## + V20_J1_2	1	9.44	2632.9	-3041.3
## + V30_J1_5	1	9.37	2633.0	-3041.1
## + V13_1_J2_4	1	9.32	2633.1	-3041.0
## + V29_J1_4	1	9.25	2633.1	-3040.9
## + V29_J2_3	1	9.16	2633.2	-3040.7
## + V5_J1_3	1	9.04	2633.3	-3040.5
## + V24_J2_3	1	9.00	2633.4	-3040.4
## + V4_J1_6	1	8.95	2633.4	-3040.3
## + V24_J1_1	1	8.66	2633.7	-3039.7
## + V1_J1_1	1	8.43	2634.0	-3039.3
## + V1_J2_5	1	8.29	2634.1	-3039.0
## + V16_J2_3	1	8.19	2634.2	-3038.8
## + V30_J2_7	1	7.83	2634.6	-3038.1
## + V20_J2_1	1	7.65	2634.7	-3037.7
## + V30_J2_4	1	7.60	2634.8	-3037.6
## + V12_1_2_J2_3	1	7.54	2634.8	-3037.5
## + V14_J2_2	1	7.50	2634.9	-3037.4
## + V20_J2_7	1	7.11	2635.3	-3036.7
## + V26_J1_1	1	7.05	2635.3	-3036.6
## + V23_J2_3	1	6.98	2635.4	-3036.4
## + V24_J1_6	1	6.86	2635.5	-3036.2
## + V26_J2_7	1	6.78	2635.6	-3036.0
## + V12_1_2_J2_4	1	6.75	2635.6	-3036.0
## + V13_2_J1_5	1	6.74	2635.6	-3035.9
## + V4_J1_2	1	6.56	2635.8	-3035.6
## + V4_J1_7	1	6.40	2636.0	-3035.3
## + V30_J1_7	1	6.21	2636.2	-3034.9

## + V19_J1_6	1	6.06	2636.3	-3034.6
## + V20_J1_3	1	5.88	2636.5	-3034.2
## + V13_1_J2_2	1	5.73	2636.7	-3034.0
## + V24_J1_7	1	5.62	2636.8	-3033.7
## + V12_1_2_J2_1	1	5.46	2636.9	-3033.4
## + V29_J1_6	1	5.45	2636.9	-3033.4
## + V5_J1_7	1	5.43	2637.0	-3033.3
## + V19_J1_2	1	5.41	2637.0	-3033.3
## + V30_J1_4	1	5.38	2637.0	-3033.3
## + V15_J2_4	1	5.29	2637.1	-3033.1
## + V13_1_J1_5	1	5.28	2637.1	-3033.1
## + V14_J2_1	1	5.23	2637.2	-3032.9
## + V14_J2_7	1	5.19	2637.2	-3032.9
## + V13_3_J1_6	1	5.08	2637.3	-3032.7
## + V13_2_J2_7	1	4.98	2637.4	-3032.5
## + V13_1_J2_1	1	4.79	2637.6	-3032.1
## + V19_J1_7	1	4.73	2637.7	-3032.0
## + V3_J2_7	1	4.66	2637.7	-3031.8
## + V14_J2_5	1	4.65	2637.7	-3031.8
## + V23_J2_2	1	4.32	2638.1	-3031.2
## + V14_J1_7	1	4.18	2638.2	-3030.9
## + V4_J2_2	1	4.15	2638.2	-3030.8
## + V20_J1_6	1	4.05	2638.3	-3030.6
## + V13_1_J2_5	1	3.92	2638.5	-3030.4
## + V15_J1_2	1	3.89	2638.5	-3030.3
## + V19_J2_2	1	3.88	2638.5	-3030.3
## + V23_J2_4	1	3.75	2638.6	-3030.1
## + V29_J1_2	1	3.67	2638.7	-3029.9
## + V13_1_J1_4	1	3.61	2638.8	-3029.8
## + V20_J1_5	1	3.55	2638.8	-3029.7
## + V14_J1_1	1	3.45	2638.9	-3029.5
## + V13_3_J2_2	1	3.42	2639.0	-3029.4
## <none>			2642.4	-3029.3
## + V26_J1_7	1	3.29	2639.1	-3029.1
## + V23_J2_5	1	3.12	2639.3	-3028.8
## + V1_J1_4	1	3.07	2639.3	-3028.7
## + V2_J2_1	1	3.02	2639.4	-3028.6
## + V24_J1_5	1	2.94	2639.4	-3028.5
## + V2_J1_7	1	2.84	2639.5	-3028.2
## + V4_J1_1	1	2.80	2639.6	-3028.2
## + V2_J1_1	1	2.79	2639.6	-3028.2
## + V3_J1_2	1	2.79	2639.6	-3028.1
## + V13_3_J2_7	1	2.74	2639.6	-3028.1
## + V23_J1_7	1	2.59	2639.8	-3027.8
## + V13_2_J2_5	1	2.54	2639.8	-3027.7
## + V15_J1_1	1	2.47	2639.9	-3027.5
## + V17_J1_6	1	2.44	2639.9	-3027.5
## + V13_3_J1_4	1	2.41	2640.0	-3027.4
## + V13_2_J1_1	1	2.39	2640.0	-3027.4
## + V3_J1_3	1	2.31	2640.1	-3027.2
## + V13_2_J1_6	1	2.28	2640.1	-3027.2
## + V16_J1_2	1	2.23	2640.2	-3027.0
## + V24_J1_2	1	2.22	2640.2	-3027.0
## + V2_J1_4	1	2.16	2640.2	-3026.9

## + V24_J2_7	1	2.13	2640.3	-3026.9
## + V16_J2_5	1	2.09	2640.3	-3026.8
## + V4_J1_3	1	2.08	2640.3	-3026.8
## + V24_J1_3	1	2.06	2640.3	-3026.7
## + V30_J2_1	1	2.01	2640.4	-3026.6
## + V17_J1_1	1	1.93	2640.5	-3026.5
## + V16_J1_4	1	1.81	2640.6	-3026.2
## + V5_J1_1	1	1.74	2640.6	-3026.1
## + V13_1_J2_3	1	1.74	2640.6	-3026.1
## + V2_J2_5	1	1.58	2640.8	-3025.8
## + V17_J1_4	1	1.58	2640.8	-3025.8
## + V13_2_J1_3	1	1.57	2640.8	-3025.8
## + V23_J1_4	1	1.46	2640.9	-3025.5
## + V14_J1_6	1	1.43	2641.0	-3025.5
## + V20_J2_5	1	1.38	2641.0	-3025.4
## + V15_J2_1	1	1.36	2641.0	-3025.3
## + V29_J2_7	1	1.31	2641.1	-3025.2
## + V1_J2_4	1	1.26	2641.1	-3025.1
## + V16_J1_5	1	1.23	2641.2	-3025.1
## + V24_J2_4	1	1.21	2641.2	-3025.0
## + V24_J2_2	1	1.06	2641.3	-3024.8
## + V14_J1_3	1	1.05	2641.3	-3024.7
## + V20_J1_7	1	1.04	2641.3	-3024.7
## + V29_J2_2	1	1.00	2641.4	-3024.6
## + V13_3_J2_1	1	0.99	2641.4	-3024.6
## + V23_J1_1	1	0.94	2641.4	-3024.5
## + V24_J1_4	1	0.91	2641.5	-3024.4
## + V19_J1_3	1	0.82	2641.6	-3024.3
## + V16_J1_7	1	0.82	2641.6	-3024.3
## + V16_J1_6	1	0.81	2641.6	-3024.3
## + V2_J1_6	1	0.77	2641.6	-3024.2
## + V1_J1_7	1	0.75	2641.6	-3024.1
## + V17_J1_2	1	0.71	2641.7	-3024.1
## + V1_J1_6	1	0.70	2641.7	-3024.0
## + V23_J1_6	1	0.65	2641.7	-3023.9
## + V17_J2_1	1	0.64	2641.7	-3023.9
## + V26_J2_2	1	0.63	2641.8	-3023.9
## + V13_1_J1_1	1	0.62	2641.8	-3023.9
## + V26_J1_3	1	0.59	2641.8	-3023.8
## + V5_J1_6	1	0.56	2641.8	-3023.8
## + V20_J1_1	1	0.50	2641.9	-3023.7
## + V13_3_J1_7	1	0.48	2641.9	-3023.6
## + V13_3_J2_3	1	0.44	2641.9	-3023.5
## + V29_J2_5	1	0.43	2642.0	-3023.5
## + V24_J2_1	1	0.38	2642.0	-3023.4
## + V13_3_J2_4	1	0.36	2642.0	-3023.4
## + V16_J1_1	1	0.36	2642.0	-3023.4
## + V13_3_J1_3	1	0.34	2642.0	-3023.3
## + V1_J2_1	1	0.33	2642.1	-3023.3
## + V13_2_J2_1	1	0.31	2642.1	-3023.3
## + V13_2_J2_3	1	0.31	2642.1	-3023.3
## + V2_J2_4	1	0.27	2642.1	-3023.2
## + V5_J2_2	1	0.27	2642.1	-3023.2
## + V1_J2_3	1	0.24	2642.1	-3023.1

## + V17_J2_3	1	0.24	2642.1	-3023.1
## + V12_1_2_J1_1	1	0.24	2642.1	-3023.1
## + V2_J1_2	1	0.23	2642.2	-3023.1
## + V1_J1_2	1	0.21	2642.2	-3023.1
## + V17_J2_4	1	0.21	2642.2	-3023.1
## + V20_J2_4	1	0.18	2642.2	-3023.0
## + V13_1_J2_7	1	0.15	2642.2	-3023.0
## + V30_J2_3	1	0.15	2642.2	-3023.0
## + V5_J1_2	1	0.14	2642.2	-3022.9
## + V17_J2_5	1	0.14	2642.2	-3022.9
## + V19_J1_1	1	0.11	2642.3	-3022.9
## + V26_J1_2	1	0.10	2642.3	-3022.9
## + V23_J1_5	1	0.08	2642.3	-3022.8
## + V15_J2_3	1	0.07	2642.3	-3022.8
## + V3_J1_7	1	0.07	2642.3	-3022.8
## + V3_J1_1	1	0.07	2642.3	-3022.8
## + V13_2_J2_4	1	0.06	2642.3	-3022.8
## + V3_J1_6	1	0.05	2642.3	-3022.8
## + V16_J2_1	1	0.05	2642.3	-3022.8
## + V13_3_J1_5	1	0.03	2642.4	-3022.7
## + V3_J2_2	1	0.01	2642.4	-3022.7
## + V17_J1_7	1	0.01	2642.4	-3022.7
## + V13_1_J1_6	1	0.01	2642.4	-3022.7
## + V2_J2_3	1	0.00	2642.4	-3022.7
## + V13_3_J1_1	1	0.00	2642.4	-3022.7
## + V13_2_J2_2	1	0.00	2642.4	-3022.7
## + V29_J2_4	1	0.00	2642.4	-3022.7
## + V23_J1_2	1	0.00	2642.4	-3022.7
## - V15_J1_3	1	34.78	2677.2	-2967.9
## - V14_J1_4	1	38.04	2680.4	-2961.6
## - V2_J2_2	1	41.18	2683.6	-2955.5
## - V14_J1_5	1	43.18	2685.6	-2951.6
## - V5_J2_3	1	43.59	2686.0	-2950.8
## - V16_J1_3	1	51.83	2694.2	-2934.9
## - V19_J2_3	1	53.10	2695.5	-2932.5
## - V3_J1_4	1	55.51	2697.9	-2927.8
## - V17_J2_7	1	56.00	2698.4	-2926.9
## - V13_2_J1_7	1	57.04	2699.4	-2924.9
## - V12_1_2_J1_4	1	61.45	2703.8	-2916.4
## - V4_J2_5	1	62.50	2704.9	-2914.4
## - V15_J2_2	1	64.90	2707.3	-2909.8
## - V1_J1_3	1	66.08	2708.5	-2907.5
## - V4_J2_1	1	67.56	2709.9	-2904.6
## - V4_J2_3	1	73.22	2715.6	-2893.8
## - V23_J1_3	1	75.18	2717.6	-2890.1
## - V1_J2_7	1	75.94	2718.3	-2888.6
## - V30_J1_3	1	80.18	2722.6	-2880.5
## - V5_J1_5	1	82.08	2724.5	-2876.9
## - V1_J2_2	1	83.30	2725.7	-2874.5
## - V2_J1_3	1	84.74	2727.1	-2871.8
## - V3_J2_1	1	84.96	2727.3	-2871.4
## - V15_J2_7	1	89.49	2731.9	-2862.7
## - V17_J2_2	1	89.84	2732.2	-2862.1
## - V17_J1_3	1	90.15	2732.5	-2861.5

```

## - V4_J2_4      1      93.90 2736.3 -2854.3
## - V19_J1_5     1      95.99 2738.4 -2850.4
## - V26_J2_1     1      96.31 2738.7 -2849.8
## - V3_J2_5      1     108.57 2751.0 -2826.5
## - V19_J1_4     1     115.08 2757.5 -2814.2
## - V26_J2_4     1     134.65 2777.0 -2777.5
## - V26_J2_5     1     140.36 2782.7 -2766.8
## - V30_J2_2     1     157.44 2799.8 -2735.0
## - V3_J2_4      1     157.84 2800.2 -2734.2
## - V3_J2_3      1     168.45 2810.8 -2714.6
## - V12_1_2_J2_2 1     172.52 2814.9 -2707.0
## - V5_J2_5      1     219.95 2862.3 -2620.2
## - V5_J2_4      1     242.26 2884.6 -2579.8
## - V20_J2_2     1     278.39 2920.8 -2515.1
## - V26_J2_3     1     302.92 2945.3 -2471.6
## - V16_J2_2     1     454.61 3097.0 -2210.4
## - J            12     873.32 3515.7 -1624.0
## - V            19    1212.61 3855.0 -1191.4
##
## Step:  AIC=-3103.79
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3
##
##
##           Df Sum of Sq  RSS      AIC
## + V5_J2_1      1      34.45 2567.0 -3166.5
## + V30_J1_1     1      32.80 2568.7 -3163.1
## + V3_J1_5      1      30.41 2571.1 -3158.3
## + V12_1_2_J1_3 1      30.28 2571.2 -3158.0
## + V15_J1_7     1      29.72 2571.8 -3156.9
## + V30_J1_6     1      29.50 2572.0 -3156.5
## + V26_J1_4     1      28.60 2572.9 -3154.6
## + V16_J2_7     1      27.09 2574.4 -3151.6
## + V29_J1_3     1      26.13 2575.3 -3149.6
## + V19_J2_1     1      25.13 2576.3 -3147.6
## + V2_J2_7      1      24.92 2576.6 -3147.2
## + V14_J2_4     1      22.86 2578.6 -3143.0
## + V15_J1_5     1      21.62 2579.9 -3140.6
## + V23_J2_1     1      20.68 2580.8 -3138.7
## + V13_1_J1_2   1      20.65 2580.8 -3138.6
## + V12_1_2_J1_7 1      20.15 2581.3 -3137.6
## + V30_J1_2     1      19.37 2582.1 -3136.0
## + V5_J1_4      1      19.32 2582.2 -3135.9
## + V12_1_2_J1_2 1      19.31 2582.2 -3135.9
## + V23_J2_7     1      19.30 2582.2 -3135.9
## + V13_1_J1_7   1      18.70 2582.8 -3134.7
## + V29_J1_5     1      18.25 2583.2 -3133.8
## + V19_J2_5     1      17.92 2583.6 -3133.1
## + V5_J2_7      1      17.55 2583.9 -3132.4

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## + V15_J1_6	1	17.30	2584.2	-3131.9
## + V20_J2_3	1	17.21	2584.3	-3131.7
## + V12_1_2_J1_6	1	16.74	2584.7	-3130.7
## + V26_J1_5	1	16.67	2584.8	-3130.6
## + V19_J2_4	1	15.73	2585.7	-3128.7
## + V4_J1_4	1	15.38	2586.1	-3128.0
## + V30_J2_5	1	14.64	2586.8	-3126.5
## + V13_1_J1_3	1	14.41	2587.1	-3126.0
## + V19_J2_7	1	13.52	2588.0	-3124.3
## + V17_J1_5	1	13.23	2588.3	-3123.7
## + V29_J1_7	1	13.16	2588.3	-3123.5
## + V13_2_J1_4	1	13.15	2588.3	-3123.5
## + V15_J2_5	1	12.94	2588.5	-3123.1
## + V12_1_2_J2_7	1	12.91	2588.6	-3123.0
## + V24_J2_5	1	12.18	2589.3	-3121.6
## + V26_J1_6	1	11.95	2589.5	-3121.1
## + V4_J1_5	1	11.33	2590.1	-3119.9
## + V15_J1_4	1	11.23	2590.2	-3119.7
## + V20_J1_4	1	11.05	2590.4	-3119.3
## + V16_J2_3	1	11.03	2590.4	-3119.3
## + V1_J1_5	1	10.76	2590.7	-3118.7
## + V13_3_J1_2	1	10.40	2591.1	-3118.0
## + V12_1_2_J2_5	1	10.25	2591.2	-3117.7
## + V12_1_2_J1_5	1	10.16	2591.3	-3117.5
## + V13_3_J2_5	1	10.06	2591.4	-3117.3
## + V4_J2_7	1	10.03	2591.4	-3117.2
## + V14_J1_2	1	9.93	2591.5	-3117.0
## + V16_J2_4	1	9.80	2591.7	-3116.8
## + V29_J2_1	1	9.72	2591.8	-3116.6
## + V2_J1_5	1	9.69	2591.8	-3116.6
## + V13_2_J1_2	1	9.61	2591.9	-3116.4
## + V29_J1_1	1	9.56	2591.9	-3116.3
## + V13_1_J2_4	1	9.56	2591.9	-3116.3
## + V30_J1_5	1	9.45	2592.0	-3116.1
## + V29_J1_4	1	9.25	2592.2	-3115.7
## + V5_J1_3	1	9.19	2592.3	-3115.6
## + V20_J1_2	1	9.17	2592.3	-3115.5
## + V4_J1_6	1	8.96	2592.5	-3115.1
## + V14_J2_1	1	8.68	2592.8	-3114.5
## + V24_J1_1	1	8.43	2593.0	-3114.0
## + V1_J1_1	1	8.09	2593.4	-3113.4
## + V1_J2_5	1	7.96	2593.5	-3113.1
## + V14_J2_5	1	7.94	2593.5	-3113.1
## + V30_J2_7	1	7.49	2594.0	-3112.1
## + V20_J2_7	1	7.41	2594.1	-3112.0
## + V20_J2_1	1	7.41	2594.1	-3112.0
## + V30_J2_4	1	7.32	2594.2	-3111.8
## + V24_J1_6	1	7.06	2594.4	-3111.3
## + V26_J1_1	1	7.05	2594.4	-3111.3
## + V12_1_2_J2_4	1	6.99	2594.5	-3111.1
## + V26_J2_7	1	6.84	2594.6	-3110.8
## + V13_2_J1_5	1	6.72	2594.8	-3110.6
## + V29_J2_3	1	6.61	2594.9	-3110.4
## + V4_J1_2	1	6.56	2594.9	-3110.3

## + V24_J2_3	1	6.48	2595.0	-3110.1
## + V4_J1_7	1	6.41	2595.1	-3110.0
## + V20_J1_3	1	6.24	2595.2	-3109.7
## + V19_J1_6	1	6.03	2595.5	-3109.2
## + V30_J1_7	1	5.94	2595.5	-3109.1
## + V24_J1_7	1	5.82	2595.7	-3108.8
## + V12_1_2_J2_1	1	5.67	2595.8	-3108.5
## + V5_J1_7	1	5.42	2596.1	-3108.0
## + V13_1_J2_2	1	5.38	2596.1	-3107.9
## + V19_J1_2	1	5.37	2596.1	-3107.9
## + V30_J1_4	1	5.32	2596.2	-3107.8
## + V13_1_J1_5	1	5.28	2596.2	-3107.7
## + V29_J1_6	1	5.27	2596.2	-3107.7
## + V12_1_2_J2_3	1	5.26	2596.2	-3107.7
## + V13_2_J2_7	1	5.22	2596.3	-3107.6
## + V15_J2_4	1	5.03	2596.4	-3107.2
## + V13_1_J2_1	1	4.96	2596.5	-3107.1
## + V13_3_J1_6	1	4.91	2596.6	-3107.0
## + V23_J2_3	1	4.80	2596.7	-3106.8
## + V19_J1_7	1	4.71	2596.8	-3106.6
## + V3_J2_7	1	4.69	2596.8	-3106.5
## + V14_J2_2	1	4.54	2596.9	-3106.2
## + V4_J2_2	1	4.29	2597.2	-3105.8
## + V15_J1_2	1	4.12	2597.4	-3105.4
## + V13_1_J2_5	1	4.08	2597.4	-3105.3
## + V19_J2_2	1	3.99	2597.5	-3105.2
## + V23_J2_2	1	3.99	2597.5	-3105.1
## + V23_J2_4	1	3.92	2597.6	-3105.0
## + V20_J1_6	1	3.88	2597.6	-3104.9
## + V13_1_J1_4	1	3.61	2597.9	-3104.4
## + V20_J1_5	1	3.57	2597.9	-3104.3
## + V29_J1_2	1	3.53	2598.0	-3104.2
## <none>			2601.5	-3103.8
## + V26_J1_7	1	3.30	2598.2	-3103.8
## + V23_J2_5	1	3.27	2598.2	-3103.7
## + V2_J2_1	1	3.21	2598.3	-3103.6
## + V13_3_J2_2	1	3.15	2598.3	-3103.5
## + V1_J1_4	1	3.14	2598.3	-3103.4
## + V24_J1_5	1	2.94	2598.5	-3103.0
## + V13_3_J2_7	1	2.90	2598.6	-3103.0
## + V4_J1_1	1	2.81	2598.7	-3102.8
## + V3_J1_2	1	2.77	2598.7	-3102.7
## + V14_J2_7	1	2.73	2598.7	-3102.6
## + V2_J1_7	1	2.66	2598.8	-3102.5
## + V15_J1_1	1	2.66	2598.8	-3102.5
## + V2_J1_1	1	2.62	2598.9	-3102.4
## + V23_J1_7	1	2.44	2599.0	-3102.0
## + V13_3_J1_4	1	2.41	2599.1	-3102.0
## + V13_2_J2_5	1	2.41	2599.1	-3102.0
## + V13_2_J1_6	1	2.41	2599.1	-3102.0
## + V3_J1_3	1	2.39	2599.1	-3101.9
## + V24_J2_7	1	2.28	2599.2	-3101.7
## + V17_J1_6	1	2.27	2599.2	-3101.7
## + V13_2_J1_1	1	2.26	2599.2	-3101.7

## + V16_J2_5	1	2.24	2599.2	-3101.6
## + V2_J1_4	1	2.20	2599.3	-3101.6
## + V24_J1_2	1	2.11	2599.4	-3101.4
## + V16_J1_2	1	2.07	2599.4	-3101.3
## + V4_J1_3	1	2.00	2599.5	-3101.2
## + V14_J1_7	1	1.99	2599.5	-3101.1
## + V24_J1_3	1	1.87	2599.6	-3100.9
## + V30_J2_1	1	1.86	2599.6	-3100.9
## + V16_J1_4	1	1.85	2599.6	-3100.9
## + V17_J1_1	1	1.77	2599.7	-3100.7
## + V13_2_J1_3	1	1.75	2599.7	-3100.7
## + V5_J1_1	1	1.73	2599.7	-3100.6
## + V2_J2_5	1	1.71	2599.8	-3100.6
## + V17_J1_4	1	1.63	2599.9	-3100.4
## + V14_J1_1	1	1.50	2600.0	-3100.2
## + V15_J2_1	1	1.49	2600.0	-3100.1
## + V20_J2_5	1	1.48	2600.0	-3100.1
## + V23_J1_4	1	1.45	2600.0	-3100.1
## + V29_J2_7	1	1.42	2600.1	-3100.0
## + V1_J2_4	1	1.39	2600.1	-3099.9
## + V24_J2_4	1	1.30	2600.2	-3099.7
## + V16_J1_5	1	1.26	2600.2	-3099.7
## + V29_J2_2	1	1.15	2600.3	-3099.5
## + V13_3_J2_1	1	1.06	2600.4	-3099.3
## + V13_2_J2_3	1	1.05	2600.4	-3099.3
## + V20_J1_7	1	0.94	2600.5	-3099.0
## + V16_J1_7	1	0.92	2600.6	-3099.0
## + V24_J2_2	1	0.91	2600.6	-3099.0
## + V24_J1_4	1	0.91	2600.6	-3099.0
## + V16_J1_6	1	0.91	2600.6	-3099.0
## + V1_J2_3	1	0.89	2600.6	-3098.9
## + V2_J1_6	1	0.87	2600.6	-3098.9
## + V19_J1_3	1	0.86	2600.6	-3098.9
## + V1_J1_7	1	0.86	2600.6	-3098.9
## + V23_J1_1	1	0.85	2600.6	-3098.9
## + V13_1_J2_3	1	0.74	2600.7	-3098.6
## + V17_J1_2	1	0.61	2600.9	-3098.4
## + V1_J1_6	1	0.61	2600.9	-3098.4
## + V23_J1_6	1	0.58	2600.9	-3098.3
## + V26_J2_2	1	0.57	2600.9	-3098.3
## + V20_J1_1	1	0.57	2600.9	-3098.3
## + V13_1_J1_1	1	0.57	2600.9	-3098.3
## + V5_J1_6	1	0.56	2600.9	-3098.3
## + V17_J2_1	1	0.55	2600.9	-3098.3
## + V26_J1_3	1	0.54	2600.9	-3098.2
## + V15_J2_3	1	0.52	2601.0	-3098.2
## + V29_J2_5	1	0.48	2601.0	-3098.1
## + V24_J2_1	1	0.43	2601.0	-3098.0
## + V16_J1_1	1	0.43	2601.1	-3098.0
## + V13_3_J1_7	1	0.42	2601.1	-3098.0
## + V13_3_J1_3	1	0.42	2601.1	-3098.0
## + V1_J2_1	1	0.40	2601.1	-3098.0
## + V13_2_J2_1	1	0.36	2601.1	-3097.9
## + V2_J2_4	1	0.33	2601.2	-3097.8

## + V13_3_J2_4	1	0.32	2601.2	-3097.8
## + V14_J1_6	1	0.31	2601.2	-3097.8
## + V5_J2_2	1	0.30	2601.2	-3097.8
## + V2_J2_3	1	0.27	2601.2	-3097.7
## + V20_J2_4	1	0.21	2601.3	-3097.6
## + V13_1_J2_7	1	0.20	2601.3	-3097.5
## + V12_1_2_J1_1	1	0.19	2601.3	-3097.5
## + V2_J1_2	1	0.18	2601.3	-3097.5
## + V14_J1_3	1	0.17	2601.3	-3097.5
## + V1_J1_2	1	0.16	2601.3	-3097.5
## + V17_J2_4	1	0.16	2601.3	-3097.5
## + V5_J1_2	1	0.15	2601.3	-3097.5
## + V19_J1_1	1	0.12	2601.4	-3097.4
## + V17_J2_5	1	0.10	2601.4	-3097.4
## + V26_J1_2	1	0.10	2601.4	-3097.4
## + V23_J1_5	1	0.09	2601.4	-3097.3
## + V13_2_J2_4	1	0.08	2601.4	-3097.3
## + V16_J2_1	1	0.08	2601.4	-3097.3
## + V3_J1_7	1	0.07	2601.4	-3097.3
## + V3_J1_1	1	0.07	2601.4	-3097.3
## + V3_J1_6	1	0.05	2601.4	-3097.3
## + V13_3_J2_3	1	0.04	2601.4	-3097.2
## + V13_3_J1_5	1	0.03	2601.5	-3097.2
## + V17_J1_7	1	0.02	2601.5	-3097.2
## + V13_2_J2_2	1	0.02	2601.5	-3097.2
## + V29_J2_4	1	0.01	2601.5	-3097.2
## + V3_J2_2	1	0.01	2601.5	-3097.2
## + V30_J2_3	1	0.00	2601.5	-3097.2
## + V17_J2_3	1	0.00	2601.5	-3097.2
## + V13_1_J1_6	1	0.00	2601.5	-3097.2
## + V13_3_J1_1	1	0.00	2601.5	-3097.2
## + V23_J1_2	1	0.00	2601.5	-3097.2
## - V15_J1_3	1	35.64	2637.1	-3039.7
## - V2_J2_2	1	40.24	2641.7	-3030.6
## - V14_J2_3	1	40.91	2642.4	-3029.3
## - V14_J1_4	1	45.23	2646.7	-3020.8
## - V5_J2_3	1	49.23	2650.7	-3013.0
## - V14_J1_5	1	50.81	2652.3	-3009.8
## - V16_J1_3	1	50.85	2652.3	-3009.8
## - V17_J2_7	1	55.13	2656.6	-3001.4
## - V3_J1_4	1	56.05	2657.5	-2999.6
## - V13_2_J1_7	1	56.46	2657.9	-2998.8
## - V19_J2_3	1	59.35	2660.8	-2993.1
## - V12_1_2_J1_4	1	61.35	2662.8	-2989.2
## - V4_J2_5	1	62.51	2664.0	-2987.0
## - V1_J1_3	1	64.88	2666.4	-2982.3
## - V15_J2_2	1	66.16	2667.6	-2979.8
## - V4_J2_1	1	67.57	2669.0	-2977.1
## - V23_J1_3	1	74.09	2675.6	-2964.4
## - V1_J2_7	1	74.92	2676.4	-2962.8
## - V30_J1_3	1	78.95	2680.4	-2955.0
## - V4_J2_3	1	80.34	2681.8	-2952.3
## - V1_J2_2	1	81.86	2683.3	-2949.3
## - V5_J1_5	1	82.74	2684.2	-2947.6


```

## - V2_J1_3      1      83.47 2684.9 -2946.2
## - V3_J2_1      1      85.04 2686.5 -2943.2
## - V17_J2_2     1      88.34 2689.8 -2936.8
## - V17_J1_3     1      88.75 2690.2 -2936.0
## - V15_J2_7     1      90.59 2692.1 -2932.4
## - V4_J2_4      1      93.91 2695.4 -2926.0
## - V26_J2_1     1      96.31 2697.8 -2921.4
## - V19_J1_5     1      96.76 2698.2 -2920.5
## - V3_J2_5      1     108.66 2710.1 -2897.6
## - V19_J1_4     1     115.92 2717.4 -2883.7
## - V26_J2_4     1     134.66 2736.1 -2848.0
## - V26_J2_5     1     140.37 2741.8 -2837.2
## - V30_J2_2     1     155.58 2757.1 -2808.4
## - V3_J2_4      1     157.95 2759.4 -2803.9
## - V12_1_2_J2_2 1     170.71 2772.2 -2779.9
## - V3_J2_3      1     178.92 2780.4 -2764.6
## - V5_J2_5      1     220.06 2821.5 -2688.2
## - V5_J2_4      1     242.38 2843.9 -2647.2
## - V20_J2_2     1     276.09 2877.6 -2585.9
## - V26_J2_3     1     316.52 2918.0 -2513.4
## - V16_J2_2     1     451.42 3052.9 -2278.4
## - J            12     891.29 3492.8 -1651.4
## - V            19    1218.53 3820.0 -1232.2
##
## Step:  AIC=-3166.48
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1
##
##           Df Sum of Sq  RSS      AIC
## + V30_J1_1    1    33.39 2533.6 -3227.9
## + V3_J1_5     1    30.90 2536.1 -3222.8
## + V15_J1_7    1    30.38 2536.6 -3221.8
## + V12_1_2_J1_3 1    29.42 2537.6 -3219.8
## + V19_J2_1    1    29.08 2537.9 -3219.1
## + V30_J1_6    1    28.94 2538.1 -3218.8
## + V26_J1_4    1    28.57 2538.5 -3218.0
## + V5_J1_4     1    26.77 2540.3 -3214.3
## + V16_J2_7    1    26.45 2540.6 -3213.7
## + V29_J1_3    1    25.44 2541.6 -3211.6
## + V2_J2_7     1    24.31 2542.7 -3209.3
## + V14_J2_4    1    22.90 2544.1 -3206.4
## + V15_J1_5    1    21.44 2545.6 -3203.5
## + V13_1_J1_2  1    20.30 2546.7 -3201.1
## + V30_J1_2    1    19.82 2547.2 -3200.2
## + V12_1_2_J1_2 1    19.75 2547.3 -3200.0
## + V12_1_2_J1_7 1    19.69 2547.3 -3199.9
## + V23_J2_7    1    18.83 2548.2 -3198.1
## + V13_1_J1_7  1    18.35 2548.7 -3197.2

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## + V29_J1_5	1	18.25	2548.8	-3196.9
## + V19_J2_5	1	17.95	2549.1	-3196.3
## + V15_J1_6	1	17.79	2549.2	-3196.0
## + V23_J2_1	1	17.57	2549.5	-3195.6
## + V20_J2_3	1	17.23	2549.8	-3194.9
## + V26_J1_5	1	17.03	2550.0	-3194.5
## + V12_1_2_J1_6	1	16.34	2550.7	-3193.0
## + V19_J2_4	1	15.77	2551.3	-3191.9
## + V4_J1_4	1	15.36	2551.7	-3191.0
## + V13_1_J1_3	1	14.93	2552.1	-3190.2
## + V30_J2_5	1	14.67	2552.4	-3189.6
## + V19_J2_7	1	13.91	2553.1	-3188.1
## + V13_2_J1_4	1	13.52	2553.5	-3187.3
## + V17_J1_5	1	13.37	2553.7	-3187.0
## + V29_J1_7	1	12.87	2554.2	-3186.0
## + V15_J2_5	1	12.86	2554.2	-3186.0
## + V12_1_2_J2_7	1	12.48	2554.5	-3185.2
## + V24_J2_5	1	12.24	2554.8	-3184.7
## + V5_J2_7	1	12.13	2554.9	-3184.5
## + V26_J1_6	1	11.91	2555.1	-3184.0
## + V4_J1_5	1	11.63	2555.4	-3183.5
## + V20_J1_4	1	11.40	2555.6	-3183.0
## + V14_J2_1	1	11.03	2556.0	-3182.2
## + V16_J2_3	1	11.01	2556.0	-3182.2
## + V1_J1_5	1	10.89	2556.1	-3182.0
## + V15_J1_4	1	10.79	2556.2	-3181.7
## + V12_1_2_J2_5	1	10.26	2556.8	-3180.7
## + V12_1_2_J1_5	1	10.24	2556.8	-3180.6
## + V14_J1_2	1	10.20	2556.8	-3180.5
## + V13_3_J1_2	1	10.16	2556.9	-3180.5
## + V13_3_J2_5	1	10.01	2557.0	-3180.2
## + V4_J2_7	1	10.00	2557.0	-3180.1
## + V16_J2_4	1	9.83	2557.2	-3179.8
## + V2_J1_5	1	9.77	2557.3	-3179.7
## + V20_J2_1	1	9.55	2557.5	-3179.2
## + V29_J1_4	1	9.54	2557.5	-3179.2
## + V30_J1_5	1	9.54	2557.5	-3179.2
## + V13_1_J2_4	1	9.51	2557.5	-3179.1
## + V13_2_J1_2	1	9.35	2557.7	-3178.8
## + V29_J1_1	1	9.33	2557.7	-3178.8
## + V4_J1_6	1	8.92	2558.1	-3177.9
## + V20_J1_2	1	8.90	2558.1	-3177.9
## + V24_J1_1	1	8.21	2558.8	-3176.5
## + V14_J2_5	1	7.97	2559.1	-3176.0
## + V1_J2_5	1	7.90	2559.1	-3175.9
## + V1_J1_1	1	7.77	2559.3	-3175.6
## + V20_J2_7	1	7.71	2559.3	-3175.5
## + V29_J2_1	1	7.59	2559.4	-3175.2
## + V30_J2_4	1	7.29	2559.7	-3174.6
## + V24_J1_6	1	7.27	2559.8	-3174.6
## + V30_J2_7	1	7.15	2559.9	-3174.4
## + V26_J1_1	1	7.02	2560.0	-3174.1
## + V12_1_2_J2_4	1	7.00	2560.0	-3174.0
## + V26_J2_7	1	6.86	2560.2	-3173.8

## + V13_2_J1_5	1	6.70	2560.3	-3173.4
## + V20_J1_3	1	6.62	2560.4	-3173.3
## + V29_J2_3	1	6.57	2560.5	-3173.2
## + V4_J1_2	1	6.53	2560.5	-3173.1
## + V24_J2_3	1	6.43	2560.6	-3172.9
## + V4_J1_7	1	6.40	2560.6	-3172.8
## + V19_J1_6	1	6.24	2560.8	-3172.5
## + V24_J1_7	1	6.01	2561.0	-3172.0
## + V30_J1_7	1	5.69	2561.3	-3171.4
## + V19_J1_2	1	5.57	2561.5	-3171.1
## + V13_2_J2_7	1	5.46	2561.6	-3170.9
## + V5_J1_3	1	5.42	2561.6	-3170.8
## + V13_1_J1_5	1	5.27	2561.8	-3170.5
## + V12_1_2_J2_3	1	5.27	2561.8	-3170.5
## + V29_J1_6	1	5.10	2561.9	-3170.2
## + V30_J1_4	1	5.05	2562.0	-3170.1
## + V13_1_J2_2	1	5.04	2562.0	-3170.1
## + V15_J2_4	1	4.98	2562.1	-3169.9
## + V19_J1_7	1	4.90	2562.1	-3169.8
## + V14_J2_2	1	4.88	2562.1	-3169.7
## + V23_J2_3	1	4.78	2562.2	-3169.5
## + V13_3_J1_6	1	4.75	2562.3	-3169.5
## + V3_J2_7	1	4.71	2562.3	-3169.4
## + V4_J2_2	1	4.42	2562.6	-3168.8
## + V15_J1_2	1	4.36	2562.7	-3168.7
## + V19_J2_2	1	4.32	2562.7	-3168.6
## + V12_1_2_J2_1	1	4.11	2562.9	-3168.2
## + V13_1_J2_5	1	4.04	2563.0	-3168.0
## + V23_J2_4	1	3.92	2563.1	-3167.8
## + V13_1_J1_4	1	3.79	2563.2	-3167.5
## + V20_J1_6	1	3.70	2563.3	-3167.3
## + V23_J2_2	1	3.68	2563.4	-3167.3
## + V20_J1_5	1	3.60	2563.4	-3167.1
## + V13_1_J2_1	1	3.47	2563.6	-3166.9
## + V29_J1_2	1	3.38	2563.6	-3166.7
## + V1_J1_4	1	3.38	2563.7	-3166.7
## + V26_J1_7	1	3.29	2563.7	-3166.5
## <none>			2567.0	-3166.5
## + V23_J2_5	1	3.27	2563.8	-3166.5
## + V13_3_J2_7	1	3.07	2564.0	-3166.1
## + V30_J2_1	1	2.98	2564.1	-3165.9
## + V24_J1_5	1	2.94	2564.1	-3165.8
## + V14_J2_7	1	2.91	2564.1	-3165.7
## + V13_3_J2_2	1	2.89	2564.1	-3165.7
## + V15_J1_1	1	2.85	2564.2	-3165.6
## + V4_J1_1	1	2.79	2564.2	-3165.5
## + V3_J1_2	1	2.75	2564.3	-3165.4
## + V5_J1_7	1	2.56	2564.5	-3165.0
## + V13_3_J1_4	1	2.56	2564.5	-3165.0
## + V13_2_J1_6	1	2.54	2564.5	-3165.0
## + V2_J1_7	1	2.49	2564.5	-3164.9
## + V3_J1_3	1	2.46	2564.6	-3164.8
## + V2_J1_1	1	2.46	2564.6	-3164.8
## + V13_2_J2_5	1	2.43	2564.6	-3164.8

## + V24_J2_7	1	2.43	2564.6	-3164.8
## + V2_J1_4	1	2.38	2564.7	-3164.7
## + V23_J1_7	1	2.30	2564.7	-3164.5
## + V5_J1_6	1	2.26	2564.8	-3164.4
## + V16_J2_5	1	2.25	2564.8	-3164.4
## + V13_2_J1_1	1	2.14	2564.9	-3164.2
## + V14_J1_7	1	2.12	2564.9	-3164.1
## + V17_J1_6	1	2.10	2564.9	-3164.1
## + V2_J2_1	1	2.06	2565.0	-3164.0
## + V16_J1_4	1	2.02	2565.0	-3163.9
## + V24_J1_2	1	2.00	2565.0	-3163.9
## + V13_2_J1_3	1	1.95	2565.1	-3163.8
## + V4_J1_3	1	1.93	2565.1	-3163.8
## + V16_J1_2	1	1.93	2565.1	-3163.7
## + V17_J1_4	1	1.80	2565.2	-3163.5
## + V2_J2_5	1	1.72	2565.3	-3163.3
## + V24_J1_3	1	1.69	2565.3	-3163.3
## + V17_J1_1	1	1.62	2565.4	-3163.1
## + V14_J1_1	1	1.60	2565.4	-3163.1
## + V29_J2_7	1	1.54	2565.5	-3163.0
## + V20_J2_5	1	1.48	2565.6	-3162.8
## + V1_J2_4	1	1.42	2565.6	-3162.7
## + V23_J1_4	1	1.32	2565.7	-3162.5
## + V29_J2_2	1	1.32	2565.7	-3162.5
## + V16_J1_5	1	1.29	2565.7	-3162.5
## + V5_J1_2	1	1.28	2565.7	-3162.4
## + V24_J2_4	1	1.28	2565.8	-3162.4
## + V17_J2_1	1	1.21	2565.8	-3162.3
## + V13_2_J2_3	1	1.06	2566.0	-3162.0
## + V16_J1_7	1	1.02	2566.0	-3161.9
## + V16_J1_6	1	1.01	2566.0	-3161.9
## + V24_J1_4	1	1.00	2566.0	-3161.9
## + V19_J1_3	1	1.00	2566.0	-3161.9
## + V1_J1_7	1	0.97	2566.1	-3161.8
## + V2_J1_6	1	0.97	2566.1	-3161.8
## + V1_J2_3	1	0.87	2566.2	-3161.6
## + V20_J1_7	1	0.86	2566.2	-3161.6
## + V24_J2_2	1	0.78	2566.3	-3161.4
## + V23_J1_1	1	0.77	2566.3	-3161.4
## + V15_J2_1	1	0.76	2566.3	-3161.4
## + V13_1_J2_3	1	0.72	2566.3	-3161.3
## + V20_J1_1	1	0.64	2566.4	-3161.1
## + V26_J2_2	1	0.53	2566.5	-3160.9
## + V17_J1_2	1	0.53	2566.5	-3160.9
## + V1_J1_6	1	0.52	2566.5	-3160.9
## + V13_3_J1_3	1	0.51	2566.5	-3160.9
## + V23_J1_6	1	0.51	2566.5	-3160.9
## + V13_1_J1_1	1	0.51	2566.5	-3160.9
## + V26_J1_3	1	0.51	2566.5	-3160.9
## + V15_J2_3	1	0.51	2566.5	-3160.9
## + V16_J1_1	1	0.50	2566.5	-3160.8
## + V29_J2_5	1	0.47	2566.6	-3160.8
## + V13_3_J2_1	1	0.44	2566.6	-3160.7
## + V13_3_J1_7	1	0.37	2566.7	-3160.6

## + V14_J1_6	1	0.36	2566.7	-3160.6
## + V5_J1_1	1	0.34	2566.7	-3160.5
## + V2_J2_4	1	0.33	2566.7	-3160.5
## + V13_3_J2_4	1	0.33	2566.7	-3160.5
## + V2_J2_3	1	0.26	2566.8	-3160.4
## + V13_1_J2_7	1	0.24	2566.8	-3160.3
## + V14_J1_3	1	0.23	2566.8	-3160.3
## + V20_J2_4	1	0.21	2566.8	-3160.3
## + V12_1_2_J1_1	1	0.15	2566.9	-3160.2
## + V17_J2_4	1	0.15	2566.9	-3160.1
## + V2_J1_2	1	0.14	2566.9	-3160.1
## + V1_J1_2	1	0.11	2566.9	-3160.1
## + V26_J1_2	1	0.10	2566.9	-3160.0
## + V17_J2_5	1	0.10	2566.9	-3160.0
## + V23_J1_5	1	0.09	2566.9	-3160.0
## + V19_J1_1	1	0.09	2566.9	-3160.0
## + V24_J2_1	1	0.08	2566.9	-3160.0
## + V1_J2_1	1	0.08	2567.0	-3160.0
## + V3_J1_7	1	0.08	2567.0	-3160.0
## + V13_2_J2_4	1	0.08	2567.0	-3160.0
## + V3_J1_1	1	0.07	2567.0	-3160.0
## + V13_2_J2_1	1	0.06	2567.0	-3160.0
## + V3_J1_6	1	0.05	2567.0	-3159.9
## + V13_2_J2_2	1	0.04	2567.0	-3159.9
## + V17_J1_7	1	0.04	2567.0	-3159.9
## + V13_3_J2_3	1	0.04	2567.0	-3159.9
## + V5_J2_2	1	0.03	2567.0	-3159.9
## + V13_3_J1_5	1	0.03	2567.0	-3159.9
## + V16_J2_1	1	0.01	2567.0	-3159.9
## + V29_J2_4	1	0.01	2567.0	-3159.9
## + V23_J1_2	1	0.00	2567.0	-3159.8
## + V30_J2_3	1	0.00	2567.0	-3159.8
## + V17_J2_3	1	0.00	2567.0	-3159.8
## + V3_J2_2	1	0.00	2567.0	-3159.8
## + V13_3_J1_1	1	0.00	2567.0	-3159.8
## + V13_1_J1_6	1	0.00	2567.0	-3159.8
## - V5_J2_1	1	34.45	2601.5	-3103.8
## - V15_J1_3	1	36.52	2603.6	-3099.7
## - V2_J2_2	1	39.30	2606.3	-3094.1
## - V14_J2_3	1	40.96	2608.0	-3090.8
## - V14_J1_4	1	44.64	2611.7	-3083.5
## - V16_J1_3	1	49.87	2616.9	-3073.1
## - V14_J1_5	1	50.76	2617.8	-3071.3
## - V17_J2_7	1	54.26	2621.3	-3064.3
## - V13_2_J1_7	1	55.88	2622.9	-3061.1
## - V3_J1_4	1	56.01	2623.0	-3060.9
## - V5_J2_3	1	58.23	2625.3	-3056.5
## - V19_J2_3	1	59.41	2626.4	-3054.1
## - V12_1_2_J1_4	1	60.57	2627.6	-3051.8
## - V4_J2_5	1	63.21	2630.2	-3046.6
## - V1_J1_3	1	63.69	2630.7	-3045.7
## - V15_J2_2	1	67.44	2634.5	-3038.3
## - V23_J1_3	1	73.01	2640.0	-3027.3
## - V4_J2_1	1	73.23	2640.3	-3026.8

```

## - V1_J2_7      1      73.91 2640.9 -3025.5
## - V30_J1_3     1      77.72 2644.8 -3018.0
## - V1_J2_2      1      80.43 2647.5 -3012.7
## - V4_J2_3      1      81.13 2648.2 -3011.3
## - V2_J1_3      1      82.21 2649.2 -3009.2
## - V17_J2_2     1      86.85 2653.9 -3000.1
## - V17_J1_3     1      87.36 2654.4 -2999.1
## - V3_J2_1      1      91.30 2658.3 -2991.4
## - V15_J2_7     1      91.69 2658.7 -2990.6
## - V5_J1_5      1      93.98 2661.0 -2986.1
## - V4_J2_4      1      94.76 2661.8 -2984.6
## - V19_J1_5     1      96.69 2663.7 -2980.9
## - V26_J2_1     1     102.99 2670.0 -2968.6
## - V3_J2_5      1     109.57 2676.6 -2955.8
## - V19_J1_4     1     114.98 2682.0 -2945.3
## - V26_J2_4     1     135.68 2702.7 -2905.3
## - V26_J2_5     1     141.41 2708.4 -2894.3
## - V30_J2_2     1     153.72 2720.7 -2870.7
## - V3_J2_4      1     159.04 2726.1 -2860.5
## - V12_1_2_J2_2 1     168.80 2735.8 -2841.9
## - V3_J2_3      1     180.09 2747.1 -2820.5
## - V5_J2_5      1     237.20 2804.2 -2713.5
## - V5_J2_4      1     260.20 2827.2 -2671.1
## - V20_J2_2     1     273.78 2840.8 -2646.1
## - V26_J2_3     1     318.09 2885.1 -2565.7
## - V16_J2_2     1     448.21 3015.2 -2336.3
## - J            12     898.81 3465.8 -1685.0
## - V            19    1188.14 3755.2 -1314.5
##
## Step:  AIC=-3227.93
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##      V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##      V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##      V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
##      V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
##      V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
##      V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
##      V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1
##
##
##      Df Sum of Sq    RSS      AIC
## + V3_J1_5      1      31.54 2502.1 -3286.4
## + V15_J1_7      1      30.07 2503.6 -3283.4
## + V19_J2_1      1      29.60 2504.0 -3282.4
## + V12_1_2_J1_3  1      29.36 2504.3 -3281.9
## + V26_J1_4      1      29.13 2504.5 -3281.4
## + V5_J1_4       1      27.38 2506.3 -3277.8
## + V16_J2_7      1      26.75 2506.9 -3276.5
## + V30_J1_2      1      25.64 2508.0 -3274.2
## + V29_J1_3      1      25.36 2508.3 -3273.6
## + V2_J2_7       1      24.59 2509.0 -3272.0
## + V14_J2_4      1      23.36 2510.3 -3269.5
## + V30_J1_6      1      23.23 2510.4 -3269.2
## + V15_J1_5      1      21.76 2511.9 -3266.1
## + V13_1_J1_2    1      20.53 2513.1 -3263.6

```

## + V12_1_2_J1_7	1	19.95	2513.7	-3262.4
## + V30_J2_5	1	19.63	2514.0	-3261.7
## + V12_1_2_J1_2	1	19.51	2514.1	-3261.5
## + V23_J2_7	1	19.09	2514.6	-3260.6
## + V13_1_J1_7	1	18.58	2515.1	-3259.6
## + V19_J2_5	1	18.36	2515.3	-3259.1
## + V29_J1_5	1	17.98	2515.7	-3258.3
## + V20_J2_3	1	17.59	2516.0	-3257.5
## + V15_J1_6	1	17.56	2516.1	-3257.5
## + V26_J1_5	1	17.45	2516.2	-3257.2
## + V23_J2_1	1	17.27	2516.4	-3256.9
## + V12_1_2_J1_6	1	16.56	2517.1	-3255.4
## + V19_J2_4	1	16.15	2517.5	-3254.6
## + V4_J1_4	1	15.77	2517.9	-3253.8
## + V13_1_J1_3	1	15.00	2518.6	-3252.2
## + V19_J2_7	1	13.61	2520.0	-3249.3
## + V30_J1_5	1	13.60	2520.0	-3249.3
## + V13_2_J1_4	1	13.25	2520.4	-3248.6
## + V15_J2_5	1	13.14	2520.5	-3248.3
## + V17_J1_5	1	13.12	2520.5	-3248.3
## + V29_J1_7	1	13.06	2520.6	-3248.2
## + V12_1_2_J2_7	1	12.71	2520.9	-3247.4
## + V24_J2_5	1	12.49	2521.1	-3247.0
## + V4_J1_5	1	11.97	2521.7	-3245.9
## + V5_J2_7	1	11.76	2521.9	-3245.5
## + V26_J1_6	1	11.62	2522.0	-3245.2
## + V14_J2_1	1	11.35	2522.3	-3244.6
## + V16_J2_3	1	11.29	2522.3	-3244.5
## + V20_J1_4	1	11.18	2522.5	-3244.3
## + V15_J1_4	1	11.03	2522.6	-3244.0
## + V1_J1_5	1	10.67	2523.0	-3243.2
## + V13_3_J1_2	1	10.32	2523.3	-3242.5
## + V4_J2_7	1	10.30	2523.3	-3242.5
## + V12_1_2_J2_5	1	10.02	2523.6	-3241.9
## + V12_1_2_J1_5	1	10.02	2523.6	-3241.9
## + V14_J1_2	1	9.97	2523.7	-3241.8
## + V13_3_J2_5	1	9.78	2523.9	-3241.4
## + V20_J2_1	1	9.77	2523.9	-3241.4
## + V16_J2_4	1	9.61	2524.0	-3241.1
## + V2_J1_5	1	9.58	2524.1	-3241.0
## + V13_2_J1_2	1	9.52	2524.1	-3240.9
## + V29_J1_4	1	9.33	2524.3	-3240.5
## + V13_1_J2_4	1	9.29	2524.4	-3240.4
## + V20_J1_2	1	9.05	2524.6	-3239.9
## + V26_J1_1	1	8.70	2524.9	-3239.2
## + V4_J1_6	1	8.67	2525.0	-3239.1
## + V14_J2_5	1	8.24	2525.4	-3238.2
## + V1_J2_5	1	8.12	2525.5	-3238.0
## + V29_J1_1	1	7.57	2526.1	-3236.8
## + V20_J2_7	1	7.55	2526.1	-3236.8
## + V29_J2_1	1	7.39	2526.2	-3236.5
## + V24_J1_6	1	7.13	2526.5	-3236.0
## + V13_2_J1_5	1	6.88	2526.8	-3235.4
## + V12_1_2_J2_4	1	6.80	2526.8	-3235.3

## + V20_J1_3	1	6.67	2527.0	-3235.0
## + V26_J2_7	1	6.62	2527.0	-3234.9
## + V24_J1_1	1	6.56	2527.1	-3234.8
## + V29_J2_3	1	6.35	2527.3	-3234.3
## + V4_J1_2	1	6.31	2527.3	-3234.3
## + V24_J2_3	1	6.21	2527.4	-3234.1
## + V4_J1_7	1	6.18	2527.5	-3234.0
## + V1_J1_1	1	6.15	2527.5	-3233.9
## + V19_J1_6	1	6.06	2527.6	-3233.7
## + V24_J1_7	1	5.88	2527.8	-3233.4
## + V13_1_J1_5	1	5.42	2528.2	-3232.4
## + V19_J1_2	1	5.40	2528.2	-3232.4
## + V5_J1_3	1	5.34	2528.3	-3232.3
## + V13_2_J2_7	1	5.31	2528.3	-3232.2
## + V29_J1_6	1	5.21	2528.4	-3232.0
## + V15_J2_4	1	5.15	2528.5	-3231.9
## + V12_1_2_J2_3	1	5.06	2528.6	-3231.7
## + V13_1_J2_2	1	5.01	2528.6	-3231.6
## + V14_J2_2	1	4.87	2528.8	-3231.3
## + V13_3_J1_6	1	4.85	2528.8	-3231.3
## + V19_J1_7	1	4.74	2528.9	-3231.0
## + V23_J2_3	1	4.60	2529.0	-3230.7
## + V30_J2_4	1	4.55	2529.1	-3230.6
## + V3_J2_7	1	4.48	2529.2	-3230.5
## + V30_J2_7	1	4.42	2529.2	-3230.4
## + V4_J2_2	1	4.39	2529.2	-3230.3
## + V19_J2_2	1	4.31	2529.3	-3230.1
## + V15_J1_2	1	4.25	2529.4	-3230.0
## + V15_J1_1	1	4.00	2529.6	-3229.5
## + V12_1_2_J2_1	1	3.95	2529.7	-3229.4
## + V13_1_J2_5	1	3.90	2529.7	-3229.3
## + V4_J1_1	1	3.87	2529.8	-3229.3
## + V20_J1_6	1	3.80	2529.8	-3229.1
## + V23_J2_4	1	3.77	2529.9	-3229.0
## + V13_1_J1_4	1	3.66	2530.0	-3228.8
## + V23_J2_2	1	3.64	2530.0	-3228.8
## + V20_J1_5	1	3.48	2530.2	-3228.4
## + V29_J1_2	1	3.48	2530.2	-3228.4
## + V13_1_J2_1	1	3.34	2530.3	-3228.1
## + V30_J1_7	1	3.27	2530.4	-3228.0
## + V1_J1_4	1	3.25	2530.4	-3228.0
## <none>			2533.6	-3227.9
## + V23_J2_5	1	3.14	2530.5	-3227.7
## + V26_J1_7	1	3.13	2530.5	-3227.7
## + V24_J1_5	1	3.05	2530.6	-3227.6
## + V13_3_J2_7	1	2.97	2530.7	-3227.4
## + V13_3_J2_2	1	2.86	2530.8	-3227.2
## + V30_J1_4	1	2.81	2530.8	-3227.1
## + V14_J2_7	1	2.77	2530.9	-3227.0
## + V3_J1_2	1	2.59	2531.0	-3226.6
## + V2_J1_7	1	2.57	2531.1	-3226.6
## + V13_2_J2_5	1	2.55	2531.1	-3226.5
## + V14_J1_1	1	2.46	2531.2	-3226.3
## + V13_2_J1_6	1	2.45	2531.2	-3226.3

## + V13_3_J1_4	1	2.45	2531.2	-3226.3
## + V3_J1_3	1	2.41	2531.2	-3226.2
## + V5_J1_6	1	2.41	2531.2	-3226.2
## + V5_J1_7	1	2.40	2531.2	-3226.2
## + V23_J1_7	1	2.38	2531.3	-3226.2
## + V24_J2_7	1	2.33	2531.3	-3226.1
## + V2_J1_4	1	2.28	2531.4	-3226.0
## + V17_J1_6	1	2.17	2531.5	-3225.8
## + V16_J2_5	1	2.15	2531.5	-3225.7
## + V24_J1_2	1	2.07	2531.6	-3225.5
## + V14_J1_7	1	2.01	2531.6	-3225.4
## + V16_J1_2	1	2.00	2531.6	-3225.4
## + V13_2_J1_3	1	1.96	2531.7	-3225.3
## + V2_J2_1	1	1.96	2531.7	-3225.3
## + V4_J1_3	1	1.95	2531.7	-3225.3
## + V16_J1_4	1	1.92	2531.7	-3225.2
## + V17_J1_4	1	1.70	2531.9	-3224.8
## + V24_J1_3	1	1.67	2532.0	-3224.7
## + V2_J2_5	1	1.63	2532.0	-3224.6
## + V2_J1_1	1	1.58	2532.1	-3224.5
## + V29_J2_7	1	1.47	2532.2	-3224.3
## + V23_J1_4	1	1.40	2532.2	-3224.2
## + V5_J1_2	1	1.40	2532.2	-3224.2
## + V20_J2_5	1	1.39	2532.2	-3224.1
## + V13_2_J1_1	1	1.34	2532.3	-3224.0
## + V29_J2_2	1	1.34	2532.3	-3224.0
## + V30_J2_1	1	1.33	2532.3	-3224.0
## + V1_J2_4	1	1.33	2532.3	-3224.0
## + V17_J2_1	1	1.30	2532.3	-3224.0
## + V20_J1_1	1	1.23	2532.4	-3223.8
## + V16_J1_5	1	1.22	2532.4	-3223.8
## + V24_J2_4	1	1.20	2532.4	-3223.7
## + V13_2_J2_3	1	1.16	2532.5	-3223.7
## + V16_J1_1	1	1.03	2532.6	-3223.4
## + V19_J1_3	1	0.99	2532.6	-3223.3
## + V16_J1_7	1	0.97	2532.7	-3223.3
## + V16_J1_6	1	0.96	2532.7	-3223.3
## + V1_J2_3	1	0.95	2532.7	-3223.3
## + V24_J1_4	1	0.94	2532.7	-3223.2
## + V17_J1_1	1	0.93	2532.7	-3223.2
## + V2_J1_6	1	0.92	2532.7	-3223.2
## + V1_J1_7	1	0.92	2532.7	-3223.2
## + V20_J1_7	1	0.90	2532.7	-3223.2
## + V5_J1_1	1	0.76	2532.9	-3222.9
## + V24_J2_2	1	0.76	2532.9	-3222.9
## + V15_J2_1	1	0.69	2532.9	-3222.7
## + V13_1_J2_3	1	0.65	2533.0	-3222.6
## + V15_J2_3	1	0.57	2533.1	-3222.5
## + V17_J1_2	1	0.57	2533.1	-3222.5
## + V1_J1_6	1	0.56	2533.1	-3222.4
## + V23_J1_6	1	0.55	2533.1	-3222.4
## + V26_J2_2	1	0.54	2533.1	-3222.4
## + V13_3_J1_3	1	0.52	2533.1	-3222.4
## + V26_J1_3	1	0.52	2533.1	-3222.4

## + V29_J2_5	1	0.42	2533.2	-3222.2
## + V13_3_J1_7	1	0.40	2533.2	-3222.1
## + V13_3_J2_1	1	0.39	2533.2	-3222.1
## + V13_3_J2_4	1	0.37	2533.3	-3222.1
## + V23_J1_1	1	0.33	2533.3	-3222.0
## + V14_J1_6	1	0.32	2533.3	-3221.9
## + V2_J2_3	1	0.31	2533.3	-3221.9
## + V3_J1_1	1	0.30	2533.3	-3221.9
## + V2_J2_4	1	0.29	2533.3	-3221.9
## + V30_J2_3	1	0.27	2533.4	-3221.8
## + V14_J1_3	1	0.23	2533.4	-3221.8
## + V13_1_J2_7	1	0.21	2533.4	-3221.7
## + V20_J2_4	1	0.18	2533.5	-3221.7
## + V17_J2_4	1	0.18	2533.5	-3221.7
## + V13_1_J1_1	1	0.17	2533.5	-3221.6
## + V2_J1_2	1	0.16	2533.5	-3221.6
## + V1_J1_2	1	0.13	2533.5	-3221.6
## + V17_J2_5	1	0.12	2533.5	-3221.5
## + V3_J1_7	1	0.11	2533.5	-3221.5
## + V13_3_J1_1	1	0.11	2533.5	-3221.5
## + V23_J1_5	1	0.07	2533.6	-3221.4
## + V26_J1_2	1	0.07	2533.6	-3221.4
## + V24_J2_1	1	0.06	2533.6	-3221.4
## + V1_J2_1	1	0.06	2533.6	-3221.4
## + V13_2_J2_4	1	0.06	2533.6	-3221.4
## + V13_2_J2_2	1	0.05	2533.6	-3221.4
## + V13_2_J2_1	1	0.04	2533.6	-3221.4
## + V5_J2_2	1	0.03	2533.6	-3221.4
## + V17_J1_7	1	0.03	2533.6	-3221.4
## + V3_J1_6	1	0.03	2533.6	-3221.4
## + V13_3_J2_3	1	0.02	2533.6	-3221.3
## + V13_3_J1_5	1	0.02	2533.6	-3221.3
## + V16_J2_1	1	0.01	2533.6	-3221.3
## + V12_1_2_J1_1	1	0.01	2533.6	-3221.3
## + V3_J2_2	1	0.00	2533.6	-3221.3
## + V23_J1_2	1	0.00	2533.6	-3221.3
## + V29_J2_4	1	0.00	2533.6	-3221.3
## + V13_1_J1_6	1	0.00	2533.6	-3221.3
## + V17_J2_3	1	0.00	2533.6	-3221.3
## + V19_J1_1	1	0.00	2533.6	-3221.3
## - V30_J1_1	1	33.39	2567.0	-3166.5
## - V5_J2_1	1	35.04	2568.7	-3163.1
## - V15_J1_3	1	36.59	2570.2	-3160.0
## - V2_J2_2	1	39.19	2572.8	-3154.8
## - V14_J2_3	1	41.56	2575.2	-3150.0
## - V14_J1_4	1	45.17	2578.8	-3142.7
## - V16_J1_3	1	49.75	2583.4	-3133.4
## - V14_J1_5	1	51.29	2584.9	-3130.3
## - V17_J2_7	1	54.65	2588.3	-3123.6
## - V13_2_J1_7	1	56.26	2589.9	-3120.4
## - V3_J1_4	1	56.74	2590.4	-3119.4
## - V5_J2_3	1	59.08	2592.7	-3114.7
## - V19_J2_3	1	60.13	2593.8	-3112.6
## - V12_1_2_J1_4	1	61.07	2594.7	-3110.7

```

## - V1_J1_3      1      63.60 2597.2 -3105.6
## - V4_J2_5      1      63.93 2597.6 -3105.0
## - V15_J2_2     1      67.54 2601.2 -3097.8
## - V30_J1_3     1      68.09 2601.7 -3096.7
## - V23_J1_3     1      72.88 2606.5 -3087.1
## - V4_J2_1      1      74.01 2607.6 -3084.8
## - V1_J2_7      1      74.37 2608.0 -3084.1
## - V1_J2_2      1      80.31 2614.0 -3072.3
## - V4_J2_3      1      82.05 2615.7 -3068.8
## - V2_J1_3      1      82.06 2615.7 -3068.8
## - V17_J2_2     1      86.73 2620.4 -3059.5
## - V17_J1_3     1      87.25 2620.9 -3058.5
## - V15_J2_7     1      91.18 2624.8 -3050.7
## - V3_J2_1      1      92.27 2625.9 -3048.6
## - V5_J1_5      1      94.89 2628.5 -3043.4
## - V4_J2_4      1      95.65 2629.3 -3041.9
## - V19_J1_5     1      97.42 2631.1 -3038.4
## - V26_J2_1     1     103.92 2637.6 -3025.5
## - V3_J2_5      1     110.63 2644.3 -3012.3
## - V19_J1_4     1     115.81 2649.4 -3002.1
## - V26_J2_4     1     136.74 2670.4 -2961.2
## - V30_J2_2     1     139.72 2673.4 -2955.4
## - V26_J2_5     1     142.49 2676.1 -2950.0
## - V3_J2_4      1     160.32 2694.0 -2915.5
## - V12_1_2_J2_2 1     168.66 2702.3 -2899.4
## - V3_J2_3      1     181.59 2715.2 -2874.6
## - V5_J2_5      1     238.75 2772.4 -2766.3
## - V5_J2_4      1     261.82 2795.5 -2723.2
## - V20_J2_2     1     273.51 2807.2 -2701.5
## - V26_J2_3     1     319.90 2853.5 -2616.3
## - V16_J2_2     1     447.84 2981.5 -2388.2
## - J            12     893.25 3426.9 -1737.2
## - V            19    1202.19 3735.8 -1334.8
##
## Step:  AIC=-3286.43
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5
##
##           Df Sum of Sq  RSS    AIC
## + V15_J1_7      1      30.79 2471.3 -3344.2
## + V19_J2_1      1      30.05 2472.0 -3342.6
## + V26_J1_4      1      29.21 2472.9 -3340.9
## + V12_1_2_J1_3  1      28.50 2473.6 -3339.4
## + V5_J1_4       1      27.94 2474.2 -3338.2
## + V30_J1_2      1      26.27 2475.8 -3334.7
## + V16_J2_7      1      26.07 2476.0 -3334.3
## + V15_J1_5      1      25.07 2477.0 -3332.2
## + V29_J1_3      1      24.63 2477.5 -3331.2

```

## + V2_J2_7	1	23.94	2478.2	-3329.8
## + V14_J2_4	1	23.76	2478.3	-3329.4
## + V30_J1_6	1	22.64	2479.5	-3327.1
## + V26_J1_5	1	20.66	2481.4	-3322.9
## + V13_1_J1_2	1	20.16	2481.9	-3321.9
## + V12_1_2_J1_2	1	19.94	2482.2	-3321.4
## + V30_J2_5	1	19.77	2482.3	-3321.0
## + V12_1_2_J1_7	1	19.50	2482.6	-3320.5
## + V19_J2_5	1	18.71	2483.4	-3318.8
## + V23_J2_7	1	18.58	2483.5	-3318.6
## + V13_1_J1_7	1	18.21	2483.9	-3317.8
## + V15_J1_6	1	18.09	2484.0	-3317.5
## + V20_J2_3	1	17.61	2484.5	-3316.5
## + V23_J2_1	1	17.29	2484.8	-3315.9
## + V19_J2_4	1	16.48	2485.6	-3314.2
## + V12_1_2_J1_6	1	16.18	2485.9	-3313.5
## + V4_J1_4	1	15.83	2486.3	-3312.8
## + V13_1_J1_3	1	15.57	2486.5	-3312.3
## + V29_J1_5	1	15.19	2486.9	-3311.5
## + V4_J1_5	1	14.64	2487.5	-3310.3
## + V19_J2_7	1	13.73	2488.4	-3308.4
## + V13_2_J1_4	1	13.24	2488.9	-3307.4
## + V15_J2_5	1	13.02	2489.1	-3306.9
## + V29_J1_7	1	12.75	2489.4	-3306.4
## + V24_J2_5	1	12.52	2489.6	-3305.9
## + V12_1_2_J2_7	1	12.29	2489.8	-3305.4
## + V26_J1_6	1	11.89	2490.2	-3304.6
## + V5_J2_7	1	11.80	2490.3	-3304.4
## + V14_J2_1	1	11.63	2490.5	-3304.0
## + V30_J1_5	1	11.29	2490.8	-3303.3
## + V16_J2_3	1	11.26	2490.8	-3303.3
## + V20_J1_4	1	11.19	2490.9	-3303.1
## + V15_J1_4	1	10.93	2491.2	-3302.6
## + V17_J1_5	1	10.86	2491.2	-3302.4
## + V13_3_J1_2	1	10.06	2492.0	-3300.7
## + V12_1_2_J2_5	1	10.04	2492.1	-3300.7
## + V14_J1_2	1	10.00	2492.1	-3300.6
## + V4_J2_7	1	9.98	2492.1	-3300.6
## + V13_3_J2_5	1	9.76	2492.3	-3300.1
## + V20_J2_1	1	9.76	2492.3	-3300.1
## + V16_J2_4	1	9.67	2492.4	-3299.9
## + V29_J1_4	1	9.30	2492.8	-3299.2
## + V13_1_J2_4	1	9.26	2492.8	-3299.1
## + V13_2_J1_2	1	9.25	2492.8	-3299.1
## + V26_J1_1	1	8.96	2493.1	-3298.4
## + V4_J1_6	1	8.91	2493.2	-3298.3
## + V13_2_J1_5	1	8.86	2493.2	-3298.2
## + V20_J1_2	1	8.76	2493.3	-3298.0
## + V1_J1_5	1	8.64	2493.5	-3297.8
## + V14_J2_5	1	8.48	2493.6	-3297.4
## + V1_J2_5	1	8.02	2494.1	-3296.5
## + V12_1_2_J1_5	1	7.98	2494.1	-3296.4
## + V20_J2_7	1	7.88	2494.2	-3296.2
## + V2_J1_5	1	7.63	2494.5	-3295.7

## + V29_J2_1	1	7.37	2494.7	-3295.1
## + V24_J1_6	1	7.36	2494.7	-3295.1
## + V29_J1_1	1	7.33	2494.8	-3295.0
## + V13_1_J1_5	1	7.20	2494.9	-3294.8
## + V20_J1_3	1	7.09	2495.0	-3294.5
## + V26_J2_7	1	6.88	2495.2	-3294.1
## + V12_1_2_J2_4	1	6.81	2495.3	-3294.0
## + V4_J1_2	1	6.52	2495.6	-3293.4
## + V4_J1_7	1	6.39	2495.7	-3293.1
## + V24_J1_1	1	6.34	2495.8	-3293.0
## + V29_J2_3	1	6.30	2495.8	-3292.9
## + V24_J2_3	1	6.17	2495.9	-3292.6
## + V24_J1_7	1	6.10	2496.0	-3292.5
## + V19_J1_6	1	6.08	2496.0	-3292.5
## + V1_J1_1	1	5.83	2496.3	-3291.9
## + V13_2_J2_7	1	5.58	2496.5	-3291.4
## + V5_J1_3	1	5.47	2496.6	-3291.2
## + V19_J1_2	1	5.43	2496.7	-3291.1
## + V15_J2_4	1	5.07	2497.0	-3290.4
## + V14_J2_2	1	5.07	2497.0	-3290.3
## + V12_1_2_J2_3	1	5.05	2497.0	-3290.3
## + V29_J1_6	1	5.03	2497.1	-3290.3
## + V19_J1_7	1	4.77	2497.3	-3289.7
## + V4_J2_2	1	4.73	2497.4	-3289.6
## + V13_3_J1_6	1	4.68	2497.4	-3289.5
## + V13_1_J2_2	1	4.65	2497.4	-3289.5
## + V23_J2_3	1	4.58	2497.5	-3289.3
## + V15_J1_2	1	4.51	2497.6	-3289.2
## + V19_J2_2	1	4.49	2497.6	-3289.1
## + V30_J2_4	1	4.49	2497.6	-3289.1
## + V24_J1_5	1	4.41	2497.7	-3289.0
## + V15_J1_1	1	4.27	2497.8	-3288.7
## + V30_J2_7	1	4.12	2498.0	-3288.4
## + V4_J1_1	1	4.05	2498.1	-3288.2
## + V12_1_2_J2_1	1	3.96	2498.1	-3288.0
## + V13_1_J2_5	1	3.88	2498.2	-3287.9
## + V23_J2_4	1	3.78	2498.3	-3287.7
## + V13_1_J1_4	1	3.64	2498.5	-3287.4
## + V20_J1_6	1	3.61	2498.5	-3287.3
## + V29_J1_2	1	3.33	2498.8	-3286.7
## + V13_1_J2_1	1	3.32	2498.8	-3286.7
## + V23_J2_2	1	3.32	2498.8	-3286.7
## + V1_J1_4	1	3.30	2498.8	-3286.7
## + V26_J1_7	1	3.28	2498.8	-3286.6
## <none>			2502.1	-3286.4
## + V13_3_J2_7	1	3.15	2498.9	-3286.4
## + V23_J2_5	1	3.15	2499.0	-3286.3
## + V30_J1_7	1	3.05	2499.1	-3286.1
## + V14_J2_7	1	2.83	2499.3	-3285.7
## + V30_J1_4	1	2.75	2499.3	-3285.5
## + V13_2_J1_6	1	2.60	2499.5	-3285.2
## + V13_3_J2_2	1	2.59	2499.5	-3285.2
## + V13_2_J2_5	1	2.55	2499.5	-3285.1
## + V24_J2_7	1	2.50	2499.6	-3285.0

## + V14_J1_1	1	2.49	2499.6	-3285.0
## + V13_3_J1_4	1	2.44	2499.7	-3284.9
## + V5_J1_6	1	2.43	2499.7	-3284.8
## + V5_J1_7	1	2.40	2499.7	-3284.8
## + V2_J1_7	1	2.39	2499.7	-3284.8
## + V20_J1_5	1	2.32	2499.8	-3284.6
## + V2_J1_4	1	2.30	2499.8	-3284.6
## + V23_J1_7	1	2.23	2499.9	-3284.4
## + V13_2_J1_3	1	2.18	2499.9	-3284.3
## + V16_J2_5	1	2.18	2499.9	-3284.3
## + V14_J1_7	1	2.03	2500.1	-3284.0
## + V17_J1_6	1	1.99	2500.1	-3283.9
## + V2_J2_1	1	1.99	2500.1	-3283.9
## + V24_J1_2	1	1.95	2500.1	-3283.9
## + V16_J1_4	1	1.95	2500.1	-3283.8
## + V16_J1_2	1	1.84	2500.3	-3283.6
## + V3_J2_7	1	1.76	2500.3	-3283.5
## + V4_J1_3	1	1.76	2500.3	-3283.5
## + V17_J1_4	1	1.75	2500.4	-3283.4
## + V2_J2_5	1	1.66	2500.4	-3283.2
## + V29_J2_7	1	1.60	2500.5	-3283.1
## + V29_J2_2	1	1.53	2500.6	-3283.0
## + V24_J1_3	1	1.49	2500.6	-3282.9
## + V2_J1_1	1	1.44	2500.7	-3282.8
## + V5_J1_2	1	1.41	2500.7	-3282.7
## + V23_J1_4	1	1.40	2500.7	-3282.7
## + V20_J2_5	1	1.40	2500.7	-3282.7
## + V1_J2_4	1	1.37	2500.7	-3282.6
## + V20_J1_1	1	1.35	2500.7	-3282.6
## + V3_J1_7	1	1.32	2500.8	-3282.5
## + V30_J2_1	1	1.29	2500.8	-3282.5
## + V17_J2_1	1	1.26	2500.8	-3282.4
## + V13_2_J1_1	1	1.23	2500.9	-3282.4
## + V24_J2_4	1	1.19	2500.9	-3282.3
## + V13_2_J2_3	1	1.17	2500.9	-3282.2
## + V16_J1_1	1	1.16	2500.9	-3282.2
## + V16_J1_7	1	1.09	2501.0	-3282.1
## + V16_J1_6	1	1.07	2501.0	-3282.0
## + V19_J1_3	1	1.07	2501.0	-3282.0
## + V1_J1_7	1	1.04	2501.1	-3282.0
## + V2_J1_6	1	1.03	2501.1	-3281.9
## + V1_J2_3	1	0.93	2501.2	-3281.7
## + V24_J1_4	1	0.93	2501.2	-3281.7
## + V20_J1_7	1	0.81	2501.3	-3281.5
## + V17_J1_1	1	0.81	2501.3	-3281.5
## + V5_J1_1	1	0.76	2501.3	-3281.4
## + V3_J2_2	1	0.72	2501.4	-3281.3
## + V15_J2_1	1	0.72	2501.4	-3281.3
## + V3_J1_2	1	0.65	2501.4	-3281.2
## + V13_1_J2_3	1	0.64	2501.5	-3281.1
## + V13_3_J1_3	1	0.64	2501.5	-3281.1
## + V24_J2_2	1	0.63	2501.5	-3281.1
## + V3_J1_3	1	0.60	2501.5	-3281.0
## + V16_J1_5	1	0.59	2501.5	-3281.0

## + V15_J2_3	1	0.56	2501.5	-3281.0
## + V23_J1_6	1	0.48	2501.6	-3280.8
## + V17_J1_2	1	0.48	2501.6	-3280.8
## + V1_J1_6	1	0.47	2501.6	-3280.8
## + V26_J2_2	1	0.43	2501.7	-3280.7
## + V26_J1_3	1	0.42	2501.7	-3280.7
## + V3_J1_6	1	0.41	2501.7	-3280.7
## + V29_J2_5	1	0.41	2501.7	-3280.7
## + V13_3_J2_1	1	0.39	2501.7	-3280.6
## + V13_3_J2_4	1	0.37	2501.7	-3280.6
## + V13_3_J1_7	1	0.35	2501.7	-3280.5
## + V14_J1_6	1	0.32	2501.8	-3280.5
## + V2_J2_3	1	0.30	2501.8	-3280.4
## + V2_J2_4	1	0.30	2501.8	-3280.4
## + V30_J2_3	1	0.28	2501.8	-3280.4
## + V23_J1_1	1	0.27	2501.8	-3280.4
## + V14_J1_3	1	0.26	2501.8	-3280.3
## + V13_1_J2_7	1	0.26	2501.8	-3280.3
## + V20_J2_4	1	0.18	2501.9	-3280.2
## + V17_J2_4	1	0.17	2501.9	-3280.1
## + V13_3_J1_1	1	0.14	2502.0	-3280.1
## + V13_1_J1_1	1	0.13	2502.0	-3280.1
## + V2_J1_2	1	0.12	2502.0	-3280.0
## + V17_J2_5	1	0.11	2502.0	-3280.0
## + V26_J1_2	1	0.10	2502.0	-3280.0
## + V1_J1_2	1	0.09	2502.0	-3280.0
## + V13_2_J2_2	1	0.09	2502.0	-3280.0
## + V3_J1_1	1	0.07	2502.0	-3279.9
## + V1_J2_1	1	0.07	2502.0	-3279.9
## + V24_J2_1	1	0.06	2502.0	-3279.9
## + V17_J1_7	1	0.06	2502.0	-3279.9
## + V13_2_J2_4	1	0.06	2502.0	-3279.9
## + V13_3_J1_5	1	0.05	2502.0	-3279.9
## + V13_2_J2_1	1	0.04	2502.1	-3279.9
## + V5_J2_2	1	0.02	2502.1	-3279.8
## + V13_3_J2_3	1	0.02	2502.1	-3279.8
## + V16_J2_1	1	0.01	2502.1	-3279.8
## + V23_J1_2	1	0.01	2502.1	-3279.8
## + V23_J1_5	1	0.01	2502.1	-3279.8
## + V29_J2_4	1	0.00	2502.1	-3279.8
## + V12_1_2_J1_1	1	0.00	2502.1	-3279.8
## + V13_1_J1_6	1	0.00	2502.1	-3279.8
## + V17_J2_3	1	0.00	2502.1	-3279.8
## + V19_J1_1	1	0.00	2502.1	-3279.8
## - V3_J1_5	1	31.54	2533.6	-3227.9
## - V30_J1_1	1	34.03	2536.1	-3222.8
## - V5_J2_1	1	35.54	2537.6	-3219.7
## - V15_J1_3	1	37.55	2539.6	-3215.6
## - V2_J2_2	1	38.19	2540.3	-3214.3
## - V14_J2_3	1	42.06	2544.2	-3206.4
## - V14_J1_4	1	45.64	2547.7	-3199.1
## - V16_J1_3	1	48.71	2550.8	-3192.8
## - V17_J2_7	1	53.73	2555.8	-3182.6
## - V13_2_J1_7	1	55.64	2557.7	-3178.7

```

## - V14_J1_5      1      55.97 2558.1 -3178.0
## - V5_J2_3       1      59.81 2561.9 -3170.2
## - V19_J2_3      1      60.73 2562.8 -3168.4
## - V12_1_2_J1_4  1      61.04 2563.1 -3167.7
## - V1_J1_3       1      62.33 2564.4 -3165.1
## - V4_J2_5       1      64.01 2566.1 -3161.7
## - V30_J1_3      1      66.79 2568.9 -3156.1
## - V3_J1_4       1      66.93 2569.0 -3155.8
## - V15_J2_2      1      68.92 2571.0 -3151.8
## - V23_J1_3      1      71.72 2573.8 -3146.1
## - V1_J2_7       1      73.28 2575.4 -3143.0
## - V4_J2_1       1      74.10 2576.2 -3141.3
## - V1_J2_2       1      78.79 2580.9 -3131.9
## - V2_J1_3       1      80.71 2582.8 -3128.0
## - V4_J2_3       1      82.23 2584.3 -3124.9
## - V17_J2_2      1      85.14 2587.2 -3119.1
## - V17_J1_3      1      85.76 2587.9 -3117.8
## - V15_J2_7      1      92.36 2594.5 -3104.6
## - V4_J2_4       1      95.75 2597.8 -3097.8
## - V5_J1_5       1     101.22 2603.3 -3086.9
## - V19_J1_5      1     103.73 2605.8 -3081.8
## - V26_J2_1      1     104.02 2606.1 -3081.3
## - V3_J2_1       1     104.79 2606.9 -3079.7
## - V19_J1_4      1     116.57 2618.7 -3056.3
## - V3_J2_5       1     124.14 2626.2 -3041.3
## - V26_J2_4      1     136.86 2639.0 -3016.2
## - V30_J2_2      1     137.71 2639.8 -3014.5
## - V26_J2_5      1     142.61 2644.7 -3004.8
## - V12_1_2_J2_2  1     166.73 2668.8 -2957.6
## - V3_J2_4       1     176.05 2678.1 -2939.5
## - V3_J2_3       1     198.17 2700.3 -2896.7
## - V5_J2_5       1     240.05 2742.1 -2816.7
## - V5_J2_4       1     263.18 2765.3 -2773.0
## - V20_J2_2      1     271.04 2773.1 -2758.2
## - V26_J2_3      1     320.26 2822.4 -2666.8
## - V16_J2_2      1     444.40 2946.5 -2442.9
## - J             12     870.94 3373.0 -1812.9
## - V             19    1214.98 3717.1 -1354.3
##
## Step: AIC=-3344.19
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7
##
##           Df Sum of Sq  RSS    AIC
## + V19_J2_1    1    30.65 2440.7 -3402.4
## + V26_J1_4    1    29.85 2441.5 -3400.7
## + V5_J1_4     1    28.65 2442.7 -3398.2

```


## + V12_1_2_J1_3	1	28.44	2442.9	-3397.7
## + V16_J2_7	1	25.99	2445.3	-3392.5
## + V30_J1_2	1	25.97	2445.3	-3392.5
## + V29_J1_3	1	24.56	2446.7	-3389.5
## + V14_J2_4	1	24.29	2447.0	-3388.9
## + V15_J1_6	1	24.11	2447.2	-3388.5
## + V2_J2_7	1	23.87	2447.4	-3388.0
## + V30_J1_6	1	22.92	2448.4	-3386.0
## + V26_J1_5	1	21.21	2450.1	-3382.4
## + V13_1_J1_2	1	20.41	2450.9	-3380.7
## + V12_1_2_J1_2	1	19.67	2451.6	-3379.1
## + V15_J1_5	1	19.51	2451.8	-3378.8
## + V30_J2_5	1	19.39	2451.9	-3378.5
## + V19_J2_5	1	19.19	2452.1	-3378.1
## + V23_J2_7	1	18.52	2452.8	-3376.7
## + V20_J2_3	1	18.02	2453.3	-3375.6
## + V23_J2_1	1	16.96	2454.3	-3373.4
## + V19_J2_4	1	16.93	2454.4	-3373.3
## + V12_1_2_J1_7	1	16.91	2454.4	-3373.2
## + V12_1_2_J1_6	1	16.42	2454.9	-3372.2
## + V4_J1_4	1	16.30	2455.0	-3372.0
## + V13_1_J1_7	1	15.70	2455.6	-3370.7
## + V13_1_J1_3	1	15.63	2455.7	-3370.6
## + V4_J1_5	1	15.11	2456.2	-3369.4
## + V29_J1_5	1	14.88	2456.4	-3369.0
## + V19_J2_7	1	13.67	2457.6	-3366.4
## + V13_2_J1_4	1	13.15	2458.2	-3365.3
## + V24_J2_5	1	12.81	2458.5	-3364.6
## + V12_1_2_J2_7	1	12.27	2459.0	-3363.4
## + V14_J2_1	1	12.00	2459.3	-3362.9
## + V5_J2_7	1	11.65	2459.7	-3362.1
## + V16_J2_3	1	11.58	2459.7	-3362.0
## + V26_J1_6	1	11.57	2459.7	-3362.0
## + V30_J1_5	1	11.01	2460.3	-3360.8
## + V20_J1_4	1	10.94	2460.4	-3360.6
## + V29_J1_7	1	10.65	2460.7	-3360.0
## + V17_J1_5	1	10.61	2460.7	-3359.9
## + V13_3_J1_2	1	10.23	2461.1	-3359.1
## + V4_J2_7	1	10.06	2461.2	-3358.8
## + V20_J2_1	1	10.01	2461.3	-3358.7
## + V12_1_2_J2_5	1	9.76	2461.5	-3358.1
## + V14_J1_2	1	9.75	2461.6	-3358.1
## + V13_3_J2_5	1	9.50	2461.8	-3357.6
## + V16_J2_4	1	9.43	2461.9	-3357.4
## + V13_2_J1_2	1	9.26	2462.0	-3357.1
## + V29_J1_4	1	9.07	2462.2	-3356.7
## + V15_J2_5	1	9.06	2462.2	-3356.7
## + V13_1_J2_4	1	9.02	2462.3	-3356.6
## + V13_2_J1_5	1	8.94	2462.4	-3356.4
## + V20_J1_2	1	8.92	2462.4	-3356.4
## + V14_J2_5	1	8.80	2462.5	-3356.1
## + V26_J1_1	1	8.67	2462.6	-3355.8
## + V4_J1_6	1	8.63	2462.7	-3355.7
## + V1_J1_5	1	8.41	2462.9	-3355.3

## + V1_J2_5	1	8.24	2463.1	-3354.9
## + V4_J1_7	1	8.01	2463.3	-3354.4
## + V20_J2_7	1	7.92	2463.4	-3354.2
## + V24_J1_7	1	7.76	2463.6	-3353.9
## + V12_1_2_J1_5	1	7.74	2463.6	-3353.9
## + V15_J1_2	1	7.65	2463.7	-3353.7
## + V29_J1_1	1	7.48	2463.8	-3353.3
## + V13_1_J1_5	1	7.42	2463.9	-3353.2
## + V2_J1_5	1	7.42	2463.9	-3353.2
## + V15_J1_1	1	7.33	2464.0	-3353.0
## + V15_J1_4	1	7.31	2464.0	-3353.0
## + V24_J1_6	1	7.21	2464.1	-3352.7
## + V29_J2_1	1	7.15	2464.2	-3352.6
## + V20_J1_3	1	7.13	2464.2	-3352.6
## + V26_J2_7	1	6.81	2464.5	-3351.9
## + V12_1_2_J2_4	1	6.59	2464.7	-3351.4
## + V24_J1_1	1	6.49	2464.8	-3351.2
## + V4_J1_2	1	6.28	2465.0	-3350.8
## + V19_J1_7	1	6.20	2465.1	-3350.6
## + V29_J2_3	1	6.06	2465.2	-3350.3
## + V1_J1_1	1	5.97	2465.3	-3350.1
## + V24_J2_3	1	5.93	2465.4	-3350.0
## + V19_J1_6	1	5.88	2465.4	-3349.9
## + V13_2_J2_7	1	5.73	2465.6	-3349.6
## + V5_J1_3	1	5.38	2465.9	-3348.9
## + V19_J1_2	1	5.24	2466.1	-3348.6
## + V29_J1_6	1	5.15	2466.2	-3348.4
## + V14_J2_2	1	5.05	2466.3	-3348.2
## + V12_1_2_J2_3	1	4.82	2466.5	-3347.7
## + V13_3_J1_6	1	4.80	2466.5	-3347.7
## + V4_J2_2	1	4.68	2466.6	-3347.4
## + V30_J2_4	1	4.67	2466.6	-3347.4
## + V13_1_J2_2	1	4.62	2466.7	-3347.3
## + V24_J1_5	1	4.58	2466.7	-3347.2
## + V19_J2_2	1	4.47	2466.8	-3347.0
## + V26_J1_7	1	4.46	2466.8	-3346.9
## + V23_J2_3	1	4.38	2466.9	-3346.8
## + V30_J2_7	1	4.10	2467.2	-3346.2
## + V4_J1_1	1	3.85	2467.5	-3345.7
## + V12_1_2_J2_1	1	3.79	2467.5	-3345.5
## + V13_1_J2_5	1	3.72	2467.6	-3345.4
## + V20_J1_6	1	3.72	2467.6	-3345.4
## + V23_J2_4	1	3.63	2467.7	-3345.2
## + V13_1_J1_4	1	3.50	2467.8	-3344.9
## + V29_J1_2	1	3.43	2467.9	-3344.8
## + V5_J1_7	1	3.40	2467.9	-3344.7
## + V23_J2_2	1	3.29	2468.0	-3344.5
## + V13_1_J2_1	1	3.18	2468.1	-3344.2
## + V13_3_J2_7	1	3.17	2468.1	-3344.2
## + V1_J1_4	1	3.17	2468.1	-3344.2
## <none>			2471.3	-3344.2
## + V23_J2_5	1	3.00	2468.3	-3343.9
## + V14_J1_7	1	2.99	2468.3	-3343.9
## + V30_J1_4	1	2.89	2468.4	-3343.6

## + V14_J2_7	1	2.80	2468.5	-3343.4
## + V15_J2_4	1	2.71	2468.6	-3343.3
## + V5_J1_6	1	2.60	2468.7	-3343.0
## + V13_2_J2_5	1	2.60	2468.7	-3343.0
## + V13_2_J1_6	1	2.59	2468.7	-3343.0
## + V13_3_J2_2	1	2.57	2468.7	-3343.0
## + V24_J2_7	1	2.52	2468.8	-3342.8
## + V14_J1_1	1	2.36	2469.0	-3342.5
## + V13_3_J1_4	1	2.32	2469.0	-3342.4
## + V13_2_J1_3	1	2.29	2469.0	-3342.4
## + V20_J1_5	1	2.20	2469.1	-3342.2
## + V2_J1_4	1	2.19	2469.1	-3342.2
## + V15_J2_1	1	2.17	2469.1	-3342.1
## + V17_J1_6	1	2.07	2469.2	-3341.9
## + V16_J2_5	1	2.06	2469.2	-3341.9
## + V30_J1_7	1	2.06	2469.2	-3341.9
## + V24_J1_2	1	2.03	2469.3	-3341.8
## + V16_J1_2	1	1.91	2469.4	-3341.6
## + V2_J2_1	1	1.88	2469.4	-3341.5
## + V16_J1_7	1	1.85	2469.5	-3341.4
## + V16_J1_4	1	1.85	2469.5	-3341.4
## + V1_J1_7	1	1.80	2469.5	-3341.3
## + V4_J1_3	1	1.79	2469.5	-3341.3
## + V3_J2_7	1	1.68	2469.6	-3341.1
## + V17_J1_4	1	1.65	2469.7	-3341.0
## + V29_J2_7	1	1.61	2469.7	-3340.9
## + V2_J2_5	1	1.56	2469.7	-3340.8
## + V29_J2_2	1	1.55	2469.8	-3340.8
## + V5_J1_2	1	1.54	2469.8	-3340.8
## + V2_J1_7	1	1.52	2469.8	-3340.7
## + V2_J1_1	1	1.51	2469.8	-3340.7
## + V23_J1_4	1	1.49	2469.8	-3340.7
## + V24_J1_3	1	1.47	2469.8	-3340.6
## + V23_J1_7	1	1.40	2469.9	-3340.5
## + V30_J2_1	1	1.39	2469.9	-3340.5
## + V17_J2_1	1	1.35	2470.0	-3340.4
## + V20_J2_5	1	1.30	2470.0	-3340.3
## + V20_J1_1	1	1.28	2470.0	-3340.3
## + V1_J2_4	1	1.28	2470.0	-3340.2
## + V13_2_J1_1	1	1.24	2470.1	-3340.2
## + V13_2_J2_3	1	1.22	2470.1	-3340.1
## + V24_J2_4	1	1.10	2470.2	-3339.9
## + V16_J1_1	1	1.10	2470.2	-3339.9
## + V19_J1_3	1	1.06	2470.2	-3339.8
## + V1_J2_3	1	1.03	2470.3	-3339.7
## + V16_J1_6	1	1.02	2470.3	-3339.7
## + V2_J1_6	1	0.98	2470.3	-3339.6
## + V17_J1_1	1	0.86	2470.4	-3339.4
## + V24_J1_4	1	0.85	2470.5	-3339.4
## + V3_J2_2	1	0.77	2470.5	-3339.2
## + V3_J1_7	1	0.75	2470.6	-3339.1
## + V5_J1_1	1	0.66	2470.6	-3338.9
## + V13_3_J1_3	1	0.65	2470.7	-3338.9
## + V24_J2_2	1	0.62	2470.7	-3338.8

## + V13_1_J2_3	1	0.56	2470.7	-3338.7
## + V3_J1_3	1	0.55	2470.8	-3338.7
## + V3_J1_2	1	0.55	2470.8	-3338.7
## + V16_J1_5	1	0.53	2470.8	-3338.7
## + V23_J1_6	1	0.52	2470.8	-3338.6
## + V17_J1_2	1	0.51	2470.8	-3338.6
## + V1_J1_6	1	0.50	2470.8	-3338.6
## + V3_J1_6	1	0.50	2470.8	-3338.6
## + V26_J2_2	1	0.44	2470.9	-3338.5
## + V26_J1_3	1	0.44	2470.9	-3338.5
## + V13_3_J2_4	1	0.43	2470.9	-3338.4
## + V29_J2_5	1	0.36	2470.9	-3338.3
## + V2_J2_3	1	0.36	2470.9	-3338.3
## + V20_J1_7	1	0.35	2471.0	-3338.3
## + V13_3_J2_1	1	0.34	2471.0	-3338.3
## + V17_J1_7	1	0.31	2471.0	-3338.2
## + V23_J1_1	1	0.30	2471.0	-3338.2
## + V14_J1_6	1	0.28	2471.0	-3338.1
## + V13_1_J2_7	1	0.27	2471.0	-3338.1
## + V2_J2_4	1	0.26	2471.0	-3338.1
## + V14_J1_3	1	0.26	2471.0	-3338.1
## + V30_J2_3	1	0.23	2471.1	-3338.0
## + V17_J2_4	1	0.20	2471.1	-3338.0
## + V13_1_J1_1	1	0.15	2471.2	-3337.9
## + V20_J2_4	1	0.15	2471.2	-3337.9
## + V17_J2_5	1	0.14	2471.2	-3337.8
## + V2_J1_2	1	0.13	2471.2	-3337.8
## + V13_3_J1_1	1	0.12	2471.2	-3337.8
## + V13_2_J2_2	1	0.11	2471.2	-3337.8
## + V3_J1_1	1	0.11	2471.2	-3337.8
## + V1_J1_2	1	0.11	2471.2	-3337.8
## + V13_3_J1_7	1	0.08	2471.2	-3337.7
## + V26_J1_2	1	0.07	2471.2	-3337.7
## + V13_3_J1_5	1	0.07	2471.2	-3337.7
## + V13_2_J2_4	1	0.05	2471.3	-3337.7
## + V1_J2_1	1	0.05	2471.3	-3337.7
## + V24_J2_1	1	0.04	2471.3	-3337.6
## + V13_2_J2_1	1	0.03	2471.3	-3337.6
## + V5_J2_2	1	0.03	2471.3	-3337.6
## + V16_J2_1	1	0.02	2471.3	-3337.6
## + V15_J2_3	1	0.02	2471.3	-3337.6
## + V23_J1_5	1	0.01	2471.3	-3337.6
## + V13_3_J2_3	1	0.01	2471.3	-3337.6
## + V12_1_2_J1_1	1	0.00	2471.3	-3337.6
## + V23_J1_2	1	0.00	2471.3	-3337.6
## + V19_J1_1	1	0.00	2471.3	-3337.6
## + V17_J2_3	1	0.00	2471.3	-3337.6
## + V29_J2_4	1	0.00	2471.3	-3337.6
## + V13_1_J1_6	1	0.00	2471.3	-3337.6
## - V15_J1_7	1	30.79	2502.1	-3286.4
## - V3_J1_5	1	32.26	2503.6	-3283.4
## - V30_J1_1	1	33.73	2505.0	-3280.3
## - V5_J2_1	1	36.23	2507.5	-3275.1
## - V2_J2_2	1	38.09	2509.4	-3271.3

```

## - V14_J2_3      1      42.74 2514.0 -3261.7
## - V15_J1_3      1      44.28 2515.6 -3258.5
## - V14_J1_4      1      46.23 2517.5 -3254.4
## - V16_J1_3      1      48.59 2519.9 -3249.6
## - V13_2_J1_7    1      51.18 2522.5 -3244.2
## - V17_J2_7      1      53.62 2524.9 -3239.2
## - V14_J1_5      1      56.65 2528.0 -3233.0
## - V5_J2_3       1      60.78 2532.1 -3224.5
## - V19_J2_3      1      61.55 2532.9 -3222.9
## - V12_1_2_J1_4  1      61.59 2532.9 -3222.8
## - V1_J1_3       1      62.20 2533.5 -3221.6
## - V4_J2_5       1      64.83 2536.1 -3216.2
## - V30_J1_3      1      66.70 2538.0 -3212.3
## - V3_J1_4       1      67.95 2539.3 -3209.8
## - V23_J1_3      1      71.60 2542.9 -3202.3
## - V1_J2_7       1      73.17 2544.5 -3199.1
## - V4_J2_1       1      74.98 2546.3 -3195.4
## - V15_J2_2      1      77.73 2549.0 -3189.8
## - V1_J2_2       1      78.63 2549.9 -3188.0
## - V2_J1_3       1      80.57 2551.9 -3184.0
## - V4_J2_3       1      83.27 2554.6 -3178.5
## - V17_J2_2      1      84.98 2556.3 -3175.0
## - V17_J1_3      1      85.60 2556.9 -3173.8
## - V4_J2_4       1      96.74 2568.0 -3151.1
## - V5_J1_5       1     102.35 2573.7 -3139.8
## - V15_J2_7      1     102.46 2573.8 -3139.6
## - V19_J1_5      1     104.65 2576.0 -3135.2
## - V26_J2_1      1     105.06 2576.4 -3134.3
## - V3_J2_1       1     106.10 2577.4 -3132.2
## - V19_J1_4      1     117.51 2588.8 -3109.3
## - V3_J2_5       1     125.57 2596.9 -3093.1
## - V30_J2_2      1     137.57 2608.9 -3069.1
## - V26_J2_4      1     138.05 2609.4 -3068.2
## - V26_J2_5      1     143.83 2615.1 -3056.7
## - V12_1_2_J2_2  1     166.61 2637.9 -3011.6
## - V3_J2_4       1     177.74 2649.1 -2989.7
## - V3_J2_3       1     200.13 2671.4 -2945.9
## - V5_J2_5       1     241.80 2713.1 -2865.4
## - V5_J2_4       1     265.01 2736.3 -2821.1
## - V20_J2_2      1     270.79 2742.1 -2810.1
## - V26_J2_3      1     322.28 2793.6 -2713.4
## - V16_J2_2      1     444.05 2915.4 -2491.5
## - J             12     860.06 3331.4 -1870.9
## - V             19    1245.65 3717.0 -1347.8
##
## Step:  AIC=-3402.45
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +

```

```

##      V15_J1_7 + V19_J2_1
##
##      Df Sum of Sq    RSS      AIC
## + V26_J1_4      1    30.24 2410.4 -3460.7
## + V5_J1_4       1    29.09 2411.6 -3458.2
## + V12_1_2_J1_3  1    27.73 2412.9 -3455.2
## + V30_J1_2      1    26.50 2414.2 -3452.6
## + V16_J2_7      1    25.43 2415.2 -3450.3
## + V19_J2_5      1    25.37 2415.3 -3450.1
## + V15_J1_6      1    24.69 2416.0 -3448.7
## + V14_J2_4      1    23.97 2416.7 -3447.1
## + V29_J1_3      1    23.95 2416.7 -3447.1
## + V2_J2_7       1    23.33 2417.3 -3445.8
## + V19_J2_4      1    22.75 2417.9 -3444.5
## + V30_J1_6      1    22.44 2418.2 -3443.8
## + V26_J1_5      1    21.57 2419.1 -3442.0
## + V13_1_J1_2    1    20.10 2420.6 -3438.8
## + V12_1_2_J1_2  1    20.03 2420.6 -3438.7
## + V30_J2_5      1    19.84 2420.8 -3438.3
## + V15_J1_5      1    19.33 2421.3 -3437.2
## + V23_J2_7      1    18.11 2422.6 -3434.5
## + V20_J2_3      1    18.04 2422.6 -3434.4
## + V4_J1_4       1    16.59 2424.1 -3431.3
## + V12_1_2_J1_7  1    16.53 2424.1 -3431.2
## + V13_1_J1_3    1    16.12 2424.5 -3430.3
## + V12_1_2_J1_6  1    16.10 2424.6 -3430.2
## + V4_J1_5       1    15.41 2425.2 -3428.8
## + V13_1_J1_7    1    15.39 2425.3 -3428.7
## + V29_J1_5      1    14.86 2425.8 -3427.6
## + V14_J2_1      1    14.83 2425.8 -3427.5
## + V23_J2_1      1    14.12 2426.5 -3426.0
## + V13_2_J1_4    1    13.17 2427.5 -3424.0
## + V24_J2_5      1    12.57 2428.1 -3422.7
## + V20_J2_1      1    12.53 2428.1 -3422.6
## + V12_1_2_J2_7  1    11.92 2428.7 -3421.3
## + V5_J2_7       1    11.68 2429.0 -3420.8
## + V26_J1_6      1    11.57 2429.1 -3420.5
## + V16_J2_3      1    11.56 2429.1 -3420.5
## + V30_J1_5      1    11.10 2429.6 -3419.5
## + V20_J1_4      1    10.97 2429.7 -3419.2
## + V17_J1_5      1    10.70 2430.0 -3418.7
## + V29_J1_7      1    10.40 2430.3 -3418.0
## + V13_3_J1_2    1    10.01 2430.6 -3417.2
## + V12_1_2_J2_5  1    10.01 2430.6 -3417.2
## + V4_J2_7       1    10.01 2430.6 -3417.2
## + V14_J1_2      1     9.96 2430.7 -3417.1
## + V13_3_J2_5    1     9.71 2430.9 -3416.5
## + V16_J2_4      1     9.71 2430.9 -3416.5
## + V19_J2_7      1     9.64 2431.0 -3416.4
## + V13_1_J2_4    1     9.22 2431.4 -3415.5
## + V29_J1_4      1     9.06 2431.6 -3415.2
## + V13_2_J1_2    1     9.03 2431.6 -3415.1
## + V13_2_J1_5    1     8.94 2431.7 -3414.9
## + V15_J2_5      1     8.72 2431.9 -3414.4

```

## + V20_J1_2	1	8.69	2432.0	-3414.4
## + V26_J1_1	1	8.68	2432.0	-3414.3
## + V4_J1_6	1	8.62	2432.0	-3414.2
## + V14_J2_5	1	8.60	2432.1	-3414.2
## + V1_J1_5	1	8.50	2432.2	-3413.9
## + V20_J2_7	1	8.20	2432.5	-3413.3
## + V4_J1_7	1	8.03	2432.6	-3413.0
## + V15_J1_2	1	7.98	2432.7	-3412.8
## + V24_J1_7	1	7.98	2432.7	-3412.8
## + V1_J2_5	1	7.95	2432.7	-3412.8
## + V12_1_2_J1_5	1	7.75	2432.9	-3412.4
## + V15_J1_1	1	7.67	2433.0	-3412.2
## + V20_J1_3	1	7.50	2433.2	-3411.8
## + V2_J1_5	1	7.46	2433.2	-3411.7
## + V13_1_J1_5	1	7.43	2433.2	-3411.7
## + V24_J1_6	1	7.39	2433.3	-3411.6
## + V29_J1_1	1	7.28	2433.4	-3411.4
## + V15_J1_4	1	7.19	2433.5	-3411.1
## + V26_J2_7	1	6.86	2433.8	-3410.4
## + V12_1_2_J2_4	1	6.79	2433.9	-3410.3
## + V24_J1_1	1	6.30	2434.4	-3409.3
## + V4_J1_2	1	6.27	2434.4	-3409.2
## + V29_J2_3	1	6.02	2434.6	-3408.6
## + V13_2_J2_7	1	5.96	2434.7	-3408.5
## + V24_J2_3	1	5.89	2434.8	-3408.4
## + V1_J1_1	1	5.70	2435.0	-3408.0
## + V5_J1_3	1	5.48	2435.2	-3407.5
## + V14_J2_2	1	5.35	2435.3	-3407.2
## + V29_J2_1	1	5.33	2435.3	-3407.2
## + V29_J1_6	1	5.00	2435.7	-3406.5
## + V4_J2_2	1	4.82	2435.8	-3406.1
## + V12_1_2_J2_3	1	4.81	2435.8	-3406.1
## + V13_3_J1_6	1	4.65	2436.0	-3405.7
## + V24_J1_5	1	4.60	2436.1	-3405.6
## + V26_J1_7	1	4.48	2436.2	-3405.4
## + V30_J2_4	1	4.45	2436.2	-3405.3
## + V23_J2_3	1	4.37	2436.3	-3405.1
## + V13_1_J2_2	1	4.33	2436.3	-3405.1
## + V4_J1_1	1	3.86	2436.8	-3404.0
## + V30_J2_7	1	3.86	2436.8	-3404.0
## + V13_1_J2_5	1	3.85	2436.8	-3404.0
## + V23_J2_4	1	3.78	2436.9	-3403.9
## + V20_J1_6	1	3.56	2437.1	-3403.4
## + V19_J1_7	1	3.56	2437.1	-3403.4
## + V13_1_J1_4	1	3.50	2437.2	-3403.3
## + V5_J1_7	1	3.40	2437.3	-3403.1
## + V13_3_J2_7	1	3.33	2437.3	-3402.9
## + V19_J1_6	1	3.30	2437.4	-3402.9
## + V29_J1_2	1	3.30	2437.4	-3402.8
## + V1_J1_4	1	3.23	2437.4	-3402.7
## + V23_J2_5	1	3.14	2437.5	-3402.5
## + V14_J1_7	1	3.13	2437.5	-3402.5
## <none>			2440.7	-3402.4
## + V23_J2_2	1	3.03	2437.6	-3402.3

## + V14_J2_7	1	2.95	2437.7	-3402.1
## + V30_J1_4	1	2.83	2437.8	-3401.9
## + V19_J1_2	1	2.82	2437.8	-3401.8
## + V13_2_J1_6	1	2.71	2437.9	-3401.6
## + V24_J2_7	1	2.66	2438.0	-3401.5
## + V5_J1_6	1	2.62	2438.0	-3401.4
## + V15_J2_4	1	2.53	2438.1	-3401.2
## + V12_1_2_J2_1	1	2.50	2438.2	-3401.1
## + V13_2_J1_3	1	2.49	2438.2	-3401.1
## + V13_2_J2_5	1	2.48	2438.2	-3401.1
## + V14_J1_1	1	2.47	2438.2	-3401.1
## + V30_J2_1	1	2.38	2438.3	-3400.9
## + V13_3_J2_2	1	2.36	2438.3	-3400.8
## + V19_J2_2	1	2.33	2438.3	-3400.8
## + V17_J2_1	1	2.32	2438.3	-3400.8
## + V13_3_J1_4	1	2.32	2438.3	-3400.8
## + V2_J1_4	1	2.23	2438.4	-3400.6
## + V20_J1_5	1	2.21	2438.4	-3400.5
## + V16_J2_5	1	2.20	2438.5	-3400.5
## + V13_1_J2_1	1	2.00	2438.7	-3400.1
## + V16_J1_7	1	1.99	2438.7	-3400.1
## + V1_J1_7	1	1.96	2438.7	-3400.0
## + V24_J1_2	1	1.93	2438.7	-3399.9
## + V17_J1_6	1	1.92	2438.7	-3399.9
## + V30_J1_7	1	1.90	2438.8	-3399.9
## + V16_J1_4	1	1.88	2438.8	-3399.8
## + V16_J1_2	1	1.79	2438.9	-3399.6
## + V29_J2_2	1	1.72	2438.9	-3399.5
## + V29_J2_7	1	1.72	2438.9	-3399.5
## + V4_J1_3	1	1.72	2438.9	-3399.5
## + V17_J1_4	1	1.69	2439.0	-3399.4
## + V3_J2_7	1	1.68	2439.0	-3399.4
## + V2_J2_5	1	1.67	2439.0	-3399.4
## + V5_J1_2	1	1.56	2439.1	-3399.1
## + V23_J1_4	1	1.48	2439.2	-3399.0
## + V1_J2_4	1	1.40	2439.3	-3398.8
## + V2_J1_7	1	1.40	2439.3	-3398.8
## + V20_J2_5	1	1.39	2439.3	-3398.8
## + V2_J1_1	1	1.39	2439.3	-3398.8
## + V20_J1_1	1	1.38	2439.3	-3398.8
## + V24_J1_3	1	1.33	2439.3	-3398.6
## + V23_J1_7	1	1.29	2439.4	-3398.6
## + V15_J2_1	1	1.26	2439.4	-3398.5
## + V13_2_J2_3	1	1.23	2439.4	-3398.4
## + V16_J1_1	1	1.20	2439.5	-3398.4
## + V24_J2_4	1	1.17	2439.5	-3398.3
## + V13_2_J1_1	1	1.15	2439.5	-3398.3
## + V16_J1_6	1	1.12	2439.5	-3398.2
## + V2_J1_6	1	1.07	2439.6	-3398.1
## + V2_J2_1	1	1.02	2439.6	-3398.0
## + V1_J2_3	1	1.01	2439.6	-3398.0
## + V24_J1_4	1	0.85	2439.8	-3397.6
## + V17_J1_1	1	0.76	2439.9	-3397.4
## + V3_J1_7	1	0.76	2439.9	-3397.4

## + V13_3_J1_3	1	0.75	2439.9	-3397.4
## + V3_J2_2	1	0.74	2439.9	-3397.4
## + V5_J1_1	1	0.66	2440.0	-3397.2
## + V3_J1_3	1	0.58	2440.1	-3397.0
## + V13_1_J2_3	1	0.55	2440.1	-3397.0
## + V16_J1_5	1	0.55	2440.1	-3397.0
## + V3_J1_2	1	0.53	2440.1	-3396.9
## + V3_J1_6	1	0.52	2440.1	-3396.9
## + V24_J2_2	1	0.51	2440.1	-3396.9
## + V23_J1_6	1	0.46	2440.2	-3396.8
## + V17_J1_2	1	0.44	2440.2	-3396.8
## + V1_J1_6	1	0.43	2440.2	-3396.7
## + V19_J1_1	1	0.43	2440.2	-3396.7
## + V29_J2_5	1	0.40	2440.3	-3396.7
## + V26_J2_2	1	0.40	2440.3	-3396.7
## + V26_J1_3	1	0.40	2440.3	-3396.7
## + V13_3_J2_4	1	0.38	2440.3	-3396.6
## + V17_J1_7	1	0.38	2440.3	-3396.6
## + V2_J2_3	1	0.36	2440.3	-3396.6
## + V14_J1_3	1	0.32	2440.3	-3396.5
## + V13_1_J2_7	1	0.32	2440.3	-3396.5
## + V14_J1_6	1	0.32	2440.3	-3396.5
## + V2_J2_4	1	0.31	2440.3	-3396.5
## + V20_J1_7	1	0.30	2440.4	-3396.4
## + V16_J2_1	1	0.26	2440.4	-3396.4
## + V23_J1_1	1	0.26	2440.4	-3396.4
## + V30_J2_3	1	0.24	2440.4	-3396.3
## + V19_J1_3	1	0.18	2440.5	-3396.2
## + V20_J2_4	1	0.18	2440.5	-3396.2
## + V13_2_J2_2	1	0.16	2440.5	-3396.2
## + V17_J2_4	1	0.16	2440.5	-3396.1
## + V13_3_J1_1	1	0.14	2440.5	-3396.1
## + V13_1_J1_1	1	0.13	2440.5	-3396.1
## + V3_J1_1	1	0.11	2440.5	-3396.1
## + V2_J1_2	1	0.10	2440.6	-3396.0
## + V17_J2_5	1	0.10	2440.6	-3396.0
## + V1_J1_2	1	0.08	2440.6	-3396.0
## + V13_3_J1_5	1	0.07	2440.6	-3396.0
## + V26_J1_2	1	0.07	2440.6	-3396.0
## + V13_2_J2_4	1	0.07	2440.6	-3396.0
## + V13_3_J1_7	1	0.06	2440.6	-3395.9
## + V13_3_J2_1	1	0.04	2440.6	-3395.9
## + V13_2_J2_1	1	0.03	2440.6	-3395.9
## + V24_J2_1	1	0.03	2440.6	-3395.9
## + V5_J2_2	1	0.02	2440.6	-3395.9
## + V1_J2_1	1	0.02	2440.6	-3395.9
## + V15_J2_3	1	0.01	2440.6	-3395.8
## + V23_J1_5	1	0.01	2440.6	-3395.8
## + V23_J1_2	1	0.01	2440.6	-3395.8
## + V13_3_J2_3	1	0.01	2440.6	-3395.8
## + V13_1_J1_6	1	0.00	2440.7	-3395.8
## + V29_J2_4	1	0.00	2440.7	-3395.8
## + V12_1_2_J1_1	1	0.00	2440.7	-3395.8
## + V17_J2_3	1	0.00	2440.7	-3395.8

```

## - V19_J2_1      1      30.65 2471.3 -3344.2
## - V15_J1_7      1      31.39 2472.0 -3342.6
## - V3_J1_5       1      32.72 2473.4 -3339.8
## - V30_J1_1      1      34.26 2474.9 -3336.6
## - V2_J2_2       1      37.27 2477.9 -3330.3
## - V5_J2_1       1      40.40 2481.1 -3323.7
## - V14_J2_3      1      42.85 2483.5 -3318.6
## - V15_J1_3      1      45.23 2485.9 -3313.6
## - V14_J1_4      1      46.25 2486.9 -3311.5
## - V16_J1_3      1      47.73 2488.4 -3308.4
## - V13_2_J1_7    1      50.65 2491.3 -3302.3
## - V17_J2_7      1      52.85 2493.5 -3297.7
## - V14_J1_5      1      56.70 2497.4 -3289.7
## - V1_J1_3       1      61.14 2501.8 -3280.4
## - V5_J2_3       1      61.42 2502.1 -3279.8
## - V12_1_2_J1_4  1      61.51 2502.2 -3279.6
## - V4_J2_5       1      64.85 2505.5 -3272.7
## - V30_J1_3      1      65.62 2506.3 -3271.1
## - V3_J1_4       1      68.58 2509.2 -3265.0
## - V19_J2_3      1      69.98 2510.6 -3262.1
## - V23_J1_3      1      70.63 2511.3 -3260.7
## - V1_J2_7       1      72.26 2512.9 -3257.4
## - V1_J2_2       1      77.36 2518.0 -3246.8
## - V15_J2_2      1      79.06 2519.7 -3243.3
## - V2_J1_3       1      79.45 2520.1 -3242.5
## - V4_J2_1       1      80.80 2521.5 -3239.7
## - V17_J2_2      1      83.66 2524.3 -3233.8
## - V4_J2_3       1      83.94 2524.6 -3233.2
## - V17_J1_3      1      84.36 2525.0 -3232.4
## - V4_J2_4       1      96.77 2537.4 -3206.9
## - V5_J1_5       1     103.07 2543.7 -3194.0
## - V15_J2_7      1     103.62 2544.3 -3192.9
## - V26_J2_1      1     111.87 2552.5 -3176.0
## - V3_J2_1       1     113.02 2553.7 -3173.7
## - V19_J1_5      1     115.26 2555.9 -3169.1
## - V3_J2_5       1     125.79 2566.4 -3147.7
## - V19_J1_4      1     128.63 2569.3 -3142.0
## - V30_J2_2      1     135.90 2576.6 -3127.3
## - V26_J2_4      1     138.08 2578.7 -3122.9
## - V26_J2_5      1     143.86 2584.5 -3111.3
## - V12_1_2_J2_2  1     164.99 2605.7 -3068.9
## - V3_J2_4       1     178.01 2618.7 -3043.0
## - V3_J2_3       1     201.39 2642.0 -2996.8
## - V5_J2_5       1     241.96 2682.6 -2917.5
## - V5_J2_4       1     265.18 2705.8 -2872.7
## - V20_J2_2      1     268.73 2709.4 -2865.9
## - V26_J2_3      1     323.59 2764.2 -2761.7
## - V16_J2_2      1     441.18 2881.8 -2545.0
## - J              12     869.97 3310.6 -1896.7
## - V              19    1247.51 3688.2 -1381.6
##
## Step:  AIC=-3460.65
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##       V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +

```

```

##      V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##      V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
##      V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
##      V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
##      V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
##      V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
##      V15_J1_7 + V19_J2_1 + V26_J1_4
##
##      Df Sum of Sq    RSS    AIC
## + V5_J1_4      1      33.43 2377.0 -3526.6
## + V26_J1_5      1      28.98 2381.4 -3516.9
## + V12_1_2_J1_3  1      27.31 2383.1 -3513.3
## + V30_J1_2      1      27.07 2383.3 -3512.8
## + V19_J2_5      1      25.77 2384.6 -3509.9
## + V15_J1_6      1      25.32 2385.1 -3508.9
## + V16_J2_7      1      24.83 2385.6 -3507.9
## + V14_J2_4      1      24.32 2386.1 -3506.7
## + V29_J1_3      1      23.31 2387.1 -3504.5
## + V19_J2_4      1      23.13 2387.3 -3504.1
## + V2_J2_7       1      22.75 2387.7 -3503.3
## + V30_J1_6      1      21.92 2388.5 -3501.5
## + V12_1_2_J1_2  1      20.12 2390.3 -3497.6
## + V30_J2_5      1      19.99 2390.4 -3497.3
## + V4_J1_4       1      19.89 2390.5 -3497.1
## + V13_1_J1_2    1      19.77 2390.6 -3496.8
## + V15_J1_5      1      18.76 2391.7 -3494.6
## + V20_J2_3      1      18.05 2392.4 -3493.1
## + V23_J2_7      1      17.66 2392.8 -3492.2
## + V13_1_J1_3    1      16.67 2393.7 -3490.1
## + V12_1_2_J1_7  1      16.40 2394.0 -3489.5
## + V12_1_2_J1_6  1      16.01 2394.4 -3488.7
## + V29_J1_5      1      15.17 2395.2 -3486.8
## + V14_J2_1      1      15.13 2395.3 -3486.8
## + V4_J1_5       1      15.11 2395.3 -3486.7
## + V13_1_J1_7    1      15.06 2395.4 -3486.6
## + V23_J2_1      1      14.14 2396.3 -3484.6
## + V24_J2_5      1      12.58 2397.8 -3481.2
## + V20_J2_1      1      12.51 2397.9 -3481.1
## + V5_J2_7       1      12.04 2398.4 -3480.1
## + V12_1_2_J2_7  1      11.78 2398.6 -3479.5
## + V16_J2_3      1      11.52 2398.9 -3478.9
## + V30_J1_5      1      11.49 2398.9 -3478.9
## + V17_J1_5      1      11.09 2399.3 -3478.0
## + V13_2_J1_4    1      10.70 2399.7 -3477.2
## + V29_J1_7      1      10.12 2400.3 -3475.9
## + V14_J1_2      1       9.98 2400.4 -3475.6
## + V12_1_2_J2_5  1       9.83 2400.6 -3475.3
## + V13_3_J1_2    1       9.78 2400.6 -3475.2
## + V16_J2_4      1       9.78 2400.6 -3475.2
## + V4_J2_7       1       9.71 2400.7 -3475.0
## + V13_3_J2_5    1       9.70 2400.7 -3475.0
## + V19_J2_7      1       9.70 2400.7 -3475.0
## + V15_J1_4      1       9.22 2401.2 -3473.9
## + V13_1_J2_4    1       9.21 2401.2 -3473.9

```

## + V1_J1_5	1	8.84	2401.6	-3473.1
## + V4_J1_6	1	8.84	2401.6	-3473.1
## + V14_J2_5	1	8.81	2401.6	-3473.1
## + V13_2_J1_2	1	8.79	2401.6	-3473.0
## + V20_J1_4	1	8.74	2401.7	-3472.9
## + V13_2_J1_5	1	8.68	2401.7	-3472.8
## + V15_J2_5	1	8.58	2401.8	-3472.6
## + V20_J2_7	1	8.51	2401.9	-3472.4
## + V20_J1_2	1	8.44	2402.0	-3472.2
## + V15_J1_2	1	8.34	2402.1	-3472.0
## + V4_J1_7	1	8.28	2402.1	-3471.9
## + V24_J1_7	1	8.22	2402.2	-3471.8
## + V15_J1_1	1	8.04	2402.4	-3471.4
## + V20_J1_3	1	7.90	2402.5	-3471.1
## + V1_J2_5	1	7.86	2402.6	-3471.0
## + V12_1_2_J1_5	1	7.82	2402.6	-3470.9
## + V2_J1_5	1	7.75	2402.7	-3470.8
## + V24_J1_6	1	7.60	2402.8	-3470.4
## + V26_J1_6	1	7.45	2403.0	-3470.1
## + V13_1_J1_5	1	7.22	2403.2	-3469.6
## + V29_J1_1	1	7.07	2403.3	-3469.3
## + V29_J1_4	1	7.02	2403.4	-3469.2
## + V12_1_2_J2_4	1	6.64	2403.8	-3468.4
## + V4_J1_2	1	6.46	2404.0	-3468.0
## + V13_2_J2_7	1	6.21	2404.2	-3467.4
## + V24_J1_1	1	6.10	2404.3	-3467.2
## + V29_J2_3	1	5.98	2404.4	-3466.9
## + V24_J2_3	1	5.86	2404.6	-3466.7
## + V5_J1_3	1	5.82	2404.6	-3466.6
## + V14_J2_2	1	5.52	2404.9	-3465.9
## + V1_J1_1	1	5.43	2405.0	-3465.7
## + V29_J2_1	1	5.31	2405.1	-3465.5
## + V26_J1_1	1	5.17	2405.2	-3465.2
## + V4_J2_2	1	5.13	2405.3	-3465.1
## + V29_J1_6	1	4.83	2405.6	-3464.4
## + V12_1_2_J2_3	1	4.66	2405.8	-3464.1
## + V13_3_J1_6	1	4.49	2405.9	-3463.7
## + V24_J1_5	1	4.43	2406.0	-3463.6
## + V30_J2_4	1	4.38	2406.0	-3463.5
## + V23_J2_3	1	4.36	2406.1	-3463.4
## + V30_J1_4	1	4.17	2406.2	-3463.0
## + V13_1_J2_2	1	4.05	2406.4	-3462.8
## + V4_J1_1	1	4.02	2406.4	-3462.7
## + V13_1_J2_5	1	3.85	2406.6	-3462.3
## + V26_J2_7	1	3.80	2406.6	-3462.2
## + V23_J2_4	1	3.79	2406.6	-3462.2
## + V30_J2_7	1	3.60	2406.8	-3461.8
## + V19_J1_7	1	3.58	2406.8	-3461.7
## + V5_J1_7	1	3.57	2406.8	-3461.7
## + V13_3_J2_7	1	3.51	2406.9	-3461.6
## + V20_J1_6	1	3.40	2407.0	-3461.4
## + V19_J1_6	1	3.30	2407.1	-3461.1
## + V29_J1_2	1	3.17	2407.2	-3460.9
## + V14_J1_7	1	3.17	2407.2	-3460.8

## + V23_J2_5	1	3.15	2407.3	-3460.8
## <none>			2410.4	-3460.7
## + V14_J2_7	1	3.00	2407.4	-3460.5
## + V13_2_J1_6	1	2.85	2407.6	-3460.2
## + V19_J1_2	1	2.82	2407.6	-3460.1
## + V24_J2_7	1	2.81	2407.6	-3460.1
## + V23_J2_2	1	2.77	2407.6	-3460.0
## + V13_2_J1_3	1	2.72	2407.7	-3459.9
## + V23_J1_4	1	2.51	2407.9	-3459.4
## + V14_J1_1	1	2.49	2407.9	-3459.4
## + V5_J1_6	1	2.49	2407.9	-3459.4
## + V13_2_J2_5	1	2.47	2407.9	-3459.4
## + V15_J2_4	1	2.45	2408.0	-3459.3
## + V19_J2_2	1	2.43	2408.0	-3459.3
## + V12_1_2_J2_1	1	2.40	2408.0	-3459.2
## + V20_J1_5	1	2.35	2408.1	-3459.1
## + V30_J2_1	1	2.34	2408.1	-3459.1
## + V17_J2_1	1	2.28	2408.1	-3458.9
## + V13_1_J1_4	1	2.27	2408.1	-3458.9
## + V16_J2_5	1	2.23	2408.2	-3458.8
## + V16_J1_7	1	2.15	2408.3	-3458.7
## + V13_3_J2_2	1	2.15	2408.3	-3458.7
## + V1_J1_7	1	2.13	2408.3	-3458.6
## + V1_J1_4	1	2.09	2408.3	-3458.5
## + V26_J1_7	1	2.07	2408.3	-3458.5
## + V13_1_J2_1	1	1.99	2408.4	-3458.3
## + V29_J2_2	1	1.91	2408.5	-3458.1
## + V29_J2_7	1	1.85	2408.6	-3458.0
## + V24_J1_2	1	1.83	2408.6	-3458.0
## + V17_J1_6	1	1.77	2408.6	-3457.8
## + V26_J1_3	1	1.74	2408.7	-3457.8
## + V26_J2_2	1	1.73	2408.7	-3457.8
## + V30_J1_7	1	1.73	2408.7	-3457.8
## + V2_J2_5	1	1.70	2408.7	-3457.7
## + V3_J2_7	1	1.67	2408.7	-3457.6
## + V16_J1_2	1	1.66	2408.8	-3457.6
## + V4_J1_3	1	1.55	2408.9	-3457.4
## + V20_J1_1	1	1.49	2408.9	-3457.2
## + V5_J1_2	1	1.45	2409.0	-3457.2
## + V1_J2_4	1	1.44	2409.0	-3457.1
## + V20_J2_5	1	1.41	2409.0	-3457.0
## + V13_3_J1_4	1	1.34	2409.1	-3456.9
## + V16_J1_1	1	1.32	2409.1	-3456.9
## + V15_J2_1	1	1.31	2409.1	-3456.8
## + V2_J1_4	1	1.29	2409.1	-3456.8
## + V2_J1_1	1	1.27	2409.1	-3456.8
## + V2_J1_7	1	1.27	2409.1	-3456.7
## + V13_2_J2_3	1	1.24	2409.2	-3456.7
## + V16_J1_6	1	1.22	2409.2	-3456.7
## + V23_J1_7	1	1.18	2409.2	-3456.6
## + V24_J1_3	1	1.18	2409.2	-3456.6
## + V2_J1_6	1	1.18	2409.2	-3456.6
## + V24_J2_4	1	1.17	2409.2	-3456.5
## + V13_2_J1_1	1	1.06	2409.4	-3456.3

## + V2_J2_1	1	1.04	2409.4	-3456.3
## + V16_J1_4	1	1.03	2409.4	-3456.2
## + V1_J2_3	1	0.98	2409.4	-3456.1
## + V17_J1_4	1	0.90	2409.5	-3456.0
## + V13_3_J1_3	1	0.87	2409.5	-3455.9
## + V3_J1_7	1	0.77	2409.6	-3455.7
## + V5_J1_1	1	0.73	2409.7	-3455.6
## + V3_J2_2	1	0.70	2409.7	-3455.5
## + V17_J1_1	1	0.66	2409.8	-3455.4
## + V16_J1_5	1	0.63	2409.8	-3455.4
## + V3_J1_3	1	0.60	2409.8	-3455.3
## + V13_1_J2_3	1	0.54	2409.9	-3455.2
## + V3_J1_6	1	0.53	2409.9	-3455.2
## + V3_J1_2	1	0.52	2409.9	-3455.1
## + V17_J1_7	1	0.46	2409.9	-3455.0
## + V19_J1_1	1	0.42	2410.0	-3454.9
## + V24_J2_2	1	0.42	2410.0	-3454.9
## + V23_J1_6	1	0.41	2410.0	-3454.9
## + V29_J2_5	1	0.40	2410.0	-3454.9
## + V13_3_J2_4	1	0.39	2410.0	-3454.8
## + V13_1_J2_7	1	0.37	2410.0	-3454.8
## + V17_J1_2	1	0.37	2410.0	-3454.8
## + V14_J1_3	1	0.36	2410.0	-3454.8
## + V1_J1_6	1	0.36	2410.0	-3454.8
## + V2_J2_3	1	0.35	2410.1	-3454.8
## + V2_J2_4	1	0.32	2410.1	-3454.7
## + V14_J1_6	1	0.32	2410.1	-3454.7
## + V24_J1_4	1	0.31	2410.1	-3454.7
## + V16_J2_1	1	0.25	2410.2	-3454.6
## + V30_J2_3	1	0.25	2410.2	-3454.5
## + V20_J1_7	1	0.24	2410.2	-3454.5
## + V13_2_J2_2	1	0.23	2410.2	-3454.5
## + V23_J1_1	1	0.21	2410.2	-3454.5
## + V19_J1_3	1	0.21	2410.2	-3454.5
## + V26_J1_2	1	0.19	2410.2	-3454.4
## + V20_J2_4	1	0.19	2410.2	-3454.4
## + V13_3_J1_1	1	0.17	2410.2	-3454.4
## + V17_J2_4	1	0.14	2410.3	-3454.3
## + V3_J1_1	1	0.12	2410.3	-3454.3
## + V13_1_J1_1	1	0.10	2410.3	-3454.2
## + V17_J2_5	1	0.09	2410.3	-3454.2
## + V2_J1_2	1	0.07	2410.3	-3454.2
## + V13_2_J2_4	1	0.07	2410.3	-3454.2
## + V13_3_J1_5	1	0.05	2410.4	-3454.1
## + V1_J1_2	1	0.05	2410.4	-3454.1
## + V13_3_J2_1	1	0.04	2410.4	-3454.1
## + V13_3_J1_7	1	0.04	2410.4	-3454.1
## + V13_2_J2_1	1	0.03	2410.4	-3454.1
## + V24_J2_1	1	0.03	2410.4	-3454.1
## + V23_J1_2	1	0.02	2410.4	-3454.1
## + V1_J2_1	1	0.02	2410.4	-3454.0
## + V15_J2_3	1	0.01	2410.4	-3454.0
## + V13_3_J2_3	1	0.01	2410.4	-3454.0
## + V5_J2_2	1	0.00	2410.4	-3454.0

## + V23_J1_5	1	0.00	2410.4	-3454.0
## + V13_1_J1_6	1	0.00	2410.4	-3454.0
## + V29_J2_4	1	0.00	2410.4	-3454.0
## + V17_J2_3	1	0.00	2410.4	-3454.0
## + V12_1_2_J1_1	1	0.00	2410.4	-3454.0
## - V26_J1_4	1	30.24	2440.7	-3402.4
## - V19_J2_1	1	31.04	2441.5	-3400.7
## - V15_J1_7	1	32.05	2442.5	-3398.6
## - V3_J1_5	1	32.81	2443.2	-3397.0
## - V30_J1_1	1	34.85	2445.3	-3392.6
## - V2_J2_2	1	36.42	2446.8	-3389.3
## - V5_J2_1	1	40.40	2450.8	-3380.8
## - V14_J2_3	1	43.29	2453.7	-3374.7
## - V15_J1_3	1	46.27	2456.7	-3368.4
## - V16_J1_3	1	46.80	2457.2	-3367.3
## - V13_2_J1_7	1	50.07	2460.5	-3360.4
## - V14_J1_4	1	50.86	2461.3	-3358.7
## - V17_J2_7	1	52.03	2462.4	-3356.2
## - V14_J1_5	1	56.62	2467.0	-3346.5
## - V1_J1_3	1	60.01	2470.4	-3339.4
## - V5_J2_3	1	61.46	2471.9	-3336.4
## - V30_J1_3	1	64.46	2474.9	-3330.1
## - V4_J2_5	1	64.89	2475.3	-3329.2
## - V12_1_2_J1_4	1	66.72	2477.1	-3325.3
## - V23_J1_3	1	69.60	2480.0	-3319.3
## - V19_J2_3	1	70.61	2481.0	-3317.2
## - V1_J2_7	1	71.29	2481.7	-3315.7
## - V3_J1_4	1	74.22	2484.6	-3309.6
## - V1_J2_2	1	76.04	2486.5	-3305.8
## - V2_J1_3	1	78.25	2488.7	-3301.2
## - V15_J2_2	1	80.47	2490.9	-3296.5
## - V4_J2_1	1	80.89	2491.3	-3295.7
## - V17_J2_2	1	82.29	2492.7	-3292.7
## - V17_J1_3	1	83.03	2493.4	-3291.2
## - V4_J2_3	1	84.06	2494.5	-3289.0
## - V4_J2_4	1	96.81	2507.2	-3262.5
## - V5_J1_5	1	102.33	2512.7	-3251.1
## - V15_J2_7	1	104.88	2515.3	-3245.8
## - V3_J2_1	1	113.95	2524.4	-3227.1
## - V19_J1_5	1	115.23	2525.6	-3224.5
## - V26_J2_1	1	123.78	2534.2	-3206.9
## - V3_J2_5	1	126.73	2537.1	-3200.8
## - V30_J2_2	1	134.16	2544.6	-3185.6
## - V19_J1_4	1	136.07	2546.5	-3181.7
## - V26_J2_4	1	151.08	2561.5	-3151.2
## - V26_J2_5	1	157.09	2567.5	-3139.0
## - V12_1_2_J2_2	1	164.06	2574.5	-3124.9
## - V3_J2_4	1	179.13	2589.5	-3094.5
## - V3_J2_3	1	202.70	2613.1	-3047.4
## - V5_J2_5	1	241.91	2652.3	-2970.0
## - V5_J2_4	1	265.13	2675.5	-2924.6
## - V20_J2_2	1	266.59	2677.0	-2921.8
## - V26_J2_3	1	341.94	2752.4	-2777.5
## - V16_J2_2	1	438.19	2848.6	-2598.7

```

## - J          12      847.35 3257.8 -1973.8
## - V          19     1204.75 3615.2 -1478.9
##
## Step:  AIC=-3526.63
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##      V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##      V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##      V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
##      V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
##      V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
##      V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
##      V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
##      V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4
##
##
##      Df Sum of Sq  RSS      AIC
## + V26_J1_5      1    29.63 2347.4 -3585.2
## + V30_J1_2      1    27.81 2349.2 -3581.2
## + V12_1_2_J1_3  1    26.74 2350.2 -3578.8
## + V19_J2_5      1    26.29 2350.7 -3577.8
## + V15_J1_6      1    26.15 2350.8 -3577.5
## + V14_J2_4      1    24.77 2352.2 -3574.5
## + V16_J2_7      1    24.08 2352.9 -3572.9
## + V4_J1_4       1    23.97 2353.0 -3572.7
## + V19_J2_4      1    23.62 2353.4 -3571.9
## + V29_J1_3      1    22.51 2354.5 -3569.5
## + V2_J2_7       1    22.03 2355.0 -3568.4
## + V30_J1_6      1    21.27 2355.7 -3566.7
## + V12_1_2_J1_2  1    20.29 2356.7 -3564.6
## + V30_J2_5      1    20.17 2356.8 -3564.3
## + V13_1_J1_2    1    19.36 2357.6 -3562.5
## + V15_J1_5      1    18.51 2358.5 -3560.7
## + V20_J2_3      1    18.06 2358.9 -3559.7
## + V13_1_J1_3    1    17.37 2359.6 -3558.1
## + V23_J2_7      1    17.10 2359.9 -3557.5
## + V12_1_2_J1_7  1    16.20 2360.8 -3555.5
## + V12_1_2_J1_6  1    15.87 2361.1 -3554.8
## + V14_J2_1      1    15.51 2361.5 -3554.0
## + V4_J1_5       1    15.16 2361.8 -3553.3
## + V29_J1_5      1    15.14 2361.8 -3553.2
## + V13_1_J1_7    1    14.64 2362.3 -3552.1
## + V23_J2_1      1    14.15 2362.8 -3551.0
## + V24_J2_5      1    12.60 2364.4 -3547.6
## + V20_J2_1      1    12.50 2364.5 -3547.4
## + V15_J1_4      1    11.77 2365.2 -3545.8
## + V30_J1_5      1    11.61 2365.4 -3545.5
## + V12_1_2_J2_7  1    11.57 2365.4 -3545.4
## + V16_J2_3      1    11.47 2365.5 -3545.2
## + V17_J1_5      1    11.22 2365.8 -3544.6
## + V14_J1_2      1    10.01 2367.0 -3541.9
## + V16_J2_4      1     9.86 2367.1 -3541.6
## + V19_J2_7      1     9.78 2367.2 -3541.4
## + V29_J1_7      1     9.78 2367.2 -3541.4
## + V13_3_J2_5    1     9.69 2367.3 -3541.2
## + V12_1_2_J2_5  1     9.63 2367.4 -3541.1

```


## + V13_3_J1_2	1	9.49	2367.5	-3540.8
## + V4_J2_7	1	9.35	2367.6	-3540.5
## + V13_1_J2_4	1	9.20	2367.8	-3540.2
## + V4_J1_6	1	9.12	2367.9	-3540.0
## + V14_J2_5	1	9.08	2367.9	-3539.9
## + V1_J1_5	1	8.96	2368.0	-3539.6
## + V20_J2_7	1	8.91	2368.1	-3539.5
## + V15_J1_2	1	8.81	2368.2	-3539.3
## + V13_2_J1_5	1	8.68	2368.3	-3539.0
## + V4_J1_7	1	8.59	2368.4	-3538.8
## + V24_J1_7	1	8.54	2368.4	-3538.7
## + V15_J1_1	1	8.53	2368.5	-3538.7
## + V13_2_J1_2	1	8.48	2368.5	-3538.6
## + V20_J1_3	1	8.43	2368.6	-3538.5
## + V15_J2_5	1	8.40	2368.6	-3538.4
## + V13_2_J1_4	1	8.23	2368.8	-3538.0
## + V20_J1_2	1	8.12	2368.9	-3537.8
## + V24_J1_6	1	7.86	2369.1	-3537.2
## + V2_J1_5	1	7.82	2369.2	-3537.1
## + V1_J2_5	1	7.74	2369.2	-3536.9
## + V12_1_2_J1_5	1	7.64	2369.3	-3536.7
## + V26_J1_6	1	7.42	2369.6	-3536.2
## + V13_1_J1_5	1	7.24	2369.7	-3535.9
## + V5_J2_7	1	7.15	2369.8	-3535.7
## + V29_J1_1	1	6.80	2370.2	-3534.9
## + V4_J1_2	1	6.70	2370.3	-3534.7
## + V13_2_J2_7	1	6.54	2370.4	-3534.3
## + V20_J1_4	1	6.53	2370.5	-3534.3
## + V12_1_2_J2_4	1	6.48	2370.5	-3534.2
## + V30_J1_4	1	5.97	2371.0	-3533.1
## + V29_J2_3	1	5.94	2371.0	-3533.0
## + V5_J1_6	1	5.93	2371.1	-3533.0
## + V24_J1_1	1	5.85	2371.1	-3532.8
## + V24_J2_3	1	5.81	2371.2	-3532.7
## + V14_J2_2	1	5.75	2371.2	-3532.6
## + V4_J2_2	1	5.55	2371.4	-3532.1
## + V29_J2_1	1	5.28	2371.7	-3531.6
## + V26_J1_1	1	5.16	2371.8	-3531.3
## + V1_J1_1	1	5.08	2371.9	-3531.1
## + V29_J1_4	1	5.03	2372.0	-3531.0
## + V29_J1_6	1	4.63	2372.4	-3530.1
## + V12_1_2_J2_3	1	4.49	2372.5	-3529.8
## + V24_J1_5	1	4.45	2372.5	-3529.7
## + V23_J2_3	1	4.35	2372.6	-3529.5
## + V30_J2_4	1	4.30	2372.7	-3529.4
## + V13_3_J1_6	1	4.29	2372.7	-3529.4
## + V5_J1_2	1	4.25	2372.7	-3529.3
## + V4_J1_1	1	4.22	2372.8	-3529.2
## + V23_J1_4	1	3.98	2373.0	-3528.7
## + V13_1_J2_5	1	3.84	2373.1	-3528.4
## + V26_J2_7	1	3.82	2373.2	-3528.4
## + V23_J2_4	1	3.81	2373.2	-3528.3
## + V13_3_J2_7	1	3.74	2373.2	-3528.2
## + V13_1_J2_2	1	3.70	2373.3	-3528.1

## + V19_J1_7	1	3.61	2373.4	-3527.9
## + V19_J1_6	1	3.30	2373.7	-3527.2
## + V30_J2_7	1	3.29	2373.7	-3527.2
## + V14_J1_7	1	3.21	2373.8	-3527.0
## + V20_J1_6	1	3.21	2373.8	-3527.0
## + V23_J2_5	1	3.17	2373.8	-3526.9
## + V14_J2_7	1	3.06	2373.9	-3526.7
## <none>			2377.0	-3526.6
## + V13_2_J1_6	1	3.03	2374.0	-3526.6
## + V24_J2_7	1	3.02	2374.0	-3526.6
## + V13_2_J1_3	1	3.02	2374.0	-3526.6
## + V29_J1_2	1	3.00	2374.0	-3526.6
## + V19_J1_2	1	2.82	2374.2	-3526.2
## + V5_J1_3	1	2.63	2374.4	-3525.8
## + V19_J2_2	1	2.56	2374.4	-3525.6
## + V14_J1_1	1	2.52	2374.5	-3525.5
## + V13_2_J2_5	1	2.47	2374.5	-3525.4
## + V23_J2_2	1	2.46	2374.5	-3525.4
## + V1_J1_7	1	2.37	2374.6	-3525.2
## + V16_J1_7	1	2.37	2374.6	-3525.2
## + V20_J1_5	1	2.36	2374.6	-3525.2
## + V15_J2_4	1	2.36	2374.6	-3525.2
## + V12_1_2_J2_1	1	2.29	2374.7	-3525.0
## + V30_J2_1	1	2.29	2374.7	-3525.0
## + V16_J2_5	1	2.27	2374.7	-3525.0
## + V17_J2_1	1	2.22	2374.8	-3524.9
## + V29_J2_2	1	2.17	2374.8	-3524.7
## + V26_J1_7	1	2.07	2374.9	-3524.5
## + V29_J2_7	1	2.02	2375.0	-3524.4
## + V13_1_J2_1	1	1.97	2375.0	-3524.3
## + V13_3_J2_2	1	1.89	2375.1	-3524.1
## + V2_J2_5	1	1.74	2375.2	-3523.8
## + V24_J1_2	1	1.71	2375.3	-3523.7
## + V3_J2_7	1	1.67	2375.3	-3523.7
## + V26_J1_3	1	1.66	2375.3	-3523.6
## + V26_J2_2	1	1.64	2375.3	-3523.6
## + V20_J1_1	1	1.64	2375.3	-3523.6
## + V17_J1_6	1	1.59	2375.4	-3523.5
## + V30_J1_7	1	1.53	2375.5	-3523.4
## + V16_J1_2	1	1.50	2375.5	-3523.3
## + V1_J2_4	1	1.49	2375.5	-3523.3
## + V16_J1_1	1	1.48	2375.5	-3523.2
## + V20_J2_5	1	1.42	2375.6	-3523.1
## + V15_J2_1	1	1.37	2375.6	-3523.0
## + V16_J1_6	1	1.37	2375.6	-3523.0
## + V4_J1_3	1	1.35	2375.6	-3522.9
## + V2_J1_6	1	1.32	2375.7	-3522.9
## + V13_2_J2_3	1	1.24	2375.7	-3522.7
## + V13_1_J1_4	1	1.20	2375.8	-3522.6
## + V24_J2_4	1	1.16	2375.8	-3522.5
## + V5_J1_7	1	1.15	2375.8	-3522.5
## + V2_J1_1	1	1.12	2375.9	-3522.5
## + V1_J1_4	1	1.11	2375.9	-3522.4
## + V2_J1_7	1	1.11	2375.9	-3522.4

## + V2_J2_1	1	1.06	2375.9	-3522.3
## + V23_J1_7	1	1.05	2375.9	-3522.3
## + V13_3_J1_3	1	1.04	2375.9	-3522.3
## + V24_J1_3	1	1.00	2376.0	-3522.2
## + V1_J2_3	1	0.95	2376.0	-3522.1
## + V13_2_J1_1	1	0.95	2376.0	-3522.1
## + V3_J1_7	1	0.78	2376.2	-3521.7
## + V5_J2_2	1	0.78	2376.2	-3521.7
## + V3_J2_2	1	0.65	2376.3	-3521.4
## + V16_J1_5	1	0.64	2376.3	-3521.4
## + V3_J1_3	1	0.64	2376.3	-3521.4
## + V17_J1_7	1	0.58	2376.4	-3521.3
## + V13_3_J1_4	1	0.56	2376.4	-3521.2
## + V3_J1_6	1	0.56	2376.4	-3521.2
## + V2_J1_4	1	0.55	2376.4	-3521.2
## + V17_J1_1	1	0.55	2376.4	-3521.2
## + V13_1_J2_3	1	0.53	2376.5	-3521.1
## + V3_J1_2	1	0.50	2376.5	-3521.1
## + V13_1_J2_7	1	0.45	2376.5	-3521.0
## + V19_J1_1	1	0.42	2376.6	-3520.9
## + V14_J1_3	1	0.42	2376.6	-3520.9
## + V29_J2_5	1	0.40	2376.6	-3520.9
## + V13_3_J2_4	1	0.39	2376.6	-3520.8
## + V16_J1_4	1	0.38	2376.6	-3520.8
## + V23_J1_6	1	0.34	2376.6	-3520.7
## + V2_J2_3	1	0.34	2376.6	-3520.7
## + V2_J2_4	1	0.34	2376.6	-3520.7
## + V13_2_J2_2	1	0.33	2376.7	-3520.7
## + V14_J1_6	1	0.33	2376.7	-3520.7
## + V24_J2_2	1	0.31	2376.7	-3520.7
## + V17_J1_4	1	0.31	2376.7	-3520.7
## + V17_J1_2	1	0.29	2376.7	-3520.6
## + V1_J1_6	1	0.28	2376.7	-3520.6
## + V30_J2_3	1	0.26	2376.7	-3520.6
## + V19_J1_3	1	0.25	2376.7	-3520.5
## + V16_J2_1	1	0.24	2376.7	-3520.5
## + V13_3_J1_1	1	0.22	2376.8	-3520.5
## + V26_J1_2	1	0.19	2376.8	-3520.4
## + V20_J2_4	1	0.19	2376.8	-3520.4
## + V20_J1_7	1	0.19	2376.8	-3520.4
## + V23_J1_1	1	0.16	2376.8	-3520.4
## + V3_J1_1	1	0.13	2376.9	-3520.3
## + V17_J2_4	1	0.13	2376.9	-3520.3
## + V17_J2_5	1	0.08	2376.9	-3520.2
## + V13_2_J2_4	1	0.07	2376.9	-3520.1
## + V13_1_J1_1	1	0.07	2376.9	-3520.1
## + V13_3_J1_5	1	0.05	2376.9	-3520.1
## + V2_J1_2	1	0.04	2376.9	-3520.1
## + V13_3_J2_1	1	0.04	2376.9	-3520.1
## + V23_J1_2	1	0.04	2376.9	-3520.1
## + V13_2_J2_1	1	0.04	2376.9	-3520.1
## + V24_J2_1	1	0.03	2377.0	-3520.1
## + V1_J1_2	1	0.02	2377.0	-3520.0
## + V24_J1_4	1	0.02	2377.0	-3520.0

## + V13_3_J1_7	1	0.02	2377.0	-3520.0
## + V13_1_J1_6	1	0.01	2377.0	-3520.0
## + V1_J2_1	1	0.01	2377.0	-3520.0
## + V15_J2_3	1	0.01	2377.0	-3520.0
## + V13_3_J2_3	1	0.00	2377.0	-3520.0
## + V23_J1_5	1	0.00	2377.0	-3520.0
## + V5_J1_1	1	0.00	2377.0	-3520.0
## + V29_J2_4	1	0.00	2377.0	-3520.0
## + V12_1_2_J1_1	1	0.00	2377.0	-3520.0
## + V17_J2_3	1	0.00	2377.0	-3520.0
## - V19_J2_1	1	31.55	2408.5	-3464.7
## - V15_J1_7	1	32.89	2409.9	-3461.8
## - V5_J1_4	1	33.43	2410.4	-3460.7
## - V3_J1_5	1	33.45	2410.4	-3460.6
## - V26_J1_4	1	34.58	2411.6	-3458.2
## - V2_J2_2	1	35.34	2412.3	-3456.5
## - V30_J1_1	1	35.60	2412.6	-3456.0
## - V14_J2_3	1	43.87	2420.9	-3438.2
## - V16_J1_3	1	45.63	2422.6	-3434.4
## - V15_J1_3	1	47.60	2424.6	-3430.2
## - V13_2_J1_7	1	49.34	2426.3	-3426.4
## - V5_J2_1	1	49.51	2426.5	-3426.1
## - V17_J2_7	1	50.98	2428.0	-3422.9
## - V14_J1_4	1	56.31	2433.3	-3411.5
## - V14_J1_5	1	57.23	2434.2	-3409.6
## - V1_J1_3	1	58.59	2435.6	-3406.6
## - V30_J1_3	1	62.99	2440.0	-3397.3
## - V4_J2_5	1	64.94	2441.9	-3393.1
## - V23_J1_3	1	68.29	2445.3	-3386.0
## - V1_J2_7	1	70.07	2447.1	-3382.2
## - V19_J2_3	1	71.41	2448.4	-3379.3
## - V5_J2_3	1	72.40	2449.4	-3377.3
## - V12_1_2_J1_4	1	72.76	2449.7	-3376.5
## - V1_J2_2	1	74.37	2451.4	-3373.1
## - V2_J1_3	1	76.73	2453.7	-3368.1
## - V17_J2_2	1	80.55	2457.5	-3360.0
## - V3_J1_4	1	80.86	2457.8	-3359.3
## - V4_J2_1	1	81.00	2458.0	-3359.0
## - V17_J1_3	1	81.35	2458.3	-3358.3
## - V15_J2_2	1	82.28	2459.3	-3356.3
## - V4_J2_3	1	84.23	2461.2	-3352.2
## - V4_J2_4	1	96.88	2473.9	-3325.5
## - V15_J2_7	1	106.49	2483.5	-3305.4
## - V3_J2_1	1	115.15	2492.1	-3287.3
## - V5_J1_5	1	115.91	2492.9	-3285.7
## - V19_J1_5	1	116.18	2493.2	-3285.1
## - V26_J2_1	1	124.89	2501.9	-3267.0
## - V3_J2_5	1	127.94	2504.9	-3260.7
## - V30_J2_2	1	131.96	2508.9	-3252.3
## - V19_J1_4	1	144.70	2521.7	-3226.0
## - V26_J2_4	1	152.23	2529.2	-3210.5
## - V26_J2_5	1	158.26	2535.2	-3198.1
## - V12_1_2_J2_2	1	162.76	2539.7	-3188.9
## - V3_J2_4	1	180.56	2557.5	-3152.6

```

## - V3_J2_3      1      204.37 2581.4 -3104.4
## - V5_J2_5      1      261.10 2638.1 -2991.3
## - V20_J2_2     1      263.86 2640.8 -2985.9
## - V5_J2_4      1      285.01 2662.0 -2944.4
## - V26_J2_3     1      343.87 2720.9 -2830.7
## - V16_J2_2     1      434.38 2811.4 -2660.5
## - J            12      827.03 3204.0 -2053.7
## - V            19     1192.72 3569.7 -1538.1
##
## Step:  AIC=-3585.22
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##      V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##      V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##      V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
##      V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
##      V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
##      V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
##      V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
##      V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5
##
##
##      Df Sum of Sq    RSS      AIC
## + V30_J1_2      1      28.50 2318.9 -3642.1
## + V15_J1_6      1      26.91 2320.4 -3638.5
## + V19_J2_5      1      26.79 2320.6 -3638.3
## + V12_1_2_J1_3  1      25.88 2321.5 -3636.2
## + V14_J2_4      1      25.20 2322.2 -3634.7
## + V19_J2_4      1      24.09 2323.3 -3632.2
## + V4_J1_4       1      24.09 2323.3 -3632.2
## + V16_J2_7      1      23.40 2324.0 -3630.7
## + V29_J1_3      1      21.79 2325.6 -3627.1
## + V15_J1_5      1      21.64 2325.7 -3626.7
## + V2_J2_7       1      21.38 2326.0 -3626.2
## + V12_1_2_J1_2  1      20.74 2326.6 -3624.7
## + V30_J1_6      1      20.68 2326.7 -3624.6
## + V30_J2_5      1      20.32 2327.0 -3623.8
## + V13_1_J1_2    1      18.98 2328.4 -3620.8
## + V4_J1_5       1      18.29 2329.1 -3619.2
## + V20_J2_3      1      18.09 2329.3 -3618.8
## + V13_1_J1_3    1      18.02 2329.3 -3618.7
## + V23_J2_7      1      16.59 2330.8 -3615.5
## + V14_J2_1      1      15.87 2331.5 -3613.9
## + V12_1_2_J1_7  1      15.74 2331.6 -3613.6
## + V12_1_2_J1_6  1      15.47 2331.9 -3613.0
## + V13_1_J1_7    1      14.26 2333.1 -3610.3
## + V23_J2_1      1      14.14 2333.2 -3610.0
## + V24_J2_5      1      12.63 2334.7 -3606.6
## + V20_J2_1      1      12.50 2334.9 -3606.3
## + V29_J1_5      1      12.50 2334.9 -3606.3
## + V15_J1_4      1      11.63 2335.7 -3604.4
## + V16_J2_3      1      11.45 2335.9 -3604.0
## + V12_1_2_J2_7  1      11.15 2336.2 -3603.3
## + V13_2_J1_5    1      10.98 2336.4 -3603.0
## + V14_J1_2      1      10.04 2337.3 -3600.9
## + V16_J2_4      1       9.93 2337.4 -3600.6

```

## + V19_J2_7	1	9.86	2337.5	-3600.5
## + V13_3_J2_5	1	9.67	2337.7	-3600.0
## + V12_1_2_J2_5	1	9.65	2337.7	-3600.0
## + V29_J1_7	1	9.47	2337.9	-3599.6
## + V30_J1_5	1	9.41	2337.9	-3599.5
## + V13_1_J1_5	1	9.37	2338.0	-3599.4
## + V4_J1_6	1	9.37	2338.0	-3599.4
## + V14_J2_5	1	9.34	2338.0	-3599.3
## + V20_J2_7	1	9.29	2338.1	-3599.2
## + V15_J1_2	1	9.26	2338.1	-3599.1
## + V13_3_J1_2	1	9.23	2338.1	-3599.1
## + V13_1_J2_4	1	9.17	2338.2	-3598.9
## + V17_J1_5	1	9.06	2338.3	-3598.7
## + V4_J2_7	1	9.02	2338.3	-3598.6
## + V15_J1_1	1	8.99	2338.4	-3598.5
## + V20_J1_3	1	8.93	2338.4	-3598.4
## + V4_J1_7	1	8.87	2338.5	-3598.3
## + V24_J1_7	1	8.83	2338.5	-3598.2
## + V15_J2_5	1	8.25	2339.1	-3596.9
## + V13_2_J1_2	1	8.21	2339.1	-3596.8
## + V13_2_J1_4	1	8.20	2339.2	-3596.8
## + V24_J1_6	1	8.10	2339.3	-3596.6
## + V20_J1_2	1	7.84	2339.5	-3596.0
## + V1_J2_5	1	7.64	2339.7	-3595.5
## + V5_J2_7	1	7.14	2340.2	-3594.4
## + V1_J1_5	1	7.04	2340.3	-3594.2
## + V4_J1_2	1	6.91	2340.5	-3593.9
## + V13_2_J2_7	1	6.85	2340.5	-3593.8
## + V29_J1_1	1	6.56	2340.8	-3593.1
## + V20_J1_4	1	6.52	2340.8	-3593.0
## + V12_1_2_J2_4	1	6.49	2340.9	-3593.0
## + V24_J1_5	1	6.13	2341.2	-3592.2
## + V2_J1_5	1	6.00	2341.4	-3591.9
## + V5_J1_6	1	6.00	2341.4	-3591.9
## + V14_J2_2	1	5.97	2341.4	-3591.8
## + V4_J2_2	1	5.94	2341.4	-3591.8
## + V30_J1_4	1	5.92	2341.4	-3591.7
## + V29_J2_3	1	5.89	2341.5	-3591.6
## + V12_1_2_J1_5	1	5.81	2341.6	-3591.5
## + V24_J2_3	1	5.76	2341.6	-3591.4
## + V24_J1_1	1	5.63	2341.7	-3591.1
## + V29_J2_1	1	5.25	2342.1	-3590.2
## + V29_J1_4	1	4.98	2342.4	-3589.6
## + V1_J1_1	1	4.78	2342.6	-3589.2
## + V12_1_2_J2_3	1	4.48	2342.9	-3588.5
## + V29_J1_6	1	4.44	2342.9	-3588.4
## + V4_J1_1	1	4.40	2343.0	-3588.3
## + V23_J2_3	1	4.34	2343.0	-3588.2
## + V5_J1_2	1	4.30	2343.1	-3588.1
## + V26_J1_3	1	4.28	2343.1	-3588.1
## + V26_J2_2	1	4.24	2343.1	-3588.0
## + V30_J2_4	1	4.23	2343.1	-3588.0
## + V13_3_J1_6	1	4.11	2343.2	-3587.7
## + V23_J1_4	1	4.00	2343.4	-3587.4

## + V13_3_J2_7	1	3.95	2343.4	-3587.3
## + V26_J1_6	1	3.83	2343.5	-3587.1
## + V13_1_J2_5	1	3.83	2343.5	-3587.1
## + V23_J2_4	1	3.82	2343.5	-3587.1
## + V19_J1_7	1	3.63	2343.7	-3586.6
## + V13_1_J2_2	1	3.38	2344.0	-3586.1
## + V13_2_J1_3	1	3.31	2344.0	-3585.9
## + V19_J1_6	1	3.30	2344.1	-3585.9
## + V14_J1_7	1	3.25	2344.1	-3585.8
## + V24_J2_7	1	3.22	2344.1	-3585.7
## + V13_2_J1_6	1	3.20	2344.2	-3585.7
## + V23_J2_5	1	3.18	2344.2	-3585.6
## + V14_J2_7	1	3.12	2344.2	-3585.5
## + V20_J1_6	1	3.03	2344.3	-3585.3
## + V30_J2_7	1	3.02	2344.3	-3585.3
## <none>			2347.4	-3585.2
## + V29_J1_2	1	2.86	2344.5	-3584.9
## + V19_J1_2	1	2.82	2344.5	-3584.8
## + V5_J1_3	1	2.70	2344.7	-3584.6
## + V19_J2_2	1	2.70	2344.7	-3584.6
## + V1_J1_7	1	2.60	2344.8	-3584.3
## + V16_J1_7	1	2.57	2344.8	-3584.3
## + V14_J1_1	1	2.54	2344.8	-3584.2
## + V13_2_J2_5	1	2.47	2344.9	-3584.0
## + V29_J2_2	1	2.43	2344.9	-3584.0
## + V16_J2_5	1	2.30	2345.1	-3583.7
## + V12_1_2_J2_1	1	2.29	2345.1	-3583.7
## + V15_J2_4	1	2.28	2345.1	-3583.6
## + V26_J1_1	1	2.26	2345.1	-3583.6
## + V30_J2_1	1	2.25	2345.1	-3583.6
## + V23_J2_2	1	2.18	2345.2	-3583.4
## + V29_J2_7	1	2.18	2345.2	-3583.4
## + V17_J2_1	1	2.18	2345.2	-3583.4
## + V13_1_J2_1	1	1.95	2345.4	-3582.9
## + V20_J1_1	1	1.78	2345.6	-3582.5
## + V2_J2_5	1	1.76	2345.6	-3582.5
## + V13_3_J2_2	1	1.67	2345.7	-3582.3
## + V3_J2_7	1	1.66	2345.7	-3582.3
## + V16_J1_1	1	1.63	2345.7	-3582.2
## + V24_J1_2	1	1.60	2345.8	-3582.1
## + V26_J1_2	1	1.54	2345.8	-3582.0
## + V1_J2_4	1	1.54	2345.8	-3582.0
## + V16_J1_6	1	1.51	2345.9	-3581.9
## + V2_J1_6	1	1.45	2345.9	-3581.8
## + V17_J1_6	1	1.43	2345.9	-3581.7
## + V20_J2_5	1	1.43	2345.9	-3581.7
## + V15_J2_1	1	1.42	2345.9	-3581.7
## + V26_J2_7	1	1.42	2345.9	-3581.7
## + V20_J1_5	1	1.40	2346.0	-3581.7
## + V16_J1_2	1	1.36	2346.0	-3581.6
## + V30_J1_7	1	1.36	2346.0	-3581.6
## + V13_2_J2_3	1	1.26	2346.1	-3581.4
## + V13_3_J1_3	1	1.20	2346.2	-3581.2
## + V4_J1_3	1	1.18	2346.2	-3581.2

## + V13_1_J1_4	1	1.18	2346.2	-3581.2
## + V24_J2_4	1	1.16	2346.2	-3581.1
## + V1_J1_4	1	1.14	2346.2	-3581.1
## + V5_J1_7	1	1.14	2346.2	-3581.1
## + V2_J2_1	1	1.07	2346.3	-3581.0
## + V2_J1_1	1	1.00	2346.4	-3580.8
## + V2_J1_7	1	0.98	2346.4	-3580.8
## + V23_J1_7	1	0.94	2346.4	-3580.7
## + V1_J2_3	1	0.93	2346.4	-3580.6
## + V24_J1_3	1	0.85	2346.5	-3580.5
## + V13_2_J1_1	1	0.85	2346.5	-3580.5
## + V3_J1_7	1	0.79	2346.6	-3580.3
## + V5_J2_2	1	0.73	2346.6	-3580.2
## + V17_J1_7	1	0.69	2346.7	-3580.1
## + V3_J1_3	1	0.67	2346.7	-3580.1
## + V3_J2_2	1	0.61	2346.7	-3579.9
## + V3_J1_6	1	0.58	2346.8	-3579.9
## + V2_J1_4	1	0.55	2346.8	-3579.8
## + V13_3_J1_4	1	0.54	2346.8	-3579.8
## + V13_1_J2_7	1	0.53	2346.8	-3579.7
## + V13_1_J2_3	1	0.51	2346.8	-3579.7
## + V3_J1_2	1	0.48	2346.9	-3579.6
## + V14_J1_3	1	0.47	2346.9	-3579.6
## + V17_J1_1	1	0.45	2346.9	-3579.6
## + V26_J1_7	1	0.44	2346.9	-3579.6
## + V13_2_J2_2	1	0.44	2346.9	-3579.6
## + V19_J1_1	1	0.41	2346.9	-3579.5
## + V29_J2_5	1	0.39	2347.0	-3579.5
## + V13_3_J2_4	1	0.39	2347.0	-3579.5
## + V16_J1_4	1	0.39	2347.0	-3579.4
## + V13_3_J1_5	1	0.35	2347.0	-3579.4
## + V2_J2_4	1	0.35	2347.0	-3579.4
## + V2_J2_3	1	0.34	2347.0	-3579.3
## + V14_J1_6	1	0.33	2347.0	-3579.3
## + V17_J1_4	1	0.32	2347.0	-3579.3
## + V23_J1_6	1	0.29	2347.1	-3579.2
## + V19_J1_3	1	0.28	2347.1	-3579.2
## + V30_J2_3	1	0.27	2347.1	-3579.2
## + V13_3_J1_1	1	0.27	2347.1	-3579.2
## + V16_J2_1	1	0.23	2347.1	-3579.1
## + V24_J2_2	1	0.22	2347.1	-3579.1
## + V17_J1_2	1	0.22	2347.1	-3579.1
## + V1_J1_6	1	0.22	2347.1	-3579.1
## + V16_J1_5	1	0.21	2347.2	-3579.0
## + V20_J2_4	1	0.19	2347.2	-3579.0
## + V23_J1_5	1	0.18	2347.2	-3579.0
## + V20_J1_7	1	0.14	2347.2	-3578.9
## + V3_J1_1	1	0.14	2347.2	-3578.9
## + V23_J1_1	1	0.12	2347.2	-3578.9
## + V17_J2_4	1	0.11	2347.2	-3578.8
## + V13_2_J2_4	1	0.07	2347.3	-3578.7
## + V17_J2_5	1	0.07	2347.3	-3578.7
## + V23_J1_2	1	0.06	2347.3	-3578.7
## + V13_1_J1_1	1	0.05	2347.3	-3578.7

## + V13_3_J2_1	1	0.04	2347.3	-3578.7
## + V13_2_J2_1	1	0.04	2347.3	-3578.7
## + V24_J2_1	1	0.03	2347.3	-3578.7
## + V13_1_J1_6	1	0.02	2347.3	-3578.6
## + V2_J1_2	1	0.02	2347.3	-3578.6
## + V24_J1_4	1	0.02	2347.3	-3578.6
## + V13_3_J1_7	1	0.01	2347.4	-3578.6
## + V1_J2_1	1	0.01	2347.4	-3578.6
## + V1_J1_2	1	0.01	2347.4	-3578.6
## + V12_1_2_J1_1	1	0.00	2347.4	-3578.6
## + V15_J2_3	1	0.00	2347.4	-3578.6
## + V13_3_J2_3	1	0.00	2347.4	-3578.6
## + V29_J2_4	1	0.00	2347.4	-3578.6
## + V17_J2_3	1	0.00	2347.4	-3578.6
## + V5_J1_1	1	0.00	2347.4	-3578.6
## - V26_J1_5	1	29.63	2377.0	-3526.6
## - V19_J2_1	1	32.03	2379.4	-3521.4
## - V15_J1_7	1	33.67	2381.0	-3517.8
## - V5_J1_4	1	34.07	2381.4	-3516.9
## - V2_J2_2	1	34.35	2381.7	-3516.3
## - V30_J1_1	1	36.29	2383.6	-3512.1
## - V3_J1_5	1	37.50	2384.9	-3509.4
## - V26_J1_4	1	42.56	2389.9	-3498.4
## - V14_J2_3	1	44.42	2391.8	-3494.4
## - V16_J1_3	1	44.57	2391.9	-3494.0
## - V13_2_J1_7	1	48.67	2396.0	-3485.1
## - V15_J1_3	1	48.83	2396.2	-3484.8
## - V17_J2_7	1	50.04	2397.4	-3482.2
## - V5_J2_1	1	50.27	2397.6	-3481.7
## - V14_J1_4	1	56.92	2404.3	-3467.3
## - V1_J1_3	1	57.31	2404.7	-3466.4
## - V30_J1_3	1	61.67	2409.0	-3457.0
## - V14_J1_5	1	62.31	2409.7	-3455.6
## - V4_J2_5	1	65.04	2412.4	-3449.7
## - V23_J1_3	1	67.10	2414.5	-3445.3
## - V1_J2_7	1	68.96	2416.3	-3441.3
## - V19_J2_3	1	72.18	2419.5	-3434.4
## - V12_1_2_J1_4	1	72.80	2420.2	-3433.0
## - V1_J2_2	1	72.82	2420.2	-3433.0
## - V5_J2_3	1	73.35	2420.7	-3431.8
## - V2_J1_3	1	75.36	2422.7	-3427.5
## - V17_J2_2	1	78.94	2426.3	-3419.9
## - V17_J1_3	1	79.83	2427.2	-3417.9
## - V4_J2_1	1	81.15	2428.5	-3415.1
## - V3_J1_4	1	81.86	2429.2	-3413.6
## - V15_J2_2	1	84.00	2431.4	-3409.0
## - V4_J2_3	1	84.44	2431.8	-3408.1
## - V4_J2_4	1	97.00	2444.4	-3381.3
## - V15_J2_7	1	107.97	2455.3	-3358.0
## - V3_J2_1	1	116.30	2463.7	-3340.4
## - V5_J1_5	1	123.13	2470.5	-3326.0
## - V19_J1_5	1	123.28	2470.6	-3325.7
## - V3_J2_5	1	129.09	2476.4	-3313.5
## - V30_J2_2	1	129.90	2477.3	-3311.8

```

## - V26_J2_1      1      138.66 2486.0 -3293.4
## - V19_J1_4      1      145.78 2493.1 -3278.5
## - V12_1_2_J2_2  1      160.77 2508.1 -3247.4
## - V26_J2_4      1      167.13 2514.5 -3234.2
## - V26_J2_5      1      173.40 2520.8 -3221.3
## - V3_J2_4       1      181.92 2529.3 -3203.7
## - V3_J2_3       1      205.96 2553.3 -3154.5
## - V20_J2_2      1      261.30 2608.7 -3043.0
## - V5_J2_5       1      262.74 2610.1 -3040.1
## - V5_J2_4       1      286.72 2634.1 -2992.6
## - V26_J2_3      1      364.23 2711.6 -2841.8
## - V16_J2_2      1      430.79 2778.2 -2715.7
## - J             12      812.65 3160.0 -2119.0
## - V             19     1160.70 3508.1 -1622.1
##
## Step:  AIC=-3642.11
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2
##
##
##           Df Sum of Sq    RSS      AIC
## + V19_J2_5      1      27.39 2291.5 -3697.3
## + V15_J1_6      1      26.63 2292.2 -3695.5
## + V30_J2_5      1      26.38 2292.5 -3695.0
## + V12_1_2_J1_3  1      25.78 2293.1 -3693.6
## + V14_J2_4      1      25.71 2293.2 -3693.4
## + V4_J1_4       1      24.71 2294.1 -3691.2
## + V19_J2_4      1      24.66 2294.2 -3691.1
## + V16_J2_7      1      23.65 2295.2 -3688.8
## + V12_1_2_J1_2  1      23.48 2295.4 -3688.4
## + V15_J1_5      1      22.05 2296.8 -3685.2
## + V29_J1_3      1      21.67 2297.2 -3684.3
## + V2_J2_7       1      21.62 2297.2 -3684.2
## + V4_J1_5       1      18.80 2300.1 -3677.8
## + V20_J2_3      1      18.47 2300.4 -3677.0
## + V13_1_J1_3    1      18.12 2300.7 -3676.3
## + V23_J2_7      1      16.81 2302.0 -3673.3
## + V13_1_J1_2    1      16.62 2302.2 -3672.9
## + V14_J2_1      1      16.31 2302.5 -3672.2
## + V12_1_2_J1_7  1      15.98 2302.9 -3671.4
## + V30_J1_6      1      15.74 2303.1 -3670.9
## + V12_1_2_J1_6  1      15.68 2303.2 -3670.8
## + V13_1_J1_7    1      14.46 2304.4 -3668.0
## + V23_J2_1      1      13.84 2305.0 -3666.6
## + V30_J1_5      1      13.57 2305.3 -3666.0
## + V24_J2_5      1      12.89 2306.0 -3664.5
## + V20_J2_1      1      12.79 2306.1 -3664.2
## + V29_J1_5      1      12.22 2306.6 -3662.9

```

## + V15_J1_4	1	11.96	2306.9	-3662.4
## + V14_J1_2	1	11.90	2307.0	-3662.2
## + V16_J2_3	1	11.74	2307.1	-3661.9
## + V12_1_2_J2_7	1	11.36	2307.5	-3661.0
## + V13_2_J1_5	1	11.26	2307.6	-3660.8
## + V15_J1_2	1	11.12	2307.7	-3660.5
## + V16_J2_4	1	9.71	2309.1	-3657.3
## + V14_J2_5	1	9.65	2309.2	-3657.2
## + V29_J1_7	1	9.63	2309.2	-3657.1
## + V13_1_J1_5	1	9.62	2309.2	-3657.1
## + V19_J2_7	1	9.56	2309.3	-3657.0
## + V13_3_J2_5	1	9.44	2309.4	-3656.7
## + V12_1_2_J2_5	1	9.40	2309.5	-3656.6
## + V4_J2_7	1	9.31	2309.6	-3656.4
## + V20_J2_7	1	9.12	2309.7	-3656.0
## + V4_J1_6	1	9.11	2309.7	-3655.9
## + V15_J1_1	1	9.02	2309.8	-3655.7
## + V20_J1_3	1	9.01	2309.8	-3655.7
## + V13_1_J2_4	1	8.95	2309.9	-3655.6
## + V17_J1_5	1	8.81	2310.0	-3655.3
## + V24_J1_7	1	8.68	2310.2	-3655.0
## + V4_J1_7	1	8.61	2310.3	-3654.8
## + V15_J2_5	1	8.49	2310.4	-3654.5
## + V4_J1_2	1	8.44	2310.4	-3654.4
## + V24_J1_6	1	7.97	2310.9	-3653.4
## + V13_2_J1_4	1	7.94	2310.9	-3653.3
## + V1_J2_5	1	7.85	2311.0	-3653.1
## + V13_3_J1_2	1	7.59	2311.3	-3652.5
## + V1_J1_5	1	6.82	2312.0	-3650.8
## + V5_J2_7	1	6.80	2312.1	-3650.7
## + V13_2_J2_7	1	6.69	2312.2	-3650.5
## + V13_2_J1_2	1	6.68	2312.2	-3650.5
## + V29_J1_1	1	6.52	2312.3	-3650.1
## + V24_J1_5	1	6.34	2312.5	-3649.7
## + V20_J1_2	1	6.33	2312.5	-3649.7
## + V20_J1_4	1	6.30	2312.6	-3649.6
## + V5_J1_6	1	6.30	2312.6	-3649.6
## + V12_1_2_J2_4	1	6.29	2312.6	-3649.6
## + V14_J2_2	1	5.97	2312.9	-3648.9
## + V4_J2_2	1	5.92	2312.9	-3648.8
## + V2_J1_5	1	5.82	2313.0	-3648.5
## + V29_J2_3	1	5.67	2313.2	-3648.2
## + V12_1_2_J1_5	1	5.60	2313.3	-3648.0
## + V24_J1_1	1	5.59	2313.3	-3648.0
## + V24_J2_3	1	5.55	2313.3	-3647.9
## + V29_J2_1	1	5.07	2313.8	-3646.8
## + V29_J1_4	1	4.79	2314.1	-3646.2
## + V1_J1_1	1	4.74	2314.1	-3646.1
## + V29_J1_6	1	4.54	2314.3	-3645.7
## + V26_J1_3	1	4.38	2314.5	-3645.3
## + V4_J1_1	1	4.36	2314.5	-3645.3
## + V26_J2_2	1	4.33	2314.5	-3645.2
## + V12_1_2_J2_3	1	4.28	2314.6	-3645.1
## + V13_3_J1_6	1	4.21	2314.6	-3644.9

## + V23_J1_4	1	4.17	2314.7	-3644.8
## + V23_J2_3	1	4.16	2314.7	-3644.8
## + V13_3_J2_7	1	3.84	2315.0	-3644.1
## + V19_J1_2	1	3.82	2315.0	-3644.0
## + V13_1_J2_5	1	3.68	2315.2	-3643.7
## + V23_J2_4	1	3.68	2315.2	-3643.7
## + V26_J1_6	1	3.60	2315.3	-3643.6
## + V19_J1_7	1	3.46	2315.4	-3643.2
## + V30_J1_4	1	3.43	2315.4	-3643.2
## + V13_2_J1_3	1	3.35	2315.5	-3643.0
## + V13_1_J2_2	1	3.33	2315.5	-3643.0
## + V5_J1_2	1	3.30	2315.6	-3642.9
## + V19_J1_6	1	3.15	2315.7	-3642.5
## + V24_J2_7	1	3.12	2315.7	-3642.5
## + V14_J1_7	1	3.11	2315.7	-3642.5
## + V20_J1_6	1	3.11	2315.8	-3642.4
## + V13_2_J1_6	1	3.10	2315.8	-3642.4
## + V23_J2_5	1	3.05	2315.8	-3642.3
## + V14_J2_7	1	2.98	2315.9	-3642.2
## <none>			2318.9	-3642.1
## + V19_J2_2	1	2.68	2316.2	-3641.5
## + V5_J1_3	1	2.62	2316.2	-3641.4
## + V13_2_J2_5	1	2.59	2316.3	-3641.3
## + V14_J1_1	1	2.53	2316.3	-3641.1
## + V1_J1_7	1	2.51	2316.3	-3641.1
## + V16_J1_7	1	2.49	2316.4	-3641.1
## + V29_J2_2	1	2.47	2316.4	-3641.0
## + V15_J2_4	1	2.40	2316.5	-3640.9
## + V17_J2_1	1	2.30	2316.6	-3640.6
## + V16_J2_5	1	2.20	2316.7	-3640.4
## + V26_J1_1	1	2.18	2316.7	-3640.4
## + V12_1_2_J2_1	1	2.16	2316.7	-3640.3
## + V30_J2_4	1	2.16	2316.7	-3640.3
## + V23_J2_2	1	2.14	2316.7	-3640.3
## + V29_J2_7	1	2.10	2316.8	-3640.2
## + V29_J1_2	1	1.98	2316.9	-3639.9
## + V13_1_J2_1	1	1.84	2317.0	-3639.6
## + V20_J1_1	1	1.80	2317.1	-3639.5
## + V2_J2_5	1	1.67	2317.2	-3639.2
## + V16_J1_1	1	1.66	2317.2	-3639.2
## + V13_3_J2_2	1	1.64	2317.2	-3639.1
## + V3_J2_7	1	1.50	2317.4	-3638.8
## + V17_J1_6	1	1.48	2317.4	-3638.8
## + V16_J1_6	1	1.45	2317.4	-3638.7
## + V1_J2_4	1	1.44	2317.4	-3638.7
## + V2_J1_6	1	1.40	2317.5	-3638.6
## + V13_2_J2_3	1	1.37	2317.5	-3638.5
## + V20_J2_5	1	1.34	2317.5	-3638.5
## + V15_J2_1	1	1.32	2317.5	-3638.4
## + V20_J1_5	1	1.30	2317.6	-3638.4
## + V30_J2_7	1	1.30	2317.6	-3638.4
## + V26_J2_7	1	1.27	2317.6	-3638.3
## + V30_J2_3	1	1.25	2317.6	-3638.3
## + V13_3_J1_3	1	1.23	2317.6	-3638.2

## + V4_J1_3	1	1.19	2317.7	-3638.1
## + V13_1_J1_4	1	1.09	2317.8	-3637.9
## + V24_J2_4	1	1.08	2317.8	-3637.9
## + V1_J1_4	1	1.05	2317.8	-3637.8
## + V2_J1_7	1	1.03	2317.8	-3637.8
## + V1_J2_3	1	1.02	2317.8	-3637.8
## + V5_J1_7	1	1.01	2317.9	-3637.7
## + V2_J2_1	1	0.99	2317.9	-3637.7
## + V23_J1_7	1	0.99	2317.9	-3637.7
## + V2_J1_1	1	0.98	2317.9	-3637.7
## + V26_J1_2	1	0.96	2317.9	-3637.6
## + V24_J1_2	1	0.96	2317.9	-3637.6
## + V3_J1_7	1	0.91	2317.9	-3637.5
## + V3_J1_2	1	0.91	2318.0	-3637.5
## + V13_2_J1_1	1	0.84	2318.0	-3637.4
## + V30_J2_1	1	0.83	2318.0	-3637.3
## + V24_J1_3	1	0.83	2318.0	-3637.3
## + V16_J1_2	1	0.77	2318.1	-3637.2
## + V5_J2_2	1	0.77	2318.1	-3637.2
## + V3_J1_6	1	0.67	2318.2	-3637.0
## + V17_J1_7	1	0.65	2318.2	-3636.9
## + V3_J2_2	1	0.65	2318.2	-3636.9
## + V3_J1_3	1	0.63	2318.2	-3636.9
## + V2_J1_4	1	0.49	2318.4	-3636.6
## + V13_1_J2_7	1	0.49	2318.4	-3636.6
## + V13_3_J1_4	1	0.48	2318.4	-3636.5
## + V14_J1_3	1	0.47	2318.4	-3636.5
## + V13_2_J2_2	1	0.45	2318.4	-3636.5
## + V13_1_J2_3	1	0.45	2318.4	-3636.5
## + V13_3_J2_4	1	0.44	2318.4	-3636.5
## + V17_J1_1	1	0.44	2318.4	-3636.5
## + V19_J1_1	1	0.43	2318.4	-3636.4
## + V13_3_J1_5	1	0.40	2318.5	-3636.4
## + V2_J2_3	1	0.39	2318.5	-3636.3
## + V26_J1_7	1	0.36	2318.5	-3636.3
## + V29_J2_5	1	0.35	2318.5	-3636.3
## + V16_J1_4	1	0.34	2318.5	-3636.2
## + V30_J1_7	1	0.32	2318.5	-3636.2
## + V2_J2_4	1	0.31	2318.5	-3636.2
## + V23_J1_6	1	0.31	2318.5	-3636.2
## + V14_J1_6	1	0.29	2318.6	-3636.1
## + V23_J1_2	1	0.29	2318.6	-3636.1
## + V17_J1_4	1	0.28	2318.6	-3636.1
## + V13_3_J1_1	1	0.27	2318.6	-3636.1
## + V19_J1_3	1	0.27	2318.6	-3636.1
## + V16_J2_1	1	0.27	2318.6	-3636.1
## + V1_J1_6	1	0.24	2318.6	-3636.0
## + V23_J1_5	1	0.21	2318.6	-3635.9
## + V24_J2_2	1	0.21	2318.6	-3635.9
## + V16_J1_5	1	0.17	2318.7	-3635.9
## + V20_J2_4	1	0.16	2318.7	-3635.8
## + V20_J1_7	1	0.16	2318.7	-3635.8
## + V3_J1_1	1	0.16	2318.7	-3635.8
## + V17_J2_4	1	0.14	2318.7	-3635.8

## + V23_J1_1	1	0.12	2318.7	-3635.7
## + V17_J2_5	1	0.09	2318.8	-3635.7
## + V13_2_J2_1	1	0.05	2318.8	-3635.6
## + V13_2_J2_4	1	0.05	2318.8	-3635.6
## + V24_J2_1	1	0.05	2318.8	-3635.6
## + V13_1_J1_1	1	0.04	2318.8	-3635.6
## + V1_J1_2	1	0.04	2318.8	-3635.6
## + V17_J1_2	1	0.03	2318.8	-3635.5
## + V13_3_J2_1	1	0.02	2318.8	-3635.5
## + V2_J1_2	1	0.02	2318.8	-3635.5
## + V1_J2_1	1	0.02	2318.8	-3635.5
## + V13_1_J1_6	1	0.02	2318.8	-3635.5
## + V13_3_J1_7	1	0.01	2318.8	-3635.5
## + V15_J2_3	1	0.01	2318.8	-3635.5
## + V24_J1_4	1	0.01	2318.8	-3635.5
## + V12_1_2_J1_1	1	0.01	2318.9	-3635.5
## + V17_J2_3	1	0.00	2318.9	-3635.5
## + V29_J2_4	1	0.00	2318.9	-3635.5
## + V5_J1_1	1	0.00	2318.9	-3635.5
## + V13_3_J2_3	1	0.00	2318.9	-3635.5
## - V30_J1_2	1	28.50	2347.4	-3585.2
## - V26_J1_5	1	30.31	2349.2	-3581.2
## - V19_J2_1	1	32.60	2351.5	-3576.1
## - V15_J1_7	1	33.38	2352.2	-3574.4
## - V2_J2_2	1	34.20	2353.1	-3572.6
## - V5_J1_4	1	34.84	2353.7	-3571.2
## - V3_J1_5	1	38.27	2357.1	-3563.6
## - V30_J1_1	1	42.73	2361.6	-3553.8
## - V26_J1_4	1	43.41	2362.3	-3552.3
## - V16_J1_3	1	44.41	2363.3	-3550.1
## - V14_J2_3	1	45.07	2363.9	-3548.6
## - V15_J1_3	1	48.94	2367.8	-3540.1
## - V13_2_J1_7	1	49.02	2367.9	-3540.0
## - V17_J2_7	1	50.38	2369.2	-3537.0
## - V5_J2_1	1	51.16	2370.0	-3535.3
## - V30_J1_3	1	52.88	2371.7	-3531.5
## - V1_J1_3	1	57.15	2376.0	-3522.1
## - V14_J1_4	1	57.65	2376.5	-3521.0
## - V14_J1_5	1	63.02	2381.9	-3509.3
## - V4_J2_5	1	65.79	2384.6	-3503.3
## - V23_J1_3	1	66.92	2385.8	-3500.8
## - V1_J2_7	1	69.36	2388.2	-3495.5
## - V1_J2_2	1	72.64	2391.5	-3488.3
## - V19_J2_3	1	73.09	2391.9	-3487.4
## - V12_1_2_J1_4	1	73.48	2392.3	-3486.5
## - V5_J2_3	1	74.48	2393.3	-3484.3
## - V2_J1_3	1	75.14	2394.0	-3482.9
## - V17_J2_2	1	78.75	2397.6	-3475.1
## - V17_J1_3	1	79.65	2398.5	-3473.1
## - V4_J2_1	1	82.04	2400.9	-3467.9
## - V3_J1_4	1	83.04	2401.9	-3465.8
## - V15_J2_2	1	84.15	2403.0	-3463.4
## - V4_J2_3	1	85.41	2404.3	-3460.7
## - V4_J2_4	1	97.91	2416.8	-3433.7

```

## - V15_J2_7      1      107.41 2426.3 -3413.3
## - V30_J2_2      1      116.62 2435.5 -3393.6
## - V3_J2_1       1      117.66 2436.5 -3391.4
## - V19_J1_5      1      124.39 2443.2 -3377.0
## - V5_J1_5       1      124.52 2443.4 -3376.8
## - V3_J2_5       1      130.45 2449.3 -3364.1
## - V26_J2_1      1      140.14 2459.0 -3343.6
## - V19_J1_4      1      147.05 2465.9 -3329.0
## - V12_1_2_J2_2  1      160.55 2479.4 -3300.6
## - V26_J2_4      1      168.68 2487.5 -3283.6
## - V26_J2_5      1      174.97 2493.8 -3270.5
## - V3_J2_4       1      183.53 2502.4 -3252.6
## - V3_J2_3       1      207.84 2526.7 -3202.4
## - V20_J2_2      1      260.91 2579.8 -3094.3
## - V5_J2_5       1      264.67 2583.5 -3086.7
## - V5_J2_4       1      288.73 2607.6 -3038.5
## - V26_J2_3      1      366.71 2685.6 -2885.3
## - V16_J2_2      1      430.25 2749.1 -2763.7
## - J             12      761.91 3080.8 -2244.4
## - V             19     1179.38 3498.2 -1630.0
##
## Step:  AIC=-3697.25
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5
##
##           Df Sum of Sq  RSS    AIC
## + V19_J2_4      1      32.25 2259.2 -3764.3
## + V15_J1_6      1      27.29 2264.2 -3752.9
## + V14_J2_4      1      25.37 2266.1 -3748.5
## + V4_J1_4       1      25.16 2266.3 -3748.0
## + V12_1_2_J1_3  1      25.05 2266.4 -3747.8
## + V12_1_2_J1_2  1      23.94 2267.5 -3745.2
## + V30_J2_5      1      23.16 2268.3 -3743.4
## + V16_J2_7      1      23.07 2268.4 -3743.2
## + V15_J1_5      1      21.87 2269.6 -3740.5
## + V2_J2_7       1      21.06 2270.4 -3738.6
## + V29_J1_3      1      21.06 2270.4 -3738.6
## + V4_J1_5       1      19.19 2272.3 -3734.3
## + V13_1_J1_3    1      18.70 2272.8 -3733.2
## + V20_J2_3      1      18.50 2273.0 -3732.8
## + V14_J2_1      1      16.40 2275.1 -3728.0
## + V23_J2_7      1      16.38 2275.1 -3727.9
## + V13_1_J1_2    1      16.30 2275.2 -3727.7
## + V24_J2_5      1      15.60 2275.9 -3726.1
## + V12_1_2_J1_7  1      15.59 2275.9 -3726.1
## + V12_1_2_J1_6  1      15.34 2276.1 -3725.6

```

## + V30_J1_6	1	15.25	2276.2	-3725.3
## + V13_1_J1_7	1	14.14	2277.3	-3722.8
## + V23_J2_1	1	13.82	2277.6	-3722.1
## + V30_J1_5	1	13.70	2277.8	-3721.8
## + V20_J2_1	1	12.80	2278.7	-3719.8
## + V29_J1_5	1	12.17	2279.3	-3718.3
## + V14_J1_2	1	12.17	2279.3	-3718.3
## + V14_J2_5	1	12.06	2279.4	-3718.1
## + V15_J1_4	1	11.83	2279.6	-3717.5
## + V16_J2_3	1	11.72	2279.8	-3717.3
## + V15_J1_2	1	11.58	2279.9	-3717.0
## + V13_2_J1_5	1	11.28	2280.2	-3716.3
## + V12_1_2_J2_7	1	11.00	2280.5	-3715.6
## + V15_J2_5	1	10.57	2280.9	-3714.7
## + V16_J2_4	1	10.01	2281.5	-3713.4
## + V1_J2_5	1	9.89	2281.6	-3713.1
## + V13_1_J1_5	1	9.66	2281.8	-3712.6
## + V20_J1_3	1	9.46	2282.0	-3712.1
## + V20_J2_7	1	9.45	2282.0	-3712.1
## + V15_J1_1	1	9.43	2282.0	-3712.1
## + V29_J1_7	1	9.37	2282.1	-3711.9
## + V4_J2_7	1	9.24	2282.2	-3711.6
## + V13_1_J2_4	1	9.16	2282.3	-3711.5
## + V4_J1_6	1	9.11	2282.4	-3711.3
## + V24_J1_7	1	8.93	2282.5	-3710.9
## + V17_J1_5	1	8.89	2282.6	-3710.8
## + V4_J1_7	1	8.64	2282.8	-3710.3
## + V4_J1_2	1	8.46	2283.0	-3709.9
## + V24_J1_6	1	8.18	2283.3	-3709.2
## + V13_2_J1_4	1	7.92	2283.5	-3708.6
## + V13_3_J2_5	1	7.44	2284.0	-3707.5
## + V12_1_2_J2_5	1	7.43	2284.0	-3707.5
## + V13_3_J1_2	1	7.37	2284.1	-3707.4
## + V13_2_J2_7	1	6.96	2284.5	-3706.4
## + V1_J1_5	1	6.89	2284.6	-3706.3
## + V5_J2_7	1	6.79	2284.7	-3706.0
## + V12_1_2_J2_4	1	6.50	2285.0	-3705.4
## + V13_2_J1_2	1	6.45	2285.0	-3705.3
## + V24_J1_5	1	6.37	2285.1	-3705.1
## + V5_J1_6	1	6.36	2285.1	-3705.1
## + V14_J2_2	1	6.33	2285.1	-3705.0
## + V29_J1_1	1	6.32	2285.2	-3705.0
## + V20_J1_4	1	6.30	2285.2	-3704.9
## + V20_J1_2	1	6.10	2285.4	-3704.5
## + V4_J2_2	1	6.10	2285.4	-3704.5
## + V19_J2_7	1	6.05	2285.4	-3704.4
## + V2_J1_5	1	5.85	2285.6	-3703.9
## + V29_J2_3	1	5.63	2285.8	-3703.4
## + V12_1_2_J1_5	1	5.60	2285.9	-3703.3
## + V24_J2_3	1	5.51	2286.0	-3703.1
## + V24_J1_1	1	5.40	2286.1	-3702.9
## + V29_J2_1	1	5.03	2286.4	-3702.0
## + V29_J1_4	1	4.76	2286.7	-3701.4
## + V1_J1_1	1	4.49	2287.0	-3700.8

## + V29_J1_6	1	4.39	2287.1	-3700.6
## + V4_J1_1	1	4.38	2287.1	-3700.6
## + V26_J1_3	1	4.31	2287.2	-3700.4
## + V12_1_2_J2_3	1	4.26	2287.2	-3700.3
## + V26_J2_2	1	4.23	2287.2	-3700.2
## + V23_J1_4	1	4.17	2287.3	-3700.1
## + V23_J2_3	1	4.14	2287.3	-3700.0
## + V13_3_J1_6	1	4.06	2287.4	-3699.8
## + V13_3_J2_7	1	4.03	2287.4	-3699.8
## + V13_2_J2_5	1	3.85	2287.6	-3699.4
## + V23_J2_4	1	3.84	2287.6	-3699.3
## + V13_2_J1_3	1	3.61	2287.9	-3698.8
## + V26_J1_6	1	3.55	2287.9	-3698.7
## + V30_J1_4	1	3.36	2288.1	-3698.3
## + V5_J1_2	1	3.33	2288.1	-3698.2
## + V24_J2_7	1	3.29	2288.2	-3698.1
## + V14_J1_7	1	3.26	2288.2	-3698.0
## + V13_2_J1_6	1	3.25	2288.2	-3698.0
## + V14_J2_7	1	3.14	2288.3	-3697.7
## + V13_1_J2_2	1	3.07	2288.4	-3697.6
## + V20_J1_6	1	2.96	2288.5	-3697.3
## <none>			2291.5	-3697.3
## + V1_J1_7	1	2.71	2288.8	-3696.8
## + V29_J2_2	1	2.70	2288.8	-3696.8
## + V5_J1_3	1	2.68	2288.8	-3696.7
## + V16_J1_7	1	2.67	2288.8	-3696.7
## + V14_J1_1	1	2.65	2288.8	-3696.6
## + V13_1_J2_5	1	2.47	2289.0	-3696.2
## + V17_J2_1	1	2.27	2289.2	-3695.8
## + V29_J2_7	1	2.24	2289.2	-3695.7
## + V15_J2_4	1	2.22	2289.3	-3695.6
## + V12_1_2_J2_1	1	2.15	2289.3	-3695.5
## + V26_J1_1	1	2.15	2289.3	-3695.5
## + V30_J2_4	1	1.99	2289.5	-3695.1
## + V23_J2_5	1	1.97	2289.5	-3695.1
## + V20_J1_1	1	1.93	2289.5	-3695.0
## + V23_J2_2	1	1.92	2289.6	-3695.0
## + V29_J1_2	1	1.87	2289.6	-3694.9
## + V13_1_J2_1	1	1.82	2289.7	-3694.7
## + V16_J1_1	1	1.80	2289.7	-3694.7
## + V19_J1_1	1	1.75	2289.7	-3694.6
## + V19_J1_2	1	1.71	2289.8	-3694.5
## + V16_J1_6	1	1.58	2289.9	-3694.2
## + V1_J2_4	1	1.58	2289.9	-3694.2
## + V2_J1_6	1	1.52	2289.9	-3694.1
## + V3_J2_7	1	1.50	2290.0	-3694.0
## + V19_J1_7	1	1.47	2290.0	-3694.0
## + V13_3_J2_2	1	1.45	2290.0	-3693.9
## + V13_2_J2_3	1	1.38	2290.1	-3693.8
## + V13_3_J1_3	1	1.38	2290.1	-3693.7
## + V15_J2_1	1	1.36	2290.1	-3693.7
## + V17_J1_6	1	1.35	2290.1	-3693.7
## + V16_J2_5	1	1.31	2290.2	-3693.6
## + V20_J1_5	1	1.30	2290.2	-3693.6

## + V30_J2_3	1	1.28	2290.2	-3693.5
## + V26_J2_7	1	1.26	2290.2	-3693.5
## + V19_J1_6	1	1.26	2290.2	-3693.5
## + V24_J2_4	1	1.15	2290.3	-3693.2
## + V30_J2_7	1	1.14	2290.3	-3693.2
## + V4_J1_3	1	1.13	2290.3	-3693.2
## + V13_1_J1_4	1	1.07	2290.4	-3693.1
## + V1_J1_4	1	1.07	2290.4	-3693.1
## + V19_J2_2	1	1.02	2290.5	-3692.9
## + V1_J2_3	1	1.00	2290.5	-3692.9
## + V2_J2_1	1	1.00	2290.5	-3692.9
## + V5_J1_7	1	0.99	2290.5	-3692.9
## + V26_J1_2	1	0.98	2290.5	-3692.8
## + V3_J1_7	1	0.92	2290.5	-3692.7
## + V2_J1_7	1	0.92	2290.6	-3692.7
## + V2_J2_5	1	0.91	2290.6	-3692.7
## + V23_J1_7	1	0.90	2290.6	-3692.7
## + V3_J1_2	1	0.89	2290.6	-3692.6
## + V24_J1_2	1	0.88	2290.6	-3692.6
## + V2_J1_1	1	0.87	2290.6	-3692.6
## + V30_J2_1	1	0.80	2290.7	-3692.4
## + V13_2_J1_1	1	0.76	2290.7	-3692.3
## + V17_J1_7	1	0.75	2290.7	-3692.3
## + V5_J2_2	1	0.73	2290.7	-3692.3
## + V24_J1_3	1	0.71	2290.8	-3692.2
## + V3_J1_6	1	0.69	2290.8	-3692.2
## + V16_J1_2	1	0.68	2290.8	-3692.2
## + V3_J1_3	1	0.66	2290.8	-3692.1
## + V20_J2_5	1	0.66	2290.8	-3692.1
## + V3_J2_2	1	0.61	2290.9	-3692.0
## + V13_2_J2_2	1	0.56	2290.9	-3691.9
## + V14_J1_3	1	0.56	2290.9	-3691.9
## + V13_1_J2_7	1	0.56	2290.9	-3691.9
## + V2_J1_4	1	0.50	2291.0	-3691.8
## + V13_3_J1_4	1	0.47	2291.0	-3691.7
## + V13_1_J2_3	1	0.44	2291.0	-3691.6
## + V13_3_J1_5	1	0.41	2291.1	-3691.5
## + V17_J2_5	1	0.41	2291.1	-3691.5
## + V13_3_J2_4	1	0.40	2291.1	-3691.5
## + V2_J2_3	1	0.38	2291.1	-3691.5
## + V2_J2_4	1	0.37	2291.1	-3691.4
## + V17_J1_1	1	0.36	2291.1	-3691.4
## + V26_J1_7	1	0.36	2291.1	-3691.4
## + V16_J1_4	1	0.34	2291.1	-3691.4
## + V23_J1_2	1	0.34	2291.1	-3691.4
## + V14_J1_6	1	0.33	2291.1	-3691.4
## + V13_3_J1_1	1	0.32	2291.2	-3691.3
## + V17_J1_4	1	0.29	2291.2	-3691.3
## + V16_J2_1	1	0.27	2291.2	-3691.2
## + V23_J1_6	1	0.26	2291.2	-3691.2
## + V30_J1_7	1	0.25	2291.2	-3691.2
## + V23_J1_5	1	0.21	2291.3	-3691.1
## + V20_J2_4	1	0.20	2291.3	-3691.1
## + V1_J1_6	1	0.19	2291.3	-3691.0

## + V16_J1_5	1	0.18	2291.3	-3691.0
## + V3_J1_1	1	0.16	2291.3	-3691.0
## + V24_J2_2	1	0.15	2291.3	-3691.0
## + V20_J1_7	1	0.12	2291.3	-3690.9
## + V17_J2_4	1	0.10	2291.4	-3690.9
## + V23_J1_1	1	0.09	2291.4	-3690.8
## + V1_J1_2	1	0.07	2291.4	-3690.8
## + V13_2_J2_4	1	0.07	2291.4	-3690.8
## + V29_J2_5	1	0.06	2291.4	-3690.7
## + V13_2_J2_1	1	0.06	2291.4	-3690.7
## + V24_J2_1	1	0.05	2291.4	-3690.7
## + V2_J1_2	1	0.04	2291.4	-3690.7
## + V13_1_J1_6	1	0.03	2291.4	-3690.7
## + V13_1_J1_1	1	0.03	2291.4	-3690.7
## + V13_3_J2_1	1	0.02	2291.4	-3690.7
## + V17_J1_2	1	0.02	2291.5	-3690.7
## + V1_J2_1	1	0.02	2291.5	-3690.7
## + V12_1_2_J1_1	1	0.01	2291.5	-3690.6
## + V19_J1_3	1	0.01	2291.5	-3690.6
## + V15_J2_3	1	0.01	2291.5	-3690.6
## + V24_J1_4	1	0.01	2291.5	-3690.6
## + V13_3_J1_7	1	0.01	2291.5	-3690.6
## + V5_J1_1	1	0.00	2291.5	-3690.6
## + V17_J2_3	1	0.00	2291.5	-3690.6
## + V29_J2_4	1	0.00	2291.5	-3690.6
## + V13_3_J2_3	1	0.00	2291.5	-3690.6
## - V19_J2_5	1	27.39	2318.9	-3642.1
## - V30_J1_2	1	29.10	2320.6	-3638.3
## - V26_J1_5	1	30.83	2322.3	-3634.4
## - V2_J2_2	1	33.35	2324.8	-3628.8
## - V15_J1_7	1	34.05	2325.5	-3627.2
## - V5_J1_4	1	35.39	2326.9	-3624.2
## - V3_J1_5	1	38.86	2330.3	-3616.5
## - V19_J2_1	1	39.25	2330.7	-3615.6
## - V30_J1_1	1	43.45	2334.9	-3606.2
## - V16_J1_3	1	43.51	2335.0	-3606.1
## - V26_J1_4	1	44.03	2335.5	-3604.9
## - V14_J2_3	1	45.21	2336.7	-3602.3
## - V13_2_J1_7	1	48.45	2339.9	-3595.1
## - V17_J2_7	1	49.57	2341.0	-3592.6
## - V15_J1_3	1	50.02	2341.5	-3591.6
## - V30_J1_3	1	51.76	2343.2	-3587.7
## - V5_J2_1	1	51.86	2343.3	-3587.5
## - V1_J1_3	1	56.05	2347.5	-3578.2
## - V14_J1_4	1	57.76	2349.2	-3574.4
## - V14_J1_5	1	63.14	2354.6	-3562.5
## - V23_J1_3	1	65.90	2357.4	-3556.4
## - V1_J2_7	1	68.41	2359.9	-3550.9
## - V4_J2_5	1	71.00	2362.5	-3545.2
## - V1_J2_2	1	71.31	2362.8	-3544.5
## - V12_1_2_J1_4	1	73.48	2365.0	-3539.8
## - V2_J1_3	1	73.96	2365.4	-3538.7
## - V5_J2_3	1	75.34	2366.8	-3535.7
## - V17_J2_2	1	77.37	2368.8	-3531.2

```

## - V17_J1_3      1      78.35 2369.8 -3529.1
## - V19_J2_3      1      82.55 2374.0 -3519.8
## - V4_J2_1       1      82.75 2374.2 -3519.4
## - V3_J1_4       1      83.89 2375.4 -3516.9
## - V15_J2_2      1      85.65 2377.1 -3513.1
## - V4_J2_3       1      86.14 2377.6 -3512.0
## - V4_J2_4       1      97.95 2389.4 -3486.2
## - V15_J2_7      1     108.69 2400.2 -3462.9
## - V30_J2_2      1     114.83 2406.3 -3449.6
## - V3_J2_1       1     118.71 2410.2 -3441.2
## - V5_J1_5       1     125.56 2417.0 -3426.5
## - V19_J1_5      1     136.23 2427.7 -3403.6
## - V3_J2_5       1     137.70 2429.2 -3400.4
## - V26_J2_1      1     141.29 2432.8 -3392.8
## - V12_1_2_J2_2  1     158.84 2450.3 -3355.4
## - V19_J1_4      1     159.72 2451.2 -3353.5
## - V26_J2_4      1     169.00 2460.5 -3333.9
## - V26_J2_5      1     183.25 2474.7 -3303.8
## - V3_J2_4       1     183.87 2475.3 -3302.5
## - V3_J2_3       1     209.25 2500.7 -3249.5
## - V20_J2_2      1     258.70 2550.2 -3147.7
## - V5_J2_5       1     274.62 2566.1 -3115.3
## - V5_J2_4       1     289.15 2580.6 -3085.9
## - V26_J2_3      1     368.58 2660.1 -2928.3
## - V16_J2_2      1     427.17 2718.6 -2815.0
## - J             12     764.56 3056.0 -2279.7
## - V             19    1188.53 3480.0 -1650.6
##
## Step:  AIC=-3764.33
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4
##
##
##      Df Sum of Sq    RSS      AIC
## + V14_J2_4      1      29.56 2229.7 -3826.2
## + V15_J1_6      1      28.12 2231.1 -3822.8
## + V4_J1_4       1      25.72 2233.5 -3817.2
## + V12_1_2_J1_2  1      24.51 2234.7 -3814.4
## + V12_1_2_J1_3  1      24.16 2235.1 -3813.6
## + V30_J2_5      1      23.35 2235.9 -3811.7
## + V16_J2_7      1      22.36 2236.9 -3809.4
## + V15_J1_5      1      21.65 2237.6 -3807.8
## + V2_J2_7       1      20.39 2238.8 -3804.8
## + V29_J1_3      1      20.31 2238.9 -3804.7
## + V4_J1_5       1      19.67 2239.5 -3803.2
## + V13_1_J1_3    1      19.42 2239.8 -3802.6
## + V20_J2_3      1      18.54 2240.7 -3800.5

```

## + V14_J2_1	1	16.51	2242.7	-3795.8
## + V13_1_J1_2	1	15.90	2243.3	-3794.4
## + V23_J2_7	1	15.86	2243.4	-3794.3
## + V24_J2_5	1	15.69	2243.5	-3793.9
## + V12_1_2_J1_7	1	15.11	2244.1	-3792.6
## + V12_1_2_J1_6	1	14.93	2244.3	-3792.2
## + V30_J1_6	1	14.66	2244.6	-3791.5
## + V30_J1_5	1	13.87	2245.3	-3789.7
## + V23_J2_1	1	13.79	2245.4	-3789.5
## + V13_1_J1_7	1	13.74	2245.5	-3789.4
## + V20_J2_1	1	12.83	2246.4	-3787.3
## + V14_J1_2	1	12.51	2246.7	-3786.6
## + V14_J2_5	1	12.16	2247.1	-3785.8
## + V15_J1_2	1	12.15	2247.1	-3785.7
## + V29_J1_5	1	12.12	2247.1	-3785.7
## + V16_J2_3	1	11.69	2247.5	-3784.7
## + V15_J1_4	1	11.67	2247.6	-3784.6
## + V13_2_J1_5	1	11.31	2247.9	-3783.8
## + V12_1_2_J2_7	1	10.56	2248.7	-3782.1
## + V15_J2_5	1	10.44	2248.8	-3781.8
## + V20_J1_3	1	10.02	2249.2	-3780.8
## + V15_J1_1	1	9.94	2249.3	-3780.6
## + V20_J2_7	1	9.86	2249.4	-3780.4
## + V1_J2_5	1	9.81	2249.4	-3780.3
## + V13_1_J1_5	1	9.71	2249.5	-3780.1
## + V24_J1_7	1	9.25	2250.0	-3779.0
## + V4_J2_7	1	9.16	2250.1	-3778.8
## + V4_J1_6	1	9.11	2250.1	-3778.7
## + V29_J1_7	1	9.05	2250.2	-3778.6
## + V17_J1_5	1	8.98	2250.2	-3778.4
## + V4_J1_7	1	8.68	2250.5	-3777.7
## + V4_J1_2	1	8.48	2250.7	-3777.3
## + V24_J1_6	1	8.44	2250.8	-3777.2
## + V13_2_J1_4	1	7.90	2251.3	-3775.9
## + V16_J2_4	1	7.86	2251.4	-3775.8
## + V12_1_2_J2_5	1	7.41	2251.8	-3774.8
## + V13_3_J2_5	1	7.38	2251.8	-3774.7
## + V13_2_J2_7	1	7.30	2251.9	-3774.5
## + V13_3_J1_2	1	7.11	2252.1	-3774.1
## + V13_1_J2_4	1	7.04	2252.2	-3773.9
## + V1_J1_5	1	6.97	2252.3	-3773.8
## + V14_J2_2	1	6.79	2252.4	-3773.3
## + V5_J2_7	1	6.78	2252.4	-3773.3
## + V5_J1_6	1	6.44	2252.8	-3772.5
## + V24_J1_5	1	6.41	2252.8	-3772.5
## + V4_J2_2	1	6.32	2252.9	-3772.3
## + V20_J1_4	1	6.30	2252.9	-3772.2
## + V13_2_J1_2	1	6.18	2253.0	-3771.9
## + V29_J1_1	1	6.07	2253.1	-3771.7
## + V2_J1_5	1	5.89	2253.3	-3771.3
## + V20_J1_2	1	5.82	2253.4	-3771.1
## + V12_1_2_J1_5	1	5.60	2253.6	-3770.6
## + V29_J2_3	1	5.57	2253.6	-3770.5
## + V24_J2_3	1	5.45	2253.8	-3770.3

## + V24_J1_1	1	5.18	2254.0	-3769.6
## + V29_J2_1	1	4.98	2254.2	-3769.2
## + V12_1_2_J2_4	1	4.75	2254.5	-3768.6
## + V29_J1_4	1	4.73	2254.5	-3768.6
## + V19_J1_1	1	4.68	2254.5	-3768.5
## + V4_J1_1	1	4.40	2254.8	-3767.8
## + V13_3_J2_7	1	4.27	2254.9	-3767.5
## + V12_1_2_J2_3	1	4.24	2255.0	-3767.5
## + V26_J1_3	1	4.22	2255.0	-3767.4
## + V29_J1_6	1	4.20	2255.0	-3767.4
## + V1_J1_1	1	4.18	2255.0	-3767.3
## + V23_J1_4	1	4.18	2255.0	-3767.3
## + V23_J2_3	1	4.12	2255.1	-3767.2
## + V26_J2_2	1	4.11	2255.1	-3767.2
## + V13_2_J1_3	1	3.95	2255.3	-3766.8
## + V13_3_J1_6	1	3.88	2255.3	-3766.6
## + V13_2_J2_5	1	3.88	2255.3	-3766.6
## + V24_J2_7	1	3.50	2255.7	-3765.8
## + V26_J1_6	1	3.49	2255.7	-3765.7
## + V14_J1_7	1	3.44	2255.8	-3765.6
## + V13_2_J1_6	1	3.43	2255.8	-3765.6
## + V15_J2_4	1	3.41	2255.8	-3765.5
## + V5_J1_2	1	3.38	2255.8	-3765.5
## + V14_J2_7	1	3.34	2255.9	-3765.4
## + V30_J1_4	1	3.28	2255.9	-3765.2
## + V30_J2_4	1	3.13	2256.1	-3764.9
## + V29_J2_2	1	3.01	2256.2	-3764.6
## + V1_J1_7	1	2.97	2256.2	-3764.5
## + V16_J1_7	1	2.90	2256.3	-3764.4
## <none>			2259.2	-3764.3
## + V14_J1_1	1	2.81	2256.4	-3764.2
## + V20_J1_6	1	2.78	2256.4	-3764.1
## + V19_J2_7	1	2.77	2256.4	-3764.1
## + V13_1_J2_2	1	2.76	2256.5	-3764.1
## + V5_J1_3	1	2.75	2256.5	-3764.0
## + V23_J2_4	1	2.53	2256.7	-3763.5
## + V13_1_J2_5	1	2.44	2256.8	-3763.3
## + V29_J2_7	1	2.42	2256.8	-3763.3
## + V17_J2_1	1	2.23	2257.0	-3762.8
## + V12_1_2_J2_1	1	2.14	2257.1	-3762.6
## + V26_J1_1	1	2.11	2257.1	-3762.6
## + V20_J1_1	1	2.09	2257.1	-3762.5
## + V16_J1_1	1	1.98	2257.2	-3762.3
## + V23_J2_5	1	1.96	2257.3	-3762.2
## + V13_1_J2_1	1	1.79	2257.4	-3761.8
## + V16_J1_6	1	1.74	2257.5	-3761.7
## + V29_J1_2	1	1.73	2257.5	-3761.7
## + V2_J1_6	1	1.68	2257.5	-3761.6
## + V23_J2_2	1	1.66	2257.6	-3761.5
## + V13_3_J1_3	1	1.58	2257.6	-3761.3
## + V3_J2_7	1	1.49	2257.7	-3761.1
## + V15_J2_1	1	1.41	2257.8	-3760.9
## + V13_2_J2_3	1	1.40	2257.8	-3760.9
## + V30_J2_3	1	1.33	2257.9	-3760.7

## + V16_J2_5	1	1.32	2257.9	-3760.7
## + V20_J1_5	1	1.30	2257.9	-3760.7
## + V26_J2_7	1	1.26	2258.0	-3760.6
## + V13_3_J2_2	1	1.24	2258.0	-3760.6
## + V17_J1_6	1	1.19	2258.0	-3760.4
## + V1_J1_4	1	1.10	2258.1	-3760.2
## + V13_1_J1_4	1	1.06	2258.2	-3760.1
## + V4_J1_3	1	1.05	2258.2	-3760.1
## + V13_3_J2_4	1	1.02	2258.2	-3760.0
## + V2_J2_1	1	1.01	2258.2	-3760.0
## + V26_J1_2	1	1.00	2258.2	-3760.0
## + V1_J2_3	1	0.98	2258.2	-3760.0
## + V5_J1_7	1	0.98	2258.2	-3759.9
## + V30_J2_7	1	0.96	2258.3	-3759.9
## + V3_J1_7	1	0.94	2258.3	-3759.9
## + V2_J2_5	1	0.92	2258.3	-3759.8
## + V17_J1_7	1	0.89	2258.3	-3759.7
## + V3_J1_2	1	0.87	2258.4	-3759.7
## + V19_J1_3	1	0.85	2258.4	-3759.7
## + V1_J2_4	1	0.80	2258.4	-3759.5
## + V2_J1_7	1	0.79	2258.4	-3759.5
## + V24_J1_2	1	0.79	2258.4	-3759.5
## + V23_J1_7	1	0.79	2258.4	-3759.5
## + V30_J2_1	1	0.77	2258.4	-3759.5
## + V2_J1_1	1	0.76	2258.5	-3759.4
## + V3_J1_6	1	0.72	2258.5	-3759.4
## + V13_2_J2_2	1	0.72	2258.5	-3759.3
## + V3_J1_3	1	0.70	2258.5	-3759.3
## + V14_J1_3	1	0.69	2258.5	-3759.3
## + V5_J2_2	1	0.68	2258.5	-3759.3
## + V13_2_J1_1	1	0.67	2258.5	-3759.2
## + V20_J2_5	1	0.66	2258.6	-3759.2
## + V13_1_J2_7	1	0.65	2258.6	-3759.2
## + V24_J1_3	1	0.58	2258.6	-3759.0
## + V16_J1_2	1	0.58	2258.6	-3759.0
## + V3_J2_2	1	0.56	2258.7	-3759.0
## + V2_J1_4	1	0.51	2258.7	-3758.9
## + V24_J2_4	1	0.48	2258.7	-3758.8
## + V17_J2_4	1	0.47	2258.7	-3758.8
## + V13_3_J1_4	1	0.46	2258.8	-3758.8
## + V13_1_J2_3	1	0.42	2258.8	-3758.7
## + V13_3_J1_5	1	0.42	2258.8	-3758.7
## + V23_J1_2	1	0.41	2258.8	-3758.6
## + V17_J2_5	1	0.39	2258.8	-3758.6
## + V14_J1_6	1	0.38	2258.8	-3758.6
## + V2_J2_3	1	0.38	2258.8	-3758.6
## + V13_3_J1_1	1	0.38	2258.8	-3758.6
## + V16_J1_4	1	0.35	2258.9	-3758.5
## + V26_J1_7	1	0.35	2258.9	-3758.5
## + V17_J1_4	1	0.30	2258.9	-3758.4
## + V17_J1_1	1	0.28	2258.9	-3758.3
## + V16_J2_1	1	0.26	2259.0	-3758.3
## + V19_J1_2	1	0.24	2259.0	-3758.3
## + V23_J1_5	1	0.21	2259.0	-3758.2

## + V23_J1_6	1	0.21	2259.0	-3758.2
## + V16_J1_5	1	0.18	2259.0	-3758.1
## + V3_J1_1	1	0.17	2259.0	-3758.1
## + V30_J1_7	1	0.17	2259.0	-3758.1
## + V19_J1_7	1	0.16	2259.1	-3758.1
## + V1_J1_6	1	0.13	2259.1	-3758.0
## + V29_J2_4	1	0.13	2259.1	-3758.0
## + V1_J1_2	1	0.11	2259.1	-3758.0
## + V19_J1_6	1	0.09	2259.1	-3757.9
## + V24_J2_2	1	0.09	2259.1	-3757.9
## + V20_J1_7	1	0.08	2259.1	-3757.9
## + V2_J1_2	1	0.07	2259.1	-3757.8
## + V13_2_J2_1	1	0.06	2259.2	-3757.8
## + V24_J2_1	1	0.06	2259.2	-3757.8
## + V2_J2_4	1	0.06	2259.2	-3757.8
## + V23_J1_1	1	0.06	2259.2	-3757.8
## + V29_J2_5	1	0.05	2259.2	-3757.8
## + V19_J2_2	1	0.05	2259.2	-3757.8
## + V13_1_J1_6	1	0.05	2259.2	-3757.8
## + V12_1_2_J1_1	1	0.03	2259.2	-3757.8
## + V13_3_J2_1	1	0.02	2259.2	-3757.7
## + V13_1_J1_1	1	0.01	2259.2	-3757.7
## + V13_2_J2_4	1	0.01	2259.2	-3757.7
## + V1_J2_1	1	0.01	2259.2	-3757.7
## + V24_J1_4	1	0.01	2259.2	-3757.7
## + V20_J2_4	1	0.01	2259.2	-3757.7
## + V15_J2_3	1	0.01	2259.2	-3757.7
## + V17_J1_2	1	0.00	2259.2	-3757.7
## + V5_J1_1	1	0.00	2259.2	-3757.7
## + V13_3_J1_7	1	0.00	2259.2	-3757.7
## + V13_3_J2_3	1	0.00	2259.2	-3757.7
## + V17_J2_3	1	0.00	2259.2	-3757.7
## - V30_J1_2	1	29.84	2289.1	-3702.7
## - V26_J1_5	1	31.48	2290.7	-3699.0
## - V19_J2_4	1	32.25	2291.5	-3697.3
## - V2_J2_2	1	32.31	2291.5	-3697.1
## - V15_J1_7	1	34.90	2294.1	-3691.3
## - V19_J2_5	1	34.98	2294.2	-3691.1
## - V5_J1_4	1	36.08	2295.3	-3688.6
## - V3_J1_5	1	39.58	2298.8	-3680.7
## - V16_J1_3	1	42.40	2301.6	-3674.3
## - V30_J1_1	1	44.36	2303.6	-3669.9
## - V26_J1_4	1	44.80	2304.0	-3668.9
## - V14_J2_3	1	45.38	2304.6	-3667.6
## - V13_2_J1_7	1	47.76	2307.0	-3662.2
## - V19_J2_1	1	48.14	2307.4	-3661.3
## - V17_J2_7	1	48.58	2307.8	-3660.3
## - V30_J1_3	1	50.39	2309.6	-3656.3
## - V15_J1_3	1	51.38	2310.6	-3654.0
## - V5_J2_1	1	52.73	2311.9	-3651.0
## - V1_J1_3	1	54.71	2313.9	-3646.5
## - V14_J1_4	1	57.90	2317.1	-3639.4
## - V14_J1_5	1	63.29	2322.5	-3627.3
## - V23_J1_3	1	64.66	2323.9	-3624.2


```

## - V1_J2_7      1      67.24 2326.5 -3618.4
## - V1_J2_2      1      69.69 2328.9 -3613.0
## - V4_J2_5      1      71.81 2331.0 -3608.3
## - V2_J1_3      1      72.52 2331.7 -3606.7
## - V12_1_2_J1_4 1      73.49 2332.7 -3604.5
## - V17_J2_2     1      75.67 2334.9 -3599.6
## - V5_J2_3      1      76.39 2335.6 -3598.0
## - V17_J1_3     1      76.76 2336.0 -3597.2
## - V4_J2_1      1      83.62 2342.8 -3582.0
## - V3_J1_4      1      84.95 2344.2 -3579.0
## - V4_J2_3      1      87.04 2346.3 -3574.4
## - V15_J2_2     1      87.52 2346.7 -3573.3
## - V19_J2_3     1      94.77 2354.0 -3557.3
## - V4_J2_4      1     104.84 2364.1 -3535.1
## - V15_J2_7     1     110.29 2369.5 -3523.1
## - V30_J2_2     1     112.65 2371.9 -3517.9
## - V3_J2_1      1     120.02 2379.2 -3501.8
## - V5_J1_5      1     126.85 2386.1 -3486.9
## - V3_J2_5      1     139.11 2398.3 -3460.3
## - V26_J2_1     1     142.71 2401.9 -3452.4
## - V19_J1_5     1     151.26 2410.5 -3434.0
## - V12_1_2_J2_2 1     156.73 2415.9 -3422.2
## - V19_J1_4     1     175.73 2434.9 -3381.5
## - V26_J2_4     1     178.02 2437.2 -3376.6
## - V26_J2_5     1     184.87 2444.1 -3362.0
## - V3_J2_4      1     193.24 2452.5 -3344.2
## - V3_J2_3      1     211.00 2470.2 -3306.7
## - V20_J2_2     1     255.99 2515.2 -3212.8
## - V5_J2_5      1     276.60 2535.8 -3170.4
## - V5_J2_4      1     300.62 2559.8 -3121.3
## - V26_J2_3     1     370.89 2630.1 -2980.5
## - V16_J2_2     1     423.37 2682.6 -2877.8
## - J            12     766.15 3025.4 -2325.5
## - V            19    1204.64 3463.9 -1668.1
##
## Step:  AIC=-3826.18
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4
##
##           Df Sum of Sq    RSS    AIC
## + V15_J1_6      1      28.80 2200.9 -3887.2
## + V4_J1_4        1      26.18 2203.5 -3881.0
## + V12_1_2_J1_2   1      24.97 2204.7 -3878.1
## + V30_J2_5        1      23.93 2205.7 -3875.7
## + V12_1_2_J1_3   1      23.44 2206.2 -3874.5
## + V14_J2_1        1      22.19 2207.5 -3871.6

```

## + V16_J2_7	1	21.79	2207.9	-3870.6
## + V15_J1_5	1	21.47	2208.2	-3869.9
## + V4_J1_5	1	20.07	2209.6	-3866.6
## + V13_1_J1_3	1	20.02	2209.6	-3866.4
## + V2_J2_7	1	19.85	2209.8	-3866.0
## + V29_J1_3	1	19.72	2209.9	-3865.7
## + V20_J2_3	1	18.57	2211.1	-3863.0
## + V14_J2_5	1	17.05	2212.6	-3859.5
## + V13_1_J1_2	1	15.58	2214.1	-3856.0
## + V23_J2_7	1	15.44	2214.2	-3855.7
## + V24_J2_5	1	15.42	2214.2	-3855.6
## + V12_1_2_J1_7	1	14.74	2214.9	-3854.0
## + V12_1_2_J1_6	1	14.60	2215.1	-3853.7
## + V30_J1_6	1	14.19	2215.5	-3852.7
## + V23_J2_1	1	14.09	2215.6	-3852.5
## + V30_J1_5	1	14.01	2215.6	-3852.3
## + V13_1_J1_7	1	13.43	2216.2	-3851.0
## + V15_J1_2	1	12.62	2217.0	-3849.1
## + V20_J2_1	1	12.54	2217.1	-3848.9
## + V29_J1_5	1	12.07	2217.6	-3847.8
## + V16_J2_3	1	11.67	2218.0	-3846.8
## + V15_J1_4	1	11.53	2218.1	-3846.5
## + V13_2_J1_5	1	11.32	2218.3	-3846.0
## + V20_J1_3	1	10.49	2219.2	-3844.1
## + V15_J1_1	1	10.37	2219.3	-3843.8
## + V12_1_2_J2_7	1	10.22	2219.4	-3843.4
## + V20_J2_7	1	10.20	2219.5	-3843.4
## + V15_J2_5	1	10.05	2219.6	-3843.0
## + V13_1_J1_5	1	9.75	2219.9	-3842.3
## + V24_J1_7	1	9.52	2220.1	-3841.8
## + V1_J2_5	1	9.48	2220.2	-3841.7
## + V4_J1_6	1	9.12	2220.5	-3840.8
## + V4_J2_7	1	9.10	2220.6	-3840.8
## + V17_J1_5	1	9.05	2220.6	-3840.7
## + V29_J1_7	1	8.80	2220.9	-3840.1
## + V4_J1_7	1	8.72	2220.9	-3839.9
## + V14_J1_2	1	8.70	2221.0	-3839.9
## + V24_J1_6	1	8.66	2221.0	-3839.8
## + V4_J1_2	1	8.50	2221.2	-3839.4
## + V13_2_J1_4	1	7.89	2221.8	-3838.0
## + V12_1_2_J2_5	1	7.63	2222.0	-3837.4
## + V13_2_J2_7	1	7.58	2222.1	-3837.2
## + V13_3_J2_5	1	7.56	2222.1	-3837.2
## + V1_J1_5	1	7.03	2222.6	-3836.0
## + V13_3_J1_2	1	6.90	2222.8	-3835.7
## + V5_J2_7	1	6.76	2222.9	-3835.3
## + V5_J1_6	1	6.51	2223.2	-3834.7
## + V4_J2_2	1	6.51	2223.2	-3834.7
## + V24_J1_5	1	6.44	2223.2	-3834.6
## + V20_J1_4	1	6.29	2223.4	-3834.2
## + V13_2_J1_2	1	5.97	2223.7	-3833.5
## + V2_J1_5	1	5.92	2223.7	-3833.4
## + V16_J2_4	1	5.89	2223.8	-3833.3
## + V29_J1_1	1	5.87	2223.8	-3833.3

## + V20_J1_2	1	5.60	2224.1	-3832.6
## + V12_1_2_J1_5	1	5.59	2224.1	-3832.6
## + V29_J2_3	1	5.53	2224.1	-3832.5
## + V24_J2_3	1	5.41	2224.3	-3832.2
## + V13_1_J2_4	1	5.14	2224.5	-3831.5
## + V29_J2_1	1	5.13	2224.5	-3831.5
## + V24_J1_1	1	5.00	2224.7	-3831.2
## + V15_J2_4	1	4.95	2224.7	-3831.1
## + V19_J1_1	1	4.72	2224.9	-3830.6
## + V29_J1_4	1	4.70	2225.0	-3830.5
## + V30_J2_4	1	4.62	2225.0	-3830.3
## + V13_3_J2_7	1	4.47	2225.2	-3830.0
## + V4_J1_1	1	4.41	2225.2	-3829.8
## + V13_2_J1_3	1	4.24	2225.4	-3829.4
## + V12_1_2_J2_3	1	4.23	2225.4	-3829.4
## + V23_J1_4	1	4.18	2225.5	-3829.3
## + V26_J1_3	1	4.15	2225.5	-3829.2
## + V14_J2_2	1	4.14	2225.5	-3829.2
## + V23_J2_3	1	4.10	2225.6	-3829.1
## + V29_J1_6	1	4.05	2225.6	-3829.0
## + V26_J2_2	1	4.02	2225.6	-3828.9
## + V1_J1_1	1	3.94	2225.7	-3828.7
## + V13_3_J1_6	1	3.73	2225.9	-3828.3
## + V13_2_J2_5	1	3.73	2225.9	-3828.2
## + V24_J2_7	1	3.68	2226.0	-3828.1
## + V13_2_J1_6	1	3.59	2226.1	-3827.9
## + V26_J1_6	1	3.45	2226.2	-3827.6
## + V5_J1_2	1	3.41	2226.2	-3827.5
## + V29_J2_2	1	3.27	2226.4	-3827.2
## + V12_1_2_J2_4	1	3.22	2226.4	-3827.1
## + V30_J1_4	1	3.21	2226.4	-3827.0
## + V1_J1_7	1	3.19	2226.5	-3827.0
## + V16_J1_7	1	3.10	2226.6	-3826.8
## <none>			2229.7	-3826.2
## + V5_J1_3	1	2.81	2226.9	-3826.1
## + V19_J2_7	1	2.76	2226.9	-3826.0
## + V20_J1_6	1	2.64	2227.0	-3825.7
## + V29_J2_7	1	2.56	2227.1	-3825.5
## + V13_1_J2_5	1	2.54	2227.1	-3825.5
## + V13_1_J2_2	1	2.53	2227.1	-3825.4
## + V12_1_2_J2_1	1	2.26	2227.4	-3824.8
## + V20_J1_1	1	2.23	2227.4	-3824.7
## + V16_J1_1	1	2.13	2227.5	-3824.5
## + V26_J1_1	1	2.09	2227.6	-3824.4
## + V17_J2_1	1	2.08	2227.6	-3824.4
## + V23_J2_5	1	2.07	2227.6	-3824.4
## + V13_3_J2_4	1	1.98	2227.7	-3824.2
## + V13_1_J2_1	1	1.88	2227.8	-3823.9
## + V16_J1_6	1	1.87	2227.8	-3823.9
## + V2_J1_6	1	1.81	2227.8	-3823.8
## + V13_3_J1_3	1	1.75	2227.9	-3823.6
## + V29_J1_2	1	1.63	2228.0	-3823.3
## + V14_J1_7	1	1.59	2228.1	-3823.2
## + V15_J2_1	1	1.55	2228.1	-3823.2

## + V14_J2_7	1	1.53	2228.1	-3823.1
## + V3_J2_7	1	1.48	2228.2	-3823.0
## + V23_J2_2	1	1.46	2228.2	-3822.9
## + V23_J2_4	1	1.45	2228.2	-3822.9
## + V16_J2_5	1	1.43	2228.2	-3822.9
## + V13_2_J2_3	1	1.41	2228.2	-3822.8
## + V30_J2_3	1	1.36	2228.3	-3822.7
## + V20_J1_5	1	1.30	2228.4	-3822.6
## + V26_J2_7	1	1.25	2228.4	-3822.5
## + V14_J1_1	1	1.16	2228.5	-3822.3
## + V17_J2_4	1	1.13	2228.5	-3822.2
## + V1_J1_4	1	1.13	2228.5	-3822.2
## + V2_J2_1	1	1.11	2228.5	-3822.1
## + V13_3_J2_2	1	1.09	2228.6	-3822.1
## + V17_J1_6	1	1.07	2228.6	-3822.0
## + V13_1_J1_4	1	1.04	2228.6	-3822.0
## + V26_J1_2	1	1.02	2228.6	-3821.9
## + V2_J2_5	1	1.01	2228.6	-3821.9
## + V17_J1_7	1	1.01	2228.6	-3821.9
## + V4_J1_3	1	0.99	2228.7	-3821.8
## + V1_J2_3	1	0.96	2228.7	-3821.8
## + V5_J1_7	1	0.96	2228.7	-3821.8
## + V3_J1_7	1	0.95	2228.7	-3821.8
## + V13_2_J2_2	1	0.85	2228.8	-3821.5
## + V3_J1_2	1	0.85	2228.8	-3821.5
## + V30_J2_7	1	0.82	2228.8	-3821.5
## + V19_J1_3	1	0.82	2228.8	-3821.5
## + V3_J1_6	1	0.74	2228.9	-3821.3
## + V3_J1_3	1	0.73	2228.9	-3821.2
## + V13_1_J2_7	1	0.72	2228.9	-3821.2
## + V20_J2_5	1	0.72	2228.9	-3821.2
## + V24_J1_2	1	0.72	2228.9	-3821.2
## + V23_J1_7	1	0.70	2229.0	-3821.2
## + V2_J1_7	1	0.70	2229.0	-3821.2
## + V30_J2_1	1	0.67	2229.0	-3821.1
## + V2_J1_1	1	0.67	2229.0	-3821.1
## + V5_J2_2	1	0.64	2229.0	-3821.0
## + V13_2_J1_1	1	0.60	2229.1	-3820.9
## + V29_J2_4	1	0.57	2229.1	-3820.9
## + V3_J2_2	1	0.53	2229.1	-3820.8
## + V2_J1_4	1	0.52	2229.1	-3820.8
## + V16_J1_2	1	0.50	2229.2	-3820.7
## + V24_J1_3	1	0.48	2229.2	-3820.7
## + V23_J1_2	1	0.47	2229.2	-3820.6
## + V13_3_J1_4	1	0.45	2229.2	-3820.6
## + V13_3_J1_5	1	0.43	2229.2	-3820.5
## + V13_3_J1_1	1	0.43	2229.2	-3820.5
## + V13_1_J2_3	1	0.41	2229.2	-3820.5
## + V2_J2_3	1	0.37	2229.3	-3820.4
## + V16_J1_4	1	0.36	2229.3	-3820.4
## + V26_J1_7	1	0.34	2229.3	-3820.3
## + V17_J2_5	1	0.33	2229.3	-3820.3
## + V17_J1_4	1	0.32	2229.3	-3820.3
## + V1_J2_4	1	0.27	2229.4	-3820.2

## + V13_2_J2_4	1	0.25	2229.4	-3820.1
## + V19_J1_2	1	0.23	2229.4	-3820.1
## + V17_J1_1	1	0.22	2229.4	-3820.1
## + V16_J2_1	1	0.22	2229.4	-3820.0
## + V23_J1_5	1	0.22	2229.4	-3820.0
## + V16_J1_5	1	0.19	2229.5	-3820.0
## + V3_J1_1	1	0.18	2229.5	-3820.0
## + V23_J1_6	1	0.18	2229.5	-3820.0
## + V1_J1_2	1	0.16	2229.5	-3819.9
## + V19_J1_7	1	0.16	2229.5	-3819.9
## + V30_J1_7	1	0.12	2229.5	-3819.8
## + V20_J2_4	1	0.10	2229.6	-3819.8
## + V2_J1_2	1	0.10	2229.6	-3819.8
## + V1_J1_6	1	0.10	2229.6	-3819.8
## + V24_J2_4	1	0.09	2229.6	-3819.8
## + V19_J1_6	1	0.09	2229.6	-3819.7
## + V29_J2_5	1	0.07	2229.6	-3819.7
## + V13_1_J1_6	1	0.06	2229.6	-3819.7
## + V19_J2_2	1	0.06	2229.6	-3819.7
## + V14_J1_3	1	0.06	2229.6	-3819.7
## + V20_J1_7	1	0.06	2229.6	-3819.7
## + V24_J2_2	1	0.05	2229.6	-3819.7
## + V12_1_2_J1_1	1	0.05	2229.6	-3819.7
## + V13_2_J2_1	1	0.04	2229.6	-3819.6
## + V24_J2_1	1	0.04	2229.6	-3819.6
## + V23_J1_1	1	0.04	2229.6	-3819.6
## + V13_3_J2_1	1	0.03	2229.6	-3819.6
## + V2_J2_4	1	0.02	2229.6	-3819.6
## + V13_1_J1_1	1	0.01	2229.7	-3819.6
## + V24_J1_4	1	0.01	2229.7	-3819.6
## + V1_J2_1	1	0.00	2229.7	-3819.6
## + V15_J2_3	1	0.00	2229.7	-3819.5
## + V5_J1_1	1	0.00	2229.7	-3819.5
## + V13_3_J2_3	1	0.00	2229.7	-3819.5
## + V13_3_J1_7	1	0.00	2229.7	-3819.5
## + V14_J1_6	1	0.00	2229.7	-3819.5
## + V17_J1_2	1	0.00	2229.7	-3819.5
## + V17_J2_3	1	0.00	2229.7	-3819.5
## - V14_J2_4	1	29.56	2259.2	-3764.3
## - V30_J1_2	1	30.44	2260.1	-3762.3
## - V2_J2_2	1	31.49	2261.1	-3759.9
## - V26_J1_5	1	32.00	2261.7	-3758.7
## - V19_J2_5	1	35.14	2264.8	-3751.5
## - V15_J1_7	1	35.59	2265.2	-3750.5
## - V19_J2_4	1	36.44	2266.1	-3748.5
## - V5_J1_4	1	36.65	2266.3	-3748.0
## - V3_J1_5	1	40.17	2269.8	-3740.0
## - V16_J1_3	1	41.52	2271.2	-3736.9
## - V30_J1_1	1	45.09	2274.8	-3728.7
## - V26_J1_4	1	45.43	2275.1	-3727.9
## - V13_2_J1_7	1	47.20	2276.9	-3723.9
## - V17_J2_7	1	47.79	2277.4	-3722.5
## - V19_J2_1	1	48.32	2278.0	-3721.3
## - V30_J1_3	1	49.29	2279.0	-3719.1

```

## - V15_J1_3      1      52.49 2282.1 -3711.8
## - V14_J2_3      1      52.63 2282.3 -3711.5
## - V5_J2_1       1      52.92 2282.6 -3710.8
## - V1_J1_3       1      53.64 2283.3 -3709.2
## - V23_J1_3      1      63.67 2293.3 -3686.4
## - V14_J1_4      1      65.95 2295.6 -3681.2
## - V1_J2_7       1      66.31 2296.0 -3680.4
## - V1_J2_2       1      68.39 2298.1 -3675.7
## - V2_J1_3       1      71.36 2301.0 -3669.0
## - V14_J1_5      1      71.68 2301.3 -3668.3
## - V4_J2_5       1      71.85 2301.5 -3667.9
## - V12_1_2_J1_4  1      73.50 2303.2 -3664.2
## - V17_J2_2      1      74.32 2304.0 -3662.3
## - V17_J1_3      1      75.48 2305.1 -3659.7
## - V5_J2_3       1      77.25 2306.9 -3655.7
## - V4_J2_1       1      83.67 2313.3 -3641.2
## - V3_J1_4       1      85.81 2315.5 -3636.4
## - V4_J2_3       1      87.78 2317.4 -3632.0
## - V15_J2_2      1      89.05 2318.7 -3629.2
## - V19_J2_3      1      95.73 2325.4 -3614.2
## - V30_J2_2      1     110.89 2340.6 -3580.4
## - V15_J2_7      1     111.58 2341.2 -3578.9
## - V4_J2_4       1     111.96 2341.6 -3578.0
## - V3_J2_1       1     120.31 2350.0 -3559.5
## - V5_J1_5       1     127.90 2357.6 -3542.8
## - V3_J2_5       1     139.42 2369.1 -3517.4
## - V26_J2_1      1     143.03 2372.7 -3509.5
## - V19_J1_5      1     152.41 2382.1 -3489.0
## - V12_1_2_J2_2  1     155.04 2384.7 -3483.3
## - V19_J1_4      1     176.96 2406.6 -3435.7
## - V26_J2_5      1     185.23 2414.9 -3417.8
## - V26_J2_4      1     187.19 2416.8 -3413.6
## - V3_J2_4       1     202.75 2432.4 -3380.2
## - V3_J2_3       1     212.43 2442.1 -3359.6
## - V20_J2_2      1     253.81 2483.5 -3272.2
## - V5_J2_5       1     277.04 2506.7 -3223.8
## - V5_J2_4       1     312.18 2541.8 -3151.4
## - V26_J2_3      1     372.77 2602.4 -3028.9
## - V16_J2_2      1     420.32 2650.0 -2934.8
## - J             12     769.45 2999.1 -2364.2
## - V             19    1218.22 3447.9 -1685.5
##
## Step:  AIC=-3887.15
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6
##

```

##		Df	Sum of Sq	RSS	AIC
##	+ V4_J1_4	1	26.94	2173.9	-3944.6
##	+ V12_1_2_J1_2	1	24.67	2176.2	-3939.1
##	+ V30_J2_5	1	23.45	2177.4	-3936.2
##	+ V12_1_2_J1_3	1	23.31	2177.5	-3935.9
##	+ V14_J2_1	1	22.86	2178.0	-3934.8
##	+ V16_J2_7	1	21.65	2179.2	-3931.9
##	+ V4_J1_5	1	20.70	2180.2	-3929.7
##	+ V13_1_J1_3	1	20.17	2180.7	-3928.4
##	+ V2_J2_7	1	19.71	2181.1	-3927.3
##	+ V29_J1_3	1	19.57	2181.3	-3927.0
##	+ V20_J2_3	1	19.00	2181.9	-3925.6
##	+ V15_J1_2	1	18.29	2182.6	-3923.9
##	+ V14_J2_5	1	17.64	2183.2	-3922.4
##	+ V15_J1_5	1	15.94	2184.9	-3918.3
##	+ V13_1_J1_2	1	15.79	2185.1	-3918.0
##	+ V24_J2_5	1	15.79	2185.1	-3918.0
##	+ V15_J1_1	1	15.53	2185.3	-3917.3
##	+ V23_J2_7	1	15.33	2185.5	-3916.9
##	+ V12_1_2_J1_7	1	14.67	2186.2	-3915.3
##	+ V23_J2_1	1	13.75	2187.1	-3913.1
##	+ V30_J1_5	1	13.64	2187.2	-3912.8
##	+ V13_1_J1_7	1	13.35	2187.5	-3912.2
##	+ V20_J2_1	1	12.87	2188.0	-3911.0
##	+ V12_1_2_J1_6	1	12.53	2188.3	-3910.2
##	+ V30_J1_6	1	12.12	2188.7	-3909.2
##	+ V16_J2_3	1	12.01	2188.8	-3909.0
##	+ V29_J1_5	1	11.75	2189.1	-3908.4
##	+ V13_2_J1_5	1	11.64	2189.2	-3908.1
##	+ V4_J1_6	1	10.85	2190.0	-3906.2
##	+ V20_J1_3	1	10.61	2190.2	-3905.6
##	+ V24_J1_6	1	10.46	2190.4	-3905.3
##	+ V20_J2_7	1	10.29	2190.6	-3904.9
##	+ V12_1_2_J2_7	1	10.16	2190.7	-3904.6
##	+ V13_1_J1_5	1	10.04	2190.8	-3904.3
##	+ V1_J2_5	1	9.74	2191.1	-3903.6
##	+ V24_J1_7	1	9.58	2191.3	-3903.2
##	+ V4_J2_7	1	9.16	2191.7	-3902.2
##	+ V17_J1_5	1	8.80	2192.1	-3901.4
##	+ V29_J1_7	1	8.73	2192.1	-3901.2
##	+ V4_J1_7	1	8.66	2192.2	-3901.0
##	+ V14_J1_2	1	8.41	2192.4	-3900.4
##	+ V4_J1_2	1	8.22	2192.6	-3900.0
##	+ V13_2_J2_7	1	7.65	2193.2	-3898.6
##	+ V13_2_J1_4	1	7.61	2193.2	-3898.5
##	+ V15_J1_4	1	7.55	2193.3	-3898.4
##	+ V12_1_2_J2_5	1	7.35	2193.5	-3897.9
##	+ V13_3_J2_5	1	7.31	2193.5	-3897.8
##	+ V13_3_J1_2	1	7.04	2193.8	-3897.2
##	+ V1_J1_5	1	6.81	2194.0	-3896.6
##	+ V24_J1_5	1	6.68	2194.2	-3896.3
##	+ V5_J2_7	1	6.61	2194.2	-3896.2
##	+ V4_J2_2	1	6.48	2194.4	-3895.9
##	+ V15_J2_5	1	6.34	2194.5	-3895.5

## + V13_2_J1_2	1	6.09	2194.8	-3894.9
## + V20_J1_4	1	6.05	2194.8	-3894.8
## + V29_J1_1	1	6.00	2194.9	-3894.7
## + V20_J1_2	1	5.72	2195.1	-3894.1
## + V2_J1_5	1	5.70	2195.2	-3894.0
## + V16_J2_4	1	5.66	2195.2	-3893.9
## + V12_1_2_J1_5	1	5.36	2195.5	-3893.2
## + V29_J2_3	1	5.29	2195.6	-3893.0
## + V5_J1_6	1	5.28	2195.6	-3893.0
## + V24_J2_3	1	5.17	2195.7	-3892.7
## + V24_J1_1	1	5.12	2195.7	-3892.6
## + V19_J1_1	1	5.04	2195.8	-3892.4
## + V29_J2_1	1	4.92	2195.9	-3892.2
## + V13_1_J2_4	1	4.91	2195.9	-3892.1
## + V30_J2_4	1	4.86	2196.0	-3892.0
## + V13_2_J1_6	1	4.78	2196.1	-3891.8
## + V13_3_J2_7	1	4.52	2196.3	-3891.2
## + V29_J1_4	1	4.48	2196.4	-3891.1
## + V26_J1_6	1	4.47	2196.4	-3891.1
## + V23_J1_4	1	4.38	2196.5	-3890.9
## + V13_2_J1_3	1	4.31	2196.5	-3890.7
## + V26_J1_3	1	4.26	2196.6	-3890.6
## + V4_J1_1	1	4.21	2196.7	-3890.5
## + V26_J2_2	1	4.12	2196.7	-3890.3
## + V14_J2_2	1	4.12	2196.7	-3890.3
## + V1_J1_1	1	4.03	2196.8	-3890.1
## + V12_1_2_J2_3	1	4.01	2196.8	-3890.0
## + V13_2_J2_5	1	3.91	2196.9	-3889.8
## + V23_J2_3	1	3.90	2197.0	-3889.7
## + V15_J2_1	1	3.74	2197.1	-3889.4
## + V24_J2_7	1	3.73	2197.1	-3889.3
## + V5_J1_2	1	3.68	2197.2	-3889.2
## + V30_J1_4	1	3.41	2197.4	-3888.6
## + V29_J2_2	1	3.33	2197.5	-3888.4
## + V1_J1_7	1	3.25	2197.6	-3888.2
## + V16_J1_7	1	3.15	2197.7	-3888.0
## + V12_1_2_J2_4	1	3.03	2197.8	-3887.7
## + V29_J1_6	1	2.98	2197.9	-3887.6
## <none>		2200.9	-3887.2	
## + V16_J1_6	1	2.76	2198.1	-3887.1
## + V5_J1_3	1	2.72	2198.1	-3886.9
## + V13_3_J1_6	1	2.71	2198.1	-3886.9
## + V2_J1_6	1	2.69	2198.2	-3886.9
## + V19_J2_7	1	2.66	2198.2	-3886.8
## + V29_J2_7	1	2.60	2198.3	-3886.7
## + V13_1_J2_2	1	2.47	2198.4	-3886.4
## + V15_J2_4	1	2.46	2198.4	-3886.3
## + V13_1_J2_5	1	2.40	2198.5	-3886.2
## + V17_J2_1	1	2.20	2198.7	-3885.7
## + V20_J1_1	1	2.15	2198.7	-3885.6
## + V13_3_J2_4	1	2.13	2198.7	-3885.6
## + V12_1_2_J2_1	1	2.12	2198.7	-3885.5
## + V16_J1_1	1	2.06	2198.8	-3885.4
## + V23_J2_5	1	1.94	2198.9	-3885.1

## + V26_J1_1	1	1.89	2199.0	-3885.0
## + V13_3_J1_3	1	1.80	2199.1	-3884.8
## + V20_J1_6	1	1.78	2199.1	-3884.7
## + V13_1_J2_1	1	1.75	2199.1	-3884.7
## + V29_J1_2	1	1.70	2199.2	-3884.5
## + V14_J1_7	1	1.56	2199.3	-3884.2
## + V13_2_J2_3	1	1.54	2199.3	-3884.1
## + V14_J2_7	1	1.50	2199.4	-3884.1
## + V23_J2_2	1	1.41	2199.4	-3883.9
## + V3_J2_7	1	1.41	2199.4	-3883.9
## + V23_J2_4	1	1.33	2199.5	-3883.7
## + V16_J2_5	1	1.33	2199.5	-3883.7
## + V17_J2_4	1	1.24	2199.6	-3883.4
## + V30_J2_3	1	1.24	2199.6	-3883.4
## + V20_J1_5	1	1.20	2199.7	-3883.4
## + V26_J2_7	1	1.18	2199.7	-3883.3
## + V26_J1_2	1	1.17	2199.7	-3883.3
## + V1_J2_3	1	1.06	2199.8	-3883.0
## + V14_J1_1	1	1.06	2199.8	-3883.0
## + V13_3_J2_2	1	1.05	2199.8	-3883.0
## + V17_J1_7	1	1.04	2199.8	-3883.0
## + V1_J1_4	1	1.03	2199.8	-3883.0
## + V2_J2_1	1	1.02	2199.8	-3882.9
## + V3_J1_7	1	1.02	2199.8	-3882.9
## + V4_J1_3	1	1.00	2199.9	-3882.9
## + V13_1_J1_4	1	0.94	2199.9	-3882.7
## + V2_J2_5	1	0.93	2199.9	-3882.7
## + V5_J1_7	1	0.90	2200.0	-3882.6
## + V13_2_J2_2	1	0.89	2200.0	-3882.6
## + V19_J1_3	1	0.87	2200.0	-3882.6
## + V30_J2_7	1	0.80	2200.1	-3882.4
## + V24_J1_2	1	0.77	2200.1	-3882.3
## + V30_J2_1	1	0.75	2200.1	-3882.3
## + V13_1_J2_7	1	0.75	2200.1	-3882.3
## + V3_J1_2	1	0.72	2200.1	-3882.2
## + V2_J1_1	1	0.71	2200.1	-3882.2
## + V23_J1_7	1	0.68	2200.2	-3882.1
## + V3_J1_3	1	0.68	2200.2	-3882.1
## + V5_J2_2	1	0.68	2200.2	-3882.1
## + V2_J1_7	1	0.67	2200.2	-3882.1
## + V29_J2_4	1	0.66	2200.2	-3882.1
## + V20_J2_5	1	0.65	2200.2	-3882.1
## + V13_2_J1_1	1	0.64	2200.2	-3882.0
## + V3_J2_2	1	0.57	2200.3	-3881.9
## + V17_J1_6	1	0.55	2200.3	-3881.8
## + V16_J1_2	1	0.53	2200.3	-3881.8
## + V13_3_J1_5	1	0.49	2200.4	-3881.7
## + V24_J1_3	1	0.46	2200.4	-3881.6
## + V2_J1_4	1	0.45	2200.4	-3881.6
## + V2_J2_3	1	0.44	2200.4	-3881.6
## + V23_J1_2	1	0.43	2200.4	-3881.5
## + V13_3_J1_1	1	0.39	2200.5	-3881.4
## + V13_3_J1_4	1	0.39	2200.5	-3881.4
## + V15_J2_3	1	0.38	2200.5	-3881.4

## + V17_J2_5	1	0.38	2200.5	-3881.4
## + V3_J1_6	1	0.37	2200.5	-3881.4
## + V13_1_J2_3	1	0.35	2200.5	-3881.3
## + V13_2_J2_4	1	0.31	2200.5	-3881.2
## + V16_J1_4	1	0.30	2200.6	-3881.2
## + V26_J1_7	1	0.30	2200.6	-3881.2
## + V19_J1_6	1	0.30	2200.6	-3881.2
## + V13_1_J1_6	1	0.29	2200.6	-3881.2
## + V17_J1_4	1	0.27	2200.6	-3881.2
## + V23_J1_5	1	0.26	2200.6	-3881.1
## + V16_J2_1	1	0.26	2200.6	-3881.1
## + V3_J1_1	1	0.25	2200.6	-3881.1
## + V17_J1_1	1	0.24	2200.6	-3881.1
## + V1_J2_4	1	0.22	2200.6	-3881.0
## + V19_J1_2	1	0.17	2200.7	-3880.9
## + V16_J1_5	1	0.15	2200.7	-3880.9
## + V1_J1_2	1	0.14	2200.7	-3880.9
## + V20_J2_4	1	0.13	2200.7	-3880.8
## + V19_J1_7	1	0.13	2200.7	-3880.8
## + V30_J1_7	1	0.11	2200.7	-3880.8
## + V2_J1_2	1	0.08	2200.8	-3880.7
## + V14_J1_6	1	0.08	2200.8	-3880.7
## + V13_2_J2_1	1	0.06	2200.8	-3880.7
## + V24_J2_1	1	0.06	2200.8	-3880.7
## + V24_J2_4	1	0.06	2200.8	-3880.7
## + V14_J1_3	1	0.06	2200.8	-3880.7
## + V20_J1_7	1	0.05	2200.8	-3880.6
## + V19_J2_2	1	0.05	2200.8	-3880.6
## + V23_J1_1	1	0.05	2200.8	-3880.6
## + V29_J2_5	1	0.05	2200.8	-3880.6
## + V24_J2_2	1	0.04	2200.8	-3880.6
## + V12_1_2_J1_1	1	0.04	2200.8	-3880.6
## + V2_J2_4	1	0.04	2200.8	-3880.6
## + V23_J1_6	1	0.02	2200.8	-3880.6
## + V13_3_J2_1	1	0.02	2200.8	-3880.6
## + V5_J1_1	1	0.01	2200.8	-3880.5
## + V13_1_J1_1	1	0.01	2200.8	-3880.5
## + V1_J2_1	1	0.01	2200.8	-3880.5
## + V13_3_J2_3	1	0.01	2200.9	-3880.5
## + V17_J2_3	1	0.00	2200.9	-3880.5
## + V13_3_J1_7	1	0.00	2200.9	-3880.5
## + V24_J1_4	1	0.00	2200.9	-3880.5
## + V17_J1_2	1	0.00	2200.9	-3880.5
## + V1_J1_6	1	0.00	2200.9	-3880.5
## - V15_J1_6	1	28.80	2229.7	-3826.2
## - V30_J1_2	1	30.17	2231.0	-3823.0
## - V14_J2_4	1	30.24	2231.1	-3822.8
## - V2_J2_2	1	31.29	2232.1	-3820.4
## - V26_J1_5	1	32.84	2233.7	-3816.8
## - V19_J2_5	1	36.02	2236.9	-3809.4
## - V19_J2_4	1	37.38	2238.2	-3806.2
## - V5_J1_4	1	37.58	2238.4	-3805.8
## - V3_J1_5	1	41.11	2242.0	-3797.6
## - V16_J1_3	1	41.31	2242.2	-3797.1

```

## - V15_J1_7      1      42.73 2243.6 -3793.8
## - V30_J1_1      1      44.76 2245.6 -3789.1
## - V26_J1_4      1      46.46 2247.3 -3785.2
## - V13_2_J1_7    1      47.06 2247.9 -3783.8
## - V17_J2_7      1      47.59 2248.4 -3782.6
## - V30_J1_3      1      49.13 2250.0 -3779.0
## - V19_J2_1      1      49.35 2250.2 -3778.5
## - V1_J1_3       1      53.37 2254.2 -3769.2
## - V14_J2_3      1      53.54 2254.4 -3768.8
## - V5_J2_1       1      54.00 2254.9 -3767.8
## - V15_J1_3      1      60.94 2261.8 -3751.8
## - V23_J1_3      1      63.42 2264.3 -3746.1
## - V1_J2_7       1      66.07 2266.9 -3740.0
## - V14_J1_4      1      66.94 2267.8 -3738.0
## - V1_J2_2       1      68.08 2268.9 -3735.4
## - V2_J1_3       1      71.08 2271.9 -3728.5
## - V14_J1_5      1      72.67 2273.5 -3724.9
## - V4_J2_5       1      72.83 2273.7 -3724.5
## - V17_J2_2      1      74.00 2274.9 -3721.8
## - V12_1_2_J1_4  1      74.27 2275.1 -3721.2
## - V17_J1_3      1      75.18 2276.0 -3719.1
## - V5_J2_3       1      78.62 2279.5 -3711.3
## - V4_J2_1       1      84.73 2285.6 -3697.3
## - V3_J1_4       1      87.22 2288.1 -3691.7
## - V4_J2_3       1      88.94 2289.8 -3687.8
## - V19_J2_3      1      97.24 2298.1 -3669.0
## - V15_J2_2      1      99.67 2300.5 -3663.5
## - V30_J2_2      1     110.62 2311.5 -3638.8
## - V4_J2_4       1     113.27 2314.1 -3632.8
## - V3_J2_1       1     121.92 2322.8 -3613.4
## - V15_J2_7      1     123.32 2324.2 -3610.3
## - V5_J1_5       1     129.56 2330.4 -3596.3
## - V3_J2_5       1     141.15 2342.0 -3570.6
## - V26_J2_1      1     144.78 2345.6 -3562.5
## - V19_J1_5      1     154.22 2355.1 -3541.6
## - V12_1_2_J2_2  1     154.73 2355.6 -3540.5
## - V19_J1_4      1     178.98 2379.8 -3487.2
## - V26_J2_5      1     187.21 2388.1 -3469.3
## - V26_J2_4      1     189.29 2390.1 -3464.7
## - V3_J2_4       1     204.94 2405.8 -3430.8
## - V3_J2_3       1     214.67 2415.5 -3409.8
## - V20_J2_2      1     253.29 2454.1 -3327.3
## - V5_J2_5       1     279.46 2480.3 -3272.2
## - V5_J2_4       1     314.88 2515.7 -3198.5
## - V26_J2_3      1     375.71 2576.6 -3074.2
## - V16_J2_2      1     419.60 2620.5 -2986.4
## - J             12     782.16 2983.0 -2385.5
## - V             19    1244.27 3445.1 -1683.0
##
## Step:  AIC=-3944.56
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##       V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##       V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##       V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +

```

```

##      V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
##      V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
##      V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
##      V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
##      V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
##      V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4
##
##      Df Sum of Sq    RSS    AIC
## + V4_J1_5      1    27.63 2146.3 -4004.5
## + V12_1_2_J1_2  1    24.83 2149.1 -3997.7
## + V30_J2_5      1    23.67 2150.2 -3994.9
## + V14_J2_1      1    23.33 2150.6 -3994.0
## + V12_1_2_J1_3  1    22.87 2151.0 -3992.9
## + V16_J2_7      1    21.03 2152.9 -3988.5
## + V13_1_J1_3    1    20.85 2153.1 -3988.1
## + V2_J2_7       1    19.12 2154.8 -3983.9
## + V15_J1_2      1    19.02 2154.9 -3983.6
## + V20_J2_3      1    19.02 2154.9 -3983.6
## + V29_J1_3      1    18.91 2155.0 -3983.4
## + V14_J2_5      1    18.05 2155.9 -3981.3
## + V15_J1_1      1    16.21 2157.7 -3976.8
## + V24_J2_5      1    15.83 2158.1 -3975.9
## + V13_1_J1_2    1    15.44 2158.5 -3975.0
## + V15_J1_5      1    15.33 2158.6 -3974.7
## + V23_J2_7      1    14.87 2159.0 -3973.6
## + V12_1_2_J1_7  1    14.53 2159.4 -3972.8
## + V30_J1_5      1    14.14 2159.8 -3971.9
## + V23_J2_1      1    13.76 2160.2 -3970.9
## + V4_J2_7       1    13.68 2160.2 -3970.8
## + V13_1_J1_7    1    13.00 2160.9 -3969.1
## + V20_J2_1      1    12.86 2161.1 -3968.8
## + V12_1_2_J1_6  1    12.41 2161.5 -3967.7
## + V29_J1_5      1    12.01 2161.9 -3966.7
## + V16_J2_3      1    11.97 2161.9 -3966.6
## + V30_J1_6      1    11.61 2162.3 -3965.8
## + V13_2_J1_5    1    11.35 2162.6 -3965.2
## + V20_J1_3      1    11.16 2162.8 -3964.7
## + V24_J1_6      1    10.76 2163.2 -3963.7
## + V20_J2_7      1    10.68 2163.2 -3963.5
## + V12_1_2_J2_7  1    10.00 2163.9 -3961.9
## + V24_J1_7      1     9.89 2164.0 -3961.6
## + V13_1_J1_5    1     9.80 2164.1 -3961.4
## + V15_J1_4      1     9.80 2164.1 -3961.4
## + V1_J2_5       1     9.65 2164.3 -3961.1
## + V17_J1_5      1     9.16 2164.8 -3959.9
## + V29_J1_7      1     8.45 2165.5 -3958.2
## + V14_J1_2      1     8.43 2165.5 -3958.1
## + V13_2_J2_7    1     7.97 2165.9 -3957.0
## + V13_3_J2_5    1     7.28 2166.6 -3955.4
## + V12_1_2_J2_5  1     7.17 2166.7 -3955.1
## + V1_J1_5       1     7.12 2166.8 -3955.0
## + V4_J1_6       1     7.10 2166.8 -3954.9
## + V13_3_J1_2    1     6.80 2167.1 -3954.2
## + V5_J2_7       1     6.59 2167.3 -3953.7

```

## + V24_J1_5	1	6.49	2167.4	-3953.5
## + V23_J1_4	1	6.25	2167.7	-3952.9
## + V15_J2_5	1	6.17	2167.7	-3952.7
## + V2_J1_5	1	5.96	2168.0	-3952.2
## + V13_2_J1_2	1	5.85	2168.1	-3952.0
## + V29_J1_1	1	5.79	2168.1	-3951.8
## + V16_J2_4	1	5.68	2168.2	-3951.5
## + V13_2_J1_4	1	5.59	2168.3	-3951.3
## + V20_J1_2	1	5.48	2168.4	-3951.0
## + V12_1_2_J1_5	1	5.40	2168.5	-3950.9
## + V4_J1_7	1	5.34	2168.6	-3950.7
## + V5_J1_6	1	5.33	2168.6	-3950.7
## + V29_J2_3	1	5.25	2168.7	-3950.5
## + V24_J2_3	1	5.13	2168.8	-3950.2
## + V19_J1_1	1	5.09	2168.8	-3950.1
## + V13_2_J1_6	1	5.00	2168.9	-3949.9
## + V30_J1_4	1	5.00	2168.9	-3949.9
## + V4_J1_2	1	4.99	2168.9	-3949.9
## + V24_J1_1	1	4.91	2169.0	-3949.7
## + V29_J2_1	1	4.90	2169.0	-3949.7
## + V13_1_J2_4	1	4.87	2169.0	-3949.6
## + V30_J2_4	1	4.78	2169.1	-3949.4
## + V13_3_J2_7	1	4.75	2169.2	-3949.3
## + V13_2_J1_3	1	4.65	2169.3	-3949.1
## + V26_J1_6	1	4.43	2169.5	-3948.5
## + V20_J1_4	1	4.28	2169.6	-3948.2
## + V14_J2_2	1	4.27	2169.6	-3948.2
## + V26_J1_3	1	4.18	2169.7	-3947.9
## + V26_J2_2	1	4.02	2169.9	-3947.6
## + V24_J2_7	1	3.94	2170.0	-3947.4
## + V13_2_J2_5	1	3.91	2170.0	-3947.3
## + V23_J2_3	1	3.89	2170.0	-3947.2
## + V15_J2_1	1	3.87	2170.0	-3947.2
## + V12_1_2_J2_3	1	3.85	2170.1	-3947.2
## + V1_J1_1	1	3.77	2170.1	-3947.0
## + V4_J2_2	1	3.74	2170.2	-3946.9
## + V5_J1_2	1	3.72	2170.2	-3946.8
## + V29_J2_2	1	3.63	2170.3	-3946.6
## + V1_J1_7	1	3.50	2170.4	-3946.3
## + V16_J1_7	1	3.37	2170.5	-3946.0
## + V16_J1_6	1	2.97	2170.9	-3945.0
## + V29_J1_4	1	2.96	2171.0	-3945.0
## + V12_1_2_J2_4	1	2.90	2171.0	-3944.9
## + V2_J1_6	1	2.89	2171.0	-3944.9
## + V29_J1_6	1	2.83	2171.1	-3944.7
## + V5_J1_3	1	2.78	2171.1	-3944.6
## + V29_J2_7	1	2.78	2171.1	-3944.6
## <none>			2173.9	-3944.6
## + V4_J1_3	1	2.69	2171.2	-3944.4
## + V19_J2_7	1	2.65	2171.3	-3944.3
## + V13_3_J1_6	1	2.57	2171.3	-3944.1
## + V13_1_J2_5	1	2.38	2171.5	-3943.6
## + V15_J2_4	1	2.37	2171.5	-3943.6
## + V20_J1_1	1	2.31	2171.6	-3943.5

## + V16_J1_1	1	2.24	2171.7	-3943.3
## + V13_1_J2_2	1	2.23	2171.7	-3943.3
## + V17_J2_1	1	2.16	2171.8	-3943.1
## + V13_3_J2_4	1	2.15	2171.8	-3943.1
## + V12_1_2_J2_1	1	2.02	2171.9	-3942.8
## + V13_3_J1_3	1	2.00	2171.9	-3942.7
## + V4_J1_1	1	1.99	2171.9	-3942.7
## + V23_J2_5	1	1.95	2172.0	-3942.6
## + V26_J1_1	1	1.86	2172.1	-3942.4
## + V13_1_J2_1	1	1.74	2172.2	-3942.1
## + V20_J1_6	1	1.65	2172.3	-3941.9
## + V29_J1_2	1	1.58	2172.3	-3941.7
## + V14_J1_7	1	1.57	2172.3	-3941.7
## + V13_2_J2_3	1	1.55	2172.4	-3941.6
## + V14_J2_7	1	1.53	2172.4	-3941.6
## + V3_J2_7	1	1.40	2172.5	-3941.3
## + V16_J2_5	1	1.35	2172.6	-3941.2
## + V23_J2_4	1	1.33	2172.6	-3941.1
## + V20_J1_5	1	1.30	2172.6	-3941.0
## + V30_J2_3	1	1.28	2172.6	-3941.0
## + V23_J2_2	1	1.22	2172.7	-3940.8
## + V17_J2_4	1	1.21	2172.7	-3940.8
## + V26_J1_2	1	1.19	2172.7	-3940.8
## + V17_J1_7	1	1.19	2172.7	-3940.8
## + V26_J2_7	1	1.18	2172.7	-3940.7
## + V14_J1_1	1	1.06	2172.9	-3940.5
## + V13_2_J2_2	1	1.05	2172.9	-3940.4
## + V2_J2_1	1	1.04	2172.9	-3940.4
## + V1_J2_3	1	1.03	2172.9	-3940.4
## + V3_J1_7	1	1.03	2172.9	-3940.4
## + V2_J2_5	1	0.94	2173.0	-3940.2
## + V13_3_J2_2	1	0.89	2173.0	-3940.1
## + V5_J1_7	1	0.89	2173.0	-3940.0
## + V13_1_J2_7	1	0.84	2173.1	-3939.9
## + V19_J1_3	1	0.83	2173.1	-3939.9
## + V3_J1_3	1	0.72	2173.2	-3939.6
## + V30_J2_1	1	0.71	2173.2	-3939.6
## + V3_J1_2	1	0.70	2173.2	-3939.6
## + V24_J1_2	1	0.69	2173.2	-3939.6
## + V29_J2_4	1	0.67	2173.2	-3939.5
## + V30_J2_7	1	0.66	2173.3	-3939.5
## + V20_J2_5	1	0.65	2173.3	-3939.5
## + V5_J2_2	1	0.64	2173.3	-3939.5
## + V2_J1_1	1	0.61	2173.3	-3939.4
## + V23_J1_7	1	0.60	2173.3	-3939.4
## + V2_J1_7	1	0.57	2173.3	-3939.3
## + V13_2_J1_1	1	0.56	2173.4	-3939.3
## + V3_J2_2	1	0.53	2173.4	-3939.2
## + V23_J1_2	1	0.50	2173.4	-3939.1
## + V17_J1_6	1	0.46	2173.5	-3939.0
## + V13_3_J1_1	1	0.45	2173.5	-3939.0
## + V16_J1_2	1	0.45	2173.5	-3939.0
## + V13_3_J1_5	1	0.44	2173.5	-3939.0
## + V2_J2_3	1	0.43	2173.5	-3939.0

## + V15_J2_3	1	0.42	2173.5	-3938.9
## + V1_J1_4	1	0.40	2173.5	-3938.9
## + V3_J1_6	1	0.38	2173.5	-3938.8
## + V24_J1_3	1	0.36	2173.6	-3938.8
## + V17_J2_5	1	0.36	2173.6	-3938.8
## + V13_1_J1_6	1	0.34	2173.6	-3938.7
## + V13_1_J2_3	1	0.34	2173.6	-3938.7
## + V13_1_J1_4	1	0.32	2173.6	-3938.7
## + V13_2_J2_4	1	0.31	2173.6	-3938.7
## + V26_J1_7	1	0.29	2173.6	-3938.6
## + V19_J1_6	1	0.29	2173.6	-3938.6
## + V3_J1_1	1	0.26	2173.7	-3938.5
## + V16_J2_1	1	0.25	2173.7	-3938.5
## + V1_J2_4	1	0.23	2173.7	-3938.5
## + V23_J1_5	1	0.22	2173.7	-3938.4
## + V16_J1_5	1	0.20	2173.7	-3938.4
## + V1_J1_2	1	0.20	2173.7	-3938.4
## + V17_J1_1	1	0.18	2173.7	-3938.4
## + V19_J1_2	1	0.16	2173.8	-3938.3
## + V24_J1_4	1	0.15	2173.8	-3938.3
## + V20_J2_4	1	0.14	2173.8	-3938.3
## + V19_J1_7	1	0.13	2173.8	-3938.2
## + V2_J1_2	1	0.12	2173.8	-3938.2
## + V14_J1_6	1	0.08	2173.8	-3938.1
## + V2_J1_4	1	0.08	2173.8	-3938.1
## + V14_J1_3	1	0.07	2173.8	-3938.1
## + V30_J1_7	1	0.07	2173.8	-3938.1
## + V24_J2_1	1	0.07	2173.8	-3938.1
## + V13_2_J2_1	1	0.06	2173.9	-3938.1
## + V24_J2_4	1	0.06	2173.9	-3938.1
## + V19_J2_2	1	0.06	2173.9	-3938.1
## + V13_3_J1_4	1	0.05	2173.9	-3938.0
## + V29_J2_5	1	0.04	2173.9	-3938.0
## + V12_1_2_J1_1	1	0.04	2173.9	-3938.0
## + V2_J2_4	1	0.04	2173.9	-3938.0
## + V20_J1_7	1	0.03	2173.9	-3938.0
## + V23_J1_1	1	0.03	2173.9	-3938.0
## + V16_J1_4	1	0.03	2173.9	-3938.0
## + V17_J1_4	1	0.02	2173.9	-3938.0
## + V24_J2_2	1	0.02	2173.9	-3938.0
## + V5_J1_1	1	0.02	2173.9	-3938.0
## + V13_3_J2_1	1	0.01	2173.9	-3938.0
## + V1_J2_1	1	0.01	2173.9	-3937.9
## + V13_3_J2_3	1	0.01	2173.9	-3937.9
## + V23_J1_6	1	0.01	2173.9	-3937.9
## + V13_3_J1_7	1	0.01	2173.9	-3937.9
## + V13_1_J1_1	1	0.00	2173.9	-3937.9
## + V1_J1_6	1	0.00	2173.9	-3937.9
## + V17_J1_2	1	0.00	2173.9	-3937.9
## + V17_J2_3	1	0.00	2173.9	-3937.9
## - V4_J1_4	1	26.94	2200.9	-3887.2
## - V15_J1_6	1	29.57	2203.5	-3881.0
## - V2_J2_2	1	30.41	2204.3	-3879.0
## - V14_J2_4	1	30.72	2204.6	-3878.2

## - V30_J1_2	1	30.85	2204.8	-3877.9
## - V26_J1_5	1	33.02	2206.9	-3872.8
## - V19_J2_5	1	36.63	2210.6	-3864.3
## - V19_J2_4	1	38.04	2212.0	-3861.0
## - V16_J1_3	1	40.33	2214.2	-3855.6
## - V3_J1_5	1	41.30	2215.2	-3853.3
## - V5_J1_4	1	42.19	2216.1	-3851.2
## - V15_J1_7	1	43.69	2217.6	-3847.7
## - V30_J1_1	1	45.59	2219.5	-3843.3
## - V13_2_J1_7	1	46.43	2220.3	-3841.3
## - V17_J2_7	1	46.70	2220.6	-3840.7
## - V30_J1_3	1	47.91	2221.8	-3837.8
## - V19_J2_1	1	50.07	2224.0	-3832.8
## - V26_J1_4	1	51.55	2225.5	-3829.3
## - V1_J1_3	1	52.18	2226.1	-3827.9
## - V14_J2_3	1	54.17	2228.1	-3823.2
## - V5_J2_1	1	54.75	2228.7	-3821.9
## - V23_J1_3	1	62.31	2236.2	-3804.3
## - V15_J1_3	1	62.40	2236.3	-3804.0
## - V1_J2_7	1	65.03	2238.9	-3797.9
## - V1_J2_2	1	66.68	2240.6	-3794.1
## - V2_J1_3	1	69.80	2243.7	-3786.9
## - V17_J2_2	1	72.54	2246.5	-3780.5
## - V14_J1_5	1	72.73	2246.7	-3780.1
## - V14_J1_4	1	72.88	2246.8	-3779.7
## - V17_J1_3	1	73.75	2247.7	-3777.7
## - V5_J2_3	1	79.57	2253.5	-3764.3
## - V12_1_2_J1_4	1	80.38	2254.3	-3762.4
## - V4_J2_5	1	82.20	2256.1	-3758.2
## - V3_J1_4	1	94.02	2267.9	-3731.0
## - V4_J2_1	1	94.72	2268.6	-3729.4
## - V19_J2_3	1	98.31	2272.2	-3721.2
## - V4_J2_3	1	99.16	2273.1	-3719.2
## - V15_J2_2	1	101.59	2275.5	-3713.7
## - V30_J2_2	1	108.72	2282.6	-3697.4
## - V3_J2_1	1	123.04	2297.0	-3664.9
## - V4_J2_4	1	124.60	2298.5	-3661.4
## - V15_J2_7	1	125.02	2298.9	-3660.4
## - V5_J1_5	1	129.91	2303.8	-3649.4
## - V3_J2_5	1	142.36	2316.3	-3621.4
## - V26_J2_1	1	146.01	2319.9	-3613.2
## - V12_1_2_J2_2	1	153.68	2327.6	-3596.0
## - V19_J1_5	1	154.60	2328.5	-3594.0
## - V19_J1_4	1	188.36	2362.3	-3519.1
## - V26_J2_5	1	188.61	2362.5	-3518.6
## - V26_J2_4	1	190.77	2364.7	-3513.8
## - V3_J2_4	1	206.47	2380.4	-3479.4
## - V3_J2_3	1	216.23	2390.1	-3458.1
## - V20_J2_2	1	250.93	2424.8	-3383.2
## - V5_J2_5	1	281.15	2455.1	-3318.7
## - V5_J2_4	1	316.77	2490.7	-3243.9
## - V26_J2_3	1	377.78	2551.7	-3118.0
## - V16_J2_2	1	416.28	2590.2	-3040.1
## - J	12	774.40	2948.3	-2439.7


```

## - V          19    1216.82 3390.7 -1759.1
##
## Step:  AIC=-4004.45
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##      V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##      V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##      V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
##      V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
##      V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
##      V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
##      V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
##      V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
##      V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5
##
##
##      Df Sum of Sq    RSS    AIC
## + V12_1_2_J1_2  1      25.40 2120.9 -4059.7
## + V30_J2_5      1      23.88 2122.4 -4056.0
## + V14_J2_1      1      23.87 2122.4 -4056.0
## + V12_1_2_J1_3  1      22.02 2124.3 -4051.4
## + V13_1_J1_3    1      21.62 2124.7 -4050.5
## + V16_J2_7      1      20.35 2125.9 -4047.4
## + V4_J2_7       1      20.21 2126.1 -4047.0
## + V15_J1_2      1      19.85 2126.4 -4046.1
## + V20_J2_3      1      19.07 2127.2 -4044.2
## + V14_J2_5      1      18.53 2127.7 -4042.9
## + V2_J2_7       1      18.48 2127.8 -4042.8
## + V15_J1_5      1      18.23 2128.1 -4042.2
## + V29_J1_3      1      18.21 2128.1 -4042.1
## + V15_J1_1      1      16.98 2129.3 -4039.1
## + V24_J2_5      1      15.90 2130.4 -4036.5
## + V13_1_J1_2    1      15.06 2131.2 -4034.4
## + V23_J2_7      1      14.37 2131.9 -4032.8
## + V13_2_J1_5    1      14.09 2132.2 -4032.1
## + V12_1_2_J1_7  1      14.07 2132.2 -4032.0
## + V23_J2_1      1      13.74 2132.5 -4031.2
## + V20_J2_1      1      12.87 2133.4 -4029.1
## + V13_1_J1_7    1      12.62 2133.7 -4028.5
## + V13_1_J1_5    1      12.37 2133.9 -4027.9
## + V12_1_2_J1_6  1      12.01 2134.3 -4027.0
## + V16_J2_3      1      11.95 2134.3 -4026.8
## + V20_J1_3      1      11.77 2134.5 -4026.4
## + V30_J1_5      1      11.65 2134.6 -4026.1
## + V20_J2_7      1      11.12 2135.2 -4024.8
## + V24_J1_6      1      11.09 2135.2 -4024.8
## + V30_J1_6      1      11.07 2135.2 -4024.7
## + V24_J1_7      1      10.22 2136.1 -4022.6
## + V15_J1_4      1       9.61 2136.7 -4021.2
## + V12_1_2_J2_7  1       9.59 2136.7 -4021.1
## + V29_J1_5      1       9.59 2136.7 -4021.1
## + V1_J2_5       1       9.56 2136.7 -4021.0
## + V24_J1_5      1       8.60 2137.7 -4018.7
## + V14_J1_2      1       8.45 2137.8 -4018.3
## + V13_2_J2_7    1       8.33 2137.9 -4018.1
## + V29_J1_7      1       8.15 2138.1 -4017.6

```

## + V13_3_J2_5	1	7.24	2139.0	-4015.4
## + V12_1_2_J2_5	1	7.16	2139.1	-4015.2
## + V17_J1_5	1	7.15	2139.1	-4015.2
## + V5_J2_7	1	6.58	2139.7	-4013.8
## + V13_3_J1_2	1	6.55	2139.7	-4013.7
## + V23_J1_4	1	6.28	2140.0	-4013.1
## + V15_J2_5	1	6.00	2140.3	-4012.4
## + V4_J1_3	1	5.75	2140.5	-4011.8
## + V16_J2_4	1	5.70	2140.6	-4011.6
## + V13_2_J1_2	1	5.60	2140.7	-4011.4
## + V13_2_J1_4	1	5.55	2140.7	-4011.3
## + V29_J1_1	1	5.55	2140.7	-4011.3
## + V5_J1_6	1	5.39	2140.9	-4010.9
## + V1_J1_5	1	5.36	2140.9	-4010.8
## + V13_2_J1_6	1	5.25	2141.0	-4010.5
## + V20_J1_2	1	5.22	2141.1	-4010.5
## + V29_J2_3	1	5.19	2141.1	-4010.4
## + V19_J1_1	1	5.15	2141.1	-4010.3
## + V24_J2_3	1	5.07	2141.2	-4010.1
## + V13_2_J1_3	1	5.03	2141.2	-4010.0
## + V13_3_J2_7	1	5.01	2141.3	-4010.0
## + V30_J1_4	1	4.92	2141.4	-4009.7
## + V29_J2_1	1	4.86	2141.4	-4009.6
## + V13_1_J2_4	1	4.81	2141.5	-4009.5
## + V24_J1_1	1	4.70	2141.6	-4009.2
## + V30_J2_4	1	4.70	2141.6	-4009.2
## + V14_J2_2	1	4.46	2141.8	-4008.6
## + V26_J1_6	1	4.38	2141.9	-4008.4
## + V2_J1_5	1	4.33	2142.0	-4008.3
## + V20_J1_4	1	4.25	2142.0	-4008.1
## + V24_J2_7	1	4.18	2142.1	-4007.9
## + V26_J1_3	1	4.09	2142.2	-4007.7
## + V15_J2_1	1	4.01	2142.3	-4007.5
## + V29_J2_2	1	3.98	2142.3	-4007.5
## + V13_2_J2_5	1	3.93	2142.4	-4007.3
## + V26_J2_2	1	3.91	2142.4	-4007.3
## + V23_J2_3	1	3.87	2142.4	-4007.2
## + V12_1_2_J2_3	1	3.83	2142.4	-4007.1
## + V12_1_2_J1_5	1	3.82	2142.5	-4007.1
## + V1_J1_7	1	3.80	2142.5	-4007.0
## + V5_J1_2	1	3.77	2142.5	-4007.0
## + V4_J1_6	1	3.72	2142.6	-4006.8
## + V16_J1_7	1	3.63	2142.6	-4006.6
## + V1_J1_1	1	3.49	2142.8	-4006.3
## + V16_J1_6	1	3.20	2143.1	-4005.6
## + V2_J1_6	1	3.12	2143.2	-4005.4
## + V29_J2_7	1	2.98	2143.3	-4005.0
## + V29_J1_4	1	2.91	2143.4	-4004.9
## + V12_1_2_J2_4	1	2.88	2143.4	-4004.8
## + V5_J1_3	1	2.86	2143.4	-4004.7
## <none>			2146.3	-4004.5
## + V29_J1_6	1	2.66	2143.6	-4004.3
## + V19_J2_7	1	2.64	2143.6	-4004.2
## + V20_J1_1	1	2.49	2143.8	-4003.8

## + V4_J1_7	1	2.48	2143.8	-4003.8
## + V16_J1_1	1	2.44	2143.8	-4003.7
## + V13_3_J1_6	1	2.41	2143.9	-4003.7
## + V13_1_J2_5	1	2.35	2143.9	-4003.5
## + V15_J2_4	1	2.28	2144.0	-4003.3
## + V13_3_J1_3	1	2.25	2144.0	-4003.3
## + V4_J1_2	1	2.23	2144.1	-4003.2
## + V13_3_J2_4	1	2.19	2144.1	-4003.1
## + V17_J2_1	1	2.11	2144.2	-4002.9
## + V12_1_2_J2_1	1	2.01	2144.3	-4002.7
## + V13_1_J2_2	1	1.97	2144.3	-4002.6
## + V23_J2_5	1	1.94	2144.3	-4002.5
## + V26_J1_1	1	1.82	2144.5	-4002.2
## + V13_1_J2_1	1	1.72	2144.6	-4002.0
## + V14_J1_7	1	1.59	2144.7	-4001.7
## + V13_2_J2_3	1	1.57	2144.7	-4001.6
## + V14_J2_7	1	1.56	2144.7	-4001.6
## + V20_J1_6	1	1.50	2144.8	-4001.5
## + V4_J2_2	1	1.48	2144.8	-4001.4
## + V29_J1_2	1	1.46	2144.8	-4001.4
## + V3_J2_7	1	1.40	2144.9	-4001.2
## + V17_J1_7	1	1.36	2144.9	-4001.1
## + V16_J2_5	1	1.36	2144.9	-4001.1
## + V30_J2_3	1	1.32	2145.0	-4001.0
## + V23_J2_4	1	1.31	2145.0	-4001.0
## + V13_2_J2_2	1	1.26	2145.0	-4000.9
## + V26_J1_2	1	1.22	2145.1	-4000.8
## + V17_J2_4	1	1.19	2145.1	-4000.7
## + V26_J2_7	1	1.17	2145.1	-4000.7
## + V13_3_J1_5	1	1.09	2145.2	-4000.5
## + V14_J1_1	1	1.07	2145.2	-4000.4
## + V2_J2_1	1	1.05	2145.2	-4000.4
## + V3_J1_7	1	1.05	2145.2	-4000.4
## + V1_J2_3	1	1.01	2145.3	-4000.3
## + V23_J2_2	1	1.01	2145.3	-4000.3
## + V2_J2_5	1	0.96	2145.3	-4000.1
## + V13_1_J2_7	1	0.95	2145.3	-4000.1
## + V5_J1_7	1	0.87	2145.4	-3999.9
## + V19_J1_3	1	0.79	2145.5	-3999.7
## + V3_J1_3	1	0.75	2145.5	-3999.6
## + V13_3_J2_2	1	0.73	2145.6	-3999.6
## + V23_J1_5	1	0.70	2145.6	-3999.5
## + V29_J2_4	1	0.69	2145.6	-3999.5
## + V3_J1_2	1	0.68	2145.6	-3999.5
## + V30_J2_1	1	0.68	2145.6	-3999.5
## + V20_J2_5	1	0.65	2145.6	-3999.4
## + V24_J1_2	1	0.61	2145.7	-3999.3
## + V5_J2_2	1	0.60	2145.7	-3999.3
## + V20_J1_5	1	0.59	2145.7	-3999.3
## + V23_J1_2	1	0.58	2145.7	-3999.2
## + V30_J2_7	1	0.52	2145.8	-3999.1
## + V13_3_J1_1	1	0.52	2145.8	-3999.1
## + V2_J1_1	1	0.51	2145.8	-3999.1
## + V23_J1_7	1	0.51	2145.8	-3999.0

## + V3_J2_2	1	0.49	2145.8	-3999.0
## + V13_2_J1_1	1	0.49	2145.8	-3999.0
## + V2_J1_7	1	0.47	2145.8	-3999.0
## + V15_J2_3	1	0.46	2145.8	-3998.9
## + V4_J1_1	1	0.44	2145.8	-3998.9
## + V2_J2_3	1	0.43	2145.9	-3998.8
## + V1_J1_4	1	0.41	2145.9	-3998.8
## + V13_1_J1_6	1	0.40	2145.9	-3998.8
## + V3_J1_6	1	0.40	2145.9	-3998.8
## + V16_J1_2	1	0.37	2145.9	-3998.7
## + V17_J1_6	1	0.36	2145.9	-3998.7
## + V17_J2_5	1	0.34	2145.9	-3998.6
## + V13_2_J2_4	1	0.32	2146.0	-3998.6
## + V13_1_J2_3	1	0.32	2146.0	-3998.6
## + V13_1_J1_4	1	0.31	2146.0	-3998.6
## + V26_J1_7	1	0.28	2146.0	-3998.5
## + V19_J1_6	1	0.28	2146.0	-3998.5
## + V3_J1_1	1	0.27	2146.0	-3998.5
## + V24_J1_3	1	0.27	2146.0	-3998.5
## + V1_J1_2	1	0.26	2146.0	-3998.5
## + V1_J2_4	1	0.24	2146.0	-3998.4
## + V16_J2_1	1	0.24	2146.0	-3998.4
## + V2_J1_2	1	0.17	2146.1	-3998.2
## + V24_J1_4	1	0.16	2146.1	-3998.2
## + V19_J1_2	1	0.15	2146.1	-3998.2
## + V20_J2_4	1	0.14	2146.1	-3998.2
## + V17_J1_1	1	0.12	2146.2	-3998.1
## + V19_J1_7	1	0.12	2146.2	-3998.1
## + V14_J1_3	1	0.09	2146.2	-3998.0
## + V14_J1_6	1	0.08	2146.2	-3998.0
## + V2_J1_4	1	0.08	2146.2	-3998.0
## + V19_J2_2	1	0.07	2146.2	-3998.0
## + V24_J2_1	1	0.07	2146.2	-3998.0
## + V12_1_2_J1_1	1	0.07	2146.2	-3998.0
## + V13_2_J2_1	1	0.07	2146.2	-3998.0
## + V24_J2_4	1	0.05	2146.2	-3997.9
## + V13_3_J1_4	1	0.04	2146.2	-3997.9
## + V29_J2_5	1	0.04	2146.2	-3997.9
## + V2_J2_4	1	0.03	2146.2	-3997.9
## + V30_J1_7	1	0.03	2146.3	-3997.9
## + V16_J1_4	1	0.03	2146.3	-3997.9
## + V17_J1_4	1	0.02	2146.3	-3997.9
## + V5_J1_1	1	0.02	2146.3	-3997.9
## + V13_3_J1_7	1	0.02	2146.3	-3997.9
## + V1_J1_6	1	0.02	2146.3	-3997.9
## + V17_J1_2	1	0.02	2146.3	-3997.9
## + V20_J1_7	1	0.01	2146.3	-3997.8
## + V23_J1_1	1	0.01	2146.3	-3997.8
## + V13_3_J2_1	1	0.01	2146.3	-3997.8
## + V13_3_J2_3	1	0.01	2146.3	-3997.8
## + V16_J1_5	1	0.01	2146.3	-3997.8
## + V1_J2_1	1	0.00	2146.3	-3997.8
## + V24_J2_2	1	0.00	2146.3	-3997.8
## + V17_J2_3	1	0.00	2146.3	-3997.8

## + V23_J1_6	1	0.00	2146.3	-3997.8
## + V13_1_J1_1	1	0.00	2146.3	-3997.8
## - V4_J1_5	1	27.63	2173.9	-3944.6
## - V2_J2_2	1	29.42	2175.7	-3940.3
## - V15_J1_6	1	30.41	2176.7	-3937.9
## - V14_J2_4	1	31.27	2177.5	-3935.9
## - V30_J1_2	1	31.61	2177.9	-3935.1
## - V4_J1_4	1	33.87	2180.2	-3929.7
## - V26_J1_5	1	37.21	2183.5	-3921.7
## - V19_J2_5	1	37.35	2183.6	-3921.4
## - V19_J2_4	1	38.81	2185.1	-3917.9
## - V16_J1_3	1	39.27	2185.5	-3916.8
## - V5_J1_4	1	43.00	2189.3	-3907.9
## - V15_J1_7	1	44.75	2191.0	-3903.8
## - V17_J2_7	1	45.74	2192.0	-3901.4
## - V13_2_J1_7	1	45.75	2192.0	-3901.4
## - V3_J1_5	1	45.95	2192.2	-3900.9
## - V30_J1_1	1	46.50	2192.8	-3899.6
## - V30_J1_3	1	46.59	2192.9	-3899.4
## - V1_J1_3	1	50.88	2197.2	-3889.3
## - V19_J2_1	1	50.90	2197.2	-3889.2
## - V26_J1_4	1	52.45	2198.7	-3885.6
## - V14_J2_3	1	54.90	2201.2	-3879.7
## - V5_J2_1	1	55.62	2201.9	-3878.0
## - V23_J1_3	1	61.10	2207.4	-3865.1
## - V1_J2_7	1	63.89	2210.2	-3858.5
## - V15_J1_3	1	64.03	2210.3	-3858.2
## - V1_J2_2	1	65.11	2211.4	-3855.7
## - V2_J1_3	1	68.39	2214.7	-3848.0
## - V17_J2_2	1	70.90	2217.2	-3842.1
## - V17_J1_3	1	72.20	2218.5	-3839.0
## - V14_J1_4	1	73.73	2220.0	-3835.5
## - V14_J1_5	1	78.65	2224.9	-3823.9
## - V12_1_2_J1_4	1	80.47	2226.8	-3819.7
## - V5_J2_3	1	80.67	2227.0	-3819.2
## - V4_J2_5	1	93.38	2239.7	-3789.6
## - V3_J1_4	1	95.22	2241.5	-3785.4
## - V19_J2_3	1	99.53	2245.8	-3775.4
## - V15_J2_2	1	103.77	2250.1	-3765.6
## - V30_J2_2	1	106.59	2252.9	-3759.1
## - V4_J2_1	1	106.60	2252.9	-3759.0
## - V4_J2_3	1	111.29	2257.6	-3748.2
## - V3_J2_1	1	124.34	2270.6	-3718.2
## - V15_J2_7	1	126.90	2273.2	-3712.4
## - V5_J1_5	1	137.77	2284.1	-3687.6
## - V4_J2_4	1	137.92	2284.2	-3687.2
## - V3_J2_5	1	143.75	2290.0	-3674.0
## - V26_J2_1	1	147.42	2293.7	-3665.7
## - V12_1_2_J2_2	1	151.61	2297.9	-3656.2
## - V19_J1_5	1	163.10	2309.4	-3630.2
## - V19_J1_4	1	190.05	2336.3	-3569.9
## - V26_J2_5	1	190.21	2336.5	-3569.5
## - V26_J2_4	1	192.46	2338.7	-3564.5
## - V3_J2_4	1	208.23	2354.5	-3529.6

```

## - V3_J2_3      1      218.03 2364.3 -3508.0
## - V20_J2_2     1      248.25 2394.5 -3442.0
## - V5_J2_5      1      283.10 2429.4 -3366.8
## - V5_J2_4      1      318.94 2465.2 -3290.7
## - V26_J2_3     1      380.14 2526.4 -3163.1
## - V16_J2_2     1      412.51 2558.8 -3096.9
## - J            12      768.86 2915.1 -2491.9
## - V            19     1198.17 3344.4 -1824.0
##
## Step:  AIC=-4059.73
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##      V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##      V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##      V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
##      V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
##      V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
##      V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
##      V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
##      V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
##      V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
##      V12_1_2_J1_2
##
##
##      Df Sum of Sq  RSS    AIC
## + V14_J2_1      1      24.35 2096.5 -4113.1
## + V30_J2_5      1      23.81 2097.1 -4111.8
## + V15_J1_2      1      22.54 2098.3 -4108.6
## + V13_1_J1_3    1      21.34 2099.5 -4105.7
## + V4_J2_7       1      20.68 2100.2 -4104.0
## + V16_J2_7      1      20.59 2100.3 -4103.8
## + V20_J2_3      1      19.40 2101.5 -4100.9
## + V14_J2_5      1      18.96 2101.9 -4099.8
## + V2_J2_7       1      18.70 2102.2 -4099.1
## + V15_J1_5      1      18.66 2102.2 -4099.1
## + V29_J1_3      1      18.47 2102.4 -4098.6
## + V12_1_2_J1_3  1      17.67 2103.2 -4096.6
## + V15_J1_1      1      16.73 2104.2 -4094.3
## + V24_J2_5      1      16.18 2104.7 -4092.9
## + V23_J2_7      1      14.57 2106.3 -4088.9
## + V13_2_J1_5    1      14.39 2106.5 -4088.5
## + V23_J2_1      1      13.47 2107.4 -4086.2
## + V20_J2_1      1      13.11 2107.8 -4085.3
## + V13_1_J1_2    1      12.95 2107.9 -4084.9
## + V13_1_J1_7    1      12.78 2108.1 -4084.5
## + V13_1_J1_5    1      12.65 2108.2 -4084.2
## + V16_J2_3      1      12.23 2108.7 -4083.2
## + V30_J1_5      1      11.58 2109.3 -4081.6
## + V20_J1_3      1      11.57 2109.3 -4081.5
## + V30_J1_6      1      11.02 2109.9 -4080.2
## + V20_J2_7      1      10.97 2109.9 -4080.1
## + V24_J1_6      1      10.95 2109.9 -4080.0
## + V12_1_2_J1_7  1      10.60 2110.3 -4079.1
## + V12_1_2_J2_5  1      10.20 2110.7 -4078.2
## + V14_J1_2      1      10.18 2110.7 -4078.1
## + V24_J1_7      1      10.08 2110.8 -4077.9

```

## + V1_J2_5	1	9.80	2111.1	-4077.2
## + V15_J1_4	1	9.68	2111.2	-4076.9
## + V29_J1_5	1	9.35	2111.5	-4076.1
## + V24_J1_5	1	8.83	2112.1	-4074.8
## + V12_1_2_J1_6	1	8.81	2112.1	-4074.7
## + V29_J1_7	1	8.27	2112.6	-4073.4
## + V13_2_J2_7	1	8.19	2112.7	-4073.2
## + V13_3_J2_5	1	7.05	2113.8	-4070.4
## + V17_J1_5	1	6.92	2114.0	-4070.1
## + V12_1_2_J2_7	1	6.75	2114.1	-4069.7
## + V5_J2_7	1	6.31	2114.6	-4068.6
## + V23_J1_4	1	6.29	2114.6	-4068.5
## + V15_J2_5	1	6.24	2114.6	-4068.4
## + V12_1_2_J2_3	1	6.10	2114.8	-4068.1
## + V12_1_2_J1_5	1	6.09	2114.8	-4068.0
## + V4_J1_3	1	6.03	2114.8	-4067.9
## + V29_J1_1	1	5.64	2115.2	-4066.9
## + V5_J1_6	1	5.62	2115.3	-4066.9
## + V13_2_J1_4	1	5.54	2115.3	-4066.7
## + V16_J2_4	1	5.51	2115.4	-4066.6
## + V19_J1_1	1	5.36	2115.5	-4066.3
## + V13_3_J1_2	1	5.18	2115.7	-4065.8
## + V1_J1_5	1	5.16	2115.7	-4065.8
## + V13_2_J1_6	1	5.14	2115.7	-4065.7
## + V29_J2_3	1	5.02	2115.9	-4065.4
## + V13_3_J2_7	1	4.90	2116.0	-4065.1
## + V24_J2_3	1	4.90	2116.0	-4065.1
## + V13_2_J1_3	1	4.89	2116.0	-4065.1
## + V12_1_2_J2_4	1	4.87	2116.0	-4065.1
## + V30_J1_4	1	4.79	2116.1	-4064.9
## + V24_J1_1	1	4.78	2116.1	-4064.8
## + V30_J2_4	1	4.74	2116.1	-4064.7
## + V29_J2_1	1	4.71	2116.2	-4064.6
## + V13_1_J2_4	1	4.65	2116.2	-4064.5
## + V14_J2_2	1	4.46	2116.4	-4064.0
## + V13_2_J1_2	1	4.34	2116.5	-4063.7
## + V26_J1_3	1	4.33	2116.5	-4063.7
## + V20_J1_4	1	4.26	2116.6	-4063.5
## + V26_J1_6	1	4.17	2116.7	-4063.3
## + V2_J1_5	1	4.16	2116.7	-4063.3
## + V13_2_J2_5	1	4.08	2116.8	-4063.1
## + V24_J2_7	1	4.08	2116.8	-4063.1
## + V29_J2_2	1	4.03	2116.8	-4063.0
## + V20_J1_2	1	3.99	2116.9	-4062.9
## + V26_J2_2	1	3.97	2116.9	-4062.8
## + V15_J2_1	1	3.82	2117.1	-4062.5
## + V12_1_2_J2_1	1	3.73	2117.2	-4062.2
## + V23_J2_3	1	3.71	2117.2	-4062.2
## + V1_J1_7	1	3.70	2117.2	-4062.2
## + V1_J1_1	1	3.58	2117.3	-4061.9
## + V16_J1_7	1	3.54	2117.3	-4061.8
## + V4_J1_6	1	3.53	2117.3	-4061.8
## + V16_J1_6	1	3.12	2117.8	-4060.7
## + V4_J1_2	1	3.12	2117.8	-4060.7

## + V2_J1_6	1	3.04	2117.8	-4060.6
## + V29_J1_4	1	2.91	2118.0	-4060.2
## + V29_J2_7	1	2.90	2118.0	-4060.2
## + V5_J1_2	1	2.80	2118.1	-4060.0
## + V29_J1_6	1	2.73	2118.1	-4059.8
## <none>			2120.9	-4059.7
## + V5_J1_3	1	2.66	2118.2	-4059.6
## + V19_J2_7	1	2.48	2118.4	-4059.2
## + V13_3_J1_6	1	2.48	2118.4	-4059.2
## + V15_J2_4	1	2.43	2118.4	-4059.1
## + V20_J1_1	1	2.43	2118.5	-4059.1
## + V16_J1_1	1	2.37	2118.5	-4058.9
## + V4_J1_7	1	2.32	2118.6	-4058.8
## + V13_3_J2_4	1	2.31	2118.6	-4058.8
## + V13_1_J2_5	1	2.25	2118.6	-4058.6
## + V17_J2_1	1	2.23	2118.6	-4058.6
## + V13_3_J1_3	1	2.16	2118.7	-4058.4
## + V13_1_J2_2	1	1.93	2118.9	-4057.8
## + V23_J2_5	1	1.84	2119.0	-4057.6
## + V26_J1_1	1	1.70	2119.2	-4057.3
## + V13_2_J2_3	1	1.67	2119.2	-4057.2
## + V13_1_J2_1	1	1.63	2119.3	-4057.1
## + V20_J1_6	1	1.55	2119.3	-4056.9
## + V14_J1_7	1	1.50	2119.4	-4056.8
## + V14_J2_7	1	1.47	2119.4	-4056.7
## + V4_J2_2	1	1.45	2119.4	-4056.6
## + V17_J1_7	1	1.30	2119.6	-4056.3
## + V30_J2_3	1	1.30	2119.6	-4056.3
## + V17_J2_4	1	1.28	2119.6	-4056.2
## + V13_2_J2_2	1	1.28	2119.6	-4056.2
## + V16_J2_5	1	1.28	2119.6	-4056.2
## + V3_J2_7	1	1.28	2119.6	-4056.2
## + V23_J2_4	1	1.22	2119.7	-4056.1
## + V3_J1_2	1	1.21	2119.7	-4056.1
## + V13_3_J1_5	1	1.17	2119.7	-4056.0
## + V3_J1_7	1	1.15	2119.7	-4055.9
## + V23_J1_2	1	1.11	2119.8	-4055.8
## + V1_J2_3	1	1.10	2119.8	-4055.8
## + V26_J2_7	1	1.06	2119.8	-4055.7
## + V14_J1_1	1	1.00	2119.9	-4055.6
## + V23_J2_2	1	0.99	2119.9	-4055.5
## + V2_J2_1	1	0.98	2119.9	-4055.5
## + V13_1_J2_7	1	0.91	2120.0	-4055.3
## + V19_J1_3	1	0.90	2120.0	-4055.3
## + V2_J2_5	1	0.89	2120.0	-4055.3
## + V29_J1_2	1	0.85	2120.0	-4055.2
## + V5_J1_7	1	0.78	2120.1	-4055.0
## + V23_J1_5	1	0.78	2120.1	-4055.0
## + V29_J2_4	1	0.76	2120.1	-4054.9
## + V13_3_J2_2	1	0.71	2120.2	-4054.8
## + V26_J1_2	1	0.70	2120.2	-4054.8
## + V30_J2_1	1	0.69	2120.2	-4054.8
## + V3_J1_3	1	0.65	2120.2	-4054.7
## + V1_J1_2	1	0.64	2120.2	-4054.7

## + V5_J2_2	1	0.62	2120.3	-4054.6
## + V12_1_2_J1_1	1	0.62	2120.3	-4054.6
## + V20_J2_5	1	0.59	2120.3	-4054.6
## + V2_J1_1	1	0.54	2120.3	-4054.4
## + V23_J1_7	1	0.54	2120.3	-4054.4
## + V20_J1_5	1	0.54	2120.3	-4054.4
## + V30_J2_7	1	0.52	2120.4	-4054.4
## + V13_2_J1_1	1	0.52	2120.4	-4054.4
## + V3_J2_2	1	0.51	2120.4	-4054.3
## + V2_J1_7	1	0.51	2120.4	-4054.3
## + V2_J1_2	1	0.49	2120.4	-4054.3
## + V13_3_J1_1	1	0.49	2120.4	-4054.3
## + V2_J2_3	1	0.48	2120.4	-4054.3
## + V3_J1_6	1	0.46	2120.4	-4054.2
## + V19_J1_2	1	0.44	2120.4	-4054.2
## + V1_J1_4	1	0.41	2120.5	-4054.1
## + V15_J2_3	1	0.40	2120.5	-4054.1
## + V17_J1_6	1	0.39	2120.5	-4054.1
## + V17_J2_5	1	0.39	2120.5	-4054.0
## + V13_1_J1_6	1	0.38	2120.5	-4054.0
## + V4_J1_1	1	0.38	2120.5	-4054.0
## + V13_2_J2_4	1	0.37	2120.5	-4054.0
## + V3_J1_1	1	0.32	2120.6	-4053.9
## + V13_1_J1_4	1	0.31	2120.6	-4053.9
## + V24_J1_3	1	0.30	2120.6	-4053.8
## + V16_J2_1	1	0.28	2120.6	-4053.8
## + V13_1_J2_3	1	0.28	2120.6	-4053.8
## + V24_J1_2	1	0.25	2120.6	-4053.7
## + V26_J1_7	1	0.23	2120.6	-4053.7
## + V19_J1_6	1	0.23	2120.7	-4053.7
## + V1_J2_4	1	0.20	2120.7	-4053.6
## + V17_J1_2	1	0.17	2120.7	-4053.5
## + V20_J2_4	1	0.17	2120.7	-4053.5
## + V24_J1_4	1	0.16	2120.7	-4053.5
## + V17_J1_1	1	0.14	2120.7	-4053.4
## + V16_J1_2	1	0.10	2120.8	-4053.3
## + V24_J2_1	1	0.09	2120.8	-4053.3
## + V13_2_J2_1	1	0.09	2120.8	-4053.3
## + V19_J1_7	1	0.09	2120.8	-4053.3
## + V2_J1_4	1	0.08	2120.8	-4053.3
## + V14_J1_3	1	0.07	2120.8	-4053.3
## + V19_J2_2	1	0.07	2120.8	-4053.3
## + V14_J1_6	1	0.06	2120.8	-4053.3
## + V2_J2_4	1	0.05	2120.8	-4053.2
## + V13_3_J1_4	1	0.04	2120.8	-4053.2
## + V24_J2_4	1	0.04	2120.8	-4053.2
## + V5_J1_1	1	0.03	2120.8	-4053.2
## + V30_J1_7	1	0.03	2120.9	-4053.2
## + V29_J2_5	1	0.03	2120.9	-4053.2
## + V16_J1_4	1	0.03	2120.9	-4053.2
## + V17_J1_4	1	0.02	2120.9	-4053.1
## + V20_J1_7	1	0.02	2120.9	-4053.1
## + V23_J1_1	1	0.02	2120.9	-4053.1
## + V13_3_J2_3	1	0.02	2120.9	-4053.1

## + V1_J2_1	1	0.01	2120.9	-4053.1
## + V13_3_J1_7	1	0.01	2120.9	-4053.1
## + V1_J1_6	1	0.01	2120.9	-4053.1
## + V13_3_J2_1	1	0.01	2120.9	-4053.1
## + V17_J2_3	1	0.00	2120.9	-4053.1
## + V23_J1_6	1	0.00	2120.9	-4053.1
## + V16_J1_5	1	0.00	2120.9	-4053.1
## + V13_1_J1_1	1	0.00	2120.9	-4053.1
## + V24_J2_2	1	0.00	2120.9	-4053.1
## - V12_1_2_J1_2	1	25.40	2146.3	-4004.5
## - V4_J1_5	1	28.20	2149.1	-3997.7
## - V2_J2_2	1	29.32	2150.2	-3995.0
## - V15_J1_6	1	30.12	2151.0	-3993.0
## - V14_J2_4	1	31.75	2152.6	-3989.1
## - V4_J1_4	1	34.13	2155.0	-3983.4
## - V30_J1_2	1	34.64	2155.5	-3982.1
## - V26_J1_5	1	37.87	2158.7	-3974.3
## - V19_J2_5	1	37.98	2158.9	-3974.1
## - V19_J2_4	1	39.48	2160.4	-3970.5
## - V16_J1_3	1	39.60	2160.5	-3970.2
## - V5_J1_4	1	43.29	2164.2	-3961.3
## - V15_J1_7	1	44.37	2165.3	-3958.7
## - V13_2_J1_7	1	46.03	2166.9	-3954.7
## - V17_J2_7	1	46.07	2166.9	-3954.6
## - V30_J1_1	1	46.61	2167.5	-3953.3
## - V30_J1_3	1	46.61	2167.5	-3953.3
## - V3_J1_5	1	46.69	2167.6	-3953.1
## - V1_J1_3	1	51.29	2172.2	-3942.1
## - V19_J2_1	1	51.63	2172.5	-3941.3
## - V26_J1_4	1	52.77	2173.6	-3938.6
## - V14_J2_3	1	55.54	2176.4	-3931.9
## - V5_J2_1	1	56.38	2177.3	-3929.9
## - V23_J1_3	1	61.53	2182.4	-3917.6
## - V15_J1_3	1	63.49	2184.4	-3913.0
## - V1_J2_7	1	64.28	2185.2	-3911.1
## - V1_J2_2	1	65.00	2185.9	-3909.4
## - V2_J1_3	1	68.83	2189.7	-3900.3
## - V17_J2_2	1	70.78	2191.7	-3895.7
## - V12_1_2_J1_4	1	71.90	2192.8	-3893.0
## - V17_J1_3	1	72.69	2193.6	-3891.1
## - V14_J1_4	1	73.92	2194.8	-3888.2
## - V14_J1_5	1	79.41	2200.3	-3875.2
## - V5_J2_3	1	81.64	2202.5	-3870.0
## - V4_J2_5	1	94.37	2215.3	-3840.0
## - V3_J1_4	1	95.65	2216.5	-3837.0
## - V19_J2_3	1	100.60	2221.5	-3825.4
## - V15_J2_2	1	103.81	2224.7	-3817.9
## - V30_J2_2	1	105.88	2226.8	-3813.0
## - V4_J2_1	1	107.65	2228.5	-3808.9
## - V4_J2_3	1	112.42	2233.3	-3797.8
## - V3_J2_1	1	125.48	2246.4	-3767.5
## - V15_J2_7	1	126.23	2247.1	-3765.7
## - V5_J1_5	1	139.03	2259.9	-3736.2
## - V12_1_2_J2_2	1	139.18	2260.1	-3735.9

```

## - V4_J2_4      1      139.18 2260.1 -3735.9
## - V3_J2_5      1      144.97 2265.9 -3722.5
## - V26_J2_1     1      148.65 2269.5 -3714.1
## - V19_J1_5     1      164.47 2285.3 -3678.0
## - V19_J1_4     1      190.66 2311.5 -3618.7
## - V26_J2_5     1      191.61 2312.5 -3616.6
## - V26_J2_4     1      193.95 2314.8 -3611.3
## - V3_J2_4      1      209.78 2330.7 -3575.9
## - V3_J2_3      1      219.61 2340.5 -3554.0
## - V20_J2_2     1      247.88 2368.8 -3491.6
## - V5_J2_5      1      284.81 2405.7 -3411.1
## - V5_J2_4      1      320.84 2441.7 -3333.8
## - V26_J2_3     1      382.21 2503.1 -3204.7
## - V16_J2_2     1      412.14 2533.0 -3142.9
## - J            12      724.06 2844.9 -2612.1
## - V            19     1199.86 3320.7 -1854.3
##
## Step:  AIC=-4113.15
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1
##
##
##           Df Sum of Sq    RSS      AIC
## + V14_J2_5    1      25.29 2071.2 -4169.6
## + V30_J2_5    1      24.41 2072.1 -4167.4
## + V15_J1_2     1      23.32 2073.2 -4164.7
## + V13_1_J1_3   1      21.99 2074.5 -4161.4
## + V4_J2_7      1      20.71 2075.8 -4158.1
## + V16_J2_7     1      20.03 2076.5 -4156.4
## + V20_J2_3     1      19.44 2077.1 -4154.9
## + V15_J1_5     1      18.45 2078.1 -4152.5
## + V2_J2_7      1      18.16 2078.4 -4151.8
## + V29_J1_3     1      17.88 2078.6 -4151.0
## + V15_J1_1     1      17.38 2079.2 -4149.8
## + V12_1_2_J1_3 1      16.99 2079.5 -4148.8
## + V24_J2_5     1      15.91 2080.6 -4146.1
## + V20_J2_1     1      15.86 2080.7 -4146.0
## + V13_2_J1_5   1      14.45 2082.1 -4142.5
## + V23_J2_7     1      14.16 2082.4 -4141.7
## + V13_1_J1_5   1      12.72 2083.8 -4138.2
## + V13_1_J1_2   1      12.64 2083.9 -4137.9
## + V13_1_J1_7   1      12.47 2084.1 -4137.5
## + V16_J2_3     1      12.21 2084.3 -4136.9
## + V20_J1_3     1      12.10 2084.4 -4136.6
## + V30_J1_5     1      11.68 2084.8 -4135.6
## + V20_J2_7     1      11.34 2085.2 -4134.7

```

## + V24_J1_6	1	11.23	2085.3	-4134.4
## + V23_J2_1	1	11.06	2085.5	-4134.0
## + V30_J1_6	1	10.57	2086.0	-4132.8
## + V12_1_2_J2_5	1	10.49	2086.0	-4132.6
## + V24_J1_7	1	10.36	2086.2	-4132.3
## + V12_1_2_J1_7	1	10.24	2086.3	-4132.0
## + V15_J1_4	1	9.53	2087.0	-4130.2
## + V1_J2_5	1	9.47	2087.1	-4130.1
## + V29_J1_5	1	9.28	2087.2	-4129.6
## + V24_J1_5	1	8.89	2087.6	-4128.6
## + V12_1_2_J1_6	1	8.50	2088.0	-4127.6
## + V13_2_J2_7	1	8.49	2088.0	-4127.6
## + V29_J1_7	1	8.02	2088.5	-4126.4
## + V13_3_J2_5	1	7.23	2089.3	-4124.5
## + V17_J1_5	1	6.96	2089.6	-4123.8
## + V14_J1_2	1	6.72	2089.8	-4123.2
## + V12_1_2_J2_7	1	6.44	2090.1	-4122.5
## + V23_J1_4	1	6.32	2090.2	-4122.2
## + V5_J2_7	1	6.30	2090.2	-4122.2
## + V12_1_2_J2_3	1	6.10	2090.4	-4121.7
## + V12_1_2_J1_5	1	6.09	2090.4	-4121.6
## + V4_J1_3	1	5.95	2090.6	-4121.3
## + V15_J2_5	1	5.89	2090.6	-4121.1
## + V5_J1_6	1	5.67	2090.9	-4120.6
## + V16_J2_4	1	5.52	2091.0	-4120.2
## + V13_2_J1_4	1	5.51	2091.0	-4120.2
## + V29_J1_1	1	5.45	2091.1	-4120.0
## + V19_J1_1	1	5.41	2091.1	-4120.0
## + V13_2_J1_6	1	5.35	2091.2	-4119.8
## + V13_2_J1_3	1	5.22	2091.3	-4119.5
## + V1_J1_5	1	5.20	2091.3	-4119.4
## + V13_3_J2_7	1	5.12	2091.4	-4119.2
## + V13_3_J1_2	1	4.98	2091.5	-4118.9
## + V29_J2_3	1	4.97	2091.6	-4118.9
## + V12_1_2_J2_4	1	4.87	2091.7	-4118.6
## + V24_J2_3	1	4.85	2091.7	-4118.6
## + V30_J1_4	1	4.73	2091.8	-4118.3
## + V30_J2_4	1	4.68	2091.8	-4118.1
## + V24_J1_1	1	4.60	2091.9	-4117.9
## + V13_1_J2_4	1	4.60	2091.9	-4117.9
## + V29_J2_2	1	4.35	2092.2	-4117.3
## + V24_J2_7	1	4.28	2092.2	-4117.1
## + V26_J1_3	1	4.26	2092.3	-4117.1
## + V20_J1_4	1	4.24	2092.3	-4117.0
## + V2_J1_5	1	4.17	2092.4	-4116.9
## + V13_2_J1_2	1	4.14	2092.4	-4116.8
## + V26_J1_6	1	4.13	2092.4	-4116.8
## + V1_J1_7	1	3.95	2092.6	-4116.3
## + V13_2_J2_5	1	3.93	2092.6	-4116.3
## + V26_J2_2	1	3.87	2092.7	-4116.1
## + V20_J1_2	1	3.79	2092.7	-4115.9
## + V16_J1_7	1	3.76	2092.8	-4115.9
## + V23_J2_3	1	3.69	2092.8	-4115.7
## + V4_J1_6	1	3.49	2093.0	-4115.2

## + V17_J2_1	1	3.38	2093.1	-4114.9
## + V1_J1_1	1	3.35	2093.2	-4114.8
## + V16_J1_6	1	3.32	2093.2	-4114.7
## + V29_J2_1	1	3.31	2093.2	-4114.7
## + V2_J1_6	1	3.24	2093.3	-4114.5
## + V4_J1_2	1	3.09	2093.4	-4114.2
## + V29_J2_7	1	3.07	2093.5	-4114.1
## + V29_J1_4	1	2.87	2093.7	-4113.6
## + V5_J1_2	1	2.83	2093.7	-4113.5
## + V5_J1_3	1	2.72	2093.8	-4113.3
## <none>			2096.5	-4113.1
## + V15_J2_1	1	2.65	2093.9	-4113.1
## + V29_J1_6	1	2.60	2093.9	-4113.0
## + V20_J1_1	1	2.58	2093.9	-4112.9
## + V16_J1_1	1	2.55	2094.0	-4112.8
## + V12_1_2_J2_1	1	2.51	2094.0	-4112.7
## + V19_J2_7	1	2.47	2094.1	-4112.6
## + V13_3_J1_3	1	2.37	2094.2	-4112.4
## + V15_J2_4	1	2.35	2094.2	-4112.4
## + V13_1_J2_5	1	2.35	2094.2	-4112.3
## + V13_3_J1_6	1	2.35	2094.2	-4112.3
## + V13_3_J2_4	1	2.34	2094.2	-4112.3
## + V14_J2_2	1	2.33	2094.2	-4112.3
## + V4_J1_7	1	2.30	2094.2	-4112.2
## + V23_J2_5	1	1.95	2094.6	-4111.3
## + V13_1_J2_2	1	1.72	2094.8	-4110.8
## + V13_2_J2_3	1	1.69	2094.8	-4110.7
## + V26_J1_1	1	1.67	2094.9	-4110.7
## + V4_J2_2	1	1.51	2095.0	-4110.3
## + V13_2_J2_2	1	1.47	2095.1	-4110.2
## + V17_J1_7	1	1.45	2095.1	-4110.1
## + V20_J1_6	1	1.44	2095.1	-4110.1
## + V16_J2_5	1	1.39	2095.1	-4110.0
## + V30_J2_1	1	1.37	2095.2	-4109.9
## + V30_J2_3	1	1.33	2095.2	-4109.8
## + V3_J2_7	1	1.27	2095.3	-4109.7
## + V17_J2_4	1	1.26	2095.3	-4109.6
## + V23_J1_2	1	1.22	2095.3	-4109.5
## + V23_J2_4	1	1.21	2095.3	-4109.5
## + V13_3_J1_5	1	1.19	2095.3	-4109.5
## + V3_J1_2	1	1.19	2095.3	-4109.5
## + V3_J1_7	1	1.17	2095.4	-4109.4
## + V1_J2_3	1	1.08	2095.4	-4109.2
## + V26_J2_7	1	1.05	2095.5	-4109.1
## + V13_1_J2_7	1	1.00	2095.5	-4109.0
## + V2_J2_5	1	0.98	2095.5	-4108.9
## + V19_J1_3	1	0.87	2095.7	-4108.7
## + V13_1_J2_1	1	0.85	2095.7	-4108.6
## + V23_J2_2	1	0.83	2095.7	-4108.6
## + V23_J1_5	1	0.78	2095.7	-4108.5
## + V29_J2_4	1	0.77	2095.8	-4108.4
## + V29_J1_2	1	0.77	2095.8	-4108.4
## + V16_J2_1	1	0.77	2095.8	-4108.4
## + V5_J1_7	1	0.76	2095.8	-4108.4

## + V1_J1_2	1	0.75	2095.8	-4108.4
## + V26_J1_2	1	0.71	2095.8	-4108.3
## + V12_1_2_J1_1	1	0.70	2095.8	-4108.3
## + V3_J1_3	1	0.68	2095.8	-4108.2
## + V20_J2_5	1	0.66	2095.9	-4108.1
## + V13_3_J2_2	1	0.59	2095.9	-4108.0
## + V5_J2_2	1	0.58	2095.9	-4108.0
## + V2_J1_2	1	0.58	2095.9	-4107.9
## + V13_3_J1_1	1	0.55	2096.0	-4107.9
## + V20_J1_5	1	0.53	2096.0	-4107.8
## + V2_J2_3	1	0.48	2096.0	-4107.7
## + V3_J2_2	1	0.48	2096.1	-4107.7
## + V3_J1_6	1	0.47	2096.1	-4107.7
## + V23_J1_7	1	0.47	2096.1	-4107.7
## + V2_J1_1	1	0.46	2096.1	-4107.7
## + V13_2_J1_1	1	0.45	2096.1	-4107.6
## + V24_J2_1	1	0.44	2096.1	-4107.6
## + V13_1_J1_6	1	0.43	2096.1	-4107.6
## + V2_J1_7	1	0.43	2096.1	-4107.6
## + V15_J2_3	1	0.43	2096.1	-4107.6
## + V19_J1_2	1	0.43	2096.1	-4107.6
## + V13_2_J2_1	1	0.42	2096.1	-4107.6
## + V1_J1_4	1	0.42	2096.1	-4107.5
## + V2_J2_1	1	0.41	2096.1	-4107.5
## + V30_J2_7	1	0.41	2096.1	-4107.5
## + V13_2_J2_4	1	0.38	2096.1	-4107.5
## + V14_J1_7	1	0.38	2096.2	-4107.4
## + V4_J1_1	1	0.36	2096.2	-4107.4
## + V14_J2_7	1	0.36	2096.2	-4107.4
## + V3_J1_1	1	0.34	2096.2	-4107.3
## + V17_J2_5	1	0.32	2096.2	-4107.3
## + V17_J1_6	1	0.32	2096.2	-4107.3
## + V13_1_J1_4	1	0.30	2096.2	-4107.2
## + V13_1_J2_3	1	0.27	2096.3	-4107.2
## + V24_J1_3	1	0.23	2096.3	-4107.1
## + V17_J1_2	1	0.23	2096.3	-4107.1
## + V26_J1_7	1	0.22	2096.3	-4107.1
## + V19_J1_6	1	0.22	2096.3	-4107.1
## + V1_J2_4	1	0.21	2096.3	-4107.0
## + V1_J2_1	1	0.20	2096.3	-4107.0
## + V24_J1_2	1	0.20	2096.3	-4107.0
## + V20_J2_4	1	0.17	2096.4	-4106.9
## + V24_J1_4	1	0.17	2096.4	-4106.9
## + V14_J1_1	1	0.15	2096.4	-4106.9
## + V14_J1_6	1	0.14	2096.4	-4106.8
## + V14_J1_3	1	0.11	2096.4	-4106.8
## + V17_J1_1	1	0.10	2096.4	-4106.8
## + V19_J1_7	1	0.08	2096.4	-4106.7
## + V2_J1_4	1	0.08	2096.4	-4106.7
## + V13_3_J2_1	1	0.08	2096.4	-4106.7
## + V19_J2_2	1	0.08	2096.4	-4106.7
## + V16_J1_2	1	0.07	2096.5	-4106.7
## + V2_J2_4	1	0.05	2096.5	-4106.6
## + V29_J2_5	1	0.04	2096.5	-4106.6

## + V13_3_J1_4	1	0.04	2096.5	-4106.6
## + V5_J1_1	1	0.04	2096.5	-4106.6
## + V24_J2_4	1	0.03	2096.5	-4106.6
## + V1_J1_6	1	0.03	2096.5	-4106.6
## + V16_J1_4	1	0.03	2096.5	-4106.6
## + V13_3_J1_7	1	0.02	2096.5	-4106.6
## + V17_J1_4	1	0.02	2096.5	-4106.6
## + V13_3_J2_3	1	0.02	2096.5	-4106.6
## + V30_J1_7	1	0.01	2096.5	-4106.5
## + V23_J1_1	1	0.01	2096.5	-4106.5
## + V20_J1_7	1	0.01	2096.5	-4106.5
## + V17_J2_3	1	0.00	2096.5	-4106.5
## + V24_J2_2	1	0.00	2096.5	-4106.5
## + V16_J1_5	1	0.00	2096.5	-4106.5
## + V13_1_J1_1	1	0.00	2096.5	-4106.5
## + V23_J1_6	1	0.00	2096.5	-4106.5
## - V14_J2_1	1	24.35	2120.9	-4059.7
## - V12_1_2_J1_2	1	25.88	2122.4	-4056.0
## - V2_J2_2	1	28.50	2125.0	-4049.6
## - V4_J1_5	1	28.77	2125.3	-4048.9
## - V15_J1_6	1	30.84	2127.4	-4043.9
## - V4_J1_4	1	34.74	2131.3	-4034.3
## - V30_J1_2	1	35.34	2131.9	-4032.9
## - V14_J2_4	1	37.94	2134.5	-4026.5
## - V19_J2_5	1	38.17	2134.7	-4026.0
## - V26_J1_5	1	38.52	2135.0	-4025.1
## - V16_J1_3	1	38.72	2135.2	-4024.6
## - V19_J2_4	1	40.14	2136.7	-4021.2
## - V5_J1_4	1	43.99	2140.5	-4011.8
## - V17_J2_7	1	45.27	2141.8	-4008.7
## - V15_J1_7	1	45.27	2141.8	-4008.7
## - V13_2_J1_7	1	45.46	2142.0	-4008.2
## - V30_J1_3	1	45.51	2142.0	-4008.1
## - V30_J1_1	1	47.39	2143.9	-4003.5
## - V3_J1_5	1	47.41	2143.9	-4003.5
## - V1_J1_3	1	50.21	2146.7	-3996.7
## - V26_J1_4	1	53.53	2150.1	-3988.7
## - V19_J2_1	1	56.41	2152.9	-3981.7
## - V23_J1_3	1	60.52	2157.0	-3971.8
## - V5_J2_1	1	61.35	2157.9	-3969.8
## - V1_J2_7	1	63.33	2159.9	-3965.0
## - V14_J2_3	1	63.45	2160.0	-3964.7
## - V1_J2_2	1	63.69	2160.2	-3964.2
## - V15_J1_3	1	64.87	2161.4	-3961.3
## - V2_J1_3	1	67.66	2164.2	-3954.6
## - V17_J2_2	1	69.41	2165.9	-3950.4
## - V17_J1_3	1	71.40	2167.9	-3945.6
## - V12_1_2_J1_4	1	71.90	2168.4	-3944.4
## - V5_J2_3	1	82.59	2179.1	-3918.9
## - V14_J1_4	1	82.85	2179.4	-3918.2
## - V14_J1_5	1	88.64	2185.2	-3904.4
## - V4_J2_5	1	94.68	2191.2	-3890.1
## - V3_J1_4	1	96.68	2193.2	-3885.4
## - V19_J2_3	1	101.65	2198.2	-3873.6

```

## - V30_J2_2      1      104.10 2200.6 -3867.8
## - V15_J2_2      1      105.67 2202.2 -3864.1
## - V4_J2_3       1      113.53 2210.1 -3845.5
## - V4_J2_1       1      114.33 2210.9 -3843.7
## - V15_J2_7      1      127.82 2224.3 -3812.0
## - V3_J2_1       1      132.64 2229.2 -3800.8
## - V12_1_2_J2_2  1      137.42 2233.9 -3789.6
## - V5_J1_5       1      140.27 2236.8 -3783.0
## - V4_J2_4       1      140.41 2236.9 -3782.7
## - V3_J2_5       1      145.35 2241.9 -3771.2
## - V26_J2_1      1      156.38 2252.9 -3745.7
## - V19_J1_5      1      165.81 2262.3 -3724.0
## - V26_J2_5      1      192.05 2288.6 -3664.0
## - V19_J1_4      1      192.10 2288.6 -3663.9
## - V26_J2_4      1      195.40 2291.9 -3656.4
## - V3_J2_4       1      211.29 2307.8 -3620.5
## - V3_J2_3       1      221.16 2317.7 -3598.3
## - V20_J2_2      1      245.63 2342.2 -3543.7
## - V5_J2_5       1      285.34 2381.9 -3456.3
## - V5_J2_4       1      322.70 2419.2 -3375.3
## - V26_J2_3      1      384.24 2480.8 -3244.7
## - V16_J2_2      1      408.98 2505.5 -3193.1
## - J             12      738.56 2835.1 -2623.4
## - V             19     1216.95 3313.5 -1859.1
##
## Step:  AIC=-4169.63
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5
##
##
##           Df Sum of Sq    RSS      AIC
## + V15_J1_2      1      24.25 2047.0 -4224.2
## + V13_1_J1_3     1      22.76 2048.5 -4220.5
## + V30_J2_5       1      21.28 2050.0 -4216.7
## + V4_J2_7        1      20.74 2050.5 -4215.3
## + V20_J2_3       1      19.48 2051.7 -4212.1
## + V16_J2_7       1      19.38 2051.8 -4211.9
## + V24_J2_5       1      19.03 2052.2 -4211.0
## + V15_J1_5       1      18.20 2053.0 -4208.9
## + V15_J1_1       1      18.15 2053.1 -4208.8
## + V2_J2_7        1      17.55 2053.7 -4207.2
## + V29_J1_3       1      17.21 2054.0 -4206.4
## + V12_1_2_J1_3   1      16.23 2055.0 -4203.9
## + V20_J2_1       1      15.90 2055.3 -4203.1
## + V13_2_J1_5     1      14.51 2056.7 -4199.6
## + V23_J2_7       1      13.68 2057.5 -4197.5

```


## + V13_1_J1_5	1	12.82	2058.4	-4195.3
## + V20_J1_3	1	12.72	2058.5	-4195.0
## + V13_1_J1_2	1	12.28	2059.0	-4193.9
## + V16_J2_3	1	12.19	2059.0	-4193.7
## + V13_1_J1_7	1	12.11	2059.1	-4193.5
## + V30_J1_5	1	11.80	2059.4	-4192.7
## + V20_J2_7	1	11.78	2059.5	-4192.7
## + V1_J2_5	1	11.76	2059.5	-4192.6
## + V24_J1_6	1	11.56	2059.7	-4192.1
## + V23_J2_1	1	11.02	2060.2	-4190.7
## + V24_J1_7	1	10.70	2060.5	-4189.9
## + V30_J1_6	1	10.07	2061.2	-4188.3
## + V12_1_2_J1_7	1	9.83	2061.4	-4187.7
## + V15_J1_4	1	9.35	2061.9	-4186.5
## + V29_J1_5	1	9.21	2062.0	-4186.2
## + V24_J1_5	1	8.97	2062.3	-4185.6
## + V13_2_J2_7	1	8.86	2062.4	-4185.3
## + V12_1_2_J2_5	1	8.37	2062.9	-4184.0
## + V12_1_2_J1_6	1	8.14	2063.1	-4183.5
## + V29_J1_7	1	7.73	2063.5	-4182.4
## + V15_J2_5	1	7.63	2063.6	-4182.2
## + V17_J1_5	1	7.02	2064.2	-4180.6
## + V23_J1_4	1	6.35	2064.9	-4179.0
## + V5_J2_7	1	6.28	2065.0	-4178.8
## + V12_1_2_J2_3	1	6.10	2065.1	-4178.3
## + V12_1_2_J1_5	1	6.09	2065.1	-4178.3
## + V12_1_2_J2_7	1	6.09	2065.1	-4178.3
## + V4_J1_3	1	5.85	2065.4	-4177.7
## + V5_J1_6	1	5.73	2065.5	-4177.4
## + V13_2_J1_3	1	5.62	2065.6	-4177.1
## + V13_2_J1_6	1	5.60	2065.6	-4177.1
## + V16_J2_4	1	5.53	2065.7	-4176.9
## + V13_2_J2_5	1	5.51	2065.7	-4176.8
## + V19_J1_1	1	5.47	2065.8	-4176.8
## + V13_2_J1_4	1	5.47	2065.8	-4176.7
## + V13_3_J2_5	1	5.44	2065.8	-4176.7
## + V13_3_J2_7	1	5.39	2065.8	-4176.5
## + V1_J1_5	1	5.25	2066.0	-4176.2
## + V29_J1_1	1	5.23	2066.0	-4176.1
## + V29_J2_3	1	4.91	2066.3	-4175.3
## + V12_1_2_J2_4	1	4.87	2066.4	-4175.2
## + V24_J2_3	1	4.80	2066.4	-4175.1
## + V13_3_J1_2	1	4.75	2066.5	-4174.9
## + V29_J2_2	1	4.73	2066.5	-4174.9
## + V30_J1_4	1	4.65	2066.6	-4174.7
## + V30_J2_4	1	4.60	2066.6	-4174.6
## + V13_1_J2_4	1	4.55	2066.7	-4174.4
## + V24_J2_7	1	4.52	2066.7	-4174.4
## + V24_J1_1	1	4.40	2066.8	-4174.1
## + V1_J1_7	1	4.25	2067.0	-4173.7
## + V20_J1_4	1	4.22	2067.0	-4173.6
## + V2_J1_5	1	4.18	2067.0	-4173.5
## + V26_J1_3	1	4.18	2067.1	-4173.5
## + V26_J1_6	1	4.08	2067.2	-4173.2

## + V16_J1_7	1	4.03	2067.2	-4173.1
## + V13_2_J1_2	1	3.92	2067.3	-4172.8
## + V26_J2_2	1	3.76	2067.5	-4172.4
## + V23_J2_3	1	3.67	2067.6	-4172.2
## + V14_J1_2	1	3.57	2067.7	-4172.0
## + V20_J1_2	1	3.57	2067.7	-4172.0
## + V16_J1_6	1	3.55	2067.7	-4171.9
## + V2_J1_6	1	3.47	2067.8	-4171.7
## + V4_J1_6	1	3.45	2067.8	-4171.7
## + V17_J2_1	1	3.35	2067.9	-4171.4
## + V29_J2_7	1	3.27	2068.0	-4171.2
## + V29_J2_1	1	3.26	2068.0	-4171.2
## + V1_J1_1	1	3.10	2068.1	-4170.8
## + V4_J1_2	1	3.06	2068.2	-4170.7
## + V5_J1_2	1	2.86	2068.4	-4170.2
## + V29_J1_4	1	2.83	2068.4	-4170.1
## + V5_J1_3	1	2.78	2068.4	-4170.0
## + V20_J1_1	1	2.76	2068.5	-4169.9
## + V16_J1_1	1	2.75	2068.5	-4169.9
## + V15_J2_1	1	2.75	2068.5	-4169.9
## <none>			2071.2	-4169.6
## + V13_3_J1_3	1	2.62	2068.6	-4169.6
## + V12_1_2_J2_1	1	2.51	2068.7	-4169.3
## + V19_J2_7	1	2.45	2068.8	-4169.2
## + V29_J1_6	1	2.44	2068.8	-4169.1
## + V13_3_J2_4	1	2.38	2068.9	-4169.0
## + V4_J1_7	1	2.27	2069.0	-4168.7
## + V15_J2_4	1	2.27	2069.0	-4168.7
## + V13_3_J1_6	1	2.20	2069.0	-4168.5
## + V13_2_J2_3	1	1.71	2069.5	-4167.3
## + V13_2_J2_2	1	1.71	2069.5	-4167.3
## + V17_J1_7	1	1.64	2069.6	-4167.1
## + V26_J1_1	1	1.64	2069.6	-4167.1
## + V4_J2_2	1	1.58	2069.7	-4167.0
## + V13_1_J2_2	1	1.50	2069.7	-4166.8
## + V13_1_J2_5	1	1.38	2069.9	-4166.5
## + V30_J2_3	1	1.37	2069.9	-4166.4
## + V23_J1_2	1	1.35	2069.9	-4166.4
## + V30_J2_1	1	1.33	2069.9	-4166.3
## + V20_J1_6	1	1.30	2069.9	-4166.3
## + V3_J2_7	1	1.26	2070.0	-4166.2
## + V17_J2_4	1	1.24	2070.0	-4166.1
## + V13_3_J1_5	1	1.22	2070.0	-4166.1
## + V14_J1_6	1	1.22	2070.0	-4166.1
## + V23_J2_4	1	1.20	2070.0	-4166.0
## + V3_J1_7	1	1.19	2070.0	-4166.0
## + V3_J1_2	1	1.17	2070.1	-4165.9
## + V13_1_J2_7	1	1.12	2070.1	-4165.8
## + V14_J1_3	1	1.10	2070.1	-4165.8
## + V23_J2_5	1	1.08	2070.1	-4165.7
## + V1_J2_3	1	1.06	2070.2	-4165.7
## + V26_J2_7	1	1.05	2070.2	-4165.6
## + V1_J1_2	1	0.89	2070.3	-4165.2
## + V17_J2_5	1	0.84	2070.4	-4165.1

## + V19_J1_3	1	0.83	2070.4	-4165.1
## + V13_1_J2_1	1	0.83	2070.4	-4165.1
## + V12_1_2_J1_1	1	0.81	2070.4	-4165.0
## + V29_J2_4	1	0.80	2070.4	-4165.0
## + V23_J1_5	1	0.80	2070.4	-4165.0
## + V16_J2_1	1	0.77	2070.5	-4164.9
## + V5_J1_7	1	0.75	2070.5	-4164.9
## + V26_J1_2	1	0.73	2070.5	-4164.8
## + V3_J1_3	1	0.71	2070.5	-4164.8
## + V14_J2_2	1	0.70	2070.5	-4164.8
## + V16_J2_5	1	0.69	2070.5	-4164.7
## + V29_J1_2	1	0.69	2070.5	-4164.7
## + V2_J1_2	1	0.68	2070.5	-4164.7
## + V23_J2_2	1	0.67	2070.6	-4164.7
## + V13_3_J1_1	1	0.63	2070.6	-4164.6
## + V5_J2_2	1	0.54	2070.7	-4164.3
## + V20_J1_5	1	0.52	2070.7	-4164.3
## + V13_1_J1_6	1	0.50	2070.7	-4164.2
## + V3_J1_6	1	0.49	2070.7	-4164.2
## + V2_J2_3	1	0.47	2070.8	-4164.2
## + V15_J2_3	1	0.47	2070.8	-4164.2
## + V13_3_J2_2	1	0.46	2070.8	-4164.1
## + V24_J2_1	1	0.45	2070.8	-4164.1
## + V3_J2_2	1	0.44	2070.8	-4164.1
## + V13_2_J2_1	1	0.44	2070.8	-4164.1
## + V1_J1_4	1	0.43	2070.8	-4164.1
## + V2_J2_1	1	0.42	2070.8	-4164.0
## + V19_J1_2	1	0.41	2070.8	-4164.0
## + V2_J2_5	1	0.41	2070.8	-4164.0
## + V23_J1_7	1	0.39	2070.8	-4164.0
## + V13_2_J2_4	1	0.39	2070.8	-4164.0
## + V13_2_J1_1	1	0.39	2070.8	-4164.0
## + V2_J1_1	1	0.38	2070.9	-4164.0
## + V3_J1_1	1	0.35	2070.9	-4163.9
## + V4_J1_1	1	0.35	2070.9	-4163.9
## + V2_J1_7	1	0.35	2070.9	-4163.9
## + V30_J2_7	1	0.31	2070.9	-4163.8
## + V17_J1_2	1	0.31	2070.9	-4163.8
## + V13_1_J1_4	1	0.28	2070.9	-4163.7
## + V13_1_J2_3	1	0.25	2071.0	-4163.6
## + V17_J1_6	1	0.24	2071.0	-4163.6
## + V1_J2_4	1	0.22	2071.0	-4163.6
## + V26_J1_7	1	0.22	2071.0	-4163.5
## + V20_J2_5	1	0.21	2071.0	-4163.5
## + V19_J1_6	1	0.21	2071.0	-4163.5
## + V1_J2_1	1	0.20	2071.0	-4163.5
## + V20_J2_4	1	0.18	2071.1	-4163.4
## + V24_J1_4	1	0.18	2071.1	-4163.4
## + V24_J1_3	1	0.16	2071.1	-4163.4
## + V24_J1_2	1	0.16	2071.1	-4163.4
## + V14_J1_1	1	0.12	2071.1	-4163.3
## + V19_J2_2	1	0.10	2071.1	-4163.2
## + V13_3_J2_1	1	0.09	2071.1	-4163.2
## + V2_J1_4	1	0.08	2071.1	-4163.2

## + V19_J1_7	1	0.08	2071.2	-4163.2
## + V17_J1_1	1	0.06	2071.2	-4163.1
## + V1_J1_6	1	0.06	2071.2	-4163.1
## + V2_J2_4	1	0.05	2071.2	-4163.1
## + V5_J1_1	1	0.04	2071.2	-4163.1
## + V13_3_J1_7	1	0.04	2071.2	-4163.1
## + V16_J1_2	1	0.04	2071.2	-4163.1
## + V13_3_J1_4	1	0.03	2071.2	-4163.1
## + V24_J2_4	1	0.03	2071.2	-4163.1
## + V16_J1_4	1	0.03	2071.2	-4163.1
## + V29_J2_5	1	0.03	2071.2	-4163.1
## + V17_J1_4	1	0.02	2071.2	-4163.1
## + V13_3_J2_3	1	0.02	2071.2	-4163.1
## + V24_J2_2	1	0.02	2071.2	-4163.0
## + V14_J2_7	1	0.01	2071.2	-4163.0
## + V14_J1_7	1	0.01	2071.2	-4163.0
## + V23_J1_6	1	0.00	2071.2	-4163.0
## + V13_1_J1_1	1	0.00	2071.2	-4163.0
## + V17_J2_3	1	0.00	2071.2	-4163.0
## + V16_J1_5	1	0.00	2071.2	-4163.0
## + V23_J1_1	1	0.00	2071.2	-4163.0
## + V20_J1_7	1	0.00	2071.2	-4163.0
## + V30_J1_7	1	0.00	2071.2	-4163.0
## - V14_J2_5	1	25.29	2096.5	-4113.1
## - V12_1_2_J1_2	1	26.44	2097.7	-4110.3
## - V2_J2_2	1	27.57	2098.8	-4107.5
## - V4_J1_5	1	29.42	2100.7	-4102.9
## - V14_J2_1	1	30.69	2101.9	-4099.8
## - V15_J1_6	1	31.68	2102.9	-4097.3
## - V4_J1_4	1	35.46	2106.7	-4088.0
## - V30_J1_2	1	36.16	2107.4	-4086.3
## - V16_J1_3	1	37.71	2108.9	-4082.5
## - V26_J1_5	1	39.28	2110.5	-4078.6
## - V19_J2_4	1	40.92	2112.1	-4074.5
## - V19_J2_5	1	42.46	2113.7	-4070.7
## - V30_J1_3	1	44.26	2115.5	-4066.3
## - V17_J2_7	1	44.34	2115.6	-4066.1
## - V5_J1_4	1	44.80	2116.0	-4065.0
## - V13_2_J1_7	1	44.81	2116.0	-4065.0
## - V14_J2_4	1	45.63	2116.9	-4063.0
## - V15_J1_7	1	46.32	2117.6	-4061.2
## - V3_J1_5	1	48.25	2119.5	-4056.5
## - V30_J1_1	1	48.31	2119.5	-4056.4
## - V1_J1_3	1	48.97	2120.2	-4054.7
## - V26_J1_4	1	54.42	2125.7	-4041.4
## - V19_J2_1	1	57.32	2128.6	-4034.3
## - V23_J1_3	1	59.36	2130.6	-4029.3
## - V1_J2_2	1	62.19	2133.4	-4022.4
## - V1_J2_7	1	62.23	2133.5	-4022.3
## - V5_J2_1	1	62.31	2133.5	-4022.1
## - V2_J1_3	1	66.32	2137.5	-4012.4
## - V15_J1_3	1	66.48	2137.7	-4012.0
## - V17_J2_2	1	67.84	2139.1	-4008.7
## - V17_J1_3	1	69.92	2141.2	-4003.6

```

## - V12_1_2_J1_4 1 71.90 2143.1 -3998.8
## - V14_J2_3 1 73.03 2144.3 -3996.1
## - V5_J2_3 1 83.70 2154.9 -3970.3
## - V14_J1_4 1 93.54 2164.8 -3946.6
## - V3_J1_4 1 97.87 2169.1 -3936.2
## - V14_J1_5 1 99.66 2170.9 -3931.9
## - V4_J2_5 1 101.20 2172.4 -3928.2
## - V30_J2_2 1 102.05 2173.3 -3926.2
## - V19_J2_3 1 102.88 2174.1 -3924.2
## - V15_J2_2 1 107.84 2179.1 -3912.3
## - V4_J2_3 1 114.83 2186.1 -3895.7
## - V4_J2_1 1 115.63 2186.9 -3893.8
## - V15_J2_7 1 129.66 2200.9 -3860.5
## - V3_J2_1 1 134.04 2205.3 -3850.2
## - V12_1_2_J2_2 1 135.39 2206.6 -3847.0
## - V5_J1_5 1 141.70 2212.9 -3832.2
## - V4_J2_4 1 141.85 2213.1 -3831.8
## - V3_J2_5 1 153.27 2224.5 -3805.1
## - V26_J2_1 1 157.89 2229.1 -3794.2
## - V19_J1_5 1 167.37 2238.6 -3772.2
## - V19_J1_4 1 193.77 2265.0 -3711.2
## - V26_J2_4 1 197.09 2268.3 -3703.6
## - V26_J2_5 1 201.00 2272.2 -3694.7
## - V3_J2_4 1 213.04 2284.3 -3667.2
## - V3_J2_3 1 222.95 2294.2 -3644.6
## - V20_J2_2 1 243.03 2314.3 -3599.3
## - V5_J2_5 1 295.97 2367.2 -3481.7
## - V5_J2_4 1 324.86 2396.1 -3418.6
## - V26_J2_3 1 386.59 2457.8 -3286.4
## - V16_J2_2 1 405.32 2476.6 -3246.9
## - J 12 747.18 2818.4 -2647.5
## - V 19 1237.63 3308.9 -1859.7
##
## Step: AIC=-4224.24
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2
##
## Df Sum of Sq RSS AIC
## + V15_J1_1 1 25.49 2021.5 -4282.8
## + V13_1_J1_3 1 22.97 2024.0 -4276.3
## + V4_J2_7 1 21.10 2025.9 -4271.5
## + V30_J2_5 1 21.05 2025.9 -4271.4
## + V20_J2_3 1 20.00 2027.0 -4268.7
## + V24_J2_5 1 19.56 2027.4 -4267.5
## + V16_J2_7 1 19.23 2027.8 -4266.7

```

## + V2_J2_7	1	17.40	2029.6	-4262.0
## + V29_J1_3	1	17.03	2030.0	-4261.1
## + V20_J2_1	1	16.37	2030.6	-4259.4
## + V12_1_2_J1_3	1	15.84	2031.1	-4258.0
## + V13_2_J1_5	1	14.96	2032.0	-4255.8
## + V23_J2_7	1	13.57	2033.4	-4252.2
## + V13_1_J1_5	1	13.25	2033.7	-4251.4
## + V15_J1_5	1	12.96	2034.0	-4250.6
## + V20_J1_3	1	12.89	2034.1	-4250.5
## + V16_J2_3	1	12.59	2034.4	-4249.7
## + V1_J2_5	1	12.14	2034.8	-4248.5
## + V13_1_J1_7	1	12.02	2035.0	-4248.2
## + V20_J2_7	1	11.89	2035.1	-4247.9
## + V30_J1_5	1	11.64	2035.3	-4247.3
## + V24_J1_6	1	11.64	2035.3	-4247.3
## + V24_J1_7	1	10.78	2036.2	-4245.1
## + V23_J2_1	1	10.65	2036.3	-4244.7
## + V13_1_J1_2	1	10.31	2036.7	-4243.9
## + V30_J1_6	1	9.77	2037.2	-4242.5
## + V12_1_2_J1_7	1	9.59	2037.4	-4242.0
## + V24_J1_5	1	9.33	2037.7	-4241.4
## + V13_2_J2_7	1	8.94	2038.0	-4240.4
## + V29_J1_5	1	8.85	2038.1	-4240.1
## + V12_1_2_J2_5	1	8.18	2038.8	-4238.4
## + V12_1_2_J1_6	1	7.93	2039.1	-4237.8
## + V29_J1_7	1	7.67	2039.3	-4237.1
## + V17_J1_5	1	6.73	2040.2	-4234.7
## + V23_J1_4	1	6.66	2040.3	-4234.5
## + V5_J2_7	1	6.09	2040.9	-4233.1
## + V4_J1_3	1	6.00	2041.0	-4232.9
## + V12_1_2_J2_3	1	5.94	2041.0	-4232.7
## + V12_1_2_J1_5	1	5.93	2041.1	-4232.7
## + V5_J1_6	1	5.92	2041.1	-4232.7
## + V12_1_2_J2_7	1	5.89	2041.1	-4232.6
## + V19_J1_1	1	5.85	2041.1	-4232.5
## + V13_2_J2_5	1	5.79	2041.2	-4232.3
## + V13_2_J1_3	1	5.73	2041.3	-4232.2
## + V15_J2_1	1	5.69	2041.3	-4232.1
## + V15_J1_4	1	5.66	2041.3	-4232.0
## + V13_2_J1_6	1	5.66	2041.3	-4232.0
## + V13_3_J2_7	1	5.45	2041.5	-4231.5
## + V29_J1_1	1	5.35	2041.6	-4231.2
## + V16_J2_4	1	5.27	2041.7	-4231.0
## + V13_2_J1_4	1	5.19	2041.8	-4230.8
## + V13_3_J2_5	1	5.17	2041.8	-4230.8
## + V1_J1_5	1	5.00	2042.0	-4230.3
## + V29_J2_2	1	4.84	2042.1	-4229.9
## + V30_J1_4	1	4.77	2042.2	-4229.7
## + V12_1_2_J2_4	1	4.73	2042.3	-4229.6
## + V30_J2_4	1	4.71	2042.3	-4229.6
## + V29_J2_3	1	4.65	2042.3	-4229.4
## + V14_J1_2	1	4.62	2042.4	-4229.4
## + V24_J2_7	1	4.58	2042.4	-4229.2
## + V24_J2_3	1	4.54	2042.4	-4229.2

## + V24_J1_1	1	4.51	2042.5	-4229.1
## + V15_J2_5	1	4.33	2042.6	-4228.6
## + V1_J1_7	1	4.33	2042.7	-4228.6
## + V26_J1_3	1	4.31	2042.7	-4228.6
## + V13_1_J2_4	1	4.30	2042.7	-4228.5
## + V16_J1_7	1	4.09	2042.9	-4228.0
## + V4_J1_2	1	4.03	2043.0	-4227.9
## + V20_J1_4	1	3.97	2043.0	-4227.7
## + V2_J1_5	1	3.96	2043.0	-4227.7
## + V26_J1_6	1	3.92	2043.1	-4227.6
## + V26_J2_2	1	3.87	2043.1	-4227.4
## + V16_J1_6	1	3.61	2043.4	-4226.8
## + V13_3_J1_2	1	3.55	2043.4	-4226.6
## + V17_J2_1	1	3.55	2043.4	-4226.6
## + V2_J1_6	1	3.53	2043.4	-4226.6
## + V23_J2_3	1	3.45	2043.5	-4226.4
## + V29_J2_7	1	3.32	2043.7	-4226.0
## + V4_J1_6	1	3.30	2043.7	-4226.0
## + V1_J1_1	1	3.17	2043.8	-4225.7
## + V29_J2_1	1	3.05	2043.9	-4225.4
## + V13_2_J1_2	1	2.83	2044.2	-4224.8
## + V13_3_J1_3	1	2.69	2044.3	-4224.4
## + V20_J1_1	1	2.68	2044.3	-4224.4
## + V16_J1_1	1	2.68	2044.3	-4224.4
## + V5_J1_3	1	2.68	2044.3	-4224.4
## + V29_J1_4	1	2.63	2044.4	-4224.3
## <none>			2047.0	-4224.2
## + V13_3_J2_4	1	2.57	2044.4	-4224.1
## + V20_J1_2	1	2.53	2044.5	-4224.0
## + V29_J1_6	1	2.41	2044.6	-4223.7
## + V12_1_2_J2_1	1	2.41	2044.6	-4223.7
## + V19_J2_7	1	2.33	2044.6	-4223.5
## + V13_3_J1_6	1	2.17	2044.8	-4223.1
## + V4_J1_7	1	2.15	2044.8	-4223.1
## + V23_J1_2	1	2.14	2044.8	-4223.1
## + V5_J1_2	1	2.06	2044.9	-4222.9
## + V15_J2_3	1	1.96	2045.0	-4222.6
## + V13_2_J2_3	1	1.87	2045.1	-4222.4
## + V3_J1_2	1	1.80	2045.2	-4222.2
## + V13_2_J2_2	1	1.78	2045.2	-4222.1
## + V17_J1_7	1	1.69	2045.3	-4221.9
## + V1_J1_2	1	1.57	2045.4	-4221.6
## + V4_J2_2	1	1.51	2045.5	-4221.4
## + V26_J1_1	1	1.44	2045.5	-4221.3
## + V13_1_J2_2	1	1.44	2045.5	-4221.3
## + V30_J2_1	1	1.38	2045.6	-4221.1
## + V17_J2_4	1	1.36	2045.6	-4221.1
## + V13_3_J1_5	1	1.36	2045.6	-4221.1
## + V30_J2_3	1	1.31	2045.7	-4220.9
## + V14_J1_6	1	1.31	2045.7	-4220.9
## + V2_J1_2	1	1.29	2045.7	-4220.9
## + V3_J1_7	1	1.28	2045.7	-4220.9
## + V20_J1_6	1	1.27	2045.7	-4220.8
## + V13_1_J2_5	1	1.24	2045.7	-4220.8

## + V1_J2_3	1	1.18	2045.8	-4220.6
## + V3_J2_7	1	1.18	2045.8	-4220.6
## + V14_J1_3	1	1.17	2045.8	-4220.6
## + V13_1_J2_7	1	1.15	2045.8	-4220.5
## + V23_J2_4	1	1.07	2045.9	-4220.3
## + V26_J2_7	1	0.97	2046.0	-4220.1
## + V23_J2_5	1	0.97	2046.0	-4220.1
## + V17_J2_5	1	0.94	2046.0	-4220.0
## + V29_J2_4	1	0.91	2046.1	-4219.9
## + V23_J1_5	1	0.90	2046.1	-4219.9
## + V19_J1_3	1	0.89	2046.1	-4219.9
## + V16_J2_1	1	0.87	2046.1	-4219.8
## + V19_J1_2	1	0.81	2046.2	-4219.7
## + V12_1_2_J1_1	1	0.81	2046.2	-4219.7
## + V17_J1_2	1	0.74	2046.2	-4219.5
## + V13_1_J2_1	1	0.72	2046.3	-4219.4
## + V5_J1_7	1	0.68	2046.3	-4219.3
## + V3_J1_3	1	0.66	2046.3	-4219.3
## + V14_J2_2	1	0.66	2046.3	-4219.3
## + V15_J2_4	1	0.66	2046.3	-4219.3
## + V23_J2_2	1	0.62	2046.4	-4219.2
## + V16_J2_5	1	0.60	2046.4	-4219.1
## + V13_3_J1_1	1	0.59	2046.4	-4219.1
## + V5_J2_2	1	0.58	2046.4	-4219.1
## + V2_J2_3	1	0.55	2046.4	-4219.0
## + V3_J1_6	1	0.55	2046.4	-4219.0
## + V24_J2_1	1	0.54	2046.4	-4219.0
## + V13_2_J2_1	1	0.52	2046.5	-4218.9
## + V13_1_J1_6	1	0.51	2046.5	-4218.9
## + V3_J2_2	1	0.47	2046.5	-4218.8
## + V13_2_J2_4	1	0.47	2046.5	-4218.8
## + V3_J1_1	1	0.45	2046.5	-4218.8
## + V20_J1_5	1	0.44	2046.5	-4218.7
## + V13_3_J2_2	1	0.43	2046.6	-4218.7
## + V13_2_J1_1	1	0.42	2046.6	-4218.7
## + V2_J1_1	1	0.41	2046.6	-4218.6
## + V23_J1_7	1	0.38	2046.6	-4218.6
## + V1_J1_4	1	0.36	2046.6	-4218.5
## + V26_J1_2	1	0.36	2046.6	-4218.5
## + V2_J2_1	1	0.35	2046.6	-4218.5
## + V2_J2_5	1	0.34	2046.6	-4218.5
## + V2_J1_7	1	0.33	2046.7	-4218.4
## + V29_J1_2	1	0.28	2046.7	-4218.3
## + V4_J1_1	1	0.26	2046.7	-4218.3
## + V30_J2_7	1	0.25	2046.7	-4218.3
## + V1_J2_1	1	0.25	2046.7	-4218.2
## + V24_J1_4	1	0.23	2046.7	-4218.2
## + V20_J2_4	1	0.23	2046.8	-4218.2
## + V17_J1_6	1	0.23	2046.8	-4218.2
## + V13_1_J1_4	1	0.22	2046.8	-4218.2
## + V13_1_J2_3	1	0.20	2046.8	-4218.1
## + V26_J1_7	1	0.18	2046.8	-4218.1
## + V14_J1_1	1	0.18	2046.8	-4218.1
## + V1_J2_4	1	0.17	2046.8	-4218.0

## + V19_J1_6	1	0.17	2046.8	-4218.0
## + V20_J2_5	1	0.16	2046.8	-4218.0
## + V24_J1_3	1	0.14	2046.8	-4218.0
## + V13_3_J2_1	1	0.13	2046.9	-4217.9
## + V5_J1_1	1	0.08	2046.9	-4217.8
## + V19_J2_2	1	0.08	2046.9	-4217.8
## + V2_J2_4	1	0.08	2046.9	-4217.8
## + V17_J1_1	1	0.07	2046.9	-4217.8
## + V1_J1_6	1	0.06	2046.9	-4217.8
## + V19_J1_7	1	0.06	2046.9	-4217.8
## + V2_J1_4	1	0.05	2046.9	-4217.7
## + V29_J2_5	1	0.05	2046.9	-4217.7
## + V13_3_J1_7	1	0.05	2046.9	-4217.7
## + V13_3_J2_3	1	0.05	2046.9	-4217.7
## + V24_J2_2	1	0.03	2047.0	-4217.7
## + V14_J2_7	1	0.02	2047.0	-4217.7
## + V14_J1_7	1	0.02	2047.0	-4217.7
## + V13_3_J1_4	1	0.01	2047.0	-4217.6
## + V16_J1_2	1	0.01	2047.0	-4217.6
## + V24_J2_4	1	0.01	2047.0	-4217.6
## + V16_J1_4	1	0.01	2047.0	-4217.6
## + V24_J1_2	1	0.01	2047.0	-4217.6
## + V17_J2_3	1	0.01	2047.0	-4217.6
## + V17_J1_4	1	0.01	2047.0	-4217.6
## + V23_J1_6	1	0.01	2047.0	-4217.6
## + V23_J1_1	1	0.00	2047.0	-4217.6
## + V30_J1_7	1	0.00	2047.0	-4217.6
## + V13_1_J1_1	1	0.00	2047.0	-4217.6
## + V16_J1_5	1	0.00	2047.0	-4217.6
## + V20_J1_7	1	0.00	2047.0	-4217.6
## - V15_J1_2	1	24.25	2071.2	-4169.6
## - V14_J2_5	1	26.22	2073.2	-4164.7
## - V2_J2_2	1	27.30	2074.3	-4162.0
## - V12_1_2_J1_2	1	29.31	2076.3	-4156.9
## - V4_J1_5	1	30.42	2077.4	-4154.2
## - V14_J2_1	1	31.71	2078.7	-4150.9
## - V4_J1_4	1	36.58	2083.6	-4138.8
## - V16_J1_3	1	37.44	2084.4	-4136.6
## - V15_J1_6	1	38.66	2085.6	-4133.6
## - V30_J1_2	1	39.56	2086.5	-4131.3
## - V26_J1_5	1	40.43	2087.4	-4129.2
## - V19_J2_4	1	42.09	2089.1	-4125.0
## - V30_J1_3	1	43.61	2090.6	-4121.2
## - V19_J2_5	1	43.66	2090.6	-4121.1
## - V17_J2_7	1	44.12	2091.1	-4120.0
## - V13_2_J1_7	1	44.65	2091.6	-4118.7
## - V5_J1_4	1	46.05	2093.0	-4115.2
## - V14_J2_4	1	46.87	2093.8	-4113.2
## - V30_J1_1	1	48.42	2095.4	-4109.3
## - V1_J1_3	1	48.65	2095.6	-4108.7
## - V3_J1_5	1	49.52	2096.5	-4106.6
## - V15_J1_7	1	54.54	2101.5	-4094.1
## - V26_J1_4	1	55.80	2102.8	-4091.0
## - V19_J2_1	1	58.71	2105.7	-4083.8

```

## - V23_J1_3      1      59.05 2106.0 -4083.0
## - V1_J2_2       1      61.77 2108.7 -4076.3
## - V1_J2_7       1      61.97 2108.9 -4075.8
## - V5_J2_1       1      63.76 2110.7 -4071.4
## - V2_J1_3       1      65.96 2112.9 -4066.0
## - V17_J2_2      1      67.40 2114.4 -4062.4
## - V17_J1_3      1      69.53 2116.5 -4057.2
## - V12_1_2_J1_4  1      72.41 2119.4 -4050.1
## - V14_J2_3      1      74.59 2121.6 -4044.8
## - V15_J1_3      1      76.07 2123.0 -4041.1
## - V5_J2_3       1      85.37 2132.3 -4018.4
## - V14_J1_4      1      95.34 2142.3 -3994.2
## - V3_J1_4       1      99.71 2146.7 -3983.6
## - V30_J2_2      1     101.00 2148.0 -3980.4
## - V14_J1_5      1     101.48 2148.5 -3979.3
## - V4_J2_5       1     103.03 2150.0 -3975.5
## - V19_J2_3      1     104.73 2151.7 -3971.4
## - V4_J2_3       1     116.78 2163.8 -3942.4
## - V4_J2_1       1     117.58 2164.6 -3940.4
## - V15_J2_2      1     119.57 2166.6 -3935.7
## - V12_1_2_J2_2  1     134.36 2181.3 -3900.3
## - V3_J2_1       1     136.14 2183.1 -3896.1
## - V15_J2_7      1     142.27 2189.2 -3881.5
## - V5_J1_5       1     143.86 2190.8 -3877.7
## - V4_J2_4       1     144.01 2191.0 -3877.3
## - V3_J2_5       1     155.51 2202.5 -3850.1
## - V26_J2_1      1     160.17 2207.1 -3839.1
## - V19_J1_5      1     169.70 2216.7 -3816.7
## - V19_J1_4      1     196.33 2243.3 -3754.6
## - V26_J2_4      1     199.62 2246.6 -3747.0
## - V26_J2_5      1     203.55 2250.5 -3737.9
## - V3_J2_4       1     215.67 2262.7 -3710.0
## - V3_J2_3       1     225.64 2272.6 -3687.1
## - V20_J2_2      1     242.30 2289.3 -3649.2
## - V5_J2_5       1     299.05 2346.0 -3521.8
## - V5_J2_4       1     328.09 2375.1 -3457.8
## - V26_J2_3      1     390.10 2437.1 -3323.8
## - V16_J2_2      1     404.30 2451.3 -3293.6
## - J             12     722.43 2769.4 -2732.1
## - V             19    1251.30 3298.3 -1869.7
##
## Step:  AIC=-4282.76
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1
##

```

##		Df	Sum of Sq	RSS	AIC
##	+ V13_1_J1_3	1	23.23	1998.3	-4336.2
##	+ V4_J2_7	1	21.50	2000.0	-4331.7
##	+ V30_J2_5	1	20.80	2000.7	-4329.9
##	+ V20_J2_3	1	20.60	2000.9	-4329.4
##	+ V24_J2_5	1	20.17	2001.3	-4328.3
##	+ V16_J2_7	1	19.03	2002.5	-4325.3
##	+ V2_J2_7	1	17.21	2004.3	-4320.6
##	+ V20_J2_1	1	16.91	2004.6	-4319.8
##	+ V29_J1_3	1	16.81	2004.7	-4319.5
##	+ V12_1_2_J1_3	1	15.64	2005.9	-4316.5
##	+ V13_2_J1_5	1	15.49	2006.0	-4316.1
##	+ V13_1_J1_5	1	13.75	2007.7	-4311.6
##	+ V23_J2_7	1	13.42	2008.1	-4310.8
##	+ V20_J1_3	1	13.11	2008.4	-4310.0
##	+ V16_J2_3	1	13.04	2008.5	-4309.8
##	+ V1_J2_5	1	12.57	2008.9	-4308.6
##	+ V20_J2_7	1	12.03	2009.5	-4307.2
##	+ V13_1_J1_7	1	11.91	2009.6	-4306.9
##	+ V24_J1_6	1	11.74	2009.8	-4306.4
##	+ V30_J1_5	1	11.45	2010.0	-4305.7
##	+ V24_J1_7	1	10.88	2010.6	-4304.2
##	+ V15_J2_1	1	10.76	2010.7	-4303.9
##	+ V23_J2_1	1	10.22	2011.3	-4302.5
##	+ V13_1_J1_2	1	10.19	2011.3	-4302.4
##	+ V24_J1_5	1	9.75	2011.7	-4301.3
##	+ V12_1_2_J1_7	1	9.51	2012.0	-4300.6
##	+ V30_J1_6	1	9.42	2012.1	-4300.4
##	+ V13_2_J2_7	1	9.06	2012.4	-4299.5
##	+ V29_J1_5	1	8.45	2013.0	-4297.9
##	+ V12_1_2_J1_6	1	7.86	2013.6	-4296.4
##	+ V15_J1_5	1	7.80	2013.7	-4296.2
##	+ V12_1_2_J2_5	1	7.77	2013.7	-4296.2
##	+ V29_J1_7	1	7.58	2013.9	-4295.7
##	+ V23_J1_4	1	7.04	2014.5	-4294.2
##	+ V17_J1_5	1	6.42	2015.1	-4292.7
##	+ V4_J1_3	1	6.17	2015.3	-4292.0
##	+ V5_J1_6	1	6.15	2015.3	-4292.0
##	+ V13_2_J2_5	1	6.12	2015.4	-4291.9
##	+ V5_J2_7	1	5.88	2015.6	-4291.3
##	+ V13_2_J1_3	1	5.87	2015.6	-4291.2
##	+ V12_1_2_J2_7	1	5.82	2015.7	-4291.1
##	+ V13_2_J1_6	1	5.74	2015.8	-4290.9
##	+ V12_1_2_J2_3	1	5.60	2015.9	-4290.5
##	+ V12_1_2_J1_5	1	5.59	2015.9	-4290.5
##	+ V13_3_J2_7	1	5.53	2016.0	-4290.4
##	+ V15_J2_3	1	5.20	2016.3	-4289.5
##	+ V16_J2_4	1	4.98	2016.5	-4289.0
##	+ V29_J2_2	1	4.97	2016.5	-4288.9
##	+ V30_J1_4	1	4.92	2016.6	-4288.8
##	+ V13_3_J2_5	1	4.86	2016.6	-4288.6
##	+ V13_2_J1_4	1	4.86	2016.6	-4288.6
##	+ V30_J2_4	1	4.83	2016.7	-4288.6
##	+ V19_J1_1	1	4.77	2016.7	-4288.4

## + V1_J1_5	1	4.73	2016.8	-4288.3
## + V24_J2_7	1	4.65	2016.8	-4288.1
## + V26_J1_3	1	4.45	2017.0	-4287.6
## + V14_J1_2	1	4.44	2017.1	-4287.6
## + V1_J1_7	1	4.43	2017.1	-4287.5
## + V12_1_2_J2_4	1	4.42	2017.1	-4287.5
## + V29_J2_3	1	4.36	2017.1	-4287.4
## + V24_J2_3	1	4.26	2017.2	-4287.1
## + V16_J1_7	1	4.18	2017.3	-4286.9
## + V29_J1_1	1	4.11	2017.4	-4286.7
## + V13_1_J2_4	1	4.02	2017.5	-4286.5
## + V26_J2_2	1	3.99	2017.5	-4286.4
## + V4_J1_2	1	3.87	2017.6	-4286.1
## + V17_J2_1	1	3.78	2017.7	-4285.9
## + V16_J1_1	1	3.75	2017.7	-4285.8
## + V26_J1_6	1	3.74	2017.8	-4285.7
## + V20_J1_1	1	3.73	2017.8	-4285.7
## + V2_J1_5	1	3.71	2017.8	-4285.7
## + V20_J1_4	1	3.69	2017.8	-4285.6
## + V16_J1_6	1	3.69	2017.8	-4285.6
## + V2_J1_6	1	3.61	2017.9	-4285.4
## + V13_3_J1_2	1	3.48	2018.0	-4285.1
## + V29_J2_7	1	3.38	2018.1	-4284.8
## + V24_J1_1	1	3.38	2018.1	-4284.8
## + V23_J2_3	1	3.21	2018.3	-4284.4
## + V4_J1_6	1	3.13	2018.4	-4284.2
## + V29_J2_1	1	2.82	2018.7	-4283.4
## + V13_3_J2_4	1	2.79	2018.7	-4283.3
## + V13_3_J1_3	1	2.78	2018.7	-4283.3
## + V13_2_J1_2	1	2.76	2018.7	-4283.2
## <none>			2021.5	-4282.8
## + V5_J1_3	1	2.57	2018.9	-4282.7
## + V20_J1_2	1	2.46	2019.0	-4282.5
## + V15_J1_4	1	2.43	2019.1	-4282.4
## + V29_J1_4	1	2.39	2019.1	-4282.3
## + V29_J1_6	1	2.36	2019.1	-4282.2
## + V23_J1_2	1	2.21	2019.3	-4281.8
## + V19_J2_7	1	2.21	2019.3	-4281.8
## + V1_J1_1	1	2.20	2019.3	-4281.8
## + V12_1_2_J2_1	1	2.19	2019.3	-4281.8
## + V5_J1_2	1	2.18	2019.3	-4281.7
## + V13_3_J1_6	1	2.12	2019.4	-4281.6
## + V26_J1_1	1	2.07	2019.4	-4281.5
## + V13_2_J2_3	1	2.06	2019.4	-4281.4
## + V4_J1_7	1	2.02	2019.5	-4281.3
## + V13_2_J2_2	1	1.86	2019.6	-4280.9
## + V17_J1_7	1	1.75	2019.7	-4280.6
## + V3_J1_2	1	1.69	2019.8	-4280.5
## + V1_J1_2	1	1.64	2019.9	-4280.3
## + V15_J2_5	1	1.57	2019.9	-4280.1
## + V13_3_J1_5	1	1.52	2020.0	-4280.0
## + V17_J2_4	1	1.51	2020.0	-4280.0
## + V30_J2_1	1	1.45	2020.0	-4279.9
## + V4_J2_2	1	1.43	2020.1	-4279.8

## + V14_J1_6	1	1.42	2020.1	-4279.8
## + V12_1_2_J1_1	1	1.42	2020.1	-4279.8
## + V3_J1_7	1	1.38	2020.1	-4279.7
## + V13_1_J2_2	1	1.37	2020.1	-4279.6
## + V2_J1_2	1	1.34	2020.2	-4279.6
## + V1_J2_3	1	1.31	2020.2	-4279.5
## + V30_J2_3	1	1.25	2020.2	-4279.3
## + V14_J1_3	1	1.24	2020.3	-4279.3
## + V20_J1_6	1	1.23	2020.3	-4279.3
## + V13_1_J2_7	1	1.19	2020.3	-4279.2
## + V13_3_J1_1	1	1.11	2020.4	-4279.0
## + V13_1_J2_5	1	1.10	2020.4	-4278.9
## + V3_J2_7	1	1.08	2020.4	-4278.9
## + V17_J2_5	1	1.06	2020.4	-4278.9
## + V29_J2_4	1	1.04	2020.5	-4278.8
## + V23_J1_5	1	1.03	2020.5	-4278.8
## + V16_J2_1	1	0.99	2020.5	-4278.7
## + V19_J1_3	1	0.95	2020.5	-4278.6
## + V23_J2_4	1	0.94	2020.6	-4278.5
## + V26_J2_7	1	0.89	2020.6	-4278.4
## + V23_J2_5	1	0.84	2020.7	-4278.3
## + V17_J1_2	1	0.79	2020.7	-4278.2
## + V19_J1_2	1	0.74	2020.8	-4278.0
## + V2_J2_3	1	0.65	2020.8	-4277.8
## + V24_J2_1	1	0.64	2020.9	-4277.8
## + V5_J2_2	1	0.63	2020.9	-4277.7
## + V3_J1_6	1	0.62	2020.9	-4277.7
## + V13_2_J2_1	1	0.62	2020.9	-4277.7
## + V3_J1_3	1	0.61	2020.9	-4277.7
## + V13_1_J2_1	1	0.61	2020.9	-4277.7
## + V14_J2_2	1	0.61	2020.9	-4277.7
## + V5_J1_7	1	0.61	2020.9	-4277.7
## + V23_J2_2	1	0.57	2020.9	-4277.6
## + V13_2_J2_4	1	0.56	2020.9	-4277.6
## + V4_J1_1	1	0.56	2020.9	-4277.6
## + V13_1_J1_6	1	0.53	2021.0	-4277.5
## + V3_J2_2	1	0.52	2021.0	-4277.5
## + V16_J2_5	1	0.51	2021.0	-4277.4
## + V26_J1_2	1	0.41	2021.1	-4277.2
## + V13_3_J2_2	1	0.39	2021.1	-4277.1
## + V20_J1_5	1	0.36	2021.1	-4277.0
## + V23_J1_7	1	0.36	2021.1	-4277.0
## + V1_J2_1	1	0.31	2021.2	-4276.9
## + V24_J1_4	1	0.31	2021.2	-4276.9
## + V2_J1_7	1	0.30	2021.2	-4276.9
## + V20_J2_4	1	0.30	2021.2	-4276.9
## + V1_J1_4	1	0.28	2021.2	-4276.8
## + V2_J2_1	1	0.28	2021.2	-4276.8
## + V2_J2_5	1	0.27	2021.2	-4276.8
## + V29_J1_2	1	0.26	2021.2	-4276.8
## + V17_J1_6	1	0.21	2021.3	-4276.6
## + V30_J2_7	1	0.20	2021.3	-4276.6
## + V3_J1_1	1	0.19	2021.3	-4276.6
## + V13_3_J2_1	1	0.18	2021.3	-4276.6

## + V13_1_J1_4	1	0.16	2021.3	-4276.5
## + V26_J1_7	1	0.14	2021.4	-4276.5
## + V13_1_J2_3	1	0.14	2021.4	-4276.5
## + V19_J1_6	1	0.14	2021.4	-4276.5
## + V13_2_J1_1	1	0.13	2021.4	-4276.4
## + V1_J2_4	1	0.13	2021.4	-4276.4
## + V24_J1_3	1	0.12	2021.4	-4276.4
## + V2_J1_1	1	0.12	2021.4	-4276.4
## + V2_J2_4	1	0.11	2021.4	-4276.4
## + V20_J2_5	1	0.11	2021.4	-4276.4
## + V13_1_J1_1	1	0.10	2021.4	-4276.4
## + V29_J2_5	1	0.08	2021.4	-4276.3
## + V13_3_J2_3	1	0.08	2021.4	-4276.3
## + V1_J1_6	1	0.08	2021.4	-4276.3
## + V19_J2_2	1	0.06	2021.4	-4276.3
## + V23_J1_1	1	0.06	2021.4	-4276.3
## + V13_3_J1_7	1	0.05	2021.4	-4276.3
## + V14_J2_7	1	0.04	2021.5	-4276.2
## + V24_J2_2	1	0.04	2021.5	-4276.2
## + V14_J1_7	1	0.04	2021.5	-4276.2
## + V19_J1_7	1	0.04	2021.5	-4276.2
## + V14_J1_1	1	0.03	2021.5	-4276.2
## + V17_J2_3	1	0.03	2021.5	-4276.2
## + V2_J1_4	1	0.03	2021.5	-4276.2
## + V16_J1_2	1	0.02	2021.5	-4276.2
## + V30_J1_7	1	0.01	2021.5	-4276.1
## + V23_J1_6	1	0.01	2021.5	-4276.1
## + V24_J1_2	1	0.01	2021.5	-4276.1
## + V16_J1_5	1	0.01	2021.5	-4276.1
## + V5_J1_1	1	0.00	2021.5	-4276.1
## + V13_3_J1_4	1	0.00	2021.5	-4276.1
## + V24_J2_4	1	0.00	2021.5	-4276.1
## + V16_J1_4	1	0.00	2021.5	-4276.1
## + V15_J2_4	1	0.00	2021.5	-4276.1
## + V17_J1_1	1	0.00	2021.5	-4276.1
## + V17_J1_4	1	0.00	2021.5	-4276.1
## + V20_J1_7	1	0.00	2021.5	-4276.1
## - V15_J1_1	1	25.49	2047.0	-4224.2
## - V2_J2_2	1	26.99	2048.5	-4220.4
## - V14_J2_5	1	27.31	2048.8	-4219.6
## - V12_1_2_J1_2	1	29.46	2051.0	-4214.1
## - V15_J1_2	1	31.59	2053.1	-4208.8
## - V4_J1_5	1	31.59	2053.1	-4208.7
## - V14_J2_1	1	32.91	2054.4	-4205.4
## - V16_J1_3	1	37.10	2058.6	-4194.8
## - V4_J1_4	1	37.91	2059.4	-4192.8
## - V30_J1_2	1	40.20	2061.7	-4187.0
## - V26_J1_5	1	41.77	2063.3	-4183.0
## - V30_J1_3	1	42.85	2064.3	-4180.3
## - V19_J2_4	1	43.47	2065.0	-4178.8
## - V17_J2_7	1	43.83	2065.3	-4177.8
## - V13_2_J1_7	1	44.45	2065.9	-4176.3
## - V19_J2_5	1	45.06	2066.6	-4174.8
## - V5_J1_4	1	47.54	2069.0	-4168.5

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## - V15_J1_6      1      47.58 2069.1 -4168.4
## - V1_J1_3       1      48.23 2069.7 -4166.8
## - V14_J2_4      1      48.31 2069.8 -4166.6
## - V3_J1_5       1      51.01 2072.5 -4159.8
## - V30_J1_1      1      52.28 2073.8 -4156.6
## - V26_J1_4      1      57.44 2078.9 -4143.7
## - V23_J1_3      1      58.66 2080.2 -4140.6
## - V19_J2_1      1      60.32 2081.8 -4136.5
## - V1_J2_2       1      61.28 2082.8 -4134.1
## - V1_J2_7       1      61.63 2083.1 -4133.2
## - V15_J1_7      1      64.84 2086.3 -4125.2
## - V5_J2_1       1      65.44 2086.9 -4123.7
## - V2_J1_3       1      65.51 2087.0 -4123.6
## - V17_J2_2      1      66.89 2088.4 -4120.1
## - V17_J1_3      1      69.04 2090.5 -4114.8
## - V12_1_2_J1_4  1      73.50 2095.0 -4103.7
## - V14_J2_3      1      76.40 2097.9 -4096.5
## - V5_J2_3       1      87.30 2108.8 -4069.5
## - V15_J1_3      1      87.89 2109.4 -4068.1
## - V14_J1_4      1      97.46 2119.0 -4044.5
## - V30_J2_2      1      99.81 2121.3 -4038.8
## - V3_J1_4       1     101.88 2123.4 -4033.7
## - V14_J1_5      1     103.59 2125.1 -4029.5
## - V4_J2_5       1     105.15 2126.6 -4025.7
## - V19_J2_3      1     106.87 2128.4 -4021.5
## - V4_J2_3       1     119.03 2140.5 -3991.9
## - V4_J2_1       1     119.85 2141.3 -3989.9
## - V15_J2_2      1     133.71 2155.2 -3956.3
## - V12_1_2_J2_2  1     133.84 2155.3 -3956.0
## - V3_J2_1       1     138.57 2160.1 -3944.6
## - V5_J1_5       1     146.36 2167.9 -3925.9
## - V4_J2_4       1     146.51 2168.0 -3925.6
## - V15_J2_7      1     157.37 2178.9 -3899.6
## - V3_J2_5       1     158.10 2179.6 -3897.8
## - V26_J2_1      1     162.80 2184.3 -3886.6
## - V19_J1_5      1     172.41 2193.9 -3863.8
## - V19_J1_4      1     199.35 2220.8 -3800.3
## - V26_J2_4      1     202.55 2224.0 -3792.8
## - V26_J2_5      1     206.51 2228.0 -3783.6
## - V3_J2_4       1     218.71 2240.2 -3755.2
## - V3_J2_3       1     228.75 2250.2 -3731.9
## - V20_J2_2      1     241.45 2262.9 -3702.7
## - V5_J2_5       1     302.61 2324.1 -3564.0
## - V5_J2_4       1     331.81 2353.3 -3499.1
## - V26_J2_3      1     394.14 2415.6 -3363.1
## - V16_J2_2      1     403.11 2424.6 -3343.9
## - J             12     729.40 2750.9 -2760.3
## - V             19    1262.12 3283.6 -1886.3
##
## Step:  AIC=-4336.22
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##       V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##       V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##       V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +

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##      V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
##      V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
##      V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
##      V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
##      V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
##      V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
##      V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
##      V13_1_J1_3
##
##      Df Sum of Sq    RSS    AIC
## + V4_J2_7      1      22.09 1976.2 -4387.4
## + V20_J2_3      1      21.07 1977.2 -4384.7
## + V30_J2_5      1      20.71 1977.6 -4383.8
## + V24_J2_5      1      20.62 1977.6 -4383.5
## + V16_J2_7      1      18.86 1979.4 -4378.9
## + V20_J2_1      1      17.34 1980.9 -4374.9
## + V2_J2_7       1      17.06 1981.2 -4374.2
## + V20_J1_3      1      16.49 1981.8 -4372.7
## + V13_2_J1_5    1      15.91 1982.4 -4371.1
## + V29_J1_3      1      13.61 1984.7 -4365.1
## + V23_J2_7      1      13.30 1985.0 -4364.3
## + V16_J2_3      1      13.14 1985.1 -4363.9
## + V1_J2_5       1      12.65 1985.6 -4362.6
## + V12_1_2_J1_3  1      12.59 1985.7 -4362.4
## + V20_J2_7      1      11.89 1986.4 -4360.6
## + V24_J1_6      1      11.60 1986.7 -4359.9
## + V30_J1_5      1      11.38 1986.9 -4359.3
## + V13_1_J1_5    1      11.11 1987.2 -4358.6
## + V15_J2_1      1      10.76 1987.5 -4357.7
## + V24_J1_7      1      10.74 1987.5 -4357.6
## + V23_J2_1      1      10.13 1988.1 -4356.0
## + V24_J1_5      1      10.07 1988.2 -4355.9
## + V12_1_2_J1_7  1       9.70 1988.6 -4354.9
## + V13_1_J1_7    1       9.32 1988.9 -4353.9
## + V30_J1_6      1       9.29 1989.0 -4353.8
## + V13_2_J2_7    1       8.94 1989.3 -4352.9
## + V13_2_J1_3    1       8.17 1990.1 -4350.9
## + V29_J1_5      1       8.16 1990.1 -4350.9
## + V12_1_2_J1_6  1       8.03 1990.2 -4350.5
## + V15_J1_5      1       7.79 1990.5 -4349.9
## + V13_1_J1_2    1       7.79 1990.5 -4349.9
## + V29_J1_7      1       7.70 1990.6 -4349.7
## + V12_1_2_J2_5  1       7.44 1990.8 -4349.0
## + V23_J1_4      1       7.14 1991.1 -4348.2
## + V5_J1_6       1       6.48 1991.8 -4346.5
## + V13_2_J2_5    1       6.38 1991.9 -4346.2
## + V17_J1_5      1       6.36 1991.9 -4346.2
## + V12_1_2_J2_7  1       5.96 1992.3 -4345.1
## + V13_1_J2_4    1       5.75 1992.5 -4344.6
## + V13_2_J1_6    1       5.63 1992.6 -4344.3
## + V5_J2_7       1       5.57 1992.7 -4344.1
## + V13_3_J2_7    1       5.45 1992.8 -4343.8
## + V12_1_2_J2_3  1       5.32 1992.9 -4343.4
## + V12_1_2_J1_5  1       5.31 1993.0 -4343.4

```


## + V15_J2_3	1	5.20	1993.1	-4343.1
## + V19_J1_1	1	5.06	1993.2	-4342.8
## + V30_J1_4	1	4.98	1993.3	-4342.6
## + V16_J2_4	1	4.93	1993.3	-4342.4
## + V29_J2_2	1	4.89	1993.4	-4342.3
## + V30_J2_4	1	4.87	1993.4	-4342.3
## + V1_J1_5	1	4.68	1993.6	-4341.8
## + V13_3_J2_5	1	4.65	1993.6	-4341.7
## + V13_2_J1_4	1	4.62	1993.6	-4341.6
## + V24_J2_7	1	4.57	1993.7	-4341.5
## + V1_J1_7	1	4.50	1993.8	-4341.3
## + V13_3_J1_3	1	4.41	1993.9	-4341.1
## + V4_J1_3	1	4.39	1993.9	-4341.0
## + V26_J2_2	1	4.25	1994.0	-4340.7
## + V16_J1_7	1	4.24	1994.0	-4340.6
## + V29_J1_1	1	4.19	1994.1	-4340.5
## + V12_1_2_J2_4	1	4.17	1994.1	-4340.5
## + V14_J1_2	1	4.17	1994.1	-4340.4
## + V29_J2_3	1	4.16	1994.1	-4340.4
## + V24_J2_3	1	4.05	1994.2	-4340.1
## + V5_J1_3	1	4.02	1994.2	-4340.1
## + V17_J2_1	1	3.83	1994.4	-4339.6
## + V16_J1_1	1	3.82	1994.4	-4339.5
## + V16_J1_6	1	3.75	1994.5	-4339.4
## + V2_J1_6	1	3.67	1994.6	-4339.1
## + V2_J1_5	1	3.66	1994.6	-4339.1
## + V20_J1_1	1	3.66	1994.6	-4339.1
## + V4_J1_2	1	3.61	1994.7	-4339.0
## + V13_3_J1_2	1	3.56	1994.7	-4338.9
## + V26_J1_6	1	3.49	1994.8	-4338.7
## + V20_J1_4	1	3.48	1994.8	-4338.7
## + V24_J1_1	1	3.45	1994.8	-4338.6
## + V29_J2_7	1	3.32	1994.9	-4338.2
## + V23_J2_3	1	3.16	1995.1	-4337.8
## + V13_3_J2_4	1	2.96	1995.3	-4337.3
## + V26_J1_3	1	2.96	1995.3	-4337.3
## + V4_J1_6	1	2.91	1995.4	-4337.2
## + V13_2_J1_2	1	2.84	1995.4	-4337.0
## + V29_J2_1	1	2.65	1995.6	-4336.5
## <none>			1998.3	-4336.2
## + V20_J1_2	1	2.53	1995.7	-4336.2
## + V15_J1_4	1	2.44	1995.8	-4335.9
## + V29_J1_6	1	2.42	1995.8	-4335.9
## + V5_J1_2	1	2.38	1995.9	-4335.8
## + V13_1_J2_7	1	2.28	1996.0	-4335.5
## + V23_J1_2	1	2.25	1996.0	-4335.4
## + V29_J1_4	1	2.23	1996.0	-4335.4
## + V13_2_J2_3	1	2.21	1996.1	-4335.3
## + V13_3_J1_6	1	2.18	1996.1	-4335.3
## + V1_J1_1	1	2.15	1996.1	-4335.2
## + V13_1_J2_5	1	2.06	1996.2	-4335.0
## + V19_J2_7	1	2.02	1996.2	-4334.8
## + V12_1_2_J2_1	1	2.02	1996.2	-4334.8
## + V26_J1_1	1	1.89	1996.4	-4334.5

## + V4_J1_7	1	1.83	1996.4	-4334.4
## + V13_2_J2_2	1	1.81	1996.5	-4334.3
## + V17_J1_7	1	1.80	1996.5	-4334.3
## + V1_J1_2	1	1.68	1996.6	-4334.0
## + V13_3_J1_5	1	1.65	1996.6	-4333.9
## + V14_J1_6	1	1.58	1996.7	-4333.7
## + V15_J2_5	1	1.56	1996.7	-4333.7
## + V3_J1_7	1	1.55	1996.7	-4333.6
## + V17_J2_4	1	1.54	1996.7	-4333.6
## + V3_J1_2	1	1.52	1996.7	-4333.5
## + V30_J2_1	1	1.47	1996.8	-4333.4
## + V3_J1_3	1	1.39	1996.9	-4333.2
## + V2_J1_2	1	1.38	1996.9	-4333.2
## + V13_1_J2_1	1	1.37	1996.9	-4333.1
## + V12_1_2_J1_1	1	1.35	1996.9	-4333.1
## + V1_J2_3	1	1.34	1996.9	-4333.1
## + V13_1_J1_6	1	1.31	1997.0	-4333.0
## + V4_J2_2	1	1.29	1997.0	-4332.9
## + V20_J1_6	1	1.28	1997.0	-4332.9
## + V30_J2_3	1	1.23	1997.0	-4332.8
## + V29_J2_4	1	1.15	1997.1	-4332.6
## + V17_J2_5	1	1.09	1997.2	-4332.4
## + V13_3_J1_1	1	1.07	1997.2	-4332.4
## + V23_J1_5	1	1.06	1997.2	-4332.4
## + V16_J2_1	1	1.02	1997.2	-4332.2
## + V3_J2_7	1	0.96	1997.3	-4332.1
## + V23_J2_4	1	0.91	1997.4	-4332.0
## + V17_J1_2	1	0.82	1997.4	-4331.7
## + V23_J2_5	1	0.81	1997.5	-4331.7
## + V26_J2_7	1	0.77	1997.5	-4331.6
## + V5_J2_2	1	0.73	1997.5	-4331.5
## + V3_J1_6	1	0.73	1997.5	-4331.5
## + V24_J2_1	1	0.72	1997.5	-4331.5
## + V13_2_J2_1	1	0.70	1997.6	-4331.4
## + V2_J2_3	1	0.67	1997.6	-4331.3
## + V13_2_J2_4	1	0.64	1997.6	-4331.3
## + V19_J1_2	1	0.63	1997.6	-4331.2
## + V3_J2_2	1	0.61	1997.7	-4331.2
## + V13_1_J1_4	1	0.61	1997.7	-4331.2
## + V13_1_J2_3	1	0.58	1997.7	-4331.1
## + V13_1_J2_2	1	0.56	1997.7	-4331.1
## + V23_J2_2	1	0.55	1997.7	-4331.0
## + V13_1_J1_1	1	0.54	1997.7	-4331.0
## + V14_J1_3	1	0.52	1997.7	-4330.9
## + V14_J2_2	1	0.51	1997.8	-4330.9
## + V5_J1_7	1	0.51	1997.8	-4330.9
## + V26_J1_2	1	0.50	1997.8	-4330.9
## + V16_J2_5	1	0.49	1997.8	-4330.9
## + V4_J1_1	1	0.47	1997.8	-4330.8
## + V13_3_J2_2	1	0.41	1997.9	-4330.7
## + V24_J1_4	1	0.37	1997.9	-4330.6
## + V20_J2_4	1	0.36	1997.9	-4330.5
## + V19_J1_3	1	0.34	1997.9	-4330.5
## + V23_J1_7	1	0.34	1997.9	-4330.5

## + V1_J2_1	1	0.32	1997.9	-4330.4
## + V20_J1_5	1	0.30	1998.0	-4330.4
## + V2_J1_7	1	0.29	1998.0	-4330.3
## + V29_J1_2	1	0.28	1998.0	-4330.3
## + V1_J1_4	1	0.27	1998.0	-4330.3
## + V2_J2_1	1	0.26	1998.0	-4330.3
## + V2_J2_5	1	0.26	1998.0	-4330.3
## + V3_J1_1	1	0.25	1998.0	-4330.2
## + V13_3_J2_1	1	0.22	1998.0	-4330.2
## + V17_J1_6	1	0.19	1998.1	-4330.1
## + V30_J2_7	1	0.18	1998.1	-4330.1
## + V13_2_J1_1	1	0.14	1998.1	-4330.0
## + V2_J2_4	1	0.12	1998.1	-4329.9
## + V1_J2_4	1	0.12	1998.1	-4329.9
## + V29_J2_5	1	0.11	1998.2	-4329.9
## + V13_3_J2_3	1	0.11	1998.2	-4329.9
## + V2_J1_1	1	0.11	1998.2	-4329.9
## + V26_J1_7	1	0.10	1998.2	-4329.8
## + V19_J1_6	1	0.09	1998.2	-4329.8
## + V1_J1_6	1	0.09	1998.2	-4329.8
## + V20_J2_5	1	0.08	1998.2	-4329.8
## + V14_J1_7	1	0.07	1998.2	-4329.8
## + V14_J2_7	1	0.07	1998.2	-4329.8
## + V23_J1_1	1	0.06	1998.2	-4329.8
## + V14_J1_1	1	0.06	1998.2	-4329.8
## + V13_3_J1_7	1	0.04	1998.2	-4329.7
## + V19_J2_2	1	0.04	1998.2	-4329.7
## + V24_J2_2	1	0.03	1998.2	-4329.7
## + V17_J2_3	1	0.03	1998.2	-4329.7
## + V16_J1_2	1	0.02	1998.2	-4329.6
## + V2_J1_4	1	0.02	1998.2	-4329.6
## + V19_J1_7	1	0.02	1998.2	-4329.6
## + V5_J1_1	1	0.01	1998.3	-4329.6
## + V30_J1_7	1	0.01	1998.3	-4329.6
## + V24_J1_2	1	0.01	1998.3	-4329.6
## + V23_J1_6	1	0.01	1998.3	-4329.6
## + V16_J1_5	1	0.01	1998.3	-4329.6
## + V24_J1_3	1	0.01	1998.3	-4329.6
## + V17_J1_1	1	0.00	1998.3	-4329.6
## + V15_J2_4	1	0.00	1998.3	-4329.6
## + V16_J1_4	1	0.00	1998.3	-4329.6
## + V20_J1_7	1	0.00	1998.3	-4329.6
## + V17_J1_4	1	0.00	1998.3	-4329.6
## + V24_J2_4	1	0.00	1998.3	-4329.6
## + V13_3_J1_4	1	0.00	1998.3	-4329.6
## - V13_1_J1_3	1	23.23	2021.5	-4282.8
## - V15_J1_1	1	25.75	2024.0	-4276.3
## - V2_J2_2	1	26.82	2025.1	-4273.5
## - V14_J2_5	1	28.13	2026.4	-4270.2
## - V12_1_2_J1_2	1	29.18	2027.4	-4267.5
## - V15_J1_2	1	31.87	2030.1	-4260.6
## - V16_J1_3	1	32.27	2030.5	-4259.5
## - V4_J1_5	1	32.47	2030.7	-4259.0
## - V14_J2_1	1	33.80	2032.1	-4255.6

## - V30_J1_3	1	37.64	2035.9	-4245.8
## - V4_J1_4	1	38.92	2037.2	-4242.6
## - V30_J1_2	1	40.41	2038.7	-4238.7
## - V1_J1_3	1	42.67	2040.9	-4233.0
## - V26_J1_5	1	42.78	2041.0	-4232.7
## - V17_J2_7	1	43.60	2041.9	-4230.6
## - V19_J2_4	1	44.49	2042.8	-4228.4
## - V13_2_J1_7	1	44.72	2043.0	-4227.8
## - V19_J2_5	1	46.10	2044.4	-4224.3
## - V15_J1_6	1	47.93	2046.2	-4219.6
## - V5_J1_4	1	48.66	2046.9	-4217.8
## - V14_J2_4	1	49.39	2047.7	-4215.9
## - V3_J1_5	1	52.11	2050.4	-4209.0
## - V23_J1_3	1	52.47	2050.7	-4208.1
## - V30_J1_1	1	52.54	2050.8	-4207.9
## - V26_J1_4	1	58.67	2056.9	-4192.4
## - V2_J1_3	1	58.94	2057.2	-4191.7
## - V1_J2_2	1	60.99	2059.3	-4186.5
## - V1_J2_7	1	61.35	2059.6	-4185.6
## - V19_J2_1	1	61.53	2059.8	-4185.2
## - V17_J1_3	1	62.28	2060.5	-4183.3
## - V15_J1_7	1	65.23	2063.5	-4175.8
## - V17_J2_2	1	66.59	2064.9	-4172.4
## - V5_J2_1	1	66.69	2065.0	-4172.2
## - V12_1_2_J1_4	1	74.43	2072.7	-4152.7
## - V14_J2_3	1	77.75	2076.0	-4144.4
## - V5_J2_3	1	88.74	2087.0	-4116.9
## - V15_J1_3	1	94.72	2093.0	-4102.0
## - V14_J1_4	1	99.05	2097.3	-4091.3
## - V30_J2_2	1	99.41	2097.7	-4090.4
## - V3_J1_4	1	103.50	2101.8	-4080.3
## - V14_J1_5	1	105.15	2103.4	-4076.2
## - V4_J2_5	1	106.73	2105.0	-4072.3
## - V19_J2_3	1	108.46	2106.7	-4068.0
## - V4_J2_3	1	120.71	2119.0	-4037.9
## - V4_J2_1	1	121.53	2119.8	-4035.8
## - V15_J2_2	1	134.34	2132.6	-4004.5
## - V12_1_2_J2_2	1	134.35	2132.6	-4004.5
## - V3_J2_1	1	140.37	2138.6	-3989.8
## - V5_J1_5	1	148.21	2146.5	-3970.8
## - V4_J2_4	1	148.36	2146.6	-3970.4
## - V15_J2_7	1	158.04	2156.3	-3947.0
## - V3_J2_5	1	160.03	2158.3	-3942.3
## - V26_J2_1	1	164.75	2163.0	-3930.9
## - V19_J1_5	1	174.42	2172.7	-3907.7
## - V19_J1_4	1	201.60	2199.9	-3843.0
## - V26_J2_4	1	204.72	2203.0	-3835.7
## - V26_J2_5	1	208.70	2207.0	-3826.3
## - V3_J2_4	1	220.97	2219.2	-3797.5
## - V3_J2_3	1	231.05	2229.3	-3773.9
## - V20_J2_2	1	241.94	2240.2	-3748.6
## - V5_J2_5	1	305.25	2303.5	-3603.7
## - V5_J2_4	1	334.57	2332.8	-3537.9
## - V26_J2_3	1	397.14	2395.4	-3400.2

```

## - V16_J2_2      1      402.43 2400.7 -3388.8
## - J             12      752.52 2750.8 -2753.9
## - V             19     1236.03 3234.3 -1958.3
##
## Step:  AIC=-4387.4
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##      V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##      V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##      V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
##      V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
##      V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
##      V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
##      V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
##      V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
##      V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
##      V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
##      V13_1_J1_3 + V4_J2_7
##
##
##      Df Sum of Sq  RSS    AIC
## + V16_J2_7      1      21.43 1954.7 -4437.5
## + V20_J2_3      1      21.05 1955.1 -4436.5
## + V30_J2_5      1      20.91 1955.3 -4436.1
## + V24_J2_5      1      20.66 1955.5 -4435.4
## + V2_J2_7       1      19.49 1956.7 -4432.3
## + V20_J2_1      1      17.32 1958.8 -4426.6
## + V20_J1_3      1      17.10 1959.1 -4426.0
## + V13_2_J1_5    1      15.91 1960.3 -4422.8
## + V23_J2_7      1      15.50 1960.7 -4421.7
## + V29_J1_3      1      13.12 1963.1 -4415.4
## + V16_J2_3      1      13.08 1963.1 -4415.3
## + V1_J2_5       1      12.79 1963.4 -4414.5
## + V12_1_2_J1_3  1      12.03 1964.1 -4412.5
## + V24_J1_6      1      11.88 1964.3 -4412.1
## + V30_J1_5      1      11.53 1964.6 -4411.2
## + V13_1_J1_5    1      11.10 1965.1 -4410.1
## + V24_J1_7      1      11.03 1965.1 -4409.9
## + V15_J2_1      1      10.76 1965.4 -4409.2
## + V23_J2_1      1      10.14 1966.0 -4407.5
## + V24_J1_5      1      10.09 1966.1 -4407.4
## + V20_J2_7      1      10.06 1966.1 -4407.3
## + V12_1_2_J1_7  1       9.36 1966.8 -4405.5
## + V13_1_J1_7    1       9.02 1967.1 -4404.6
## + V30_J1_6      1       8.89 1967.3 -4404.2
## + V13_2_J1_3    1       8.58 1967.6 -4403.4
## + V4_J1_3       1       8.49 1967.7 -4403.1
## + V29_J1_5      1       8.14 1968.0 -4402.2
## + V15_J1_5      1       7.79 1968.4 -4401.3
## + V12_1_2_J1_6  1       7.73 1968.4 -4401.2
## + V13_1_J1_2    1       7.50 1968.7 -4400.5
## + V12_1_2_J2_5  1       7.48 1968.7 -4400.5
## + V29_J1_7      1       7.46 1968.7 -4400.4
## + V12_1_2_J2_7  1       7.43 1968.7 -4400.3
## + V13_2_J2_7    1       7.34 1968.8 -4400.1
## + V23_J1_4      1       7.13 1969.0 -4399.6

```

## + V13_2_J2_5	1	6.38	1969.8	-4397.6
## + V5_J1_6	1	6.28	1969.9	-4397.3
## + V17_J1_5	1	6.26	1969.9	-4397.3
## + V13_2_J1_6	1	5.84	1970.3	-4396.2
## + V13_1_J2_4	1	5.76	1970.4	-4395.9
## + V12_1_2_J2_3	1	5.35	1970.8	-4394.9
## + V12_1_2_J1_5	1	5.34	1970.8	-4394.8
## + V15_J2_3	1	5.20	1971.0	-4394.5
## + V29_J2_2	1	5.20	1971.0	-4394.5
## + V16_J2_4	1	4.96	1971.2	-4393.8
## + V30_J1_4	1	4.88	1971.3	-4393.6
## + V19_J1_1	1	4.87	1971.3	-4393.6
## + V30_J2_4	1	4.78	1971.4	-4393.4
## + V13_3_J1_3	1	4.70	1971.5	-4393.2
## + V13_3_J2_5	1	4.63	1971.5	-4393.0
## + V1_J1_7	1	4.62	1971.6	-4392.9
## + V13_2_J1_4	1	4.62	1971.6	-4392.9
## + V1_J1_5	1	4.60	1971.6	-4392.9
## + V16_J1_7	1	4.48	1971.7	-4392.6
## + V14_J1_2	1	4.36	1971.8	-4392.2
## + V5_J1_3	1	4.29	1971.9	-4392.1
## + V5_J2_7	1	4.26	1971.9	-4392.0
## + V12_1_2_J2_4	1	4.20	1972.0	-4391.8
## + V13_3_J2_7	1	4.20	1972.0	-4391.8
## + V29_J2_3	1	4.14	1972.0	-4391.7
## + V16_J1_1	1	4.04	1972.1	-4391.4
## + V24_J2_3	1	4.04	1972.1	-4391.4
## + V29_J1_1	1	4.01	1972.2	-4391.3
## + V26_J2_2	1	3.98	1972.2	-4391.2
## + V16_J1_6	1	3.96	1972.2	-4391.2
## + V17_J2_1	1	3.90	1972.3	-4391.1
## + V2_J1_6	1	3.88	1972.3	-4391.0
## + V20_J1_1	1	3.85	1972.3	-4390.9
## + V2_J1_5	1	3.69	1972.5	-4390.5
## + V26_J1_6	1	3.64	1972.5	-4390.3
## + V20_J1_4	1	3.49	1972.7	-4390.0
## + V24_J2_7	1	3.44	1972.7	-4389.8
## + V13_3_J1_2	1	3.38	1972.8	-4389.7
## + V24_J1_1	1	3.29	1972.9	-4389.4
## + V23_J2_3	1	3.16	1973.0	-4389.1
## + V13_3_J2_4	1	2.97	1973.2	-4388.6
## + V26_J1_3	1	2.73	1973.4	-4388.0
## + V13_2_J1_2	1	2.67	1973.5	-4387.8
## + V29_J2_1	1	2.64	1973.5	-4387.7
## <none>			1976.2	-4387.4
## + V15_J1_4	1	2.44	1973.7	-4387.2
## + V23_J1_2	1	2.41	1973.8	-4387.1
## + V20_J1_2	1	2.36	1973.8	-4387.0
## + V29_J2_7	1	2.36	1973.8	-4387.0
## + V29_J1_6	1	2.30	1973.9	-4386.8
## + V5_J1_2	1	2.25	1973.9	-4386.7
## + V29_J1_4	1	2.22	1974.0	-4386.6
## + V13_2_J2_3	1	2.21	1974.0	-4386.6
## + V13_1_J2_5	1	2.07	1974.1	-4386.2

## + V13_3_J1_6	1	2.06	1974.1	-4386.2
## + V1_J1_1	1	2.06	1974.1	-4386.2
## + V12_1_2_J2_1	1	2.04	1974.1	-4386.1
## + V26_J1_1	1	2.01	1974.2	-4386.1
## + V13_2_J2_2	1	2.01	1974.2	-4386.1
## + V17_J1_7	1	1.87	1974.3	-4385.7
## + V1_J1_2	1	1.77	1974.4	-4385.4
## + V13_3_J1_5	1	1.66	1974.5	-4385.1
## + V3_J1_2	1	1.63	1974.5	-4385.1
## + V17_J2_4	1	1.59	1974.6	-4385.0
## + V15_J2_5	1	1.56	1974.6	-4384.9
## + V3_J1_3	1	1.55	1974.6	-4384.9
## + V2_J1_2	1	1.52	1974.6	-4384.8
## + V13_1_J2_7	1	1.51	1974.7	-4384.7
## + V12_1_2_J1_1	1	1.48	1974.7	-4384.7
## + V14_J1_6	1	1.48	1974.7	-4384.7
## + V3_J1_7	1	1.45	1974.7	-4384.6
## + V13_1_J1_6	1	1.42	1974.7	-4384.5
## + V30_J2_1	1	1.42	1974.7	-4384.5
## + V1_J2_3	1	1.39	1974.8	-4384.4
## + V13_1_J2_1	1	1.37	1974.8	-4384.4
## + V30_J2_3	1	1.28	1974.9	-4384.1
## + V4_J1_2	1	1.27	1974.9	-4384.1
## + V19_J2_7	1	1.26	1974.9	-4384.1
## + V20_J1_6	1	1.18	1975.0	-4383.9
## + V13_3_J1_1	1	1.17	1975.0	-4383.8
## + V29_J2_4	1	1.15	1975.0	-4383.8
## + V17_J2_5	1	1.13	1975.0	-4383.7
## + V23_J1_5	1	1.06	1975.1	-4383.6
## + V16_J2_1	1	1.00	1975.2	-4383.4
## + V23_J2_4	1	0.91	1975.3	-4383.2
## + V17_J1_2	1	0.88	1975.3	-4383.1
## + V4_J1_6	1	0.86	1975.3	-4383.0
## + V23_J2_5	1	0.82	1975.4	-4382.9
## + V24_J2_1	1	0.73	1975.4	-4382.7
## + V19_J1_2	1	0.70	1975.5	-4382.6
## + V13_2_J2_1	1	0.70	1975.5	-4382.6
## + V3_J1_6	1	0.66	1975.5	-4382.5
## + V2_J2_3	1	0.66	1975.5	-4382.5
## + V13_2_J2_4	1	0.64	1975.5	-4382.5
## + V5_J2_2	1	0.62	1975.5	-4382.4
## + V13_1_J1_1	1	0.62	1975.6	-4382.4
## + V14_J2_2	1	0.62	1975.6	-4382.4
## + V13_1_J1_4	1	0.61	1975.6	-4382.4
## + V13_1_J2_3	1	0.59	1975.6	-4382.3
## + V5_J1_7	1	0.57	1975.6	-4382.3
## + V3_J2_2	1	0.51	1975.7	-4382.1
## + V16_J2_5	1	0.50	1975.7	-4382.1
## + V30_J2_7	1	0.48	1975.7	-4382.0
## + V3_J2_7	1	0.46	1975.7	-4382.0
## + V13_1_J2_2	1	0.46	1975.7	-4382.0
## + V23_J2_2	1	0.44	1975.7	-4381.9
## + V26_J1_2	1	0.43	1975.7	-4381.9
## + V14_J1_3	1	0.43	1975.7	-4381.9

## + V24_J1_4	1	0.38	1975.8	-4381.8
## + V20_J2_4	1	0.35	1975.8	-4381.7
## + V1_J2_1	1	0.35	1975.8	-4381.7
## + V26_J2_7	1	0.33	1975.8	-4381.6
## + V13_3_J2_2	1	0.33	1975.8	-4381.6
## + V4_J1_7	1	0.33	1975.8	-4381.6
## + V14_J2_7	1	0.32	1975.9	-4381.6
## + V20_J1_5	1	0.30	1975.9	-4381.6
## + V23_J1_7	1	0.28	1975.9	-4381.5
## + V2_J2_1	1	0.27	1975.9	-4381.5
## + V19_J1_3	1	0.27	1975.9	-4381.5
## + V2_J2_5	1	0.27	1975.9	-4381.5
## + V1_J1_4	1	0.25	1975.9	-4381.4
## + V29_J1_2	1	0.24	1975.9	-4381.4
## + V2_J1_7	1	0.23	1975.9	-4381.4
## + V13_3_J2_1	1	0.23	1975.9	-4381.4
## + V3_J1_1	1	0.21	1976.0	-4381.3
## + V17_J1_6	1	0.17	1976.0	-4381.2
## + V4_J2_2	1	0.13	1976.0	-4381.1
## + V26_J1_7	1	0.13	1976.0	-4381.1
## + V2_J2_4	1	0.12	1976.1	-4381.1
## + V29_J2_5	1	0.12	1976.1	-4381.1
## + V19_J1_6	1	0.12	1976.1	-4381.1
## + V13_3_J2_3	1	0.11	1976.1	-4381.1
## + V13_2_J1_1	1	0.11	1976.1	-4381.1
## + V1_J2_4	1	0.10	1976.1	-4381.0
## + V1_J1_6	1	0.10	1976.1	-4381.0
## + V23_J1_1	1	0.09	1976.1	-4381.0
## + V20_J2_5	1	0.08	1976.1	-4381.0
## + V2_J1_1	1	0.07	1976.1	-4381.0
## + V19_J2_2	1	0.06	1976.1	-4380.9
## + V13_3_J1_7	1	0.06	1976.1	-4380.9
## + V24_J2_2	1	0.06	1976.1	-4380.9
## + V14_J1_7	1	0.05	1976.1	-4380.9
## + V16_J1_2	1	0.04	1976.1	-4380.9
## + V14_J1_1	1	0.04	1976.1	-4380.9
## + V17_J2_3	1	0.04	1976.1	-4380.9
## + V30_J1_7	1	0.03	1976.1	-4380.9
## + V19_J1_7	1	0.03	1976.1	-4380.8
## + V2_J1_4	1	0.02	1976.1	-4380.8
## + V23_J1_6	1	0.02	1976.1	-4380.8
## + V24_J1_3	1	0.02	1976.2	-4380.8
## + V4_J1_1	1	0.01	1976.2	-4380.8
## + V17_J1_1	1	0.01	1976.2	-4380.8
## + V16_J1_5	1	0.01	1976.2	-4380.8
## + V5_J1_1	1	0.01	1976.2	-4380.8
## + V24_J1_2	1	0.00	1976.2	-4380.8
## + V15_J2_4	1	0.00	1976.2	-4380.8
## + V20_J1_7	1	0.00	1976.2	-4380.8
## + V16_J1_4	1	0.00	1976.2	-4380.8
## + V24_J2_4	1	0.00	1976.2	-4380.8
## + V13_3_J1_4	1	0.00	1976.2	-4380.8
## + V17_J1_4	1	0.00	1976.2	-4380.8
## - V4_J2_7	1	22.09	1998.3	-4336.2

## - V13_1_J1_3	1	23.83	2000.0	-4331.7
## - V2_J2_2	1	26.12	2002.3	-4325.8
## - V15_J1_1	1	26.16	2002.3	-4325.7
## - V14_J2_5	1	28.19	2004.4	-4320.4
## - V12_1_2_J1_2	1	29.73	2005.9	-4316.4
## - V16_J1_3	1	31.50	2007.7	-4311.8
## - V15_J1_2	1	32.35	2008.5	-4309.6
## - V14_J2_1	1	33.87	2010.0	-4305.7
## - V30_J1_3	1	36.68	2012.9	-4298.4
## - V4_J1_5	1	39.85	2016.0	-4290.2
## - V30_J1_2	1	41.20	2017.4	-4286.7
## - V1_J1_3	1	42.10	2018.3	-4284.4
## - V26_J1_5	1	42.86	2019.0	-4282.5
## - V13_2_J1_7	1	44.18	2020.3	-4279.1
## - V19_J2_4	1	44.57	2020.7	-4278.1
## - V19_J2_5	1	46.18	2022.4	-4273.9
## - V4_J1_4	1	46.86	2023.0	-4272.2
## - V17_J2_7	1	46.96	2023.1	-4271.9
## - V15_J1_6	1	48.45	2024.6	-4268.1
## - V5_J1_4	1	48.74	2024.9	-4267.4
## - V14_J2_4	1	49.47	2025.6	-4265.5
## - V23_J1_3	1	51.57	2027.7	-4260.1
## - V3_J1_5	1	52.20	2028.4	-4258.5
## - V30_J1_1	1	53.40	2029.6	-4255.4
## - V2_J1_3	1	57.89	2034.1	-4243.9
## - V26_J1_4	1	58.75	2034.9	-4241.7
## - V1_J2_2	1	60.30	2036.5	-4237.7
## - V17_J1_3	1	61.58	2037.8	-4234.5
## - V19_J2_1	1	61.62	2037.8	-4234.4
## - V1_J2_7	1	65.30	2041.5	-4225.0
## - V15_J1_7	1	65.86	2042.0	-4223.6
## - V17_J2_2	1	65.87	2042.0	-4223.5
## - V5_J2_1	1	66.78	2043.0	-4221.2
## - V12_1_2_J1_4	1	74.31	2050.5	-4202.1
## - V14_J2_3	1	77.86	2054.0	-4193.1
## - V5_J2_3	1	88.86	2065.0	-4165.3
## - V15_J1_3	1	95.84	2072.0	-4147.8
## - V30_J2_2	1	97.83	2074.0	-4142.8
## - V14_J1_4	1	99.16	2075.3	-4139.4
## - V3_J1_4	1	103.62	2079.8	-4128.3
## - V14_J1_5	1	105.28	2081.4	-4124.1
## - V19_J2_3	1	108.58	2084.8	-4115.9
## - V4_J2_5	1	118.77	2094.9	-4090.6
## - V12_1_2_J2_2	1	132.78	2109.0	-4055.9
## - V4_J2_3	1	133.33	2109.5	-4054.5
## - V4_J2_1	1	134.18	2110.4	-4052.4
## - V15_J2_2	1	135.68	2111.9	-4048.7
## - V3_J2_1	1	140.52	2116.7	-4036.8
## - V5_J1_5	1	148.36	2124.5	-4017.6
## - V15_J2_7	1	151.77	2127.9	-4009.3
## - V3_J2_5	1	160.18	2136.3	-3988.8
## - V4_J2_4	1	162.01	2138.2	-3984.3
## - V26_J2_1	1	164.91	2141.1	-3977.3
## - V19_J1_5	1	174.58	2150.7	-3953.8

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## - V19_J1_4      1      201.76 2177.9 -3888.5
## - V26_J2_4      1      204.89 2181.1 -3881.0
## - V26_J2_5      1      208.88 2185.0 -3871.6
## - V3_J2_4       1      221.15 2197.3 -3842.4
## - V3_J2_3       1      231.23 2207.4 -3818.6
## - V20_J2_2      1      239.96 2216.1 -3798.1
## - V5_J2_5       1      305.45 2281.6 -3646.7
## - V5_J2_4       1      334.78 2311.0 -3580.2
## - V26_J2_3      1      397.37 2373.5 -3441.3
## - V16_J2_2      1      399.63 2375.8 -3436.3
## - J             12      727.05 2703.2 -2838.0
## - V             19     1224.34 3200.5 -2006.3
##
## Step:  AIC=-4437.45
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7
##
##
##          Df Sum of Sq  RSS      AIC
## + V2_J2_7      1      22.57 1932.2 -4491.2
## + V30_J2_5     1      21.33 1933.4 -4487.9
## + V20_J2_3     1      20.67 1934.1 -4486.1
## + V24_J2_5     1      20.27 1934.5 -4485.0
## + V23_J2_7     1      18.22 1936.5 -4479.5
## + V20_J2_1     1      16.97 1937.8 -4476.2
## + V20_J1_3     1      16.96 1937.8 -4476.1
## + V16_J2_3     1      16.75 1938.0 -4475.6
## + V13_2_J1_5   1      15.55 1939.2 -4472.3
## + V29_J1_3     1      13.23 1941.5 -4466.1
## + V1_J2_5      1      12.73 1942.0 -4464.8
## + V12_1_2_J1_3 1      12.10 1942.6 -4463.1
## + V24_J1_6     1      12.02 1942.7 -4462.9
## + V30_J1_5     1      11.84 1942.9 -4462.4
## + V24_J1_7     1      11.17 1943.6 -4460.6
## + V13_1_J1_5   1      10.82 1943.9 -4459.7
## + V15_J2_1     1      10.76 1944.0 -4459.5
## + V23_J2_1     1      10.41 1944.3 -4458.6
## + V24_J1_5     1       9.82 1944.9 -4457.0
## + V12_1_2_J2_7 1       9.30 1945.4 -4455.6
## + V12_1_2_J1_7 1       9.20 1945.5 -4455.3
## + V13_1_J1_7   1       8.90 1945.8 -4454.6
## + V30_J1_6     1       8.76 1946.0 -4454.2
## + V4_J1_3      1       8.64 1946.1 -4453.9
## + V13_2_J1_3   1       8.50 1946.2 -4453.5
## + V29_J1_5     1       8.39 1946.4 -4453.2

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## + V20_J2_7	1	8.16	1946.6	-4452.6
## + V15_J1_5	1	7.80	1946.9	-4451.6
## + V12_1_2_J2_5	1	7.76	1947.0	-4451.5
## + V12_1_2_J1_6	1	7.59	1947.2	-4451.0
## + V13_1_J1_2	1	7.38	1947.4	-4450.5
## + V29_J1_7	1	7.34	1947.4	-4450.4
## + V23_J1_4	1	6.88	1947.9	-4449.2
## + V17_J1_5	1	6.31	1948.4	-4447.6
## + V13_2_J2_5	1	6.15	1948.6	-4447.2
## + V5_J1_6	1	5.99	1948.8	-4446.8
## + V13_1_J2_4	1	5.96	1948.8	-4446.7
## + V13_2_J1_6	1	5.95	1948.8	-4446.7
## + V13_2_J2_7	1	5.75	1949.0	-4446.1
## + V12_1_2_J2_3	1	5.58	1949.2	-4445.7
## + V12_1_2_J1_5	1	5.57	1949.2	-4445.7
## + V15_J2_3	1	5.20	1949.5	-4444.7
## + V29_J2_2	1	5.13	1949.6	-4444.5
## + V13_2_J1_4	1	4.83	1949.9	-4443.7
## + V13_3_J2_5	1	4.82	1949.9	-4443.7
## + V30_J1_4	1	4.66	1950.1	-4443.2
## + V13_3_J1_3	1	4.64	1950.1	-4443.2
## + V1_J1_5	1	4.63	1950.1	-4443.2
## + V14_J1_2	1	4.62	1950.1	-4443.1
## + V19_J1_1	1	4.60	1950.1	-4443.1
## + V30_J2_4	1	4.58	1950.2	-4443.0
## + V1_J1_7	1	4.56	1950.2	-4443.0
## + V12_1_2_J2_4	1	4.41	1950.3	-4442.6
## + V5_J1_3	1	4.39	1950.4	-4442.5
## + V29_J2_3	1	4.32	1950.4	-4442.3
## + V24_J2_3	1	4.21	1950.5	-4442.0
## + V2_J1_6	1	3.95	1950.8	-4441.3
## + V20_J1_1	1	3.93	1950.8	-4441.3
## + V29_J1_1	1	3.93	1950.8	-4441.3
## + V26_J2_2	1	3.88	1950.9	-4441.2
## + V17_J2_1	1	3.87	1950.9	-4441.1
## + V26_J1_6	1	3.87	1950.9	-4441.1
## + V2_J1_5	1	3.85	1950.9	-4441.1
## + V20_J1_4	1	3.67	1951.1	-4440.6
## + V23_J2_3	1	3.32	1951.4	-4439.6
## + V13_3_J1_2	1	3.30	1951.4	-4439.6
## + V24_J1_1	1	3.21	1951.5	-4439.4
## + V16_J2_4	1	3.17	1951.6	-4439.3
## + V5_J2_7	1	3.15	1951.6	-4439.2
## + V13_3_J2_7	1	3.01	1951.7	-4438.8
## + V13_3_J2_4	1	2.83	1951.9	-4438.3
## + V29_J2_1	1	2.78	1952.0	-4438.2
## + V16_J1_7	1	2.72	1952.0	-4438.1
## + V26_J1_3	1	2.66	1952.1	-4437.9
## + V13_2_J1_2	1	2.59	1952.2	-4437.7
## <none>			1954.7	-4437.5
## + V23_J1_2	1	2.48	1952.3	-4437.4
## + V15_J1_4	1	2.43	1952.3	-4437.3
## + V16_J1_1	1	2.38	1952.4	-4437.2
## + V24_J2_7	1	2.37	1952.4	-4437.1

## + V29_J1_4	1	2.36	1952.4	-4437.1
## + V16_J1_6	1	2.32	1952.4	-4437.0
## + V20_J1_2	1	2.30	1952.4	-4436.9
## + V29_J1_6	1	2.24	1952.5	-4436.8
## + V13_1_J2_5	1	2.19	1952.6	-4436.7
## + V26_J1_1	1	2.19	1952.6	-4436.6
## + V12_1_2_J2_1	1	2.18	1952.6	-4436.6
## + V16_J2_1	1	2.14	1952.6	-4436.5
## + V1_J1_1	1	2.10	1952.6	-4436.4
## + V13_2_J2_3	1	2.08	1952.7	-4436.3
## + V5_J1_2	1	2.06	1952.7	-4436.3
## + V13_3_J1_6	1	2.01	1952.7	-4436.2
## + V13_2_J2_2	1	1.97	1952.8	-4436.1
## + V17_J1_7	1	1.84	1952.9	-4435.7
## + V3_J1_2	1	1.80	1952.9	-4435.6
## + V1_J1_2	1	1.74	1953.0	-4435.4
## + V3_J1_3	1	1.61	1953.1	-4435.1
## + V2_J1_2	1	1.58	1953.2	-4435.0
## + V17_J2_4	1	1.57	1953.2	-4435.0
## + V15_J2_5	1	1.57	1953.2	-4435.0
## + V12_1_2_J1_1	1	1.55	1953.2	-4434.9
## + V13_3_J1_5	1	1.55	1953.2	-4434.9
## + V29_J2_7	1	1.49	1953.3	-4434.8
## + V13_1_J2_1	1	1.47	1953.3	-4434.7
## + V13_1_J1_6	1	1.47	1953.3	-4434.7
## + V30_J2_3	1	1.38	1953.4	-4434.5
## + V1_J2_3	1	1.37	1953.4	-4434.5
## + V14_J1_6	1	1.34	1953.4	-4434.4
## + V30_J2_1	1	1.31	1953.4	-4434.3
## + V4_J1_2	1	1.31	1953.4	-4434.3
## + V3_J1_7	1	1.30	1953.4	-4434.3
## + V13_3_J1_1	1	1.21	1953.5	-4434.0
## + V20_J1_6	1	1.14	1953.6	-4433.9
## + V17_J2_5	1	1.11	1953.6	-4433.8
## + V29_J2_4	1	1.06	1953.7	-4433.6
## + V30_J2_7	1	1.04	1953.7	-4433.6
## + V23_J2_4	1	1.00	1953.7	-4433.5
## + V23_J1_5	1	0.97	1953.8	-4433.4
## + V23_J2_5	1	0.90	1953.8	-4433.2
## + V4_J1_6	1	0.88	1953.9	-4433.2
## + V17_J1_2	1	0.86	1953.9	-4433.1
## + V13_1_J2_7	1	0.83	1953.9	-4433.0
## + V19_J1_2	1	0.81	1953.9	-4433.0
## + V14_J2_7	1	0.74	1954.0	-4432.8
## + V19_J2_7	1	0.69	1954.1	-4432.7
## + V13_1_J1_4	1	0.69	1954.1	-4432.6
## + V5_J1_7	1	0.67	1954.1	-4432.6
## + V24_J2_1	1	0.66	1954.1	-4432.6
## + V13_1_J2_3	1	0.65	1954.1	-4432.6
## + V14_J2_2	1	0.65	1954.1	-4432.6
## + V13_1_J1_1	1	0.65	1954.1	-4432.5
## + V13_2_J2_1	1	0.63	1954.1	-4432.5
## + V2_J2_3	1	0.59	1954.2	-4432.4
## + V5_J2_2	1	0.59	1954.2	-4432.4

## + V13_2_J2_4	1	0.57	1954.2	-4432.3
## + V3_J1_6	1	0.57	1954.2	-4432.3
## + V13_1_J2_2	1	0.48	1954.3	-4432.1
## + V3_J2_2	1	0.48	1954.3	-4432.1
## + V23_J2_2	1	0.47	1954.3	-4432.1
## + V14_J1_3	1	0.40	1954.3	-4431.9
## + V26_J1_2	1	0.36	1954.4	-4431.8
## + V20_J1_5	1	0.35	1954.4	-4431.8
## + V13_3_J2_2	1	0.34	1954.4	-4431.7
## + V4_J1_7	1	0.34	1954.4	-4431.7
## + V1_J2_1	1	0.34	1954.4	-4431.7
## + V24_J1_4	1	0.32	1954.4	-4431.7
## + V2_J2_1	1	0.32	1954.4	-4431.7
## + V2_J2_5	1	0.31	1954.4	-4431.6
## + V20_J2_4	1	0.31	1954.4	-4431.6
## + V16_J1_5	1	0.29	1954.5	-4431.6
## + V23_J1_7	1	0.26	1954.5	-4431.5
## + V1_J1_4	1	0.26	1954.5	-4431.5
## + V19_J1_3	1	0.24	1954.5	-4431.5
## + V29_J1_2	1	0.21	1954.5	-4431.4
## + V2_J1_7	1	0.21	1954.5	-4431.4
## + V13_3_J2_1	1	0.19	1954.6	-4431.3
## + V16_J1_4	1	0.18	1954.6	-4431.3
## + V17_J1_6	1	0.18	1954.6	-4431.3
## + V26_J1_7	1	0.17	1954.6	-4431.3
## + V19_J1_6	1	0.16	1954.6	-4431.2
## + V3_J1_1	1	0.16	1954.6	-4431.2
## + V3_J2_7	1	0.15	1954.6	-4431.2
## + V4_J2_2	1	0.11	1954.6	-4431.1
## + V1_J2_4	1	0.11	1954.6	-4431.1
## + V20_J2_5	1	0.11	1954.6	-4431.1
## + V23_J1_1	1	0.10	1954.6	-4431.1
## + V13_2_J1_1	1	0.09	1954.7	-4431.1
## + V1_J1_6	1	0.09	1954.7	-4431.1
## + V2_J2_4	1	0.09	1954.7	-4431.1
## + V29_J2_5	1	0.09	1954.7	-4431.1
## + V13_3_J2_3	1	0.09	1954.7	-4431.0
## + V26_J2_7	1	0.08	1954.7	-4431.0
## + V19_J2_2	1	0.08	1954.7	-4431.0
## + V13_3_J1_7	1	0.08	1954.7	-4431.0
## + V16_J1_2	1	0.07	1954.7	-4431.0
## + V16_J2_5	1	0.06	1954.7	-4431.0
## + V2_J1_1	1	0.06	1954.7	-4431.0
## + V24_J2_2	1	0.05	1954.7	-4431.0
## + V19_J1_7	1	0.05	1954.7	-4431.0
## + V30_J1_7	1	0.04	1954.7	-4430.9
## + V2_J1_4	1	0.04	1954.7	-4430.9
## + V17_J2_3	1	0.03	1954.7	-4430.9
## + V23_J1_6	1	0.03	1954.7	-4430.9
## + V14_J1_7	1	0.03	1954.7	-4430.9
## + V14_J1_1	1	0.02	1954.7	-4430.9
## + V24_J1_3	1	0.02	1954.7	-4430.9
## + V4_J1_1	1	0.01	1954.7	-4430.8
## + V17_J1_1	1	0.00	1954.7	-4430.8

## + V20_J1_7	1	0.00	1954.7	-4430.8
## + V15_J2_4	1	0.00	1954.7	-4430.8
## + V13_3_J1_4	1	0.00	1954.7	-4430.8
## + V24_J1_2	1	0.00	1954.7	-4430.8
## + V24_J2_4	1	0.00	1954.7	-4430.8
## + V5_J1_1	1	0.00	1954.7	-4430.8
## + V17_J1_4	1	0.00	1954.7	-4430.8
## - V16_J2_7	1	21.43	1976.2	-4387.4
## - V13_1_J1_3	1	23.69	1978.4	-4381.4
## - V4_J2_7	1	24.66	1979.4	-4378.9
## - V15_J1_1	1	25.96	1980.7	-4375.5
## - V2_J2_2	1	26.27	1981.0	-4374.7
## - V14_J2_5	1	27.47	1982.2	-4371.5
## - V12_1_2_J1_2	1	29.99	1984.7	-4364.9
## - V15_J1_2	1	32.15	1986.9	-4359.3
## - V14_J2_1	1	33.08	1987.8	-4356.8
## - V16_J1_3	1	36.25	1991.0	-4348.5
## - V30_J1_3	1	36.83	1991.6	-4347.0
## - V4_J1_5	1	39.49	1994.2	-4340.1
## - V30_J1_2	1	41.47	1996.2	-4334.9
## - V26_J1_5	1	41.96	1996.7	-4333.6
## - V1_J1_3	1	42.65	1997.4	-4331.9
## - V19_J2_4	1	43.66	1998.4	-4329.2
## - V13_2_J1_7	1	43.91	1998.7	-4328.6
## - V19_J2_5	1	45.26	2000.0	-4325.1
## - V4_J1_4	1	46.43	2001.2	-4322.0
## - V5_J1_4	1	47.74	2002.5	-4318.6
## - V15_J1_6	1	48.17	2002.9	-4317.5
## - V14_J2_4	1	48.52	2003.3	-4316.6
## - V17_J2_7	1	51.00	2005.7	-4310.2
## - V3_J1_5	1	51.22	2006.0	-4309.6
## - V23_J1_3	1	51.77	2006.5	-4308.2
## - V30_J1_1	1	53.68	2008.4	-4303.2
## - V26_J1_4	1	57.66	2012.4	-4292.9
## - V2_J1_3	1	58.13	2012.9	-4291.7
## - V19_J2_1	1	60.55	2015.3	-4285.5
## - V1_J2_2	1	60.95	2015.7	-4284.4
## - V17_J1_3	1	62.25	2017.0	-4281.1
## - V15_J1_7	1	65.56	2020.3	-4272.6
## - V5_J2_1	1	65.67	2020.4	-4272.3
## - V17_J2_2	1	66.55	2021.3	-4270.0
## - V1_J2_7	1	70.00	2024.7	-4261.1
## - V12_1_2_J1_4	1	73.54	2028.3	-4252.1
## - V14_J2_3	1	76.65	2031.4	-4244.1
## - V5_J2_3	1	87.57	2042.3	-4216.2
## - V15_J1_3	1	94.88	2049.6	-4197.6
## - V14_J1_4	1	97.73	2052.5	-4190.4
## - V30_J2_2	1	98.05	2052.8	-4189.6
## - V3_J1_4	1	102.16	2056.9	-4179.2
## - V14_J1_5	1	103.87	2058.6	-4174.9
## - V19_J2_3	1	107.15	2061.9	-4166.6
## - V4_J2_5	1	118.15	2072.9	-4138.9
## - V4_J2_3	1	132.68	2087.4	-4102.6
## - V12_1_2_J2_2	1	132.96	2087.7	-4101.9

```

## - V4_J2_1      1      133.53 2088.3 -4100.5
## - V15_J2_2     1      134.54 2089.3 -4098.0
## - V3_J2_1      1      138.88 2093.6 -4087.2
## - V15_J2_7     1      143.81 2098.6 -4074.9
## - V5_J1_5      1      146.68 2101.4 -4067.8
## - V3_J2_5      1      158.43 2113.2 -4038.8
## - V4_J2_4      1      161.28 2116.0 -4031.8
## - V26_J2_1     1      163.14 2117.9 -4027.3
## - V19_J1_5     1      172.76 2127.5 -4003.7
## - V19_J1_4     1      199.71 2154.5 -3938.3
## - V26_J2_4     1      202.92 2157.7 -3930.5
## - V26_J2_5     1      206.88 2161.6 -3921.0
## - V3_J2_4      1      219.09 2173.8 -3891.7
## - V3_J2_3      1      229.13 2183.9 -3867.7
## - V20_J2_2     1      240.38 2195.1 -3841.0
## - V5_J2_5      1      303.03 2257.8 -3694.7
## - V5_J2_4      1      332.24 2287.0 -3627.8
## - V26_J2_3     1      394.59 2349.3 -3487.9
## - V16_J2_2     1      413.53 2368.3 -3446.2
## - J            12      690.87 2645.6 -2943.3
## - V            19     1227.62 3182.4 -2029.2
##
## Step:  AIC=-4491.21
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7
##
##
##           Df Sum of Sq    RSS    AIC
## + V30_J2_5      1      21.80 1910.4 -4543.6
## + V23_J2_7      1      21.49 1910.7 -4542.7
## + V20_J2_3      1      20.25 1911.9 -4539.4
## + V24_J2_5      1      19.84 1912.3 -4538.3
## + V20_J1_3      1      16.81 1915.4 -4530.0
## + V16_J2_3      1      16.67 1915.5 -4529.6
## + V20_J2_1      1      16.59 1915.6 -4529.4
## + V13_2_J1_5     1      15.16 1917.0 -4525.5
## + V29_J1_3      1      13.36 1918.8 -4520.6
## + V1_J2_5       1      12.66 1919.5 -4518.8
## + V30_J1_5      1      12.20 1920.0 -4517.5
## + V12_1_2_J1_3   1      12.18 1920.0 -4517.5
## + V24_J1_6      1      12.17 1920.0 -4517.4
## + V12_1_2_J2_7   1      11.62 1920.5 -4515.9
## + V24_J1_7      1      11.33 1920.8 -4515.2
## + V15_J2_1      1      10.75 1921.4 -4513.6
## + V23_J2_1      1      10.71 1921.5 -4513.5

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## + V13_1_J1_5	1	10.52	1921.7	-4513.0
## + V24_J1_5	1	9.52	1922.7	-4510.3
## + V12_1_2_J1_7	1	9.02	1923.2	-4508.9
## + V4_J1_3	1	8.81	1923.4	-4508.3
## + V13_1_J1_7	1	8.77	1923.4	-4508.2
## + V29_J1_5	1	8.67	1923.5	-4508.0
## + V30_J1_6	1	8.62	1923.5	-4507.8
## + V13_2_J1_3	1	8.41	1923.8	-4507.3
## + V12_1_2_J2_5	1	8.07	1924.1	-4506.3
## + V15_J1_5	1	7.80	1924.4	-4505.6
## + V12_1_2_J1_6	1	7.43	1924.7	-4504.6
## + V13_1_J1_2	1	7.25	1924.9	-4504.1
## + V29_J1_7	1	7.22	1925.0	-4504.0
## + V23_J1_4	1	6.62	1925.5	-4502.4
## + V17_J1_5	1	6.35	1925.8	-4501.7
## + V20_J2_7	1	6.30	1925.9	-4501.6
## + V13_1_J2_4	1	6.19	1926.0	-4501.3
## + V13_2_J1_6	1	6.07	1926.1	-4500.9
## + V13_2_J2_5	1	5.91	1926.3	-4500.5
## + V12_1_2_J2_3	1	5.85	1926.3	-4500.3
## + V12_1_2_J1_5	1	5.83	1926.3	-4500.3
## + V5_J1_6	1	5.67	1926.5	-4499.9
## + V15_J2_3	1	5.19	1927.0	-4498.6
## + V13_2_J1_4	1	5.08	1927.1	-4498.3
## + V29_J2_2	1	5.06	1927.1	-4498.2
## + V13_3_J2_5	1	5.03	1927.1	-4498.1
## + V14_J1_2	1	4.93	1927.2	-4497.9
## + V1_J1_5	1	4.68	1927.5	-4497.2
## + V12_1_2_J2_4	1	4.64	1927.5	-4497.1
## + V13_3_J1_3	1	4.56	1927.6	-4496.9
## + V29_J2_3	1	4.52	1927.7	-4496.8
## + V5_J1_3	1	4.50	1927.7	-4496.7
## + V1_J1_7	1	4.50	1927.7	-4496.7
## + V30_J1_4	1	4.43	1927.7	-4496.5
## + V24_J2_3	1	4.41	1927.8	-4496.5
## + V30_J2_4	1	4.37	1927.8	-4496.3
## + V19_J1_1	1	4.32	1927.8	-4496.2
## + V13_2_J2_7	1	4.21	1928.0	-4495.9
## + V26_J1_6	1	4.13	1928.0	-4495.7
## + V20_J1_1	1	4.02	1928.2	-4495.4
## + V20_J1_4	1	3.86	1928.3	-4495.0
## + V17_J2_1	1	3.83	1928.3	-4494.9
## + V29_J1_1	1	3.83	1928.3	-4494.9
## + V26_J2_2	1	3.78	1928.4	-4494.8
## + V23_J2_3	1	3.49	1928.7	-4494.0
## + V13_3_J1_2	1	3.21	1929.0	-4493.2
## + V16_J2_4	1	3.20	1929.0	-4493.2
## + V24_J1_1	1	3.13	1929.0	-4493.0
## + V29_J2_1	1	2.94	1929.2	-4492.5
## + V16_J1_7	1	2.67	1929.5	-4491.8
## + V13_3_J2_4	1	2.67	1929.5	-4491.8
## + V26_J1_3	1	2.57	1929.6	-4491.5
## + V23_J1_2	1	2.56	1929.6	-4491.5
## + V29_J1_4	1	2.52	1929.7	-4491.4

## + V13_2_J1_2	1	2.50	1929.7	-4491.3
## <none>			1932.2	-4491.2
## + V15_J1_4	1	2.42	1929.8	-4491.1
## + V26_J1_1	1	2.39	1929.8	-4491.0
## + V12_1_2_J2_1	1	2.35	1929.8	-4490.9
## + V16_J1_1	1	2.34	1929.8	-4490.9
## + V13_1_J2_5	1	2.33	1929.8	-4490.9
## + V16_J1_6	1	2.27	1929.9	-4490.7
## + V2_J1_6	1	2.27	1929.9	-4490.7
## + V2_J1_5	1	2.26	1929.9	-4490.7
## + V20_J1_2	1	2.23	1930.0	-4490.6
## + V29_J1_6	1	2.17	1930.0	-4490.4
## + V1_J1_1	1	2.14	1930.0	-4490.4
## + V5_J2_7	1	2.12	1930.0	-4490.3
## + V16_J2_1	1	2.11	1930.1	-4490.3
## + V3_J1_2	1	1.99	1930.2	-4489.9
## + V13_3_J1_6	1	1.95	1930.2	-4489.8
## + V13_2_J2_3	1	1.94	1930.2	-4489.8
## + V13_2_J2_2	1	1.93	1930.2	-4489.8
## + V13_3_J2_7	1	1.93	1930.2	-4489.8
## + V30_J2_7	1	1.90	1930.3	-4489.7
## + V5_J1_2	1	1.87	1930.3	-4489.6
## + V17_J1_7	1	1.79	1930.4	-4489.4
## + V1_J1_2	1	1.70	1930.5	-4489.2
## + V3_J1_3	1	1.68	1930.5	-4489.1
## + V12_1_2_J1_1	1	1.63	1930.5	-4489.0
## + V13_1_J2_1	1	1.59	1930.6	-4488.9
## + V15_J2_5	1	1.57	1930.6	-4488.8
## + V2_J2_3	1	1.55	1930.6	-4488.7
## + V17_J2_4	1	1.55	1930.6	-4488.7
## + V13_1_J1_6	1	1.52	1930.7	-4488.7
## + V30_J2_3	1	1.51	1930.7	-4488.6
## + V13_3_J1_5	1	1.43	1930.7	-4488.4
## + V24_J2_7	1	1.42	1930.8	-4488.4
## + V14_J2_7	1	1.40	1930.8	-4488.3
## + V1_J2_3	1	1.34	1930.8	-4488.2
## + V4_J1_2	1	1.34	1930.8	-4488.2
## + V13_3_J1_1	1	1.27	1930.9	-4488.0
## + V30_J2_1	1	1.20	1931.0	-4487.8
## + V14_J1_6	1	1.19	1931.0	-4487.8
## + V3_J1_7	1	1.16	1931.0	-4487.7
## + V20_J1_6	1	1.10	1931.1	-4487.5
## + V23_J2_4	1	1.09	1931.1	-4487.5
## + V17_J2_5	1	1.09	1931.1	-4487.5
## + V23_J2_5	1	0.99	1931.2	-4487.2
## + V29_J2_4	1	0.97	1931.2	-4487.2
## + V19_J1_2	1	0.94	1931.2	-4487.1
## + V2_J1_7	1	0.91	1931.3	-4487.0
## + V4_J1_6	1	0.90	1931.3	-4487.0
## + V23_J1_5	1	0.88	1931.3	-4487.0
## + V17_J1_2	1	0.84	1931.3	-4486.8
## + V5_J1_7	1	0.78	1931.4	-4486.7
## + V13_1_J1_4	1	0.77	1931.4	-4486.7
## + V29_J2_7	1	0.76	1931.4	-4486.6

## + V13_1_J2_3	1	0.73	1931.4	-4486.5
## + V14_J2_2	1	0.70	1931.5	-4486.5
## + V13_1_J1_1	1	0.69	1931.5	-4486.4
## + V2_J1_2	1	0.60	1931.6	-4486.2
## + V2_J2_4	1	0.60	1931.6	-4486.2
## + V24_J2_1	1	0.58	1931.6	-4486.1
## + V2_J1_1	1	0.55	1931.6	-4486.1
## + V13_2_J2_1	1	0.55	1931.6	-4486.1
## + V5_J2_2	1	0.55	1931.6	-4486.0
## + V13_1_J2_2	1	0.51	1931.7	-4485.9
## + V13_2_J2_4	1	0.50	1931.7	-4485.9
## + V23_J2_2	1	0.49	1931.7	-4485.9
## + V3_J1_6	1	0.48	1931.7	-4485.9
## + V3_J2_2	1	0.44	1931.7	-4485.8
## + V20_J1_5	1	0.41	1931.8	-4485.7
## + V14_J1_3	1	0.37	1931.8	-4485.6
## + V13_3_J2_2	1	0.36	1931.8	-4485.6
## + V4_J1_7	1	0.36	1931.8	-4485.5
## + V1_J2_1	1	0.33	1931.8	-4485.5
## + V13_1_J2_7	1	0.31	1931.9	-4485.4
## + V16_J1_5	1	0.28	1931.9	-4485.3
## + V26_J1_2	1	0.28	1931.9	-4485.3
## + V1_J1_4	1	0.27	1931.9	-4485.3
## + V24_J1_4	1	0.27	1931.9	-4485.3
## + V19_J2_7	1	0.26	1931.9	-4485.3
## + V20_J2_4	1	0.26	1931.9	-4485.3
## + V23_J1_7	1	0.24	1931.9	-4485.2
## + V26_J1_7	1	0.23	1931.9	-4485.2
## + V19_J1_3	1	0.22	1932.0	-4485.2
## + V19_J1_6	1	0.22	1932.0	-4485.2
## + V17_J1_6	1	0.19	1932.0	-4485.1
## + V29_J1_2	1	0.19	1932.0	-4485.1
## + V16_J1_4	1	0.17	1932.0	-4485.0
## + V13_3_J2_1	1	0.15	1932.0	-4485.0
## + V20_J2_5	1	0.14	1932.0	-4485.0
## + V23_J1_1	1	0.12	1932.0	-4484.9
## + V1_J2_4	1	0.12	1932.1	-4484.9
## + V3_J1_1	1	0.11	1932.1	-4484.9
## + V4_J2_2	1	0.10	1932.1	-4484.8
## + V19_J2_2	1	0.09	1932.1	-4484.8
## + V13_3_J1_7	1	0.09	1932.1	-4484.8
## + V19_J1_7	1	0.09	1932.1	-4484.8
## + V1_J1_6	1	0.08	1932.1	-4484.8
## + V13_2_J1_1	1	0.08	1932.1	-4484.8
## + V16_J1_2	1	0.08	1932.1	-4484.8
## + V2_J1_4	1	0.07	1932.1	-4484.8
## + V16_J2_5	1	0.07	1932.1	-4484.8
## + V29_J2_5	1	0.06	1932.1	-4484.7
## + V13_3_J2_3	1	0.06	1932.1	-4484.7
## + V30_J1_7	1	0.05	1932.1	-4484.7
## + V24_J2_2	1	0.05	1932.1	-4484.7
## + V23_J1_6	1	0.04	1932.1	-4484.7
## + V17_J2_3	1	0.03	1932.1	-4484.7
## + V24_J1_3	1	0.01	1932.2	-4484.6

## + V2_J2_1	1	0.01	1932.2	-4484.6
## + V14_J1_7	1	0.01	1932.2	-4484.6
## + V2_J2_5	1	0.01	1932.2	-4484.6
## + V13_3_J1_4	1	0.01	1932.2	-4484.6
## + V4_J1_1	1	0.01	1932.2	-4484.6
## + V14_J1_1	1	0.01	1932.2	-4484.6
## + V24_J2_4	1	0.01	1932.2	-4484.6
## + V20_J1_7	1	0.01	1932.2	-4484.6
## + V3_J2_7	1	0.00	1932.2	-4484.6
## + V5_J1_1	1	0.00	1932.2	-4484.6
## + V17_J1_1	1	0.00	1932.2	-4484.6
## + V15_J2_4	1	0.00	1932.2	-4484.6
## + V26_J2_7	1	0.00	1932.2	-4484.6
## + V17_J1_4	1	0.00	1932.2	-4484.6
## + V24_J1_2	1	0.00	1932.2	-4484.6
## - V2_J2_7	1	22.57	1954.8	-4437.5
## - V13_1_J1_3	1	23.54	1955.7	-4434.9
## - V16_J2_7	1	24.50	1956.7	-4432.3
## - V15_J1_1	1	25.75	1957.9	-4429.0
## - V14_J2_5	1	26.69	1958.9	-4426.5
## - V4_J2_7	1	27.62	1959.8	-4424.0
## - V12_1_2_J1_2	1	30.29	1962.5	-4417.0
## - V2_J2_2	1	30.78	1963.0	-4415.7
## - V15_J1_2	1	31.93	1964.1	-4412.6
## - V14_J2_1	1	32.22	1964.4	-4411.9
## - V16_J1_3	1	36.81	1969.0	-4399.7
## - V30_J1_3	1	36.98	1969.2	-4399.3
## - V4_J1_5	1	39.10	1971.3	-4393.7
## - V26_J1_5	1	40.99	1973.2	-4388.7
## - V30_J1_2	1	41.77	1973.9	-4386.6
## - V19_J2_4	1	42.67	1974.8	-4384.3
## - V1_J1_3	1	43.26	1975.4	-4382.7
## - V13_2_J1_7	1	43.62	1975.8	-4381.8
## - V19_J2_5	1	44.25	1976.4	-4380.1
## - V4_J1_4	1	45.96	1978.1	-4375.6
## - V5_J1_4	1	46.66	1978.8	-4373.8
## - V14_J2_4	1	47.47	1979.6	-4371.6
## - V15_J1_6	1	47.87	1980.0	-4370.6
## - V3_J1_5	1	50.14	1982.3	-4364.6
## - V23_J1_3	1	52.00	1984.2	-4359.8
## - V30_J1_1	1	54.00	1986.2	-4354.5
## - V17_J2_7	1	55.60	1987.8	-4350.3
## - V26_J1_4	1	56.47	1988.6	-4348.1
## - V19_J2_1	1	59.38	1991.5	-4340.5
## - V1_J2_2	1	61.67	1993.8	-4334.5
## - V17_J1_3	1	62.99	1995.2	-4331.0
## - V5_J2_1	1	64.45	1996.6	-4327.2
## - V2_J1_3	1	64.59	1996.8	-4326.9
## - V15_J1_7	1	65.22	1997.4	-4325.2
## - V17_J2_2	1	67.30	1999.5	-4319.8
## - V12_1_2_J1_4	1	72.68	2004.9	-4305.8
## - V1_J2_7	1	75.32	2007.5	-4299.0
## - V14_J2_3	1	75.33	2007.5	-4299.0
## - V5_J2_3	1	86.16	2018.3	-4271.0

```

## - V15_J1_3      1      93.83 2026.0 -4251.3
## - V14_J1_4      1      96.18 2028.3 -4245.2
## - V30_J2_2      1      98.30 2030.5 -4239.8
## - V3_J1_4       1     100.56 2032.7 -4234.0
## - V14_J1_5      1     102.33 2034.5 -4229.5
## - V19_J2_3      1     105.59 2037.8 -4221.2
## - V4_J2_5       1     117.47 2049.6 -4190.9
## - V4_J2_3       1     131.96 2064.1 -4154.3
## - V4_J2_1       1     132.81 2065.0 -4152.2
## - V12_1_2_J2_2  1     133.16 2065.3 -4151.3
## - V15_J2_2      1     133.30 2065.5 -4150.9
## - V15_J2_7      1     135.31 2067.5 -4145.9
## - V3_J2_1       1     137.10 2069.3 -4141.4
## - V5_J1_5       1     144.85 2077.0 -4122.0
## - V3_J2_5       1     156.52 2088.7 -4092.8
## - V4_J2_4       1     160.49 2092.7 -4082.9
## - V26_J2_1      1     161.20 2093.4 -4081.2
## - V19_J1_5      1     170.76 2102.9 -4057.5
## - V19_J1_4      1     197.46 2129.6 -3991.9
## - V26_J2_4      1     200.75 2132.9 -3983.8
## - V26_J2_5      1     204.69 2136.9 -3974.2
## - V3_J2_4       1     216.83 2149.0 -3944.8
## - V3_J2_3       1     226.82 2159.0 -3920.7
## - V20_J2_2      1     240.85 2173.0 -3887.0
## - V5_J2_5       1     300.36 2232.5 -3746.5
## - V5_J2_4       1     329.45 2261.6 -3679.2
## - V26_J2_3      1     391.54 2323.7 -3538.3
## - V16_J2_2      1     415.38 2347.6 -3485.3
## - J             12     658.93 2591.1 -3045.0
## - V             19    1217.82 3150.0 -2075.8
##
## Step:  AIC=-4543.59
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5
##
##
##           Df Sum of Sq    RSS    AIC
## + V23_J2_7      1      21.98 1888.4 -4597.1
## + V20_J2_3      1      20.61 1889.8 -4593.4
## + V16_J2_3      1      17.06 1893.3 -4583.6
## + V20_J2_1      1      16.92 1893.5 -4583.2
## + V30_J1_5      1      16.89 1893.5 -4583.1
## + V24_J2_5      1      16.88 1893.5 -4583.1
## + V20_J1_3      1      16.72 1893.7 -4582.7
## + V13_2_J1_5    1      15.49 1894.9 -4579.3

```

## + V29_J1_3	1	13.43	1896.9	-4573.6
## + V12_1_2_J1_3	1	12.29	1898.1	-4570.5
## + V12_1_2_J2_7	1	12.02	1898.3	-4569.8
## + V24_J1_6	1	11.92	1898.5	-4569.5
## + V24_J1_7	1	11.07	1899.3	-4567.2
## + V13_1_J1_5	1	10.78	1899.6	-4566.4
## + V23_J2_1	1	10.45	1899.9	-4565.5
## + V1_J2_5	1	10.32	1900.0	-4565.1
## + V15_J2_1	1	10.31	1900.1	-4565.1
## + V12_1_2_J2_5	1	10.28	1900.1	-4565.0
## + V24_J1_5	1	9.77	1900.6	-4563.6
## + V12_1_2_J1_7	1	9.29	1901.1	-4562.3
## + V13_1_J1_7	1	9.01	1901.4	-4561.5
## + V4_J1_3	1	8.76	1901.6	-4560.9
## + V29_J1_5	1	8.44	1901.9	-4560.0
## + V13_2_J1_3	1	8.34	1902.0	-4559.7
## + V15_J1_5	1	8.19	1902.2	-4559.3
## + V12_1_2_J1_6	1	7.67	1902.7	-4557.9
## + V29_J1_7	1	7.43	1902.9	-4557.2
## + V13_1_J1_2	1	7.28	1903.1	-4556.8
## + V23_J1_4	1	6.85	1903.5	-4555.6
## + V13_3_J2_5	1	6.81	1903.6	-4555.5
## + V17_J1_5	1	6.12	1904.2	-4553.6
## + V20_J2_7	1	6.04	1904.3	-4553.4
## + V13_1_J2_4	1	5.99	1904.4	-4553.3
## + V13_2_J1_6	1	5.87	1904.5	-4553.0
## + V5_J1_6	1	5.74	1904.6	-4552.6
## + V12_1_2_J2_3	1	5.63	1904.7	-4552.3
## + V30_J1_6	1	5.62	1904.7	-4552.3
## + V12_1_2_J1_5	1	5.62	1904.8	-4552.3
## + V29_J2_2	1	5.01	1905.4	-4550.6
## + V14_J1_2	1	5.01	1905.4	-4550.6
## + V15_J2_3	1	4.89	1905.5	-4550.3
## + V13_2_J1_4	1	4.87	1905.5	-4550.2
## + V5_J1_3	1	4.56	1905.8	-4549.4
## + V13_3_J1_3	1	4.52	1905.8	-4549.3
## + V1_J1_5	1	4.48	1905.9	-4549.2
## + V12_1_2_J2_4	1	4.45	1905.9	-4549.1
## + V29_J2_3	1	4.36	1906.0	-4548.8
## + V13_2_J2_5	1	4.33	1906.0	-4548.8
## + V1_J1_7	1	4.30	1906.1	-4548.7
## + V24_J2_3	1	4.25	1906.1	-4548.5
## + V19_J1_1	1	4.24	1906.1	-4548.5
## + V26_J1_6	1	4.07	1906.3	-4548.1
## + V17_J2_1	1	4.02	1906.3	-4547.9
## + V20_J1_1	1	3.99	1906.4	-4547.8
## + V13_2_J2_7	1	3.99	1906.4	-4547.8
## + V29_J1_1	1	3.85	1906.5	-4547.5
## + V26_J2_2	1	3.73	1906.6	-4547.1
## + V20_J1_4	1	3.69	1906.7	-4547.0
## + V13_1_J2_5	1	3.58	1906.8	-4546.7
## + V23_J2_3	1	3.34	1907.0	-4546.1
## + V30_J2_3	1	3.34	1907.0	-4546.1
## + V13_3_J1_2	1	3.23	1907.1	-4545.8

## + V24_J1_1	1	3.15	1907.2	-4545.5
## + V16_J2_4	1	3.04	1907.3	-4545.2
## + V29_J2_1	1	2.81	1907.6	-4544.6
## + V13_3_J2_4	1	2.80	1907.6	-4544.6
## + V15_J1_4	1	2.65	1907.7	-4544.2
## + V23_J1_2	1	2.54	1907.8	-4543.9
## + V26_J1_3	1	2.53	1907.8	-4543.9
## + V13_2_J1_2	1	2.53	1907.8	-4543.8
## + V16_J1_7	1	2.52	1907.8	-4543.8
## + V26_J1_1	1	2.45	1907.9	-4543.6
## <none>			1910.4	-4543.6
## + V29_J1_4	1	2.39	1908.0	-4543.5
## + V30_J1_4	1	2.35	1908.0	-4543.4
## + V16_J1_1	1	2.30	1908.1	-4543.2
## + V30_J2_4	1	2.30	1908.1	-4543.2
## + V29_J1_6	1	2.28	1908.1	-4543.2
## + V16_J2_1	1	2.25	1908.1	-4543.1
## + V20_J1_2	1	2.25	1908.1	-4543.1
## + V12_1_2_J2_1	1	2.21	1908.2	-4543.0
## + V1_J1_1	1	2.18	1908.2	-4542.9
## + V16_J1_6	1	2.14	1908.2	-4542.8
## + V2_J1_6	1	2.14	1908.2	-4542.8
## + V2_J1_5	1	2.12	1908.2	-4542.7
## + V13_2_J2_3	1	2.06	1908.3	-4542.6
## + V13_3_J1_6	1	2.05	1908.3	-4542.5
## + V3_J1_2	1	2.04	1908.3	-4542.5
## + V5_J2_7	1	2.04	1908.3	-4542.5
## + V13_2_J2_2	1	1.89	1908.5	-4542.1
## + V23_J2_5	1	1.84	1908.5	-4542.0
## + V5_J1_2	1	1.82	1908.5	-4541.9
## + V13_3_J2_7	1	1.79	1908.6	-4541.8
## + V3_J1_3	1	1.71	1908.7	-4541.6
## + V17_J1_7	1	1.67	1908.7	-4541.5
## + V1_J1_2	1	1.67	1908.7	-4541.5
## + V2_J2_3	1	1.66	1908.7	-4541.5
## + V17_J2_4	1	1.66	1908.7	-4541.5
## + V12_1_2_J1_1	1	1.60	1908.8	-4541.3
## + V13_3_J1_5	1	1.53	1908.8	-4541.1
## + V13_1_J2_1	1	1.49	1908.9	-4541.0
## + V14_J2_7	1	1.47	1908.9	-4541.0
## + V1_J2_3	1	1.46	1908.9	-4540.9
## + V13_1_J1_6	1	1.43	1908.9	-4540.8
## + V4_J1_2	1	1.37	1909.0	-4540.7
## + V24_J2_7	1	1.30	1909.1	-4540.5
## + V13_3_J1_1	1	1.25	1909.1	-4540.4
## + V14_J1_6	1	1.23	1909.1	-4540.3
## + V3_J1_7	1	1.19	1909.2	-4540.2
## + V20_J1_6	1	1.18	1909.2	-4540.2
## + V29_J2_4	1	1.05	1909.3	-4539.8
## + V23_J2_4	1	1.01	1909.4	-4539.7
## + V2_J1_7	1	1.00	1909.4	-4539.7
## + V19_J1_2	1	0.98	1909.4	-4539.6
## + V23_J1_5	1	0.96	1909.4	-4539.6
## + V4_J1_6	1	0.86	1909.5	-4539.3

## + V15_J2_5	1	0.82	1909.5	-4539.2
## + V17_J1_2	1	0.81	1909.6	-4539.2
## + V5_J1_7	1	0.75	1909.6	-4539.0
## + V14_J2_2	1	0.72	1909.7	-4538.9
## + V13_1_J1_4	1	0.70	1909.7	-4538.9
## + V13_1_J1_1	1	0.68	1909.7	-4538.8
## + V29_J2_7	1	0.67	1909.7	-4538.8
## + V2_J2_4	1	0.67	1909.7	-4538.8
## + V30_J1_7	1	0.67	1909.7	-4538.8
## + V13_1_J2_3	1	0.66	1909.7	-4538.8
## + V30_J2_7	1	0.66	1909.7	-4538.7
## + V24_J2_1	1	0.64	1909.7	-4538.7
## + V13_2_J2_1	1	0.62	1909.8	-4538.6
## + V2_J1_2	1	0.58	1909.8	-4538.5
## + V2_J1_1	1	0.57	1909.8	-4538.5
## + V13_2_J2_4	1	0.56	1909.8	-4538.5
## + V20_J2_5	1	0.54	1909.8	-4538.4
## + V5_J2_2	1	0.53	1909.8	-4538.4
## + V13_1_J2_2	1	0.52	1909.8	-4538.4
## + V23_J2_2	1	0.51	1909.9	-4538.3
## + V3_J1_6	1	0.50	1909.9	-4538.3
## + V17_J2_5	1	0.48	1909.9	-4538.3
## + V3_J2_2	1	0.43	1909.9	-4538.1
## + V16_J2_5	1	0.38	1910.0	-4538.0
## + V1_J2_1	1	0.38	1910.0	-4538.0
## + V13_3_J2_2	1	0.38	1910.0	-4538.0
## + V20_J1_5	1	0.36	1910.0	-4537.9
## + V14_J1_3	1	0.35	1910.0	-4537.9
## + V16_J1_5	1	0.33	1910.0	-4537.9
## + V4_J1_7	1	0.33	1910.0	-4537.9
## + V24_J1_4	1	0.31	1910.1	-4537.8
## + V20_J2_4	1	0.30	1910.1	-4537.8
## + V23_J1_7	1	0.28	1910.1	-4537.7
## + V30_J2_1	1	0.26	1910.1	-4537.7
## + V26_J1_2	1	0.26	1910.1	-4537.7
## + V13_1_J2_7	1	0.25	1910.1	-4537.6
## + V17_J1_6	1	0.24	1910.1	-4537.6
## + V19_J2_7	1	0.23	1910.1	-4537.6
## + V1_J1_4	1	0.22	1910.2	-4537.6
## + V26_J1_7	1	0.22	1910.2	-4537.5
## + V16_J1_4	1	0.21	1910.2	-4537.5
## + V19_J1_3	1	0.21	1910.2	-4537.5
## + V19_J1_6	1	0.20	1910.2	-4537.5
## + V2_J2_5	1	0.20	1910.2	-4537.5
## + V29_J1_2	1	0.20	1910.2	-4537.5
## + V13_3_J2_1	1	0.18	1910.2	-4537.5
## + V23_J1_1	1	0.11	1910.2	-4537.3
## + V2_J1_4	1	0.10	1910.3	-4537.2
## + V19_J2_2	1	0.10	1910.3	-4537.2
## + V4_J2_2	1	0.10	1910.3	-4537.2
## + V3_J1_1	1	0.10	1910.3	-4537.2
## + V1_J2_4	1	0.09	1910.3	-4537.2
## + V16_J1_2	1	0.08	1910.3	-4537.2
## + V13_2_J1_1	1	0.08	1910.3	-4537.2

## + V13_3_J2_3	1	0.08	1910.3	-4537.2
## + V19_J1_7	1	0.08	1910.3	-4537.2
## + V13_3_J1_7	1	0.07	1910.3	-4537.1
## + V1_J1_6	1	0.06	1910.3	-4537.1
## + V17_J2_3	1	0.05	1910.3	-4537.1
## + V24_J2_2	1	0.04	1910.3	-4537.1
## + V23_J1_6	1	0.02	1910.3	-4537.0
## + V14_J1_7	1	0.01	1910.4	-4537.0
## + V29_J2_5	1	0.01	1910.4	-4537.0
## + V24_J1_3	1	0.01	1910.4	-4537.0
## + V5_J1_1	1	0.01	1910.4	-4537.0
## + V4_J1_1	1	0.00	1910.4	-4537.0
## + V26_J2_7	1	0.00	1910.4	-4537.0
## + V14_J1_1	1	0.00	1910.4	-4537.0
## + V2_J2_1	1	0.00	1910.4	-4537.0
## + V13_3_J1_4	1	0.00	1910.4	-4537.0
## + V17_J1_1	1	0.00	1910.4	-4537.0
## + V24_J2_4	1	0.00	1910.4	-4537.0
## + V3_J2_7	1	0.00	1910.4	-4537.0
## + V20_J1_7	1	0.00	1910.4	-4537.0
## + V15_J2_4	1	0.00	1910.4	-4537.0
## + V17_J1_4	1	0.00	1910.4	-4537.0
## + V24_J1_2	1	0.00	1910.4	-4537.0
## - V30_J2_5	1	21.80	1932.2	-4491.2
## - V2_J2_7	1	23.04	1933.4	-4487.9
## - V14_J2_5	1	23.40	1933.8	-4486.9
## - V13_1_J1_3	1	23.45	1933.8	-4486.8
## - V16_J2_7	1	24.99	1935.4	-4482.6
## - V15_J1_1	1	25.49	1935.9	-4481.3
## - V4_J2_7	1	27.91	1938.3	-4474.8
## - V12_1_2_J1_2	1	30.18	1940.5	-4468.7
## - V30_J1_3	1	30.70	1941.1	-4467.3
## - V2_J2_2	1	30.95	1941.3	-4466.7
## - V15_J1_2	1	31.63	1942.0	-4464.8
## - V14_J2_1	1	32.37	1942.7	-4462.9
## - V16_J1_3	1	36.99	1947.4	-4450.5
## - V4_J1_5	1	39.32	1949.7	-4444.3
## - V19_J2_5	1	39.94	1950.3	-4442.6
## - V26_J1_5	1	41.17	1951.5	-4439.4
## - V19_J2_4	1	42.85	1953.2	-4434.9
## - V1_J1_3	1	43.45	1953.8	-4433.3
## - V13_2_J1_7	1	44.10	1954.5	-4431.6
## - V4_J1_4	1	46.24	1956.6	-4425.9
## - V5_J1_4	1	46.88	1957.2	-4424.1
## - V15_J1_6	1	47.13	1957.5	-4423.5
## - V14_J2_4	1	47.66	1958.0	-4422.1
## - V30_J1_2	1	48.13	1958.5	-4420.8
## - V3_J1_5	1	50.33	1960.7	-4415.0
## - V23_J1_3	1	52.13	1962.5	-4410.2
## - V17_J2_7	1	56.33	1966.7	-4399.1
## - V26_J1_4	1	56.71	1967.1	-4398.1
## - V19_J2_1	1	59.59	1970.0	-4390.5
## - V30_J1_1	1	61.14	1971.5	-4386.4
## - V1_J2_2	1	61.91	1972.3	-4384.4


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## - V17_J1_3      1      63.22 1973.6 -4380.9
## - V15_J1_7      1      64.33 1974.7 -4378.0
## - V5_J2_1       1      64.67 1975.0 -4377.1
## - V2_J1_3       1      64.82 1975.2 -4376.7
## - V17_J2_2      1      67.55 1977.9 -4369.5
## - V12_1_2_J1_4  1      73.38 1983.8 -4354.2
## - V14_J2_3      1      75.57 1985.9 -4348.5
## - V1_J2_7       1      76.18 1986.5 -4346.9
## - V5_J2_3       1      86.41 1996.8 -4320.2
## - V30_J2_2      1      87.47 1997.8 -4317.4
## - V15_J1_3      1      93.24 2003.6 -4302.4
## - V14_J1_4      1      96.50 2006.9 -4294.0
## - V3_J1_4       1     100.89 2011.3 -4282.6
## - V14_J1_5      1     102.60 2013.0 -4278.2
## - V19_J2_3      1     105.87 2016.2 -4269.8
## - V4_J2_5       1     110.36 2020.7 -4258.2
## - V4_J2_3       1     132.36 2042.7 -4201.9
## - V15_J2_2      1     132.59 2043.0 -4201.3
## - V4_J2_1       1     133.21 2043.6 -4199.7
## - V12_1_2_J2_2  1     133.48 2043.8 -4199.0
## - V15_J2_7      1     133.80 2044.2 -4198.2
## - V3_J2_1       1     137.42 2047.8 -4189.0
## - V5_J1_5       1     145.17 2055.5 -4169.4
## - V3_J2_5       1     148.00 2058.4 -4162.2
## - V4_J2_4       1     160.93 2071.3 -4129.7
## - V26_J2_1      1     161.54 2071.9 -4128.1
## - V19_J1_5      1     171.11 2081.5 -4104.2
## - V26_J2_5      1     194.81 2105.2 -4045.3
## - V19_J1_4      1     197.92 2108.3 -4037.6
## - V26_J2_4      1     201.13 2111.5 -4029.7
## - V3_J2_4       1     217.23 2127.6 -3990.2
## - V3_J2_3       1     227.23 2137.6 -3965.8
## - V20_J2_2      1     241.15 2151.5 -3932.1
## - V5_J2_5       1     288.14 2198.5 -3819.7
## - V5_J2_4       1     329.94 2240.3 -3721.8
## - V26_J2_3      1     392.08 2302.4 -3579.5
## - V16_J2_2      1     415.99 2326.4 -3525.8
## - J             12     655.00 2565.4 -3090.2
## - V             19    1236.86 3147.2 -2073.7
##
## Step:  AIC=-4597.14
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7
##

```

##	Df	Sum of Sq	RSS	AIC
## + V20_J2_3	1	20.19	1868.2	-4646.4
## + V30_J1_5	1	17.39	1871.0	-4638.6
## + V16_J2_3	1	16.99	1871.4	-4637.5
## + V20_J1_3	1	16.60	1871.8	-4636.4
## + V20_J2_1	1	16.54	1871.8	-4636.3
## + V24_J2_5	1	16.48	1871.9	-4636.1
## + V13_2_J1_5	1	15.13	1873.3	-4632.3
## + V12_1_2_J2_7	1	14.83	1873.6	-4631.5
## + V29_J1_3	1	13.55	1874.8	-4628.0
## + V12_1_2_J1_3	1	12.34	1876.0	-4624.6
## + V24_J1_6	1	12.06	1876.3	-4623.8
## + V24_J1_7	1	11.21	1877.2	-4621.5
## + V12_1_2_J2_5	1	10.67	1877.7	-4620.0
## + V13_1_J1_5	1	10.50	1877.9	-4619.5
## + V15_J2_1	1	10.30	1878.1	-4618.9
## + V1_J2_5	1	10.24	1878.1	-4618.8
## + V24_J1_5	1	9.49	1878.9	-4616.7
## + V23_J1_4	1	9.25	1879.1	-4616.1
## + V12_1_2_J1_7	1	9.10	1879.3	-4615.6
## + V4_J1_3	1	8.97	1879.4	-4615.3
## + V13_1_J1_7	1	8.89	1879.5	-4615.0
## + V29_J1_5	1	8.71	1879.7	-4614.5
## + V13_2_J1_3	1	8.25	1880.1	-4613.3
## + V15_J1_5	1	8.20	1880.2	-4613.1
## + V23_J2_1	1	8.00	1880.4	-4612.6
## + V12_1_2_J1_6	1	7.50	1880.9	-4611.2
## + V29_J1_7	1	7.31	1881.1	-4610.7
## + V13_1_J1_2	1	7.16	1881.2	-4610.3
## + V13_3_J2_5	1	7.07	1881.3	-4610.0
## + V13_1_J2_4	1	6.21	1882.2	-4607.6
## + V17_J1_5	1	6.16	1882.2	-4607.5
## + V13_2_J1_6	1	5.98	1882.4	-4607.0
## + V12_1_2_J2_3	1	5.90	1882.5	-4606.8
## + V12_1_2_J1_5	1	5.88	1882.5	-4606.7
## + V30_J1_6	1	5.46	1882.9	-4605.6
## + V5_J1_6	1	5.45	1882.9	-4605.5
## + V14_J1_2	1	5.31	1883.1	-4605.1
## + V29_J2_2	1	5.11	1883.3	-4604.6
## + V13_2_J1_4	1	5.10	1883.3	-4604.6
## + V15_J2_3	1	4.88	1883.5	-4604.0
## + V12_1_2_J2_4	1	4.69	1883.7	-4603.4
## + V5_J1_3	1	4.66	1883.7	-4603.4
## + V29_J2_3	1	4.55	1883.8	-4603.0
## + V1_J1_5	1	4.51	1883.9	-4602.9
## + V13_3_J1_3	1	4.45	1883.9	-4602.8
## + V24_J2_3	1	4.44	1884.0	-4602.7
## + V20_J2_7	1	4.36	1884.0	-4602.5
## + V26_J1_6	1	4.33	1884.1	-4602.4
## + V1_J1_7	1	4.24	1884.2	-4602.2
## + V13_2_J2_5	1	4.12	1884.3	-4601.9
## + V20_J1_1	1	4.09	1884.3	-4601.8
## + V17_J2_1	1	3.99	1884.4	-4601.5
## + V19_J1_1	1	3.98	1884.4	-4601.5

## + V20_J1_4	1	3.89	1884.5	-4601.2
## + V29_J1_1	1	3.77	1884.6	-4600.9
## + V13_1_J2_5	1	3.76	1884.6	-4600.9
## + V30_J2_3	1	3.56	1884.8	-4600.3
## + V26_J2_2	1	3.48	1884.9	-4600.1
## + V13_3_J1_2	1	3.14	1885.2	-4599.2
## + V24_J1_1	1	3.07	1885.3	-4599.0
## + V16_J2_4	1	3.07	1885.3	-4599.0
## + V29_J2_1	1	2.96	1885.4	-4598.7
## + V26_J1_1	1	2.65	1885.7	-4597.8
## + V13_3_J2_4	1	2.65	1885.7	-4597.8
## + V13_2_J2_7	1	2.65	1885.7	-4597.8
## + V15_J1_4	1	2.64	1885.8	-4597.8
## + V29_J1_4	1	2.55	1885.8	-4597.5
## + V16_J1_7	1	2.48	1885.9	-4597.3
## + V26_J1_3	1	2.46	1885.9	-4597.3
## + V14_J2_7	1	2.45	1885.9	-4597.3
## + V13_2_J1_2	1	2.44	1885.9	-4597.2
## <none>			1888.4	-4597.1
## + V12_1_2_J2_1	1	2.38	1886.0	-4597.1
## + V16_J1_1	1	2.26	1886.1	-4596.7
## + V3_J1_2	1	2.23	1886.2	-4596.7
## + V16_J2_1	1	2.23	1886.2	-4596.6
## + V1_J1_1	1	2.22	1886.2	-4596.6
## + V29_J1_6	1	2.22	1886.2	-4596.6
## + V20_J1_2	1	2.17	1886.2	-4596.5
## + V30_J1_4	1	2.16	1886.2	-4596.5
## + V2_J1_5	1	2.15	1886.2	-4596.4
## + V30_J2_4	1	2.12	1886.3	-4596.4
## + V16_J1_6	1	2.09	1886.3	-4596.3
## + V2_J1_6	1	2.09	1886.3	-4596.3
## + V23_J2_3	1	2.01	1886.4	-4596.0
## + V13_3_J1_6	1	1.99	1886.4	-4596.0
## + V23_J1_5	1	1.97	1886.4	-4595.9
## + V13_2_J2_2	1	1.96	1886.4	-4595.9
## + V13_2_J2_3	1	1.92	1886.5	-4595.8
## + V3_J1_3	1	1.78	1886.6	-4595.4
## + V12_1_2_J1_1	1	1.68	1886.7	-4595.1
## + V5_J1_2	1	1.65	1886.7	-4595.0
## + V2_J2_3	1	1.64	1886.7	-4595.0
## + V17_J2_4	1	1.64	1886.7	-4595.0
## + V1_J1_2	1	1.64	1886.8	-4595.0
## + V17_J1_7	1	1.63	1886.8	-4595.0
## + V13_1_J2_1	1	1.60	1886.8	-4594.9
## + V13_1_J1_6	1	1.47	1886.9	-4594.6
## + V1_J2_3	1	1.44	1887.0	-4594.5
## + V13_3_J1_5	1	1.42	1887.0	-4594.4
## + V30_J2_7	1	1.41	1887.0	-4594.4
## + V4_J1_2	1	1.39	1887.0	-4594.3
## + V23_J1_2	1	1.35	1887.0	-4594.2
## + V23_J2_2	1	1.34	1887.0	-4594.2
## + V13_3_J1_1	1	1.31	1887.1	-4594.1
## + V5_J2_7	1	1.17	1887.2	-4593.7
## + V20_J1_6	1	1.13	1887.3	-4593.6

## + V19_J1_2	1	1.11	1887.3	-4593.6
## + V14_J1_6	1	1.09	1887.3	-4593.5
## + V3_J1_7	1	1.06	1887.3	-4593.4
## + V2_J1_7	1	1.03	1887.4	-4593.3
## + V29_J2_4	1	0.96	1887.4	-4593.1
## + V23_J1_7	1	0.94	1887.4	-4593.1
## + V13_3_J2_7	1	0.93	1887.5	-4593.1
## + V23_J2_5	1	0.89	1887.5	-4593.0
## + V4_J1_6	1	0.87	1887.5	-4592.9
## + V5_J1_7	1	0.86	1887.5	-4592.9
## + V14_J2_2	1	0.83	1887.5	-4592.8
## + V15_J2_5	1	0.81	1887.6	-4592.8
## + V17_J1_2	1	0.79	1887.6	-4592.7
## + V13_1_J1_4	1	0.78	1887.6	-4592.7
## + V13_1_J2_3	1	0.74	1887.7	-4592.5
## + V30_J1_7	1	0.73	1887.7	-4592.5
## + V13_1_J1_1	1	0.71	1887.7	-4592.5
## + V2_J2_4	1	0.66	1887.7	-4592.3
## + V20_J2_5	1	0.62	1887.8	-4592.2
## + V2_J1_1	1	0.59	1887.8	-4592.1
## + V24_J2_7	1	0.59	1887.8	-4592.1
## + V24_J2_1	1	0.57	1887.8	-4592.1
## + V2_J1_2	1	0.56	1887.8	-4592.0
## + V13_2_J2_1	1	0.55	1887.8	-4592.0
## + V13_2_J2_4	1	0.49	1887.9	-4591.9
## + V13_1_J2_2	1	0.49	1887.9	-4591.9
## + V17_J2_5	1	0.46	1887.9	-4591.8
## + V5_J2_2	1	0.44	1888.0	-4591.7
## + V20_J1_5	1	0.42	1888.0	-4591.7
## + V3_J1_6	1	0.41	1888.0	-4591.6
## + V16_J2_5	1	0.40	1888.0	-4591.6
## + V1_J2_1	1	0.37	1888.0	-4591.5
## + V23_J2_4	1	0.35	1888.0	-4591.5
## + V13_3_J2_2	1	0.35	1888.0	-4591.5
## + V3_J2_2	1	0.35	1888.0	-4591.5
## + V4_J1_7	1	0.34	1888.0	-4591.4
## + V14_J1_3	1	0.32	1888.1	-4591.4
## + V16_J1_5	1	0.32	1888.1	-4591.4
## + V26_J1_7	1	0.28	1888.1	-4591.3
## + V19_J1_6	1	0.26	1888.1	-4591.2
## + V24_J1_4	1	0.26	1888.1	-4591.2
## + V17_J1_6	1	0.25	1888.1	-4591.2
## + V20_J2_4	1	0.25	1888.1	-4591.2
## + V1_J1_4	1	0.24	1888.2	-4591.2
## + V2_J2_5	1	0.21	1888.2	-4591.1
## + V30_J2_1	1	0.21	1888.2	-4591.1
## + V16_J1_4	1	0.20	1888.2	-4591.1
## + V29_J2_7	1	0.20	1888.2	-4591.1
## + V26_J1_2	1	0.20	1888.2	-4591.0
## + V19_J1_3	1	0.19	1888.2	-4591.0
## + V29_J1_2	1	0.17	1888.2	-4591.0
## + V26_J2_7	1	0.17	1888.2	-4591.0
## + V19_J2_2	1	0.15	1888.2	-4590.9
## + V13_3_J2_1	1	0.14	1888.2	-4590.9

## + V19_J1_7	1	0.12	1888.3	-4590.8
## + V4_J2_2	1	0.11	1888.3	-4590.8
## + V3_J2_7	1	0.10	1888.3	-4590.8
## + V2_J1_4	1	0.09	1888.3	-4590.8
## + V1_J2_4	1	0.09	1888.3	-4590.8
## + V16_J1_2	1	0.09	1888.3	-4590.8
## + V23_J1_6	1	0.08	1888.3	-4590.7
## + V13_3_J1_7	1	0.08	1888.3	-4590.7
## + V13_2_J1_1	1	0.07	1888.3	-4590.7
## + V3_J1_1	1	0.06	1888.3	-4590.7
## + V13_3_J2_3	1	0.06	1888.3	-4590.7
## + V24_J2_2	1	0.05	1888.3	-4590.7
## + V1_J1_6	1	0.05	1888.3	-4590.7
## + V17_J2_3	1	0.05	1888.3	-4590.6
## + V29_J2_5	1	0.02	1888.4	-4590.6
## + V5_J1_1	1	0.02	1888.4	-4590.6
## + V19_J2_7	1	0.02	1888.4	-4590.6
## + V13_1_J2_7	1	0.02	1888.4	-4590.6
## + V23_J1_1	1	0.01	1888.4	-4590.5
## + V13_3_J1_4	1	0.01	1888.4	-4590.5
## + V24_J2_4	1	0.01	1888.4	-4590.5
## + V24_J1_3	1	0.01	1888.4	-4590.5
## + V4_J1_1	1	0.00	1888.4	-4590.5
## + V2_J2_1	1	0.00	1888.4	-4590.5
## + V20_J1_7	1	0.00	1888.4	-4590.5
## + V14_J1_7	1	0.00	1888.4	-4590.5
## + V15_J2_4	1	0.00	1888.4	-4590.5
## + V17_J1_1	1	0.00	1888.4	-4590.5
## + V17_J1_4	1	0.00	1888.4	-4590.5
## + V24_J1_2	1	0.00	1888.4	-4590.5
## + V14_J1_1	1	0.00	1888.4	-4590.5
## - V23_J2_7	1	21.98	1910.4	-4543.6
## - V30_J2_5	1	22.29	1910.7	-4542.7
## - V14_J2_5	1	22.68	1911.1	-4541.7
## - V13_1_J1_3	1	23.30	1911.7	-4540.0
## - V15_J1_1	1	25.29	1913.7	-4534.6
## - V2_J2_7	1	26.39	1914.8	-4531.6
## - V16_J2_7	1	28.47	1916.9	-4526.0
## - V12_1_2_J1_2	1	30.51	1918.9	-4520.4
## - V30_J1_3	1	30.73	1919.1	-4519.8
## - V2_J2_2	1	31.08	1919.5	-4518.9
## - V4_J2_7	1	31.30	1919.7	-4518.3
## - V15_J1_2	1	31.43	1919.8	-4517.9
## - V14_J2_1	1	31.57	1920.0	-4517.6
## - V16_J1_3	1	37.53	1925.9	-4501.4
## - V19_J2_5	1	39.00	1927.4	-4497.5
## - V4_J1_5	1	39.03	1927.4	-4497.4
## - V26_J1_5	1	40.26	1928.7	-4494.1
## - V19_J2_4	1	41.92	1930.3	-4489.6
## - V13_2_J1_7	1	43.82	1932.2	-4484.5
## - V1_J1_3	1	44.04	1932.4	-4483.9
## - V5_J1_4	1	45.87	1934.2	-4479.0
## - V4_J1_4	1	45.87	1934.3	-4479.0
## - V14_J2_4	1	46.68	1935.1	-4476.8

```

## - V15_J1_6      1      46.84 1935.2 -4476.4
## - V30_J1_2      1      48.58 1937.0 -4471.7
## - V3_J1_5       1      49.33 1937.7 -4469.7
## - V26_J1_4      1      55.59 1944.0 -4452.9
## - V23_J1_3      1      57.73 1946.1 -4447.2
## - V19_J2_1      1      58.49 1946.9 -4445.2
## - V17_J2_7      1      61.39 1949.8 -4437.4
## - V30_J1_1      1      61.62 1950.0 -4436.8
## - V1_J2_2       1      62.09 1950.5 -4435.6
## - V5_J2_1       1      63.52 1951.9 -4431.7
## - V17_J1_3      1      63.93 1952.3 -4430.6
## - V15_J1_7      1      64.01 1952.4 -4430.4
## - V2_J1_3       1      65.54 1953.9 -4426.4
## - V17_J2_2      1      67.74 1956.1 -4420.5
## - V12_1_2_J1_4  1      72.52 1960.9 -4407.8
## - V14_J2_3      1      74.33 1962.7 -4403.0
## - V1_J2_7       1      81.97 1970.4 -4382.8
## - V5_J2_3       1      85.08 1973.5 -4374.6
## - V30_J2_2      1      86.90 1975.3 -4369.8
## - V15_J1_3      1      92.24 1980.6 -4355.8
## - V14_J1_4      1      95.03 1983.4 -4348.5
## - V3_J1_4       1      99.39 1987.8 -4337.1
## - V14_J1_5      1     101.16 1989.5 -4332.4
## - V19_J2_3      1     104.40 1992.8 -4324.0
## - V4_J2_5       1     109.78 1998.2 -4309.9
## - V15_J2_7      1     125.17 2013.6 -4270.0
## - V4_J2_3       1     131.81 2020.2 -4252.9
## - V15_J2_2      1     132.15 2020.5 -4252.0
## - V4_J2_1       1     132.66 2021.0 -4250.7
## - V12_1_2_J2_2  1     132.84 2021.2 -4250.3
## - V3_J2_1       1     135.74 2024.1 -4242.8
## - V5_J1_5       1     143.44 2031.8 -4223.1
## - V3_J2_5       1     146.17 2034.5 -4216.1
## - V26_J2_1      1     159.72 2048.1 -4181.6
## - V4_J2_4       1     160.33 2048.7 -4180.0
## - V19_J1_5      1     169.23 2057.6 -4157.5
## - V26_J2_5      1     192.70 2081.1 -4098.5
## - V19_J1_4      1     195.80 2084.2 -4090.8
## - V26_J2_4      1     199.09 2087.5 -4082.6
## - V3_J2_4       1     215.11 2103.5 -4042.8
## - V3_J2_3       1     225.06 2113.4 -4018.3
## - V20_J2_2      1     240.48 2128.9 -3980.5
## - V5_J2_5       1     285.55 2173.9 -3871.5
## - V5_J2_4       1     327.30 2215.7 -3772.6
## - V26_J2_3      1     389.20 2277.6 -3629.3
## - V16_J2_2      1     416.46 2304.8 -3567.5
## - J             12     628.49 2516.9 -3182.8
## - V             19    1243.16 3131.6 -2093.0
##
## Step:  AIC=-4646.4
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##       V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##       V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##       V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +

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##      V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
##      V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
##      V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
##      V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
##      V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
##      V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
##      V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
##      V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
##      V20_J2_3
##
##      Df Sum of Sq    RSS    AIC
## + V20_J2_1      1    20.28 1847.9 -4696.5
## + V16_J2_3      1    20.09 1848.1 -4696.0
## + V30_J1_5      1    17.75 1850.4 -4689.4
## + V24_J2_5      1    16.27 1851.9 -4685.3
## + V13_2_J1_5     1    14.94 1853.3 -4681.5
## + V12_1_2_J2_7   1    14.43 1853.8 -4680.1
## + V20_J1_3       1    13.68 1854.5 -4678.0
## + V29_J1_3       1    13.17 1855.0 -4676.5
## + V24_J1_6       1    12.26 1855.9 -4674.0
## + V12_1_2_J1_3   1    11.92 1856.3 -4673.0
## + V24_J1_7       1    11.42 1856.8 -4671.7
## + V12_1_2_J2_5   1    10.89 1857.3 -4670.2
## + V15_J2_1       1    10.72 1857.5 -4669.7
## + V13_1_J1_5     1    10.33 1857.9 -4668.6
## + V1_J2_5        1    10.01 1858.2 -4667.7
## + V24_J1_5       1     9.35 1858.8 -4665.9
## + V23_J1_4       1     9.05 1859.2 -4665.0
## + V12_1_2_J1_7   1     8.87 1859.3 -4664.5
## + V29_J1_5       1     8.84 1859.4 -4664.4
## + V4_J1_3        1     8.84 1859.4 -4664.4
## + V13_1_J1_7     1     8.68 1859.5 -4664.0
## + V13_2_J1_3     1     8.58 1859.6 -4663.7
## + V23_J2_1       1     8.17 1860.0 -4662.6
## + V15_J1_5       1     7.83 1860.4 -4661.6
## + V12_1_2_J1_6   1     7.30 1860.9 -4660.1
## + V13_3_J2_5     1     7.20 1861.0 -4659.9
## + V29_J1_7       1     7.15 1861.0 -4659.7
## + V13_1_J1_2     1     6.96 1861.2 -4659.2
## + V13_1_J2_4     1     6.34 1861.8 -4657.5
## + V17_J1_5       1     6.33 1861.9 -4657.4
## + V13_2_J1_6     1     6.14 1862.1 -4656.9
## + V12_1_2_J1_5   1     6.03 1862.2 -4656.6
## + V5_J1_6        1     5.47 1862.7 -4655.0
## + V14_J1_2       1     5.31 1862.9 -4654.6
## + V30_J1_6       1     5.23 1863.0 -4654.3
## + V13_2_J1_4     1     5.22 1863.0 -4654.3
## + V29_J2_2       1     5.19 1863.0 -4654.2
## + V12_1_2_J2_4   1     4.82 1863.4 -4653.2
## + V5_J1_3        1     4.74 1863.5 -4653.0
## + V13_3_J1_3     1     4.68 1863.5 -4652.8
## + V1_J1_5        1     4.65 1863.5 -4652.7
## + V1_J1_7        1     4.42 1863.8 -4652.1
## + V12_1_2_J2_3   1     4.34 1863.9 -4651.9

```

## + V26_J1_6	1	4.31	1863.9	-4651.8
## + V13_2_J2_5	1	4.00	1864.2	-4650.9
## + V19_J1_1	1	3.99	1864.2	-4650.9
## + V13_1_J2_5	1	3.88	1864.3	-4650.6
## + V17_J2_1	1	3.85	1864.3	-4650.5
## + V29_J1_1	1	3.64	1864.5	-4649.9
## + V26_J2_2	1	3.55	1864.6	-4649.7
## + V15_J2_3	1	3.55	1864.7	-4649.6
## + V20_J1_2	1	3.54	1864.7	-4649.6
## + V16_J2_4	1	3.19	1865.0	-4648.6
## + V29_J2_3	1	3.18	1865.0	-4648.6
## + V24_J2_3	1	3.09	1865.1	-4648.4
## + V13_2_J2_3	1	3.05	1865.2	-4648.3
## + V29_J2_1	1	3.04	1865.2	-4648.2
## + V13_3_J1_2	1	3.02	1865.2	-4648.2
## + V24_J1_1	1	2.96	1865.2	-4648.0
## + V20_J2_7	1	2.88	1865.3	-4647.8
## + V13_2_J2_7	1	2.80	1865.4	-4647.6
## + V2_J2_3	1	2.67	1865.5	-4647.2
## + V26_J1_1	1	2.65	1865.5	-4647.1
## + V20_J1_1	1	2.64	1865.5	-4647.1
## + V29_J1_4	1	2.62	1865.6	-4647.1
## + V16_J1_7	1	2.61	1865.6	-4647.0
## + V13_3_J2_4	1	2.58	1865.6	-4646.9
## + V12_1_2_J2_1	1	2.47	1865.7	-4646.6
## + V20_J1_4	1	2.45	1865.8	-4646.6
## + V15_J1_4	1	2.42	1865.8	-4646.5
## + V14_J2_7	1	2.42	1865.8	-4646.5
## + V1_J2_3	1	2.40	1865.8	-4646.5
## + V30_J2_3	1	2.40	1865.8	-4646.4
## + V26_J1_3	1	2.40	1865.8	-4646.4
## + V16_J1_1	1	2.39	1865.8	-4646.4
## <none>			1868.2	-4646.4
## + V13_2_J1_2	1	2.33	1865.9	-4646.3
## + V2_J1_5	1	2.25	1866.0	-4646.0
## + V3_J1_2	1	2.23	1866.0	-4646.0
## + V16_J1_6	1	2.21	1866.0	-4645.9
## + V2_J1_6	1	2.21	1866.0	-4645.9
## + V20_J1_6	1	2.17	1866.0	-4645.8
## + V29_J1_6	1	2.14	1866.1	-4645.7
## + V16_J2_1	1	2.13	1866.1	-4645.7
## + V1_J1_1	1	2.09	1866.1	-4645.6
## + V30_J1_4	1	2.03	1866.2	-4645.4
## + V13_2_J2_2	1	2.01	1866.2	-4645.4
## + V30_J2_4	1	2.00	1866.2	-4645.3
## + V13_3_J1_6	1	1.91	1866.3	-4645.1
## + V23_J1_5	1	1.88	1866.3	-4645.0
## + V3_J1_3	1	1.83	1866.4	-4644.9
## + V12_1_2_J1_1	1	1.79	1866.4	-4644.7
## + V1_J1_2	1	1.76	1866.4	-4644.7
## + V17_J1_7	1	1.74	1866.5	-4644.6
## + V13_1_J2_1	1	1.67	1866.5	-4644.4
## + V5_J1_2	1	1.65	1866.5	-4644.4
## + V17_J2_4	1	1.56	1866.6	-4644.1

## + V13_1_J1_6	1	1.55	1866.6	-4644.1
## + V23_J1_2	1	1.46	1866.7	-4643.8
## + V4_J1_2	1	1.40	1866.8	-4643.7
## + V13_3_J1_1	1	1.38	1866.8	-4643.6
## + V13_3_J1_5	1	1.36	1866.8	-4643.6
## + V23_J2_2	1	1.29	1866.9	-4643.4
## + V30_J2_7	1	1.26	1866.9	-4643.3
## + V5_J2_7	1	1.19	1867.0	-4643.1
## + V23_J2_3	1	1.15	1867.0	-4643.0
## + V19_J1_2	1	1.11	1867.1	-4642.9
## + V14_J1_6	1	1.10	1867.1	-4642.8
## + V3_J1_7	1	1.06	1867.1	-4642.7
## + V13_3_J2_7	1	1.01	1867.2	-4642.6
## + V23_J2_5	1	0.96	1867.2	-4642.4
## + V2_J1_7	1	0.95	1867.2	-4642.4
## + V29_J2_4	1	0.91	1867.3	-4642.3
## + V17_J1_2	1	0.87	1867.3	-4642.2
## + V23_J1_7	1	0.87	1867.3	-4642.2
## + V4_J1_6	1	0.87	1867.3	-4642.2
## + V5_J1_7	1	0.86	1867.3	-4642.2
## + V20_J2_4	1	0.85	1867.3	-4642.1
## + V13_1_J1_4	1	0.83	1867.4	-4642.1
## + V30_J1_7	1	0.82	1867.4	-4642.0
## + V14_J2_2	1	0.80	1867.4	-4642.0
## + V13_1_J1_1	1	0.77	1867.4	-4641.9
## + V15_J2_5	1	0.70	1867.5	-4641.7
## + V24_J2_7	1	0.66	1867.5	-4641.6
## + V2_J1_2	1	0.63	1867.6	-4641.5
## + V2_J2_4	1	0.60	1867.6	-4641.5
## + V24_J2_1	1	0.54	1867.7	-4641.3
## + V2_J1_1	1	0.53	1867.7	-4641.2
## + V13_2_J2_1	1	0.51	1867.7	-4641.2
## + V13_1_J2_2	1	0.46	1867.7	-4641.1
## + V5_J2_2	1	0.46	1867.7	-4641.1
## + V13_2_J2_4	1	0.46	1867.7	-4641.0
## + V16_J2_5	1	0.45	1867.8	-4641.0
## + V3_J1_6	1	0.42	1867.8	-4640.9
## + V17_J2_5	1	0.41	1867.8	-4640.9
## + V23_J2_4	1	0.39	1867.8	-4640.8
## + V3_J2_2	1	0.37	1867.8	-4640.8
## + V13_3_J2_3	1	0.36	1867.8	-4640.8
## + V4_J1_7	1	0.34	1867.9	-4640.7
## + V1_J2_1	1	0.33	1867.9	-4640.7
## + V13_3_J2_2	1	0.33	1867.9	-4640.7
## + V17_J2_3	1	0.32	1867.9	-4640.7
## + V14_J1_3	1	0.30	1867.9	-4640.6
## + V16_J1_5	1	0.29	1867.9	-4640.6
## + V26_J1_7	1	0.28	1867.9	-4640.5
## + V1_J1_4	1	0.27	1867.9	-4640.5
## + V13_1_J2_3	1	0.26	1867.9	-4640.5
## + V19_J1_6	1	0.26	1867.9	-4640.5
## + V2_J2_5	1	0.25	1868.0	-4640.5
## + V29_J2_7	1	0.24	1868.0	-4640.4
## + V24_J1_4	1	0.23	1868.0	-4640.4

## + V17_J1_6	1	0.21	1868.0	-4640.4
## + V26_J1_2	1	0.20	1868.0	-4640.3
## + V16_J1_4	1	0.17	1868.0	-4640.2
## + V19_J1_3	1	0.17	1868.0	-4640.2
## + V30_J2_1	1	0.17	1868.0	-4640.2
## + V26_J2_7	1	0.16	1868.0	-4640.2
## + V29_J1_2	1	0.15	1868.0	-4640.2
## + V20_J2_5	1	0.14	1868.1	-4640.2
## + V19_J2_2	1	0.13	1868.1	-4640.1
## + V13_3_J2_1	1	0.13	1868.1	-4640.1
## + V20_J1_7	1	0.12	1868.1	-4640.1
## + V19_J1_7	1	0.12	1868.1	-4640.1
## + V1_J2_4	1	0.11	1868.1	-4640.1
## + V13_3_J1_7	1	0.10	1868.1	-4640.0
## + V4_J2_2	1	0.09	1868.1	-4640.0
## + V3_J2_7	1	0.09	1868.1	-4640.0
## + V2_J1_4	1	0.07	1868.1	-4640.0
## + V1_J1_6	1	0.07	1868.1	-4640.0
## + V16_J1_2	1	0.07	1868.1	-4640.0
## + V3_J1_1	1	0.06	1868.1	-4639.9
## + V23_J1_6	1	0.06	1868.1	-4639.9
## + V24_J2_2	1	0.06	1868.1	-4639.9
## + V20_J1_5	1	0.05	1868.1	-4639.9
## + V13_2_J1_1	1	0.05	1868.1	-4639.9
## + V29_J2_5	1	0.03	1868.2	-4639.9
## + V13_1_J2_7	1	0.03	1868.2	-4639.9
## + V19_J2_7	1	0.02	1868.2	-4639.8
## + V5_J1_1	1	0.02	1868.2	-4639.8
## + V24_J1_3	1	0.02	1868.2	-4639.8
## + V13_3_J1_4	1	0.01	1868.2	-4639.8
## + V24_J2_4	1	0.01	1868.2	-4639.8
## + V2_J2_1	1	0.01	1868.2	-4639.8
## + V17_J1_1	1	0.01	1868.2	-4639.8
## + V4_J1_1	1	0.00	1868.2	-4639.8
## + V23_J1_1	1	0.00	1868.2	-4639.8
## + V14_J1_7	1	0.00	1868.2	-4639.8
## + V24_J1_2	1	0.00	1868.2	-4639.8
## + V15_J2_4	1	0.00	1868.2	-4639.8
## + V17_J1_4	1	0.00	1868.2	-4639.8
## + V14_J1_1	1	0.00	1868.2	-4639.8
## - V20_J2_3	1	20.19	1888.4	-4597.1
## - V23_J2_7	1	21.56	1889.8	-4593.4
## - V30_J2_5	1	22.65	1890.8	-4590.4
## - V14_J2_5	1	22.75	1891.0	-4590.1
## - V13_1_J1_3	1	23.77	1892.0	-4587.3
## - V15_J1_1	1	25.89	1894.1	-4581.5
## - V2_J2_7	1	25.91	1894.1	-4581.4
## - V16_J2_7	1	27.97	1896.2	-4575.8
## - V30_J1_3	1	30.06	1898.3	-4570.0
## - V2_J2_2	1	30.83	1899.0	-4567.9
## - V12_1_2_J1_2	1	30.90	1899.1	-4567.7
## - V4_J2_7	1	31.19	1899.4	-4567.0
## - V14_J2_1	1	31.68	1899.9	-4565.6
## - V15_J1_2	1	32.12	1900.3	-4564.4

## - V16_J1_3	1	36.87	1905.1	-4551.4
## - V19_J2_5	1	39.09	1907.3	-4545.4
## - V4_J1_5	1	39.13	1907.3	-4545.2
## - V26_J1_5	1	40.38	1908.6	-4541.8
## - V19_J2_4	1	42.05	1910.2	-4537.3
## - V1_J1_3	1	43.33	1911.5	-4533.8
## - V13_2_J1_7	1	43.44	1911.6	-4533.5
## - V4_J1_4	1	45.96	1914.2	-4526.7
## - V5_J1_4	1	45.97	1914.2	-4526.6
## - V14_J2_4	1	46.81	1915.0	-4524.3
## - V15_J1_6	1	47.62	1915.8	-4522.2
## - V30_J1_2	1	49.21	1917.4	-4517.8
## - V3_J1_5	1	49.47	1917.7	-4517.1
## - V26_J1_4	1	55.71	1923.9	-4500.2
## - V23_J1_3	1	56.93	1925.1	-4496.9
## - V19_J2_1	1	58.64	1926.8	-4492.3
## - V17_J2_7	1	60.65	1928.8	-4486.9
## - V1_J2_2	1	61.73	1929.9	-4484.0
## - V30_J1_1	1	62.30	1930.5	-4482.5
## - V17_J1_3	1	63.06	1931.3	-4480.4
## - V5_J2_1	1	63.68	1931.9	-4478.7
## - V2_J1_3	1	64.66	1932.9	-4476.1
## - V15_J1_7	1	64.94	1933.1	-4475.4
## - V17_J2_2	1	67.37	1935.6	-4468.8
## - V12_1_2_J1_4	1	72.06	1940.2	-4456.2
## - V14_J2_3	1	79.60	1947.8	-4436.1
## - V1_J2_7	1	81.12	1949.3	-4432.0
## - V30_J2_2	1	86.34	1954.5	-4418.1
## - V5_J2_3	1	90.69	1958.9	-4406.6
## - V15_J1_3	1	93.67	1961.9	-4398.6
## - V14_J1_4	1	95.18	1963.4	-4394.6
## - V3_J1_4	1	99.55	1967.7	-4383.1
## - V14_J1_5	1	101.35	1969.5	-4378.3
## - V4_J2_5	1	109.90	1978.1	-4355.8
## - V19_J2_3	1	110.54	1978.7	-4354.1
## - V15_J2_7	1	126.69	1994.9	-4311.9
## - V12_1_2_J2_2	1	132.39	2000.6	-4297.0
## - V4_J2_1	1	132.85	2001.0	-4295.8
## - V15_J2_2	1	133.18	2001.4	-4295.0
## - V3_J2_1	1	135.97	2004.2	-4287.7
## - V4_J2_3	1	138.54	2006.7	-4281.1
## - V5_J1_5	1	143.68	2011.9	-4267.8
## - V3_J2_5	1	146.34	2014.5	-4260.9
## - V26_J2_1	1	159.96	2028.2	-4225.8
## - V4_J2_4	1	160.54	2028.7	-4224.4
## - V19_J1_5	1	169.49	2037.7	-4201.5
## - V26_J2_5	1	192.90	2061.1	-4142.1
## - V19_J1_4	1	196.02	2064.2	-4134.2
## - V26_J2_4	1	199.37	2067.6	-4125.8
## - V3_J2_4	1	215.40	2083.6	-4085.6
## - V3_J2_3	1	233.66	2101.9	-4040.2
## - V20_J2_2	1	250.17	2118.4	-3999.6
## - V5_J2_5	1	285.79	2154.0	-3912.8
## - V5_J2_4	1	327.66	2195.9	-3812.7

```

## - V26_J2_3      1      400.00 2268.2 -3644.2
## - V16_J2_2      1      415.53 2283.7 -3608.7
## - J             12      646.14 2514.3 -3181.4
## - V             19     1194.38 3062.6 -2202.2
##
## Step:  AIC=-4696.53
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##      V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##      V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##      V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
##      V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
##      V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
##      V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
##      V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
##      V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
##      V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
##      V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
##      V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
##      V20_J2_3 + V20_J2_1
##
##
##      Df Sum of Sq  RSS    AIC
## + V16_J2_3      1      20.08 1827.8 -4746.7
## + V30_J1_5      1      18.16 1829.8 -4741.2
## + V24_J2_5      1      16.05 1831.9 -4735.2
## + V13_2_J1_5    1      14.73 1833.2 -4731.5
## + V12_1_2_J2_7  1      14.00 1833.9 -4729.4
## + V29_J1_3      1      12.75 1835.2 -4725.9
## + V24_J1_6      1      12.49 1835.4 -4725.2
## + V24_J1_7      1      11.65 1836.3 -4722.8
## + V12_1_2_J1_3  1      11.46 1836.5 -4722.2
## + V12_1_2_J2_5  1      11.13 1836.8 -4721.3
## + V20_J1_3      1      10.78 1837.1 -4720.3
## + V13_1_J1_5    1      10.14 1837.8 -4718.5
## + V1_J2_5       1       9.75 1838.2 -4717.4
## + V24_J1_5      1       9.20 1838.7 -4715.9
## + V29_J1_5      1       8.99 1838.9 -4715.2
## + V13_2_J1_3    1       8.94 1839.0 -4715.1
## + V23_J1_4      1       8.83 1839.1 -4714.8
## + V15_J2_1      1       8.73 1839.2 -4714.5
## + V4_J1_3       1       8.70 1839.2 -4714.4
## + V12_1_2_J1_7  1       8.62 1839.3 -4714.2
## + V13_1_J1_7    1       8.45 1839.5 -4713.7
## + V15_J1_5      1       7.44 1840.5 -4710.9
## + V13_3_J2_5    1       7.36 1840.6 -4710.6
## + V12_1_2_J1_6  1       7.09 1840.8 -4709.9
## + V29_J1_7      1       6.97 1841.0 -4709.5
## + V13_1_J1_2    1       6.73 1841.2 -4708.9
## + V17_J1_5      1       6.52 1841.4 -4708.3
## + V13_1_J2_4    1       6.49 1841.4 -4708.2
## + V23_J2_1      1       6.34 1841.6 -4707.8
## + V13_2_J1_6    1       6.31 1841.6 -4707.7
## + V12_1_2_J1_5  1       6.19 1841.7 -4707.4
## + V5_J1_6       1       5.50 1842.4 -4705.4
## + V20_J1_2      1       5.47 1842.5 -4705.3

```

## + V17_J2_1	1	5.37	1842.5	-4705.0
## + V13_2_J1_4	1	5.36	1842.5	-4705.0
## + V14_J1_2	1	5.31	1842.6	-4704.9
## + V29_J2_2	1	5.26	1842.7	-4704.7
## + V30_J1_6	1	4.98	1842.9	-4703.9
## + V12_1_2_J2_4	1	4.96	1843.0	-4703.9
## + V13_3_J1_3	1	4.93	1843.0	-4703.8
## + V5_J1_3	1	4.84	1843.1	-4703.5
## + V1_J1_5	1	4.82	1843.1	-4703.5
## + V1_J1_7	1	4.61	1843.3	-4702.9
## + V12_1_2_J2_3	1	4.33	1843.6	-4702.1
## + V26_J1_6	1	4.28	1843.6	-4702.0
## + V13_1_J2_5	1	4.01	1843.9	-4701.2
## + V19_J1_1	1	4.00	1843.9	-4701.2
## + V13_2_J2_5	1	3.88	1844.0	-4700.8
## + V20_J1_6	1	3.74	1844.2	-4700.4
## + V15_J2_3	1	3.68	1844.2	-4700.3
## + V26_J2_2	1	3.63	1844.3	-4700.1
## + V29_J1_1	1	3.51	1844.4	-4699.8
## + V16_J2_4	1	3.32	1844.6	-4699.2
## + V16_J2_1	1	3.28	1844.6	-4699.1
## + V29_J2_3	1	3.14	1844.8	-4698.8
## + V13_2_J2_3	1	3.07	1844.8	-4698.6
## + V24_J2_3	1	3.05	1844.9	-4698.5
## + V13_2_J2_7	1	2.98	1844.9	-4698.3
## + V13_3_J1_2	1	2.90	1845.0	-4698.1
## + V24_J1_1	1	2.84	1845.1	-4697.9
## + V16_J1_7	1	2.76	1845.2	-4697.7
## + V29_J1_4	1	2.71	1845.2	-4697.5
## + V2_J2_3	1	2.67	1845.2	-4697.4
## + V26_J1_1	1	2.64	1845.3	-4697.3
## + V16_J1_1	1	2.54	1845.4	-4697.0
## + V13_3_J2_4	1	2.50	1845.4	-4696.9
## + V30_J2_3	1	2.43	1845.5	-4696.7
## + V1_J2_3	1	2.40	1845.5	-4696.6
## + V14_J2_7	1	2.38	1845.5	-4696.6
## + V2_J1_5	1	2.36	1845.5	-4696.5
## <none>			1847.9	-4696.5
## + V16_J1_6	1	2.35	1845.6	-4696.5
## + V2_J1_6	1	2.35	1845.6	-4696.5
## + V26_J1_3	1	2.33	1845.6	-4696.5
## + V3_J1_2	1	2.23	1845.7	-4696.2
## + V13_2_J1_2	1	2.21	1845.7	-4696.1
## + V15_J1_4	1	2.20	1845.7	-4696.1
## + V13_2_J2_2	1	2.07	1845.8	-4695.7
## + V29_J1_6	1	2.04	1845.9	-4695.7
## + V1_J1_1	1	1.96	1846.0	-4695.4
## + V29_J2_1	1	1.94	1846.0	-4695.4
## + V20_J2_4	1	1.93	1846.0	-4695.3
## + V12_1_2_J1_1	1	1.90	1846.0	-4695.3
## + V1_J1_2	1	1.89	1846.0	-4695.2
## + V30_J1_4	1	1.89	1846.0	-4695.2
## + V3_J1_3	1	1.89	1846.0	-4695.2
## + V17_J1_7	1	1.87	1846.0	-4695.2

## + V30_J2_4	1	1.87	1846.0	-4695.2
## + V13_3_J1_6	1	1.82	1846.1	-4695.0
## + V23_J1_5	1	1.79	1846.1	-4694.9
## + V13_1_J1_6	1	1.65	1846.3	-4694.5
## + V5_J1_2	1	1.65	1846.3	-4694.5
## + V20_J2_7	1	1.60	1846.3	-4694.4
## + V23_J1_2	1	1.57	1846.3	-4694.3
## + V12_1_2_J2_1	1	1.50	1846.4	-4694.1
## + V17_J2_4	1	1.47	1846.5	-4694.0
## + V13_3_J1_1	1	1.46	1846.5	-4694.0
## + V20_J1_1	1	1.40	1846.5	-4693.8
## + V4_J1_2	1	1.40	1846.5	-4693.8
## + V13_3_J1_5	1	1.31	1846.6	-4693.6
## + V20_J1_4	1	1.23	1846.7	-4693.4
## + V23_J2_2	1	1.23	1846.7	-4693.3
## + V5_J2_7	1	1.22	1846.7	-4693.3
## + V24_J2_1	1	1.19	1846.7	-4693.3
## + V23_J2_3	1	1.15	1846.8	-4693.1
## + V13_2_J2_1	1	1.14	1846.8	-4693.1
## + V13_3_J2_7	1	1.12	1846.8	-4693.0
## + V19_J1_2	1	1.12	1846.8	-4693.0
## + V14_J1_6	1	1.11	1846.8	-4693.0
## + V30_J2_7	1	1.10	1846.8	-4693.0
## + V3_J1_7	1	1.07	1846.8	-4692.9
## + V23_J2_5	1	1.04	1846.9	-4692.8
## + V17_J1_2	1	0.97	1846.9	-4692.6
## + V30_J1_7	1	0.92	1847.0	-4692.5
## + V13_1_J1_4	1	0.89	1847.0	-4692.4
## + V13_1_J2_1	1	0.89	1847.0	-4692.4
## + V29_J2_4	1	0.87	1847.0	-4692.3
## + V4_J1_6	1	0.86	1847.0	-4692.3
## + V2_J1_7	1	0.86	1847.1	-4692.3
## + V1_J2_1	1	0.85	1847.1	-4692.3
## + V5_J1_7	1	0.85	1847.1	-4692.3
## + V13_1_J1_1	1	0.85	1847.1	-4692.3
## + V23_J1_7	1	0.79	1847.1	-4692.1
## + V14_J2_2	1	0.76	1847.2	-4692.0
## + V24_J2_7	1	0.74	1847.2	-4692.0
## + V2_J1_2	1	0.71	1847.2	-4691.9
## + V20_J1_7	1	0.64	1847.3	-4691.7
## + V15_J2_5	1	0.58	1847.3	-4691.5
## + V30_J2_1	1	0.57	1847.3	-4691.5
## + V2_J2_4	1	0.55	1847.4	-4691.4
## + V13_3_J2_1	1	0.51	1847.4	-4691.3
## + V16_J2_5	1	0.50	1847.4	-4691.3
## + V5_J2_2	1	0.49	1847.4	-4691.3
## + V2_J1_1	1	0.46	1847.5	-4691.2
## + V13_1_J2_2	1	0.43	1847.5	-4691.1
## + V23_J2_4	1	0.43	1847.5	-4691.1
## + V3_J1_6	1	0.43	1847.5	-4691.1
## + V13_2_J2_4	1	0.42	1847.5	-4691.1
## + V3_J2_2	1	0.39	1847.5	-4691.0
## + V13_3_J2_3	1	0.37	1847.5	-4690.9
## + V17_J2_5	1	0.36	1847.5	-4690.9

## + V4_J1_7	1	0.33	1847.6	-4690.8
## + V17_J2_3	1	0.32	1847.6	-4690.8
## + V1_J1_4	1	0.31	1847.6	-4690.8
## + V13_3_J2_2	1	0.31	1847.6	-4690.8
## + V2_J2_5	1	0.29	1847.6	-4690.7
## + V29_J2_7	1	0.29	1847.6	-4690.7
## + V14_J1_3	1	0.28	1847.6	-4690.7
## + V26_J1_7	1	0.27	1847.6	-4690.7
## + V13_1_J2_3	1	0.25	1847.7	-4690.6
## + V19_J1_6	1	0.25	1847.7	-4690.6
## + V16_J1_5	1	0.25	1847.7	-4690.6
## + V24_J1_4	1	0.21	1847.7	-4690.5
## + V26_J1_2	1	0.20	1847.7	-4690.4
## + V17_J1_6	1	0.17	1847.7	-4690.4
## + V26_J2_7	1	0.15	1847.8	-4690.3
## + V19_J1_3	1	0.15	1847.8	-4690.3
## + V16_J1_4	1	0.14	1847.8	-4690.3
## + V1_J2_4	1	0.14	1847.8	-4690.3
## + V29_J1_2	1	0.12	1847.8	-4690.2
## + V13_3_J1_7	1	0.12	1847.8	-4690.2
## + V19_J2_2	1	0.12	1847.8	-4690.2
## + V19_J1_7	1	0.11	1847.8	-4690.2
## + V1_J1_6	1	0.10	1847.8	-4690.2
## + V3_J2_7	1	0.09	1847.8	-4690.1
## + V4_J2_2	1	0.08	1847.8	-4690.1
## + V24_J2_2	1	0.07	1847.8	-4690.1
## + V2_J2_1	1	0.06	1847.8	-4690.1
## + V3_J1_1	1	0.06	1847.8	-4690.1
## + V20_J1_5	1	0.05	1847.9	-4690.0
## + V2_J1_4	1	0.05	1847.9	-4690.0
## + V13_1_J2_7	1	0.05	1847.9	-4690.0
## + V29_J2_5	1	0.04	1847.9	-4690.0
## + V16_J1_2	1	0.04	1847.9	-4690.0
## + V23_J1_6	1	0.04	1847.9	-4690.0
## + V13_2_J1_1	1	0.04	1847.9	-4690.0
## + V24_J1_3	1	0.04	1847.9	-4690.0
## + V19_J2_7	1	0.02	1847.9	-4690.0
## + V13_3_J1_4	1	0.02	1847.9	-4690.0
## + V5_J1_1	1	0.02	1847.9	-4689.9
## + V24_J2_4	1	0.02	1847.9	-4689.9
## + V17_J1_1	1	0.01	1847.9	-4689.9
## + V15_J2_4	1	0.01	1847.9	-4689.9
## + V20_J2_5	1	0.01	1847.9	-4689.9
## + V24_J1_2	1	0.01	1847.9	-4689.9
## + V4_J1_1	1	0.00	1847.9	-4689.9
## + V17_J1_4	1	0.00	1847.9	-4689.9
## + V14_J1_7	1	0.00	1847.9	-4689.9
## + V23_J1_1	1	0.00	1847.9	-4689.9
## + V14_J1_1	1	0.00	1847.9	-4689.9
## - V20_J2_1	1	20.28	1868.2	-4646.4
## - V23_J2_7	1	21.10	1869.0	-4644.1
## - V14_J2_5	1	22.83	1870.7	-4639.3
## - V30_J2_5	1	23.05	1871.0	-4638.7
## - V20_J2_3	1	23.93	1871.8	-4636.3

## - V13_1_J1_3	1	24.29	1872.2	-4635.3
## - V2_J2_7	1	25.38	1873.3	-4632.2
## - V15_J1_1	1	26.55	1874.5	-4629.0
## - V16_J2_7	1	27.42	1875.3	-4626.6
## - V30_J1_3	1	29.33	1877.2	-4621.3
## - V2_J2_2	1	30.55	1878.5	-4617.9
## - V4_J2_7	1	31.07	1879.0	-4616.5
## - V12_1_2_J1_2	1	31.33	1879.2	-4615.7
## - V15_J1_2	1	32.87	1880.8	-4611.5
## - V14_J2_1	1	35.28	1883.2	-4604.8
## - V16_J1_3	1	36.15	1884.1	-4602.4
## - V19_J2_5	1	39.19	1887.1	-4594.0
## - V4_J1_5	1	39.24	1887.2	-4593.9
## - V26_J1_5	1	40.52	1888.4	-4590.4
## - V19_J2_4	1	42.19	1890.1	-4585.8
## - V1_J1_3	1	42.54	1890.5	-4584.8
## - V13_2_J1_7	1	43.02	1890.9	-4583.5
## - V4_J1_4	1	46.05	1894.0	-4575.2
## - V5_J1_4	1	46.09	1894.0	-4575.1
## - V14_J2_4	1	46.96	1894.9	-4572.7
## - V15_J1_6	1	48.48	1896.4	-4568.5
## - V3_J1_5	1	49.62	1897.5	-4565.4
## - V30_J1_2	1	49.91	1897.8	-4564.6
## - V26_J1_4	1	55.84	1903.8	-4548.4
## - V23_J1_3	1	56.06	1904.0	-4547.8
## - V17_J2_7	1	59.84	1907.8	-4537.4
## - V1_J2_2	1	61.34	1909.3	-4533.4
## - V17_J1_3	1	62.12	1910.0	-4531.2
## - V30_J1_1	1	63.06	1911.0	-4528.7
## - V19_J2_1	1	63.42	1911.3	-4527.7
## - V2_J1_3	1	63.70	1911.6	-4526.9
## - V15_J1_7	1	65.97	1913.9	-4520.8
## - V17_J2_2	1	66.96	1914.9	-4518.1
## - V5_J2_1	1	68.64	1916.5	-4513.5
## - V12_1_2_J1_4	1	71.55	1919.5	-4505.6
## - V1_J2_7	1	80.18	1928.1	-4482.3
## - V14_J2_3	1	80.31	1928.2	-4481.9
## - V30_J2_2	1	85.73	1933.7	-4467.3
## - V5_J2_3	1	91.44	1939.4	-4452.0
## - V15_J1_3	1	95.25	1943.2	-4441.8
## - V14_J1_4	1	95.35	1943.3	-4441.5
## - V3_J1_4	1	99.72	1947.6	-4429.9
## - V14_J1_5	1	101.57	1949.5	-4424.9
## - V4_J2_5	1	110.03	1958.0	-4402.4
## - V19_J2_3	1	111.38	1959.3	-4398.8
## - V15_J2_7	1	128.36	1976.3	-4353.9
## - V12_1_2_J2_2	1	131.90	1979.8	-4344.7
## - V15_J2_2	1	134.31	1982.2	-4338.3
## - V4_J2_3	1	139.43	1987.3	-4324.9
## - V4_J2_1	1	139.66	1987.6	-4324.3
## - V3_J2_1	1	142.94	1990.8	-4315.7
## - V5_J1_5	1	143.94	1991.8	-4313.1
## - V3_J2_5	1	146.53	1994.4	-4306.4
## - V4_J2_4	1	160.77	2008.7	-4269.4


```

## - V26_J2_1      1      167.45 2015.4 -4252.1
## - V19_J1_5      1      169.77 2017.7 -4246.1
## - V26_J2_5      1      193.11 2041.0 -4186.3
## - V19_J1_4      1      196.26 2044.2 -4178.3
## - V26_J2_4      1      199.67 2047.6 -4169.6
## - V3_J2_4       1      215.71 2063.6 -4129.0
## - V3_J2_3       1      234.87 2082.8 -4081.0
## - V20_J2_2      1      260.80 2108.7 -4016.7
## - V5_J2_5       1      286.06 2134.0 -3954.7
## - V5_J2_4       1      328.05 2176.0 -3853.4
## - V26_J2_3      1      401.57 2249.5 -3680.6
## - V16_J2_2      1      414.51 2262.4 -3650.8
## - J             12      662.01 2509.9 -3183.9
## - V             19     1152.29 3000.2 -2302.5
##
## Step:  AIC=-4746.71
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
## V20_J2_3 + V20_J2_1 + V16_J2_3
##
##
##           Df Sum of Sq    RSS    AIC
## + V30_J1_5      1      18.63 1809.2 -4793.3
## + V24_J2_5      1      15.74 1812.1 -4785.0
## + V13_2_J1_5     1      14.44 1813.4 -4781.3
## + V12_1_2_J2_7   1      13.84 1814.0 -4779.6
## + V24_J1_6       1      12.74 1815.1 -4776.5
## + V29_J1_3       1      12.64 1815.2 -4776.1
## + V24_J1_7       1      11.91 1815.9 -4774.1
## + V12_1_2_J2_5   1      11.46 1816.4 -4772.8
## + V12_1_2_J1_3   1      11.29 1816.5 -4772.3
## + V20_J1_3       1      10.66 1817.2 -4770.5
## + V13_1_J1_5     1       9.91 1817.9 -4768.4
## + V1_J2_5        1       9.48 1818.3 -4767.1
## + V29_J1_5       1       9.19 1818.6 -4766.3
## + V15_J2_1       1       9.16 1818.7 -4766.2
## + V13_2_J1_3     1       9.06 1818.8 -4765.9
## + V24_J1_5       1       9.00 1818.8 -4765.7
## + V4_J1_3        1       8.79 1819.0 -4765.2
## + V23_J1_4       1       8.59 1819.2 -4764.6
## + V12_1_2_J1_7   1       8.34 1819.5 -4763.9
## + V13_1_J1_7     1       8.23 1819.6 -4763.5
## + V13_3_J2_5     1       7.57 1820.3 -4761.6
## + V15_J1_5       1       7.06 1820.8 -4760.2
## + V12_1_2_J1_6   1       6.85 1821.0 -4759.6

```

## + V29_J1_7	1	6.77	1821.1	-4759.4
## + V17_J1_5	1	6.72	1821.1	-4759.2
## + V13_1_J2_4	1	6.68	1821.2	-4759.1
## + V23_J2_1	1	6.53	1821.3	-4758.7
## + V13_1_J1_2	1	6.51	1821.3	-4758.6
## + V13_2_J1_6	1	6.51	1821.3	-4758.6
## + V12_1_2_J1_5	1	6.42	1821.4	-4758.4
## + V13_2_J1_4	1	5.55	1822.3	-4755.9
## + V5_J1_6	1	5.46	1822.4	-4755.6
## + V20_J1_2	1	5.43	1822.4	-4755.5
## + V16_J2_1	1	5.41	1822.4	-4755.5
## + V14_J1_2	1	5.38	1822.5	-4755.4
## + V29_J2_2	1	5.33	1822.5	-4755.3
## + V17_J2_1	1	5.19	1822.7	-4754.9
## + V12_1_2_J2_4	1	5.16	1822.7	-4754.8
## + V13_3_J1_3	1	5.00	1822.8	-4754.3
## + V1_J1_5	1	4.99	1822.8	-4754.3
## + V1_J1_7	1	4.80	1823.0	-4753.7
## + V5_J1_3	1	4.78	1823.0	-4753.7
## + V30_J1_6	1	4.74	1823.1	-4753.6
## + V13_2_J2_3	1	4.56	1823.3	-4753.1
## + V26_J1_6	1	4.32	1823.5	-4752.4
## + V13_1_J2_5	1	4.17	1823.7	-4752.0
## + V2_J2_3	1	4.06	1823.8	-4751.6
## + V19_J1_1	1	3.96	1823.9	-4751.3
## + V1_J2_3	1	3.73	1824.1	-4750.7
## + V20_J1_6	1	3.72	1824.1	-4750.7
## + V13_2_J2_5	1	3.72	1824.1	-4750.7
## + V26_J2_2	1	3.69	1824.1	-4750.6
## + V29_J1_1	1	3.37	1824.5	-4749.7
## + V13_2_J2_7	1	3.03	1824.8	-4748.7
## + V12_1_2_J2_3	1	2.94	1824.9	-4748.5
## + V29_J1_4	1	2.84	1825.0	-4748.2
## + V13_3_J1_2	1	2.76	1825.1	-4747.9
## + V24_J1_1	1	2.71	1825.1	-4747.8
## + V26_J1_1	1	2.68	1825.2	-4747.7
## + V2_J1_5	1	2.48	1825.3	-4747.1
## + V2_J1_6	1	2.47	1825.4	-4747.1
## + V15_J2_3	1	2.44	1825.4	-4747.0
## + V14_J2_7	1	2.44	1825.4	-4747.0
## + V13_3_J2_4	1	2.39	1825.4	-4746.9
## + V26_J1_3	1	2.37	1825.5	-4746.8
## <none>			1827.8	-4746.7
## + V3_J1_2	1	2.28	1825.6	-4746.6
## + V13_2_J2_2	1	2.12	1825.7	-4746.1
## + V13_2_J1_2	1	2.08	1825.8	-4746.0
## + V12_1_2_J1_1	1	2.04	1825.8	-4745.9
## + V29_J2_1	1	2.04	1825.8	-4745.9
## + V1_J1_2	1	2.02	1825.8	-4745.8
## + V17_J1_7	1	1.99	1825.8	-4745.7
## + V15_J1_4	1	1.98	1825.8	-4745.7
## + V29_J2_3	1	1.97	1825.9	-4745.7
## + V29_J1_6	1	1.94	1825.9	-4745.6
## + V20_J2_4	1	1.92	1825.9	-4745.6

## + V24_J2_3	1	1.89	1825.9	-4745.5
## + V3_J1_3	1	1.85	1826.0	-4745.3
## + V1_J1_1	1	1.84	1826.0	-4745.3
## + V16_J2_4	1	1.77	1826.1	-4745.1
## + V13_1_J1_6	1	1.74	1826.1	-4745.0
## + V30_J1_4	1	1.73	1826.1	-4745.0
## + V13_3_J1_6	1	1.73	1826.1	-4745.0
## + V30_J2_4	1	1.72	1826.1	-4745.0
## + V23_J1_5	1	1.69	1826.1	-4744.9
## + V23_J1_2	1	1.69	1826.2	-4744.9
## + V12_1_2_J2_1	1	1.61	1826.2	-4744.7
## + V5_J1_2	1	1.61	1826.2	-4744.7
## + V13_3_J1_1	1	1.56	1826.3	-4744.5
## + V20_J2_7	1	1.55	1826.3	-4744.5
## + V30_J2_3	1	1.43	1826.4	-4744.2
## + V4_J1_2	1	1.43	1826.4	-4744.1
## + V20_J1_1	1	1.42	1826.4	-4744.1
## + V16_J1_7	1	1.39	1826.5	-4744.0
## + V17_J2_4	1	1.37	1826.5	-4744.0
## + V20_J1_4	1	1.24	1826.6	-4743.6
## + V13_3_J1_5	1	1.23	1826.6	-4743.6
## + V16_J1_1	1	1.23	1826.6	-4743.6
## + V23_J2_2	1	1.19	1826.6	-4743.5
## + V5_J2_7	1	1.18	1826.7	-4743.4
## + V19_J1_2	1	1.15	1826.7	-4743.3
## + V13_3_J2_7	1	1.14	1826.7	-4743.3
## + V23_J2_5	1	1.12	1826.7	-4743.3
## + V24_J2_1	1	1.12	1826.7	-4743.3
## + V14_J1_6	1	1.10	1826.7	-4743.2
## + V16_J1_6	1	1.09	1826.7	-4743.2
## + V13_2_J2_1	1	1.07	1826.8	-4743.1
## + V17_J1_2	1	1.06	1826.8	-4743.1
## + V3_J1_7	1	1.05	1826.8	-4743.1
## + V30_J2_7	1	1.04	1826.8	-4743.0
## + V30_J1_7	1	1.04	1826.8	-4743.0
## + V16_J1_5	1	1.01	1826.8	-4742.9
## + V13_3_J2_3	1	0.97	1826.9	-4742.8
## + V13_1_J1_4	1	0.97	1826.9	-4742.8
## + V13_1_J2_1	1	0.96	1826.9	-4742.8
## + V13_1_J1_1	1	0.92	1826.9	-4742.7
## + V17_J2_3	1	0.89	1827.0	-4742.6
## + V5_J1_7	1	0.87	1827.0	-4742.6
## + V4_J1_6	1	0.87	1827.0	-4742.6
## + V29_J2_4	1	0.80	1827.0	-4742.4
## + V2_J1_2	1	0.79	1827.0	-4742.3
## + V1_J2_1	1	0.78	1827.0	-4742.3
## + V2_J1_7	1	0.78	1827.0	-4742.3
## + V16_J1_4	1	0.77	1827.1	-4742.3
## + V24_J2_7	1	0.76	1827.1	-4742.2
## + V14_J2_2	1	0.74	1827.1	-4742.2
## + V23_J1_7	1	0.72	1827.1	-4742.1
## + V20_J1_7	1	0.63	1827.2	-4741.9
## + V5_J2_2	1	0.51	1827.3	-4741.5
## + V2_J2_4	1	0.49	1827.3	-4741.5

## + V30_J2_1	1	0.49	1827.3	-4741.5
## + V16_J1_2	1	0.49	1827.3	-4741.5
## + V23_J2_3	1	0.49	1827.3	-4741.5
## + V23_J2_4	1	0.48	1827.3	-4741.4
## + V15_J2_5	1	0.47	1827.4	-4741.4
## + V13_3_J2_1	1	0.46	1827.4	-4741.4
## + V3_J1_6	1	0.42	1827.4	-4741.3
## + V13_1_J2_2	1	0.41	1827.4	-4741.3
## + V3_J2_2	1	0.41	1827.4	-4741.3
## + V2_J1_1	1	0.40	1827.4	-4741.2
## + V13_2_J2_4	1	0.38	1827.5	-4741.1
## + V1_J1_4	1	0.36	1827.5	-4741.1
## + V4_J1_7	1	0.34	1827.5	-4741.1
## + V2_J2_5	1	0.34	1827.5	-4741.0
## + V17_J2_5	1	0.31	1827.5	-4741.0
## + V29_J2_7	1	0.30	1827.5	-4740.9
## + V13_3_J2_2	1	0.30	1827.5	-4740.9
## + V14_J1_3	1	0.29	1827.5	-4740.9
## + V26_J1_7	1	0.28	1827.5	-4740.9
## + V19_J1_6	1	0.26	1827.6	-4740.8
## + V26_J1_2	1	0.18	1827.7	-4740.6
## + V24_J1_4	1	0.18	1827.7	-4740.6
## + V1_J2_4	1	0.17	1827.7	-4740.6
## + V26_J2_7	1	0.17	1827.7	-4740.6
## + V19_J1_3	1	0.16	1827.7	-4740.5
## + V13_3_J1_7	1	0.15	1827.7	-4740.5
## + V17_J1_6	1	0.14	1827.7	-4740.5
## + V1_J1_6	1	0.12	1827.7	-4740.4
## + V19_J1_7	1	0.12	1827.7	-4740.4
## + V19_J2_2	1	0.11	1827.7	-4740.4
## + V3_J2_7	1	0.10	1827.7	-4740.3
## + V29_J1_2	1	0.09	1827.7	-4740.3
## + V24_J2_2	1	0.08	1827.8	-4740.3
## + V4_J2_2	1	0.07	1827.8	-4740.3
## + V29_J2_5	1	0.06	1827.8	-4740.3
## + V13_1_J2_7	1	0.06	1827.8	-4740.2
## + V3_J1_1	1	0.06	1827.8	-4740.2
## + V20_J1_5	1	0.05	1827.8	-4740.2
## + V2_J2_1	1	0.05	1827.8	-4740.2
## + V16_J2_5	1	0.05	1827.8	-4740.2
## + V24_J1_3	1	0.04	1827.8	-4740.2
## + V2_J1_4	1	0.03	1827.8	-4740.2
## + V13_3_J1_4	1	0.03	1827.8	-4740.2
## + V15_J2_4	1	0.03	1827.8	-4740.2
## + V23_J1_6	1	0.03	1827.8	-4740.2
## + V24_J2_4	1	0.03	1827.8	-4740.2
## + V17_J1_1	1	0.03	1827.8	-4740.2
## + V13_2_J1_1	1	0.02	1827.8	-4740.1
## + V5_J1_1	1	0.02	1827.8	-4740.1
## + V19_J2_7	1	0.02	1827.8	-4740.1
## + V13_1_J2_3	1	0.02	1827.8	-4740.1
## + V24_J1_2	1	0.02	1827.8	-4740.1
## + V17_J1_4	1	0.01	1827.8	-4740.1
## + V20_J2_5	1	0.01	1827.8	-4740.1

## + V4_J1_1	1	0.00	1827.8	-4740.1
## + V14_J1_7	1	0.00	1827.8	-4740.1
## + V23_J1_1	1	0.00	1827.8	-4740.1
## + V14_J1_1	1	0.00	1827.8	-4740.1
## - V16_J2_3	1	20.08	1847.9	-4696.5
## - V20_J2_1	1	20.27	1848.1	-4696.0
## - V23_J2_7	1	21.00	1848.8	-4694.0
## - V14_J2_5	1	22.74	1850.6	-4689.0
## - V30_J2_5	1	23.51	1851.3	-4686.9
## - V13_1_J1_3	1	24.43	1852.3	-4684.3
## - V2_J2_7	1	25.26	1853.1	-4682.0
## - V15_J1_1	1	27.16	1855.0	-4676.6
## - V20_J2_3	1	27.27	1855.1	-4676.3
## - V30_J1_3	1	29.02	1856.8	-4671.4
## - V2_J2_2	1	30.39	1858.2	-4667.6
## - V4_J2_7	1	31.25	1859.1	-4665.2
## - V12_1_2_J1_2	1	31.82	1859.7	-4663.6
## - V16_J2_7	1	31.90	1859.7	-4663.4
## - V15_J1_2	1	33.58	1861.4	-4658.7
## - V14_J2_1	1	35.21	1863.0	-4654.1
## - V19_J2_5	1	39.08	1866.9	-4643.3
## - V4_J1_5	1	39.21	1867.0	-4643.0
## - V26_J1_5	1	40.45	1868.3	-4639.5
## - V16_J1_3	1	41.15	1869.0	-4637.6
## - V19_J2_4	1	42.12	1870.0	-4634.9
## - V1_J1_3	1	42.32	1870.2	-4634.3
## - V13_2_J1_7	1	42.55	1870.4	-4633.7
## - V4_J1_4	1	45.98	1873.8	-4624.2
## - V5_J1_4	1	45.98	1873.8	-4624.1
## - V14_J2_4	1	46.89	1874.7	-4621.6
## - V15_J1_6	1	49.27	1877.1	-4615.0
## - V3_J1_5	1	49.54	1877.4	-4614.3
## - V30_J1_2	1	50.63	1878.5	-4611.3
## - V26_J1_4	1	55.72	1883.5	-4597.2
## - V23_J1_3	1	55.83	1883.7	-4596.9
## - V17_J2_7	1	59.65	1887.5	-4586.4
## - V1_J2_2	1	61.11	1888.9	-4582.3
## - V17_J1_3	1	61.85	1889.7	-4580.3
## - V19_J2_1	1	63.33	1891.2	-4576.2
## - V2_J1_3	1	63.43	1891.3	-4575.9
## - V30_J1_1	1	63.83	1891.7	-4574.9
## - V17_J2_2	1	66.71	1894.5	-4566.9
## - V15_J1_7	1	66.91	1894.8	-4566.4
## - V5_J2_1	1	68.55	1896.4	-4561.9
## - V12_1_2_J1_4	1	70.87	1898.7	-4555.5
## - V1_J2_7	1	79.96	1907.8	-4530.7
## - V30_J2_2	1	85.23	1913.1	-4516.3
## - V14_J2_3	1	85.94	1913.8	-4514.4
## - V14_J1_4	1	95.19	1923.0	-4489.3
## - V15_J1_3	1	96.02	1923.8	-4487.1
## - V5_J2_3	1	97.41	1925.2	-4483.4
## - V3_J1_4	1	99.56	1927.4	-4477.6
## - V14_J1_5	1	101.46	1929.3	-4472.4
## - V4_J2_5	1	109.90	1937.7	-4449.7

```

## - V19_J2_3      1      117.89 1945.7 -4428.3
## - V15_J2_7      1      129.16 1957.0 -4398.3
## - V12_1_2_J2_2  1      131.45 1959.3 -4392.2
## - V15_J2_2      1      135.18 1963.0 -4382.3
## - V4_J2_1       1      139.59 1967.4 -4370.7
## - V3_J2_1       1      142.81 1970.6 -4362.2
## - V5_J1_5       1      143.81 1971.6 -4359.5
## - V3_J2_5       1      146.32 1974.2 -4352.9
## - V4_J2_3       1      146.60 1974.4 -4352.2
## - V4_J2_4       1      160.69 1988.5 -4315.2
## - V26_J2_1      1      167.31 1995.2 -4297.9
## - V19_J1_5      1      169.63 1997.5 -4291.9
## - V26_J2_5      1      192.87 2020.7 -4231.7
## - V19_J1_4      1      196.03 2023.9 -4223.6
## - V26_J2_4      1      199.52 2027.3 -4214.6
## - V3_J2_4       1      215.56 2043.4 -4173.7
## - V3_J2_3       1      243.87 2071.7 -4102.1
## - V20_J2_2      1      261.32 2089.2 -4058.5
## - V5_J2_5       1      285.76 2113.6 -3998.0
## - V5_J2_4       1      327.85 2155.7 -3895.5
## - V26_J2_3      1      412.79 2240.6 -3694.5
## - V16_J2_2      1      428.35 2256.2 -3658.5
## - J             12      678.45 2506.3 -3184.8
## - V             19     1162.58 2990.4 -2312.9
##
## Step:  AIC=-4793.33
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
## V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5
##
##
##           Df Sum of Sq   RSS   AIC
## + V24_J2_5      1      15.68 1793.5 -4832.0
## + V12_1_2_J2_7  1       14.33 1794.9 -4828.0
## + V29_J1_3      1      12.70 1796.5 -4823.3
## + V24_J1_6      1      12.48 1796.7 -4822.7
## + V13_2_J1_5    1      12.12 1797.1 -4821.7
## + V24_J1_7      1      11.64 1797.6 -4820.3
## + V12_1_2_J2_5  1      11.47 1797.7 -4819.8
## + V12_1_2_J1_3  1      11.39 1797.8 -4819.5
## + V29_J1_5      1      11.37 1797.8 -4819.5
## + V20_J1_3      1      10.53 1798.7 -4817.1
## + V1_J2_5       1       9.49 1799.7 -4814.0
## + V13_2_J1_3    1       8.98 1800.2 -4812.6
## + V23_J1_4      1       8.89 1800.3 -4812.3

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## + V4_J1_3	1	8.74	1800.5	-4811.9
## + V15_J2_1	1	8.71	1800.5	-4811.8
## + V12_1_2_J1_7	1	8.61	1800.6	-4811.5
## + V17_J1_5	1	8.57	1800.6	-4811.4
## + V13_1_J1_7	1	8.46	1800.8	-4811.1
## + V12_1_2_J1_5	1	8.24	1801.0	-4810.4
## + V13_1_J1_5	1	7.99	1801.2	-4809.7
## + V13_3_J2_5	1	7.61	1801.6	-4808.6
## + V24_J1_5	1	7.17	1802.0	-4807.3
## + V12_1_2_J1_6	1	7.08	1802.1	-4807.1
## + V29_J1_7	1	6.98	1802.2	-4806.8
## + V1_J1_5	1	6.59	1802.6	-4805.7
## + V13_1_J1_2	1	6.54	1802.7	-4805.5
## + V13_1_J2_4	1	6.47	1802.7	-4805.3
## + V13_2_J1_6	1	6.30	1802.9	-4804.9
## + V23_J2_1	1	6.28	1802.9	-4804.8
## + V16_J2_1	1	5.68	1803.5	-4803.1
## + V5_J1_6	1	5.53	1803.7	-4802.6
## + V15_J1_5	1	5.50	1803.7	-4802.5
## + V20_J1_2	1	5.50	1803.7	-4802.5
## + V14_J1_2	1	5.47	1803.7	-4802.4
## + V17_J2_1	1	5.43	1803.8	-4802.3
## + V13_2_J1_4	1	5.34	1803.9	-4802.1
## + V29_J2_2	1	5.28	1803.9	-4801.9
## + V13_3_J1_3	1	4.96	1804.2	-4801.0
## + V12_1_2_J2_4	1	4.96	1804.2	-4801.0
## + V5_J1_3	1	4.85	1804.4	-4800.6
## + V13_2_J2_3	1	4.78	1804.4	-4800.5
## + V1_J1_7	1	4.59	1804.6	-4799.9
## + V2_J2_3	1	4.30	1804.9	-4799.1
## + V26_J1_6	1	4.26	1805.0	-4799.0
## + V13_1_J2_5	1	4.20	1805.0	-4798.8
## + V1_J2_3	1	3.95	1805.2	-4798.1
## + V20_J1_6	1	3.91	1805.3	-4798.0
## + V19_J1_1	1	3.88	1805.3	-4797.9
## + V13_2_J2_5	1	3.70	1805.5	-4797.4
## + V26_J2_2	1	3.64	1805.6	-4797.2
## + V2_J1_5	1	3.64	1805.6	-4797.2
## + V29_J1_1	1	3.38	1805.8	-4796.4
## + V30_J2_3	1	3.36	1805.8	-4796.4
## + V13_2_J2_7	1	2.82	1806.4	-4794.8
## + V13_3_J1_2	1	2.77	1806.4	-4794.7
## + V12_1_2_J2_3	1	2.76	1806.5	-4794.6
## + V26_J1_1	1	2.74	1806.5	-4794.6
## + V30_J1_7	1	2.73	1806.5	-4794.6
## + V24_J1_1	1	2.72	1806.5	-4794.5
## + V29_J1_4	1	2.70	1806.5	-4794.5
## + V14_J2_7	1	2.55	1806.7	-4794.0
## + V13_3_J2_4	1	2.52	1806.7	-4793.9
## + V30_J1_6	1	2.48	1806.7	-4793.8
## + V3_J1_2	1	2.34	1806.9	-4793.4
## + V2_J1_6	1	2.33	1806.9	-4793.4
## + V26_J1_3	1	2.32	1806.9	-4793.4
## <none>			1809.2	-4793.3

## + V15_J1_4	1	2.20	1807.0	-4793.0
## + V15_J2_3	1	2.20	1807.0	-4793.0
## + V13_2_J1_2	1	2.10	1807.1	-4792.7
## + V13_2_J2_2	1	2.08	1807.1	-4792.7
## + V20_J2_4	1	2.07	1807.1	-4792.6
## + V29_J1_6	1	2.05	1807.2	-4792.6
## + V12_1_2_J1_1	1	2.01	1807.2	-4792.5
## + V1_J1_2	1	1.99	1807.2	-4792.4
## + V29_J2_1	1	1.92	1807.3	-4792.2
## + V3_J1_3	1	1.89	1807.3	-4792.1
## + V1_J1_1	1	1.87	1807.3	-4792.1
## + V17_J1_7	1	1.85	1807.3	-4792.0
## + V29_J2_3	1	1.83	1807.4	-4792.0
## + V13_3_J1_6	1	1.83	1807.4	-4792.0
## + V24_J2_3	1	1.76	1807.5	-4791.8
## + V23_J1_2	1	1.66	1807.5	-4791.5
## + V13_1_J1_6	1	1.64	1807.6	-4791.4
## + V16_J2_4	1	1.63	1807.6	-4791.4
## + V5_J1_2	1	1.56	1807.7	-4791.2
## + V13_3_J1_1	1	1.55	1807.7	-4791.2
## + V17_J2_4	1	1.49	1807.7	-4791.0
## + V12_1_2_J2_1	1	1.49	1807.7	-4791.0
## + V4_J1_2	1	1.46	1807.8	-4790.9
## + V20_J1_1	1	1.39	1807.8	-4790.7
## + V20_J2_7	1	1.38	1807.8	-4790.7
## + V16_J1_7	1	1.26	1808.0	-4790.3
## + V23_J2_2	1	1.23	1808.0	-4790.2
## + V24_J2_1	1	1.21	1808.0	-4790.2
## + V16_J1_1	1	1.19	1808.0	-4790.1
## + V19_J1_2	1	1.19	1808.0	-4790.1
## + V13_2_J2_1	1	1.16	1808.0	-4790.0
## + V14_J1_6	1	1.13	1808.1	-4789.9
## + V20_J1_4	1	1.13	1808.1	-4789.9
## + V23_J2_5	1	1.13	1808.1	-4789.9
## + V5_J2_7	1	1.10	1808.1	-4789.9
## + V3_J1_7	1	1.08	1808.1	-4789.8
## + V13_3_J2_3	1	1.07	1808.1	-4789.8
## + V17_J1_2	1	1.04	1808.2	-4789.7
## + V13_3_J2_7	1	1.02	1808.2	-4789.6
## + V17_J2_3	1	1.00	1808.2	-4789.6
## + V16_J1_6	1	0.99	1808.2	-4789.5
## + V23_J1_5	1	0.95	1808.3	-4789.4
## + V13_1_J1_1	1	0.91	1808.3	-4789.3
## + V13_1_J1_4	1	0.89	1808.3	-4789.2
## + V1_J2_1	1	0.88	1808.3	-4789.2
## + V29_J2_4	1	0.88	1808.3	-4789.2
## + V16_J1_4	1	0.88	1808.3	-4789.2
## + V13_1_J2_1	1	0.87	1808.3	-4789.2
## + V2_J1_7	1	0.87	1808.3	-4789.2
## + V5_J1_7	1	0.84	1808.4	-4789.1
## + V4_J1_6	1	0.83	1808.4	-4789.1
## + V23_J1_7	1	0.80	1808.4	-4789.0
## + V2_J1_2	1	0.77	1808.4	-4788.9
## + V14_J2_2	1	0.76	1808.5	-4788.9

## + V20_J1_7	1	0.71	1808.5	-4788.7
## + V24_J2_7	1	0.66	1808.5	-4788.6
## + V13_3_J1_5	1	0.61	1808.6	-4788.5
## + V2_J2_4	1	0.56	1808.7	-4788.3
## + V13_3_J2_1	1	0.52	1808.7	-4788.2
## + V16_J1_2	1	0.52	1808.7	-4788.2
## + V15_J2_5	1	0.50	1808.7	-4788.1
## + V30_J1_4	1	0.50	1808.7	-4788.1
## + V5_J2_2	1	0.49	1808.7	-4788.1
## + V30_J2_4	1	0.49	1808.7	-4788.1
## + V16_J1_5	1	0.47	1808.7	-4788.0
## + V3_J1_6	1	0.43	1808.8	-4787.9
## + V13_2_J2_4	1	0.43	1808.8	-4787.9
## + V13_1_J2_2	1	0.43	1808.8	-4787.9
## + V23_J2_4	1	0.42	1808.8	-4787.9
## + V2_J1_1	1	0.42	1808.8	-4787.9
## + V23_J2_3	1	0.41	1808.8	-4787.9
## + V3_J2_2	1	0.40	1808.8	-4787.8
## + V2_J2_5	1	0.34	1808.9	-4787.7
## + V4_J1_7	1	0.32	1808.9	-4787.6
## + V17_J2_5	1	0.31	1808.9	-4787.6
## + V13_3_J2_2	1	0.31	1808.9	-4787.6
## + V1_J1_4	1	0.30	1808.9	-4787.6
## + V14_J1_3	1	0.28	1808.9	-4787.5
## + V26_J1_7	1	0.27	1808.9	-4787.5
## + V19_J1_6	1	0.25	1809.0	-4787.4
## + V29_J2_7	1	0.24	1809.0	-4787.4
## + V24_J1_4	1	0.21	1809.0	-4787.3
## + V26_J2_7	1	0.20	1809.0	-4787.3
## + V17_J1_6	1	0.18	1809.0	-4787.2
## + V30_J2_7	1	0.17	1809.0	-4787.2
## + V26_J1_2	1	0.17	1809.0	-4787.2
## + V19_J1_3	1	0.15	1809.1	-4787.1
## + V1_J2_4	1	0.13	1809.1	-4787.1
## + V3_J2_7	1	0.12	1809.1	-4787.0
## + V13_3_J1_7	1	0.12	1809.1	-4787.0
## + V19_J2_2	1	0.12	1809.1	-4787.0
## + V19_J1_7	1	0.11	1809.1	-4787.0
## + V29_J1_2	1	0.10	1809.1	-4787.0
## + V1_J1_6	1	0.09	1809.1	-4787.0
## + V4_J2_2	1	0.08	1809.1	-4786.9
## + V2_J2_1	1	0.07	1809.1	-4786.9
## + V24_J2_2	1	0.07	1809.1	-4786.9
## + V29_J2_5	1	0.07	1809.1	-4786.9
## + V2_J1_4	1	0.06	1809.2	-4786.9
## + V3_J1_1	1	0.05	1809.2	-4786.8
## + V23_J1_6	1	0.04	1809.2	-4786.8
## + V16_J2_5	1	0.04	1809.2	-4786.8
## + V24_J1_3	1	0.04	1809.2	-4786.8
## + V13_1_J2_7	1	0.03	1809.2	-4786.8
## + V5_J1_1	1	0.03	1809.2	-4786.8
## + V13_2_J1_1	1	0.02	1809.2	-4786.8
## + V17_J1_1	1	0.02	1809.2	-4786.8
## + V13_3_J1_4	1	0.02	1809.2	-4786.8

## + V24_J2_4	1	0.02	1809.2	-4786.7
## + V24_J1_2	1	0.01	1809.2	-4786.7
## + V19_J2_7	1	0.01	1809.2	-4786.7
## + V15_J2_4	1	0.01	1809.2	-4786.7
## + V20_J1_5	1	0.01	1809.2	-4786.7
## + V20_J2_5	1	0.01	1809.2	-4786.7
## + V30_J2_1	1	0.01	1809.2	-4786.7
## + V13_1_J2_3	1	0.01	1809.2	-4786.7
## + V14_J1_7	1	0.00	1809.2	-4786.7
## + V17_J1_4	1	0.00	1809.2	-4786.7
## + V4_J1_1	1	0.00	1809.2	-4786.7
## + V14_J1_1	1	0.00	1809.2	-4786.7
## + V23_J1_1	1	0.00	1809.2	-4786.7
## - V30_J1_5	1	18.63	1827.8	-4746.7
## - V16_J2_3	1	20.55	1829.8	-4741.2
## - V20_J2_1	1	20.68	1829.9	-4740.9
## - V23_J2_7	1	21.49	1830.7	-4738.6
## - V14_J2_5	1	22.50	1831.7	-4735.7
## - V30_J1_3	1	23.23	1832.4	-4733.6
## - V13_1_J1_3	1	24.34	1833.5	-4730.5
## - V2_J2_7	1	25.81	1835.0	-4726.3
## - V15_J1_1	1	26.89	1836.1	-4723.2
## - V20_J2_3	1	27.79	1837.0	-4720.7
## - V30_J2_5	1	28.66	1837.9	-4718.2
## - V2_J2_2	1	30.55	1839.8	-4712.9
## - V4_J2_7	1	31.61	1840.8	-4709.9
## - V12_1_2_J1_2	1	31.72	1840.9	-4709.6
## - V16_J2_7	1	32.57	1841.8	-4707.2
## - V15_J1_2	1	33.27	1842.5	-4705.2
## - V14_J2_1	1	35.41	1844.6	-4699.2
## - V4_J1_5	1	35.54	1844.8	-4698.8
## - V26_J1_5	1	36.62	1845.8	-4695.8
## - V19_J2_5	1	38.76	1848.0	-4689.7
## - V16_J1_3	1	41.41	1850.6	-4682.3
## - V19_J2_4	1	42.29	1851.5	-4679.8
## - V1_J1_3	1	42.51	1851.7	-4679.2
## - V13_2_J1_7	1	43.04	1852.2	-4677.7
## - V3_J1_5	1	45.27	1854.5	-4671.5
## - V5_J1_4	1	46.20	1855.4	-4668.8
## - V4_J1_4	1	46.26	1855.5	-4668.7
## - V14_J2_4	1	47.07	1856.3	-4666.4
## - V15_J1_6	1	48.51	1857.7	-4662.4
## - V26_J1_4	1	55.96	1865.2	-4641.6
## - V23_J1_3	1	56.03	1865.2	-4641.4
## - V30_J1_2	1	57.72	1866.9	-4636.7
## - V17_J2_7	1	60.49	1869.7	-4629.0
## - V1_J2_2	1	61.34	1870.5	-4626.6
## - V17_J1_3	1	62.08	1871.3	-4624.5
## - V19_J2_1	1	63.60	1872.8	-4620.3
## - V2_J1_3	1	63.67	1872.9	-4620.1
## - V15_J1_7	1	65.99	1875.2	-4613.7
## - V17_J2_2	1	66.96	1876.2	-4611.0
## - V5_J2_1	1	68.83	1878.0	-4605.8
## - V12_1_2_J1_4	1	71.56	1880.8	-4598.2

```

## - V30_J1_1      1      71.66 1880.9 -4598.0
## - V30_J2_2      1      74.60 1883.8 -4589.8
## - V1_J2_7       1      80.93 1890.1 -4572.4
## - V14_J2_3      1      86.32 1895.5 -4557.6
## - V14_J1_5      1      95.17 1904.4 -4533.4
## - V15_J1_3      1      95.43 1904.6 -4532.7
## - V14_J1_4      1      95.51 1904.7 -4532.4
## - V5_J2_3       1      97.82 1907.0 -4526.2
## - V3_J1_4       1      99.89 1909.1 -4520.5
## - V4_J2_5       1     109.47 1918.7 -4494.5
## - V19_J2_3      1     118.34 1927.5 -4470.5
## - V15_J2_7      1     127.56 1936.8 -4445.7
## - V12_1_2_J2_2  1     131.76 1941.0 -4434.4
## - V15_J2_2      1     134.46 1943.7 -4427.2
## - V5_J1_5       1     136.19 1945.4 -4422.6
## - V4_J2_1       1     140.09 1949.3 -4412.2
## - V3_J2_1       1     143.21 1952.4 -4403.8
## - V3_J2_5       1     145.71 1954.9 -4397.2
## - V4_J2_3       1     147.21 1956.4 -4393.2
## - V4_J2_4       1     161.15 1970.4 -4356.3
## - V19_J1_5      1     161.29 1970.5 -4355.9
## - V26_J2_1      1     167.74 1977.0 -4338.9
## - V26_J2_5      1     192.17 2001.4 -4275.1
## - V19_J1_4      1     196.49 2005.7 -4263.8
## - V26_J2_4      1     199.90 2009.1 -4255.0
## - V3_J2_4       1     215.95 2025.2 -4213.6
## - V3_J2_3       1     244.51 2053.7 -4140.8
## - V20_J2_2      1     261.87 2071.1 -4097.0
## - V5_J2_5       1     284.90 2094.1 -4039.5
## - V5_J2_4       1     328.34 2137.6 -3932.8
## - V26_J2_3      1     413.62 2222.8 -3729.3
## - V16_J2_2      1     429.19 2238.4 -3693.0
## - J              12     687.08 2496.3 -3199.0
## - V              19    1180.90 2990.1 -2306.8
##
## Step:  AIC=-4831.98
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
## V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5
##
##
##           Df Sum of Sq    RSS    AIC
## + V12_1_2_J2_7  1      13.95 1779.6 -4865.9
## + V29_J1_3      1      12.38 1781.1 -4861.4
## + V13_2_J1_5    1      11.98 1781.5 -4860.2

```

## + V1_J2_5	1	11.72	1781.8	-4859.4
## + V29_J1_5	1	11.49	1782.0	-4858.8
## + V12_1_2_J1_3	1	11.02	1782.5	-4857.4
## + V20_J1_3	1	10.90	1782.6	-4857.0
## + V24_J1_6	1	10.34	1783.2	-4855.4
## + V24_J1_7	1	9.58	1783.9	-4853.2
## + V12_1_2_J2_5	1	9.37	1784.2	-4852.6
## + V13_2_J1_3	1	9.27	1784.3	-4852.3
## + V24_J1_5	1	9.17	1784.3	-4852.0
## + V15_J2_1	1	9.09	1784.4	-4851.8
## + V17_J1_5	1	8.75	1784.8	-4850.8
## + V23_J1_4	1	8.72	1784.8	-4850.7
## + V4_J1_3	1	8.67	1784.9	-4850.5
## + V12_1_2_J1_5	1	8.39	1785.1	-4849.7
## + V12_1_2_J1_7	1	8.39	1785.1	-4849.7
## + V13_1_J1_7	1	8.28	1785.2	-4849.4
## + V13_1_J1_5	1	7.87	1785.7	-4848.2
## + V12_1_2_J1_6	1	6.89	1786.6	-4845.4
## + V29_J1_7	1	6.83	1786.7	-4845.2
## + V1_J1_5	1	6.75	1786.8	-4845.0
## + V13_1_J2_4	1	6.58	1786.9	-4844.5
## + V13_2_J1_6	1	6.45	1787.1	-4844.1
## + V23_J2_1	1	6.43	1787.1	-4844.0
## + V13_1_J1_2	1	6.38	1787.2	-4843.9
## + V13_3_J2_5	1	5.89	1787.6	-4842.4
## + V5_J1_6	1	5.57	1788.0	-4841.5
## + V16_J2_1	1	5.50	1788.0	-4841.3
## + V29_J2_2	1	5.49	1788.0	-4841.3
## + V13_2_J1_4	1	5.44	1788.1	-4841.1
## + V14_J1_2	1	5.44	1788.1	-4841.1
## + V20_J1_2	1	5.32	1788.2	-4840.8
## + V17_J2_1	1	5.27	1788.2	-4840.6
## + V15_J1_5	1	5.22	1788.3	-4840.5
## + V13_2_J2_5	1	5.17	1788.4	-4840.3
## + V13_3_J1_3	1	5.17	1788.4	-4840.3
## + V12_1_2_J2_4	1	5.08	1788.4	-4840.1
## + V5_J1_3	1	4.89	1788.6	-4839.6
## + V1_J1_7	1	4.77	1788.8	-4839.2
## + V13_2_J2_3	1	4.67	1788.8	-4838.9
## + V26_J1_6	1	4.22	1789.3	-4837.6
## + V2_J2_3	1	4.14	1789.4	-4837.4
## + V24_J1_1	1	3.94	1789.6	-4836.8
## + V19_J1_1	1	3.91	1789.6	-4836.7
## + V1_J2_3	1	3.81	1789.7	-4836.4
## + V20_J1_6	1	3.77	1789.8	-4836.3
## + V2_J1_5	1	3.76	1789.8	-4836.2
## + V26_J2_2	1	3.59	1789.9	-4835.8
## + V30_J2_3	1	3.35	1790.2	-4835.1
## + V29_J1_1	1	3.29	1790.2	-4834.9
## + V13_2_J2_7	1	2.97	1790.6	-4833.9
## + V13_1_J2_5	1	2.95	1790.6	-4833.9
## + V12_1_2_J2_3	1	2.87	1790.7	-4833.7
## + V29_J1_4	1	2.76	1790.8	-4833.4
## + V30_J1_7	1	2.74	1790.8	-4833.3

## + V26_J1_1	1	2.71	1790.8	-4833.2
## + V13_3_J1_2	1	2.68	1790.8	-4833.1
## + V14_J2_7	1	2.53	1791.0	-4832.7
## + V30_J1_6	1	2.48	1791.0	-4832.5
## + V13_3_J2_4	1	2.46	1791.1	-4832.5
## + V2_J1_6	1	2.45	1791.1	-4832.5
## + V15_J2_3	1	2.40	1791.1	-4832.3
## + V3_J1_2	1	2.32	1791.2	-4832.1
## + V26_J1_3	1	2.29	1791.2	-4832.0
## <none>			1793.5	-4832.0
## + V13_2_J2_2	1	2.22	1791.3	-4831.8
## + V12_1_2_J1_1	1	2.12	1791.4	-4831.5
## + V1_J1_2	1	2.11	1791.4	-4831.5
## + V24_J2_1	1	2.09	1791.4	-4831.4
## + V15_J1_4	1	2.02	1791.5	-4831.2
## + V13_2_J1_2	1	2.01	1791.5	-4831.2
## + V20_J2_4	1	1.99	1791.5	-4831.1
## + V29_J1_6	1	1.98	1791.5	-4831.1
## + V29_J2_1	1	1.97	1791.5	-4831.1
## + V17_J1_7	1	1.97	1791.6	-4831.1
## + V3_J1_3	1	1.92	1791.6	-4830.9
## + V29_J2_3	1	1.90	1791.6	-4830.8
## + V1_J1_1	1	1.77	1791.8	-4830.5
## + V13_3_J1_6	1	1.76	1791.8	-4830.4
## + V23_J1_2	1	1.75	1791.8	-4830.4
## + V16_J2_4	1	1.72	1791.8	-4830.3
## + V13_1_J1_6	1	1.72	1791.8	-4830.3
## + V13_3_J1_1	1	1.61	1791.9	-4830.0
## + V5_J1_2	1	1.58	1792.0	-4829.9
## + V12_1_2_J2_1	1	1.56	1792.0	-4829.9
## + V20_J2_7	1	1.50	1792.0	-4829.7
## + V20_J1_1	1	1.47	1792.0	-4829.6
## + V4_J1_2	1	1.45	1792.1	-4829.5
## + V17_J2_4	1	1.41	1792.1	-4829.4
## + V16_J1_7	1	1.37	1792.2	-4829.3
## + V16_J1_1	1	1.29	1792.2	-4829.1
## + V20_J1_4	1	1.19	1792.3	-4828.8
## + V19_J1_2	1	1.17	1792.3	-4828.7
## + V14_J1_6	1	1.15	1792.4	-4828.7
## + V17_J1_2	1	1.13	1792.4	-4828.6
## + V5_J2_7	1	1.12	1792.4	-4828.6
## + V13_2_J2_1	1	1.12	1792.4	-4828.6
## + V23_J2_2	1	1.11	1792.4	-4828.6
## + V13_3_J2_7	1	1.10	1792.4	-4828.5
## + V3_J1_7	1	1.10	1792.4	-4828.5
## + V16_J1_6	1	1.08	1792.5	-4828.5
## + V15_J2_5	1	1.05	1792.5	-4828.4
## + V13_3_J2_3	1	1.02	1792.5	-4828.3
## + V24_J2_3	1	0.99	1792.5	-4828.2
## + V13_1_J1_1	1	0.97	1792.5	-4828.2
## + V13_1_J1_4	1	0.93	1792.6	-4828.0
## + V17_J2_3	1	0.93	1792.6	-4828.0
## + V13_1_J2_1	1	0.92	1792.6	-4828.0
## + V23_J1_5	1	0.90	1792.6	-4828.0

## + V2_J1_2	1	0.85	1792.7	-4827.8
## + V29_J2_4	1	0.84	1792.7	-4827.8
## + V5_J1_7	1	0.83	1792.7	-4827.7
## + V4_J1_6	1	0.82	1792.7	-4827.7
## + V1_J2_1	1	0.82	1792.7	-4827.7
## + V16_J1_4	1	0.81	1792.7	-4827.7
## + V17_J2_5	1	0.80	1792.7	-4827.7
## + V2_J1_7	1	0.79	1792.7	-4827.6
## + V14_J2_2	1	0.78	1792.7	-4827.6
## + V23_J1_7	1	0.74	1792.8	-4827.5
## + V20_J1_7	1	0.65	1792.9	-4827.2
## + V24_J1_4	1	0.65	1792.9	-4827.2
## + V13_3_J1_5	1	0.58	1792.9	-4827.0
## + V23_J2_5	1	0.53	1793.0	-4826.9
## + V2_J2_4	1	0.52	1793.0	-4826.8
## + V30_J1_4	1	0.50	1793.0	-4826.8
## + V30_J2_4	1	0.50	1793.0	-4826.8
## + V13_3_J2_1	1	0.50	1793.0	-4826.8
## + V5_J2_2	1	0.48	1793.0	-4826.7
## + V23_J2_4	1	0.45	1793.1	-4826.7
## + V23_J2_3	1	0.45	1793.1	-4826.7
## + V16_J1_2	1	0.45	1793.1	-4826.7
## + V3_J1_6	1	0.45	1793.1	-4826.6
## + V16_J1_5	1	0.42	1793.1	-4826.6
## + V13_2_J2_4	1	0.40	1793.1	-4826.5
## + V3_J2_2	1	0.38	1793.1	-4826.4
## + V2_J1_1	1	0.37	1793.2	-4826.4
## + V13_1_J2_2	1	0.37	1793.2	-4826.4
## + V1_J1_4	1	0.34	1793.2	-4826.3
## + V4_J1_7	1	0.31	1793.2	-4826.2
## + V29_J2_7	1	0.28	1793.2	-4826.2
## + V14_J1_3	1	0.27	1793.3	-4826.1
## + V26_J1_7	1	0.26	1793.3	-4826.1
## + V13_3_J2_2	1	0.26	1793.3	-4826.1
## + V24_J2_7	1	0.25	1793.3	-4826.1
## + V19_J1_6	1	0.24	1793.3	-4826.0
## + V26_J2_7	1	0.19	1793.3	-4825.9
## + V20_J2_5	1	0.18	1793.3	-4825.9
## + V26_J1_2	1	0.17	1793.3	-4825.8
## + V30_J2_7	1	0.16	1793.4	-4825.8
## + V1_J2_4	1	0.16	1793.4	-4825.8
## + V17_J1_6	1	0.15	1793.4	-4825.8
## + V19_J1_3	1	0.14	1793.4	-4825.8
## + V13_3_J1_7	1	0.14	1793.4	-4825.7
## + V19_J2_2	1	0.12	1793.4	-4825.7
## + V1_J1_6	1	0.12	1793.4	-4825.7
## + V3_J2_7	1	0.11	1793.4	-4825.7
## + V19_J1_7	1	0.10	1793.4	-4825.6
## + V4_J2_2	1	0.08	1793.4	-4825.6
## + V29_J1_2	1	0.08	1793.5	-4825.6
## + V2_J2_5	1	0.06	1793.5	-4825.5
## + V2_J2_1	1	0.05	1793.5	-4825.5
## + V3_J1_1	1	0.05	1793.5	-4825.5
## + V13_1_J2_7	1	0.05	1793.5	-4825.5

## + V24_J2_4	1	0.05	1793.5	-4825.5
## + V24_J1_2	1	0.04	1793.5	-4825.5
## + V2_J1_4	1	0.04	1793.5	-4825.5
## + V17_J1_1	1	0.04	1793.5	-4825.4
## + V23_J1_6	1	0.03	1793.5	-4825.4
## + V15_J2_4	1	0.03	1793.5	-4825.4
## + V13_3_J1_4	1	0.03	1793.5	-4825.4
## + V5_J1_1	1	0.02	1793.5	-4825.4
## + V13_2_J1_1	1	0.02	1793.5	-4825.4
## + V16_J2_5	1	0.02	1793.5	-4825.4
## + V20_J1_5	1	0.01	1793.5	-4825.4
## + V24_J1_3	1	0.01	1793.5	-4825.4
## + V19_J2_7	1	0.01	1793.5	-4825.4
## + V13_1_J2_3	1	0.01	1793.5	-4825.4
## + V30_J2_1	1	0.01	1793.5	-4825.4
## + V29_J2_5	1	0.01	1793.5	-4825.4
## + V17_J1_4	1	0.01	1793.5	-4825.4
## + V14_J1_7	1	0.00	1793.5	-4825.4
## + V23_J1_1	1	0.00	1793.5	-4825.4
## + V24_J2_2	1	0.00	1793.5	-4825.3
## + V4_J1_1	1	0.00	1793.5	-4825.3
## + V14_J1_1	1	0.00	1793.5	-4825.3
## - V24_J2_5	1	15.68	1809.2	-4793.3
## - V30_J1_5	1	18.57	1812.1	-4785.0
## - V16_J2_3	1	20.24	1813.8	-4780.3
## - V20_J2_1	1	20.45	1814.0	-4779.6
## - V23_J2_7	1	21.10	1814.6	-4777.8
## - V30_J1_3	1	23.07	1816.6	-4772.1
## - V13_1_J1_3	1	24.75	1818.3	-4767.3
## - V2_J2_7	1	25.34	1818.9	-4765.7
## - V30_J2_5	1	25.34	1818.9	-4765.6
## - V14_J2_5	1	25.39	1818.9	-4765.5
## - V15_J1_1	1	27.46	1821.0	-4759.6
## - V20_J2_3	1	27.50	1821.0	-4759.5
## - V2_J2_2	1	30.00	1823.5	-4752.3
## - V4_J2_7	1	31.54	1825.1	-4748.0
## - V16_J2_7	1	32.01	1825.5	-4746.6
## - V12_1_2_J1_2	1	32.08	1825.6	-4746.4
## - V15_J1_2	1	33.93	1827.5	-4741.2
## - V14_J2_1	1	35.55	1829.1	-4736.6
## - V4_J1_5	1	35.69	1829.2	-4736.1
## - V26_J1_5	1	36.79	1830.3	-4733.0
## - V16_J1_3	1	40.73	1834.2	-4721.9
## - V1_J1_3	1	41.87	1835.4	-4718.6
## - V19_J2_4	1	42.47	1836.0	-4716.9
## - V19_J2_5	1	42.47	1836.0	-4716.9
## - V13_2_J1_7	1	42.69	1836.2	-4716.3
## - V3_J1_5	1	45.46	1839.0	-4708.5
## - V5_J1_4	1	46.36	1839.9	-4705.9
## - V4_J1_4	1	46.40	1839.9	-4705.8
## - V14_J2_4	1	47.26	1840.8	-4703.4
## - V15_J1_6	1	49.27	1842.8	-4697.7
## - V23_J1_3	1	55.35	1848.9	-4680.6
## - V26_J1_4	1	56.14	1849.7	-4678.3

```

## - V30_J1_2      1      57.76 1851.3 -4673.8
## - V17_J2_7      1      59.77 1853.3 -4668.1
## - V1_J2_2       1      60.56 1854.1 -4665.9
## - V17_J1_3      1      61.30 1854.8 -4663.9
## - V2_J1_3       1      62.87 1856.4 -4659.4
## - V19_J2_1      1      63.78 1857.3 -4656.9
## - V17_J2_2      1      66.14 1859.7 -4650.3
## - V15_J1_7      1      66.90 1860.4 -4648.2
## - V5_J2_1       1      69.02 1862.5 -4642.3
## - V12_1_2_J1_4  1      71.14 1864.7 -4636.4
## - V30_J1_1      1      71.68 1865.2 -4634.8
## - V30_J2_2      1      74.31 1867.8 -4627.5
## - V1_J2_7       1      80.09 1873.6 -4611.4
## - V14_J2_3      1      86.49 1880.0 -4593.7
## - V14_J1_5      1      95.44 1889.0 -4569.0
## - V14_J1_4      1      95.74 1889.3 -4568.2
## - V15_J1_3      1      96.76 1890.3 -4565.4
## - V5_J2_3       1      98.00 1891.5 -4562.0
## - V3_J1_4       1     100.12 1893.6 -4556.1
## - V4_J2_5       1     115.30 1908.8 -4514.6
## - V19_J2_3      1     118.54 1912.1 -4505.8
## - V15_J2_7      1     129.03 1922.5 -4477.4
## - V12_1_2_J2_2  1     130.67 1924.2 -4472.9
## - V15_J2_2      1     136.05 1929.6 -4458.4
## - V5_J1_5       1     136.52 1930.0 -4457.1
## - V4_J2_1       1     140.34 1933.9 -4446.9
## - V3_J2_1       1     143.49 1937.0 -4438.4
## - V4_J2_3       1     147.40 1940.9 -4427.9
## - V3_J2_5       1     152.37 1945.9 -4414.6
## - V4_J2_4       1     161.47 1955.0 -4390.4
## - V19_J1_5      1     161.64 1955.2 -4389.9
## - V26_J2_1      1     168.05 1961.6 -4372.9
## - V19_J1_4      1     196.82 1990.3 -4297.2
## - V26_J2_5      1     199.65 1993.2 -4289.8
## - V26_J2_4      1     200.28 1993.8 -4288.1
## - V3_J2_4       1     216.35 2009.9 -4246.4
## - V3_J2_3       1     244.80 2038.3 -4173.3
## - V20_J2_2      1     260.35 2053.9 -4133.8
## - V5_J2_5       1     293.69 2087.2 -4050.1
## - V5_J2_4       1     328.83 2122.3 -3963.2
## - V26_J2_3      1     413.99 2207.5 -3758.7
## - V16_J2_2      1     426.92 2220.4 -3728.3
## - J             12     690.44 2484.0 -3218.1
## - V             19    1192.33 2985.9 -2307.6
##
## Step:  AIC=-4865.93
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##      V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##      V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##      V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
##      V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
##      V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
##      V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
##      V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +

```



```

##      V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
##      V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
##      V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
##      V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
##      V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7
##
##      Df Sum of Sq    RSS    AIC
## + V12_1_2_J1_3  1      14.26 1765.3 -4901.1
## + V29_J1_3      1      12.23 1767.3 -4895.2
## + V29_J1_5      1      11.82 1767.8 -4894.0
## + V13_2_J1_5    1      11.64 1767.9 -4893.4
## + V1_J2_5       1      11.58 1768.0 -4893.2
## + V12_1_2_J1_7  1      11.18 1768.4 -4892.1
## + V20_J1_3      1      11.10 1768.5 -4891.8
## + V24_J1_6      1      10.50 1769.1 -4890.1
## + V24_J1_7      1       9.75 1769.8 -4887.9
## + V12_1_2_J1_6  1       9.42 1770.2 -4886.9
## + V13_2_J1_3    1       9.42 1770.2 -4886.9
## + V15_J2_1      1       9.13 1770.5 -4886.0
## + V24_J1_5      1       8.86 1770.7 -4885.3
## + V17_J1_5      1       8.85 1770.7 -4885.2
## + V23_J1_4      1       8.81 1770.8 -4885.1
## + V4_J1_3       1       8.61 1771.0 -4884.5
## + V13_1_J1_7    1       8.15 1771.4 -4883.2
## + V13_1_J1_5    1       7.59 1772.0 -4881.5
## + V12_1_2_J2_5  1       7.17 1772.4 -4880.3
## + V1_J1_5       1       6.84 1772.7 -4879.3
## + V13_1_J2_4    1       6.82 1772.8 -4879.3
## + V29_J1_7      1       6.72 1772.9 -4879.0
## + V13_2_J1_6    1       6.56 1773.0 -4878.5
## + V23_J2_1      1       6.53 1773.0 -4878.4
## + V13_1_J1_2    1       6.38 1773.2 -4878.0
## + V12_1_2_J1_5  1       6.30 1773.3 -4877.7
## + V13_3_J2_5    1       6.14 1773.4 -4877.3
## + V14_J1_2      1       5.60 1774.0 -4875.7
## + V13_2_J1_4    1       5.51 1774.1 -4875.4
## + V29_J2_2      1       5.44 1774.1 -4875.2
## + V16_J2_1      1       5.42 1774.2 -4875.2
## + V5_J1_6       1       5.30 1774.3 -4874.8
## + V20_J1_2      1       5.29 1774.3 -4874.8
## + V13_3_J1_3    1       5.27 1774.3 -4874.7
## + V17_J2_1      1       5.20 1774.4 -4874.5
## + V15_J1_5      1       5.19 1774.4 -4874.5
## + V5_J1_3       1       5.17 1774.4 -4874.4
## + V13_2_J2_5    1       4.92 1774.7 -4873.7
## + V1_J1_7       1       4.73 1774.8 -4873.1
## + V26_J1_6      1       4.47 1775.1 -4872.4
## + V13_2_J2_3    1       4.45 1775.1 -4872.3
## + V2_J2_3       1       4.07 1775.5 -4871.2
## + V24_J1_1      1       3.84 1775.7 -4870.5
## + V2_J1_5       1       3.82 1775.8 -4870.5
## + V1_J2_3       1       3.74 1775.8 -4870.2
## + V19_J1_1      1       3.68 1775.9 -4870.1
## + V20_J1_6      1       3.66 1775.9 -4870.0

```

## + V30_J2_3	1	3.61	1776.0	-4869.9
## + V14_J2_7	1	3.59	1776.0	-4869.8
## + V26_J2_2	1	3.50	1776.1	-4869.5
## + V12_1_2_J2_4	1	3.46	1776.1	-4869.4
## + V29_J1_1	1	3.21	1776.4	-4868.7
## + V13_1_J2_5	1	3.14	1776.4	-4868.5
## + V26_J1_1	1	2.92	1776.7	-4867.8
## + V30_J1_7	1	2.88	1776.7	-4867.7
## + V29_J1_4	1	2.80	1776.8	-4867.5
## + V13_3_J1_2	1	2.68	1776.9	-4867.1
## + V3_J1_2	1	2.43	1777.2	-4866.4
## + V15_J2_3	1	2.42	1777.2	-4866.4
## + V2_J1_6	1	2.42	1777.2	-4866.4
## + V30_J1_6	1	2.35	1777.2	-4866.2
## + V13_3_J2_4	1	2.33	1777.2	-4866.1
## <none>			1779.6	-4865.9
## + V13_2_J2_2	1	2.19	1777.4	-4865.7
## + V26_J1_3	1	2.11	1777.5	-4865.5
## + V29_J2_1	1	2.11	1777.5	-4865.5
## + V15_J1_4	1	2.10	1777.5	-4865.5
## + V3_J1_3	1	2.09	1777.5	-4865.4
## + V29_J2_3	1	2.03	1777.5	-4865.2
## + V13_2_J1_2	1	2.01	1777.6	-4865.2
## + V1_J1_2	1	2.01	1777.6	-4865.2
## + V13_2_J2_7	1	1.97	1777.6	-4865.1
## + V24_J2_1	1	1.94	1777.6	-4865.0
## + V17_J1_7	1	1.94	1777.6	-4865.0
## + V29_J1_6	1	1.92	1777.7	-4864.9
## + V20_J2_4	1	1.85	1777.7	-4864.7
## + V1_J1_1	1	1.79	1777.8	-4864.5
## + V13_1_J1_6	1	1.78	1777.8	-4864.5
## + V16_J2_4	1	1.76	1777.8	-4864.4
## + V13_3_J1_6	1	1.70	1777.9	-4864.3
## + V12_1_2_J2_3	1	1.69	1777.9	-4864.2
## + V23_J1_2	1	1.68	1777.9	-4864.2
## + V13_3_J1_1	1	1.67	1777.9	-4864.2
## + V20_J1_1	1	1.55	1778.0	-4863.8
## + V5_J1_2	1	1.49	1778.1	-4863.6
## + V4_J1_2	1	1.41	1778.2	-4863.4
## + V17_J2_4	1	1.38	1778.2	-4863.3
## + V16_J1_7	1	1.35	1778.2	-4863.2
## + V16_J1_1	1	1.27	1778.3	-4863.0
## + V19_J1_2	1	1.25	1778.3	-4863.0
## + V20_J1_4	1	1.24	1778.3	-4862.9
## + V23_J2_2	1	1.20	1778.4	-4862.8
## + V24_J2_3	1	1.10	1778.5	-4862.5
## + V12_1_2_J1_1	1	1.08	1778.5	-4862.4
## + V16_J1_6	1	1.06	1778.5	-4862.4
## + V17_J1_2	1	1.06	1778.5	-4862.4
## + V15_J2_5	1	1.03	1778.5	-4862.3
## + V14_J1_6	1	1.03	1778.5	-4862.3
## + V13_1_J1_1	1	1.02	1778.6	-4862.3
## + V13_1_J2_1	1	1.02	1778.6	-4862.3
## + V13_2_J2_1	1	1.02	1778.6	-4862.3

## + V3_J1_7	1	0.98	1778.6	-4862.2
## + V13_1_J1_4	1	0.96	1778.6	-4862.1
## + V5_J1_7	1	0.94	1778.6	-4862.0
## + V13_3_J2_3	1	0.93	1778.7	-4862.0
## + V17_J2_3	1	0.89	1778.7	-4861.9
## + V23_J1_5	1	0.87	1778.7	-4861.8
## + V16_J1_4	1	0.84	1778.7	-4861.7
## + V4_J1_6	1	0.83	1778.7	-4861.7
## + V20_J2_7	1	0.83	1778.8	-4861.7
## + V14_J2_2	1	0.82	1778.8	-4861.7
## + V2_J1_7	1	0.81	1778.8	-4861.7
## + V1_J2_1	1	0.79	1778.8	-4861.6
## + V2_J1_2	1	0.78	1778.8	-4861.6
## + V29_J2_4	1	0.77	1778.8	-4861.5
## + V17_J2_5	1	0.76	1778.8	-4861.5
## + V23_J1_7	1	0.75	1778.8	-4861.5
## + V12_1_2_J2_1	1	0.72	1778.9	-4861.4
## + V24_J1_4	1	0.62	1779.0	-4861.1
## + V20_J1_7	1	0.60	1779.0	-4861.1
## + V5_J2_7	1	0.58	1779.0	-4861.0
## + V23_J2_5	1	0.57	1779.0	-4861.0
## + V26_J2_7	1	0.55	1779.0	-4860.9
## + V13_3_J2_7	1	0.53	1779.0	-4860.8
## + V30_J2_7	1	0.52	1779.1	-4860.8
## + V13_3_J1_5	1	0.51	1779.1	-4860.8
## + V2_J2_4	1	0.50	1779.1	-4860.8
## + V16_J1_2	1	0.50	1779.1	-4860.7
## + V23_J2_3	1	0.48	1779.1	-4860.7
## + V23_J2_4	1	0.48	1779.1	-4860.7
## + V30_J1_4	1	0.46	1779.1	-4860.6
## + V5_J2_2	1	0.44	1779.1	-4860.6
## + V13_3_J2_1	1	0.43	1779.2	-4860.6
## + V30_J2_4	1	0.41	1779.2	-4860.5
## + V3_J2_7	1	0.41	1779.2	-4860.5
## + V16_J1_5	1	0.40	1779.2	-4860.5
## + V2_J1_1	1	0.38	1779.2	-4860.4
## + V13_1_J2_2	1	0.38	1779.2	-4860.4
## + V3_J1_6	1	0.37	1779.2	-4860.4
## + V3_J2_2	1	0.35	1779.2	-4860.3
## + V13_2_J2_4	1	0.35	1779.2	-4860.3
## + V26_J1_7	1	0.32	1779.3	-4860.2
## + V4_J1_7	1	0.32	1779.3	-4860.2
## + V1_J1_4	1	0.32	1779.3	-4860.2
## + V19_J1_6	1	0.30	1779.3	-4860.2
## + V13_3_J2_2	1	0.27	1779.3	-4860.1
## + V14_J1_3	1	0.21	1779.4	-4859.9
## + V1_J2_4	1	0.17	1779.4	-4859.8
## + V13_3_J1_7	1	0.15	1779.4	-4859.7
## + V17_J1_6	1	0.15	1779.4	-4859.7
## + V19_J1_7	1	0.15	1779.4	-4859.7
## + V26_J1_2	1	0.15	1779.4	-4859.7
## + V19_J2_2	1	0.14	1779.4	-4859.7
## + V20_J2_5	1	0.13	1779.5	-4859.7
## + V1_J1_6	1	0.11	1779.5	-4859.6

## + V19_J1_3	1	0.10	1779.5	-4859.6
## + V29_J1_2	1	0.08	1779.5	-4859.5
## + V2_J2_5	1	0.07	1779.5	-4859.5
## + V4_J2_2	1	0.07	1779.5	-4859.5
## + V2_J1_4	1	0.05	1779.5	-4859.4
## + V5_J1_1	1	0.05	1779.5	-4859.4
## + V2_J2_1	1	0.05	1779.5	-4859.4
## + V29_J2_7	1	0.04	1779.5	-4859.4
## + V24_J1_2	1	0.04	1779.5	-4859.4
## + V19_J2_7	1	0.04	1779.5	-4859.4
## + V23_J1_6	1	0.03	1779.5	-4859.4
## + V17_J1_1	1	0.03	1779.5	-4859.4
## + V20_J1_5	1	0.03	1779.5	-4859.4
## + V24_J2_7	1	0.03	1779.5	-4859.4
## + V13_3_J1_4	1	0.03	1779.5	-4859.4
## + V3_J1_1	1	0.03	1779.5	-4859.4
## + V24_J2_4	1	0.03	1779.5	-4859.4
## + V15_J2_4	1	0.03	1779.5	-4859.4
## + V13_1_J2_3	1	0.02	1779.5	-4859.4
## + V13_2_J1_1	1	0.01	1779.6	-4859.3
## + V16_J2_5	1	0.01	1779.6	-4859.3
## + V13_1_J2_7	1	0.01	1779.6	-4859.3
## + V24_J1_3	1	0.01	1779.6	-4859.3
## + V14_J1_1	1	0.01	1779.6	-4859.3
## + V17_J1_4	1	0.00	1779.6	-4859.3
## + V24_J2_2	1	0.00	1779.6	-4859.3
## + V23_J1_1	1	0.00	1779.6	-4859.3
## + V4_J1_1	1	0.00	1779.6	-4859.3
## + V29_J2_5	1	0.00	1779.6	-4859.3
## + V30_J2_1	1	0.00	1779.6	-4859.3
## + V14_J1_7	1	0.00	1779.6	-4859.3
## - V12_1_2_J2_7	1	13.95	1793.5	-4832.0
## - V24_J2_5	1	15.30	1794.9	-4828.0
## - V30_J1_5	1	19.05	1798.6	-4817.2
## - V20_J2_1	1	20.03	1799.6	-4814.4
## - V16_J2_3	1	20.10	1799.7	-4814.2
## - V30_J1_3	1	22.75	1802.3	-4806.5
## - V23_J2_7	1	23.79	1803.4	-4803.5
## - V14_J2_5	1	24.66	1804.2	-4801.0
## - V13_1_J1_3	1	24.95	1804.5	-4800.2
## - V30_J2_5	1	25.93	1805.5	-4797.3
## - V20_J2_3	1	26.99	1806.6	-4794.3
## - V15_J1_1	1	27.30	1806.9	-4793.4
## - V12_1_2_J1_2	1	27.62	1807.2	-4792.5
## - V2_J2_7	1	28.28	1807.9	-4790.6
## - V2_J2_2	1	30.41	1810.0	-4784.5
## - V15_J1_2	1	33.50	1813.1	-4775.6
## - V4_J2_7	1	34.54	1814.1	-4772.6
## - V14_J2_1	1	34.72	1814.3	-4772.1
## - V16_J2_7	1	35.25	1814.8	-4770.6
## - V4_J1_5	1	35.34	1814.9	-4770.3
## - V26_J1_5	1	35.94	1815.5	-4768.6
## - V16_J1_3	1	40.81	1820.4	-4754.7
## - V19_J2_5	1	41.51	1821.1	-4752.7

## - V19_J2_4	1	41.60	1821.2	-4752.4
## - V1_J1_3	1	41.97	1821.5	-4751.4
## - V13_2_J1_7	1	42.42	1822.0	-4750.1
## - V3_J1_5	1	44.51	1824.1	-4744.1
## - V5_J1_4	1	45.82	1825.4	-4740.4
## - V14_J2_4	1	46.35	1825.9	-4738.9
## - V4_J1_4	1	46.41	1826.0	-4738.7
## - V15_J1_6	1	49.02	1828.6	-4731.3
## - V23_J1_3	1	55.42	1835.0	-4713.1
## - V26_J1_4	1	55.54	1835.1	-4712.8
## - V30_J1_2	1	57.97	1837.5	-4705.9
## - V1_J2_2	1	61.13	1840.7	-4696.9
## - V17_J1_3	1	61.42	1841.0	-4696.1
## - V19_J2_1	1	62.67	1842.2	-4692.6
## - V2_J1_3	1	63.00	1842.6	-4691.7
## - V17_J2_7	1	64.10	1843.7	-4688.6
## - V15_J1_7	1	66.63	1846.2	-4681.4
## - V17_J2_2	1	66.73	1846.3	-4681.1
## - V5_J2_1	1	67.86	1847.4	-4678.0
## - V30_J1_1	1	72.26	1851.8	-4665.6
## - V30_J2_2	1	74.22	1853.8	-4660.1
## - V12_1_2_J1_4	1	76.72	1856.3	-4653.1
## - V1_J2_7	1	85.02	1864.6	-4629.9
## - V14_J2_3	1	85.17	1864.8	-4629.5
## - V14_J1_5	1	94.05	1873.6	-4604.8
## - V14_J1_4	1	94.95	1874.5	-4602.3
## - V15_J1_3	1	96.44	1876.0	-4598.1
## - V5_J2_3	1	96.59	1876.2	-4597.7
## - V3_J1_4	1	99.31	1878.9	-4590.2
## - V4_J2_5	1	114.59	1894.2	-4548.1
## - V19_J2_3	1	116.98	1896.6	-4541.5
## - V15_J2_7	1	121.51	1901.1	-4529.1
## - V5_J1_5	1	134.85	1914.4	-4492.7
## - V15_J2_2	1	135.00	1914.6	-4492.3
## - V12_1_2_J2_2	1	138.17	1917.8	-4483.7
## - V4_J2_1	1	139.66	1919.2	-4479.7
## - V3_J2_1	1	141.80	1921.4	-4473.9
## - V4_J2_3	1	146.67	1926.2	-4460.7
## - V3_J2_5	1	150.52	1930.1	-4450.4
## - V19_J1_5	1	159.82	1939.4	-4425.3
## - V4_J2_4	1	160.81	1940.4	-4422.7
## - V26_J2_1	1	166.21	1945.8	-4408.3
## - V19_J1_4	1	195.68	1975.3	-4330.1
## - V26_J2_5	1	197.53	1977.1	-4325.2
## - V26_J2_4	1	198.37	1978.0	-4323.0
## - V3_J2_4	1	214.35	1993.9	-4281.2
## - V3_J2_3	1	242.53	2022.1	-4208.2
## - V20_J2_2	1	260.45	2040.0	-4162.3
## - V5_J2_5	1	291.08	2070.7	-4084.8
## - V5_J2_4	1	326.35	2105.9	-3997.0
## - V26_J2_3	1	411.01	2190.6	-3792.0
## - V16_J2_2	1	428.34	2207.9	-3751.1
## - J	12	678.76	2458.3	-3265.4
## - V	19	1187.23	2966.8	-2334.2

```

##
## Step: AIC=-4901.13
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
## V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3
##
##
## Df Sum of Sq RSS AIC
## + V29_J1_3 1 15.05 1750.3 -4939.0
## + V12_1_2_J1_7 1 14.91 1750.4 -4938.6
## + V12_1_2_J1_6 1 12.87 1752.5 -4932.5
## + V29_J1_5 1 12.23 1753.1 -4930.7
## + V1_J2_5 1 11.41 1753.9 -4928.2
## + V13_2_J1_5 1 11.23 1754.1 -4927.7
## + V4_J1_3 1 10.72 1754.6 -4926.2
## + V24_J1_6 1 10.69 1754.6 -4926.1
## + V24_J1_7 1 9.94 1755.4 -4923.9
## + V15_J2_1 1 9.18 1756.1 -4921.6
## + V17_J1_5 1 8.96 1756.3 -4921.0
## + V20_J1_3 1 8.92 1756.4 -4920.9
## + V23_J1_4 1 8.88 1756.4 -4920.7
## + V24_J1_5 1 8.48 1756.8 -4919.5
## + V13_1_J1_7 1 8.17 1757.2 -4918.6
## + V13_1_J1_5 1 7.43 1757.9 -4916.4
## + V13_2_J1_3 1 7.38 1757.9 -4916.3
## + V13_1_J2_4 1 6.96 1758.4 -4915.0
## + V1_J1_5 1 6.94 1758.4 -4915.0
## + V13_2_J1_6 1 6.70 1758.6 -4914.3
## + V23_J2_1 1 6.67 1758.7 -4914.2
## + V29_J1_7 1 6.59 1758.7 -4913.9
## + V13_1_J1_2 1 6.56 1758.8 -4913.8
## + V13_3_J2_5 1 6.47 1758.8 -4913.6
## + V14_J1_2 1 5.81 1759.5 -4911.6
## + V13_2_J1_4 1 5.62 1759.7 -4911.1
## + V29_J2_2 1 5.35 1760.0 -4910.3
## + V16_J2_1 1 5.30 1760.0 -4910.1
## + V20_J1_2 1 5.26 1760.0 -4910.0
## + V15_J1_5 1 5.17 1760.2 -4909.8
## + V17_J2_1 1 5.10 1760.2 -4909.5
## + V12_1_2_J2_5 1 5.02 1760.3 -4909.3
## + V5_J1_6 1 4.97 1760.3 -4909.2
## + V26_J1_6 1 4.78 1760.5 -4908.6
## + V1_J1_7 1 4.67 1760.7 -4908.3
## + V13_2_J2_5 1 4.63 1760.7 -4908.2

```

## + V12_1_2_J1_5	1	4.27	1761.0	-4907.1
## + V13_2_J2_3	1	4.18	1761.1	-4906.8
## + V2_J2_3	1	3.97	1761.3	-4906.2
## + V2_J1_5	1	3.90	1761.4	-4906.0
## + V5_J1_3	1	3.81	1761.5	-4905.7
## + V13_3_J1_3	1	3.76	1761.6	-4905.6
## + V30_J2_3	1	3.73	1761.6	-4905.5
## + V24_J1_1	1	3.72	1761.6	-4905.5
## + V1_J2_3	1	3.64	1761.7	-4905.2
## + V20_J1_6	1	3.53	1761.8	-4904.9
## + V14_J2_7	1	3.47	1761.8	-4904.7
## + V19_J1_1	1	3.41	1761.9	-4904.5
## + V26_J2_2	1	3.39	1761.9	-4904.5
## + V13_1_J2_5	1	3.26	1762.1	-4904.1
## + V26_J1_3	1	3.20	1762.1	-4903.9
## + V26_J1_1	1	3.17	1762.2	-4903.8
## + V29_J1_1	1	3.12	1762.2	-4903.7
## + V29_J1_4	1	2.88	1762.4	-4903.0
## + V30_J1_7	1	2.85	1762.5	-4902.9
## + V13_3_J1_2	1	2.70	1762.6	-4902.5
## + V3_J1_2	1	2.56	1762.8	-4902.1
## + V15_J2_3	1	2.46	1762.9	-4901.7
## + V30_J1_6	1	2.38	1762.9	-4901.5
## + V2_J1_6	1	2.37	1763.0	-4901.5
## + V29_J2_1	1	2.29	1763.0	-4901.3
## <none>			1765.3	-4901.1
## + V29_J2_3	1	2.22	1763.1	-4901.1
## + V15_J1_4	1	2.21	1763.1	-4901.0
## + V13_3_J2_4	1	2.16	1763.2	-4900.9
## + V13_2_J2_2	1	2.14	1763.2	-4900.8
## + V13_2_J1_2	1	2.02	1763.3	-4900.5
## + V12_1_2_J2_4	1	1.99	1763.3	-4900.4
## + V13_2_J2_7	1	1.93	1763.4	-4900.2
## + V17_J1_7	1	1.90	1763.4	-4900.1
## + V1_J1_2	1	1.88	1763.4	-4900.1
## + V29_J1_6	1	1.85	1763.5	-4900.0
## + V1_J1_1	1	1.83	1763.5	-4899.9
## + V16_J2_4	1	1.81	1763.5	-4899.8
## + V13_1_J1_6	1	1.77	1763.5	-4899.7
## + V24_J2_1	1	1.76	1763.6	-4899.7
## + V13_3_J1_1	1	1.73	1763.6	-4899.6
## + V20_J2_4	1	1.66	1763.7	-4899.4
## + V13_3_J1_6	1	1.64	1763.7	-4899.3
## + V20_J1_1	1	1.63	1763.7	-4899.3
## + V23_J1_2	1	1.58	1763.7	-4899.1
## + V4_J1_2	1	1.53	1763.8	-4899.0
## + V5_J1_2	1	1.39	1763.9	-4898.6
## + V19_J1_2	1	1.35	1764.0	-4898.5
## + V17_J2_4	1	1.34	1764.0	-4898.5
## + V16_J1_7	1	1.32	1764.0	-4898.4
## + V23_J2_2	1	1.32	1764.0	-4898.4
## + V20_J1_4	1	1.31	1764.0	-4898.4
## + V3_J1_3	1	1.26	1764.1	-4898.2
## + V24_J2_3	1	1.25	1764.1	-4898.2

## + V16_J1_1	1	1.24	1764.1	-4898.2
## + V5_J1_7	1	1.09	1764.2	-4897.7
## + V13_1_J2_1	1	1.08	1764.2	-4897.7
## + V16_J1_6	1	1.03	1764.3	-4897.5
## + V15_J2_5	1	1.01	1764.3	-4897.5
## + V13_1_J1_1	1	1.01	1764.3	-4897.5
## + V4_J1_6	1	0.99	1764.3	-4897.4
## + V17_J1_2	1	0.97	1764.3	-4897.3
## + V13_1_J1_4	1	0.94	1764.4	-4897.3
## + V13_2_J2_1	1	0.89	1764.4	-4897.1
## + V14_J1_6	1	0.88	1764.4	-4897.1
## + V14_J2_2	1	0.88	1764.4	-4897.1
## + V16_J1_4	1	0.87	1764.5	-4897.0
## + V17_J2_3	1	0.85	1764.5	-4897.0
## + V3_J1_7	1	0.84	1764.5	-4897.0
## + V2_J1_7	1	0.84	1764.5	-4897.0
## + V23_J1_5	1	0.82	1764.5	-4896.9
## + V20_J2_7	1	0.82	1764.5	-4896.9
## + V13_3_J2_3	1	0.81	1764.5	-4896.9
## + V23_J1_7	1	0.76	1764.6	-4896.7
## + V1_J2_1	1	0.75	1764.6	-4896.7
## + V12_1_2_J2_3	1	0.72	1764.6	-4896.6
## + V17_J2_5	1	0.72	1764.6	-4896.6
## + V2_J1_2	1	0.71	1764.6	-4896.6
## + V29_J2_4	1	0.67	1764.7	-4896.5
## + V5_J2_7	1	0.63	1764.7	-4896.4
## + V14_J1_3	1	0.62	1764.7	-4896.3
## + V23_J2_5	1	0.61	1764.7	-4896.3
## + V30_J2_7	1	0.60	1764.7	-4896.3
## + V24_J1_4	1	0.58	1764.7	-4896.2
## + V16_J1_2	1	0.56	1764.8	-4896.1
## + V20_J1_7	1	0.55	1764.8	-4896.1
## + V23_J2_3	1	0.53	1764.8	-4896.0
## + V13_3_J2_7	1	0.51	1764.8	-4896.0
## + V23_J2_4	1	0.51	1764.8	-4896.0
## + V26_J2_7	1	0.50	1764.8	-4896.0
## + V30_J1_4	1	0.48	1764.8	-4895.9
## + V2_J2_4	1	0.47	1764.8	-4895.9
## + V13_1_J2_2	1	0.44	1764.9	-4895.8
## + V13_3_J1_5	1	0.43	1764.9	-4895.8
## + V4_J1_7	1	0.42	1764.9	-4895.7
## + V19_J1_3	1	0.42	1764.9	-4895.7
## + V26_J1_7	1	0.41	1764.9	-4895.7
## + V5_J2_2	1	0.41	1764.9	-4895.7
## + V2_J1_1	1	0.40	1764.9	-4895.7
## + V19_J1_6	1	0.38	1764.9	-4895.6
## + V30_J2_4	1	0.38	1764.9	-4895.6
## + V3_J2_7	1	0.37	1765.0	-4895.6
## + V16_J1_5	1	0.37	1765.0	-4895.6
## + V13_3_J2_1	1	0.35	1765.0	-4895.5
## + V3_J2_2	1	0.32	1765.0	-4895.4
## + V12_1_2_J1_1	1	0.31	1765.0	-4895.4
## + V1_J1_4	1	0.30	1765.0	-4895.4
## + V13_3_J2_2	1	0.29	1765.0	-4895.4

## + V3_J1_6	1	0.29	1765.0	-4895.3
## + V13_2_J2_4	1	0.28	1765.0	-4895.3
## + V19_J1_7	1	0.21	1765.1	-4895.1
## + V24_J1_3	1	0.20	1765.1	-4895.1
## + V1_J2_4	1	0.18	1765.1	-4895.0
## + V13_3_J1_7	1	0.18	1765.1	-4895.0
## + V17_J1_6	1	0.17	1765.2	-4895.0
## + V19_J2_2	1	0.17	1765.2	-4895.0
## + V12_1_2_J2_1	1	0.16	1765.2	-4895.0
## + V26_J1_2	1	0.11	1765.2	-4894.8
## + V1_J1_6	1	0.10	1765.2	-4894.8
## + V4_J2_2	1	0.09	1765.2	-4894.8
## + V2_J2_5	1	0.09	1765.2	-4894.8
## + V5_J1_1	1	0.08	1765.2	-4894.7
## + V29_J1_2	1	0.08	1765.2	-4894.7
## + V20_J2_5	1	0.08	1765.2	-4894.7
## + V20_J1_5	1	0.06	1765.3	-4894.7
## + V2_J1_4	1	0.06	1765.3	-4894.7
## + V24_J1_2	1	0.04	1765.3	-4894.6
## + V13_3_J1_4	1	0.04	1765.3	-4894.6
## + V23_J1_6	1	0.04	1765.3	-4894.6
## + V2_J2_1	1	0.04	1765.3	-4894.6
## + V29_J2_7	1	0.04	1765.3	-4894.6
## + V13_1_J2_3	1	0.04	1765.3	-4894.6
## + V15_J2_4	1	0.03	1765.3	-4894.6
## + V17_J1_1	1	0.03	1765.3	-4894.6
## + V24_J2_7	1	0.03	1765.3	-4894.6
## + V19_J2_7	1	0.02	1765.3	-4894.6
## + V14_J1_1	1	0.02	1765.3	-4894.6
## + V13_1_J2_7	1	0.02	1765.3	-4894.6
## + V24_J2_4	1	0.01	1765.3	-4894.5
## + V3_J1_1	1	0.01	1765.3	-4894.5
## + V13_2_J1_1	1	0.01	1765.3	-4894.5
## + V16_J2_5	1	0.01	1765.3	-4894.5
## + V24_J2_2	1	0.01	1765.3	-4894.5
## + V14_J1_7	1	0.00	1765.3	-4894.5
## + V17_J1_4	1	0.00	1765.3	-4894.5
## + V4_J1_1	1	0.00	1765.3	-4894.5
## + V23_J1_1	1	0.00	1765.3	-4894.5
## + V29_J2_5	1	0.00	1765.3	-4894.5
## + V30_J2_1	1	0.00	1765.3	-4894.5
## - V12_1_2_J1_3	1	14.26	1779.6	-4865.9
## - V24_J2_5	1	14.84	1780.2	-4864.2
## - V12_1_2_J2_7	1	17.19	1782.5	-4857.4
## - V30_J1_5	1	19.22	1784.5	-4851.4
## - V20_J2_1	1	19.47	1784.8	-4850.7
## - V16_J2_3	1	19.89	1785.2	-4849.5
## - V13_1_J1_3	1	21.56	1786.9	-4844.6
## - V12_1_2_J1_2	1	22.93	1788.2	-4840.7
## - V14_J2_5	1	23.74	1789.0	-4838.3
## - V23_J2_7	1	24.20	1789.5	-4837.0
## - V30_J1_3	1	25.79	1791.1	-4832.3
## - V30_J2_5	1	26.19	1791.5	-4831.2
## - V20_J2_3	1	26.33	1791.7	-4830.8

## - V15_J1_1	1	27.02	1792.3	-4828.8
## - V2_J2_7	1	28.78	1794.1	-4823.7
## - V2_J2_2	1	30.95	1796.3	-4817.4
## - V15_J1_2	1	32.93	1798.2	-4811.7
## - V14_J2_1	1	33.64	1799.0	-4809.6
## - V4_J2_7	1	34.19	1799.5	-4808.0
## - V4_J1_5	1	34.24	1799.6	-4807.9
## - V26_J1_5	1	34.87	1800.2	-4806.0
## - V16_J2_7	1	35.77	1801.1	-4803.4
## - V19_J2_5	1	40.31	1805.6	-4790.4
## - V19_J2_4	1	40.47	1805.8	-4789.9
## - V13_2_J1_7	1	42.11	1807.4	-4785.2
## - V3_J1_5	1	43.32	1808.6	-4781.7
## - V16_J1_3	1	44.85	1810.2	-4777.3
## - V5_J1_4	1	45.03	1810.3	-4776.8
## - V14_J2_4	1	45.15	1810.5	-4776.4
## - V4_J1_4	1	45.56	1810.9	-4775.3
## - V1_J1_3	1	46.10	1811.4	-4773.7
## - V15_J1_6	1	48.66	1814.0	-4766.4
## - V26_J1_4	1	54.67	1820.0	-4749.2
## - V30_J1_2	1	57.47	1822.8	-4741.2
## - V23_J1_3	1	60.06	1825.4	-4733.8
## - V19_J2_1	1	61.21	1826.5	-4730.5
## - V1_J2_2	1	61.90	1827.2	-4728.6
## - V17_J2_7	1	64.84	1830.2	-4720.2
## - V15_J1_7	1	66.23	1831.5	-4716.2
## - V17_J1_3	1	66.31	1831.6	-4716.0
## - V5_J2_1	1	66.34	1831.7	-4716.0
## - V17_J2_2	1	67.54	1832.8	-4712.5
## - V2_J1_3	1	67.95	1833.3	-4711.4
## - V30_J1_1	1	72.11	1837.4	-4699.6
## - V30_J2_2	1	74.97	1840.3	-4691.5
## - V12_1_2_J1_4	1	83.07	1848.4	-4668.6
## - V14_J2_3	1	83.43	1848.8	-4667.7
## - V1_J2_7	1	85.87	1851.2	-4660.8
## - V15_J1_3	1	89.14	1854.5	-4651.6
## - V14_J1_5	1	92.31	1857.6	-4642.7
## - V14_J1_4	1	93.81	1859.1	-4638.5
## - V5_J2_3	1	94.73	1860.0	-4636.0
## - V3_J1_4	1	98.14	1863.5	-4626.4
## - V4_J2_5	1	112.48	1877.8	-4586.6
## - V19_J2_3	1	114.93	1880.2	-4579.8
## - V15_J2_7	1	120.21	1885.5	-4565.2
## - V5_J1_5	1	132.75	1898.1	-4530.7
## - V15_J2_2	1	133.56	1898.9	-4528.5
## - V4_J2_1	1	137.36	1902.7	-4518.1
## - V3_J2_1	1	139.56	1904.9	-4512.1
## - V4_J2_3	1	144.28	1909.6	-4499.3
## - V12_1_2_J2_2	1	146.74	1912.1	-4492.5
## - V3_J2_5	1	148.18	1913.5	-4488.6
## - V19_J1_5	1	157.53	1922.8	-4463.3
## - V4_J2_4	1	158.45	1923.8	-4460.8
## - V26_J2_1	1	163.79	1929.1	-4446.4
## - V19_J1_4	1	194.03	1959.3	-4365.5

```

## - V26_J2_5      1      194.83 1960.2 -4363.4
## - V26_J2_4      1      195.83 1961.2 -4360.7
## - V3_J2_4       1      211.72 1977.0 -4318.8
## - V3_J2_3       1      239.53 2004.8 -4246.1
## - V20_J2_2      1      260.68 2026.0 -4191.6
## - V5_J2_5       1      287.78 2053.1 -4122.5
## - V5_J2_4       1      323.06 2088.4 -4033.9
## - V26_J2_3      1      407.04 2172.4 -3828.9
## - V16_J2_2      1      430.23 2195.5 -3773.7
## - J             12      609.92 2375.2 -3437.6
## - V             19     1184.41 2949.7 -2357.6
##
## Step:  AIC=-4939.03
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
## V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3
##
##           Df Sum of Sq  RSS    AIC
## + V12_1_2_J1_7  1      15.07 1735.2 -4977.4
## + V4_J1_3       1      13.48 1736.8 -4972.6
## + V12_1_2_J1_6  1      13.02 1737.2 -4971.2
## + V1_J2_5       1      11.30 1739.0 -4966.1
## + V13_2_J1_5    1      10.89 1739.4 -4964.8
## + V24_J1_6      1      10.84 1739.4 -4964.7
## + V29_J1_5      1      10.26 1740.0 -4963.0
## + V24_J1_7      1      10.09 1740.2 -4962.5
## + V15_J2_1      1       9.19 1741.1 -4959.8
## + V17_J1_5      1       9.03 1741.2 -4959.3
## + V23_J1_4      1       8.80 1741.5 -4958.6
## + V29_J1_7      1       8.46 1741.8 -4957.6
## + V13_1_J1_7    1       8.25 1742.0 -4957.0
## + V24_J1_5      1       8.17 1742.1 -4956.7
## + V13_1_J1_5    1       7.35 1742.9 -4954.3
## + V13_1_J2_4    1       7.04 1743.2 -4953.3
## + V1_J1_5       1       7.00 1743.3 -4953.2
## + V13_2_J1_6    1       6.80 1743.5 -4952.6
## + V23_J2_1      1       6.76 1743.5 -4952.5
## + V13_3_J2_5    1       6.75 1743.5 -4952.5
## + V20_J1_3      1       6.71 1743.5 -4952.4
## + V13_1_J1_2    1       6.65 1743.6 -4952.2
## + V14_J1_2      1       6.12 1744.2 -4950.6
## + V13_2_J1_4    1       5.87 1744.4 -4949.9
## + V13_2_J1_3    1       5.35 1744.9 -4948.3

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## + V16_J2_1	1	5.22	1745.0	-4947.9
## + V15_J1_5	1	5.18	1745.1	-4947.8
## + V20_J1_2	1	5.13	1745.1	-4947.7
## + V12_1_2_J2_5	1	5.09	1745.2	-4947.5
## + V26_J1_6	1	5.07	1745.2	-4947.5
## + V17_J2_1	1	5.03	1745.2	-4947.3
## + V26_J1_3	1	4.77	1745.5	-4946.6
## + V5_J1_6	1	4.69	1745.6	-4946.3
## + V1_J1_7	1	4.59	1745.7	-4946.0
## + V29_J1_1	1	4.45	1745.8	-4945.6
## + V13_2_J2_5	1	4.39	1745.9	-4945.5
## + V12_1_2_J1_5	1	4.32	1746.0	-4945.2
## + V13_2_J2_3	1	3.95	1746.3	-4944.1
## + V2_J1_5	1	3.94	1746.3	-4944.1
## + V2_J2_3	1	3.91	1746.4	-4944.0
## + V29_J2_2	1	3.90	1746.4	-4944.0
## + V30_J2_3	1	3.80	1746.5	-4943.7
## + V24_J1_1	1	3.64	1746.6	-4943.2
## + V1_J2_3	1	3.58	1746.7	-4943.0
## + V20_J1_6	1	3.41	1746.8	-4942.5
## + V26_J1_1	1	3.40	1746.9	-4942.5
## + V13_1_J2_5	1	3.34	1746.9	-4942.3
## + V14_J2_7	1	3.24	1747.0	-4942.0
## + V26_J2_2	1	3.18	1747.1	-4941.9
## + V19_J1_1	1	3.17	1747.1	-4941.8
## + V29_J1_6	1	2.89	1747.4	-4941.0
## + V30_J1_7	1	2.79	1747.5	-4940.7
## + V3_J1_2	1	2.77	1747.5	-4940.6
## + V13_3_J1_2	1	2.65	1747.6	-4940.3
## + V5_J1_3	1	2.48	1747.8	-4939.8
## + V15_J2_3	1	2.47	1747.8	-4939.7
## + V30_J1_6	1	2.44	1747.8	-4939.7
## + V13_3_J1_3	1	2.34	1747.9	-4939.4
## + V2_J1_6	1	2.31	1748.0	-4939.3
## <none>			1750.3	-4939.0
## + V15_J1_4	1	2.21	1748.0	-4939.0
## + V13_2_J2_2	1	2.18	1748.1	-4938.9
## + V12_1_2_J2_4	1	2.02	1748.2	-4938.4
## + V13_3_J2_4	1	2.01	1748.2	-4938.4
## + V13_2_J2_7	1	1.98	1748.3	-4938.3
## + V13_2_J1_2	1	1.97	1748.3	-4938.3
## + V29_J1_4	1	1.95	1748.3	-4938.2
## + V1_J1_1	1	1.89	1748.4	-4938.0
## + V17_J1_7	1	1.85	1748.4	-4937.9
## + V16_J2_4	1	1.85	1748.4	-4937.9
## + V1_J1_2	1	1.82	1748.4	-4937.8
## + V13_3_J1_1	1	1.78	1748.5	-4937.7
## + V4_J1_2	1	1.73	1748.5	-4937.5
## + V13_1_J1_6	1	1.72	1748.5	-4937.5
## + V20_J1_1	1	1.71	1748.6	-4937.5
## + V24_J2_1	1	1.61	1748.7	-4937.2
## + V13_3_J1_6	1	1.60	1748.7	-4937.1
## + V23_J1_2	1	1.53	1748.7	-4936.9
## + V20_J2_4	1	1.51	1748.8	-4936.9

## + V19_J1_2	1	1.50	1748.8	-4936.9
## + V29_J2_1	1	1.48	1748.8	-4936.8
## + V20_J1_4	1	1.46	1748.8	-4936.7
## + V29_J2_3	1	1.43	1748.8	-4936.6
## + V24_J2_3	1	1.39	1748.9	-4936.5
## + V14_J1_3	1	1.39	1748.9	-4936.5
## + V23_J2_2	1	1.38	1748.9	-4936.5
## + V17_J2_4	1	1.32	1749.0	-4936.3
## + V16_J1_7	1	1.28	1749.0	-4936.2
## + V29_J2_4	1	1.27	1749.0	-4936.2
## + V5_J1_2	1	1.24	1749.0	-4936.1
## + V5_J1_7	1	1.23	1749.0	-4936.1
## + V16_J1_1	1	1.20	1749.1	-4936.0
## + V4_J1_6	1	1.14	1749.1	-4935.8
## + V13_1_J2_1	1	1.12	1749.1	-4935.7
## + V19_J1_3	1	1.08	1749.2	-4935.6
## + V15_J2_5	1	1.00	1749.3	-4935.4
## + V16_J1_6	1	0.99	1749.3	-4935.3
## + V14_J2_2	1	0.99	1749.3	-4935.3
## + V13_1_J1_4	1	0.97	1749.3	-4935.3
## + V13_1_J1_1	1	0.97	1749.3	-4935.3
## + V17_J1_2	1	0.92	1749.3	-4935.1
## + V2_J1_7	1	0.87	1749.4	-4935.0
## + V20_J2_7	1	0.87	1749.4	-4935.0
## + V16_J1_4	1	0.84	1749.4	-4934.9
## + V17_J2_3	1	0.81	1749.5	-4934.8
## + V23_J1_5	1	0.79	1749.5	-4934.8
## + V23_J1_7	1	0.79	1749.5	-4934.7
## + V13_2_J2_1	1	0.79	1749.5	-4934.7
## + V14_J1_6	1	0.77	1749.5	-4934.7
## + V24_J1_3	1	0.76	1749.5	-4934.7
## + V12_1_2_J2_3	1	0.75	1749.5	-4934.6
## + V5_J2_7	1	0.73	1749.5	-4934.6
## + V1_J2_1	1	0.72	1749.5	-4934.5
## + V3_J1_7	1	0.72	1749.5	-4934.5
## + V13_3_J2_3	1	0.71	1749.6	-4934.5
## + V17_J2_5	1	0.69	1749.6	-4934.4
## + V2_J1_2	1	0.67	1749.6	-4934.4
## + V23_J2_5	1	0.64	1749.6	-4934.3
## + V30_J2_7	1	0.63	1749.6	-4934.3
## + V16_J1_2	1	0.59	1749.7	-4934.1
## + V23_J2_3	1	0.55	1749.7	-4934.0
## + V3_J1_3	1	0.55	1749.7	-4934.0
## + V13_3_J2_7	1	0.53	1749.7	-4934.0
## + V4_J1_7	1	0.53	1749.7	-4934.0
## + V23_J2_4	1	0.53	1749.7	-4934.0
## + V26_J1_7	1	0.50	1749.8	-4933.9
## + V20_J1_7	1	0.50	1749.8	-4933.9
## + V24_J1_4	1	0.50	1749.8	-4933.9
## + V13_1_J2_2	1	0.47	1749.8	-4933.8
## + V19_J1_6	1	0.47	1749.8	-4933.8
## + V2_J2_4	1	0.46	1749.8	-4933.8
## + V30_J1_4	1	0.46	1749.8	-4933.8
## + V2_J1_1	1	0.43	1749.8	-4933.7

## + V26_J2_7	1	0.42	1749.8	-4933.6
## + V29_J1_2	1	0.39	1749.9	-4933.6
## + V13_3_J1_5	1	0.37	1749.9	-4933.5
## + V30_J2_4	1	0.37	1749.9	-4933.5
## + V16_J1_5	1	0.35	1749.9	-4933.4
## + V5_J2_2	1	0.33	1749.9	-4933.4
## + V1_J1_4	1	0.31	1750.0	-4933.3
## + V3_J2_7	1	0.30	1750.0	-4933.3
## + V13_3_J2_1	1	0.29	1750.0	-4933.3
## + V12_1_2_J1_1	1	0.28	1750.0	-4933.2
## + V13_3_J2_2	1	0.28	1750.0	-4933.2
## + V19_J1_7	1	0.27	1750.0	-4933.2
## + V3_J2_2	1	0.26	1750.0	-4933.2
## + V13_2_J2_4	1	0.23	1750.0	-4933.1
## + V3_J1_6	1	0.22	1750.0	-4933.1
## + V19_J2_2	1	0.22	1750.0	-4933.0
## + V13_3_J1_7	1	0.19	1750.1	-4933.0
## + V1_J2_4	1	0.19	1750.1	-4933.0
## + V17_J1_6	1	0.18	1750.1	-4932.9
## + V12_1_2_J2_1	1	0.17	1750.1	-4932.9
## + V4_J2_2	1	0.14	1750.1	-4932.8
## + V5_J1_1	1	0.13	1750.1	-4932.8
## + V2_J2_5	1	0.10	1750.2	-4932.7
## + V20_J1_5	1	0.10	1750.2	-4932.7
## + V1_J1_6	1	0.09	1750.2	-4932.7
## + V26_J1_2	1	0.08	1750.2	-4932.6
## + V29_J2_5	1	0.07	1750.2	-4932.6
## + V13_3_J1_4	1	0.06	1750.2	-4932.6
## + V2_J1_4	1	0.05	1750.2	-4932.5
## + V14_J1_1	1	0.05	1750.2	-4932.5
## + V20_J2_5	1	0.05	1750.2	-4932.5
## + V13_1_J2_3	1	0.05	1750.2	-4932.5
## + V23_J1_6	1	0.04	1750.2	-4932.5
## + V24_J2_7	1	0.03	1750.2	-4932.5
## + V24_J1_2	1	0.03	1750.2	-4932.5
## + V2_J2_1	1	0.03	1750.2	-4932.5
## + V15_J2_4	1	0.03	1750.2	-4932.5
## + V13_1_J2_7	1	0.03	1750.2	-4932.5
## + V29_J2_7	1	0.02	1750.2	-4932.5
## + V17_J1_1	1	0.02	1750.2	-4932.5
## + V14_J1_7	1	0.02	1750.2	-4932.4
## + V4_J1_1	1	0.01	1750.2	-4932.4
## + V19_J2_7	1	0.01	1750.3	-4932.4
## + V17_J1_4	1	0.00	1750.3	-4932.4
## + V13_2_J1_1	1	0.00	1750.3	-4932.4
## + V24_J2_2	1	0.00	1750.3	-4932.4
## + V16_J2_5	1	0.00	1750.3	-4932.4
## + V24_J2_4	1	0.00	1750.3	-4932.4
## + V3_J1_1	1	0.00	1750.3	-4932.4
## + V30_J2_1	1	0.00	1750.3	-4932.4
## + V23_J1_1	1	0.00	1750.3	-4932.4
## - V24_J2_5	1	14.45	1764.7	-4902.9
## - V29_J1_3	1	15.05	1765.3	-4901.1
## - V12_1_2_J1_3	1	17.08	1767.3	-4895.2

## - V12_1_2_J2_7	1	17.36	1767.6	-4894.4
## - V13_1_J1_3	1	18.02	1768.3	-4892.4
## - V20_J2_1	1	18.98	1769.2	-4889.6
## - V30_J1_5	1	19.32	1769.6	-4888.6
## - V16_J2_3	1	19.75	1770.0	-4887.3
## - V12_1_2_J1_2	1	22.74	1773.0	-4878.5
## - V14_J2_5	1	22.93	1773.2	-4878.0
## - V23_J2_7	1	24.38	1774.6	-4873.7
## - V20_J2_3	1	25.74	1776.0	-4869.7
## - V30_J2_5	1	26.33	1776.6	-4868.0
## - V15_J1_1	1	26.73	1777.0	-4866.9
## - V2_J2_7	1	28.99	1779.2	-4860.3
## - V30_J1_3	1	29.43	1779.7	-4858.9
## - V2_J2_2	1	31.20	1781.5	-4853.8
## - V15_J1_2	1	32.59	1782.8	-4849.7
## - V14_J2_1	1	32.68	1783.0	-4849.5
## - V4_J1_5	1	33.23	1783.5	-4847.9
## - V4_J2_7	1	33.51	1783.8	-4847.0
## - V26_J1_5	1	33.94	1784.2	-4845.8
## - V16_J2_7	1	35.99	1786.2	-4839.8
## - V19_J2_5	1	39.26	1789.5	-4830.3
## - V19_J2_4	1	39.47	1789.7	-4829.7
## - V13_2_J1_7	1	41.87	1792.1	-4822.7
## - V3_J1_5	1	42.27	1792.5	-4821.6
## - V5_J1_4	1	43.96	1794.2	-4816.7
## - V14_J2_4	1	44.09	1794.4	-4816.3
## - V4_J1_4	1	44.39	1794.7	-4815.4
## - V15_J1_6	1	48.28	1798.5	-4804.2
## - V16_J1_3	1	49.56	1799.8	-4800.5
## - V1_J1_3	1	50.91	1801.2	-4796.6
## - V26_J1_4	1	53.49	1803.8	-4789.1
## - V30_J1_2	1	57.20	1807.5	-4778.4
## - V19_J2_1	1	59.91	1810.2	-4770.7
## - V1_J2_2	1	62.25	1812.5	-4763.9
## - V5_J2_1	1	64.98	1815.2	-4756.1
## - V17_J2_7	1	65.16	1815.4	-4755.6
## - V23_J1_3	1	65.45	1815.7	-4754.8
## - V15_J1_7	1	65.79	1816.1	-4753.8
## - V17_J2_2	1	67.91	1818.2	-4747.7
## - V30_J1_1	1	71.83	1822.1	-4736.5
## - V17_J1_3	1	71.95	1822.2	-4736.2
## - V2_J1_3	1	73.64	1823.9	-4731.4
## - V30_J2_2	1	75.34	1825.6	-4726.5
## - V15_J1_3	1	81.36	1831.6	-4709.4
## - V14_J2_3	1	81.88	1832.2	-4707.9
## - V12_1_2_J1_4	1	82.92	1833.2	-4705.0
## - V1_J2_7	1	86.24	1836.5	-4695.6
## - V14_J1_5	1	90.77	1841.0	-4682.8
## - V14_J1_4	1	92.26	1842.5	-4678.5
## - V5_J2_3	1	93.08	1843.3	-4676.2
## - V3_J1_4	1	96.55	1846.8	-4666.4
## - V4_J2_5	1	110.53	1860.8	-4627.2
## - V19_J2_3	1	113.11	1863.4	-4620.0
## - V15_J2_7	1	119.55	1869.8	-4602.1

```

## - V5_J1_5      1      130.89 1881.2 -4570.7
## - V15_J2_2     1      132.79 1883.1 -4565.4
## - V4_J2_1      1      135.20 1885.5 -4558.7
## - V3_J2_1      1      137.58 1887.8 -4552.2
## - V4_J2_3      1      142.04 1892.3 -4539.9
## - V3_J2_5      1      146.12 1896.4 -4528.7
## - V12_1_2_J2_2 1      147.31 1897.6 -4525.5
## - V19_J1_5     1      155.49 1905.8 -4503.1
## - V4_J2_4      1      156.23 1906.5 -4501.1
## - V26_J2_1     1      161.63 1911.9 -4486.4
## - V19_J1_4     1      191.77 1942.0 -4405.0
## - V26_J2_5     1      192.46 1942.7 -4403.2
## - V26_J2_4     1      193.57 1943.8 -4400.2
## - V3_J2_4      1      209.36 1959.6 -4358.1
## - V3_J2_3      1      236.87 1987.1 -4285.7
## - V20_J2_2     1      260.03 2010.3 -4225.4
## - V5_J2_5      1      284.87 2035.1 -4161.5
## - V5_J2_4      1      320.13 2070.4 -4072.2
## - V26_J2_3     1      403.52 2153.8 -3866.9
## - V16_J2_2     1      431.09 2181.3 -3800.7
## - J            12      546.20 2296.5 -3606.3
## - V            19     1192.59 2942.9 -2363.1
##
## Step:  AIC=-4977.36
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
## V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7
##
##           Df Sum of Sq    RSS      AIC
## + V12_1_2_J1_6  1      17.92 1717.3 -5024.7
## + V4_J1_3       1      13.33 1721.9 -5010.8
## + V24_J1_6      1      11.01 1724.2 -5003.8
## + V1_J2_5       1      10.96 1724.2 -5003.7
## + V13_2_J1_5    1      10.68 1724.5 -5002.8
## + V29_J1_5      1      10.58 1724.6 -5002.5
## + V29_J1_7      1       9.94 1725.3 -5000.6
## + V13_1_J1_7    1       9.72 1725.5 -4999.9
## + V17_J1_5      1       9.31 1725.9 -4998.7
## + V15_J2_1      1       9.23 1726.0 -4998.5
## + V23_J1_4      1       8.79 1726.4 -4997.1
## + V24_J1_7      1       8.71 1726.5 -4996.9
## + V24_J1_5      1       7.85 1727.3 -4994.3
## + V13_1_J2_4    1       7.28 1727.9 -4992.6

```


## + V1_J1_5	1	7.25	1728.0	-4992.5
## + V13_1_J1_5	1	7.08	1728.1	-4992.0
## + V13_3_J2_5	1	7.05	1728.2	-4991.9
## + V23_J2_1	1	7.01	1728.2	-4991.8
## + V13_2_J1_6	1	6.80	1728.4	-4991.2
## + V13_1_J1_2	1	6.72	1728.5	-4990.9
## + V20_J1_3	1	6.64	1728.5	-4990.7
## + V14_J1_2	1	6.25	1728.9	-4989.5
## + V13_2_J1_4	1	5.80	1729.4	-4988.1
## + V26_J1_6	1	5.34	1729.8	-4986.8
## + V13_2_J1_3	1	5.15	1730.0	-4986.2
## + V15_J1_5	1	5.15	1730.0	-4986.2
## + V20_J1_2	1	5.15	1730.0	-4986.2
## + V16_J2_1	1	4.99	1730.2	-4985.7
## + V17_J2_1	1	4.82	1730.4	-4985.2
## + V26_J1_3	1	4.70	1730.5	-4984.8
## + V5_J1_6	1	4.43	1730.8	-4984.0
## + V29_J1_1	1	4.36	1730.8	-4983.8
## + V13_2_J2_5	1	4.24	1731.0	-4983.5
## + V2_J1_5	1	4.13	1731.1	-4983.1
## + V30_J2_3	1	4.08	1731.1	-4983.0
## + V29_J2_2	1	3.83	1731.4	-4982.2
## + V13_2_J2_3	1	3.81	1731.4	-4982.2
## + V2_J2_3	1	3.71	1731.5	-4981.9
## + V26_J1_1	1	3.63	1731.6	-4981.6
## + V1_J1_7	1	3.62	1731.6	-4981.6
## + V24_J1_1	1	3.54	1731.7	-4981.4
## + V13_1_J2_5	1	3.54	1731.7	-4981.3
## + V1_J2_3	1	3.39	1731.8	-4980.9
## + V20_J1_6	1	3.31	1731.9	-4980.7
## + V14_J2_7	1	3.16	1732.0	-4980.2
## + V26_J2_2	1	3.11	1732.1	-4980.0
## + V12_1_2_J2_5	1	2.97	1732.2	-4979.6
## + V19_J1_1	1	2.96	1732.2	-4979.6
## + V3_J1_2	1	2.86	1732.3	-4979.3
## + V29_J1_6	1	2.83	1732.4	-4979.2
## + V13_3_J1_2	1	2.68	1732.5	-4978.8
## + V5_J1_3	1	2.53	1732.7	-4978.3
## + V15_J2_3	1	2.50	1732.7	-4978.2
## + V12_1_2_J1_5	1	2.38	1732.8	-4977.9
## + V2_J1_6	1	2.35	1732.8	-4977.8
## + V30_J1_6	1	2.35	1732.8	-4977.8
## + V15_J1_4	1	2.34	1732.9	-4977.7
## + V13_3_J1_3	1	2.27	1732.9	-4977.5
## <none>			1735.2	-4977.4
## + V13_2_J2_2	1	2.07	1733.1	-4976.9
## + V30_J1_7	1	2.07	1733.1	-4976.9
## + V13_2_J1_2	1	2.06	1733.1	-4976.9
## + V16_J2_4	1	1.98	1733.2	-4976.7
## + V29_J1_4	1	1.96	1733.2	-4976.6
## + V13_3_J2_4	1	1.89	1733.3	-4976.4
## + V13_2_J2_7	1	1.88	1733.3	-4976.4
## + V1_J1_1	1	1.85	1733.3	-4976.3
## + V13_3_J1_1	1	1.84	1733.4	-4976.2

## + V4_J1_2	1	1.81	1733.4	-4976.1
## + V20_J1_1	1	1.79	1733.4	-4976.1
## + V1_J1_2	1	1.78	1733.4	-4976.1
## + V13_1_J1_6	1	1.77	1733.4	-4976.0
## + V29_J2_1	1	1.60	1733.6	-4975.5
## + V19_J1_2	1	1.57	1733.6	-4975.4
## + V29_J2_3	1	1.56	1733.6	-4975.4
## + V13_3_J1_6	1	1.55	1733.7	-4975.4
## + V24_J2_3	1	1.54	1733.7	-4975.3
## + V20_J1_4	1	1.49	1733.7	-4975.2
## + V23_J1_2	1	1.49	1733.7	-4975.2
## + V24_J2_1	1	1.47	1733.7	-4975.1
## + V23_J2_2	1	1.43	1733.8	-4975.0
## + V2_J1_7	1	1.39	1733.8	-4974.9
## + V20_J2_4	1	1.37	1733.8	-4974.8
## + V14_J1_3	1	1.35	1733.8	-4974.8
## + V4_J1_6	1	1.29	1733.9	-4974.6
## + V23_J1_7	1	1.28	1733.9	-4974.6
## + V17_J1_7	1	1.25	1733.9	-4974.5
## + V16_J1_1	1	1.25	1734.0	-4974.5
## + V13_1_J2_1	1	1.23	1734.0	-4974.4
## + V17_J2_4	1	1.23	1734.0	-4974.4
## + V5_J1_2	1	1.18	1734.0	-4974.3
## + V29_J2_4	1	1.17	1734.0	-4974.2
## + V3_J1_7	1	1.11	1734.1	-4974.1
## + V19_J1_3	1	1.05	1734.2	-4973.9
## + V16_J1_6	1	1.03	1734.2	-4973.8
## + V14_J2_2	1	1.03	1734.2	-4973.8
## + V13_1_J1_1	1	1.01	1734.2	-4973.8
## + V13_1_J1_4	1	0.98	1734.2	-4973.7
## + V15_J2_5	1	0.98	1734.2	-4973.7
## + V17_J1_2	1	0.89	1734.3	-4973.4
## + V20_J1_7	1	0.88	1734.3	-4973.4
## + V20_J2_7	1	0.86	1734.3	-4973.3
## + V16_J1_4	1	0.83	1734.4	-4973.2
## + V5_J1_7	1	0.82	1734.4	-4973.2
## + V16_J1_7	1	0.80	1734.4	-4973.1
## + V24_J1_3	1	0.79	1734.4	-4973.1
## + V5_J2_7	1	0.77	1734.4	-4973.0
## + V12_1_2_J2_4	1	0.77	1734.4	-4973.0
## + V13_2_J2_1	1	0.73	1734.5	-4972.9
## + V23_J2_5	1	0.73	1734.5	-4972.9
## + V17_J2_3	1	0.73	1734.5	-4972.9
## + V23_J1_5	1	0.71	1734.5	-4972.9
## + V14_J1_6	1	0.67	1734.5	-4972.7
## + V1_J2_1	1	0.65	1734.5	-4972.7
## + V2_J1_2	1	0.64	1734.5	-4972.7
## + V30_J2_7	1	0.64	1734.5	-4972.7
## + V23_J2_3	1	0.64	1734.6	-4972.6
## + V13_3_J2_3	1	0.62	1734.6	-4972.6
## + V17_J2_5	1	0.61	1734.6	-4972.6
## + V16_J1_2	1	0.61	1734.6	-4972.5
## + V23_J2_4	1	0.59	1734.6	-4972.5
## + V3_J1_3	1	0.57	1734.6	-4972.4

## + V19_J1_6	1	0.55	1734.6	-4972.4
## + V13_3_J2_7	1	0.51	1734.7	-4972.2
## + V13_1_J2_2	1	0.50	1734.7	-4972.2
## + V24_J1_4	1	0.48	1734.7	-4972.2
## + V30_J1_4	1	0.44	1734.8	-4972.0
## + V29_J1_2	1	0.41	1734.8	-4972.0
## + V2_J1_1	1	0.41	1734.8	-4971.9
## + V2_J2_4	1	0.41	1734.8	-4971.9
## + V26_J2_7	1	0.39	1734.8	-4971.9
## + V1_J1_4	1	0.31	1734.9	-4971.7
## + V5_J2_2	1	0.31	1734.9	-4971.7
## + V13_3_J1_5	1	0.31	1734.9	-4971.7
## + V30_J2_4	1	0.30	1734.9	-4971.6
## + V13_3_J2_2	1	0.30	1734.9	-4971.6
## + V16_J1_5	1	0.29	1734.9	-4971.6
## + V4_J1_7	1	0.27	1734.9	-4971.5
## + V3_J2_7	1	0.27	1734.9	-4971.5
## + V26_J1_7	1	0.25	1734.9	-4971.5
## + V13_3_J2_1	1	0.24	1735.0	-4971.4
## + V19_J2_2	1	0.24	1735.0	-4971.4
## + V3_J2_2	1	0.23	1735.0	-4971.4
## + V1_J2_4	1	0.23	1735.0	-4971.4
## + V13_2_J2_4	1	0.21	1735.0	-4971.3
## + V5_J1_1	1	0.17	1735.0	-4971.2
## + V17_J1_6	1	0.17	1735.0	-4971.2
## + V3_J1_6	1	0.17	1735.0	-4971.2
## + V4_J2_2	1	0.16	1735.0	-4971.2
## + V20_J1_5	1	0.14	1735.1	-4971.1
## + V2_J2_5	1	0.13	1735.1	-4971.1
## + V12_1_2_J2_3	1	0.10	1735.1	-4971.0
## + V19_J1_7	1	0.10	1735.1	-4971.0
## + V1_J1_6	1	0.10	1735.1	-4971.0
## + V14_J1_1	1	0.08	1735.1	-4971.0
## + V13_1_J2_3	1	0.07	1735.1	-4970.9
## + V13_3_J1_4	1	0.06	1735.1	-4970.9
## + V26_J1_2	1	0.06	1735.1	-4970.9
## + V2_J1_4	1	0.05	1735.1	-4970.9
## + V29_J2_5	1	0.05	1735.2	-4970.9
## + V13_3_J1_7	1	0.04	1735.2	-4970.9
## + V23_J1_6	1	0.04	1735.2	-4970.8
## + V24_J1_2	1	0.04	1735.2	-4970.8
## + V4_J1_1	1	0.03	1735.2	-4970.8
## + V13_1_J2_7	1	0.03	1735.2	-4970.8
## + V24_J2_7	1	0.03	1735.2	-4970.8
## + V15_J2_4	1	0.03	1735.2	-4970.8
## + V29_J2_7	1	0.03	1735.2	-4970.8
## + V17_J1_1	1	0.03	1735.2	-4970.8
## + V20_J2_5	1	0.02	1735.2	-4970.8
## + V12_1_2_J2_1	1	0.02	1735.2	-4970.8
## + V2_J2_1	1	0.02	1735.2	-4970.8
## + V30_J2_1	1	0.01	1735.2	-4970.8
## + V19_J2_7	1	0.01	1735.2	-4970.7
## + V14_J1_7	1	0.01	1735.2	-4970.7
## + V24_J2_2	1	0.00	1735.2	-4970.7

## + V17_J1_4	1	0.00	1735.2	-4970.7
## + V13_2_J1_1	1	0.00	1735.2	-4970.7
## + V12_1_2_J1_1	1	0.00	1735.2	-4970.7
## + V23_J1_1	1	0.00	1735.2	-4970.7
## + V3_J1_1	1	0.00	1735.2	-4970.7
## + V16_J2_5	1	0.00	1735.2	-4970.7
## + V24_J2_4	1	0.00	1735.2	-4970.7
## - V24_J2_5	1	14.06	1749.3	-4942.0
## - V12_1_2_J1_7	1	15.07	1750.3	-4939.0
## - V29_J1_3	1	15.21	1750.4	-4938.6
## - V13_1_J1_3	1	17.84	1753.0	-4930.8
## - V12_1_2_J1_2	1	17.86	1753.1	-4930.7
## - V20_J2_1	1	18.54	1753.7	-4928.7
## - V16_J2_3	1	19.34	1754.5	-4926.4
## - V30_J1_5	1	19.77	1755.0	-4925.1
## - V12_1_2_J1_3	1	21.15	1756.3	-4921.0
## - V12_1_2_J2_7	1	21.44	1756.6	-4920.1
## - V14_J2_5	1	22.19	1757.4	-4917.9
## - V23_J2_7	1	24.54	1759.7	-4911.0
## - V20_J2_3	1	25.19	1760.4	-4909.0
## - V15_J1_1	1	26.54	1761.7	-4905.1
## - V30_J2_5	1	26.89	1762.1	-4904.0
## - V2_J2_7	1	29.18	1764.4	-4897.3
## - V30_J1_3	1	29.54	1764.7	-4896.2
## - V2_J2_2	1	31.42	1766.6	-4890.7
## - V14_J2_1	1	31.84	1767.0	-4889.4
## - V15_J1_2	1	32.06	1767.2	-4888.8
## - V4_J1_5	1	32.35	1767.5	-4888.0
## - V26_J1_5	1	33.08	1768.3	-4885.8
## - V4_J2_7	1	33.27	1768.5	-4885.2
## - V16_J2_7	1	36.15	1771.3	-4876.8
## - V19_J2_5	1	38.28	1773.5	-4870.5
## - V19_J2_4	1	38.58	1773.8	-4869.6
## - V3_J1_5	1	41.31	1776.5	-4861.7
## - V14_J2_4	1	43.15	1778.3	-4856.3
## - V5_J1_4	1	43.49	1778.7	-4855.3
## - V4_J1_4	1	43.88	1779.1	-4854.1
## - V13_2_J1_7	1	44.65	1779.8	-4851.9
## - V15_J1_6	1	48.00	1783.2	-4842.1
## - V16_J1_3	1	49.82	1785.0	-4836.8
## - V1_J1_3	1	51.25	1786.4	-4832.7
## - V26_J1_4	1	52.97	1788.2	-4827.6
## - V30_J1_2	1	57.19	1792.4	-4815.4
## - V19_J2_1	1	58.76	1794.0	-4810.8
## - V15_J1_7	1	61.84	1797.0	-4801.9
## - V1_J2_2	1	62.55	1797.8	-4799.8
## - V5_J2_1	1	63.78	1799.0	-4796.3
## - V17_J2_7	1	65.44	1800.6	-4791.5
## - V23_J1_3	1	65.80	1801.0	-4790.5
## - V17_J2_2	1	68.22	1803.4	-4783.5
## - V30_J1_1	1	72.29	1807.5	-4771.8
## - V17_J1_3	1	72.34	1807.5	-4771.6
## - V2_J1_3	1	74.04	1809.2	-4766.7
## - V30_J2_2	1	75.43	1810.6	-4762.7

```

## - V15_J1_3      1      80.38 1815.6 -4748.5
## - V14_J2_3      1      80.47 1815.7 -4748.3
## - V1_J2_7       1      86.57 1821.8 -4730.8
## - V14_J1_5      1      89.34 1824.5 -4722.9
## - V12_1_2_J1_4  1      90.62 1825.8 -4719.3
## - V5_J2_3       1      91.57 1826.8 -4716.6
## - V14_J1_4      1      91.58 1826.8 -4716.6
## - V3_J1_4       1      95.86 1831.0 -4704.4
## - V4_J2_5       1     108.83 1844.0 -4667.7
## - V19_J2_3      1     111.44 1846.6 -4660.3
## - V15_J2_7      1     118.47 1853.7 -4640.6
## - V5_J1_5       1     129.17 1864.4 -4610.6
## - V15_J2_2      1     131.62 1866.8 -4603.8
## - V4_J2_1       1     133.40 1868.6 -4598.9
## - V3_J2_1       1     135.81 1871.0 -4592.1
## - V4_J2_3       1     140.11 1875.3 -4580.2
## - V3_J2_5       1     144.21 1879.4 -4568.8
## - V19_J1_5      1     153.61 1888.8 -4542.9
## - V4_J2_4       1     154.37 1889.6 -4540.8
## - V12_1_2_J2_2  1     157.15 1892.3 -4533.2
## - V26_J2_1      1     159.71 1894.9 -4526.1
## - V26_J2_5      1     190.25 1925.5 -4443.0
## - V19_J1_4      1     190.78 1926.0 -4441.6
## - V26_J2_4      1     191.57 1926.8 -4439.4
## - V3_J2_4       1     207.28 1942.5 -4397.2
## - V3_J2_3       1     234.43 1969.6 -4325.0
## - V20_J2_2      1     260.26 1995.5 -4257.3
## - V5_J2_5       1     282.17 2017.4 -4200.5
## - V5_J2_4       1     317.53 2052.7 -4110.1
## - V26_J2_3      1     400.30 2135.5 -3904.6
## - V16_J2_2      1     431.68 2166.9 -3828.7
## - J              12     547.34 2282.5 -3631.3
## - V              19    1194.00 2929.2 -2380.7
##
## Step:  AIC=-5024.7
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
## V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6
##
##
##          Df Sum of Sq    RSS    AIC
## + V4_J1_3      1      13.17 1704.1 -5058.1
## + V29_J1_5     1      10.98 1706.3 -5051.4
## + V1_J2_5      1      10.56 1706.7 -5050.1

```

## + V13_2_J1_5	1	10.29	1707.0	-5049.3
## + V29_J1_7	1	10.06	1707.2	-5048.6
## + V13_1_J1_7	1	9.83	1707.5	-5047.9
## + V17_J1_5	1	9.66	1707.6	-5047.4
## + V24_J1_6	1	9.52	1707.8	-5047.0
## + V15_J2_1	1	9.29	1708.0	-5046.3
## + V23_J1_4	1	8.79	1708.5	-5044.8
## + V24_J1_7	1	8.64	1708.6	-5044.3
## + V13_1_J2_4	1	7.58	1709.7	-5041.1
## + V1_J1_5	1	7.56	1709.7	-5041.0
## + V24_J1_5	1	7.48	1709.8	-5040.7
## + V13_3_J2_5	1	7.42	1709.9	-5040.6
## + V23_J2_1	1	7.33	1710.0	-5040.3
## + V13_1_J1_2	1	6.81	1710.5	-5038.7
## + V13_1_J1_5	1	6.77	1710.5	-5038.6
## + V20_J1_3	1	6.54	1710.7	-5037.9
## + V14_J1_2	1	6.41	1710.9	-5037.5
## + V13_2_J1_4	1	5.82	1711.5	-5035.7
## + V13_2_J1_6	1	5.61	1711.7	-5035.1
## + V5_J1_6	1	5.34	1711.9	-5034.3
## + V20_J1_2	1	5.17	1712.1	-5033.7
## + V15_J1_5	1	5.11	1712.2	-5033.5
## + V13_2_J1_3	1	5.01	1712.3	-5033.3
## + V16_J2_1	1	4.71	1712.6	-5032.4
## + V26_J1_3	1	4.63	1712.7	-5032.1
## + V17_J2_1	1	4.58	1712.7	-5032.0
## + V26_J1_6	1	4.46	1712.8	-5031.6
## + V30_J2_3	1	4.42	1712.8	-5031.5
## + V2_J1_5	1	4.36	1712.9	-5031.3
## + V29_J1_1	1	4.26	1713.0	-5031.0
## + V20_J1_6	1	4.23	1713.0	-5030.9
## + V13_2_J2_5	1	3.97	1713.3	-5030.1
## + V26_J1_1	1	3.93	1713.3	-5030.0
## + V13_1_J2_5	1	3.79	1713.5	-5029.6
## + V29_J2_2	1	3.73	1713.5	-5029.4
## + V29_J1_6	1	3.72	1713.6	-5029.3
## + V13_2_J2_3	1	3.55	1713.7	-5028.8
## + V1_J1_7	1	3.53	1713.8	-5028.7
## + V2_J2_3	1	3.48	1713.8	-5028.6
## + V24_J1_1	1	3.42	1713.9	-5028.4
## + V1_J2_3	1	3.17	1714.1	-5027.7
## + V30_J1_6	1	3.14	1714.1	-5027.6
## + V14_J2_7	1	3.07	1714.2	-5027.4
## + V26_J2_2	1	3.02	1714.3	-5027.2
## + V3_J1_2	1	2.97	1714.3	-5027.1
## + V13_3_J1_2	1	2.74	1714.5	-5026.4
## + V19_J1_1	1	2.71	1714.6	-5026.3
## + V5_J1_3	1	2.59	1714.7	-5025.9
## + V15_J2_3	1	2.55	1714.7	-5025.8
## + V15_J1_4	1	2.50	1714.8	-5025.6
## + V13_3_J1_6	1	2.21	1715.1	-5024.8
## <none>			1717.3	-5024.7
## + V13_3_J1_3	1	2.18	1715.1	-5024.7
## + V16_J2_4	1	2.15	1715.1	-5024.6

## + V13_2_J1_2	1	2.11	1715.2	-5024.5
## + V30_J1_7	1	2.06	1715.2	-5024.3
## + V13_2_J2_2	1	2.00	1715.3	-5024.1
## + V29_J1_4	1	1.96	1715.3	-5024.0
## + V13_3_J1_1	1	1.91	1715.4	-5023.8
## + V4_J1_2	1	1.91	1715.4	-5023.8
## + V20_J1_1	1	1.89	1715.4	-5023.8
## + V13_2_J2_7	1	1.82	1715.5	-5023.6
## + V1_J1_1	1	1.79	1715.5	-5023.5
## + V29_J2_1	1	1.76	1715.5	-5023.4
## + V13_3_J2_4	1	1.73	1715.5	-5023.3
## + V29_J2_3	1	1.73	1715.5	-5023.3
## + V24_J2_3	1	1.73	1715.5	-5023.3
## + V1_J1_2	1	1.72	1715.6	-5023.3
## + V2_J1_6	1	1.65	1715.6	-5023.1
## + V19_J1_2	1	1.65	1715.6	-5023.1
## + V20_J1_4	1	1.53	1715.8	-5022.7
## + V23_J2_2	1	1.49	1715.8	-5022.6
## + V2_J1_7	1	1.45	1715.8	-5022.4
## + V23_J1_2	1	1.44	1715.8	-5022.4
## + V13_1_J2_1	1	1.37	1715.9	-5022.2
## + V23_J1_7	1	1.33	1716.0	-5022.1
## + V14_J1_3	1	1.31	1716.0	-5022.0
## + V16_J1_1	1	1.31	1716.0	-5022.0
## + V24_J2_1	1	1.31	1716.0	-5022.0
## + V20_J2_4	1	1.22	1716.1	-5021.8
## + V17_J1_7	1	1.20	1716.1	-5021.7
## + V13_1_J1_6	1	1.18	1716.1	-5021.6
## + V17_J2_4	1	1.12	1716.2	-5021.4
## + V5_J1_2	1	1.12	1716.2	-5021.4
## + V14_J2_2	1	1.08	1716.2	-5021.3
## + V12_1_2_J2_5	1	1.07	1716.2	-5021.3
## + V13_1_J1_1	1	1.06	1716.2	-5021.3
## + V29_J2_4	1	1.05	1716.2	-5021.3
## + V3_J1_7	1	1.05	1716.2	-5021.2
## + V14_J1_6	1	1.04	1716.2	-5021.2
## + V19_J1_3	1	1.01	1716.3	-5021.1
## + V13_1_J1_4	1	0.98	1716.3	-5021.0
## + V15_J2_5	1	0.95	1716.3	-5020.9
## + V20_J1_7	1	0.89	1716.4	-5020.8
## + V5_J1_7	1	0.88	1716.4	-5020.7
## + V4_J1_6	1	0.87	1716.4	-5020.7
## + V17_J1_2	1	0.85	1716.4	-5020.6
## + V23_J2_5	1	0.85	1716.4	-5020.6
## + V24_J1_3	1	0.84	1716.4	-5020.6
## + V20_J2_7	1	0.84	1716.4	-5020.6
## + V16_J1_4	1	0.82	1716.5	-5020.6
## + V5_J2_7	1	0.82	1716.5	-5020.5
## + V16_J1_7	1	0.77	1716.5	-5020.4
## + V23_J2_3	1	0.74	1716.5	-5020.3
## + V12_1_2_J2_1	1	0.74	1716.5	-5020.3
## + V12_1_2_J1_5	1	0.72	1716.6	-5020.2
## + V23_J2_4	1	0.68	1716.6	-5020.1
## + V30_J2_7	1	0.66	1716.6	-5020.0

## + V12_1_2_J1_1	1	0.63	1716.7	-5020.0
## + V16_J1_2	1	0.63	1716.7	-5020.0
## + V13_2_J2_1	1	0.63	1716.7	-5020.0
## + V17_J2_3	1	0.63	1716.7	-5020.0
## + V23_J1_5	1	0.62	1716.7	-5019.9
## + V2_J1_2	1	0.61	1716.7	-5019.9
## + V3_J1_3	1	0.60	1716.7	-5019.9
## + V16_J1_6	1	0.60	1716.7	-5019.9
## + V1_J2_1	1	0.56	1716.7	-5019.8
## + V13_1_J2_2	1	0.54	1716.7	-5019.7
## + V13_3_J2_3	1	0.52	1716.8	-5019.6
## + V17_J2_5	1	0.52	1716.8	-5019.6
## + V13_3_J2_7	1	0.48	1716.8	-5019.5
## + V24_J1_4	1	0.47	1716.8	-5019.5
## + V17_J1_6	1	0.44	1716.8	-5019.4
## + V29_J1_2	1	0.43	1716.8	-5019.4
## + V30_J1_4	1	0.41	1716.9	-5019.3
## + V2_J1_1	1	0.38	1716.9	-5019.2
## + V3_J1_6	1	0.38	1716.9	-5019.2
## + V26_J2_7	1	0.36	1716.9	-5019.1
## + V2_J2_4	1	0.34	1716.9	-5019.1
## + V13_3_J2_2	1	0.32	1717.0	-5019.0
## + V4_J1_7	1	0.31	1717.0	-5019.0
## + V1_J1_4	1	0.31	1717.0	-5019.0
## + V19_J1_6	1	0.29	1717.0	-5018.9
## + V26_J1_7	1	0.29	1717.0	-5018.9
## + V5_J2_2	1	0.28	1717.0	-5018.9
## + V1_J2_4	1	0.28	1717.0	-5018.9
## + V19_J2_2	1	0.26	1717.0	-5018.9
## + V3_J2_7	1	0.25	1717.0	-5018.8
## + V13_3_J1_5	1	0.24	1717.0	-5018.8
## + V5_J1_1	1	0.24	1717.0	-5018.8
## + V16_J1_5	1	0.23	1717.0	-5018.8
## + V30_J2_4	1	0.22	1717.0	-5018.7
## + V3_J2_2	1	0.21	1717.1	-5018.7
## + V20_J1_5	1	0.20	1717.1	-5018.7
## + V23_J1_6	1	0.20	1717.1	-5018.7
## + V13_3_J2_1	1	0.18	1717.1	-5018.6
## + V2_J2_5	1	0.18	1717.1	-5018.6
## + V4_J2_2	1	0.18	1717.1	-5018.6
## + V13_2_J2_4	1	0.16	1717.1	-5018.5
## + V12_1_2_J2_3	1	0.15	1717.1	-5018.5
## + V14_J1_1	1	0.13	1717.2	-5018.4
## + V19_J1_7	1	0.12	1717.2	-5018.4
## + V13_1_J2_3	1	0.11	1717.2	-5018.4
## + V4_J1_1	1	0.07	1717.2	-5018.3
## + V13_3_J1_4	1	0.07	1717.2	-5018.3
## + V2_J1_4	1	0.05	1717.2	-5018.2
## + V26_J1_2	1	0.05	1717.2	-5018.2
## + V13_1_J2_7	1	0.04	1717.2	-5018.2
## + V24_J1_2	1	0.04	1717.2	-5018.2
## + V29_J2_7	1	0.04	1717.2	-5018.2
## + V13_3_J1_7	1	0.03	1717.2	-5018.2
## + V17_J1_1	1	0.03	1717.2	-5018.2

## + V15_J2_4	1	0.03	1717.2	-5018.1
## + V30_J2_1	1	0.03	1717.2	-5018.1
## + V12_1_2_J2_4	1	0.03	1717.2	-5018.1
## + V24_J2_7	1	0.02	1717.2	-5018.1
## + V29_J2_5	1	0.02	1717.3	-5018.1
## + V3_J1_1	1	0.01	1717.3	-5018.1
## + V24_J2_2	1	0.01	1717.3	-5018.1
## + V2_J2_1	1	0.01	1717.3	-5018.1
## + V16_J2_5	1	0.01	1717.3	-5018.1
## + V20_J2_5	1	0.01	1717.3	-5018.1
## + V1_J1_6	1	0.00	1717.3	-5018.1
## + V24_J2_4	1	0.00	1717.3	-5018.1
## + V23_J1_1	1	0.00	1717.3	-5018.1
## + V17_J1_4	1	0.00	1717.3	-5018.1
## + V19_J2_7	1	0.00	1717.3	-5018.1
## + V14_J1_7	1	0.00	1717.3	-5018.1
## + V13_2_J1_1	1	0.00	1717.3	-5018.1
## - V12_1_2_J1_2	1	12.61	1729.9	-4993.3
## - V24_J2_5	1	13.59	1730.9	-4990.3
## - V29_J1_3	1	15.42	1732.7	-4984.8
## - V13_1_J1_3	1	17.61	1734.9	-4978.3
## - V12_1_2_J1_6	1	17.92	1735.2	-4977.4
## - V20_J2_1	1	18.00	1735.3	-4977.1
## - V16_J2_3	1	18.84	1736.1	-4974.6
## - V12_1_2_J1_7	1	19.97	1737.2	-4971.2
## - V30_J1_5	1	20.32	1737.6	-4970.1
## - V14_J2_5	1	21.30	1738.6	-4967.2
## - V20_J2_3	1	24.53	1741.8	-4957.6
## - V23_J2_7	1	24.75	1742.0	-4956.9
## - V15_J1_1	1	26.30	1743.6	-4952.3
## - V12_1_2_J1_3	1	26.78	1744.1	-4950.9
## - V12_1_2_J2_7	1	27.09	1744.4	-4949.9
## - V30_J2_5	1	27.59	1744.9	-4948.5
## - V2_J2_7	1	29.44	1746.7	-4942.9
## - V30_J1_3	1	29.69	1747.0	-4942.2
## - V14_J2_1	1	30.82	1748.1	-4938.8
## - V4_J1_5	1	31.29	1748.6	-4937.5
## - V15_J1_2	1	31.41	1748.7	-4937.1
## - V2_J2_2	1	31.70	1749.0	-4936.2
## - V26_J1_5	1	32.03	1749.3	-4935.2
## - V4_J2_7	1	32.99	1750.3	-4932.4
## - V16_J2_7	1	36.37	1753.7	-4922.4
## - V19_J2_5	1	37.10	1754.4	-4920.2
## - V19_J2_4	1	37.51	1754.8	-4919.0
## - V3_J1_5	1	40.14	1757.4	-4911.2
## - V14_J2_4	1	42.01	1759.3	-4905.6
## - V5_J1_4	1	42.94	1760.2	-4902.9
## - V4_J1_4	1	43.28	1760.6	-4901.9
## - V15_J1_6	1	44.48	1761.8	-4898.4
## - V13_2_J1_7	1	44.85	1762.1	-4897.3
## - V16_J1_3	1	50.18	1767.5	-4881.6
## - V1_J1_3	1	51.69	1769.0	-4877.1
## - V26_J1_4	1	52.36	1769.6	-4875.2
## - V30_J1_2	1	57.16	1774.4	-4861.1

```

## - V19_J2_1      1      57.36 1774.6 -4860.5
## - V15_J1_7      1      60.92 1778.2 -4850.1
## - V5_J2_1       1      62.32 1779.6 -4846.0
## - V1_J2_2       1      62.96 1780.2 -4844.1
## - V17_J2_7      1      65.83 1783.1 -4835.7
## - V23_J1_3      1      66.26 1783.5 -4834.5
## - V17_J2_2      1      68.64 1785.9 -4827.5
## - V30_J1_1      1      72.85 1790.1 -4815.3
## - V17_J1_3      1      72.86 1790.1 -4815.2
## - V2_J1_3       1      74.57 1791.8 -4810.3
## - V30_J2_2      1      75.58 1792.9 -4807.4
## - V14_J2_3      1      78.76 1796.0 -4798.2
## - V15_J1_3      1      79.16 1796.4 -4797.0
## - V1_J2_7       1      87.01 1804.3 -4774.3
## - V14_J1_5      1      87.60 1804.9 -4772.6
## - V5_J2_3       1      89.74 1807.0 -4766.5
## - V14_J1_4      1      90.76 1808.0 -4763.5
## - V3_J1_4       1      95.03 1812.3 -4751.3
## - V12_1_2_J1_4  1     100.59 1817.9 -4735.3
## - V4_J2_5       1     106.75 1824.0 -4717.7
## - V19_J2_3      1     109.41 1826.7 -4710.2
## - V15_J2_7      1     117.11 1834.4 -4688.3
## - V5_J1_5       1     127.06 1844.3 -4660.1
## - V15_J2_2      1     130.16 1847.4 -4651.4
## - V4_J2_1       1     131.21 1848.5 -4648.5
## - V3_J2_1       1     133.66 1850.9 -4641.6
## - V4_J2_3       1     137.76 1855.0 -4630.1
## - V3_J2_5       1     141.88 1859.2 -4618.6
## - V19_J1_5      1     151.32 1868.6 -4592.2
## - V4_J2_4       1     152.11 1869.4 -4590.0
## - V26_J2_1      1     157.37 1874.7 -4575.4
## - V12_1_2_J2_2  1     169.64 1886.9 -4541.5
## - V26_J2_5      1     187.56 1904.8 -4492.3
## - V26_J2_4      1     189.12 1906.4 -4488.1
## - V19_J1_4      1     189.60 1906.9 -4486.8
## - V3_J2_4       1     204.73 1922.0 -4445.7
## - V3_J2_3       1     231.44 1948.7 -4373.9
## - V20_J2_2      1     260.59 1977.9 -4296.7
## - V5_J2_5       1     278.86 1996.1 -4248.9
## - V5_J2_4       1     314.34 2031.6 -4157.2
## - V26_J2_3      1     396.35 2113.6 -3951.5
## - V16_J2_2      1     432.50 2149.8 -3863.3
## - J             12     530.44 2247.7 -3704.6
## - V             19     1199.79 2917.1 -2395.6
##
## Step:  AIC=-5058.09
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +

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##      V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
##      V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
##      V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
##      V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
##      V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
##      V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3
##
##      Df Sum of Sq    RSS    AIC
## + V29_J1_5      1    10.90 1693.2 -5084.8
## + V1_J2_5       1    10.63 1693.5 -5084.0
## + V13_2_J1_5    1    10.13 1694.0 -5082.5
## + V29_J1_7      1     9.93 1694.2 -5081.9
## + V24_J1_6      1     9.84 1694.3 -5081.6
## + V13_1_J1_7    1     9.71 1694.4 -5081.2
## + V17_J1_5      1     9.58 1694.5 -5080.8
## + V15_J2_1      1     9.30 1694.8 -5079.9
## + V24_J1_7      1     8.97 1695.2 -5078.9
## + V23_J1_4      1     8.88 1695.2 -5078.6
## + V13_3_J2_5    1     7.54 1696.6 -5074.5
## + V13_1_J2_4    1     7.51 1696.6 -5074.4
## + V1_J1_5       1     7.49 1696.6 -5074.3
## + V24_J1_5      1     7.35 1696.8 -5073.9
## + V23_J2_1      1     7.26 1696.8 -5073.7
## + V13_1_J1_5    1     6.83 1697.3 -5072.3
## + V14_J1_2      1     6.78 1697.3 -5072.2
## + V13_1_J1_2    1     6.72 1697.4 -5072.0
## + V26_J1_3      1     6.54 1697.6 -5071.4
## + V13_2_J1_4    1     5.94 1698.2 -5069.6
## + V13_2_J1_6    1     5.87 1698.2 -5069.4
## + V15_J1_5      1     5.11 1699.0 -5067.1
## + V5_J1_6       1     5.03 1699.1 -5066.8
## + V20_J1_2      1     4.89 1699.2 -5066.4
## + V16_J2_1      1     4.76 1699.3 -5066.0
## + V26_J1_6      1     4.76 1699.3 -5066.0
## + V20_J1_3      1     4.75 1699.4 -5066.0
## + V17_J2_1      1     4.62 1699.5 -5065.6
## + V30_J2_3      1     4.41 1699.7 -5064.9
## + V2_J1_5       1     4.31 1699.8 -5064.6
## + V26_J1_1      1     4.21 1699.9 -5064.3
## + V29_J1_1      1     4.20 1699.9 -5064.3
## + V20_J1_6      1     3.98 1700.1 -5063.6
## + V13_2_J2_5    1     3.86 1700.2 -5063.3
## + V29_J2_2      1     3.84 1700.3 -5063.2
## + V13_1_J2_5    1     3.75 1700.4 -5062.9
## + V29_J1_6      1     3.66 1700.5 -5062.6
## + V1_J1_7       1     3.60 1700.5 -5062.4
## + V2_J2_3       1     3.52 1700.6 -5062.2
## + V13_2_J2_3    1     3.45 1700.7 -5062.0
## + V13_2_J1_3    1     3.44 1700.7 -5062.0
## + V24_J1_1      1     3.24 1700.9 -5061.3
## + V3_J1_2       1     3.22 1700.9 -5061.3
## + V1_J2_3       1     3.21 1700.9 -5061.3
## + V30_J1_6      1     3.06 1701.0 -5060.8
## + V14_J2_7      1     3.01 1701.1 -5060.6

```

## + V26_J2_2	1	2.74	1701.4	-5059.8
## + V13_3_J1_2	1	2.57	1701.5	-5059.3
## + V15_J2_3	1	2.55	1701.6	-5059.3
## + V15_J1_4	1	2.50	1701.6	-5059.1
## + V19_J1_1	1	2.49	1701.6	-5059.0
## + V14_J1_3	1	2.39	1701.7	-5058.7
## + V13_2_J2_2	1	2.20	1701.9	-5058.2
## <none>			1704.1	-5058.1
## + V30_J1_7	1	2.14	1702.0	-5058.0
## + V16_J2_4	1	2.11	1702.0	-5057.9
## + V13_3_J1_6	1	2.07	1702.0	-5057.8
## + V20_J1_1	1	2.06	1702.0	-5057.8
## + V13_3_J1_1	1	2.05	1702.1	-5057.7
## + V19_J1_3	1	1.97	1702.1	-5057.5
## + V13_2_J1_2	1	1.95	1702.2	-5057.4
## + V29_J1_4	1	1.93	1702.2	-5057.3
## + V19_J1_2	1	1.84	1702.3	-5057.1
## + V13_2_J2_7	1	1.83	1702.3	-5057.0
## + V24_J2_3	1	1.79	1702.3	-5056.9
## + V1_J1_2	1	1.76	1702.3	-5056.8
## + V1_J1_1	1	1.75	1702.4	-5056.8
## + V24_J1_3	1	1.74	1702.4	-5056.8
## + V29_J2_1	1	1.74	1702.4	-5056.8
## + V29_J2_3	1	1.70	1702.4	-5056.6
## + V2_J1_6	1	1.69	1702.4	-5056.6
## + V13_3_J2_4	1	1.68	1702.4	-5056.6
## + V20_J1_4	1	1.61	1702.5	-5056.4
## + V5_J1_3	1	1.50	1702.6	-5056.0
## + V23_J1_2	1	1.48	1702.6	-5056.0
## + V23_J2_2	1	1.43	1702.7	-5055.8
## + V2_J1_7	1	1.40	1702.7	-5055.7
## + V13_1_J2_1	1	1.35	1702.8	-5055.6
## + V16_J1_1	1	1.34	1702.8	-5055.6
## + V23_J1_7	1	1.29	1702.8	-5055.4
## + V14_J2_2	1	1.26	1702.8	-5055.3
## + V24_J2_1	1	1.25	1702.9	-5055.3
## + V17_J1_7	1	1.24	1702.9	-5055.2
## + V13_1_J1_6	1	1.22	1702.9	-5055.2
## + V13_3_J1_3	1	1.18	1702.9	-5055.1
## + V20_J2_4	1	1.15	1703.0	-5055.0
## + V17_J2_4	1	1.14	1703.0	-5054.9
## + V13_1_J1_1	1	1.10	1703.0	-5054.8
## + V29_J2_4	1	1.08	1703.0	-5054.7
## + V12_1_2_J2_5	1	1.06	1703.0	-5054.7
## + V5_J1_7	1	1.02	1703.1	-5054.6
## + V5_J1_2	1	0.97	1703.1	-5054.4
## + V13_1_J1_4	1	0.96	1703.2	-5054.4
## + V15_J2_5	1	0.95	1703.2	-5054.3
## + V3_J1_7	1	0.91	1703.2	-5054.2
## + V14_J1_6	1	0.90	1703.2	-5054.2
## + V17_J1_2	1	0.88	1703.2	-5054.1
## + V20_J2_7	1	0.85	1703.3	-5054.1
## + V5_J2_7	1	0.85	1703.3	-5054.1
## + V16_J1_4	1	0.85	1703.3	-5054.1

## + V23_J2_5	1	0.82	1703.3	-5054.0
## + V16_J1_7	1	0.80	1703.3	-5053.9
## + V20_J1_7	1	0.78	1703.3	-5053.8
## + V12_1_2_J2_1	1	0.74	1703.4	-5053.7
## + V23_J2_3	1	0.72	1703.4	-5053.6
## + V12_1_2_J1_5	1	0.71	1703.4	-5053.6
## + V30_J2_7	1	0.71	1703.4	-5053.6
## + V23_J2_4	1	0.65	1703.5	-5053.4
## + V17_J2_3	1	0.64	1703.5	-5053.4
## + V23_J1_5	1	0.64	1703.5	-5053.4
## + V2_J1_2	1	0.63	1703.5	-5053.4
## + V16_J1_6	1	0.62	1703.5	-5053.3
## + V16_J1_2	1	0.61	1703.5	-5053.3
## + V12_1_2_J1_1	1	0.60	1703.5	-5053.3
## + V13_2_J2_1	1	0.59	1703.5	-5053.3
## + V1_J2_1	1	0.57	1703.5	-5053.2
## + V17_J2_5	1	0.53	1703.6	-5053.1
## + V13_1_J2_2	1	0.50	1703.6	-5053.0
## + V13_3_J2_3	1	0.49	1703.6	-5052.9
## + V13_3_J2_7	1	0.48	1703.6	-5052.9
## + V4_J1_2	1	0.46	1703.7	-5052.9
## + V24_J1_4	1	0.44	1703.7	-5052.8
## + V17_J1_6	1	0.42	1703.7	-5052.7
## + V30_J1_4	1	0.42	1703.7	-5052.7
## + V29_J1_2	1	0.41	1703.7	-5052.7
## + V19_J1_6	1	0.37	1703.7	-5052.6
## + V26_J1_7	1	0.37	1703.7	-5052.6
## + V2_J1_1	1	0.36	1703.8	-5052.6
## + V2_J2_4	1	0.36	1703.8	-5052.6
## + V19_J2_2	1	0.35	1703.8	-5052.5
## + V26_J2_7	1	0.34	1703.8	-5052.5
## + V5_J1_1	1	0.31	1703.8	-5052.4
## + V3_J1_6	1	0.30	1703.8	-5052.4
## + V1_J1_4	1	0.30	1703.8	-5052.4
## + V1_J2_4	1	0.27	1703.8	-5052.3
## + V13_3_J2_2	1	0.26	1703.8	-5052.2
## + V16_J1_5	1	0.24	1703.9	-5052.2
## + V30_J2_4	1	0.23	1703.9	-5052.2
## + V20_J1_5	1	0.23	1703.9	-5052.2
## + V3_J2_7	1	0.23	1703.9	-5052.2
## + V13_3_J1_5	1	0.22	1703.9	-5052.1
## + V4_J1_1	1	0.21	1703.9	-5052.1
## + V5_J2_2	1	0.20	1703.9	-5052.1
## + V23_J1_6	1	0.19	1703.9	-5052.0
## + V14_J1_1	1	0.18	1703.9	-5052.0
## + V19_J1_7	1	0.18	1703.9	-5052.0
## + V2_J2_5	1	0.17	1703.9	-5052.0
## + V13_3_J2_1	1	0.16	1704.0	-5052.0
## + V12_1_2_J2_3	1	0.15	1704.0	-5051.9
## + V3_J1_3	1	0.15	1704.0	-5051.9
## + V3_J2_2	1	0.14	1704.0	-5051.9
## + V13_2_J2_4	1	0.14	1704.0	-5051.9
## + V13_1_J2_3	1	0.10	1704.0	-5051.8
## + V4_J2_2	1	0.09	1704.0	-5051.7

## + V13_3_J1_4	1	0.08	1704.0	-5051.7
## + V2_J1_4	1	0.06	1704.0	-5051.6
## + V13_1_J2_7	1	0.06	1704.0	-5051.6
## + V13_3_J1_7	1	0.06	1704.0	-5051.6
## + V29_J2_7	1	0.05	1704.1	-5051.6
## + V4_J1_6	1	0.05	1704.1	-5051.6
## + V17_J1_1	1	0.04	1704.1	-5051.6
## + V3_J1_1	1	0.03	1704.1	-5051.5
## + V15_J2_4	1	0.03	1704.1	-5051.5
## + V30_J2_1	1	0.03	1704.1	-5051.5
## + V12_1_2_J2_4	1	0.03	1704.1	-5051.5
## + V29_J2_5	1	0.03	1704.1	-5051.5
## + V24_J2_7	1	0.03	1704.1	-5051.5
## + V4_J1_7	1	0.02	1704.1	-5051.5
## + V24_J1_2	1	0.02	1704.1	-5051.5
## + V26_J1_2	1	0.02	1704.1	-5051.5
## + V2_J2_1	1	0.01	1704.1	-5051.5
## + V24_J2_4	1	0.01	1704.1	-5051.5
## + V1_J1_6	1	0.01	1704.1	-5051.5
## + V23_J1_1	1	0.01	1704.1	-5051.5
## + V16_J2_5	1	0.00	1704.1	-5051.5
## + V17_J1_4	1	0.00	1704.1	-5051.5
## + V20_J2_5	1	0.00	1704.1	-5051.5
## + V14_J1_7	1	0.00	1704.1	-5051.5
## + V19_J2_7	1	0.00	1704.1	-5051.5
## + V24_J2_2	1	0.00	1704.1	-5051.5
## + V13_2_J1_1	1	0.00	1704.1	-5051.5
## - V12_1_2_J1_2	1	12.75	1716.9	-5026.0
## - V4_J1_3	1	13.17	1717.3	-5024.7
## - V24_J2_5	1	13.44	1717.5	-5023.9
## - V13_1_J1_3	1	14.60	1718.7	-5020.4
## - V12_1_2_J1_6	1	17.76	1721.9	-5010.8
## - V20_J2_1	1	17.76	1721.9	-5010.8
## - V29_J1_3	1	18.18	1722.3	-5009.6
## - V16_J2_3	1	18.93	1723.0	-5007.3
## - V12_1_2_J1_7	1	19.77	1723.9	-5004.7
## - V30_J1_5	1	20.28	1724.4	-5003.2
## - V14_J2_5	1	20.99	1725.1	-5001.1
## - V20_J2_3	1	24.25	1728.4	-4991.2
## - V23_J2_7	1	25.06	1729.2	-4988.8
## - V15_J1_1	1	26.54	1730.7	-4984.4
## - V12_1_2_J2_7	1	27.33	1731.4	-4982.0
## - V30_J2_5	1	27.55	1731.7	-4981.3
## - V2_J2_7	1	29.75	1733.9	-4974.7
## - V12_1_2_J1_3	1	30.13	1734.2	-4973.6
## - V14_J2_1	1	30.43	1734.5	-4972.7
## - V2_J2_2	1	31.43	1735.5	-4969.7
## - V26_J1_5	1	31.66	1735.8	-4969.0
## - V15_J1_2	1	31.67	1735.8	-4969.0
## - V30_J1_3	1	33.24	1737.3	-4964.3
## - V19_J2_5	1	36.69	1740.8	-4954.0
## - V16_J2_7	1	36.73	1740.8	-4953.8
## - V19_J2_4	1	37.10	1741.2	-4952.7
## - V4_J1_5	1	37.21	1741.3	-4952.4

## - V4_J2_7	1	39.21	1743.3	-4946.4
## - V3_J1_5	1	39.73	1743.8	-4944.9
## - V14_J2_4	1	41.59	1745.7	-4939.4
## - V5_J1_4	1	42.51	1746.6	-4936.6
## - V13_2_J1_7	1	44.19	1748.3	-4931.6
## - V15_J1_6	1	44.78	1748.9	-4929.8
## - V4_J1_4	1	50.03	1754.1	-4914.3
## - V26_J1_4	1	51.89	1756.0	-4908.8
## - V16_J1_3	1	54.79	1758.9	-4900.2
## - V1_J1_3	1	56.37	1760.5	-4895.5
## - V19_J2_1	1	56.83	1760.9	-4894.1
## - V30_J1_2	1	57.46	1761.6	-4892.3
## - V15_J1_7	1	61.31	1765.4	-4880.9
## - V5_J2_1	1	61.77	1765.9	-4879.6
## - V1_J2_2	1	62.58	1766.7	-4877.2
## - V17_J2_7	1	66.30	1770.4	-4866.2
## - V17_J2_2	1	68.25	1772.4	-4860.5
## - V23_J1_3	1	71.53	1775.6	-4850.9
## - V15_J1_3	1	72.71	1776.8	-4847.5
## - V30_J1_1	1	73.17	1777.3	-4846.1
## - V30_J2_2	1	75.08	1779.2	-4840.5
## - V14_J2_3	1	78.15	1782.3	-4831.6
## - V17_J1_3	1	78.29	1782.4	-4831.1
## - V2_J1_3	1	80.05	1784.2	-4826.0
## - V14_J1_5	1	86.99	1791.1	-4805.8
## - V1_J2_7	1	87.55	1791.7	-4804.2
## - V5_J2_3	1	89.09	1793.2	-4799.7
## - V14_J1_4	1	90.14	1794.2	-4796.7
## - V3_J1_4	1	94.39	1798.5	-4784.4
## - V12_1_2_J1_4	1	100.69	1804.8	-4766.2
## - V19_J2_3	1	108.69	1812.8	-4743.2
## - V4_J2_5	1	116.14	1820.2	-4721.9
## - V15_J2_7	1	116.70	1820.8	-4720.3
## - V5_J1_5	1	126.33	1830.4	-4692.9
## - V15_J2_2	1	130.89	1835.0	-4679.9
## - V3_J2_1	1	132.85	1837.0	-4674.4
## - V3_J2_5	1	141.06	1845.2	-4651.2
## - V4_J2_1	1	141.26	1845.4	-4650.6
## - V4_J2_3	1	147.96	1852.1	-4631.8
## - V19_J1_5	1	150.51	1854.6	-4624.6
## - V26_J2_1	1	156.49	1860.6	-4607.9
## - V4_J2_4	1	162.68	1866.8	-4590.6
## - V12_1_2_J2_2	1	168.89	1873.0	-4573.3
## - V26_J2_5	1	186.62	1890.7	-4524.3
## - V26_J2_4	1	188.21	1892.3	-4520.0
## - V19_J1_4	1	188.70	1892.8	-4518.6
## - V3_J2_4	1	203.77	1907.9	-4477.4
## - V3_J2_3	1	230.39	1934.5	-4405.3
## - V20_J2_2	1	258.56	1962.7	-4330.2
## - V5_J2_5	1	277.71	1981.8	-4279.7
## - V5_J2_4	1	313.16	2017.3	-4187.5
## - V26_J2_3	1	394.97	2099.1	-3980.8
## - V16_J2_2	1	431.54	2135.7	-3890.9
## - J	12	478.32	2182.4	-3851.3

```

## - V          19    1195.22 2899.3 -2420.7
##
## Step:  AIC=-5084.82
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##      V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##      V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##      V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
##      V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
##      V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
##      V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
##      V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
##      V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
##      V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
##      V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
##      V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
##      V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
##      V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
##      V29_J1_5
##
##
##      Df Sum of Sq    RSS    AIC
## + V17_J1_5      1    11.46 1681.8 -5113.5
## + V1_J2_5       1    10.81 1682.4 -5111.5
## + V13_1_J1_7     1     9.89 1683.3 -5108.6
## + V24_J1_6       1     9.67 1683.5 -5108.0
## + V1_J1_5        1     9.15 1684.1 -5106.4
## + V23_J1_4       1     9.03 1684.2 -5106.0
## + V15_J2_1       1     8.98 1684.2 -5105.8
## + V24_J1_7       1     8.80 1684.4 -5105.3
## + V13_2_J1_5     1     8.47 1684.8 -5104.3
## + V29_J1_7       1     8.23 1685.0 -5103.5
## + V13_3_J2_5     1     7.45 1685.8 -5101.1
## + V13_1_J2_4     1     7.42 1685.8 -5101.0
## + V23_J2_1       1     7.14 1686.1 -5100.2
## + V13_1_J1_2     1     6.86 1686.4 -5099.3
## + V14_J1_2       1     6.79 1686.4 -5099.1
## + V26_J1_3       1     6.47 1686.8 -5098.1
## + V24_J1_5       1     5.94 1687.3 -5096.4
## + V13_2_J1_4     1     5.83 1687.4 -5096.1
## + V13_2_J1_6     1     5.73 1687.5 -5095.8
## + V2_J1_5        1     5.58 1687.6 -5095.3
## + V13_1_J1_5     1     5.47 1687.8 -5095.0
## + V29_J2_2       1     5.08 1688.1 -5093.8
## + V20_J1_2       1     5.04 1688.2 -5093.7
## + V5_J1_6        1     5.02 1688.2 -5093.6
## + V16_J2_1       1     4.90 1688.3 -5093.2
## + V26_J1_6       1     4.77 1688.5 -5092.8
## + V17_J2_1       1     4.74 1688.5 -5092.8
## + V20_J1_3       1     4.65 1688.6 -5092.5
## + V30_J2_3       1     4.42 1688.8 -5091.8
## + V26_J1_1       1     4.23 1689.0 -5091.2
## + V20_J1_6       1     4.12 1689.1 -5090.8
## + V15_J1_5       1     4.01 1689.2 -5090.5
## + V13_2_J2_5     1     3.94 1689.3 -5090.3
## + V13_1_J2_5     1     3.68 1689.5 -5089.5

```


## + V2_J2_3	1	3.64	1689.6	-5089.4
## + V13_2_J2_3	1	3.54	1689.7	-5089.1
## + V1_J1_7	1	3.46	1689.8	-5088.8
## + V13_2_J1_3	1	3.38	1689.8	-5088.6
## + V24_J1_1	1	3.32	1689.9	-5088.4
## + V1_J2_3	1	3.32	1689.9	-5088.4
## + V3_J1_2	1	3.23	1690.0	-5088.1
## + V29_J1_1	1	3.08	1690.1	-5087.7
## + V30_J1_6	1	3.06	1690.2	-5087.6
## + V14_J2_7	1	3.05	1690.2	-5087.6
## + V29_J1_4	1	2.89	1690.3	-5087.1
## + V26_J2_2	1	2.78	1690.4	-5086.7
## + V15_J1_4	1	2.68	1690.5	-5086.4
## + V29_J2_1	1	2.66	1690.5	-5086.4
## + V13_3_J1_2	1	2.65	1690.6	-5086.3
## + V29_J1_6	1	2.63	1690.6	-5086.3
## + V29_J2_3	1	2.61	1690.6	-5086.2
## + V19_J1_1	1	2.47	1690.7	-5085.8
## + V15_J2_3	1	2.38	1690.8	-5085.5
## + V14_J1_3	1	2.34	1690.9	-5085.4
## <none>			1693.2	-5084.8
## + V13_3_J1_6	1	2.14	1691.1	-5084.8
## + V30_J1_7	1	2.13	1691.1	-5084.7
## + V13_2_J2_2	1	2.07	1691.1	-5084.5
## + V13_2_J1_2	1	2.03	1691.2	-5084.4
## + V16_J2_4	1	2.02	1691.2	-5084.4
## + V13_3_J1_1	1	1.98	1691.2	-5084.3
## + V20_J1_1	1	1.98	1691.2	-5084.3
## + V19_J1_3	1	1.93	1691.3	-5084.1
## + V19_J1_2	1	1.84	1691.4	-5083.8
## + V1_J1_1	1	1.84	1691.4	-5083.8
## + V24_J1_3	1	1.78	1691.4	-5083.7
## + V24_J2_3	1	1.73	1691.5	-5083.5
## + V13_3_J2_4	1	1.72	1691.5	-5083.5
## + V13_2_J2_7	1	1.71	1691.5	-5083.4
## + V1_J1_2	1	1.67	1691.5	-5083.3
## + V2_J1_6	1	1.60	1691.6	-5083.1
## + V23_J2_2	1	1.54	1691.7	-5082.9
## + V20_J1_4	1	1.54	1691.7	-5082.9
## + V5_J1_3	1	1.53	1691.7	-5082.9
## + V2_J1_7	1	1.49	1691.7	-5082.8
## + V23_J1_2	1	1.40	1691.8	-5082.5
## + V23_J1_7	1	1.36	1691.8	-5082.4
## + V13_1_J2_1	1	1.30	1691.9	-5082.2
## + V24_J2_1	1	1.29	1691.9	-5082.2
## + V16_J1_1	1	1.26	1692.0	-5082.1
## + V14_J2_2	1	1.24	1692.0	-5082.0
## + V12_1_2_J1_5	1	1.23	1692.0	-5082.0
## + V20_J2_4	1	1.20	1692.0	-5081.9
## + V17_J2_4	1	1.20	1692.0	-5081.9
## + V13_1_J1_6	1	1.16	1692.0	-5081.8
## + V17_J1_7	1	1.16	1692.0	-5081.8
## + V13_3_J1_3	1	1.15	1692.1	-5081.7
## + V15_J2_5	1	1.05	1692.2	-5081.4

## + V13_1_J1_1	1	1.05	1692.2	-5081.4
## + V5_J1_7	1	1.02	1692.2	-5081.3
## + V5_J1_2	1	0.97	1692.2	-5081.1
## + V12_1_2_J2_5	1	0.96	1692.2	-5081.1
## + V13_1_J1_4	1	0.92	1692.3	-5081.0
## + V16_J1_4	1	0.91	1692.3	-5081.0
## + V3_J1_7	1	0.91	1692.3	-5081.0
## + V14_J1_6	1	0.90	1692.3	-5080.9
## + V20_J1_7	1	0.84	1692.4	-5080.8
## + V12_1_2_J2_1	1	0.84	1692.4	-5080.7
## + V5_J2_7	1	0.83	1692.4	-5080.7
## + V17_J1_2	1	0.82	1692.4	-5080.7
## + V23_J2_5	1	0.78	1692.4	-5080.6
## + V20_J2_7	1	0.77	1692.5	-5080.5
## + V30_J2_7	1	0.73	1692.5	-5080.4
## + V16_J1_7	1	0.73	1692.5	-5080.4
## + V17_J2_3	1	0.69	1692.5	-5080.3
## + V12_1_2_J1_1	1	0.69	1692.5	-5080.3
## + V23_J2_3	1	0.68	1692.5	-5080.3
## + V16_J1_2	1	0.67	1692.5	-5080.2
## + V13_2_J2_1	1	0.62	1692.6	-5080.1
## + V23_J2_4	1	0.62	1692.6	-5080.1
## + V1_J2_1	1	0.62	1692.6	-5080.1
## + V20_J1_5	1	0.58	1692.6	-5080.0
## + V2_J1_2	1	0.58	1692.6	-5080.0
## + V17_J2_5	1	0.57	1692.6	-5079.9
## + V16_J1_6	1	0.56	1692.7	-5079.9
## + V13_1_J2_2	1	0.56	1692.7	-5079.9
## + V29_J2_4	1	0.54	1692.7	-5079.8
## + V13_3_J2_3	1	0.51	1692.7	-5079.8
## + V17_J1_6	1	0.47	1692.7	-5079.6
## + V24_J1_4	1	0.47	1692.8	-5079.6
## + V4_J1_2	1	0.47	1692.8	-5079.6
## + V13_3_J2_7	1	0.42	1692.8	-5079.5
## + V30_J1_4	1	0.42	1692.8	-5079.5
## + V2_J1_1	1	0.40	1692.8	-5079.4
## + V2_J2_4	1	0.39	1692.8	-5079.4
## + V19_J1_6	1	0.38	1692.8	-5079.3
## + V26_J1_7	1	0.37	1692.8	-5079.3
## + V26_J2_7	1	0.35	1692.9	-5079.3
## + V19_J2_2	1	0.34	1692.9	-5079.2
## + V5_J1_1	1	0.32	1692.9	-5079.2
## + V13_3_J2_2	1	0.30	1692.9	-5079.1
## + V3_J1_6	1	0.30	1692.9	-5079.1
## + V23_J1_5	1	0.27	1692.9	-5079.0
## + V1_J1_4	1	0.26	1693.0	-5079.0
## + V1_J2_4	1	0.24	1693.0	-5078.9
## + V3_J2_7	1	0.24	1693.0	-5078.9
## + V30_J2_4	1	0.22	1693.0	-5078.9
## + V5_J2_2	1	0.21	1693.0	-5078.8
## + V23_J1_6	1	0.21	1693.0	-5078.8
## + V4_J1_1	1	0.20	1693.0	-5078.8
## + V12_1_2_J2_3	1	0.20	1693.0	-5078.8
## + V14_J1_1	1	0.18	1693.0	-5078.7

## + V19_J1_7	1	0.18	1693.0	-5078.7
## + V13_3_J2_1	1	0.18	1693.0	-5078.7
## + V3_J1_3	1	0.16	1693.0	-5078.7
## + V13_2_J2_4	1	0.15	1693.1	-5078.7
## + V3_J2_2	1	0.15	1693.1	-5078.6
## + V2_J2_5	1	0.15	1693.1	-5078.6
## + V29_J1_2	1	0.12	1693.1	-5078.5
## + V4_J2_2	1	0.09	1693.1	-5078.5
## + V13_1_J2_3	1	0.09	1693.1	-5078.5
## + V13_1_J2_7	1	0.08	1693.1	-5078.4
## + V2_J1_4	1	0.08	1693.1	-5078.4
## + V13_3_J1_4	1	0.07	1693.2	-5078.4
## + V4_J1_6	1	0.05	1693.2	-5078.3
## + V16_J1_5	1	0.05	1693.2	-5078.3
## + V13_3_J1_7	1	0.05	1693.2	-5078.3
## + V13_3_J1_5	1	0.04	1693.2	-5078.3
## + V3_J1_1	1	0.03	1693.2	-5078.3
## + V24_J1_2	1	0.03	1693.2	-5078.3
## + V30_J2_1	1	0.03	1693.2	-5078.3
## + V17_J1_1	1	0.03	1693.2	-5078.3
## + V4_J1_7	1	0.02	1693.2	-5078.3
## + V29_J2_5	1	0.02	1693.2	-5078.2
## + V26_J1_2	1	0.02	1693.2	-5078.2
## + V15_J2_4	1	0.01	1693.2	-5078.2
## + V24_J2_7	1	0.01	1693.2	-5078.2
## + V2_J2_1	1	0.01	1693.2	-5078.2
## + V12_1_2_J2_4	1	0.01	1693.2	-5078.2
## + V24_J2_4	1	0.00	1693.2	-5078.2
## + V20_J2_5	1	0.00	1693.2	-5078.2
## + V24_J2_2	1	0.00	1693.2	-5078.2
## + V29_J2_7	1	0.00	1693.2	-5078.2
## + V23_J1_1	1	0.00	1693.2	-5078.2
## + V1_J1_6	1	0.00	1693.2	-5078.2
## + V19_J2_7	1	0.00	1693.2	-5078.2
## + V14_J1_7	1	0.00	1693.2	-5078.2
## + V16_J2_5	1	0.00	1693.2	-5078.2
## + V17_J1_4	1	0.00	1693.2	-5078.2
## + V13_2_J1_1	1	0.00	1693.2	-5078.2
## - V29_J1_5	1	10.90	1704.1	-5058.1
## - V12_1_2_J1_2	1	12.42	1705.6	-5053.5
## - V4_J1_3	1	13.09	1706.3	-5051.4
## - V24_J2_5	1	13.55	1706.8	-5050.0
## - V13_1_J1_3	1	14.51	1707.7	-5047.1
## - V29_J1_3	1	15.93	1709.2	-5042.7
## - V20_J2_1	1	17.94	1711.2	-5036.6
## - V12_1_2_J1_6	1	18.15	1711.4	-5036.0
## - V16_J2_3	1	19.17	1712.4	-5032.9
## - V12_1_2_J1_7	1	20.20	1713.4	-5029.8
## - V14_J2_5	1	20.90	1714.1	-5027.6
## - V30_J1_5	1	22.51	1715.7	-5022.8
## - V20_J2_3	1	24.48	1717.7	-5016.8
## - V23_J2_7	1	25.44	1718.7	-5013.9
## - V15_J1_1	1	26.07	1719.3	-5012.0
## - V30_J2_5	1	27.61	1720.8	-5007.3

## - V12_1_2_J2_7	1	27.93	1721.2	-5006.4
## - V26_J1_5	1	28.65	1721.9	-5004.2
## - V2_J2_7	1	30.20	1723.4	-4999.5
## - V14_J2_1	1	30.34	1723.6	-4999.1
## - V12_1_2_J1_3	1	30.53	1723.8	-4998.5
## - V15_J1_2	1	31.13	1724.3	-4996.7
## - V2_J2_2	1	31.90	1725.1	-4994.4
## - V30_J1_3	1	33.15	1726.4	-4990.6
## - V4_J1_5	1	33.99	1727.2	-4988.1
## - V3_J1_5	1	36.32	1729.5	-4981.1
## - V19_J2_5	1	36.58	1729.8	-4980.3
## - V19_J2_4	1	36.99	1730.2	-4979.1
## - V16_J2_7	1	37.25	1730.5	-4978.3
## - V4_J2_7	1	39.33	1732.5	-4972.1
## - V14_J2_4	1	41.46	1734.7	-4965.7
## - V5_J1_4	1	42.43	1735.6	-4962.8
## - V15_J1_6	1	44.14	1737.3	-4957.6
## - V13_2_J1_7	1	44.52	1737.7	-4956.5
## - V4_J1_4	1	49.94	1743.2	-4940.3
## - V26_J1_4	1	51.79	1745.0	-4934.8
## - V16_J1_3	1	55.12	1748.3	-4924.9
## - V1_J1_3	1	56.66	1749.9	-4920.3
## - V19_J2_1	1	56.71	1749.9	-4920.2
## - V30_J1_2	1	57.44	1750.7	-4918.0
## - V15_J1_7	1	60.54	1753.8	-4908.8
## - V5_J2_1	1	61.64	1754.9	-4905.5
## - V1_J2_2	1	63.23	1756.4	-4900.8
## - V17_J2_7	1	66.96	1760.2	-4889.8
## - V17_J2_2	1	68.92	1762.1	-4884.0
## - V23_J1_3	1	71.79	1765.0	-4875.5
## - V15_J1_3	1	72.07	1765.3	-4874.7
## - V30_J1_1	1	73.19	1766.4	-4871.4
## - V30_J2_2	1	75.31	1768.5	-4865.2
## - V14_J2_3	1	78.05	1771.3	-4857.1
## - V17_J1_3	1	78.63	1771.8	-4855.4
## - V2_J1_3	1	80.39	1773.6	-4850.2
## - V14_J1_5	1	81.74	1775.0	-4846.3
## - V1_J2_7	1	88.31	1781.5	-4827.1
## - V5_J2_3	1	88.98	1782.2	-4825.1
## - V14_J1_4	1	90.02	1783.2	-4822.1
## - V3_J1_4	1	94.26	1787.5	-4809.7
## - V12_1_2_J1_4	1	101.52	1794.7	-4788.7
## - V19_J2_3	1	108.57	1801.8	-4768.3
## - V15_J2_7	1	115.40	1808.6	-4748.6
## - V4_J2_5	1	115.95	1809.2	-4747.0
## - V5_J1_5	1	119.86	1813.1	-4735.8
## - V15_J2_2	1	129.50	1822.7	-4708.2
## - V3_J2_1	1	132.66	1825.9	-4699.2
## - V3_J2_5	1	140.85	1834.1	-4675.9
## - V4_J2_1	1	141.07	1834.3	-4675.3
## - V19_J1_5	1	143.36	1836.6	-4668.8
## - V4_J2_3	1	147.82	1841.0	-4656.2
## - V26_J2_1	1	156.29	1849.5	-4632.4
## - V4_J2_4	1	162.43	1855.7	-4615.1

```

## - V12_1_2_J2_2  1    170.36 1863.6 -4592.9
## - V26_J2_5      1    186.38 1879.6 -4548.4
## - V26_J2_4      1    187.94 1881.2 -4544.1
## - V19_J1_4      1    188.52 1881.7 -4542.5
## - V3_J2_4       1    203.50 1896.7 -4501.3
## - V3_J2_3       1    230.21 1923.4 -4428.6
## - V20_J2_2      1    259.82 1953.0 -4349.1
## - V5_J2_5       1    277.41 1970.6 -4302.5
## - V5_J2_4       1    312.82 2006.0 -4209.9
## - V26_J2_3      1    394.73 2087.9 -4001.8
## - V16_J2_2      1    433.30 2126.5 -3906.6
## - J             12    487.06 2180.3 -3849.8
## - V             19    1181.83 2875.0 -2457.8
##
## Step:  AIC=-5113.5
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
## V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5
##
##
##      Df Sum of Sq  RSS    AIC
## + V1_J1_5      1    11.23 1670.5 -5141.7
## + V1_J2_5      1    11.03 1670.7 -5141.1
## + V13_1_J1_7   1    10.11 1671.6 -5138.2
## + V24_J1_6     1     9.47 1672.3 -5136.2
## + V23_J1_4     1     9.23 1672.5 -5135.5
## + V15_J2_1     1     8.63 1673.1 -5133.6
## + V24_J1_7     1     8.59 1673.2 -5133.5
## + V29_J1_7     1     8.26 1673.5 -5132.5
## + V13_3_J2_5   1     7.29 1674.5 -5129.5
## + V13_1_J2_4   1     7.27 1674.5 -5129.4
## + V2_J1_5      1     7.21 1674.5 -5129.2
## + V13_1_J1_2   1     7.03 1674.7 -5128.7
## + V23_J2_1     1     6.97 1674.8 -5128.5
## + V13_2_J1_5   1     6.81 1674.9 -5128.0
## + V14_J1_2     1     6.75 1675.0 -5127.8
## + V26_J1_3     1     6.40 1675.3 -5126.7
## + V13_2_J1_4   1     5.67 1676.1 -5124.4
## + V13_2_J1_6   1     5.57 1676.2 -5124.1
## + V20_J1_2     1     5.22 1676.5 -5123.0
## + V29_J2_2     1     5.14 1676.6 -5122.8
## + V16_J2_1     1     5.07 1676.7 -5122.6
## + V5_J1_6      1     5.06 1676.7 -5122.5

```

## + V26_J1_6	1	4.73	1677.0	-5121.5
## + V20_J1_3	1	4.57	1677.2	-5121.0
## + V24_J1_5	1	4.56	1677.2	-5121.0
## + V30_J2_3	1	4.40	1677.3	-5120.5
## + V20_J1_6	1	4.28	1677.5	-5120.1
## + V26_J1_1	1	4.21	1677.5	-5119.9
## + V13_1_J1_5	1	4.14	1677.6	-5119.7
## + V13_2_J2_5	1	4.07	1677.7	-5119.5
## + V2_J2_3	1	3.78	1678.0	-5118.6
## + V13_2_J2_3	1	3.67	1678.1	-5118.2
## + V13_1_J2_5	1	3.57	1678.2	-5117.9
## + V1_J2_3	1	3.45	1678.3	-5117.6
## + V24_J1_1	1	3.44	1678.3	-5117.5
## + V13_2_J1_3	1	3.33	1678.4	-5117.2
## + V1_J1_7	1	3.32	1678.4	-5117.2
## + V17_J2_1	1	3.29	1678.5	-5117.0
## + V3_J1_2	1	3.20	1678.5	-5116.8
## + V29_J1_1	1	3.09	1678.7	-5116.4
## + V30_J1_6	1	3.08	1678.7	-5116.4
## + V14_J2_7	1	3.01	1678.7	-5116.2
## + V15_J1_5	1	2.92	1678.8	-5115.9
## + V15_J1_4	1	2.88	1678.9	-5115.8
## + V29_J1_4	1	2.88	1678.9	-5115.8
## + V13_3_J1_2	1	2.76	1679.0	-5115.4
## + V26_J2_2	1	2.75	1679.0	-5115.4
## + V29_J2_1	1	2.66	1679.1	-5115.1
## + V29_J1_6	1	2.65	1679.1	-5115.1
## + V29_J2_3	1	2.60	1679.2	-5114.9
## + V19_J1_1	1	2.49	1679.3	-5114.6
## + V14_J1_3	1	2.30	1679.5	-5114.0
## + V13_3_J1_6	1	2.24	1679.5	-5113.8
## + V15_J2_3	1	2.19	1679.6	-5113.6
## <none>			1681.8	-5113.5
## + V13_2_J1_2	1	2.13	1679.6	-5113.5
## + V17_J1_7	1	2.12	1679.6	-5113.4
## + V30_J1_7	1	2.11	1679.6	-5113.4
## + V13_2_J2_2	1	2.02	1679.7	-5113.1
## + V12_1_2_J1_5	1	2.00	1679.8	-5113.1
## + V16_J2_4	1	1.92	1679.8	-5112.8
## + V1_J1_1	1	1.92	1679.8	-5112.8
## + V13_3_J1_1	1	1.91	1679.8	-5112.8
## + V19_J1_3	1	1.90	1679.8	-5112.7
## + V20_J1_1	1	1.88	1679.9	-5112.7
## + V24_J1_3	1	1.82	1679.9	-5112.5
## + V19_J1_2	1	1.82	1679.9	-5112.5
## + V13_3_J2_4	1	1.79	1680.0	-5112.4
## + V13_2_J2_7	1	1.67	1680.1	-5112.0
## + V24_J2_3	1	1.64	1680.1	-5112.0
## + V17_J1_2	1	1.64	1680.1	-5111.9
## + V2_J1_7	1	1.58	1680.2	-5111.8
## + V23_J2_2	1	1.58	1680.2	-5111.8
## + V1_J1_2	1	1.58	1680.2	-5111.8
## + V5_J1_3	1	1.56	1680.2	-5111.7
## + V2_J1_6	1	1.51	1680.2	-5111.6

## + V23_J1_7	1	1.45	1680.3	-5111.4
## + V20_J1_4	1	1.45	1680.3	-5111.3
## + V24_J2_1	1	1.37	1680.4	-5111.1
## + V23_J1_2	1	1.33	1680.4	-5111.0
## + V20_J2_4	1	1.28	1680.5	-5110.8
## + V14_J2_2	1	1.26	1680.5	-5110.8
## + V13_1_J2_1	1	1.23	1680.5	-5110.7
## + V16_J1_1	1	1.18	1680.6	-5110.5
## + V15_J2_5	1	1.18	1680.6	-5110.5
## + V20_J1_5	1	1.15	1680.6	-5110.4
## + V13_3_J1_3	1	1.12	1680.6	-5110.3
## + V13_1_J1_6	1	1.09	1680.7	-5110.3
## + V5_J1_7	1	1.00	1680.8	-5110.0
## + V13_1_J1_1	1	0.99	1680.8	-5109.9
## + V16_J1_4	1	0.99	1680.8	-5109.9
## + V5_J1_2	1	0.98	1680.8	-5109.9
## + V12_1_2_J2_1	1	0.95	1680.8	-5109.8
## + V3_J1_7	1	0.93	1680.8	-5109.7
## + V20_J1_7	1	0.92	1680.8	-5109.7
## + V14_J1_6	1	0.92	1680.8	-5109.7
## + V13_1_J1_4	1	0.86	1680.9	-5109.5
## + V5_J2_7	1	0.85	1680.9	-5109.5
## + V12_1_2_J2_5	1	0.85	1680.9	-5109.5
## + V12_1_2_J1_1	1	0.79	1681.0	-5109.3
## + V16_J1_2	1	0.74	1681.0	-5109.1
## + V20_J2_7	1	0.73	1681.0	-5109.1
## + V23_J2_5	1	0.73	1681.0	-5109.1
## + V30_J2_7	1	0.71	1681.0	-5109.1
## + V13_2_J2_1	1	0.67	1681.1	-5108.9
## + V1_J2_1	1	0.67	1681.1	-5108.9
## + V16_J1_7	1	0.66	1681.1	-5108.9
## + V23_J2_3	1	0.62	1681.1	-5108.8
## + V13_1_J2_2	1	0.58	1681.2	-5108.7
## + V23_J2_4	1	0.57	1681.2	-5108.6
## + V13_3_J2_3	1	0.56	1681.2	-5108.6
## + V29_J2_4	1	0.54	1681.2	-5108.5
## + V2_J1_2	1	0.53	1681.2	-5108.5
## + V17_J2_4	1	0.52	1681.2	-5108.5
## + V24_J1_4	1	0.51	1681.2	-5108.5
## + V16_J1_6	1	0.50	1681.2	-5108.4
## + V4_J1_2	1	0.46	1681.3	-5108.3
## + V2_J1_1	1	0.44	1681.3	-5108.2
## + V2_J2_4	1	0.43	1681.3	-5108.2
## + V30_J1_4	1	0.42	1681.3	-5108.2
## + V13_3_J2_7	1	0.41	1681.3	-5108.1
## + V19_J1_6	1	0.37	1681.4	-5108.0
## + V26_J1_7	1	0.36	1681.4	-5108.0
## + V19_J2_2	1	0.35	1681.4	-5108.0
## + V26_J2_7	1	0.34	1681.4	-5107.9
## + V5_J1_1	1	0.31	1681.4	-5107.8
## + V13_3_J2_2	1	0.31	1681.4	-5107.8
## + V3_J1_6	1	0.31	1681.4	-5107.8
## + V17_J1_1	1	0.29	1681.5	-5107.8
## + V12_1_2_J2_3	1	0.26	1681.5	-5107.7

## + V23_J1_6	1	0.24	1681.5	-5107.6
## + V3_J2_7	1	0.23	1681.5	-5107.6
## + V1_J1_4	1	0.23	1681.5	-5107.6
## + V30_J2_4	1	0.22	1681.5	-5107.6
## + V17_J2_3	1	0.21	1681.5	-5107.5
## + V1_J2_4	1	0.21	1681.5	-5107.5
## + V5_J2_2	1	0.20	1681.5	-5107.5
## + V4_J1_1	1	0.20	1681.5	-5107.5
## + V13_3_J2_1	1	0.20	1681.5	-5107.5
## + V14_J1_1	1	0.18	1681.6	-5107.4
## + V13_2_J2_4	1	0.18	1681.6	-5107.4
## + V3_J1_3	1	0.17	1681.6	-5107.4
## + V19_J1_7	1	0.17	1681.6	-5107.4
## + V17_J1_4	1	0.15	1681.6	-5107.3
## + V17_J2_5	1	0.14	1681.6	-5107.3
## + V3_J2_2	1	0.14	1681.6	-5107.3
## + V2_J2_5	1	0.13	1681.6	-5107.3
## + V29_J1_2	1	0.12	1681.6	-5107.2
## + V17_J1_6	1	0.10	1681.7	-5107.2
## + V2_J1_4	1	0.10	1681.7	-5107.2
## + V13_1_J2_7	1	0.09	1681.7	-5107.1
## + V4_J2_2	1	0.08	1681.7	-5107.1
## + V13_1_J2_3	1	0.07	1681.7	-5107.1
## + V13_3_J1_4	1	0.05	1681.7	-5107.0
## + V4_J1_6	1	0.05	1681.7	-5107.0
## + V24_J1_2	1	0.04	1681.7	-5107.0
## + V23_J1_5	1	0.04	1681.7	-5107.0
## + V13_3_J1_7	1	0.03	1681.7	-5107.0
## + V3_J1_1	1	0.03	1681.7	-5107.0
## + V30_J2_1	1	0.03	1681.7	-5107.0
## + V4_J1_7	1	0.03	1681.7	-5107.0
## + V26_J1_2	1	0.02	1681.7	-5106.9
## + V2_J2_1	1	0.02	1681.7	-5106.9
## + V29_J2_5	1	0.02	1681.7	-5106.9
## + V13_3_J1_5	1	0.02	1681.7	-5106.9
## + V24_J2_7	1	0.01	1681.7	-5106.9
## + V20_J2_5	1	0.01	1681.7	-5106.9
## + V16_J1_5	1	0.01	1681.7	-5106.9
## + V24_J2_2	1	0.01	1681.7	-5106.9
## + V29_J2_7	1	0.01	1681.7	-5106.9
## + V15_J2_4	1	0.00	1681.8	-5106.9
## + V12_1_2_J2_4	1	0.00	1681.8	-5106.9
## + V24_J2_4	1	0.00	1681.8	-5106.9
## + V13_2_J1_1	1	0.00	1681.8	-5106.9
## + V19_J2_7	1	0.00	1681.8	-5106.9
## + V14_J1_7	1	0.00	1681.8	-5106.9
## + V23_J1_1	1	0.00	1681.8	-5106.9
## + V1_J1_6	1	0.00	1681.8	-5106.9
## + V16_J2_5	1	0.00	1681.8	-5106.9
## - V17_J1_5	1	11.46	1693.2	-5084.8
## - V12_1_2_J1_2	1	12.07	1693.8	-5083.0
## - V29_J1_5	1	12.78	1694.5	-5080.8
## - V4_J1_3	1	12.99	1694.7	-5080.1
## - V24_J2_5	1	13.75	1695.5	-5077.8

## - V13_1_J1_3	1	14.43	1696.2	-5075.7
## - V29_J1_3	1	15.83	1697.6	-5071.4
## - V20_J2_1	1	18.20	1700.0	-5064.2
## - V12_1_2_J1_6	1	18.57	1700.3	-5063.0
## - V16_J2_3	1	19.46	1701.2	-5060.3
## - V12_1_2_J1_7	1	20.66	1702.4	-5056.7
## - V14_J2_5	1	20.94	1702.7	-5055.8
## - V20_J2_3	1	24.81	1706.6	-5044.0
## - V30_J1_5	1	25.08	1706.8	-5043.2
## - V23_J2_7	1	25.57	1707.3	-5041.7
## - V15_J1_1	1	25.60	1707.3	-5041.6
## - V26_J1_5	1	25.60	1707.3	-5041.6
## - V30_J2_5	1	27.61	1709.4	-5035.5
## - V12_1_2_J2_7	1	28.29	1710.0	-5033.4
## - V2_J2_7	1	30.36	1712.1	-5027.1
## - V14_J2_1	1	30.39	1712.1	-5027.0
## - V15_J1_2	1	30.58	1712.3	-5026.4
## - V4_J1_5	1	30.68	1712.4	-5026.1
## - V12_1_2_J1_3	1	30.88	1712.6	-5025.5
## - V2_J2_2	1	32.06	1713.8	-5021.9
## - V3_J1_5	1	32.85	1714.6	-5019.6
## - V30_J1_3	1	33.00	1714.8	-5019.1
## - V19_J2_5	1	36.63	1718.4	-5008.1
## - V19_J2_4	1	37.02	1718.8	-5006.9
## - V16_J2_7	1	37.47	1719.2	-5005.6
## - V4_J2_7	1	39.18	1720.9	-5000.4
## - V14_J2_4	1	41.49	1723.2	-4993.4
## - V5_J1_4	1	42.50	1724.2	-4990.3
## - V15_J1_6	1	43.49	1725.2	-4987.4
## - V13_2_J1_7	1	44.94	1726.7	-4983.0
## - V4_J1_4	1	49.97	1731.7	-4967.9
## - V26_J1_4	1	51.88	1733.6	-4962.2
## - V16_J1_3	1	55.36	1737.1	-4951.7
## - V19_J2_1	1	56.78	1738.5	-4947.5
## - V1_J1_3	1	56.85	1738.6	-4947.3
## - V30_J1_2	1	57.39	1739.1	-4945.7
## - V15_J1_7	1	59.74	1741.5	-4938.6
## - V17_J2_7	1	61.16	1742.9	-4934.4
## - V5_J2_1	1	61.72	1743.5	-4932.7
## - V17_J2_2	1	63.04	1744.8	-4928.8
## - V1_J2_2	1	63.46	1745.2	-4927.5
## - V15_J1_3	1	71.53	1753.3	-4903.5
## - V23_J1_3	1	71.99	1753.7	-4902.2
## - V17_J1_3	1	72.35	1754.1	-4901.1
## - V30_J1_1	1	73.18	1754.9	-4898.7
## - V30_J2_2	1	75.10	1756.8	-4893.0
## - V14_J1_5	1	76.32	1758.1	-4889.4
## - V14_J2_3	1	78.17	1759.9	-4883.9
## - V2_J1_3	1	80.62	1762.4	-4876.6
## - V1_J2_7	1	88.58	1770.3	-4853.2
## - V5_J2_3	1	89.11	1770.9	-4851.7
## - V14_J1_4	1	90.13	1771.9	-4848.7
## - V3_J1_4	1	94.38	1776.1	-4836.2
## - V12_1_2_J1_4	1	102.47	1784.2	-4812.6

```

## - V19_J2_3      1      108.72 1790.5 -4794.4
## - V5_J1_5       1      113.14 1794.9 -4781.6
## - V15_J2_7      1      114.68 1796.4 -4777.1
## - V4_J2_5       1      115.96 1797.7 -4773.4
## - V15_J2_2      1      128.73 1810.5 -4736.6
## - V3_J2_1       1      132.77 1814.5 -4725.0
## - V19_J1_5      1      135.93 1817.7 -4716.0
## - V3_J2_5       1      140.95 1822.7 -4701.6
## - V4_J2_1       1      141.09 1822.8 -4701.2
## - V4_J2_3       1      147.90 1829.7 -4681.8
## - V26_J2_1      1      156.40 1838.2 -4657.7
## - V4_J2_4       1      162.40 1844.2 -4640.8
## - V12_1_2_J2_2  1      171.23 1853.0 -4616.0
## - V26_J2_5      1      186.49 1868.2 -4573.3
## - V26_J2_4      1      188.01 1869.8 -4569.1
## - V19_J1_4      1      188.68 1870.4 -4567.2
## - V3_J2_4       1      203.57 1885.3 -4526.0
## - V3_J2_3       1      230.43 1912.2 -4452.4
## - V20_J2_2      1      260.38 1942.1 -4371.6
## - V5_J2_5       1      277.55 1959.3 -4325.8
## - V5_J2_4       1      312.90 1994.7 -4232.8
## - V26_J2_3      1      395.01 2076.8 -4023.1
## - V16_J2_2      1      434.03 2115.8 -3926.3
## - J             12      497.21 2179.0 -3846.3
## - V             19     1185.87 2867.6 -2464.6
##
## Step:  AIC=-5141.71
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
## V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5
##
##
##          Df Sum of Sq    RSS    AIC
## + V13_1_J1_7      1      10.35 1660.2 -5167.4
## + V23_J1_4        1       9.45 1661.1 -5164.6
## + V2_J1_5         1       9.25 1661.3 -5163.9
## + V24_J1_6        1       9.24 1661.3 -5163.9
## + V1_J2_5         1       8.80 1661.7 -5162.5
## + V24_J1_7        1       8.36 1662.2 -5161.2
## + V29_J1_7        1       8.30 1662.2 -5161.0
## + V15_J2_1        1       8.26 1662.3 -5160.9
## + V13_1_J1_2      1       7.22 1663.3 -5157.6
## + V13_3_J2_5      1       7.13 1663.4 -5157.3

```

## + V13_1_J2_4	1	7.11	1663.4	-5157.3
## + V23_J2_1	1	6.79	1663.7	-5156.3
## + V14_J1_2	1	6.70	1663.8	-5156.0
## + V26_J1_3	1	6.33	1664.2	-5154.8
## + V13_2_J1_4	1	5.50	1665.0	-5152.2
## + V20_J1_2	1	5.42	1665.1	-5152.0
## + V13_2_J1_6	1	5.40	1665.1	-5151.9
## + V16_J2_1	1	5.25	1665.3	-5151.5
## + V13_2_J1_5	1	5.21	1665.3	-5151.3
## + V29_J2_2	1	5.21	1665.3	-5151.3
## + V5_J1_6	1	5.10	1665.4	-5151.0
## + V1_J1_7	1	4.84	1665.7	-5150.1
## + V26_J1_6	1	4.69	1665.8	-5149.7
## + V20_J1_3	1	4.48	1666.0	-5149.0
## + V20_J1_6	1	4.46	1666.1	-5149.0
## + V30_J2_3	1	4.38	1666.1	-5148.7
## + V13_2_J2_5	1	4.21	1666.3	-5148.2
## + V26_J1_1	1	4.19	1666.3	-5148.1
## + V2_J2_3	1	3.93	1666.6	-5147.3
## + V13_2_J2_3	1	3.82	1666.7	-5147.0
## + V24_J1_1	1	3.56	1667.0	-5146.2
## + V13_1_J2_5	1	3.45	1667.1	-5145.8
## + V17_J2_1	1	3.28	1667.2	-5145.3
## + V13_2_J1_3	1	3.27	1667.2	-5145.3
## + V24_J1_5	1	3.26	1667.3	-5145.2
## + V3_J1_2	1	3.16	1667.4	-5144.9
## + V15_J1_4	1	3.11	1667.4	-5144.8
## + V29_J1_1	1	3.09	1667.4	-5144.7
## + V30_J1_6	1	3.09	1667.4	-5144.7
## + V12_1_2_J1_5	1	3.05	1667.5	-5144.6
## + V14_J2_7	1	2.97	1667.5	-5144.3
## + V13_1_J1_5	1	2.90	1667.6	-5144.1
## + V13_3_J1_2	1	2.87	1667.7	-5144.0
## + V29_J1_4	1	2.87	1667.7	-5144.0
## + V26_J2_2	1	2.71	1667.8	-5143.5
## + V29_J1_6	1	2.66	1667.9	-5143.4
## + V1_J1_2	1	2.66	1667.9	-5143.4
## + V29_J2_1	1	2.65	1667.9	-5143.3
## + V29_J2_3	1	2.58	1667.9	-5143.1
## + V19_J1_1	1	2.50	1668.0	-5142.9
## + V13_3_J1_6	1	2.34	1668.2	-5142.4
## + V14_J1_3	1	2.26	1668.3	-5142.1
## + V1_J2_3	1	2.25	1668.3	-5142.1
## + V13_2_J1_2	1	2.24	1668.3	-5142.1
## <none>			1670.5	-5141.7
## + V17_J1_7	1	2.11	1668.4	-5141.6
## + V30_J1_7	1	2.09	1668.4	-5141.6
## + V20_J1_5	1	2.01	1668.5	-5141.3
## + V15_J2_3	1	1.99	1668.5	-5141.3
## + V13_2_J2_2	1	1.97	1668.5	-5141.2
## + V15_J1_5	1	1.93	1668.6	-5141.1
## + V13_3_J2_4	1	1.87	1668.7	-5140.9
## + V24_J1_3	1	1.86	1668.7	-5140.9
## + V19_J1_3	1	1.86	1668.7	-5140.9

## + V13_3_J1_1	1	1.82	1668.7	-5140.7
## + V16_J2_4	1	1.82	1668.7	-5140.7
## + V19_J1_2	1	1.79	1668.7	-5140.7
## + V20_J1_1	1	1.77	1668.8	-5140.6
## + V2_J1_7	1	1.69	1668.8	-5140.3
## + V17_J1_2	1	1.64	1668.9	-5140.2
## + V13_2_J2_7	1	1.63	1668.9	-5140.1
## + V23_J2_2	1	1.63	1668.9	-5140.1
## + V5_J1_3	1	1.60	1668.9	-5140.1
## + V24_J2_3	1	1.55	1669.0	-5139.9
## + V23_J1_7	1	1.54	1669.0	-5139.9
## + V24_J2_1	1	1.45	1669.1	-5139.6
## + V2_J1_6	1	1.42	1669.1	-5139.5
## + V20_J2_4	1	1.36	1669.2	-5139.3
## + V20_J1_4	1	1.35	1669.2	-5139.3
## + V15_J2_5	1	1.32	1669.2	-5139.2
## + V14_J2_2	1	1.28	1669.2	-5139.1
## + V23_J1_2	1	1.24	1669.3	-5138.9
## + V13_1_J2_1	1	1.16	1669.4	-5138.7
## + V16_J1_1	1	1.10	1669.4	-5138.5
## + V13_3_J1_3	1	1.10	1669.4	-5138.5
## + V12_1_2_J2_1	1	1.08	1669.4	-5138.4
## + V16_J1_4	1	1.07	1669.5	-5138.4
## + V1_J1_1	1	1.05	1669.5	-5138.3
## + V13_1_J1_6	1	1.02	1669.5	-5138.3
## + V20_J1_7	1	1.01	1669.5	-5138.2
## + V5_J1_2	1	1.00	1669.5	-5138.2
## + V5_J1_7	1	0.98	1669.5	-5138.1
## + V3_J1_7	1	0.95	1669.6	-5138.0
## + V14_J1_6	1	0.93	1669.6	-5138.0
## + V13_1_J1_1	1	0.93	1669.6	-5138.0
## + V12_1_2_J1_1	1	0.91	1669.6	-5137.9
## + V5_J2_7	1	0.87	1669.7	-5137.8
## + V16_J1_2	1	0.81	1669.7	-5137.6
## + V13_1_J1_4	1	0.80	1669.7	-5137.6
## + V12_1_2_J2_5	1	0.73	1669.8	-5137.4
## + V13_2_J2_1	1	0.73	1669.8	-5137.3
## + V1_J1_4	1	0.73	1669.8	-5137.3
## + V1_J2_4	1	0.70	1669.8	-5137.3
## + V20_J2_7	1	0.69	1669.8	-5137.2
## + V30_J2_7	1	0.68	1669.8	-5137.2
## + V23_J2_5	1	0.67	1669.8	-5137.2
## + V13_3_J2_3	1	0.62	1669.9	-5137.0
## + V13_1_J2_2	1	0.60	1669.9	-5137.0
## + V16_J1_7	1	0.59	1669.9	-5136.9
## + V24_J1_4	1	0.57	1670.0	-5136.8
## + V23_J2_3	1	0.56	1670.0	-5136.8
## + V29_J2_4	1	0.54	1670.0	-5136.7
## + V23_J2_4	1	0.53	1670.0	-5136.7
## + V17_J2_4	1	0.51	1670.0	-5136.7
## + V2_J1_1	1	0.49	1670.0	-5136.6
## + V2_J2_4	1	0.47	1670.0	-5136.5
## + V2_J1_2	1	0.47	1670.0	-5136.5
## + V4_J1_2	1	0.45	1670.1	-5136.5

## + V16_J1_6	1	0.44	1670.1	-5136.5
## + V30_J1_4	1	0.42	1670.1	-5136.4
## + V13_3_J2_7	1	0.39	1670.1	-5136.3
## + V19_J2_2	1	0.36	1670.2	-5136.2
## + V19_J1_6	1	0.36	1670.2	-5136.2
## + V26_J1_7	1	0.34	1670.2	-5136.1
## + V12_1_2_J2_3	1	0.34	1670.2	-5136.1
## + V13_3_J2_2	1	0.33	1670.2	-5136.1
## + V26_J2_7	1	0.32	1670.2	-5136.1
## + V3_J1_6	1	0.32	1670.2	-5136.1
## + V5_J1_1	1	0.31	1670.2	-5136.0
## + V17_J1_1	1	0.30	1670.2	-5136.0
## + V23_J1_6	1	0.28	1670.2	-5136.0
## + V13_3_J2_1	1	0.23	1670.3	-5135.8
## + V30_J2_4	1	0.22	1670.3	-5135.8
## + V3_J2_7	1	0.22	1670.3	-5135.8
## + V13_3_J1_5	1	0.22	1670.3	-5135.8
## + V17_J2_3	1	0.21	1670.3	-5135.7
## + V4_J1_1	1	0.20	1670.3	-5135.7
## + V13_2_J2_4	1	0.20	1670.3	-5135.7
## + V1_J2_1	1	0.20	1670.3	-5135.7
## + V5_J2_2	1	0.20	1670.3	-5135.7
## + V16_J1_5	1	0.19	1670.3	-5135.7
## + V3_J1_3	1	0.18	1670.3	-5135.6
## + V14_J1_1	1	0.18	1670.3	-5135.6
## + V19_J1_7	1	0.16	1670.4	-5135.6
## + V17_J1_4	1	0.15	1670.4	-5135.5
## + V17_J2_5	1	0.14	1670.4	-5135.5
## + V1_J1_6	1	0.14	1670.4	-5135.5
## + V3_J2_2	1	0.14	1670.4	-5135.5
## + V29_J1_2	1	0.13	1670.4	-5135.5
## + V2_J1_4	1	0.12	1670.4	-5135.5
## + V2_J2_5	1	0.10	1670.4	-5135.4
## + V17_J1_6	1	0.10	1670.4	-5135.4
## + V13_1_J2_7	1	0.10	1670.4	-5135.4
## + V4_J2_2	1	0.08	1670.5	-5135.3
## + V24_J1_2	1	0.06	1670.5	-5135.3
## + V13_1_J2_3	1	0.05	1670.5	-5135.2
## + V4_J1_6	1	0.05	1670.5	-5135.2
## + V13_3_J1_4	1	0.04	1670.5	-5135.2
## + V2_J2_1	1	0.03	1670.5	-5135.2
## + V30_J2_1	1	0.03	1670.5	-5135.2
## + V3_J1_1	1	0.03	1670.5	-5135.2
## + V4_J1_7	1	0.03	1670.5	-5135.2
## + V26_J1_2	1	0.03	1670.5	-5135.2
## + V29_J2_5	1	0.02	1670.5	-5135.1
## + V13_3_J1_7	1	0.02	1670.5	-5135.1
## + V20_J2_5	1	0.02	1670.5	-5135.1
## + V23_J1_5	1	0.02	1670.5	-5135.1
## + V24_J2_2	1	0.01	1670.5	-5135.1
## + V29_J2_7	1	0.01	1670.5	-5135.1
## + V24_J2_7	1	0.01	1670.5	-5135.1
## + V13_2_J1_1	1	0.00	1670.5	-5135.1
## + V16_J2_5	1	0.00	1670.5	-5135.1

## + V19_J2_7	1	0.00	1670.5	-5135.1
## + V23_J1_1	1	0.00	1670.5	-5135.1
## + V14_J1_7	1	0.00	1670.5	-5135.1
## + V24_J2_4	1	0.00	1670.5	-5135.1
## + V12_1_2_J2_4	1	0.00	1670.5	-5135.1
## + V15_J2_4	1	0.00	1670.5	-5135.1
## - V1_J1_5	1	11.23	1681.8	-5113.5
## - V12_1_2_J1_2	1	11.70	1682.2	-5112.1
## - V4_J1_3	1	12.89	1683.4	-5108.4
## - V17_J1_5	1	13.54	1684.1	-5106.4
## - V24_J2_5	1	13.96	1684.5	-5105.1
## - V13_1_J1_3	1	14.34	1684.9	-5103.9
## - V29_J1_5	1	14.96	1685.5	-5102.0
## - V29_J1_3	1	15.72	1686.2	-5099.6
## - V20_J2_1	1	18.49	1689.0	-5091.1
## - V12_1_2_J1_6	1	19.03	1689.5	-5089.5
## - V16_J2_3	1	19.78	1690.3	-5087.1
## - V14_J2_5	1	20.99	1691.5	-5083.4
## - V12_1_2_J1_7	1	21.15	1691.7	-5082.9
## - V26_J1_5	1	22.49	1693.0	-5078.8
## - V15_J1_1	1	25.08	1695.6	-5070.8
## - V20_J2_3	1	25.17	1695.7	-5070.6
## - V23_J2_7	1	25.71	1696.2	-5068.9
## - V4_J1_5	1	27.28	1697.8	-5064.1
## - V30_J2_5	1	27.60	1698.1	-5063.1
## - V30_J1_5	1	27.98	1698.5	-5062.0
## - V12_1_2_J2_7	1	28.67	1699.2	-5059.9
## - V3_J1_5	1	29.28	1699.8	-5058.0
## - V15_J1_2	1	29.99	1700.5	-5055.8
## - V14_J2_1	1	30.45	1701.0	-5054.4
## - V2_J2_7	1	30.53	1701.0	-5054.2
## - V12_1_2_J1_3	1	31.26	1701.8	-5051.9
## - V2_J2_2	1	32.24	1702.8	-5048.9
## - V30_J1_3	1	32.83	1703.3	-5047.1
## - V19_J2_5	1	36.69	1707.2	-5035.4
## - V19_J2_4	1	37.05	1707.6	-5034.3
## - V16_J2_7	1	37.70	1708.2	-5032.3
## - V4_J2_7	1	39.02	1709.5	-5028.3
## - V14_J2_4	1	41.53	1712.0	-5020.7
## - V5_J1_4	1	42.59	1713.1	-5017.4
## - V15_J1_6	1	42.78	1713.3	-5016.9
## - V13_2_J1_7	1	45.39	1715.9	-5008.9
## - V4_J1_4	1	50.00	1720.5	-4995.0
## - V1_J1_3	1	51.66	1722.2	-4990.0
## - V26_J1_4	1	51.97	1722.5	-4989.0
## - V16_J1_3	1	55.61	1726.1	-4978.0
## - V19_J2_1	1	56.85	1727.4	-4974.3
## - V30_J1_2	1	57.34	1727.9	-4972.9
## - V1_J2_2	1	57.89	1728.4	-4971.2
## - V15_J1_7	1	58.88	1729.4	-4968.2
## - V17_J2_7	1	60.92	1731.4	-4962.1
## - V5_J2_1	1	61.79	1732.3	-4959.5
## - V17_J2_2	1	62.80	1733.3	-4956.5
## - V14_J1_5	1	70.63	1741.2	-4933.0

```

## - V15_J1_3      1      70.95 1741.5 -4932.1
## - V17_J1_3      1      72.06 1742.6 -4928.7
## - V23_J1_3      1      72.20 1742.7 -4928.3
## - V30_J1_1      1      73.17 1743.7 -4925.4
## - V30_J2_2      1      74.88 1745.4 -4920.3
## - V14_J2_3      1      78.31 1748.8 -4910.1
## - V2_J1_3       1      80.87 1751.4 -4902.5
## - V1_J2_7       1      81.84 1752.4 -4899.6
## - V5_J2_3       1      89.26 1759.8 -4877.7
## - V14_J1_4      1      90.25 1760.8 -4874.7
## - V3_J1_4       1      94.50 1765.0 -4862.2
## - V12_1_2_J1_4  1     103.50 1774.0 -4835.8
## - V5_J1_5       1     106.03 1776.5 -4828.3
## - V19_J2_3      1     108.88 1779.4 -4820.0
## - V15_J2_7      1     113.90 1784.4 -4805.4
## - V4_J2_5       1     115.97 1786.5 -4799.3
## - V15_J2_2      1     127.89 1798.4 -4764.7
## - V19_J1_5      1     128.03 1798.5 -4764.3
## - V3_J2_1       1     132.88 1803.4 -4750.3
## - V3_J2_5       1     141.06 1811.6 -4726.8
## - V4_J2_1       1     141.11 1811.6 -4726.7
## - V4_J2_3       1     147.99 1818.5 -4707.0
## - V26_J2_1      1     156.53 1827.0 -4682.6
## - V4_J2_4       1     162.37 1832.9 -4666.0
## - V12_1_2_J2_2  1     172.17 1842.7 -4638.3
## - V26_J2_5      1     186.62 1857.1 -4597.7
## - V26_J2_4      1     188.08 1858.6 -4593.6
## - V19_J1_4      1     188.85 1859.4 -4591.4
## - V3_J2_4       1     203.64 1874.2 -4550.2
## - V3_J2_3       1     230.66 1901.2 -4475.8
## - V20_J2_2      1     261.00 1931.5 -4393.4
## - V5_J2_5       1     277.71 1948.2 -4348.7
## - V5_J2_4       1     313.00 1983.5 -4255.3
## - V26_J2_3      1     395.31 2065.8 -4043.9
## - V16_J2_2      1     434.84 2105.4 -3945.3
## - J             12     507.79 2178.3 -3841.2
## - V             19    1145.63 2816.2 -2552.1
##
## Step:  AIC=-5167.38
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
## V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7

```

##	Df	Sum of Sq	RSS	AIC
## + V29_J1_7	1	9.61	1650.6	-5190.9
## + V2_J1_5	1	9.49	1650.7	-5190.6
## + V24_J1_6	1	9.30	1650.9	-5190.0
## + V23_J1_4	1	9.30	1650.9	-5190.0
## + V13_1_J1_2	1	9.03	1651.1	-5189.1
## + V1_J2_5	1	8.58	1651.6	-5187.7
## + V15_J2_1	1	8.25	1651.9	-5186.6
## + V13_3_J2_5	1	7.29	1652.9	-5183.6
## + V24_J1_7	1	7.22	1653.0	-5183.4
## + V23_J2_1	1	6.94	1653.2	-5182.5
## + V14_J1_2	1	6.88	1653.3	-5182.3
## + V26_J1_3	1	6.27	1653.9	-5180.4
## + V13_1_J2_4	1	5.69	1654.5	-5178.6
## + V13_2_J1_4	1	5.53	1654.6	-5178.1
## + V13_2_J1_6	1	5.35	1654.8	-5177.5
## + V20_J1_2	1	5.35	1654.8	-5177.5
## + V29_J2_2	1	5.29	1654.9	-5177.3
## + V13_2_J1_5	1	5.13	1655.0	-5176.8
## + V16_J2_1	1	5.10	1655.1	-5176.8
## + V5_J1_6	1	4.95	1655.2	-5176.3
## + V26_J1_6	1	4.83	1655.3	-5175.9
## + V30_J2_3	1	4.57	1655.6	-5175.1
## + V20_J1_3	1	4.45	1655.7	-5174.7
## + V20_J1_6	1	4.40	1655.8	-5174.5
## + V26_J1_1	1	4.33	1655.8	-5174.3
## + V13_2_J2_5	1	4.16	1656.0	-5173.8
## + V13_1_J1_5	1	3.97	1656.2	-5173.2
## + V1_J1_7	1	3.97	1656.2	-5173.2
## + V2_J2_3	1	3.81	1656.4	-5172.7
## + V13_2_J2_3	1	3.77	1656.4	-5172.6
## + V24_J1_1	1	3.52	1656.7	-5171.8
## + V3_J1_2	1	3.28	1656.9	-5171.0
## + V17_J2_1	1	3.16	1657.0	-5170.7
## + V13_2_J1_3	1	3.15	1657.0	-5170.6
## + V15_J1_4	1	3.13	1657.0	-5170.6
## + V24_J1_5	1	3.11	1657.1	-5170.5
## + V12_1_2_J1_5	1	3.09	1657.1	-5170.4
## + V29_J1_1	1	3.05	1657.1	-5170.3
## + V30_J1_6	1	3.02	1657.2	-5170.2
## + V29_J1_4	1	2.96	1657.2	-5170.0
## + V13_3_J1_2	1	2.85	1657.3	-5169.7
## + V14_J2_7	1	2.83	1657.3	-5169.6
## + V29_J2_1	1	2.75	1657.4	-5169.4
## + V1_J1_2	1	2.71	1657.5	-5169.2
## + V29_J2_3	1	2.68	1657.5	-5169.2
## + V29_J1_6	1	2.63	1657.5	-5169.0
## + V26_J2_2	1	2.58	1657.6	-5168.8
## + V13_1_J2_5	1	2.48	1657.7	-5168.5
## + V19_J1_1	1	2.39	1657.8	-5168.2
## + V13_3_J1_6	1	2.32	1657.9	-5168.0
## + V2_J1_7	1	2.30	1657.9	-5168.0
## + V13_2_J1_2	1	2.27	1657.9	-5167.9

## + V14_J1_3	1	2.23	1658.0	-5167.7
## + V20_J1_5	1	2.14	1658.0	-5167.5
## + V1_J2_3	1	2.14	1658.0	-5167.4
## + V23_J1_7	1	2.13	1658.0	-5167.4
## <none>			1660.2	-5167.4
## + V15_J2_3	1	2.00	1658.2	-5167.0
## + V13_2_J2_2	1	1.96	1658.2	-5166.9
## + V15_J1_5	1	1.91	1658.3	-5166.7
## + V16_J2_4	1	1.90	1658.3	-5166.7
## + V24_J1_3	1	1.89	1658.3	-5166.7
## + V19_J1_2	1	1.89	1658.3	-5166.7
## + V13_3_J1_1	1	1.85	1658.3	-5166.5
## + V19_J1_3	1	1.83	1658.3	-5166.5
## + V20_J1_1	1	1.82	1658.4	-5166.4
## + V13_3_J2_4	1	1.80	1658.4	-5166.4
## + V17_J1_2	1	1.67	1658.5	-5166.0
## + V5_J1_3	1	1.63	1658.5	-5165.9
## + V24_J2_3	1	1.63	1658.5	-5165.9
## + V13_2_J2_7	1	1.62	1658.5	-5165.8
## + V23_J2_2	1	1.59	1658.6	-5165.7
## + V17_J1_7	1	1.55	1658.6	-5165.6
## + V30_J1_7	1	1.54	1658.6	-5165.6
## + V20_J1_7	1	1.47	1658.7	-5165.4
## + V2_J1_6	1	1.44	1658.7	-5165.3
## + V20_J1_4	1	1.42	1658.8	-5165.2
## + V24_J2_1	1	1.38	1658.8	-5165.1
## + V14_J2_2	1	1.38	1658.8	-5165.1
## + V3_J1_7	1	1.37	1658.8	-5165.0
## + V15_J2_5	1	1.32	1658.9	-5164.9
## + V20_J2_4	1	1.29	1658.9	-5164.8
## + V23_J1_2	1	1.26	1658.9	-5164.7
## + V13_1_J2_2	1	1.18	1659.0	-5164.4
## + V16_J1_1	1	1.13	1659.0	-5164.3
## + V12_1_2_J2_1	1	1.08	1659.1	-5164.1
## + V13_3_J1_3	1	1.07	1659.1	-5164.1
## + V1_J1_1	1	1.02	1659.2	-5163.9
## + V16_J1_4	1	1.01	1659.2	-5163.9
## + V5_J2_7	1	0.95	1659.2	-5163.7
## + V12_1_2_J1_1	1	0.94	1659.2	-5163.7
## + V5_J1_2	1	0.93	1659.2	-5163.7
## + V14_J1_6	1	0.87	1659.3	-5163.5
## + V16_J1_2	1	0.79	1659.4	-5163.2
## + V1_J1_4	1	0.78	1659.4	-5163.2
## + V1_J2_4	1	0.76	1659.4	-5163.1
## + V12_1_2_J2_5	1	0.74	1659.4	-5163.1
## + V20_J2_7	1	0.73	1659.4	-5163.0
## + V23_J2_5	1	0.72	1659.5	-5163.0
## + V13_2_J2_1	1	0.71	1659.5	-5163.0
## + V5_J1_7	1	0.63	1659.5	-5162.7
## + V30_J2_7	1	0.63	1659.5	-5162.7
## + V13_1_J2_1	1	0.63	1659.5	-5162.7
## + V23_J2_3	1	0.61	1659.6	-5162.6
## + V13_3_J2_3	1	0.57	1659.6	-5162.5
## + V23_J2_4	1	0.56	1659.6	-5162.5

## + V24_J1_4	1	0.53	1659.7	-5162.4
## + V4_J1_2	1	0.52	1659.7	-5162.4
## + V13_1_J1_6	1	0.50	1659.7	-5162.3
## + V29_J2_4	1	0.50	1659.7	-5162.3
## + V2_J1_2	1	0.49	1659.7	-5162.3
## + V2_J1_1	1	0.48	1659.7	-5162.2
## + V17_J2_4	1	0.47	1659.7	-5162.2
## + V16_J1_6	1	0.46	1659.7	-5162.2
## + V13_1_J1_1	1	0.44	1659.7	-5162.1
## + V2_J2_4	1	0.44	1659.7	-5162.1
## + V19_J2_2	1	0.41	1659.8	-5162.0
## + V13_3_J2_7	1	0.41	1659.8	-5162.0
## + V19_J1_6	1	0.40	1659.8	-5162.0
## + V13_1_J2_7	1	0.38	1659.8	-5161.9
## + V30_J1_4	1	0.37	1659.8	-5161.9
## + V13_1_J1_4	1	0.36	1659.8	-5161.9
## + V5_J1_1	1	0.35	1659.8	-5161.8
## + V12_1_2_J2_3	1	0.33	1659.8	-5161.8
## + V13_3_J2_2	1	0.32	1659.9	-5161.7
## + V17_J1_1	1	0.31	1659.9	-5161.7
## + V16_J1_7	1	0.31	1659.9	-5161.7
## + V3_J1_6	1	0.28	1659.9	-5161.6
## + V26_J2_7	1	0.28	1659.9	-5161.6
## + V23_J1_6	1	0.27	1659.9	-5161.6
## + V13_3_J1_5	1	0.25	1659.9	-5161.5
## + V16_J1_5	1	0.23	1660.0	-5161.5
## + V13_3_J2_1	1	0.21	1660.0	-5161.4
## + V14_J1_1	1	0.21	1660.0	-5161.4
## + V13_2_J2_4	1	0.20	1660.0	-5161.4
## + V3_J1_3	1	0.19	1660.0	-5161.3
## + V30_J2_4	1	0.19	1660.0	-5161.3
## + V3_J2_7	1	0.18	1660.0	-5161.3
## + V17_J2_3	1	0.18	1660.0	-5161.3
## + V17_J1_4	1	0.18	1660.0	-5161.3
## + V1_J2_1	1	0.17	1660.0	-5161.3
## + V4_J1_1	1	0.16	1660.0	-5161.3
## + V5_J2_2	1	0.16	1660.0	-5161.2
## + V26_J1_7	1	0.15	1660.0	-5161.2
## + V1_J1_6	1	0.15	1660.0	-5161.2
## + V4_J1_7	1	0.13	1660.0	-5161.2
## + V2_J2_5	1	0.12	1660.0	-5161.1
## + V29_J1_2	1	0.12	1660.1	-5161.1
## + V17_J2_5	1	0.12	1660.1	-5161.1
## + V3_J2_2	1	0.11	1660.1	-5161.1
## + V2_J1_4	1	0.10	1660.1	-5161.1
## + V17_J1_6	1	0.09	1660.1	-5161.0
## + V4_J1_6	1	0.07	1660.1	-5161.0
## + V24_J1_2	1	0.06	1660.1	-5160.9
## + V4_J2_2	1	0.05	1660.1	-5160.9
## + V13_3_J1_4	1	0.05	1660.1	-5160.9
## + V30_J2_1	1	0.04	1660.1	-5160.9
## + V19_J1_7	1	0.04	1660.1	-5160.9
## + V3_J1_1	1	0.04	1660.1	-5160.9
## + V14_J1_7	1	0.03	1660.1	-5160.9

## + V29_J2_5	1	0.03	1660.1	-5160.8
## + V23_J1_5	1	0.03	1660.2	-5160.8
## + V2_J2_1	1	0.02	1660.2	-5160.8
## + V26_J1_2	1	0.02	1660.2	-5160.8
## + V29_J2_7	1	0.01	1660.2	-5160.8
## + V24_J2_7	1	0.01	1660.2	-5160.8
## + V20_J2_5	1	0.01	1660.2	-5160.8
## + V24_J2_2	1	0.01	1660.2	-5160.8
## + V13_2_J1_1	1	0.01	1660.2	-5160.8
## + V13_3_J1_7	1	0.00	1660.2	-5160.8
## + V13_1_J2_3	1	0.00	1660.2	-5160.8
## + V24_J2_4	1	0.00	1660.2	-5160.7
## + V19_J2_7	1	0.00	1660.2	-5160.7
## + V16_J2_5	1	0.00	1660.2	-5160.7
## + V12_1_2_J2_4	1	0.00	1660.2	-5160.7
## + V23_J1_1	1	0.00	1660.2	-5160.7
## + V15_J2_4	1	0.00	1660.2	-5160.7
## - V13_1_J1_7	1	10.35	1670.5	-5141.7
## - V1_J1_5	1	11.47	1671.6	-5138.2
## - V12_1_2_J1_2	1	11.60	1671.8	-5137.8
## - V13_1_J1_3	1	12.25	1672.4	-5135.8
## - V4_J1_3	1	12.76	1672.9	-5134.2
## - V24_J2_5	1	13.75	1673.9	-5131.1
## - V17_J1_5	1	13.81	1674.0	-5131.0
## - V29_J1_5	1	15.22	1675.4	-5126.6
## - V29_J1_3	1	15.79	1676.0	-5124.8
## - V20_J2_1	1	18.24	1678.4	-5117.2
## - V12_1_2_J1_6	1	19.16	1679.3	-5114.3
## - V16_J2_3	1	19.52	1679.7	-5113.2
## - V14_J2_5	1	20.57	1680.7	-5110.0
## - V26_J1_5	1	22.00	1682.2	-5105.5
## - V12_1_2_J1_7	1	22.94	1683.1	-5102.7
## - V20_J2_3	1	24.86	1685.0	-5096.7
## - V15_J1_1	1	24.92	1685.1	-5096.5
## - V23_J2_7	1	25.58	1685.8	-5094.5
## - V4_J1_5	1	26.67	1686.8	-5091.1
## - V30_J2_5	1	27.97	1688.1	-5087.1
## - V30_J1_5	1	28.41	1688.6	-5085.8
## - V3_J1_5	1	28.73	1688.9	-5084.8
## - V12_1_2_J2_7	1	28.76	1688.9	-5084.7
## - V15_J1_2	1	29.81	1690.0	-5081.5
## - V14_J2_1	1	29.97	1690.2	-5081.0
## - V2_J2_7	1	30.37	1690.5	-5079.8
## - V12_1_2_J1_3	1	31.61	1691.8	-5075.9
## - V2_J2_2	1	32.09	1692.3	-5074.5
## - V30_J1_3	1	32.83	1693.0	-5072.2
## - V19_J2_5	1	36.14	1696.3	-5062.0
## - V19_J2_4	1	36.55	1696.7	-5060.8
## - V16_J2_7	1	37.49	1697.7	-5057.9
## - V4_J2_7	1	38.50	1698.7	-5054.8
## - V14_J2_4	1	40.99	1701.2	-5047.2
## - V5_J1_4	1	42.05	1702.2	-5043.9
## - V15_J1_6	1	42.54	1702.7	-5042.4
## - V13_2_J1_7	1	47.94	1708.1	-5026.0

```

## - V4_J1_4      1      49.31 1709.5 -5021.8
## - V26_J1_4     1      51.38 1711.5 -5015.5
## - V1_J1_3      1      51.74 1711.9 -5014.4
## - V15_J1_7     1      55.62 1715.8 -5002.7
## - V16_J1_3     1      55.71 1715.9 -5002.4
## - V19_J2_1     1      56.20 1716.4 -5000.9
## - V30_J1_2     1      57.60 1717.8 -4996.7
## - V1_J2_2      1      57.63 1717.8 -4996.6
## - V17_J2_7     1      60.64 1720.8 -4987.5
## - V5_J2_1      1      61.11 1721.3 -4986.0
## - V17_J2_2     1      62.53 1722.7 -4981.8
## - V14_J1_5     1      69.76 1729.9 -4960.0
## - V15_J1_3     1      70.38 1730.5 -4958.1
## - V17_J1_3     1      72.16 1732.3 -4952.8
## - V23_J1_3     1      72.38 1732.5 -4952.1
## - V30_J1_1     1      73.48 1733.7 -4948.8
## - V30_J2_2     1      74.50 1734.7 -4945.8
## - V14_J2_3     1      77.50 1737.7 -4936.8
## - V2_J1_3      1      81.04 1741.2 -4926.2
## - V1_J2_7      1      81.52 1741.7 -4924.8
## - V5_J2_3      1      88.39 1748.6 -4904.3
## - V14_J1_4     1      89.46 1749.6 -4901.1
## - V3_J1_4      1      93.69 1753.9 -4888.5
## - V12_1_2_J1_4 1      103.53 1763.7 -4859.4
## - V5_J1_5      1      104.96 1765.1 -4855.2
## - V19_J2_3     1      107.92 1768.1 -4846.5
## - V15_J2_7     1      113.67 1773.8 -4829.7
## - V4_J2_5      1      114.81 1775.0 -4826.3
## - V19_J1_5     1      126.86 1787.0 -4791.1
## - V15_J2_2     1      127.62 1787.8 -4788.9
## - V3_J2_1      1      131.87 1792.0 -4776.5
## - V4_J2_1      1      139.88 1800.1 -4753.4
## - V3_J2_5      1      139.96 1800.1 -4753.1
## - V4_J2_3      1      146.68 1806.8 -4733.8
## - V26_J2_1     1      155.43 1815.6 -4708.6
## - V4_J2_4      1      161.10 1821.3 -4692.4
## - V12_1_2_J2_2 1      172.43 1832.6 -4660.2
## - V26_J2_5     1      185.35 1845.5 -4623.6
## - V26_J2_4     1      186.93 1847.1 -4619.2
## - V19_J1_4     1      187.70 1847.9 -4617.0
## - V3_J2_4      1      202.44 1862.6 -4575.7
## - V3_J2_3      1      229.25 1889.4 -4501.4
## - V20_J2_2     1      260.42 1920.6 -4416.3
## - V5_J2_5      1      276.15 1936.3 -4373.9
## - V5_J2_4      1      311.50 1971.7 -4279.8
## - V26_J2_3     1      393.45 2053.6 -4068.1
## - V16_J2_2     1      434.15 2094.3 -3966.0
## - J            12      510.90 2171.1 -3851.8
## - V            19      1155.01 2815.2 -2547.3
##
## Step:  AIC=-5190.95
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##       V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##       V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +

```

```

##      V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
##      V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
##      V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
##      V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
##      V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
##      V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
##      V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
##      V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
##      V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
##      V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
##      V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
##      V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7

```

```

##
##      Df Sum of Sq      RSS      AIC
## + V2_J1_5      1      9.55 1641.0 -5214.5
## + V24_J1_6      1      9.38 1641.2 -5214.0
## + V23_J1_4      1      9.13 1641.4 -5213.2
## + V13_1_J1_2     1      9.09 1641.5 -5213.0
## + V1_J2_5        1      8.37 1642.2 -5210.7
## + V15_J2_1       1      8.27 1642.3 -5210.4
## + V13_3_J2_5     1      7.47 1643.1 -5207.9
## + V23_J2_1       1      7.10 1643.5 -5206.7
## + V14_J1_2       1      7.06 1643.5 -5206.6
## + V26_J1_3       1      6.21 1644.3 -5203.9
## + V24_J1_7       1      6.14 1644.4 -5203.7
## + V13_1_J2_4     1      5.73 1644.8 -5202.4
## + V13_2_J1_4     1      5.58 1645.0 -5201.9
## + V13_2_J1_6     1      5.31 1645.2 -5201.1
## + V20_J1_2       1      5.26 1645.3 -5200.9
## + V13_2_J1_5     1      5.18 1645.4 -5200.7
## + V26_J1_6       1      4.99 1645.6 -5200.0
## + V16_J2_1       1      4.94 1645.6 -5199.9
## + V5_J1_6        1      4.80 1645.8 -5199.5
## + V30_J2_3       1      4.77 1645.8 -5199.3
## + V26_J1_1       1      4.48 1646.1 -5198.5
## + V20_J1_3       1      4.44 1646.1 -5198.3
## + V20_J1_6       1      4.32 1646.2 -5197.9
## + V29_J1_1       1      4.32 1646.2 -5197.9
## + V13_2_J2_5     1      4.10 1646.5 -5197.2
## + V13_1_J1_5     1      4.03 1646.5 -5197.0
## + V29_J2_2       1      3.97 1646.6 -5196.8
## + V29_J1_6       1      3.82 1646.7 -5196.4
## + V13_2_J2_3     1      3.71 1646.8 -5196.0
## + V2_J2_3        1      3.67 1646.9 -5195.9
## + V24_J1_1       1      3.46 1647.1 -5195.2
## + V3_J1_2        1      3.41 1647.2 -5195.1
## + V1_J1_7        1      3.16 1647.4 -5194.3
## + V15_J1_4       1      3.13 1647.4 -5194.2
## + V24_J1_5       1      3.08 1647.5 -5194.0
## + V13_2_J1_3     1      3.05 1647.5 -5193.9
## + V17_J2_1       1      3.04 1647.5 -5193.9
## + V12_1_2_J1_5   1      3.03 1647.5 -5193.9
## + V2_J1_7        1      3.02 1647.5 -5193.8
## + V30_J1_6       1      2.95 1647.6 -5193.6

```

## + V23_J1_7	1	2.83	1647.7	-5193.2
## + V13_3_J1_2	1	2.81	1647.8	-5193.2
## + V1_J1_2	1	2.76	1647.8	-5193.0
## + V14_J2_7	1	2.69	1647.9	-5192.8
## + V13_1_J2_5	1	2.52	1648.0	-5192.3
## + V26_J2_2	1	2.45	1648.1	-5192.0
## + V13_2_J1_2	1	2.29	1648.3	-5191.5
## + V13_3_J1_6	1	2.29	1648.3	-5191.5
## + V19_J1_1	1	2.28	1648.3	-5191.5
## + V14_J1_3	1	2.19	1648.4	-5191.2
## + V20_J1_5	1	2.19	1648.4	-5191.2
## <none>			1650.6	-5190.9
## + V20_J1_7	1	2.04	1648.5	-5190.8
## + V1_J2_3	1	2.03	1648.5	-5190.7
## + V29_J1_4	1	2.02	1648.5	-5190.7
## + V15_J2_3	1	2.02	1648.5	-5190.7
## + V16_J2_4	1	2.00	1648.6	-5190.6
## + V19_J1_2	1	1.98	1648.6	-5190.6
## + V15_J1_5	1	1.97	1648.6	-5190.5
## + V13_2_J2_2	1	1.96	1648.6	-5190.5
## + V24_J1_3	1	1.92	1648.6	-5190.4
## + V3_J1_7	1	1.89	1648.7	-5190.3
## + V13_3_J1_1	1	1.88	1648.7	-5190.2
## + V20_J1_1	1	1.87	1648.7	-5190.2
## + V29_J2_1	1	1.85	1648.7	-5190.1
## + V29_J2_3	1	1.80	1648.8	-5190.0
## + V19_J1_3	1	1.80	1648.8	-5190.0
## + V13_3_J2_4	1	1.73	1648.8	-5189.8
## + V24_J2_3	1	1.72	1648.8	-5189.7
## + V17_J1_2	1	1.71	1648.8	-5189.7
## + V5_J1_3	1	1.66	1648.9	-5189.5
## + V13_2_J2_7	1	1.62	1648.9	-5189.4
## + V23_J2_2	1	1.54	1649.0	-5189.2
## + V20_J1_4	1	1.51	1649.0	-5189.1
## + V14_J2_2	1	1.48	1649.1	-5189.0
## + V2_J1_6	1	1.47	1649.1	-5189.0
## + V24_J2_1	1	1.30	1649.3	-5188.4
## + V15_J2_5	1	1.30	1649.3	-5188.4
## + V23_J1_2	1	1.29	1649.3	-5188.4
## + V20_J2_4	1	1.21	1649.3	-5188.1
## + V13_1_J2_2	1	1.18	1649.4	-5188.0
## + V16_J1_1	1	1.17	1649.4	-5188.0
## + V12_1_2_J2_1	1	1.06	1649.5	-5187.7
## + V30_J1_7	1	1.06	1649.5	-5187.6
## + V17_J1_7	1	1.06	1649.5	-5187.6
## + V13_3_J1_3	1	1.05	1649.5	-5187.6
## + V5_J2_7	1	1.04	1649.5	-5187.6
## + V29_J2_4	1	1.03	1649.5	-5187.6
## + V1_J1_1	1	0.99	1649.6	-5187.4
## + V12_1_2_J1_1	1	0.96	1649.6	-5187.3
## + V16_J1_4	1	0.94	1649.6	-5187.3
## + V5_J1_2	1	0.87	1649.7	-5187.0
## + V1_J1_4	1	0.84	1649.7	-5187.0
## + V1_J2_4	1	0.81	1649.8	-5186.9

## + V14_J1_6	1	0.81	1649.8	-5186.9
## + V23_J2_5	1	0.78	1649.8	-5186.8
## + V20_J2_7	1	0.78	1649.8	-5186.8
## + V12_1_2_J2_5	1	0.76	1649.8	-5186.7
## + V16_J1_2	1	0.76	1649.8	-5186.7
## + V13_2_J2_1	1	0.69	1649.9	-5186.5
## + V23_J2_3	1	0.66	1649.9	-5186.4
## + V13_1_J2_1	1	0.64	1649.9	-5186.3
## + V23_J2_4	1	0.61	1650.0	-5186.2
## + V4_J1_2	1	0.59	1650.0	-5186.2
## + V30_J2_7	1	0.58	1650.0	-5186.1
## + V13_3_J2_3	1	0.52	1650.0	-5186.0
## + V2_J1_2	1	0.51	1650.0	-5185.9
## + V13_1_J1_6	1	0.49	1650.1	-5185.8
## + V16_J1_6	1	0.48	1650.1	-5185.8
## + V24_J1_4	1	0.48	1650.1	-5185.8
## + V19_J2_2	1	0.47	1650.1	-5185.8
## + V2_J1_1	1	0.46	1650.1	-5185.7
## + V29_J1_2	1	0.44	1650.1	-5185.7
## + V19_J1_6	1	0.44	1650.1	-5185.7
## + V13_3_J2_7	1	0.43	1650.1	-5185.7
## + V17_J2_4	1	0.43	1650.1	-5185.7
## + V13_1_J1_1	1	0.43	1650.1	-5185.7
## + V2_J2_4	1	0.40	1650.2	-5185.6
## + V5_J1_1	1	0.39	1650.2	-5185.5
## + V13_1_J2_7	1	0.38	1650.2	-5185.5
## + V13_1_J1_4	1	0.37	1650.2	-5185.5
## + V5_J1_7	1	0.35	1650.2	-5185.4
## + V17_J1_1	1	0.33	1650.2	-5185.4
## + V30_J1_4	1	0.33	1650.2	-5185.3
## + V12_1_2_J2_3	1	0.32	1650.2	-5185.3
## + V4_J1_7	1	0.31	1650.2	-5185.3
## + V13_3_J2_2	1	0.30	1650.3	-5185.2
## + V23_J1_6	1	0.26	1650.3	-5185.1
## + V13_3_J1_5	1	0.26	1650.3	-5185.1
## + V3_J1_6	1	0.25	1650.3	-5185.1
## + V16_J1_5	1	0.24	1650.3	-5185.1
## + V14_J1_1	1	0.24	1650.3	-5185.1
## + V26_J2_7	1	0.23	1650.3	-5185.0
## + V17_J1_4	1	0.21	1650.3	-5185.0
## + V3_J1_3	1	0.20	1650.4	-5185.0
## + V13_2_J2_4	1	0.19	1650.4	-5184.9
## + V13_3_J2_1	1	0.18	1650.4	-5184.9
## + V1_J1_6	1	0.16	1650.4	-5184.8
## + V30_J2_4	1	0.15	1650.4	-5184.8
## + V17_J2_3	1	0.15	1650.4	-5184.8
## + V14_J1_7	1	0.15	1650.4	-5184.8
## + V2_J2_5	1	0.15	1650.4	-5184.8
## + V1_J2_1	1	0.15	1650.4	-5184.8
## + V3_J2_7	1	0.15	1650.4	-5184.8
## + V5_J2_2	1	0.13	1650.4	-5184.7
## + V4_J1_1	1	0.13	1650.4	-5184.7
## + V16_J1_7	1	0.12	1650.4	-5184.7
## + V4_J1_6	1	0.10	1650.5	-5184.6

## + V17_J2_5	1	0.09	1650.5	-5184.6
## + V2_J1_4	1	0.09	1650.5	-5184.6
## + V17_J1_6	1	0.09	1650.5	-5184.6
## + V13_3_J1_7	1	0.08	1650.5	-5184.6
## + V3_J2_2	1	0.08	1650.5	-5184.6
## + V30_J2_1	1	0.06	1650.5	-5184.5
## + V13_3_J1_4	1	0.06	1650.5	-5184.5
## + V3_J1_1	1	0.06	1650.5	-5184.5
## + V24_J1_2	1	0.05	1650.5	-5184.5
## + V29_J2_7	1	0.04	1650.5	-5184.4
## + V26_J1_7	1	0.04	1650.5	-5184.4
## + V23_J1_5	1	0.03	1650.5	-5184.4
## + V4_J2_2	1	0.03	1650.5	-5184.4
## + V24_J2_7	1	0.02	1650.5	-5184.4
## + V29_J2_5	1	0.02	1650.5	-5184.4
## + V2_J2_1	1	0.01	1650.5	-5184.4
## + V26_J1_2	1	0.01	1650.5	-5184.3
## + V13_2_J1_1	1	0.01	1650.5	-5184.3
## + V19_J2_7	1	0.00	1650.6	-5184.3
## + V24_J2_4	1	0.00	1650.6	-5184.3
## + V20_J2_5	1	0.00	1650.6	-5184.3
## + V24_J2_2	1	0.00	1650.6	-5184.3
## + V13_1_J2_3	1	0.00	1650.6	-5184.3
## + V16_J2_5	1	0.00	1650.6	-5184.3
## + V23_J1_1	1	0.00	1650.6	-5184.3
## + V12_1_2_J2_4	1	0.00	1650.6	-5184.3
## + V19_J1_7	1	0.00	1650.6	-5184.3
## + V15_J2_4	1	0.00	1650.6	-5184.3
## - V29_J1_7	1	9.61	1660.2	-5167.4
## - V12_1_2_J1_2	1	11.53	1662.1	-5161.4
## - V1_J1_5	1	11.53	1662.1	-5161.4
## - V13_1_J1_7	1	11.66	1662.2	-5161.0
## - V13_1_J1_3	1	12.06	1662.6	-5159.7
## - V4_J1_3	1	12.64	1663.2	-5157.9
## - V29_J1_5	1	13.06	1663.6	-5156.6
## - V24_J2_5	1	13.53	1664.1	-5155.1
## - V17_J1_5	1	13.87	1664.4	-5154.1
## - V20_J2_1	1	17.96	1668.5	-5141.3
## - V29_J1_3	1	18.00	1668.6	-5141.2
## - V16_J2_3	1	19.23	1669.8	-5137.4
## - V12_1_2_J1_6	1	19.26	1669.8	-5137.3
## - V14_J2_5	1	20.15	1670.7	-5134.5
## - V26_J1_5	1	21.78	1672.3	-5129.4
## - V20_J2_3	1	24.51	1675.1	-5120.9
## - V12_1_2_J1_7	1	24.79	1675.3	-5120.1
## - V15_J1_1	1	24.81	1675.4	-5120.0
## - V23_J2_7	1	25.40	1676.0	-5118.2
## - V4_J1_5	1	26.34	1676.9	-5115.3
## - V30_J2_5	1	28.34	1678.9	-5109.1
## - V3_J1_5	1	28.47	1679.0	-5108.7
## - V30_J1_5	1	28.56	1679.1	-5108.4
## - V12_1_2_J2_7	1	28.80	1679.4	-5107.6
## - V14_J2_1	1	29.49	1680.0	-5105.5
## - V15_J1_2	1	29.67	1680.2	-5104.9

## - V2_J2_7	1	30.16	1680.7	-5103.4
## - V2_J2_2	1	31.89	1682.5	-5098.1
## - V12_1_2_J1_3	1	31.93	1682.5	-5097.9
## - V30_J1_3	1	32.85	1683.4	-5095.1
## - V19_J2_5	1	35.58	1686.1	-5086.7
## - V19_J2_4	1	36.04	1686.6	-5085.3
## - V16_J2_7	1	37.21	1687.8	-5081.6
## - V4_J2_7	1	37.96	1688.5	-5079.3
## - V14_J2_4	1	40.46	1691.0	-5071.7
## - V5_J1_4	1	41.50	1692.1	-5068.4
## - V15_J1_6	1	42.37	1692.9	-5065.8
## - V4_J1_4	1	48.61	1699.2	-5046.7
## - V13_2_J1_7	1	50.58	1701.1	-5040.6
## - V26_J1_4	1	50.77	1701.3	-5040.0
## - V1_J1_3	1	51.83	1702.4	-5036.8
## - V15_J1_7	1	52.42	1703.0	-5035.0
## - V19_J2_1	1	55.53	1706.1	-5025.5
## - V16_J1_3	1	55.77	1706.3	-5024.8
## - V1_J2_2	1	57.35	1707.9	-5020.0
## - V30_J1_2	1	57.87	1708.4	-5018.4
## - V17_J2_7	1	60.33	1710.9	-5010.9
## - V5_J2_1	1	60.42	1711.0	-5010.6
## - V17_J2_2	1	62.23	1712.8	-5005.1
## - V14_J1_5	1	69.36	1719.9	-4983.5
## - V15_J1_3	1	69.86	1720.4	-4982.0
## - V17_J1_3	1	72.27	1722.8	-4974.7
## - V23_J1_3	1	72.53	1723.1	-4973.9
## - V30_J1_1	1	73.80	1724.4	-4970.1
## - V30_J2_2	1	74.08	1724.6	-4969.3
## - V14_J2_3	1	76.67	1727.2	-4961.5
## - V1_J2_7	1	81.16	1731.7	-4948.0
## - V2_J1_3	1	81.18	1731.7	-4947.9
## - V5_J2_3	1	87.51	1738.1	-4928.9
## - V14_J1_4	1	88.66	1739.2	-4925.5
## - V3_J1_4	1	92.87	1743.4	-4912.9
## - V12_1_2_J1_4	1	103.46	1754.0	-4881.4
## - V5_J1_5	1	104.46	1755.0	-4878.5
## - V19_J2_3	1	106.94	1757.5	-4871.1
## - V15_J2_7	1	113.55	1764.1	-4851.6
## - V4_J2_5	1	113.64	1764.2	-4851.4
## - V19_J1_5	1	126.31	1776.9	-4814.1
## - V15_J2_2	1	127.47	1778.0	-4810.7
## - V3_J2_1	1	130.85	1781.4	-4800.9
## - V4_J2_1	1	138.64	1789.2	-4778.2
## - V3_J2_5	1	138.85	1789.4	-4777.6
## - V4_J2_3	1	145.34	1795.9	-4758.7
## - V26_J2_1	1	154.31	1804.9	-4732.8
## - V4_J2_4	1	159.81	1810.4	-4717.0
## - V12_1_2_J2_2	1	172.54	1823.1	-4680.6
## - V26_J2_5	1	184.06	1834.6	-4647.8
## - V26_J2_4	1	185.76	1836.3	-4643.0
## - V19_J1_4	1	186.53	1837.1	-4640.8
## - V3_J2_4	1	201.23	1851.8	-4599.4
## - V3_J2_3	1	227.81	1878.4	-4525.3

```

## - V20_J2_2      1      259.68 1910.2 -4437.8
## - V5_J2_5       1      274.57 1925.1 -4397.4
## - V5_J2_4       1      309.98 1960.5 -4302.6
## - V26_J2_3      1      391.54 2042.1 -4090.7
## - V16_J2_2      1      433.26 2083.8 -3985.5
## - J             12      513.74 2164.3 -3861.5
## - V             19     1161.91 2812.5 -2545.7
##
## Step:  AIC=-5214.5
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
## V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5
##
##
##           Df Sum of Sq  RSS    AIC
## + V23_J1_4      1      9.35 1631.7 -5237.6
## + V13_1_J1_2     1      9.33 1631.7 -5237.5
## + V24_J1_6       1      9.16 1631.8 -5237.0
## + V1_J2_5        1      8.35 1632.7 -5234.4
## + V15_J2_1       1      7.90 1633.1 -5233.0
## + V13_3_J2_5     1      7.30 1633.7 -5231.0
## + V14_J1_2       1      7.02 1634.0 -5230.1
## + V23_J2_1       1      6.92 1634.1 -5229.8
## + V26_J1_3       1      6.14 1634.9 -5227.4
## + V24_J1_7       1      5.93 1635.1 -5226.7
## + V13_1_J2_4     1      5.56 1635.4 -5225.5
## + V20_J1_2       1      5.46 1635.5 -5225.2
## + V13_2_J1_4     1      5.40 1635.6 -5225.0
## + V13_2_J1_6     1      5.14 1635.9 -5224.2
## + V16_J2_1       1      5.12 1635.9 -5224.1
## + V26_J1_6       1      4.95 1636.1 -5223.6
## + V5_J1_6        1      4.84 1636.2 -5223.2
## + V30_J2_3       1      4.75 1636.3 -5222.9
## + V20_J1_6       1      4.50 1636.5 -5222.2
## + V26_J1_1       1      4.46 1636.5 -5222.0
## + V12_1_2_J1_5   1      4.36 1636.7 -5221.7
## + V20_J1_3       1      4.34 1636.7 -5221.6
## + V29_J1_1       1      4.33 1636.7 -5221.6
## + V13_2_J2_5     1      4.24 1636.8 -5221.3
## + V29_J2_2       1      4.03 1637.0 -5220.6
## + V13_2_J2_3     1      3.87 1637.1 -5220.1
## + V29_J1_6       1      3.84 1637.2 -5220.1
## + V13_2_J1_5     1      3.76 1637.2 -5219.8

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## + V24_J1_1	1	3.59	1637.4	-5219.2
## + V3_J1_2	1	3.38	1637.6	-5218.6
## + V20_J1_5	1	3.37	1637.6	-5218.6
## + V15_J1_4	1	3.37	1637.6	-5218.6
## + V1_J1_7	1	3.14	1637.9	-5217.8
## + V17_J2_1	1	3.03	1638.0	-5217.5
## + V13_2_J1_3	1	2.99	1638.0	-5217.3
## + V23_J1_7	1	2.98	1638.0	-5217.3
## + V30_J1_6	1	2.96	1638.0	-5217.3
## + V13_3_J1_2	1	2.93	1638.1	-5217.1
## + V13_1_J1_5	1	2.79	1638.2	-5216.7
## + V1_J1_2	1	2.76	1638.2	-5216.6
## + V14_J2_7	1	2.65	1638.4	-5216.3
## + V2_J2_3	1	2.51	1638.5	-5215.8
## + V2_J1_6	1	2.43	1638.6	-5215.6
## + V26_J2_2	1	2.41	1638.6	-5215.5
## + V13_2_J1_2	1	2.41	1638.6	-5215.5
## + V13_1_J2_5	1	2.41	1638.6	-5215.5
## + V13_3_J1_6	1	2.39	1638.6	-5215.4
## + V19_J1_1	1	2.30	1638.7	-5215.2
## + V20_J1_7	1	2.19	1638.8	-5214.8
## + V14_J1_3	1	2.15	1638.9	-5214.7
## <none>			1641.0	-5214.5
## + V1_J2_3	1	2.03	1639.0	-5214.3
## + V29_J1_4	1	2.01	1639.0	-5214.2
## + V2_J1_7	1	2.00	1639.0	-5214.2
## + V24_J1_5	1	2.00	1639.0	-5214.2
## + V24_J1_3	1	1.96	1639.0	-5214.1
## + V19_J1_2	1	1.96	1639.0	-5214.1
## + V3_J1_7	1	1.93	1639.1	-5214.0
## + V13_2_J2_2	1	1.91	1639.1	-5213.9
## + V16_J2_4	1	1.89	1639.1	-5213.9
## + V29_J2_1	1	1.84	1639.2	-5213.7
## + V15_J2_3	1	1.83	1639.2	-5213.7
## + V13_3_J2_4	1	1.80	1639.2	-5213.6
## + V13_3_J1_1	1	1.80	1639.2	-5213.6
## + V29_J2_3	1	1.78	1639.2	-5213.5
## + V20_J1_1	1	1.77	1639.2	-5213.5
## + V19_J1_3	1	1.76	1639.2	-5213.4
## + V17_J1_2	1	1.71	1639.3	-5213.3
## + V5_J1_3	1	1.70	1639.3	-5213.2
## + V24_J2_3	1	1.63	1639.4	-5213.0
## + V23_J2_2	1	1.59	1639.4	-5212.9
## + V13_2_J2_7	1	1.58	1639.4	-5212.9
## + V14_J2_2	1	1.51	1639.5	-5212.6
## + V15_J2_5	1	1.46	1639.5	-5212.5
## + V20_J1_4	1	1.41	1639.6	-5212.3
## + V24_J2_1	1	1.38	1639.6	-5212.2
## + V20_J2_4	1	1.29	1639.7	-5212.0
## + V13_1_J2_2	1	1.23	1639.8	-5211.8
## + V23_J1_2	1	1.20	1639.8	-5211.7
## + V12_1_2_J2_1	1	1.20	1639.8	-5211.7
## + V15_J1_5	1	1.15	1639.8	-5211.5
## + V2_J1_2	1	1.11	1639.9	-5211.4

## + V12_1_2_J1_1	1	1.10	1639.9	-5211.3
## + V16_J1_1	1	1.08	1639.9	-5211.3
## + V5_J2_7	1	1.06	1639.9	-5211.2
## + V17_J1_7	1	1.04	1640.0	-5211.2
## + V30_J1_7	1	1.04	1640.0	-5211.2
## + V29_J2_4	1	1.03	1640.0	-5211.1
## + V16_J1_4	1	1.03	1640.0	-5211.1
## + V13_3_J1_3	1	1.02	1640.0	-5211.1
## + V1_J1_1	1	0.98	1640.0	-5211.0
## + V5_J1_2	1	0.89	1640.1	-5210.7
## + V1_J1_4	1	0.84	1640.2	-5210.5
## + V16_J1_2	1	0.84	1640.2	-5210.5
## + V14_J1_6	1	0.82	1640.2	-5210.5
## + V1_J2_4	1	0.82	1640.2	-5210.5
## + V13_2_J2_1	1	0.75	1640.2	-5210.3
## + V13_3_J1_5	1	0.75	1640.2	-5210.2
## + V20_J2_7	1	0.74	1640.3	-5210.2
## + V23_J2_5	1	0.72	1640.3	-5210.2
## + V16_J1_5	1	0.71	1640.3	-5210.1
## + V12_1_2_J2_5	1	0.65	1640.4	-5209.9
## + V23_J2_3	1	0.60	1640.4	-5209.8
## + V13_1_J2_1	1	0.59	1640.4	-5209.7
## + V4_J1_2	1	0.58	1640.4	-5209.7
## + V13_3_J2_3	1	0.57	1640.4	-5209.7
## + V23_J2_4	1	0.56	1640.5	-5209.6
## + V30_J2_7	1	0.56	1640.5	-5209.6
## + V2_J2_5	1	0.54	1640.5	-5209.6
## + V24_J1_4	1	0.53	1640.5	-5209.6
## + V19_J2_2	1	0.49	1640.5	-5209.4
## + V29_J1_2	1	0.45	1640.5	-5209.3
## + V13_1_J1_6	1	0.43	1640.6	-5209.2
## + V19_J1_6	1	0.43	1640.6	-5209.2
## + V16_J1_6	1	0.42	1640.6	-5209.2
## + V17_J2_4	1	0.42	1640.6	-5209.2
## + V13_3_J2_7	1	0.41	1640.6	-5209.2
## + V13_1_J2_7	1	0.41	1640.6	-5209.1
## + V12_1_2_J2_3	1	0.40	1640.6	-5209.1
## + V5_J1_1	1	0.39	1640.6	-5209.1
## + V13_1_J1_1	1	0.38	1640.6	-5209.1
## + V5_J1_7	1	0.34	1640.7	-5208.9
## + V17_J1_1	1	0.33	1640.7	-5208.9
## + V30_J1_4	1	0.33	1640.7	-5208.9
## + V13_1_J1_4	1	0.33	1640.7	-5208.9
## + V4_J1_7	1	0.32	1640.7	-5208.9
## + V13_3_J2_2	1	0.31	1640.7	-5208.9
## + V23_J1_6	1	0.30	1640.7	-5208.8
## + V23_J1_5	1	0.28	1640.7	-5208.8
## + V3_J1_6	1	0.25	1640.8	-5208.7
## + V14_J1_1	1	0.23	1640.8	-5208.6
## + V26_J2_7	1	0.22	1640.8	-5208.6
## + V13_2_J2_4	1	0.22	1640.8	-5208.6
## + V3_J1_3	1	0.22	1640.8	-5208.5
## + V13_3_J2_1	1	0.21	1640.8	-5208.5
## + V17_J1_4	1	0.21	1640.8	-5208.5

## + V14_J1_7	1	0.16	1640.8	-5208.4
## + V1_J1_6	1	0.16	1640.8	-5208.4
## + V17_J2_3	1	0.15	1640.8	-5208.3
## + V30_J2_4	1	0.15	1640.8	-5208.3
## + V1_J2_1	1	0.14	1640.9	-5208.3
## + V3_J2_7	1	0.14	1640.9	-5208.3
## + V4_J1_1	1	0.13	1640.9	-5208.3
## + V5_J2_2	1	0.12	1640.9	-5208.2
## + V2_J1_1	1	0.12	1640.9	-5208.2
## + V13_3_J1_7	1	0.11	1640.9	-5208.2
## + V4_J1_6	1	0.09	1640.9	-5208.2
## + V17_J2_5	1	0.09	1640.9	-5208.2
## + V16_J1_7	1	0.09	1640.9	-5208.1
## + V17_J1_6	1	0.09	1640.9	-5208.1
## + V2_J2_4	1	0.08	1640.9	-5208.1
## + V3_J2_2	1	0.07	1640.9	-5208.1
## + V24_J1_2	1	0.07	1640.9	-5208.1
## + V30_J2_1	1	0.06	1640.9	-5208.1
## + V3_J1_1	1	0.06	1641.0	-5208.0
## + V2_J2_1	1	0.05	1641.0	-5208.0
## + V13_3_J1_4	1	0.04	1641.0	-5208.0
## + V29_J2_7	1	0.04	1641.0	-5208.0
## + V26_J1_7	1	0.03	1641.0	-5208.0
## + V4_J2_2	1	0.02	1641.0	-5207.9
## + V29_J2_5	1	0.02	1641.0	-5207.9
## + V13_2_J1_1	1	0.01	1641.0	-5207.9
## + V24_J2_7	1	0.01	1641.0	-5207.9
## + V26_J1_2	1	0.01	1641.0	-5207.9
## + V20_J2_5	1	0.01	1641.0	-5207.9
## + V13_1_J2_3	1	0.01	1641.0	-5207.9
## + V19_J2_7	1	0.01	1641.0	-5207.9
## + V24_J2_2	1	0.01	1641.0	-5207.9
## + V12_1_2_J2_4	1	0.00	1641.0	-5207.9
## + V15_J2_4	1	0.00	1641.0	-5207.9
## + V2_J1_4	1	0.00	1641.0	-5207.9
## + V24_J2_4	1	0.00	1641.0	-5207.9
## + V23_J1_1	1	0.00	1641.0	-5207.9
## + V16_J2_5	1	0.00	1641.0	-5207.9
## + V19_J1_7	1	0.00	1641.0	-5207.9
## - V2_J1_5	1	9.55	1650.6	-5190.9
## - V29_J1_7	1	9.67	1650.7	-5190.6
## - V12_1_2_J1_2	1	11.15	1652.2	-5185.9
## - V13_1_J1_7	1	11.92	1652.9	-5183.5
## - V13_1_J1_3	1	11.95	1653.0	-5183.4
## - V4_J1_3	1	12.54	1653.5	-5181.6
## - V1_J1_5	1	13.63	1654.6	-5178.1
## - V24_J2_5	1	13.74	1654.8	-5177.8
## - V29_J1_5	1	15.26	1656.3	-5173.0
## - V17_J1_5	1	16.15	1657.2	-5170.2
## - V29_J1_3	1	17.88	1658.9	-5164.8
## - V20_J2_1	1	18.25	1659.2	-5163.6
## - V26_J1_5	1	18.85	1659.8	-5161.8
## - V16_J2_3	1	19.55	1660.5	-5159.6
## - V12_1_2_J1_6	1	19.74	1660.7	-5159.0

## - V14_J2_5	1	20.19	1661.2	-5157.6
## - V4_J1_5	1	23.11	1664.1	-5148.4
## - V15_J1_1	1	24.29	1665.3	-5144.7
## - V20_J2_3	1	24.87	1665.9	-5142.9
## - V3_J1_5	1	25.07	1666.1	-5142.3
## - V12_1_2_J1_7	1	25.37	1666.4	-5141.3
## - V23_J2_7	1	25.55	1666.5	-5140.8
## - V2_J2_7	1	26.72	1667.7	-5137.1
## - V30_J2_5	1	28.34	1669.3	-5132.1
## - V2_J2_2	1	28.35	1669.4	-5132.1
## - V15_J1_2	1	29.07	1670.1	-5129.8
## - V12_1_2_J2_7	1	29.20	1670.2	-5129.4
## - V14_J2_1	1	29.54	1670.5	-5128.4
## - V30_J1_5	1	31.64	1672.7	-5121.8
## - V12_1_2_J1_3	1	32.33	1673.3	-5119.7
## - V30_J1_3	1	32.68	1673.7	-5118.6
## - V19_J2_5	1	35.63	1676.6	-5109.4
## - V19_J2_4	1	36.06	1677.1	-5108.1
## - V16_J2_7	1	37.45	1678.5	-5103.8
## - V4_J2_7	1	37.79	1678.8	-5102.7
## - V14_J2_4	1	40.48	1681.5	-5094.4
## - V5_J1_4	1	41.58	1682.6	-5091.0
## - V15_J1_6	1	41.65	1682.7	-5090.8
## - V4_J1_4	1	48.63	1689.6	-5069.3
## - V26_J1_4	1	50.86	1691.9	-5062.4
## - V13_2_J1_7	1	51.11	1692.1	-5061.7
## - V15_J1_7	1	51.56	1692.6	-5060.3
## - V1_J1_3	1	51.59	1692.6	-5060.2
## - V19_J2_1	1	55.60	1696.6	-5047.9
## - V16_J1_3	1	56.04	1697.0	-5046.5
## - V1_J2_2	1	57.11	1698.1	-5043.2
## - V30_J1_2	1	57.82	1698.8	-5041.1
## - V17_J2_7	1	60.08	1701.1	-5034.2
## - V5_J2_1	1	60.49	1701.5	-5032.9
## - V17_J2_2	1	61.98	1703.0	-5028.3
## - V14_J1_5	1	63.76	1704.8	-5022.9
## - V15_J1_3	1	69.26	1710.3	-5006.2
## - V17_J1_3	1	71.98	1713.0	-4997.9
## - V23_J1_3	1	72.75	1713.8	-4995.6
## - V30_J1_1	1	73.80	1714.8	-4992.4
## - V30_J2_2	1	73.85	1714.9	-4992.2
## - V2_J1_3	1	75.26	1716.3	-4988.0
## - V14_J2_3	1	76.80	1717.8	-4983.3
## - V1_J2_7	1	80.87	1721.9	-4971.0
## - V5_J2_3	1	87.64	1728.7	-4950.6
## - V14_J1_4	1	88.77	1729.8	-4947.2
## - V3_J1_4	1	92.99	1734.0	-4934.5
## - V5_J1_5	1	97.39	1738.4	-4921.3
## - V12_1_2_J1_4	1	104.52	1745.5	-4900.1
## - V19_J2_3	1	107.09	1748.1	-4892.4
## - V15_J2_7	1	112.75	1753.8	-4875.6
## - V4_J2_5	1	113.64	1754.6	-4873.0
## - V19_J1_5	1	118.41	1759.4	-4858.8
## - V15_J2_2	1	126.61	1767.6	-4834.6

```

## - V3_J2_1      1      130.95 1772.0 -4821.9
## - V4_J2_1      1      138.64 1779.7 -4799.4
## - V3_J2_5      1      138.95 1780.0 -4798.5
## - V4_J2_3      1      145.41 1786.4 -4779.6
## - V26_J2_1     1      154.42 1795.4 -4753.5
## - V4_J2_4      1      159.76 1800.8 -4738.0
## - V12_1_2_J2_2 1      173.51 1814.5 -4698.5
## - V26_J2_5     1      184.17 1825.2 -4668.0
## - V26_J2_4     1      185.82 1826.8 -4663.3
## - V19_J1_4     1      186.69 1827.7 -4660.8
## - V3_J2_4      1      201.29 1842.3 -4619.5
## - V3_J2_3      1      228.02 1869.0 -4544.6
## - V20_J2_2     1      260.29 1901.3 -4455.5
## - V5_J2_5      1      274.70 1915.7 -4416.3
## - V5_J2_4      1      310.05 1951.1 -4321.2
## - V26_J2_3     1      391.83 2032.8 -4107.7
## - V16_J2_2     1      434.06 2075.1 -4000.8
## - J            12      523.26 2164.3 -3854.9
## - V            19     1163.02 2804.0 -2554.7
##
## Step: AIC=-5237.58
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
## V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
## V23_J1_4
##
##
##      Df Sum of Sq  RSS    AIC
## + V24_J1_6      1      9.30 1622.4 -5260.7
## + V13_1_J1_2     1      9.17 1622.5 -5260.3
## + V15_J2_1       1      8.17 1623.5 -5257.0
## + V1_J2_5        1      8.17 1623.5 -5257.0
## + V13_3_J2_5     1      7.42 1624.2 -5254.7
## + V14_J1_2       1      7.03 1624.6 -5253.4
## + V26_J1_3       1      6.20 1625.5 -5250.7
## + V24_J1_7       1      6.06 1625.6 -5250.3
## + V13_1_J2_4     1      5.66 1626.0 -5249.0
## + V23_J2_1       1      5.44 1626.2 -5248.3
## + V20_J1_2       1      5.32 1626.3 -5247.9
## + V13_2_J1_6     1      5.25 1626.4 -5247.7
## + V16_J2_1       1      5.00 1626.7 -5246.9
## + V30_J2_3       1      4.95 1626.7 -5246.7
## + V26_J1_6       1      4.95 1626.7 -5246.7

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## + V5_J1_6	1	4.84	1626.8	-5246.4
## + V26_J1_1	1	4.47	1627.2	-5245.2
## + V20_J1_3	1	4.42	1627.2	-5245.1
## + V12_1_2_J1_5	1	4.41	1627.2	-5245.0
## + V20_J1_6	1	4.38	1627.3	-5244.9
## + V15_J1_4	1	4.38	1627.3	-5244.9
## + V13_2_J1_4	1	4.29	1627.4	-5244.6
## + V29_J2_2	1	4.21	1627.4	-5244.4
## + V29_J1_1	1	4.20	1627.5	-5244.3
## + V23_J1_7	1	4.16	1627.5	-5244.2
## + V13_2_J2_5	1	4.14	1627.5	-5244.2
## + V13_2_J2_3	1	3.77	1627.9	-5243.0
## + V29_J1_6	1	3.73	1627.9	-5242.9
## + V13_2_J1_5	1	3.62	1628.0	-5242.5
## + V20_J1_5	1	3.53	1628.1	-5242.2
## + V24_J1_1	1	3.49	1628.2	-5242.1
## + V3_J1_2	1	3.39	1628.3	-5241.8
## + V1_J1_7	1	3.27	1628.4	-5241.4
## + V13_2_J1_3	1	3.03	1628.6	-5240.6
## + V17_J2_1	1	2.93	1628.7	-5240.3
## + V1_J1_2	1	2.87	1628.8	-5240.1
## + V13_3_J1_2	1	2.85	1628.8	-5240.0
## + V30_J1_6	1	2.81	1628.8	-5239.9
## + V14_J2_7	1	2.70	1629.0	-5239.6
## + V13_1_J1_5	1	2.67	1629.0	-5239.4
## + V2_J1_6	1	2.52	1629.1	-5239.0
## + V13_1_J2_5	1	2.49	1629.2	-5238.9
## + V23_J2_2	1	2.44	1629.2	-5238.7
## + V2_J2_3	1	2.41	1629.2	-5238.6
## + V26_J2_2	1	2.36	1629.3	-5238.5
## + V13_2_J1_2	1	2.33	1629.3	-5238.4
## + V13_3_J1_6	1	2.33	1629.3	-5238.4
## + V19_J1_1	1	2.29	1629.4	-5238.3
## + V14_J1_3	1	2.18	1629.5	-5237.9
## + V20_J1_7	1	2.09	1629.6	-5237.6
## <none>			1631.7	-5237.6
## + V13_2_J2_2	1	2.02	1629.6	-5237.4
## + V16_J2_4	1	1.97	1629.7	-5237.2
## + V19_J1_2	1	1.97	1629.7	-5237.2
## + V15_J2_3	1	1.96	1629.7	-5237.2
## + V1_J2_3	1	1.94	1629.7	-5237.1
## + V24_J1_3	1	1.93	1629.7	-5237.1
## + V3_J1_7	1	1.92	1629.7	-5237.1
## + V29_J2_1	1	1.92	1629.7	-5237.1
## + V2_J1_7	1	1.90	1629.8	-5237.0
## + V24_J1_5	1	1.90	1629.8	-5237.0
## + V29_J2_3	1	1.86	1629.8	-5236.9
## + V13_3_J1_1	1	1.86	1629.8	-5236.9
## + V20_J1_1	1	1.85	1629.8	-5236.8
## + V17_J1_2	1	1.80	1629.9	-5236.7
## + V19_J1_3	1	1.79	1629.9	-5236.6
## + V13_3_J2_4	1	1.76	1629.9	-5236.6
## + V24_J2_3	1	1.69	1630.0	-5236.3
## + V5_J1_3	1	1.67	1630.0	-5236.3

## + V16_J1_4	1	1.63	1630.0	-5236.2
## + V13_2_J2_7	1	1.60	1630.1	-5236.0
## + V14_J2_2	1	1.55	1630.1	-5235.9
## + V29_J1_4	1	1.35	1630.3	-5235.3
## + V15_J2_5	1	1.34	1630.3	-5235.2
## + V24_J2_1	1	1.33	1630.3	-5235.2
## + V20_J2_4	1	1.24	1630.4	-5234.9
## + V12_1_2_J2_1	1	1.21	1630.4	-5234.8
## + V2_J1_2	1	1.18	1630.5	-5234.7
## + V16_J1_1	1	1.15	1630.5	-5234.6
## + V30_J1_7	1	1.14	1630.5	-5234.6
## + V13_1_J2_2	1	1.14	1630.5	-5234.6
## + V17_J1_7	1	1.12	1630.5	-5234.5
## + V12_1_2_J1_1	1	1.10	1630.6	-5234.4
## + V13_3_J1_3	1	1.04	1630.6	-5234.3
## + V5_J2_7	1	1.03	1630.6	-5234.2
## + V15_J1_5	1	1.02	1630.6	-5234.2
## + V24_J1_4	1	0.99	1630.7	-5234.1
## + V29_J2_4	1	0.98	1630.7	-5234.1
## + V1_J1_1	1	0.92	1630.7	-5233.9
## + V5_J1_2	1	0.88	1630.8	-5233.8
## + V20_J1_4	1	0.87	1630.8	-5233.7
## + V1_J2_4	1	0.87	1630.8	-5233.7
## + V14_J1_6	1	0.82	1630.8	-5233.6
## + V13_3_J1_5	1	0.81	1630.8	-5233.5
## + V16_J1_5	1	0.79	1630.9	-5233.5
## + V16_J1_2	1	0.78	1630.9	-5233.4
## + V20_J2_7	1	0.76	1630.9	-5233.4
## + V23_J1_6	1	0.74	1630.9	-5233.3
## + V13_2_J2_1	1	0.72	1630.9	-5233.2
## + V30_J1_4	1	0.68	1631.0	-5233.1
## + V12_1_2_J2_5	1	0.65	1631.0	-5233.0
## + V23_J1_2	1	0.64	1631.0	-5233.0
## + V13_1_J2_1	1	0.62	1631.0	-5232.9
## + V2_J2_5	1	0.59	1631.1	-5232.8
## + V4_J1_2	1	0.58	1631.1	-5232.8
## + V13_3_J2_3	1	0.54	1631.1	-5232.7
## + V30_J2_7	1	0.52	1631.1	-5232.6
## + V19_J2_2	1	0.51	1631.1	-5232.6
## + V13_1_J1_6	1	0.47	1631.2	-5232.4
## + V16_J1_6	1	0.46	1631.2	-5232.4
## + V1_J1_4	1	0.44	1631.2	-5232.3
## + V19_J1_6	1	0.43	1631.2	-5232.3
## + V13_3_J2_7	1	0.42	1631.2	-5232.3
## + V13_1_J1_1	1	0.42	1631.2	-5232.3
## + V29_J1_2	1	0.41	1631.2	-5232.3
## + V12_1_2_J2_3	1	0.41	1631.2	-5232.2
## + V13_1_J2_7	1	0.39	1631.3	-5232.2
## + V5_J1_1	1	0.39	1631.3	-5232.2
## + V17_J2_4	1	0.39	1631.3	-5232.2
## + V17_J1_1	1	0.37	1631.3	-5232.1
## + V5_J1_7	1	0.34	1631.3	-5232.0
## + V4_J1_7	1	0.32	1631.3	-5232.0
## + V23_J2_5	1	0.29	1631.4	-5231.9

## + V13_3_J2_2	1	0.27	1631.4	-5231.8
## + V3_J1_6	1	0.25	1631.4	-5231.8
## + V26_J2_7	1	0.24	1631.4	-5231.7
## + V14_J1_1	1	0.24	1631.4	-5231.7
## + V23_J2_3	1	0.22	1631.4	-5231.6
## + V3_J1_3	1	0.21	1631.5	-5231.6
## + V13_2_J2_4	1	0.20	1631.5	-5231.6
## + V23_J2_4	1	0.19	1631.5	-5231.6
## + V13_3_J2_1	1	0.19	1631.5	-5231.6
## + V1_J1_6	1	0.19	1631.5	-5231.5
## + V14_J1_7	1	0.16	1631.5	-5231.5
## + V3_J2_7	1	0.15	1631.5	-5231.4
## + V4_J1_1	1	0.13	1631.5	-5231.4
## + V17_J2_3	1	0.13	1631.5	-5231.4
## + V1_J2_1	1	0.12	1631.5	-5231.3
## + V30_J2_4	1	0.12	1631.5	-5231.3
## + V23_J1_1	1	0.11	1631.5	-5231.3
## + V5_J2_2	1	0.11	1631.5	-5231.3
## + V16_J1_7	1	0.11	1631.5	-5231.3
## + V13_1_J1_4	1	0.10	1631.6	-5231.3
## + V2_J1_1	1	0.09	1631.6	-5231.2
## + V13_3_J1_7	1	0.09	1631.6	-5231.2
## + V4_J1_6	1	0.09	1631.6	-5231.2
## + V30_J2_1	1	0.09	1631.6	-5231.2
## + V17_J2_5	1	0.07	1631.6	-5231.2
## + V2_J2_4	1	0.07	1631.6	-5231.2
## + V17_J1_6	1	0.07	1631.6	-5231.2
## + V3_J2_2	1	0.07	1631.6	-5231.2
## + V2_J2_1	1	0.06	1631.6	-5231.1
## + V3_J1_1	1	0.06	1631.6	-5231.1
## + V24_J1_2	1	0.05	1631.6	-5231.1
## + V23_J1_5	1	0.05	1631.6	-5231.1
## + V2_J1_4	1	0.04	1631.6	-5231.1
## + V17_J1_4	1	0.04	1631.6	-5231.1
## + V26_J1_7	1	0.03	1631.6	-5231.1
## + V29_J2_7	1	0.03	1631.6	-5231.1
## + V4_J2_2	1	0.02	1631.6	-5231.0
## + V24_J2_7	1	0.01	1631.6	-5231.0
## + V26_J1_2	1	0.01	1631.6	-5231.0
## + V29_J2_5	1	0.01	1631.6	-5231.0
## + V13_2_J1_1	1	0.01	1631.7	-5231.0
## + V12_1_2_J2_4	1	0.01	1631.7	-5231.0
## + V20_J2_5	1	0.00	1631.7	-5231.0
## + V19_J2_7	1	0.00	1631.7	-5231.0
## + V13_1_J2_3	1	0.00	1631.7	-5231.0
## + V24_J2_4	1	0.00	1631.7	-5231.0
## + V13_3_J1_4	1	0.00	1631.7	-5231.0
## + V24_J2_2	1	0.00	1631.7	-5231.0
## + V15_J2_4	1	0.00	1631.7	-5230.9
## + V16_J2_5	1	0.00	1631.7	-5230.9
## + V19_J1_7	1	0.00	1631.7	-5230.9
## - V23_J1_4	1	9.35	1641.0	-5214.5
## - V29_J1_7	1	9.50	1641.2	-5214.0
## - V2_J1_5	1	9.78	1641.4	-5213.2

## - V12_1_2_J1_2	1	11.16	1642.8	-5208.8
## - V13_1_J1_7	1	11.75	1643.4	-5206.9
## - V13_1_J1_3	1	12.03	1643.7	-5206.0
## - V4_J1_3	1	12.63	1644.3	-5204.1
## - V24_J2_5	1	13.59	1645.2	-5201.1
## - V1_J1_5	1	13.90	1645.5	-5200.1
## - V29_J1_5	1	15.53	1647.2	-5195.0
## - V17_J1_5	1	16.44	1648.1	-5192.1
## - V29_J1_3	1	17.76	1649.4	-5187.9
## - V20_J2_1	1	18.05	1649.7	-5187.0
## - V26_J1_5	1	18.76	1650.4	-5184.8
## - V16_J2_3	1	19.32	1651.0	-5183.0
## - V12_1_2_J1_6	1	19.75	1651.4	-5181.6
## - V14_J2_5	1	20.18	1651.8	-5180.3
## - V4_J1_5	1	23.05	1654.7	-5171.3
## - V20_J2_3	1	24.62	1656.3	-5166.3
## - V15_J1_1	1	24.68	1656.3	-5166.2
## - V3_J1_5	1	24.97	1656.6	-5165.3
## - V12_1_2_J1_7	1	25.35	1657.0	-5164.0
## - V2_J2_7	1	26.60	1658.2	-5160.1
## - V2_J2_2	1	27.93	1659.6	-5155.9
## - V23_J2_7	1	28.16	1659.8	-5155.2
## - V30_J2_5	1	28.73	1660.4	-5153.5
## - V12_1_2_J2_7	1	29.36	1661.0	-5151.5
## - V15_J1_2	1	29.50	1661.2	-5151.0
## - V14_J2_1	1	29.55	1661.2	-5150.9
## - V30_J1_5	1	32.15	1663.8	-5142.8
## - V30_J1_3	1	32.38	1664.0	-5142.0
## - V12_1_2_J1_3	1	32.45	1664.1	-5141.8
## - V19_J2_5	1	35.61	1667.3	-5131.9
## - V19_J2_4	1	36.10	1667.8	-5130.4
## - V16_J2_7	1	37.31	1669.0	-5126.6
## - V4_J2_7	1	38.00	1669.7	-5124.5
## - V14_J2_4	1	40.52	1672.2	-5116.7
## - V15_J1_6	1	42.13	1673.8	-5111.6
## - V5_J1_4	1	44.39	1676.0	-5104.6
## - V13_2_J1_7	1	50.76	1682.4	-5084.9
## - V1_J1_3	1	51.35	1683.0	-5083.1
## - V4_J1_4	1	51.63	1683.3	-5082.2
## - V15_J1_7	1	52.15	1683.8	-5080.6
## - V26_J1_4	1	53.93	1685.6	-5075.1
## - V19_J2_1	1	55.62	1687.3	-5069.9
## - V16_J1_3	1	55.81	1687.5	-5069.3
## - V1_J2_2	1	56.51	1688.2	-5067.2
## - V30_J1_2	1	58.39	1690.0	-5061.4
## - V17_J2_7	1	59.88	1691.5	-5056.8
## - V5_J2_1	1	60.51	1692.2	-5054.9
## - V17_J2_2	1	61.36	1693.0	-5052.3
## - V14_J1_5	1	63.59	1695.2	-5045.4
## - V15_J1_3	1	69.72	1701.4	-5026.6
## - V17_J1_3	1	71.70	1703.3	-5020.6
## - V30_J2_2	1	73.00	1704.7	-5016.6
## - V30_J1_1	1	74.44	1706.1	-5012.2
## - V2_J1_3	1	74.97	1706.6	-5010.6

```

## - V23_J1_3      1      76.77 1708.4 -5005.1
## - V14_J2_3      1      76.78 1708.4 -5005.1
## - V1_J2_7       1      80.64 1712.3 -4993.4
## - V5_J2_3       1      87.63 1719.3 -4972.2
## - V14_J1_4      1      92.69 1724.3 -4956.9
## - V3_J1_4       1      96.99 1728.6 -4944.0
## - V5_J1_5       1      97.18 1728.8 -4943.4
## - V19_J2_3      1     107.08 1738.7 -4913.7
## - V12_1_2_J1_4  1     108.72 1740.4 -4908.8
## - V15_J2_7      1     113.25 1744.9 -4895.3
## - V4_J2_5       1     113.70 1745.3 -4893.9
## - V19_J1_5      1     118.18 1749.8 -4880.6
## - V15_J2_2      1     127.71 1759.4 -4852.4
## - V3_J2_1       1     130.98 1762.6 -4842.7
## - V4_J2_1       1     138.77 1770.4 -4819.8
## - V3_J2_5       1     138.92 1770.6 -4819.3
## - V4_J2_3       1     145.50 1777.2 -4800.0
## - V26_J2_1      1     154.45 1786.1 -4773.9
## - V4_J2_4       1     159.94 1791.6 -4758.0
## - V12_1_2_J2_2  1     173.20 1804.9 -4719.6
## - V26_J2_5      1     184.14 1815.8 -4688.2
## - V26_J2_4      1     185.90 1817.5 -4683.2
## - V19_J1_4      1     192.02 1823.7 -4665.7
## - V3_J2_4       1     201.37 1833.0 -4639.1
## - V3_J2_3       1     228.00 1859.7 -4564.1
## - V20_J2_2      1     259.04 1890.7 -4478.0
## - V5_J2_5       1     274.66 1906.3 -4435.2
## - V5_J2_4       1     310.15 1941.8 -4339.3
## - V26_J2_3      1     391.80 2023.5 -4125.1
## - V16_J2_2      1     432.41 2064.1 -4021.8
## - J             12     512.65 2144.3 -3896.5
## - V             19    1170.90 2802.6 -2550.8
##
## Step:  AIC=-5260.65
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
## V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
## V23_J1_4 + V24_J1_6
##
##
##           Df Sum of Sq    RSS    AIC
## + V13_1_J1_2      1      9.23 1613.1 -5283.7
## + V1_J2_5         1      8.21 1614.2 -5280.4

```

## + V15_J2_1	1	8.16	1614.2	-5280.2
## + V24_J1_7	1	7.63	1614.7	-5278.5
## + V13_3_J2_5	1	7.43	1614.9	-5277.9
## + V14_J1_2	1	6.90	1615.5	-5276.2
## + V26_J1_3	1	6.41	1616.0	-5274.6
## + V13_2_J1_6	1	6.17	1616.2	-5273.8
## + V26_J1_6	1	5.80	1616.6	-5272.6
## + V13_1_J2_4	1	5.56	1616.8	-5271.9
## + V20_J1_2	1	5.38	1617.0	-5271.3
## + V23_J2_1	1	5.31	1617.0	-5271.1
## + V16_J2_1	1	5.13	1617.2	-5270.5
## + V30_J2_3	1	4.79	1617.6	-5269.4
## + V15_J1_4	1	4.39	1618.0	-5268.1
## + V26_J1_1	1	4.37	1618.0	-5268.0
## + V12_1_2_J1_5	1	4.33	1618.0	-5267.9
## + V20_J1_3	1	4.30	1618.1	-5267.8
## + V29_J1_1	1	4.26	1618.1	-5267.7
## + V23_J1_7	1	4.22	1618.1	-5267.6
## + V13_2_J1_4	1	4.20	1618.2	-5267.5
## + V13_2_J2_5	1	4.13	1618.2	-5267.3
## + V29_J2_2	1	4.13	1618.2	-5267.3
## + V5_J1_6	1	4.10	1618.3	-5267.2
## + V13_2_J2_3	1	3.86	1618.5	-5266.4
## + V13_2_J1_5	1	3.76	1618.6	-5266.1
## + V20_J1_6	1	3.65	1618.7	-5265.7
## + V20_J1_5	1	3.38	1619.0	-5264.9
## + V3_J1_2	1	3.30	1619.1	-5264.6
## + V1_J1_7	1	3.20	1619.2	-5264.3
## + V2_J1_6	1	3.15	1619.2	-5264.1
## + V29_J1_6	1	3.06	1619.3	-5263.8
## + V17_J2_1	1	3.04	1619.3	-5263.8
## + V13_2_J1_3	1	2.95	1619.4	-5263.5
## + V13_3_J1_2	1	2.87	1619.5	-5263.2
## + V1_J1_2	1	2.81	1619.5	-5263.0
## + V14_J2_7	1	2.81	1619.5	-5263.0
## + V13_1_J1_5	1	2.79	1619.6	-5263.0
## + V24_J1_1	1	2.53	1619.8	-5262.1
## + V2_J2_3	1	2.52	1619.8	-5262.1
## + V23_J2_2	1	2.50	1619.9	-5262.0
## + V24_J2_3	1	2.50	1619.9	-5262.0
## + V13_1_J2_5	1	2.49	1619.9	-5262.0
## + V26_J2_2	1	2.46	1619.9	-5261.9
## + V19_J1_1	1	2.37	1620.0	-5261.6
## + V13_2_J1_2	1	2.35	1620.0	-5261.6
## + V14_J1_3	1	2.31	1620.0	-5261.4
## + V30_J1_6	1	2.24	1620.1	-5261.2
## + V20_J1_7	1	2.13	1620.2	-5260.8
## <none>			1622.4	-5260.7
## + V1_J2_3	1	2.04	1620.3	-5260.6
## + V3_J1_7	1	1.99	1620.4	-5260.4
## + V13_2_J2_2	1	1.98	1620.4	-5260.4
## + V2_J1_7	1	1.95	1620.4	-5260.3
## + V15_J2_3	1	1.95	1620.4	-5260.3
## + V19_J1_3	1	1.90	1620.5	-5260.1

## + V19_J1_2	1	1.90	1620.5	-5260.1
## + V16_J2_4	1	1.89	1620.5	-5260.1
## + V29_J2_1	1	1.84	1620.5	-5259.9
## + V13_3_J1_1	1	1.84	1620.5	-5259.9
## + V20_J1_1	1	1.81	1620.5	-5259.8
## + V13_3_J2_4	1	1.81	1620.5	-5259.8
## + V13_3_J1_6	1	1.79	1620.6	-5259.8
## + V29_J2_3	1	1.78	1620.6	-5259.7
## + V17_J1_2	1	1.75	1620.6	-5259.6
## + V16_J1_4	1	1.71	1620.7	-5259.5
## + V5_J1_3	1	1.56	1620.8	-5259.0
## + V13_2_J2_7	1	1.56	1620.8	-5259.0
## + V14_J2_2	1	1.47	1620.9	-5258.7
## + V20_J2_4	1	1.29	1621.1	-5258.2
## + V29_J1_4	1	1.29	1621.1	-5258.2
## + V15_J2_5	1	1.29	1621.1	-5258.1
## + V24_J1_5	1	1.24	1621.1	-5258.0
## + V24_J1_3	1	1.24	1621.1	-5258.0
## + V12_1_2_J2_1	1	1.22	1621.1	-5257.9
## + V13_1_J2_2	1	1.18	1621.2	-5257.8
## + V2_J1_2	1	1.14	1621.2	-5257.7
## + V16_J1_1	1	1.12	1621.2	-5257.6
## + V30_J1_7	1	1.10	1621.3	-5257.5
## + V17_J1_7	1	1.08	1621.3	-5257.5
## + V12_1_2_J1_1	1	1.08	1621.3	-5257.5
## + V15_J1_5	1	1.06	1621.3	-5257.4
## + V29_J2_4	1	1.03	1621.3	-5257.3
## + V13_3_J1_3	1	0.99	1621.4	-5257.2
## + V5_J2_7	1	0.96	1621.4	-5257.1
## + V1_J1_1	1	0.95	1621.4	-5257.1
## + V5_J1_2	1	0.93	1621.4	-5257.0
## + V20_J1_4	1	0.82	1621.5	-5256.7
## + V1_J2_4	1	0.82	1621.5	-5256.6
## + V16_J1_2	1	0.81	1621.5	-5256.6
## + V24_J2_1	1	0.77	1621.6	-5256.5
## + V13_1_J1_6	1	0.76	1621.6	-5256.5
## + V13_2_J2_1	1	0.75	1621.6	-5256.4
## + V16_J1_6	1	0.75	1621.6	-5256.4
## + V13_3_J1_5	1	0.75	1621.6	-5256.4
## + V30_J1_4	1	0.74	1621.6	-5256.4
## + V20_J2_7	1	0.73	1621.6	-5256.3
## + V16_J1_5	1	0.71	1621.7	-5256.3
## + V19_J1_6	1	0.70	1621.7	-5256.3
## + V12_1_2_J2_5	1	0.68	1621.7	-5256.2
## + V23_J1_2	1	0.61	1621.7	-5256.0
## + V13_1_J2_1	1	0.58	1621.8	-5255.9
## + V2_J2_5	1	0.58	1621.8	-5255.9
## + V13_3_J2_3	1	0.57	1621.8	-5255.9
## + V30_J2_7	1	0.56	1621.8	-5255.8
## + V14_J1_6	1	0.53	1621.8	-5255.7
## + V4_J1_2	1	0.52	1621.8	-5255.7
## + V24_J1_4	1	0.52	1621.8	-5255.7
## + V19_J2_2	1	0.47	1621.9	-5255.5
## + V23_J1_6	1	0.46	1621.9	-5255.5

## + V29_J1_2	1	0.43	1621.9	-5255.4
## + V17_J2_4	1	0.42	1621.9	-5255.4
## + V13_1_J2_7	1	0.42	1621.9	-5255.4
## + V12_1_2_J2_3	1	0.41	1621.9	-5255.3
## + V13_1_J1_1	1	0.40	1622.0	-5255.3
## + V13_3_J2_7	1	0.40	1622.0	-5255.3
## + V1_J1_4	1	0.40	1622.0	-5255.3
## + V1_J1_6	1	0.38	1622.0	-5255.2
## + V4_J1_7	1	0.37	1622.0	-5255.2
## + V5_J1_1	1	0.36	1622.0	-5255.2
## + V17_J1_1	1	0.35	1622.0	-5255.1
## + V5_J1_7	1	0.31	1622.0	-5255.0
## + V23_J2_5	1	0.29	1622.1	-5255.0
## + V13_3_J2_2	1	0.29	1622.1	-5254.9
## + V26_J2_7	1	0.27	1622.1	-5254.9
## + V4_J1_6	1	0.22	1622.1	-5254.7
## + V13_2_J2_4	1	0.22	1622.1	-5254.7
## + V14_J1_1	1	0.21	1622.2	-5254.7
## + V13_3_J2_1	1	0.21	1622.2	-5254.7
## + V23_J2_3	1	0.19	1622.2	-5254.6
## + V14_J1_7	1	0.18	1622.2	-5254.6
## + V3_J2_7	1	0.18	1622.2	-5254.6
## + V23_J2_4	1	0.17	1622.2	-5254.6
## + V3_J1_3	1	0.17	1622.2	-5254.6
## + V4_J1_1	1	0.16	1622.2	-5254.5
## + V24_J2_7	1	0.16	1622.2	-5254.5
## + V17_J2_3	1	0.15	1622.2	-5254.5
## + V1_J2_1	1	0.15	1622.2	-5254.5
## + V30_J2_4	1	0.14	1622.2	-5254.5
## + V5_J2_2	1	0.13	1622.2	-5254.4
## + V23_J1_1	1	0.12	1622.2	-5254.4
## + V24_J2_4	1	0.11	1622.2	-5254.4
## + V3_J1_6	1	0.11	1622.2	-5254.4
## + V2_J1_1	1	0.10	1622.2	-5254.4
## + V16_J1_7	1	0.10	1622.3	-5254.3
## + V13_3_J1_7	1	0.10	1622.3	-5254.3
## + V2_J2_4	1	0.08	1622.3	-5254.3
## + V13_1_J1_4	1	0.08	1622.3	-5254.3
## + V3_J2_2	1	0.08	1622.3	-5254.3
## + V17_J2_5	1	0.08	1622.3	-5254.3
## + V30_J2_1	1	0.07	1622.3	-5254.2
## + V24_J2_2	1	0.06	1622.3	-5254.2
## + V2_J1_4	1	0.06	1622.3	-5254.2
## + V2_J2_1	1	0.05	1622.3	-5254.2
## + V3_J1_1	1	0.05	1622.3	-5254.2
## + V29_J2_7	1	0.04	1622.3	-5254.2
## + V23_J1_5	1	0.04	1622.3	-5254.1
## + V4_J2_2	1	0.03	1622.3	-5254.1
## + V17_J1_4	1	0.03	1622.3	-5254.1
## + V26_J1_7	1	0.02	1622.3	-5254.1
## + V26_J1_2	1	0.02	1622.3	-5254.1
## + V29_J2_5	1	0.01	1622.3	-5254.1
## + V13_2_J1_1	1	0.01	1622.3	-5254.1
## + V13_1_J2_3	1	0.01	1622.3	-5254.0

## + V17_J1_6	1	0.01	1622.3	-5254.0
## + V12_1_2_J2_4	1	0.01	1622.3	-5254.0
## + V20_J2_5	1	0.01	1622.3	-5254.0
## + V13_3_J1_4	1	0.01	1622.3	-5254.0
## + V24_J1_2	1	0.00	1622.4	-5254.0
## + V19_J1_7	1	0.00	1622.4	-5254.0
## + V19_J2_7	1	0.00	1622.4	-5254.0
## + V15_J2_4	1	0.00	1622.4	-5254.0
## + V16_J2_5	1	0.00	1622.4	-5254.0
## - V24_J1_6	1	9.30	1631.7	-5237.6
## - V23_J1_4	1	9.49	1631.8	-5237.0
## - V2_J1_5	1	9.55	1631.9	-5236.8
## - V29_J1_7	1	9.58	1631.9	-5236.7
## - V12_1_2_J1_2	1	11.21	1633.6	-5231.5
## - V24_J2_5	1	11.70	1634.1	-5229.9
## - V13_1_J1_7	1	11.81	1634.2	-5229.6
## - V13_1_J1_3	1	11.88	1634.2	-5229.3
## - V4_J1_3	1	12.93	1635.3	-5226.0
## - V1_J1_5	1	13.62	1636.0	-5223.8
## - V29_J1_5	1	15.26	1637.6	-5218.6
## - V17_J1_5	1	16.14	1638.5	-5215.8
## - V29_J1_3	1	17.97	1640.3	-5210.0
## - V12_1_2_J1_6	1	18.19	1640.5	-5209.3
## - V20_J2_1	1	18.24	1640.6	-5209.2
## - V26_J1_5	1	19.11	1641.5	-5206.4
## - V16_J2_3	1	19.55	1641.9	-5205.0
## - V14_J2_5	1	20.29	1642.6	-5202.7
## - V4_J1_5	1	23.55	1645.9	-5192.4
## - V15_J1_1	1	24.77	1647.1	-5188.5
## - V20_J2_3	1	24.86	1647.2	-5188.2
## - V12_1_2_J1_7	1	25.28	1647.6	-5186.9
## - V3_J1_5	1	25.38	1647.7	-5186.6
## - V2_J2_7	1	26.81	1649.2	-5182.0
## - V2_J2_2	1	28.14	1650.5	-5177.9
## - V23_J2_7	1	28.35	1650.7	-5177.2
## - V30_J2_5	1	28.63	1651.0	-5176.3
## - V12_1_2_J2_7	1	29.34	1651.7	-5174.1
## - V15_J1_2	1	29.61	1652.0	-5173.3
## - V14_J2_1	1	29.88	1652.2	-5172.4
## - V30_J1_5	1	31.71	1654.1	-5166.6
## - V12_1_2_J1_3	1	32.50	1654.9	-5164.1
## - V30_J1_3	1	32.70	1655.1	-5163.5
## - V19_J2_5	1	35.76	1658.1	-5153.9
## - V19_J2_4	1	36.45	1658.8	-5151.8
## - V16_J2_7	1	37.56	1659.9	-5148.3
## - V4_J2_7	1	38.46	1660.8	-5145.5
## - V14_J2_4	1	40.89	1663.2	-5137.9
## - V15_J1_6	1	44.28	1666.6	-5127.3
## - V5_J1_4	1	44.80	1667.2	-5125.6
## - V13_2_J1_7	1	50.87	1673.2	-5106.7
## - V1_J1_3	1	51.73	1674.1	-5104.1
## - V4_J1_4	1	52.23	1674.6	-5102.5
## - V15_J1_7	1	52.28	1674.6	-5102.4
## - V26_J1_4	1	54.38	1676.7	-5095.8


```

## - V19_J2_1      1      56.07 1678.4 -5090.6
## - V16_J1_3      1      56.19 1678.5 -5090.2
## - V1_J2_2       1      56.81 1679.2 -5088.3
## - V30_J1_2      1      58.14 1680.5 -5084.2
## - V17_J2_7      1      60.21 1682.6 -5077.8
## - V5_J2_1       1      60.98 1683.3 -5075.4
## - V17_J2_2      1      61.67 1684.0 -5073.3
## - V14_J1_5      1      64.24 1686.6 -5065.3
## - V15_J1_3      1      69.67 1692.0 -5048.7
## - V17_J1_3      1      72.15 1694.5 -5041.0
## - V30_J2_2      1      73.37 1695.7 -5037.3
## - V30_J1_1      1      74.15 1696.5 -5034.9
## - V2_J1_3       1      75.43 1697.8 -5031.0
## - V23_J1_3      1      77.19 1699.5 -5025.6
## - V14_J2_3      1      77.35 1699.7 -5025.1
## - V1_J2_7       1      81.02 1703.4 -5013.9
## - V5_J2_3       1      88.23 1710.6 -4991.9
## - V14_J1_4      1      93.28 1715.6 -4976.6
## - V3_J1_4       1      97.59 1720.0 -4963.6
## - V5_J1_5       1      97.98 1720.3 -4962.4
## - V19_J2_3      1     107.74 1730.1 -4932.9
## - V12_1_2_J1_4  1     108.79 1731.1 -4929.8
## - V15_J2_7      1     113.32 1735.7 -4916.2
## - V4_J2_5       1     114.19 1736.5 -4913.6
## - V19_J1_5      1     119.06 1741.4 -4899.0
## - V15_J2_2      1     127.81 1750.2 -4873.0
## - V3_J2_1       1     131.67 1754.0 -4861.5
## - V3_J2_5       1     139.20 1761.6 -4839.2
## - V4_J2_1       1     139.73 1762.1 -4837.7
## - V4_J2_3       1     146.52 1768.9 -4817.7
## - V26_J2_1      1     155.20 1777.6 -4792.2
## - V4_J2_4       1     160.93 1783.3 -4775.5
## - V12_1_2_J2_2  1     173.14 1795.5 -4740.0
## - V26_J2_5      1     184.46 1806.8 -4707.3
## - V26_J2_4      1     186.68 1809.0 -4700.9
## - V19_J1_4      1     192.85 1815.2 -4683.2
## - V3_J2_4       1     202.18 1824.5 -4656.6
## - V3_J2_3       1     228.96 1851.3 -4580.8
## - V20_J2_2      1     259.56 1881.9 -4495.5
## - V5_J2_5       1     275.06 1897.4 -4452.9
## - V5_J2_4       1     311.15 1933.5 -4354.9
## - V26_J2_3      1     393.04 2015.4 -4139.2
## - V16_J2_2      1     433.18 2055.5 -4036.7
## - J              12     518.16 2140.5 -3899.0
## - V              19    1161.06 2783.4 -2579.8
##
## Step:  AIC=-5283.69
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##      V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##      V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##      V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
##      V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
##      V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
##      V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +

```

```
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
## V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
## V23_J1_4 + V24_J1_6 + V13_1_J1_2
```

```
##
## Df Sum of Sq RSS AIC
## + V15_J2_1 1 8.15 1605.0 -5303.4
## + V1_J2_5 1 8.01 1605.1 -5302.9
## + V13_3_J2_5 1 7.60 1605.5 -5301.6
## + V24_J1_7 1 7.58 1605.5 -5301.6
## + V26_J1_3 1 6.35 1606.8 -5297.6
## + V20_J1_2 1 6.35 1606.8 -5297.6
## + V13_2_J1_6 1 6.21 1606.9 -5297.1
## + V14_J1_2 1 6.00 1607.1 -5296.4
## + V26_J1_6 1 5.97 1607.2 -5296.3
## + V23_J2_1 1 5.46 1607.7 -5294.7
## + V16_J2_1 1 4.97 1608.2 -5293.1
## + V30_J2_3 1 4.85 1608.3 -5292.7
## + V26_J1_1 1 4.52 1608.6 -5291.6
## + V15_J1_4 1 4.40 1608.7 -5291.2
## + V12_1_2_J1_5 1 4.39 1608.7 -5291.2
## + V13_2_J1_4 1 4.32 1608.8 -5291.0
## + V13_1_J2_4 1 4.27 1608.9 -5290.8
## + V20_J1_3 1 4.26 1608.9 -5290.8
## + V23_J1_7 1 4.26 1608.9 -5290.8
## + V29_J1_1 1 4.22 1608.9 -5290.7
## + V29_J2_2 1 4.18 1609.0 -5290.6
## + V13_2_J2_5 1 4.02 1609.1 -5290.0
## + V5_J1_6 1 3.95 1609.2 -5289.8
## + V13_1_J1_5 1 3.90 1609.2 -5289.6
## + V13_2_J2_3 1 3.74 1609.4 -5289.1
## + V13_3_J1_2 1 3.61 1609.5 -5288.7
## + V13_2_J1_5 1 3.61 1609.5 -5288.7
## + V20_J1_6 1 3.59 1609.5 -5288.6
## + V20_J1_5 1 3.57 1609.6 -5288.6
## + V2_J1_6 1 3.20 1609.9 -5287.4
## + V1_J1_7 1 3.18 1610.0 -5287.3
## + V13_2_J1_2 1 3.03 1610.1 -5286.8
## + V29_J1_6 1 3.03 1610.1 -5286.8
## + V17_J2_1 1 2.92 1610.2 -5286.5
## + V13_2_J1_3 1 2.89 1610.2 -5286.4
## + V3_J1_2 1 2.68 1610.4 -5285.7
## + V14_J2_7 1 2.66 1610.5 -5285.6
## + V24_J2_3 1 2.62 1610.5 -5285.5
## + V24_J1_1 1 2.49 1610.6 -5285.1
## + V23_J2_2 1 2.45 1610.7 -5285.0
## + V2_J2_3 1 2.40 1610.7 -5284.8
## + V26_J2_2 1 2.33 1610.8 -5284.6
## + V14_J1_3 1 2.27 1610.8 -5284.4
```

## + V30_J1_6	1	2.27	1610.9	-5284.4
## + V19_J1_1	1	2.26	1610.9	-5284.3
## + V1_J1_2	1	2.19	1610.9	-5284.1
## + V20_J1_7	1	2.14	1611.0	-5284.0
## <none>			1613.1	-5283.7
## + V13_2_J2_2	1	2.01	1611.1	-5283.6
## + V13_1_J2_2	1	1.99	1611.1	-5283.5
## + V16_J2_4	1	1.98	1611.2	-5283.4
## + V2_J1_7	1	1.97	1611.2	-5283.4
## + V15_J2_3	1	1.95	1611.2	-5283.3
## + V3_J1_7	1	1.95	1611.2	-5283.3
## + V1_J2_3	1	1.93	1611.2	-5283.3
## + V29_J2_1	1	1.92	1611.2	-5283.3
## + V29_J2_3	1	1.87	1611.2	-5283.1
## + V19_J1_3	1	1.87	1611.3	-5283.1
## + V13_3_J1_1	1	1.86	1611.3	-5283.1
## + V20_J1_1	1	1.86	1611.3	-5283.0
## + V13_3_J1_6	1	1.77	1611.4	-5282.8
## + V13_3_J2_4	1	1.74	1611.4	-5282.7
## + V13_1_J2_5	1	1.64	1611.5	-5282.4
## + V16_J1_4	1	1.62	1611.5	-5282.3
## + V13_2_J2_7	1	1.60	1611.5	-5282.2
## + V5_J1_3	1	1.59	1611.5	-5282.2
## + V14_J2_2	1	1.57	1611.6	-5282.1
## + V19_J1_2	1	1.44	1611.7	-5281.7
## + V29_J1_4	1	1.36	1611.8	-5281.4
## + V5_J1_2	1	1.31	1611.8	-5281.3
## + V15_J2_5	1	1.29	1611.8	-5281.2
## + V17_J1_2	1	1.27	1611.9	-5281.2
## + V24_J1_3	1	1.27	1611.9	-5281.1
## + V12_1_2_J2_1	1	1.22	1611.9	-5281.0
## + V20_J2_4	1	1.22	1611.9	-5281.0
## + V16_J1_2	1	1.21	1611.9	-5281.0
## + V16_J1_1	1	1.14	1612.0	-5280.7
## + V24_J1_5	1	1.14	1612.0	-5280.7
## + V12_1_2_J1_1	1	1.12	1612.0	-5280.7
## + V17_J1_7	1	1.07	1612.1	-5280.5
## + V5_J2_7	1	1.05	1612.1	-5280.5
## + V15_J1_5	1	1.04	1612.1	-5280.4
## + V30_J1_7	1	1.03	1612.1	-5280.4
## + V29_J2_4	1	0.98	1612.2	-5280.2
## + V13_3_J1_3	1	0.96	1612.2	-5280.2
## + V13_1_J2_7	1	0.93	1612.2	-5280.1
## + V1_J1_1	1	0.93	1612.2	-5280.0
## + V20_J1_4	1	0.89	1612.2	-5279.9
## + V1_J2_4	1	0.88	1612.2	-5279.9
## + V13_3_J1_5	1	0.82	1612.3	-5279.7
## + V16_J1_5	1	0.79	1612.3	-5279.6
## + V16_J1_6	1	0.78	1612.3	-5279.6
## + V20_J2_7	1	0.77	1612.4	-5279.5
## + V2_J1_2	1	0.76	1612.4	-5279.5
## + V19_J1_6	1	0.76	1612.4	-5279.5
## + V29_J1_2	1	0.74	1612.4	-5279.4
## + V30_J1_4	1	0.72	1612.4	-5279.4

## + V24_J2_1	1	0.72	1612.4	-5279.4
## + V13_2_J2_1	1	0.71	1612.4	-5279.3
## + V12_1_2_J2_5	1	0.68	1612.5	-5279.3
## + V2_J2_5	1	0.63	1612.5	-5279.1
## + V30_J2_7	1	0.56	1612.6	-5278.9
## + V13_3_J2_3	1	0.53	1612.6	-5278.8
## + V19_J2_2	1	0.52	1612.6	-5278.7
## + V14_J1_6	1	0.48	1612.7	-5278.6
## + V24_J1_4	1	0.47	1612.7	-5278.6
## + V1_J1_4	1	0.44	1612.7	-5278.5
## + V23_J1_6	1	0.44	1612.7	-5278.5
## + V13_3_J2_7	1	0.42	1612.7	-5278.4
## + V12_1_2_J2_3	1	0.41	1612.7	-5278.4
## + V5_J1_1	1	0.40	1612.7	-5278.4
## + V1_J1_6	1	0.40	1612.7	-5278.3
## + V17_J2_4	1	0.38	1612.8	-5278.3
## + V17_J1_1	1	0.37	1612.8	-5278.2
## + V4_J1_7	1	0.34	1612.8	-5278.2
## + V23_J1_2	1	0.34	1612.8	-5278.2
## + V5_J1_7	1	0.33	1612.8	-5278.1
## + V23_J2_5	1	0.33	1612.8	-5278.1
## + V13_1_J1_6	1	0.31	1612.8	-5278.1
## + V4_J1_2	1	0.30	1612.8	-5278.0
## + V13_3_J2_2	1	0.27	1612.9	-5277.9
## + V4_J1_6	1	0.27	1612.9	-5277.9
## + V14_J1_1	1	0.25	1612.9	-5277.9
## + V26_J2_7	1	0.23	1612.9	-5277.8
## + V23_J2_3	1	0.23	1612.9	-5277.8
## + V13_1_J2_1	1	0.22	1612.9	-5277.8
## + V13_2_J2_4	1	0.20	1612.9	-5277.7
## + V23_J2_4	1	0.20	1612.9	-5277.7
## + V13_3_J2_1	1	0.18	1612.9	-5277.7
## + V3_J1_3	1	0.18	1613.0	-5277.6
## + V24_J2_7	1	0.18	1613.0	-5277.6
## + V14_J1_7	1	0.17	1613.0	-5277.6
## + V13_1_J2_3	1	0.15	1613.0	-5277.5
## + V3_J2_7	1	0.14	1613.0	-5277.5
## + V30_J2_4	1	0.14	1613.0	-5277.5
## + V24_J2_4	1	0.13	1613.0	-5277.5
## + V17_J2_3	1	0.12	1613.0	-5277.5
## + V4_J1_1	1	0.12	1613.0	-5277.5
## + V1_J2_1	1	0.12	1613.0	-5277.4
## + V23_J1_1	1	0.11	1613.0	-5277.4
## + V13_3_J1_7	1	0.10	1613.0	-5277.4
## + V5_J2_2	1	0.10	1613.0	-5277.4
## + V13_1_J1_1	1	0.10	1613.0	-5277.4
## + V2_J1_1	1	0.10	1613.0	-5277.4
## + V26_J1_2	1	0.09	1613.0	-5277.4
## + V16_J1_7	1	0.09	1613.0	-5277.4
## + V3_J1_6	1	0.08	1613.0	-5277.3
## + V30_J2_1	1	0.07	1613.0	-5277.3
## + V24_J2_2	1	0.07	1613.1	-5277.3
## + V2_J2_4	1	0.07	1613.1	-5277.3
## + V2_J2_1	1	0.06	1613.1	-5277.3

## + V3_J1_1	1	0.06	1613.1	-5277.3
## + V3_J2_2	1	0.06	1613.1	-5277.3
## + V17_J2_5	1	0.06	1613.1	-5277.2
## + V23_J1_5	1	0.05	1613.1	-5277.2
## + V2_J1_4	1	0.04	1613.1	-5277.2
## + V17_J1_4	1	0.04	1613.1	-5277.2
## + V29_J2_7	1	0.03	1613.1	-5277.2
## + V26_J1_7	1	0.03	1613.1	-5277.1
## + V24_J1_2	1	0.02	1613.1	-5277.1
## + V4_J2_2	1	0.02	1613.1	-5277.1
## + V13_2_J1_1	1	0.01	1613.1	-5277.1
## + V12_1_2_J2_4	1	0.01	1613.1	-5277.1
## + V19_J2_7	1	0.01	1613.1	-5277.1
## + V29_J2_5	1	0.01	1613.1	-5277.1
## + V17_J1_6	1	0.00	1613.1	-5277.1
## + V16_J2_5	1	0.00	1613.1	-5277.1
## + V13_3_J1_4	1	0.00	1613.1	-5277.1
## + V20_J2_5	1	0.00	1613.1	-5277.1
## + V15_J2_4	1	0.00	1613.1	-5277.1
## + V19_J1_7	1	0.00	1613.1	-5277.1
## + V13_1_J1_4	1	0.00	1613.1	-5277.1
## - V13_1_J1_2	1	9.23	1622.4	-5260.7
## - V23_J1_4	1	9.33	1622.5	-5260.3
## - V24_J1_6	1	9.36	1622.5	-5260.3
## - V29_J1_7	1	9.64	1622.8	-5259.4
## - V2_J1_5	1	9.79	1622.9	-5258.9
## - V13_1_J1_3	1	9.90	1623.0	-5258.5
## - V12_1_2_J1_2	1	9.93	1623.1	-5258.4
## - V24_J2_5	1	11.51	1624.6	-5253.4
## - V4_J1_3	1	12.81	1625.9	-5249.2
## - V13_1_J1_7	1	13.76	1626.9	-5246.2
## - V1_J1_5	1	13.91	1627.0	-5245.7
## - V29_J1_5	1	15.53	1628.7	-5240.5
## - V17_J1_5	1	16.46	1629.6	-5237.5
## - V20_J2_1	1	17.98	1631.1	-5232.7
## - V29_J1_3	1	18.07	1631.2	-5232.4
## - V12_1_2_J1_6	1	18.32	1631.5	-5231.6
## - V26_J1_5	1	18.63	1631.8	-5230.6
## - V16_J2_3	1	19.28	1632.4	-5228.5
## - V14_J2_5	1	19.87	1633.0	-5226.7
## - V4_J1_5	1	22.94	1636.1	-5216.9
## - V20_J2_3	1	24.53	1637.7	-5211.8
## - V15_J1_1	1	24.58	1637.7	-5211.7
## - V3_J1_5	1	24.82	1638.0	-5210.9
## - V12_1_2_J1_7	1	25.61	1638.7	-5208.4
## - V2_J2_7	1	26.61	1639.7	-5205.2
## - V15_J1_2	1	27.43	1640.6	-5202.6
## - V2_J2_2	1	27.98	1641.1	-5200.9
## - V23_J2_7	1	28.17	1641.3	-5200.3
## - V30_J2_5	1	28.73	1641.9	-5198.5
## - V14_J2_1	1	29.38	1642.5	-5196.5
## - V12_1_2_J2_7	1	29.43	1642.6	-5196.3
## - V30_J1_5	1	31.92	1645.0	-5188.4
## - V12_1_2_J1_3	1	32.90	1646.0	-5185.3

## - V30_J1_3	1	33.02	1646.2	-5185.0
## - V19_J2_5	1	35.20	1648.3	-5178.1
## - V19_J2_4	1	35.91	1649.0	-5175.8
## - V16_J2_7	1	37.33	1650.5	-5171.4
## - V4_J2_7	1	37.91	1651.0	-5169.5
## - V14_J2_4	1	40.32	1653.5	-5161.9
## - V15_J1_6	1	44.03	1657.2	-5150.3
## - V5_J1_4	1	44.19	1657.3	-5149.8
## - V13_2_J1_7	1	51.03	1664.2	-5128.4
## - V4_J1_4	1	51.45	1664.6	-5127.1
## - V15_J1_7	1	51.76	1664.9	-5126.1
## - V1_J1_3	1	51.85	1665.0	-5125.8
## - V26_J1_4	1	53.70	1666.8	-5120.0
## - V30_J1_2	1	55.15	1668.3	-5115.5
## - V19_J2_1	1	55.37	1668.5	-5114.8
## - V16_J1_3	1	56.33	1669.5	-5111.9
## - V1_J2_2	1	56.57	1669.7	-5111.1
## - V17_J2_7	1	59.91	1673.0	-5100.7
## - V5_J2_1	1	60.25	1673.4	-5099.6
## - V17_J2_2	1	61.42	1674.5	-5096.0
## - V14_J1_5	1	63.35	1676.5	-5090.0
## - V15_J1_3	1	69.03	1682.2	-5072.4
## - V17_J1_3	1	72.29	1685.4	-5062.4
## - V30_J2_2	1	73.45	1686.6	-5058.8
## - V30_J1_1	1	74.00	1687.1	-5057.1
## - V2_J1_3	1	75.57	1688.7	-5052.3
## - V14_J2_3	1	76.49	1689.6	-5049.4
## - V23_J1_3	1	77.38	1690.5	-5046.7
## - V1_J2_7	1	80.67	1693.8	-5036.6
## - V5_J2_3	1	87.31	1700.4	-5016.2
## - V14_J1_4	1	92.39	1705.5	-5000.7
## - V3_J1_4	1	96.67	1709.8	-4987.7
## - V5_J1_5	1	96.87	1710.0	-4987.1
## - V19_J2_3	1	106.72	1719.8	-4957.2
## - V12_1_2_J1_4	1	108.77	1721.9	-4951.0
## - V4_J2_5	1	113.01	1726.1	-4938.2
## - V15_J2_7	1	113.07	1726.2	-4938.0
## - V19_J1_5	1	117.83	1731.0	-4923.7
## - V15_J2_2	1	127.47	1740.6	-4894.9
## - V3_J2_1	1	130.59	1743.7	-4885.5
## - V3_J2_5	1	138.08	1751.2	-4863.2
## - V4_J2_1	1	138.42	1751.5	-4862.2
## - V4_J2_3	1	145.13	1758.3	-4842.4
## - V26_J2_1	1	154.03	1767.2	-4816.1
## - V4_J2_4	1	159.58	1772.7	-4799.8
## - V12_1_2_J2_2	1	173.45	1786.6	-4759.3
## - V26_J2_5	1	183.17	1796.3	-4731.0
## - V26_J2_4	1	185.45	1798.6	-4724.5
## - V19_J1_4	1	191.55	1804.7	-4706.8
## - V3_J2_4	1	200.90	1814.0	-4680.0
## - V3_J2_3	1	227.46	1840.6	-4604.4
## - V20_J2_2	1	259.01	1872.1	-4516.0
## - V5_J2_5	1	273.47	1886.6	-4476.0
## - V5_J2_4	1	309.55	1922.7	-4377.5

```

## - V26_J2_3      1      391.05 2004.2 -4161.6
## - V16_J2_2      1      432.55 2045.7 -4055.0
## - J             12      527.00 2140.1 -3893.3
## - V             19     1169.63 2782.8 -2574.4
##
## Step:  AIC=-5303.38
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##      V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##      V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##      V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
##      V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
##      V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
##      V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
##      V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
##      V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
##      V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
##      V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
##      V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
##      V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
##      V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
##      V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
##      V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1
##
##
##      Df Sum of Sq    RSS    AIC
## + V1_J2_5      1      8.33 1596.7 -5323.8
## + V24_J1_7      1      7.58 1597.4 -5321.3
## + V13_3_J2_5      1      7.34 1597.7 -5320.6
## + V23_J2_1      1      6.63 1598.3 -5318.3
## + V26_J1_3      1      6.37 1598.6 -5317.4
## + V20_J1_2      1      6.25 1598.7 -5317.0
## + V13_2_J1_6      1      6.22 1598.8 -5317.0
## + V14_J1_2      1      6.00 1599.0 -5316.2
## + V26_J1_6      1      5.98 1599.0 -5316.1
## + V30_J2_3      1      4.58 1600.4 -5311.6
## + V26_J1_1      1      4.52 1600.5 -5311.4
## + V20_J1_3      1      4.34 1600.6 -5310.8
## + V23_J1_7      1      4.27 1600.7 -5310.6
## + V29_J1_1      1      4.24 1600.7 -5310.5
## + V13_2_J2_5      1      4.21 1600.8 -5310.4
## + V13_1_J1_5      1      4.17 1600.8 -5310.3
## + V29_J2_2      1      4.16 1600.8 -5310.3
## + V13_2_J1_4      1      4.13 1600.9 -5310.1
## + V13_1_J2_4      1      4.11 1600.9 -5310.1
## + V12_1_2_J1_5      1      4.07 1600.9 -5310.0
## + V15_J2_3      1      4.06 1600.9 -5309.9
## + V16_J2_1      1      4.02 1601.0 -5309.8
## + V5_J1_6      1      3.95 1601.0 -5309.6
## + V13_2_J2_3      1      3.92 1601.1 -5309.5
## + V13_2_J1_5      1      3.87 1601.1 -5309.3
## + V13_3_J1_2      1      3.60 1601.4 -5308.4
## + V20_J1_6      1      3.51 1601.5 -5308.1
## + V20_J1_5      1      3.39 1601.6 -5307.7
## + V2_J1_6      1      3.19 1601.8 -5307.1
## + V1_J1_7      1      3.17 1601.8 -5307.0

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## + V29_J1_6	1	3.04	1601.9	-5306.6
## + V13_2_J1_2	1	3.02	1602.0	-5306.6
## + V13_2_J1_3	1	2.89	1602.1	-5306.1
## + V3_J1_2	1	2.68	1602.3	-5305.5
## + V14_J2_7	1	2.66	1602.3	-5305.4
## + V29_J2_1	1	2.62	1602.4	-5305.3
## + V2_J2_3	1	2.57	1602.4	-5305.1
## + V24_J1_1	1	2.49	1602.5	-5304.8
## + V23_J2_2	1	2.46	1602.5	-5304.7
## + V24_J2_3	1	2.46	1602.5	-5304.7
## + V15_J1_4	1	2.41	1602.6	-5304.6
## + V26_J2_2	1	2.33	1602.7	-5304.3
## + V30_J1_6	1	2.31	1602.7	-5304.2
## + V14_J1_3	1	2.28	1602.7	-5304.1
## + V19_J1_1	1	2.26	1602.7	-5304.1
## + V17_J2_1	1	2.20	1602.8	-5303.9
## + V1_J1_2	1	2.18	1602.8	-5303.8
## + V20_J1_7	1	2.08	1602.9	-5303.5
## + V1_J2_3	1	2.08	1602.9	-5303.5
## <none>			1605.0	-5303.4
## + V13_2_J2_2	1	2.02	1603.0	-5303.3
## + V2_J1_7	1	1.98	1603.0	-5303.2
## + V13_1_J2_2	1	1.98	1603.0	-5303.2
## + V3_J1_7	1	1.95	1603.0	-5303.1
## + V20_J1_1	1	1.91	1603.1	-5302.9
## + V19_J1_3	1	1.88	1603.1	-5302.8
## + V13_3_J1_1	1	1.87	1603.1	-5302.8
## + V16_J2_4	1	1.86	1603.1	-5302.8
## + V13_3_J2_4	1	1.84	1603.1	-5302.7
## + V13_3_J1_6	1	1.76	1603.2	-5302.5
## + V16_J1_4	1	1.76	1603.2	-5302.4
## + V29_J2_3	1	1.74	1603.2	-5302.4
## + V13_2_J2_7	1	1.60	1603.4	-5301.9
## + V5_J1_3	1	1.58	1603.4	-5301.9
## + V14_J2_2	1	1.57	1603.4	-5301.8
## + V13_1_J2_5	1	1.52	1603.5	-5301.7
## + V19_J1_2	1	1.44	1603.5	-5301.4
## + V5_J1_2	1	1.31	1603.7	-5301.0
## + V24_J1_5	1	1.30	1603.7	-5301.0
## + V24_J1_3	1	1.28	1603.7	-5300.9
## + V20_J2_4	1	1.26	1603.7	-5300.8
## + V17_J1_2	1	1.26	1603.7	-5300.8
## + V29_J1_4	1	1.24	1603.8	-5300.8
## + V16_J1_2	1	1.22	1603.8	-5300.7
## + V16_J1_1	1	1.14	1603.8	-5300.4
## + V12_1_2_J1_1	1	1.13	1603.9	-5300.4
## + V29_J2_4	1	1.07	1603.9	-5300.2
## + V17_J1_7	1	1.06	1603.9	-5300.2
## + V5_J2_7	1	1.05	1603.9	-5300.2
## + V30_J1_7	1	1.00	1604.0	-5300.0
## + V13_3_J1_3	1	0.96	1604.0	-5299.9
## + V1_J1_1	1	0.93	1604.0	-5299.8
## + V13_1_J2_7	1	0.93	1604.0	-5299.8
## + V30_J1_4	1	0.84	1604.2	-5299.5

## + V20_J1_4	1	0.84	1604.2	-5299.5
## + V20_J2_7	1	0.80	1604.2	-5299.4
## + V1_J2_4	1	0.79	1604.2	-5299.3
## + V16_J1_6	1	0.77	1604.2	-5299.2
## + V19_J1_6	1	0.76	1604.2	-5299.2
## + V12_1_2_J2_1	1	0.76	1604.2	-5299.2
## + V2_J1_2	1	0.75	1604.2	-5299.2
## + V29_J1_2	1	0.75	1604.2	-5299.2
## + V13_3_J1_5	1	0.71	1604.3	-5299.0
## + V16_J1_5	1	0.67	1604.3	-5298.9
## + V13_3_J2_3	1	0.60	1604.4	-5298.7
## + V12_1_2_J2_5	1	0.59	1604.4	-5298.7
## + V30_J2_7	1	0.58	1604.4	-5298.6
## + V2_J2_5	1	0.55	1604.4	-5298.5
## + V24_J1_4	1	0.55	1604.4	-5298.5
## + V19_J2_2	1	0.52	1604.5	-5298.4
## + V13_1_J2_1	1	0.49	1604.5	-5298.3
## + V14_J1_6	1	0.48	1604.5	-5298.3
## + V12_1_2_J2_3	1	0.48	1604.5	-5298.3
## + V23_J1_6	1	0.44	1604.5	-5298.2
## + V17_J2_4	1	0.44	1604.5	-5298.2
## + V13_3_J2_7	1	0.42	1604.6	-5298.1
## + V5_J1_1	1	0.40	1604.6	-5298.1
## + V1_J1_6	1	0.39	1604.6	-5298.0
## + V24_J2_1	1	0.39	1604.6	-5298.0
## + V1_J1_4	1	0.37	1604.6	-5298.0
## + V13_2_J2_1	1	0.37	1604.6	-5297.9
## + V17_J1_1	1	0.36	1604.6	-5297.9
## + V4_J1_7	1	0.34	1604.6	-5297.8
## + V23_J1_2	1	0.34	1604.6	-5297.8
## + V5_J1_7	1	0.33	1604.7	-5297.8
## + V15_J2_5	1	0.33	1604.7	-5297.8
## + V15_J2_4	1	0.32	1604.7	-5297.8
## + V13_1_J1_6	1	0.31	1604.7	-5297.8
## + V4_J1_2	1	0.30	1604.7	-5297.7
## + V13_3_J2_2	1	0.27	1604.7	-5297.6
## + V4_J1_6	1	0.27	1604.7	-5297.6
## + V23_J2_5	1	0.27	1604.7	-5297.6
## + V14_J1_1	1	0.25	1604.7	-5297.5
## + V30_J2_1	1	0.25	1604.7	-5297.5
## + V2_J2_1	1	0.23	1604.8	-5297.5
## + V13_2_J2_4	1	0.23	1604.8	-5297.5
## + V26_J2_7	1	0.23	1604.8	-5297.5
## + V15_J1_5	1	0.22	1604.8	-5297.4
## + V13_1_J2_3	1	0.19	1604.8	-5297.3
## + V30_J2_4	1	0.18	1604.8	-5297.3
## + V23_J2_3	1	0.18	1604.8	-5297.3
## + V3_J1_3	1	0.18	1604.8	-5297.3
## + V24_J2_7	1	0.17	1604.8	-5297.3
## + V14_J1_7	1	0.17	1604.8	-5297.3
## + V17_J2_3	1	0.16	1604.8	-5297.3
## + V23_J2_4	1	0.16	1604.8	-5297.3
## + V3_J2_7	1	0.14	1604.8	-5297.2
## + V4_J1_1	1	0.12	1604.9	-5297.1

## + V23_J1_1	1	0.11	1604.9	-5297.1
## + V13_3_J1_7	1	0.10	1604.9	-5297.1
## + V5_J2_2	1	0.10	1604.9	-5297.1
## + V24_J2_4	1	0.10	1604.9	-5297.1
## + V13_1_J1_1	1	0.10	1604.9	-5297.1
## + V2_J1_1	1	0.10	1604.9	-5297.1
## + V2_J2_4	1	0.09	1604.9	-5297.0
## + V26_J1_2	1	0.09	1604.9	-5297.0
## + V16_J1_7	1	0.09	1604.9	-5297.0
## + V17_J2_5	1	0.09	1604.9	-5297.0
## + V3_J1_6	1	0.08	1604.9	-5297.0
## + V24_J2_2	1	0.07	1604.9	-5297.0
## + V2_J1_4	1	0.07	1604.9	-5297.0
## + V3_J1_1	1	0.06	1604.9	-5296.9
## + V3_J2_2	1	0.06	1604.9	-5296.9
## + V13_3_J2_1	1	0.04	1604.9	-5296.9
## + V29_J2_7	1	0.04	1605.0	-5296.9
## + V26_J1_7	1	0.03	1605.0	-5296.8
## + V23_J1_5	1	0.03	1605.0	-5296.8
## + V24_J1_2	1	0.02	1605.0	-5296.8
## + V17_J1_4	1	0.02	1605.0	-5296.8
## + V4_J2_2	1	0.02	1605.0	-5296.8
## + V29_J2_5	1	0.02	1605.0	-5296.8
## + V12_1_2_J2_4	1	0.02	1605.0	-5296.8
## + V1_J2_1	1	0.01	1605.0	-5296.8
## + V13_2_J1_1	1	0.01	1605.0	-5296.8
## + V13_3_J1_4	1	0.01	1605.0	-5296.8
## + V19_J2_7	1	0.01	1605.0	-5296.8
## + V17_J1_6	1	0.00	1605.0	-5296.8
## + V20_J2_5	1	0.00	1605.0	-5296.8
## + V13_1_J1_4	1	0.00	1605.0	-5296.8
## + V19_J1_7	1	0.00	1605.0	-5296.7
## + V16_J2_5	1	0.00	1605.0	-5296.7
## - V15_J2_1	1	8.15	1613.1	-5283.7
## - V13_1_J1_2	1	9.22	1614.2	-5280.2
## - V24_J1_6	1	9.35	1614.3	-5279.8
## - V2_J1_5	1	9.41	1614.4	-5279.6
## - V23_J1_4	1	9.59	1614.6	-5279.0
## - V29_J1_7	1	9.66	1614.6	-5278.8
## - V13_1_J1_3	1	9.90	1614.9	-5278.0
## - V12_1_2_J1_2	1	9.91	1614.9	-5278.0
## - V24_J2_5	1	11.80	1616.8	-5271.9
## - V4_J1_3	1	12.83	1617.8	-5268.6
## - V1_J1_5	1	13.46	1618.4	-5266.6
## - V13_1_J1_7	1	13.74	1618.7	-5265.7
## - V29_J1_5	1	15.05	1620.0	-5261.5
## - V17_J1_5	1	15.96	1621.0	-5258.5
## - V20_J2_1	1	16.14	1621.1	-5258.0
## - V29_J1_3	1	18.12	1623.1	-5251.6
## - V12_1_2_J1_6	1	18.35	1623.3	-5250.9
## - V26_J1_5	1	19.10	1624.1	-5248.5
## - V16_J2_3	1	19.64	1624.6	-5246.8
## - V14_J2_5	1	20.23	1625.2	-5244.9
## - V4_J1_5	1	23.45	1628.4	-5234.6

## - V20_J2_3	1	24.74	1629.7	-5230.5
## - V3_J1_5	1	25.36	1630.3	-5228.5
## - V12_1_2_J1_7	1	25.63	1630.6	-5227.6
## - V2_J2_7	1	26.66	1631.7	-5224.3
## - V14_J2_1	1	27.24	1632.2	-5222.5
## - V2_J2_2	1	28.02	1633.0	-5220.0
## - V30_J2_5	1	28.17	1633.2	-5219.5
## - V23_J2_7	1	28.20	1633.2	-5219.4
## - V15_J1_1	1	28.84	1633.8	-5217.4
## - V12_1_2_J2_7	1	29.48	1634.5	-5215.4
## - V30_J1_5	1	31.16	1636.1	-5210.0
## - V15_J1_2	1	31.85	1636.8	-5207.8
## - V12_1_2_J1_3	1	32.96	1637.9	-5204.3
## - V30_J1_3	1	33.17	1638.2	-5203.6
## - V19_J2_5	1	35.68	1640.7	-5195.7
## - V19_J2_4	1	36.32	1641.3	-5193.7
## - V16_J2_7	1	37.37	1642.3	-5190.3
## - V4_J2_7	1	37.92	1642.9	-5188.6
## - V14_J2_4	1	40.75	1645.7	-5179.6
## - V5_J1_4	1	44.71	1649.7	-5167.1
## - V15_J1_6	1	49.32	1654.3	-5152.6
## - V13_2_J1_7	1	51.00	1656.0	-5147.4
## - V1_J1_3	1	51.94	1656.9	-5144.4
## - V4_J1_4	1	52.00	1657.0	-5144.2
## - V19_J2_1	1	52.35	1657.3	-5143.1
## - V26_J1_4	1	54.28	1659.3	-5137.1
## - V30_J1_2	1	54.98	1660.0	-5134.9
## - V16_J1_3	1	56.39	1661.4	-5130.4
## - V1_J2_2	1	56.63	1661.6	-5129.7
## - V5_J2_1	1	57.09	1662.1	-5128.3
## - V15_J1_7	1	57.34	1662.3	-5127.5
## - V17_J2_7	1	59.98	1665.0	-5119.2
## - V17_J2_2	1	61.48	1666.5	-5114.5
## - V14_J1_5	1	64.20	1669.2	-5106.1
## - V17_J1_3	1	72.40	1677.4	-5080.6
## - V30_J2_2	1	73.63	1678.6	-5076.8
## - V30_J1_1	1	73.81	1678.8	-5076.2
## - V15_J1_3	1	75.07	1680.0	-5072.3
## - V2_J1_3	1	75.68	1680.7	-5070.4
## - V14_J2_3	1	77.14	1682.1	-5065.9
## - V23_J1_3	1	77.45	1682.4	-5064.9
## - V1_J2_7	1	80.76	1685.7	-5054.7
## - V5_J2_3	1	88.01	1693.0	-5032.4
## - V14_J1_4	1	93.14	1698.1	-5016.7
## - V3_J1_4	1	97.44	1702.4	-5003.5
## - V5_J1_5	1	97.92	1702.9	-5002.1
## - V19_J2_3	1	107.49	1712.5	-4972.9
## - V12_1_2_J1_4	1	109.64	1714.6	-4966.4
## - V4_J2_5	1	113.84	1718.8	-4953.7
## - V19_J1_5	1	118.98	1724.0	-4938.1
## - V15_J2_7	1	120.14	1725.1	-4934.7
## - V3_J2_1	1	125.73	1730.7	-4917.8
## - V4_J2_1	1	133.54	1738.5	-4894.4
## - V15_J2_2	1	134.75	1739.7	-4890.8

```

## - V3_J2_5      1      139.01 1744.0 -4878.1
## - V4_J2_3      1      146.01 1751.0 -4857.2
## - V26_J2_1     1      148.70 1753.7 -4849.3
## - V4_J2_4      1      160.41 1765.4 -4814.7
## - V12_1_2_J2_2 1      173.54 1778.5 -4776.1
## - V26_J2_5     1      184.23 1789.2 -4745.0
## - V26_J2_4     1      186.34 1791.3 -4738.8
## - V19_J1_4     1      192.62 1797.6 -4720.6
## - V3_J2_4      1      201.83 1806.8 -4694.1
## - V3_J2_3      1      228.57 1833.5 -4617.7
## - V20_J2_2     1      258.44 1863.4 -4533.7
## - V5_J2_5      1      274.75 1879.7 -4488.3
## - V5_J2_4      1      310.70 1915.7 -4389.8
## - V26_J2_3     1      392.49 1997.5 -4172.4
## - V16_J2_2     1      432.64 2037.6 -4068.9
## - J            12      516.26 2121.2 -3932.8
## - V            19     1135.33 2740.3 -2647.7
##
## Step:  AIC=-5323.79
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
## V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
## V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5
##
##
##           Df Sum of Sq    RSS    AIC
## + V24_J1_7      1      7.66 1589.0 -5342.2
## + V23_J2_1      1      6.82 1589.8 -5339.4
## + V26_J1_3      1      6.42 1590.2 -5338.1
## + V13_2_J1_6     1      6.39 1590.3 -5338.0
## + V20_J1_2      1      6.05 1590.6 -5336.9
## + V14_J1_2      1      6.05 1590.6 -5336.9
## + V26_J1_6      1      6.01 1590.7 -5336.8
## + V13_3_J2_5     1      6.01 1590.7 -5336.8
## + V13_2_J2_5     1      5.42 1591.2 -5334.8
## + V30_J2_3       1      4.58 1592.1 -5332.1
## + V26_J1_1       1      4.53 1592.1 -5331.9
## + V20_J1_3       1      4.43 1592.2 -5331.6
## + V15_J2_3       1      4.36 1592.3 -5331.4
## + V13_2_J1_4     1      4.26 1592.4 -5331.1
## + V13_1_J2_4     1      4.24 1592.4 -5331.0
## + V29_J2_2       1      4.23 1592.4 -5331.0
## + V13_1_J1_5     1      4.17 1592.5 -5330.8

```

## + V12_1_2_J1_5	1	4.16	1592.5	-5330.7
## + V29_J1_1	1	4.11	1592.5	-5330.6
## + V23_J1_7	1	4.09	1592.6	-5330.5
## + V5_J1_6	1	3.92	1592.7	-5329.9
## + V13_2_J1_5	1	3.89	1592.8	-5329.8
## + V16_J2_1	1	3.87	1592.8	-5329.8
## + V13_2_J2_3	1	3.80	1592.9	-5329.5
## + V13_3_J1_2	1	3.48	1593.2	-5328.5
## + V20_J1_5	1	3.38	1593.3	-5328.2
## + V20_J1_6	1	3.37	1593.3	-5328.1
## + V2_J1_6	1	3.31	1593.3	-5327.9
## + V1_J2_3	1	3.31	1593.3	-5327.9
## + V13_2_J1_3	1	2.95	1593.7	-5326.8
## + V29_J1_6	1	2.92	1593.7	-5326.7
## + V13_2_J1_2	1	2.90	1593.8	-5326.6
## + V29_J2_1	1	2.74	1593.9	-5326.1
## + V3_J1_2	1	2.71	1593.9	-5326.0
## + V14_J2_7	1	2.70	1594.0	-5326.0
## + V24_J2_3	1	2.48	1594.2	-5325.2
## + V24_J1_1	1	2.48	1594.2	-5325.2
## + V2_J2_3	1	2.46	1594.2	-5325.2
## + V23_J2_2	1	2.40	1594.2	-5325.0
## + V26_J2_2	1	2.37	1594.3	-5324.9
## + V14_J1_3	1	2.31	1594.3	-5324.7
## + V30_J1_6	1	2.30	1594.4	-5324.6
## + V19_J1_1	1	2.25	1594.4	-5324.5
## + V15_J1_4	1	2.19	1594.5	-5324.3
## + V17_J2_1	1	2.10	1594.5	-5324.0
## + V1_J1_7	1	2.07	1594.6	-5323.9
## + V13_2_J2_2	1	2.06	1594.6	-5323.9
## <none>			1596.7	-5323.8
## + V20_J1_1	1	2.01	1594.7	-5323.7
## + V20_J1_7	1	1.96	1594.7	-5323.5
## + V16_J2_4	1	1.94	1594.7	-5323.5
## + V13_3_J1_1	1	1.94	1594.7	-5323.5
## + V13_1_J2_2	1	1.93	1594.7	-5323.4
## + V3_J1_7	1	1.91	1594.8	-5323.4
## + V19_J1_3	1	1.90	1594.8	-5323.4
## + V2_J1_7	1	1.87	1594.8	-5323.3
## + V29_J2_3	1	1.82	1594.8	-5323.1
## + V1_J1_1	1	1.78	1594.9	-5323.0
## + V13_3_J2_4	1	1.78	1594.9	-5323.0
## + V13_3_J1_6	1	1.69	1595.0	-5322.6
## + V16_J1_4	1	1.66	1595.0	-5322.6
## + V13_2_J2_7	1	1.64	1595.0	-5322.5
## + V5_J1_3	1	1.56	1595.1	-5322.2
## + V14_J2_2	1	1.54	1595.1	-5322.2
## + V19_J1_2	1	1.46	1595.2	-5321.9
## + V24_J1_5	1	1.37	1595.3	-5321.6
## + V17_J1_2	1	1.34	1595.3	-5321.5
## + V29_J1_4	1	1.31	1595.3	-5321.4
## + V24_J1_3	1	1.29	1595.4	-5321.4
## + V5_J1_2	1	1.29	1595.4	-5321.4
## + V1_J1_2	1	1.28	1595.4	-5321.3

## + V16_J1_1	1	1.21	1595.4	-5321.1
## + V20_J2_4	1	1.19	1595.5	-5321.0
## + V17_J1_7	1	1.14	1595.5	-5320.9
## + V16_J1_2	1	1.13	1595.5	-5320.8
## + V5_J2_7	1	1.03	1595.6	-5320.5
## + V30_J1_7	1	1.02	1595.6	-5320.5
## + V29_J2_4	1	1.02	1595.6	-5320.5
## + V12_1_2_J1_1	1	1.01	1595.7	-5320.4
## + V13_3_J1_3	1	0.99	1595.7	-5320.4
## + V13_1_J2_5	1	0.95	1595.7	-5320.3
## + V20_J1_4	1	0.91	1595.8	-5320.1
## + V13_1_J2_7	1	0.89	1595.8	-5320.1
## + V16_J1_6	1	0.84	1595.8	-5319.9
## + V20_J2_7	1	0.84	1595.8	-5319.9
## + V30_J1_4	1	0.83	1595.8	-5319.9
## + V2_J1_2	1	0.81	1595.8	-5319.8
## + V19_J1_6	1	0.77	1595.9	-5319.7
## + V13_3_J1_5	1	0.69	1596.0	-5319.4
## + V29_J1_2	1	0.69	1596.0	-5319.4
## + V15_J2_5	1	0.68	1596.0	-5319.4
## + V16_J1_5	1	0.67	1596.0	-5319.3
## + V12_1_2_J2_1	1	0.65	1596.0	-5319.3
## + V30_J2_7	1	0.61	1596.0	-5319.1
## + V13_3_J2_3	1	0.55	1596.1	-5319.0
## + V13_1_J2_1	1	0.55	1596.1	-5319.0
## + V24_J1_4	1	0.54	1596.1	-5318.9
## + V19_J2_2	1	0.51	1596.2	-5318.8
## + V14_J1_6	1	0.47	1596.2	-5318.7
## + V13_3_J2_7	1	0.44	1596.2	-5318.6
## + V17_J2_4	1	0.41	1596.2	-5318.5
## + V5_J1_1	1	0.41	1596.2	-5318.5
## + V12_1_2_J2_3	1	0.40	1596.2	-5318.5
## + V15_J2_4	1	0.40	1596.3	-5318.5
## + V17_J1_1	1	0.40	1596.3	-5318.5
## + V23_J1_6	1	0.40	1596.3	-5318.5
## + V23_J1_2	1	0.38	1596.3	-5318.4
## + V24_J2_1	1	0.37	1596.3	-5318.4
## + V13_1_J1_6	1	0.36	1596.3	-5318.3
## + V5_J1_7	1	0.35	1596.3	-5318.3
## + V13_2_J2_1	1	0.33	1596.3	-5318.2
## + V4_J1_7	1	0.33	1596.3	-5318.2
## + V17_J2_5	1	0.32	1596.3	-5318.2
## + V4_J1_2	1	0.30	1596.3	-5318.1
## + V1_J2_4	1	0.28	1596.4	-5318.1
## + V4_J1_6	1	0.27	1596.4	-5318.0
## + V2_J2_1	1	0.27	1596.4	-5318.0
## + V12_1_2_J2_5	1	0.27	1596.4	-5318.0
## + V13_3_J2_2	1	0.26	1596.4	-5318.0
## + V14_J1_1	1	0.25	1596.4	-5318.0
## + V30_J2_1	1	0.25	1596.4	-5318.0
## + V26_J2_7	1	0.24	1596.4	-5317.9
## + V1_J2_1	1	0.23	1596.4	-5317.9
## + V2_J2_5	1	0.22	1596.4	-5317.9
## + V23_J2_3	1	0.21	1596.5	-5317.8

## + V13_2_J2_4	1	0.21	1596.5	-5317.8
## + V30_J2_4	1	0.19	1596.5	-5317.8
## + V15_J1_5	1	0.19	1596.5	-5317.8
## + V23_J2_4	1	0.18	1596.5	-5317.8
## + V3_J1_3	1	0.17	1596.5	-5317.7
## + V24_J2_7	1	0.17	1596.5	-5317.7
## + V13_1_J2_3	1	0.16	1596.5	-5317.7
## + V14_J1_7	1	0.16	1596.5	-5317.7
## + V29_J2_5	1	0.16	1596.5	-5317.7
## + V3_J2_7	1	0.15	1596.5	-5317.6
## + V17_J2_3	1	0.14	1596.5	-5317.6
## + V13_1_J1_1	1	0.13	1596.5	-5317.6
## + V4_J1_1	1	0.13	1596.5	-5317.6
## + V16_J1_7	1	0.12	1596.5	-5317.5
## + V5_J2_2	1	0.11	1596.5	-5317.5
## + V20_J2_5	1	0.11	1596.5	-5317.5
## + V24_J2_4	1	0.10	1596.5	-5317.5
## + V23_J1_1	1	0.09	1596.6	-5317.5
## + V26_J1_2	1	0.09	1596.6	-5317.4
## + V2_J1_1	1	0.08	1596.6	-5317.4
## + V13_3_J1_7	1	0.08	1596.6	-5317.4
## + V3_J1_6	1	0.08	1596.6	-5317.4
## + V2_J2_4	1	0.08	1596.6	-5317.4
## + V1_J1_6	1	0.08	1596.6	-5317.4
## + V16_J2_5	1	0.07	1596.6	-5317.4
## + V3_J2_2	1	0.07	1596.6	-5317.4
## + V23_J2_5	1	0.07	1596.6	-5317.4
## + V24_J2_2	1	0.06	1596.6	-5317.4
## + V1_J1_4	1	0.06	1596.6	-5317.4
## + V3_J1_1	1	0.06	1596.6	-5317.4
## + V2_J1_4	1	0.05	1596.6	-5317.3
## + V26_J1_7	1	0.03	1596.6	-5317.3
## + V17_J1_4	1	0.03	1596.6	-5317.3
## + V29_J2_7	1	0.03	1596.6	-5317.3
## + V13_3_J2_1	1	0.03	1596.6	-5317.2
## + V23_J1_5	1	0.02	1596.6	-5317.2
## + V4_J2_2	1	0.02	1596.6	-5317.2
## + V24_J1_2	1	0.02	1596.6	-5317.2
## + V12_1_2_J2_4	1	0.01	1596.7	-5317.2
## + V19_J2_7	1	0.00	1596.7	-5317.2
## + V13_2_J1_1	1	0.00	1596.7	-5317.2
## + V13_3_J1_4	1	0.00	1596.7	-5317.2
## + V17_J1_6	1	0.00	1596.7	-5317.2
## + V13_1_J1_4	1	0.00	1596.7	-5317.2
## + V19_J1_7	1	0.00	1596.7	-5317.2
## - V1_J2_5	1	8.33	1605.0	-5303.4
## - V15_J2_1	1	8.47	1605.1	-5302.9
## - V13_1_J1_2	1	9.01	1605.7	-5301.2
## - V2_J1_5	1	9.38	1606.0	-5300.0
## - V24_J1_6	1	9.39	1606.0	-5299.9
## - V23_J1_4	1	9.41	1606.1	-5299.9
## - V29_J1_7	1	9.44	1606.1	-5299.8
## - V13_1_J1_3	1	10.02	1606.7	-5297.9
## - V12_1_2_J1_2	1	10.22	1606.9	-5297.2

## - V1_J1_5	1	11.05	1607.7	-5294.6
## - V4_J1_3	1	12.90	1609.6	-5288.6
## - V24_J2_5	1	13.44	1610.1	-5286.8
## - V13_1_J1_7	1	13.46	1610.1	-5286.8
## - V29_J1_5	1	15.03	1611.7	-5281.7
## - V20_J2_1	1	15.88	1612.5	-5279.0
## - V17_J1_5	1	15.93	1612.6	-5278.8
## - V12_1_2_J1_6	1	17.94	1614.6	-5272.3
## - V29_J1_3	1	17.99	1614.7	-5272.2
## - V26_J1_5	1	19.33	1616.0	-5267.9
## - V16_J2_3	1	19.38	1616.0	-5267.7
## - V14_J2_5	1	22.28	1618.9	-5258.4
## - V4_J1_5	1	23.73	1620.4	-5253.7
## - V20_J2_3	1	24.45	1621.1	-5251.4
## - V12_1_2_J1_7	1	25.09	1621.8	-5249.3
## - V30_J2_5	1	25.47	1622.1	-5248.1
## - V3_J1_5	1	25.62	1622.3	-5247.6
## - V2_J2_7	1	26.53	1623.2	-5244.7
## - V14_J2_1	1	27.17	1623.8	-5242.7
## - V2_J2_2	1	27.88	1624.5	-5240.4
## - V23_J2_7	1	28.04	1624.7	-5239.9
## - V12_1_2_J2_7	1	29.12	1625.8	-5236.4
## - V15_J1_1	1	29.40	1626.1	-5235.5
## - V30_J1_5	1	30.83	1627.5	-5231.0
## - V15_J1_2	1	32.49	1629.2	-5225.7
## - V12_1_2_J1_3	1	32.57	1629.2	-5225.4
## - V30_J1_3	1	33.29	1630.0	-5223.1
## - V19_J2_4	1	36.32	1633.0	-5213.5
## - V16_J2_7	1	37.17	1633.8	-5210.8
## - V4_J2_7	1	38.08	1634.7	-5207.9
## - V19_J2_5	1	38.33	1635.0	-5207.1
## - V14_J2_4	1	40.75	1637.4	-5199.4
## - V5_J1_4	1	44.64	1641.3	-5187.0
## - V15_J1_6	1	50.09	1646.8	-5169.8
## - V13_2_J1_7	1	50.51	1647.2	-5168.5
## - V4_J1_4	1	51.98	1648.6	-5163.8
## - V19_J2_1	1	52.27	1648.9	-5162.9
## - V26_J1_4	1	54.20	1650.9	-5156.8
## - V30_J1_2	1	55.04	1651.7	-5154.2
## - V1_J1_3	1	55.80	1652.5	-5151.8
## - V16_J1_3	1	56.12	1652.8	-5150.8
## - V5_J2_1	1	57.00	1653.7	-5148.0
## - V15_J1_7	1	58.24	1654.9	-5144.1
## - V17_J2_7	1	59.78	1656.4	-5139.3
## - V1_J2_2	1	60.70	1657.3	-5136.4
## - V17_J2_2	1	61.28	1657.9	-5134.6
## - V14_J1_5	1	64.61	1661.3	-5124.1
## - V17_J1_3	1	72.15	1668.8	-5100.6
## - V30_J1_1	1	73.80	1670.5	-5095.5
## - V30_J2_2	1	73.85	1670.5	-5095.3
## - V2_J1_3	1	75.43	1672.1	-5090.4
## - V15_J1_3	1	75.79	1672.4	-5089.3
## - V14_J2_3	1	77.08	1673.7	-5085.3
## - V23_J1_3	1	77.16	1673.8	-5085.0


```

## - V1_J2_7      1      85.45 1682.1 -5059.3
## - V5_J2_3      1      87.94 1684.6 -5051.6
## - V14_J1_4     1      93.04 1689.7 -5035.9
## - V3_J1_4      1      97.33 1694.0 -5022.7
## - V5_J1_5      1      98.42 1695.1 -5019.4
## - V19_J2_3     1     107.41 1704.1 -4991.9
## - V12_1_2_J1_4 1     108.63 1705.3 -4988.1
## - V4_J2_5      1     118.16 1714.8 -4959.2
## - V19_J1_5     1     119.54 1716.2 -4955.0
## - V15_J2_7     1     121.01 1717.7 -4950.5
## - V3_J2_1      1     125.60 1722.2 -4936.7
## - V4_J2_1      1     133.48 1730.1 -4912.9
## - V15_J2_2     1     135.68 1732.3 -4906.3
## - V3_J2_5      1     143.72 1740.4 -4882.3
## - V4_J2_3      1     146.00 1742.7 -4875.4
## - V26_J2_1     1     148.55 1745.2 -4867.8
## - V4_J2_4      1     160.50 1757.2 -4832.3
## - V12_1_2_J2_2 1     172.66 1769.3 -4796.5
## - V26_J2_4     1     186.35 1783.0 -4756.4
## - V26_J2_5     1     189.48 1786.1 -4747.3
## - V19_J1_4     1     192.48 1789.1 -4738.6
## - V3_J2_4      1     201.84 1798.5 -4711.4
## - V3_J2_3      1     228.45 1825.1 -4635.0
## - V20_J2_2     1     257.91 1854.6 -4551.8
## - V5_J2_5      1     280.81 1877.5 -4488.0
## - V5_J2_4      1     310.71 1907.4 -4405.8
## - V26_J2_3     1     392.34 1989.0 -4187.9
## - V16_J2_2     1     431.95 2028.6 -4085.4
## - J            12     514.25 2110.9 -3951.5
## - V            19    1142.78 2739.4 -2642.7
##
## Step:  AIC=-5342.17
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
## V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
## V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7
##
##           Df Sum of Sq    RSS    AIC
## + V23_J2_1      1      6.66 1582.3 -5357.4
## + V26_J1_3      1      6.65 1582.3 -5357.3
## + V13_2_J1_6     1      6.53 1582.5 -5356.9
## + V20_J1_2      1      6.13 1582.9 -5355.6

```

## + V13_3_J2_5	1	5.99	1583.0	-5355.2
## + V26_J1_6	1	5.95	1583.0	-5355.1
## + V14_J1_2	1	5.90	1583.1	-5354.9
## + V13_2_J2_5	1	5.36	1583.6	-5353.1
## + V26_J1_1	1	4.40	1584.6	-5350.0
## + V30_J2_3	1	4.40	1584.6	-5349.9
## + V15_J2_3	1	4.34	1584.7	-5349.8
## + V20_J1_3	1	4.31	1584.7	-5349.6
## + V13_1_J1_5	1	4.26	1584.7	-5349.5
## + V13_2_J1_4	1	4.23	1584.8	-5349.4
## + V29_J2_2	1	4.23	1584.8	-5349.4
## + V13_1_J2_4	1	4.22	1584.8	-5349.4
## + V29_J1_1	1	4.09	1584.9	-5348.9
## + V12_1_2_J1_5	1	4.08	1584.9	-5348.9
## + V16_J2_1	1	4.01	1585.0	-5348.7
## + V13_2_J1_5	1	3.98	1585.0	-5348.6
## + V5_J1_6	1	3.97	1585.0	-5348.5
## + V13_2_J2_3	1	3.84	1585.2	-5348.1
## + V13_3_J1_2	1	3.51	1585.5	-5347.0
## + V1_J2_3	1	3.47	1585.5	-5346.9
## + V24_J2_3	1	3.45	1585.5	-5346.8
## + V20_J1_6	1	3.36	1585.6	-5346.5
## + V23_J1_7	1	3.32	1585.7	-5346.4
## + V2_J1_6	1	3.31	1585.7	-5346.4
## + V20_J1_5	1	3.21	1585.8	-5346.0
## + V13_2_J1_3	1	2.93	1586.1	-5345.1
## + V13_2_J1_2	1	2.87	1586.1	-5344.9
## + V14_J2_7	1	2.84	1586.2	-5344.8
## + V29_J1_6	1	2.84	1586.2	-5344.8
## + V1_J1_7	1	2.71	1586.3	-5344.4
## + V29_J2_1	1	2.71	1586.3	-5344.4
## + V3_J1_2	1	2.62	1586.4	-5344.1
## + V2_J2_3	1	2.59	1586.4	-5344.0
## + V26_J2_2	1	2.49	1586.5	-5343.7
## + V23_J2_2	1	2.48	1586.5	-5343.6
## + V14_J1_3	1	2.45	1586.5	-5343.6
## + V19_J1_1	1	2.35	1586.7	-5343.2
## + V30_J1_6	1	2.31	1586.7	-5343.1
## + V17_J2_1	1	2.21	1586.8	-5342.8
## + V15_J1_4	1	2.20	1586.8	-5342.7
## + V13_2_J2_2	1	2.07	1586.9	-5342.3
## + V19_J1_3	1	2.03	1587.0	-5342.2
## <none>			1589.0	-5342.2
## + V20_J1_1	1	1.96	1587.0	-5342.0
## + V13_1_J2_2	1	1.92	1587.1	-5341.8
## + V13_3_J1_1	1	1.91	1587.1	-5341.8
## + V16_J2_4	1	1.85	1587.1	-5341.6
## + V1_J1_1	1	1.85	1587.2	-5341.6
## + V13_3_J2_4	1	1.84	1587.2	-5341.6
## + V29_J2_3	1	1.79	1587.2	-5341.4
## + V16_J1_4	1	1.75	1587.2	-5341.3
## + V24_J1_1	1	1.68	1587.3	-5341.0
## + V13_3_J1_6	1	1.66	1587.3	-5341.0
## + V13_2_J2_7	1	1.64	1587.4	-5340.9

## + V17_J1_7	1	1.63	1587.4	-5340.9
## + V30_J1_7	1	1.49	1587.5	-5340.4
## + V14_J2_2	1	1.45	1587.5	-5340.3
## + V5_J1_3	1	1.45	1587.5	-5340.3
## + V20_J1_7	1	1.43	1587.6	-5340.2
## + V3_J1_7	1	1.41	1587.6	-5340.1
## + V19_J1_2	1	1.39	1587.6	-5340.1
## + V5_J1_2	1	1.36	1587.6	-5340.0
## + V2_J1_7	1	1.36	1587.6	-5340.0
## + V17_J1_2	1	1.30	1587.7	-5339.8
## + V29_J1_4	1	1.29	1587.7	-5339.8
## + V20_J2_4	1	1.26	1587.7	-5339.7
## + V1_J1_2	1	1.23	1587.8	-5339.6
## + V16_J1_1	1	1.17	1587.8	-5339.4
## + V16_J1_2	1	1.17	1587.8	-5339.4
## + V29_J2_4	1	1.03	1588.0	-5338.9
## + V12_1_2_J1_1	1	0.98	1588.0	-5338.8
## + V13_1_J2_5	1	0.98	1588.0	-5338.7
## + V5_J2_7	1	0.95	1588.0	-5338.6
## + V13_3_J1_3	1	0.94	1588.0	-5338.6
## + V30_J1_4	1	0.91	1588.1	-5338.5
## + V13_1_J2_7	1	0.89	1588.1	-5338.5
## + V20_J1_4	1	0.84	1588.2	-5338.3
## + V16_J1_6	1	0.84	1588.2	-5338.3
## + V24_J1_5	1	0.83	1588.2	-5338.2
## + V20_J2_7	1	0.79	1588.2	-5338.1
## + V2_J1_2	1	0.78	1588.2	-5338.1
## + V19_J1_6	1	0.75	1588.2	-5338.0
## + V24_J1_3	1	0.74	1588.3	-5337.9
## + V29_J1_2	1	0.67	1588.3	-5337.7
## + V30_J2_7	1	0.66	1588.3	-5337.7
## + V12_1_2_J2_1	1	0.66	1588.3	-5337.7
## + V15_J2_5	1	0.64	1588.3	-5337.6
## + V13_3_J1_5	1	0.63	1588.4	-5337.6
## + V5_J1_7	1	0.62	1588.4	-5337.6
## + V13_3_J2_3	1	0.60	1588.4	-5337.5
## + V16_J1_5	1	0.59	1588.4	-5337.5
## + V13_1_J2_1	1	0.54	1588.5	-5337.3
## + V14_J1_6	1	0.49	1588.5	-5337.1
## + V24_J2_7	1	0.48	1588.5	-5337.1
## + V17_J2_4	1	0.45	1588.5	-5337.0
## + V19_J2_2	1	0.45	1588.5	-5337.0
## + V13_3_J2_7	1	0.41	1588.6	-5336.9
## + V12_1_2_J2_3	1	0.41	1588.6	-5336.9
## + V15_J2_4	1	0.40	1588.6	-5336.8
## + V23_J1_6	1	0.39	1588.6	-5336.8
## + V13_1_J1_6	1	0.39	1588.6	-5336.8
## + V17_J1_1	1	0.38	1588.6	-5336.8
## + V5_J1_1	1	0.37	1588.6	-5336.7
## + V23_J1_2	1	0.37	1588.6	-5336.7
## + V24_J2_4	1	0.36	1588.6	-5336.7
## + V17_J2_5	1	0.34	1588.7	-5336.6
## + V13_2_J2_1	1	0.34	1588.7	-5336.6
## + V16_J1_7	1	0.31	1588.7	-5336.5

## + V24_J2_2	1	0.29	1588.7	-5336.5
## + V12_1_2_J2_5	1	0.29	1588.7	-5336.5
## + V26_J2_7	1	0.28	1588.7	-5336.4
## + V13_3_J2_2	1	0.28	1588.7	-5336.4
## + V1_J2_1	1	0.27	1588.7	-5336.4
## + V4_J1_2	1	0.25	1588.7	-5336.4
## + V4_J1_6	1	0.24	1588.8	-5336.3
## + V1_J2_4	1	0.24	1588.8	-5336.3
## + V2_J2_1	1	0.23	1588.8	-5336.3
## + V30_J2_4	1	0.22	1588.8	-5336.3
## + V14_J1_1	1	0.22	1588.8	-5336.3
## + V13_2_J2_4	1	0.21	1588.8	-5336.2
## + V30_J2_1	1	0.21	1588.8	-5336.2
## + V24_J1_4	1	0.21	1588.8	-5336.2
## + V2_J2_5	1	0.21	1588.8	-5336.2
## + V15_J1_5	1	0.20	1588.8	-5336.2
## + V3_J2_7	1	0.18	1588.8	-5336.1
## + V23_J2_3	1	0.18	1588.8	-5336.1
## + V17_J2_3	1	0.17	1588.8	-5336.1
## + V13_1_J2_3	1	0.16	1588.8	-5336.1
## + V4_J1_1	1	0.16	1588.8	-5336.1
## + V23_J2_4	1	0.16	1588.8	-5336.0
## + V4_J1_7	1	0.15	1588.8	-5336.0
## + V26_J1_7	1	0.15	1588.8	-5336.0
## + V29_J2_5	1	0.15	1588.8	-5336.0
## + V5_J2_2	1	0.14	1588.9	-5336.0
## + V3_J1_3	1	0.13	1588.9	-5336.0
## + V13_1_J1_1	1	0.13	1588.9	-5336.0
## + V20_J2_5	1	0.12	1588.9	-5335.9
## + V24_J2_1	1	0.11	1588.9	-5335.9
## + V26_J1_2	1	0.11	1588.9	-5335.9
## + V23_J1_1	1	0.10	1588.9	-5335.9
## + V2_J2_4	1	0.10	1588.9	-5335.9
## + V2_J1_1	1	0.09	1588.9	-5335.8
## + V3_J2_2	1	0.09	1588.9	-5335.8
## + V3_J1_6	1	0.09	1588.9	-5335.8
## + V16_J2_5	1	0.08	1588.9	-5335.8
## + V1_J1_6	1	0.07	1588.9	-5335.8
## + V2_J1_4	1	0.07	1588.9	-5335.8
## + V23_J2_5	1	0.06	1588.9	-5335.7
## + V3_J1_1	1	0.05	1589.0	-5335.7
## + V1_J1_4	1	0.05	1589.0	-5335.7
## + V4_J2_2	1	0.04	1589.0	-5335.7
## + V14_J1_7	1	0.04	1589.0	-5335.7
## + V19_J1_7	1	0.04	1589.0	-5335.7
## + V13_3_J2_1	1	0.04	1589.0	-5335.7
## + V29_J2_7	1	0.03	1589.0	-5335.6
## + V24_J1_2	1	0.02	1589.0	-5335.6
## + V17_J1_4	1	0.02	1589.0	-5335.6
## + V23_J1_5	1	0.01	1589.0	-5335.6
## + V13_3_J1_4	1	0.01	1589.0	-5335.6
## + V13_3_J1_7	1	0.01	1589.0	-5335.5
## + V12_1_2_J2_4	1	0.01	1589.0	-5335.5
## + V13_2_J1_1	1	0.00	1589.0	-5335.5

## + V17_J1_6	1	0.00	1589.0	-5335.5
## + V13_1_J1_4	1	0.00	1589.0	-5335.5
## + V19_J2_7	1	0.00	1589.0	-5335.5
## - V24_J1_7	1	7.66	1596.7	-5323.8
## - V29_J1_7	1	8.25	1597.2	-5321.9
## - V1_J2_5	1	8.41	1597.4	-5321.3
## - V15_J2_1	1	8.46	1597.5	-5321.2
## - V13_1_J1_2	1	8.96	1598.0	-5319.6
## - V2_J1_5	1	9.13	1598.1	-5319.0
## - V23_J1_4	1	9.57	1598.6	-5317.6
## - V13_1_J1_3	1	9.99	1599.0	-5316.2
## - V12_1_2_J1_2	1	10.29	1599.3	-5315.2
## - V1_J1_5	1	10.76	1599.8	-5313.7
## - V24_J1_6	1	10.98	1600.0	-5313.0
## - V24_J2_5	1	11.60	1600.6	-5311.0
## - V13_1_J1_7	1	12.00	1601.0	-5309.7
## - V4_J1_3	1	13.25	1602.2	-5305.6
## - V29_J1_5	1	14.87	1603.9	-5300.4
## - V17_J1_5	1	15.59	1604.6	-5298.0
## - V20_J2_1	1	16.10	1605.1	-5296.4
## - V12_1_2_J1_6	1	17.72	1606.7	-5291.1
## - V29_J1_3	1	18.04	1607.0	-5290.1
## - V16_J2_3	1	19.65	1608.7	-5284.9
## - V26_J1_5	1	19.76	1608.8	-5284.5
## - V14_J2_5	1	22.48	1611.5	-5275.8
## - V12_1_2_J1_7	1	23.09	1612.1	-5273.8
## - V4_J1_5	1	24.32	1613.3	-5269.8
## - V20_J2_3	1	24.74	1613.7	-5268.5
## - V30_J2_5	1	25.31	1614.3	-5266.6
## - V3_J1_5	1	26.11	1615.1	-5264.0
## - V2_J2_7	1	26.78	1615.8	-5261.9
## - V14_J2_1	1	27.57	1616.6	-5259.4
## - V2_J2_2	1	28.12	1617.1	-5257.6
## - V23_J2_7	1	28.27	1617.3	-5257.1
## - V12_1_2_J2_7	1	29.10	1618.1	-5254.4
## - V15_J1_1	1	29.53	1618.5	-5253.0
## - V30_J1_5	1	30.34	1619.3	-5250.5
## - V12_1_2_J1_3	1	32.58	1621.6	-5243.3
## - V15_J1_2	1	32.64	1621.6	-5243.1
## - V30_J1_3	1	33.63	1622.6	-5239.9
## - V19_J2_4	1	36.75	1625.8	-5229.9
## - V16_J2_7	1	37.45	1626.5	-5227.7
## - V19_J2_5	1	38.59	1627.6	-5224.0
## - V4_J2_7	1	38.63	1627.6	-5223.9
## - V14_J2_4	1	41.21	1630.2	-5215.6
## - V5_J1_4	1	45.15	1634.1	-5203.1
## - V13_2_J1_7	1	47.51	1636.5	-5195.6
## - V15_J1_6	1	50.48	1639.5	-5186.2
## - V4_J1_4	1	52.70	1641.7	-5179.1
## - V19_J2_1	1	52.81	1641.8	-5178.8
## - V26_J1_4	1	54.76	1643.8	-5172.6
## - V30_J1_2	1	54.76	1643.8	-5172.6
## - V1_J1_3	1	56.23	1645.2	-5168.0
## - V16_J1_3	1	56.52	1645.5	-5167.1

```

## - V5_J2_1      1      57.57 1646.6 -5163.7
## - V17_J2_7     1      60.16 1649.2 -5155.6
## - V15_J1_7     1      60.91 1649.9 -5153.2
## - V1_J2_2      1      61.07 1650.1 -5152.7
## - V17_J2_2     1      61.64 1650.6 -5150.9
## - V14_J1_5     1      65.39 1654.4 -5139.1
## - V17_J1_3     1      72.61 1661.6 -5116.4
## - V30_J1_1     1      73.45 1662.5 -5113.8
## - V30_J2_2     1      74.28 1663.3 -5111.2
## - V15_J1_3     1      75.81 1664.8 -5106.5
## - V2_J1_3      1      75.90 1664.9 -5106.2
## - V23_J1_3     1      77.58 1666.6 -5100.9
## - V14_J2_3     1      77.77 1666.8 -5100.3
## - V1_J2_7      1      85.92 1674.9 -5075.0
## - V5_J2_3      1      88.68 1677.7 -5066.4
## - V14_J1_4     1      93.76 1682.8 -5050.7
## - V3_J1_4      1      98.08 1687.1 -5037.4
## - V5_J1_5      1      99.37 1688.4 -5033.4
## - V19_J2_3     1     108.23 1697.2 -5006.2
## - V12_1_2_J1_4 1     108.70 1697.7 -5004.7
## - V4_J2_5      1     118.88 1707.9 -4973.6
## - V19_J1_5     1     120.58 1709.6 -4968.5
## - V15_J2_7     1     121.11 1710.1 -4966.8
## - V3_J2_1      1     126.43 1715.4 -4950.7
## - V4_J2_1      1     134.61 1723.6 -4925.9
## - V15_J2_2     1     135.82 1724.8 -4922.3
## - V3_J2_5      1     144.21 1733.2 -4897.1
## - V4_J2_3      1     147.23 1736.2 -4888.0
## - V26_J2_1     1     149.45 1738.5 -4881.4
## - V4_J2_4      1     161.70 1750.7 -4844.9
## - V12_1_2_J2_2 1     172.55 1761.5 -4812.7
## - V26_J2_4     1     187.32 1776.3 -4769.3
## - V26_J2_5     1     190.05 1779.0 -4761.3
## - V19_J1_4     1     193.51 1782.5 -4751.2
## - V3_J2_4      1     202.84 1791.8 -4724.1
## - V3_J2_3      1     229.63 1818.6 -4646.9
## - V20_J2_2     1     258.54 1847.5 -4564.9
## - V5_J2_5      1     281.50 1870.5 -4500.7
## - V5_J2_4      1     311.94 1900.9 -4416.7
## - V26_J2_3     1     393.86 1982.9 -4197.3
## - V16_J2_2     1     432.83 2021.8 -4096.1
## - J            12     507.39 2096.4 -3980.8
## - V            19    1133.40 2722.4 -2668.5
##
## Step:  AIC=-5357.36
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +

```

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##      V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
##      V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
##      V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
##      V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
##      V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
##      V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
##      V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
##      V23_J2_1
##
##      Df Sum of Sq    RSS    AIC
## + V26_J1_3      1      6.61 1575.7 -5372.5
## + V13_2_J1_6      1      6.41 1575.9 -5371.8
## + V20_J1_2       1      6.16 1576.2 -5371.0
## + V26_J1_6       1      5.95 1576.4 -5370.3
## + V14_J1_2       1      5.88 1576.5 -5370.1
## + V13_3_J2_5      1      5.86 1576.5 -5370.0
## + V13_2_J2_5      1      5.49 1576.8 -5368.8
## + V13_1_J1_5      1      4.44 1577.9 -5365.3
## + V26_J1_1       1      4.40 1577.9 -5365.2
## + V15_J2_3       1      4.34 1578.0 -5365.0
## + V20_J1_3       1      4.33 1578.0 -5365.0
## + V13_2_J1_4      1      4.24 1578.1 -5364.7
## + V30_J2_3       1      4.22 1578.1 -5364.6
## + V29_J1_1       1      4.21 1578.1 -5364.6
## + V13_2_J1_5      1      4.13 1578.2 -5364.3
## + V13_1_J2_4      1      4.12 1578.2 -5364.3
## + V29_J2_2       1      4.05 1578.3 -5364.1
## + V5_J1_6        1      3.97 1578.4 -5363.8
## + V13_2_J2_3      1      3.92 1578.4 -5363.6
## + V12_1_2_J1_5    1      3.85 1578.5 -5363.4
## + V13_3_J1_2      1      3.61 1578.7 -5362.6
## + V1_J2_3        1      3.59 1578.8 -5362.5
## + V29_J2_1       1      3.57 1578.8 -5362.5
## + V20_J1_6       1      3.38 1579.0 -5361.8
## + V24_J2_3       1      3.35 1579.0 -5361.7
## + V2_J1_6        1      3.19 1579.2 -5361.2
## + V20_J1_5       1      3.16 1579.2 -5361.1
## + V16_J2_1       1      3.14 1579.2 -5361.1
## + V13_2_J1_2      1      2.97 1579.4 -5360.5
## + V29_J1_6       1      2.94 1579.4 -5360.4
## + V13_2_J1_3      1      2.88 1579.5 -5360.2
## + V14_J2_7       1      2.79 1579.5 -5359.9
## + V2_J2_3        1      2.69 1579.7 -5359.6
## + V3_J1_2        1      2.61 1579.7 -5359.3
## + V1_J1_7        1      2.57 1579.8 -5359.2
## + V26_J2_2       1      2.53 1579.8 -5359.1
## + V30_J1_6       1      2.45 1579.9 -5358.8
## + V14_J1_3       1      2.43 1579.9 -5358.7
## + V23_J1_7       1      2.40 1579.9 -5358.6
## + V19_J1_1       1      2.34 1580.0 -5358.4
## + V15_J1_4       1      2.13 1580.2 -5357.7
## + V13_1_J2_2      1      2.04 1580.3 -5357.4
## <none>                1582.3 -5357.4
## + V19_J1_3       1      2.01 1580.3 -5357.3

```

## + V13_2_J2_2	1	1.96	1580.4	-5357.2
## + V20_J1_1	1	1.96	1580.4	-5357.2
## + V1_J1_1	1	1.94	1580.4	-5357.1
## + V13_3_J2_4	1	1.89	1580.5	-5356.9
## + V13_3_J1_1	1	1.86	1580.5	-5356.8
## + V16_J2_4	1	1.78	1580.6	-5356.6
## + V16_J1_4	1	1.76	1580.6	-5356.5
## + V24_J1_1	1	1.75	1580.6	-5356.5
## + V13_3_J1_6	1	1.72	1580.6	-5356.4
## + V29_J2_3	1	1.72	1580.6	-5356.4
## + V23_J2_2	1	1.70	1580.6	-5356.3
## + V13_2_J2_7	1	1.61	1580.7	-5356.0
## + V17_J2_1	1	1.58	1580.8	-5355.9
## + V17_J1_7	1	1.53	1580.8	-5355.8
## + V5_J1_3	1	1.47	1580.9	-5355.6
## + V2_J1_7	1	1.45	1580.9	-5355.5
## + V20_J1_7	1	1.45	1580.9	-5355.5
## + V3_J1_7	1	1.43	1580.9	-5355.4
## + V14_J2_2	1	1.42	1580.9	-5355.4
## + V19_J1_2	1	1.38	1581.0	-5355.3
## + V5_J1_2	1	1.37	1581.0	-5355.2
## + V30_J1_7	1	1.36	1581.0	-5355.2
## + V29_J1_4	1	1.28	1581.1	-5354.9
## + V20_J2_4	1	1.26	1581.1	-5354.9
## + V16_J1_2	1	1.24	1581.1	-5354.8
## + V17_J1_2	1	1.22	1581.1	-5354.7
## + V1_J1_2	1	1.14	1581.2	-5354.5
## + V16_J1_1	1	1.11	1581.2	-5354.4
## + V29_J2_4	1	1.08	1581.3	-5354.3
## + V12_1_2_J1_1	1	1.07	1581.3	-5354.2
## + V5_J2_7	1	0.98	1581.4	-5353.9
## + V13_1_J2_1	1	0.95	1581.4	-5353.9
## + V30_J1_4	1	0.95	1581.4	-5353.8
## + V13_1_J2_7	1	0.92	1581.4	-5353.7
## + V13_3_J1_3	1	0.92	1581.4	-5353.7
## + V13_1_J2_5	1	0.92	1581.4	-5353.7
## + V24_J1_5	1	0.91	1581.4	-5353.7
## + V20_J1_4	1	0.89	1581.5	-5353.6
## + V20_J2_7	1	0.81	1581.5	-5353.4
## + V23_J1_2	1	0.80	1581.5	-5353.4
## + V16_J1_6	1	0.78	1581.5	-5353.3
## + V24_J1_3	1	0.78	1581.6	-5353.3
## + V19_J1_6	1	0.75	1581.6	-5353.2
## + V29_J1_2	1	0.73	1581.6	-5353.1
## + V2_J1_2	1	0.72	1581.6	-5353.1
## + V30_J2_7	1	0.71	1581.6	-5353.1
## + V15_J2_5	1	0.65	1581.7	-5352.9
## + V13_3_J2_3	1	0.62	1581.7	-5352.8
## + V5_J1_7	1	0.61	1581.7	-5352.7
## + V13_3_J1_5	1	0.58	1581.8	-5352.6
## + V16_J1_5	1	0.52	1581.8	-5352.4
## + V23_J2_3	1	0.52	1581.8	-5352.4
## + V2_J2_1	1	0.52	1581.8	-5352.4
## + V17_J2_4	1	0.49	1581.8	-5352.3

## + V14_J1_6	1	0.49	1581.8	-5352.3
## + V23_J2_4	1	0.48	1581.9	-5352.3
## + V30_J2_1	1	0.48	1581.9	-5352.3
## + V12_1_2_J2_3	1	0.47	1581.9	-5352.3
## + V24_J2_7	1	0.46	1581.9	-5352.2
## + V19_J2_2	1	0.44	1581.9	-5352.2
## + V13_3_J2_7	1	0.41	1581.9	-5352.1
## + V15_J2_4	1	0.40	1581.9	-5352.1
## + V17_J2_5	1	0.39	1582.0	-5352.0
## + V5_J1_1	1	0.37	1582.0	-5351.9
## + V13_1_J1_6	1	0.36	1582.0	-5351.9
## + V12_1_2_J2_1	1	0.34	1582.0	-5351.8
## + V17_J1_1	1	0.34	1582.0	-5351.8
## + V24_J2_4	1	0.33	1582.0	-5351.8
## + V13_3_J2_2	1	0.31	1582.0	-5351.8
## + V23_J2_5	1	0.29	1582.0	-5351.7
## + V16_J1_7	1	0.27	1582.1	-5351.6
## + V26_J2_7	1	0.26	1582.1	-5351.6
## + V30_J2_4	1	0.26	1582.1	-5351.6
## + V4_J1_2	1	0.25	1582.1	-5351.6
## + V24_J2_2	1	0.25	1582.1	-5351.5
## + V4_J1_6	1	0.25	1582.1	-5351.5
## + V12_1_2_J2_5	1	0.24	1582.1	-5351.5
## + V13_2_J2_4	1	0.23	1582.1	-5351.5
## + V14_J1_1	1	0.22	1582.1	-5351.5
## + V15_J1_5	1	0.22	1582.1	-5351.4
## + V24_J1_4	1	0.21	1582.1	-5351.4
## + V1_J2_4	1	0.21	1582.1	-5351.4
## + V17_J2_3	1	0.20	1582.1	-5351.4
## + V13_1_J2_3	1	0.19	1582.2	-5351.3
## + V2_J2_5	1	0.18	1582.2	-5351.3
## + V29_J2_5	1	0.17	1582.2	-5351.3
## + V3_J2_7	1	0.17	1582.2	-5351.3
## + V4_J1_1	1	0.16	1582.2	-5351.2
## + V23_J1_5	1	0.16	1582.2	-5351.2
## + V4_J1_7	1	0.15	1582.2	-5351.2
## + V5_J2_2	1	0.15	1582.2	-5351.2
## + V26_J1_7	1	0.14	1582.2	-5351.2
## + V3_J1_3	1	0.14	1582.2	-5351.2
## + V20_J2_5	1	0.12	1582.2	-5351.1
## + V13_2_J2_1	1	0.12	1582.2	-5351.1
## + V23_J1_6	1	0.12	1582.2	-5351.1
## + V2_J2_4	1	0.12	1582.2	-5351.1
## + V13_1_J1_1	1	0.11	1582.2	-5351.1
## + V2_J1_1	1	0.11	1582.2	-5351.1
## + V26_J1_2	1	0.11	1582.2	-5351.1
## + V16_J2_5	1	0.10	1582.2	-5351.1
## + V3_J2_2	1	0.10	1582.2	-5351.0
## + V3_J1_6	1	0.09	1582.2	-5351.0
## + V1_J2_1	1	0.08	1582.3	-5351.0
## + V2_J1_4	1	0.07	1582.3	-5351.0
## + V1_J1_6	1	0.05	1582.3	-5350.9
## + V3_J1_1	1	0.05	1582.3	-5350.9
## + V4_J2_2	1	0.05	1582.3	-5350.9

## + V14_J1_7	1	0.04	1582.3	-5350.9
## + V1_J1_4	1	0.04	1582.3	-5350.9
## + V29_J2_7	1	0.04	1582.3	-5350.8
## + V19_J1_7	1	0.04	1582.3	-5350.8
## + V17_J1_4	1	0.02	1582.3	-5350.8
## + V24_J1_2	1	0.01	1582.3	-5350.8
## + V12_1_2_J2_4	1	0.01	1582.3	-5350.8
## + V13_3_J1_7	1	0.01	1582.3	-5350.8
## + V24_J2_1	1	0.01	1582.3	-5350.8
## + V13_3_J1_4	1	0.01	1582.3	-5350.7
## + V13_2_J1_1	1	0.01	1582.3	-5350.7
## + V17_J1_6	1	0.00	1582.3	-5350.7
## + V13_3_J2_1	1	0.00	1582.3	-5350.7
## + V19_J2_7	1	0.00	1582.3	-5350.7
## + V23_J1_1	1	0.00	1582.3	-5350.7
## + V13_1_J1_4	1	0.00	1582.3	-5350.7
## - V23_J2_1	1	6.66	1589.0	-5342.2
## - V24_J1_7	1	7.49	1589.8	-5339.4
## - V23_J1_4	1	7.93	1590.3	-5338.0
## - V29_J1_7	1	8.42	1590.8	-5336.4
## - V1_J2_5	1	8.60	1590.9	-5335.8
## - V2_J1_5	1	8.91	1591.2	-5334.8
## - V13_1_J1_2	1	9.12	1591.5	-5334.1
## - V15_J2_1	1	9.65	1592.0	-5332.4
## - V13_1_J1_3	1	9.89	1592.2	-5331.6
## - V12_1_2_J1_2	1	10.05	1592.4	-5331.1
## - V1_J1_5	1	10.50	1592.8	-5329.6
## - V24_J1_6	1	10.81	1593.2	-5328.6
## - V24_J2_5	1	11.79	1594.1	-5325.4
## - V13_1_J1_7	1	12.21	1594.5	-5324.0
## - V4_J1_3	1	13.17	1595.5	-5320.9
## - V20_J2_1	1	14.29	1596.6	-5317.2
## - V29_J1_5	1	14.61	1597.0	-5316.2
## - V17_J1_5	1	15.31	1597.7	-5313.9
## - V12_1_2_J1_6	1	18.02	1600.4	-5305.1
## - V29_J1_3	1	18.19	1600.5	-5304.6
## - V26_J1_5	1	19.84	1602.2	-5299.2
## - V16_J2_3	1	19.85	1602.2	-5299.2
## - V14_J2_5	1	22.51	1604.8	-5290.5
## - V12_1_2_J1_7	1	23.47	1605.8	-5287.4
## - V4_J1_5	1	24.37	1606.7	-5284.5
## - V20_J2_3	1	24.74	1607.1	-5283.3
## - V30_J2_5	1	24.91	1607.2	-5282.8
## - V14_J2_1	1	25.17	1607.5	-5281.9
## - V23_J2_7	1	25.40	1607.7	-5281.2
## - V3_J1_5	1	26.21	1608.5	-5278.6
## - V2_J2_7	1	26.93	1609.3	-5276.3
## - V2_J2_2	1	28.51	1610.8	-5271.1
## - V12_1_2_J2_7	1	29.34	1611.7	-5268.5
## - V15_J1_1	1	29.51	1611.8	-5267.9
## - V30_J1_5	1	29.84	1612.2	-5266.9
## - V15_J1_2	1	32.58	1614.9	-5258.0
## - V12_1_2_J1_3	1	32.89	1615.2	-5257.0
## - V30_J1_3	1	33.96	1616.3	-5253.6

## - V19_J2_4	1	36.71	1619.0	-5244.7
## - V16_J2_7	1	37.60	1619.9	-5241.9
## - V4_J2_7	1	38.43	1620.8	-5239.2
## - V19_J2_5	1	38.62	1621.0	-5238.6
## - V14_J2_4	1	41.16	1623.5	-5230.5
## - V5_J1_4	1	44.86	1627.2	-5218.6
## - V13_2_J1_7	1	47.86	1630.2	-5209.0
## - V19_J2_1	1	49.37	1631.7	-5204.2
## - V15_J1_6	1	50.43	1632.8	-5200.9
## - V4_J1_4	1	52.34	1634.7	-5194.8
## - V5_J2_1	1	53.95	1636.3	-5189.6
## - V30_J1_2	1	54.17	1636.5	-5188.9
## - V26_J1_4	1	54.44	1636.8	-5188.1
## - V1_J1_3	1	56.56	1638.9	-5181.4
## - V16_J1_3	1	56.78	1639.1	-5180.7
## - V17_J2_7	1	60.37	1642.7	-5169.3
## - V15_J1_7	1	60.78	1643.1	-5168.0
## - V1_J2_2	1	61.70	1644.0	-5165.1
## - V17_J2_2	1	62.21	1644.5	-5163.5
## - V14_J1_5	1	65.54	1647.9	-5153.0
## - V23_J1_3	1	72.68	1655.0	-5130.5
## - V30_J1_1	1	72.83	1655.2	-5130.0
## - V17_J1_3	1	72.93	1655.3	-5129.7
## - V30_J2_2	1	75.06	1657.4	-5123.0
## - V15_J1_3	1	75.88	1658.2	-5120.4
## - V2_J1_3	1	76.22	1658.6	-5119.4
## - V14_J2_3	1	77.73	1660.1	-5114.6
## - V1_J2_7	1	86.24	1668.6	-5088.0
## - V5_J2_3	1	88.64	1671.0	-5080.6
## - V14_J1_4	1	93.34	1675.7	-5066.0
## - V3_J1_4	1	97.65	1680.0	-5052.6
## - V5_J1_5	1	99.56	1681.9	-5046.7
## - V19_J2_3	1	108.18	1690.5	-5020.1
## - V12_1_2_J1_4	1	108.98	1691.3	-5017.6
## - V4_J2_5	1	118.87	1701.2	-4987.3
## - V3_J2_1	1	120.76	1703.1	-4981.5
## - V19_J1_5	1	120.79	1703.1	-4981.5
## - V15_J2_7	1	121.31	1703.7	-4979.9
## - V4_J2_1	1	128.77	1711.1	-4957.2
## - V15_J2_2	1	135.50	1717.8	-4936.7
## - V26_J2_1	1	143.20	1725.5	-4913.5
## - V3_J2_5	1	144.29	1726.6	-4910.2
## - V4_J2_3	1	147.09	1729.4	-4901.8
## - V4_J2_4	1	161.50	1743.8	-4858.6
## - V12_1_2_J2_2	1	173.69	1756.0	-4822.4
## - V26_J2_4	1	187.21	1769.5	-4782.5
## - V26_J2_5	1	190.14	1772.5	-4773.9
## - V19_J1_4	1	192.90	1775.2	-4765.8
## - V3_J2_4	1	202.73	1785.1	-4737.1
## - V3_J2_3	1	229.56	1811.9	-4659.5
## - V20_J2_2	1	258.96	1841.3	-4575.8
## - V5_J2_5	1	281.61	1864.0	-4512.3
## - V5_J2_4	1	311.80	1894.1	-4428.7
## - V26_J2_3	1	393.77	1976.1	-4208.4

```

## - V16_J2_2      1      434.25 2016.6 -4103.0
## - J             12      501.51 2083.8 -4005.4
## - V             19     1129.48 2711.8 -2682.1
##
## Step:  AIC=-5372.48
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##      V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##      V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##      V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
##      V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
##      V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
##      V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
##      V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
##      V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
##      V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
##      V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
##      V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
##      V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
##      V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
##      V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
##      V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
##      V23_J2_1 + V26_J1_3
##
##
##      Df Sum of Sq    RSS    AIC
## + V13_2_J1_6      1      6.61 1569.1 -5387.7
## + V14_J1_2        1      6.13 1569.6 -5386.1
## + V20_J1_2        1      5.95 1569.8 -5385.5
## + V13_3_J2_5      1      5.94 1569.8 -5385.5
## + V13_2_J2_5      1      5.40 1570.3 -5383.7
## + V13_1_J1_5      1      4.50 1571.2 -5380.7
## + V15_J2_3        1      4.35 1571.4 -5380.2
## + V13_2_J1_4      1      4.31 1571.4 -5380.1
## + V26_J1_6        1      4.19 1571.5 -5379.7
## + V30_J2_3        1      4.19 1571.5 -5379.7
## + V29_J1_1        1      4.17 1571.6 -5379.6
## + V26_J2_2        1      4.15 1571.6 -5379.6
## + V29_J2_2        1      4.11 1571.6 -5379.4
## + V13_1_J2_4      1      4.09 1571.6 -5379.4
## + V13_2_J1_5      1      4.07 1571.7 -5379.3
## + V13_2_J2_3      1      3.84 1571.9 -5378.5
## + V12_1_2_J1_5    1      3.82 1571.9 -5378.5
## + V5_J1_6         1      3.77 1572.0 -5378.3
## + V1_J2_3         1      3.63 1572.1 -5377.8
## + V14_J1_3        1      3.57 1572.2 -5377.6
## + V29_J2_1        1      3.53 1572.2 -5377.5
## + V13_3_J1_2      1      3.47 1572.3 -5377.3
## + V24_J2_3        1      3.45 1572.3 -5377.2
## + V2_J1_6         1      3.23 1572.5 -5376.5
## + V20_J1_5        1      3.22 1572.5 -5376.5
## + V20_J1_6        1      3.22 1572.5 -5376.5
## + V16_J2_1        1      3.17 1572.6 -5376.3
## + V20_J1_3        1      3.16 1572.6 -5376.3
## + V19_J1_3        1      3.05 1572.7 -5375.9
## + V29_J1_6        1      2.91 1572.8 -5375.4

```

## + V26_J1_1	1	2.89	1572.8	-5375.4
## + V13_2_J1_2	1	2.83	1572.9	-5375.2
## + V3_J1_2	1	2.77	1573.0	-5375.0
## + V2_J2_3	1	2.71	1573.0	-5374.8
## + V1_J1_7	1	2.62	1573.1	-5374.5
## + V14_J2_7	1	2.62	1573.1	-5374.5
## + V30_J1_6	1	2.42	1573.3	-5373.8
## + V23_J1_7	1	2.35	1573.4	-5373.6
## + V19_J1_1	1	2.20	1573.5	-5373.1
## + V15_J1_4	1	2.13	1573.6	-5372.9
## + V13_2_J2_2	1	2.09	1573.6	-5372.7
## + V20_J1_1	1	2.07	1573.7	-5372.7
## <none>			1575.7	-5372.5
## + V13_1_J2_2	1	1.99	1573.7	-5372.4
## + V13_3_J1_1	1	1.95	1573.8	-5372.3
## + V13_2_J1_3	1	1.93	1573.8	-5372.2
## + V1_J1_1	1	1.92	1573.8	-5372.2
## + V13_3_J2_4	1	1.85	1573.9	-5371.9
## + V16_J1_4	1	1.79	1573.9	-5371.8
## + V16_J2_4	1	1.76	1574.0	-5371.7
## + V13_2_J2_7	1	1.72	1574.0	-5371.5
## + V29_J2_3	1	1.69	1574.0	-5371.4
## + V23_J2_2	1	1.66	1574.1	-5371.3
## + V24_J1_1	1	1.64	1574.1	-5371.3
## + V13_3_J1_6	1	1.62	1574.1	-5371.2
## + V17_J2_1	1	1.60	1574.1	-5371.1
## + V17_J1_7	1	1.57	1574.2	-5371.0
## + V14_J2_2	1	1.55	1574.2	-5371.0
## + V19_J1_2	1	1.50	1574.2	-5370.8
## + V24_J1_3	1	1.45	1574.3	-5370.6
## + V2_J1_7	1	1.41	1574.3	-5370.5
## + V30_J1_7	1	1.40	1574.3	-5370.5
## + V20_J1_7	1	1.34	1574.4	-5370.3
## + V3_J1_7	1	1.30	1574.4	-5370.1
## + V5_J1_2	1	1.26	1574.5	-5370.0
## + V29_J1_4	1	1.25	1574.5	-5370.0
## + V17_J1_2	1	1.24	1574.5	-5369.9
## + V16_J1_2	1	1.22	1574.5	-5369.9
## + V20_J2_4	1	1.21	1574.5	-5369.8
## + V1_J1_2	1	1.16	1574.6	-5369.7
## + V16_J1_1	1	1.13	1574.6	-5369.6
## + V29_J2_4	1	1.11	1574.6	-5369.5
## + V5_J2_7	1	1.08	1574.7	-5369.4
## + V12_1_2_J1_1	1	1.04	1574.7	-5369.3
## + V30_J1_4	1	0.97	1574.8	-5369.0
## + V13_1_J2_1	1	0.94	1574.8	-5368.9
## + V20_J1_4	1	0.93	1574.8	-5368.9
## + V26_J2_7	1	0.90	1574.8	-5368.8
## + V13_1_J2_5	1	0.90	1574.8	-5368.8
## + V20_J2_7	1	0.90	1574.8	-5368.8
## + V13_1_J2_7	1	0.89	1574.8	-5368.8
## + V24_J1_5	1	0.87	1574.9	-5368.7
## + V19_J1_6	1	0.84	1574.9	-5368.6
## + V23_J1_2	1	0.81	1574.9	-5368.5

## + V5_J1_3	1	0.81	1574.9	-5368.5
## + V16_J1_6	1	0.81	1574.9	-5368.5
## + V2_J1_2	1	0.74	1575.0	-5368.3
## + V29_J1_2	1	0.71	1575.0	-5368.2
## + V5_J1_7	1	0.70	1575.0	-5368.2
## + V30_J2_7	1	0.69	1575.0	-5368.1
## + V15_J2_5	1	0.65	1575.1	-5368.0
## + V13_3_J2_3	1	0.60	1575.1	-5367.8
## + V13_3_J1_5	1	0.59	1575.1	-5367.8
## + V26_J1_2	1	0.58	1575.2	-5367.7
## + V24_J2_7	1	0.53	1575.2	-5367.6
## + V19_J2_2	1	0.51	1575.2	-5367.5
## + V2_J2_1	1	0.51	1575.2	-5367.5
## + V23_J2_3	1	0.50	1575.2	-5367.5
## + V17_J2_4	1	0.50	1575.2	-5367.5
## + V16_J1_5	1	0.50	1575.2	-5367.5
## + V12_1_2_J2_3	1	0.47	1575.3	-5367.4
## + V23_J2_4	1	0.47	1575.3	-5367.4
## + V30_J2_1	1	0.46	1575.3	-5367.4
## + V13_3_J2_7	1	0.46	1575.3	-5367.3
## + V5_J1_1	1	0.43	1575.3	-5367.3
## + V14_J1_6	1	0.42	1575.3	-5367.2
## + V13_3_J1_3	1	0.41	1575.3	-5367.2
## + V15_J2_4	1	0.41	1575.3	-5367.2
## + V17_J2_5	1	0.40	1575.3	-5367.2
## + V13_1_J1_6	1	0.37	1575.4	-5367.1
## + V24_J2_4	1	0.36	1575.4	-5367.0
## + V17_J1_1	1	0.35	1575.4	-5367.0
## + V12_1_2_J2_1	1	0.34	1575.4	-5367.0
## + V24_J2_2	1	0.30	1575.4	-5366.8
## + V16_J1_7	1	0.29	1575.5	-5366.8
## + V23_J2_5	1	0.27	1575.5	-5366.7
## + V30_J2_4	1	0.27	1575.5	-5366.7
## + V13_3_J2_2	1	0.27	1575.5	-5366.7
## + V14_J1_1	1	0.27	1575.5	-5366.7
## + V4_J1_2	1	0.25	1575.5	-5366.7
## + V4_J1_6	1	0.25	1575.5	-5366.7
## + V12_1_2_J2_5	1	0.24	1575.5	-5366.6
## + V15_J1_5	1	0.22	1575.5	-5366.6
## + V13_2_J2_4	1	0.21	1575.5	-5366.5
## + V17_J2_3	1	0.20	1575.5	-5366.5
## + V1_J2_4	1	0.20	1575.5	-5366.5
## + V24_J1_4	1	0.19	1575.5	-5366.5
## + V13_1_J2_3	1	0.19	1575.5	-5366.5
## + V29_J2_5	1	0.18	1575.5	-5366.4
## + V2_J2_5	1	0.17	1575.6	-5366.4
## + V4_J1_1	1	0.16	1575.6	-5366.4
## + V4_J1_7	1	0.15	1575.6	-5366.3
## + V23_J1_5	1	0.14	1575.6	-5366.3
## + V3_J2_7	1	0.13	1575.6	-5366.3
## + V2_J2_4	1	0.12	1575.6	-5366.2
## + V13_1_J1_1	1	0.12	1575.6	-5366.2
## + V23_J1_6	1	0.11	1575.6	-5366.2
## + V16_J2_5	1	0.11	1575.6	-5366.2

## + V5_J2_2	1	0.11	1575.6	-5366.2
## + V2_J1_1	1	0.11	1575.6	-5366.2
## + V20_J2_5	1	0.11	1575.6	-5366.2
## + V13_2_J2_1	1	0.11	1575.6	-5366.2
## + V1_J2_1	1	0.09	1575.6	-5366.1
## + V2_J1_4	1	0.08	1575.7	-5366.1
## + V3_J1_1	1	0.07	1575.7	-5366.1
## + V3_J2_2	1	0.07	1575.7	-5366.1
## + V1_J1_6	1	0.06	1575.7	-5366.0
## + V19_J1_7	1	0.06	1575.7	-5366.0
## + V3_J1_6	1	0.06	1575.7	-5366.0
## + V4_J2_2	1	0.04	1575.7	-5366.0
## + V1_J1_4	1	0.04	1575.7	-5366.0
## + V29_J2_7	1	0.03	1575.7	-5366.0
## + V24_J1_2	1	0.03	1575.7	-5365.9
## + V14_J1_7	1	0.02	1575.7	-5365.9
## + V17_J1_4	1	0.02	1575.7	-5365.9
## + V12_1_2_J2_4	1	0.01	1575.7	-5365.9
## + V19_J2_7	1	0.01	1575.7	-5365.9
## + V24_J2_1	1	0.01	1575.7	-5365.9
## + V13_3_J1_4	1	0.00	1575.7	-5365.9
## + V13_3_J2_1	1	0.00	1575.7	-5365.9
## + V13_3_J1_7	1	0.00	1575.7	-5365.9
## + V17_J1_6	1	0.00	1575.7	-5365.9
## + V3_J1_3	1	0.00	1575.7	-5365.9
## + V13_1_J1_4	1	0.00	1575.7	-5365.8
## + V26_J1_7	1	0.00	1575.7	-5365.8
## + V13_2_J1_1	1	0.00	1575.7	-5365.8
## + V23_J1_1	1	0.00	1575.7	-5365.8
## - V26_J1_3	1	6.61	1582.3	-5357.4
## - V23_J2_1	1	6.61	1582.3	-5357.3
## - V24_J1_7	1	7.73	1583.5	-5353.7
## - V23_J1_4	1	8.00	1583.7	-5352.8
## - V13_1_J1_3	1	8.11	1583.8	-5352.4
## - V29_J1_7	1	8.35	1584.1	-5351.6
## - V1_J2_5	1	8.65	1584.4	-5350.6
## - V2_J1_5	1	8.84	1584.6	-5350.0
## - V13_1_J1_2	1	9.06	1584.8	-5349.3
## - V15_J2_1	1	9.67	1585.4	-5347.3
## - V12_1_2_J1_2	1	10.14	1585.9	-5345.8
## - V1_J1_5	1	10.42	1586.2	-5344.9
## - V24_J1_6	1	11.06	1586.8	-5342.7
## - V24_J2_5	1	11.64	1587.4	-5340.8
## - V13_1_J1_7	1	12.10	1587.8	-5339.3
## - V20_J2_1	1	14.14	1589.9	-5332.7
## - V29_J1_5	1	14.50	1590.2	-5331.5
## - V4_J1_3	1	15.10	1590.8	-5329.5
## - V17_J1_5	1	15.21	1591.0	-5329.2
## - V12_1_2_J1_6	1	17.88	1593.6	-5320.4
## - V16_J2_3	1	19.91	1595.6	-5313.8
## - V29_J1_3	1	20.43	1596.2	-5312.1
## - V14_J2_5	1	22.29	1598.0	-5306.1
## - V26_J1_5	1	22.68	1598.4	-5304.8
## - V12_1_2_J1_7	1	23.29	1599.0	-5302.8

## - V20_J2_3	1	24.54	1600.3	-5298.8
## - V4_J1_5	1	24.59	1600.3	-5298.6
## - V30_J2_5	1	24.83	1600.6	-5297.8
## - V14_J2_1	1	24.93	1600.7	-5297.5
## - V23_J2_7	1	25.31	1601.0	-5296.2
## - V3_J1_5	1	26.02	1601.8	-5293.9
## - V2_J2_7	1	26.82	1602.5	-5291.4
## - V2_J2_2	1	28.37	1604.1	-5286.3
## - V12_1_2_J2_7	1	29.16	1604.9	-5283.7
## - V15_J1_1	1	29.68	1605.4	-5282.1
## - V30_J1_5	1	29.70	1605.4	-5282.0
## - V15_J1_2	1	32.77	1608.5	-5272.1
## - V12_1_2_J1_3	1	35.63	1611.4	-5262.8
## - V19_J2_4	1	36.42	1612.2	-5260.3
## - V30_J1_3	1	36.83	1612.6	-5259.0
## - V16_J2_7	1	37.47	1613.2	-5256.9
## - V19_J2_5	1	38.33	1614.1	-5254.1
## - V4_J2_7	1	38.43	1614.2	-5253.8
## - V14_J2_4	1	40.86	1616.6	-5246.0
## - V5_J1_4	1	44.56	1620.3	-5234.1
## - V13_2_J1_7	1	47.33	1623.1	-5225.2
## - V19_J2_1	1	49.03	1624.8	-5219.8
## - V15_J1_6	1	50.69	1626.4	-5214.5
## - V4_J1_4	1	52.61	1628.3	-5208.3
## - V5_J2_1	1	53.60	1629.3	-5205.2
## - V30_J1_2	1	54.29	1630.0	-5203.0
## - V26_J1_4	1	58.68	1634.4	-5189.0
## - V1_J1_3	1	60.12	1635.9	-5184.4
## - V17_J2_7	1	60.21	1635.9	-5184.1
## - V16_J1_3	1	60.35	1636.1	-5183.7
## - V15_J1_7	1	61.12	1636.8	-5181.2
## - V1_J2_2	1	61.50	1637.2	-5180.0
## - V17_J2_2	1	61.99	1637.7	-5178.4
## - V14_J1_5	1	65.24	1641.0	-5168.1
## - V15_J1_3	1	70.70	1646.4	-5150.9
## - V30_J1_1	1	72.95	1648.7	-5143.8
## - V30_J2_2	1	74.83	1650.6	-5137.8
## - V23_J1_3	1	76.65	1652.4	-5132.1
## - V17_J1_3	1	76.87	1652.6	-5131.4
## - V14_J2_3	1	77.30	1653.0	-5130.1
## - V2_J1_3	1	80.23	1656.0	-5120.9
## - V1_J2_7	1	86.06	1661.8	-5102.6
## - V5_J2_3	1	88.18	1663.9	-5096.0
## - V14_J1_4	1	92.91	1668.6	-5081.2
## - V3_J1_4	1	97.21	1672.9	-5067.8
## - V5_J1_5	1	99.19	1674.9	-5061.7
## - V19_J2_3	1	107.68	1683.4	-5035.4
## - V12_1_2_J1_4	1	109.05	1684.8	-5031.2
## - V4_J2_5	1	119.24	1695.0	-4999.8
## - V3_J2_1	1	120.23	1696.0	-4996.8
## - V19_J1_5	1	120.38	1696.1	-4996.3
## - V15_J2_7	1	121.71	1697.5	-4992.2
## - V4_J2_1	1	129.15	1704.9	-4969.5
## - V15_J2_2	1	136.00	1711.7	-4948.6


```

## - V3_J2_5      1      143.72 1719.5 -4925.2
## - V4_J2_3      1      147.49 1723.2 -4913.8
## - V26_J2_1     1      148.95 1724.7 -4909.4
## - V4_J2_4      1      161.95 1737.7 -4870.4
## - V12_1_2_J2_2 1      173.18 1748.9 -4836.9
## - V19_J1_4     1      192.28 1768.0 -4780.4
## - V26_J2_4     1      193.36 1769.1 -4777.2
## - V26_J2_5     1      196.28 1772.0 -4768.6
## - V3_J2_4      1      202.05 1777.8 -4751.7
## - V3_J2_3      1      228.81 1804.5 -4674.0
## - V20_J2_2     1      257.58 1833.3 -4591.8
## - V5_J2_5      1      280.80 1856.5 -4526.4
## - V5_J2_4      1      310.96 1886.7 -4442.6
## - V26_J2_3     1      400.35 1976.1 -4201.9
## - V16_J2_2     1      433.64 2009.4 -4115.0
## - J            12      466.41 2042.2 -4103.8
## - V            19     1111.16 2686.9 -2723.5
##
## Step:  AIC=-5387.7
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
## V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
## V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
## V23_J2_1 + V26_J1_3 + V13_2_J1_6
##
##
##      Df Sum of Sq  RSS    AIC
## + V14_J1_2      1      6.01 1563.1 -5401.0
## + V20_J1_2      1      6.00 1563.1 -5401.0
## + V13_3_J2_5     1      5.83 1563.3 -5400.4
## + V13_2_J1_4     1      5.38 1563.7 -5398.9
## + V26_J1_6       1      4.87 1564.2 -5397.2
## + V13_1_J1_5     1      4.65 1564.5 -5396.5
## + V13_2_J2_5     1      4.41 1564.7 -5395.7
## + V15_J2_3       1      4.36 1564.8 -5395.5
## + V26_J2_2       1      4.31 1564.8 -5395.4
## + V29_J1_1       1      4.21 1564.9 -5395.1
## + V29_J2_2       1      4.06 1565.1 -5394.5
## + V30_J2_3       1      4.04 1565.1 -5394.5
## + V13_1_J2_4     1      4.01 1565.1 -5394.4
## + V2_J1_6        1      3.88 1565.2 -5393.9
## + V12_1_2_J1_5   1      3.77 1565.4 -5393.6
## + V1_J2_3        1      3.77 1565.4 -5393.6

```

## + V14_J1_3	1	3.74	1565.4	-5393.5
## + V13_3_J1_2	1	3.49	1565.6	-5392.7
## + V29_J2_1	1	3.44	1565.7	-5392.5
## + V24_J2_3	1	3.43	1565.7	-5392.4
## + V16_J2_1	1	3.28	1565.8	-5391.9
## + V13_2_J1_5	1	3.24	1565.9	-5391.8
## + V19_J1_3	1	3.22	1565.9	-5391.7
## + V5_J1_6	1	3.19	1565.9	-5391.7
## + V20_J1_5	1	3.08	1566.0	-5391.3
## + V20_J1_3	1	3.06	1566.1	-5391.2
## + V13_2_J2_3	1	3.01	1566.1	-5391.1
## + V13_2_J2_2	1	2.88	1566.2	-5390.6
## + V2_J2_3	1	2.82	1566.3	-5390.4
## + V26_J1_1	1	2.78	1566.3	-5390.3
## + V14_J2_7	1	2.72	1566.4	-5390.1
## + V3_J1_2	1	2.69	1566.4	-5390.0
## + V13_2_J1_3	1	2.67	1566.5	-5389.9
## + V20_J1_6	1	2.65	1566.5	-5389.8
## + V1_J1_7	1	2.63	1566.5	-5389.8
## + V13_2_J2_7	1	2.44	1566.7	-5389.1
## + V29_J1_6	1	2.36	1566.8	-5388.9
## + V23_J1_7	1	2.33	1566.8	-5388.8
## + V19_J1_1	1	2.28	1566.8	-5388.6
## + V15_J1_4	1	2.12	1567.0	-5388.1
## + V13_2_J1_2	1	2.08	1567.0	-5388.0
## + V20_J1_1	1	2.04	1567.1	-5387.8
## + V13_1_J2_2	1	2.02	1567.1	-5387.8
## <none>			1569.1	-5387.7
## + V1_J1_1	1	1.97	1567.2	-5387.6
## + V30_J1_6	1	1.94	1567.2	-5387.5
## + V13_3_J1_1	1	1.93	1567.2	-5387.5
## + V13_3_J2_4	1	1.89	1567.2	-5387.4
## + V16_J1_4	1	1.87	1567.3	-5387.3
## + V23_J2_2	1	1.71	1567.4	-5386.8
## + V16_J2_4	1	1.69	1567.4	-5386.7
## + V17_J2_1	1	1.68	1567.5	-5386.6
## + V29_J2_3	1	1.63	1567.5	-5386.5
## + V24_J1_1	1	1.61	1567.5	-5386.4
## + V17_J1_7	1	1.59	1567.5	-5386.3
## + V14_J2_2	1	1.48	1567.6	-5386.0
## + V24_J1_3	1	1.47	1567.7	-5385.9
## + V19_J1_2	1	1.44	1567.7	-5385.8
## + V30_J1_7	1	1.40	1567.7	-5385.7
## + V2_J1_7	1	1.40	1567.7	-5385.7
## + V20_J1_7	1	1.31	1567.8	-5385.4
## + V5_J1_2	1	1.31	1567.8	-5385.4
## + V3_J1_7	1	1.31	1567.8	-5385.4
## + V20_J2_4	1	1.26	1567.9	-5385.2
## + V16_J1_2	1	1.24	1567.9	-5385.2
## + V13_3_J1_6	1	1.22	1567.9	-5385.1
## + V17_J1_2	1	1.21	1567.9	-5385.1
## + V29_J1_4	1	1.20	1567.9	-5385.1
## + V19_J1_6	1	1.16	1568.0	-5384.9
## + V29_J2_4	1	1.15	1568.0	-5384.9

## + V16_J1_6	1	1.14	1568.0	-5384.9
## + V1_J1_2	1	1.12	1568.0	-5384.8
## + V16_J1_1	1	1.10	1568.0	-5384.7
## + V30_J1_4	1	1.04	1568.1	-5384.5
## + V5_J2_7	1	1.02	1568.1	-5384.4
## + V12_1_2_J1_1	1	1.01	1568.1	-5384.4
## + V26_J2_7	1	0.98	1568.1	-5384.3
## + V13_1_J2_7	1	0.92	1568.2	-5384.1
## + V24_J1_5	1	0.90	1568.2	-5384.1
## + V13_1_J2_1	1	0.90	1568.2	-5384.0
## + V20_J1_4	1	0.88	1568.2	-5384.0
## + V20_J2_7	1	0.87	1568.3	-5383.9
## + V13_1_J2_5	1	0.85	1568.3	-5383.9
## + V23_J1_2	1	0.79	1568.3	-5383.7
## + V30_J2_7	1	0.74	1568.4	-5383.5
## + V5_J1_3	1	0.73	1568.4	-5383.5
## + V29_J1_2	1	0.73	1568.4	-5383.5
## + V2_J1_2	1	0.71	1568.4	-5383.4
## + V5_J1_7	1	0.69	1568.4	-5383.4
## + V15_J2_5	1	0.65	1568.5	-5383.2
## + V13_3_J2_3	1	0.63	1568.5	-5383.2
## + V26_J1_2	1	0.63	1568.5	-5383.2
## + V13_1_J1_6	1	0.62	1568.5	-5383.1
## + V17_J2_4	1	0.54	1568.6	-5382.9
## + V13_3_J1_5	1	0.54	1568.6	-5382.9
## + V24_J2_7	1	0.54	1568.6	-5382.8
## + V12_1_2_J2_3	1	0.47	1568.7	-5382.6
## + V19_J2_2	1	0.47	1568.7	-5382.6
## + V2_J2_1	1	0.47	1568.7	-5382.6
## + V23_J2_3	1	0.46	1568.7	-5382.6
## + V16_J1_5	1	0.44	1568.7	-5382.5
## + V13_3_J2_7	1	0.44	1568.7	-5382.5
## + V17_J2_5	1	0.44	1568.7	-5382.5
## + V23_J2_4	1	0.43	1568.7	-5382.5
## + V4_J1_6	1	0.42	1568.7	-5382.5
## + V30_J2_1	1	0.41	1568.7	-5382.4
## + V15_J2_4	1	0.41	1568.7	-5382.4
## + V5_J1_1	1	0.40	1568.7	-5382.4
## + V13_3_J1_3	1	0.38	1568.7	-5382.3
## + V24_J2_4	1	0.36	1568.8	-5382.3
## + V12_1_2_J2_1	1	0.34	1568.8	-5382.2
## + V17_J1_1	1	0.33	1568.8	-5382.2
## + V24_J2_2	1	0.31	1568.8	-5382.1
## + V30_J2_4	1	0.31	1568.8	-5382.1
## + V16_J1_7	1	0.29	1568.8	-5382.0
## + V13_3_J2_2	1	0.28	1568.8	-5382.0
## + V14_J1_1	1	0.24	1568.9	-5381.9
## + V23_J2_5	1	0.24	1568.9	-5381.9
## + V14_J1_6	1	0.24	1568.9	-5381.9
## + V12_1_2_J2_5	1	0.23	1568.9	-5381.8
## + V17_J2_3	1	0.23	1568.9	-5381.8
## + V15_J1_5	1	0.23	1568.9	-5381.8
## + V13_1_J2_3	1	0.21	1568.9	-5381.8
## + V4_J1_2	1	0.21	1568.9	-5381.8

## + V29_J2_5	1	0.21	1568.9	-5381.8
## + V4_J1_1	1	0.20	1568.9	-5381.7
## + V24_J1_4	1	0.19	1568.9	-5381.7
## + V1_J2_4	1	0.18	1569.0	-5381.7
## + V1_J1_6	1	0.17	1569.0	-5381.6
## + V4_J1_7	1	0.17	1569.0	-5381.6
## + V3_J2_7	1	0.15	1569.0	-5381.6
## + V2_J2_5	1	0.14	1569.0	-5381.5
## + V2_J2_4	1	0.14	1569.0	-5381.5
## + V16_J2_5	1	0.13	1569.0	-5381.5
## + V5_J2_2	1	0.13	1569.0	-5381.5
## + V20_J2_5	1	0.13	1569.0	-5381.5
## + V2_J1_1	1	0.12	1569.0	-5381.5
## + V13_1_J1_1	1	0.12	1569.0	-5381.5
## + V23_J1_5	1	0.11	1569.0	-5381.4
## + V1_J2_1	1	0.11	1569.0	-5381.4
## + V2_J1_4	1	0.10	1569.0	-5381.4
## + V3_J2_2	1	0.08	1569.0	-5381.3
## + V4_J2_2	1	0.07	1569.1	-5381.3
## + V3_J1_1	1	0.06	1569.1	-5381.3
## + V19_J1_7	1	0.06	1569.1	-5381.3
## + V13_2_J2_4	1	0.05	1569.1	-5381.2
## + V13_2_J1_1	1	0.04	1569.1	-5381.2
## + V29_J2_7	1	0.04	1569.1	-5381.2
## + V24_J1_2	1	0.03	1569.1	-5381.2
## + V23_J1_6	1	0.03	1569.1	-5381.2
## + V1_J1_4	1	0.03	1569.1	-5381.2
## + V14_J1_7	1	0.02	1569.1	-5381.1
## + V12_1_2_J2_4	1	0.01	1569.1	-5381.1
## + V17_J1_6	1	0.01	1569.1	-5381.1
## + V17_J1_4	1	0.01	1569.1	-5381.1
## + V13_2_J2_1	1	0.01	1569.1	-5381.1
## + V13_3_J1_4	1	0.01	1569.1	-5381.1
## + V3_J1_6	1	0.01	1569.1	-5381.1
## + V24_J2_1	1	0.01	1569.1	-5381.1
## + V13_1_J1_4	1	0.00	1569.1	-5381.1
## + V19_J2_7	1	0.00	1569.1	-5381.1
## + V26_J1_7	1	0.00	1569.1	-5381.1
## + V13_3_J1_7	1	0.00	1569.1	-5381.1
## + V23_J1_1	1	0.00	1569.1	-5381.1
## + V13_3_J2_1	1	0.00	1569.1	-5381.1
## + V3_J1_3	1	0.00	1569.1	-5381.1
## - V23_J2_1	1	6.48	1575.6	-5372.9
## - V13_2_J1_6	1	6.61	1575.7	-5372.5
## - V26_J1_3	1	6.81	1575.9	-5371.8
## - V24_J1_7	1	7.87	1577.0	-5368.3
## - V13_1_J1_3	1	8.00	1577.1	-5367.9
## - V23_J1_4	1	8.13	1577.2	-5367.5
## - V29_J1_7	1	8.30	1577.4	-5366.9
## - V2_J1_5	1	8.64	1577.8	-5365.8
## - V1_J2_5	1	8.82	1578.0	-5365.2
## - V13_1_J1_2	1	9.09	1578.2	-5364.3
## - V15_J2_1	1	9.67	1578.8	-5362.4
## - V1_J1_5	1	10.18	1579.3	-5360.7

## - V12_1_2_J1_2	1	10.22	1579.3	-5360.6
## - V24_J2_5	1	11.68	1580.8	-5355.8
## - V13_1_J1_7	1	12.03	1581.2	-5354.6
## - V24_J1_6	1	12.12	1581.2	-5354.3
## - V29_J1_5	1	14.27	1583.4	-5347.3
## - V20_J2_1	1	14.31	1583.4	-5347.1
## - V17_J1_5	1	14.95	1584.1	-5345.0
## - V4_J1_3	1	15.45	1584.6	-5343.4
## - V12_1_2_J1_6	1	16.49	1585.6	-5340.0
## - V16_J2_3	1	20.12	1589.2	-5328.1
## - V29_J1_3	1	20.63	1589.8	-5326.4
## - V14_J2_5	1	22.61	1591.7	-5319.9
## - V12_1_2_J1_7	1	23.01	1592.1	-5318.6
## - V26_J1_5	1	23.13	1592.2	-5318.3
## - V30_J2_5	1	24.53	1593.7	-5313.7
## - V20_J2_3	1	24.76	1593.9	-5312.9
## - V4_J1_5	1	25.10	1594.2	-5311.8
## - V14_J2_1	1	25.25	1594.4	-5311.3
## - V23_J2_7	1	25.48	1594.6	-5310.6
## - V3_J1_5	1	26.44	1595.6	-5307.4
## - V2_J2_7	1	26.99	1596.1	-5305.6
## - V2_J2_2	1	28.53	1597.7	-5300.6
## - V12_1_2_J2_7	1	29.09	1598.2	-5298.8
## - V30_J1_5	1	29.28	1598.4	-5298.2
## - V15_J1_1	1	29.83	1599.0	-5296.4
## - V15_J1_2	1	32.93	1602.1	-5286.3
## - V12_1_2_J1_3	1	35.67	1604.8	-5277.5
## - V19_J2_4	1	36.78	1605.9	-5273.8
## - V30_J1_3	1	37.19	1606.3	-5272.5
## - V16_J2_7	1	37.66	1606.8	-5271.0
## - V19_J2_5	1	38.75	1607.9	-5267.5
## - V4_J2_7	1	38.88	1608.0	-5267.1
## - V14_J2_4	1	41.24	1610.4	-5259.4
## - V13_2_J1_7	1	43.91	1613.0	-5250.8
## - V5_J1_4	1	44.97	1614.1	-5247.4
## - V19_J2_1	1	49.48	1618.6	-5232.9
## - V15_J1_6	1	52.79	1621.9	-5222.3
## - V4_J1_4	1	53.21	1622.3	-5220.9
## - V30_J1_2	1	54.06	1623.2	-5218.2
## - V5_J2_1	1	54.07	1623.2	-5218.2
## - V26_J1_4	1	59.24	1628.4	-5201.7
## - V17_J2_7	1	60.47	1629.6	-5197.7
## - V1_J1_3	1	60.57	1629.7	-5197.4
## - V16_J1_3	1	60.73	1629.9	-5196.9
## - V15_J1_7	1	61.57	1630.7	-5194.2
## - V1_J2_2	1	61.79	1630.9	-5193.5
## - V17_J2_2	1	62.24	1631.4	-5192.1
## - V14_J1_5	1	65.90	1635.0	-5180.4
## - V15_J1_3	1	70.68	1639.8	-5165.2
## - V30_J1_1	1	72.67	1641.8	-5158.9
## - V30_J2_2	1	75.17	1644.3	-5151.0
## - V23_J1_3	1	77.10	1646.2	-5144.9
## - V17_J1_3	1	77.32	1646.5	-5144.2
## - V14_J2_3	1	77.87	1647.0	-5142.5

```

## - V2_J1_3      1      80.70 1649.8 -5133.6
## - V1_J2_7      1      86.43 1655.6 -5115.5
## - V5_J2_3      1      88.79 1657.9 -5108.1
## - V14_J1_4     1      93.51 1662.6 -5093.3
## - V3_J1_4      1      97.81 1666.9 -5079.9
## - V5_J1_5      1     100.00 1669.1 -5073.1
## - V19_J2_3     1     108.35 1677.5 -5047.1
## - V12_1_2_J1_4 1     109.03 1678.2 -5045.0
## - V4_J2_5      1     120.20 1689.3 -5010.5
## - V3_J2_1      1     120.94 1690.1 -5008.3
## - V19_J1_5     1     121.27 1690.4 -5007.2
## - V15_J2_7     1     121.90 1691.0 -5005.3
## - V4_J2_1      1     130.11 1699.2 -4980.1
## - V15_J2_2     1     136.23 1705.3 -4961.4
## - V3_J2_5      1     144.52 1713.6 -4936.2
## - V4_J2_3      1     148.52 1717.7 -4924.1
## - V26_J2_1     1     149.86 1719.0 -4920.0
## - V4_J2_4      1     162.96 1732.1 -4880.5
## - V12_1_2_J2_2 1     172.96 1742.1 -4850.6
## - V19_J1_4     1     193.12 1762.2 -4790.8
## - V26_J2_4     1     194.32 1763.4 -4787.2
## - V26_J2_5     1     197.35 1766.5 -4778.3
## - V3_J2_4      1     202.88 1772.0 -4762.0
## - V3_J2_3      1     229.78 1798.9 -4683.7
## - V20_J2_2     1     257.98 1827.1 -4602.8
## - V5_J2_5      1     281.91 1851.0 -4535.2
## - V5_J2_4      1     311.98 1881.1 -4451.4
## - V26_J2_3     1     401.81 1970.9 -4208.8
## - V16_J2_2     1     434.23 2003.3 -4124.0
## - J            12     471.38 2040.5 -4101.4
## - V            19    1106.98 2676.1 -2737.8
##
## Step:  AIC=-5401.01
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
## V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
## V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
## V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V14_J1_2
##
##
##           Df Sum of Sq    RSS    AIC
## + V13_3_J2_5  1      5.86 1557.3 -5413.9
## + V13_2_J1_4  1      5.39 1557.7 -5412.3

```

## + V20_J1_2	1	5.25	1557.9	-5411.9
## + V26_J1_6	1	4.75	1558.4	-5410.2
## + V13_1_J1_5	1	4.59	1558.5	-5409.7
## + V26_J2_2	1	4.48	1558.6	-5409.3
## + V13_2_J2_5	1	4.41	1558.7	-5409.1
## + V15_J2_3	1	4.35	1558.8	-5408.9
## + V29_J1_1	1	4.33	1558.8	-5408.8
## + V30_J2_3	1	4.10	1559.0	-5408.0
## + V13_1_J2_4	1	4.07	1559.0	-5407.9
## + V29_J2_2	1	3.89	1559.2	-5407.3
## + V1_J2_3	1	3.80	1559.3	-5407.1
## + V12_1_2_J1_5	1	3.78	1559.3	-5407.0
## + V2_J1_6	1	3.73	1559.4	-5406.8
## + V24_J2_3	1	3.43	1559.7	-5405.8
## + V29_J2_1	1	3.43	1559.7	-5405.8
## + V19_J1_3	1	3.41	1559.7	-5405.7
## + V16_J2_1	1	3.31	1559.8	-5405.4
## + V3_J1_2	1	3.30	1559.8	-5405.4
## + V5_J1_6	1	3.26	1559.9	-5405.2
## + V13_2_J1_5	1	3.24	1559.9	-5405.2
## + V20_J1_5	1	3.09	1560.0	-5404.7
## + V13_2_J2_3	1	3.01	1560.1	-5404.4
## + V13_3_J1_2	1	2.92	1560.2	-5404.1
## + V20_J1_3	1	2.86	1560.3	-5403.9
## + V2_J2_3	1	2.85	1560.3	-5403.9
## + V13_2_J2_2	1	2.75	1560.4	-5403.5
## + V20_J1_6	1	2.73	1560.4	-5403.5
## + V14_J2_2	1	2.72	1560.4	-5403.4
## + V26_J1_1	1	2.70	1560.4	-5403.4
## + V1_J1_7	1	2.50	1560.6	-5402.7
## + V13_2_J1_3	1	2.47	1560.6	-5402.6
## + V29_J1_6	1	2.46	1560.7	-5402.6
## + V23_J1_7	1	2.45	1560.7	-5402.5
## + V14_J1_3	1	2.42	1560.7	-5402.4
## + V19_J1_1	1	2.32	1560.8	-5402.1
## + V13_2_J2_7	1	2.31	1560.8	-5402.1
## + V15_J1_4	1	2.11	1561.0	-5401.4
## + V13_1_J2_2	1	2.10	1561.0	-5401.4
## + V1_J1_1	1	2.07	1561.0	-5401.3
## <none>			1563.1	-5401.0
## + V20_J1_1	1	1.98	1561.1	-5401.0
## + V30_J1_6	1	1.98	1561.1	-5401.0
## + V19_J1_2	1	1.89	1561.2	-5400.7
## + V16_J1_4	1	1.89	1561.2	-5400.7
## + V13_3_J1_1	1	1.88	1561.2	-5400.6
## + V13_3_J2_4	1	1.88	1561.2	-5400.6
## + V23_J2_2	1	1.83	1561.3	-5400.5
## + V17_J2_1	1	1.70	1561.4	-5400.0
## + V16_J2_4	1	1.67	1561.4	-5399.9
## + V24_J1_1	1	1.67	1561.5	-5399.9
## + V13_2_J1_2	1	1.65	1561.5	-5399.9
## + V24_J1_3	1	1.62	1561.5	-5399.8
## + V29_J2_3	1	1.62	1561.5	-5399.8
## + V14_J2_7	1	1.59	1561.5	-5399.7

## + V17_J1_2	1	1.58	1561.5	-5399.6
## + V2_J1_7	1	1.50	1561.6	-5399.4
## + V17_J1_7	1	1.49	1561.6	-5399.3
## + V1_J1_2	1	1.48	1561.6	-5399.3
## + V20_J1_7	1	1.38	1561.7	-5399.0
## + V30_J1_7	1	1.36	1561.8	-5398.9
## + V3_J1_7	1	1.36	1561.8	-5398.9
## + V13_3_J1_6	1	1.27	1561.8	-5398.6
## + V20_J2_4	1	1.25	1561.9	-5398.5
## + V29_J1_4	1	1.20	1561.9	-5398.4
## + V29_J2_4	1	1.16	1562.0	-5398.2
## + V19_J1_6	1	1.12	1562.0	-5398.1
## + V23_J1_2	1	1.10	1562.0	-5398.0
## + V16_J1_6	1	1.07	1562.0	-5397.9
## + V26_J2_7	1	1.07	1562.0	-5397.9
## + V12_1_2_J1_1	1	1.05	1562.1	-5397.9
## + V16_J1_1	1	1.03	1562.1	-5397.8
## + V30_J1_4	1	1.01	1562.1	-5397.7
## + V2_J1_2	1	1.00	1562.1	-5397.7
## + V13_1_J2_7	1	0.97	1562.1	-5397.6
## + V5_J1_2	1	0.95	1562.2	-5397.5
## + V5_J2_7	1	0.95	1562.2	-5397.5
## + V16_J1_2	1	0.93	1562.2	-5397.5
## + V13_1_J2_1	1	0.92	1562.2	-5397.4
## + V24_J1_5	1	0.90	1562.2	-5397.4
## + V20_J1_4	1	0.89	1562.2	-5397.3
## + V13_1_J2_5	1	0.88	1562.2	-5397.3
## + V14_J1_1	1	0.86	1562.3	-5397.2
## + V20_J2_7	1	0.79	1562.3	-5397.0
## + V30_J2_7	1	0.79	1562.3	-5397.0
## + V5_J1_7	1	0.65	1562.5	-5396.6
## + V15_J2_5	1	0.65	1562.5	-5396.5
## + V5_J1_3	1	0.65	1562.5	-5396.5
## + V13_3_J2_3	1	0.63	1562.5	-5396.5
## + V13_1_J1_6	1	0.60	1562.5	-5396.4
## + V17_J2_4	1	0.55	1562.6	-5396.2
## + V13_3_J1_5	1	0.55	1562.6	-5396.2
## + V29_J1_2	1	0.49	1562.6	-5396.0
## + V24_J2_7	1	0.48	1562.6	-5396.0
## + V12_1_2_J2_3	1	0.46	1562.7	-5395.9
## + V23_J2_3	1	0.46	1562.7	-5395.9
## + V2_J2_1	1	0.45	1562.7	-5395.9
## + V17_J2_5	1	0.45	1562.7	-5395.9
## + V30_J2_1	1	0.43	1562.7	-5395.8
## + V16_J1_5	1	0.43	1562.7	-5395.8
## + V19_J2_2	1	0.43	1562.7	-5395.8
## + V23_J2_4	1	0.43	1562.7	-5395.8
## + V15_J2_4	1	0.41	1562.7	-5395.8
## + V13_3_J2_7	1	0.39	1562.7	-5395.7
## + V26_J1_2	1	0.39	1562.7	-5395.7
## + V4_J1_2	1	0.39	1562.7	-5395.7
## + V5_J1_1	1	0.38	1562.7	-5395.6
## + V4_J1_6	1	0.37	1562.8	-5395.6
## + V24_J2_4	1	0.36	1562.8	-5395.6

## + V12_1_2_J2_1	1	0.34	1562.8	-5395.5
## + V13_3_J1_3	1	0.32	1562.8	-5395.4
## + V13_3_J2_2	1	0.32	1562.8	-5395.4
## + V17_J1_1	1	0.30	1562.8	-5395.4
## + V30_J2_4	1	0.29	1562.8	-5395.3
## + V24_J2_2	1	0.27	1562.8	-5395.3
## + V16_J1_7	1	0.25	1562.9	-5395.2
## + V17_J2_3	1	0.24	1562.9	-5395.2
## + V12_1_2_J2_5	1	0.24	1562.9	-5395.2
## + V23_J2_5	1	0.24	1562.9	-5395.2
## + V15_J1_5	1	0.23	1562.9	-5395.1
## + V4_J1_1	1	0.23	1562.9	-5395.1
## + V29_J2_5	1	0.21	1562.9	-5395.1
## + V4_J1_7	1	0.20	1562.9	-5395.0
## + V13_1_J2_3	1	0.20	1562.9	-5395.0
## + V24_J1_4	1	0.19	1562.9	-5395.0
## + V3_J2_7	1	0.18	1562.9	-5395.0
## + V1_J2_4	1	0.17	1563.0	-5394.9
## + V5_J2_2	1	0.15	1563.0	-5394.9
## + V2_J2_4	1	0.15	1563.0	-5394.9
## + V2_J1_1	1	0.14	1563.0	-5394.8
## + V1_J1_6	1	0.14	1563.0	-5394.8
## + V2_J2_5	1	0.14	1563.0	-5394.8
## + V16_J2_5	1	0.14	1563.0	-5394.8
## + V20_J2_5	1	0.12	1563.0	-5394.8
## + V1_J2_1	1	0.12	1563.0	-5394.8
## + V24_J1_2	1	0.11	1563.0	-5394.8
## + V23_J1_5	1	0.11	1563.0	-5394.7
## + V13_1_J1_1	1	0.11	1563.0	-5394.7
## + V2_J1_4	1	0.10	1563.0	-5394.7
## + V3_J2_2	1	0.10	1563.0	-5394.7
## + V4_J2_2	1	0.09	1563.0	-5394.7
## + V14_J1_7	1	0.07	1563.0	-5394.6
## + V29_J2_7	1	0.06	1563.1	-5394.6
## + V3_J1_1	1	0.05	1563.1	-5394.6
## + V13_2_J2_4	1	0.05	1563.1	-5394.5
## + V19_J1_7	1	0.05	1563.1	-5394.5
## + V23_J1_6	1	0.04	1563.1	-5394.5
## + V13_2_J1_1	1	0.03	1563.1	-5394.5
## + V1_J1_4	1	0.02	1563.1	-5394.5
## + V12_1_2_J2_4	1	0.01	1563.1	-5394.4
## + V3_J1_6	1	0.01	1563.1	-5394.4
## + V13_2_J2_1	1	0.01	1563.1	-5394.4
## + V17_J1_4	1	0.01	1563.1	-5394.4
## + V26_J1_7	1	0.01	1563.1	-5394.4
## + V13_3_J1_4	1	0.01	1563.1	-5394.4
## + V24_J2_1	1	0.01	1563.1	-5394.4
## + V17_J1_6	1	0.01	1563.1	-5394.4
## + V14_J1_6	1	0.01	1563.1	-5394.4
## + V23_J1_1	1	0.01	1563.1	-5394.4
## + V13_3_J1_7	1	0.01	1563.1	-5394.4
## + V13_1_J1_4	1	0.00	1563.1	-5394.4
## + V13_3_J2_1	1	0.00	1563.1	-5394.4
## + V3_J1_3	1	0.00	1563.1	-5394.4

## + V19_J2_7	1	0.00	1563.1	-5394.4
## - V14_J1_2	1	6.01	1569.1	-5387.7
## - V23_J2_1	1	6.47	1569.6	-5386.2
## - V13_2_J1_6	1	6.49	1569.6	-5386.1
## - V26_J1_3	1	7.05	1570.2	-5384.2
## - V24_J1_7	1	7.73	1570.8	-5382.0
## - V13_1_J1_3	1	7.79	1570.9	-5381.8
## - V23_J1_4	1	8.15	1571.3	-5380.6
## - V13_1_J1_2	1	8.20	1571.3	-5380.4
## - V29_J1_7	1	8.47	1571.6	-5379.6
## - V2_J1_5	1	8.59	1571.7	-5379.2
## - V1_J2_5	1	8.87	1572.0	-5378.2
## - V15_J2_1	1	9.67	1572.8	-5375.6
## - V1_J1_5	1	10.12	1573.2	-5374.1
## - V12_1_2_J1_2	1	11.07	1574.2	-5371.0
## - V24_J2_5	1	11.67	1574.8	-5369.0
## - V24_J1_6	1	11.96	1575.1	-5368.0
## - V13_1_J1_7	1	12.13	1575.2	-5367.5
## - V29_J1_5	1	14.24	1577.4	-5360.5
## - V20_J2_1	1	14.29	1577.4	-5360.3
## - V17_J1_5	1	14.88	1578.0	-5358.4
## - V4_J1_3	1	15.86	1579.0	-5355.2
## - V12_1_2_J1_6	1	16.65	1579.8	-5352.6
## - V14_J2_5	1	18.94	1582.1	-5345.0
## - V16_J2_3	1	20.19	1583.3	-5340.9
## - V29_J1_3	1	21.09	1584.2	-5338.0
## - V14_J2_1	1	21.35	1584.5	-5337.1
## - V26_J1_5	1	23.13	1586.2	-5331.3
## - V12_1_2_J1_7	1	23.22	1586.3	-5331.0
## - V30_J2_5	1	24.65	1587.8	-5326.3
## - V20_J2_3	1	24.74	1587.8	-5326.0
## - V4_J1_5	1	25.17	1588.3	-5324.6
## - V23_J2_7	1	25.86	1589.0	-5322.3
## - V3_J1_5	1	26.38	1589.5	-5320.6
## - V2_J2_7	1	27.42	1590.5	-5317.2
## - V2_J2_2	1	28.95	1592.1	-5312.2
## - V30_J1_5	1	29.39	1592.5	-5310.8
## - V12_1_2_J2_7	1	29.41	1592.5	-5310.7
## - V15_J1_1	1	29.61	1592.7	-5310.1
## - V15_J1_2	1	34.34	1597.5	-5294.6
## - V14_J2_4	1	35.98	1599.1	-5289.3
## - V12_1_2_J1_3	1	36.18	1599.3	-5288.7
## - V19_J2_4	1	36.69	1599.8	-5287.0
## - V30_J1_3	1	37.62	1600.7	-5284.0
## - V16_J2_7	1	38.16	1601.3	-5282.2
## - V19_J2_5	1	38.66	1601.8	-5280.6
## - V4_J2_7	1	39.36	1602.5	-5278.3
## - V13_2_J1_7	1	44.25	1607.4	-5262.5
## - V5_J1_4	1	44.87	1608.0	-5260.5
## - V19_J2_1	1	49.38	1612.5	-5245.9
## - V15_J1_6	1	52.46	1615.6	-5236.0
## - V4_J1_4	1	53.30	1616.4	-5233.3
## - V5_J2_1	1	53.97	1617.1	-5231.2
## - V30_J1_2	1	56.02	1619.1	-5224.6

```

## - V14_J1_5      1      59.09 1622.2 -5214.7
## - V26_J1_4      1      59.23 1622.3 -5214.3
## - V17_J2_7      1      61.10 1624.2 -5208.2
## - V15_J1_7      1      61.17 1624.3 -5208.0
## - V1_J1_3       1      61.41 1624.5 -5207.3
## - V16_J1_3      1      61.56 1624.7 -5206.8
## - V1_J2_2       1      62.40 1625.5 -5204.1
## - V17_J2_2      1      62.85 1626.0 -5202.7
## - V15_J1_3      1      69.89 1633.0 -5180.2
## - V14_J2_3      1      70.21 1633.3 -5179.2
## - V30_J1_1      1      72.53 1635.6 -5171.8
## - V30_J2_2      1      75.52 1638.6 -5162.3
## - V23_J1_3      1      77.97 1641.1 -5154.5
## - V17_J1_3      1      78.26 1641.4 -5153.6
## - V2_J1_3       1      81.65 1644.8 -5142.9
## - V14_J1_4      1      84.90 1648.0 -5132.6
## - V1_J2_7       1      87.19 1650.3 -5125.4
## - V5_J2_3       1      88.65 1651.8 -5120.8
## - V3_J1_4       1      97.66 1660.8 -5092.5
## - V5_J1_5       1      99.88 1663.0 -5085.6
## - V19_J2_3      1     108.20 1671.3 -5059.6
## - V12_1_2_J1_4  1     108.96 1672.1 -5057.3
## - V4_J2_5       1     120.32 1683.4 -5022.0
## - V3_J2_1       1     120.77 1683.9 -5020.6
## - V19_J1_5      1     121.13 1684.2 -5019.5
## - V15_J2_7      1     121.15 1684.3 -5019.5
## - V4_J2_1       1     130.25 1693.4 -4991.5
## - V15_J2_2      1     135.48 1698.6 -4975.4
## - V3_J2_5       1     144.33 1707.5 -4948.4
## - V4_J2_3       1     148.68 1711.8 -4935.2
## - V26_J2_1      1     149.85 1713.0 -4931.6
## - V4_J2_4       1     163.11 1726.2 -4891.5
## - V12_1_2_J2_2  1     173.68 1736.8 -4859.8
## - V19_J1_4      1     192.91 1756.0 -4802.5
## - V26_J2_4      1     194.30 1757.4 -4798.4
## - V26_J2_5      1     197.33 1760.4 -4789.5
## - V3_J2_4       1     202.67 1765.8 -4773.7
## - V3_J2_3       1     229.57 1792.7 -4695.1
## - V20_J2_2      1     258.93 1822.0 -4610.6
## - V5_J2_5       1     281.64 1844.8 -4546.2
## - V5_J2_4       1     311.72 1874.8 -4462.1
## - V26_J2_3      1     401.80 1964.9 -4218.1
## - J             12     446.13 2009.2 -4175.0
## - V16_J2_2      1     435.76 1998.9 -4128.9
## - V             19    1092.72 2655.8 -2770.7
##
## Step:  AIC=-5413.9
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##      V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##      V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##      V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
##      V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
##      V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
##      V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +

```

```
##      V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
##      V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
##      V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
##      V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
##      V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
##      V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
##      V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
##      V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
##      V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
##      V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V14_J1_2 + V13_3_J2_5
```

```
##
##      Df Sum of Sq    RSS      AIC
## + V20_J1_2      1      5.38 1551.9 -5425.3
## + V13_2_J1_4     1      5.30 1552.0 -5425.0
## + V26_J1_6       1      4.76 1552.5 -5423.2
## + V13_1_J1_5     1      4.70 1552.6 -5423.0
## + V26_J2_2       1      4.51 1552.8 -5422.3
## + V29_J1_1       1      4.43 1552.8 -5422.1
## + V30_J2_3       1      4.12 1553.1 -5421.0
## + V15_J2_3       1      4.12 1553.1 -5421.0
## + V13_1_J2_4     1      4.00 1553.3 -5420.6
## + V1_J2_3        1      3.79 1553.5 -5419.9
## + V29_J2_2       1      3.74 1553.5 -5419.8
## + V2_J1_6        1      3.60 1553.7 -5419.3
## + V12_1_2_J1_5   1      3.60 1553.7 -5419.3
## + V19_J1_3       1      3.47 1553.8 -5418.9
## + V24_J2_3       1      3.46 1553.8 -5418.8
## + V13_2_J2_5     1      3.44 1553.8 -5418.8
## + V16_J2_1       1      3.42 1553.8 -5418.7
## + V29_J2_1       1      3.33 1553.9 -5418.4
## + V3_J1_2        1      3.32 1553.9 -5418.4
## + V13_2_J1_5     1      3.31 1554.0 -5418.3
## + V5_J1_6        1      3.24 1554.0 -5418.1
## + V13_2_J2_3     1      3.07 1554.2 -5417.5
## + V20_J1_5       1      3.01 1554.2 -5417.3
## + V2_J2_3        1      2.93 1554.3 -5417.1
## + V20_J1_6       1      2.82 1554.4 -5416.7
## + V26_J1_1       1      2.73 1554.5 -5416.4
## + V14_J2_2       1      2.71 1554.5 -5416.3
## + V20_J1_3       1      2.69 1554.6 -5416.3
## + V13_2_J2_2     1      2.64 1554.6 -5416.1
## + V23_J1_7       1      2.57 1554.7 -5415.8
## + V29_J1_6       1      2.55 1554.7 -5415.8
## + V13_3_J1_1     1      2.49 1554.8 -5415.6
## + V14_J1_3       1      2.47 1554.8 -5415.5
## + V1_J1_7        1      2.47 1554.8 -5415.5
## + V13_2_J1_3     1      2.32 1554.9 -5415.0
## + V13_3_J1_2     1      2.30 1555.0 -5414.9
## + V15_J1_4       1      2.29 1555.0 -5414.9
## + V19_J1_1       1      2.29 1555.0 -5414.9
## + V13_1_J2_2     1      2.21 1555.0 -5414.7
## + V13_2_J2_7     1      2.20 1555.1 -5414.6
## + V1_J1_1        1      2.07 1555.2 -5414.2
## + V30_J1_6       1      1.99 1555.3 -5413.9
```

## <none>		1557.3 -5413.9
## + V16_J1_4	1	1.97 1555.3 -5413.8
## + V23_J2_2	1	1.95 1555.3 -5413.8
## + V20_J1_1	1	1.92 1555.3 -5413.7
## + V19_J1_2	1	1.91 1555.3 -5413.6
## + V17_J2_1	1	1.78 1555.5 -5413.2
## + V13_2_J1_2	1	1.72 1555.5 -5413.0
## + V24_J1_3	1	1.68 1555.6 -5412.9
## + V24_J1_1	1	1.66 1555.6 -5412.8
## + V16_J2_4	1	1.61 1555.7 -5412.7
## + V2_J1_7	1	1.60 1555.7 -5412.6
## + V14_J2_7	1	1.59 1555.7 -5412.6
## + V29_J2_3	1	1.56 1555.7 -5412.5
## + V17_J1_2	1	1.49 1555.8 -5412.2
## + V1_J1_2	1	1.47 1555.8 -5412.2
## + V20_J1_7	1	1.46 1555.8 -5412.1
## + V13_1_J2_5	1	1.43 1555.8 -5412.0
## + V17_J1_7	1	1.40 1555.9 -5411.9
## + V3_J1_7	1	1.36 1555.9 -5411.8
## + V13_3_J2_4	1	1.36 1555.9 -5411.8
## + V30_J1_7	1	1.35 1555.9 -5411.8
## + V20_J2_4	1	1.29 1556.0 -5411.6
## + V29_J2_4	1	1.20 1556.1 -5411.3
## + V12_1_2_J1_1	1	1.16 1556.1 -5411.1
## + V29_J1_4	1	1.15 1556.1 -5411.1
## + V19_J1_6	1	1.13 1556.1 -5411.1
## + V26_J2_7	1	1.08 1556.2 -5410.9
## + V13_1_J2_7	1	1.05 1556.2 -5410.8
## + V23_J1_2	1	1.03 1556.2 -5410.7
## + V30_J1_4	1	1.00 1556.3 -5410.6
## + V16_J1_2	1	1.00 1556.3 -5410.6
## + V16_J1_6	1	1.00 1556.3 -5410.6
## + V16_J1_1	1	0.97 1556.3 -5410.5
## + V5_J2_7	1	0.94 1556.3 -5410.4
## + V5_J1_2	1	0.94 1556.3 -5410.4
## + V2_J1_2	1	0.93 1556.3 -5410.4
## + V13_3_J1_5	1	0.91 1556.3 -5410.3
## + V24_J1_5	1	0.89 1556.4 -5410.2
## + V14_J1_1	1	0.88 1556.4 -5410.2
## + V13_1_J2_1	1	0.87 1556.4 -5410.2
## + V13_3_J1_6	1	0.87 1556.4 -5410.2
## + V20_J1_4	1	0.85 1556.4 -5410.1
## + V30_J2_7	1	0.81 1556.5 -5410.0
## + V20_J2_7	1	0.73 1556.5 -5409.7
## + V13_3_J2_7	1	0.67 1556.6 -5409.5
## + V5_J1_7	1	0.66 1556.6 -5409.5
## + V5_J1_3	1	0.62 1556.6 -5409.3
## + V17_J2_4	1	0.59 1556.7 -5409.2
## + V13_3_J1_3	1	0.56 1556.7 -5409.1
## + V13_1_J1_6	1	0.55 1556.7 -5409.1
## + V23_J2_5	1	0.55 1556.7 -5409.1
## + V12_1_2_J2_5	1	0.53 1556.7 -5409.0
## + V29_J1_2	1	0.53 1556.7 -5409.0
## + V12_1_2_J2_3	1	0.53 1556.7 -5409.0

## + V24_J2_7	1	0.46	1556.8	-5408.8
## + V30_J2_1	1	0.44	1556.8	-5408.7
## + V23_J2_3	1	0.42	1556.8	-5408.7
## + V19_J2_2	1	0.42	1556.8	-5408.7
## + V2_J2_1	1	0.41	1556.8	-5408.6
## + V23_J2_4	1	0.40	1556.9	-5408.6
## + V12_1_2_J2_1	1	0.40	1556.9	-5408.6
## + V16_J1_5	1	0.40	1556.9	-5408.6
## + V4_J1_2	1	0.39	1556.9	-5408.6
## + V5_J1_1	1	0.39	1556.9	-5408.6
## + V2_J2_5	1	0.39	1556.9	-5408.6
## + V26_J1_2	1	0.39	1556.9	-5408.6
## + V24_J2_4	1	0.38	1556.9	-5408.5
## + V4_J1_6	1	0.37	1556.9	-5408.5
## + V15_J2_4	1	0.35	1556.9	-5408.4
## + V13_3_J2_3	1	0.34	1556.9	-5408.4
## + V15_J2_5	1	0.33	1556.9	-5408.4
## + V15_J1_5	1	0.29	1557.0	-5408.2
## + V30_J2_4	1	0.28	1557.0	-5408.2
## + V17_J2_3	1	0.27	1557.0	-5408.2
## + V17_J1_1	1	0.26	1557.0	-5408.1
## + V24_J2_2	1	0.26	1557.0	-5408.1
## + V4_J1_1	1	0.22	1557.0	-5408.0
## + V13_1_J2_3	1	0.22	1557.0	-5408.0
## + V16_J1_7	1	0.21	1557.0	-5408.0
## + V4_J1_7	1	0.20	1557.1	-5407.9
## + V24_J1_4	1	0.19	1557.1	-5407.9
## + V3_J2_7	1	0.19	1557.1	-5407.9
## + V17_J2_5	1	0.18	1557.1	-5407.9
## + V1_J2_4	1	0.18	1557.1	-5407.8
## + V2_J2_4	1	0.17	1557.1	-5407.8
## + V2_J1_1	1	0.16	1557.1	-5407.8
## + V5_J2_2	1	0.16	1557.1	-5407.8
## + V13_3_J2_2	1	0.14	1557.1	-5407.7
## + V1_J1_6	1	0.14	1557.1	-5407.7
## + V2_J1_4	1	0.12	1557.1	-5407.7
## + V1_J2_1	1	0.12	1557.1	-5407.7
## + V24_J1_2	1	0.11	1557.2	-5407.6
## + V3_J2_2	1	0.10	1557.2	-5407.6
## + V4_J2_2	1	0.10	1557.2	-5407.6
## + V13_1_J1_1	1	0.09	1557.2	-5407.6
## + V23_J1_5	1	0.09	1557.2	-5407.6
## + V29_J2_7	1	0.08	1557.2	-5407.5
## + V14_J1_7	1	0.07	1557.2	-5407.5
## + V13_3_J2_1	1	0.07	1557.2	-5407.5
## + V13_2_J2_4	1	0.06	1557.2	-5407.5
## + V3_J1_1	1	0.06	1557.2	-5407.5
## + V23_J1_6	1	0.05	1557.2	-5407.4
## + V19_J1_7	1	0.05	1557.2	-5407.4
## + V29_J2_5	1	0.04	1557.2	-5407.4
## + V13_2_J1_1	1	0.03	1557.2	-5407.3
## + V1_J1_4	1	0.02	1557.2	-5407.3
## + V12_1_2_J2_4	1	0.02	1557.2	-5407.3
## + V13_3_J1_4	1	0.02	1557.2	-5407.3

## + V13_3_J1_7	1	0.02	1557.2	-5407.3
## + V16_J2_5	1	0.01	1557.2	-5407.3
## + V13_2_J2_1	1	0.01	1557.2	-5407.3
## + V23_J1_1	1	0.01	1557.2	-5407.3
## + V20_J2_5	1	0.01	1557.2	-5407.3
## + V3_J1_6	1	0.01	1557.2	-5407.3
## + V26_J1_7	1	0.01	1557.2	-5407.3
## + V24_J2_1	1	0.01	1557.2	-5407.3
## + V13_1_J1_4	1	0.01	1557.3	-5407.3
## + V14_J1_6	1	0.00	1557.3	-5407.3
## + V17_J1_4	1	0.00	1557.3	-5407.3
## + V3_J1_3	1	0.00	1557.3	-5407.3
## + V17_J1_6	1	0.00	1557.3	-5407.3
## + V19_J2_7	1	0.00	1557.3	-5407.3
## - V13_3_J2_5	1	5.86	1563.1	-5401.0
## - V14_J1_2	1	6.03	1563.3	-5400.4
## - V23_J2_1	1	6.34	1563.6	-5399.4
## - V13_2_J1_6	1	6.38	1563.6	-5399.3
## - V26_J1_3	1	7.13	1564.4	-5396.8
## - V1_J2_5	1	7.51	1564.8	-5395.5
## - V13_1_J1_3	1	7.55	1564.8	-5395.4
## - V24_J1_7	1	7.70	1565.0	-5394.9
## - V23_J1_4	1	8.27	1565.5	-5393.0
## - V13_1_J1_2	1	8.34	1565.6	-5392.7
## - V2_J1_5	1	8.46	1565.7	-5392.4
## - V29_J1_7	1	8.63	1565.9	-5391.8
## - V15_J2_1	1	9.38	1566.6	-5389.3
## - V24_J2_5	1	10.05	1567.3	-5387.1
## - V1_J1_5	1	10.14	1567.4	-5386.8
## - V12_1_2_J1_2	1	10.78	1568.0	-5384.7
## - V24_J1_6	1	11.96	1569.2	-5380.8
## - V13_1_J1_7	1	12.33	1569.6	-5379.5
## - V29_J1_5	1	14.10	1571.4	-5373.6
## - V20_J2_1	1	14.43	1571.7	-5372.6
## - V17_J1_5	1	14.71	1572.0	-5371.6
## - V4_J1_3	1	15.98	1573.2	-5367.4
## - V14_J2_5	1	16.84	1574.1	-5364.6
## - V12_1_2_J1_6	1	16.99	1574.2	-5364.1
## - V16_J2_3	1	20.38	1577.6	-5352.9
## - V14_J2_1	1	21.26	1578.5	-5350.0
## - V29_J1_3	1	21.47	1578.7	-5349.3
## - V26_J1_5	1	23.05	1580.3	-5344.1
## - V12_1_2_J1_7	1	23.66	1580.9	-5342.1
## - V20_J2_3	1	24.89	1582.2	-5338.1
## - V4_J1_5	1	25.10	1582.4	-5337.4
## - V23_J2_7	1	26.21	1583.5	-5333.7
## - V3_J1_5	1	26.27	1583.5	-5333.5
## - V30_J2_5	1	26.71	1584.0	-5332.1
## - V2_J2_7	1	27.80	1585.1	-5328.5
## - V15_J1_1	1	29.09	1586.3	-5324.3
## - V2_J2_2	1	29.34	1586.6	-5323.5
## - V30_J1_5	1	29.43	1586.7	-5323.2
## - V12_1_2_J2_7	1	29.95	1587.2	-5321.5
## - V15_J1_2	1	33.74	1591.0	-5309.1

## - V19_J2_5	1	35.50	1592.8	-5303.3
## - V14_J2_4	1	35.79	1593.0	-5302.4
## - V19_J2_4	1	36.51	1593.8	-5300.0
## - V12_1_2_J1_3	1	36.86	1594.1	-5298.9
## - V30_J1_3	1	37.86	1595.1	-5295.6
## - V16_J2_7	1	38.60	1595.9	-5293.2
## - V4_J2_7	1	39.44	1596.7	-5290.5
## - V13_2_J1_7	1	44.58	1601.8	-5273.8
## - V5_J1_4	1	44.73	1602.0	-5273.3
## - V19_J2_1	1	49.26	1606.5	-5258.6
## - V15_J1_6	1	51.70	1609.0	-5250.7
## - V4_J1_4	1	53.20	1610.5	-5245.9
## - V5_J2_1	1	53.84	1611.1	-5243.8
## - V30_J1_2	1	55.98	1613.2	-5236.9
## - V14_J1_5	1	58.92	1616.2	-5227.4
## - V26_J1_4	1	59.10	1616.4	-5226.8
## - V15_J1_7	1	60.31	1617.6	-5223.0
## - V17_J2_7	1	61.66	1618.9	-5218.6
## - V1_J1_3	1	61.73	1619.0	-5218.4
## - V16_J1_3	1	62.26	1619.5	-5216.7
## - V1_J2_2	1	62.58	1619.8	-5215.7
## - V17_J2_2	1	63.41	1620.7	-5213.0
## - V15_J1_3	1	68.74	1626.0	-5195.9
## - V14_J2_3	1	69.99	1627.2	-5191.9
## - V30_J1_1	1	72.55	1629.8	-5183.8
## - V30_J2_2	1	75.69	1633.0	-5173.7
## - V23_J1_3	1	78.73	1636.0	-5164.1
## - V17_J1_3	1	79.04	1636.3	-5163.1
## - V2_J1_3	1	82.45	1639.7	-5152.3
## - V14_J1_4	1	84.70	1642.0	-5145.1
## - V1_J2_7	1	87.40	1644.7	-5136.6
## - V5_J2_3	1	88.42	1645.7	-5133.3
## - V3_J1_4	1	97.46	1654.7	-5104.9
## - V5_J1_5	1	99.67	1656.9	-5097.9
## - V19_J2_3	1	107.94	1665.2	-5072.0
## - V12_1_2_J1_4	1	109.70	1667.0	-5066.5
## - V4_J2_5	1	114.50	1671.8	-5051.6
## - V15_J2_7	1	119.82	1677.1	-5035.1
## - V3_J2_1	1	120.59	1677.8	-5032.7
## - V19_J1_5	1	120.90	1678.2	-5031.7
## - V4_J2_1	1	130.14	1687.4	-5003.2
## - V15_J2_2	1	134.08	1691.3	-4991.1
## - V3_J2_5	1	137.56	1694.8	-4980.4
## - V4_J2_3	1	148.46	1705.7	-4947.0
## - V26_J2_1	1	149.70	1707.0	-4943.2
## - V4_J2_4	1	162.82	1720.1	-4903.4
## - V12_1_2_J2_2	1	174.93	1732.2	-4866.9
## - V26_J2_5	1	189.32	1746.6	-4823.9
## - V19_J1_4	1	192.62	1749.9	-4814.1
## - V26_J2_4	1	193.95	1751.2	-4810.2
## - V3_J2_4	1	202.24	1759.5	-4785.6
## - V3_J2_3	1	229.19	1786.5	-4706.6
## - V20_J2_2	1	259.87	1817.1	-4618.0
## - V5_J2_5	1	271.44	1828.7	-4585.0


```

## - V5_J2_4      1      311.18 1868.4 -4473.2
## - V26_J2_3     1      401.40 1958.7 -4228.0
## - J            12      443.36 2000.6 -4190.8
## - V16_J2_2     1      437.18 1994.4 -4133.9
## - V            19     1093.62 2650.9 -2773.7
##
## Step:  AIC=-5425.25
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
## V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
## V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
## V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V14_J1_2 + V13_3_J2_5 +
## V20_J1_2
##
##
##      Df Sum of Sq  RSS    AIC
## + V13_2_J1_4      1      5.42 1546.5 -5436.8
## + V26_J1_6         1      4.91 1547.0 -5435.1
## + V13_1_J1_5       1      4.61 1547.3 -5434.1
## + V26_J2_2         1      4.44 1547.4 -5433.5
## + V29_J1_1         1      4.36 1547.5 -5433.3
## + V30_J2_3         1      4.08 1547.8 -5432.3
## + V15_J2_3         1      4.03 1547.8 -5432.1
## + V13_1_J2_4       1      4.02 1547.9 -5432.1
## + V20_J1_6         1      3.84 1548.0 -5431.5
## + V29_J2_2         1      3.73 1548.2 -5431.1
## + V1_J2_3          1      3.73 1548.2 -5431.1
## + V2_J1_6          1      3.67 1548.2 -5430.9
## + V12_1_2_J1_5     1      3.67 1548.2 -5430.9
## + V24_J2_3         1      3.48 1548.4 -5430.3
## + V16_J2_1         1      3.41 1548.5 -5430.0
## + V29_J2_1         1      3.36 1548.5 -5429.9
## + V13_2_J2_5       1      3.32 1548.6 -5429.8
## + V19_J1_3         1      3.30 1548.6 -5429.7
## + V13_2_J1_5       1      3.18 1548.7 -5429.3
## + V5_J1_6          1      3.15 1548.7 -5429.2
## + V13_2_J2_3       1      3.06 1548.8 -5428.9
## + V2_J2_3          1      2.90 1549.0 -5428.4
## + V13_3_J1_2       1      2.87 1549.0 -5428.2
## + V26_J1_1         1      2.84 1549.0 -5428.1
## + V3_J1_2          1      2.76 1549.1 -5427.9
## + V14_J2_2         1      2.65 1549.2 -5427.5
## + V13_2_J2_2       1      2.62 1549.3 -5427.4

```

## + V1_J1_7	1	2.55	1549.3	-5427.2
## + V13_3_J1_1	1	2.53	1549.3	-5427.1
## + V23_J1_7	1	2.50	1549.4	-5427.0
## + V29_J1_6	1	2.50	1549.4	-5427.0
## + V13_2_J1_3	1	2.42	1549.5	-5426.7
## + V14_J1_3	1	2.41	1549.5	-5426.7
## + V15_J1_4	1	2.29	1549.6	-5426.3
## + V13_1_J2_2	1	2.28	1549.6	-5426.3
## + V13_2_J2_7	1	2.27	1549.6	-5426.2
## + V20_J1_5	1	2.23	1549.7	-5426.1
## + V13_2_J1_2	1	2.22	1549.7	-5426.1
## + V19_J1_1	1	2.22	1549.7	-5426.1
## + V20_J1_7	1	2.21	1549.7	-5426.0
## + V1_J1_1	1	2.01	1549.9	-5425.3
## + V30_J1_6	1	1.99	1549.9	-5425.3
## <none>			1551.9	-5425.3
## + V20_J2_4	1	1.96	1549.9	-5425.2
## + V23_J2_2	1	1.95	1549.9	-5425.2
## + V20_J1_3	1	1.94	1550.0	-5425.1
## + V16_J1_4	1	1.89	1550.0	-5424.9
## + V17_J2_1	1	1.76	1550.1	-5424.5
## + V16_J2_4	1	1.68	1550.2	-5424.2
## + V24_J1_1	1	1.62	1550.3	-5424.1
## + V24_J1_3	1	1.59	1550.3	-5423.9
## + V29_J2_3	1	1.59	1550.3	-5423.9
## + V14_J2_7	1	1.57	1550.3	-5423.9
## + V2_J1_7	1	1.55	1550.3	-5423.8
## + V19_J1_2	1	1.49	1550.4	-5423.6
## + V13_1_J2_5	1	1.47	1550.4	-5423.5
## + V17_J1_7	1	1.44	1550.4	-5423.5
## + V16_J1_2	1	1.38	1550.5	-5423.3
## + V30_J1_7	1	1.35	1550.5	-5423.1
## + V13_3_J2_4	1	1.30	1550.6	-5423.0
## + V3_J1_7	1	1.30	1550.6	-5423.0
## + V5_J1_2	1	1.29	1550.6	-5423.0
## + V20_J1_1	1	1.26	1550.6	-5422.9
## + V29_J1_4	1	1.21	1550.7	-5422.7
## + V19_J1_6	1	1.19	1550.7	-5422.6
## + V12_1_2_J1_1	1	1.17	1550.7	-5422.5
## + V29_J2_4	1	1.14	1550.8	-5422.4
## + V17_J1_2	1	1.11	1550.8	-5422.3
## + V1_J1_2	1	1.10	1550.8	-5422.3
## + V13_1_J2_7	1	1.04	1550.8	-5422.1
## + V16_J1_6	1	1.03	1550.8	-5422.1
## + V5_J2_7	1	1.01	1550.9	-5422.0
## + V16_J1_1	1	1.00	1550.9	-5422.0
## + V26_J2_7	1	0.99	1550.9	-5421.9
## + V13_3_J1_5	1	0.98	1550.9	-5421.9
## + V30_J1_4	1	0.98	1550.9	-5421.9
## + V14_J1_1	1	0.88	1551.0	-5421.6
## + V13_1_J2_1	1	0.85	1551.0	-5421.4
## + V13_3_J1_6	1	0.85	1551.0	-5421.4
## + V24_J1_5	1	0.82	1551.1	-5421.4
## + V29_J1_2	1	0.81	1551.1	-5421.3

## + V30_J2_7	1	0.79	1551.1	-5421.3
## + V23_J1_2	1	0.72	1551.2	-5421.0
## + V13_3_J2_7	1	0.71	1551.2	-5421.0
## + V5_J1_7	1	0.70	1551.2	-5421.0
## + V5_J1_3	1	0.70	1551.2	-5421.0
## + V2_J1_2	1	0.64	1551.2	-5420.7
## + V26_J1_2	1	0.62	1551.3	-5420.7
## + V13_3_J1_3	1	0.61	1551.3	-5420.7
## + V23_J2_5	1	0.61	1551.3	-5420.6
## + V12_1_2_J2_5	1	0.55	1551.3	-5420.5
## + V12_1_2_J2_3	1	0.55	1551.3	-5420.5
## + V17_J2_4	1	0.55	1551.3	-5420.4
## + V13_1_J1_6	1	0.55	1551.3	-5420.4
## + V24_J2_7	1	0.50	1551.4	-5420.3
## + V16_J1_5	1	0.45	1551.4	-5420.1
## + V20_J1_4	1	0.45	1551.4	-5420.1
## + V2_J2_5	1	0.44	1551.4	-5420.1
## + V23_J2_4	1	0.44	1551.5	-5420.1
## + V23_J2_3	1	0.44	1551.5	-5420.1
## + V19_J2_2	1	0.43	1551.5	-5420.1
## + V4_J1_6	1	0.43	1551.5	-5420.1
## + V2_J2_1	1	0.42	1551.5	-5420.0
## + V5_J1_1	1	0.42	1551.5	-5420.0
## + V12_1_2_J2_1	1	0.42	1551.5	-5420.0
## + V30_J2_1	1	0.42	1551.5	-5420.0
## + V24_J2_4	1	0.41	1551.5	-5420.0
## + V20_J2_7	1	0.36	1551.5	-5419.8
## + V15_J2_4	1	0.35	1551.5	-5419.8
## + V13_3_J2_3	1	0.34	1551.5	-5419.7
## + V15_J2_5	1	0.33	1551.6	-5419.7
## + V17_J1_1	1	0.28	1551.6	-5419.6
## + V15_J1_5	1	0.28	1551.6	-5419.5
## + V30_J2_4	1	0.27	1551.6	-5419.5
## + V17_J2_3	1	0.26	1551.6	-5419.5
## + V24_J2_2	1	0.25	1551.6	-5419.5
## + V13_1_J2_3	1	0.23	1551.7	-5419.4
## + V16_J1_7	1	0.23	1551.7	-5419.4
## + V4_J1_2	1	0.22	1551.7	-5419.4
## + V1_J2_4	1	0.20	1551.7	-5419.3
## + V4_J1_1	1	0.18	1551.7	-5419.2
## + V4_J1_7	1	0.17	1551.7	-5419.2
## + V24_J1_4	1	0.16	1551.7	-5419.2
## + V3_J2_7	1	0.16	1551.7	-5419.1
## + V1_J1_6	1	0.15	1551.7	-5419.1
## + V5_J2_2	1	0.15	1551.7	-5419.1
## + V2_J1_1	1	0.15	1551.7	-5419.1
## + V17_J2_5	1	0.15	1551.7	-5419.1
## + V2_J2_4	1	0.14	1551.7	-5419.1
## + V13_3_J2_2	1	0.14	1551.7	-5419.1
## + V20_J2_5	1	0.13	1551.8	-5419.0
## + V23_J1_5	1	0.12	1551.8	-5419.0
## + V1_J2_1	1	0.11	1551.8	-5419.0
## + V2_J1_4	1	0.10	1551.8	-5418.9
## + V3_J2_2	1	0.10	1551.8	-5418.9

## + V13_1_J1_1	1	0.09	1551.8	-5418.9
## + V4_J2_2	1	0.09	1551.8	-5418.9
## + V14_J1_7	1	0.07	1551.8	-5418.9
## + V3_J1_1	1	0.07	1551.8	-5418.8
## + V13_3_J2_1	1	0.07	1551.8	-5418.8
## + V29_J2_7	1	0.06	1551.8	-5418.8
## + V19_J1_7	1	0.06	1551.8	-5418.8
## + V13_2_J2_4	1	0.05	1551.8	-5418.8
## + V23_J1_6	1	0.05	1551.8	-5418.8
## + V1_J1_4	1	0.04	1551.8	-5418.7
## + V13_2_J1_1	1	0.03	1551.8	-5418.7
## + V29_J2_5	1	0.03	1551.8	-5418.7
## + V24_J1_2	1	0.03	1551.8	-5418.7
## + V13_3_J1_4	1	0.02	1551.9	-5418.7
## + V12_1_2_J2_4	1	0.02	1551.9	-5418.7
## + V13_3_J1_7	1	0.02	1551.9	-5418.7
## + V13_2_J2_1	1	0.01	1551.9	-5418.7
## + V17_J1_4	1	0.01	1551.9	-5418.6
## + V16_J2_5	1	0.01	1551.9	-5418.6
## + V23_J1_1	1	0.01	1551.9	-5418.6
## + V3_J1_6	1	0.01	1551.9	-5418.6
## + V24_J2_1	1	0.00	1551.9	-5418.6
## + V14_J1_6	1	0.00	1551.9	-5418.6
## + V13_1_J1_4	1	0.00	1551.9	-5418.6
## + V17_J1_6	1	0.00	1551.9	-5418.6
## + V19_J2_7	1	0.00	1551.9	-5418.6
## + V26_J1_7	1	0.00	1551.9	-5418.6
## + V3_J1_3	1	0.00	1551.9	-5418.6
## - V14_J1_2	1	5.28	1557.2	-5414.2
## - V20_J1_2	1	5.38	1557.3	-5413.9
## - V13_3_J2_5	1	5.98	1557.9	-5411.9
## - V23_J2_1	1	6.37	1558.3	-5410.6
## - V13_2_J1_6	1	6.43	1558.3	-5410.4
## - V26_J1_3	1	6.91	1558.8	-5408.8
## - V1_J2_5	1	7.32	1559.2	-5407.4
## - V13_1_J1_3	1	7.62	1559.5	-5406.4
## - V24_J1_7	1	7.78	1559.7	-5405.9
## - V23_J1_4	1	8.12	1560.0	-5404.7
## - V29_J1_7	1	8.54	1560.4	-5403.4
## - V2_J1_5	1	8.66	1560.5	-5403.0
## - V13_1_J1_2	1	9.25	1561.1	-5401.0
## - V15_J2_1	1	9.27	1561.2	-5400.9
## - V12_1_2_J1_2	1	9.73	1561.6	-5399.4
## - V24_J2_5	1	9.87	1561.8	-5398.9
## - V1_J1_5	1	10.38	1562.3	-5397.2
## - V24_J1_6	1	12.05	1563.9	-5391.7
## - V13_1_J1_7	1	12.34	1564.2	-5390.7
## - V29_J1_5	1	14.36	1566.2	-5384.0
## - V17_J1_5	1	14.97	1566.9	-5381.9
## - V4_J1_3	1	15.60	1567.5	-5379.9
## - V20_J2_1	1	16.09	1568.0	-5378.2
## - V14_J2_5	1	16.73	1568.6	-5376.1
## - V12_1_2_J1_6	1	17.03	1568.9	-5375.1
## - V16_J2_3	1	20.34	1572.2	-5364.2

## - V29_J1_3	1	21.18	1573.1	-5361.4
## - V14_J2_1	1	21.36	1573.2	-5360.8
## - V26_J1_5	1	22.61	1574.5	-5356.7
## - V12_1_2_J1_7	1	23.69	1575.6	-5353.1
## - V4_J1_5	1	24.58	1576.5	-5350.2
## - V3_J1_5	1	25.86	1577.7	-5346.0
## - V23_J2_7	1	25.98	1577.9	-5345.6
## - V30_J2_5	1	26.85	1578.7	-5342.7
## - V20_J2_3	1	26.99	1578.9	-5342.2
## - V2_J2_7	1	27.55	1579.4	-5340.4
## - V15_J1_1	1	28.98	1580.9	-5335.7
## - V2_J2_2	1	29.34	1581.2	-5334.5
## - V30_J1_5	1	29.63	1581.5	-5333.6
## - V12_1_2_J2_7	1	29.91	1581.8	-5332.6
## - V15_J1_2	1	31.76	1583.7	-5326.5
## - V19_J2_5	1	35.07	1587.0	-5315.7
## - V14_J2_4	1	35.71	1587.6	-5313.6
## - V19_J2_4	1	36.16	1588.0	-5312.1
## - V12_1_2_J1_3	1	36.73	1588.6	-5310.3
## - V30_J1_3	1	37.69	1589.6	-5307.1
## - V16_J2_7	1	38.36	1590.2	-5304.9
## - V4_J2_7	1	38.93	1590.8	-5303.1
## - V5_J1_4	1	44.31	1596.2	-5285.5
## - V13_2_J1_7	1	44.43	1596.3	-5285.1
## - V19_J2_1	1	49.10	1601.0	-5269.9
## - V15_J1_6	1	51.58	1603.5	-5261.9
## - V4_J1_4	1	52.55	1604.4	-5258.7
## - V30_J1_2	1	53.43	1605.3	-5255.9
## - V5_J2_1	1	53.67	1605.6	-5255.1
## - V26_J1_4	1	58.52	1610.4	-5239.4
## - V14_J1_5	1	58.65	1610.5	-5239.0
## - V15_J1_7	1	60.18	1612.1	-5234.0
## - V1_J1_3	1	61.18	1613.1	-5230.8
## - V17_J2_7	1	61.30	1613.2	-5230.4
## - V16_J1_3	1	61.81	1613.7	-5228.8
## - V1_J2_2	1	62.51	1614.4	-5226.5
## - V17_J2_2	1	63.41	1615.3	-5223.6
## - V15_J1_3	1	68.84	1620.7	-5206.2
## - V14_J2_3	1	70.14	1622.0	-5202.0
## - V30_J1_1	1	72.51	1624.4	-5194.4
## - V30_J2_2	1	75.97	1627.8	-5183.4
## - V23_J1_3	1	78.18	1630.1	-5176.3
## - V17_J1_3	1	78.48	1630.4	-5175.4
## - V2_J1_3	1	81.87	1633.8	-5164.5
## - V14_J1_4	1	84.53	1636.4	-5156.1
## - V1_J2_7	1	86.89	1638.8	-5148.6
## - V5_J2_3	1	88.18	1640.1	-5144.5
## - V3_J1_4	1	96.83	1648.7	-5117.2
## - V5_J1_5	1	98.85	1650.7	-5110.8
## - V19_J2_3	1	107.67	1659.6	-5083.1
## - V12_1_2_J1_4	1	109.57	1661.5	-5077.1
## - V4_J2_5	1	113.44	1665.3	-5065.0
## - V15_J2_7	1	119.79	1671.7	-5045.2
## - V19_J1_5	1	119.99	1671.9	-5044.6

```

## - V3_J2_1      1      120.34 1672.2 -5043.5
## - V4_J2_1      1      129.58 1681.5 -5014.9
## - V15_J2_2     1      133.52 1685.4 -5002.7
## - V3_J2_5      1      136.69 1688.6 -4992.9
## - V4_J2_3      1      147.83 1699.7 -4958.7
## - V26_J2_1     1      149.26 1701.2 -4954.4
## - V4_J2_4      1      161.73 1713.6 -4916.4
## - V12_1_2_J2_2 1      175.42 1727.3 -4875.0
## - V26_J2_5     1      188.12 1740.0 -4836.9
## - V19_J1_4     1      191.72 1743.6 -4826.2
## - V26_J2_4     1      192.94 1744.8 -4822.5
## - V3_J2_4      1      201.39 1753.3 -4797.4
## - V3_J2_3      1      228.80 1780.7 -4716.8
## - V20_J2_2     1      264.82 1816.7 -4612.6
## - V5_J2_5      1      270.20 1822.1 -4597.2
## - V5_J2_4      1      310.11 1862.0 -4484.5
## - V26_J2_3     1      400.62 1952.5 -4237.7
## - J            12     447.78 1999.7 -4186.6
## - V16_J2_2     1      437.30 1989.2 -4141.0
## - V            19     1059.28 2611.2 -2845.6
##
## Step:  AIC=-5436.8
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
## V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
## V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
## V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V14_J1_2 + V13_3_J2_5 +
## V20_J1_2 + V13_2_J1_4
##
##
##      Df Sum of Sq    RSS    AIC
## + V26_J1_6      1      4.98 1541.5 -5446.9
## + V13_1_J1_5     1      4.75 1541.7 -5446.1
## + V26_J2_2      1      4.50 1542.0 -5445.3
## + V29_J1_1      1      4.47 1542.0 -5445.2
## + V13_1_J2_4     1      3.95 1542.5 -5443.5
## + V30_J2_3      1      3.93 1542.5 -5443.4
## + V20_J1_6      1      3.89 1542.6 -5443.2
## + V1_J2_3       1      3.86 1542.6 -5443.2
## + V15_J2_3      1      3.84 1542.6 -5443.1
## + V12_1_2_J1_5   1      3.64 1542.8 -5442.4
## + V2_J1_6       1      3.62 1542.8 -5442.3
## + V29_J2_2      1      3.59 1542.9 -5442.3

```

## + V16_J2_1	1	3.52	1543.0	-5442.0
## + V13_2_J2_2	1	3.43	1543.0	-5441.7
## + V24_J2_3	1	3.42	1543.0	-5441.7
## + V19_J1_3	1	3.38	1543.1	-5441.5
## + V29_J2_1	1	3.27	1543.2	-5441.2
## + V13_2_J1_3	1	3.19	1543.3	-5440.9
## + V5_J1_6	1	3.08	1543.4	-5440.5
## + V13_2_J2_7	1	3.04	1543.4	-5440.4
## + V2_J2_3	1	3.00	1543.5	-5440.3
## + V13_3_J1_2	1	2.94	1543.5	-5440.1
## + V26_J1_1	1	2.83	1543.6	-5439.7
## + V3_J1_2	1	2.76	1543.7	-5439.4
## + V14_J2_2	1	2.61	1543.9	-5438.9
## + V13_2_J2_5	1	2.54	1543.9	-5438.7
## + V29_J1_6	1	2.52	1543.9	-5438.7
## + V1_J1_7	1	2.48	1544.0	-5438.5
## + V14_J1_3	1	2.48	1544.0	-5438.5
## + V13_3_J1_1	1	2.47	1544.0	-5438.5
## + V23_J1_7	1	2.46	1544.0	-5438.4
## + V13_2_J1_5	1	2.43	1544.0	-5438.3
## + V13_1_J2_2	1	2.39	1544.1	-5438.2
## + V13_2_J2_3	1	2.30	1544.2	-5437.9
## + V20_J1_7	1	2.24	1544.2	-5437.7
## + V19_J1_1	1	2.21	1544.2	-5437.6
## + V20_J1_5	1	2.13	1544.3	-5437.3
## + V1_J1_1	1	2.11	1544.4	-5437.3
## + V30_J1_6	1	2.06	1544.4	-5437.1
## + V20_J2_4	1	2.02	1544.5	-5437.0
## + V23_J2_2	1	1.99	1544.5	-5436.9
## <none>			1546.5	-5436.8
## + V17_J2_1	1	1.84	1544.6	-5436.4
## + V20_J1_3	1	1.80	1544.7	-5436.2
## + V29_J1_4	1	1.76	1544.7	-5436.1
## + V15_J1_4	1	1.72	1544.8	-5436.0
## + V24_J1_3	1	1.70	1544.8	-5435.9
## + V24_J1_1	1	1.68	1544.8	-5435.8
## + V16_J2_4	1	1.62	1544.8	-5435.6
## + V13_2_J1_2	1	1.60	1544.9	-5435.5
## + V14_J2_7	1	1.59	1544.9	-5435.5
## + V2_J1_7	1	1.59	1544.9	-5435.5
## + V29_J2_3	1	1.53	1544.9	-5435.3
## + V19_J1_2	1	1.48	1545.0	-5435.2
## + V16_J1_2	1	1.46	1545.0	-5435.1
## + V13_1_J2_5	1	1.41	1545.1	-5434.9
## + V17_J1_7	1	1.40	1545.1	-5434.9
## + V16_J1_4	1	1.36	1545.1	-5434.7
## + V13_3_J2_4	1	1.33	1545.1	-5434.6
## + V5_J1_2	1	1.30	1545.2	-5434.5
## + V30_J1_7	1	1.29	1545.2	-5434.5
## + V3_J1_7	1	1.26	1545.2	-5434.4
## + V19_J1_6	1	1.23	1545.2	-5434.3
## + V20_J1_1	1	1.21	1545.3	-5434.2
## + V29_J2_4	1	1.17	1545.3	-5434.1
## + V12_1_2_J1_1	1	1.17	1545.3	-5434.1

## + V13_1_J2_7	1	1.11	1545.4	-5433.9
## + V17_J1_2	1	1.04	1545.4	-5433.7
## + V1_J1_2	1	1.02	1545.5	-5433.6
## + V26_J2_7	1	1.01	1545.5	-5433.6
## + V5_J2_7	1	1.00	1545.5	-5433.5
## + V16_J1_6	1	1.00	1545.5	-5433.5
## + V16_J1_1	1	0.94	1545.5	-5433.3
## + V13_3_J1_5	1	0.93	1545.5	-5433.3
## + V30_J2_7	1	0.88	1545.6	-5433.1
## + V14_J1_1	1	0.88	1545.6	-5433.1
## + V24_J1_5	1	0.87	1545.6	-5433.1
## + V29_J1_2	1	0.86	1545.6	-5433.1
## + V13_3_J1_6	1	0.85	1545.6	-5433.0
## + V13_1_J2_1	1	0.80	1545.7	-5432.9
## + V20_J1_4	1	0.79	1545.7	-5432.8
## + V5_J1_7	1	0.73	1545.7	-5432.6
## + V23_J1_2	1	0.71	1545.8	-5432.5
## + V13_3_J2_7	1	0.67	1545.8	-5432.4
## + V5_J1_3	1	0.66	1545.8	-5432.4
## + V26_J1_2	1	0.62	1545.8	-5432.3
## + V30_J1_4	1	0.61	1545.8	-5432.2
## + V23_J2_5	1	0.60	1545.9	-5432.2
## + V17_J2_4	1	0.58	1545.9	-5432.1
## + V2_J1_2	1	0.58	1545.9	-5432.1
## + V12_1_2_J2_5	1	0.55	1545.9	-5432.0
## + V12_1_2_J2_3	1	0.55	1545.9	-5432.0
## + V13_3_J1_3	1	0.55	1545.9	-5432.0
## + V13_1_J1_6	1	0.53	1545.9	-5432.0
## + V24_J2_7	1	0.46	1546.0	-5431.7
## + V4_J1_6	1	0.45	1546.0	-5431.7
## + V23_J2_4	1	0.44	1546.0	-5431.6
## + V23_J2_3	1	0.44	1546.0	-5431.6
## + V5_J1_1	1	0.42	1546.0	-5431.6
## + V12_1_2_J2_1	1	0.42	1546.0	-5431.6
## + V19_J2_2	1	0.42	1546.0	-5431.6
## + V16_J1_5	1	0.40	1546.1	-5431.5
## + V2_J2_5	1	0.39	1546.1	-5431.5
## + V24_J2_4	1	0.39	1546.1	-5431.5
## + V15_J2_5	1	0.39	1546.1	-5431.5
## + V2_J2_1	1	0.38	1546.1	-5431.5
## + V30_J2_1	1	0.37	1546.1	-5431.4
## + V13_3_J2_3	1	0.36	1546.1	-5431.4
## + V15_J1_5	1	0.35	1546.1	-5431.3
## + V20_J2_7	1	0.32	1546.2	-5431.2
## + V30_J2_4	1	0.31	1546.2	-5431.2
## + V15_J2_4	1	0.30	1546.2	-5431.2
## + V17_J2_3	1	0.29	1546.2	-5431.1
## + V13_1_J2_3	1	0.25	1546.2	-5431.0
## + V17_J1_1	1	0.25	1546.2	-5431.0
## + V24_J2_2	1	0.22	1546.2	-5430.9
## + V4_J1_2	1	0.22	1546.2	-5430.9
## + V16_J1_7	1	0.21	1546.2	-5430.9
## + V4_J1_1	1	0.19	1546.3	-5430.8
## + V1_J2_4	1	0.18	1546.3	-5430.8

## + V17_J2_5	1	0.18	1546.3	-5430.8
## + V2_J1_1	1	0.17	1546.3	-5430.7
## + V13_3_J2_2	1	0.17	1546.3	-5430.7
## + V13_2_J1_1	1	0.17	1546.3	-5430.7
## + V2_J2_4	1	0.16	1546.3	-5430.7
## + V3_J2_7	1	0.16	1546.3	-5430.7
## + V1_J1_4	1	0.16	1546.3	-5430.7
## + V5_J2_2	1	0.16	1546.3	-5430.7
## + V4_J1_7	1	0.16	1546.3	-5430.7
## + V20_J2_5	1	0.15	1546.3	-5430.7
## + V13_3_J1_4	1	0.14	1546.3	-5430.6
## + V1_J1_6	1	0.14	1546.3	-5430.6
## + V1_J2_1	1	0.13	1546.3	-5430.6
## + V23_J1_5	1	0.11	1546.3	-5430.5
## + V3_J2_2	1	0.11	1546.4	-5430.5
## + V4_J2_2	1	0.10	1546.4	-5430.5
## + V17_J1_4	1	0.09	1546.4	-5430.5
## + V14_J1_7	1	0.08	1546.4	-5430.4
## + V29_J2_7	1	0.08	1546.4	-5430.4
## + V13_1_J1_1	1	0.08	1546.4	-5430.4
## + V3_J1_1	1	0.07	1546.4	-5430.4
## + V19_J1_7	1	0.07	1546.4	-5430.4
## + V13_3_J2_1	1	0.06	1546.4	-5430.4
## + V23_J1_6	1	0.04	1546.4	-5430.3
## + V29_J2_5	1	0.04	1546.4	-5430.3
## + V24_J1_4	1	0.03	1546.4	-5430.3
## + V13_1_J1_4	1	0.02	1546.4	-5430.2
## + V24_J1_2	1	0.02	1546.5	-5430.2
## + V12_1_2_J2_4	1	0.02	1546.5	-5430.2
## + V13_3_J1_7	1	0.02	1546.5	-5430.2
## + V13_2_J2_1	1	0.02	1546.5	-5430.2
## + V16_J2_5	1	0.01	1546.5	-5430.2
## + V2_J1_4	1	0.01	1546.5	-5430.2
## + V24_J2_1	1	0.01	1546.5	-5430.2
## + V23_J1_1	1	0.01	1546.5	-5430.2
## + V3_J1_6	1	0.00	1546.5	-5430.2
## + V19_J2_7	1	0.00	1546.5	-5430.2
## + V14_J1_6	1	0.00	1546.5	-5430.2
## + V17_J1_6	1	0.00	1546.5	-5430.2
## + V26_J1_7	1	0.00	1546.5	-5430.2
## + V3_J1_3	1	0.00	1546.5	-5430.2
## + V13_2_J2_4	1	0.00	1546.5	-5430.2
## - V14_J1_2	1	5.27	1551.7	-5425.7
## - V13_2_J1_4	1	5.42	1551.9	-5425.3
## - V20_J1_2	1	5.49	1552.0	-5425.0
## - V13_3_J2_5	1	5.90	1552.4	-5423.6
## - V23_J2_1	1	6.37	1552.8	-5422.0
## - V23_J1_4	1	6.98	1553.4	-5420.0
## - V26_J1_3	1	7.01	1553.5	-5419.9
## - V13_1_J1_3	1	7.41	1553.9	-5418.6
## - V1_J2_5	1	7.48	1554.0	-5418.3
## - V13_2_J1_6	1	7.50	1554.0	-5418.3
## - V24_J1_7	1	7.76	1554.2	-5417.4
## - V2_J1_5	1	8.47	1554.9	-5415.0

## - V29_J1_7	1	8.58	1555.0	-5414.6
## - V15_J2_1	1	9.05	1555.5	-5413.1
## - V13_1_J1_2	1	9.39	1555.9	-5412.0
## - V12_1_2_J1_2	1	9.71	1556.2	-5410.9
## - V24_J2_5	1	9.99	1556.5	-5410.0
## - V1_J1_5	1	10.16	1556.6	-5409.4
## - V24_J1_6	1	12.03	1558.5	-5403.1
## - V13_1_J1_7	1	12.40	1558.9	-5401.9
## - V29_J1_5	1	14.16	1560.6	-5396.0
## - V17_J1_5	1	14.73	1561.2	-5394.1
## - V4_J1_3	1	15.76	1562.2	-5390.7
## - V20_J2_1	1	16.26	1562.7	-5389.0
## - V14_J2_5	1	16.73	1563.2	-5387.5
## - V12_1_2_J1_6	1	16.92	1563.4	-5386.8
## - V16_J2_3	1	20.53	1567.0	-5374.8
## - V14_J2_1	1	21.33	1567.8	-5372.2
## - V29_J1_3	1	21.53	1568.0	-5371.5
## - V26_J1_5	1	22.68	1569.1	-5367.7
## - V12_1_2_J1_7	1	23.58	1570.0	-5364.8
## - V4_J1_5	1	24.66	1571.1	-5361.2
## - V3_J1_5	1	25.90	1572.4	-5357.1
## - V23_J2_7	1	26.06	1572.5	-5356.5
## - V30_J2_5	1	26.50	1573.0	-5355.1
## - V20_J2_3	1	27.19	1573.7	-5352.8
## - V2_J2_7	1	27.88	1574.3	-5350.5
## - V15_J1_1	1	28.56	1575.0	-5348.3
## - V30_J1_5	1	29.21	1575.7	-5346.1
## - V2_J2_2	1	29.72	1576.2	-5344.4
## - V12_1_2_J2_7	1	29.98	1576.5	-5343.6
## - V15_J1_2	1	31.29	1577.8	-5339.3
## - V19_J2_5	1	35.07	1581.5	-5326.8
## - V14_J2_4	1	35.63	1582.1	-5325.0
## - V19_J2_4	1	36.07	1582.5	-5323.5
## - V12_1_2_J1_3	1	36.94	1583.4	-5320.7
## - V30_J1_3	1	38.28	1584.8	-5316.3
## - V16_J2_7	1	38.73	1585.2	-5314.8
## - V4_J2_7	1	39.03	1585.5	-5313.8
## - V13_2_J1_7	1	41.31	1587.8	-5306.3
## - V5_J1_4	1	41.41	1587.9	-5306.0
## - V19_J2_1	1	49.06	1595.5	-5281.0
## - V4_J1_4	1	49.51	1596.0	-5279.6
## - V15_J1_6	1	51.20	1597.7	-5274.1
## - V30_J1_2	1	52.91	1599.4	-5268.5
## - V5_J2_1	1	53.63	1600.1	-5266.2
## - V26_J1_4	1	55.21	1601.7	-5261.0
## - V14_J1_5	1	58.71	1605.2	-5249.7
## - V15_J1_7	1	59.76	1606.2	-5246.3
## - V17_J2_7	1	61.79	1608.2	-5239.7
## - V1_J1_3	1	61.88	1608.3	-5239.4
## - V16_J1_3	1	62.46	1608.9	-5237.5
## - V1_J2_2	1	63.12	1609.6	-5235.4
## - V17_J2_2	1	63.97	1610.4	-5232.7
## - V15_J1_3	1	67.89	1614.4	-5220.0
## - V14_J2_3	1	70.08	1616.5	-5213.0

```

## - V30_J1_1      1      71.94 1618.4 -5207.0
## - V30_J2_2      1      76.69 1623.2 -5191.8
## - V23_J1_3      1      78.52 1625.0 -5185.9
## - V17_J1_3      1      79.22 1625.7 -5183.6
## - V14_J1_4      1      80.39 1626.9 -5179.9
## - V2_J1_3       1      82.63 1629.1 -5172.8
## - V1_J2_7       1      87.53 1634.0 -5157.1
## - V5_J2_3       1      88.10 1634.6 -5155.3
## - V3_J1_4       1      92.29 1638.8 -5142.0
## - V5_J1_5       1      98.93 1645.4 -5121.0
## - V12_1_2_J1_4  1     104.79 1651.3 -5102.5
## - V19_J2_3      1     107.58 1654.0 -5093.7
## - V4_J2_5       1     113.52 1660.0 -5075.1
## - V15_J2_7      1     118.77 1665.2 -5058.7
## - V19_J1_5      1     120.09 1666.5 -5054.5
## - V3_J2_1       1     120.27 1666.7 -5054.0
## - V4_J2_1       1     129.61 1676.1 -5024.9
## - V15_J2_2      1     132.35 1678.8 -5016.4
## - V3_J2_5       1     136.69 1683.2 -5003.0
## - V4_J2_3       1     147.83 1694.3 -4968.7
## - V26_J2_1      1     149.26 1695.7 -4964.3
## - V4_J2_4       1     161.65 1708.1 -4926.4
## - V12_1_2_J2_2  1     175.69 1722.2 -4883.9
## - V19_J1_4      1     184.92 1731.4 -4856.1
## - V26_J2_5      1     188.20 1734.7 -4846.3
## - V26_J2_4      1     192.81 1739.3 -4832.4
## - V3_J2_4       1     201.18 1747.7 -4807.5
## - V3_J2_3       1     228.67 1775.1 -4726.3
## - V20_J2_2      1     265.83 1812.3 -4618.6
## - V5_J2_5       1     270.20 1816.7 -4606.1
## - V5_J2_4       1     309.86 1856.3 -4493.8
## - V26_J2_3      1     400.56 1947.0 -4245.7
## - J             12     451.12 1997.6 -4185.4
## - V16_J2_2      1     438.67 1985.1 -4144.9
## - V             19     1050.26 2596.7 -2867.8
##
## Step:  AIC=-5446.93
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
## V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
## V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
## V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V14_J1_2 + V13_3_J2_5 +

```

```

##      V20_J1_2 + V13_2_J1_4 + V26_J1_6
##
##      Df Sum of Sq    RSS    AIC
## + V13_1_J1_5      1      4.77 1536.7 -5456.4
## + V26_J1_1        1      4.76 1536.7 -5456.4
## + V29_J1_1        1      4.58 1536.9 -5455.8
## + V2_J1_6         1      4.19 1537.3 -5454.4
## + V13_1_J2_4      1      3.94 1537.5 -5453.6
## + V1_J2_3         1      3.89 1537.6 -5453.4
## + V30_J2_3        1      3.88 1537.6 -5453.4
## + V15_J2_3        1      3.84 1537.7 -5453.3
## + V12_1_2_J1_5    1      3.65 1537.8 -5452.6
## + V16_J2_1        1      3.54 1538.0 -5452.2
## + V24_J2_3        1      3.48 1538.0 -5452.0
## + V29_J2_2        1      3.43 1538.1 -5451.9
## + V19_J1_3        1      3.38 1538.1 -5451.7
## + V20_J1_6        1      3.36 1538.1 -5451.6
## + V13_2_J2_2      1      3.33 1538.2 -5451.5
## + V29_J2_1        1      3.27 1538.2 -5451.3
## + V13_2_J1_3      1      3.22 1538.3 -5451.2
## + V13_3_J1_2      1      3.05 1538.4 -5450.6
## + V2_J2_3         1      3.02 1538.5 -5450.5
## + V13_2_J2_7      1      2.95 1538.5 -5450.3
## + V26_J2_2        1      2.93 1538.5 -5450.2
## + V3_J1_2         1      2.66 1538.8 -5449.3
## + V5_J1_6         1      2.58 1538.9 -5449.0
## + V23_J1_7        1      2.57 1538.9 -5449.0
## + V13_1_J2_2      1      2.54 1539.0 -5448.9
## + V14_J1_3        1      2.50 1539.0 -5448.7
## + V13_2_J2_5      1      2.49 1539.0 -5448.7
## + V14_J2_2        1      2.47 1539.0 -5448.6
## + V13_3_J1_1      1      2.40 1539.1 -5448.4
## + V13_2_J1_5      1      2.39 1539.1 -5448.3
## + V1_J1_7         1      2.36 1539.1 -5448.3
## + V20_J1_7        1      2.35 1539.1 -5448.2
## + V19_J1_1        1      2.28 1539.2 -5448.0
## + V13_2_J2_3      1      2.26 1539.2 -5447.9
## + V1_J1_1         1      2.21 1539.3 -5447.8
## + V23_J2_2        1      2.12 1539.4 -5447.4
## + V20_J1_5        1      2.11 1539.4 -5447.4
## + V29_J1_6        1      2.09 1539.4 -5447.4
## + V20_J2_4        1      2.03 1539.5 -5447.2
## <none>                1541.5 -5446.9
## + V17_J2_1        1      1.86 1539.6 -5446.6
## + V20_J1_3        1      1.77 1539.7 -5446.3
## + V29_J1_4        1      1.76 1539.7 -5446.2
## + V15_J1_4        1      1.71 1539.8 -5446.1
## + V24_J1_1        1      1.71 1539.8 -5446.1
## + V14_J2_7        1      1.70 1539.8 -5446.0
## + V30_J1_6        1      1.69 1539.8 -5446.0
## + V2_J1_7         1      1.68 1539.8 -5446.0
## + V24_J1_3        1      1.67 1539.8 -5445.9
## + V13_2_J1_2      1      1.65 1539.8 -5445.9
## + V16_J2_4        1      1.61 1539.9 -5445.7

```

## + V19_J1_6	1	1.61	1539.9	-5445.7
## + V16_J1_2	1	1.56	1539.9	-5445.6
## + V29_J2_3	1	1.53	1540.0	-5445.5
## + V19_J1_2	1	1.41	1540.1	-5445.1
## + V13_1_J2_5	1	1.40	1540.1	-5445.0
## + V5_J1_2	1	1.37	1540.1	-5444.9
## + V16_J1_4	1	1.37	1540.1	-5444.9
## + V13_3_J2_4	1	1.32	1540.2	-5444.8
## + V3_J1_7	1	1.32	1540.2	-5444.7
## + V17_J1_7	1	1.32	1540.2	-5444.7
## + V16_J1_6	1	1.31	1540.2	-5444.7
## + V12_1_2_J1_1	1	1.22	1540.3	-5444.4
## + V13_1_J2_7	1	1.21	1540.3	-5444.4
## + V30_J1_7	1	1.19	1540.3	-5444.3
## + V29_J2_4	1	1.17	1540.3	-5444.3
## + V20_J1_1	1	1.14	1540.3	-5444.1
## + V30_J2_7	1	0.99	1540.5	-5443.6
## + V17_J1_2	1	0.96	1540.5	-5443.5
## + V1_J1_2	1	0.94	1540.5	-5443.5
## + V13_3_J1_5	1	0.93	1540.6	-5443.4
## + V5_J2_7	1	0.93	1540.6	-5443.4
## + V29_J1_2	1	0.93	1540.6	-5443.4
## + V16_J1_1	1	0.88	1540.6	-5443.3
## + V24_J1_5	1	0.84	1540.6	-5443.1
## + V14_J1_1	1	0.83	1540.7	-5443.1
## + V13_1_J2_1	1	0.80	1540.7	-5443.0
## + V20_J1_4	1	0.79	1540.7	-5443.0
## + V13_1_J1_6	1	0.76	1540.7	-5442.9
## + V5_J1_7	1	0.69	1540.8	-5442.6
## + V4_J1_6	1	0.68	1540.8	-5442.6
## + V5_J1_3	1	0.66	1540.8	-5442.5
## + V23_J1_2	1	0.65	1540.8	-5442.5
## + V30_J1_4	1	0.63	1540.9	-5442.4
## + V13_3_J2_7	1	0.60	1540.9	-5442.3
## + V13_3_J1_6	1	0.60	1540.9	-5442.3
## + V23_J2_5	1	0.60	1540.9	-5442.3
## + V17_J2_4	1	0.59	1540.9	-5442.3
## + V12_1_2_J2_5	1	0.56	1540.9	-5442.2
## + V13_3_J1_3	1	0.54	1540.9	-5442.1
## + V12_1_2_J2_3	1	0.54	1541.0	-5442.1
## + V2_J1_2	1	0.52	1541.0	-5442.1
## + V23_J2_4	1	0.44	1541.0	-5441.8
## + V23_J2_3	1	0.44	1541.0	-5441.8
## + V24_J2_7	1	0.42	1541.1	-5441.7
## + V12_1_2_J2_1	1	0.41	1541.1	-5441.7
## + V24_J2_4	1	0.41	1541.1	-5441.7
## + V5_J1_1	1	0.40	1541.1	-5441.6
## + V15_J2_5	1	0.39	1541.1	-5441.6
## + V2_J2_5	1	0.39	1541.1	-5441.6
## + V16_J1_5	1	0.39	1541.1	-5441.6
## + V2_J2_1	1	0.38	1541.1	-5441.6
## + V19_J2_2	1	0.37	1541.1	-5441.5
## + V30_J2_1	1	0.36	1541.1	-5441.5
## + V13_3_J2_3	1	0.35	1541.1	-5441.5

## + V15_J1_5	1	0.35	1541.1	-5441.5
## + V26_J2_7	1	0.33	1541.2	-5441.4
## + V30_J2_4	1	0.32	1541.2	-5441.4
## + V15_J2_4	1	0.30	1541.2	-5441.3
## + V17_J2_3	1	0.29	1541.2	-5441.3
## + V20_J2_7	1	0.27	1541.2	-5441.2
## + V1_J1_6	1	0.26	1541.2	-5441.2
## + V13_1_J2_3	1	0.26	1541.2	-5441.2
## + V17_J1_1	1	0.22	1541.3	-5441.0
## + V4_J1_1	1	0.21	1541.3	-5441.0
## + V2_J1_1	1	0.20	1541.3	-5441.0
## + V13_3_J2_2	1	0.20	1541.3	-5441.0
## + V24_J2_2	1	0.20	1541.3	-5441.0
## + V3_J2_7	1	0.19	1541.3	-5440.9
## + V5_J2_2	1	0.19	1541.3	-5440.9
## + V4_J1_7	1	0.18	1541.3	-5440.9
## + V17_J2_5	1	0.18	1541.3	-5440.9
## + V4_J1_2	1	0.18	1541.3	-5440.9
## + V16_J1_7	1	0.18	1541.3	-5440.9
## + V26_J1_7	1	0.18	1541.3	-5440.9
## + V1_J2_4	1	0.17	1541.3	-5440.9
## + V2_J2_4	1	0.17	1541.3	-5440.9
## + V13_2_J1_1	1	0.16	1541.3	-5440.8
## + V1_J1_4	1	0.16	1541.3	-5440.8
## + V20_J2_5	1	0.15	1541.3	-5440.8
## + V13_3_J1_4	1	0.14	1541.3	-5440.8
## + V1_J2_1	1	0.14	1541.3	-5440.8
## + V3_J2_2	1	0.13	1541.4	-5440.7
## + V4_J2_2	1	0.13	1541.4	-5440.7
## + V26_J1_2	1	0.12	1541.4	-5440.7
## + V23_J1_5	1	0.11	1541.4	-5440.7
## + V29_J2_7	1	0.11	1541.4	-5440.7
## + V17_J1_4	1	0.09	1541.4	-5440.6
## + V14_J1_7	1	0.06	1541.4	-5440.5
## + V13_1_J1_1	1	0.06	1541.4	-5440.5
## + V3_J1_1	1	0.06	1541.4	-5440.5
## + V13_3_J2_1	1	0.06	1541.4	-5440.5
## + V19_J1_7	1	0.06	1541.4	-5440.5
## + V29_J2_5	1	0.04	1541.5	-5440.4
## + V17_J1_6	1	0.03	1541.5	-5440.4
## + V24_J1_4	1	0.03	1541.5	-5440.4
## + V13_1_J1_4	1	0.02	1541.5	-5440.4
## + V13_2_J2_1	1	0.02	1541.5	-5440.4
## + V12_1_2_J2_4	1	0.02	1541.5	-5440.4
## + V24_J1_2	1	0.02	1541.5	-5440.3
## + V16_J2_5	1	0.02	1541.5	-5440.3
## + V23_J1_1	1	0.01	1541.5	-5440.3
## + V2_J1_4	1	0.01	1541.5	-5440.3
## + V13_3_J1_7	1	0.01	1541.5	-5440.3
## + V14_J1_6	1	0.01	1541.5	-5440.3
## + V3_J1_6	1	0.01	1541.5	-5440.3
## + V24_J2_1	1	0.01	1541.5	-5440.3
## + V23_J1_6	1	0.00	1541.5	-5440.3
## + V13_2_J2_4	1	0.00	1541.5	-5440.3

## + V3_J1_3	1	0.00	1541.5	-5440.3
## + V19_J2_7	1	0.00	1541.5	-5440.3
## - V26_J1_6	1	4.98	1546.5	-5436.8
## - V26_J1_3	1	5.06	1546.5	-5436.5
## - V14_J1_2	1	5.14	1546.6	-5436.3
## - V13_2_J1_4	1	5.48	1547.0	-5435.1
## - V20_J1_2	1	5.65	1547.1	-5434.5
## - V13_3_J2_5	1	5.91	1547.4	-5433.7
## - V23_J2_1	1	6.37	1547.9	-5432.1
## - V23_J1_4	1	6.97	1548.5	-5430.1
## - V13_1_J1_3	1	7.37	1548.9	-5428.8
## - V1_J2_5	1	7.51	1549.0	-5428.3
## - V24_J1_7	1	7.68	1549.2	-5427.7
## - V13_2_J1_6	1	8.23	1549.7	-5425.9
## - V2_J1_5	1	8.43	1549.9	-5425.2
## - V29_J1_7	1	8.74	1550.2	-5424.2
## - V15_J2_1	1	9.05	1550.5	-5423.1
## - V12_1_2_J1_2	1	9.56	1551.0	-5421.4
## - V13_1_J1_2	1	9.59	1551.1	-5421.3
## - V24_J2_5	1	9.90	1551.4	-5420.3
## - V1_J1_5	1	10.11	1551.6	-5419.6
## - V13_1_J1_7	1	12.60	1554.1	-5411.2
## - V24_J1_6	1	12.94	1554.4	-5410.1
## - V29_J1_5	1	14.14	1555.6	-5406.1
## - V17_J1_5	1	14.67	1556.2	-5404.3
## - V4_J1_3	1	15.80	1557.3	-5400.5
## - V12_1_2_J1_6	1	15.88	1557.4	-5400.3
## - V20_J2_1	1	16.29	1557.8	-5398.9
## - V14_J2_5	1	16.72	1558.2	-5397.5
## - V26_J1_5	1	18.76	1560.2	-5390.7
## - V16_J2_3	1	20.58	1562.1	-5384.6
## - V14_J2_1	1	21.33	1562.8	-5382.1
## - V29_J1_3	1	21.58	1563.1	-5381.3
## - V12_1_2_J1_7	1	23.79	1565.3	-5373.9
## - V4_J1_5	1	24.69	1566.2	-5370.9
## - V3_J1_5	1	25.88	1567.4	-5367.0
## - V23_J2_7	1	26.41	1567.9	-5365.2
## - V30_J2_5	1	26.41	1567.9	-5365.2
## - V20_J2_3	1	27.23	1568.7	-5362.5
## - V2_J2_7	1	28.29	1569.8	-5359.0
## - V15_J1_1	1	28.32	1569.8	-5358.9
## - V30_J1_5	1	29.09	1570.6	-5356.3
## - V2_J2_2	1	30.15	1571.6	-5352.8
## - V12_1_2_J2_7	1	30.30	1571.8	-5352.3
## - V15_J1_2	1	30.97	1572.5	-5350.1
## - V19_J2_5	1	35.01	1576.5	-5336.8
## - V14_J2_4	1	35.62	1577.1	-5334.8
## - V19_J2_4	1	36.01	1577.5	-5333.5
## - V12_1_2_J1_3	1	36.95	1578.4	-5330.4
## - V30_J1_3	1	38.44	1579.9	-5325.5
## - V16_J2_7	1	39.21	1580.7	-5322.9
## - V4_J2_7	1	39.46	1580.9	-5322.1
## - V5_J1_4	1	41.32	1582.8	-5316.0
## - V13_2_J1_7	1	41.49	1583.0	-5315.5

```

## - V26_J1_4      1      48.33 1589.8 -5293.0
## - V19_J2_1      1      49.00 1590.5 -5290.9
## - V4_J1_4       1      49.50 1591.0 -5289.2
## - V30_J1_2      1      52.35 1593.8 -5279.9
## - V15_J1_6      1      52.74 1594.2 -5278.6
## - V5_J2_1       1      53.56 1595.0 -5275.9
## - V14_J1_5      1      58.74 1600.2 -5259.1
## - V15_J1_7      1      59.36 1600.8 -5257.1
## - V1_J1_3       1      62.04 1603.5 -5248.4
## - V17_J2_7      1      62.39 1603.9 -5247.2
## - V16_J1_3      1      62.61 1604.1 -5246.5
## - V1_J2_2       1      63.75 1605.2 -5242.9
## - V17_J2_2      1      64.60 1606.1 -5240.1
## - V15_J1_3      1      67.81 1609.3 -5229.7
## - V14_J2_3      1      70.07 1611.6 -5222.4
## - V30_J1_1      1      71.39 1612.9 -5218.1
## - V30_J2_2      1      77.42 1618.9 -5198.7
## - V23_J1_3      1      78.61 1620.1 -5194.9
## - V17_J1_3      1      79.39 1620.9 -5192.4
## - V14_J1_4      1      80.35 1621.8 -5189.3
## - V2_J1_3       1      82.81 1624.3 -5181.5
## - V5_J2_3       1      88.02 1629.5 -5164.8
## - V1_J2_7       1      88.25 1629.7 -5164.1
## - V3_J1_4       1      92.16 1633.7 -5151.6
## - V5_J1_5       1      98.89 1640.4 -5130.2
## - V12_1_2_J1_4  1      104.67 1646.2 -5111.9
## - V19_J2_3      1      107.50 1649.0 -5103.0
## - V4_J2_5       1      113.54 1655.0 -5084.0
## - V15_J2_7      1      118.03 1659.5 -5069.9
## - V19_J1_5      1      120.04 1661.5 -5063.6
## - V3_J2_1       1      120.17 1661.7 -5063.2
## - V4_J2_1       1      129.64 1671.1 -5033.7
## - V15_J2_2      1      131.53 1673.0 -5027.8
## - V26_J2_1      1      136.30 1677.8 -5013.0
## - V3_J2_5       1      136.57 1678.1 -5012.1
## - V4_J2_3       1      147.87 1689.4 -4977.2
## - V4_J2_4       1      161.68 1703.2 -4934.9
## - V26_J2_5      1      173.13 1714.6 -4900.1
## - V12_1_2_J2_2  1      176.47 1718.0 -4889.9
## - V26_J2_4      1      177.25 1718.7 -4887.6
## - V19_J1_4      1      184.75 1726.2 -4865.0
## - V3_J2_4       1      201.04 1742.5 -4816.1
## - V3_J2_3       1      228.54 1770.0 -4734.7
## - V20_J2_2      1      267.03 1808.5 -4622.8
## - V5_J2_5       1      270.03 1811.5 -4614.2
## - V5_J2_4       1      309.69 1851.2 -4501.6
## - V26_J2_3      1      374.86 1916.3 -4321.7
## - J             12      455.96 1997.5 -4179.1
## - V16_J2_2      1      440.21 1981.7 -4147.3
## - V             19      1055.18 2596.7 -2861.3
##
## Step:  AIC=-5456.42
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##       V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +

```



```

##      V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##      V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
##      V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
##      V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
##      V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
##      V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
##      V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
##      V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
##      V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
##      V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
##      V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
##      V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
##      V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
##      V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
##      V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V14_J1_2 + V13_3_J2_5 +
##      V20_J1_2 + V13_2_J1_4 + V26_J1_6 + V13_1_J1_5
##

```

	Df	Sum of Sq	RSS	AIC
## + V26_J1_1	1	4.76	1532.0	-5465.9
## + V29_J1_1	1	4.59	1532.1	-5465.3
## + V2_J1_6	1	4.22	1532.5	-5464.1
## + V15_J2_3	1	4.11	1532.6	-5463.7
## + V1_J2_3	1	3.88	1532.8	-5462.9
## + V30_J2_3	1	3.88	1532.8	-5462.9
## + V24_J2_3	1	3.60	1533.1	-5462.0
## + V13_2_J2_2	1	3.48	1533.2	-5461.6
## + V29_J2_2	1	3.46	1533.3	-5461.5
## + V19_J1_3	1	3.44	1533.3	-5461.4
## + V13_2_J1_5	1	3.39	1533.3	-5461.3
## + V16_J2_1	1	3.38	1533.3	-5461.2
## + V13_1_J2_2	1	3.38	1533.3	-5461.2
## + V29_J2_1	1	3.29	1533.4	-5460.9
## + V13_2_J1_3	1	3.28	1533.4	-5460.9
## + V20_J1_6	1	3.21	1533.5	-5460.7
## + V13_2_J2_7	1	3.10	1533.6	-5460.3
## + V13_1_J2_4	1	3.07	1533.7	-5460.2
## + V2_J2_3	1	3.02	1533.7	-5460.0
## + V13_3_J1_2	1	3.00	1533.7	-5460.0
## + V26_J2_2	1	2.90	1533.8	-5459.6
## + V12_1_2_J1_5	1	2.73	1534.0	-5459.0
## + V3_J1_2	1	2.62	1534.1	-5458.7
## + V14_J1_3	1	2.55	1534.2	-5458.4
## + V5_J1_6	1	2.55	1534.2	-5458.4
## + V14_J2_2	1	2.50	1534.2	-5458.3
## + V23_J1_7	1	2.49	1534.2	-5458.2
## + V13_3_J1_1	1	2.47	1534.2	-5458.2
## + V13_2_J2_5	1	2.39	1534.3	-5457.9
## + V1_J1_7	1	2.34	1534.4	-5457.7
## + V20_J1_7	1	2.28	1534.4	-5457.5
## + V19_J1_1	1	2.27	1534.4	-5457.5
## + V1_J1_1	1	2.21	1534.5	-5457.3
## + V13_2_J2_3	1	2.16	1534.5	-5457.1
## + V29_J1_6	1	2.08	1534.6	-5456.8
## + V23_J2_2	1	1.99	1534.7	-5456.5

## <none>		1536.7 -5456.4
## + V20_J2_4	1	1.95 1534.8 -5456.4
## + V17_J2_1	1	1.84 1534.9 -5456.0
## + V20_J1_3	1	1.82 1534.9 -5456.0
## + V13_1_J2_7	1	1.79 1534.9 -5455.9
## + V29_J1_4	1	1.77 1534.9 -5455.8
## + V2_J1_7	1	1.71 1535.0 -5455.6
## + V16_J2_4	1	1.68 1535.0 -5455.5
## + V30_J1_6	1	1.68 1535.0 -5455.5
## + V14_J2_7	1	1.67 1535.0 -5455.5
## + V24_J1_3	1	1.63 1535.1 -5455.3
## + V24_J1_1	1	1.63 1535.1 -5455.3
## + V19_J1_6	1	1.63 1535.1 -5455.3
## + V13_2_J1_2	1	1.60 1535.1 -5455.2
## + V15_J1_4	1	1.54 1535.2 -5455.0
## + V29_J2_3	1	1.53 1535.2 -5455.0
## + V16_J1_2	1	1.51 1535.2 -5454.9
## + V24_J1_5	1	1.46 1535.2 -5454.7
## + V16_J1_6	1	1.40 1535.3 -5454.5
## + V20_J1_5	1	1.40 1535.3 -5454.5
## + V5_J1_2	1	1.39 1535.3 -5454.5
## + V19_J1_2	1	1.39 1535.3 -5454.5
## + V3_J1_7	1	1.34 1535.4 -5454.3
## + V17_J1_7	1	1.30 1535.4 -5454.2
## + V13_3_J2_4	1	1.28 1535.4 -5454.1
## + V16_J1_4	1	1.27 1535.4 -5454.1
## + V20_J1_1	1	1.21 1535.5 -5453.9
## + V29_J2_4	1	1.19 1535.5 -5453.8
## + V30_J1_7	1	1.16 1535.5 -5453.7
## + V12_1_2_J1_1	1	1.11 1535.6 -5453.5
## + V30_J2_7	1	0.97 1535.7 -5453.1
## + V29_J1_2	1	0.95 1535.8 -5453.0
## + V5_J2_7	1	0.95 1535.8 -5453.0
## + V16_J1_1	1	0.95 1535.8 -5453.0
## + V17_J1_2	1	0.94 1535.8 -5453.0
## + V1_J1_2	1	0.91 1535.8 -5452.9
## + V13_1_J2_5	1	0.89 1535.8 -5452.8
## + V20_J1_4	1	0.86 1535.8 -5452.7
## + V14_J1_1	1	0.83 1535.9 -5452.6
## + V15_J1_5	1	0.74 1536.0 -5452.3
## + V4_J1_6	1	0.69 1536.0 -5452.1
## + V23_J1_2	1	0.69 1536.0 -5452.1
## + V5_J1_7	1	0.67 1536.0 -5452.1
## + V13_3_J2_7	1	0.66 1536.0 -5452.0
## + V23_J2_5	1	0.66 1536.1 -5452.0
## + V12_1_2_J2_5	1	0.64 1536.1 -5451.9
## + V5_J1_3	1	0.64 1536.1 -5451.9
## + V30_J1_4	1	0.62 1536.1 -5451.9
## + V17_J2_4	1	0.60 1536.1 -5451.8
## + V13_1_J2_3	1	0.57 1536.2 -5451.7
## + V13_3_J1_3	1	0.56 1536.2 -5451.7
## + V13_3_J1_6	1	0.55 1536.2 -5451.7
## + V2_J1_2	1	0.51 1536.2 -5451.5
## + V23_J2_3	1	0.49 1536.2 -5451.4

## + V23_J2_4	1	0.48	1536.2	-5451.4
## + V24_J2_7	1	0.48	1536.2	-5451.4
## + V13_3_J1_5	1	0.47	1536.2	-5451.4
## + V12_1_2_J2_3	1	0.46	1536.2	-5451.4
## + V24_J2_4	1	0.45	1536.3	-5451.3
## + V13_1_J2_1	1	0.44	1536.3	-5451.3
## + V13_1_J1_6	1	0.41	1536.3	-5451.2
## + V5_J1_1	1	0.40	1536.3	-5451.1
## + V2_J2_5	1	0.39	1536.3	-5451.1
## + V2_J2_1	1	0.39	1536.3	-5451.1
## + V19_J2_2	1	0.39	1536.3	-5451.1
## + V15_J2_4	1	0.37	1536.3	-5451.0
## + V30_J2_1	1	0.36	1536.3	-5451.0
## + V12_1_2_J2_1	1	0.34	1536.4	-5450.9
## + V30_J2_4	1	0.33	1536.4	-5450.9
## + V13_3_J2_3	1	0.32	1536.4	-5450.9
## + V20_J2_7	1	0.31	1536.4	-5450.9
## + V26_J2_7	1	0.31	1536.4	-5450.8
## + V15_J2_5	1	0.31	1536.4	-5450.8
## + V17_J2_3	1	0.29	1536.4	-5450.8
## + V1_J1_6	1	0.27	1536.4	-5450.7
## + V24_J2_2	1	0.24	1536.5	-5450.6
## + V17_J1_1	1	0.22	1536.5	-5450.5
## + V4_J1_1	1	0.21	1536.5	-5450.5
## + V2_J1_1	1	0.20	1536.5	-5450.5
## + V16_J1_7	1	0.20	1536.5	-5450.5
## + V4_J1_7	1	0.19	1536.5	-5450.4
## + V13_2_J1_1	1	0.18	1536.5	-5450.4
## + V3_J2_7	1	0.18	1536.5	-5450.4
## + V17_J2_5	1	0.18	1536.5	-5450.4
## + V5_J2_2	1	0.18	1536.5	-5450.4
## + V26_J1_7	1	0.17	1536.5	-5450.4
## + V4_J1_2	1	0.17	1536.5	-5450.4
## + V13_3_J2_2	1	0.17	1536.5	-5450.4
## + V1_J2_4	1	0.17	1536.5	-5450.4
## + V2_J2_4	1	0.17	1536.5	-5450.4
## + V13_3_J1_4	1	0.17	1536.5	-5450.4
## + V1_J1_4	1	0.16	1536.5	-5450.3
## + V1_J2_1	1	0.13	1536.6	-5450.2
## + V26_J1_2	1	0.13	1536.6	-5450.2
## + V20_J2_5	1	0.12	1536.6	-5450.2
## + V3_J2_2	1	0.12	1536.6	-5450.2
## + V16_J1_5	1	0.12	1536.6	-5450.2
## + V4_J2_2	1	0.12	1536.6	-5450.2
## + V29_J2_7	1	0.10	1536.6	-5450.1
## + V17_J1_4	1	0.10	1536.6	-5450.1
## + V13_3_J2_1	1	0.08	1536.6	-5450.0
## + V3_J1_1	1	0.06	1536.7	-5450.0
## + V14_J1_7	1	0.06	1536.7	-5450.0
## + V19_J1_7	1	0.05	1536.7	-5450.0
## + V29_J2_5	1	0.04	1536.7	-5449.9
## + V17_J1_6	1	0.04	1536.7	-5449.9
## + V13_2_J2_1	1	0.03	1536.7	-5449.9
## + V24_J1_2	1	0.02	1536.7	-5449.9

## + V24_J1_4	1	0.02	1536.7	-5449.8
## + V13_3_J1_7	1	0.01	1536.7	-5449.8
## + V14_J1_6	1	0.01	1536.7	-5449.8
## + V3_J1_6	1	0.01	1536.7	-5449.8
## + V2_J1_4	1	0.01	1536.7	-5449.8
## + V16_J2_5	1	0.01	1536.7	-5449.8
## + V12_1_2_J2_4	1	0.01	1536.7	-5449.8
## + V13_1_J1_4	1	0.01	1536.7	-5449.8
## + V23_J1_1	1	0.01	1536.7	-5449.8
## + V13_2_J2_4	1	0.00	1536.7	-5449.8
## + V23_J1_5	1	0.00	1536.7	-5449.8
## + V3_J1_3	1	0.00	1536.7	-5449.8
## + V24_J2_1	1	0.00	1536.7	-5449.8
## + V19_J2_7	1	0.00	1536.7	-5449.8
## + V23_J1_6	1	0.00	1536.7	-5449.8
## + V13_1_J1_1	1	0.00	1536.7	-5449.8
## - V13_1_J1_5	1	4.77	1541.5	-5446.9
## - V26_J1_6	1	5.01	1541.7	-5446.1
## - V14_J1_2	1	5.10	1541.8	-5445.8
## - V26_J1_3	1	5.11	1541.8	-5445.8
## - V20_J1_2	1	5.56	1542.3	-5444.3
## - V13_2_J1_4	1	5.63	1542.3	-5444.1
## - V13_3_J2_5	1	6.01	1542.7	-5442.7
## - V13_1_J1_3	1	6.22	1542.9	-5442.1
## - V23_J2_1	1	6.54	1543.3	-5441.0
## - V23_J1_4	1	6.80	1543.5	-5440.1
## - V2_J1_5	1	6.95	1543.7	-5439.6
## - V1_J2_5	1	7.51	1544.2	-5437.7
## - V24_J1_7	1	7.78	1544.5	-5436.8
## - V13_2_J1_6	1	8.41	1545.1	-5434.7
## - V1_J1_5	1	8.48	1545.2	-5434.4
## - V29_J1_7	1	8.80	1545.5	-5433.4
## - V15_J2_1	1	9.36	1546.1	-5431.5
## - V24_J2_5	1	9.75	1546.5	-5430.2
## - V12_1_2_J1_2	1	9.75	1546.5	-5430.2
## - V13_1_J1_2	1	10.84	1547.6	-5426.5
## - V29_J1_5	1	12.14	1548.9	-5422.1
## - V17_J1_5	1	12.66	1549.4	-5420.4
## - V24_J1_6	1	13.16	1549.9	-5418.7
## - V13_1_J1_7	1	14.01	1550.7	-5415.9
## - V12_1_2_J1_6	1	15.50	1552.2	-5410.9
## - V4_J1_3	1	15.90	1552.6	-5409.5
## - V20_J2_1	1	16.01	1552.7	-5409.2
## - V14_J2_5	1	16.73	1553.4	-5406.8
## - V16_J2_3	1	20.31	1557.0	-5394.8
## - V26_J1_5	1	20.65	1557.4	-5393.6
## - V14_J2_1	1	21.28	1558.0	-5391.5
## - V29_J1_3	1	21.71	1558.4	-5390.1
## - V12_1_2_J1_7	1	23.46	1560.2	-5384.3
## - V23_J2_7	1	26.03	1562.7	-5375.7
## - V30_J1_5	1	26.14	1562.8	-5375.4
## - V30_J2_5	1	26.39	1563.1	-5374.5
## - V4_J1_5	1	26.81	1563.5	-5373.1
## - V20_J2_3	1	26.92	1563.6	-5372.8

## - V3_J1_5	1	28.08	1564.8	-5368.9
## - V2_J2_7	1	28.20	1564.9	-5368.5
## - V15_J1_1	1	28.83	1565.5	-5366.4
## - V12_1_2_J2_7	1	29.75	1566.5	-5363.3
## - V2_J2_2	1	30.06	1566.8	-5362.3
## - V15_J1_2	1	31.40	1568.1	-5357.9
## - V19_J2_5	1	35.00	1571.7	-5345.9
## - V14_J2_4	1	35.66	1572.4	-5343.8
## - V19_J2_4	1	36.04	1572.8	-5342.5
## - V12_1_2_J1_3	1	36.61	1573.3	-5340.6
## - V30_J1_3	1	38.62	1575.3	-5334.0
## - V16_J2_7	1	38.74	1575.5	-5333.6
## - V4_J2_7	1	39.35	1576.1	-5331.6
## - V5_J1_4	1	41.25	1578.0	-5325.3
## - V13_2_J1_7	1	41.25	1578.0	-5325.3
## - V26_J1_4	1	48.27	1585.0	-5302.2
## - V19_J2_1	1	48.90	1585.6	-5300.1
## - V4_J1_4	1	49.43	1586.2	-5298.4
## - V30_J1_2	1	52.18	1588.9	-5289.4
## - V5_J2_1	1	53.47	1590.2	-5285.2
## - V15_J1_6	1	53.50	1590.2	-5285.1
## - V15_J1_7	1	59.97	1596.7	-5264.0
## - V14_J1_5	1	61.76	1598.5	-5258.1
## - V1_J1_3	1	62.23	1598.9	-5256.6
## - V17_J2_7	1	62.25	1599.0	-5256.6
## - V16_J1_3	1	62.36	1599.1	-5256.2
## - V1_J2_2	1	63.61	1600.3	-5252.2
## - V17_J2_2	1	64.46	1601.2	-5249.4
## - V15_J1_3	1	68.38	1605.1	-5236.7
## - V14_J2_3	1	70.06	1606.8	-5231.2
## - V30_J1_1	1	71.36	1608.1	-5227.0
## - V30_J2_2	1	77.32	1614.0	-5207.8
## - V23_J1_3	1	78.34	1615.0	-5204.5
## - V17_J1_3	1	79.61	1616.3	-5200.4
## - V14_J1_4	1	80.27	1617.0	-5198.3
## - V2_J1_3	1	83.03	1619.7	-5189.4
## - V5_J2_3	1	87.98	1624.7	-5173.5
## - V1_J2_7	1	88.08	1624.8	-5173.2
## - V3_J1_4	1	92.06	1628.8	-5160.5
## - V5_J1_5	1	102.52	1639.2	-5127.2
## - V12_1_2_J1_4	1	103.71	1640.4	-5123.4
## - V19_J2_3	1	107.46	1644.2	-5111.6
## - V4_J2_5	1	113.53	1650.2	-5092.4
## - V15_J2_7	1	119.17	1655.9	-5074.7
## - V3_J2_1	1	120.03	1656.7	-5072.0
## - V19_J1_5	1	123.90	1660.6	-5059.8
## - V4_J2_1	1	129.50	1666.2	-5042.3
## - V15_J2_2	1	132.73	1669.5	-5032.3
## - V26_J2_1	1	136.18	1672.9	-5021.5
## - V3_J2_5	1	136.55	1673.3	-5020.4
## - V4_J2_3	1	147.84	1684.5	-4985.4
## - V4_J2_4	1	161.75	1698.5	-4942.7
## - V26_J2_5	1	173.13	1709.8	-4907.9
## - V12_1_2_J2_2	1	175.10	1711.8	-4901.9

```

## - V26_J2_4      1      177.33 1714.0 -4895.2
## - V19_J1_4      1      184.60 1721.3 -4873.2
## - V3_J2_4       1      201.10 1737.8 -4823.5
## - V3_J2_3       1      228.48 1765.2 -4742.3
## - V20_J2_2      1      265.75 1802.5 -4633.6
## - V5_J2_5       1      270.00 1806.7 -4621.4
## - V5_J2_4       1      309.76 1846.5 -4508.2
## - V26_J2_3      1      374.82 1911.5 -4328.1
## - J             12      439.99 1976.7 -4226.8
## - V16_J2_2      1      438.55 1975.3 -4157.6
## - V             19     1057.52 2594.2 -2859.5
##
## Step:  AIC=-5465.92
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
## V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
## V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
## V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V14_J1_2 + V13_3_J2_5 +
## V20_J1_2 + V13_2_J1_4 + V26_J1_6 + V13_1_J1_5 + V26_J1_1
##
##
##      Df Sum of Sq    RSS    AIC
## + V2_J1_6      1      4.19 1527.8 -5473.5
## + V15_J2_3      1      4.10 1527.8 -5473.2
## + V29_J1_1      1      4.10 1527.9 -5473.2
## + V30_J2_3      1      3.94 1528.0 -5472.7
## + V1_J2_3       1      3.90 1528.1 -5472.5
## + V24_J2_3      1      3.61 1528.3 -5471.6
## + V13_1_J2_2    1      3.59 1528.4 -5471.5
## + V19_J1_3      1      3.41 1528.5 -5470.9
## + V16_J2_1      1      3.39 1528.6 -5470.8
## + V13_2_J1_5    1      3.37 1528.6 -5470.7
## + V29_J2_1      1      3.30 1528.7 -5470.5
## + V13_2_J2_2    1      3.30 1528.7 -5470.5
## + V29_J2_2      1      3.28 1528.7 -5470.4
## + V13_2_J1_3    1      3.27 1528.7 -5470.4
## + V20_J1_6      1      3.23 1528.7 -5470.3
## + V13_3_J1_2    1      3.13 1528.8 -5469.9
## + V13_1_J2_4    1      3.06 1528.9 -5469.7
## + V2_J2_3       1      3.03 1528.9 -5469.6
## + V13_2_J2_7    1      2.92 1529.0 -5469.2
## + V13_3_J1_1    1      2.89 1529.1 -5469.1
## + V12_1_2_J1_5  1      2.67 1529.3 -5468.3

```

## + V23_J1_7	1	2.62	1529.3	-5468.2
## + V14_J1_3	1	2.56	1529.4	-5468.0
## + V5_J1_6	1	2.52	1529.4	-5467.9
## + V3_J1_2	1	2.52	1529.4	-5467.8
## + V20_J1_7	1	2.42	1529.5	-5467.5
## + V13_2_J2_5	1	2.37	1529.6	-5467.4
## + V14_J2_2	1	2.35	1529.6	-5467.3
## + V1_J1_7	1	2.19	1529.8	-5466.7
## + V13_2_J2_3	1	2.15	1529.8	-5466.6
## + V23_J2_2	1	2.14	1529.8	-5466.6
## + V29_J1_6	1	2.08	1529.9	-5466.4
## <none>			1532.0	-5465.9
## + V20_J2_4	1	1.95	1530.0	-5465.9
## + V13_1_J2_7	1	1.95	1530.0	-5465.9
## + V19_J1_1	1	1.89	1530.1	-5465.7
## + V1_J1_1	1	1.88	1530.1	-5465.7
## + V17_J2_1	1	1.85	1530.1	-5465.6
## + V2_J1_7	1	1.84	1530.1	-5465.5
## + V14_J2_7	1	1.80	1530.2	-5465.4
## + V20_J1_3	1	1.80	1530.2	-5465.4
## + V29_J1_4	1	1.78	1530.2	-5465.3
## + V13_2_J1_2	1	1.70	1530.2	-5465.1
## + V16_J2_4	1	1.68	1530.3	-5465.0
## + V19_J1_6	1	1.65	1530.3	-5464.9
## + V30_J1_6	1	1.65	1530.3	-5464.9
## + V24_J1_3	1	1.64	1530.3	-5464.9
## + V16_J1_2	1	1.63	1530.3	-5464.8
## + V15_J1_4	1	1.54	1530.4	-5464.5
## + V29_J2_3	1	1.53	1530.4	-5464.5
## + V20_J1_1	1	1.49	1530.5	-5464.4
## + V5_J1_2	1	1.47	1530.5	-5464.3
## + V24_J1_5	1	1.45	1530.5	-5464.2
## + V26_J2_2	1	1.42	1530.5	-5464.1
## + V3_J1_7	1	1.42	1530.5	-5464.1
## + V20_J1_5	1	1.40	1530.5	-5464.0
## + V16_J1_6	1	1.39	1530.6	-5464.0
## + V24_J1_1	1	1.34	1530.6	-5463.8
## + V19_J1_2	1	1.31	1530.6	-5463.7
## + V16_J1_4	1	1.28	1530.7	-5463.6
## + V13_3_J2_4	1	1.26	1530.7	-5463.6
## + V16_J1_1	1	1.19	1530.8	-5463.3
## + V17_J1_7	1	1.19	1530.8	-5463.3
## + V29_J2_4	1	1.18	1530.8	-5463.3
## + V30_J1_7	1	1.10	1530.8	-5463.0
## + V14_J1_1	1	1.09	1530.9	-5463.0
## + V30_J2_7	1	1.05	1530.9	-5462.9
## + V29_J1_2	1	1.03	1530.9	-5462.8
## + V26_J1_7	1	1.00	1531.0	-5462.7
## + V12_1_2_J1_1	1	0.91	1531.0	-5462.4
## + V13_1_J2_5	1	0.89	1531.1	-5462.3
## + V5_J2_7	1	0.87	1531.1	-5462.2
## + V20_J1_4	1	0.86	1531.1	-5462.2
## + V17_J1_2	1	0.85	1531.1	-5462.2
## + V1_J1_2	1	0.83	1531.1	-5462.1

## + V15_J1_5	1	0.74	1531.2	-5461.8
## - V26_J1_3	1	3.19	1535.1	-5461.7
## + V4_J1_6	1	0.69	1531.3	-5461.6
## + V23_J2_5	1	0.66	1531.3	-5461.5
## + V5_J1_3	1	0.65	1531.3	-5461.5
## + V23_J1_2	1	0.62	1531.3	-5461.4
## + V5_J1_7	1	0.62	1531.3	-5461.4
## + V12_1_2_J2_5	1	0.61	1531.3	-5461.4
## + V17_J2_4	1	0.60	1531.3	-5461.3
## + V30_J1_4	1	0.60	1531.3	-5461.3
## + V13_3_J2_7	1	0.59	1531.4	-5461.3
## + V5_J1_1	1	0.59	1531.4	-5461.3
## + V13_1_J2_3	1	0.57	1531.4	-5461.2
## + V13_3_J1_3	1	0.56	1531.4	-5461.2
## + V13_3_J1_6	1	0.55	1531.4	-5461.2
## + V12_1_2_J2_3	1	0.50	1531.5	-5461.0
## + V23_J2_3	1	0.49	1531.5	-5460.9
## + V23_J2_4	1	0.49	1531.5	-5460.9
## + V13_3_J1_5	1	0.48	1531.5	-5460.9
## + V24_J2_4	1	0.45	1531.5	-5460.8
## + V2_J1_2	1	0.44	1531.5	-5460.8
## + V13_1_J2_1	1	0.43	1531.5	-5460.8
## + V24_J2_7	1	0.41	1531.5	-5460.7
## + V13_1_J1_6	1	0.41	1531.5	-5460.7
## + V2_J2_5	1	0.39	1531.6	-5460.6
## + V2_J2_1	1	0.38	1531.6	-5460.6
## + V30_J2_1	1	0.38	1531.6	-5460.6
## + V12_1_2_J2_1	1	0.37	1531.6	-5460.5
## + V15_J2_4	1	0.36	1531.6	-5460.5
## + V17_J1_1	1	0.34	1531.6	-5460.4
## + V19_J2_2	1	0.34	1531.6	-5460.4
## + V13_3_J2_3	1	0.31	1531.6	-5460.4
## + V15_J2_5	1	0.31	1531.6	-5460.3
## + V30_J2_4	1	0.31	1531.6	-5460.3
## + V13_2_J1_1	1	0.30	1531.7	-5460.3
## + V17_J2_3	1	0.30	1531.7	-5460.3
## + V1_J1_6	1	0.26	1531.7	-5460.2
## + V20_J2_7	1	0.26	1531.7	-5460.2
## + V4_J1_7	1	0.23	1531.7	-5460.1
## + V3_J2_7	1	0.22	1531.7	-5460.0
## + V5_J2_2	1	0.22	1531.7	-5460.0
## + V13_3_J2_2	1	0.21	1531.7	-5460.0
## + V24_J2_2	1	0.19	1531.8	-5459.9
## + V17_J2_5	1	0.18	1531.8	-5459.9
## + V13_3_J1_4	1	0.17	1531.8	-5459.9
## + V2_J2_4	1	0.17	1531.8	-5459.9
## + V1_J2_4	1	0.17	1531.8	-5459.9
## + V16_J1_7	1	0.16	1531.8	-5459.8
## + V1_J1_4	1	0.16	1531.8	-5459.8
## + V4_J2_2	1	0.16	1531.8	-5459.8
## + V3_J2_2	1	0.15	1531.8	-5459.8
## + V3_J1_1	1	0.14	1531.8	-5459.8
## + V4_J1_2	1	0.14	1531.8	-5459.8
## + V29_J2_7	1	0.14	1531.8	-5459.8

## + V1_J2_1	1	0.14	1531.8	-5459.7
## + V20_J2_5	1	0.12	1531.8	-5459.7
## + V16_J1_5	1	0.12	1531.8	-5459.7
## + V2_J1_1	1	0.11	1531.8	-5459.7
## + V4_J1_1	1	0.11	1531.8	-5459.7
## + V17_J1_4	1	0.09	1531.9	-5459.6
## + V13_3_J2_1	1	0.08	1531.9	-5459.6
## + V14_J1_7	1	0.04	1531.9	-5459.4
## + V26_J1_2	1	0.04	1531.9	-5459.4
## + V19_J1_7	1	0.04	1531.9	-5459.4
## + V29_J2_5	1	0.04	1531.9	-5459.4
## + V13_2_J2_1	1	0.03	1531.9	-5459.4
## + V17_J1_6	1	0.03	1531.9	-5459.4
## + V24_J1_4	1	0.02	1531.9	-5459.3
## + V13_1_J1_1	1	0.02	1531.9	-5459.3
## + V3_J1_6	1	0.01	1531.9	-5459.3
## + V14_J1_6	1	0.01	1531.9	-5459.3
## + V12_1_2_J2_4	1	0.01	1531.9	-5459.3
## + V2_J1_4	1	0.01	1531.9	-5459.3
## + V24_J1_2	1	0.01	1531.9	-5459.3
## + V16_J2_5	1	0.01	1532.0	-5459.3
## + V13_1_J1_4	1	0.01	1532.0	-5459.3
## + V13_3_J1_7	1	0.01	1532.0	-5459.3
## + V13_2_J2_4	1	0.00	1532.0	-5459.3
## + V23_J1_5	1	0.00	1532.0	-5459.3
## + V23_J1_1	1	0.00	1532.0	-5459.3
## + V3_J1_3	1	0.00	1532.0	-5459.3
## + V24_J2_1	1	0.00	1532.0	-5459.3
## + V19_J2_7	1	0.00	1532.0	-5459.3
## + V23_J1_6	1	0.00	1532.0	-5459.3
## + V26_J2_7	1	0.00	1532.0	-5459.3
## - V26_J1_1	1	4.76	1536.7	-5456.4
## - V13_1_J1_5	1	4.77	1536.7	-5456.4
## - V14_J1_2	1	4.96	1536.9	-5455.7
## - V13_2_J1_4	1	5.63	1537.6	-5453.5
## - V20_J1_2	1	5.73	1537.7	-5453.1
## - V13_3_J2_5	1	6.05	1538.0	-5452.0
## - V13_1_J1_3	1	6.18	1538.1	-5451.6
## - V23_J2_1	1	6.55	1538.5	-5450.4
## - V23_J1_4	1	6.79	1538.7	-5449.6
## - V26_J1_6	1	6.94	1538.9	-5449.1
## - V2_J1_5	1	6.95	1538.9	-5449.0
## - V1_J2_5	1	7.51	1539.5	-5447.1
## - V24_J1_7	1	7.58	1539.5	-5446.9
## - V13_2_J1_6	1	8.41	1540.4	-5444.1
## - V1_J1_5	1	8.47	1540.4	-5443.9
## - V29_J1_7	1	9.00	1541.0	-5442.1
## - V15_J2_1	1	9.36	1541.3	-5440.9
## - V12_1_2_J1_2	1	9.42	1541.4	-5440.7
## - V24_J2_5	1	9.71	1541.7	-5439.7
## - V13_1_J1_2	1	11.09	1543.0	-5435.1
## - V29_J1_5	1	12.17	1544.1	-5431.4
## - V17_J1_5	1	12.65	1544.6	-5429.8
## - V24_J1_6	1	13.16	1545.1	-5428.1

## - V13_1_J1_7	1	14.29	1546.2	-5424.3
## - V12_1_2_J1_6	1	15.66	1547.6	-5419.7
## - V4_J1_3	1	15.91	1547.9	-5418.8
## - V20_J2_1	1	16.02	1548.0	-5418.5
## - V26_J1_5	1	16.13	1548.1	-5418.1
## - V14_J2_5	1	16.66	1548.6	-5416.3
## - V16_J2_3	1	20.34	1552.3	-5404.0
## - V14_J2_1	1	21.23	1553.2	-5401.0
## - V29_J1_3	1	21.74	1553.7	-5399.3
## - V12_1_2_J1_7	1	23.96	1555.9	-5391.8
## - V30_J1_5	1	26.27	1558.2	-5384.2
## - V23_J2_7	1	26.45	1558.4	-5383.6
## - V30_J2_5	1	26.53	1558.5	-5383.3
## - V4_J1_5	1	26.76	1558.7	-5382.5
## - V20_J2_3	1	26.93	1558.9	-5381.9
## - V3_J1_5	1	27.96	1559.9	-5378.5
## - V2_J2_7	1	28.69	1560.6	-5376.1
## - V15_J1_1	1	29.81	1561.8	-5372.3
## - V12_1_2_J2_7	1	30.39	1562.3	-5370.4
## - V2_J2_2	1	30.56	1562.5	-5369.9
## - V15_J1_2	1	30.99	1563.0	-5368.4
## - V19_J2_5	1	34.86	1566.8	-5355.6
## - V14_J2_4	1	35.59	1567.5	-5353.1
## - V19_J2_4	1	35.92	1567.9	-5352.1
## - V12_1_2_J1_3	1	36.88	1568.8	-5348.9
## - V30_J1_3	1	38.54	1570.5	-5343.3
## - V16_J2_7	1	39.31	1571.3	-5340.8
## - V4_J2_7	1	39.82	1571.8	-5339.1
## - V26_J1_4	1	40.50	1572.5	-5336.9
## - V5_J1_4	1	41.14	1573.1	-5334.8
## - V13_2_J1_7	1	41.69	1573.6	-5332.9
## - V19_J2_1	1	48.76	1580.7	-5309.6
## - V4_J1_4	1	49.39	1581.3	-5307.6
## - V30_J1_2	1	51.83	1583.8	-5299.6
## - V5_J2_1	1	53.32	1585.3	-5294.7
## - V15_J1_6	1	53.45	1585.4	-5294.2
## - V15_J1_7	1	59.40	1591.3	-5274.8
## - V14_J1_5	1	61.66	1593.6	-5267.4
## - V1_J1_3	1	62.36	1594.3	-5265.1
## - V16_J1_3	1	62.49	1594.5	-5264.6
## - V17_J2_7	1	62.96	1594.9	-5263.1
## - V1_J2_2	1	64.32	1596.3	-5258.7
## - V17_J2_2	1	65.18	1597.1	-5255.9
## - V15_J1_3	1	68.28	1600.2	-5245.8
## - V14_J2_3	1	69.97	1601.9	-5240.3
## - V30_J1_1	1	73.06	1605.0	-5230.3
## - V30_J2_2	1	77.85	1609.8	-5214.8
## - V23_J1_3	1	78.40	1610.4	-5213.0
## - V17_J1_3	1	79.76	1611.7	-5208.7
## - V14_J1_4	1	80.19	1612.1	-5207.2
## - V2_J1_3	1	83.18	1615.1	-5197.6
## - V5_J2_3	1	87.80	1619.8	-5182.8
## - V1_J2_7	1	88.92	1620.9	-5179.2
## - V3_J1_4	1	91.88	1623.8	-5169.7

```

## - V5_J1_5      1      102.30 1634.3 -5136.4
## - V12_1_2_J1_4 1      104.06 1636.0 -5130.8
## - V19_J2_3     1      107.25 1639.2 -5120.7
## - V4_J2_5      1      113.40 1645.4 -5101.2
## - V15_J2_7     1      118.19 1650.2 -5086.1
## - V3_J2_1      1      119.80 1651.8 -5081.0
## - V26_J2_1     1      120.70 1652.7 -5078.2
## - V19_J1_5     1      123.66 1655.6 -5068.9
## - V4_J2_1      1      129.41 1661.4 -5050.9
## - V15_J2_2     1      131.71 1663.7 -5043.7
## - V3_J2_5      1      136.27 1668.2 -5029.4
## - V4_J2_3      1      147.74 1679.7 -4993.8
## - V26_J2_5     1      154.88 1686.8 -4971.7
## - V26_J2_4     1      158.56 1690.5 -4960.4
## - V4_J2_4      1      161.64 1693.6 -4951.0
## - V12_1_2_J2_2 1      176.54 1708.5 -4905.4
## - V19_J1_4     1      184.35 1716.3 -4881.7
## - V3_J2_4      1      200.81 1732.8 -4832.1
## - V3_J2_3      1      228.18 1760.1 -4750.6
## - V20_J2_2     1      267.11 1799.1 -4636.8
## - V5_J2_5      1      269.60 1801.5 -4629.6
## - V5_J2_4      1      309.40 1841.3 -4516.0
## - V26_J2_3     1      342.83 1874.8 -4422.4
## - J            12      443.96 1975.9 -4222.2
## - V16_J2_2     1      440.30 1972.2 -4158.9
## - V            19      1060.97 2592.9 -2855.5
##
## Step:  AIC=-5473.53
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
## V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
## V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
## V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V14_J1_2 + V13_3_J2_5 +
## V20_J1_2 + V13_2_J1_4 + V26_J1_6 + V13_1_J1_5 + V26_J1_1 +
## V2_J1_6
##
##
##      Df Sum of Sq  RSS    AIC
## + V29_J1_1      1      4.14 1523.6 -5481.0
## + V15_J2_3      1      4.08 1523.7 -5480.8
## + V1_J2_3       1      4.01 1523.8 -5480.6
## + V30_J2_3      1      3.80 1524.0 -5479.8
## + V13_1_J2_2    1      3.57 1524.2 -5479.0

```

## + V24_J2_3	1	3.55	1524.2	-5479.0
## + V16_J2_1	1	3.50	1524.3	-5478.8
## + V19_J1_3	1	3.46	1524.3	-5478.7
## + V13_2_J2_2	1	3.37	1524.4	-5478.4
## + V13_2_J1_5	1	3.35	1524.4	-5478.3
## + V13_2_J1_3	1	3.35	1524.4	-5478.3
## + V29_J2_2	1	3.30	1524.5	-5478.2
## + V29_J2_1	1	3.20	1524.6	-5477.8
## + V13_3_J1_2	1	3.20	1524.6	-5477.8
## + V13_2_J2_7	1	2.99	1524.8	-5477.1
## + V13_1_J2_4	1	2.97	1524.8	-5477.0
## + V13_3_J1_1	1	2.85	1524.9	-5476.6
## + V20_J1_6	1	2.73	1525.0	-5476.2
## + V12_1_2_J1_5	1	2.72	1525.0	-5476.1
## + V23_J1_7	1	2.67	1525.1	-5476.0
## + V14_J1_3	1	2.61	1525.2	-5475.8
## + V20_J1_7	1	2.47	1525.3	-5475.3
## + V13_2_J2_5	1	2.44	1525.3	-5475.2
## + V3_J1_2	1	2.41	1525.4	-5475.1
## + V14_J2_2	1	2.30	1525.5	-5474.7
## + V2_J2_3	1	2.25	1525.5	-5474.6
## + V13_2_J2_3	1	2.20	1525.6	-5474.4
## + V1_J1_7	1	2.15	1525.6	-5474.2
## + V23_J2_2	1	2.13	1525.6	-5474.1
## + V5_J1_6	1	2.11	1525.7	-5474.1
## + V20_J2_4	1	2.03	1525.7	-5473.8
## + V19_J1_6	1	2.03	1525.7	-5473.8
## + V19_J1_1	1	1.98	1525.8	-5473.6
## <none>			1527.8	-5473.5
## + V13_1_J2_7	1	1.93	1525.8	-5473.5
## + V17_J2_1	1	1.92	1525.8	-5473.4
## + V1_J1_1	1	1.91	1525.8	-5473.4
## + V14_J2_7	1	1.86	1525.9	-5473.2
## + V20_J1_3	1	1.81	1526.0	-5473.0
## + V16_J1_6	1	1.79	1526.0	-5473.0
## + V13_2_J1_2	1	1.71	1526.0	-5472.7
## + V29_J1_4	1	1.70	1526.1	-5472.7
## + V29_J1_6	1	1.67	1526.1	-5472.6
## + V16_J1_2	1	1.67	1526.1	-5472.6
## + V16_J2_4	1	1.62	1526.2	-5472.4
## + V24_J1_3	1	1.59	1526.2	-5472.3
## + V5_J1_2	1	1.56	1526.2	-5472.2
## + V15_J1_4	1	1.55	1526.2	-5472.2
## + V3_J1_7	1	1.49	1526.3	-5472.0
## + V29_J2_3	1	1.47	1526.3	-5471.9
## + V20_J1_1	1	1.45	1526.3	-5471.8
## + V24_J1_5	1	1.44	1526.3	-5471.8
## + V26_J2_2	1	1.40	1526.4	-5471.6
## + V20_J1_5	1	1.37	1526.4	-5471.5
## + V16_J1_4	1	1.35	1526.4	-5471.5
## + V24_J1_1	1	1.33	1526.4	-5471.4
## + V13_3_J2_4	1	1.32	1526.5	-5471.4
## + V30_J1_6	1	1.29	1526.5	-5471.3
## + V29_J2_4	1	1.23	1526.5	-5471.1

## + V19_J1_2	1	1.23	1526.5	-5471.1
## + V2_J1_7	1	1.20	1526.6	-5471.0
## + V17_J1_7	1	1.17	1526.6	-5470.9
## + V16_J1_1	1	1.17	1526.6	-5470.9
## + V29_J1_2	1	1.07	1526.7	-5470.5
## + V30_J1_7	1	1.06	1526.7	-5470.5
## + V30_J2_7	1	1.05	1526.7	-5470.5
## + V14_J1_1	1	1.01	1526.8	-5470.3
## + V26_J1_7	1	0.99	1526.8	-5470.2
## + V4_J1_6	1	0.94	1526.8	-5470.1
## + V12_1_2_J1_1	1	0.89	1526.9	-5469.9
## + V2_J1_2	1	0.87	1526.9	-5469.9
## + V5_J2_7	1	0.85	1526.9	-5469.8
## + V13_1_J2_5	1	0.83	1526.9	-5469.7
## + V17_J1_2	1	0.82	1526.9	-5469.7
## + V20_J1_4	1	0.80	1527.0	-5469.6
## + V1_J1_2	1	0.80	1527.0	-5469.6
## + V2_J2_5	1	0.77	1527.0	-5469.5
## + V2_J2_1	1	0.77	1527.0	-5469.5
## - V26_J1_3	1	3.16	1530.9	-5469.4
## + V15_J1_5	1	0.71	1527.0	-5469.3
## + V30_J1_4	1	0.66	1527.1	-5469.1
## + V17_J2_4	1	0.63	1527.1	-5469.1
## + V13_1_J1_6	1	0.63	1527.1	-5469.0
## + V5_J1_3	1	0.63	1527.1	-5469.0
## + V13_1_J2_3	1	0.62	1527.2	-5469.0
## + V23_J2_5	1	0.61	1527.2	-5469.0
## + V13_3_J2_7	1	0.60	1527.2	-5468.9
## + V12_1_2_J2_5	1	0.59	1527.2	-5468.9
## + V23_J1_2	1	0.59	1527.2	-5468.9
## + V5_J1_7	1	0.57	1527.2	-5468.8
## + V13_3_J1_3	1	0.57	1527.2	-5468.8
## + V5_J1_1	1	0.54	1527.2	-5468.7
## + V12_1_2_J2_3	1	0.50	1527.3	-5468.6
## + V13_3_J1_5	1	0.47	1527.3	-5468.5
## + V1_J1_6	1	0.45	1527.3	-5468.4
## + V23_J2_4	1	0.45	1527.3	-5468.4
## + V23_J2_3	1	0.44	1527.3	-5468.4
## + V24_J2_7	1	0.44	1527.3	-5468.4
## + V24_J2_4	1	0.44	1527.3	-5468.4
## + V13_1_J2_1	1	0.39	1527.4	-5468.2
## + V12_1_2_J2_1	1	0.37	1527.4	-5468.2
## + V15_J2_4	1	0.37	1527.4	-5468.1
## + V13_3_J1_6	1	0.35	1527.4	-5468.1
## + V13_3_J2_3	1	0.35	1527.4	-5468.1
## + V30_J2_4	1	0.35	1527.4	-5468.1
## + V30_J2_1	1	0.34	1527.4	-5468.0
## + V17_J1_1	1	0.33	1527.4	-5468.0
## + V17_J2_3	1	0.32	1527.4	-5468.0
## + V15_J2_5	1	0.32	1527.4	-5468.0
## + V19_J2_2	1	0.32	1527.4	-5468.0
## + V13_2_J1_1	1	0.30	1527.5	-5467.9
## + V4_J1_7	1	0.27	1527.5	-5467.8
## + V20_J2_7	1	0.26	1527.5	-5467.8

## + V3_J2_7	1	0.23	1527.5	-5467.7
## + V5_J2_2	1	0.23	1527.5	-5467.7
## + V17_J2_5	1	0.21	1527.6	-5467.6
## + V24_J2_2	1	0.21	1527.6	-5467.6
## + V13_3_J2_2	1	0.21	1527.6	-5467.6
## + V4_J2_2	1	0.17	1527.6	-5467.5
## + V3_J2_2	1	0.17	1527.6	-5467.5
## + V1_J2_1	1	0.16	1527.6	-5467.4
## + V16_J1_7	1	0.15	1527.6	-5467.4
## + V20_J2_5	1	0.15	1527.6	-5467.4
## + V13_3_J1_4	1	0.15	1527.6	-5467.4
## + V1_J2_4	1	0.15	1527.6	-5467.4
## + V4_J1_1	1	0.14	1527.6	-5467.4
## + V1_J1_4	1	0.14	1527.6	-5467.4
## + V29_J2_7	1	0.13	1527.6	-5467.3
## + V3_J1_1	1	0.12	1527.6	-5467.3
## + V17_J1_6	1	0.12	1527.7	-5467.3
## + V16_J1_5	1	0.11	1527.7	-5467.3
## + V4_J1_2	1	0.11	1527.7	-5467.3
## + V17_J1_4	1	0.08	1527.7	-5467.2
## + V3_J1_6	1	0.07	1527.7	-5467.1
## + V13_3_J2_1	1	0.06	1527.7	-5467.1
## + V14_J1_6	1	0.06	1527.7	-5467.1
## + V29_J2_5	1	0.05	1527.7	-5467.1
## + V26_J1_2	1	0.04	1527.7	-5467.0
## + V13_2_J2_1	1	0.03	1527.7	-5467.0
## + V14_J1_7	1	0.03	1527.7	-5467.0
## + V19_J1_7	1	0.03	1527.7	-5467.0
## + V2_J2_4	1	0.03	1527.7	-5467.0
## + V2_J1_4	1	0.02	1527.7	-5467.0
## + V24_J1_4	1	0.02	1527.7	-5467.0
## + V23_J1_6	1	0.02	1527.8	-5467.0
## + V16_J2_5	1	0.02	1527.8	-5466.9
## + V13_1_J1_4	1	0.01	1527.8	-5466.9
## + V13_1_J1_1	1	0.01	1527.8	-5466.9
## + V12_1_2_J2_4	1	0.01	1527.8	-5466.9
## + V24_J1_2	1	0.01	1527.8	-5466.9
## + V13_3_J1_7	1	0.00	1527.8	-5466.9
## + V2_J1_1	1	0.00	1527.8	-5466.9
## + V13_2_J2_4	1	0.00	1527.8	-5466.9
## + V3_J1_3	1	0.00	1527.8	-5466.9
## + V24_J2_1	1	0.00	1527.8	-5466.9
## + V23_J1_5	1	0.00	1527.8	-5466.9
## + V19_J2_7	1	0.00	1527.8	-5466.9
## + V23_J1_1	1	0.00	1527.8	-5466.9
## + V26_J2_7	1	0.00	1527.8	-5466.9
## - V2_J1_6	1	4.19	1532.0	-5465.9
## - V26_J1_1	1	4.73	1532.5	-5464.1
## - V13_1_J1_5	1	4.81	1532.6	-5463.8
## - V14_J1_2	1	4.81	1532.6	-5463.8
## - V13_2_J1_4	1	5.58	1533.3	-5461.2
## - V20_J1_2	1	5.82	1533.6	-5460.4
## - V13_3_J2_5	1	5.91	1533.7	-5460.1
## - V13_1_J1_3	1	6.21	1534.0	-5459.1

## - V23_J2_1	1	6.42	1534.2	-5458.4
## - V23_J1_4	1	6.92	1534.7	-5456.7
## - V26_J1_6	1	7.58	1535.3	-5454.4
## - V24_J1_7	1	7.59	1535.3	-5454.4
## - V1_J2_5	1	7.66	1535.4	-5454.1
## - V2_J1_5	1	8.06	1535.8	-5452.8
## - V1_J1_5	1	8.43	1536.2	-5451.5
## - V29_J1_7	1	9.06	1536.8	-5449.4
## - V13_2_J1_6	1	9.20	1537.0	-5448.9
## - V15_J2_1	1	9.34	1537.1	-5448.5
## - V12_1_2_J1_2	1	9.45	1537.2	-5448.1
## - V24_J2_5	1	9.82	1537.6	-5446.8
## - V13_1_J1_2	1	11.18	1539.0	-5442.2
## - V29_J1_5	1	12.12	1539.9	-5439.1
## - V17_J1_5	1	12.62	1540.4	-5437.4
## - V24_J1_6	1	14.13	1541.9	-5432.3
## - V13_1_J1_7	1	14.38	1542.1	-5431.5
## - V12_1_2_J1_6	1	14.47	1542.2	-5431.2
## - V4_J1_3	1	16.01	1543.8	-5426.0
## - V26_J1_5	1	16.16	1543.9	-5425.4
## - V20_J2_1	1	16.25	1544.0	-5425.2
## - V14_J2_5	1	17.04	1544.8	-5422.5
## - V16_J2_3	1	20.54	1548.3	-5410.7
## - V14_J2_1	1	21.62	1549.4	-5407.1
## - V29_J1_3	1	21.68	1549.4	-5406.9
## - V12_1_2_J1_7	1	23.88	1551.6	-5399.5
## - V2_J2_7	1	25.89	1553.7	-5392.8
## - V30_J1_5	1	26.15	1553.9	-5391.9
## - V30_J2_5	1	26.20	1554.0	-5391.7
## - V23_J2_7	1	26.43	1554.2	-5391.0
## - V4_J1_5	1	27.02	1554.8	-5389.0
## - V20_J2_3	1	27.22	1555.0	-5388.3
## - V2_J2_2	1	27.64	1555.4	-5386.9
## - V3_J1_5	1	28.19	1556.0	-5385.1
## - V15_J1_1	1	29.92	1557.7	-5379.3
## - V12_1_2_J2_7	1	30.13	1557.9	-5378.6
## - V15_J1_2	1	31.07	1558.8	-5375.5
## - V19_J2_5	1	35.35	1563.1	-5361.2
## - V14_J2_4	1	36.06	1563.8	-5358.9
## - V19_J2_4	1	36.33	1564.1	-5357.9
## - V12_1_2_J1_3	1	36.58	1564.3	-5357.1
## - V30_J1_3	1	38.52	1566.3	-5350.7
## - V16_J2_7	1	39.24	1567.0	-5348.3
## - V4_J2_7	1	40.00	1567.8	-5345.7
## - V26_J1_4	1	40.74	1568.5	-5343.3
## - V5_J1_4	1	41.61	1569.4	-5340.4
## - V13_2_J1_7	1	41.67	1569.4	-5340.2
## - V19_J2_1	1	49.30	1577.1	-5315.0
## - V4_J1_4	1	49.95	1577.7	-5312.9
## - V30_J1_2	1	51.57	1579.3	-5307.5
## - V5_J2_1	1	53.88	1581.6	-5299.9
## - V15_J1_6	1	55.29	1583.0	-5295.3
## - V15_J1_7	1	59.55	1587.3	-5281.3
## - V14_J1_5	1	62.06	1589.8	-5273.1

```

## - V1_J1_3      1      62.27 1590.0 -5272.4
## - V16_J1_3     1      62.38 1590.1 -5272.1
## - V17_J2_7     1      62.85 1590.6 -5270.5
## - V1_J2_2      1      64.24 1592.0 -5266.0
## - V17_J2_2     1      65.04 1592.8 -5263.4
## - V15_J1_3     1      68.68 1596.5 -5251.5
## - V14_J2_3     1      70.67 1598.4 -5245.0
## - V30_J1_1     1      72.81 1600.6 -5238.1
## - V30_J2_2     1      77.83 1605.6 -5221.8
## - V2_J1_3      1      78.00 1605.8 -5221.2
## - V23_J1_3     1      78.33 1606.1 -5220.2
## - V17_J1_3     1      79.59 1607.4 -5216.1
## - V14_J1_4     1      80.92 1608.7 -5211.8
## - V5_J2_3      1      88.50 1616.3 -5187.3
## - V1_J2_7      1      88.84 1616.6 -5186.2
## - V3_J1_4      1      92.58 1620.3 -5174.2
## - V5_J1_5      1     102.73 1630.5 -5141.7
## - V12_1_2_J1_4 1     104.15 1631.9 -5137.2
## - V19_J2_3     1     108.02 1635.8 -5124.9
## - V4_J2_5      1     114.32 1642.1 -5104.9
## - V15_J2_7     1     118.69 1646.5 -5091.1
## - V3_J2_1      1     120.62 1648.4 -5085.0
## - V26_J2_1     1     121.12 1648.9 -5083.4
## - V19_J1_5     1     124.13 1651.9 -5073.9
## - V4_J2_1      1     130.32 1658.1 -5054.5
## - V15_J2_2     1     132.26 1660.0 -5048.4
## - V3_J2_5      1     137.20 1665.0 -5033.0
## - V4_J2_3      1     148.70 1676.5 -4997.2
## - V26_J2_5     1     155.43 1683.2 -4976.3
## - V26_J2_4     1     158.95 1686.7 -4965.5
## - V4_J2_4      1     162.57 1690.3 -4954.3
## - V12_1_2_J2_2 1     175.89 1703.7 -4913.5
## - V19_J1_4     1     185.32 1713.1 -4884.8
## - V3_J2_4      1     201.76 1729.5 -4835.2
## - V3_J2_3      1     229.27 1757.0 -4753.1
## - V20_J2_2     1     267.07 1794.8 -4642.4
## - V5_J2_5      1     270.88 1798.7 -4631.4
## - V5_J2_4      1     310.55 1838.3 -4517.9
## - V26_J2_3     1     343.51 1871.3 -4425.5
## - J            12     448.03 1975.8 -4215.9
## - V16_J2_2     1     440.02 1967.8 -4164.0
## - V            19     1064.43 2592.2 -2850.4
##
## Step:  AIC=-5481.02
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +

```



```
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
## V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
## V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
## V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V14_J1_2 + V13_3_J2_5 +
## V20_J1_2 + V13_2_J1_4 + V26_J1_6 + V13_1_J1_5 + V26_J1_1 +
## V2_J1_6 + V29_J1_1
```

```
##
## Df Sum of Sq RSS AIC
## + V15_J2_3 1 4.10 1519.5 -5488.4
## + V1_J2_3 1 3.91 1519.7 -5487.8
## + V30_J2_3 1 3.82 1519.8 -5487.4
## + V24_J2_3 1 3.64 1520.0 -5486.8
## + V13_1_J2_2 1 3.52 1520.1 -5486.4
## + V19_J1_3 1 3.44 1520.2 -5486.1
## + V13_2_J2_2 1 3.43 1520.2 -5486.1
## + V16_J2_1 1 3.41 1520.2 -5486.0
## + V13_2_J1_5 1 3.35 1520.3 -5485.8
## + V13_2_J1_3 1 3.32 1520.3 -5485.7
## + V13_3_J1_2 1 3.15 1520.5 -5485.1
## + V13_2_J2_7 1 3.05 1520.6 -5484.8
## + V13_1_J2_4 1 3.03 1520.6 -5484.7
## + V12_1_2_J1_5 1 2.74 1520.9 -5483.8
## + V23_J1_7 1 2.67 1521.0 -5483.5
## + V20_J1_6 1 2.67 1521.0 -5483.5
## + V14_J1_3 1 2.58 1521.0 -5483.2
## + V29_J2_2 1 2.54 1521.1 -5483.1
## + V3_J1_2 1 2.49 1521.1 -5482.9
## + V20_J1_7 1 2.47 1521.2 -5482.8
## + V29_J2_1 1 2.47 1521.2 -5482.8
## + V13_3_J1_1 1 2.43 1521.2 -5482.7
## + V14_J2_2 1 2.40 1521.2 -5482.6
## + V29_J1_6 1 2.36 1521.3 -5482.4
## + V13_2_J2_5 1 2.36 1521.3 -5482.4
## + V19_J1_1 1 2.36 1521.3 -5482.4
## + V1_J1_1 1 2.31 1521.3 -5482.3
## + V2_J2_3 1 2.18 1521.4 -5481.8
## + V1_J1_7 1 2.15 1521.5 -5481.7
## + V13_2_J2_3 1 2.13 1521.5 -5481.7
## + V19_J1_6 1 2.11 1521.5 -5481.6
## + V23_J2_2 1 2.07 1521.5 -5481.5
## + V5_J1_6 1 2.04 1521.6 -5481.3
## + V20_J2_4 1 1.97 1521.7 -5481.1
## <none> 1523.6 -5481.0
## + V13_1_J2_7 1 1.89 1521.7 -5480.8
## + V17_J2_1 1 1.86 1521.8 -5480.7
## + V16_J1_6 1 1.83 1521.8 -5480.6
## + V29_J2_4 1 1.81 1521.8 -5480.6
## + V20_J1_3 1 1.80 1521.8 -5480.5
## + V14_J2_7 1 1.76 1521.9 -5480.4
## + V13_2_J1_2 1 1.67 1521.9 -5480.1
## + V16_J2_4 1 1.67 1522.0 -5480.1
```

## + V24_J1_1	1	1.67	1522.0	-5480.1
## + V29_J1_2	1	1.63	1522.0	-5479.9
## + V16_J1_2	1	1.63	1522.0	-5479.9
## + V24_J1_3	1	1.61	1522.0	-5479.9
## + V15_J1_4	1	1.53	1522.1	-5479.6
## + V5_J1_2	1	1.49	1522.1	-5479.5
## + V3_J1_7	1	1.47	1522.2	-5479.4
## + V24_J1_5	1	1.44	1522.2	-5479.3
## + V26_J2_2	1	1.38	1522.2	-5479.1
## + V20_J1_5	1	1.38	1522.2	-5479.1
## + V30_J1_6	1	1.30	1522.3	-5478.8
## + V19_J1_2	1	1.29	1522.3	-5478.8
## + V16_J1_4	1	1.28	1522.3	-5478.8
## + V13_3_J2_4	1	1.28	1522.3	-5478.7
## + V2_J1_7	1	1.21	1522.4	-5478.5
## + V29_J1_4	1	1.18	1522.4	-5478.4
## + V17_J1_7	1	1.16	1522.5	-5478.3
## + V20_J1_1	1	1.16	1522.5	-5478.3
## + V12_1_2_J1_1	1	1.15	1522.5	-5478.3
## + V30_J2_7	1	1.05	1522.6	-5478.0
## + V30_J1_7	1	1.02	1522.6	-5477.9
## + V4_J1_6	1	1.01	1522.6	-5477.8
## + V29_J2_3	1	0.98	1522.6	-5477.7
## + V26_J1_7	1	0.95	1522.7	-5477.6
## + V5_J2_7	1	0.90	1522.7	-5477.5
## + V2_J1_2	1	0.90	1522.7	-5477.5
## + V16_J1_1	1	0.90	1522.7	-5477.5
## + V13_1_J2_5	1	0.87	1522.8	-5477.3
## + V20_J1_4	1	0.85	1522.8	-5477.3
## + V17_J1_2	1	0.85	1522.8	-5477.3
## + V1_J1_2	1	0.83	1522.8	-5477.2
## + V2_J2_5	1	0.82	1522.8	-5477.2
## + V2_J2_1	1	0.81	1522.8	-5477.2
## + V14_J1_1	1	0.78	1522.8	-5477.1
## + V15_J1_5	1	0.74	1522.9	-5476.9
## - V26_J1_3	1	3.21	1526.8	-5476.7
## + V23_J2_5	1	0.65	1523.0	-5476.6
## + V13_1_J1_6	1	0.65	1523.0	-5476.6
## + V12_1_2_J2_5	1	0.65	1523.0	-5476.6
## + V30_J1_4	1	0.64	1523.0	-5476.6
## + V5_J1_3	1	0.63	1523.0	-5476.5
## + V13_3_J2_7	1	0.62	1523.0	-5476.5
## + V23_J1_2	1	0.62	1523.0	-5476.5
## + V17_J2_4	1	0.61	1523.0	-5476.4
## + V13_1_J2_3	1	0.59	1523.0	-5476.4
## + V5_J1_7	1	0.58	1523.0	-5476.4
## + V13_3_J1_3	1	0.56	1523.1	-5476.3
## + V23_J2_4	1	0.48	1523.1	-5476.0
## + V23_J2_3	1	0.48	1523.1	-5476.0
## + V1_J1_6	1	0.47	1523.2	-5476.0
## + V13_3_J1_5	1	0.47	1523.2	-5476.0
## + V24_J2_7	1	0.46	1523.2	-5476.0
## + V24_J2_4	1	0.46	1523.2	-5476.0
## + V12_1_2_J2_3	1	0.46	1523.2	-5476.0

## + V13_1_J2_1	1	0.42	1523.2	-5475.8
## + V5_J1_1	1	0.37	1523.2	-5475.7
## + V15_J2_4	1	0.37	1523.2	-5475.6
## + V29_J2_7	1	0.36	1523.3	-5475.6
## + V19_J2_2	1	0.35	1523.3	-5475.6
## + V30_J2_1	1	0.34	1523.3	-5475.6
## + V30_J2_4	1	0.34	1523.3	-5475.6
## + V13_3_J1_6	1	0.34	1523.3	-5475.5
## + V12_1_2_J2_1	1	0.34	1523.3	-5475.5
## + V13_3_J2_3	1	0.32	1523.3	-5475.5
## + V15_J2_5	1	0.31	1523.3	-5475.5
## + V17_J2_3	1	0.30	1523.3	-5475.4
## + V20_J2_7	1	0.28	1523.3	-5475.3
## + V4_J1_7	1	0.25	1523.4	-5475.2
## + V4_J1_1	1	0.24	1523.4	-5475.2
## + V24_J2_2	1	0.22	1523.4	-5475.1
## + V29_J2_5	1	0.21	1523.4	-5475.1
## + V3_J2_7	1	0.20	1523.4	-5475.1
## + V5_J2_2	1	0.20	1523.4	-5475.1
## + V17_J1_1	1	0.20	1523.4	-5475.0
## + V13_3_J2_2	1	0.19	1523.4	-5475.0
## + V17_J2_5	1	0.19	1523.4	-5475.0
## + V13_2_J1_1	1	0.18	1523.4	-5475.0
## + V13_3_J1_4	1	0.17	1523.5	-5475.0
## + V1_J2_4	1	0.17	1523.5	-5474.9
## + V1_J1_4	1	0.16	1523.5	-5474.9
## + V16_J1_7	1	0.15	1523.5	-5474.9
## + V3_J2_2	1	0.14	1523.5	-5474.9
## + V4_J2_2	1	0.14	1523.5	-5474.9
## + V1_J2_1	1	0.14	1523.5	-5474.9
## + V4_J1_2	1	0.13	1523.5	-5474.8
## + V20_J2_5	1	0.13	1523.5	-5474.8
## + V17_J1_6	1	0.13	1523.5	-5474.8
## + V16_J1_5	1	0.12	1523.5	-5474.8
## + V17_J1_4	1	0.09	1523.5	-5474.7
## + V3_J1_6	1	0.08	1523.5	-5474.7
## + V14_J1_6	1	0.08	1523.5	-5474.6
## + V13_3_J2_1	1	0.08	1523.5	-5474.6
## + V3_J1_1	1	0.05	1523.6	-5474.6
## + V2_J1_1	1	0.04	1523.6	-5474.5
## + V13_2_J2_1	1	0.04	1523.6	-5474.5
## + V26_J1_2	1	0.04	1523.6	-5474.5
## + V14_J1_7	1	0.03	1523.6	-5474.5
## + V2_J1_4	1	0.03	1523.6	-5474.5
## + V19_J1_7	1	0.03	1523.6	-5474.5
## + V23_J1_6	1	0.02	1523.6	-5474.5
## + V2_J2_4	1	0.02	1523.6	-5474.5
## + V24_J1_4	1	0.01	1523.6	-5474.4
## + V24_J1_2	1	0.01	1523.6	-5474.4
## + V23_J1_1	1	0.01	1523.6	-5474.4
## + V16_J2_5	1	0.01	1523.6	-5474.4
## + V13_1_J1_4	1	0.01	1523.6	-5474.4
## + V12_1_2_J2_4	1	0.01	1523.6	-5474.4
## + V13_2_J2_4	1	0.01	1523.6	-5474.4

## + V13_3_J1_7	1	0.00	1523.6	-5474.4
## + V23_J1_5	1	0.00	1523.6	-5474.4
## + V3_J1_3	1	0.00	1523.6	-5474.4
## + V13_1_J1_1	1	0.00	1523.6	-5474.4
## + V24_J2_1	1	0.00	1523.6	-5474.4
## + V26_J2_7	1	0.00	1523.6	-5474.4
## + V19_J2_7	1	0.00	1523.6	-5474.4
## - V29_J1_1	1	4.14	1527.8	-5473.5
## - V26_J1_1	1	4.23	1527.8	-5473.2
## - V2_J1_6	1	4.24	1527.9	-5473.2
## - V13_1_J1_5	1	4.82	1528.4	-5471.2
## - V14_J1_2	1	4.92	1528.5	-5470.9
## - V13_2_J1_4	1	5.68	1529.3	-5468.3
## - V20_J1_2	1	5.75	1529.4	-5468.1
## - V13_3_J2_5	1	6.01	1529.6	-5467.2
## - V13_1_J1_3	1	6.17	1529.8	-5466.6
## - V23_J2_1	1	6.53	1530.2	-5465.4
## - V23_J1_4	1	6.80	1530.4	-5464.5
## - V1_J2_5	1	7.54	1531.2	-5462.0
## - V24_J1_7	1	7.57	1531.2	-5461.9
## - V26_J1_6	1	7.59	1531.2	-5461.8
## - V2_J1_5	1	8.06	1531.7	-5460.2
## - V1_J1_5	1	8.45	1532.1	-5458.9
## - V13_2_J1_6	1	9.27	1532.9	-5456.1
## - V15_J2_1	1	9.36	1533.0	-5455.8
## - V12_1_2_J1_2	1	9.56	1533.2	-5455.1
## - V24_J2_5	1	9.69	1533.3	-5454.7
## - V29_J1_7	1	10.26	1533.9	-5452.7
## - V29_J1_5	1	10.65	1534.3	-5451.4
## - V13_1_J1_2	1	11.12	1534.7	-5449.8
## - V17_J1_5	1	12.62	1536.2	-5444.8
## - V24_J1_6	1	14.21	1537.8	-5439.4
## - V12_1_2_J1_6	1	14.34	1538.0	-5438.9
## - V13_1_J1_7	1	14.42	1538.0	-5438.7
## - V4_J1_3	1	15.93	1539.5	-5433.6
## - V20_J2_1	1	16.06	1539.7	-5433.1
## - V26_J1_5	1	16.23	1539.8	-5432.6
## - V14_J2_5	1	16.76	1540.4	-5430.8
## - V16_J2_3	1	20.35	1544.0	-5418.6
## - V14_J2_1	1	21.32	1544.9	-5415.4
## - V29_J1_3	1	23.41	1547.0	-5408.4
## - V12_1_2_J1_7	1	23.85	1547.5	-5406.9
## - V2_J2_7	1	25.72	1549.3	-5400.6
## - V30_J1_5	1	26.02	1549.6	-5399.6
## - V23_J2_7	1	26.24	1549.9	-5398.9
## - V30_J2_5	1	26.27	1549.9	-5398.7
## - V4_J1_5	1	26.86	1550.5	-5396.8
## - V20_J2_3	1	26.98	1550.6	-5396.4
## - V2_J2_2	1	27.49	1551.1	-5394.7
## - V3_J1_5	1	28.09	1551.7	-5392.7
## - V15_J1_1	1	28.49	1552.1	-5391.3
## - V12_1_2_J2_7	1	29.90	1553.5	-5386.6
## - V15_J1_2	1	31.03	1554.7	-5382.8
## - V19_J2_5	1	34.98	1558.6	-5369.6

## - V14_J2_4	1	35.71	1559.3	-5367.2
## - V19_J2_4	1	36.02	1559.6	-5366.1
## - V12_1_2_J1_3	1	36.58	1560.2	-5364.3
## - V30_J1_3	1	38.75	1562.4	-5357.0
## - V16_J2_7	1	39.03	1562.7	-5356.1
## - V4_J2_7	1	39.62	1563.2	-5354.2
## - V26_J1_4	1	40.60	1564.2	-5350.9
## - V5_J1_4	1	41.22	1564.8	-5348.9
## - V13_2_J1_7	1	41.71	1565.3	-5347.2
## - V19_J2_1	1	48.89	1572.5	-5323.4
## - V4_J1_4	1	49.44	1573.1	-5321.6
## - V30_J1_2	1	51.53	1575.2	-5314.7
## - V5_J2_1	1	53.45	1577.1	-5308.4
## - V15_J1_6	1	55.23	1578.8	-5302.5
## - V15_J1_7	1	59.27	1582.9	-5289.2
## - V14_J1_5	1	61.86	1585.5	-5280.7
## - V1_J1_3	1	62.32	1585.9	-5279.2
## - V16_J1_3	1	62.44	1586.1	-5278.8
## - V17_J2_7	1	62.61	1586.2	-5278.3
## - V1_J2_2	1	63.99	1587.6	-5273.7
## - V17_J2_2	1	64.84	1588.5	-5271.0
## - V15_J1_3	1	68.35	1592.0	-5259.5
## - V14_J2_3	1	70.12	1593.7	-5253.7
## - V30_J1_1	1	70.44	1594.1	-5252.6
## - V30_J2_2	1	77.85	1601.5	-5228.5
## - V2_J1_3	1	78.08	1601.7	-5227.8
## - V23_J1_3	1	78.39	1602.0	-5226.8
## - V17_J1_3	1	79.70	1603.3	-5222.5
## - V14_J1_4	1	80.30	1603.9	-5220.6
## - V5_J2_3	1	87.95	1611.6	-5195.8
## - V1_J2_7	1	88.51	1612.1	-5194.0
## - V3_J1_4	1	91.99	1615.6	-5182.8
## - V5_J1_5	1	102.53	1626.2	-5149.0
## - V12_1_2_J1_4	1	103.60	1627.2	-5145.6
## - V19_J2_3	1	107.41	1631.0	-5133.4
## - V4_J2_5	1	113.54	1637.2	-5113.9
## - V15_J2_7	1	118.69	1642.3	-5097.6
## - V3_J2_1	1	119.97	1643.6	-5093.5
## - V26_J2_1	1	120.91	1644.5	-5090.5
## - V19_J1_5	1	123.91	1647.5	-5081.1
## - V4_J2_1	1	129.52	1653.1	-5063.4
## - V15_J2_2	1	132.21	1655.8	-5055.0
## - V3_J2_5	1	136.47	1660.1	-5041.6
## - V4_J2_3	1	147.85	1671.5	-5006.0
## - V26_J2_5	1	155.15	1678.8	-4983.4
## - V26_J2_4	1	158.79	1682.4	-4972.1
## - V4_J2_4	1	161.76	1685.4	-4963.0
## - V12_1_2_J2_2	1	175.38	1699.0	-4921.1
## - V19_J1_4	1	184.46	1708.1	-4893.4
## - V3_J2_4	1	201.01	1724.6	-4843.3
## - V3_J2_3	1	228.37	1752.0	-4761.4
## - V20_J2_2	1	266.50	1790.1	-4649.4
## - V5_J2_5	1	269.84	1793.5	-4639.8
## - V5_J2_4	1	309.61	1833.2	-4525.7

```

## - V26_J2_3      1      343.17 1866.8 -4431.4
## - J             12      442.58 1966.2 -4234.6
## - V16_J2_2      1      439.39 1963.0 -4170.0
## - V             19     1067.61 2591.2 -2845.6
##
## Step:  AIC=-5488.41
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
## V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
## V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
## V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V14_J1_2 + V13_3_J2_5 +
## V20_J1_2 + V13_2_J1_4 + V26_J1_6 + V13_1_J1_5 + V26_J1_1 +
## V2_J1_6 + V29_J1_1 + V15_J2_3
##
##
##      Df Sum of Sq  RSS    AIC
## + V30_J2_3      1      4.54 1515.0 -5497.3
## + V24_J2_3      1      4.37 1515.1 -5496.8
## + V13_2_J1_5     1      3.63 1515.9 -5494.2
## + V13_1_J2_2     1      3.53 1516.0 -5493.9
## + V19_J1_3       1      3.45 1516.1 -5493.6
## + V13_2_J2_2     1      3.43 1516.1 -5493.5
## + V16_J2_1       1      3.31 1516.2 -5493.1
## + V13_2_J1_3     1      3.30 1516.2 -5493.1
## + V1_J2_3        1      3.30 1516.2 -5493.1
## + V13_3_J1_2     1      3.15 1516.4 -5492.6
## + V13_2_J2_7     1      3.05 1516.5 -5492.2
## + V13_1_J2_4     1      2.89 1516.6 -5491.7
## + V23_J1_7       1      2.68 1516.8 -5491.0
## + V20_J1_6       1      2.59 1516.9 -5490.7
## + V14_J1_3       1      2.59 1516.9 -5490.6
## + V13_2_J2_5     1      2.54 1517.0 -5490.5
## + V29_J2_2       1      2.53 1517.0 -5490.4
## + V3_J1_2        1      2.49 1517.0 -5490.3
## + V12_1_2_J1_5   1      2.49 1517.0 -5490.3
## + V29_J2_1       1      2.46 1517.0 -5490.2
## + V13_3_J1_1     1      2.42 1517.1 -5490.1
## + V14_J2_2       1      2.40 1517.1 -5490.0
## + V20_J1_7       1      2.40 1517.1 -5490.0
## + V29_J1_6       1      2.38 1517.1 -5489.9
## + V19_J1_1       1      2.36 1517.2 -5489.9
## + V1_J1_1        1      2.35 1517.2 -5489.8
## + V1_J1_7        1      2.11 1517.4 -5489.0

```

## + V19_J1_6	1	2.11	1517.4	-5489.0
## + V23_J2_2	1	2.07	1517.4	-5488.9
## + V5_J1_6	1	2.04	1517.5	-5488.8
## + V20_J2_4	1	2.01	1517.5	-5488.6
## <none>			1519.5	-5488.4
## + V29_J2_4	1	1.93	1517.6	-5488.4
## + V13_1_J2_7	1	1.90	1517.6	-5488.3
## + V16_J1_6	1	1.89	1517.6	-5488.2
## + V17_J2_1	1	1.86	1517.7	-5488.1
## + V20_J1_3	1	1.86	1517.7	-5488.1
## + V14_J2_7	1	1.76	1517.8	-5487.8
## + V2_J2_3	1	1.70	1517.8	-5487.6
## + V13_2_J1_2	1	1.68	1517.8	-5487.5
## + V24_J1_1	1	1.67	1517.8	-5487.5
## + V13_2_J2_3	1	1.66	1517.9	-5487.4
## + V29_J1_2	1	1.64	1517.9	-5487.4
## + V16_J2_4	1	1.64	1517.9	-5487.4
## + V24_J1_5	1	1.63	1517.9	-5487.3
## + V24_J1_3	1	1.62	1517.9	-5487.3
## + V16_J1_2	1	1.56	1518.0	-5487.1
## + V5_J1_2	1	1.49	1518.0	-5486.9
## + V3_J1_7	1	1.47	1518.0	-5486.8
## + V26_J2_2	1	1.38	1518.1	-5486.5
## + V29_J2_3	1	1.37	1518.2	-5486.5
## + V13_3_J2_4	1	1.37	1518.2	-5486.4
## + V15_J2_4	1	1.35	1518.2	-5486.4
## + V16_J1_4	1	1.34	1518.2	-5486.4
## + V30_J1_6	1	1.33	1518.2	-5486.3
## + V19_J1_2	1	1.29	1518.2	-5486.2
## + V20_J1_5	1	1.27	1518.2	-5486.1
## + V2_J1_7	1	1.22	1518.3	-5486.0
## + V20_J1_1	1	1.21	1518.3	-5485.9
## + V12_1_2_J1_1	1	1.16	1518.3	-5485.7
## + V17_J1_7	1	1.15	1518.4	-5485.7
## + V30_J2_7	1	1.08	1518.4	-5485.5
## + V29_J1_4	1	1.07	1518.5	-5485.4
## + V4_J1_6	1	1.01	1518.5	-5485.2
## + V30_J1_7	1	0.99	1518.5	-5485.2
## + V26_J1_7	1	0.95	1518.6	-5485.0
## + V16_J1_1	1	0.95	1518.6	-5485.0
## + V5_J2_7	1	0.91	1518.6	-5484.9
## + V2_J1_2	1	0.89	1518.6	-5484.8
## + V17_J1_2	1	0.84	1518.7	-5484.7
## + V2_J2_1	1	0.81	1518.7	-5484.5
## + V20_J1_4	1	0.81	1518.7	-5484.5
## + V1_J1_2	1	0.81	1518.7	-5484.5
## + V14_J1_1	1	0.78	1518.7	-5484.4
## + V23_J2_3	1	0.76	1518.8	-5484.4
## + V13_1_J2_5	1	0.76	1518.8	-5484.4
## + V30_J1_4	1	0.75	1518.8	-5484.3
## + V2_J2_5	1	0.71	1518.8	-5484.2
## + V17_J2_4	1	0.67	1518.8	-5484.1
## - V26_J1_3	1	3.21	1522.7	-5484.1
## + V13_1_J1_6	1	0.64	1518.9	-5484.0

## + V5_J1_3	1	0.63	1518.9	-5483.9
## + V13_3_J2_7	1	0.62	1518.9	-5483.9
## + V23_J1_2	1	0.62	1518.9	-5483.9
## + V5_J1_7	1	0.58	1518.9	-5483.8
## + V23_J2_5	1	0.56	1519.0	-5483.7
## + V15_J1_4	1	0.56	1519.0	-5483.7
## + V12_1_2_J2_5	1	0.55	1519.0	-5483.7
## + V13_3_J1_3	1	0.55	1519.0	-5483.7
## + V24_J2_7	1	0.46	1519.1	-5483.3
## + V1_J1_6	1	0.46	1519.1	-5483.3
## + V23_J2_4	1	0.43	1519.1	-5483.2
## + V13_1_J2_1	1	0.42	1519.1	-5483.2
## + V24_J2_4	1	0.41	1519.1	-5483.2
## + V30_J2_4	1	0.41	1519.1	-5483.2
## + V13_3_J1_5	1	0.37	1519.1	-5483.1
## + V5_J1_1	1	0.37	1519.1	-5483.0
## + V29_J2_7	1	0.36	1519.2	-5483.0
## + V19_J2_2	1	0.36	1519.2	-5483.0
## + V13_1_J2_3	1	0.35	1519.2	-5483.0
## + V13_3_J1_6	1	0.34	1519.2	-5482.9
## + V12_1_2_J2_1	1	0.34	1519.2	-5482.9
## + V30_J2_1	1	0.33	1519.2	-5482.9
## + V20_J2_7	1	0.31	1519.2	-5482.8
## + V29_J2_5	1	0.27	1519.2	-5482.7
## + V4_J1_7	1	0.25	1519.3	-5482.6
## + V12_1_2_J2_3	1	0.25	1519.3	-5482.6
## + V17_J2_5	1	0.24	1519.3	-5482.6
## + V4_J1_1	1	0.24	1519.3	-5482.6
## + V24_J2_2	1	0.22	1519.3	-5482.5
## + V3_J2_7	1	0.20	1519.3	-5482.5
## + V5_J2_2	1	0.20	1519.3	-5482.5
## + V13_3_J2_2	1	0.19	1519.3	-5482.4
## + V17_J1_1	1	0.19	1519.3	-5482.4
## + V13_2_J1_1	1	0.17	1519.3	-5482.4
## + V16_J1_7	1	0.17	1519.3	-5482.4
## + V13_3_J2_3	1	0.16	1519.4	-5482.3
## + V20_J2_5	1	0.15	1519.4	-5482.3
## + V1_J2_1	1	0.15	1519.4	-5482.3
## + V15_J1_5	1	0.14	1519.4	-5482.3
## + V3_J2_2	1	0.14	1519.4	-5482.3
## + V4_J2_2	1	0.14	1519.4	-5482.3
## + V17_J2_3	1	0.14	1519.4	-5482.2
## + V4_J1_2	1	0.13	1519.4	-5482.2
## + V13_3_J1_4	1	0.13	1519.4	-5482.2
## + V1_J2_4	1	0.13	1519.4	-5482.2
## + V17_J1_6	1	0.12	1519.4	-5482.2
## + V1_J1_4	1	0.11	1519.4	-5482.2
## + V16_J1_5	1	0.08	1519.4	-5482.1
## + V3_J1_6	1	0.08	1519.4	-5482.0
## + V14_J1_6	1	0.08	1519.4	-5482.0
## + V13_3_J2_1	1	0.08	1519.4	-5482.0
## + V17_J1_4	1	0.06	1519.5	-5482.0
## + V3_J1_1	1	0.05	1519.5	-5481.9
## + V2_J1_1	1	0.04	1519.5	-5481.9

## + V13_2_J2_1	1	0.04	1519.5	-5481.9
## + V26_J1_2	1	0.04	1519.5	-5481.9
## + V2_J2_4	1	0.03	1519.5	-5481.9
## + V14_J1_7	1	0.03	1519.5	-5481.9
## + V19_J1_7	1	0.03	1519.5	-5481.9
## + V24_J1_4	1	0.03	1519.5	-5481.9
## + V23_J1_6	1	0.02	1519.5	-5481.8
## + V13_1_J1_4	1	0.02	1519.5	-5481.8
## + V16_J2_5	1	0.02	1519.5	-5481.8
## + V2_J1_4	1	0.02	1519.5	-5481.8
## + V12_1_2_J2_4	1	0.01	1519.5	-5481.8
## + V24_J1_2	1	0.01	1519.5	-5481.8
## + V23_J1_1	1	0.01	1519.5	-5481.8
## + V13_3_J1_7	1	0.00	1519.5	-5481.8
## + V15_J2_5	1	0.00	1519.5	-5481.8
## + V3_J1_3	1	0.00	1519.5	-5481.8
## + V13_2_J2_4	1	0.00	1519.5	-5481.8
## + V13_1_J1_1	1	0.00	1519.5	-5481.8
## + V24_J2_1	1	0.00	1519.5	-5481.8
## + V23_J1_5	1	0.00	1519.5	-5481.8
## + V26_J2_7	1	0.00	1519.5	-5481.8
## + V19_J2_7	1	0.00	1519.5	-5481.8
## - V15_J2_3	1	4.10	1523.6	-5481.0
## - V29_J1_1	1	4.16	1523.7	-5480.8
## - V2_J1_6	1	4.22	1523.7	-5480.6
## - V26_J1_1	1	4.23	1523.8	-5480.6
## - V14_J1_2	1	4.92	1524.4	-5478.2
## - V13_1_J1_5	1	5.08	1524.6	-5477.7
## - V13_2_J1_4	1	5.48	1525.0	-5476.3
## - V20_J1_2	1	5.65	1525.2	-5475.8
## - V13_3_J2_5	1	5.78	1525.3	-5475.3
## - V13_1_J1_3	1	6.14	1525.7	-5474.1
## - V23_J2_1	1	6.53	1526.0	-5472.7
## - V23_J1_4	1	7.01	1526.5	-5471.1
## - V24_J1_7	1	7.56	1527.1	-5469.2
## - V26_J1_6	1	7.59	1527.1	-5469.1
## - V2_J1_5	1	7.71	1527.2	-5468.7
## - V1_J2_5	1	7.83	1527.3	-5468.3
## - V1_J1_5	1	8.06	1527.6	-5467.5
## - V13_2_J1_6	1	9.26	1528.8	-5463.5
## - V12_1_2_J1_2	1	9.55	1529.1	-5462.5
## - V24_J2_5	1	9.98	1529.5	-5461.0
## - V29_J1_5	1	10.25	1529.8	-5460.1
## - V29_J1_7	1	10.29	1529.8	-5459.9
## - V13_1_J1_2	1	11.15	1530.7	-5457.0
## - V15_J2_1	1	11.62	1531.1	-5455.4
## - V17_J1_5	1	12.18	1531.7	-5453.5
## - V24_J1_6	1	14.20	1533.7	-5446.7
## - V12_1_2_J1_6	1	14.36	1533.9	-5446.1
## - V13_1_J1_7	1	14.45	1534.0	-5445.8
## - V20_J2_1	1	15.88	1535.4	-5441.0
## - V4_J1_3	1	15.95	1535.5	-5440.7
## - V26_J1_5	1	16.66	1536.2	-5438.4
## - V14_J2_5	1	17.11	1536.6	-5436.8

## - V16_J2_3	1	18.75	1538.3	-5431.3
## - V14_J2_1	1	21.30	1540.8	-5422.7
## - V29_J1_3	1	23.47	1543.0	-5415.3
## - V12_1_2_J1_7	1	23.88	1543.4	-5414.0
## - V20_J2_3	1	25.11	1544.6	-5409.8
## - V30_J1_5	1	25.31	1544.8	-5409.2
## - V30_J2_5	1	25.69	1545.2	-5407.9
## - V2_J2_7	1	25.76	1545.3	-5407.6
## - V23_J2_7	1	26.25	1545.8	-5406.0
## - V4_J1_5	1	27.41	1546.9	-5402.1
## - V2_J2_2	1	27.52	1547.0	-5401.7
## - V3_J1_5	1	28.66	1548.2	-5397.9
## - V12_1_2_J2_7	1	29.92	1549.4	-5393.6
## - V15_J1_1	1	31.80	1551.3	-5387.4
## - V15_J1_2	1	34.41	1553.9	-5378.6
## - V19_J2_5	1	35.49	1555.0	-5375.0
## - V14_J2_4	1	36.06	1555.6	-5373.1
## - V19_J2_4	1	36.38	1555.9	-5372.0
## - V12_1_2_J1_3	1	36.63	1556.1	-5371.2
## - V16_J2_7	1	38.78	1558.3	-5364.0
## - V30_J1_3	1	38.91	1558.4	-5363.6
## - V4_J2_7	1	39.62	1559.1	-5361.2
## - V26_J1_4	1	41.06	1560.6	-5356.4
## - V5_J1_4	1	41.70	1561.2	-5354.3
## - V13_2_J1_7	1	41.74	1561.3	-5354.1
## - V19_J2_1	1	48.85	1568.4	-5330.5
## - V4_J1_4	1	49.96	1569.5	-5326.8
## - V30_J1_2	1	51.38	1570.9	-5322.1
## - V5_J2_1	1	53.41	1572.9	-5315.4
## - V15_J1_6	1	59.11	1578.6	-5296.6
## - V16_J1_3	1	62.17	1581.7	-5286.5
## - V1_J1_3	1	62.50	1582.0	-5285.4
## - V17_J2_7	1	62.66	1582.2	-5284.9
## - V14_J1_5	1	62.68	1582.2	-5284.8
## - V15_J1_7	1	63.20	1582.7	-5283.1
## - V1_J2_2	1	64.13	1583.6	-5280.1
## - V17_J2_2	1	64.88	1584.4	-5277.6
## - V14_J2_3	1	67.40	1586.9	-5269.3
## - V30_J1_1	1	70.24	1589.8	-5260.1
## - V15_J1_3	1	72.33	1591.8	-5253.2
## - V30_J2_2	1	78.02	1597.5	-5234.7
## - V2_J1_3	1	78.18	1597.7	-5234.1
## - V23_J1_3	1	78.45	1598.0	-5233.3
## - V17_J1_3	1	79.80	1599.3	-5228.9
## - V14_J1_4	1	80.96	1600.5	-5225.1
## - V5_J2_3	1	84.82	1604.3	-5212.6
## - V1_J2_7	1	88.68	1608.2	-5200.1
## - V3_J1_4	1	92.69	1612.2	-5187.1
## - V5_J1_5	1	103.60	1623.1	-5152.1
## - V19_J2_3	1	103.90	1623.4	-5151.1
## - V12_1_2_J1_4	1	104.39	1623.9	-5149.5
## - V4_J2_5	1	114.42	1633.9	-5117.5
## - V3_J2_1	1	119.92	1639.4	-5100.0
## - V26_J2_1	1	120.87	1640.4	-5097.0

```

## - V15_J2_7      1      122.75 1642.3 -5091.1
## - V19_J1_5      1      125.07 1644.6 -5083.7
## - V4_J2_1       1      129.47 1649.0 -5069.8
## - V15_J2_2      1      136.19 1655.7 -5048.7
## - V3_J2_5       1      137.44 1657.0 -5044.8
## - V4_J2_3       1      143.74 1663.2 -5025.0
## - V26_J2_5      1      156.15 1675.7 -4986.4
## - V26_J2_4      1      159.50 1679.0 -4976.0
## - V4_J2_4       1      162.48 1682.0 -4966.8
## - V12_1_2_J2_2  1      175.42 1694.9 -4926.9
## - V19_J1_4      1      185.44 1705.0 -4896.3
## - V3_J2_4       1      201.82 1721.3 -4846.6
## - V3_J2_3       1      222.88 1742.4 -4783.3
## - V20_J2_2      1      265.79 1785.3 -4656.8
## - V5_J2_5       1      271.16 1790.7 -4641.2
## - V5_J2_4       1      310.61 1830.1 -4527.9
## - V26_J2_3      1      336.51 1856.0 -4454.8
## - J             12      420.12 1939.6 -4298.7
## - V16_J2_2      1      438.50 1958.0 -4176.6
## - V             19     1011.66 2531.2 -2961.0
##
## Step:  AIC=-5497.34
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
## V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
## V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
## V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V14_J1_2 + V13_3_J2_5 +
## V20_J1_2 + V13_2_J1_4 + V26_J1_6 + V13_1_J1_5 + V26_J1_1 +
## V2_J1_6 + V29_J1_1 + V15_J2_3 + V30_J2_3
##
##
##      Df Sum of Sq    RSS    AIC
## + V24_J2_3      1      5.35 1509.6 -5509.1
## + V13_2_J1_5     1      3.67 1511.3 -5503.3
## + V13_1_J2_2     1      3.58 1511.4 -5503.0
## + V19_J1_3       1      3.41 1511.6 -5502.4
## + V13_2_J2_2     1      3.37 1511.6 -5502.3
## + V16_J2_1       1      3.35 1511.6 -5502.2
## + V13_2_J1_3     1      3.23 1511.7 -5501.8
## + V13_3_J1_2     1      3.16 1511.8 -5501.6
## + V13_2_J2_7     1      2.88 1512.1 -5500.6
## + V23_J1_7       1      2.84 1512.1 -5500.5
## + V13_1_J2_4     1      2.79 1512.2 -5500.3

```

## + V20_J1_6	1	2.64	1512.3	-5499.8
## + V1_J2_3	1	2.59	1512.4	-5499.6
## + V13_2_J2_5	1	2.57	1512.4	-5499.5
## + V14_J1_3	1	2.55	1512.4	-5499.5
## + V3_J1_2	1	2.54	1512.4	-5499.4
## + V29_J1_6	1	2.50	1512.5	-5499.3
## + V29_J2_2	1	2.50	1512.5	-5499.3
## + V14_J2_2	1	2.45	1512.5	-5499.1
## + V20_J1_7	1	2.45	1512.5	-5499.1
## + V13_3_J1_1	1	2.41	1512.6	-5499.0
## + V12_1_2_J1_5	1	2.41	1512.6	-5499.0
## + V1_J1_1	1	2.37	1512.6	-5498.9
## + V29_J2_1	1	2.36	1512.6	-5498.8
## + V19_J1_1	1	2.31	1512.7	-5498.6
## + V23_J2_2	1	2.13	1512.8	-5498.0
## + V5_J1_6	1	2.08	1512.9	-5497.9
## + V19_J1_6	1	2.06	1512.9	-5497.8
## + V13_1_J2_7	1	2.03	1512.9	-5497.7
## + V20_J2_4	1	2.02	1513.0	-5497.6
## + V29_J2_4	1	2.01	1513.0	-5497.6
## + V1_J1_7	1	1.99	1513.0	-5497.6
## + V17_J2_1	1	1.96	1513.0	-5497.4
## + V29_J2_3	1	1.93	1513.0	-5497.3
## <none>			1515.0	-5497.3
## + V20_J1_3	1	1.89	1513.1	-5497.2
## + V30_J1_7	1	1.86	1513.1	-5497.1
## + V16_J1_6	1	1.85	1513.1	-5497.1
## + V14_J2_7	1	1.81	1513.2	-5496.9
## + V13_2_J1_2	1	1.71	1513.3	-5496.6
## + V24_J1_1	1	1.70	1513.3	-5496.5
## + V24_J1_3	1	1.66	1513.3	-5496.4
## + V29_J1_2	1	1.66	1513.3	-5496.4
## + V24_J1_5	1	1.64	1513.3	-5496.3
## + V16_J2_4	1	1.62	1513.3	-5496.3
## + V16_J1_2	1	1.53	1513.4	-5496.0
## + V3_J1_7	1	1.51	1513.5	-5495.9
## + V5_J1_2	1	1.46	1513.5	-5495.7
## + V13_3_J2_4	1	1.42	1513.5	-5495.6
## + V16_J1_4	1	1.38	1513.6	-5495.5
## + V26_J2_2	1	1.34	1513.6	-5495.3
## + V15_J2_4	1	1.33	1513.6	-5495.3
## + V2_J1_7	1	1.33	1513.6	-5495.3
## + V19_J1_2	1	1.33	1513.7	-5495.3
## + V20_J1_5	1	1.32	1513.7	-5495.2
## + V20_J1_1	1	1.25	1513.7	-5495.0
## + V12_1_2_J1_1	1	1.23	1513.7	-5494.9
## + V2_J2_3	1	1.21	1513.8	-5494.9
## + V23_J2_3	1	1.18	1513.8	-5494.8
## + V13_2_J2_3	1	1.18	1513.8	-5494.8
## + V17_J1_7	1	1.06	1513.9	-5494.4
## + V29_J1_4	1	0.99	1514.0	-5494.1
## + V16_J1_1	1	0.97	1514.0	-5494.1
## + V4_J1_6	1	0.97	1514.0	-5494.1
## + V26_J1_7	1	0.92	1514.0	-5493.9

## + V30_J2_1	1	0.90	1514.1	-5493.8
## + V5_J2_7	1	0.87	1514.1	-5493.7
## + V2_J1_2	1	0.87	1514.1	-5493.7
## + V17_J1_2	1	0.82	1514.2	-5493.5
## + V14_J1_1	1	0.82	1514.2	-5493.5
## + V1_J1_2	1	0.79	1514.2	-5493.4
## + V20_J1_4	1	0.78	1514.2	-5493.4
## + V13_1_J2_5	1	0.75	1514.2	-5493.3
## + V2_J2_1	1	0.74	1514.2	-5493.2
## + V17_J2_4	1	0.72	1514.2	-5493.2
## + V2_J2_5	1	0.70	1514.3	-5493.1
## - V26_J1_3	1	3.18	1518.2	-5493.1
## + V30_J1_6	1	0.66	1514.3	-5493.0
## + V5_J1_3	1	0.65	1514.3	-5492.9
## + V15_J1_4	1	0.60	1514.4	-5492.8
## + V23_J1_2	1	0.59	1514.4	-5492.7
## + V13_1_J1_6	1	0.58	1514.4	-5492.7
## + V13_3_J2_7	1	0.56	1514.4	-5492.6
## + V5_J1_7	1	0.56	1514.4	-5492.6
## + V23_J2_5	1	0.55	1514.4	-5492.6
## + V13_3_J1_3	1	0.54	1514.4	-5492.5
## + V12_1_2_J2_5	1	0.51	1514.5	-5492.5
## + V30_J2_7	1	0.49	1514.5	-5492.4
## + V29_J2_7	1	0.42	1514.5	-5492.2
## + V12_1_2_J2_1	1	0.41	1514.6	-5492.1
## + V1_J1_6	1	0.40	1514.6	-5492.1
## + V24_J2_7	1	0.40	1514.6	-5492.1
## + V5_J1_1	1	0.39	1514.6	-5492.1
## + V23_J2_4	1	0.38	1514.6	-5492.0
## + V13_3_J1_6	1	0.38	1514.6	-5492.0
## + V13_3_J1_5	1	0.38	1514.6	-5492.0
## + V13_1_J2_1	1	0.37	1514.6	-5492.0
## + V19_J2_2	1	0.37	1514.6	-5492.0
## + V24_J2_4	1	0.37	1514.6	-5492.0
## + V20_J2_7	1	0.29	1514.7	-5491.7
## + V4_J1_7	1	0.27	1514.7	-5491.7
## + V30_J1_4	1	0.27	1514.7	-5491.6
## + V29_J2_5	1	0.27	1514.7	-5491.6
## + V17_J2_5	1	0.25	1514.7	-5491.6
## + V4_J1_1	1	0.23	1514.7	-5491.5
## + V3_J2_7	1	0.22	1514.8	-5491.5
## + V24_J2_2	1	0.21	1514.8	-5491.4
## + V13_3_J2_2	1	0.20	1514.8	-5491.4
## + V5_J2_2	1	0.19	1514.8	-5491.4
## + V17_J1_1	1	0.18	1514.8	-5491.3
## + V1_J2_1	1	0.17	1514.8	-5491.3
## + V13_2_J1_1	1	0.16	1514.8	-5491.3
## + V16_J1_7	1	0.16	1514.8	-5491.2
## + V13_1_J2_3	1	0.15	1514.8	-5491.2
## + V4_J1_2	1	0.14	1514.8	-5491.2
## + V20_J2_5	1	0.14	1514.8	-5491.2
## + V4_J2_2	1	0.13	1514.8	-5491.2
## + V3_J2_2	1	0.13	1514.8	-5491.2
## + V15_J1_5	1	0.13	1514.8	-5491.2

## + V13_3_J1_4	1	0.11	1514.9	-5491.1
## + V1_J2_4	1	0.11	1514.9	-5491.1
## + V17_J1_6	1	0.10	1514.9	-5491.0
## + V16_J1_5	1	0.10	1514.9	-5491.0
## + V12_1_2_J2_3	1	0.09	1514.9	-5491.0
## + V1_J1_4	1	0.09	1514.9	-5491.0
## + V30_J2_4	1	0.08	1514.9	-5491.0
## + V3_J1_6	1	0.07	1514.9	-5491.0
## + V14_J1_6	1	0.07	1514.9	-5490.9
## + V13_3_J2_1	1	0.06	1514.9	-5490.9
## + V3_J1_1	1	0.06	1514.9	-5490.9
## + V2_J1_1	1	0.05	1514.9	-5490.9
## + V2_J2_4	1	0.05	1514.9	-5490.9
## + V17_J1_4	1	0.04	1514.9	-5490.9
## + V24_J1_4	1	0.04	1514.9	-5490.9
## + V26_J1_2	1	0.04	1514.9	-5490.9
## + V13_1_J1_4	1	0.04	1514.9	-5490.8
## + V13_3_J2_3	1	0.03	1514.9	-5490.8
## + V12_1_2_J2_4	1	0.03	1514.9	-5490.8
## + V14_J1_7	1	0.03	1515.0	-5490.8
## + V17_J2_3	1	0.03	1515.0	-5490.8
## + V13_2_J2_1	1	0.02	1515.0	-5490.8
## + V19_J1_7	1	0.02	1515.0	-5490.8
## + V23_J1_1	1	0.01	1515.0	-5490.8
## + V16_J2_5	1	0.01	1515.0	-5490.7
## + V23_J1_6	1	0.01	1515.0	-5490.7
## + V24_J1_2	1	0.01	1515.0	-5490.7
## + V2_J1_4	1	0.01	1515.0	-5490.7
## + V24_J2_1	1	0.00	1515.0	-5490.7
## + V3_J1_3	1	0.00	1515.0	-5490.7
## + V13_1_J1_1	1	0.00	1515.0	-5490.7
## + V23_J1_5	1	0.00	1515.0	-5490.7
## + V15_J2_5	1	0.00	1515.0	-5490.7
## + V13_3_J1_7	1	0.00	1515.0	-5490.7
## + V19_J2_7	1	0.00	1515.0	-5490.7
## + V26_J2_7	1	0.00	1515.0	-5490.7
## + V13_2_J2_4	1	0.00	1515.0	-5490.7
## - V2_J1_6	1	4.07	1519.0	-5490.0
## - V29_J1_1	1	4.19	1519.2	-5489.6
## - V26_J1_1	1	4.29	1519.3	-5489.3
## - V30_J2_3	1	4.54	1519.5	-5488.4
## - V15_J2_3	1	4.82	1519.8	-5487.4
## - V14_J1_2	1	4.99	1520.0	-5486.9
## - V13_1_J1_5	1	5.10	1520.1	-5486.5
## - V13_2_J1_4	1	5.30	1520.3	-5485.8
## - V20_J1_2	1	5.58	1520.6	-5484.8
## - V13_3_J2_5	1	5.79	1520.8	-5484.1
## - V13_1_J1_3	1	6.08	1521.0	-5483.2
## - V23_J2_1	1	6.36	1521.3	-5482.2
## - V23_J1_4	1	7.22	1522.2	-5479.3
## - V24_J1_7	1	7.36	1522.3	-5478.8
## - V26_J1_6	1	7.53	1522.5	-5478.2
## - V2_J1_5	1	7.67	1522.6	-5477.7
## - V1_J2_5	1	7.85	1522.8	-5477.1

## - V1_J1_5	1	8.03	1523.0	-5476.5
## - V13_2_J1_6	1	9.03	1524.0	-5473.1
## - V12_1_2_J1_2	1	9.39	1524.4	-5471.8
## - V24_J2_5	1	10.00	1525.0	-5469.8
## - V29_J1_5	1	10.22	1525.2	-5469.0
## - V29_J1_7	1	10.51	1525.5	-5468.0
## - V13_1_J1_2	1	11.20	1526.2	-5465.7
## - V15_J2_1	1	11.54	1526.5	-5464.5
## - V17_J1_5	1	12.15	1527.1	-5462.4
## - V24_J1_6	1	13.94	1528.9	-5456.4
## - V13_1_J1_7	1	14.71	1529.7	-5453.7
## - V12_1_2_J1_6	1	14.73	1529.7	-5453.7
## - V4_J1_3	1	15.91	1530.9	-5449.7
## - V20_J2_1	1	15.94	1530.9	-5449.5
## - V26_J1_5	1	16.52	1531.5	-5447.6
## - V14_J2_5	1	16.96	1531.9	-5446.1
## - V16_J2_3	1	16.98	1532.0	-5446.0
## - V14_J2_1	1	21.36	1536.3	-5431.2
## - V20_J2_3	1	23.01	1538.0	-5425.6
## - V29_J1_3	1	23.59	1538.6	-5423.6
## - V12_1_2_J1_7	1	24.36	1539.3	-5421.0
## - V2_J2_7	1	26.17	1541.1	-5414.9
## - V23_J2_7	1	26.68	1541.7	-5413.2
## - V4_J1_5	1	27.27	1542.2	-5411.2
## - V2_J2_2	1	27.67	1542.7	-5409.9
## - V30_J1_5	1	27.88	1542.8	-5409.2
## - V30_J2_5	1	28.31	1543.3	-5407.7
## - V3_J1_5	1	28.50	1543.5	-5407.1
## - V12_1_2_J2_7	1	30.49	1545.5	-5400.4
## - V15_J1_1	1	31.89	1546.9	-5395.6
## - V15_J1_2	1	34.50	1549.5	-5386.9
## - V30_J1_3	1	34.68	1549.7	-5386.3
## - V19_J2_5	1	35.28	1550.3	-5384.3
## - V14_J2_4	1	36.09	1551.1	-5381.6
## - V19_J2_4	1	36.43	1551.4	-5380.4
## - V12_1_2_J1_3	1	36.98	1552.0	-5378.6
## - V16_J2_7	1	38.99	1554.0	-5371.8
## - V4_J2_7	1	39.84	1554.8	-5369.0
## - V26_J1_4	1	41.20	1556.2	-5364.4
## - V5_J1_4	1	41.87	1556.8	-5362.2
## - V13_2_J1_7	1	42.22	1557.2	-5361.0
## - V19_J2_1	1	48.97	1563.9	-5338.6
## - V4_J1_4	1	50.17	1565.1	-5334.6
## - V5_J2_1	1	53.53	1568.5	-5323.4
## - V30_J1_2	1	54.73	1569.7	-5319.4
## - V15_J1_6	1	58.87	1573.8	-5305.7
## - V16_J1_3	1	62.07	1577.0	-5295.2
## - V14_J1_5	1	62.41	1577.4	-5294.1
## - V1_J1_3	1	62.71	1577.7	-5293.1
## - V15_J1_7	1	62.93	1577.9	-5292.3
## - V17_J2_7	1	63.23	1578.2	-5291.4
## - V14_J2_3	1	63.81	1578.8	-5289.4
## - V1_J2_2	1	64.29	1579.3	-5287.9
## - V17_J2_2	1	65.04	1580.0	-5285.4

```

## - V30_J2_2      1      71.34 1586.3 -5264.7
## - V15_J1_3      1      72.38 1587.3 -5261.3
## - V30_J1_1      1      73.95 1588.9 -5256.1
## - V2_J1_3       1      78.48 1593.5 -5241.4
## - V23_J1_3      1      78.76 1593.7 -5240.4
## - V17_J1_3      1      80.03 1595.0 -5236.3
## - V5_J2_3       1      80.71 1595.7 -5234.1
## - V14_J1_4      1      81.16 1596.1 -5232.6
## - V1_J2_7       1      89.36 1604.3 -5206.0
## - V3_J1_4       1      92.95 1607.9 -5194.3
## - V19_J2_3      1      99.27 1614.2 -5173.9
## - V5_J1_5       1     103.28 1618.2 -5161.1
## - V12_1_2_J1_4  1     105.36 1620.3 -5154.4
## - V4_J2_5       1     114.09 1629.1 -5126.4
## - V3_J2_1       1     120.10 1635.1 -5107.3
## - V26_J2_1      1     121.00 1636.0 -5104.4
## - V15_J2_7      1     122.31 1637.3 -5100.2
## - V19_J1_5      1     124.72 1639.7 -5092.6
## - V4_J2_1       1     129.69 1644.7 -5076.8
## - V15_J2_2      1     136.33 1651.3 -5055.9
## - V3_J2_5       1     137.03 1652.0 -5053.7
## - V4_J2_3       1     138.33 1653.3 -5049.6
## - V26_J2_5      1     155.69 1670.7 -4995.3
## - V26_J2_4      1     159.56 1674.5 -4983.3
## - V4_J2_4       1     162.64 1677.6 -4973.7
## - V12_1_2_J2_2  1     176.10 1691.1 -4932.2
## - V19_J1_4      1     185.80 1700.8 -4902.4
## - V3_J2_4       1     201.95 1716.9 -4853.3
## - V3_J2_3       1     215.52 1730.5 -4812.3
## - V20_J2_2      1     265.42 1780.4 -4664.5
## - V5_J2_5       1     270.58 1785.5 -4649.5
## - V5_J2_4       1     310.77 1825.7 -4533.7
## - V26_J2_3      1     327.37 1842.3 -4486.7
## - J             12     401.43 1916.4 -4354.7
## - V16_J2_2      1     438.08 1953.1 -4183.2
## - V             19    1005.87 2520.8 -2975.6
##
## Step:  AIC=-5509.11
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
## V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
## V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +

```



```

##      V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V14_J1_2 + V13_3_J2_5 +
##      V20_J1_2 + V13_2_J1_4 + V26_J1_6 + V13_1_J1_5 + V26_J1_1 +
##      V2_J1_6 + V29_J1_1 + V15_J2_3 + V30_J2_3 + V24_J2_3
##
##      Df Sum of Sq    RSS    AIC
## + V13_2_J1_5      1      3.83 1505.8 -5515.7
## + V13_1_J2_2      1      3.75 1505.9 -5515.4
## + V19_J1_3        1      3.51 1506.1 -5514.6
## + V16_J2_1        1      3.36 1506.3 -5514.1
## + V13_3_J1_2      1      3.25 1506.4 -5513.7
## + V13_2_J2_2      1      3.24 1506.4 -5513.6
## + V13_2_J1_3      1      3.03 1506.6 -5512.9
## + V23_J1_7        1      2.92 1506.7 -5512.6
## + V29_J2_3        1      2.76 1506.9 -5512.0
## + V13_2_J2_7      1      2.75 1506.9 -5512.0
## + V13_1_J2_4      1      2.69 1506.9 -5511.7
## + V14_J1_3        1      2.64 1507.0 -5511.6
## + V20_J1_6        1      2.59 1507.0 -5511.4
## + V29_J1_6        1      2.56 1507.1 -5511.3
## + V13_2_J2_5      1      2.56 1507.1 -5511.3
## + V3_J1_2         1      2.55 1507.1 -5511.3
## + V1_J1_1         1      2.50 1507.1 -5511.1
## + V14_J2_2        1      2.43 1507.2 -5510.9
## + V20_J1_7        1      2.41 1507.2 -5510.8
## + V29_J2_2        1      2.35 1507.3 -5510.6
## + V13_3_J1_1      1      2.35 1507.3 -5510.6
## + V19_J1_1        1      2.29 1507.3 -5510.4
## + V23_J2_2        1      2.27 1507.3 -5510.3
## + V29_J2_1        1      2.26 1507.4 -5510.3
## + V12_1_2_J1_5    1      2.19 1507.4 -5510.0
## + V13_1_J2_7      1      2.17 1507.5 -5510.0
## + V19_J1_6        1      2.12 1507.5 -5509.8
## + V29_J2_4        1      2.10 1507.5 -5509.7
## + V17_J2_1        1      2.06 1507.6 -5509.6
## + V5_J1_6         1      2.03 1507.6 -5509.5
## + V20_J2_4        1      2.00 1507.6 -5509.4
## <none>                        1509.6 -5509.1
## + V1_J1_7         1      1.91 1507.7 -5509.1
## + V30_J1_7        1      1.88 1507.7 -5509.0
## + V16_J1_6        1      1.87 1507.8 -5508.9
## + V1_J2_3         1      1.85 1507.8 -5508.9
## + V14_J2_7        1      1.83 1507.8 -5508.8
## + V23_J2_3        1      1.83 1507.8 -5508.8
## + V20_J1_3        1      1.81 1507.8 -5508.7
## + V13_2_J1_2      1      1.79 1507.8 -5508.6
## + V29_J1_2        1      1.76 1507.9 -5508.5
## + V16_J2_4        1      1.62 1508.0 -5508.1
## + V16_J1_2        1      1.55 1508.1 -5507.8
## + V3_J1_7         1      1.47 1508.2 -5507.6
## + V13_3_J2_4      1      1.46 1508.2 -5507.5
## + V5_J1_2         1      1.45 1508.2 -5507.5
## + V16_J1_4        1      1.40 1508.2 -5507.3
## + V2_J1_7         1      1.40 1508.2 -5507.3
## + V26_J2_2        1      1.36 1508.3 -5507.2

```

## + V12_1_2_J1_1	1	1.35	1508.3	-5507.1
## + V15_J2_4	1	1.33	1508.3	-5507.1
## + V19_J1_2	1	1.33	1508.3	-5507.1
## + V20_J1_5	1	1.28	1508.3	-5506.9
## + V20_J1_1	1	1.25	1508.4	-5506.8
## + V24_J1_3	1	1.12	1508.5	-5506.3
## + V24_J1_1	1	1.10	1508.5	-5506.3
## + V24_J1_5	1	1.07	1508.5	-5506.2
## + V17_J1_7	1	1.01	1508.6	-5505.9
## + V4_J1_6	1	1.00	1508.6	-5505.9
## + V16_J1_1	1	0.97	1508.7	-5505.8
## + V26_J1_7	1	0.95	1508.7	-5505.8
## + V29_J1_4	1	0.91	1508.7	-5505.6
## + V30_J2_1	1	0.90	1508.7	-5505.6
## + V5_J2_7	1	0.85	1508.8	-5505.4
## + V14_J1_1	1	0.83	1508.8	-5505.3
## + V2_J1_2	1	0.79	1508.8	-5505.2
## + V24_J2_7	1	0.78	1508.8	-5505.2
## + V17_J2_4	1	0.78	1508.8	-5505.2
## + V24_J2_4	1	0.77	1508.8	-5505.1
## + V20_J1_4	1	0.77	1508.8	-5505.1
## + V17_J1_2	1	0.75	1508.9	-5505.1
## + V13_1_J2_5	1	0.74	1508.9	-5505.0
## + V2_J2_3	1	0.73	1508.9	-5505.0
## + V1_J1_2	1	0.71	1508.9	-5504.9
## + V13_2_J2_3	1	0.68	1508.9	-5504.8
## + V2_J2_5	1	0.67	1509.0	-5504.8
## + V2_J2_1	1	0.67	1509.0	-5504.8
## + V30_J1_6	1	0.64	1509.0	-5504.7
## + V15_J1_4	1	0.61	1509.0	-5504.6
## + V5_J1_3	1	0.60	1509.0	-5504.6
## - V26_J1_3	1	3.25	1512.9	-5504.6
## + V5_J1_7	1	0.58	1509.0	-5504.5
## + V13_1_J1_6	1	0.55	1509.1	-5504.4
## + V23_J1_2	1	0.53	1509.1	-5504.3
## + V23_J2_5	1	0.53	1509.1	-5504.3
## + V30_J2_7	1	0.51	1509.1	-5504.2
## + V13_3_J2_7	1	0.51	1509.1	-5504.2
## + V24_J2_2	1	0.51	1509.1	-5504.2
## + V29_J2_7	1	0.49	1509.1	-5504.2
## + V12_1_2_J2_5	1	0.48	1509.1	-5504.1
## + V12_1_2_J2_1	1	0.48	1509.2	-5504.1
## + V13_3_J1_3	1	0.46	1509.2	-5504.1
## + V5_J1_1	1	0.40	1509.2	-5503.9
## + V13_3_J1_6	1	0.39	1509.2	-5503.8
## + V1_J1_6	1	0.37	1509.2	-5503.8
## + V19_J2_2	1	0.36	1509.3	-5503.7
## + V23_J2_4	1	0.34	1509.3	-5503.7
## + V13_1_J2_1	1	0.34	1509.3	-5503.6
## + V13_3_J1_5	1	0.33	1509.3	-5503.6
## + V30_J1_4	1	0.28	1509.3	-5503.4
## + V29_J2_5	1	0.28	1509.3	-5503.4
## + V20_J2_7	1	0.27	1509.3	-5503.4
## + V4_J1_7	1	0.26	1509.4	-5503.4

## + V17_J2_5	1	0.26	1509.4	-5503.4
## + V3_J2_7	1	0.23	1509.4	-5503.3
## + V4_J1_1	1	0.23	1509.4	-5503.3
## + V13_3_J2_2	1	0.23	1509.4	-5503.3
## + V1_J2_1	1	0.21	1509.4	-5503.2
## + V5_J2_2	1	0.20	1509.4	-5503.2
## + V16_J1_7	1	0.16	1509.5	-5503.0
## + V17_J1_1	1	0.15	1509.5	-5503.0
## + V15_J1_5	1	0.15	1509.5	-5503.0
## + V13_2_J1_1	1	0.14	1509.5	-5503.0
## + V4_J2_2	1	0.14	1509.5	-5503.0
## + V4_J1_2	1	0.14	1509.5	-5503.0
## + V3_J2_2	1	0.14	1509.5	-5502.9
## + V24_J1_2	1	0.13	1509.5	-5502.9
## + V20_J2_5	1	0.12	1509.5	-5502.9
## + V13_3_J1_4	1	0.09	1509.5	-5502.8
## + V1_J2_4	1	0.09	1509.5	-5502.8
## + V16_J1_5	1	0.08	1509.5	-5502.8
## + V17_J1_6	1	0.08	1509.5	-5502.8
## + V3_J1_6	1	0.08	1509.5	-5502.8
## + V14_J1_6	1	0.08	1509.5	-5502.8
## + V30_J2_4	1	0.08	1509.5	-5502.7
## + V2_J1_1	1	0.07	1509.5	-5502.7
## + V2_J2_4	1	0.07	1509.6	-5502.7
## + V1_J1_4	1	0.06	1509.6	-5502.7
## + V3_J1_1	1	0.06	1509.6	-5502.7
## + V13_3_J2_1	1	0.05	1509.6	-5502.7
## + V13_1_J1_4	1	0.05	1509.6	-5502.7
## + V12_1_2_J2_4	1	0.05	1509.6	-5502.6
## + V26_J1_2	1	0.04	1509.6	-5502.6
## + V24_J2_1	1	0.04	1509.6	-5502.6
## + V14_J1_7	1	0.03	1509.6	-5502.6
## + V19_J1_7	1	0.03	1509.6	-5502.6
## + V17_J1_4	1	0.03	1509.6	-5502.6
## + V23_J1_1	1	0.02	1509.6	-5502.6
## + V13_2_J2_1	1	0.02	1509.6	-5502.5
## + V13_1_J2_3	1	0.02	1509.6	-5502.5
## + V17_J2_3	1	0.01	1509.6	-5502.5
## + V13_3_J2_3	1	0.01	1509.6	-5502.5
## + V23_J1_5	1	0.01	1509.6	-5502.5
## + V16_J2_5	1	0.01	1509.6	-5502.5
## + V23_J1_6	1	0.01	1509.6	-5502.5
## + V13_1_J1_1	1	0.01	1509.6	-5502.5
## + V3_J1_3	1	0.00	1509.6	-5502.5
## + V12_1_2_J2_3	1	0.00	1509.6	-5502.5
## + V24_J1_4	1	0.00	1509.6	-5502.5
## + V19_J2_7	1	0.00	1509.6	-5502.5
## + V2_J1_4	1	0.00	1509.6	-5502.5
## + V26_J2_7	1	0.00	1509.6	-5502.5
## + V13_3_J1_7	1	0.00	1509.6	-5502.5
## + V13_2_J2_4	1	0.00	1509.6	-5502.5
## + V15_J2_5	1	0.00	1509.6	-5502.5
## - V2_J1_6	1	3.98	1513.6	-5502.1
## - V29_J1_1	1	4.30	1513.9	-5500.9

## - V26_J1_1	1	4.30	1513.9	-5500.9
## - V14_J1_2	1	4.99	1514.6	-5498.6
## - V13_2_J1_4	1	5.19	1514.8	-5497.9
## - V13_1_J1_5	1	5.28	1514.9	-5497.6
## - V24_J2_3	1	5.35	1515.0	-5497.3
## - V30_J2_3	1	5.52	1515.1	-5496.8
## - V20_J1_2	1	5.59	1515.2	-5496.5
## - V15_J2_3	1	5.79	1515.4	-5495.8
## - V13_3_J2_5	1	5.81	1515.4	-5495.8
## - V13_1_J1_3	1	5.82	1515.4	-5495.7
## - V23_J2_1	1	6.22	1515.8	-5494.4
## - V23_J1_4	1	7.39	1517.0	-5490.3
## - V2_J1_5	1	7.42	1517.0	-5490.3
## - V26_J1_6	1	7.61	1517.2	-5489.6
## - V1_J1_5	1	7.78	1517.4	-5489.0
## - V1_J2_5	1	7.91	1517.5	-5488.6
## - V24_J2_5	1	8.47	1518.1	-5486.7
## - V24_J1_7	1	8.57	1518.2	-5486.3
## - V13_2_J1_6	1	8.97	1518.6	-5484.9
## - V12_1_2_J1_2	1	9.12	1518.7	-5484.4
## - V29_J1_5	1	9.97	1519.6	-5481.5
## - V29_J1_7	1	10.63	1520.2	-5479.3
## - V13_1_J1_2	1	11.40	1521.0	-5476.6
## - V15_J2_1	1	11.53	1521.2	-5476.2
## - V17_J1_5	1	11.85	1521.5	-5475.1
## - V13_1_J1_7	1	14.85	1524.5	-5464.8
## - V16_J2_3	1	14.96	1524.6	-5464.5
## - V12_1_2_J1_6	1	14.96	1524.6	-5464.5
## - V24_J1_6	1	15.55	1525.2	-5462.4
## - V20_J2_1	1	15.92	1525.5	-5461.2
## - V4_J1_3	1	16.11	1525.7	-5460.6
## - V26_J1_5	1	16.59	1526.2	-5458.9
## - V14_J2_5	1	16.75	1526.4	-5458.4
## - V20_J2_3	1	20.57	1530.2	-5445.4
## - V14_J2_1	1	21.30	1530.9	-5442.9
## - V29_J1_3	1	24.07	1533.7	-5433.5
## - V12_1_2_J1_7	1	24.67	1534.3	-5431.4
## - V2_J2_7	1	26.62	1536.2	-5424.8
## - V23_J2_7	1	27.09	1536.7	-5423.2
## - V4_J1_5	1	27.42	1537.0	-5422.2
## - V30_J1_5	1	27.73	1537.3	-5421.1
## - V2_J2_2	1	28.11	1537.7	-5419.8
## - V30_J2_5	1	28.51	1538.1	-5418.4
## - V3_J1_5	1	28.59	1538.2	-5418.2
## - V12_1_2_J2_7	1	31.06	1540.7	-5409.9
## - V15_J1_1	1	31.87	1541.5	-5407.1
## - V15_J1_2	1	34.45	1544.1	-5398.4
## - V30_J1_3	1	34.97	1544.6	-5396.7
## - V19_J2_5	1	34.98	1544.6	-5396.6
## - V14_J2_4	1	35.99	1545.6	-5393.2
## - V19_J2_4	1	36.34	1546.0	-5392.1
## - V12_1_2_J1_3	1	37.73	1547.3	-5387.4
## - V16_J2_7	1	39.18	1548.8	-5382.5
## - V4_J2_7	1	40.00	1549.6	-5379.7

```

## - V26_J1_4      1      41.20 1550.8 -5375.7
## - V5_J1_4       1      41.87 1551.5 -5373.5
## - V13_2_J1_7    1      42.37 1552.0 -5371.8
## - V19_J2_1      1      48.88 1558.5 -5350.0
## - V4_J1_4       1      50.24 1559.9 -5345.5
## - V5_J2_1       1      53.45 1563.1 -5334.8
## - V30_J1_2      1      54.67 1564.3 -5330.8
## - V15_J1_6      1      59.00 1568.6 -5316.4
## - V14_J2_3      1      59.50 1569.1 -5314.7
## - V16_J1_3      1      62.49 1572.1 -5304.8
## - V14_J1_5      1      62.54 1572.2 -5304.7
## - V15_J1_7      1      63.04 1572.7 -5303.0
## - V1_J1_3       1      63.55 1573.2 -5301.3
## - V17_J2_7      1      63.89 1573.5 -5300.2
## - V1_J2_2       1      64.94 1574.6 -5296.7
## - V17_J2_2      1      65.67 1575.3 -5294.3
## - V30_J2_2      1      71.52 1581.2 -5275.0
## - V15_J1_3      1      71.96 1581.6 -5273.6
## - V30_J1_1      1      73.93 1583.5 -5267.1
## - V5_J2_3       1      75.71 1585.3 -5261.3
## - V2_J1_3       1      79.44 1589.1 -5249.1
## - V23_J1_3      1      79.65 1589.3 -5248.4
## - V17_J1_3      1      80.96 1590.6 -5244.1
## - V14_J1_4      1      81.15 1590.8 -5243.5
## - V1_J2_7       1      90.16 1599.8 -5214.1
## - V3_J1_4       1      92.94 1602.6 -5205.1
## - V19_J2_3      1      93.61 1603.2 -5202.9
## - V5_J1_5       1     103.45 1613.1 -5171.1
## - V12_1_2_J1_4  1     106.24 1615.9 -5162.1
## - V4_J2_5       1     113.68 1623.3 -5138.2
## - V3_J2_1       1     119.97 1629.6 -5118.1
## - V26_J2_1      1     120.89 1630.5 -5115.2
## - V15_J2_7      1     122.01 1631.6 -5111.6
## - V19_J1_5      1     124.91 1634.5 -5102.4
## - V4_J2_1       1     129.69 1639.3 -5087.2
## - V4_J2_3       1     131.79 1641.4 -5080.5
## - V15_J2_2      1     136.08 1645.7 -5067.0
## - V3_J2_5       1     136.43 1646.0 -5065.8
## - V26_J2_5      1     155.08 1664.7 -5007.3
## - V26_J2_4      1     159.38 1669.0 -4993.8
## - V4_J2_4       1     162.59 1672.2 -4983.9
## - V12_1_2_J2_2  1     177.35 1687.0 -4938.1
## - V19_J1_4      1     185.79 1695.4 -4912.2
## - V3_J2_4       1     201.73 1711.3 -4863.5
## - V3_J2_3       1     206.44 1716.1 -4849.2
## - V20_J2_2      1     265.70 1775.3 -4672.7
## - V5_J2_5       1     269.73 1779.3 -4660.9
## - V5_J2_4       1     310.50 1820.1 -4543.1
## - V26_J2_3      1     316.17 1825.8 -4526.9
## - J             12     381.95 1891.6 -4415.9
## - V16_J2_2      1     438.60 1948.2 -4189.5
## - V             19    1006.27 2515.9 -2979.2
##
## Step:  AIC=-5515.69

```

```

## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
## V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
## V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
## V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V14_J1_2 + V13_3_J2_5 +
## V20_J1_2 + V13_2_J1_4 + V26_J1_6 + V13_1_J1_5 + V26_J1_1 +
## V2_J1_6 + V29_J1_1 + V15_J2_3 + V30_J2_3 + V24_J2_3 + V13_2_J1_5
##
##
## Df Sum of Sq RSS AIC
## + V13_1_J2_2 1 3.70 1502.1 -5521.9
## + V19_J1_3 1 3.46 1502.3 -5521.0
## + V13_2_J2_5 1 3.37 1502.4 -5520.7
## + V16_J2_1 1 3.20 1502.6 -5520.1
## + V13_3_J1_2 1 3.14 1502.7 -5519.9
## + V23_J1_7 1 2.84 1503.0 -5518.9
## + V29_J2_3 1 2.79 1503.0 -5518.7
## + V13_1_J2_4 1 2.67 1503.1 -5518.3
## + V29_J1_6 1 2.60 1503.2 -5518.0
## + V14_J1_3 1 2.59 1503.2 -5518.0
## + V13_2_J2_2 1 2.57 1503.2 -5517.9
## + V3_J1_2 1 2.56 1503.2 -5517.9
## + V20_J1_6 1 2.50 1503.3 -5517.7
## + V1_J1_1 1 2.49 1503.3 -5517.6
## + V14_J2_2 1 2.46 1503.3 -5517.6
## + V13_3_J1_1 1 2.43 1503.4 -5517.4
## + V13_2_J1_2 1 2.42 1503.4 -5517.4
## + V29_J2_2 1 2.39 1503.4 -5517.3
## + V13_2_J1_3 1 2.38 1503.4 -5517.3
## + V20_J1_7 1 2.32 1503.5 -5517.1
## + V19_J1_1 1 2.31 1503.5 -5517.0
## + V29_J2_1 1 2.28 1503.5 -5516.9
## + V13_1_J2_7 1 2.14 1503.7 -5516.4
## + V13_2_J2_7 1 2.13 1503.7 -5516.4
## + V23_J2_2 1 2.13 1503.7 -5516.4
## + V29_J2_4 1 2.12 1503.7 -5516.4
## + V19_J1_6 1 2.08 1503.7 -5516.2
## + V5_J1_6 1 2.07 1503.7 -5516.2
## + V17_J2_1 1 2.04 1503.8 -5516.1
## + V20_J1_3 1 1.96 1503.8 -5515.8
## + V23_J2_3 1 1.96 1503.8 -5515.8
## + V16_J1_6 1 1.96 1503.8 -5515.8
## <none> 1505.8 -5515.7

```

## + V20_J2_4	1	1.92	1503.9	-5515.7
## + V1_J1_7	1	1.90	1503.9	-5515.6
## + V30_J1_7	1	1.87	1503.9	-5515.5
## + V1_J2_3	1	1.82	1504.0	-5515.3
## + V14_J2_7	1	1.81	1504.0	-5515.3
## + V24_J1_5	1	1.80	1504.0	-5515.3
## + V29_J1_2	1	1.74	1504.0	-5515.1
## + V16_J2_4	1	1.70	1504.1	-5514.9
## + V15_J2_4	1	1.54	1504.2	-5514.4
## + V3_J1_7	1	1.51	1504.3	-5514.3
## + V12_1_2_J1_5	1	1.47	1504.3	-5514.1
## + V5_J1_2	1	1.44	1504.3	-5514.0
## + V16_J1_2	1	1.43	1504.4	-5514.0
## + V13_3_J2_4	1	1.42	1504.4	-5513.9
## + V2_J1_7	1	1.41	1504.4	-5513.9
## + V16_J1_4	1	1.36	1504.4	-5513.7
## + V26_J2_2	1	1.34	1504.5	-5513.7
## + V19_J1_2	1	1.34	1504.5	-5513.7
## + V20_J1_1	1	1.34	1504.5	-5513.7
## + V12_1_2_J1_1	1	1.23	1504.6	-5513.3
## + V13_2_J2_3	1	1.08	1504.7	-5512.8
## + V16_J1_1	1	1.05	1504.7	-5512.7
## + V24_J1_1	1	1.03	1504.8	-5512.6
## + V24_J1_3	1	1.01	1504.8	-5512.5
## + V17_J1_7	1	1.00	1504.8	-5512.5
## + V4_J1_6	1	0.98	1504.8	-5512.4
## + V26_J1_7	1	0.92	1504.9	-5512.2
## + V30_J2_1	1	0.92	1504.9	-5512.2
## + V29_J1_4	1	0.87	1504.9	-5512.1
## + V24_J2_7	1	0.87	1504.9	-5512.0
## + V5_J2_7	1	0.86	1504.9	-5512.0
## + V24_J2_4	1	0.82	1505.0	-5511.9
## + V14_J1_1	1	0.82	1505.0	-5511.9
## + V2_J1_2	1	0.80	1505.0	-5511.8
## + V20_J1_4	1	0.80	1505.0	-5511.8
## + V17_J2_4	1	0.79	1505.0	-5511.8
## + V17_J1_2	1	0.77	1505.0	-5511.7
## + V13_1_J2_5	1	0.73	1505.1	-5511.6
## + V1_J1_2	1	0.73	1505.1	-5511.6
## + V20_J1_5	1	0.73	1505.1	-5511.6
## + V2_J2_3	1	0.70	1505.1	-5511.5
## + V2_J2_1	1	0.69	1505.1	-5511.4
## + V2_J2_5	1	0.67	1505.1	-5511.4
## + V30_J1_6	1	0.65	1505.1	-5511.3
## - V26_J1_3	1	3.22	1509.0	-5511.2
## + V5_J1_3	1	0.63	1505.2	-5511.2
## + V23_J1_2	1	0.60	1505.2	-5511.1
## + V23_J2_5	1	0.58	1505.2	-5511.1
## + V24_J2_2	1	0.58	1505.2	-5511.0
## + V13_3_J2_7	1	0.56	1505.2	-5511.0
## + V5_J1_7	1	0.56	1505.2	-5511.0
## + V12_1_2_J2_5	1	0.55	1505.2	-5510.9
## + V13_1_J1_6	1	0.53	1505.3	-5510.9
## + V13_3_J1_3	1	0.52	1505.3	-5510.9

## + V15_J1_4	1	0.50	1505.3	-5510.8
## + V30_J2_7	1	0.49	1505.3	-5510.7
## + V29_J2_7	1	0.47	1505.3	-5510.7
## + V15_J1_5	1	0.41	1505.4	-5510.5
## + V12_1_2_J2_1	1	0.40	1505.4	-5510.4
## + V5_J1_1	1	0.40	1505.4	-5510.4
## + V23_J2_4	1	0.38	1505.4	-5510.4
## + V19_J2_2	1	0.37	1505.4	-5510.3
## + V13_3_J1_6	1	0.37	1505.4	-5510.3
## + V1_J1_6	1	0.36	1505.4	-5510.3
## + V13_1_J2_1	1	0.34	1505.5	-5510.2
## + V20_J2_7	1	0.33	1505.5	-5510.2
## + V30_J1_4	1	0.29	1505.5	-5510.1
## + V29_J2_5	1	0.28	1505.5	-5510.0
## + V4_J1_7	1	0.28	1505.5	-5510.0
## + V17_J2_5	1	0.26	1505.5	-5509.9
## + V4_J1_1	1	0.23	1505.6	-5509.8
## + V3_J2_7	1	0.22	1505.6	-5509.8
## + V1_J2_1	1	0.20	1505.6	-5509.7
## + V13_3_J2_2	1	0.19	1505.6	-5509.7
## + V5_J2_2	1	0.19	1505.6	-5509.7
## + V16_J1_7	1	0.19	1505.6	-5509.7
## + V24_J1_2	1	0.16	1505.6	-5509.6
## + V17_J1_1	1	0.16	1505.6	-5509.6
## + V23_J1_5	1	0.15	1505.6	-5509.6
## + V4_J1_2	1	0.15	1505.7	-5509.6
## + V4_J2_2	1	0.13	1505.7	-5509.5
## + V3_J2_2	1	0.13	1505.7	-5509.5
## + V20_J2_5	1	0.09	1505.7	-5509.4
## + V13_3_J1_4	1	0.09	1505.7	-5509.4
## + V1_J2_4	1	0.08	1505.7	-5509.3
## + V13_3_J1_5	1	0.08	1505.7	-5509.3
## + V30_J2_4	1	0.08	1505.7	-5509.3
## + V17_J1_6	1	0.08	1505.7	-5509.3
## + V3_J1_6	1	0.07	1505.7	-5509.3
## + V14_J1_6	1	0.07	1505.7	-5509.3
## + V2_J1_1	1	0.07	1505.7	-5509.3
## + V2_J2_4	1	0.07	1505.7	-5509.3
## + V13_3_J2_1	1	0.07	1505.7	-5509.3
## + V13_1_J1_4	1	0.06	1505.7	-5509.3
## + V24_J2_1	1	0.06	1505.7	-5509.3
## + V13_2_J2_4	1	0.06	1505.7	-5509.3
## + V3_J1_1	1	0.06	1505.7	-5509.2
## + V1_J1_4	1	0.05	1505.7	-5509.2
## + V26_J1_2	1	0.05	1505.8	-5509.2
## + V12_1_2_J2_4	1	0.03	1505.8	-5509.2
## + V14_J1_7	1	0.03	1505.8	-5509.1
## + V13_2_J1_1	1	0.03	1505.8	-5509.1
## + V19_J1_7	1	0.02	1505.8	-5509.1
## + V17_J1_4	1	0.02	1505.8	-5509.1
## - V13_2_J1_5	1	3.83	1509.6	-5509.1
## + V13_3_J2_3	1	0.02	1505.8	-5509.1
## + V23_J1_1	1	0.01	1505.8	-5509.1
## + V13_1_J2_3	1	0.01	1505.8	-5509.1

## + V23_J1_6	1	0.01	1505.8	-5509.1
## + V17_J2_3	1	0.01	1505.8	-5509.1
## + V15_J2_5	1	0.01	1505.8	-5509.1
## + V13_2_J2_1	1	0.01	1505.8	-5509.1
## + V13_1_J1_1	1	0.01	1505.8	-5509.1
## + V24_J1_4	1	0.00	1505.8	-5509.1
## + V3_J1_3	1	0.00	1505.8	-5509.1
## + V16_J2_5	1	0.00	1505.8	-5509.1
## + V13_3_J1_7	1	0.00	1505.8	-5509.1
## + V19_J2_7	1	0.00	1505.8	-5509.1
## + V26_J2_7	1	0.00	1505.8	-5509.1
## + V12_1_2_J2_3	1	0.00	1505.8	-5509.1
## + V2_J1_4	1	0.00	1505.8	-5509.1
## + V16_J1_5	1	0.00	1505.8	-5509.1
## - V2_J1_6	1	3.95	1509.7	-5508.7
## - V13_2_J1_4	1	4.29	1510.1	-5507.5
## - V26_J1_1	1	4.29	1510.1	-5507.5
## - V29_J1_1	1	4.31	1510.1	-5507.5
## - V14_J1_2	1	5.00	1510.8	-5505.1
## - V20_J1_2	1	5.42	1511.2	-5503.6
## - V24_J2_3	1	5.51	1511.3	-5503.3
## - V30_J2_3	1	5.58	1511.4	-5503.1
## - V13_1_J1_3	1	5.89	1511.7	-5502.0
## - V13_3_J2_5	1	5.90	1511.7	-5502.0
## - V2_J1_5	1	6.00	1511.8	-5501.6
## - V15_J2_3	1	6.15	1511.9	-5501.1
## - V1_J1_5	1	6.33	1512.1	-5500.5
## - V23_J2_1	1	6.38	1512.2	-5500.3
## - V13_1_J1_5	1	6.41	1512.2	-5500.2
## - V23_J1_4	1	7.33	1513.1	-5497.1
## - V26_J1_6	1	7.55	1513.3	-5496.3
## - V13_2_J1_6	1	7.80	1513.6	-5495.4
## - V1_J2_5	1	7.91	1513.7	-5495.1
## - V29_J1_5	1	8.27	1514.1	-5493.8
## - V24_J2_5	1	8.33	1514.1	-5493.6
## - V24_J1_7	1	8.68	1514.5	-5492.4
## - V12_1_2_J1_2	1	9.41	1515.2	-5489.9
## - V17_J1_5	1	10.00	1515.8	-5487.9
## - V29_J1_7	1	10.68	1516.5	-5485.6
## - V13_1_J1_2	1	11.36	1517.2	-5483.2
## - V15_J2_1	1	12.01	1517.8	-5481.0
## - V16_J2_3	1	14.63	1520.4	-5472.0
## - V12_1_2_J1_6	1	14.69	1520.5	-5471.8
## - V13_1_J1_7	1	14.91	1520.7	-5471.1
## - V20_J2_1	1	15.64	1521.4	-5468.6
## - V24_J1_6	1	15.70	1521.5	-5468.4
## - V4_J1_3	1	16.00	1521.8	-5467.4
## - V14_J2_5	1	16.80	1522.6	-5464.6
## - V26_J1_5	1	18.36	1524.2	-5459.3
## - V20_J2_3	1	20.20	1526.0	-5453.0
## - V14_J2_1	1	21.29	1527.1	-5449.3
## - V29_J1_3	1	23.94	1529.7	-5440.3
## - V12_1_2_J1_7	1	24.33	1530.1	-5439.0
## - V30_J1_5	1	24.81	1530.6	-5437.4

## - V2_J2_7	1	26.51	1532.3	-5431.6
## - V23_J2_7	1	26.68	1532.5	-5431.0
## - V2_J2_2	1	27.99	1533.8	-5426.6
## - V30_J2_5	1	28.52	1534.3	-5424.7
## - V4_J1_5	1	29.59	1535.4	-5421.1
## - V12_1_2_J2_7	1	30.47	1536.3	-5418.1
## - V3_J1_5	1	30.86	1536.7	-5416.8
## - V15_J1_1	1	32.61	1538.4	-5410.9
## - V30_J1_3	1	34.76	1540.5	-5403.7
## - V19_J2_5	1	35.06	1540.8	-5402.6
## - V15_J1_2	1	35.27	1541.1	-5401.9
## - V14_J2_4	1	36.10	1541.9	-5399.1
## - V19_J2_4	1	36.45	1542.2	-5397.9
## - V12_1_2_J1_3	1	37.03	1542.8	-5396.0
## - V16_J2_7	1	38.64	1544.4	-5390.6
## - V4_J2_7	1	39.89	1545.7	-5386.4
## - V26_J1_4	1	41.46	1547.3	-5381.1
## - V5_J1_4	1	42.13	1547.9	-5378.8
## - V13_2_J1_7	1	44.45	1550.2	-5371.0
## - V19_J2_1	1	48.88	1554.7	-5356.2
## - V4_J1_4	1	50.48	1556.3	-5350.9
## - V5_J2_1	1	53.44	1559.2	-5341.0
## - V30_J1_2	1	54.81	1560.6	-5336.4
## - V14_J2_3	1	59.41	1565.2	-5321.1
## - V15_J1_6	1	59.87	1565.7	-5319.6
## - V16_J1_3	1	61.73	1567.5	-5313.4
## - V1_J1_3	1	63.29	1569.1	-5308.2
## - V17_J2_7	1	63.70	1569.5	-5306.9
## - V15_J1_7	1	63.94	1569.7	-5306.1
## - V1_J2_2	1	64.73	1570.5	-5303.4
## - V17_J2_2	1	65.46	1571.2	-5301.0
## - V14_J1_5	1	65.51	1571.3	-5300.9
## - V30_J2_2	1	71.28	1577.1	-5281.8
## - V15_J1_3	1	73.19	1579.0	-5275.5
## - V30_J1_1	1	74.00	1579.8	-5272.8
## - V5_J2_3	1	75.62	1581.4	-5267.5
## - V23_J1_3	1	78.86	1584.7	-5256.9
## - V2_J1_3	1	79.15	1584.9	-5255.9
## - V17_J1_3	1	80.66	1586.5	-5251.0
## - V14_J1_4	1	81.50	1587.3	-5248.2
## - V1_J2_7	1	89.93	1595.7	-5220.7
## - V3_J1_4	1	93.33	1599.1	-5209.6
## - V19_J2_3	1	93.51	1599.3	-5209.0
## - V12_1_2_J1_4	1	105.72	1611.5	-5169.5
## - V5_J1_5	1	106.89	1612.7	-5165.7
## - V4_J2_5	1	113.74	1619.5	-5143.7
## - V3_J2_1	1	119.96	1625.8	-5123.7
## - V26_J2_1	1	120.89	1626.7	-5120.7
## - V15_J2_7	1	123.52	1629.3	-5112.3
## - V19_J1_5	1	128.50	1634.3	-5096.5
## - V4_J2_1	1	129.60	1635.4	-5093.0
## - V4_J2_3	1	131.59	1637.4	-5086.7
## - V3_J2_5	1	136.58	1642.4	-5070.8
## - V15_J2_2	1	137.67	1643.5	-5067.4

```

## - V26_J2_5      1      155.26 1661.0 -5012.0
## - V26_J2_4      1      159.63 1665.4 -4998.4
## - V4_J2_4       1      162.74 1668.5 -4988.7
## - V12_1_2_J2_2  1      175.86 1681.7 -4947.9
## - V19_J1_4      1      186.34 1692.1 -4915.6
## - V3_J2_4       1      202.00 1707.8 -4867.7
## - V3_J2_3       1      206.29 1712.1 -4854.7
## - V20_J2_2      1      264.24 1770.0 -4681.6
## - V5_J2_5       1      269.94 1775.7 -4664.9
## - V5_J2_4       1      310.83 1816.6 -4546.5
## - V26_J2_3      1      316.02 1821.8 -4531.6
## - J             12      368.93 1874.7 -4455.8
## - V16_J2_2      1      436.60 1942.4 -4198.4
## - V             19     1010.09 2515.9 -2972.6
##
## Step:  AIC=-5521.86
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
## V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
## V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
## V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V14_J1_2 + V13_3_J2_5 +
## V20_J1_2 + V13_2_J1_4 + V26_J1_6 + V13_1_J1_5 + V26_J1_1 +
## V2_J1_6 + V29_J1_1 + V15_J2_3 + V30_J2_3 + V24_J2_3 + V13_2_J1_5 +
## V13_1_J2_2
##
##
##      Df Sum of Sq    RSS    AIC
## + V19_J1_3      1      3.41 1498.7 -5527.1
## + V13_2_J2_5      1      3.21 1498.9 -5526.4
## + V13_3_J1_2      1      3.15 1498.9 -5526.1
## + V16_J2_1        1      3.14 1499.0 -5526.1
## + V13_1_J2_7      1      3.01 1499.1 -5525.6
## + V29_J2_3        1      2.92 1499.2 -5525.4
## + V23_J1_7        1      2.83 1499.2 -5525.0
## + V23_J2_2        1      2.74 1499.3 -5524.7
## + V3_J1_2         1      2.62 1499.5 -5524.3
## + V29_J1_6        1      2.55 1499.5 -5524.1
## + V14_J1_3        1      2.54 1499.5 -5524.0
## + V20_J1_6        1      2.50 1499.6 -5523.9
## + V1_J1_1         1      2.50 1499.6 -5523.9
## + V13_3_J1_1      1      2.48 1499.6 -5523.8
## + V13_2_J1_2      1      2.43 1499.7 -5523.6
## + V20_J1_7        1      2.39 1499.7 -5523.5

```

## + V29_J2_1	1	2.38	1499.7	-5523.5
## + V13_2_J1_3	1	2.36	1499.7	-5523.4
## + V19_J1_6	1	2.20	1499.9	-5522.8
## + V19_J1_1	1	2.19	1499.9	-5522.8
## + V13_2_J2_7	1	2.18	1499.9	-5522.8
## + V23_J2_3	1	2.09	1500.0	-5522.5
## + V29_J2_4	1	2.04	1500.0	-5522.3
## + V13_2_J2_2	1	2.02	1500.1	-5522.2
## + V17_J2_1	1	2.00	1500.1	-5522.2
## + V13_1_J2_4	1	1.98	1500.1	-5522.1
## + V14_J2_2	1	1.97	1500.1	-5522.0
## + V5_J1_6	1	1.95	1500.1	-5522.0
## + V16_J1_6	1	1.95	1500.1	-5522.0
## <none>			1502.1	-5521.9
## + V20_J1_3	1	1.88	1500.2	-5521.7
## + V20_J2_4	1	1.88	1500.2	-5521.7
## + V29_J2_2	1	1.85	1500.2	-5521.6
## + V1_J1_7	1	1.83	1500.3	-5521.6
## + V30_J1_7	1	1.80	1500.3	-5521.5
## + V1_J2_3	1	1.76	1500.3	-5521.3
## + V29_J1_2	1	1.76	1500.3	-5521.3
## + V24_J1_5	1	1.75	1500.3	-5521.3
## + V26_J2_2	1	1.74	1500.3	-5521.3
## + V16_J2_4	1	1.73	1500.3	-5521.2
## + V14_J2_7	1	1.70	1500.4	-5521.1
## + V15_J2_4	1	1.55	1500.5	-5520.6
## + V16_J1_2	1	1.50	1500.6	-5520.4
## + V2_J1_7	1	1.48	1500.6	-5520.4
## + V3_J1_7	1	1.46	1500.6	-5520.3
## + V12_1_2_J1_5	1	1.42	1500.7	-5520.2
## + V5_J1_2	1	1.40	1500.7	-5520.1
## + V19_J1_2	1	1.38	1500.7	-5520.0
## + V13_3_J2_4	1	1.34	1500.7	-5519.9
## + V20_J1_1	1	1.33	1500.8	-5519.8
## + V16_J1_4	1	1.32	1500.8	-5519.8
## + V12_1_2_J1_1	1	1.26	1500.8	-5519.6
## + V4_J1_6	1	1.09	1501.0	-5519.0
## + V16_J1_1	1	1.04	1501.0	-5518.8
## + V24_J1_3	1	1.02	1501.1	-5518.8
## + V26_J1_7	1	1.02	1501.1	-5518.7
## + V13_2_J2_3	1	0.99	1501.1	-5518.7
## + V24_J1_1	1	0.99	1501.1	-5518.6
## + V30_J2_1	1	0.95	1501.1	-5518.5
## + V17_J1_7	1	0.94	1501.1	-5518.5
## + V29_J1_4	1	0.94	1501.2	-5518.5
## + V5_J2_7	1	0.93	1501.2	-5518.5
## + V24_J2_7	1	0.90	1501.2	-5518.3
## + V14_J1_1	1	0.90	1501.2	-5518.3
## + V24_J2_4	1	0.89	1501.2	-5518.3
## + V20_J1_4	1	0.84	1501.2	-5518.1
## + V17_J2_4	1	0.77	1501.3	-5517.9
## + V2_J1_2	1	0.75	1501.3	-5517.8
## + V20_J1_5	1	0.72	1501.4	-5517.7
## + V17_J1_2	1	0.72	1501.4	-5517.7

## - V26_J1_3	1	3.12	1505.2	-5517.7
## + V2_J2_1	1	0.71	1501.4	-5517.7
## + V2_J2_5	1	0.70	1501.4	-5517.6
## + V1_J1_2	1	0.68	1501.4	-5517.6
## + V2_J2_3	1	0.68	1501.4	-5517.6
## + V30_J1_6	1	0.66	1501.4	-5517.5
## + V23_J2_5	1	0.65	1501.4	-5517.5
## + V5_J1_3	1	0.65	1501.4	-5517.5
## + V23_J1_2	1	0.60	1501.5	-5517.3
## + V5_J1_7	1	0.59	1501.5	-5517.3
## + V13_3_J2_7	1	0.59	1501.5	-5517.2
## + V12_1_2_J2_5	1	0.57	1501.5	-5517.2
## + V13_3_J1_3	1	0.51	1501.6	-5517.0
## + V30_J2_7	1	0.50	1501.6	-5517.0
## + V15_J1_4	1	0.49	1501.6	-5516.9
## + V29_J2_7	1	0.46	1501.6	-5516.8
## + V5_J1_1	1	0.45	1501.6	-5516.8
## + V15_J1_5	1	0.44	1501.7	-5516.7
## + V23_J2_4	1	0.42	1501.7	-5516.7
## + V13_3_J2_2	1	0.40	1501.7	-5516.6
## + V13_1_J2_5	1	0.40	1501.7	-5516.6
## + V12_1_2_J2_1	1	0.39	1501.7	-5516.6
## + V5_J2_2	1	0.37	1501.7	-5516.5
## + V1_J1_6	1	0.36	1501.7	-5516.5
## + V13_3_J1_6	1	0.35	1501.7	-5516.4
## + V24_J2_2	1	0.33	1501.8	-5516.4
## + V20_J2_7	1	0.32	1501.8	-5516.3
## + V3_J2_2	1	0.29	1501.8	-5516.2
## + V4_J2_2	1	0.29	1501.8	-5516.2
## + V30_J1_4	1	0.28	1501.8	-5516.2
## + V4_J1_7	1	0.24	1501.8	-5516.1
## + V29_J2_5	1	0.24	1501.8	-5516.1
## + V17_J2_5	1	0.24	1501.8	-5516.1
## + V13_1_J1_6	1	0.23	1501.8	-5516.0
## + V13_1_J1_4	1	0.23	1501.8	-5516.0
## + V19_J2_2	1	0.19	1501.9	-5515.9
## + V3_J2_7	1	0.19	1501.9	-5515.9
## + V1_J2_1	1	0.19	1501.9	-5515.9
## + V4_J1_1	1	0.18	1501.9	-5515.9
## + V4_J1_2	1	0.17	1501.9	-5515.8
## + V16_J1_7	1	0.17	1501.9	-5515.8
## + V24_J1_2	1	0.16	1501.9	-5515.8
## + V17_J1_1	1	0.15	1501.9	-5515.7
## + V23_J1_5	1	0.13	1502.0	-5515.7
## - V13_1_J2_2	1	3.70	1505.8	-5515.7
## + V13_1_J2_1	1	0.13	1502.0	-5515.7
## + V13_1_J2_3	1	0.12	1502.0	-5515.6
## + V13_3_J1_4	1	0.12	1502.0	-5515.6
## + V13_1_J1_1	1	0.11	1502.0	-5515.6
## + V14_J1_6	1	0.10	1502.0	-5515.6
## + V3_J1_6	1	0.10	1502.0	-5515.6
## + V1_J2_4	1	0.09	1502.0	-5515.5
## + V13_3_J1_5	1	0.09	1502.0	-5515.5
## + V13_3_J2_1	1	0.09	1502.0	-5515.5

## + V24_J2_1	1	0.08	1502.0	-5515.5
## + V20_J2_5	1	0.08	1502.0	-5515.5
## + V3_J1_1	1	0.08	1502.0	-5515.5
## + V17_J1_6	1	0.08	1502.0	-5515.5
## + V30_J2_4	1	0.07	1502.0	-5515.5
## + V2_J1_1	1	0.07	1502.0	-5515.5
## + V26_J1_2	1	0.07	1502.0	-5515.5
## + V2_J2_4	1	0.06	1502.0	-5515.4
## + V1_J1_4	1	0.06	1502.0	-5515.4
## - V13_2_J1_5	1	3.78	1505.9	-5515.4
## + V13_2_J2_4	1	0.04	1502.0	-5515.4
## + V14_J1_7	1	0.04	1502.0	-5515.3
## + V13_2_J1_1	1	0.03	1502.0	-5515.3
## + V19_J1_7	1	0.03	1502.1	-5515.3
## + V12_1_2_J2_4	1	0.03	1502.1	-5515.3
## + V13_3_J2_3	1	0.03	1502.1	-5515.3
## + V17_J1_4	1	0.03	1502.1	-5515.3
## + V23_J1_6	1	0.02	1502.1	-5515.3
## + V17_J2_3	1	0.02	1502.1	-5515.3
## + V24_J1_4	1	0.01	1502.1	-5515.3
## + V23_J1_1	1	0.01	1502.1	-5515.3
## + V15_J2_5	1	0.01	1502.1	-5515.3
## + V26_J2_7	1	0.00	1502.1	-5515.2
## + V13_2_J2_1	1	0.00	1502.1	-5515.2
## + V3_J1_3	1	0.00	1502.1	-5515.2
## + V13_3_J1_7	1	0.00	1502.1	-5515.2
## + V16_J2_5	1	0.00	1502.1	-5515.2
## + V2_J1_4	1	0.00	1502.1	-5515.2
## + V12_1_2_J2_3	1	0.00	1502.1	-5515.2
## + V19_J2_7	1	0.00	1502.1	-5515.2
## + V16_J1_5	1	0.00	1502.1	-5515.2
## - V2_J1_6	1	3.93	1506.0	-5514.9
## - V29_J1_1	1	4.26	1506.3	-5513.8
## - V13_2_J1_4	1	4.43	1506.5	-5513.2
## - V26_J1_1	1	4.49	1506.6	-5513.0
## - V13_1_J1_3	1	4.78	1506.9	-5512.0
## - V14_J1_2	1	5.08	1507.2	-5510.9
## - V20_J1_2	1	5.50	1507.6	-5509.5
## - V30_J2_3	1	5.65	1507.7	-5509.0
## - V24_J2_3	1	5.69	1507.8	-5508.8
## - V2_J1_5	1	5.96	1508.0	-5507.9
## - V13_3_J2_5	1	6.06	1508.2	-5507.5
## - V15_J2_3	1	6.19	1508.3	-5507.1
## - V1_J1_5	1	6.29	1508.4	-5506.7
## - V23_J2_1	1	6.55	1508.6	-5505.9
## - V23_J1_4	1	7.14	1509.2	-5503.8
## - V13_1_J1_5	1	7.41	1509.5	-5502.9
## - V26_J1_6	1	7.82	1509.9	-5501.5
## - V1_J2_5	1	7.82	1509.9	-5501.5
## - V13_2_J1_6	1	7.90	1510.0	-5501.2
## - V24_J2_5	1	8.11	1510.2	-5500.5
## - V29_J1_5	1	8.32	1510.4	-5499.8
## - V24_J1_7	1	8.69	1510.8	-5498.5
## - V12_1_2_J1_2	1	9.23	1511.3	-5496.6

## - V17_J1_5	1	9.94	1512.0	-5494.2
## - V29_J1_7	1	10.71	1512.8	-5491.5
## - V15_J2_1	1	12.04	1514.1	-5487.0
## - V13_1_J1_2	1	12.76	1514.8	-5484.5
## - V16_J2_3	1	14.51	1516.6	-5478.5
## - V12_1_2_J1_6	1	14.77	1516.9	-5477.6
## - V20_J2_1	1	15.51	1517.6	-5475.1
## - V24_J1_6	1	15.86	1517.9	-5473.9
## - V4_J1_3	1	15.86	1518.0	-5473.9
## - V14_J2_5	1	16.35	1518.4	-5472.2
## - V13_1_J1_7	1	16.47	1518.6	-5471.8
## - V26_J1_5	1	17.97	1520.1	-5466.7
## - V20_J2_3	1	20.03	1522.1	-5459.6
## - V14_J2_1	1	20.82	1522.9	-5456.9
## - V29_J1_3	1	24.05	1526.1	-5445.9
## - V12_1_2_J1_7	1	24.59	1526.7	-5444.1
## - V30_J1_5	1	24.73	1526.8	-5443.6
## - V23_J2_7	1	26.53	1528.6	-5437.4
## - V2_J2_7	1	26.60	1528.7	-5437.2
## - V30_J2_5	1	28.68	1530.8	-5430.1
## - V4_J1_5	1	29.20	1531.3	-5428.4
## - V2_J2_2	1	29.63	1531.7	-5426.9
## - V3_J1_5	1	30.54	1532.6	-5423.8
## - V12_1_2_J2_7	1	30.62	1532.7	-5423.6
## - V15_J1_1	1	32.48	1534.6	-5417.2
## - V19_J2_5	1	34.43	1536.5	-5410.7
## - V15_J1_2	1	34.93	1537.0	-5409.0
## - V30_J1_3	1	35.06	1537.2	-5408.5
## - V14_J2_4	1	35.52	1537.6	-5407.0
## - V19_J2_4	1	35.89	1538.0	-5405.7
## - V12_1_2_J1_3	1	37.41	1539.5	-5400.6
## - V16_J2_7	1	38.71	1540.8	-5396.2
## - V4_J2_7	1	39.41	1541.5	-5393.8
## - V26_J1_4	1	40.57	1542.7	-5389.9
## - V5_J1_4	1	41.46	1543.5	-5386.9
## - V13_2_J1_7	1	44.45	1546.5	-5376.8
## - V19_J2_1	1	48.17	1550.3	-5364.4
## - V4_J1_4	1	49.63	1551.7	-5359.4
## - V5_J2_1	1	52.70	1554.8	-5349.2
## - V30_J1_2	1	54.48	1556.6	-5343.2
## - V14_J2_3	1	58.55	1560.6	-5329.6
## - V15_J1_6	1	59.71	1561.8	-5325.8
## - V16_J1_3	1	62.12	1564.2	-5317.8
## - V15_J1_7	1	63.50	1565.6	-5313.2
## - V1_J1_3	1	63.69	1565.8	-5312.5
## - V17_J2_7	1	63.83	1565.9	-5312.1
## - V14_J1_5	1	65.00	1567.1	-5308.2
## - V1_J2_2	1	67.01	1569.1	-5301.5
## - V17_J2_2	1	67.78	1569.9	-5299.0
## - V15_J1_3	1	72.63	1574.7	-5283.0
## - V30_J2_2	1	73.62	1575.7	-5279.7
## - V30_J1_1	1	73.92	1576.0	-5278.7
## - V5_J2_3	1	74.68	1576.8	-5276.2
## - V23_J1_3	1	78.96	1581.0	-5262.1

```

## - V2_J1_3      1      79.64 1581.7 -5259.8
## - V14_J1_4     1      80.51 1582.6 -5257.0
## - V17_J1_3     1      81.14 1583.2 -5254.9
## - V1_J2_7      1      90.06 1592.1 -5225.7
## - V3_J1_4      1      92.31 1594.4 -5218.4
## - V19_J2_3     1      92.47 1594.5 -5217.9
## - V12_1_2_J1_4 1     105.57 1607.7 -5175.3
## - V5_J1_5      1     106.28 1608.4 -5173.0
## - V4_J2_5      1     112.40 1614.5 -5153.2
## - V3_J2_1      1     118.82 1620.9 -5132.6
## - V26_J2_1     1     119.35 1621.4 -5130.9
## - V15_J2_7     1     123.21 1625.3 -5118.5
## - V19_J1_5     1     127.83 1629.9 -5103.8
## - V4_J2_1      1     128.24 1630.3 -5102.5
## - V4_J2_3      1     130.16 1632.2 -5096.4
## - V15_J2_2     1     132.64 1634.7 -5088.5
## - V3_J2_5      1     135.28 1637.4 -5080.1
## - V26_J2_5     1     153.40 1655.5 -5022.9
## - V26_J2_4     1     157.93 1660.0 -5008.6
## - V4_J2_4      1     161.31 1663.4 -4998.1
## - V12_1_2_J2_2 1     179.06 1681.2 -4942.9
## - V19_J1_4     1     184.85 1686.9 -4925.0
## - V3_J2_4      1     200.61 1702.7 -4876.6
## - V3_J2_3      1     204.69 1706.8 -4864.2
## - V20_J2_2     1     267.72 1769.8 -4675.6
## - V5_J2_5      1     268.05 1770.1 -4674.6
## - V5_J2_4      1     309.07 1811.2 -4555.5
## - V26_J2_3     1     313.29 1815.4 -4543.4
## - J            12     371.88 1874.0 -4451.2
## - V16_J2_2     1     440.31 1942.4 -4191.8
## - V            19    1013.21 2515.3 -2967.1
##
## Step: AIC=-5527.05
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
## V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
## V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
## V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V14_J1_2 + V13_3_J2_5 +
## V20_J1_2 + V13_2_J1_4 + V26_J1_6 + V13_1_J1_5 + V26_J1_1 +
## V2_J1_6 + V29_J1_1 + V15_J2_3 + V30_J2_3 + V24_J2_3 + V13_2_J1_5 +
## V13_1_J2_2 + V19_J1_3
##

```


##	Df	Sum of Sq	RSS	AIC
## + V14_J1_3	1	3.50	1495.2	-5532.6
## + V19_J1_1	1	3.27	1495.4	-5531.8
## + V16_J2_1	1	3.17	1495.5	-5531.4
## + V13_2_J2_5	1	3.13	1495.5	-5531.3
## + V13_3_J1_2	1	3.03	1495.6	-5530.9
## + V13_1_J2_7	1	2.97	1495.7	-5530.7
## + V29_J2_3	1	2.90	1495.8	-5530.5
## + V23_J1_7	1	2.80	1495.9	-5530.1
## + V3_J1_2	1	2.77	1495.9	-5530.0
## + V23_J2_2	1	2.70	1496.0	-5529.8
## + V13_3_J1_1	1	2.57	1496.1	-5529.3
## + V29_J1_6	1	2.51	1496.2	-5529.1
## + V1_J1_1	1	2.49	1496.2	-5529.1
## + V20_J1_6	1	2.37	1496.3	-5528.6
## + V29_J2_1	1	2.35	1496.3	-5528.6
## + V13_2_J1_2	1	2.30	1496.4	-5528.4
## + V13_2_J2_7	1	2.30	1496.4	-5528.4
## + V20_J1_7	1	2.25	1496.4	-5528.2
## + V13_2_J2_2	1	2.15	1496.5	-5527.9
## + V14_J2_2	1	2.13	1496.5	-5527.8
## + V23_J2_3	1	2.07	1496.6	-5527.6
## + V29_J2_4	1	2.07	1496.6	-5527.6
## + V17_J2_1	1	2.03	1496.7	-5527.5
## + V16_J1_6	1	1.98	1496.7	-5527.3
## + V13_1_J2_4	1	1.96	1496.7	-5527.2
## <none>			1498.7	-5527.1
## + V29_J2_2	1	1.88	1496.8	-5526.9
## + V1_J1_7	1	1.86	1496.8	-5526.9
## + V5_J1_6	1	1.83	1496.8	-5526.8
## + V30_J1_7	1	1.83	1496.8	-5526.8
## + V20_J2_4	1	1.82	1496.9	-5526.7
## + V1_J2_3	1	1.79	1496.9	-5526.6
## + V26_J2_2	1	1.74	1496.9	-5526.5
## + V29_J1_2	1	1.73	1497.0	-5526.4
## + V16_J2_4	1	1.71	1497.0	-5526.4
## + V24_J1_5	1	1.70	1497.0	-5526.3
## + V13_2_J1_3	1	1.66	1497.0	-5526.2
## + V24_J1_3	1	1.65	1497.0	-5526.1
## + V14_J2_7	1	1.58	1497.1	-5525.9
## + V15_J2_4	1	1.55	1497.1	-5525.8
## + V16_J1_2	1	1.46	1497.2	-5525.5
## + V2_J1_7	1	1.45	1497.2	-5525.5
## + V19_J1_6	1	1.44	1497.2	-5525.4
## + V20_J1_1	1	1.42	1497.2	-5525.4
## + V12_1_2_J1_5	1	1.40	1497.3	-5525.3
## + V3_J1_7	1	1.35	1497.3	-5525.1
## + V16_J1_4	1	1.34	1497.3	-5525.1
## + V13_3_J2_4	1	1.31	1497.4	-5525.0
## + V5_J1_2	1	1.30	1497.4	-5524.9
## + V20_J1_3	1	1.26	1497.4	-5524.8
## + V12_1_2_J1_1	1	1.23	1497.4	-5524.7
## + V4_J1_6	1	1.09	1497.6	-5524.2
## + V16_J1_1	1	1.05	1497.6	-5524.1

## + V26_J1_7	1	1.02	1497.7	-5523.9
## + V5_J2_7	1	1.01	1497.7	-5523.9
## + V14_J1_1	1	0.99	1497.7	-5523.9
## + V24_J2_7	1	0.98	1497.7	-5523.8
## + V17_J1_7	1	0.97	1497.7	-5523.8
## + V13_2_J2_3	1	0.94	1497.7	-5523.7
## + V24_J2_4	1	0.93	1497.7	-5523.7
## + V30_J2_1	1	0.93	1497.7	-5523.6
## + V29_J1_4	1	0.92	1497.8	-5523.6
## + V24_J1_1	1	0.92	1497.8	-5523.6
## + V20_J1_4	1	0.88	1497.8	-5523.5
## + V17_J2_4	1	0.79	1497.9	-5523.2
## + V19_J1_2	1	0.79	1497.9	-5523.2
## + V2_J1_2	1	0.78	1497.9	-5523.1
## + V20_J1_5	1	0.75	1497.9	-5523.0
## + V17_J1_2	1	0.74	1497.9	-5523.0
## + V1_J1_2	1	0.70	1498.0	-5522.9
## + V2_J2_1	1	0.69	1498.0	-5522.8
## + V2_J2_5	1	0.69	1498.0	-5522.8
## + V2_J2_3	1	0.69	1498.0	-5522.8
## + V5_J1_7	1	0.66	1498.0	-5522.7
## + V30_J1_6	1	0.64	1498.0	-5522.6
## + V23_J2_5	1	0.64	1498.0	-5522.6
## + V13_3_J2_7	1	0.63	1498.0	-5522.6
## + V23_J1_2	1	0.61	1498.1	-5522.5
## + V12_1_2_J2_5	1	0.57	1498.1	-5522.4
## + V5_J1_1	1	0.50	1498.2	-5522.1
## + V30_J2_7	1	0.49	1498.2	-5522.1
## + V15_J1_4	1	0.49	1498.2	-5522.1
## + V15_J1_5	1	0.45	1498.2	-5522.0
## + V29_J2_7	1	0.45	1498.2	-5522.0
## - V19_J1_3	1	3.41	1502.1	-5521.9
## + V23_J2_4	1	0.41	1498.3	-5521.8
## + V12_1_2_J2_1	1	0.39	1498.3	-5521.8
## + V13_1_J2_5	1	0.39	1498.3	-5521.8
## + V24_J2_2	1	0.39	1498.3	-5521.8
## + V1_J1_6	1	0.37	1498.3	-5521.7
## + V20_J2_7	1	0.37	1498.3	-5521.7
## + V13_3_J2_2	1	0.36	1498.3	-5521.7
## + V5_J2_2	1	0.32	1498.4	-5521.5
## + V13_3_J1_6	1	0.31	1498.4	-5521.5
## + V5_J1_3	1	0.30	1498.4	-5521.5
## + V30_J1_4	1	0.29	1498.4	-5521.4
## + V4_J2_2	1	0.28	1498.4	-5521.4
## + V29_J2_5	1	0.25	1498.4	-5521.3
## + V17_J2_5	1	0.25	1498.4	-5521.3
## + V13_1_J1_6	1	0.25	1498.4	-5521.3
## + V4_J1_7	1	0.24	1498.4	-5521.3
## + V13_1_J1_4	1	0.24	1498.4	-5521.3
## + V3_J2_2	1	0.24	1498.4	-5521.2
## + V13_3_J1_3	1	0.20	1498.5	-5521.1
## + V24_J1_2	1	0.20	1498.5	-5521.1
## + V1_J2_1	1	0.19	1498.5	-5521.1
## + V4_J1_1	1	0.19	1498.5	-5521.1

## + V16_J1_7	1	0.18	1498.5	-5521.0
## - V13_1_J2_2	1	3.66	1502.3	-5521.0
## + V4_J1_2	1	0.17	1498.5	-5521.0
## + V3_J2_7	1	0.16	1498.5	-5521.0
## + V17_J1_1	1	0.15	1498.5	-5521.0
## + V23_J1_5	1	0.15	1498.5	-5520.9
## + V14_J1_6	1	0.14	1498.5	-5520.9
## + V13_3_J1_4	1	0.13	1498.5	-5520.9
## + V3_J1_6	1	0.13	1498.5	-5520.9
## + V13_1_J2_3	1	0.12	1498.5	-5520.8
## + V13_1_J2_1	1	0.12	1498.5	-5520.8
## + V13_1_J1_1	1	0.10	1498.6	-5520.8
## + V3_J1_1	1	0.10	1498.6	-5520.8
## - V13_2_J1_5	1	3.73	1502.4	-5520.8
## + V24_J2_1	1	0.10	1498.6	-5520.8
## + V13_3_J2_1	1	0.10	1498.6	-5520.7
## + V3_J1_3	1	0.10	1498.6	-5520.7
## + V13_3_J1_5	1	0.09	1498.6	-5520.7
## + V19_J2_7	1	0.09	1498.6	-5520.7
## + V1_J2_4	1	0.08	1498.6	-5520.7
## + V17_J1_6	1	0.08	1498.6	-5520.7
## + V30_J2_4	1	0.08	1498.6	-5520.7
## + V2_J1_1	1	0.07	1498.6	-5520.7
## + V2_J2_4	1	0.07	1498.6	-5520.7
## + V26_J1_2	1	0.07	1498.6	-5520.6
## + V20_J2_5	1	0.07	1498.6	-5520.6
## + V14_J1_7	1	0.06	1498.6	-5520.6
## + V1_J1_4	1	0.06	1498.6	-5520.6
## + V13_2_J1_1	1	0.05	1498.6	-5520.6
## - V13_1_J1_3	1	3.79	1502.5	-5520.5
## + V13_2_J2_4	1	0.03	1498.6	-5520.5
## + V13_3_J2_3	1	0.03	1498.6	-5520.5
## + V12_1_2_J2_4	1	0.03	1498.6	-5520.5
## + V17_J1_4	1	0.02	1498.7	-5520.5
## + V19_J2_2	1	0.02	1498.7	-5520.5
## + V23_J1_6	1	0.02	1498.7	-5520.5
## + V24_J1_4	1	0.02	1498.7	-5520.5
## + V19_J1_7	1	0.02	1498.7	-5520.5
## + V17_J2_3	1	0.01	1498.7	-5520.5
## + V15_J2_5	1	0.01	1498.7	-5520.4
## + V23_J1_1	1	0.01	1498.7	-5520.4
## + V13_3_J1_7	1	0.00	1498.7	-5520.4
## + V26_J2_7	1	0.00	1498.7	-5520.4
## + V16_J2_5	1	0.00	1498.7	-5520.4
## + V12_1_2_J2_3	1	0.00	1498.7	-5520.4
## + V13_2_J2_1	1	0.00	1498.7	-5520.4
## + V16_J1_5	1	0.00	1498.7	-5520.4
## + V2_J1_4	1	0.00	1498.7	-5520.4
## - V26_J1_3	1	3.91	1502.6	-5520.1
## - V2_J1_6	1	3.97	1502.6	-5519.9
## - V29_J1_1	1	4.24	1502.9	-5519.0
## - V26_J1_1	1	4.47	1503.1	-5518.2
## - V13_2_J1_4	1	4.50	1503.2	-5518.1
## - V14_J1_2	1	5.27	1503.9	-5515.4

## - V20_J1_2	1	5.33	1504.0	-5515.2
## - V30_J2_3	1	5.62	1504.3	-5514.2
## - V24_J2_3	1	5.79	1504.5	-5513.6
## - V2_J1_5	1	5.90	1504.6	-5513.2
## - V13_3_J2_5	1	6.12	1504.8	-5512.5
## - V15_J2_3	1	6.20	1504.9	-5512.2
## - V1_J1_5	1	6.23	1504.9	-5512.1
## - V23_J2_1	1	6.51	1505.2	-5511.1
## - V23_J1_4	1	7.19	1505.9	-5508.8
## - V13_1_J1_5	1	7.46	1506.1	-5507.9
## - V26_J1_6	1	7.82	1506.5	-5506.6
## - V1_J2_5	1	7.87	1506.5	-5506.5
## - V24_J2_5	1	8.00	1506.7	-5506.0
## - V13_2_J1_6	1	8.09	1506.8	-5505.7
## - V29_J1_5	1	8.25	1506.9	-5505.2
## - V24_J1_7	1	8.91	1507.6	-5502.9
## - V12_1_2_J1_2	1	9.33	1508.0	-5501.4
## - V17_J1_5	1	9.87	1508.5	-5499.6
## - V29_J1_7	1	10.65	1509.3	-5496.9
## - V15_J2_1	1	12.05	1510.7	-5492.0
## - V13_1_J1_2	1	12.67	1511.3	-5489.9
## - V16_J2_3	1	14.55	1513.2	-5483.5
## - V12_1_2_J1_6	1	14.65	1513.3	-5483.1
## - V20_J2_1	1	15.36	1514.0	-5480.7
## - V24_J1_6	1	16.14	1514.8	-5478.0
## - V14_J2_5	1	16.15	1514.8	-5477.9
## - V13_1_J1_7	1	16.37	1515.0	-5477.2
## - V4_J1_3	1	17.47	1516.2	-5473.4
## - V26_J1_5	1	18.14	1516.8	-5471.1
## - V20_J2_3	1	19.85	1518.5	-5465.3
## - V14_J2_1	1	20.59	1519.3	-5462.7
## - V12_1_2_J1_7	1	24.43	1523.1	-5449.6
## - V30_J1_5	1	24.61	1523.3	-5449.0
## - V29_J1_3	1	25.95	1524.6	-5444.4
## - V23_J2_7	1	26.48	1525.2	-5442.6
## - V2_J2_7	1	26.52	1525.2	-5442.5
## - V30_J2_5	1	28.60	1527.3	-5435.4
## - V4_J1_5	1	29.41	1528.1	-5432.6
## - V2_J2_2	1	29.50	1528.2	-5432.3
## - V3_J1_5	1	30.39	1529.1	-5429.3
## - V12_1_2_J2_7	1	30.48	1529.2	-5429.0
## - V15_J1_1	1	32.62	1531.3	-5421.7
## - V15_J1_2	1	35.14	1533.8	-5413.2
## - V14_J2_4	1	35.23	1533.9	-5412.9
## - V19_J2_5	1	36.76	1535.4	-5407.7
## - V30_J1_3	1	37.22	1535.9	-5406.1
## - V19_J2_4	1	38.29	1537.0	-5402.5
## - V16_J2_7	1	38.62	1537.3	-5401.4
## - V4_J2_7	1	39.44	1538.1	-5398.6
## - V12_1_2_J1_3	1	39.57	1538.2	-5398.2
## - V26_J1_4	1	40.77	1539.5	-5394.1
## - V5_J1_4	1	41.22	1539.9	-5392.6
## - V13_2_J1_7	1	43.96	1542.6	-5383.3
## - V4_J1_4	1	49.85	1548.5	-5363.5

```

## - V19_J2_1      1      50.79 1549.5 -5360.4
## - V5_J2_1       1      52.42 1551.1 -5354.9
## - V30_J1_2      1      54.62 1553.3 -5347.5
## - V14_J2_3      1      58.15 1556.8 -5335.7
## - V15_J1_6      1      59.96 1558.6 -5329.7
## - V17_J2_7      1      63.73 1562.4 -5317.1
## - V15_J1_7      1      63.78 1562.5 -5317.0
## - V14_J1_5      1      64.69 1563.4 -5313.9
## - V16_J1_3      1      64.78 1563.5 -5313.6
## - V1_J1_3       1      66.37 1565.0 -5308.3
## - V1_J2_2       1      66.85 1565.5 -5306.8
## - V17_J2_2      1      67.60 1566.3 -5304.3
## - V15_J1_3      1      68.28 1567.0 -5302.0
## - V30_J2_2      1      73.45 1572.1 -5284.9
## - V30_J1_1      1      73.98 1572.7 -5283.1
## - V5_J2_3       1      74.33 1573.0 -5282.0
## - V14_J1_4      1      80.07 1578.7 -5263.0
## - V23_J1_3      1      81.83 1580.5 -5257.2
## - V2_J1_3       1      82.49 1581.2 -5255.1
## - V17_J1_3      1      84.03 1582.7 -5250.0
## - V1_J2_7       1      89.95 1588.6 -5230.6
## - V3_J1_4       1      91.95 1590.6 -5224.0
## - V19_J2_3      1      95.58 1594.3 -5212.2
## - V12_1_2_J1_4  1      105.60 1604.3 -5179.6
## - V5_J1_5       1      106.01 1604.7 -5178.3
## - V4_J2_5       1      112.72 1611.4 -5156.6
## - V3_J2_1       1      118.41 1617.1 -5138.3
## - V26_J2_1      1      119.68 1618.4 -5134.2
## - V15_J2_7      1      123.52 1622.2 -5121.9
## - V4_J2_1       1      128.59 1627.3 -5105.6
## - V4_J2_3       1      130.47 1629.2 -5099.6
## - V19_J1_5      1      131.15 1629.8 -5097.5
## - V15_J2_2      1      133.04 1631.7 -5091.4
## - V3_J2_5       1      134.83 1633.5 -5085.7
## - V26_J2_5      1      153.76 1652.4 -5025.8
## - V26_J2_4      1      158.34 1657.0 -5011.4
## - V4_J2_4       1      161.71 1660.4 -5000.8
## - V12_1_2_J2_2  1      178.62 1677.3 -4948.2
## - V19_J1_4      1      188.26 1686.9 -4918.3
## - V3_J2_4       1      200.09 1698.8 -4882.0
## - V3_J2_3       1      204.10 1702.8 -4869.8
## - V20_J2_2      1      266.41 1765.1 -4682.9
## - V5_J2_5       1      267.41 1766.1 -4679.9
## - V5_J2_4       1      308.42 1807.1 -4560.6
## - V26_J2_3      1      313.77 1812.4 -4545.2
## - J             12      346.45 1845.1 -4525.2
## - V16_J2_2      1      439.81 1938.5 -4195.6
## - V             19      1016.62 2515.3 -2960.5
##
## Step:  AIC=-5532.58
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##       V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##       V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##       V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +

```

```

##      V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
##      V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
##      V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
##      V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
##      V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
##      V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
##      V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
##      V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
##      V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
##      V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
##      V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
##      V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
##      V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V14_J1_2 + V13_3_J2_5 +
##      V20_J1_2 + V13_2_J1_4 + V26_J1_6 + V13_1_J1_5 + V26_J1_1 +
##      V2_J1_6 + V29_J1_1 + V15_J2_3 + V30_J2_3 + V24_J2_3 + V13_2_J1_5 +
##      V13_1_J2_2 + V19_J1_3 + V14_J1_3
##
##      Df Sum of Sq    RSS    AIC
## + V19_J1_1      1      3.27 1491.9 -5537.3
## + V16_J2_1      1      3.20 1492.0 -5537.1
## + V13_2_J2_5     1      3.04 1492.1 -5536.5
## + V13_3_J1_2     1      2.98 1492.2 -5536.3
## + V13_1_J2_7     1      2.92 1492.3 -5536.1
## + V29_J2_3       1      2.87 1492.3 -5535.9
## + V3_J1_2        1      2.85 1492.3 -5535.9
## + V23_J1_7       1      2.74 1492.4 -5535.5
## + V14_J2_7       1      2.73 1492.4 -5535.5
## + V13_3_J1_1     1      2.68 1492.5 -5535.3
## + V23_J2_2       1      2.63 1492.5 -5535.1
## + V24_J1_3       1      2.57 1492.6 -5534.9
## + V13_2_J2_7     1      2.46 1492.7 -5534.5
## + V1_J1_1        1      2.45 1492.7 -5534.5
## + V29_J1_6       1      2.45 1492.7 -5534.5
## + V29_J2_1       1      2.32 1492.8 -5534.0
## + V13_2_J2_2     1      2.32 1492.8 -5534.0
## + V13_2_J1_2     1      2.22 1493.0 -5533.7
## + V20_J1_6       1      2.21 1493.0 -5533.6
## + V20_J1_7       1      2.10 1493.1 -5533.2
## + V29_J2_4       1      2.10 1493.1 -5533.2
## + V17_J2_1       1      2.05 1493.1 -5533.1
## + V16_J1_6       1      2.04 1493.1 -5533.0
## + V23_J2_3       1      2.04 1493.1 -5533.0
## + V29_J2_2       1      1.94 1493.2 -5532.7
## + V13_1_J2_4     1      1.93 1493.2 -5532.7
## + V1_J1_7        1      1.91 1493.3 -5532.6
## <none>              1495.2 -5532.6
## + V30_J1_7       1      1.88 1493.3 -5532.5
## + V1_J2_3        1      1.81 1493.4 -5532.2
## + V20_J2_4       1      1.76 1493.4 -5532.1
## + V29_J1_2       1      1.75 1493.4 -5532.0
## + V26_J2_2       1      1.71 1493.5 -5531.9
## + V5_J1_6        1      1.69 1493.5 -5531.8
## + V16_J2_4       1      1.69 1493.5 -5531.8
## + V24_J1_5       1      1.65 1493.5 -5531.7

```

## + V15_J2_4	1	1.55	1493.6	-5531.3
## + V20_J1_1	1	1.53	1493.6	-5531.3
## + V16_J1_2	1	1.48	1493.7	-5531.1
## + V19_J1_6	1	1.45	1493.7	-5531.0
## + V2_J1_7	1	1.40	1493.8	-5530.8
## + V12_1_2_J1_5	1	1.38	1493.8	-5530.7
## + V16_J1_4	1	1.36	1493.8	-5530.7
## + V13_3_J2_4	1	1.28	1493.9	-5530.4
## + V14_J2_2	1	1.25	1493.9	-5530.3
## + V5_J1_2	1	1.24	1493.9	-5530.2
## + V3_J1_7	1	1.23	1493.9	-5530.2
## + V12_1_2_J1_1	1	1.19	1494.0	-5530.1
## + V5_J2_7	1	1.12	1494.0	-5529.8
## + V4_J1_6	1	1.10	1494.1	-5529.8
## + V24_J2_7	1	1.09	1494.1	-5529.7
## + V16_J1_1	1	1.08	1494.1	-5529.7
## + V26_J1_7	1	1.03	1494.1	-5529.5
## - V13_1_J1_3	1	2.80	1498.0	-5529.5
## + V17_J1_7	1	1.01	1494.2	-5529.4
## + V13_2_J1_3	1	1.00	1494.2	-5529.4
## + V24_J2_4	1	0.99	1494.2	-5529.4
## + V20_J1_4	1	0.93	1494.2	-5529.2
## + V30_J2_1	1	0.90	1494.3	-5529.1
## + V29_J1_4	1	0.90	1494.3	-5529.1
## + V13_2_J2_3	1	0.89	1494.3	-5529.0
## + V24_J1_1	1	0.83	1494.3	-5528.8
## + V17_J2_4	1	0.81	1494.4	-5528.8
## + V20_J1_5	1	0.78	1494.4	-5528.7
## + V2_J1_2	1	0.76	1494.4	-5528.6
## + V5_J1_7	1	0.76	1494.4	-5528.6
## + V19_J1_2	1	0.75	1494.4	-5528.5
## + V17_J1_2	1	0.73	1494.5	-5528.5
## + V13_3_J2_7	1	0.70	1494.5	-5528.4
## + V2_J2_3	1	0.69	1494.5	-5528.4
## + V20_J1_3	1	0.69	1494.5	-5528.3
## + V1_J1_2	1	0.69	1494.5	-5528.3
## + V2_J2_1	1	0.68	1494.5	-5528.3
## + V2_J2_5	1	0.68	1494.5	-5528.3
## + V23_J2_5	1	0.62	1494.5	-5528.1
## + V30_J1_6	1	0.62	1494.6	-5528.1
## + V23_J1_2	1	0.60	1494.6	-5528.0
## + V5_J1_1	1	0.57	1494.6	-5527.9
## + V12_1_2_J2_5	1	0.56	1494.6	-5527.9
## + V15_J1_4	1	0.48	1494.7	-5527.6
## + V30_J2_7	1	0.47	1494.7	-5527.6
## + V24_J2_2	1	0.46	1494.7	-5527.6
## + V15_J1_5	1	0.45	1494.7	-5527.5
## + V20_J2_7	1	0.43	1494.7	-5527.4
## + V29_J2_7	1	0.42	1494.8	-5527.4
## + V14_J1_1	1	0.41	1494.8	-5527.4
## + V1_J1_6	1	0.39	1494.8	-5527.3
## + V12_1_2_J2_1	1	0.39	1494.8	-5527.3
## + V23_J2_4	1	0.39	1494.8	-5527.3
## + V3_J1_3	1	0.39	1494.8	-5527.3

## + V13_1_J2_5	1	0.38	1494.8	-5527.3
## - V14_J1_3	1	3.50	1498.7	-5527.1
## + V30_J1_4	1	0.30	1494.9	-5527.0
## + V13_3_J2_2	1	0.30	1494.9	-5527.0
## + V4_J2_2	1	0.27	1494.9	-5526.9
## + V13_1_J1_6	1	0.27	1494.9	-5526.9
## + V13_3_J1_6	1	0.26	1494.9	-5526.9
## + V29_J2_5	1	0.26	1494.9	-5526.8
## + V17_J2_5	1	0.26	1494.9	-5526.8
## + V5_J2_2	1	0.25	1494.9	-5526.8
## + V13_1_J1_4	1	0.25	1494.9	-5526.8
## + V4_J1_7	1	0.23	1494.9	-5526.8
## - V13_1_J2_2	1	3.59	1498.8	-5526.7
## + V24_J1_2	1	0.23	1495.0	-5526.7
## + V1_J2_1	1	0.20	1495.0	-5526.6
## + V16_J1_7	1	0.20	1495.0	-5526.6
## + V4_J1_1	1	0.19	1495.0	-5526.6
## + V3_J2_2	1	0.19	1495.0	-5526.6
## + V3_J1_6	1	0.17	1495.0	-5526.5
## + V17_J1_1	1	0.16	1495.0	-5526.5
## + V23_J1_5	1	0.16	1495.0	-5526.5
## + V4_J1_2	1	0.15	1495.0	-5526.5
## - V13_2_J1_5	1	3.67	1498.8	-5526.5
## + V13_3_J1_4	1	0.14	1495.0	-5526.4
## + V3_J1_1	1	0.13	1495.0	-5526.4
## + V13_1_J2_3	1	0.13	1495.0	-5526.4
## + V3_J2_7	1	0.12	1495.1	-5526.4
## + V24_J2_1	1	0.12	1495.1	-5526.3
## + V13_1_J2_1	1	0.11	1495.1	-5526.3
## + V13_3_J2_1	1	0.11	1495.1	-5526.3
## + V13_3_J1_5	1	0.10	1495.1	-5526.3
## + V13_1_J1_1	1	0.10	1495.1	-5526.3
## + V17_J1_6	1	0.09	1495.1	-5526.3
## + V30_J2_4	1	0.09	1495.1	-5526.2
## + V19_J2_7	1	0.08	1495.1	-5526.2
## + V1_J2_4	1	0.08	1495.1	-5526.2
## + V2_J2_4	1	0.07	1495.1	-5526.2
## + V13_2_J1_1	1	0.07	1495.1	-5526.2
## + V2_J1_1	1	0.06	1495.1	-5526.2
## + V5_J1_3	1	0.06	1495.1	-5526.1
## + V26_J1_2	1	0.06	1495.1	-5526.1
## + V20_J2_5	1	0.05	1495.1	-5526.1
## + V1_J1_4	1	0.05	1495.1	-5526.1
## + V13_3_J2_3	1	0.04	1495.1	-5526.1
## + V12_1_2_J2_4	1	0.03	1495.1	-5526.1
## + V13_2_J2_4	1	0.03	1495.2	-5526.0
## + V23_J1_6	1	0.02	1495.2	-5526.0
## + V24_J1_4	1	0.02	1495.2	-5526.0
## + V19_J2_2	1	0.02	1495.2	-5526.0
## + V17_J1_4	1	0.02	1495.2	-5526.0
## + V13_3_J1_3	1	0.02	1495.2	-5526.0
## + V14_J1_7	1	0.01	1495.2	-5526.0
## + V19_J1_7	1	0.01	1495.2	-5526.0
## + V17_J2_3	1	0.01	1495.2	-5526.0

## + V13_3_J1_7	1	0.01	1495.2	-5526.0
## + V15_J2_5	1	0.01	1495.2	-5526.0
## + V23_J1_1	1	0.01	1495.2	-5526.0
## + V26_J2_7	1	0.00	1495.2	-5525.9
## + V16_J2_5	1	0.00	1495.2	-5525.9
## + V16_J1_5	1	0.00	1495.2	-5525.9
## + V12_1_2_J2_3	1	0.00	1495.2	-5525.9
## + V2_J1_4	1	0.00	1495.2	-5525.9
## + V14_J1_6	1	0.00	1495.2	-5525.9
## + V13_2_J2_1	1	0.00	1495.2	-5525.9
## - V14_J1_2	1	3.86	1499.0	-5525.8
## - V2_J1_6	1	4.04	1499.2	-5525.2
## - V29_J1_1	1	4.20	1499.4	-5524.6
## - V19_J1_3	1	4.38	1499.5	-5524.0
## - V26_J1_1	1	4.47	1499.6	-5523.7
## - V13_2_J1_4	1	4.59	1499.8	-5523.3
## - V26_J1_3	1	4.90	1500.1	-5522.2
## - V20_J1_2	1	5.24	1500.4	-5521.0
## - V30_J2_3	1	5.58	1500.8	-5519.9
## - V2_J1_5	1	5.85	1501.0	-5518.9
## - V24_J2_3	1	5.90	1501.1	-5518.7
## - V1_J1_5	1	6.17	1501.3	-5517.8
## - V13_3_J2_5	1	6.18	1501.4	-5517.7
## - V15_J2_3	1	6.22	1501.4	-5517.6
## - V23_J2_1	1	6.46	1501.6	-5516.8
## - V23_J1_4	1	7.24	1502.4	-5514.1
## - V13_1_J1_5	1	7.53	1502.7	-5513.1
## - V26_J1_6	1	7.85	1503.0	-5512.0
## - V24_J2_5	1	7.87	1503.0	-5511.9
## - V1_J2_5	1	7.91	1503.1	-5511.8
## - V29_J1_5	1	8.17	1503.3	-5510.9
## - V13_2_J1_6	1	8.35	1503.5	-5510.3
## - V24_J1_7	1	9.18	1504.4	-5507.4
## - V12_1_2_J1_2	1	9.32	1504.5	-5506.9
## - V17_J1_5	1	9.79	1505.0	-5505.3
## - V29_J1_7	1	10.54	1505.7	-5502.7
## - V15_J2_1	1	12.06	1507.2	-5497.4
## - V13_1_J1_2	1	12.73	1507.9	-5495.1
## - V12_1_2_J1_6	1	14.49	1509.7	-5489.1
## - V16_J2_3	1	14.58	1509.8	-5488.7
## - V20_J2_1	1	15.20	1510.4	-5486.6
## - V13_1_J1_7	1	16.24	1511.4	-5483.0
## - V24_J1_6	1	16.50	1511.7	-5482.1
## - V14_J2_5	1	18.18	1513.3	-5476.4
## - V26_J1_5	1	18.32	1513.5	-5475.9
## - V4_J1_3	1	19.35	1514.5	-5472.4
## - V20_J2_3	1	19.66	1514.8	-5471.3
## - V14_J2_1	1	22.82	1518.0	-5460.4
## - V12_1_2_J1_7	1	24.21	1519.4	-5455.7
## - V30_J1_5	1	24.45	1519.6	-5454.9
## - V2_J2_7	1	26.36	1521.5	-5448.3
## - V23_J2_7	1	26.36	1521.5	-5448.3
## - V29_J1_3	1	28.12	1523.3	-5442.3
## - V30_J2_5	1	28.49	1523.7	-5441.1

## - V2_J2_2	1	29.28	1524.5	-5438.4
## - V4_J1_5	1	29.65	1524.8	-5437.1
## - V3_J1_5	1	30.22	1525.4	-5435.1
## - V12_1_2_J2_7	1	30.27	1525.5	-5435.0
## - V15_J1_1	1	32.82	1528.0	-5426.3
## - V15_J1_2	1	35.16	1530.3	-5418.4
## - V19_J2_5	1	36.97	1532.2	-5412.2
## - V14_J2_4	1	37.93	1533.1	-5408.9
## - V16_J2_7	1	38.44	1533.6	-5407.2
## - V19_J2_4	1	38.52	1533.7	-5406.9
## - V4_J2_7	1	39.40	1534.6	-5403.9
## - V30_J1_3	1	39.68	1534.8	-5403.0
## - V5_J1_4	1	40.95	1536.1	-5398.7
## - V26_J1_4	1	40.99	1536.2	-5398.6
## - V12_1_2_J1_3	1	42.01	1537.2	-5395.1
## - V13_2_J1_7	1	43.33	1538.5	-5390.7
## - V4_J1_4	1	50.10	1545.3	-5367.8
## - V19_J2_1	1	51.05	1546.2	-5364.6
## - V5_J2_1	1	52.12	1547.3	-5361.0
## - V30_J1_2	1	54.46	1549.6	-5353.2
## - V15_J1_6	1	60.32	1555.5	-5333.5
## - V14_J2_3	1	61.23	1556.4	-5330.5
## - V15_J1_3	1	63.41	1558.6	-5323.2
## - V17_J2_7	1	63.50	1558.7	-5322.9
## - V15_J1_7	1	64.15	1559.3	-5320.7
## - V1_J2_2	1	66.56	1561.7	-5312.7
## - V17_J2_2	1	67.29	1562.5	-5310.3
## - V16_J1_3	1	67.72	1562.9	-5308.9
## - V14_J1_5	1	67.85	1563.0	-5308.4
## - V1_J1_3	1	69.33	1564.5	-5303.5
## - V30_J2_2	1	73.20	1568.4	-5290.7
## - V5_J2_3	1	73.94	1569.1	-5288.2
## - V30_J1_1	1	74.08	1569.3	-5287.7
## - V14_J1_4	1	83.39	1578.6	-5257.0
## - V23_J1_3	1	84.97	1580.2	-5251.8
## - V2_J1_3	1	85.60	1580.8	-5249.7
## - V17_J1_3	1	87.18	1582.3	-5244.5
## - V1_J2_7	1	89.70	1584.9	-5236.3
## - V3_J1_4	1	91.55	1586.7	-5230.2
## - V19_J2_3	1	95.90	1591.1	-5216.0
## - V12_1_2_J1_4	1	105.65	1600.8	-5184.2
## - V5_J1_5	1	105.69	1600.9	-5184.0
## - V4_J2_5	1	113.07	1608.2	-5160.1
## - V3_J2_1	1	117.94	1613.1	-5144.4
## - V26_J2_1	1	120.04	1615.2	-5137.6
## - V15_J2_7	1	123.98	1619.2	-5125.0
## - V4_J2_1	1	128.97	1624.1	-5109.0
## - V4_J2_3	1	130.82	1626.0	-5103.0
## - V19_J1_5	1	131.66	1626.8	-5100.4
## - V15_J2_2	1	133.60	1628.8	-5094.2
## - V3_J2_5	1	134.33	1629.5	-5091.8
## - V26_J2_5	1	154.16	1649.3	-5029.0
## - V26_J2_4	1	158.77	1653.9	-5014.4
## - V4_J2_4	1	162.16	1657.3	-5003.8

```

## - V12_1_2_J2_2  1    177.98 1673.2 -4954.4
## - V19_J1_4      1    188.75 1683.9 -4921.0
## - V3_J2_4       1    199.50 1694.7 -4887.9
## - V3_J2_3       1    203.44 1698.6 -4875.8
## - V20_J2_2      1    264.77 1759.9 -4691.4
## - V5_J2_5       1    266.69 1761.9 -4685.7
## - J             12    328.47 1823.6 -4579.5
## - V5_J2_4       1    307.68 1802.8 -4566.1
## - V26_J2_3      1    314.28 1809.5 -4547.1
## - V16_J2_2      1    438.97 1934.1 -4200.6
## - V             19   1019.74 2514.9 -2954.7
##
## Step:  AIC=-5537.33
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
## V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
## V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
## V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V14_J1_2 + V13_3_J2_5 +
## V20_J1_2 + V13_2_J1_4 + V26_J1_6 + V13_1_J1_5 + V26_J1_1 +
## V2_J1_6 + V29_J1_1 + V15_J2_3 + V30_J2_3 + V24_J2_3 + V13_2_J1_5 +
## V13_1_J2_2 + V19_J1_3 + V14_J1_3 + V19_J1_1
##
##
##      Df Sum of Sq  RSS    AIC
## + V16_J2_1      1      3.19 1488.7 -5541.8
## + V13_2_J2_5     1      3.05 1488.9 -5541.3
## + V3_J1_2        1      2.94 1489.0 -5540.9
## + V13_3_J1_2     1      2.89 1489.0 -5540.8
## + V1_J1_1        1      2.84 1489.1 -5540.6
## + V29_J2_3       1      2.81 1489.1 -5540.5
## + V13_1_J2_7     1      2.76 1489.1 -5540.3
## + V23_J1_7       1      2.64 1489.3 -5539.9
## + V14_J2_7       1      2.62 1489.3 -5539.8
## + V13_2_J2_7     1      2.59 1489.3 -5539.7
## + V24_J1_3       1      2.56 1489.3 -5539.6
## + V23_J2_2       1      2.50 1489.4 -5539.4
## + V13_2_J2_2     1      2.46 1489.4 -5539.3
## + V29_J1_6       1      2.40 1489.5 -5539.1
## + V13_3_J1_1     1      2.31 1489.6 -5538.8
## + V29_J2_1       1      2.27 1489.6 -5538.6
## + V29_J2_4       1      2.14 1489.8 -5538.2
## + V16_J1_6       1      2.14 1489.8 -5538.2
## + V13_2_J1_2     1      2.12 1489.8 -5538.1

```

## + V20_J1_6	1	2.11	1489.8	-5538.1
## + V17_J2_1	1	2.05	1489.9	-5537.8
## + V23_J2_3	1	2.03	1489.9	-5537.8
## + V29_J2_2	1	2.02	1489.9	-5537.7
## + V1_J1_7	1	2.01	1489.9	-5537.7
## + V20_J1_7	1	2.00	1489.9	-5537.7
## + V13_1_J2_4	1	1.95	1490.0	-5537.5
## + V30_J1_7	1	1.92	1490.0	-5537.4
## <none>			1491.9	-5537.3
## + V1_J2_3	1	1.81	1490.1	-5537.0
## + V20_J2_4	1	1.75	1490.2	-5536.8
## + V29_J1_2	1	1.71	1490.2	-5536.7
## + V26_J2_2	1	1.69	1490.2	-5536.6
## + V16_J2_4	1	1.69	1490.2	-5536.6
## + V24_J1_5	1	1.66	1490.2	-5536.5
## + V5_J1_6	1	1.63	1490.3	-5536.4
## + V15_J2_4	1	1.55	1490.3	-5536.1
## + V12_1_2_J1_5	1	1.43	1490.5	-5535.7
## + V12_1_2_J1_1	1	1.42	1490.5	-5535.7
## + V16_J1_2	1	1.40	1490.5	-5535.6
## + V16_J1_4	1	1.35	1490.6	-5535.4
## + V14_J2_2	1	1.34	1490.6	-5535.4
## + V2_J1_7	1	1.30	1490.6	-5535.2
## + V13_3_J2_4	1	1.29	1490.6	-5535.2
## + V20_J1_1	1	1.26	1490.6	-5535.1
## + V5_J2_7	1	1.19	1490.7	-5534.9
## + V5_J1_2	1	1.19	1490.7	-5534.8
## + V24_J2_7	1	1.18	1490.7	-5534.8
## + V3_J1_7	1	1.18	1490.7	-5534.8
## + V4_J1_6	1	1.16	1490.7	-5534.8
## + V17_J1_7	1	1.08	1490.8	-5534.5
## + V24_J1_1	1	1.06	1490.8	-5534.4
## + V26_J1_7	1	1.02	1490.9	-5534.3
## + V13_2_J1_3	1	1.01	1490.9	-5534.2
## - V13_1_J1_3	1	2.82	1494.7	-5534.1
## + V24_J2_4	1	0.98	1490.9	-5534.1
## + V20_J1_4	1	0.94	1491.0	-5534.0
## + V13_2_J2_3	1	0.89	1491.0	-5533.8
## + V29_J1_4	1	0.88	1491.0	-5533.7
## + V30_J2_1	1	0.87	1491.0	-5533.7
## + V16_J1_1	1	0.86	1491.0	-5533.7
## + V2_J1_2	1	0.84	1491.1	-5533.6
## + V17_J2_4	1	0.80	1491.1	-5533.5
## + V5_J1_7	1	0.80	1491.1	-5533.5
## + V17_J1_2	1	0.79	1491.1	-5533.4
## + V20_J1_5	1	0.78	1491.1	-5533.4
## + V13_3_J2_7	1	0.76	1491.1	-5533.3
## + V1_J1_2	1	0.75	1491.2	-5533.3
## + V19_J1_6	1	0.73	1491.2	-5533.3
## + V20_J1_3	1	0.70	1491.2	-5533.1
## + V2_J2_1	1	0.69	1491.2	-5533.1
## + V2_J2_5	1	0.69	1491.2	-5533.1
## + V2_J2_3	1	0.68	1491.2	-5533.1
## + V23_J1_2	1	0.64	1491.3	-5532.9

## + V23_J2_5	1	0.61	1491.3	-5532.8
## + V30_J1_6	1	0.59	1491.3	-5532.8
## + V12_1_2_J2_5	1	0.59	1491.3	-5532.8
## - V19_J1_1	1	3.27	1495.2	-5532.6
## + V24_J2_2	1	0.53	1491.4	-5532.5
## + V20_J2_7	1	0.49	1491.4	-5532.4
## + V15_J1_4	1	0.48	1491.4	-5532.4
## + V15_J1_5	1	0.46	1491.4	-5532.3
## + V19_J2_7	1	0.44	1491.5	-5532.2
## + V30_J2_7	1	0.44	1491.5	-5532.2
## + V1_J1_6	1	0.44	1491.5	-5532.2
## + V3_J1_3	1	0.40	1491.5	-5532.1
## + V29_J2_7	1	0.39	1491.5	-5532.1
## + V5_J1_1	1	0.39	1491.5	-5532.1
## + V23_J2_4	1	0.39	1491.5	-5532.1
## + V13_1_J2_5	1	0.38	1491.5	-5532.0
## - V13_1_J2_2	1	3.44	1495.3	-5532.0
## + V12_1_2_J2_1	1	0.37	1491.5	-5532.0
## + V30_J1_4	1	0.32	1491.6	-5531.8
## + V4_J1_1	1	0.32	1491.6	-5531.8
## + V13_1_J1_6	1	0.31	1491.6	-5531.8
## - V14_J1_3	1	3.51	1495.4	-5531.8
## + V29_J2_5	1	0.28	1491.6	-5531.7
## + V14_J1_1	1	0.26	1491.6	-5531.6
## + V13_3_J2_2	1	0.26	1491.6	-5531.6
## + V19_J1_2	1	0.26	1491.6	-5531.6
## + V17_J2_5	1	0.26	1491.6	-5531.6
## + V24_J1_2	1	0.26	1491.6	-5531.6
## + V19_J1_7	1	0.24	1491.7	-5531.5
## + V13_1_J1_4	1	0.24	1491.7	-5531.5
## + V13_3_J1_6	1	0.24	1491.7	-5531.5
## + V4_J2_2	1	0.23	1491.7	-5531.5
## + V16_J1_7	1	0.23	1491.7	-5531.5
## + V5_J2_2	1	0.22	1491.7	-5531.5
## + V4_J1_7	1	0.21	1491.7	-5531.4
## + V1_J2_1	1	0.20	1491.7	-5531.4
## + V3_J1_6	1	0.19	1491.7	-5531.4
## + V13_1_J1_1	1	0.18	1491.7	-5531.3
## + V4_J1_2	1	0.18	1491.7	-5531.3
## + V23_J1_5	1	0.17	1491.7	-5531.3
## + V3_J2_2	1	0.16	1491.7	-5531.2
## + V13_3_J1_4	1	0.14	1491.8	-5531.2
## - V13_2_J1_5	1	3.68	1495.6	-5531.2
## + V2_J1_1	1	0.13	1491.8	-5531.2
## + V13_1_J2_3	1	0.13	1491.8	-5531.1
## + V13_1_J2_1	1	0.12	1491.8	-5531.1
## + V17_J1_6	1	0.12	1491.8	-5531.1
## + V24_J2_1	1	0.11	1491.8	-5531.1
## + V13_3_J2_1	1	0.10	1491.8	-5531.1
## + V30_J2_4	1	0.10	1491.8	-5531.0
## + V3_J2_7	1	0.10	1491.8	-5531.0
## + V13_3_J1_5	1	0.09	1491.8	-5531.0
## + V17_J1_1	1	0.08	1491.8	-5531.0
## + V1_J2_4	1	0.08	1491.8	-5531.0

## + V2_J2_4	1	0.07	1491.8	-5530.9
## + V3_J1_1	1	0.06	1491.8	-5530.9
## + V5_J1_3	1	0.06	1491.8	-5530.9
## + V20_J2_5	1	0.06	1491.8	-5530.9
## + V1_J1_4	1	0.05	1491.8	-5530.9
## + V26_J1_2	1	0.05	1491.8	-5530.9
## + V19_J2_2	1	0.04	1491.9	-5530.9
## + V23_J1_1	1	0.04	1491.9	-5530.8
## + V13_3_J2_3	1	0.04	1491.9	-5530.8
## + V23_J1_6	1	0.04	1491.9	-5530.8
## + V12_1_2_J2_4	1	0.03	1491.9	-5530.8
## + V13_2_J2_4	1	0.03	1491.9	-5530.8
## + V24_J1_4	1	0.03	1491.9	-5530.8
## + V13_2_J1_1	1	0.02	1491.9	-5530.8
## + V17_J1_4	1	0.02	1491.9	-5530.8
## + V13_3_J1_3	1	0.02	1491.9	-5530.8
## + V13_3_J1_7	1	0.02	1491.9	-5530.8
## + V17_J2_3	1	0.01	1491.9	-5530.7
## + V15_J2_5	1	0.01	1491.9	-5530.7
## + V14_J1_7	1	0.01	1491.9	-5530.7
## + V26_J2_7	1	0.00	1491.9	-5530.7
## + V12_1_2_J2_3	1	0.00	1491.9	-5530.7
## + V16_J2_5	1	0.00	1491.9	-5530.7
## + V14_J1_6	1	0.00	1491.9	-5530.7
## + V16_J1_5	1	0.00	1491.9	-5530.7
## + V2_J1_4	1	0.00	1491.9	-5530.7
## + V13_2_J2_1	1	0.00	1491.9	-5530.7
## - V14_J1_2	1	3.95	1495.8	-5530.2
## - V26_J1_1	1	3.95	1495.8	-5530.2
## - V2_J1_6	1	4.17	1496.1	-5529.4
## - V13_2_J1_4	1	4.60	1496.5	-5528.0
## - V29_J1_1	1	4.65	1496.5	-5527.8
## - V26_J1_3	1	5.01	1496.9	-5526.5
## - V20_J1_2	1	5.11	1497.0	-5526.2
## - V30_J2_3	1	5.50	1497.4	-5524.8
## - V19_J1_3	1	5.56	1497.5	-5524.6
## - V2_J1_5	1	5.87	1497.8	-5523.5
## - V24_J2_3	1	5.89	1497.8	-5523.5
## - V13_3_J2_5	1	6.15	1498.0	-5522.6
## - V1_J1_5	1	6.17	1498.1	-5522.5
## - V15_J2_3	1	6.21	1498.1	-5522.4
## - V23_J2_1	1	6.45	1498.3	-5521.5
## - V23_J1_4	1	7.24	1499.1	-5518.8
## - V13_1_J1_5	1	7.52	1499.4	-5517.8
## - V26_J1_6	1	7.82	1499.7	-5516.8
## - V24_J2_5	1	7.88	1499.8	-5516.6
## - V1_J2_5	1	7.91	1499.8	-5516.5
## - V29_J1_5	1	8.09	1500.0	-5515.9
## - V13_2_J1_6	1	8.50	1500.4	-5514.4
## - V24_J1_7	1	9.35	1501.2	-5511.5
## - V12_1_2_J1_2	1	9.58	1501.5	-5510.7
## - V17_J1_5	1	9.79	1501.7	-5510.0
## - V29_J1_7	1	10.45	1502.3	-5507.7
## - V15_J2_1	1	12.06	1504.0	-5502.1

## - V13_1_J1_2	1	12.50	1504.4	-5500.6
## - V12_1_2_J1_6	1	14.16	1506.1	-5494.8
## - V16_J2_3	1	14.58	1506.5	-5493.4
## - V20_J2_1	1	15.19	1507.1	-5491.3
## - V13_1_J1_7	1	15.98	1507.9	-5488.6
## - V24_J1_6	1	16.71	1508.6	-5486.0
## - V14_J2_5	1	18.24	1510.1	-5480.8
## - V26_J1_5	1	18.57	1510.5	-5479.6
## - V4_J1_3	1	19.35	1511.2	-5477.0
## - V20_J2_3	1	19.66	1511.6	-5475.9
## - V14_J2_1	1	22.87	1514.8	-5464.9
## - V12_1_2_J1_7	1	23.77	1515.7	-5461.8
## - V30_J1_5	1	24.29	1516.2	-5460.0
## - V2_J2_7	1	25.95	1517.8	-5454.3
## - V23_J2_7	1	26.03	1517.9	-5454.0
## - V29_J1_3	1	28.22	1520.1	-5446.5
## - V30_J2_5	1	28.32	1520.2	-5446.2
## - V2_J2_2	1	28.82	1520.7	-5444.5
## - V4_J1_5	1	29.71	1521.6	-5441.4
## - V12_1_2_J2_7	1	29.72	1521.6	-5441.4
## - V3_J1_5	1	30.33	1522.2	-5439.3
## - V15_J1_1	1	31.70	1523.6	-5434.6
## - V15_J1_2	1	35.46	1527.4	-5421.8
## - V16_J2_7	1	37.99	1529.9	-5413.2
## - V14_J2_4	1	38.00	1529.9	-5413.2
## - V4_J2_7	1	39.04	1530.9	-5409.6
## - V19_J2_5	1	39.68	1531.6	-5407.5
## - V30_J1_3	1	39.81	1531.7	-5407.0
## - V5_J1_4	1	41.04	1532.9	-5402.9
## - V19_J2_4	1	41.27	1533.2	-5402.1
## - V26_J1_4	1	41.33	1533.2	-5401.9
## - V12_1_2_J1_3	1	41.76	1533.7	-5400.4
## - V13_2_J1_7	1	42.96	1534.9	-5396.4
## - V4_J1_4	1	50.13	1542.0	-5372.1
## - V5_J2_1	1	52.23	1544.1	-5365.0
## - V19_J2_1	1	53.99	1545.9	-5359.1
## - V30_J1_2	1	54.63	1546.5	-5356.9
## - V15_J1_6	1	60.71	1552.6	-5336.6
## - V14_J2_3	1	61.33	1553.2	-5334.5
## - V17_J2_7	1	62.92	1554.8	-5329.2
## - V15_J1_3	1	63.47	1555.4	-5327.3
## - V15_J1_7	1	64.57	1556.5	-5323.7
## - V1_J2_2	1	65.92	1557.8	-5319.1
## - V17_J2_2	1	66.64	1558.5	-5316.7
## - V16_J1_3	1	67.64	1559.5	-5313.4
## - V14_J1_5	1	67.97	1559.9	-5312.3
## - V1_J1_3	1	69.25	1561.2	-5308.0
## - V30_J1_1	1	71.94	1563.8	-5299.1
## - V30_J2_2	1	72.84	1564.7	-5296.1
## - V5_J2_3	1	74.10	1566.0	-5291.9
## - V14_J1_4	1	83.45	1575.4	-5260.9
## - V23_J1_3	1	84.94	1576.8	-5256.0
## - V2_J1_3	1	85.45	1577.3	-5254.4
## - V17_J1_3	1	87.08	1579.0	-5249.0

```

## - V1_J2_7      1      89.00 1580.9 -5242.7
## - V3_J1_4      1      91.67 1583.6 -5233.9
## - V19_J2_3     1      99.15 1591.0 -5209.4
## - V12_1_2_J1_4 1     105.27 1597.2 -5189.4
## - V5_J1_5      1     105.89 1597.8 -5187.4
## - V4_J2_5      1     113.18 1605.1 -5163.7
## - V3_J2_1      1     118.11 1610.0 -5147.8
## - V26_J2_1     1     120.65 1612.5 -5139.6
## - V15_J2_7     1     124.65 1616.5 -5126.7
## - V4_J2_1      1     129.06 1621.0 -5112.5
## - V4_J2_3      1     130.94 1622.8 -5106.5
## - V15_J2_2     1     134.35 1626.2 -5095.6
## - V3_J2_5      1     134.55 1626.5 -5095.0
## - V19_J1_5     1     134.91 1626.8 -5093.8
## - V26_J2_5     1     154.87 1646.8 -5030.4
## - V26_J2_4     1     159.46 1651.4 -5015.9
## - V4_J2_4      1     162.26 1654.2 -5007.1
## - V12_1_2_J2_2 1     176.48 1668.4 -4962.6
## - V19_J1_4     1     191.74 1683.6 -4915.3
## - V3_J2_4      1     199.72 1691.6 -4890.7
## - V3_J2_3      1     203.69 1695.6 -4878.5
## - V20_J2_2     1     263.46 1755.4 -4698.3
## - V5_J2_5      1     267.00 1758.9 -4687.8
## - J            12     325.06 1817.0 -4592.0
## - V5_J2_4      1     307.96 1799.9 -4568.2
## - V26_J2_3     1     315.26 1807.2 -4547.1
## - V16_J2_2     1     437.19 1929.1 -4207.6
## - V            19     1022.97 2514.9 -2948.1
##
## Step:  AIC=-5541.82
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
## V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
## V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
## V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V14_J1_2 + V13_3_J2_5 +
## V20_J1_2 + V13_2_J1_4 + V26_J1_6 + V13_1_J1_5 + V26_J1_1 +
## V2_J1_6 + V29_J1_1 + V15_J2_3 + V30_J2_3 + V24_J2_3 + V13_2_J1_5 +
## V13_1_J2_2 + V19_J1_3 + V14_J1_3 + V19_J1_1 + V16_J2_1
##
##
##           Df Sum of Sq    RSS    AIC
## + V3_J1_2      1      2.96 1485.8 -5545.5
## + V13_2_J2_5    1      2.92 1485.8 -5545.4

```


## + V29_J2_3	1	2.82	1485.9	-5545.1
## + V13_3_J1_2	1	2.81	1485.9	-5545.0
## + V1_J1_1	1	2.75	1486.0	-5544.8
## + V13_1_J2_7	1	2.71	1486.0	-5544.7
## + V14_J2_7	1	2.66	1486.1	-5544.5
## + V13_2_J2_7	1	2.64	1486.1	-5544.4
## + V17_J2_1	1	2.63	1486.1	-5544.4
## + V23_J1_7	1	2.62	1486.1	-5544.3
## + V23_J2_2	1	2.54	1486.2	-5544.0
## + V24_J1_3	1	2.52	1486.2	-5544.0
## + V13_2_J2_2	1	2.52	1486.2	-5544.0
## + V13_3_J1_1	1	2.37	1486.3	-5543.5
## + V29_J1_6	1	2.31	1486.4	-5543.3
## + V1_J1_7	1	2.11	1486.6	-5542.6
## + V20_J1_6	1	2.11	1486.6	-5542.5
## + V29_J2_4	1	2.08	1486.6	-5542.4
## + V29_J2_2	1	2.07	1486.7	-5542.4
## + V30_J1_7	1	2.04	1486.7	-5542.3
## + V13_2_J1_2	1	2.03	1486.7	-5542.3
## + V13_1_J2_4	1	2.02	1486.7	-5542.2
## + V16_J1_2	1	2.01	1486.7	-5542.2
## + V20_J1_7	1	1.99	1486.7	-5542.1
## + V23_J2_3	1	1.96	1486.8	-5542.0
## + V16_J1_4	1	1.95	1486.8	-5542.0
## <none>			1488.7	-5541.8
## + V1_J2_3	1	1.80	1486.9	-5541.5
## + V29_J2_1	1	1.78	1486.9	-5541.4
## + V20_J2_4	1	1.76	1487.0	-5541.3
## + V26_J2_2	1	1.71	1487.0	-5541.2
## + V29_J1_2	1	1.63	1487.1	-5540.9
## + V5_J1_6	1	1.61	1487.1	-5540.8
## + V12_1_2_J1_5	1	1.58	1487.1	-5540.7
## + V16_J1_6	1	1.57	1487.2	-5540.7
## + V24_J1_5	1	1.53	1487.2	-5540.5
## + V15_J2_4	1	1.53	1487.2	-5540.5
## + V12_1_2_J1_1	1	1.34	1487.4	-5539.9
## + V14_J2_2	1	1.32	1487.4	-5539.8
## + V20_J1_1	1	1.26	1487.5	-5539.6
## + V13_3_J2_4	1	1.26	1487.5	-5539.6
## + V2_J1_7	1	1.23	1487.5	-5539.5
## + V24_J2_7	1	1.20	1487.5	-5539.4
## + V5_J1_2	1	1.17	1487.5	-5539.3
## + V4_J1_6	1	1.17	1487.5	-5539.3
## + V16_J2_4	1	1.17	1487.5	-5539.3
## + V5_J2_7	1	1.17	1487.5	-5539.3
## + V3_J1_7	1	1.16	1487.6	-5539.2
## + V17_J1_7	1	1.14	1487.6	-5539.2
## + V26_J1_7	1	1.05	1487.7	-5538.8
## + V13_2_J1_3	1	1.04	1487.7	-5538.8
## + V24_J2_4	1	1.03	1487.7	-5538.8
## + V24_J1_1	1	1.01	1487.7	-5538.7
## + V20_J1_4	1	0.94	1487.8	-5538.5
## - V13_1_J1_3	1	2.87	1491.6	-5538.5
## + V29_J1_4	1	0.93	1487.8	-5538.4

## + V2_J1_2	1	0.89	1487.8	-5538.3
## + V13_2_J2_3	1	0.88	1487.8	-5538.3
## + V17_J1_2	1	0.84	1487.9	-5538.1
## + V20_J1_5	1	0.82	1487.9	-5538.1
## + V5_J1_7	1	0.82	1487.9	-5538.0
## + V1_J1_2	1	0.80	1487.9	-5538.0
## + V17_J2_4	1	0.77	1488.0	-5537.9
## + V13_3_J2_7	1	0.77	1488.0	-5537.9
## + V19_J1_6	1	0.74	1488.0	-5537.8
## + V2_J2_5	1	0.74	1488.0	-5537.8
## + V2_J2_3	1	0.68	1488.0	-5537.6
## + V20_J1_3	1	0.68	1488.0	-5537.5
## + V12_1_2_J2_5	1	0.66	1488.1	-5537.5
## + V23_J1_2	1	0.65	1488.1	-5537.4
## + V23_J2_5	1	0.62	1488.1	-5537.4
## + V12_1_2_J2_1	1	0.62	1488.1	-5537.4
## - V16_J2_1	1	3.19	1491.9	-5537.3
## + V30_J2_1	1	0.58	1488.1	-5537.2
## + V24_J2_2	1	0.55	1488.2	-5537.1
## - V19_J1_1	1	3.26	1492.0	-5537.1
## + V30_J1_6	1	0.53	1488.2	-5537.0
## + V16_J1_1	1	0.50	1488.2	-5536.9
## + V15_J1_4	1	0.49	1488.2	-5536.9
## + V1_J1_6	1	0.48	1488.2	-5536.9
## + V20_J2_7	1	0.47	1488.2	-5536.8
## + V19_J2_7	1	0.46	1488.2	-5536.8
## + V15_J1_5	1	0.43	1488.3	-5536.7
## + V2_J2_1	1	0.43	1488.3	-5536.7
## + V13_1_J2_5	1	0.43	1488.3	-5536.7
## - V13_1_J2_2	1	3.38	1492.1	-5536.7
## + V30_J2_7	1	0.41	1488.3	-5536.6
## + V3_J1_3	1	0.41	1488.3	-5536.6
## + V1_J2_1	1	0.40	1488.3	-5536.6
## + V5_J1_1	1	0.40	1488.3	-5536.6
## + V23_J2_4	1	0.39	1488.3	-5536.5
## + V29_J2_7	1	0.38	1488.3	-5536.5
## + V13_1_J1_6	1	0.35	1488.4	-5536.4
## + V4_J1_1	1	0.32	1488.4	-5536.3
## + V24_J1_2	1	0.29	1488.4	-5536.2
## - V13_2_J1_5	1	3.52	1492.2	-5536.2
## + V30_J1_4	1	0.28	1488.4	-5536.2
## - V14_J1_3	1	3.54	1492.2	-5536.1
## + V14_J1_1	1	0.27	1488.5	-5536.1
## + V19_J1_2	1	0.27	1488.5	-5536.1
## + V13_3_J2_2	1	0.25	1488.5	-5536.1
## + V29_J2_5	1	0.24	1488.5	-5536.0
## + V4_J2_2	1	0.24	1488.5	-5536.0
## + V19_J1_7	1	0.23	1488.5	-5536.0
## + V17_J2_5	1	0.23	1488.5	-5536.0
## + V5_J2_2	1	0.23	1488.5	-5536.0
## + V13_3_J1_6	1	0.22	1488.5	-5535.9
## + V13_1_J1_4	1	0.21	1488.5	-5535.9
## + V4_J1_7	1	0.20	1488.5	-5535.9
## + V3_J1_6	1	0.20	1488.5	-5535.9

## + V4_J1_2	1	0.18	1488.5	-5535.8
## + V3_J2_2	1	0.16	1488.5	-5535.8
## + V13_3_J1_4	1	0.15	1488.6	-5535.7
## + V13_1_J1_1	1	0.15	1488.6	-5535.7
## + V23_J1_5	1	0.15	1488.6	-5535.7
## + V17_J1_6	1	0.13	1488.6	-5535.7
## + V13_1_J2_3	1	0.12	1488.6	-5535.6
## + V13_3_J1_5	1	0.12	1488.6	-5535.6
## + V2_J1_1	1	0.11	1488.6	-5535.6
## + V3_J2_7	1	0.11	1488.6	-5535.6
## + V17_J1_1	1	0.10	1488.6	-5535.5
## + V1_J2_4	1	0.09	1488.6	-5535.5
## + V30_J2_4	1	0.08	1488.6	-5535.5
## + V16_J2_5	1	0.07	1488.6	-5535.4
## + V1_J1_4	1	0.07	1488.7	-5535.4
## + V16_J1_7	1	0.07	1488.7	-5535.4
## + V16_J1_5	1	0.06	1488.7	-5535.4
## + V3_J1_1	1	0.06	1488.7	-5535.4
## + V2_J2_4	1	0.06	1488.7	-5535.4
## + V26_J1_2	1	0.06	1488.7	-5535.4
## + V20_J2_5	1	0.05	1488.7	-5535.4
## + V5_J1_3	1	0.05	1488.7	-5535.4
## + V19_J2_2	1	0.05	1488.7	-5535.4
## + V23_J1_1	1	0.04	1488.7	-5535.3
## + V23_J1_6	1	0.04	1488.7	-5535.3
## + V13_3_J2_3	1	0.04	1488.7	-5535.3
## + V24_J1_4	1	0.03	1488.7	-5535.3
## + V13_2_J1_1	1	0.03	1488.7	-5535.3
## + V17_J1_4	1	0.03	1488.7	-5535.3
## + V13_2_J2_1	1	0.03	1488.7	-5535.3
## + V13_1_J2_1	1	0.03	1488.7	-5535.3
## + V13_3_J1_7	1	0.03	1488.7	-5535.3
## + V24_J2_1	1	0.02	1488.7	-5535.3
## + V13_3_J1_3	1	0.02	1488.7	-5535.3
## + V13_3_J2_1	1	0.02	1488.7	-5535.2
## + V13_2_J2_4	1	0.02	1488.7	-5535.2
## + V12_1_2_J2_4	1	0.02	1488.7	-5535.2
## + V17_J2_3	1	0.01	1488.7	-5535.2
## + V15_J2_5	1	0.01	1488.7	-5535.2
## + V14_J1_7	1	0.01	1488.7	-5535.2
## + V12_1_2_J2_3	1	0.00	1488.7	-5535.2
## + V2_J1_4	1	0.00	1488.7	-5535.2
## + V14_J1_6	1	0.00	1488.7	-5535.2
## + V26_J2_7	1	0.00	1488.7	-5535.2
## - V14_J1_2	1	3.96	1492.7	-5534.6
## - V26_J1_1	1	3.97	1492.7	-5534.6
## - V2_J1_6	1	4.27	1493.0	-5533.5
## - V29_J1_1	1	4.56	1493.3	-5532.6
## - V13_2_J1_4	1	4.71	1493.4	-5532.0
## - V26_J1_3	1	5.04	1493.8	-5530.9
## - V20_J1_2	1	5.10	1493.8	-5530.7
## - V30_J2_3	1	5.54	1494.3	-5529.1
## - V23_J2_1	1	5.58	1494.3	-5529.0
## - V19_J1_3	1	5.60	1494.3	-5528.9

## - V24_J2_3	1	5.90	1494.6	-5527.9
## - V2_J1_5	1	6.06	1494.8	-5527.3
## - V15_J2_3	1	6.09	1494.8	-5527.2
## - V13_3_J2_5	1	6.26	1495.0	-5526.6
## - V1_J1_5	1	6.36	1495.1	-5526.3
## - V23_J1_4	1	7.23	1496.0	-5523.3
## - V13_1_J1_5	1	7.29	1496.0	-5523.0
## - V24_J2_5	1	7.74	1496.5	-5521.5
## - V1_J2_5	1	7.75	1496.5	-5521.4
## - V26_J1_6	1	7.86	1496.6	-5521.1
## - V29_J1_5	1	8.31	1497.0	-5519.5
## - V13_2_J1_6	1	8.66	1497.4	-5518.3
## - V24_J1_7	1	9.50	1498.2	-5515.4
## - V12_1_2_J1_2	1	9.76	1498.5	-5514.5
## - V17_J1_5	1	10.01	1498.7	-5513.6
## - V29_J1_7	1	10.27	1499.0	-5512.7
## - V15_J2_1	1	10.86	1499.6	-5510.6
## - V13_1_J1_2	1	12.31	1501.0	-5505.6
## - V12_1_2_J1_6	1	13.93	1502.7	-5500.0
## - V13_1_J1_7	1	15.74	1504.5	-5493.7
## - V16_J2_3	1	15.97	1504.7	-5493.0
## - V20_J2_1	1	16.39	1505.1	-5491.5
## - V24_J1_6	1	16.90	1505.6	-5489.8
## - V14_J2_5	1	18.17	1506.9	-5485.4
## - V26_J1_5	1	18.39	1507.1	-5484.6
## - V4_J1_3	1	19.44	1508.2	-5481.0
## - V20_J2_3	1	19.84	1508.5	-5479.6
## - V12_1_2_J1_7	1	23.46	1512.2	-5467.1
## - V14_J2_1	1	24.22	1512.9	-5464.5
## - V30_J1_5	1	24.72	1513.4	-5462.8
## - V2_J2_7	1	25.85	1514.6	-5458.9
## - V23_J2_7	1	26.16	1514.9	-5457.9
## - V29_J1_3	1	28.11	1516.8	-5451.2
## - V30_J2_5	1	28.66	1517.4	-5449.3
## - V2_J2_2	1	28.68	1517.4	-5449.2
## - V4_J1_5	1	29.52	1518.2	-5446.4
## - V12_1_2_J2_7	1	29.55	1518.3	-5446.2
## - V3_J1_5	1	30.10	1518.8	-5444.4
## - V15_J1_1	1	31.65	1520.4	-5439.1
## - V15_J1_2	1	35.42	1524.1	-5426.2
## - V14_J2_4	1	37.99	1526.7	-5417.4
## - V4_J2_7	1	39.19	1527.9	-5413.3
## - V19_J2_5	1	39.58	1528.3	-5412.0
## - V30_J1_3	1	39.60	1528.3	-5412.0
## - V16_J2_7	1	39.97	1528.7	-5410.7
## - V5_J1_4	1	40.97	1529.7	-5407.3
## - V26_J1_4	1	41.27	1530.0	-5406.3
## - V19_J2_4	1	41.27	1530.0	-5406.2
## - V12_1_2_J1_3	1	41.56	1530.3	-5405.3
## - V13_2_J1_7	1	42.57	1531.3	-5401.8
## - V4_J1_4	1	50.11	1538.8	-5376.3
## - V5_J2_1	1	54.15	1542.9	-5362.7
## - V30_J1_2	1	55.07	1543.8	-5359.6
## - V19_J2_1	1	55.91	1544.6	-5356.7

```

## - V15_J1_6      1      60.67 1549.4 -5340.8
## - V14_J2_3      1      61.57 1550.3 -5337.7
## - V17_J2_7      1      62.81 1551.5 -5333.6
## - V15_J1_3      1      63.22 1551.9 -5332.2
## - V15_J1_7      1      64.55 1553.3 -5327.7
## - V1_J2_2       1      65.70 1554.4 -5323.9
## - V17_J2_2      1      66.47 1555.2 -5321.3
## - V14_J1_5      1      67.63 1556.3 -5317.4
## - V1_J1_3       1      69.06 1557.8 -5312.6
## - V16_J1_3      1      70.00 1558.7 -5309.5
## - V30_J1_1      1      72.41 1561.1 -5301.5
## - V30_J2_2      1      72.50 1561.2 -5301.2
## - V5_J2_3       1      74.37 1563.1 -5295.0
## - V14_J1_4      1      83.38 1572.1 -5265.1
## - V23_J1_3      1      85.14 1573.8 -5259.3
## - V2_J1_3       1      85.25 1574.0 -5258.9
## - V17_J1_3      1      86.93 1575.6 -5253.3
## - V1_J2_7       1      88.81 1577.5 -5247.1
## - V3_J1_4       1      91.58 1580.3 -5238.0
## - V19_J2_3      1      99.47 1588.2 -5212.1
## - V12_1_2_J1_4  1     104.66 1593.4 -5195.2
## - V5_J1_5       1     105.45 1594.2 -5192.6
## - V4_J2_5       1     113.08 1601.8 -5167.8
## - V3_J2_1       1     120.67 1609.4 -5143.2
## - V26_J2_1      1     123.14 1611.9 -5135.2
## - V15_J2_7      1     124.26 1613.0 -5131.6
## - V4_J2_3       1     131.36 1620.1 -5108.8
## - V4_J2_1       1     131.68 1620.4 -5107.7
## - V15_J2_2      1     134.03 1622.7 -5100.2
## - V3_J2_5       1     134.35 1623.1 -5099.2
## - V19_J1_5      1     134.45 1623.2 -5098.9
## - V26_J2_5      1     154.66 1643.4 -5034.5
## - V26_J2_4      1     159.43 1648.2 -5019.4
## - V4_J2_4       1     162.33 1651.0 -5010.3
## - V12_1_2_J2_2  1     175.97 1664.7 -4967.5
## - V19_J1_4      1     191.63 1680.3 -4918.8
## - V3_J2_4       1     199.70 1688.4 -4893.9
## - V3_J2_3       1     204.14 1692.8 -4880.2
## - V20_J2_2      1     263.76 1752.5 -4700.2
## - V5_J2_5       1     266.72 1755.4 -4691.5
## - J             12     328.12 1816.8 -4585.7
## - V5_J2_4       1     307.93 1796.6 -4570.8
## - V26_J2_3      1     315.77 1804.5 -4548.2
## - V16_J2_2      1     440.15 1928.9 -4201.6
## - V             19     1025.43 2514.2 -2943.0
##
## Step:  AIC=-5545.52
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##      V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##      V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##      V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
##      V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
##      V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
##      V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +

```

```

##      V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
##      V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
##      V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
##      V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
##      V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
##      V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
##      V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
##      V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
##      V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
##      V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V14_J1_2 + V13_3_J2_5 +
##      V20_J1_2 + V13_2_J1_4 + V26_J1_6 + V13_1_J1_5 + V26_J1_1 +
##      V2_J1_6 + V29_J1_1 + V15_J2_3 + V30_J2_3 + V24_J2_3 + V13_2_J1_5 +
##      V13_1_J2_2 + V19_J1_3 + V14_J1_3 + V19_J1_1 + V16_J2_1 +
##      V3_J1_2

```

```

##
##      Df Sum of Sq    RSS    AIC
## + V13_2_J2_5      1      2.92 1482.8 -5549.1
## + V1_J1_1          1      2.85 1482.9 -5548.9
## + V29_J2_3          1      2.81 1483.0 -5548.7
## + V13_1_J2_7        1      2.78 1483.0 -5548.6
## + V24_J1_3          1      2.72 1483.0 -5548.4
## + V23_J1_7          1      2.71 1483.0 -5548.4
## + V14_J2_7          1      2.67 1483.1 -5548.3
## + V17_J2_1          1      2.65 1483.1 -5548.2
## + V23_J2_2          1      2.64 1483.1 -5548.1
## + V13_2_J2_7        1      2.54 1483.2 -5547.8
## + V13_2_J2_2        1      2.43 1483.3 -5547.4
## + V29_J1_6          1      2.41 1483.3 -5547.3
## + V13_3_J1_2        1      2.39 1483.4 -5547.3
## + V13_3_J1_1        1      2.32 1483.4 -5547.0
## + V20_J1_6          1      2.13 1483.6 -5546.3
## + V29_J2_4          1      2.09 1483.7 -5546.2
## + V13_1_J2_4        1      2.05 1483.7 -5546.1
## + V1_J1_7           1      2.02 1483.7 -5546.0
## + V30_J1_7          1      2.01 1483.7 -5545.9
## + V20_J1_7          1      2.00 1483.8 -5545.9
## + V16_J1_4          1      1.98 1483.8 -5545.8
## + V29_J2_2          1      1.97 1483.8 -5545.8
## + V23_J2_3          1      1.95 1483.8 -5545.7
## <none>              1485.8 -5545.5
## + V26_J2_2          1      1.84 1483.9 -5545.3
## + V1_J2_3           1      1.81 1483.9 -5545.2
## + V29_J2_1          1      1.77 1484.0 -5545.1
## + V20_J2_4          1      1.72 1484.0 -5544.9
## + V13_2_J1_2        1      1.68 1484.1 -5544.8
## + V16_J1_2          1      1.67 1484.1 -5544.7
## + V5_J1_6           1      1.66 1484.1 -5544.7
## + V12_1_2_J1_5      1      1.58 1484.2 -5544.4
## + V24_J1_5          1      1.54 1484.2 -5544.3
## + V15_J2_4          1      1.53 1484.2 -5544.2
## + V16_J1_6          1      1.49 1484.3 -5544.1
## + V12_1_2_J1_1      1      1.39 1484.4 -5543.7
## + V29_J1_2          1      1.33 1484.4 -5543.5
## + V14_J2_2          1      1.32 1484.4 -5543.5

```

## + V2_J1_7	1	1.31	1484.5	-5543.5
## + V20_J1_1	1	1.25	1484.5	-5543.3
## + V13_3_J2_4	1	1.25	1484.5	-5543.3
## + V16_J2_4	1	1.15	1484.6	-5542.9
## + V2_J1_2	1	1.15	1484.6	-5542.9
## + V24_J2_7	1	1.13	1484.6	-5542.9
## + V5_J2_7	1	1.12	1484.6	-5542.8
## + V4_J1_6	1	1.10	1484.7	-5542.7
## + V17_J1_2	1	1.09	1484.7	-5542.7
## + V17_J1_7	1	1.08	1484.7	-5542.7
## - V13_1_J1_3	1	2.74	1488.5	-5542.6
## + V24_J1_1	1	1.05	1484.7	-5542.6
## + V1_J1_2	1	1.05	1484.7	-5542.6
## + V24_J2_4	1	1.03	1484.7	-5542.5
## + V20_J1_4	1	0.97	1484.8	-5542.3
## + V26_J1_7	1	0.97	1484.8	-5542.3
## + V13_2_J1_3	1	0.92	1484.8	-5542.1
## + V29_J1_4	1	0.92	1484.8	-5542.1
## + V5_J1_2	1	0.89	1484.9	-5542.0
## + V23_J1_2	1	0.88	1484.9	-5542.0
## + V13_2_J2_3	1	0.88	1484.9	-5542.0
## + V20_J1_5	1	0.85	1484.9	-5541.9
## - V3_J1_2	1	2.96	1488.7	-5541.8
## + V5_J1_7	1	0.79	1485.0	-5541.7
## + V17_J2_4	1	0.78	1485.0	-5541.6
## + V2_J2_5	1	0.72	1485.0	-5541.4
## + V13_3_J2_7	1	0.72	1485.0	-5541.4
## + V2_J2_3	1	0.70	1485.1	-5541.3
## + V19_J1_6	1	0.69	1485.1	-5541.3
## + V12_1_2_J2_5	1	0.67	1485.1	-5541.2
## + V3_J1_7	1	0.63	1485.1	-5541.1
## + V23_J2_5	1	0.62	1485.1	-5541.0
## + V12_1_2_J2_1	1	0.61	1485.1	-5541.0
## + V20_J1_3	1	0.61	1485.2	-5541.0
## + V30_J2_1	1	0.60	1485.2	-5541.0
## - V16_J2_1	1	3.21	1489.0	-5540.9
## + V3_J1_6	1	0.56	1485.2	-5540.8
## + V30_J1_6	1	0.55	1485.2	-5540.8
## + V19_J2_7	1	0.52	1485.2	-5540.7
## + V24_J2_2	1	0.51	1485.2	-5540.7
## + V15_J1_4	1	0.49	1485.3	-5540.6
## + V16_J1_1	1	0.46	1485.3	-5540.5
## + V24_J1_2	1	0.45	1485.3	-5540.5
## - V19_J1_1	1	3.34	1489.1	-5540.5
## + V20_J2_7	1	0.45	1485.3	-5540.5
## + V13_1_J2_5	1	0.44	1485.3	-5540.4
## + V30_J2_7	1	0.44	1485.3	-5540.4
## + V1_J1_6	1	0.44	1485.3	-5540.4
## + V15_J1_5	1	0.44	1485.3	-5540.4
## + V19_J1_2	1	0.43	1485.3	-5540.4
## + V29_J2_7	1	0.43	1485.3	-5540.4
## + V2_J2_1	1	0.42	1485.3	-5540.3
## + V1_J2_1	1	0.41	1485.3	-5540.3
## + V23_J2_4	1	0.38	1485.4	-5540.2

## + V5_J1_1	1	0.38	1485.4	-5540.2
## - V13_1_J2_2	1	3.44	1489.2	-5540.1
## + V4_J1_1	1	0.36	1485.4	-5540.1
## + V13_1_J1_6	1	0.33	1485.4	-5540.0
## + V4_J1_2	1	0.31	1485.5	-5540.0
## + V3_J1_1	1	0.30	1485.5	-5539.9
## + V4_J2_2	1	0.28	1485.5	-5539.9
## + V13_3_J2_2	1	0.28	1485.5	-5539.9
## + V14_J1_1	1	0.27	1485.5	-5539.8
## - V13_2_J1_5	1	3.53	1489.3	-5539.8
## + V30_J1_4	1	0.27	1485.5	-5539.8
## + V19_J1_7	1	0.26	1485.5	-5539.8
## + V29_J2_5	1	0.25	1485.5	-5539.8
## + V5_J2_2	1	0.25	1485.5	-5539.8
## + V17_J2_5	1	0.23	1485.5	-5539.7
## + V13_3_J1_6	1	0.23	1485.5	-5539.7
## + V4_J1_7	1	0.23	1485.5	-5539.7
## + V13_1_J1_4	1	0.20	1485.5	-5539.6
## - V14_J1_3	1	3.63	1489.4	-5539.5
## + V13_1_J1_1	1	0.16	1485.6	-5539.5
## + V13_3_J1_4	1	0.16	1485.6	-5539.4
## + V23_J1_5	1	0.15	1485.6	-5539.4
## + V26_J1_2	1	0.14	1485.6	-5539.4
## + V3_J1_3	1	0.14	1485.6	-5539.4
## + V2_J1_1	1	0.13	1485.6	-5539.4
## + V13_3_J1_5	1	0.12	1485.6	-5539.3
## + V13_1_J2_3	1	0.11	1485.6	-5539.3
## + V17_J1_6	1	0.11	1485.6	-5539.3
## + V1_J2_4	1	0.09	1485.7	-5539.2
## + V17_J1_1	1	0.08	1485.7	-5539.2
## + V16_J2_5	1	0.08	1485.7	-5539.2
## + V30_J2_4	1	0.07	1485.7	-5539.1
## + V16_J1_5	1	0.07	1485.7	-5539.1
## + V19_J2_2	1	0.07	1485.7	-5539.1
## + V1_J1_4	1	0.06	1485.7	-5539.1
## + V2_J2_4	1	0.06	1485.7	-5539.1
## + V23_J1_1	1	0.05	1485.7	-5539.1
## + V16_J1_7	1	0.05	1485.7	-5539.1
## + V20_J2_5	1	0.04	1485.7	-5539.0
## + V13_3_J2_3	1	0.04	1485.7	-5539.0
## + V24_J1_4	1	0.03	1485.7	-5539.0
## + V13_1_J2_1	1	0.03	1485.7	-5539.0
## + V5_J1_3	1	0.03	1485.7	-5539.0
## + V13_2_J2_1	1	0.03	1485.7	-5539.0
## + V17_J1_4	1	0.03	1485.7	-5539.0
## + V23_J1_6	1	0.03	1485.7	-5539.0
## + V24_J2_1	1	0.03	1485.7	-5539.0
## + V13_2_J1_1	1	0.02	1485.7	-5539.0
## + V13_3_J1_7	1	0.02	1485.7	-5539.0
## + V13_3_J2_1	1	0.02	1485.7	-5539.0
## + V13_2_J2_4	1	0.02	1485.7	-5539.0
## + V12_1_2_J2_4	1	0.02	1485.7	-5538.9
## + V3_J2_2	1	0.01	1485.7	-5538.9
## + V17_J2_3	1	0.01	1485.8	-5538.9

## + V15_J2_5	1	0.01	1485.8	-5538.9
## + V13_3_J1_3	1	0.01	1485.8	-5538.9
## + V14_J1_7	1	0.01	1485.8	-5538.9
## + V12_1_2_J2_3	1	0.00	1485.8	-5538.9
## + V14_J1_6	1	0.00	1485.8	-5538.9
## + V2_J1_4	1	0.00	1485.8	-5538.9
## + V3_J2_7	1	0.00	1485.8	-5538.9
## + V26_J2_7	1	0.00	1485.8	-5538.9
## - V26_J1_1	1	3.86	1489.6	-5538.7
## - V2_J1_6	1	4.15	1489.9	-5537.6
## - V14_J1_2	1	4.46	1490.2	-5536.6
## - V20_J1_2	1	4.52	1490.3	-5536.3
## - V29_J1_1	1	4.65	1490.4	-5535.9
## - V13_2_J1_4	1	4.71	1490.5	-5535.7
## - V26_J1_3	1	5.27	1491.0	-5533.7
## - V23_J2_1	1	5.56	1491.3	-5532.7
## - V30_J2_3	1	5.60	1491.4	-5532.6
## - V19_J1_3	1	5.83	1491.6	-5531.8
## - V24_J2_3	1	5.91	1491.7	-5531.5
## - V2_J1_5	1	6.00	1491.8	-5531.2
## - V15_J2_3	1	6.10	1491.9	-5530.8
## - V13_3_J2_5	1	6.28	1492.0	-5530.2
## - V1_J1_5	1	6.32	1492.1	-5530.1
## - V23_J1_4	1	7.25	1493.0	-5526.8
## - V13_1_J1_5	1	7.26	1493.0	-5526.8
## - V26_J1_6	1	7.69	1493.5	-5525.3
## - V24_J2_5	1	7.73	1493.5	-5525.2
## - V1_J2_5	1	7.79	1493.5	-5525.0
## - V29_J1_5	1	8.27	1494.0	-5523.3
## - V13_2_J1_6	1	8.54	1494.3	-5522.4
## - V24_J1_7	1	9.39	1495.1	-5519.4
## - V17_J1_5	1	9.96	1495.7	-5517.4
## - V12_1_2_J1_2	1	10.42	1496.2	-5515.8
## - V29_J1_7	1	10.42	1496.2	-5515.8
## - V15_J2_1	1	10.87	1496.6	-5514.3
## - V13_1_J1_2	1	11.44	1497.2	-5512.3
## - V12_1_2_J1_6	1	14.06	1499.8	-5503.2
## - V13_1_J1_7	1	15.83	1501.6	-5497.0
## - V16_J2_3	1	16.00	1501.8	-5496.5
## - V20_J2_1	1	16.27	1502.0	-5495.5
## - V24_J1_6	1	16.74	1502.5	-5493.9
## - V14_J2_5	1	17.99	1503.8	-5489.6
## - V26_J1_5	1	18.49	1504.2	-5487.8
## - V20_J2_3	1	19.69	1505.5	-5483.7
## - V4_J1_3	1	19.86	1505.6	-5483.1
## - V12_1_2_J1_7	1	23.61	1509.4	-5470.2
## - V14_J2_1	1	24.02	1509.8	-5468.8
## - V30_J1_5	1	24.80	1510.6	-5466.1
## - V2_J2_7	1	26.19	1512.0	-5461.3
## - V23_J2_7	1	26.44	1512.2	-5460.4
## - V3_J1_5	1	26.93	1512.7	-5458.7
## - V29_J1_3	1	28.62	1514.4	-5453.0
## - V30_J2_5	1	28.78	1514.5	-5452.4
## - V2_J2_2	1	29.02	1514.8	-5451.6

## - V4_J1_5	1	29.60	1515.3	-5449.6
## - V12_1_2_J2_7	1	29.78	1515.5	-5449.0
## - V15_J1_1	1	31.45	1517.2	-5443.2
## - V15_J1_2	1	36.54	1522.3	-5425.8
## - V14_J2_4	1	37.74	1523.5	-5421.7
## - V4_J2_7	1	39.56	1525.3	-5415.5
## - V19_J2_5	1	39.63	1525.4	-5415.3
## - V30_J1_3	1	40.01	1525.8	-5414.0
## - V16_J2_7	1	40.36	1526.1	-5412.8
## - V5_J1_4	1	40.90	1526.7	-5410.9
## - V19_J2_4	1	41.34	1527.1	-5409.5
## - V26_J1_4	1	41.40	1527.2	-5409.2
## - V12_1_2_J1_3	1	42.07	1527.8	-5407.0
## - V13_2_J1_7	1	42.81	1528.6	-5404.5
## - V4_J1_4	1	50.20	1536.0	-5379.4
## - V5_J2_1	1	54.06	1539.8	-5366.3
## - V19_J2_1	1	55.97	1541.7	-5359.9
## - V30_J1_2	1	56.58	1542.3	-5357.8
## - V15_J1_6	1	60.37	1546.1	-5345.0
## - V14_J2_3	1	61.22	1547.0	-5342.2
## - V15_J1_3	1	62.52	1548.3	-5337.8
## - V17_J2_7	1	63.28	1549.0	-5335.3
## - V15_J1_7	1	64.27	1550.0	-5332.0
## - V1_J2_2	1	66.16	1551.9	-5325.6
## - V17_J2_2	1	66.93	1552.7	-5323.0
## - V14_J1_5	1	67.33	1553.1	-5321.7
## - V1_J1_3	1	69.86	1555.6	-5313.2
## - V16_J1_3	1	70.80	1556.5	-5310.1
## - V30_J1_1	1	72.28	1558.0	-5305.2
## - V30_J2_2	1	72.71	1558.5	-5303.7
## - V5_J2_3	1	74.24	1560.0	-5298.6
## - V14_J1_4	1	83.01	1568.8	-5269.5
## - V3_J1_4	1	85.01	1570.8	-5262.8
## - V23_J1_3	1	85.97	1571.7	-5259.7
## - V2_J1_3	1	86.16	1571.9	-5259.0
## - V17_J1_3	1	87.81	1573.6	-5253.6
## - V1_J2_7	1	89.38	1575.1	-5248.4
## - V19_J2_3	1	99.53	1585.3	-5215.0
## - V12_1_2_J1_4	1	104.61	1590.4	-5198.4
## - V5_J1_5	1	105.36	1591.1	-5195.9
## - V3_J2_1	1	112.80	1598.6	-5171.6
## - V4_J2_5	1	113.19	1599.0	-5170.4
## - V26_J2_1	1	123.36	1609.1	-5137.4
## - V15_J2_7	1	123.72	1609.5	-5136.2
## - V3_J2_5	1	125.91	1611.7	-5129.2
## - V4_J2_3	1	131.45	1617.2	-5111.3
## - V4_J2_1	1	131.80	1617.6	-5110.2
## - V15_J2_2	1	133.51	1619.3	-5104.7
## - V19_J1_5	1	134.58	1620.3	-5101.3
## - V26_J2_5	1	154.90	1640.7	-5036.5
## - V26_J2_4	1	159.69	1645.5	-5021.3
## - V4_J2_4	1	162.48	1648.2	-5012.5
## - V12_1_2_J2_2	1	176.48	1662.2	-4968.5
## - V3_J2_4	1	188.47	1674.2	-4931.1

```

## - V19_J1_4      1      191.76 1677.5 -4920.9
## - V3_J2_3       1      192.88 1678.6 -4917.5
## - V20_J2_2      1      264.05 1749.8 -4701.5
## - V5_J2_5       1      266.51 1752.3 -4694.2
## - J             12      307.97 1793.7 -4645.6
## - V5_J2_4       1      307.73 1793.5 -4573.3
## - V26_J2_3      1      316.06 1801.8 -4549.2
## - V16_J2_2      1      441.26 1927.0 -4199.9
## - V             19     1022.20 2508.0 -2949.2
##
## Step:  AIC=-5549.12
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
## V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
## V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
## V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V14_J1_2 + V13_3_J2_5 +
## V20_J1_2 + V13_2_J1_4 + V26_J1_6 + V13_1_J1_5 + V26_J1_1 +
## V2_J1_6 + V29_J1_1 + V15_J2_3 + V30_J2_3 + V24_J2_3 + V13_2_J1_5 +
## V13_1_J2_2 + V19_J1_3 + V14_J1_3 + V19_J1_1 + V16_J2_1 +
## V3_J1_2 + V13_2_J2_5
##
##
##          Df Sum of Sq    RSS    AIC
## + V29_J2_3      1      2.91 1479.9 -5552.7
## + V1_J1_1       1      2.84 1480.0 -5552.4
## + V23_J1_7      1      2.65 1480.2 -5551.8
## + V13_1_J2_7    1      2.64 1480.2 -5551.7
## + V14_J2_7      1      2.64 1480.2 -5551.7
## + V24_J1_3      1      2.61 1480.2 -5551.6
## + V17_J2_1      1      2.54 1480.3 -5551.4
## + V23_J2_2      1      2.50 1480.3 -5551.2
## + V13_3_J1_2    1      2.37 1480.5 -5550.8
## + V29_J1_6      1      2.37 1480.5 -5550.8
## + V13_3_J1_1    1      2.32 1480.5 -5550.6
## + V13_2_J1_2    1      2.31 1480.5 -5550.6
## + V13_1_J2_4    1      2.11 1480.7 -5549.9
## + V29_J2_2      1      2.09 1480.7 -5549.8
## + V20_J1_6      1      2.08 1480.8 -5549.8
## + V29_J2_4      1      2.05 1480.8 -5549.7
## + V23_J2_3      1      2.04 1480.8 -5549.7
## + V1_J1_7       1      2.01 1480.8 -5549.5
## + V30_J1_7      1      2.00 1480.8 -5549.5
## + V13_2_J2_7    1      1.95 1480.9 -5549.3

```

## + V20_J1_7	1	1.95	1480.9	-5549.3
## + V16_J1_4	1	1.94	1480.9	-5549.3
## <none>			1482.8	-5549.1
## + V13_2_J2_2	1	1.86	1481.0	-5549.0
## + V29_J2_1	1	1.85	1481.0	-5549.0
## + V26_J2_2	1	1.80	1481.0	-5548.8
## + V1_J2_3	1	1.79	1481.0	-5548.8
## + V5_J1_6	1	1.71	1481.1	-5548.5
## + V15_J2_4	1	1.70	1481.1	-5548.5
## + V20_J2_4	1	1.66	1481.2	-5548.3
## + V24_J1_5	1	1.62	1481.2	-5548.2
## + V12_1_2_J1_5	1	1.61	1481.2	-5548.1
## + V16_J1_2	1	1.56	1481.3	-5548.0
## + V16_J1_6	1	1.55	1481.3	-5547.9
## + V13_2_J2_3	1	1.36	1481.5	-5547.3
## + V14_J2_2	1	1.36	1481.5	-5547.2
## + V20_J1_1	1	1.32	1481.5	-5547.1
## + V12_1_2_J1_1	1	1.29	1481.5	-5547.0
## + V13_3_J2_4	1	1.27	1481.6	-5546.9
## + V2_J1_7	1	1.26	1481.6	-5546.9
## + V29_J1_2	1	1.26	1481.6	-5546.9
## + V2_J1_2	1	1.23	1481.6	-5546.8
## + V16_J2_4	1	1.22	1481.6	-5546.8
## + V17_J1_2	1	1.17	1481.7	-5546.6
## + V24_J2_7	1	1.16	1481.7	-5546.5
## + V5_J2_7	1	1.13	1481.7	-5546.4
## + V17_J1_7	1	1.12	1481.7	-5546.4
## + V1_J1_2	1	1.07	1481.8	-5546.3
## + V4_J1_6	1	1.07	1481.8	-5546.2
## + V24_J1_1	1	1.06	1481.8	-5546.2
## + V24_J2_4	1	1.01	1481.8	-5546.0
## + V20_J1_4	1	0.98	1481.9	-5545.9
## + V23_J1_2	1	0.95	1481.9	-5545.8
## + V26_J1_7	1	0.93	1481.9	-5545.8
## + V29_J1_4	1	0.92	1481.9	-5545.7
## + V5_J1_2	1	0.89	1482.0	-5545.6
## - V13_1_J1_3	1	2.91	1485.8	-5545.6
## - V13_2_J2_5	1	2.92	1485.8	-5545.5
## + V20_J1_5	1	0.85	1482.0	-5545.5
## - V3_J1_2	1	2.96	1485.8	-5545.4
## + V5_J1_7	1	0.76	1482.1	-5545.1
## + V17_J2_4	1	0.75	1482.1	-5545.1
## + V13_3_J2_7	1	0.74	1482.1	-5545.1
## + V20_J1_3	1	0.72	1482.1	-5545.0
## - V16_J2_1	1	3.09	1485.9	-5544.9
## + V19_J1_6	1	0.66	1482.2	-5544.8
## + V3_J1_7	1	0.65	1482.2	-5544.8
## + V2_J2_3	1	0.64	1482.2	-5544.7
## + V30_J2_1	1	0.62	1482.2	-5544.6
## + V13_2_J1_3	1	0.59	1482.2	-5544.6
## + V30_J1_6	1	0.56	1482.3	-5544.4
## + V12_1_2_J2_1	1	0.54	1482.3	-5544.4
## + V3_J1_6	1	0.53	1482.3	-5544.3
## + V24_J2_2	1	0.53	1482.3	-5544.3

## + V16_J1_1	1	0.51	1482.3	-5544.3
## + V20_J2_7	1	0.51	1482.3	-5544.3
## + V19_J2_7	1	0.50	1482.3	-5544.2
## + V29_J2_5	1	0.50	1482.3	-5544.2
## - V13_1_J2_2	1	3.29	1486.1	-5544.2
## + V17_J2_5	1	0.47	1482.4	-5544.1
## + V2_J2_1	1	0.47	1482.4	-5544.1
## + V24_J1_2	1	0.46	1482.4	-5544.1
## - V19_J1_1	1	3.35	1486.2	-5544.0
## + V2_J2_5	1	0.44	1482.4	-5544.0
## + V19_J1_2	1	0.43	1482.4	-5544.0
## + V1_J1_6	1	0.43	1482.4	-5544.0
## + V15_J1_4	1	0.42	1482.4	-5544.0
## + V30_J2_7	1	0.41	1482.4	-5543.9
## + V23_J2_4	1	0.41	1482.4	-5543.9
## + V12_1_2_J2_5	1	0.40	1482.4	-5543.9
## + V1_J2_1	1	0.40	1482.4	-5543.9
## + V29_J2_7	1	0.38	1482.5	-5543.8
## + V15_J1_5	1	0.38	1482.5	-5543.8
## + V5_J1_1	1	0.37	1482.5	-5543.8
## + V4_J1_1	1	0.36	1482.5	-5543.7
## + V13_1_J1_6	1	0.35	1482.5	-5543.7
## + V23_J2_5	1	0.35	1482.5	-5543.7
## + V4_J1_2	1	0.32	1482.5	-5543.6
## + V3_J1_1	1	0.29	1482.5	-5543.5
## + V30_J1_4	1	0.29	1482.5	-5543.5
## + V19_J1_7	1	0.28	1482.6	-5543.5
## + V14_J1_1	1	0.27	1482.6	-5543.4
## + V4_J2_2	1	0.26	1482.6	-5543.4
## + V13_3_J2_2	1	0.26	1482.6	-5543.4
## - V14_J1_3	1	3.53	1486.4	-5543.4
## + V13_3_J1_6	1	0.25	1482.6	-5543.3
## + V4_J1_7	1	0.24	1482.6	-5543.3
## + V5_J2_2	1	0.24	1482.6	-5543.3
## + V13_1_J2_5	1	0.22	1482.6	-5543.3
## + V16_J2_5	1	0.22	1482.6	-5543.2
## + V13_1_J1_4	1	0.20	1482.6	-5543.2
## + V20_J2_5	1	0.17	1482.7	-5543.1
## + V23_J1_5	1	0.15	1482.7	-5543.0
## + V13_2_J2_1	1	0.15	1482.7	-5543.0
## + V13_1_J1_1	1	0.14	1482.7	-5543.0
## + V13_3_J1_4	1	0.14	1482.7	-5543.0
## + V26_J1_2	1	0.14	1482.7	-5543.0
## + V13_2_J2_4	1	0.13	1482.7	-5542.9
## + V17_J1_6	1	0.12	1482.7	-5542.9
## + V3_J1_3	1	0.12	1482.7	-5542.9
## + V2_J1_1	1	0.11	1482.7	-5542.9
## + V13_3_J1_5	1	0.10	1482.7	-5542.8
## + V17_J1_1	1	0.10	1482.7	-5542.8
## + V13_1_J2_3	1	0.09	1482.8	-5542.8
## + V1_J2_4	1	0.08	1482.8	-5542.8
## + V30_J2_4	1	0.07	1482.8	-5542.7
## + V16_J1_7	1	0.07	1482.8	-5542.7
## + V16_J1_5	1	0.06	1482.8	-5542.7

## + V19_J2_2	1	0.06	1482.8	-5542.7
## + V1_J1_4	1	0.05	1482.8	-5542.7
## + V2_J2_4	1	0.05	1482.8	-5542.7
## + V13_1_J2_1	1	0.05	1482.8	-5542.6
## + V23_J1_1	1	0.04	1482.8	-5542.6
## + V5_J1_3	1	0.04	1482.8	-5542.6
## + V13_3_J2_3	1	0.04	1482.8	-5542.6
## + V23_J1_6	1	0.03	1482.8	-5542.6
## + V17_J1_4	1	0.03	1482.8	-5542.6
## + V24_J2_1	1	0.03	1482.8	-5542.6
## + V24_J1_4	1	0.03	1482.8	-5542.6
## + V13_3_J2_1	1	0.02	1482.8	-5542.6
## + V17_J2_3	1	0.02	1482.8	-5542.5
## + V13_3_J1_7	1	0.02	1482.8	-5542.5
## + V13_3_J1_3	1	0.02	1482.8	-5542.5
## + V12_1_2_J2_3	1	0.01	1482.8	-5542.5
## + V3_J2_2	1	0.01	1482.8	-5542.5
## + V12_1_2_J2_4	1	0.01	1482.8	-5542.5
## + V14_J1_7	1	0.01	1482.8	-5542.5
## + V15_J2_5	1	0.00	1482.8	-5542.5
## + V13_2_J1_1	1	0.00	1482.8	-5542.5
## + V2_J1_4	1	0.00	1482.8	-5542.5
## + V3_J2_7	1	0.00	1482.8	-5542.5
## + V14_J1_6	1	0.00	1482.8	-5542.5
## + V26_J2_7	1	0.00	1482.8	-5542.5
## - V13_2_J1_4	1	3.83	1486.7	-5542.3
## - V26_J1_1	1	3.84	1486.7	-5542.3
## - V2_J1_6	1	4.22	1487.0	-5541.0
## - V13_2_J1_5	1	4.25	1487.1	-5540.9
## - V20_J1_2	1	4.40	1487.2	-5540.3
## - V14_J1_2	1	4.48	1487.3	-5540.1
## - V29_J1_1	1	4.57	1487.4	-5539.8
## - V26_J1_3	1	5.18	1488.0	-5537.6
## - V13_3_J2_5	1	5.33	1488.2	-5537.1
## - V30_J2_3	1	5.64	1488.5	-5536.0
## - V23_J2_1	1	5.69	1488.5	-5535.8
## - V19_J1_3	1	5.71	1488.5	-5535.8
## - V24_J2_3	1	5.91	1488.8	-5535.1
## - V2_J1_5	1	6.01	1488.8	-5534.7
## - V1_J1_5	1	6.22	1489.1	-5534.0
## - V15_J2_3	1	6.38	1489.2	-5533.4
## - V23_J1_4	1	7.23	1490.1	-5530.4
## - V13_1_J1_5	1	7.25	1490.1	-5530.4
## - V13_2_J1_6	1	7.36	1490.2	-5530.0
## - V26_J1_6	1	7.61	1490.5	-5529.1
## - V29_J1_5	1	8.25	1491.1	-5526.9
## - V24_J2_5	1	8.68	1491.5	-5525.4
## - V1_J2_5	1	8.71	1491.5	-5525.3
## - V24_J1_7	1	9.33	1492.2	-5523.1
## - V17_J1_5	1	9.96	1492.8	-5520.9
## - V29_J1_7	1	10.34	1493.2	-5519.6
## - V12_1_2_J1_2	1	10.67	1493.5	-5518.5
## - V13_1_J1_2	1	11.23	1494.1	-5516.5
## - V15_J2_1	1	11.25	1494.1	-5516.5

## - V12_1_2_J1_6	1	13.88	1496.7	-5507.3
## - V13_1_J1_7	1	15.69	1498.5	-5501.0
## - V16_J2_3	1	15.73	1498.6	-5500.9
## - V20_J2_1	1	16.04	1498.9	-5499.8
## - V24_J1_6	1	16.64	1499.5	-5497.7
## - V26_J1_5	1	18.72	1501.6	-5490.5
## - V14_J2_5	1	19.31	1502.2	-5488.5
## - V20_J2_3	1	19.46	1502.3	-5488.0
## - V4_J1_3	1	19.63	1502.5	-5487.4
## - V12_1_2_J1_7	1	23.35	1506.2	-5474.5
## - V14_J2_1	1	23.99	1506.8	-5472.3
## - V30_J1_5	1	24.62	1507.5	-5470.1
## - V2_J2_7	1	25.81	1508.7	-5466.0
## - V23_J2_7	1	26.08	1508.9	-5465.1
## - V30_J2_5	1	26.68	1509.5	-5463.0
## - V3_J1_5	1	27.22	1510.1	-5461.2
## - V29_J1_3	1	28.10	1510.9	-5458.1
## - V2_J2_2	1	28.58	1511.4	-5456.5
## - V12_1_2_J2_7	1	29.29	1512.1	-5454.1
## - V4_J1_5	1	29.84	1512.7	-5452.1
## - V15_J1_1	1	32.04	1514.9	-5444.6
## - V15_J1_2	1	37.22	1520.1	-5426.8
## - V14_J2_4	1	37.84	1520.7	-5424.7
## - V4_J2_7	1	39.43	1522.3	-5419.3
## - V30_J1_3	1	39.60	1522.4	-5418.7
## - V16_J2_7	1	39.81	1522.7	-5418.0
## - V5_J1_4	1	41.21	1524.0	-5413.2
## - V12_1_2_J1_3	1	41.26	1524.1	-5413.1
## - V19_J2_5	1	41.45	1524.3	-5412.4
## - V19_J2_4	1	41.45	1524.3	-5412.4
## - V26_J1_4	1	41.70	1524.5	-5411.5
## - V13_2_J1_7	1	44.77	1527.6	-5401.1
## - V4_J1_4	1	50.47	1533.3	-5381.7
## - V5_J2_1	1	54.09	1536.9	-5369.5
## - V19_J2_1	1	55.95	1538.8	-5363.2
## - V30_J1_2	1	56.73	1539.6	-5360.5
## - V15_J1_6	1	61.04	1543.9	-5346.0
## - V14_J2_3	1	61.21	1544.0	-5345.4
## - V17_J2_7	1	62.71	1545.5	-5340.4
## - V15_J1_3	1	63.63	1546.5	-5337.3
## - V15_J1_7	1	64.98	1547.8	-5332.7
## - V1_J2_2	1	65.86	1548.7	-5329.8
## - V17_J2_2	1	66.28	1549.1	-5328.4
## - V14_J1_5	1	67.71	1550.5	-5323.6
## - V1_J1_3	1	69.32	1552.2	-5318.2
## - V16_J1_3	1	69.77	1552.6	-5316.7
## - V30_J1_1	1	72.36	1555.2	-5308.0
## - V30_J2_2	1	72.38	1555.2	-5307.9
## - V5_J2_3	1	74.29	1557.1	-5301.6
## - V14_J1_4	1	83.36	1566.2	-5271.3
## - V23_J1_3	1	84.98	1567.8	-5266.0
## - V2_J1_3	1	85.13	1568.0	-5265.5
## - V3_J1_4	1	85.45	1568.3	-5264.4
## - V17_J1_3	1	86.80	1569.6	-5260.0

```

## - V1_J2_7      1      89.10 1571.9 -5252.3
## - V19_J2_3     1      99.52 1582.4 -5218.0
## - V12_1_2_J1_4 1     104.30 1587.1 -5202.3
## - V5_J1_5      1     105.92 1588.8 -5197.0
## - V3_J2_1      1     112.83 1595.7 -5174.4
## - V4_J2_5      1     115.73 1598.6 -5165.0
## - V26_J2_1     1     123.39 1606.2 -5140.1
## - V15_J2_7     1     124.99 1607.8 -5134.9
## - V3_J2_5      1     128.57 1611.4 -5123.4
## - V4_J2_3      1     131.40 1614.2 -5114.2
## - V4_J2_1      1     131.72 1614.5 -5113.2
## - V15_J2_2     1     134.87 1617.7 -5103.1
## - V19_J1_5     1     135.13 1618.0 -5102.2
## - V26_J2_5     1     157.63 1640.5 -5030.4
## - V26_J2_4     1     159.98 1642.8 -5023.0
## - V4_J2_4      1     162.65 1645.5 -5014.5
## - V12_1_2_J2_2 1     175.09 1657.9 -4975.4
## - V3_J2_4      1     188.80 1671.6 -4932.5
## - V19_J1_4     1     192.32 1675.2 -4921.6
## - V3_J2_3      1     192.97 1675.8 -4919.6
## - V20_J2_2     1     262.69 1745.5 -4707.6
## - V5_J2_5      1     269.43 1752.3 -4687.6
## - J            12     307.92 1790.8 -4647.6
## - V5_J2_4      1     308.14 1791.0 -4574.0
## - V26_J2_3     1     316.16 1799.0 -4550.7
## - V16_J2_2     1     439.08 1921.9 -4207.0
## - V            19    1025.01 2507.8 -2942.8
##
## Step:  AIC=-5552.68
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
## V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
## V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
## V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V14_J1_2 + V13_3_J2_5 +
## V20_J1_2 + V13_2_J1_4 + V26_J1_6 + V13_1_J1_5 + V26_J1_1 +
## V2_J1_6 + V29_J1_1 + V15_J2_3 + V30_J2_3 + V24_J2_3 + V13_2_J1_5 +
## V13_1_J2_2 + V19_J1_3 + V14_J1_3 + V19_J1_1 + V16_J2_1 +
## V3_J1_2 + V13_2_J2_5 + V29_J2_3
##
##
##           Df Sum of Sq    RSS    AIC
## + V1_J1_1      1      2.89 1477.0 -5556.2
## + V13_1_J2_7   1      2.78 1477.2 -5555.8

```


## + V29_J2_2	1	2.76	1477.2	-5555.8
## + V23_J2_3	1	2.75	1477.2	-5555.7
## + V23_J1_7	1	2.71	1477.2	-5555.6
## + V14_J2_7	1	2.67	1477.3	-5555.5
## + V17_J2_1	1	2.63	1477.3	-5555.3
## + V23_J2_2	1	2.63	1477.3	-5555.3
## + V24_J1_3	1	2.58	1477.3	-5555.1
## + V29_J2_1	1	2.53	1477.4	-5554.9
## + V13_3_J1_2	1	2.45	1477.5	-5554.7
## + V13_2_J1_2	1	2.41	1477.5	-5554.5
## + V13_3_J1_1	1	2.31	1477.6	-5554.2
## + V20_J1_6	1	2.10	1477.8	-5553.4
## + V13_1_J2_4	1	2.04	1477.9	-5553.2
## + V30_J1_7	1	2.04	1477.9	-5553.2
## + V16_J1_4	1	1.96	1478.0	-5553.0
## + V1_J1_7	1	1.94	1478.0	-5552.9
## + V20_J1_7	1	1.93	1478.0	-5552.8
## <none>			1479.9	-5552.7
## + V13_2_J2_7	1	1.83	1478.1	-5552.5
## + V26_J2_2	1	1.83	1478.1	-5552.5
## + V29_J1_6	1	1.80	1478.1	-5552.4
## + V13_2_J2_2	1	1.75	1478.2	-5552.2
## + V5_J1_6	1	1.72	1478.2	-5552.1
## + V15_J2_4	1	1.71	1478.2	-5552.1
## + V20_J2_4	1	1.66	1478.3	-5551.9
## + V24_J1_5	1	1.58	1478.3	-5551.6
## + V16_J1_2	1	1.58	1478.3	-5551.6
## + V12_1_2_J1_5	1	1.53	1478.4	-5551.4
## + V16_J1_6	1	1.53	1478.4	-5551.4
## + V29_J2_4	1	1.50	1478.4	-5551.3
## + V29_J1_4	1	1.39	1478.5	-5550.9
## + V12_1_2_J1_1	1	1.35	1478.6	-5550.8
## + V20_J1_1	1	1.35	1478.6	-5550.8
## + V14_J2_2	1	1.33	1478.6	-5550.7
## + V2_J1_7	1	1.31	1478.6	-5550.6
## + V13_3_J2_4	1	1.31	1478.6	-5550.6
## + V1_J2_3	1	1.29	1478.6	-5550.6
## + V16_J2_4	1	1.22	1478.7	-5550.3
## + V2_J1_2	1	1.15	1478.8	-5550.1
## + V24_J2_7	1	1.13	1478.8	-5550.0
## + V5_J2_7	1	1.10	1478.8	-5549.9
## + V17_J1_2	1	1.10	1478.8	-5549.9
## + V17_J1_7	1	1.08	1478.8	-5549.9
## + V4_J1_6	1	1.06	1478.9	-5549.8
## + V24_J1_1	1	1.02	1478.9	-5549.7
## + V24_J2_4	1	1.01	1478.9	-5549.6
## + V1_J1_2	1	1.00	1478.9	-5549.6
## + V26_J1_7	1	0.96	1479.0	-5549.4
## + V20_J1_4	1	0.96	1479.0	-5549.4
## - V13_1_J1_3	1	2.86	1482.8	-5549.3
## + V13_2_J2_3	1	0.92	1479.0	-5549.3
## + V5_J1_2	1	0.90	1479.0	-5549.2
## + V23_J1_2	1	0.89	1479.0	-5549.2
## - V29_J2_3	1	2.91	1482.8	-5549.1

## + V20_J1_5	1	0.87	1479.1	-5549.1
## + V29_J1_2	1	0.84	1479.1	-5549.0
## - V3_J1_2	1	2.94	1482.9	-5549.0
## + V17_J2_4	1	0.79	1479.1	-5548.8
## + V5_J1_7	1	0.78	1479.2	-5548.8
## - V13_2_J2_5	1	3.02	1483.0	-5548.7
## + V20_J1_3	1	0.73	1479.2	-5548.6
## + V13_3_J2_7	1	0.69	1479.2	-5548.5
## - V16_J2_1	1	3.09	1483.0	-5548.5
## + V19_J1_6	1	0.66	1479.3	-5548.4
## + V3_J1_7	1	0.64	1479.3	-5548.3
## + V30_J2_1	1	0.62	1479.3	-5548.2
## + V12_1_2_J2_1	1	0.61	1479.3	-5548.2
## + V30_J1_6	1	0.57	1479.4	-5548.0
## + V13_2_J1_3	1	0.56	1479.4	-5548.0
## + V16_J1_1	1	0.53	1479.4	-5547.9
## + V3_J1_6	1	0.52	1479.4	-5547.9
## + V17_J2_5	1	0.52	1479.4	-5547.9
## + V19_J2_7	1	0.51	1479.4	-5547.8
## + V24_J2_2	1	0.51	1479.4	-5547.8
## - V19_J1_1	1	3.29	1483.2	-5547.8
## + V20_J2_7	1	0.49	1479.4	-5547.8
## + V24_J1_2	1	0.45	1479.5	-5547.6
## + V1_J2_1	1	0.44	1479.5	-5547.6
## + V19_J1_2	1	0.43	1479.5	-5547.6
## + V15_J1_4	1	0.43	1479.5	-5547.6
## + V30_J2_7	1	0.43	1479.5	-5547.5
## + V2_J2_1	1	0.42	1479.5	-5547.5
## + V5_J1_1	1	0.39	1479.5	-5547.4
## + V2_J2_5	1	0.39	1479.5	-5547.4
## + V1_J1_6	1	0.38	1479.5	-5547.4
## + V23_J2_4	1	0.37	1479.6	-5547.4
## - V13_1_J2_2	1	3.41	1483.3	-5547.3
## + V15_J1_5	1	0.36	1479.6	-5547.3
## + V2_J2_3	1	0.35	1479.6	-5547.3
## + V4_J1_1	1	0.34	1479.6	-5547.2
## + V12_1_2_J2_5	1	0.33	1479.6	-5547.2
## + V4_J1_2	1	0.31	1479.6	-5547.1
## + V23_J2_5	1	0.31	1479.6	-5547.1
## + V13_1_J1_6	1	0.31	1479.6	-5547.1
## + V3_J1_1	1	0.31	1479.6	-5547.1
## + V13_3_J2_2	1	0.30	1479.6	-5547.1
## + V30_J1_4	1	0.29	1479.6	-5547.1
## + V14_J1_1	1	0.29	1479.6	-5547.1
## + V4_J2_2	1	0.28	1479.7	-5547.0
## - V14_J1_3	1	3.50	1483.4	-5547.0
## + V13_3_J1_6	1	0.27	1479.7	-5547.0
## + V19_J1_7	1	0.26	1479.7	-5547.0
## + V5_J2_2	1	0.25	1479.7	-5546.9
## + V29_J2_5	1	0.25	1479.7	-5546.9
## + V4_J1_7	1	0.23	1479.7	-5546.9
## + V13_1_J1_4	1	0.23	1479.7	-5546.9
## + V16_J2_5	1	0.23	1479.7	-5546.8
## + V13_1_J2_5	1	0.19	1479.7	-5546.7

## + V13_3_J2_3	1	0.18	1479.8	-5546.7
## + V13_2_J2_1	1	0.18	1479.8	-5546.7
## + V20_J2_5	1	0.18	1479.8	-5546.7
## + V29_J2_7	1	0.17	1479.8	-5546.6
## + V23_J1_5	1	0.16	1479.8	-5546.6
## + V13_2_J2_4	1	0.15	1479.8	-5546.6
## + V13_1_J1_1	1	0.15	1479.8	-5546.6
## + V26_J1_2	1	0.14	1479.8	-5546.5
## + V17_J2_3	1	0.13	1479.8	-5546.5
## + V2_J1_1	1	0.12	1479.8	-5546.5
## + V13_3_J1_4	1	0.12	1479.8	-5546.5
## + V3_J1_3	1	0.11	1479.8	-5546.4
## + V17_J1_6	1	0.10	1479.8	-5546.4
## + V12_1_2_J2_3	1	0.10	1479.8	-5546.4
## + V13_3_J1_5	1	0.10	1479.8	-5546.4
## + V17_J1_1	1	0.09	1479.8	-5546.4
## + V30_J2_4	1	0.07	1479.9	-5546.3
## + V16_J1_7	1	0.07	1479.9	-5546.3
## + V1_J2_4	1	0.07	1479.9	-5546.3
## + V2_J2_4	1	0.07	1479.9	-5546.3
## - V13_2_J1_4	1	3.72	1483.7	-5546.3
## + V19_J2_2	1	0.06	1479.9	-5546.3
## + V16_J1_5	1	0.06	1479.9	-5546.2
## + V23_J1_1	1	0.05	1479.9	-5546.2
## + V5_J1_3	1	0.05	1479.9	-5546.2
## - V29_J1_1	1	3.74	1483.7	-5546.2
## + V1_J1_4	1	0.04	1479.9	-5546.2
## + V13_1_J2_1	1	0.03	1479.9	-5546.2
## + V24_J2_1	1	0.03	1479.9	-5546.1
## + V24_J1_4	1	0.02	1479.9	-5546.1
## + V23_J1_6	1	0.02	1479.9	-5546.1
## + V17_J1_4	1	0.02	1479.9	-5546.1
## + V12_1_2_J2_4	1	0.02	1479.9	-5546.1
## + V13_3_J2_1	1	0.02	1479.9	-5546.1
## + V13_3_J1_7	1	0.02	1479.9	-5546.1
## + V13_3_J1_3	1	0.01	1479.9	-5546.1
## + V3_J2_2	1	0.01	1479.9	-5546.1
## + V13_1_J2_3	1	0.01	1479.9	-5546.1
## + V14_J1_7	1	0.01	1479.9	-5546.1
## + V15_J2_5	1	0.01	1479.9	-5546.1
## + V13_2_J1_1	1	0.01	1479.9	-5546.1
## + V3_J2_7	1	0.00	1479.9	-5546.1
## + V14_J1_6	1	0.00	1479.9	-5546.0
## + V26_J2_7	1	0.00	1479.9	-5546.0
## + V2_J1_4	1	0.00	1479.9	-5546.0
## - V26_J1_1	1	3.90	1483.8	-5545.6
## - V2_J1_6	1	4.09	1484.0	-5545.0
## - V13_2_J1_5	1	4.30	1484.2	-5544.2
## - V20_J1_2	1	4.42	1484.3	-5543.8
## - V14_J1_2	1	4.47	1484.4	-5543.6
## - V26_J1_3	1	5.13	1485.1	-5541.3
## - V13_3_J2_5	1	5.23	1485.2	-5541.0
## - V23_J2_1	1	5.58	1485.5	-5539.7
## - V19_J1_3	1	5.66	1485.6	-5539.5

## - V2_J1_5	1	5.94	1485.9	-5538.5
## - V1_J1_5	1	6.15	1486.1	-5537.7
## - V30_J2_3	1	6.50	1486.4	-5536.5
## - V24_J2_3	1	6.80	1486.7	-5535.5
## - V13_2_J1_6	1	7.20	1487.1	-5534.1
## - V15_J2_3	1	7.25	1487.2	-5533.9
## - V13_1_J1_5	1	7.32	1487.2	-5533.7
## - V23_J1_4	1	7.38	1487.3	-5533.4
## - V26_J1_6	1	7.61	1487.5	-5532.7
## - V24_J2_5	1	8.71	1488.6	-5528.8
## - V1_J2_5	1	8.89	1488.8	-5528.2
## - V29_J1_7	1	9.08	1489.0	-5527.5
## - V29_J1_5	1	9.23	1489.2	-5527.0
## - V24_J1_7	1	9.37	1489.3	-5526.5
## - V17_J1_5	1	9.90	1489.8	-5524.7
## - V12_1_2_J1_2	1	10.41	1490.3	-5522.9
## - V15_J2_1	1	11.24	1491.2	-5520.0
## - V13_1_J1_2	1	11.41	1491.3	-5519.4
## - V16_J2_3	1	14.08	1494.0	-5510.1
## - V12_1_2_J1_6	1	14.17	1494.1	-5509.8
## - V13_1_J1_7	1	15.82	1495.8	-5504.0
## - V20_J2_1	1	16.06	1496.0	-5503.2
## - V24_J1_6	1	16.60	1496.5	-5501.3
## - V20_J2_3	1	17.58	1497.5	-5497.9
## - V26_J1_5	1	18.60	1498.5	-5494.4
## - V14_J2_5	1	19.34	1499.3	-5491.8
## - V4_J1_3	1	19.57	1499.5	-5491.0
## - V12_1_2_J1_7	1	23.62	1503.5	-5477.0
## - V14_J2_1	1	23.99	1503.9	-5475.7
## - V30_J1_5	1	24.74	1504.7	-5473.1
## - V29_J1_3	1	25.97	1505.9	-5468.8
## - V2_J2_7	1	26.16	1506.1	-5468.2
## - V23_J2_7	1	26.41	1506.3	-5467.3
## - V30_J2_5	1	26.65	1506.6	-5466.5
## - V3_J1_5	1	27.11	1507.0	-5464.9
## - V2_J2_2	1	28.95	1508.9	-5458.6
## - V4_J1_5	1	29.73	1509.7	-5455.9
## - V12_1_2_J2_7	1	29.76	1509.7	-5455.8
## - V15_J1_1	1	32.18	1512.1	-5447.5
## - V15_J1_2	1	37.17	1517.1	-5430.3
## - V14_J2_4	1	37.80	1517.7	-5428.2
## - V30_J1_3	1	39.49	1519.4	-5422.4
## - V4_J2_7	1	39.55	1519.5	-5422.2
## - V16_J2_7	1	39.96	1519.9	-5420.8
## - V5_J1_4	1	41.28	1521.2	-5416.3
## - V19_J2_4	1	41.37	1521.3	-5415.9
## - V19_J2_5	1	41.45	1521.4	-5415.7
## - V12_1_2_J1_3	1	41.60	1521.5	-5415.2
## - V26_J1_4	1	41.71	1521.6	-5414.8
## - V13_2_J1_7	1	44.99	1524.9	-5403.6
## - V4_J1_4	1	50.54	1530.5	-5384.7
## - V5_J2_1	1	54.09	1534.0	-5372.7
## - V19_J2_1	1	55.89	1535.8	-5366.6
## - V30_J1_2	1	56.70	1536.6	-5363.8

```

## - V14_J2_3      1      57.61 1537.5 -5360.7
## - V15_J1_6      1      60.95 1540.9 -5349.4
## - V17_J2_7      1      63.20 1543.1 -5341.9
## - V15_J1_3      1      63.72 1543.7 -5340.1
## - V15_J1_7      1      65.08 1545.0 -5335.5
## - V1_J2_2       1      66.42 1546.3 -5331.0
## - V17_J2_2      1      66.79 1546.7 -5329.8
## - V14_J1_5      1      67.51 1547.4 -5327.4
## - V1_J1_3       1      69.61 1549.5 -5320.3
## - V16_J1_3      1      69.69 1549.6 -5320.0
## - V5_J2_3       1      70.15 1550.1 -5318.5
## - V30_J2_2      1      72.53 1552.5 -5310.5
## - V30_J1_1      1      72.61 1552.5 -5310.2
## - V14_J1_4      1      83.44 1563.4 -5274.1
## - V23_J1_3      1      85.25 1565.2 -5268.1
## - V2_J1_3       1      85.45 1565.4 -5267.4
## - V3_J1_4       1      85.55 1565.5 -5267.1
## - V17_J1_3      1      87.06 1567.0 -5262.1
## - V1_J2_7       1      89.73 1569.7 -5253.2
## - V19_J2_3      1      94.57 1574.5 -5237.2
## - V12_1_2_J1_4  1     105.08 1585.0 -5202.6
## - V5_J1_5       1     105.69 1585.6 -5200.6
## - V3_J2_1       1     112.85 1592.8 -5177.2
## - V4_J2_5       1     115.83 1595.8 -5167.5
## - V26_J2_1      1     123.30 1603.2 -5143.2
## - V15_J2_7      1     124.75 1604.7 -5138.5
## - V4_J2_3       1     125.66 1605.6 -5135.5
## - V3_J2_5       1     128.67 1608.6 -5125.8
## - V4_J2_1       1     131.73 1611.7 -5115.9
## - V15_J2_2      1     134.61 1614.5 -5106.6
## - V19_J1_5      1     134.78 1614.7 -5106.1
## - V26_J2_5      1     157.64 1637.6 -5033.0
## - V26_J2_4      1     159.83 1639.8 -5026.0
## - V4_J2_4       1     162.62 1642.5 -5017.2
## - V12_1_2_J2_2  1     176.17 1656.1 -4974.5
## - V3_J2_3       1     185.50 1665.4 -4945.3
## - V3_J2_4       1     188.76 1668.7 -4935.1
## - V19_J1_4      1     192.35 1672.3 -4923.9
## - V20_J2_2      1     263.09 1743.0 -4708.5
## - V5_J2_5       1     269.57 1749.5 -4689.2
## - J             12     298.25 1778.2 -4677.6
## - V26_J2_3      1     305.88 1785.8 -4582.3
## - V5_J2_4       1     308.08 1788.0 -4576.0
## - V16_J2_2      1     439.60 1919.5 -4206.9
## - V             19    1021.83 2501.8 -2948.7
##
## Step:  AIC=-5556.2
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##      V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##      V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##      V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
##      V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
##      V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
##      V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +

```

```

##      V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
##      V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
##      V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
##      V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
##      V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
##      V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
##      V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
##      V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
##      V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
##      V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V14_J1_2 + V13_3_J2_5 +
##      V20_J1_2 + V13_2_J1_4 + V26_J1_6 + V13_1_J1_5 + V26_J1_1 +
##      V2_J1_6 + V29_J1_1 + V15_J2_3 + V30_J2_3 + V24_J2_3 + V13_2_J1_5 +
##      V13_1_J2_2 + V19_J1_3 + V14_J1_3 + V19_J1_1 + V16_J2_1 +
##      V3_J1_2 + V13_2_J2_5 + V29_J2_3 + V1_J1_1
##
##
##      Df Sum of Sq    RSS    AIC
## + V23_J2_3      1      2.87 1474.2 -5559.7
## + V13_1_J2_7     1      2.78 1474.3 -5559.4
## + V29_J2_2      1      2.70 1474.3 -5559.1
## + V23_J1_7      1      2.65 1474.4 -5558.9
## + V23_J2_2      1      2.64 1474.4 -5558.9
## + V14_J2_7      1      2.61 1474.4 -5558.8
## + V24_J1_3      1      2.59 1474.5 -5558.7
## + V29_J2_1      1      2.58 1474.5 -5558.7
## + V17_J2_1      1      2.55 1474.5 -5558.6
## + V13_3_J1_2     1      2.39 1474.7 -5558.0
## + V13_2_J1_2     1      2.34 1474.7 -5557.8
## + V13_1_J2_4     1      2.10 1475.0 -5557.0
## + V20_J1_6      1      2.04 1475.0 -5556.7
## + V30_J1_7      1      2.03 1475.0 -5556.7
## + V13_3_J1_1     1      1.95 1475.1 -5556.4
## + V1_J2_3       1      1.93 1475.1 -5556.4
## <none>                1477.0 -5556.2
## + V16_J1_4      1      1.88 1475.2 -5556.2
## + V20_J1_7      1      1.87 1475.2 -5556.1
## + V26_J2_2      1      1.86 1475.2 -5556.1
## + V13_2_J2_7     1      1.84 1475.2 -5556.1
## + V29_J1_6      1      1.79 1475.3 -5555.9
## + V13_2_J2_2     1      1.75 1475.3 -5555.7
## + V15_J2_4      1      1.73 1475.3 -5555.7
## + V12_1_2_J1_1   1      1.66 1475.4 -5555.4
## + V5_J1_6       1      1.65 1475.4 -5555.4
## + V20_J2_4      1      1.60 1475.5 -5555.2
## + V16_J1_6      1      1.58 1475.5 -5555.1
## + V24_J1_5      1      1.58 1475.5 -5555.1
## + V12_1_2_J1_5   1      1.55 1475.5 -5555.0
## + V16_J1_2      1      1.52 1475.5 -5554.9
## + V29_J2_4      1      1.48 1475.6 -5554.8
## + V29_J1_4      1      1.42 1475.6 -5554.6
## + V14_J2_2      1      1.37 1475.7 -5554.4
## + V1_J1_7       1      1.34 1475.7 -5554.3
## + V24_J1_1      1      1.29 1475.8 -5554.1
## + V2_J1_7       1      1.28 1475.8 -5554.1
## + V16_J2_4      1      1.27 1475.8 -5554.0

```

## + V13_3_J2_4	1	1.27	1475.8	-5554.0
## + V2_J1_2	1	1.19	1475.8	-5553.8
## + V24_J2_7	1	1.14	1475.9	-5553.6
## + V17_J1_2	1	1.13	1475.9	-5553.6
## + V4_J1_6	1	1.13	1475.9	-5553.5
## + V5_J2_7	1	1.13	1475.9	-5553.5
## + V17_J1_7	1	1.11	1475.9	-5553.5
## + V20_J1_1	1	1.09	1476.0	-5553.4
## + V24_J2_4	1	1.06	1476.0	-5553.3
## + V20_J1_4	1	1.03	1476.0	-5553.2
## + V26_J1_7	1	0.98	1476.1	-5553.0
## - V13_1_J1_3	1	2.84	1479.9	-5552.9
## + V23_J1_2	1	0.93	1476.1	-5552.8
## - V1_J1_1	1	2.89	1479.9	-5552.7
## + V20_J1_5	1	0.88	1476.2	-5552.7
## + V13_2_J2_3	1	0.85	1476.2	-5552.6
## + V5_J1_2	1	0.83	1476.2	-5552.5
## + V1_J2_1	1	0.83	1476.2	-5552.5
## + V29_J1_2	1	0.83	1476.2	-5552.5
## + V5_J1_7	1	0.83	1476.2	-5552.5
## - V29_J2_3	1	2.96	1480.0	-5552.4
## - V13_2_J2_5	1	3.00	1480.0	-5552.3
## - V16_J2_1	1	3.00	1480.0	-5552.3
## + V17_J2_4	1	0.76	1476.3	-5552.2
## + V20_J1_3	1	0.73	1476.3	-5552.1
## - V3_J1_2	1	3.05	1480.1	-5552.1
## + V13_3_J2_7	1	0.68	1476.4	-5552.0
## + V19_J1_6	1	0.68	1476.4	-5551.9
## + V30_J2_1	1	0.64	1476.4	-5551.8
## + V3_J1_7	1	0.59	1476.5	-5551.6
## + V1_J1_2	1	0.58	1476.5	-5551.6
## + V3_J1_6	1	0.57	1476.5	-5551.6
## + V30_J1_6	1	0.57	1476.5	-5551.6
## + V13_2_J1_3	1	0.56	1476.5	-5551.5
## + V12_1_2_J2_1	1	0.55	1476.5	-5551.5
## + V19_J2_7	1	0.53	1476.5	-5551.4
## + V17_J2_5	1	0.52	1476.5	-5551.4
## + V24_J2_2	1	0.51	1476.5	-5551.4
## + V20_J2_7	1	0.49	1476.5	-5551.3
## + V4_J1_1	1	0.49	1476.6	-5551.3
## + V24_J1_2	1	0.49	1476.6	-5551.3
## + V2_J2_1	1	0.46	1476.6	-5551.2
## + V30_J2_7	1	0.45	1476.6	-5551.2
## + V19_J1_2	1	0.45	1476.6	-5551.1
## + V15_J1_4	1	0.41	1476.6	-5551.0
## + V23_J2_4	1	0.40	1476.6	-5551.0
## + V2_J2_5	1	0.39	1476.7	-5550.9
## + V15_J1_5	1	0.38	1476.7	-5550.9
## + V16_J1_1	1	0.37	1476.7	-5550.9
## + V4_J1_2	1	0.36	1476.7	-5550.8
## - V13_1_J2_2	1	3.43	1480.5	-5550.8
## + V12_1_2_J2_5	1	0.35	1476.7	-5550.8
## + V13_1_J1_6	1	0.33	1476.7	-5550.7
## + V23_J2_5	1	0.32	1476.7	-5550.7

## + V2_J2_3	1	0.31	1476.7	-5550.7
## - V14_J1_3	1	3.47	1480.5	-5550.6
## + V13_3_J2_2	1	0.30	1476.7	-5550.6
## - V26_J1_1	1	3.48	1480.5	-5550.6
## + V30_J1_4	1	0.28	1476.8	-5550.6
## + V4_J2_2	1	0.27	1476.8	-5550.5
## + V13_1_J1_1	1	0.26	1476.8	-5550.5
## + V5_J1_1	1	0.26	1476.8	-5550.5
## + V29_J2_5	1	0.26	1476.8	-5550.5
## + V13_3_J1_6	1	0.26	1476.8	-5550.5
## + V19_J1_7	1	0.26	1476.8	-5550.5
## + V5_J2_2	1	0.24	1476.8	-5550.4
## + V2_J1_1	1	0.23	1476.8	-5550.4
## + V16_J2_5	1	0.22	1476.8	-5550.3
## + V13_3_J2_3	1	0.21	1476.8	-5550.3
## + V13_1_J1_4	1	0.20	1476.8	-5550.3
## + V4_J1_7	1	0.20	1476.8	-5550.3
## + V3_J1_1	1	0.20	1476.8	-5550.3
## + V13_1_J2_5	1	0.19	1476.8	-5550.2
## + V29_J2_7	1	0.18	1476.9	-5550.2
## + V14_J1_1	1	0.18	1476.9	-5550.2
## + V20_J2_5	1	0.17	1476.9	-5550.2
## + V23_J1_5	1	0.16	1476.9	-5550.1
## + V13_2_J2_1	1	0.15	1476.9	-5550.1
## + V17_J2_3	1	0.15	1476.9	-5550.1
## + V26_J1_2	1	0.15	1476.9	-5550.1
## + V13_3_J1_4	1	0.14	1476.9	-5550.1
## + V1_J1_6	1	0.14	1476.9	-5550.0
## + V13_2_J2_4	1	0.13	1476.9	-5550.0
## + V12_1_2_J2_3	1	0.13	1476.9	-5550.0
## + V23_J1_1	1	0.12	1476.9	-5550.0
## + V17_J1_6	1	0.11	1476.9	-5550.0
## + V3_J1_3	1	0.10	1476.9	-5549.9
## + V13_3_J1_5	1	0.10	1477.0	-5549.9
## - V19_J1_1	1	3.68	1480.7	-5549.9
## + V16_J1_7	1	0.08	1477.0	-5549.9
## + V30_J2_4	1	0.07	1477.0	-5549.8
## + V19_J2_2	1	0.07	1477.0	-5549.8
## + V2_J2_4	1	0.06	1477.0	-5549.8
## + V16_J1_5	1	0.06	1477.0	-5549.8
## + V5_J1_3	1	0.05	1477.0	-5549.7
## + V13_1_J2_1	1	0.05	1477.0	-5549.7
## + V13_2_J1_1	1	0.04	1477.0	-5549.7
## + V24_J2_1	1	0.04	1477.0	-5549.7
## + V24_J1_4	1	0.03	1477.0	-5549.7
## + V17_J1_1	1	0.03	1477.0	-5549.7
## + V23_J1_6	1	0.03	1477.0	-5549.7
## + V17_J1_4	1	0.03	1477.0	-5549.7
## + V13_3_J2_1	1	0.02	1477.0	-5549.6
## + V13_3_J1_7	1	0.02	1477.0	-5549.6
## + V13_3_J1_3	1	0.01	1477.0	-5549.6
## + V12_1_2_J2_4	1	0.01	1477.0	-5549.6
## + V3_J2_2	1	0.01	1477.0	-5549.6
## + V15_J2_5	1	0.01	1477.0	-5549.6

## + V14_J1_6	1	0.00	1477.0	-5549.6
## + V13_1_J2_3	1	0.00	1477.0	-5549.6
## + V1_J1_4	1	0.00	1477.0	-5549.6
## + V14_J1_7	1	0.00	1477.0	-5549.6
## + V2_J1_4	1	0.00	1477.0	-5549.6
## + V3_J2_7	1	0.00	1477.0	-5549.6
## + V26_J2_7	1	0.00	1477.0	-5549.6
## + V1_J2_4	1	0.00	1477.0	-5549.6
## - V13_2_J1_4	1	3.82	1480.9	-5549.4
## - V2_J1_6	1	4.14	1481.2	-5548.3
## - V29_J1_1	1	4.18	1481.2	-5548.1
## - V13_2_J1_5	1	4.29	1481.3	-5547.7
## - V20_J1_2	1	4.33	1481.4	-5547.6
## - V14_J1_2	1	4.60	1481.7	-5546.7
## - V1_J1_5	1	5.07	1482.1	-5545.0
## - V26_J1_3	1	5.18	1482.2	-5544.6
## - V13_3_J2_5	1	5.23	1482.3	-5544.5
## - V23_J2_1	1	5.70	1482.8	-5542.8
## - V19_J1_3	1	5.72	1482.8	-5542.7
## - V2_J1_5	1	5.93	1483.0	-5542.0
## - V30_J2_3	1	6.56	1483.6	-5539.8
## - V24_J2_3	1	6.96	1484.0	-5538.4
## - V23_J1_4	1	7.25	1484.3	-5537.4
## - V13_2_J1_6	1	7.30	1484.3	-5537.2
## - V13_1_J1_5	1	7.32	1484.4	-5537.1
## - V15_J2_3	1	7.33	1484.4	-5537.1
## - V26_J1_6	1	7.65	1484.7	-5536.0
## - V24_J2_5	1	8.68	1485.7	-5532.4
## - V29_J1_7	1	9.07	1486.1	-5531.0
## - V29_J1_5	1	9.15	1486.2	-5530.7
## - V24_J1_7	1	9.48	1486.5	-5529.6
## - V17_J1_5	1	9.87	1486.9	-5528.2
## - V1_J2_5	1	10.04	1487.1	-5527.6
## - V12_1_2_J1_2	1	10.55	1487.6	-5525.8
## - V13_1_J1_2	1	11.30	1488.3	-5523.2
## - V15_J2_1	1	11.32	1488.4	-5523.1
## - V16_J2_3	1	13.86	1490.9	-5514.3
## - V12_1_2_J1_6	1	14.02	1491.1	-5513.7
## - V13_1_J1_7	1	15.71	1492.8	-5507.8
## - V20_J2_1	1	15.83	1492.9	-5507.4
## - V24_J1_6	1	16.74	1493.8	-5504.2
## - V20_J2_3	1	17.32	1494.4	-5502.2
## - V26_J1_5	1	18.66	1495.7	-5497.6
## - V14_J2_5	1	19.19	1496.2	-5495.7
## - V4_J1_3	1	19.52	1496.6	-5494.6
## - V12_1_2_J1_7	1	23.43	1500.5	-5481.0
## - V14_J2_1	1	23.60	1500.7	-5480.4
## - V30_J1_5	1	24.59	1501.6	-5477.0
## - V29_J1_3	1	26.14	1503.2	-5471.6
## - V2_J2_7	1	26.19	1503.2	-5471.4
## - V23_J2_7	1	26.40	1503.4	-5470.7
## - V30_J2_5	1	26.52	1503.6	-5470.3
## - V3_J1_5	1	26.98	1504.0	-5468.7
## - V2_J2_2	1	29.01	1506.0	-5461.7

## - V4_J1_5	1	29.61	1506.7	-5459.6
## - V12_1_2_J2_7	1	29.70	1506.7	-5459.3
## - V15_J1_1	1	30.84	1507.9	-5455.4
## - V15_J1_2	1	37.25	1514.3	-5433.3
## - V14_J2_4	1	37.40	1514.4	-5432.8
## - V4_J2_7	1	39.41	1516.5	-5425.9
## - V30_J1_3	1	39.74	1516.8	-5424.8
## - V16_J2_7	1	39.94	1517.0	-5424.1
## - V5_J1_4	1	40.85	1517.9	-5421.0
## - V19_J2_4	1	41.26	1518.3	-5419.6
## - V26_J1_4	1	41.51	1518.6	-5418.7
## - V19_J2_5	1	41.53	1518.6	-5418.6
## - V12_1_2_J1_3	1	41.59	1518.6	-5418.4
## - V13_2_J1_7	1	44.75	1521.8	-5407.6
## - V4_J1_4	1	50.04	1527.1	-5389.6
## - V5_J2_1	1	53.58	1530.6	-5377.5
## - V19_J2_1	1	55.66	1532.7	-5370.5
## - V30_J1_2	1	56.73	1533.8	-5366.9
## - V14_J2_3	1	56.97	1534.0	-5366.1
## - V15_J1_6	1	61.01	1538.1	-5352.4
## - V17_J2_7	1	63.27	1540.3	-5344.7
## - V15_J1_3	1	63.49	1540.5	-5344.0
## - V15_J1_7	1	65.14	1542.2	-5338.4
## - V17_J2_2	1	66.90	1544.0	-5332.5
## - V14_J1_5	1	67.28	1544.3	-5331.2
## - V1_J2_2	1	68.89	1545.9	-5325.8
## - V5_J2_3	1	69.53	1546.6	-5323.6
## - V16_J1_3	1	69.74	1546.8	-5322.9
## - V30_J1_1	1	70.29	1547.3	-5321.1
## - V1_J1_3	1	72.08	1549.1	-5315.1
## - V30_J2_2	1	72.82	1549.9	-5312.6
## - V14_J1_4	1	82.72	1559.8	-5279.5
## - V3_J1_4	1	84.84	1561.9	-5272.4
## - V23_J1_3	1	85.32	1562.4	-5270.8
## - V2_J1_3	1	85.59	1562.6	-5269.9
## - V17_J1_3	1	87.22	1564.3	-5264.5
## - V1_J2_7	1	92.38	1569.4	-5247.4
## - V19_J2_3	1	94.22	1571.3	-5241.3
## - V12_1_2_J1_4	1	104.47	1581.5	-5207.5
## - V5_J1_5	1	105.51	1582.6	-5204.0
## - V3_J2_1	1	112.01	1589.1	-5182.7
## - V4_J2_5	1	115.54	1592.6	-5171.2
## - V26_J2_1	1	122.94	1600.0	-5147.1
## - V15_J2_7	1	124.52	1601.6	-5142.0
## - V4_J2_3	1	124.77	1601.8	-5141.2
## - V3_J2_5	1	128.32	1605.4	-5129.6
## - V4_J2_1	1	130.88	1607.9	-5121.4
## - V15_J2_2	1	134.31	1611.4	-5110.3
## - V19_J1_5	1	134.97	1612.0	-5108.1
## - V26_J2_5	1	157.76	1634.8	-5035.1
## - V26_J2_4	1	159.58	1636.6	-5029.4
## - V4_J2_4	1	161.84	1638.9	-5022.2
## - V12_1_2_J2_2	1	176.10	1653.1	-4977.1
## - V3_J2_3	1	184.33	1661.4	-4951.3

```

## - V3_J2_4      1      187.86 1664.9 -4940.3
## - V19_J1_4     1      191.94 1669.0 -4927.5
## - V20_J2_2     1      263.04 1740.1 -4710.6
## - J            12      293.80 1770.8 -4692.5
## - V5_J2_5      1      269.20 1746.2 -4692.2
## - V26_J2_3     1      305.20 1782.2 -4586.1
## - V5_J2_4      1      307.06 1784.1 -4580.7
## - V16_J2_2     1      439.62 1916.7 -4208.0
## - V            19     1021.71 2498.8 -2948.4
##
## Step:  AIC=-5559.69
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
## V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
## V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
## V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V14_J1_2 + V13_3_J2_5 +
## V20_J1_2 + V13_2_J1_4 + V26_J1_6 + V13_1_J1_5 + V26_J1_1 +
## V2_J1_6 + V29_J1_1 + V15_J2_3 + V30_J2_3 + V24_J2_3 + V13_2_J1_5 +
## V13_1_J2_2 + V19_J1_3 + V14_J1_3 + V19_J1_1 + V16_J2_1 +
## V3_J1_2 + V13_2_J2_5 + V29_J2_3 + V1_J1_1 + V23_J2_3
##
##
##           Df Sum of Sq    RSS    AIC
## + V13_1_J2_7      1      2.89 1471.3 -5563.3
## + V29_J2_1        1      2.66 1471.5 -5562.4
## + V29_J2_2        1      2.64 1471.5 -5562.4
## + V17_J2_1        1      2.57 1471.6 -5562.1
## + V14_J2_7        1      2.57 1471.6 -5562.1
## + V24_J1_3        1      2.56 1471.6 -5562.1
## + V13_3_J1_2      1      2.48 1471.7 -5561.8
## + V13_2_J1_2      1      2.47 1471.7 -5561.8
## + V23_J2_2        1      2.05 1472.1 -5560.3
## + V20_J1_6        1      2.05 1472.1 -5560.3
## + V23_J1_7        1      2.05 1472.1 -5560.3
## + V13_1_J2_4      1      2.00 1472.2 -5560.1
## + V30_J1_7        1      1.99 1472.2 -5560.1
## + V26_J2_2        1      1.90 1472.3 -5559.7
## + V13_3_J1_1      1      1.89 1472.3 -5559.7
## + V20_J1_7        1      1.88 1472.3 -5559.7
## <none>              1474.2 -5559.7
## + V16_J1_4        1      1.82 1472.3 -5559.5
## + V29_J1_6        1      1.81 1472.4 -5559.5
## + V12_1_2_J1_1    1      1.79 1472.4 -5559.4

```

## + V13_2_J2_7	1	1.76	1472.4	-5559.3
## + V15_J2_4	1	1.75	1472.4	-5559.2
## + V5_J1_6	1	1.66	1472.5	-5558.9
## + V24_J1_5	1	1.64	1472.5	-5558.8
## + V13_2_J2_2	1	1.61	1472.6	-5558.7
## + V20_J2_4	1	1.59	1472.6	-5558.7
## + V16_J1_6	1	1.57	1472.6	-5558.6
## + V16_J1_2	1	1.52	1472.7	-5558.4
## + V29_J2_4	1	1.48	1472.7	-5558.3
## + V29_J1_4	1	1.46	1472.7	-5558.2
## + V23_J1_2	1	1.40	1472.8	-5558.0
## + V2_J1_7	1	1.38	1472.8	-5557.9
## + V12_1_2_J1_5	1	1.38	1472.8	-5557.9
## + V1_J2_3	1	1.35	1472.8	-5557.8
## + V14_J2_2	1	1.34	1472.8	-5557.8
## + V13_3_J2_4	1	1.31	1472.9	-5557.7
## + V24_J1_1	1	1.30	1472.9	-5557.6
## + V16_J2_4	1	1.29	1472.9	-5557.6
## + V1_J1_7	1	1.22	1473.0	-5557.4
## + V24_J2_7	1	1.15	1473.0	-5557.1
## + V5_J2_7	1	1.15	1473.0	-5557.1
## + V4_J1_6	1	1.13	1473.0	-5557.0
## + V2_J1_2	1	1.10	1473.1	-5556.9
## + V20_J1_1	1	1.09	1473.1	-5556.9
## + V20_J1_4	1	1.07	1473.1	-5556.8
## + V24_J2_4	1	1.07	1473.1	-5556.8
## + V17_J1_2	1	1.06	1473.1	-5556.8
## + V17_J1_7	1	1.03	1473.2	-5556.7
## - V13_1_J1_3	1	2.76	1476.9	-5556.6
## + V26_J1_7	1	0.98	1473.2	-5556.5
## - V23_J2_3	1	2.87	1477.0	-5556.2
## + V1_J2_1	1	0.86	1473.3	-5556.1
## - V16_J2_1	1	2.92	1477.1	-5556.0
## + V29_J1_2	1	0.84	1473.3	-5556.0
## + V20_J1_5	1	0.84	1473.3	-5556.0
## + V5_J1_2	1	0.84	1473.3	-5556.0
## + V5_J1_7	1	0.82	1473.3	-5555.9
## + V17_J2_4	1	0.81	1473.4	-5555.9
## - V1_J1_1	1	3.01	1477.2	-5555.7
## + V20_J1_3	1	0.75	1473.4	-5555.7
## + V23_J2_4	1	0.74	1473.4	-5555.7
## - V3_J1_2	1	3.04	1477.2	-5555.6
## + V19_J1_6	1	0.67	1473.5	-5555.4
## + V30_J2_1	1	0.67	1473.5	-5555.4
## + V13_3_J2_7	1	0.66	1473.5	-5555.4
## - V13_2_J2_5	1	3.12	1477.3	-5555.3
## + V23_J2_5	1	0.61	1473.6	-5555.2
## + V3_J1_7	1	0.59	1473.6	-5555.1
## + V30_J1_6	1	0.59	1473.6	-5555.1
## + V12_1_2_J2_1	1	0.58	1473.6	-5555.1
## + V17_J2_5	1	0.58	1473.6	-5555.1
## + V3_J1_6	1	0.57	1473.6	-5555.1
## + V13_2_J1_3	1	0.51	1473.7	-5554.9
## + V13_3_J2_3	1	0.51	1473.7	-5554.9

## + V1_J1_2	1	0.51	1473.7	-5554.9
## + V19_J2_7	1	0.51	1473.7	-5554.8
## + V20_J2_7	1	0.51	1473.7	-5554.8
## + V24_J2_2	1	0.48	1473.7	-5554.8
## + V4_J1_1	1	0.48	1473.7	-5554.7
## + V24_J1_2	1	0.48	1473.7	-5554.7
## + V13_2_J2_3	1	0.47	1473.7	-5554.7
## + V30_J2_7	1	0.45	1473.7	-5554.6
## + V19_J1_2	1	0.45	1473.7	-5554.6
## + V2_J2_1	1	0.44	1473.7	-5554.6
## + V17_J2_3	1	0.41	1473.8	-5554.5
## + V15_J1_5	1	0.40	1473.8	-5554.5
## + V15_J1_4	1	0.38	1473.8	-5554.4
## + V16_J1_1	1	0.37	1473.8	-5554.4
## + V12_1_2_J2_3	1	0.37	1473.8	-5554.3
## + V4_J1_2	1	0.36	1473.8	-5554.3
## + V13_3_J2_2	1	0.35	1473.8	-5554.3
## - V14_J1_3	1	3.43	1477.6	-5554.3
## + V2_J2_5	1	0.33	1473.8	-5554.2
## + V13_1_J1_1	1	0.31	1473.9	-5554.1
## + V13_3_J1_6	1	0.29	1473.9	-5554.1
## + V12_1_2_J2_5	1	0.28	1473.9	-5554.1
## + V13_1_J1_6	1	0.28	1473.9	-5554.0
## + V4_J2_2	1	0.28	1473.9	-5554.0
## + V2_J1_1	1	0.27	1473.9	-5554.0
## - V26_J1_1	1	3.49	1477.7	-5554.0
## + V30_J1_4	1	0.27	1473.9	-5554.0
## + V29_J2_5	1	0.27	1473.9	-5554.0
## + V5_J1_1	1	0.26	1473.9	-5554.0
## + V19_J1_7	1	0.26	1473.9	-5554.0
## + V5_J2_2	1	0.26	1473.9	-5554.0
## + V13_1_J1_4	1	0.23	1474.0	-5553.9
## + V16_J2_5	1	0.22	1474.0	-5553.8
## + V4_J1_7	1	0.20	1474.0	-5553.8
## + V3_J1_1	1	0.20	1474.0	-5553.7
## + V14_J1_1	1	0.18	1474.0	-5553.7
## + V29_J2_7	1	0.18	1474.0	-5553.7
## - V13_1_J2_2	1	3.59	1477.8	-5553.7
## + V20_J2_5	1	0.17	1474.0	-5553.7
## + V13_2_J2_4	1	0.16	1474.0	-5553.6
## + V13_2_J2_1	1	0.16	1474.0	-5553.6
## + V13_1_J2_5	1	0.15	1474.0	-5553.6
## + V26_J1_2	1	0.15	1474.0	-5553.6
## + V23_J1_6	1	0.14	1474.0	-5553.5
## + V13_3_J1_4	1	0.13	1474.0	-5553.5
## + V2_J2_3	1	0.10	1474.1	-5553.4
## + V1_J1_6	1	0.10	1474.1	-5553.4
## - V19_J1_1	1	3.67	1477.8	-5553.4
## + V3_J1_3	1	0.09	1474.1	-5553.4
## + V17_J1_6	1	0.09	1474.1	-5553.4
## - V29_J2_3	1	3.69	1477.9	-5553.3
## + V16_J1_7	1	0.08	1474.1	-5553.3
## + V19_J2_2	1	0.08	1474.1	-5553.3
## + V2_J2_4	1	0.07	1474.1	-5553.3

## + V30_J2_4	1	0.07	1474.1	-5553.3
## + V13_3_J1_5	1	0.07	1474.1	-5553.3
## + V16_J1_5	1	0.06	1474.1	-5553.3
## + V13_2_J1_1	1	0.06	1474.1	-5553.3
## + V5_J1_3	1	0.05	1474.1	-5553.2
## + V24_J2_1	1	0.05	1474.1	-5553.2
## + V23_J1_5	1	0.04	1474.1	-5553.2
## + V13_1_J2_1	1	0.04	1474.1	-5553.2
## + V24_J1_4	1	0.04	1474.1	-5553.2
## + V13_1_J2_3	1	0.04	1474.1	-5553.2
## + V13_3_J2_1	1	0.02	1474.2	-5553.1
## + V12_1_2_J2_4	1	0.02	1474.2	-5553.1
## + V17_J1_4	1	0.02	1474.2	-5553.1
## + V17_J1_1	1	0.02	1474.2	-5553.1
## + V23_J1_1	1	0.02	1474.2	-5553.1
## - V13_2_J1_4	1	3.75	1477.9	-5553.1
## + V3_J2_2	1	0.01	1474.2	-5553.1
## + V13_3_J1_7	1	0.01	1474.2	-5553.1
## + V13_3_J1_3	1	0.01	1474.2	-5553.1
## + V15_J2_5	1	0.01	1474.2	-5553.1
## + V1_J1_4	1	0.01	1474.2	-5553.1
## + V14_J1_6	1	0.00	1474.2	-5553.1
## + V14_J1_7	1	0.00	1474.2	-5553.1
## + V1_J2_4	1	0.00	1474.2	-5553.1
## + V3_J2_7	1	0.00	1474.2	-5553.1
## + V2_J1_4	1	0.00	1474.2	-5553.1
## + V26_J2_7	1	0.00	1474.2	-5553.1
## - V2_J1_6	1	3.99	1478.2	-5552.3
## - V29_J1_1	1	4.19	1478.4	-5551.6
## - V20_J1_2	1	4.35	1478.5	-5551.0
## - V13_2_J1_5	1	4.48	1478.7	-5550.5
## - V14_J1_2	1	4.60	1478.8	-5550.1
## - V1_J1_5	1	4.84	1479.0	-5549.3
## - V13_3_J2_5	1	5.12	1479.3	-5548.3
## - V26_J1_3	1	5.13	1479.3	-5548.3
## - V19_J1_3	1	5.66	1479.8	-5546.4
## - V2_J1_5	1	5.70	1479.9	-5546.3
## - V23_J1_4	1	6.19	1480.4	-5544.5
## - V23_J2_1	1	6.59	1480.8	-5543.1
## - V13_2_J1_6	1	7.10	1481.3	-5541.3
## - V30_J2_3	1	7.55	1481.7	-5539.7
## - V13_1_J1_5	1	7.58	1481.8	-5539.7
## - V26_J1_6	1	7.64	1481.8	-5539.4
## - V24_J2_3	1	8.02	1482.2	-5538.1
## - V15_J2_3	1	8.38	1482.5	-5536.8
## - V24_J2_5	1	8.72	1482.9	-5535.6
## - V29_J1_5	1	9.04	1483.2	-5534.5
## - V29_J1_7	1	9.12	1483.3	-5534.3
## - V24_J1_7	1	9.43	1483.6	-5533.2
## - V17_J1_5	1	9.59	1483.8	-5532.6
## - V12_1_2_J1_2	1	10.28	1484.5	-5530.2
## - V1_J2_5	1	10.29	1484.5	-5530.1
## - V15_J2_1	1	11.47	1485.6	-5526.0
## - V13_1_J1_2	1	11.53	1485.7	-5525.8

## - V16_J2_3	1	12.06	1486.2	-5524.0
## - V12_1_2_J1_6	1	14.33	1488.5	-5516.0
## - V20_J2_3	1	15.28	1489.5	-5512.7
## - V20_J2_1	1	15.65	1489.8	-5511.4
## - V13_1_J1_7	1	16.00	1490.2	-5510.2
## - V24_J1_6	1	16.68	1490.8	-5507.8
## - V26_J1_5	1	18.76	1492.9	-5500.6
## - V14_J2_5	1	19.21	1493.4	-5499.0
## - V4_J1_3	1	19.40	1493.6	-5498.3
## - V14_J2_1	1	23.36	1497.5	-5484.6
## - V12_1_2_J1_7	1	23.83	1498.0	-5483.0
## - V23_J2_7	1	24.29	1498.5	-5481.3
## - V30_J1_5	1	24.37	1498.5	-5481.1
## - V29_J1_3	1	26.09	1500.3	-5475.1
## - V30_J2_5	1	26.40	1500.6	-5474.0
## - V2_J2_7	1	26.44	1500.6	-5473.9
## - V3_J1_5	1	27.13	1501.3	-5471.5
## - V2_J2_2	1	29.46	1503.6	-5463.4
## - V4_J1_5	1	29.72	1503.9	-5462.5
## - V12_1_2_J2_7	1	30.02	1504.2	-5461.5
## - V15_J1_1	1	30.84	1505.0	-5458.6
## - V15_J1_2	1	37.23	1511.4	-5436.6
## - V14_J2_4	1	37.32	1511.5	-5436.3
## - V4_J2_7	1	39.26	1513.4	-5429.6
## - V30_J1_3	1	39.71	1513.9	-5428.1
## - V16_J2_7	1	39.83	1514.0	-5427.7
## - V5_J1_4	1	40.65	1514.8	-5424.9
## - V19_J2_4	1	41.17	1515.3	-5423.1
## - V26_J1_4	1	41.30	1515.5	-5422.7
## - V19_J2_5	1	41.55	1515.7	-5421.8
## - V12_1_2_J1_3	1	41.94	1516.1	-5420.4
## - V13_2_J1_7	1	45.22	1519.4	-5409.2
## - V4_J1_4	1	49.77	1524.0	-5393.6
## - V14_J2_3	1	52.92	1527.1	-5382.9
## - V5_J2_1	1	53.23	1527.4	-5381.9
## - V19_J2_1	1	55.27	1529.4	-5374.9
## - V30_J1_2	1	56.59	1530.8	-5370.5
## - V15_J1_6	1	60.96	1535.1	-5355.6
## - V17_J2_7	1	63.59	1537.8	-5346.7
## - V15_J1_3	1	63.63	1537.8	-5346.6
## - V5_J2_3	1	64.87	1539.0	-5342.4
## - V15_J1_7	1	65.07	1539.2	-5341.7
## - V14_J1_5	1	67.48	1541.7	-5333.6
## - V17_J2_2	1	67.51	1541.7	-5333.5
## - V16_J1_3	1	69.57	1543.7	-5326.5
## - V1_J2_2	1	69.62	1543.8	-5326.4
## - V30_J1_1	1	70.18	1544.3	-5324.5
## - V1_J1_3	1	72.51	1546.7	-5316.6
## - V30_J2_2	1	73.12	1547.3	-5314.6
## - V23_J1_3	1	81.21	1555.4	-5287.5
## - V14_J1_4	1	82.41	1556.6	-5283.5
## - V3_J1_4	1	84.56	1558.7	-5276.3
## - V2_J1_3	1	85.98	1560.2	-5271.6
## - V17_J1_3	1	87.55	1561.7	-5266.3

```

## - V19_J2_3      1      88.66 1562.8 -5262.6
## - V1_J2_7       1      92.91 1567.1 -5248.5
## - V12_1_2_J1_4  1     104.93 1579.1 -5208.8
## - V5_J1_5       1     105.80 1580.0 -5205.9
## - V3_J2_1       1     111.50 1585.7 -5187.2
## - V4_J2_5       1     115.54 1589.7 -5174.0
## - V4_J2_3       1     118.04 1592.2 -5165.8
## - V26_J2_1      1     122.37 1596.5 -5151.7
## - V15_J2_7      1     124.68 1598.9 -5144.1
## - V3_J2_5       1     128.40 1602.6 -5132.0
## - V4_J2_1       1     130.24 1604.4 -5126.1
## - V15_J2_2      1     134.06 1608.2 -5113.7
## - V19_J1_5      1     135.25 1609.4 -5109.9
## - V26_J2_5      1     157.80 1632.0 -5037.5
## - V26_J2_4      1     159.41 1633.6 -5032.4
## - V4_J2_4       1     161.62 1635.8 -5025.4
## - V3_J2_3       1     175.68 1649.8 -4980.9
## - V12_1_2_J2_2  1     177.25 1651.4 -4975.9
## - V3_J2_4       1     187.73 1661.9 -4943.0
## - V19_J1_4      1     191.45 1665.6 -4931.4
## - J             12     285.40 1759.6 -4719.0
## - V20_J2_2      1     263.43 1737.6 -4711.4
## - V5_J2_5       1     269.31 1743.5 -4693.8
## - V26_J2_3      1     293.34 1767.5 -4622.6
## - V5_J2_4       1     306.88 1781.1 -4583.0
## - V16_J2_2      1     440.03 1914.2 -4208.1
## - V             19    1021.64 2495.8 -2947.9
##
## Step:  AIC=-5563.25
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
## V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
## V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
## V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V14_J1_2 + V13_3_J2_5 +
## V20_J1_2 + V13_2_J1_4 + V26_J1_6 + V13_1_J1_5 + V26_J1_1 +
## V2_J1_6 + V29_J1_1 + V15_J2_3 + V30_J2_3 + V24_J2_3 + V13_2_J1_5 +
## V13_1_J2_2 + V19_J1_3 + V14_J1_3 + V19_J1_1 + V16_J2_1 +
## V3_J1_2 + V13_2_J2_5 + V29_J2_3 + V1_J1_1 + V23_J2_3 + V13_1_J2_7
##
##
##           Df Sum of Sq    RSS    AIC
## + V14_J2_7      1      3.09 1468.2 -5567.5
## + V29_J2_1      1      2.79 1468.5 -5566.5

```


## + V29_J2_2	1	2.60	1468.7	-5565.8
## + V24_J1_3	1	2.58	1468.7	-5565.7
## + V17_J2_1	1	2.54	1468.8	-5565.6
## + V13_3_J1_2	1	2.48	1468.8	-5565.4
## + V13_2_J1_2	1	2.45	1468.8	-5565.3
## + V23_J2_2	1	2.14	1469.2	-5564.2
## + V23_J1_7	1	2.10	1469.2	-5564.0
## + V30_J1_7	1	2.01	1469.3	-5563.7
## + V20_J1_6	1	2.00	1469.3	-5563.7
## + V13_3_J1_1	1	1.94	1469.3	-5563.5
## + V20_J1_7	1	1.89	1469.4	-5563.3
## <none>			1471.3	-5563.3
## + V12_1_2_J1_1	1	1.82	1469.5	-5563.1
## + V26_J2_2	1	1.80	1469.5	-5563.0
## + V16_J1_4	1	1.78	1469.5	-5562.9
## + V29_J1_6	1	1.76	1469.5	-5562.8
## + V15_J2_4	1	1.75	1469.5	-5562.8
## - V13_1_J1_3	1	2.03	1473.3	-5562.7
## + V13_2_J2_2	1	1.59	1469.7	-5562.2
## + V24_J1_5	1	1.59	1469.7	-5562.2
## + V16_J1_2	1	1.57	1469.7	-5562.2
## + V16_J1_6	1	1.56	1469.7	-5562.1
## + V5_J1_6	1	1.56	1469.7	-5562.1
## + V29_J1_4	1	1.55	1469.7	-5562.1
## + V20_J2_4	1	1.51	1469.8	-5561.9
## + V2_J1_7	1	1.46	1469.8	-5561.8
## + V29_J2_4	1	1.40	1469.9	-5561.6
## + V13_1_J2_4	1	1.40	1469.9	-5561.5
## + V14_J2_2	1	1.38	1469.9	-5561.5
## + V13_2_J2_7	1	1.36	1469.9	-5561.4
## + V23_J1_2	1	1.36	1469.9	-5561.4
## + V12_1_2_J1_5	1	1.33	1470.0	-5561.3
## + V16_J2_4	1	1.31	1470.0	-5561.2
## + V1_J2_3	1	1.28	1470.0	-5561.1
## + V13_3_J2_4	1	1.24	1470.0	-5561.0
## + V24_J1_1	1	1.24	1470.0	-5561.0
## + V1_J1_7	1	1.16	1470.1	-5560.7
## + V4_J1_6	1	1.16	1470.1	-5560.7
## + V20_J1_4	1	1.15	1470.1	-5560.7
## + V24_J2_4	1	1.14	1470.1	-5560.7
## + V20_J1_1	1	1.14	1470.1	-5560.6
## + V26_J1_7	1	1.07	1470.2	-5560.4
## + V2_J1_2	1	1.04	1470.2	-5560.3
## + V17_J1_2	1	1.00	1470.3	-5560.2
## + V17_J1_7	1	0.97	1470.3	-5560.0
## - V16_J2_1	1	2.87	1474.2	-5559.7
## + V20_J1_5	1	0.87	1470.4	-5559.7
## - V13_1_J2_7	1	2.89	1474.2	-5559.7
## + V5_J2_7	1	0.86	1470.4	-5559.6
## + V5_J1_7	1	0.85	1470.4	-5559.6
## + V1_J2_1	1	0.84	1470.4	-5559.6
## + V29_J1_2	1	0.84	1470.4	-5559.6
## + V24_J2_7	1	0.83	1470.5	-5559.6
## + V17_J2_4	1	0.81	1470.5	-5559.5

## + V5_J1_2	1	0.80	1470.5	-5559.4
## - V13_2_J2_5	1	2.97	1474.2	-5559.4
## - V23_J2_3	1	2.98	1474.3	-5559.4
## + V23_J2_4	1	0.77	1470.5	-5559.3
## + V19_J1_6	1	0.76	1470.5	-5559.3
## + V30_J2_1	1	0.75	1470.5	-5559.3
## - V1_J1_1	1	3.02	1474.3	-5559.2
## + V19_J2_7	1	0.74	1470.5	-5559.2
## + V20_J1_3	1	0.73	1470.5	-5559.2
## + V30_J2_7	1	0.71	1470.6	-5559.1
## + V13_1_J1_1	1	0.67	1470.6	-5559.0
## + V23_J2_5	1	0.66	1470.6	-5559.0
## - V3_J1_2	1	3.11	1474.4	-5558.9
## + V3_J1_6	1	0.64	1470.7	-5558.9
## + V13_3_J2_3	1	0.59	1470.7	-5558.7
## + V12_1_2_J2_1	1	0.58	1470.7	-5558.7
## + V3_J1_7	1	0.56	1470.7	-5558.6
## + V17_J2_5	1	0.55	1470.7	-5558.6
## + V30_J1_6	1	0.55	1470.7	-5558.6
## + V13_1_J1_4	1	0.53	1470.8	-5558.5
## + V13_2_J1_3	1	0.51	1470.8	-5558.4
## + V19_J1_2	1	0.50	1470.8	-5558.4
## + V24_J1_2	1	0.48	1470.8	-5558.3
## + V1_J1_2	1	0.47	1470.8	-5558.3
## + V24_J2_2	1	0.47	1470.8	-5558.3
## + V2_J2_1	1	0.46	1470.8	-5558.2
## + V4_J1_1	1	0.45	1470.8	-5558.2
## + V17_J2_3	1	0.45	1470.8	-5558.2
## + V15_J1_5	1	0.43	1470.8	-5558.1
## + V13_3_J2_7	1	0.42	1470.9	-5558.1
## + V12_1_2_J2_3	1	0.39	1470.9	-5558.0
## - V14_J1_3	1	3.37	1474.7	-5558.0
## + V13_2_J2_3	1	0.39	1470.9	-5558.0
## + V15_J1_4	1	0.38	1470.9	-5557.9
## + V16_J1_1	1	0.37	1470.9	-5557.9
## + V13_3_J2_2	1	0.36	1470.9	-5557.9
## + V29_J2_7	1	0.35	1470.9	-5557.9
## + V2_J2_5	1	0.35	1470.9	-5557.9
## + V4_J1_2	1	0.35	1470.9	-5557.9
## + V5_J1_1	1	0.31	1471.0	-5557.7
## + V12_1_2_J2_5	1	0.30	1471.0	-5557.7
## + V20_J2_7	1	0.30	1471.0	-5557.7
## + V4_J2_2	1	0.30	1471.0	-5557.7
## + V2_J1_1	1	0.28	1471.0	-5557.6
## + V13_3_J1_6	1	0.27	1471.0	-5557.6
## - V19_J1_1	1	3.50	1474.8	-5557.5
## + V5_J2_2	1	0.25	1471.0	-5557.5
## + V3_J1_1	1	0.24	1471.0	-5557.5
## + V14_J1_1	1	0.23	1471.0	-5557.4
## + V19_J1_7	1	0.23	1471.1	-5557.4
## + V30_J1_4	1	0.22	1471.1	-5557.4
## + V29_J2_5	1	0.22	1471.1	-5557.4
## + V4_J1_7	1	0.21	1471.1	-5557.4
## + V16_J2_5	1	0.20	1471.1	-5557.3

## + V26_J1_2	1	0.19	1471.1	-5557.3
## + V13_3_J1_4	1	0.16	1471.1	-5557.2
## + V23_J1_6	1	0.14	1471.1	-5557.1
## + V20_J2_5	1	0.14	1471.2	-5557.1
## + V13_2_J2_4	1	0.13	1471.2	-5557.1
## + V13_2_J2_1	1	0.13	1471.2	-5557.1
## + V1_J1_6	1	0.10	1471.2	-5557.0
## + V2_J2_3	1	0.09	1471.2	-5556.9
## + V3_J1_3	1	0.08	1471.2	-5556.9
## + V17_J1_6	1	0.08	1471.2	-5556.9
## + V13_3_J1_5	1	0.08	1471.2	-5556.9
## + V13_1_J1_6	1	0.07	1471.2	-5556.9
## + V2_J2_4	1	0.07	1471.2	-5556.9
## + V24_J2_1	1	0.07	1471.2	-5556.9
## + V16_J1_5	1	0.07	1471.2	-5556.9
## - V26_J1_1	1	3.69	1475.0	-5556.8
## + V16_J1_7	1	0.07	1471.2	-5556.8
## + V19_J2_2	1	0.06	1471.2	-5556.8
## + V5_J1_3	1	0.06	1471.2	-5556.8
## + V24_J1_4	1	0.06	1471.2	-5556.8
## + V30_J2_4	1	0.05	1471.2	-5556.8
## + V13_2_J1_1	1	0.04	1471.2	-5556.8
## + V23_J1_5	1	0.04	1471.2	-5556.8
## + V13_3_J2_1	1	0.04	1471.2	-5556.7
## + V3_J2_7	1	0.03	1471.3	-5556.7
## + V13_1_J2_5	1	0.03	1471.3	-5556.7
## + V17_J1_4	1	0.02	1471.3	-5556.7
## + V12_1_2_J2_4	1	0.02	1471.3	-5556.7
## + V26_J2_7	1	0.02	1471.3	-5556.7
## + V17_J1_1	1	0.02	1471.3	-5556.7
## + V23_J1_1	1	0.01	1471.3	-5556.7
## + V14_J1_6	1	0.01	1471.3	-5556.7
## + V3_J2_2	1	0.01	1471.3	-5556.7
## + V13_3_J1_7	1	0.01	1471.3	-5556.7
## + V13_3_J1_3	1	0.01	1471.3	-5556.6
## + V15_J2_5	1	0.01	1471.3	-5556.6
## + V1_J1_4	1	0.00	1471.3	-5556.6
## + V13_1_J2_1	1	0.00	1471.3	-5556.6
## + V13_1_J2_3	1	0.00	1471.3	-5556.6
## + V1_J2_4	1	0.00	1471.3	-5556.6
## + V2_J1_4	1	0.00	1471.3	-5556.6
## + V14_J1_7	1	0.00	1471.3	-5556.6
## - V29_J2_3	1	3.86	1475.1	-5556.3
## - V13_2_J1_4	1	3.88	1475.2	-5556.2
## - V2_J1_6	1	3.95	1475.2	-5555.9
## - V29_J1_1	1	4.11	1475.4	-5555.4
## - V20_J1_2	1	4.34	1475.6	-5554.6
## - V13_2_J1_5	1	4.42	1475.7	-5554.3
## - V13_1_J2_2	1	4.44	1475.7	-5554.2
## - V14_J1_2	1	4.70	1476.0	-5553.3
## - V1_J1_5	1	4.80	1476.1	-5553.0
## - V26_J1_3	1	5.01	1476.3	-5552.2
## - V13_3_J2_5	1	5.29	1476.6	-5551.2
## - V19_J1_3	1	5.58	1476.9	-5550.2

## - V2_J1_5	1	5.64	1476.9	-5550.0
## - V23_J1_4	1	6.11	1477.4	-5548.3
## - V23_J2_1	1	6.68	1478.0	-5546.3
## - V13_2_J1_6	1	7.20	1478.5	-5544.5
## - V30_J2_3	1	7.82	1479.1	-5542.3
## - V26_J1_6	1	7.91	1479.2	-5542.0
## - V24_J2_3	1	8.29	1479.6	-5540.7
## - V24_J2_5	1	8.47	1479.8	-5540.0
## - V15_J2_3	1	8.48	1479.8	-5540.0
## - V13_1_J1_5	1	8.63	1479.9	-5539.5
## - V29_J1_5	1	9.11	1480.4	-5537.8
## - V29_J1_7	1	9.12	1480.4	-5537.7
## - V24_J1_7	1	9.44	1480.7	-5536.6
## - V17_J1_5	1	9.53	1480.8	-5536.3
## - V12_1_2_J1_2	1	10.11	1481.4	-5534.3
## - V1_J2_5	1	10.17	1481.5	-5534.1
## - V15_J2_1	1	11.50	1482.8	-5529.4
## - V16_J2_3	1	11.87	1483.2	-5528.1
## - V13_1_J1_2	1	12.88	1484.2	-5524.6
## - V12_1_2_J1_6	1	14.43	1485.7	-5519.1
## - V20_J2_3	1	14.92	1486.2	-5517.4
## - V20_J2_1	1	15.40	1486.7	-5515.8
## - V24_J1_6	1	16.84	1488.1	-5510.7
## - V13_1_J1_7	1	17.56	1488.8	-5508.2
## - V26_J1_5	1	18.36	1489.7	-5505.4
## - V14_J2_5	1	18.67	1490.0	-5504.3
## - V4_J1_3	1	19.50	1490.8	-5501.4
## - V14_J2_1	1	22.84	1494.1	-5489.8
## - V12_1_2_J1_7	1	24.11	1495.4	-5485.4
## - V30_J1_5	1	24.54	1495.8	-5483.9
## - V23_J2_7	1	25.58	1496.9	-5480.2
## - V29_J1_3	1	26.15	1497.4	-5478.3
## - V3_J1_5	1	26.80	1498.1	-5476.0
## - V30_J2_5	1	26.84	1498.1	-5475.9
## - V2_J2_7	1	27.86	1499.1	-5472.3
## - V4_J1_5	1	29.65	1500.9	-5466.1
## - V2_J2_2	1	29.81	1501.1	-5465.6
## - V15_J1_1	1	30.76	1502.0	-5462.3
## - V12_1_2_J2_7	1	31.53	1502.8	-5459.6
## - V14_J2_4	1	36.71	1508.0	-5441.7
## - V15_J1_2	1	36.92	1508.2	-5441.0
## - V30_J1_3	1	39.72	1511.0	-5431.3
## - V5_J1_4	1	40.04	1511.3	-5430.3
## - V26_J1_4	1	40.44	1511.7	-5428.9
## - V19_J2_4	1	40.48	1511.8	-5428.8
## - V19_J2_5	1	40.68	1512.0	-5428.0
## - V4_J2_7	1	40.73	1512.0	-5427.9
## - V16_J2_7	1	41.45	1512.7	-5425.4
## - V12_1_2_J1_3	1	42.37	1513.7	-5422.3
## - V13_2_J1_7	1	45.19	1516.5	-5412.6
## - V4_J1_4	1	49.42	1520.7	-5398.1
## - V14_J2_3	1	51.91	1523.2	-5389.6
## - V5_J2_1	1	52.50	1523.8	-5387.6
## - V19_J2_1	1	54.40	1525.7	-5381.1

```

## - V30_J1_2      1      56.69 1528.0 -5373.3
## - V15_J1_6      1      60.78 1532.1 -5359.4
## - V15_J1_3      1      63.11 1534.4 -5351.5
## - V5_J2_3       1      63.81 1535.1 -5349.1
## - V15_J1_7      1      64.62 1535.9 -5346.4
## - V17_J2_7      1      65.58 1536.9 -5343.1
## - V14_J1_5      1      66.92 1538.2 -5338.6
## - V17_J2_2      1      68.03 1539.3 -5334.8
## - V16_J1_3      1      69.96 1541.2 -5328.3
## - V1_J2_2       1      70.12 1541.4 -5327.8
## - V30_J1_1      1      70.58 1541.9 -5326.2
## - V1_J1_3       1      72.95 1544.2 -5318.2
## - V30_J2_2      1      73.19 1544.5 -5317.4
## - V14_J1_4      1      81.42 1552.7 -5289.8
## - V23_J1_3      1      81.55 1552.8 -5289.4
## - V3_J1_4       1      83.60 1554.9 -5282.5
## - V2_J1_3       1      86.51 1557.8 -5272.8
## - V19_J2_3      1      87.25 1558.5 -5270.3
## - V17_J1_3      1      88.07 1559.4 -5267.6
## - V1_J2_7       1      95.14 1566.4 -5244.1
## - V12_1_2_J1_4  1     104.91 1576.2 -5211.7
## - V5_J1_5       1     105.20 1576.5 -5210.8
## - V3_J2_1       1     110.36 1581.6 -5193.8
## - V4_J2_5       1     114.78 1586.1 -5179.3
## - V4_J2_3       1     117.14 1588.4 -5171.5
## - V15_J2_7      1     120.28 1591.6 -5161.3
## - V26_J2_1      1     120.79 1592.1 -5159.6
## - V3_J2_5       1     126.95 1598.2 -5139.5
## - V4_J2_1       1     129.63 1600.9 -5130.8
## - V15_J2_2      1     133.20 1604.5 -5119.2
## - V19_J1_5      1     134.35 1605.6 -5115.5
## - V26_J2_5      1     155.74 1627.0 -5046.7
## - V26_J2_4      1     157.70 1629.0 -5040.4
## - V4_J2_4       1     161.07 1632.3 -5029.7
## - V3_J2_3       1     173.78 1645.1 -4989.3
## - V12_1_2_J2_2  1     178.17 1649.5 -4975.5
## - V3_J2_4       1     186.34 1657.6 -4949.8
## - V19_J1_4      1     189.76 1661.0 -4939.1
## - J             12     279.58 1750.9 -4738.2
## - V20_J2_2      1     263.73 1735.0 -4712.5
## - V5_J2_5       1     267.21 1738.5 -4702.1
## - V26_J2_3      1     290.16 1761.4 -4633.9
## - V5_J2_4       1     305.18 1776.5 -4589.7
## - V16_J2_2      1     441.08 1912.4 -4206.4
## - V             19     1020.51 2491.8 -2949.6
##
## Step:  AIC=-5567.53
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +

```

```

##      V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
##      V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
##      V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
##      V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
##      V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
##      V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
##      V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
##      V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
##      V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
##      V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V14_J1_2 + V13_3_J2_5 +
##      V20_J1_2 + V13_2_J1_4 + V26_J1_6 + V13_1_J1_5 + V26_J1_1 +
##      V2_J1_6 + V29_J1_1 + V15_J2_3 + V30_J2_3 + V24_J2_3 + V13_2_J1_5 +
##      V13_1_J2_2 + V19_J1_3 + V14_J1_3 + V19_J1_1 + V16_J2_1 +
##      V3_J1_2 + V13_2_J2_5 + V29_J2_3 + V1_J1_1 + V23_J2_3 + V13_1_J2_7 +
##      V14_J2_7

```

```

##
##      Df Sum of Sq    RSS    AIC
## + V29_J2_1      1      2.83 1465.4 -5570.9
## + V29_J2_2      1      2.77 1465.4 -5570.7
## + V17_J2_1      1      2.58 1465.6 -5570.1
## + V24_J1_3      1      2.56 1465.6 -5570.0
## + V13_3_J1_2     1      2.47 1465.7 -5569.7
## + V13_2_J1_2     1      2.41 1465.8 -5569.4
## + V30_J1_7      1      2.16 1466.0 -5568.5
## + V23_J2_2      1      2.09 1466.1 -5568.3
## + V23_J1_7      1      2.06 1466.1 -5568.2
## + V13_3_J1_1     1      2.05 1466.2 -5568.2
## + V20_J1_6      1      1.88 1466.3 -5567.6
## <none>                1468.2 -5567.5
## + V16_J1_4      1      1.82 1466.4 -5567.3
## + V20_J1_7      1      1.78 1466.4 -5567.2
## - V13_1_J1_3     1      1.99 1470.2 -5567.1
## + V12_1_2_J1_1   1      1.75 1466.5 -5567.1
## + V15_J2_4      1      1.74 1466.5 -5567.1
## + V13_2_J2_2     1      1.72 1466.5 -5567.0
## + V29_J1_6      1      1.64 1466.6 -5566.7
## + V26_J2_2      1      1.62 1466.6 -5566.6
## + V16_J1_6      1      1.61 1466.6 -5566.6
## + V16_J1_2      1      1.61 1466.6 -5566.6
## + V29_J1_4      1      1.58 1466.6 -5566.5
## + V24_J1_5      1      1.55 1466.7 -5566.4
## + V20_J2_4      1      1.48 1466.7 -5566.2
## + V5_J1_6       1      1.46 1466.7 -5566.1
## + V2_J1_7       1      1.40 1466.8 -5565.9
## + V13_1_J2_4     1      1.37 1466.8 -5565.8
## + V29_J2_4      1      1.37 1466.8 -5565.7
## + V23_J1_2      1      1.32 1466.9 -5565.6
## + V12_1_2_J1_5   1      1.31 1466.9 -5565.6
## + V1_J2_3       1      1.29 1466.9 -5565.5
## + V16_J2_4      1      1.28 1466.9 -5565.4
## + V20_J1_1      1      1.24 1467.0 -5565.3
## + V13_3_J2_4     1      1.23 1467.0 -5565.3
## + V26_J1_7      1      1.21 1467.0 -5565.2
## + V1_J1_7       1      1.21 1467.0 -5565.2

```

## + V4_J1_6	1	1.17	1467.0	-5565.1
## + V24_J2_4	1	1.17	1467.0	-5565.1
## + V20_J1_4	1	1.17	1467.0	-5565.0
## + V24_J1_1	1	1.13	1467.1	-5564.9
## + V19_J2_7	1	1.07	1467.1	-5564.7
## + V30_J2_7	1	1.03	1467.2	-5564.5
## + V2_J1_2	1	1.02	1467.2	-5564.5
## + V13_2_J2_7	1	1.01	1467.2	-5564.5
## + V17_J1_7	1	1.01	1467.2	-5564.5
## + V17_J1_2	1	0.98	1467.2	-5564.4
## + V5_J1_7	1	0.93	1467.3	-5564.2
## + V20_J1_5	1	0.89	1467.3	-5564.1
## + V1_J2_1	1	0.86	1467.3	-5564.0
## + V19_J1_6	1	0.86	1467.3	-5563.9
## - V16_J2_1	1	2.91	1471.1	-5563.9
## - V13_2_J2_5	1	2.91	1471.1	-5563.9
## + V17_J2_4	1	0.83	1467.4	-5563.8
## + V29_J1_2	1	0.82	1467.4	-5563.8
## - V1_J1_1	1	2.94	1471.1	-5563.8
## - V23_J2_3	1	2.94	1471.1	-5563.8
## + V30_J2_1	1	0.78	1467.4	-5563.7
## + V5_J1_2	1	0.78	1467.4	-5563.7
## + V23_J2_4	1	0.74	1467.5	-5563.5
## + V20_J1_3	1	0.73	1467.5	-5563.5
## + V3_J1_6	1	0.71	1467.5	-5563.4
## - V14_J2_7	1	3.09	1471.3	-5563.3
## + V23_J2_5	1	0.64	1467.6	-5563.2
## + V13_1_J1_1	1	0.63	1467.6	-5563.1
## - V3_J1_2	1	3.14	1471.3	-5563.1
## + V13_3_J2_3	1	0.61	1467.6	-5563.0
## + V12_1_2_J2_1	1	0.59	1467.6	-5563.0
## - V14_J1_2	1	3.16	1471.4	-5563.0
## + V29_J2_7	1	0.59	1467.6	-5563.0
## + V14_J2_2	1	0.58	1467.6	-5562.9
## + V5_J2_7	1	0.57	1467.6	-5562.9
## + V24_J2_7	1	0.56	1467.6	-5562.9
## + V17_J2_5	1	0.56	1467.6	-5562.9
## + V13_1_J1_4	1	0.54	1467.7	-5562.8
## + V24_J2_2	1	0.54	1467.7	-5562.8
## + V19_J1_2	1	0.52	1467.7	-5562.7
## + V13_2_J1_3	1	0.52	1467.7	-5562.7
## + V24_J1_2	1	0.50	1467.7	-5562.7
## + V3_J1_7	1	0.50	1467.7	-5562.7
## + V30_J1_6	1	0.47	1467.7	-5562.6
## + V1_J1_2	1	0.46	1467.7	-5562.5
## + V4_J1_1	1	0.44	1467.8	-5562.5
## + V2_J2_1	1	0.44	1467.8	-5562.5
## + V17_J2_3	1	0.44	1467.8	-5562.4
## + V15_J1_5	1	0.43	1467.8	-5562.4
## - V19_J1_1	1	3.35	1471.5	-5562.3
## + V16_J1_1	1	0.40	1467.8	-5562.3
## + V12_1_2_J2_3	1	0.39	1467.8	-5562.3
## + V15_J1_4	1	0.38	1467.8	-5562.2
## + V13_2_J2_3	1	0.36	1467.8	-5562.2

## + V5_J1_1	1	0.36	1467.8	-5562.2
## + V2_J2_5	1	0.35	1467.8	-5562.1
## - V13_1_J2_7	1	3.40	1471.6	-5562.1
## + V4_J1_2	1	0.32	1467.9	-5562.0
## + V13_3_J2_2	1	0.32	1467.9	-5562.0
## + V12_1_2_J2_5	1	0.30	1467.9	-5561.9
## + V3_J1_1	1	0.29	1467.9	-5561.9
## + V4_J2_2	1	0.29	1467.9	-5561.9
## + V2_J1_1	1	0.25	1468.0	-5561.8
## + V13_3_J1_6	1	0.23	1468.0	-5561.7
## + V13_3_J2_7	1	0.23	1468.0	-5561.7
## + V26_J1_2	1	0.22	1468.0	-5561.7
## + V14_J1_7	1	0.22	1468.0	-5561.7
## + V5_J2_2	1	0.21	1468.0	-5561.6
## + V16_J2_5	1	0.21	1468.0	-5561.6
## + V30_J1_4	1	0.21	1468.0	-5561.6
## + V4_J1_7	1	0.20	1468.0	-5561.6
## + V29_J2_5	1	0.20	1468.0	-5561.6
## + V19_J1_7	1	0.18	1468.0	-5561.5
## + V13_3_J1_4	1	0.16	1468.0	-5561.5
## + V23_J1_6	1	0.15	1468.0	-5561.4
## + V20_J2_7	1	0.14	1468.1	-5561.4
## + V20_J2_5	1	0.12	1468.1	-5561.3
## + V13_2_J2_4	1	0.12	1468.1	-5561.3
## + V3_J2_7	1	0.12	1468.1	-5561.3
## + V13_2_J2_1	1	0.12	1468.1	-5561.3
## + V14_J1_6	1	0.11	1468.1	-5561.3
## + V1_J1_6	1	0.11	1468.1	-5561.3
## + V26_J2_7	1	0.09	1468.1	-5561.2
## + V17_J1_6	1	0.09	1468.1	-5561.2
## + V2_J2_3	1	0.09	1468.1	-5561.2
## + V13_1_J1_6	1	0.09	1468.1	-5561.2
## + V3_J1_3	1	0.08	1468.1	-5561.2
## + V13_3_J1_5	1	0.08	1468.1	-5561.2
## + V2_J2_4	1	0.08	1468.1	-5561.2
## + V24_J2_1	1	0.08	1468.1	-5561.2
## + V16_J1_7	1	0.08	1468.1	-5561.2
## + V16_J1_5	1	0.07	1468.1	-5561.2
## + V24_J1_4	1	0.06	1468.1	-5561.1
## + V5_J1_3	1	0.06	1468.1	-5561.1
## + V23_J1_5	1	0.05	1468.2	-5561.1
## + V30_J2_4	1	0.04	1468.2	-5561.0
## + V19_J2_2	1	0.04	1468.2	-5561.0
## + V13_3_J2_1	1	0.04	1468.2	-5561.0
## + V12_1_2_J2_4	1	0.03	1468.2	-5561.0
## + V13_2_J1_1	1	0.02	1468.2	-5561.0
## + V17_J1_1	1	0.02	1468.2	-5561.0
## + V13_1_J2_5	1	0.02	1468.2	-5561.0
## + V17_J1_4	1	0.02	1468.2	-5561.0
## + V13_3_J1_7	1	0.02	1468.2	-5561.0
## + V23_J1_1	1	0.01	1468.2	-5560.9
## + V13_3_J1_3	1	0.01	1468.2	-5560.9
## + V1_J1_4	1	0.01	1468.2	-5560.9
## + V15_J2_5	1	0.01	1468.2	-5560.9

## + V3_J2_2	1	0.00	1468.2	-5560.9
## + V13_1_J2_1	1	0.00	1468.2	-5560.9
## + V14_J1_1	1	0.00	1468.2	-5560.9
## + V13_1_J2_3	1	0.00	1468.2	-5560.9
## + V1_J2_4	1	0.00	1468.2	-5560.9
## + V2_J1_4	1	0.00	1468.2	-5560.9
## - V26_J1_1	1	3.88	1472.1	-5560.4
## - V29_J2_3	1	3.91	1472.1	-5560.3
## - V13_2_J1_4	1	3.93	1472.1	-5560.3
## - V29_J1_1	1	3.95	1472.2	-5560.2
## - V2_J1_6	1	4.03	1472.2	-5559.9
## - V20_J1_2	1	4.31	1472.5	-5558.9
## - V13_1_J2_2	1	4.36	1472.6	-5558.7
## - V13_2_J1_5	1	4.36	1472.6	-5558.7
## - V14_J1_3	1	4.60	1472.8	-5557.9
## - V1_J1_5	1	4.77	1473.0	-5557.3
## - V26_J1_3	1	4.95	1473.1	-5556.7
## - V13_3_J2_5	1	5.32	1473.5	-5555.4
## - V19_J1_3	1	5.56	1473.8	-5554.5
## - V2_J1_5	1	5.62	1473.8	-5554.3
## - V23_J1_4	1	6.18	1474.4	-5552.3
## - V23_J2_1	1	6.60	1474.8	-5550.8
## - V13_2_J1_6	1	7.41	1475.6	-5548.0
## - V30_J2_3	1	7.93	1476.1	-5546.2
## - V26_J1_6	1	8.17	1476.4	-5545.3
## - V24_J2_3	1	8.37	1476.6	-5544.6
## - V24_J2_5	1	8.38	1476.6	-5544.6
## - V15_J2_3	1	8.49	1476.7	-5544.2
## - V13_1_J1_5	1	8.67	1476.9	-5543.6
## - V29_J1_7	1	8.90	1477.1	-5542.8
## - V29_J1_5	1	9.18	1477.4	-5541.7
## - V17_J1_5	1	9.48	1477.7	-5540.7
## - V24_J1_7	1	9.67	1477.9	-5540.0
## - V12_1_2_J1_2	1	10.07	1478.3	-5538.6
## - V1_J2_5	1	10.19	1478.4	-5538.2
## - V15_J2_1	1	11.48	1479.7	-5533.7
## - V16_J2_3	1	11.92	1480.1	-5532.1
## - V13_1_J1_2	1	12.95	1481.1	-5528.5
## - V12_1_2_J1_6	1	14.27	1482.5	-5523.9
## - V20_J2_3	1	14.83	1483.0	-5521.9
## - V20_J2_1	1	15.35	1483.5	-5520.1
## - V24_J1_6	1	17.14	1485.3	-5513.8
## - V13_1_J1_7	1	17.41	1485.6	-5512.9
## - V26_J1_5	1	18.16	1486.4	-5510.2
## - V4_J1_3	1	19.74	1487.9	-5504.7
## - V14_J2_5	1	20.95	1489.2	-5500.5
## - V12_1_2_J1_7	1	23.92	1492.1	-5490.1
## - V30_J1_5	1	24.70	1492.9	-5487.4
## - V14_J2_1	1	25.31	1493.5	-5485.3
## - V29_J1_3	1	26.12	1494.3	-5482.5
## - V3_J1_5	1	26.71	1494.9	-5480.4
## - V23_J2_7	1	27.00	1495.2	-5479.4
## - V30_J2_5	1	27.04	1495.2	-5479.3
## - V2_J2_7	1	29.28	1497.5	-5471.5

## - V2_J2_2	1	29.58	1497.8	-5470.4
## - V4_J1_5	1	29.85	1498.0	-5469.5
## - V15_J1_1	1	31.04	1499.2	-5465.4
## - V12_1_2_J2_7	1	32.99	1501.2	-5458.6
## - V15_J1_2	1	36.90	1505.1	-5445.1
## - V14_J2_4	1	39.52	1507.7	-5436.0
## - V30_J1_3	1	39.63	1507.8	-5435.7
## - V5_J1_4	1	39.96	1508.2	-5434.5
## - V26_J1_4	1	40.16	1508.4	-5433.9
## - V19_J2_4	1	40.31	1508.5	-5433.3
## - V19_J2_5	1	40.47	1508.7	-5432.8
## - V4_J2_7	1	42.47	1510.7	-5425.9
## - V12_1_2_J1_3	1	42.54	1510.7	-5425.6
## - V16_J2_7	1	43.15	1511.3	-5423.6
## - V13_2_J1_7	1	44.66	1512.9	-5418.3
## - V4_J1_4	1	49.71	1517.9	-5401.0
## - V5_J2_1	1	52.42	1520.6	-5391.7
## - V19_J2_1	1	54.23	1522.4	-5385.6
## - V14_J2_3	1	54.87	1523.1	-5383.4
## - V30_J1_2	1	56.92	1525.1	-5376.4
## - V15_J1_6	1	61.14	1529.3	-5362.0
## - V15_J1_3	1	62.97	1531.2	-5355.8
## - V5_J2_3	1	63.66	1531.9	-5353.5
## - V15_J1_7	1	64.97	1533.2	-5349.0
## - V17_J2_7	1	67.60	1535.8	-5340.1
## - V17_J2_2	1	67.71	1535.9	-5339.7
## - V1_J2_2	1	69.76	1538.0	-5332.8
## - V14_J1_5	1	69.98	1538.2	-5332.0
## - V16_J1_3	1	70.25	1538.5	-5331.1
## - V30_J1_1	1	71.27	1539.5	-5327.7
## - V30_J2_2	1	72.41	1540.6	-5323.8
## - V1_J1_3	1	73.20	1541.4	-5321.2
## - V23_J1_3	1	81.92	1550.1	-5291.8
## - V3_J1_4	1	83.47	1551.7	-5286.6
## - V14_J1_4	1	84.50	1552.7	-5283.2
## - V2_J1_3	1	86.78	1555.0	-5275.6
## - V19_J2_3	1	86.95	1555.2	-5275.0
## - V17_J1_3	1	88.39	1556.6	-5270.2
## - V1_J2_7	1	97.40	1565.6	-5240.2
## - V5_J1_5	1	105.04	1573.2	-5214.9
## - V12_1_2_J1_4	1	105.04	1573.2	-5214.9
## - V3_J2_1	1	110.23	1578.4	-5197.7
## - V4_J2_5	1	115.12	1583.3	-5181.6
## - V15_J2_7	1	116.53	1584.7	-5177.0
## - V4_J2_3	1	117.50	1585.7	-5173.8
## - V26_J2_1	1	120.32	1588.5	-5164.6
## - V3_J2_5	1	126.69	1594.9	-5143.8
## - V4_J2_1	1	130.12	1598.3	-5132.6
## - V15_J2_2	1	133.76	1602.0	-5120.8
## - V19_J1_5	1	134.02	1602.2	-5119.9
## - V26_J2_5	1	155.06	1623.3	-5052.1
## - V26_J2_4	1	157.11	1625.3	-5045.5
## - V4_J2_4	1	161.57	1629.8	-5031.3
## - V3_J2_3	1	173.50	1641.7	-4993.4

```

## - V12_1_2_J2_2  1    177.57 1645.8 -4980.5
## - V3_J2_4       1    186.13 1654.3 -4953.5
## - V19_J1_4      1    189.41 1657.6 -4943.2
## - J             12   275.55 1743.7 -4752.8
## - V20_J2_2      1    262.46 1730.7 -4719.0
## - V5_J2_5       1    266.85 1735.0 -4705.8
## - V26_J2_3      1    289.27 1757.5 -4639.0
## - V5_J2_4       1    304.93 1773.1 -4592.9
## - V16_J2_2      1    440.30 1908.5 -4210.3
## - V             19   1021.92 2490.1 -2946.5
##
## Step:  AIC=-5570.94
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
## V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
## V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
## V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V14_J1_2 + V13_3_J2_5 +
## V20_J1_2 + V13_2_J1_4 + V26_J1_6 + V13_1_J1_5 + V26_J1_1 +
## V2_J1_6 + V29_J1_1 + V15_J2_3 + V30_J2_3 + V24_J2_3 + V13_2_J1_5 +
## V13_1_J2_2 + V19_J1_3 + V14_J1_3 + V19_J1_1 + V16_J2_1 +
## V3_J1_2 + V13_2_J2_5 + V29_J2_3 + V1_J1_1 + V23_J2_3 + V13_1_J2_7 +
## V14_J2_7 + V29_J2_1
##
##
##           Df Sum of Sq    RSS    AIC
## + V29_J2_2    1      3.66 1461.7 -5577.3
## + V24_J1_3     1      2.60 1462.8 -5573.5
## + V13_3_J1_2   1      2.56 1462.8 -5573.4
## + V13_2_J1_2   1      2.52 1462.8 -5573.3
## + V29_J1_4     1      2.31 1463.1 -5572.5
## + V23_J2_2     1      2.14 1463.2 -5571.9
## + V30_J1_7     1      2.09 1463.3 -5571.7
## + V13_3_J1_1   1      2.04 1463.3 -5571.5
## + V17_J2_1     1      2.04 1463.3 -5571.5
## + V23_J1_7     1      2.03 1463.3 -5571.5
## + V20_J1_6     1      1.91 1463.5 -5571.1
## <none>                1465.4 -5570.9
## + V16_J1_4     1      1.83 1463.5 -5570.8
## + V12_1_2_J1_1 1      1.83 1463.5 -5570.8
## - V13_1_J1_3   1      1.94 1467.3 -5570.7
## + V20_J1_7     1      1.76 1463.6 -5570.5
## + V15_J2_4     1      1.75 1463.6 -5570.5
## + V26_J2_2     1      1.65 1463.7 -5570.2

```

## + V16_J1_2	1	1.63	1463.7	-5570.1
## + V13_2_J2_2	1	1.60	1463.8	-5570.0
## + V16_J1_6	1	1.59	1463.8	-5569.9
## + V24_J1_5	1	1.58	1463.8	-5569.9
## + V20_J2_4	1	1.48	1463.9	-5569.6
## + V5_J1_6	1	1.47	1463.9	-5569.5
## + V2_J1_7	1	1.46	1463.9	-5569.5
## - V16_J2_1	1	2.33	1467.7	-5569.3
## + V23_J1_2	1	1.31	1464.1	-5568.9
## + V13_1_J2_4	1	1.30	1464.1	-5568.9
## + V1_J2_3	1	1.29	1464.1	-5568.9
## + V16_J2_4	1	1.28	1464.1	-5568.9
## + V13_3_J2_4	1	1.27	1464.1	-5568.8
## + V20_J1_1	1	1.27	1464.1	-5568.8
## + V26_J1_7	1	1.26	1464.1	-5568.8
## + V12_1_2_J1_5	1	1.24	1464.1	-5568.7
## + V30_J2_1	1	1.17	1464.2	-5568.5
## + V4_J1_6	1	1.16	1464.2	-5568.4
## + V1_J1_7	1	1.16	1464.2	-5568.4
## + V20_J1_4	1	1.15	1464.2	-5568.4
## + V24_J1_1	1	1.15	1464.2	-5568.4
## + V30_J2_7	1	1.13	1464.2	-5568.3
## + V24_J2_4	1	1.13	1464.2	-5568.3
## + V29_J1_6	1	1.11	1464.3	-5568.2
## + V19_J2_7	1	1.09	1464.3	-5568.2
## + V17_J1_7	1	0.97	1464.4	-5567.7
## + V5_J1_7	1	0.95	1464.4	-5567.7
## + V2_J1_2	1	0.95	1464.4	-5567.7
## + V13_2_J2_7	1	0.92	1464.5	-5567.6
## + V20_J1_5	1	0.92	1464.5	-5567.6
## + V17_J1_2	1	0.91	1464.5	-5567.5
## - V29_J2_1	1	2.83	1468.2	-5567.5
## + V17_J2_4	1	0.87	1464.5	-5567.4
## + V29_J2_4	1	0.87	1464.5	-5567.4
## + V19_J1_6	1	0.86	1464.5	-5567.3
## + V5_J1_2	1	0.79	1464.6	-5567.1
## + V20_J1_3	1	0.75	1464.6	-5567.0
## - V1_J1_1	1	3.00	1468.4	-5566.9
## + V23_J2_4	1	0.74	1464.6	-5566.9
## + V2_J2_1	1	0.73	1464.6	-5566.9
## - V13_2_J2_5	1	3.03	1468.4	-5566.8
## - V23_J2_3	1	3.03	1468.4	-5566.8
## + V3_J1_6	1	0.70	1464.7	-5566.8
## + V13_1_J1_1	1	0.66	1464.7	-5566.6
## - V29_J1_1	1	3.10	1468.5	-5566.6
## - V3_J1_2	1	3.12	1468.5	-5566.5
## + V13_3_J2_3	1	0.62	1464.7	-5566.5
## + V23_J2_5	1	0.62	1464.7	-5566.5
## + V17_J2_5	1	0.62	1464.8	-5566.5
## - V14_J2_7	1	3.13	1468.5	-5566.5
## - V14_J1_2	1	3.14	1468.5	-5566.4
## + V13_1_J1_4	1	0.60	1464.8	-5566.4
## + V1_J2_1	1	0.56	1464.8	-5566.3
## + V14_J2_2	1	0.55	1464.8	-5566.3

## + V5_J2_7	1	0.55	1464.8	-5566.2
## + V30_J1_6	1	0.53	1464.8	-5566.2
## + V19_J1_2	1	0.52	1464.8	-5566.2
## + V24_J2_7	1	0.50	1464.9	-5566.1
## + V13_2_J1_3	1	0.49	1464.9	-5566.0
## + V24_J2_2	1	0.48	1464.9	-5566.0
## + V3_J1_7	1	0.48	1464.9	-5566.0
## - V19_J1_1	1	3.28	1468.7	-5565.9
## + V24_J1_2	1	0.46	1464.9	-5565.9
## + V29_J1_2	1	0.45	1464.9	-5565.9
## + V17_J2_3	1	0.44	1464.9	-5565.9
## + V4_J1_1	1	0.42	1465.0	-5565.8
## + V16_J1_1	1	0.42	1465.0	-5565.8
## + V15_J1_5	1	0.41	1465.0	-5565.8
## + V1_J1_2	1	0.40	1465.0	-5565.7
## + V15_J1_4	1	0.38	1465.0	-5565.7
## + V5_J1_1	1	0.38	1465.0	-5565.7
## + V12_1_2_J2_3	1	0.37	1465.0	-5565.6
## + V13_3_J2_2	1	0.36	1465.0	-5565.6
## + V13_2_J2_3	1	0.36	1465.0	-5565.6
## + V12_1_2_J2_1	1	0.36	1465.0	-5565.6
## + V4_J1_2	1	0.31	1465.0	-5565.4
## + V3_J1_1	1	0.31	1465.1	-5565.4
## + V4_J2_2	1	0.31	1465.1	-5565.4
## + V2_J2_5	1	0.30	1465.1	-5565.4
## + V29_J2_7	1	0.29	1465.1	-5565.3
## + V2_J1_1	1	0.27	1465.1	-5565.3
## + V13_3_J1_6	1	0.26	1465.1	-5565.2
## + V30_J1_4	1	0.24	1465.1	-5565.2
## + V12_1_2_J2_5	1	0.24	1465.1	-5565.1
## + V24_J2_1	1	0.22	1465.1	-5565.1
## + V5_J2_2	1	0.22	1465.2	-5565.1
## + V16_J2_5	1	0.22	1465.2	-5565.1
## + V26_J1_2	1	0.22	1465.2	-5565.1
## + V14_J1_7	1	0.21	1465.2	-5565.0
## + V4_J1_7	1	0.19	1465.2	-5565.0
## + V13_3_J2_7	1	0.19	1465.2	-5565.0
## - V13_1_J2_7	1	3.55	1468.9	-5565.0
## + V19_J1_7	1	0.17	1465.2	-5564.9
## + V13_3_J2_1	1	0.15	1465.2	-5564.8
## + V23_J1_6	1	0.15	1465.2	-5564.8
## + V13_3_J1_4	1	0.14	1465.2	-5564.8
## + V13_2_J2_4	1	0.14	1465.2	-5564.8
## + V20_J2_5	1	0.13	1465.2	-5564.8
## + V20_J2_7	1	0.13	1465.2	-5564.8
## + V3_J2_7	1	0.13	1465.2	-5564.8
## + V14_J1_6	1	0.12	1465.2	-5564.7
## + V26_J2_7	1	0.10	1465.3	-5564.7
## + V2_J2_4	1	0.09	1465.3	-5564.6
## + V2_J2_3	1	0.09	1465.3	-5564.6
## + V1_J1_6	1	0.09	1465.3	-5564.6
## + V16_J1_7	1	0.08	1465.3	-5564.6
## + V3_J1_3	1	0.08	1465.3	-5564.6
## + V13_3_J1_5	1	0.08	1465.3	-5564.6

## + V17_J1_6	1	0.07	1465.3	-5564.6
## + V16_J1_5	1	0.07	1465.3	-5564.5
## + V5_J1_3	1	0.07	1465.3	-5564.5
## + V13_1_J1_6	1	0.06	1465.3	-5564.5
## + V30_J2_4	1	0.06	1465.3	-5564.5
## + V24_J1_4	1	0.05	1465.3	-5564.5
## + V29_J2_5	1	0.04	1465.3	-5564.5
## + V19_J2_2	1	0.04	1465.3	-5564.5
## + V23_J1_5	1	0.04	1465.3	-5564.5
## + V12_1_2_J2_4	1	0.04	1465.3	-5564.4
## + V13_2_J1_1	1	0.03	1465.3	-5564.4
## + V13_2_J2_1	1	0.02	1465.3	-5564.4
## + V17_J1_1	1	0.02	1465.3	-5564.4
## + V13_1_J2_1	1	0.02	1465.3	-5564.4
## + V13_3_J1_7	1	0.02	1465.3	-5564.4
## + V17_J1_4	1	0.01	1465.3	-5564.3
## + V1_J1_4	1	0.01	1465.3	-5564.3
## + V13_1_J2_5	1	0.01	1465.3	-5564.3
## + V23_J1_1	1	0.01	1465.4	-5564.3
## + V15_J2_5	1	0.01	1465.4	-5564.3
## + V3_J2_2	1	0.01	1465.4	-5564.3
## + V13_3_J1_3	1	0.00	1465.4	-5564.3
## + V14_J1_1	1	0.00	1465.4	-5564.3
## + V1_J2_4	1	0.00	1465.4	-5564.3
## + V13_1_J2_3	1	0.00	1465.4	-5564.3
## + V2_J1_4	1	0.00	1465.4	-5564.3
## - V13_2_J1_4	1	3.82	1469.2	-5564.0
## - V2_J1_6	1	3.90	1469.3	-5563.7
## - V26_J1_1	1	3.95	1469.3	-5563.6
## - V20_J1_2	1	4.34	1469.7	-5562.2
## - V13_2_J1_5	1	4.42	1469.8	-5561.9
## - V13_1_J2_2	1	4.54	1469.9	-5561.5
## - V14_J1_3	1	4.56	1469.9	-5561.4
## - V1_J1_5	1	4.70	1470.1	-5560.9
## - V29_J2_3	1	4.75	1470.1	-5560.8
## - V26_J1_3	1	4.88	1470.2	-5560.3
## - V13_3_J2_5	1	5.20	1470.6	-5559.2
## - V19_J1_3	1	5.48	1470.8	-5558.1
## - V2_J1_5	1	5.55	1470.9	-5557.9
## - V23_J1_4	1	6.19	1471.6	-5555.6
## - V13_2_J1_6	1	7.24	1472.6	-5551.9
## - V23_J2_1	1	7.44	1472.8	-5551.2
## - V29_J1_7	1	7.59	1473.0	-5550.7
## - V30_J2_3	1	7.92	1473.3	-5549.6
## - V26_J1_6	1	8.17	1473.5	-5548.7
## - V24_J2_3	1	8.41	1473.8	-5547.8
## - V24_J2_5	1	8.54	1473.9	-5547.4
## - V15_J2_3	1	8.63	1474.0	-5547.0
## - V13_1_J1_5	1	8.77	1474.1	-5546.5
## - V17_J1_5	1	9.41	1474.8	-5544.3
## - V24_J1_7	1	9.59	1475.0	-5543.6
## - V12_1_2_J1_2	1	9.80	1475.2	-5542.9
## - V29_J1_5	1	10.31	1475.7	-5541.1
## - V1_J2_5	1	10.42	1475.8	-5540.7

## - V16_J2_3	1	11.75	1477.1	-5536.0
## - V15_J2_1	1	12.50	1477.9	-5533.4
## - V13_1_J1_2	1	13.19	1478.5	-5531.0
## - V20_J2_1	1	13.88	1479.2	-5528.6
## - V12_1_2_J1_6	1	14.58	1480.0	-5526.1
## - V20_J2_3	1	14.65	1480.0	-5525.9
## - V24_J1_6	1	16.93	1482.3	-5517.9
## - V13_1_J1_7	1	17.58	1483.0	-5515.6
## - V26_J1_5	1	18.03	1483.4	-5514.0
## - V4_J1_3	1	19.65	1485.0	-5508.3
## - V14_J2_5	1	21.03	1486.4	-5503.5
## - V14_J2_1	1	23.46	1488.8	-5495.0
## - V29_J1_3	1	23.76	1489.1	-5493.9
## - V12_1_2_J1_7	1	24.19	1489.6	-5492.4
## - V30_J1_5	1	24.54	1489.9	-5491.2
## - V3_J1_5	1	26.60	1492.0	-5484.0
## - V30_J2_5	1	26.66	1492.0	-5483.8
## - V23_J2_7	1	27.12	1492.5	-5482.2
## - V2_J2_7	1	29.67	1495.0	-5473.3
## - V4_J1_5	1	29.73	1495.1	-5473.1
## - V2_J2_2	1	29.99	1495.4	-5472.2
## - V15_J1_1	1	31.16	1496.5	-5468.1
## - V12_1_2_J2_7	1	33.50	1498.9	-5460.0
## - V15_J1_2	1	36.83	1502.2	-5448.5
## - V14_J2_4	1	39.49	1504.9	-5439.3
## - V30_J1_3	1	39.83	1505.2	-5438.1
## - V5_J1_4	1	39.97	1505.3	-5437.6
## - V26_J1_4	1	40.11	1505.5	-5437.1
## - V19_J2_4	1	40.20	1505.6	-5436.8
## - V19_J2_5	1	40.51	1505.9	-5435.8
## - V4_J2_7	1	42.61	1508.0	-5428.5
## - V12_1_2_J1_3	1	42.85	1508.2	-5427.7
## - V16_J2_7	1	43.32	1508.7	-5426.1
## - V13_2_J1_7	1	44.88	1510.2	-5420.7
## - V5_J2_1	1	49.43	1514.8	-5405.1
## - V4_J1_4	1	49.73	1515.1	-5404.0
## - V19_J2_1	1	51.16	1516.5	-5399.1
## - V14_J2_3	1	54.51	1519.9	-5387.7
## - V30_J1_2	1	56.40	1521.8	-5381.2
## - V15_J1_6	1	61.05	1526.4	-5365.3
## - V15_J1_3	1	63.11	1528.5	-5358.3
## - V5_J2_3	1	63.23	1528.6	-5357.9
## - V15_J1_7	1	65.09	1530.5	-5351.6
## - V17_J2_7	1	68.14	1533.5	-5341.2
## - V17_J2_2	1	68.28	1533.6	-5340.8
## - V14_J1_5	1	69.81	1535.2	-5335.6
## - V16_J1_3	1	70.10	1535.5	-5334.6
## - V1_J2_2	1	70.41	1535.8	-5333.5
## - V30_J1_1	1	71.02	1536.4	-5331.5
## - V30_J2_2	1	73.05	1538.4	-5324.6
## - V1_J1_3	1	73.49	1538.8	-5323.1
## - V23_J1_3	1	81.74	1547.1	-5295.3
## - V3_J1_4	1	83.51	1548.9	-5289.4
## - V14_J1_4	1	84.55	1549.9	-5285.9

```

## - V19_J2_3      1      86.36 1551.7 -5279.8
## - V2_J1_3       1      87.05 1552.4 -5277.5
## - V17_J1_3      1      88.60 1554.0 -5272.3
## - V1_J2_7       1      98.13 1563.5 -5240.5
## - V5_J1_5       1     104.80 1570.2 -5218.4
## - V3_J2_1       1     105.61 1571.0 -5215.7
## - V12_1_2_J1_4  1     105.76 1571.1 -5215.2
## - V4_J2_5       1     115.29 1580.7 -5183.8
## - V26_J2_1      1     115.45 1580.8 -5183.2
## - V15_J2_7      1     116.27 1581.6 -5180.5
## - V4_J2_3       1     116.92 1582.3 -5178.4
## - V4_J2_1       1     125.03 1590.4 -5151.8
## - V3_J2_5       1     126.88 1592.2 -5145.8
## - V15_J2_2      1     133.44 1598.8 -5124.4
## - V19_J1_5      1     133.64 1599.0 -5123.7
## - V26_J2_5      1     155.14 1620.5 -5054.3
## - V26_J2_4      1     156.91 1622.3 -5048.6
## - V4_J2_4       1     161.48 1626.8 -5034.0
## - V3_J2_3       1     172.80 1638.2 -4997.9
## - V12_1_2_J2_2  1     178.72 1644.1 -4979.2
## - V3_J2_4       1     186.06 1651.4 -4956.0
## - V19_J1_4      1     189.31 1654.7 -4945.8
## - J             12     270.34 1735.7 -4770.1
## - V20_J2_2      1     262.93 1728.3 -4719.4
## - V5_J2_5       1     267.11 1732.5 -4706.9
## - V26_J2_3      1     288.17 1753.5 -4644.0
## - V5_J2_4       1     304.81 1770.2 -4594.9
## - V16_J2_2      1     440.89 1906.3 -4209.8
## - V             19    1016.94 2482.3 -2956.2
##
## Step:  AIC=-5577.3
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
## V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
## V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
## V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V14_J1_2 + V13_3_J2_5 +
## V20_J1_2 + V13_2_J1_4 + V26_J1_6 + V13_1_J1_5 + V26_J1_1 +
## V2_J1_6 + V29_J1_1 + V15_J2_3 + V30_J2_3 + V24_J2_3 + V13_2_J1_5 +
## V13_1_J2_2 + V19_J1_3 + V14_J1_3 + V19_J1_1 + V16_J2_1 +
## V3_J1_2 + V13_2_J2_5 + V29_J2_3 + V1_J1_1 + V23_J2_3 + V13_1_J2_7 +
## V14_J2_7 + V29_J2_1 + V29_J2_2
##

```


##		Df	Sum of Sq	RSS	AIC
##	+ V29_J1_4	1	3.41	1458.3	-5582.8
##	+ V13_2_J1_2	1	2.64	1459.1	-5580.1
##	+ V13_3_J1_2	1	2.63	1459.1	-5580.0
##	+ V24_J1_3	1	2.60	1459.1	-5579.9
##	+ V30_J1_7	1	2.18	1459.5	-5578.4
##	+ V13_2_J2_2	1	2.17	1459.5	-5578.4
##	+ V23_J1_7	1	2.04	1459.7	-5577.9
##	+ V13_3_J1_1	1	2.03	1459.7	-5577.9
##	+ V17_J2_1	1	2.01	1459.7	-5577.8
##	+ V20_J1_6	1	1.91	1459.8	-5577.5
##	+ V16_J1_4	1	1.90	1459.8	-5577.4
##	<none>			1461.7	-5577.3
##	+ V12_1_2_J1_1	1	1.76	1459.9	-5576.9
##	+ V15_J2_4	1	1.75	1460.0	-5576.9
##	- V13_1_J1_3	1	2.02	1463.7	-5576.8
##	+ V20_J1_7	1	1.69	1460.0	-5576.7
##	+ V24_J1_5	1	1.63	1460.1	-5576.5
##	+ V16_J1_2	1	1.62	1460.1	-5576.4
##	+ V23_J2_2	1	1.60	1460.1	-5576.4
##	+ V16_J1_6	1	1.60	1460.1	-5576.3
##	- V29_J1_1	1	2.14	1463.8	-5576.3
##	+ V5_J1_6	1	1.58	1460.1	-5576.3
##	+ V20_J2_4	1	1.52	1460.2	-5576.1
##	- V16_J2_1	1	2.30	1464.0	-5575.8
##	+ V2_J1_7	1	1.39	1460.3	-5575.6
##	+ V13_3_J2_4	1	1.37	1460.3	-5575.5
##	+ V20_J1_1	1	1.32	1460.4	-5575.4
##	+ V1_J2_3	1	1.28	1460.4	-5575.2
##	+ V13_1_J2_4	1	1.27	1460.4	-5575.2
##	+ V12_1_2_J1_5	1	1.26	1460.4	-5575.2
##	+ V16_J2_4	1	1.25	1460.5	-5575.1
##	+ V23_J1_2	1	1.24	1460.5	-5575.1
##	+ V26_J2_2	1	1.22	1460.5	-5575.0
##	+ V1_J1_7	1	1.22	1460.5	-5575.0
##	+ V19_J2_7	1	1.21	1460.5	-5575.0
##	+ V30_J2_1	1	1.19	1460.5	-5574.9
##	+ V26_J1_7	1	1.17	1460.5	-5574.8
##	+ V24_J1_1	1	1.16	1460.5	-5574.8
##	+ V30_J2_7	1	1.14	1460.6	-5574.7
##	+ V20_J1_4	1	1.09	1460.6	-5574.6
##	+ V4_J1_6	1	1.04	1460.7	-5574.4
##	+ V24_J2_4	1	1.03	1460.7	-5574.4
##	+ V17_J1_7	1	1.03	1460.7	-5574.3
##	+ V2_J1_2	1	0.95	1460.8	-5574.0
##	+ V20_J1_5	1	0.93	1460.8	-5574.0
##	+ V5_J1_7	1	0.92	1460.8	-5573.9
##	+ V17_J1_2	1	0.91	1460.8	-5573.9
##	+ V17_J2_4	1	0.90	1460.8	-5573.9
##	+ V5_J1_2	1	0.88	1460.8	-5573.8
##	+ V13_2_J2_7	1	0.85	1460.9	-5573.7
##	+ V14_J2_2	1	0.85	1460.9	-5573.7
##	+ V24_J2_2	1	0.82	1460.9	-5573.6
##	+ V20_J1_3	1	0.81	1460.9	-5573.5

## - V1_J1_1	1	2.93	1464.6	-5573.5
## - V14_J1_2	1	2.95	1464.7	-5573.5
## - V23_J2_3	1	2.97	1464.7	-5573.4
## + V19_J1_6	1	0.76	1461.0	-5573.4
## - V3_J1_2	1	2.97	1464.7	-5573.4
## + V2_J2_1	1	0.75	1461.0	-5573.3
## + V17_J2_5	1	0.68	1461.0	-5573.1
## + V23_J2_4	1	0.66	1461.0	-5573.0
## + V13_1_J1_4	1	0.64	1461.1	-5572.9
## + V13_1_J1_1	1	0.61	1461.1	-5572.9
## + V3_J1_6	1	0.61	1461.1	-5572.8
## + V13_3_J2_3	1	0.60	1461.1	-5572.8
## + V1_J2_1	1	0.55	1461.2	-5572.6
## + V29_J1_6	1	0.54	1461.2	-5572.6
## + V30_J1_6	1	0.53	1461.2	-5572.6
## + V23_J2_5	1	0.52	1461.2	-5572.5
## + V3_J1_7	1	0.52	1461.2	-5572.5
## - V13_2_J2_5	1	3.23	1464.9	-5572.5
## + V13_2_J1_3	1	0.48	1461.2	-5572.4
## + V5_J2_7	1	0.48	1461.2	-5572.4
## + V4_J1_1	1	0.47	1461.2	-5572.3
## + V24_J2_7	1	0.46	1461.2	-5572.3
## + V17_J2_3	1	0.45	1461.2	-5572.3
## + V16_J1_1	1	0.45	1461.3	-5572.3
## + V19_J1_2	1	0.45	1461.3	-5572.3
## + V24_J1_2	1	0.42	1461.3	-5572.2
## - V14_J2_7	1	3.33	1465.0	-5572.1
## + V1_J1_2	1	0.41	1461.3	-5572.1
## + V15_J1_4	1	0.40	1461.3	-5572.1
## + V13_2_J2_3	1	0.40	1461.3	-5572.1
## + V29_J2_4	1	0.39	1461.3	-5572.1
## + V12_1_2_J2_3	1	0.38	1461.3	-5572.0
## + V15_J1_5	1	0.38	1461.3	-5572.0
## - V19_J1_1	1	3.36	1465.1	-5572.0
## + V5_J1_1	1	0.36	1461.3	-5571.9
## + V12_1_2_J2_1	1	0.34	1461.4	-5571.9
## + V13_3_J1_6	1	0.29	1461.4	-5571.7
## + V3_J1_1	1	0.28	1461.4	-5571.7
## + V30_J1_4	1	0.27	1461.4	-5571.6
## + V2_J2_5	1	0.26	1461.4	-5571.6
## + V14_J1_7	1	0.25	1461.5	-5571.6
## + V16_J2_5	1	0.25	1461.5	-5571.6
## + V4_J1_2	1	0.25	1461.5	-5571.6
## + V2_J1_1	1	0.24	1461.5	-5571.5
## + V4_J1_7	1	0.22	1461.5	-5571.5
## + V24_J2_1	1	0.20	1461.5	-5571.4
## + V12_1_2_J2_5	1	0.20	1461.5	-5571.4
## - V13_1_J2_7	1	3.54	1465.2	-5571.4
## + V19_J1_7	1	0.19	1461.5	-5571.3
## + V13_2_J2_4	1	0.18	1461.5	-5571.3
## + V14_J1_6	1	0.18	1461.5	-5571.3
## + V3_J2_7	1	0.17	1461.5	-5571.3
## + V13_3_J2_7	1	0.17	1461.5	-5571.3
## + V20_J2_5	1	0.16	1461.5	-5571.2

## + V13_3_J2_2	1	0.16	1461.5	-5571.2
## + V26_J1_2	1	0.16	1461.5	-5571.2
## + V26_J2_7	1	0.15	1461.6	-5571.2
## + V13_3_J2_1	1	0.14	1461.6	-5571.2
## + V4_J2_2	1	0.14	1461.6	-5571.2
## + V20_J2_7	1	0.13	1461.6	-5571.1
## + V23_J1_6	1	0.13	1461.6	-5571.1
## + V29_J1_2	1	0.12	1461.6	-5571.1
## - V13_2_J1_4	1	3.62	1465.3	-5571.1
## + V13_3_J1_4	1	0.11	1461.6	-5571.1
## + V2_J2_4	1	0.10	1461.6	-5571.0
## + V16_J1_7	1	0.10	1461.6	-5571.0
## + V3_J1_3	1	0.09	1461.6	-5571.0
## + V1_J1_6	1	0.09	1461.6	-5571.0
## + V2_J2_3	1	0.08	1461.6	-5571.0
## + V5_J2_2	1	0.08	1461.6	-5570.9
## - V29_J2_2	1	3.66	1465.4	-5570.9
## + V17_J1_6	1	0.07	1461.6	-5570.9
## + V13_3_J1_5	1	0.07	1461.6	-5570.9
## + V13_1_J1_6	1	0.07	1461.6	-5570.9
## + V30_J2_4	1	0.06	1461.6	-5570.9
## + V16_J1_5	1	0.06	1461.6	-5570.9
## + V5_J1_3	1	0.06	1461.7	-5570.9
## + V23_J1_5	1	0.05	1461.7	-5570.9
## + V12_1_2_J2_4	1	0.05	1461.7	-5570.8
## + V29_J2_7	1	0.04	1461.7	-5570.8
## + V13_2_J1_1	1	0.03	1461.7	-5570.8
## + V13_2_J2_1	1	0.03	1461.7	-5570.8
## + V24_J1_4	1	0.03	1461.7	-5570.8
## + V17_J1_1	1	0.03	1461.7	-5570.8
## + V13_1_J2_1	1	0.02	1461.7	-5570.7
## + V1_J1_4	1	0.02	1461.7	-5570.7
## + V13_3_J1_7	1	0.02	1461.7	-5570.7
## + V3_J2_2	1	0.01	1461.7	-5570.7
## - V13_1_J2_2	1	3.72	1465.4	-5570.7
## - V29_J2_1	1	3.72	1465.4	-5570.7
## + V15_J2_5	1	0.01	1461.7	-5570.7
## + V23_J1_1	1	0.01	1461.7	-5570.7
## + V29_J2_5	1	0.01	1461.7	-5570.7
## + V17_J1_4	1	0.01	1461.7	-5570.7
## + V13_3_J1_3	1	0.01	1461.7	-5570.7
## + V13_1_J2_5	1	0.01	1461.7	-5570.7
## + V1_J2_4	1	0.01	1461.7	-5570.7
## + V2_J1_4	1	0.00	1461.7	-5570.7
## + V13_1_J2_3	1	0.00	1461.7	-5570.7
## + V19_J2_2	1	0.00	1461.7	-5570.7
## + V14_J1_1	1	0.00	1461.7	-5570.7
## - V26_J1_1	1	3.82	1465.5	-5570.4
## - V2_J1_6	1	3.91	1465.6	-5570.1
## - V20_J1_2	1	4.34	1466.0	-5568.5
## - V13_2_J1_5	1	4.51	1466.2	-5567.9
## - V14_J1_3	1	4.68	1466.4	-5567.3
## - V1_J1_5	1	4.73	1466.4	-5567.1
## - V13_3_J2_5	1	4.97	1466.7	-5566.3

## - V26_J1_3	1	4.99	1466.7	-5566.2
## - V19_J1_3	1	5.56	1467.3	-5564.2
## - V2_J1_5	1	5.59	1467.3	-5564.1
## - V29_J2_3	1	5.84	1467.5	-5563.2
## - V29_J1_7	1	5.96	1467.7	-5562.8
## - V23_J1_4	1	6.42	1468.1	-5561.1
## - V13_2_J1_6	1	7.09	1468.8	-5558.8
## - V23_J2_1	1	7.35	1469.0	-5557.9
## - V26_J1_6	1	7.88	1469.6	-5556.0
## - V30_J2_3	1	7.96	1469.7	-5555.7
## - V24_J2_3	1	8.31	1470.0	-5554.5
## - V13_1_J1_5	1	8.70	1470.4	-5553.1
## - V15_J2_3	1	8.74	1470.4	-5553.0
## - V24_J2_5	1	8.84	1470.5	-5552.6
## - V17_J1_5	1	9.46	1471.2	-5550.4
## - V24_J1_7	1	9.59	1471.3	-5549.9
## - V12_1_2_J1_2	1	9.81	1471.5	-5549.2
## - V1_J2_5	1	10.61	1472.3	-5546.3
## - V16_J2_3	1	11.70	1473.4	-5542.5
## - V29_J1_5	1	11.84	1473.5	-5542.0
## - V15_J2_1	1	12.64	1474.3	-5539.2
## - V13_1_J1_2	1	13.15	1474.9	-5537.4
## - V20_J2_1	1	13.83	1475.5	-5535.0
## - V12_1_2_J1_6	1	14.58	1476.3	-5532.3
## - V20_J2_3	1	14.61	1476.3	-5532.2
## - V24_J1_6	1	16.73	1478.4	-5524.8
## - V13_1_J1_7	1	17.35	1479.1	-5522.6
## - V26_J1_5	1	18.38	1480.1	-5519.0
## - V4_J1_3	1	19.82	1481.5	-5513.9
## - V29_J1_3	1	20.71	1482.4	-5510.8
## - V14_J2_5	1	21.75	1483.5	-5507.1
## - V14_J2_1	1	23.91	1485.6	-5499.6
## - V12_1_2_J1_7	1	23.96	1485.7	-5499.4
## - V30_J1_5	1	24.62	1486.3	-5497.1
## - V30_J2_5	1	26.38	1488.1	-5490.9
## - V3_J1_5	1	26.94	1488.6	-5489.0
## - V23_J2_7	1	27.39	1489.1	-5487.4
## - V2_J2_2	1	27.69	1489.4	-5486.3
## - V2_J2_7	1	29.68	1491.4	-5479.4
## - V4_J1_5	1	30.12	1491.8	-5477.9
## - V15_J1_1	1	31.51	1493.2	-5473.0
## - V12_1_2_J2_7	1	33.52	1495.2	-5466.1
## - V15_J1_2	1	37.00	1498.7	-5454.0
## - V30_J1_3	1	39.51	1501.2	-5445.3
## - V14_J2_4	1	40.30	1502.0	-5442.5
## - V5_J1_4	1	40.67	1502.4	-5441.2
## - V19_J2_4	1	40.86	1502.6	-5440.6
## - V26_J1_4	1	40.96	1502.7	-5440.2
## - V19_J2_5	1	41.32	1503.0	-5439.0
## - V12_1_2_J1_3	1	42.53	1504.2	-5434.8
## - V4_J2_7	1	43.19	1504.9	-5432.5
## - V16_J2_7	1	43.32	1505.0	-5432.1
## - V13_2_J1_7	1	44.97	1506.7	-5426.4
## - V5_J2_1	1	49.82	1511.5	-5409.6

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## - V4_J1_4      1      50.61 1512.3 -5406.9
## - V19_J2_1     1      51.62 1513.3 -5403.5
## - V14_J2_3     1      55.18 1516.9 -5391.2
## - V30_J1_2     1      56.43 1518.1 -5387.0
## - V15_J1_6     1      61.26 1523.0 -5370.5
## - V15_J1_3     1      63.66 1525.4 -5362.2
## - V5_J2_3      1      63.68 1525.4 -5362.2
## - V17_J2_2     1      64.54 1526.2 -5359.3
## - V15_J1_7     1      65.63 1527.3 -5355.5
## - V1_J2_2      1      66.69 1528.4 -5351.9
## - V17_J2_7     1      68.15 1529.9 -5347.0
## - V30_J2_2     1      69.25 1531.0 -5343.2
## - V16_J1_3     1      69.65 1531.4 -5341.9
## - V14_J1_5     1      70.55 1532.2 -5338.8
## - V30_J1_1     1      71.36 1533.1 -5336.1
## - V1_J1_3      1      73.06 1534.8 -5330.3
## - V23_J1_3     1      81.73 1543.4 -5301.0
## - V3_J1_4      1      84.57 1546.3 -5291.5
## - V14_J1_4     1      85.81 1547.5 -5287.3
## - V2_J1_3      1      86.56 1548.3 -5284.8
## - V19_J2_3     1      86.97 1548.7 -5283.4
## - V17_J1_3     1      88.10 1549.8 -5279.6
## - V1_J2_7      1      98.16 1559.9 -5246.0
## - V5_J1_5      1     105.35 1567.0 -5222.1
## - V12_1_2_J1_4 1     106.19 1567.9 -5219.3
## - V3_J2_1      1     106.28 1568.0 -5219.0
## - V26_J2_1     1     116.31 1578.0 -5185.8
## - V15_J2_7     1     116.52 1578.2 -5185.1
## - V4_J2_5      1     116.67 1578.4 -5184.6
## - V4_J2_3      1     117.70 1579.4 -5181.2
## - V4_J2_1      1     125.83 1587.5 -5154.5
## - V3_J2_5      1     128.27 1590.0 -5146.5
## - V19_J1_5     1     134.35 1596.1 -5126.7
## - V15_J2_2     1     136.53 1598.2 -5119.6
## - V26_J2_5     1     156.79 1618.5 -5054.1
## - V26_J2_4     1     158.32 1620.0 -5049.2
## - V4_J2_4      1     162.82 1624.5 -5034.8
## - V12_1_2_J2_2 1     172.23 1633.9 -5004.7
## - V3_J2_3      1     173.66 1635.4 -5000.2
## - V3_J2_4      1     187.41 1649.1 -4956.6
## - V19_J1_4     1     190.82 1652.5 -4945.9
## - J            12     265.25 1727.0 -4789.8
## - V20_J2_2     1     254.40 1716.1 -4749.6
## - V5_J2_5      1     268.90 1730.6 -4705.8
## - V26_J2_3     1     289.49 1751.2 -4644.3
## - V5_J2_4      1     306.35 1768.1 -4594.5
## - V16_J2_2     1     428.74 1890.5 -4246.5
## - V            19    1012.66 2474.4 -2966.2
##
## Step:  AIC=-5582.81
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##       V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##       V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##       V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +

```

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##      V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
##      V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
##      V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
##      V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
##      V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
##      V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
##      V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
##      V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
##      V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
##      V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
##      V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
##      V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
##      V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V14_J1_2 + V13_3_J2_5 +
##      V20_J1_2 + V13_2_J1_4 + V26_J1_6 + V13_1_J1_5 + V26_J1_1 +
##      V2_J1_6 + V29_J1_1 + V15_J2_3 + V30_J2_3 + V24_J2_3 + V13_2_J1_5 +
##      V13_1_J2_2 + V19_J1_3 + V14_J1_3 + V19_J1_1 + V16_J2_1 +
##      V3_J1_2 + V13_2_J2_5 + V29_J2_3 + V1_J1_1 + V23_J2_3 + V13_1_J2_7 +
##      V14_J2_7 + V29_J2_1 + V29_J2_2 + V29_J1_4
##
##      Df Sum of Sq    RSS    AIC
## + V13_3_J1_2      1      2.76 1455.5 -5586.0
## + V13_2_J1_2      1      2.71 1455.6 -5585.8
## + V24_J1_3        1      2.64 1455.7 -5585.6
## - V29_J1_1        1      1.29 1459.6 -5584.8
## + V13_2_J2_2      1      2.17 1456.1 -5583.9
## + V30_J1_7        1      2.11 1456.2 -5583.7
## + V13_3_J1_1      1      2.01 1456.3 -5583.4
## + V20_J1_6        1      2.01 1456.3 -5583.4
## + V17_J2_1        1      2.01 1456.3 -5583.4
## + V23_J1_7        1      2.00 1456.3 -5583.3
## <none>                        1458.3 -5582.8
## + V12_1_2_J1_1    1      1.75 1456.5 -5582.4
## - V13_1_J1_3      1      1.97 1460.3 -5582.4
## + V16_J1_2        1      1.74 1456.6 -5582.4
## + V20_J1_7        1      1.72 1456.6 -5582.3
## + V24_J1_5        1      1.64 1456.7 -5582.0
## + V5_J1_6         1      1.61 1456.7 -5581.9
## + V15_J2_4        1      1.60 1456.7 -5581.9
## + V20_J2_4        1      1.59 1456.7 -5581.9
## + V23_J2_2        1      1.59 1456.7 -5581.8
## + V20_J1_4        1      1.54 1456.8 -5581.7
## + V16_J1_6        1      1.50 1456.8 -5581.5
## + V16_J1_4        1      1.44 1456.9 -5581.3
## + V2_J1_7         1      1.43 1456.9 -5581.3
## + V13_3_J2_4      1      1.43 1456.9 -5581.3
## - V16_J2_1        1      2.31 1460.6 -5581.2
## + V1_J2_3         1      1.30 1457.0 -5580.8
## + V20_J1_1        1      1.30 1457.0 -5580.8
## + V12_1_2_J1_5    1      1.29 1457.0 -5580.8
## + V30_J2_7        1      1.28 1457.0 -5580.7
## + V19_J2_7        1      1.26 1457.0 -5580.7
## + V26_J1_7        1      1.22 1457.1 -5580.5
## + V23_J1_2        1      1.20 1457.1 -5580.5
## + V26_J2_2        1      1.20 1457.1 -5580.4

```

## + V24_J1_1	1	1.19	1457.1	-5580.4
## + V13_1_J2_4	1	1.19	1457.1	-5580.4
## + V16_J2_4	1	1.19	1457.1	-5580.4
## + V1_J1_7	1	1.17	1457.1	-5580.4
## + V30_J2_1	1	1.17	1457.1	-5580.4
## + V4_J1_6	1	1.01	1457.3	-5579.8
## + V17_J1_7	1	1.00	1457.3	-5579.8
## + V24_J2_4	1	0.98	1457.3	-5579.7
## + V17_J2_4	1	0.96	1457.3	-5579.6
## + V5_J1_7	1	0.95	1457.3	-5579.6
## + V20_J1_5	1	0.93	1457.4	-5579.5
## + V5_J1_2	1	0.91	1457.4	-5579.4
## + V2_J1_2	1	0.86	1457.4	-5579.2
## + V14_J2_2	1	0.85	1457.5	-5579.2
## - V14_J1_2	1	2.89	1461.2	-5579.2
## + V17_J1_2	1	0.84	1457.5	-5579.2
## - V3_J1_2	1	2.92	1461.2	-5579.0
## + V13_2_J2_7	1	0.79	1457.5	-5579.0
## + V20_J1_3	1	0.79	1457.5	-5579.0
## + V24_J2_2	1	0.78	1457.5	-5579.0
## + V17_J2_5	1	0.75	1457.5	-5578.9
## + V19_J1_6	1	0.75	1457.5	-5578.9
## - V1_J1_1	1	2.98	1461.3	-5578.8
## + V2_J2_1	1	0.74	1457.6	-5578.8
## - V23_J2_3	1	3.03	1461.3	-5578.7
## + V23_J2_4	1	0.66	1457.6	-5578.5
## + V13_1_J1_1	1	0.64	1457.7	-5578.5
## + V30_J1_6	1	0.60	1457.7	-5578.3
## + V13_3_J2_3	1	0.60	1457.7	-5578.3
## + V3_J1_6	1	0.59	1457.7	-5578.3
## + V1_J2_1	1	0.56	1457.7	-5578.2
## + V3_J1_7	1	0.50	1457.8	-5578.0
## + V13_2_J1_3	1	0.50	1457.8	-5577.9
## + V23_J2_5	1	0.49	1457.8	-5577.9
## + V17_J2_3	1	0.45	1457.8	-5577.8
## + V4_J1_1	1	0.45	1457.8	-5577.8
## + V5_J2_7	1	0.44	1457.9	-5577.8
## + V16_J1_1	1	0.44	1457.9	-5577.7
## + V19_J1_2	1	0.43	1457.9	-5577.7
## - V13_2_J2_5	1	3.29	1461.6	-5577.7
## - V19_J1_1	1	3.29	1461.6	-5577.7
## + V15_J1_5	1	0.42	1457.9	-5577.7
## + V12_1_2_J2_3	1	0.40	1457.9	-5577.6
## + V24_J2_7	1	0.39	1457.9	-5577.6
## + V13_1_J1_4	1	0.39	1457.9	-5577.6
## + V5_J1_1	1	0.38	1457.9	-5577.5
## + V13_2_J2_3	1	0.37	1457.9	-5577.5
## + V24_J1_2	1	0.37	1457.9	-5577.5
## + V1_J1_2	1	0.34	1458.0	-5577.4
## + V12_1_2_J2_1	1	0.33	1458.0	-5577.3
## + V13_3_J1_6	1	0.33	1458.0	-5577.3
## - V29_J1_4	1	3.41	1461.7	-5577.3
## - V14_J2_7	1	3.42	1461.7	-5577.3
## + V16_J2_5	1	0.30	1458.0	-5577.2

## + V3_J1_1	1	0.29	1458.0	-5577.2
## + V13_3_J1_4	1	0.27	1458.0	-5577.1
## + V2_J1_1	1	0.26	1458.0	-5577.1
## + V14_J1_7	1	0.24	1458.0	-5577.0
## + V4_J1_2	1	0.23	1458.1	-5577.0
## + V29_J2_5	1	0.22	1458.1	-5577.0
## + V2_J2_5	1	0.21	1458.1	-5576.9
## + V15_J1_4	1	0.21	1458.1	-5576.9
## + V4_J1_7	1	0.21	1458.1	-5576.9
## + V24_J2_1	1	0.20	1458.1	-5576.9
## + V20_J2_5	1	0.20	1458.1	-5576.9
## + V3_J2_7	1	0.20	1458.1	-5576.9
## + V14_J1_6	1	0.19	1458.1	-5576.9
## + V13_2_J2_4	1	0.19	1458.1	-5576.9
## + V12_1_2_J2_5	1	0.18	1458.1	-5576.8
## + V13_3_J2_2	1	0.17	1458.1	-5576.8
## + V26_J2_7	1	0.17	1458.1	-5576.8
## + V19_J1_7	1	0.17	1458.1	-5576.8
## + V26_J1_2	1	0.15	1458.2	-5576.7
## + V13_3_J2_1	1	0.14	1458.2	-5576.7
## + V29_J1_6	1	0.14	1458.2	-5576.7
## + V4_J2_2	1	0.13	1458.2	-5576.7
## + V13_3_J2_7	1	0.13	1458.2	-5576.6
## + V2_J2_4	1	0.13	1458.2	-5576.6
## + V24_J1_4	1	0.13	1458.2	-5576.6
## + V23_J1_6	1	0.12	1458.2	-5576.6
## + V30_J1_4	1	0.11	1458.2	-5576.6
## + V20_J2_7	1	0.09	1458.2	-5576.5
## + V16_J1_7	1	0.09	1458.2	-5576.5
## + V2_J2_3	1	0.09	1458.2	-5576.5
## + V30_J2_4	1	0.09	1458.2	-5576.5
## + V3_J1_3	1	0.08	1458.2	-5576.5
## + V5_J2_2	1	0.07	1458.2	-5576.4
## + V17_J1_4	1	0.07	1458.2	-5576.4
## + V13_3_J1_5	1	0.07	1458.2	-5576.4
## + V5_J1_3	1	0.07	1458.2	-5576.4
## + V29_J2_4	1	0.07	1458.2	-5576.4
## + V16_J1_5	1	0.06	1458.2	-5576.4
## + V1_J1_6	1	0.06	1458.2	-5576.4
## + V17_J1_6	1	0.05	1458.2	-5576.4
## + V12_1_2_J2_4	1	0.05	1458.2	-5576.4
## + V13_1_J1_6	1	0.05	1458.2	-5576.3
## + V23_J1_5	1	0.04	1458.2	-5576.3
## + V15_J2_5	1	0.03	1458.3	-5576.3
## + V13_2_J1_1	1	0.03	1458.3	-5576.3
## + V13_2_J2_1	1	0.03	1458.3	-5576.3
## + V17_J1_1	1	0.03	1458.3	-5576.3
## + V29_J2_7	1	0.02	1458.3	-5576.3
## + V13_1_J2_1	1	0.02	1458.3	-5576.2
## + V2_J1_4	1	0.02	1458.3	-5576.2
## + V13_3_J1_7	1	0.02	1458.3	-5576.2
## + V3_J2_2	1	0.01	1458.3	-5576.2
## + V1_J2_4	1	0.01	1458.3	-5576.2
## + V23_J1_1	1	0.01	1458.3	-5576.2

## + V13_3_J1_3	1	0.00	1458.3	-5576.2
## + V13_1_J2_3	1	0.00	1458.3	-5576.2
## + V1_J1_4	1	0.00	1458.3	-5576.2
## - V13_1_J2_7	1	3.72	1462.0	-5576.2
## + V14_J1_1	1	0.00	1458.3	-5576.2
## + V13_1_J2_5	1	0.00	1458.3	-5576.2
## + V29_J1_2	1	0.00	1458.3	-5576.2
## + V19_J2_2	1	0.00	1458.3	-5576.2
## - V2_J1_6	1	3.77	1462.1	-5576.0
## - V13_1_J2_2	1	3.81	1462.1	-5575.9
## - V26_J1_1	1	3.89	1462.2	-5575.6
## - V13_2_J1_4	1	4.25	1462.5	-5574.3
## - V29_J1_7	1	4.42	1462.7	-5573.7
## - V13_2_J1_5	1	4.44	1462.7	-5573.6
## - V20_J1_2	1	4.48	1462.8	-5573.5
## - V14_J1_3	1	4.66	1463.0	-5572.9
## - V1_J1_5	1	4.69	1463.0	-5572.7
## - V29_J2_2	1	4.76	1463.1	-5572.5
## - V13_3_J2_5	1	4.83	1463.1	-5572.3
## - V29_J2_1	1	4.89	1463.2	-5572.0
## - V26_J1_3	1	4.93	1463.2	-5571.9
## - V19_J1_3	1	5.48	1463.8	-5569.9
## - V23_J1_4	1	5.55	1463.8	-5569.7
## - V2_J1_5	1	5.56	1463.9	-5569.7
## - V13_2_J1_6	1	7.01	1465.3	-5564.5
## - V29_J2_3	1	7.22	1465.5	-5563.8
## - V23_J2_1	1	7.45	1465.8	-5562.9
## - V26_J1_6	1	7.86	1466.2	-5561.5
## - V30_J2_3	1	7.91	1466.2	-5561.3
## - V24_J2_3	1	8.29	1466.6	-5560.0
## - V15_J2_3	1	8.61	1466.9	-5558.9
## - V13_1_J1_5	1	8.75	1467.0	-5558.3
## - V24_J2_5	1	9.06	1467.4	-5557.2
## - V17_J1_5	1	9.45	1467.8	-5555.9
## - V24_J1_7	1	9.52	1467.8	-5555.6
## - V12_1_2_J1_2	1	9.67	1468.0	-5555.1
## - V1_J2_5	1	10.88	1469.2	-5550.8
## - V16_J2_3	1	11.72	1470.0	-5547.8
## - V15_J2_1	1	12.49	1470.8	-5545.1
## - V13_1_J1_2	1	13.44	1471.7	-5541.7
## - V29_J1_5	1	13.67	1472.0	-5540.9
## - V20_J2_1	1	13.82	1472.1	-5540.4
## - V20_J2_3	1	14.61	1472.9	-5537.6
## - V12_1_2_J1_6	1	14.72	1473.0	-5537.2
## - V24_J1_6	1	16.46	1474.8	-5531.1
## - V13_1_J1_7	1	17.49	1475.8	-5527.5
## - V29_J1_3	1	17.65	1476.0	-5526.9
## - V26_J1_5	1	18.18	1476.5	-5525.0
## - V4_J1_3	1	19.74	1478.0	-5519.5
## - V14_J2_5	1	21.91	1480.2	-5511.9
## - V14_J2_1	1	23.76	1482.1	-5505.4
## - V12_1_2_J1_7	1	23.94	1482.2	-5504.8
## - V30_J1_5	1	24.54	1482.8	-5502.7
## - V30_J2_5	1	25.94	1484.2	-5497.8

## - V3_J1_5	1	26.76	1485.0	-5494.9
## - V23_J2_7	1	27.63	1485.9	-5491.9
## - V2_J2_2	1	27.91	1486.2	-5490.9
## - V4_J1_5	1	29.93	1488.2	-5483.8
## - V2_J2_7	1	30.17	1488.5	-5483.0
## - V15_J1_1	1	31.18	1489.5	-5479.4
## - V12_1_2_J2_7	1	33.86	1492.2	-5470.1
## - V15_J1_2	1	36.32	1494.6	-5461.5
## - V5_J1_4	1	38.23	1496.5	-5454.9
## - V26_J1_4	1	38.56	1496.9	-5453.7
## - V30_J1_3	1	39.71	1498.0	-5449.7
## - V14_J2_4	1	40.38	1498.7	-5447.4
## - V19_J2_4	1	40.81	1499.1	-5445.9
## - V19_J2_5	1	41.43	1499.7	-5443.8
## - V12_1_2_J1_3	1	42.51	1500.8	-5440.0
## - V4_J2_7	1	43.47	1501.8	-5436.7
## - V16_J2_7	1	43.87	1502.2	-5435.3
## - V13_2_J1_7	1	44.86	1503.2	-5431.9
## - V4_J1_4	1	47.94	1506.2	-5421.3
## - V5_J2_1	1	49.52	1507.8	-5415.8
## - V19_J2_1	1	51.25	1509.5	-5409.8
## - V14_J2_3	1	54.98	1513.3	-5397.0
## - V30_J1_2	1	55.80	1514.1	-5394.2
## - V15_J1_6	1	60.43	1518.7	-5378.3
## - V15_J1_3	1	63.18	1521.5	-5368.9
## - V5_J2_3	1	63.37	1521.7	-5368.3
## - V17_J2_2	1	64.81	1523.1	-5363.3
## - V15_J1_7	1	65.13	1523.4	-5362.3
## - V1_J2_2	1	67.06	1525.4	-5355.6
## - V17_J2_7	1	68.83	1527.1	-5349.6
## - V30_J2_2	1	69.63	1527.9	-5346.9
## - V16_J1_3	1	69.83	1528.1	-5346.2
## - V14_J1_5	1	70.32	1528.6	-5344.6
## - V30_J1_1	1	71.09	1529.4	-5341.9
## - V1_J1_3	1	73.34	1531.6	-5334.3
## - V3_J1_4	1	80.92	1539.2	-5308.6
## - V23_J1_3	1	81.55	1539.8	-5306.5
## - V14_J1_4	1	82.34	1540.6	-5303.8
## - V19_J2_3	1	86.51	1544.8	-5289.8
## - V2_J1_3	1	86.82	1545.1	-5288.7
## - V17_J1_3	1	88.30	1546.6	-5283.8
## - V1_J2_7	1	99.07	1557.4	-5247.7
## - V12_1_2_J1_4	1	102.21	1560.5	-5237.2
## - V5_J1_5	1	104.94	1563.2	-5228.1
## - V3_J2_1	1	105.88	1564.2	-5225.0
## - V15_J2_7	1	115.08	1573.4	-5194.5
## - V26_J2_1	1	115.77	1574.1	-5192.2
## - V4_J2_5	1	116.99	1575.3	-5188.2
## - V4_J2_3	1	117.32	1575.6	-5187.1
## - V4_J2_1	1	125.40	1583.7	-5160.5
## - V3_J2_5	1	128.61	1586.9	-5150.0
## - V19_J1_5	1	133.78	1592.1	-5133.0
## - V15_J2_2	1	135.62	1593.9	-5127.0
## - V26_J2_5	1	157.02	1615.3	-5057.7

```

## - V26_J2_4      1      158.26 1616.6 -5053.7
## - V4_J2_4       1      162.90 1621.2 -5038.8
## - V12_1_2_J2_2  1      172.36 1630.7 -5008.5
## - V3_J2_3       1      173.19 1631.5 -5005.9
## - V19_J1_4      1      184.60 1642.9 -4969.6
## - V3_J2_4       1      187.50 1645.8 -4960.5
## - J             12     268.07 1726.4 -4784.9
## - V20_J2_2      1      254.88 1713.2 -4751.8
## - V5_J2_5       1      269.33 1727.6 -4708.2
## - V26_J2_3      1      288.69 1747.0 -4650.2
## - V5_J2_4       1      306.40 1764.7 -4597.8
## - V16_J2_2      1      429.43 1887.7 -4247.3
## - V             19     1001.29 2459.6 -2990.7
##
## Step:  AIC=-5586.03
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
## V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
## V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
## V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V14_J1_2 + V13_3_J2_5 +
## V20_J1_2 + V13_2_J1_4 + V26_J1_6 + V13_1_J1_5 + V26_J1_1 +
## V2_J1_6 + V29_J1_1 + V15_J2_3 + V30_J2_3 + V24_J2_3 + V13_2_J1_5 +
## V13_1_J2_2 + V19_J1_3 + V14_J1_3 + V19_J1_1 + V16_J2_1 +
## V3_J1_2 + V13_2_J2_5 + V29_J2_3 + V1_J1_1 + V23_J2_3 + V13_1_J2_7 +
## V14_J2_7 + V29_J2_1 + V29_J2_2 + V29_J1_4 + V13_3_J1_2
##
##
##      Df Sum of Sq    RSS    AIC
## + V13_2_J1_2      1      3.25 1452.3 -5591.0
## + V24_J1_3        1      2.54 1453.0 -5588.5
## - V29_J1_1        1      1.23 1456.8 -5588.3
## + V13_2_J2_2      1      2.21 1453.3 -5587.3
## + V16_J1_2        1      2.16 1453.4 -5587.1
## + V30_J1_7        1      2.09 1453.4 -5586.9
## + V20_J1_6        1      2.03 1453.5 -5586.7
## + V23_J1_7        1      1.96 1453.6 -5586.4
## + V17_J2_1        1      1.94 1453.6 -5586.3
## <none>                                1455.5 -5586.0
## + V13_3_J2_4      1      1.84 1453.7 -5586.0
## + V12_1_2_J1_1    1      1.76 1453.8 -5585.7
## + V20_J1_7        1      1.74 1453.8 -5585.6
## - V13_1_J1_3      1      2.01 1457.5 -5585.5
## + V13_3_J1_1      1      1.61 1453.9 -5585.2

```

## + V20_J2_4	1	1.60	1453.9	-5585.1
## + V15_J2_4	1	1.59	1454.0	-5585.1
## + V5_J1_6	1	1.56	1454.0	-5585.0
## + V24_J1_5	1	1.56	1454.0	-5585.0
## + V20_J1_4	1	1.55	1454.0	-5584.9
## + V16_J1_6	1	1.54	1454.0	-5584.9
## + V23_J2_2	1	1.54	1454.0	-5584.9
## - V16_J2_1	1	2.24	1457.8	-5584.7
## + V2_J1_7	1	1.40	1454.1	-5584.4
## + V16_J1_4	1	1.37	1454.2	-5584.3
## + V12_1_2_J1_5	1	1.32	1454.2	-5584.1
## + V26_J1_7	1	1.31	1454.2	-5584.1
## + V20_J1_1	1	1.29	1454.2	-5584.0
## + V30_J2_7	1	1.28	1454.3	-5584.0
## - V14_J1_2	1	2.46	1458.0	-5583.9
## - V3_J1_2	1	2.47	1458.0	-5583.8
## + V16_J2_4	1	1.23	1454.3	-5583.8
## + V1_J2_3	1	1.22	1454.3	-5583.8
## + V5_J1_2	1	1.21	1454.3	-5583.7
## + V1_J1_7	1	1.21	1454.3	-5583.7
## + V30_J2_1	1	1.19	1454.3	-5583.6
## + V13_1_J2_4	1	1.18	1454.3	-5583.6
## + V19_J2_7	1	1.18	1454.4	-5583.6
## + V24_J1_1	1	1.16	1454.4	-5583.5
## + V26_J2_2	1	1.10	1454.4	-5583.3
## + V4_J1_6	1	1.08	1454.5	-5583.2
## + V17_J1_7	1	1.03	1454.5	-5583.1
## + V24_J2_4	1	1.00	1454.5	-5583.0
## + V5_J1_7	1	0.98	1454.6	-5582.9
## + V20_J1_5	1	0.96	1454.6	-5582.8
## - V13_3_J1_2	1	2.76	1458.3	-5582.8
## + V17_J2_4	1	0.92	1454.6	-5582.7
## + V23_J1_2	1	0.91	1454.6	-5582.6
## + V14_J2_2	1	0.85	1454.7	-5582.4
## + V13_2_J2_7	1	0.82	1454.7	-5582.3
## + V20_J1_3	1	0.82	1454.7	-5582.3
## + V19_J1_6	1	0.81	1454.7	-5582.3
## + V24_J2_2	1	0.80	1454.7	-5582.2
## - V1_J1_1	1	2.93	1458.5	-5582.2
## + V2_J2_1	1	0.79	1454.8	-5582.2
## + V17_J2_5	1	0.74	1454.8	-5582.0
## + V23_J2_4	1	0.69	1454.8	-5581.9
## + V13_1_J1_1	1	0.65	1454.9	-5581.7
## + V2_J1_2	1	0.61	1454.9	-5581.6
## + V30_J1_6	1	0.61	1454.9	-5581.6
## - V23_J2_3	1	3.13	1458.7	-5581.5
## + V17_J1_2	1	0.59	1455.0	-5581.5
## + V3_J1_6	1	0.58	1455.0	-5581.5
## + V13_2_J1_3	1	0.55	1455.0	-5581.4
## + V13_3_J1_6	1	0.54	1455.0	-5581.3
## - V19_J1_1	1	3.19	1458.7	-5581.3
## + V1_J2_1	1	0.52	1455.0	-5581.2
## + V3_J1_7	1	0.51	1455.0	-5581.2
## + V23_J2_5	1	0.51	1455.0	-5581.2

## + V17_J2_3	1	0.49	1455.0	-5581.2
## + V5_J2_7	1	0.47	1455.1	-5581.1
## + V16_J1_1	1	0.46	1455.1	-5581.0
## - V13_2_J2_5	1	3.28	1458.8	-5581.0
## + V12_1_2_J2_3	1	0.41	1455.1	-5580.9
## + V5_J1_1	1	0.40	1455.1	-5580.8
## + V24_J2_7	1	0.40	1455.1	-5580.8
## + V15_J1_5	1	0.40	1455.1	-5580.8
## + V4_J1_1	1	0.40	1455.1	-5580.8
## + V13_3_J2_3	1	0.39	1455.2	-5580.8
## + V13_1_J1_4	1	0.38	1455.2	-5580.7
## + V13_3_J2_2	1	0.34	1455.2	-5580.6
## + V13_2_J2_3	1	0.33	1455.2	-5580.6
## + V12_1_2_J2_1	1	0.32	1455.2	-5580.5
## - V14_J2_7	1	3.41	1459.0	-5580.5
## + V3_J1_1	1	0.29	1455.2	-5580.4
## + V16_J2_5	1	0.29	1455.2	-5580.4
## + V19_J1_2	1	0.27	1455.3	-5580.4
## + V14_J1_7	1	0.25	1455.3	-5580.3
## + V29_J2_5	1	0.25	1455.3	-5580.3
## + V2_J1_1	1	0.24	1455.3	-5580.2
## + V24_J2_1	1	0.22	1455.3	-5580.2
## + V2_J2_5	1	0.22	1455.3	-5580.2
## + V20_J2_5	1	0.21	1455.3	-5580.1
## + V15_J1_4	1	0.21	1455.3	-5580.1
## + V24_J1_2	1	0.21	1455.3	-5580.1
## + V3_J2_7	1	0.20	1455.3	-5580.1
## + V14_J1_6	1	0.19	1455.3	-5580.1
## + V1_J1_2	1	0.19	1455.3	-5580.1
## - V29_J1_4	1	3.54	1459.1	-5580.0
## + V4_J1_7	1	0.18	1455.4	-5580.0
## + V13_2_J2_4	1	0.18	1455.4	-5580.0
## + V12_1_2_J2_5	1	0.16	1455.4	-5580.0
## + V19_J1_7	1	0.14	1455.4	-5579.9
## + V24_J1_4	1	0.14	1455.4	-5579.9
## + V13_3_J1_4	1	0.13	1455.4	-5579.9
## + V26_J2_7	1	0.13	1455.4	-5579.9
## + V23_J1_6	1	0.13	1455.4	-5579.9
## + V4_J1_2	1	0.12	1455.4	-5579.8
## + V29_J1_6	1	0.12	1455.4	-5579.8
## + V2_J2_4	1	0.11	1455.4	-5579.8
## + V30_J1_4	1	0.11	1455.4	-5579.8
## + V4_J2_2	1	0.11	1455.4	-5579.8
## + V16_J1_7	1	0.10	1455.4	-5579.7
## + V5_J1_3	1	0.09	1455.5	-5579.7
## + V20_J2_7	1	0.09	1455.5	-5579.7
## + V17_J1_4	1	0.09	1455.5	-5579.7
## + V30_J2_4	1	0.09	1455.5	-5579.7
## + V3_J1_3	1	0.07	1455.5	-5579.6
## + V1_J1_6	1	0.07	1455.5	-5579.6
## + V2_J2_3	1	0.07	1455.5	-5579.6
## + V26_J1_2	1	0.06	1455.5	-5579.6
## + V5_J2_2	1	0.06	1455.5	-5579.6
## + V17_J1_6	1	0.06	1455.5	-5579.6

## + V12_1_2_J2_4	1	0.06	1455.5	-5579.6
## + V13_3_J2_1	1	0.05	1455.5	-5579.6
## + V29_J2_4	1	0.05	1455.5	-5579.6
## + V16_J1_5	1	0.05	1455.5	-5579.6
## + V13_1_J1_6	1	0.04	1455.5	-5579.5
## + V13_3_J2_7	1	0.04	1455.5	-5579.5
## + V15_J2_5	1	0.04	1455.5	-5579.5
## + V29_J2_7	1	0.04	1455.5	-5579.5
## + V17_J1_1	1	0.03	1455.5	-5579.5
## + V23_J1_5	1	0.03	1455.5	-5579.5
## + V13_2_J1_1	1	0.02	1455.5	-5579.5
## + V2_J1_4	1	0.02	1455.5	-5579.5
## + V13_1_J2_1	1	0.02	1455.5	-5579.5
## + V13_2_J2_1	1	0.02	1455.5	-5579.5
## + V29_J1_2	1	0.01	1455.5	-5579.4
## + V13_3_J1_5	1	0.01	1455.5	-5579.4
## + V3_J2_2	1	0.01	1455.5	-5579.4
## + V1_J2_4	1	0.01	1455.5	-5579.4
## + V13_3_J1_3	1	0.01	1455.5	-5579.4
## + V1_J1_4	1	0.00	1455.5	-5579.4
## + V23_J1_1	1	0.00	1455.5	-5579.4
## + V13_3_J1_7	1	0.00	1455.5	-5579.4
## + V13_1_J2_3	1	0.00	1455.5	-5579.4
## + V14_J1_1	1	0.00	1455.5	-5579.4
## + V19_J2_2	1	0.00	1455.5	-5579.4
## + V13_1_J2_5	1	0.00	1455.5	-5579.4
## - V13_1_J2_7	1	3.73	1459.3	-5579.3
## - V2_J1_6	1	3.82	1459.4	-5579.0
## - V13_1_J2_2	1	3.83	1459.4	-5579.0
## - V26_J1_1	1	4.02	1459.6	-5578.3
## - V13_3_J2_5	1	4.21	1459.8	-5577.6
## - V29_J1_7	1	4.32	1459.9	-5577.2
## - V13_2_J1_4	1	4.32	1459.9	-5577.2
## - V13_2_J1_5	1	4.33	1459.9	-5577.2
## - V14_J1_3	1	4.59	1460.1	-5576.3
## - V26_J1_3	1	4.72	1460.3	-5575.8
## - V1_J1_5	1	4.82	1460.4	-5575.5
## - V29_J2_2	1	4.87	1460.4	-5575.3
## - V29_J2_1	1	5.04	1460.6	-5574.7
## - V20_J1_2	1	5.05	1460.6	-5574.7
## - V19_J1_3	1	5.29	1460.8	-5573.8
## - V23_J1_4	1	5.44	1461.0	-5573.3
## - V2_J1_5	1	5.69	1461.2	-5572.4
## - V13_2_J1_6	1	7.07	1462.6	-5567.5
## - V29_J2_3	1	7.42	1463.0	-5566.2
## - V23_J2_1	1	7.58	1463.1	-5565.6
## - V30_J2_3	1	7.96	1463.5	-5564.3
## - V26_J1_6	1	8.03	1463.6	-5564.1
## - V24_J2_3	1	8.41	1464.0	-5562.7
## - V15_J2_3	1	8.65	1464.2	-5561.9
## - V13_1_J1_5	1	8.68	1464.2	-5561.7
## - V12_1_2_J1_2	1	8.78	1464.3	-5561.4
## - V24_J2_5	1	9.05	1464.6	-5560.4
## - V24_J1_7	1	9.56	1465.1	-5558.6

## - V17_J1_5	1	9.61	1465.2	-5558.4
## - V1_J2_5	1	10.83	1466.4	-5554.1
## - V16_J2_3	1	11.53	1467.1	-5551.6
## - V15_J2_1	1	12.52	1468.1	-5548.1
## - V20_J2_1	1	13.78	1469.3	-5543.6
## - V29_J1_5	1	13.96	1469.5	-5543.0
## - V13_1_J1_2	1	14.36	1469.9	-5541.6
## - V20_J2_3	1	14.55	1470.1	-5541.0
## - V12_1_2_J1_6	1	14.77	1470.3	-5540.2
## - V24_J1_6	1	16.52	1472.1	-5534.0
## - V29_J1_3	1	17.29	1472.8	-5531.2
## - V13_1_J1_7	1	17.54	1473.1	-5530.4
## - V26_J1_5	1	17.79	1473.3	-5529.5
## - V4_J1_3	1	19.36	1474.9	-5523.9
## - V14_J2_5	1	21.97	1477.5	-5514.7
## - V14_J2_1	1	23.67	1479.2	-5508.8
## - V12_1_2_J1_7	1	24.02	1479.6	-5507.6
## - V30_J1_5	1	24.65	1480.2	-5505.3
## - V30_J2_5	1	25.84	1481.4	-5501.2
## - V3_J1_5	1	26.63	1482.2	-5498.4
## - V23_J2_7	1	27.45	1483.0	-5495.5
## - V2_J2_2	1	27.78	1483.3	-5494.4
## - V4_J1_5	1	29.48	1485.0	-5488.4
## - V2_J2_7	1	30.00	1485.5	-5486.6
## - V15_J1_1	1	31.15	1486.7	-5482.5
## - V12_1_2_J2_7	1	33.90	1489.4	-5472.9
## - V15_J1_2	1	34.55	1490.1	-5470.7
## - V5_J1_4	1	37.92	1493.5	-5458.9
## - V26_J1_4	1	38.05	1493.6	-5458.5
## - V30_J1_3	1	39.54	1495.1	-5453.3
## - V14_J2_4	1	40.35	1495.9	-5450.5
## - V19_J2_4	1	40.44	1496.0	-5450.2
## - V19_J2_5	1	41.18	1496.7	-5447.6
## - V12_1_2_J1_3	1	42.37	1497.9	-5443.5
## - V4_J2_7	1	43.10	1498.6	-5440.9
## - V16_J2_7	1	43.65	1499.2	-5439.0
## - V13_2_J1_7	1	44.74	1500.3	-5435.2
## - V4_J1_4	1	47.45	1503.0	-5425.8
## - V5_J2_1	1	49.16	1504.7	-5419.9
## - V19_J2_1	1	50.74	1506.3	-5414.5
## - V30_J1_2	1	53.46	1509.0	-5405.1
## - V14_J2_3	1	54.80	1510.3	-5400.5
## - V15_J1_6	1	60.35	1515.9	-5381.4
## - V5_J2_3	1	62.90	1518.4	-5372.7
## - V15_J1_3	1	63.35	1518.9	-5371.1
## - V17_J2_2	1	64.63	1520.2	-5366.8
## - V15_J1_7	1	65.02	1520.6	-5365.4
## - V1_J2_2	1	66.83	1522.4	-5359.2
## - V17_J2_7	1	68.60	1524.1	-5353.2
## - V16_J1_3	1	69.30	1524.8	-5350.8
## - V30_J2_2	1	69.69	1525.2	-5349.5
## - V14_J1_5	1	70.07	1525.6	-5348.2
## - V30_J1_1	1	71.08	1526.6	-5344.7
## - V1_J1_3	1	72.80	1528.3	-5338.9

```

## - V3_J1_4      1      80.82 1536.4 -5311.7
## - V23_J1_3     1      80.96 1536.5 -5311.2
## - V14_J1_4     1      82.19 1537.7 -5307.0
## - V19_J2_3     1      85.77 1541.3 -5294.9
## - V2_J1_3      1      86.25 1541.8 -5293.3
## - V17_J1_3     1      87.75 1543.3 -5288.3
## - V1_J2_7      1      98.74 1554.3 -5251.4
## - V12_1_2_J1_4 1     102.16 1557.7 -5239.9
## - V5_J1_5      1     104.27 1559.8 -5232.9
## - V3_J2_1      1     105.75 1561.3 -5228.0
## - V26_J2_1     1     114.85 1570.4 -5197.7
## - V15_J2_7     1     115.02 1570.5 -5197.2
## - V4_J2_3      1     116.45 1572.0 -5192.4
## - V4_J2_5      1     116.56 1572.1 -5192.1
## - V4_J2_1      1     124.57 1580.1 -5165.7
## - V3_J2_5      1     128.82 1584.4 -5151.7
## - V19_J1_5     1     132.79 1588.3 -5138.7
## - V15_J2_2     1     135.51 1591.0 -5129.8
## - V26_J2_5     1     156.37 1611.9 -5062.1
## - V26_J2_4     1     157.33 1612.9 -5058.9
## - V4_J2_4      1     162.12 1617.7 -5043.5
## - V12_1_2_J2_2 1     172.52 1628.1 -5010.2
## - V3_J2_3      1     172.94 1628.5 -5008.9
## - V19_J1_4     1     183.61 1639.2 -4974.9
## - V3_J2_4      1     187.51 1643.0 -4962.5
## - J            12     269.43 1725.0 -4782.5
## - V20_J2_2     1     255.02 1710.6 -4753.1
## - V5_J2_5      1     269.02 1724.6 -4710.8
## - V26_J2_3     1     287.05 1742.6 -4656.7
## - V5_J2_4      1     305.69 1761.2 -4601.3
## - V16_J2_2     1     428.83 1884.4 -4249.9
## - V            19     995.80 2451.3 -3001.6
##
## Step: AIC=-5591.03
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
## V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
## V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
## V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V14_J1_2 + V13_3_J2_5 +
## V20_J1_2 + V13_2_J1_4 + V26_J1_6 + V13_1_J1_5 + V26_J1_1 +
## V2_J1_6 + V29_J1_1 + V15_J2_3 + V30_J2_3 + V24_J2_3 + V13_2_J1_5 +
## V13_1_J2_2 + V19_J1_3 + V14_J1_3 + V19_J1_1 + V16_J2_1 +

```



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##      V3_J1_2 + V13_2_J2_5 + V29_J2_3 + V1_J1_1 + V23_J2_3 + V13_1_J2_7 +
##      V14_J2_7 + V29_J2_1 + V29_J2_2 + V29_J1_4 + V13_3_J1_2 +
##      V13_2_J1_2
##
##      Df Sum of Sq    RSS    AIC
## + V16_J1_2      1      2.69 1449.6 -5594.0
## - V29_J1_1      1      1.14 1453.4 -5593.6
## + V24_J1_3      1      2.36 1449.9 -5592.9
## + V20_J1_6      1      2.08 1450.2 -5591.8
## + V30_J1_7      1      2.04 1450.2 -5591.7
## + V23_J1_7      1      1.93 1450.3 -5591.3
## <none>                      1452.3 -5591.0
## + V13_3_J2_4      1      1.83 1450.5 -5591.0
## + V17_J2_1      1      1.81 1450.5 -5590.9
## + V20_J1_7      1      1.79 1450.5 -5590.8
## + V12_1_2_J1_1    1      1.76 1450.5 -5590.7
## - V3_J1_2        1      1.98 1454.3 -5590.6
## - V14_J1_2        1      2.01 1454.3 -5590.5
## + V5_J1_2         1      1.64 1450.6 -5590.3
## + V15_J2_4        1      1.63 1450.7 -5590.2
## - V13_1_J1_3      1      2.09 1454.4 -5590.2
## + V13_3_J1_1      1      1.62 1450.7 -5590.2
## - V16_J2_1        1      2.10 1454.4 -5590.1
## + V20_J2_4        1      1.58 1450.7 -5590.0
## + V16_J1_6        1      1.58 1450.7 -5590.0
## + V24_J1_5        1      1.55 1450.7 -5590.0
## + V5_J1_6         1      1.55 1450.7 -5589.9
## + V20_J1_4        1      1.52 1450.8 -5589.8
## + V13_2_J2_2      1      1.51 1450.8 -5589.8
## + V23_J2_2        1      1.45 1450.8 -5589.6
## + V2_J1_7         1      1.39 1450.9 -5589.4
## + V26_J1_7        1      1.38 1450.9 -5589.3
## + V16_J1_4        1      1.32 1451.0 -5589.1
## + V16_J2_4        1      1.32 1451.0 -5589.1
## + V20_J1_1        1      1.31 1451.0 -5589.1
## + V12_1_2_J1_5    1      1.28 1451.0 -5589.0
## + V30_J2_7        1      1.25 1451.0 -5588.9
## + V30_J2_1        1      1.25 1451.0 -5588.9
## + V1_J1_7         1      1.22 1451.1 -5588.8
## + V13_1_J2_4      1      1.19 1451.1 -5588.7
## + V4_J1_6         1      1.13 1451.2 -5588.5
## + V24_J1_1        1      1.12 1451.2 -5588.4
## + V1_J2_3         1      1.10 1451.2 -5588.3
## + V19_J2_7        1      1.06 1451.2 -5588.2
## + V24_J2_4        1      1.04 1451.2 -5588.1
## + V17_J1_7        1      1.03 1451.3 -5588.1
## + V5_J1_7         1      0.99 1451.3 -5587.9
## + V26_J2_2        1      0.98 1451.3 -5587.9
## + V20_J1_5        1      0.94 1451.3 -5587.8
## + V20_J1_3        1      0.90 1451.4 -5587.6
## - V1_J1_1         1      2.83 1455.1 -5587.5
## + V14_J2_2        1      0.87 1451.4 -5587.5
## + V2_J2_1         1      0.87 1451.4 -5587.5
## + V17_J2_4        1      0.87 1451.4 -5587.5

```

## + V19_J1_6	1	0.86	1451.4	-5587.5
## + V24_J2_2	1	0.84	1451.5	-5587.4
## + V23_J2_4	1	0.76	1451.5	-5587.1
## + V17_J2_5	1	0.73	1451.5	-5587.0
## + V13_2_J2_3	1	0.70	1451.6	-5586.9
## - V19_J1_1	1	3.05	1455.3	-5586.8
## + V13_1_J1_1	1	0.64	1451.6	-5586.7
## + V30_J1_6	1	0.64	1451.7	-5586.7
## + V23_J1_2	1	0.63	1451.7	-5586.6
## + V17_J2_3	1	0.57	1451.7	-5586.5
## + V13_3_J1_6	1	0.57	1451.7	-5586.4
## + V3_J1_7	1	0.55	1451.7	-5586.4
## + V3_J1_6	1	0.55	1451.7	-5586.3
## + V23_J2_5	1	0.53	1451.8	-5586.3
## + V5_J2_7	1	0.52	1451.8	-5586.3
## + V16_J1_1	1	0.52	1451.8	-5586.3
## + V13_2_J2_4	1	0.48	1451.8	-5586.1
## - V13_2_J1_2	1	3.25	1455.5	-5586.0
## + V1_J2_1	1	0.45	1451.8	-5586.0
## + V5_J1_1	1	0.45	1451.8	-5586.0
## + V12_1_2_J2_3	1	0.44	1451.8	-5586.0
## + V24_J2_7	1	0.44	1451.8	-5586.0
## + V13_3_J2_3	1	0.43	1451.9	-5585.9
## + V13_2_J2_7	1	0.42	1451.9	-5585.9
## - V23_J2_3	1	3.30	1455.6	-5585.9
## - V13_3_J1_2	1	3.31	1455.6	-5585.8
## + V15_J1_5	1	0.40	1451.9	-5585.8
## + V13_1_J1_4	1	0.40	1451.9	-5585.8
## + V2_J1_2	1	0.37	1451.9	-5585.7
## + V17_J1_2	1	0.36	1451.9	-5585.7
## - V14_J2_7	1	3.36	1455.7	-5585.6
## - V13_2_J1_4	1	3.37	1455.7	-5585.6
## + V13_3_J2_2	1	0.34	1452.0	-5585.6
## + V4_J1_1	1	0.33	1452.0	-5585.6
## + V12_1_2_J2_1	1	0.30	1452.0	-5585.5
## + V3_J1_1	1	0.29	1452.0	-5585.4
## + V29_J2_5	1	0.27	1452.0	-5585.4
## + V16_J2_5	1	0.27	1452.0	-5585.4
## + V14_J1_7	1	0.26	1452.0	-5585.3
## + V24_J2_1	1	0.26	1452.0	-5585.3
## + V13_2_J1_3	1	0.25	1452.0	-5585.3
## + V20_J2_5	1	0.23	1452.1	-5585.2
## + V2_J2_5	1	0.23	1452.1	-5585.2
## + V15_J1_4	1	0.21	1452.1	-5585.2
## + V2_J1_1	1	0.21	1452.1	-5585.2
## + V14_J1_6	1	0.21	1452.1	-5585.1
## + V3_J2_7	1	0.19	1452.1	-5585.1
## + V13_2_J1_1	1	0.18	1452.1	-5585.1
## + V4_J1_7	1	0.16	1452.1	-5585.0
## + V13_2_J2_1	1	0.16	1452.1	-5585.0
## + V24_J1_4	1	0.14	1452.1	-5584.9
## + V12_1_2_J2_5	1	0.14	1452.1	-5584.9
## + V23_J1_6	1	0.14	1452.2	-5584.9
## + V5_J1_3	1	0.14	1452.2	-5584.9

## + V19_J1_2	1	0.13	1452.2	-5584.9
## + V19_J1_7	1	0.13	1452.2	-5584.8
## + V13_3_J1_4	1	0.12	1452.2	-5584.8
## + V30_J1_4	1	0.12	1452.2	-5584.8
## + V16_J1_7	1	0.11	1452.2	-5584.8
## + V29_J1_6	1	0.10	1452.2	-5584.7
## + V20_J2_7	1	0.10	1452.2	-5584.7
## + V2_J2_4	1	0.10	1452.2	-5584.7
## + V17_J1_4	1	0.09	1452.2	-5584.7
## + V26_J2_7	1	0.09	1452.2	-5584.7
## - V29_J1_4	1	3.62	1455.9	-5584.7
## + V30_J2_4	1	0.08	1452.2	-5584.7
## + V29_J1_2	1	0.08	1452.2	-5584.7
## + V4_J2_2	1	0.08	1452.2	-5584.7
## + V24_J1_2	1	0.08	1452.2	-5584.7
## + V1_J1_6	1	0.07	1452.2	-5584.7
## + V1_J1_2	1	0.07	1452.2	-5584.7
## + V17_J1_6	1	0.06	1452.2	-5584.6
## + V29_J2_7	1	0.06	1452.2	-5584.6
## + V13_3_J2_1	1	0.06	1452.2	-5584.6
## + V12_1_2_J2_4	1	0.06	1452.2	-5584.6
## + V3_J1_3	1	0.05	1452.2	-5584.6
## + V5_J2_2	1	0.05	1452.2	-5584.6
## + V13_3_J2_7	1	0.04	1452.2	-5584.6
## + V15_J2_5	1	0.04	1452.2	-5584.6
## + V2_J2_3	1	0.04	1452.2	-5584.5
## + V17_J1_1	1	0.04	1452.2	-5584.5
## + V16_J1_5	1	0.04	1452.2	-5584.5
## + V4_J1_2	1	0.04	1452.2	-5584.5
## + V13_1_J1_6	1	0.03	1452.2	-5584.5
## + V29_J2_4	1	0.03	1452.3	-5584.5
## + V2_J1_4	1	0.03	1452.3	-5584.5
## + V13_1_J2_1	1	0.03	1452.3	-5584.5
## + V23_J1_5	1	0.02	1452.3	-5584.5
## + V3_J2_2	1	0.01	1452.3	-5584.4
## + V13_3_J1_5	1	0.01	1452.3	-5584.4
## + V26_J1_2	1	0.01	1452.3	-5584.4
## + V1_J1_4	1	0.01	1452.3	-5584.4
## + V19_J2_2	1	0.01	1452.3	-5584.4
## + V13_3_J1_7	1	0.00	1452.3	-5584.4
## + V1_J2_4	1	0.00	1452.3	-5584.4
## - V13_1_J2_7	1	3.71	1456.0	-5584.4
## + V14_J1_1	1	0.00	1452.3	-5584.4
## + V13_3_J1_3	1	0.00	1452.3	-5584.4
## + V23_J1_1	1	0.00	1452.3	-5584.4
## + V13_1_J2_5	1	0.00	1452.3	-5584.4
## + V13_1_J2_3	1	0.00	1452.3	-5584.4
## - V13_1_J2_2	1	3.82	1456.1	-5584.0
## - V2_J1_6	1	3.83	1456.1	-5584.0
## - V13_2_J2_5	1	4.10	1456.4	-5583.0
## - V13_3_J2_5	1	4.13	1456.4	-5582.9
## - V26_J1_1	1	4.20	1456.5	-5582.7
## - V29_J1_7	1	4.25	1456.5	-5582.5
## - V26_J1_3	1	4.43	1456.7	-5581.8

## - V14_J1_3	1	4.44	1456.7	-5581.8
## - V1_J1_5	1	4.87	1457.2	-5580.2
## - V19_J1_3	1	4.99	1457.3	-5579.8
## - V29_J2_2	1	5.04	1457.3	-5579.6
## - V13_2_J1_5	1	5.23	1457.5	-5579.0
## - V29_J2_1	1	5.27	1457.5	-5578.8
## - V23_J1_4	1	5.37	1457.7	-5578.5
## - V2_J1_5	1	5.73	1458.0	-5577.2
## - V20_J1_2	1	5.73	1458.0	-5577.2
## - V13_2_J1_6	1	5.76	1458.0	-5577.1
## - V29_J2_3	1	7.73	1460.0	-5570.1
## - V12_1_2_J1_2	1	7.80	1460.1	-5569.8
## - V23_J2_1	1	7.81	1460.1	-5569.8
## - V30_J2_3	1	8.11	1460.4	-5568.7
## - V26_J1_6	1	8.16	1460.5	-5568.5
## - V24_J2_3	1	8.61	1460.9	-5566.9
## - V13_1_J1_5	1	8.75	1461.0	-5566.4
## - V15_J2_3	1	8.82	1461.1	-5566.2
## - V24_J2_5	1	9.06	1461.3	-5565.3
## - V24_J1_7	1	9.52	1461.8	-5563.7
## - V17_J1_5	1	9.67	1462.0	-5563.2
## - V1_J2_5	1	10.77	1463.1	-5559.2
## - V16_J2_3	1	11.18	1463.5	-5557.8
## - V15_J2_1	1	12.68	1465.0	-5552.5
## - V20_J2_1	1	13.64	1465.9	-5549.1
## - V29_J1_5	1	14.14	1466.4	-5547.3
## - V20_J2_3	1	14.34	1466.6	-5546.6
## - V12_1_2_J1_6	1	14.92	1467.2	-5544.5
## - V13_1_J1_2	1	15.46	1467.8	-5542.6
## - V24_J1_6	1	16.49	1468.8	-5539.0
## - V29_J1_3	1	16.75	1469.0	-5538.0
## - V26_J1_5	1	17.54	1469.8	-5535.2
## - V13_1_J1_7	1	17.70	1470.0	-5534.7
## - V4_J1_3	1	18.78	1471.1	-5530.9
## - V14_J2_5	1	22.04	1474.3	-5519.3
## - V14_J2_1	1	23.46	1475.7	-5514.3
## - V12_1_2_J1_7	1	24.23	1476.5	-5511.6
## - V30_J1_5	1	24.59	1476.9	-5510.4
## - V30_J2_5	1	25.72	1478.0	-5506.4
## - V3_J1_5	1	26.75	1479.0	-5502.8
## - V23_J2_7	1	27.09	1479.4	-5501.5
## - V2_J2_2	1	27.52	1479.8	-5500.0
## - V4_J1_5	1	29.19	1481.5	-5494.2
## - V2_J2_7	1	29.71	1482.0	-5492.4
## - V15_J1_1	1	31.28	1483.6	-5486.8
## - V15_J1_2	1	32.70	1485.0	-5481.9
## - V12_1_2_J2_7	1	33.87	1486.2	-5477.8
## - V26_J1_4	1	37.69	1490.0	-5464.4
## - V5_J1_4	1	37.80	1490.1	-5464.1
## - V30_J1_3	1	39.12	1491.4	-5459.5
## - V19_J2_4	1	39.93	1492.2	-5456.6
## - V14_J2_4	1	40.22	1492.5	-5455.6
## - V19_J2_5	1	40.91	1493.2	-5453.2
## - V12_1_2_J1_3	1	42.02	1494.3	-5449.3

## - V4_J2_7	1	42.52	1494.8	-5447.6
## - V16_J2_7	1	43.18	1495.5	-5445.3
## - V4_J1_4	1	47.10	1499.4	-5431.7
## - V13_2_J1_7	1	47.18	1499.5	-5431.4
## - V5_J2_1	1	48.62	1500.9	-5426.4
## - V19_J2_1	1	49.98	1502.3	-5421.7
## - V30_J1_2	1	50.88	1503.2	-5418.6
## - V14_J2_3	1	54.37	1506.7	-5406.6
## - V15_J1_6	1	60.22	1512.5	-5386.4
## - V5_J2_3	1	62.18	1514.5	-5379.7
## - V15_J1_3	1	63.90	1516.2	-5373.8
## - V17_J2_2	1	64.24	1516.5	-5372.6
## - V15_J1_7	1	64.86	1517.1	-5370.5
## - V1_J2_2	1	66.38	1518.7	-5365.3
## - V17_J2_7	1	68.15	1520.4	-5359.2
## - V16_J1_3	1	68.29	1520.6	-5358.7
## - V30_J2_2	1	69.57	1521.8	-5354.4
## - V14_J1_5	1	70.12	1522.4	-5352.5
## - V30_J1_1	1	71.20	1523.5	-5348.8
## - V1_J1_3	1	71.85	1524.1	-5346.6
## - V23_J1_3	1	79.89	1532.2	-5319.2
## - V3_J1_4	1	81.05	1533.3	-5315.3
## - V14_J1_4	1	82.27	1534.5	-5311.1
## - V19_J2_3	1	84.64	1536.9	-5303.1
## - V2_J1_3	1	85.28	1537.6	-5300.9
## - V17_J1_3	1	86.77	1539.0	-5295.9
## - V1_J2_7	1	98.12	1550.4	-5257.7
## - V12_1_2_J1_4	1	102.45	1554.7	-5243.2
## - V5_J1_5	1	104.05	1556.3	-5237.8
## - V3_J2_1	1	105.45	1557.7	-5233.2
## - V26_J2_1	1	113.58	1565.9	-5206.1
## - V4_J2_3	1	115.10	1567.4	-5201.1
## - V15_J2_7	1	115.32	1567.6	-5200.3
## - V4_J2_5	1	116.09	1568.4	-5197.8
## - V4_J2_1	1	123.32	1575.6	-5173.9
## - V3_J2_5	1	129.18	1581.5	-5154.5
## - V19_J1_5	1	132.19	1584.5	-5144.7
## - V15_J2_2	1	135.77	1588.1	-5132.9
## - V26_J2_5	1	155.72	1608.0	-5068.0
## - V26_J2_4	1	156.17	1608.5	-5066.6
## - V4_J2_4	1	161.04	1613.3	-5050.8
## - V3_J2_3	1	172.37	1624.7	-5014.4
## - V12_1_2_J2_2	1	172.51	1624.8	-5014.0
## - V19_J1_4	1	182.92	1635.2	-4980.8
## - V3_J2_4	1	187.47	1639.8	-4966.4
## - J	12	272.01	1724.3	-4777.9
## - V20_J2_2	1	254.79	1707.1	-4757.1
## - V5_J2_5	1	268.82	1721.1	-4714.5
## - V26_J2_3	1	284.70	1737.0	-4666.8
## - V5_J2_4	1	304.78	1757.1	-4607.0
## - V16_J2_2	1	427.38	1879.7	-4256.3
## - V	19	997.66	2449.9	-2997.9
##				
## Step: AIC=-5594.03				

```

## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
## V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
## V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
## V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V14_J1_2 + V13_3_J2_5 +
## V20_J1_2 + V13_2_J1_4 + V26_J1_6 + V13_1_J1_5 + V26_J1_1 +
## V2_J1_6 + V29_J1_1 + V15_J2_3 + V30_J2_3 + V24_J2_3 + V13_2_J1_5 +
## V13_1_J2_2 + V19_J1_3 + V14_J1_3 + V19_J1_1 + V16_J2_1 +
## V3_J1_2 + V13_2_J2_5 + V29_J2_3 + V1_J1_1 + V23_J2_3 + V13_1_J2_7 +
## V14_J2_7 + V29_J2_1 + V29_J2_2 + V29_J1_4 + V13_3_J1_2 +
## V13_2_J1_2 + V16_J1_2
##
##
## Df Sum of Sq RSS AIC
## - V29_J1_1 1 1.07 1450.7 -5596.8
## + V24_J1_3 1 2.33 1447.3 -5595.8
## - V3_J1_2 1 1.58 1451.2 -5595.0
## + V5_J1_2 1 2.10 1447.5 -5595.0
## + V20_J1_6 1 2.09 1447.5 -5594.9
## - V14_J1_2 1 1.61 1451.2 -5594.9
## + V30_J1_7 1 2.03 1447.6 -5594.7
## + V16_J1_4 1 1.94 1447.7 -5594.4
## + V23_J1_7 1 1.89 1447.7 -5594.2
## <none> 1449.6 -5594.0
## + V20_J1_7 1 1.81 1447.8 -5593.9
## + V13_3_J2_4 1 1.81 1447.8 -5593.9
## + V17_J2_1 1 1.79 1447.8 -5593.8
## + V12_1_2_J1_1 1 1.77 1447.8 -5593.8
## - V13_1_J1_3 1 2.05 1451.7 -5593.3
## + V13_3_J1_1 1 1.63 1448.0 -5593.3
## + V15_J2_4 1 1.60 1448.0 -5593.1
## + V20_J2_4 1 1.57 1448.0 -5593.0
## + V20_J1_4 1 1.56 1448.0 -5593.0
## + V26_J1_7 1 1.54 1448.1 -5592.9
## + V13_2_J2_2 1 1.47 1448.1 -5592.7
## + V23_J2_2 1 1.46 1448.1 -5592.7
## + V5_J1_6 1 1.46 1448.1 -5592.6
## + V24_J1_5 1 1.41 1448.2 -5592.5
## + V2_J1_7 1 1.35 1448.2 -5592.3
## + V12_1_2_J1_5 1 1.34 1448.2 -5592.2
## + V20_J1_1 1 1.31 1448.3 -5592.1
## + V30_J2_7 1 1.30 1448.3 -5592.1
## + V1_J1_7 1 1.27 1448.3 -5592.0

```

## + V4_J1_6	1	1.24	1448.4	-5591.8
## + V30_J2_1	1	1.23	1448.4	-5591.8
## + V13_1_J2_4	1	1.20	1448.4	-5591.7
## + V24_J2_4	1	1.11	1448.5	-5591.4
## + V24_J1_1	1	1.06	1448.5	-5591.2
## + V17_J1_7	1	1.06	1448.5	-5591.2
## + V5_J1_7	1	1.06	1448.5	-5591.2
## + V1_J2_3	1	1.06	1448.5	-5591.2
## + V16_J1_6	1	1.05	1448.5	-5591.2
## - V16_J1_2	1	2.69	1452.3	-5591.0
## - V16_J2_1	1	2.69	1452.3	-5591.0
## + V19_J2_7	1	1.00	1448.6	-5591.0
## + V20_J1_5	1	1.00	1448.6	-5591.0
## + V19_J1_6	1	0.96	1448.6	-5590.8
## - V1_J1_1	1	2.74	1452.3	-5590.8
## + V26_J2_2	1	0.90	1448.7	-5590.6
## + V2_J2_1	1	0.89	1448.7	-5590.6
## + V20_J1_3	1	0.86	1448.7	-5590.5
## + V16_J2_4	1	0.85	1448.7	-5590.5
## + V14_J2_2	1	0.83	1448.8	-5590.4
## + V24_J2_2	1	0.83	1448.8	-5590.4
## + V17_J2_4	1	0.82	1448.8	-5590.3
## + V23_J2_4	1	0.81	1448.8	-5590.3
## - V19_J1_1	1	2.90	1452.5	-5590.3
## + V13_2_J2_3	1	0.70	1448.9	-5589.9
## + V17_J2_5	1	0.67	1448.9	-5589.8
## + V13_1_J1_1	1	0.64	1449.0	-5589.7
## + V30_J1_6	1	0.63	1449.0	-5589.7
## + V23_J2_5	1	0.59	1449.0	-5589.5
## + V17_J2_3	1	0.59	1449.0	-5589.5
## + V16_J2_5	1	0.57	1449.0	-5589.5
## + V13_3_J1_6	1	0.57	1449.0	-5589.4
## + V3_J1_6	1	0.56	1449.0	-5589.4
## + V5_J2_7	1	0.54	1449.0	-5589.4
## + V3_J1_7	1	0.54	1449.1	-5589.3
## + V5_J1_1	1	0.50	1449.1	-5589.2
## + V13_2_J2_4	1	0.46	1449.1	-5589.0
## + V24_J2_7	1	0.44	1449.2	-5589.0
## + V1_J2_1	1	0.42	1449.2	-5588.9
## + V12_1_2_J2_3	1	0.42	1449.2	-5588.9
## + V13_3_J2_3	1	0.42	1449.2	-5588.9
## + V13_2_J2_7	1	0.40	1449.2	-5588.8
## + V15_J1_5	1	0.38	1449.2	-5588.8
## + V23_J1_2	1	0.38	1449.2	-5588.8
## + V13_1_J1_4	1	0.38	1449.2	-5588.8
## - V23_J2_3	1	3.33	1452.9	-5588.7
## + V13_3_J2_2	1	0.36	1449.2	-5588.7
## + V29_J2_5	1	0.34	1449.2	-5588.6
## + V12_1_2_J2_1	1	0.32	1449.3	-5588.6
## + V3_J1_1	1	0.31	1449.3	-5588.5
## - V14_J2_7	1	3.41	1453.0	-5588.5
## + V4_J1_1	1	0.28	1449.3	-5588.4
## + V24_J2_1	1	0.27	1449.3	-5588.4
## + V2_J2_5	1	0.27	1449.3	-5588.4

## + V14_J1_7	1	0.26	1449.3	-5588.3
## - V13_2_J1_4	1	3.45	1453.0	-5588.3
## + V13_2_J1_3	1	0.25	1449.3	-5588.3
## + V16_J1_1	1	0.24	1449.4	-5588.3
## + V15_J1_4	1	0.21	1449.4	-5588.2
## + V20_J2_5	1	0.21	1449.4	-5588.2
## + V3_J2_7	1	0.21	1449.4	-5588.1
## + V14_J1_6	1	0.20	1449.4	-5588.1
## + V29_J1_2	1	0.20	1449.4	-5588.1
## + V2_J1_2	1	0.19	1449.4	-5588.1
## + V2_J1_1	1	0.19	1449.4	-5588.1
## + V17_J1_2	1	0.18	1449.4	-5588.0
## + V24_J1_4	1	0.18	1449.4	-5588.0
## + V13_2_J1_1	1	0.17	1449.4	-5588.0
## + V16_J1_5	1	0.17	1449.4	-5588.0
## + V5_J1_3	1	0.16	1449.4	-5588.0
## + V13_2_J2_1	1	0.16	1449.4	-5588.0
## + V23_J1_6	1	0.15	1449.4	-5587.9
## + V12_1_2_J2_5	1	0.15	1449.4	-5587.9
## + V13_3_J1_4	1	0.14	1449.5	-5587.9
## + V4_J1_7	1	0.13	1449.5	-5587.9
## + V17_J1_4	1	0.12	1449.5	-5587.8
## + V30_J1_4	1	0.10	1449.5	-5587.8
## + V19_J1_7	1	0.09	1449.5	-5587.7
## + V1_J1_6	1	0.09	1449.5	-5587.7
## + V20_J2_7	1	0.08	1449.5	-5587.7
## + V2_J2_4	1	0.08	1449.5	-5587.7
## + V29_J1_6	1	0.08	1449.5	-5587.7
## + V30_J2_4	1	0.07	1449.5	-5587.7
## + V17_J1_6	1	0.07	1449.5	-5587.7
## + V29_J2_7	1	0.07	1449.5	-5587.6
## + V4_J2_2	1	0.07	1449.5	-5587.6
## + V26_J2_7	1	0.07	1449.5	-5587.6
## + V12_1_2_J2_4	1	0.06	1449.5	-5587.6
## + V13_3_J2_1	1	0.06	1449.5	-5587.6
## + V3_J1_3	1	0.05	1449.5	-5587.6
## + V17_J1_1	1	0.05	1449.5	-5587.6
## + V19_J1_2	1	0.05	1449.5	-5587.6
## + V5_J2_2	1	0.04	1449.5	-5587.6
## + V15_J2_5	1	0.04	1449.5	-5587.6
## + V2_J1_4	1	0.04	1449.5	-5587.5
## + V2_J2_3	1	0.04	1449.6	-5587.5
## + V13_3_J2_7	1	0.04	1449.6	-5587.5
## + V13_1_J1_6	1	0.03	1449.6	-5587.5
## + V13_1_J2_1	1	0.02	1449.6	-5587.5
## + V13_3_J1_5	1	0.02	1449.6	-5587.5
## + V1_J1_4	1	0.02	1449.6	-5587.5
## + V29_J2_4	1	0.01	1449.6	-5587.4
## + V19_J2_2	1	0.01	1449.6	-5587.4
## + V24_J1_2	1	0.01	1449.6	-5587.4
## + V1_J1_2	1	0.01	1449.6	-5587.4
## + V3_J2_2	1	0.01	1449.6	-5587.4
## + V23_J1_5	1	0.01	1449.6	-5587.4
## + V16_J1_7	1	0.01	1449.6	-5587.4

## + V13_3_J1_7	1	0.00	1449.6	-5587.4
## + V14_J1_1	1	0.00	1449.6	-5587.4
## + V13_3_J1_3	1	0.00	1449.6	-5587.4
## + V26_J1_2	1	0.00	1449.6	-5587.4
## + V4_J1_2	1	0.00	1449.6	-5587.4
## + V1_J2_4	1	0.00	1449.6	-5587.4
## + V13_1_J2_3	1	0.00	1449.6	-5587.4
## + V13_1_J2_5	1	0.00	1449.6	-5587.4
## + V23_J1_1	1	0.00	1449.6	-5587.4
## - V13_2_J1_2	1	3.78	1453.4	-5587.1
## - V29_J1_4	1	3.79	1453.4	-5587.1
## - V13_1_J2_7	1	3.79	1453.4	-5587.1
## - V13_3_J1_2	1	3.87	1453.5	-5586.8
## - V2_J1_6	1	3.89	1453.5	-5586.7
## - V13_1_J2_2	1	3.91	1453.5	-5586.7
## - V13_2_J2_5	1	4.01	1453.6	-5586.3
## - V29_J1_7	1	4.14	1453.7	-5585.8
## - V13_3_J2_5	1	4.21	1453.8	-5585.6
## - V26_J1_3	1	4.27	1453.9	-5585.4
## - V26_J1_1	1	4.41	1454.0	-5584.9
## - V14_J1_3	1	4.46	1454.0	-5584.7
## - V19_J1_3	1	4.87	1454.5	-5583.2
## - V13_2_J1_5	1	5.08	1454.7	-5582.5
## - V1_J1_5	1	5.08	1454.7	-5582.5
## - V29_J2_2	1	5.08	1454.7	-5582.5
## - V23_J1_4	1	5.23	1454.8	-5582.0
## - V29_J2_1	1	5.37	1455.0	-5581.5
## - V13_2_J1_6	1	5.80	1455.4	-5579.9
## - V2_J1_5	1	5.94	1455.5	-5579.4
## - V20_J1_2	1	6.48	1456.1	-5577.5
## - V12_1_2_J1_2	1	6.86	1456.5	-5576.1
## - V29_J2_3	1	7.85	1457.4	-5572.6
## - V23_J2_1	1	7.86	1457.5	-5572.6
## - V30_J2_3	1	8.07	1457.7	-5571.8
## - V26_J1_6	1	8.43	1458.0	-5570.5
## - V13_1_J1_5	1	8.61	1458.2	-5569.9
## - V24_J2_3	1	8.68	1458.3	-5569.6
## - V15_J2_3	1	8.69	1458.3	-5569.6
## - V24_J2_5	1	8.85	1458.5	-5569.0
## - V24_J1_7	1	9.61	1459.2	-5566.3
## - V17_J1_5	1	9.92	1459.5	-5565.2
## - V1_J2_5	1	10.52	1460.1	-5563.1
## - V16_J2_3	1	12.37	1462.0	-5556.5
## - V15_J2_1	1	12.52	1462.1	-5556.0
## - V20_J2_1	1	13.73	1463.3	-5551.7
## - V20_J2_3	1	14.43	1464.0	-5549.2
## - V29_J1_5	1	14.54	1464.1	-5548.8
## - V12_1_2_J1_6	1	14.97	1464.6	-5547.2
## - V13_1_J1_2	1	16.59	1466.2	-5541.5
## - V29_J1_3	1	16.59	1466.2	-5541.5
## - V24_J1_6	1	16.64	1466.2	-5541.3
## - V26_J1_5	1	16.92	1466.5	-5540.3
## - V13_1_J1_7	1	17.76	1467.3	-5537.4
## - V4_J1_3	1	18.57	1468.2	-5534.5

## - V14_J2_5	1	21.85	1471.5	-5522.9
## - V14_J2_1	1	23.48	1473.1	-5517.1
## - V12_1_2_J1_7	1	24.32	1473.9	-5514.1
## - V30_J1_5	1	24.85	1474.5	-5512.3
## - V30_J2_5	1	25.90	1475.5	-5508.6
## - V3_J1_5	1	26.39	1476.0	-5506.8
## - V23_J2_7	1	27.12	1476.7	-5504.3
## - V2_J2_2	1	27.57	1477.2	-5502.7
## - V4_J1_5	1	28.52	1478.1	-5499.3
## - V2_J2_7	1	29.73	1479.3	-5495.1
## - V15_J1_2	1	30.53	1480.1	-5492.3
## - V15_J1_1	1	31.15	1480.8	-5490.1
## - V12_1_2_J2_7	1	34.14	1483.7	-5479.6
## - V26_J1_4	1	36.90	1486.5	-5470.0
## - V5_J1_4	1	37.24	1486.8	-5468.8
## - V30_J1_3	1	39.22	1488.8	-5461.8
## - V19_J2_4	1	39.32	1488.9	-5461.5
## - V14_J2_4	1	40.08	1489.7	-5458.9
## - V19_J2_5	1	40.18	1489.8	-5458.5
## - V12_1_2_J1_3	1	42.22	1491.8	-5451.4
## - V4_J2_7	1	42.29	1491.9	-5451.1
## - V16_J2_7	1	45.26	1494.9	-5440.8
## - V4_J1_4	1	46.40	1496.0	-5436.8
## - V13_2_J1_7	1	47.11	1496.7	-5434.4
## - V30_J1_2	1	48.28	1497.9	-5430.3
## - V5_J2_1	1	48.32	1497.9	-5430.2
## - V19_J2_1	1	49.52	1499.1	-5426.0
## - V14_J2_3	1	54.40	1504.0	-5409.1
## - V15_J1_6	1	59.97	1509.6	-5389.9
## - V5_J2_3	1	61.84	1511.4	-5383.5
## - V15_J1_3	1	63.50	1513.1	-5377.7
## - V17_J2_2	1	64.34	1513.9	-5374.9
## - V15_J1_7	1	64.56	1514.2	-5374.1
## - V1_J2_2	1	66.36	1516.0	-5367.9
## - V17_J2_7	1	68.21	1517.8	-5361.6
## - V14_J1_5	1	69.60	1519.2	-5356.8
## - V30_J2_2	1	69.88	1519.5	-5355.8
## - V16_J1_3	1	70.58	1520.2	-5353.5
## - V30_J1_1	1	71.29	1520.9	-5351.0
## - V1_J1_3	1	71.65	1521.2	-5349.8
## - V23_J1_3	1	79.79	1529.4	-5322.0
## - V3_J1_4	1	80.63	1530.2	-5319.2
## - V14_J1_4	1	81.92	1531.5	-5314.8
## - V19_J2_3	1	84.05	1533.6	-5307.6
## - V2_J1_3	1	85.16	1534.8	-5303.8
## - V17_J1_3	1	86.68	1536.3	-5298.7
## - V1_J2_7	1	98.05	1547.6	-5260.3
## - V12_1_2_J1_4	1	102.29	1551.9	-5246.1
## - V5_J1_5	1	102.83	1552.4	-5244.3
## - V3_J2_1	1	105.45	1555.0	-5235.5
## - V26_J2_1	1	112.67	1562.3	-5211.4
## - V4_J2_3	1	114.50	1564.1	-5205.3
## - V15_J2_7	1	114.58	1564.2	-5205.1
## - V4_J2_5	1	114.91	1564.5	-5204.0

```

## - V4_J2_1      1      122.70 1572.3 -5178.2
## - V3_J2_5      1      128.62 1578.2 -5158.6
## - V19_J1_5     1      130.55 1580.1 -5152.3
## - V15_J2_2     1      134.90 1584.5 -5138.0
## - V26_J2_5     1      153.94 1603.5 -5075.9
## - V26_J2_4     1      154.64 1604.2 -5073.6
## - V4_J2_4      1      159.88 1609.5 -5056.6
## - V3_J2_3      1      172.36 1622.0 -5016.5
## - V12_1_2_J2_2 1      173.17 1622.8 -5013.9
## - V19_J1_4     1      181.31 1630.9 -4987.8
## - V3_J2_4      1      187.04 1636.6 -4969.6
## - J            12     272.28 1721.9 -4778.6
## - V20_J2_2     1      255.54 1705.1 -4756.4
## - V5_J2_5      1      267.14 1716.7 -4721.1
## - V26_J2_3     1      283.21 1732.8 -4672.7
## - V5_J2_4      1      303.36 1753.0 -4612.6
## - V16_J2_2     1      428.92 1878.5 -4252.8
## - V            19     1000.22 2449.8 -2991.5
##
## Step:  AIC=-5596.83
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
## V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
## V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
## V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V14_J1_2 + V13_3_J2_5 +
## V20_J1_2 + V13_2_J1_4 + V26_J1_6 + V13_1_J1_5 + V26_J1_1 +
## V2_J1_6 + V15_J2_3 + V30_J2_3 + V24_J2_3 + V13_2_J1_5 + V13_1_J2_2 +
## V19_J1_3 + V14_J1_3 + V19_J1_1 + V16_J2_1 + V3_J1_2 + V13_2_J2_5 +
## V29_J2_3 + V1_J1_1 + V23_J2_3 + V13_1_J2_7 + V14_J2_7 + V29_J2_1 +
## V29_J2_2 + V29_J1_4 + V13_3_J1_2 + V13_2_J1_2 + V16_J1_2
##
##
##      Df Sum of Sq    RSS    AIC
## + V24_J1_3      1      2.33 1448.3 -5598.5
## - V3_J1_2       1      1.52 1452.2 -5598.0
## + V5_J1_2       1      2.18 1448.5 -5598.0
## - V14_J1_2      1      1.53 1452.2 -5598.0
## + V20_J1_6      1      2.14 1448.5 -5597.9
## + V30_J1_7      1      2.06 1448.6 -5597.6
## + V16_J1_4      1      1.95 1448.7 -5597.2
## + V23_J1_7      1      1.89 1448.8 -5597.0
## + V13_3_J2_4    1      1.86 1448.8 -5596.9
## <none>              1450.7 -5596.8

```

## + V13_3_J1_1	1	1.81	1448.8	-5596.7
## + V20_J1_7	1	1.81	1448.8	-5596.7
## + V17_J2_1	1	1.79	1448.9	-5596.6
## - V13_1_J1_3	1	2.05	1452.7	-5596.1
## + V20_J2_4	1	1.61	1449.1	-5596.0
## + V15_J2_4	1	1.58	1449.1	-5595.9
## + V12_1_2_J1_1	1	1.58	1449.1	-5595.9
## + V26_J1_7	1	1.57	1449.1	-5595.8
## + V20_J1_4	1	1.55	1449.1	-5595.8
## + V5_J1_6	1	1.50	1449.2	-5595.6
## + V20_J1_1	1	1.48	1449.2	-5595.5
## + V23_J2_2	1	1.46	1449.2	-5595.4
## + V13_2_J2_2	1	1.46	1449.2	-5595.4
## + V24_J1_5	1	1.42	1449.2	-5595.3
## + V2_J1_7	1	1.36	1449.3	-5595.1
## + V30_J2_7	1	1.34	1449.3	-5595.0
## + V12_1_2_J1_5	1	1.33	1449.3	-5595.0
## + V1_J1_7	1	1.29	1449.4	-5594.8
## + V30_J2_1	1	1.25	1449.4	-5594.7
## + V4_J1_6	1	1.18	1449.5	-5594.4
## - V1_J1_1	1	2.53	1453.2	-5594.4
## + V13_1_J2_4	1	1.16	1449.5	-5594.4
## + V29_J1_1	1	1.07	1449.6	-5594.0
## + V24_J2_4	1	1.07	1449.6	-5594.0
## + V17_J1_7	1	1.06	1449.6	-5594.0
## + V5_J1_7	1	1.05	1449.6	-5594.0
## + V1_J2_3	1	1.04	1449.6	-5593.9
## + V19_J2_7	1	1.03	1449.6	-5593.9
## - V19_J1_1	1	2.68	1453.3	-5593.9
## + V16_J1_6	1	1.01	1449.7	-5593.8
## - V16_J2_1	1	2.70	1453.4	-5593.8
## + V20_J1_5	1	1.00	1449.7	-5593.8
## + V19_J1_6	1	0.95	1449.7	-5593.6
## - V16_J1_2	1	2.76	1453.4	-5593.6
## + V24_J1_1	1	0.91	1449.8	-5593.5
## + V2_J2_1	1	0.89	1449.8	-5593.4
## + V26_J2_2	1	0.87	1449.8	-5593.3
## + V20_J1_3	1	0.87	1449.8	-5593.3
## + V17_J2_4	1	0.85	1449.8	-5593.2
## + V24_J2_2	1	0.83	1449.8	-5593.2
## + V16_J2_4	1	0.82	1449.8	-5593.1
## + V14_J2_2	1	0.81	1449.9	-5593.1
## + V23_J2_4	1	0.78	1449.9	-5593.0
## + V13_2_J2_3	1	0.71	1450.0	-5592.8
## + V17_J2_5	1	0.71	1450.0	-5592.7
## + V30_J1_6	1	0.64	1450.0	-5592.5
## + V16_J2_5	1	0.62	1450.0	-5592.4
## + V5_J1_1	1	0.61	1450.0	-5592.4
## + V29_J2_5	1	0.61	1450.0	-5592.4
## + V13_3_J1_6	1	0.60	1450.1	-5592.3
## + V17_J2_3	1	0.59	1450.1	-5592.3
## + V23_J2_5	1	0.55	1450.1	-5592.2
## + V3_J1_7	1	0.55	1450.1	-5592.2
## + V3_J1_6	1	0.53	1450.1	-5592.1

## + V13_1_J1_1	1	0.52	1450.1	-5592.1
## + V5_J2_7	1	0.51	1450.2	-5592.0
## + V13_2_J2_4	1	0.49	1450.2	-5591.9
## + V13_3_J2_3	1	0.42	1450.2	-5591.7
## + V12_1_2_J2_3	1	0.41	1450.2	-5591.7
## + V1_J2_1	1	0.41	1450.2	-5591.7
## + V24_J2_7	1	0.40	1450.3	-5591.6
## + V3_J1_1	1	0.39	1450.3	-5591.6
## + V13_1_J1_4	1	0.39	1450.3	-5591.6
## - V23_J2_3	1	3.33	1454.0	-5591.5
## + V15_J1_5	1	0.37	1450.3	-5591.5
## + V13_3_J2_2	1	0.36	1450.3	-5591.5
## + V13_2_J2_7	1	0.36	1450.3	-5591.5
## + V23_J1_2	1	0.35	1450.3	-5591.5
## + V12_1_2_J2_1	1	0.33	1450.3	-5591.4
## + V16_J1_1	1	0.31	1450.3	-5591.3
## - V13_2_J1_4	1	3.43	1454.1	-5591.2
## + V14_J1_7	1	0.28	1450.4	-5591.2
## + V24_J2_1	1	0.27	1450.4	-5591.2
## + V13_2_J1_3	1	0.24	1450.4	-5591.1
## + V2_J2_5	1	0.24	1450.4	-5591.1
## + V20_J2_5	1	0.24	1450.4	-5591.0
## + V3_J2_7	1	0.23	1450.4	-5591.0
## + V14_J1_6	1	0.23	1450.4	-5591.0
## + V29_J2_7	1	0.22	1450.5	-5591.0
## + V4_J1_1	1	0.21	1450.5	-5590.9
## + V15_J1_4	1	0.21	1450.5	-5590.9
## - V14_J2_7	1	3.52	1454.2	-5590.9
## + V24_J1_4	1	0.17	1450.5	-5590.8
## + V16_J1_5	1	0.17	1450.5	-5590.8
## + V2_J1_2	1	0.17	1450.5	-5590.8
## + V13_2_J2_1	1	0.16	1450.5	-5590.8
## + V17_J1_2	1	0.16	1450.5	-5590.8
## + V5_J1_3	1	0.16	1450.5	-5590.8
## - V29_J1_7	1	3.56	1454.2	-5590.7
## + V23_J1_6	1	0.14	1450.5	-5590.7
## + V4_J1_7	1	0.14	1450.5	-5590.7
## + V13_3_J1_4	1	0.13	1450.5	-5590.7
## + V2_J1_1	1	0.13	1450.5	-5590.7
## + V12_1_2_J2_5	1	0.13	1450.5	-5590.7
## + V17_J1_4	1	0.12	1450.5	-5590.6
## + V13_2_J1_1	1	0.12	1450.5	-5590.6
## + V30_J1_4	1	0.10	1450.6	-5590.6
## + V17_J1_1	1	0.09	1450.6	-5590.5
## + V2_J2_4	1	0.09	1450.6	-5590.5
## + V19_J1_7	1	0.09	1450.6	-5590.5
## + V1_J1_6	1	0.09	1450.6	-5590.5
## + V30_J2_4	1	0.08	1450.6	-5590.5
## + V26_J2_7	1	0.07	1450.6	-5590.5
## + V4_J2_2	1	0.07	1450.6	-5590.4
## + V20_J2_7	1	0.07	1450.6	-5590.4
## + V12_1_2_J2_4	1	0.07	1450.6	-5590.4
## + V17_J1_6	1	0.06	1450.6	-5590.4
## + V3_J1_3	1	0.06	1450.6	-5590.4

## + V13_3_J2_1	1	0.05	1450.6	-5590.4
## + V29_J1_2	1	0.05	1450.6	-5590.4
## + V15_J2_5	1	0.05	1450.6	-5590.4
## + V5_J2_2	1	0.04	1450.6	-5590.4
## + V2_J1_4	1	0.04	1450.6	-5590.3
## + V19_J1_2	1	0.04	1450.6	-5590.3
## + V2_J2_3	1	0.04	1450.6	-5590.3
## + V13_3_J2_7	1	0.03	1450.6	-5590.3
## + V13_1_J1_6	1	0.03	1450.6	-5590.3
## + V13_1_J2_1	1	0.02	1450.6	-5590.3
## + V1_J1_4	1	0.02	1450.7	-5590.3
## + V13_3_J1_5	1	0.02	1450.7	-5590.3
## + V19_J2_2	1	0.01	1450.7	-5590.3
## + V14_J1_1	1	0.01	1450.7	-5590.3
## + V29_J2_4	1	0.01	1450.7	-5590.2
## + V3_J2_2	1	0.01	1450.7	-5590.2
## + V23_J1_5	1	0.01	1450.7	-5590.2
## + V1_J1_2	1	0.01	1450.7	-5590.2
## + V23_J1_1	1	0.01	1450.7	-5590.2
## + V16_J1_7	1	0.01	1450.7	-5590.2
## + V24_J1_2	1	0.01	1450.7	-5590.2
## + V13_3_J1_7	1	0.00	1450.7	-5590.2
## + V26_J1_2	1	0.00	1450.7	-5590.2
## + V29_J1_6	1	0.00	1450.7	-5590.2
## + V13_3_J1_3	1	0.00	1450.7	-5590.2
## + V1_J2_4	1	0.00	1450.7	-5590.2
## + V13_1_J2_5	1	0.00	1450.7	-5590.2
## + V13_1_J2_3	1	0.00	1450.7	-5590.2
## + V4_J1_2	1	0.00	1450.7	-5590.2
## - V2_J1_6	1	3.84	1454.5	-5589.7
## - V13_1_J2_7	1	3.88	1454.5	-5589.6
## - V13_2_J1_2	1	3.88	1454.5	-5589.6
## - V13_1_J2_2	1	3.92	1454.6	-5589.5
## - V13_3_J1_2	1	3.96	1454.6	-5589.3
## - V13_2_J2_5	1	4.11	1454.8	-5588.8
## - V13_3_J2_5	1	4.12	1454.8	-5588.7
## - V26_J1_3	1	4.22	1454.9	-5588.3
## - V14_J1_3	1	4.50	1455.2	-5587.4
## - V29_J1_4	1	4.62	1455.3	-5586.9
## - V26_J1_1	1	4.72	1455.4	-5586.6
## - V19_J1_3	1	4.82	1455.5	-5586.2
## - V13_2_J1_5	1	5.10	1455.8	-5585.2
## - V1_J1_5	1	5.11	1455.8	-5585.2
## - V23_J1_4	1	5.23	1455.9	-5584.8
## - V13_2_J1_6	1	5.72	1456.4	-5583.0
## - V2_J1_5	1	5.93	1456.6	-5582.2
## - V29_J2_2	1	6.08	1456.7	-5581.7
## - V29_J2_1	1	6.38	1457.0	-5580.7
## - V20_J1_2	1	6.58	1457.2	-5579.9
## - V12_1_2_J1_2	1	6.74	1457.4	-5579.4
## - V23_J2_1	1	7.86	1458.5	-5575.4
## - V30_J2_3	1	8.12	1458.8	-5574.4
## - V26_J1_6	1	8.42	1459.1	-5573.4
## - V13_1_J1_5	1	8.62	1459.3	-5572.6

## - V24_J2_3	1	8.67	1459.3	-5572.5
## - V15_J2_3	1	8.74	1459.4	-5572.2
## - V24_J2_5	1	8.98	1459.7	-5571.4
## - V29_J2_3	1	9.09	1459.8	-5571.0
## - V24_J1_7	1	9.60	1460.3	-5569.2
## - V17_J1_5	1	9.92	1460.6	-5568.0
## - V1_J2_5	1	10.61	1461.3	-5565.6
## - V16_J2_3	1	12.38	1463.0	-5559.3
## - V15_J2_1	1	12.58	1463.2	-5558.6
## - V20_J2_1	1	13.73	1464.4	-5554.5
## - V20_J2_3	1	14.42	1465.1	-5552.0
## - V12_1_2_J1_6	1	15.11	1465.8	-5549.6
## - V29_J1_3	1	15.66	1466.3	-5547.7
## - V29_J1_5	1	16.31	1467.0	-5545.3
## - V24_J1_6	1	16.53	1467.2	-5544.6
## - V13_1_J1_2	1	16.78	1467.4	-5543.7
## - V26_J1_5	1	16.84	1467.5	-5543.4
## - V13_1_J1_7	1	17.78	1468.4	-5540.1
## - V4_J1_3	1	18.60	1469.3	-5537.2
## - V14_J2_5	1	22.16	1472.8	-5524.6
## - V14_J2_1	1	23.60	1474.3	-5519.6
## - V12_1_2_J1_7	1	24.37	1475.0	-5516.8
## - V30_J1_5	1	24.93	1475.6	-5514.9
## - V30_J2_5	1	25.78	1476.4	-5511.9
## - V3_J1_5	1	26.45	1477.1	-5509.5
## - V23_J2_7	1	27.32	1478.0	-5506.4
## - V2_J2_2	1	27.57	1478.2	-5505.6
## - V4_J1_5	1	28.58	1479.2	-5502.0
## - V2_J2_7	1	29.96	1480.6	-5497.2
## - V15_J1_2	1	30.42	1481.1	-5495.6
## - V15_J1_1	1	32.04	1482.7	-5489.9
## - V12_1_2_J2_7	1	34.43	1485.1	-5481.5
## - V26_J1_4	1	36.81	1487.5	-5473.2
## - V5_J1_4	1	37.28	1488.0	-5471.5
## - V30_J1_3	1	39.10	1489.8	-5465.2
## - V19_J2_4	1	39.36	1490.0	-5464.3
## - V19_J2_5	1	40.30	1491.0	-5461.0
## - V14_J2_4	1	40.41	1491.1	-5460.6
## - V12_1_2_J1_3	1	42.25	1492.9	-5454.2
## - V4_J2_7	1	42.64	1493.3	-5452.8
## - V16_J2_7	1	45.57	1496.2	-5442.7
## - V4_J1_4	1	46.50	1497.2	-5439.4
## - V13_2_J1_7	1	47.18	1497.8	-5437.0
## - V30_J1_2	1	48.12	1498.8	-5433.8
## - V5_J2_1	1	48.34	1499.0	-5433.0
## - V19_J2_1	1	49.39	1500.1	-5429.4
## - V14_J2_3	1	54.56	1505.2	-5411.5
## - V15_J1_6	1	59.92	1510.6	-5393.0
## - V5_J2_3	1	61.85	1512.5	-5386.4
## - V15_J1_3	1	63.67	1514.3	-5380.1
## - V17_J2_2	1	64.31	1515.0	-5377.9
## - V15_J1_7	1	64.69	1515.3	-5376.6
## - V1_J2_2	1	66.24	1516.9	-5371.3
## - V17_J2_7	1	68.54	1519.2	-5363.4

```

## - V30_J2_2      1      69.74 1520.4 -5359.3
## - V14_J1_5      1      69.80 1520.5 -5359.1
## - V16_J1_3      1      70.57 1521.2 -5356.5
## - V1_J1_3       1      71.51 1522.2 -5353.3
## - V30_J1_1      1      72.77 1523.4 -5349.0
## - V23_J1_3      1      79.74 1530.4 -5325.2
## - V3_J1_4       1      80.76 1531.4 -5321.7
## - V14_J1_4      1      82.18 1532.8 -5316.9
## - V19_J2_3      1      83.86 1534.5 -5311.2
## - V2_J1_3       1      85.13 1535.8 -5306.9
## - V17_J1_3      1      86.63 1537.3 -5301.9
## - V1_J2_7       1      98.31 1549.0 -5262.5
## - V12_1_2_J1_4  1     102.42 1553.1 -5248.7
## - V5_J1_5       1     102.87 1553.5 -5247.2
## - V3_J2_1       1     105.56 1556.2 -5238.2
## - V26_J2_1      1     112.49 1563.2 -5215.1
## - V15_J2_7      1     114.38 1565.0 -5208.8
## - V4_J2_3       1     114.60 1565.3 -5208.1
## - V4_J2_5       1     115.52 1566.2 -5205.1
## - V4_J2_1       1     122.83 1573.5 -5180.8
## - V3_J2_5       1     129.25 1579.9 -5159.6
## - V19_J1_5      1     130.34 1581.0 -5156.1
## - V15_J2_2      1     135.13 1585.8 -5140.3
## - V26_J2_5      1     154.20 1604.9 -5078.2
## - V26_J2_4      1     154.73 1605.4 -5076.5
## - V4_J2_4       1     160.41 1611.1 -5058.1
## - V3_J2_3       1     172.47 1623.1 -5019.3
## - V12_1_2_J2_2  1     173.26 1623.9 -5016.8
## - V19_J1_4      1     181.10 1631.8 -4991.7
## - V3_J2_4       1     187.62 1638.3 -4971.0
## - J             12     274.13 1724.8 -4776.4
## - V20_J2_2      1     255.48 1706.2 -4759.9
## - V5_J2_5       1     267.96 1718.6 -4722.0
## - V26_J2_3      1     282.90 1733.6 -4677.0
## - V5_J2_4       1     303.96 1754.6 -4614.3
## - V16_J2_2      1     428.94 1879.6 -4256.5
## - V             19     999.91 2450.6 -2996.5
##
## Step:  AIC=-5598.55
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V13_1_J1_3 + V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 +
## V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +

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##      V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
##      V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V14_J1_2 + V13_3_J2_5 +
##      V20_J1_2 + V13_2_J1_4 + V26_J1_6 + V13_1_J1_5 + V26_J1_1 +
##      V2_J1_6 + V15_J2_3 + V30_J2_3 + V24_J2_3 + V13_2_J1_5 + V13_1_J2_2 +
##      V19_J1_3 + V14_J1_3 + V19_J1_1 + V16_J2_1 + V3_J1_2 + V13_2_J2_5 +
##      V29_J2_3 + V1_J1_1 + V23_J2_3 + V13_1_J2_7 + V14_J2_7 + V29_J2_1 +
##      V29_J2_2 + V29_J1_4 + V13_3_J1_2 + V13_2_J1_2 + V16_J1_2 +
##      V24_J1_3
##
##      Df Sum of Sq    RSS    AIC
## - V13_1_J1_3      1      1.33 1449.7 -5600.4
## - V14_J1_2        1      1.57 1449.9 -5599.5
## + V20_J1_6        1      2.07 1446.3 -5599.4
## - V3_J1_2         1      1.66 1450.0 -5599.2
## + V30_J1_7        1      2.02 1446.3 -5599.2
## + V5_J1_2         1      2.00 1446.3 -5599.1
## + V23_J1_7        1      1.93 1446.4 -5598.8
## + V16_J1_4        1      1.92 1446.4 -5598.8
## + V24_J1_5        1      1.89 1446.5 -5598.7
## + V13_3_J1_1      1      1.89 1446.5 -5598.7
## <none>                        1448.3 -5598.5
## + V13_3_J2_4      1      1.76 1446.6 -5598.2
## + V17_J2_1        1      1.75 1446.6 -5598.2
## + V20_J1_7        1      1.75 1446.6 -5598.2
## + V20_J1_4        1      1.68 1446.7 -5598.0
## + V12_1_2_J1_1    1      1.60 1446.7 -5597.6
## + V13_2_J2_2      1      1.58 1446.8 -5597.6
## + V15_J2_4        1      1.57 1446.8 -5597.6
## + V20_J1_1        1      1.57 1446.8 -5597.5
## + V26_J1_7        1      1.54 1446.8 -5597.4
## + V20_J2_4        1      1.50 1446.8 -5597.3
## + V23_J2_2        1      1.46 1446.9 -5597.2
## + V5_J1_6         1      1.41 1446.9 -5597.0
## + V2_J1_7         1      1.40 1446.9 -5596.9
## - V24_J1_3        1      2.33 1450.7 -5596.8
## + V12_1_2_J1_5    1      1.37 1447.0 -5596.8
## + V30_J2_7        1      1.35 1447.0 -5596.8
## + V24_J1_1        1      1.33 1447.0 -5596.7
## + V30_J2_1        1      1.28 1447.1 -5596.5
## + V1_J1_7         1      1.26 1447.1 -5596.4
## + V13_1_J2_4      1      1.17 1447.2 -5596.1
## + V4_J1_6         1      1.16 1447.2 -5596.1
## - V1_J1_1         1      2.55 1450.9 -5596.0
## + V5_J1_7         1      1.13 1447.2 -5596.0
## + V20_J1_5        1      1.12 1447.2 -5595.9
## + V29_J1_1        1      1.07 1447.3 -5595.8
## + V1_J2_3         1      1.06 1447.3 -5595.7
## - V16_J2_1        1      2.67 1451.0 -5595.6
## + V17_J1_7        1      1.03 1447.3 -5595.6
## + V19_J2_7        1      1.03 1447.3 -5595.6
## - V19_J1_1        1      2.68 1451.0 -5595.6
## + V16_J1_6        1      0.98 1447.4 -5595.4
## - V16_J1_2        1      2.73 1451.1 -5595.4
## + V19_J1_6        1      0.93 1447.4 -5595.3

```

## + V2_J2_1	1	0.91	1447.4	-5595.2
## + V26_J2_2	1	0.87	1447.5	-5595.0
## + V17_J2_4	1	0.84	1447.5	-5594.9
## + V16_J2_4	1	0.83	1447.5	-5594.9
## + V14_J2_2	1	0.82	1447.5	-5594.9
## + V23_J2_4	1	0.79	1447.5	-5594.7
## + V24_J2_4	1	0.74	1447.6	-5594.6
## + V17_J2_5	1	0.71	1447.6	-5594.5
## + V5_J1_1	1	0.69	1447.7	-5594.4
## + V30_J1_6	1	0.67	1447.7	-5594.3
## + V13_2_J2_3	1	0.65	1447.7	-5594.2
## + V16_J2_5	1	0.62	1447.7	-5594.1
## + V29_J2_5	1	0.61	1447.7	-5594.1
## + V3_J1_6	1	0.60	1447.7	-5594.1
## + V5_J2_7	1	0.58	1447.8	-5594.0
## + V17_J2_3	1	0.58	1447.8	-5594.0
## + V13_3_J1_6	1	0.57	1447.8	-5594.0
## + V23_J2_5	1	0.55	1447.8	-5593.9
## + V13_1_J1_1	1	0.53	1447.8	-5593.8
## + V24_J2_2	1	0.52	1447.8	-5593.8
## + V3_J1_7	1	0.48	1447.9	-5593.6
## + V3_J1_1	1	0.47	1447.9	-5593.6
## + V13_3_J2_3	1	0.44	1447.9	-5593.5
## + V13_2_J2_7	1	0.42	1447.9	-5593.4
## + V13_2_J2_4	1	0.41	1447.9	-5593.4
## + V20_J1_3	1	0.40	1447.9	-5593.3
## - V23_J2_3	1	3.30	1451.6	-5593.3
## + V1_J2_1	1	0.40	1447.9	-5593.3
## + V12_1_2_J2_3	1	0.39	1447.9	-5593.3
## + V13_1_J1_4	1	0.37	1448.0	-5593.2
## + V23_J1_2	1	0.37	1448.0	-5593.2
## + V15_J1_5	1	0.35	1448.0	-5593.2
## + V13_3_J2_2	1	0.33	1448.0	-5593.1
## + V12_1_2_J2_1	1	0.32	1448.0	-5593.1
## + V16_J1_1	1	0.31	1448.0	-5593.0
## + V3_J1_3	1	0.29	1448.0	-5593.0
## + V14_J1_7	1	0.28	1448.0	-5592.9
## + V14_J1_6	1	0.24	1448.1	-5592.8
## + V2_J2_5	1	0.24	1448.1	-5592.8
## + V29_J2_7	1	0.21	1448.1	-5592.7
## + V4_J1_1	1	0.20	1448.1	-5592.6
## + V20_J2_5	1	0.20	1448.1	-5592.6
## + V15_J1_4	1	0.20	1448.1	-5592.6
## + V24_J2_7	1	0.20	1448.1	-5592.6
## - V14_J2_7	1	3.51	1451.8	-5592.6
## + V3_J2_7	1	0.18	1448.2	-5592.6
## + V2_J1_2	1	0.18	1448.2	-5592.5
## + V17_J1_2	1	0.17	1448.2	-5592.5
## + V13_3_J1_4	1	0.17	1448.2	-5592.5
## + V16_J1_5	1	0.16	1448.2	-5592.5
## + V13_3_J1_3	1	0.14	1448.2	-5592.4
## + V4_J1_7	1	0.14	1448.2	-5592.4
## + V2_J1_1	1	0.13	1448.2	-5592.4
## + V23_J1_6	1	0.13	1448.2	-5592.4

## + V17_J1_4	1	0.13	1448.2	-5592.4
## + V12_1_2_J2_5	1	0.12	1448.2	-5592.4
## + V24_J2_1	1	0.12	1448.2	-5592.3
## + V13_2_J2_1	1	0.11	1448.2	-5592.3
## - V29_J1_7	1	3.60	1451.9	-5592.3
## + V19_J1_7	1	0.09	1448.2	-5592.2
## - V13_2_J1_4	1	3.61	1452.0	-5592.2
## + V17_J1_1	1	0.09	1448.2	-5592.2
## + V30_J1_4	1	0.09	1448.2	-5592.2
## + V13_2_J1_1	1	0.09	1448.2	-5592.2
## + V20_J2_7	1	0.09	1448.2	-5592.2
## + V2_J2_4	1	0.09	1448.2	-5592.2
## + V1_J1_6	1	0.08	1448.3	-5592.2
## + V13_3_J2_1	1	0.08	1448.3	-5592.2
## + V30_J2_4	1	0.08	1448.3	-5592.2
## + V26_J2_7	1	0.07	1448.3	-5592.2
## + V4_J2_2	1	0.07	1448.3	-5592.2
## + V12_1_2_J2_4	1	0.07	1448.3	-5592.1
## + V24_J1_4	1	0.06	1448.3	-5592.1
## + V17_J1_6	1	0.06	1448.3	-5592.1
## + V15_J2_5	1	0.06	1448.3	-5592.1
## + V19_J1_2	1	0.05	1448.3	-5592.1
## + V29_J1_2	1	0.05	1448.3	-5592.1
## + V2_J1_4	1	0.05	1448.3	-5592.1
## + V2_J2_3	1	0.04	1448.3	-5592.1
## + V13_2_J1_3	1	0.04	1448.3	-5592.0
## + V13_3_J2_7	1	0.04	1448.3	-5592.0
## + V13_3_J1_5	1	0.03	1448.3	-5592.0
## + V5_J2_2	1	0.03	1448.3	-5592.0
## + V13_1_J2_1	1	0.03	1448.3	-5592.0
## + V3_J2_2	1	0.02	1448.3	-5592.0
## + V1_J1_4	1	0.02	1448.3	-5592.0
## + V13_1_J1_6	1	0.02	1448.3	-5592.0
## + V14_J1_1	1	0.02	1448.3	-5592.0
## + V19_J2_2	1	0.02	1448.3	-5592.0
## - V13_2_J1_2	1	3.69	1452.0	-5592.0
## + V29_J2_4	1	0.01	1448.3	-5592.0
## + V24_J1_2	1	0.01	1448.3	-5591.9
## + V5_J1_3	1	0.01	1448.3	-5591.9
## + V1_J1_2	1	0.01	1448.3	-5591.9
## + V23_J1_1	1	0.01	1448.3	-5591.9
## + V23_J1_5	1	0.01	1448.3	-5591.9
## + V29_J1_6	1	0.00	1448.3	-5591.9
## + V16_J1_7	1	0.00	1448.3	-5591.9
## + V13_3_J1_7	1	0.00	1448.3	-5591.9
## + V26_J1_2	1	0.00	1448.3	-5591.9
## + V13_1_J2_3	1	0.00	1448.3	-5591.9
## + V13_1_J2_5	1	0.00	1448.3	-5591.9
## + V1_J2_4	1	0.00	1448.3	-5591.9
## + V4_J1_2	1	0.00	1448.3	-5591.9
## - V2_J1_6	1	3.79	1452.1	-5591.6
## - V13_3_J1_2	1	3.82	1452.2	-5591.5
## - V13_1_J2_7	1	3.89	1452.2	-5591.2
## - V13_1_J2_2	1	3.92	1452.3	-5591.1

## - V13_2_J2_5	1	3.96	1452.3	-5591.0
## - V13_3_J2_5	1	4.21	1452.5	-5590.1
## - V29_J1_4	1	4.67	1453.0	-5588.4
## - V26_J1_1	1	4.71	1453.0	-5588.3
## - V13_2_J1_5	1	4.86	1453.2	-5587.8
## - V26_J1_3	1	5.17	1453.5	-5586.6
## - V1_J1_5	1	5.18	1453.5	-5586.6
## - V23_J1_4	1	5.18	1453.5	-5586.6
## - V14_J1_3	1	5.46	1453.8	-5585.6
## - V19_J1_3	1	5.83	1454.2	-5584.3
## - V13_2_J1_6	1	5.85	1454.2	-5584.2
## - V2_J1_5	1	6.00	1454.3	-5583.7
## - V29_J2_2	1	6.07	1454.4	-5583.4
## - V20_J1_2	1	6.37	1454.7	-5582.4
## - V29_J2_1	1	6.43	1454.8	-5582.1
## - V12_1_2_J1_2	1	6.78	1455.1	-5580.9
## - V24_J2_3	1	7.69	1456.0	-5577.7
## - V23_J2_1	1	7.92	1456.2	-5576.8
## - V30_J2_3	1	8.08	1456.4	-5576.3
## - V26_J1_6	1	8.36	1456.7	-5575.2
## - V24_J1_7	1	8.50	1456.8	-5574.7
## - V13_1_J1_5	1	8.54	1456.9	-5574.6
## - V15_J2_3	1	8.66	1457.0	-5574.2
## - V29_J2_3	1	9.05	1457.4	-5572.8
## - V24_J2_5	1	9.83	1458.2	-5570.0
## - V17_J1_5	1	10.01	1458.3	-5569.3
## - V1_J2_5	1	10.63	1459.0	-5567.2
## - V16_J2_3	1	12.44	1460.8	-5560.7
## - V15_J2_1	1	12.60	1460.9	-5560.1
## - V20_J2_1	1	13.42	1461.8	-5557.2
## - V20_J2_3	1	14.25	1462.6	-5554.3
## - V24_J1_6	1	15.02	1463.4	-5551.5
## - V12_1_2_J1_6	1	15.22	1463.5	-5550.8
## - V29_J1_5	1	16.44	1464.8	-5546.5
## - V13_1_J1_2	1	16.69	1465.0	-5545.6
## - V26_J1_5	1	16.71	1465.0	-5545.5
## - V29_J1_3	1	17.27	1465.6	-5543.5
## - V13_1_J1_7	1	17.87	1466.2	-5541.4
## - V4_J1_3	1	20.28	1468.6	-5532.9
## - V14_J2_5	1	22.11	1470.5	-5526.4
## - V14_J2_1	1	23.44	1471.8	-5521.7
## - V12_1_2_J1_7	1	24.51	1472.8	-5517.9
## - V30_J1_5	1	25.07	1473.4	-5515.9
## - V3_J1_5	1	25.76	1474.1	-5513.5
## - V30_J2_5	1	25.76	1474.1	-5513.5
## - V23_J2_7	1	27.37	1475.7	-5507.8
## - V2_J2_2	1	27.60	1475.9	-5507.0
## - V4_J1_5	1	28.39	1476.7	-5504.2
## - V2_J2_7	1	30.02	1478.3	-5498.5
## - V15_J1_2	1	30.45	1478.8	-5497.0
## - V15_J1_1	1	31.93	1480.3	-5491.8
## - V12_1_2_J2_7	1	34.51	1482.8	-5482.7
## - V5_J1_4	1	36.61	1485.0	-5475.4
## - V26_J1_4	1	36.66	1485.0	-5475.2

## - V19_J2_4	1	39.25	1487.6	-5466.1
## - V14_J2_4	1	40.26	1488.6	-5462.6
## - V19_J2_5	1	40.28	1488.6	-5462.5
## - V30_J1_3	1	41.22	1489.6	-5459.3
## - V4_J2_7	1	42.64	1491.0	-5454.3
## - V12_1_2_J1_3	1	44.41	1492.8	-5448.1
## - V16_J2_7	1	45.63	1494.0	-5443.9
## - V4_J1_4	1	46.31	1494.7	-5441.5
## - V13_2_J1_7	1	46.79	1495.1	-5439.9
## - V5_J2_1	1	47.58	1495.9	-5437.1
## - V30_J1_2	1	48.26	1496.6	-5434.7
## - V19_J2_1	1	49.20	1497.5	-5431.5
## - V14_J2_3	1	54.58	1502.9	-5412.8
## - V15_J1_3	1	58.01	1506.3	-5401.0
## - V15_J1_6	1	59.63	1508.0	-5395.4
## - V5_J2_3	1	61.31	1509.7	-5389.6
## - V17_J2_2	1	64.34	1512.7	-5379.2
## - V15_J1_7	1	64.39	1512.7	-5379.0
## - V1_J2_2	1	66.28	1514.6	-5372.5
## - V17_J2_7	1	68.61	1516.9	-5364.5
## - V14_J1_5	1	69.44	1517.8	-5361.6
## - V30_J2_2	1	69.77	1518.1	-5360.5
## - V30_J1_1	1	72.73	1521.1	-5350.4
## - V16_J1_3	1	72.89	1521.2	-5349.9
## - V1_J1_3	1	73.83	1522.2	-5346.6
## - V3_J1_4	1	79.57	1527.9	-5327.1
## - V14_J1_4	1	81.86	1530.2	-5319.3
## - V23_J1_3	1	82.07	1530.4	-5318.6
## - V19_J2_3	1	83.94	1532.3	-5312.2
## - V2_J1_3	1	87.45	1535.8	-5300.3
## - V17_J1_3	1	88.95	1537.3	-5295.3
## - V1_J2_7	1	98.40	1546.7	-5263.4
## - V5_J1_5	1	101.61	1550.0	-5252.6
## - V12_1_2_J1_4	1	102.26	1550.6	-5250.4
## - V3_J2_1	1	104.19	1552.5	-5244.0
## - V26_J2_1	1	112.24	1560.6	-5217.1
## - V15_J2_7	1	114.14	1562.5	-5210.7
## - V4_J2_3	1	114.70	1563.0	-5208.9
## - V4_J2_5	1	115.49	1563.8	-5206.3
## - V4_J2_1	1	122.53	1570.9	-5182.9
## - V3_J2_5	1	128.06	1576.4	-5164.6
## - V19_J1_5	1	129.91	1578.2	-5158.5
## - V15_J2_2	1	134.92	1583.3	-5142.0
## - V26_J2_5	1	154.21	1602.5	-5079.1
## - V26_J2_4	1	154.57	1602.9	-5077.9
## - V4_J2_4	1	160.20	1608.5	-5059.7
## - V3_J2_3	1	171.29	1619.6	-5023.9
## - V12_1_2_J2_2	1	173.38	1621.7	-5017.2
## - V19_J1_4	1	180.71	1629.0	-4993.8
## - V3_J2_4	1	185.87	1634.2	-4977.3
## - J	12	255.66	1704.0	-4832.8
## - V20_J2_2	1	254.49	1702.8	-4763.4
## - V5_J2_5	1	266.51	1714.8	-4726.9
## - V26_J2_3	1	283.10	1731.4	-4676.8

```

## - V5_J2_4      1      302.04 1750.4 -4620.2
## - V16_J2_2     1      429.04 1877.4 -4256.0
## - V            19     1002.19 2450.5 -2990.0
##
## Step:  AIC=-5600.4
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 + V20_J2_3 +
## V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
## V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
## V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V14_J1_2 + V13_3_J2_5 +
## V20_J1_2 + V13_2_J1_4 + V26_J1_6 + V13_1_J1_5 + V26_J1_1 +
## V2_J1_6 + V15_J2_3 + V30_J2_3 + V24_J2_3 + V13_2_J1_5 + V13_1_J2_2 +
## V19_J1_3 + V14_J1_3 + V19_J1_1 + V16_J2_1 + V3_J1_2 + V13_2_J2_5 +
## V29_J2_3 + V1_J1_1 + V23_J2_3 + V13_1_J2_7 + V14_J2_7 + V29_J2_1 +
## V29_J2_2 + V29_J1_4 + V13_3_J1_2 + V13_2_J1_2 + V16_J1_2 +
## V24_J1_3
##
##
##      Df Sum of Sq  RSS    AIC
## - V14_J1_2      1      1.58 1451.2 -5601.4
## + V20_J1_6      1      1.99 1447.7 -5600.9
## + V30_J1_7      1      1.98 1447.7 -5600.9
## + V23_J1_7      1      1.96 1447.7 -5600.8
## + V13_3_J1_1    1      1.95 1447.7 -5600.7
## - V3_J1_2       1      1.76 1451.4 -5600.7
## + V24_J1_5      1      1.90 1447.8 -5600.6
## + V16_J1_4      1      1.89 1447.8 -5600.5
## + V5_J1_2       1      1.88 1447.8 -5600.5
## <none>                      1449.7 -5600.4
## + V20_J1_4      1      1.79 1447.9 -5600.2
## + V17_J2_1      1      1.73 1447.9 -5600.0
## + V20_J1_7      1      1.71 1448.0 -5599.9
## + V13_3_J2_4    1      1.68 1448.0 -5599.8
## + V20_J1_1      1      1.64 1448.0 -5599.6
## + V12_1_2_J1_1  1      1.62 1448.0 -5599.6
## + V13_2_J2_2    1      1.62 1448.0 -5599.6
## + V15_J2_4      1      1.57 1448.1 -5599.4
## + V26_J1_7      1      1.54 1448.1 -5599.3
## + V23_J2_2      1      1.51 1448.2 -5599.2
## + V2_J1_7       1      1.44 1448.2 -5598.9
## + V20_J2_4      1      1.41 1448.3 -5598.8
## + V30_J2_7      1      1.40 1448.3 -5598.8
## + V13_1_J1_3    1      1.33 1448.3 -5598.5

```

## + V12_1_2_J1_5	1	1.33	1448.3	-5598.5
## + V24_J1_1	1	1.33	1448.3	-5598.5
## + V30_J2_1	1	1.31	1448.4	-5598.5
## + V5_J1_6	1	1.30	1448.4	-5598.4
## + V1_J1_7	1	1.22	1448.5	-5598.1
## + V5_J1_7	1	1.20	1448.5	-5598.1
## + V4_J1_6	1	1.18	1448.5	-5598.0
## + V20_J1_5	1	1.17	1448.5	-5598.0
## - V1_J1_1	1	2.56	1452.2	-5597.8
## + V29_J1_1	1	1.08	1448.6	-5597.6
## - V16_J2_1	1	2.64	1452.3	-5597.6
## - V19_J1_1	1	2.65	1452.3	-5597.5
## + V19_J2_7	1	1.05	1448.6	-5597.5
## + V1_J2_3	1	1.03	1448.6	-5597.5
## + V17_J1_7	1	0.99	1448.7	-5597.3
## + V16_J1_6	1	0.97	1448.7	-5597.3
## + V19_J1_6	1	0.96	1448.7	-5597.2
## - V16_J1_2	1	2.76	1452.4	-5597.2
## + V2_J2_1	1	0.93	1448.7	-5597.1
## + V26_J2_2	1	0.88	1448.8	-5596.9
## + V16_J2_4	1	0.84	1448.8	-5596.8
## + V13_1_J2_4	1	0.83	1448.8	-5596.8
## + V17_J2_4	1	0.83	1448.8	-5596.8
## + V23_J2_4	1	0.81	1448.9	-5596.7
## + V14_J2_2	1	0.79	1448.9	-5596.6
## + V13_1_J1_1	1	0.79	1448.9	-5596.6
## + V5_J1_1	1	0.77	1448.9	-5596.5
## + V24_J2_4	1	0.76	1448.9	-5596.5
## + V17_J2_5	1	0.69	1449.0	-5596.2
## + V3_J1_6	1	0.69	1449.0	-5596.2
## + V30_J1_6	1	0.67	1449.0	-5596.2
## - V24_J1_3	1	3.05	1452.7	-5596.1
## + V29_J2_5	1	0.64	1449.0	-5596.1
## + V5_J2_7	1	0.61	1449.1	-5596.0
## + V17_J2_3	1	0.60	1449.1	-5595.9
## + V16_J2_5	1	0.60	1449.1	-5595.9
## + V23_J2_5	1	0.58	1449.1	-5595.8
## + V13_1_J1_4	1	0.57	1449.1	-5595.8
## + V3_J1_3	1	0.57	1449.1	-5595.8
## + V13_2_J2_3	1	0.55	1449.1	-5595.7
## + V3_J1_1	1	0.55	1449.1	-5595.7
## + V13_3_J1_6	1	0.54	1449.1	-5595.7
## + V13_3_J2_3	1	0.50	1449.2	-5595.6
## + V24_J2_2	1	0.50	1449.2	-5595.5
## + V13_2_J2_7	1	0.44	1449.2	-5595.3
## + V3_J1_7	1	0.42	1449.2	-5595.3
## + V12_1_2_J2_3	1	0.41	1449.3	-5595.2
## + V1_J2_1	1	0.38	1449.3	-5595.1
## + V13_3_J1_3	1	0.37	1449.3	-5595.1
## + V15_J1_5	1	0.37	1449.3	-5595.1
## + V23_J1_2	1	0.36	1449.3	-5595.1
## + V13_2_J2_4	1	0.36	1449.3	-5595.0
## - V23_J2_3	1	3.36	1453.0	-5595.0
## + V13_3_J2_2	1	0.33	1449.3	-5594.9

## + V12_1_2_J2_1	1	0.31	1449.4	-5594.9
## + V16_J1_1	1	0.30	1449.4	-5594.9
## + V14_J1_7	1	0.29	1449.4	-5594.8
## + V2_J2_5	1	0.25	1449.4	-5594.7
## + V14_J1_6	1	0.23	1449.4	-5594.6
## + V13_3_J1_4	1	0.20	1449.5	-5594.5
## + V4_J1_1	1	0.20	1449.5	-5594.5
## + V15_J1_4	1	0.20	1449.5	-5594.5
## + V29_J2_7	1	0.19	1449.5	-5594.5
## + V24_J2_7	1	0.18	1449.5	-5594.4
## + V2_J1_2	1	0.17	1449.5	-5594.4
## + V16_J1_5	1	0.16	1449.5	-5594.4
## + V20_J2_5	1	0.16	1449.5	-5594.3
## + V17_J1_2	1	0.16	1449.5	-5594.3
## + V3_J2_7	1	0.15	1449.5	-5594.3
## - V14_J2_7	1	3.55	1453.2	-5594.3
## + V4_J1_7	1	0.15	1449.5	-5594.3
## + V20_J1_3	1	0.14	1449.5	-5594.3
## + V2_J1_1	1	0.14	1449.5	-5594.3
## + V17_J1_4	1	0.13	1449.5	-5594.2
## + V23_J1_6	1	0.13	1449.5	-5594.2
## + V12_1_2_J2_5	1	0.13	1449.5	-5594.2
## + V24_J2_1	1	0.13	1449.5	-5594.2
## - V13_2_J1_2	1	3.60	1453.3	-5594.1
## + V13_3_J2_1	1	0.10	1449.6	-5594.1
## + V19_J1_7	1	0.09	1449.6	-5594.1
## + V20_J2_7	1	0.09	1449.6	-5594.1
## + V17_J1_1	1	0.09	1449.6	-5594.1
## + V2_J2_4	1	0.09	1449.6	-5594.1
## + V30_J1_4	1	0.08	1449.6	-5594.1
## + V13_2_J2_1	1	0.08	1449.6	-5594.1
## + V26_J2_7	1	0.08	1449.6	-5594.0
## + V4_J2_2	1	0.08	1449.6	-5594.0
## + V1_J1_6	1	0.07	1449.6	-5594.0
## + V30_J2_4	1	0.07	1449.6	-5594.0
## - V29_J1_7	1	3.63	1453.3	-5594.0
## + V13_2_J1_1	1	0.07	1449.6	-5594.0
## + V24_J1_4	1	0.07	1449.6	-5594.0
## + V12_1_2_J2_4	1	0.07	1449.6	-5594.0
## + V17_J1_6	1	0.05	1449.6	-5594.0
## + V15_J2_5	1	0.05	1449.6	-5593.9
## + V19_J1_2	1	0.05	1449.6	-5593.9
## + V29_J1_2	1	0.05	1449.6	-5593.9
## + V2_J1_4	1	0.05	1449.6	-5593.9
## + V13_3_J1_5	1	0.04	1449.6	-5593.9
## + V2_J2_3	1	0.04	1449.6	-5593.9
## + V13_3_J2_7	1	0.04	1449.6	-5593.9
## + V3_J2_2	1	0.04	1449.6	-5593.9
## + V13_1_J2_3	1	0.03	1449.6	-5593.9
## + V13_1_J2_5	1	0.03	1449.6	-5593.9
## + V1_J1_4	1	0.03	1449.7	-5593.9
## + V5_J2_2	1	0.02	1449.7	-5593.8
## + V14_J1_1	1	0.02	1449.7	-5593.8
## + V5_J1_3	1	0.02	1449.7	-5593.8

## + V19_J2_2	1	0.01	1449.7	-5593.8
## + V29_J2_4	1	0.01	1449.7	-5593.8
## + V24_J1_2	1	0.01	1449.7	-5593.8
## + V1_J1_2	1	0.01	1449.7	-5593.8
## + V23_J1_1	1	0.01	1449.7	-5593.8
## + V23_J1_5	1	0.01	1449.7	-5593.8
## + V29_J1_6	1	0.00	1449.7	-5593.8
## + V13_2_J1_3	1	0.00	1449.7	-5593.8
## + V16_J1_7	1	0.00	1449.7	-5593.8
## + V13_3_J1_7	1	0.00	1449.7	-5593.8
## + V26_J1_2	1	0.00	1449.7	-5593.8
## + V1_J2_4	1	0.00	1449.7	-5593.8
## + V13_1_J1_6	1	0.00	1449.7	-5593.8
## + V4_J1_2	1	0.00	1449.7	-5593.8
## + V13_1_J2_1	1	0.00	1449.7	-5593.8
## - V13_3_J1_2	1	3.77	1453.4	-5593.5
## - V2_J1_6	1	3.77	1453.4	-5593.5
## - V13_2_J1_4	1	3.77	1453.4	-5593.5
## - V13_2_J2_5	1	3.79	1453.5	-5593.5
## - V13_3_J2_5	1	4.36	1454.0	-5591.4
## - V13_1_J2_7	1	4.58	1454.2	-5590.6
## - V13_1_J2_2	1	4.61	1454.3	-5590.5
## - V29_J1_4	1	4.72	1454.4	-5590.1
## - V13_2_J1_5	1	4.75	1454.4	-5590.0
## - V26_J1_1	1	4.76	1454.4	-5590.0
## - V23_J1_4	1	5.12	1454.8	-5588.7
## - V1_J1_5	1	5.14	1454.8	-5588.6
## - V2_J1_5	1	5.95	1455.6	-5585.7
## - V13_2_J1_6	1	6.00	1455.7	-5585.6
## - V29_J2_2	1	6.00	1455.7	-5585.6
## - V26_J1_3	1	6.15	1455.8	-5585.0
## - V20_J1_2	1	6.28	1456.0	-5584.5
## - V29_J2_1	1	6.49	1456.2	-5583.8
## - V14_J1_3	1	6.50	1456.2	-5583.8
## - V12_1_2_J1_2	1	6.71	1456.4	-5583.0
## - V19_J1_3	1	6.91	1456.6	-5582.3
## - V24_J2_3	1	7.78	1457.5	-5579.2
## - V23_J2_1	1	7.99	1457.7	-5578.4
## - V30_J2_3	1	8.16	1457.8	-5577.8
## - V26_J1_6	1	8.43	1458.1	-5576.9
## - V24_J1_7	1	8.45	1458.1	-5576.8
## - V15_J2_3	1	8.70	1458.4	-5575.9
## - V29_J2_3	1	9.14	1458.8	-5574.4
## - V13_1_J1_5	1	9.47	1459.1	-5573.2
## - V24_J2_5	1	9.72	1459.4	-5572.3
## - V17_J1_5	1	9.96	1459.6	-5571.4
## - V1_J2_5	1	10.56	1460.2	-5569.3
## - V16_J2_3	1	12.35	1462.0	-5562.9
## - V15_J2_1	1	12.63	1462.3	-5561.9
## - V20_J2_1	1	13.18	1462.8	-5560.0
## - V20_J2_3	1	13.99	1463.7	-5557.1
## - V24_J1_6	1	15.04	1464.7	-5553.4
## - V12_1_2_J1_6	1	15.27	1464.9	-5552.5
## - V29_J1_5	1	16.41	1466.1	-5548.5

## - V26_J1_5	1	16.65	1466.3	-5547.7
## - V13_1_J1_2	1	18.10	1467.8	-5542.5
## - V13_1_J1_7	1	19.42	1469.1	-5537.8
## - V29_J1_3	1	19.46	1469.1	-5537.7
## - V14_J2_5	1	21.93	1471.6	-5529.0
## - V4_J1_3	1	22.56	1472.2	-5526.7
## - V14_J2_1	1	23.27	1472.9	-5524.2
## - V12_1_2_J1_7	1	24.69	1474.4	-5519.2
## - V30_J1_5	1	25.03	1474.7	-5518.0
## - V3_J1_5	1	25.42	1475.1	-5516.7
## - V30_J2_5	1	25.91	1475.6	-5514.9
## - V23_J2_7	1	27.53	1477.2	-5509.2
## - V2_J2_2	1	27.84	1477.5	-5508.1
## - V4_J1_5	1	28.36	1478.0	-5506.3
## - V2_J2_7	1	30.28	1480.0	-5499.5
## - V15_J1_2	1	30.32	1480.0	-5499.4
## - V15_J1_1	1	31.84	1481.5	-5494.1
## - V12_1_2_J2_7	1	34.81	1484.5	-5483.6
## - V5_J1_4	1	36.10	1485.8	-5479.1
## - V26_J1_4	1	36.40	1486.1	-5478.1
## - V19_J2_4	1	39.06	1488.7	-5468.8
## - V19_J2_5	1	39.99	1489.7	-5465.5
## - V14_J2_4	1	40.11	1489.8	-5465.1
## - V4_J2_7	1	42.78	1492.5	-5455.8
## - V30_J1_3	1	45.02	1494.7	-5448.0
## - V16_J2_7	1	45.91	1495.6	-5444.9
## - V4_J1_4	1	46.08	1495.8	-5444.3
## - V13_2_J1_7	1	46.53	1496.2	-5442.7
## - V5_J2_1	1	47.00	1496.7	-5441.1
## - V30_J1_2	1	48.18	1497.9	-5437.0
## - V12_1_2_J1_3	1	48.57	1498.2	-5435.7
## - V19_J2_1	1	48.92	1498.6	-5434.4
## - V14_J2_3	1	54.30	1504.0	-5415.8
## - V15_J1_3	1	56.69	1506.4	-5407.6
## - V15_J1_6	1	59.53	1509.2	-5397.8
## - V5_J2_3	1	60.64	1510.3	-5393.9
## - V15_J1_7	1	64.14	1513.8	-5381.9
## - V17_J2_2	1	64.71	1514.4	-5380.0
## - V1_J2_2	1	66.64	1516.3	-5373.3
## - V17_J2_7	1	69.00	1518.7	-5365.2
## - V14_J1_5	1	69.40	1519.1	-5363.9
## - V30_J2_2	1	70.06	1519.7	-5361.6
## - V30_J1_1	1	72.70	1522.4	-5352.6
## - V16_J1_3	1	78.60	1528.3	-5332.5
## - V3_J1_4	1	78.80	1528.5	-5331.8
## - V1_J1_3	1	79.66	1529.3	-5328.9
## - V14_J1_4	1	81.57	1531.2	-5322.4
## - V19_J2_3	1	83.54	1533.2	-5315.7
## - V23_J1_3	1	88.15	1537.8	-5300.1
## - V2_J1_3	1	94.13	1543.8	-5279.9
## - V17_J1_3	1	95.74	1545.4	-5274.5
## - V1_J2_7	1	98.86	1548.5	-5264.0
## - V5_J1_5	1	101.05	1550.7	-5256.6
## - V12_1_2_J1_4	1	102.18	1551.8	-5252.8

```

## - V3_J2_1      1      103.33 1553.0 -5249.0
## - V26_J2_1     1      111.80 1561.5 -5220.7
## - V15_J2_7     1      113.69 1563.4 -5214.4
## - V4_J2_3      1      114.29 1564.0 -5212.4
## - V4_J2_5      1      115.07 1564.8 -5209.8
## - V4_J2_1      1      122.16 1571.8 -5186.3
## - V3_J2_5      1      127.10 1576.8 -5170.0
## - V19_J1_5     1      129.78 1579.5 -5161.2
## - V15_J2_2     1      134.45 1584.1 -5145.8
## - V26_J2_5     1      153.64 1603.3 -5083.2
## - V26_J2_4     1      154.16 1603.8 -5081.5
## - V4_J2_4      1      159.89 1609.6 -5063.0
## - V3_J2_3      1      170.24 1619.9 -5029.7
## - V12_1_2_J2_2 1      174.07 1623.7 -5017.4
## - V19_J1_4     1      180.21 1629.9 -4997.7
## - V3_J2_4      1      184.88 1634.5 -4982.9
## - J            12     256.59 1706.3 -4832.6
## - V20_J2_2     1      254.30 1704.0 -4766.6
## - V5_J2_5      1      265.37 1715.0 -4732.9
## - V26_J2_3     1      282.38 1732.0 -4681.6
## - V5_J2_4      1      300.96 1750.6 -4626.1
## - V16_J2_2     1      429.95 1879.6 -4256.4
## - V            19     1028.18 2477.8 -2939.0
##
## Step:  AIC=-5601.37
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 + V20_J2_3 +
## V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
## V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
## V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V13_3_J2_5 + V20_J1_2 +
## V13_2_J1_4 + V26_J1_6 + V13_1_J1_5 + V26_J1_1 + V2_J1_6 +
## V15_J2_3 + V30_J2_3 + V24_J2_3 + V13_2_J1_5 + V13_1_J2_2 +
## V19_J1_3 + V14_J1_3 + V19_J1_1 + V16_J2_1 + V3_J1_2 + V13_2_J2_5 +
## V29_J2_3 + V1_J1_1 + V23_J2_3 + V13_1_J2_7 + V14_J2_7 + V29_J2_1 +
## V29_J2_2 + V29_J1_4 + V13_3_J1_2 + V13_2_J1_2 + V16_J1_2 +
## V24_J1_3
##
##
##      Df Sum of Sq    RSS    AIC
## + V5_J1_2      1      2.23 1449.0 -5602.7
## - V3_J1_2      1      1.48 1452.7 -5602.7
## + V30_J1_7     1      2.02 1449.2 -5602.0
## + V13_3_J1_1   1      1.98 1449.3 -5601.8

```

## + V20_J1_6	1	1.95	1449.3	-5601.7
## + V16_J1_4	1	1.91	1449.3	-5601.6
## + V23_J1_7	1	1.89	1449.4	-5601.5
## + V24_J1_5	1	1.87	1449.4	-5601.4
## <none>			1451.2	-5601.4
## + V20_J1_4	1	1.77	1449.5	-5601.1
## + V17_J2_1	1	1.71	1449.5	-5600.9
## + V13_3_J2_4	1	1.70	1449.5	-5600.8
## + V13_2_J2_2	1	1.68	1449.6	-5600.7
## + V20_J1_7	1	1.67	1449.6	-5600.7
## + V20_J1_1	1	1.67	1449.6	-5600.7
## + V26_J1_7	1	1.65	1449.6	-5600.7
## + V14_J1_2	1	1.58	1449.7	-5600.4
## + V12_1_2_J1_1	1	1.57	1449.7	-5600.4
## + V15_J2_4	1	1.57	1449.7	-5600.4
## + V20_J2_4	1	1.43	1449.8	-5599.9
## + V23_J2_2	1	1.42	1449.8	-5599.8
## + V30_J2_7	1	1.42	1449.8	-5599.8
## + V2_J1_7	1	1.36	1449.9	-5599.6
## + V13_1_J1_3	1	1.34	1449.9	-5599.5
## + V12_1_2_J1_5	1	1.33	1449.9	-5599.5
## + V30_J2_1	1	1.30	1450.0	-5599.4
## + V1_J1_7	1	1.29	1450.0	-5599.4
## + V5_J1_7	1	1.26	1450.0	-5599.3
## + V24_J1_1	1	1.25	1450.0	-5599.2
## + V4_J1_6	1	1.25	1450.0	-5599.2
## + V5_J1_6	1	1.24	1450.0	-5599.2
## - V1_J1_1	1	2.48	1453.7	-5599.1
## + V20_J1_5	1	1.16	1450.1	-5598.9
## - V19_J1_1	1	2.56	1453.8	-5598.8
## + V17_J1_7	1	1.05	1450.2	-5598.5
## - V16_J2_1	1	2.66	1453.9	-5598.5
## + V19_J1_6	1	1.03	1450.2	-5598.4
## + V19_J2_7	1	1.02	1450.2	-5598.4
## + V1_J2_3	1	1.00	1450.2	-5598.3
## + V16_J1_6	1	1.00	1450.2	-5598.3
## + V29_J1_1	1	1.00	1450.2	-5598.3
## + V2_J2_1	1	0.95	1450.3	-5598.1
## + V13_1_J2_4	1	0.82	1450.4	-5597.7
## + V17_J2_4	1	0.82	1450.4	-5597.7
## + V16_J2_4	1	0.82	1450.4	-5597.7
## + V23_J2_4	1	0.81	1450.4	-5597.7
## + V5_J1_1	1	0.81	1450.4	-5597.7
## + V26_J2_2	1	0.78	1450.5	-5597.5
## + V24_J2_4	1	0.77	1450.5	-5597.5
## + V13_1_J1_1	1	0.76	1450.5	-5597.5
## - V24_J1_3	1	3.00	1454.2	-5597.3
## + V14_J1_7	1	0.70	1450.5	-5597.2
## + V3_J1_6	1	0.70	1450.5	-5597.2
## + V17_J2_5	1	0.68	1450.6	-5597.2
## + V29_J2_5	1	0.66	1450.6	-5597.1
## + V30_J1_6	1	0.64	1450.6	-5597.0
## + V5_J2_7	1	0.62	1450.6	-5597.0
## + V16_J2_5	1	0.61	1450.6	-5596.9

## + V17_J2_3	1	0.61	1450.6	-5596.9
## + V14_J1_6	1	0.60	1450.7	-5596.9
## + V23_J2_5	1	0.59	1450.7	-5596.8
## + V13_1_J1_4	1	0.58	1450.7	-5596.8
## + V3_J1_3	1	0.58	1450.7	-5596.8
## + V13_2_J2_3	1	0.57	1450.7	-5596.8
## + V24_J2_2	1	0.55	1450.7	-5596.7
## + V3_J1_1	1	0.55	1450.7	-5596.7
## - V16_J1_2	1	3.16	1454.4	-5596.7
## + V13_3_J1_6	1	0.52	1450.7	-5596.6
## + V13_3_J2_3	1	0.49	1450.8	-5596.5
## + V13_2_J2_7	1	0.42	1450.8	-5596.3
## + V3_J1_7	1	0.42	1450.8	-5596.2
## + V12_1_2_J2_3	1	0.40	1450.8	-5596.2
## + V13_3_J1_3	1	0.38	1450.9	-5596.1
## + V15_J1_5	1	0.37	1450.9	-5596.1
## + V1_J2_1	1	0.37	1450.9	-5596.1
## + V13_2_J2_4	1	0.37	1450.9	-5596.1
## - V23_J2_3	1	3.37	1454.6	-5595.9
## + V12_1_2_J2_1	1	0.32	1450.9	-5595.9
## + V16_J1_1	1	0.32	1450.9	-5595.9
## + V14_J2_2	1	0.31	1450.9	-5595.8
## + V13_3_J2_2	1	0.31	1450.9	-5595.8
## + V2_J2_5	1	0.26	1451.0	-5595.7
## + V23_J1_2	1	0.22	1451.0	-5595.5
## + V29_J2_7	1	0.21	1451.0	-5595.5
## + V15_J1_4	1	0.20	1451.0	-5595.4
## + V13_3_J1_4	1	0.19	1451.1	-5595.4
## + V24_J2_7	1	0.19	1451.1	-5595.4
## - V29_J1_7	1	3.53	1454.8	-5595.4
## + V4_J1_1	1	0.17	1451.1	-5595.4
## + V16_J1_5	1	0.17	1451.1	-5595.4
## + V3_J2_7	1	0.17	1451.1	-5595.3
## + V20_J2_5	1	0.17	1451.1	-5595.3
## + V23_J1_6	1	0.15	1451.1	-5595.3
## + V20_J1_3	1	0.14	1451.1	-5595.3
## + V17_J1_4	1	0.14	1451.1	-5595.2
## + V24_J2_1	1	0.14	1451.1	-5595.2
## + V12_1_2_J2_5	1	0.13	1451.1	-5595.2
## + V4_J1_7	1	0.13	1451.1	-5595.2
## + V29_J1_2	1	0.12	1451.1	-5595.2
## + V2_J1_1	1	0.11	1451.1	-5595.2
## + V17_J1_1	1	0.10	1451.1	-5595.1
## + V1_J1_6	1	0.09	1451.2	-5595.1
## + V13_3_J2_1	1	0.09	1451.2	-5595.1
## + V13_2_J2_1	1	0.09	1451.2	-5595.0
## + V30_J1_4	1	0.09	1451.2	-5595.0
## + V20_J2_7	1	0.09	1451.2	-5595.0
## + V2_J1_2	1	0.08	1451.2	-5595.0
## + V2_J2_4	1	0.08	1451.2	-5595.0
## + V30_J2_4	1	0.08	1451.2	-5595.0
## + V17_J1_2	1	0.08	1451.2	-5595.0
## + V19_J1_7	1	0.07	1451.2	-5595.0
## + V24_J1_4	1	0.07	1451.2	-5595.0

## + V17_J1_6	1	0.07	1451.2	-5595.0
## + V12_1_2_J2_4	1	0.07	1451.2	-5595.0
## + V26_J2_7	1	0.07	1451.2	-5595.0
## + V13_2_J1_1	1	0.06	1451.2	-5595.0
## + V4_J2_2	1	0.06	1451.2	-5594.9
## + V2_J1_4	1	0.05	1451.2	-5594.9
## + V15_J2_5	1	0.05	1451.2	-5594.9
## + V24_J1_2	1	0.05	1451.2	-5594.9
## + V3_J2_2	1	0.04	1451.2	-5594.9
## + V13_3_J1_5	1	0.04	1451.2	-5594.9
## + V13_1_J2_3	1	0.04	1451.2	-5594.9
## + V13_1_J2_5	1	0.03	1451.2	-5594.9
## + V2_J2_3	1	0.03	1451.2	-5594.9
## + V14_J1_1	1	0.03	1451.2	-5594.9
## + V13_3_J2_7	1	0.03	1451.2	-5594.9
## + V1_J1_4	1	0.03	1451.2	-5594.8
## + V19_J2_2	1	0.03	1451.2	-5594.8
## + V26_J1_2	1	0.02	1451.2	-5594.8
## + V29_J2_4	1	0.02	1451.2	-5594.8
## + V5_J1_3	1	0.01	1451.2	-5594.8
## + V4_J1_2	1	0.01	1451.2	-5594.8
## + V23_J1_1	1	0.01	1451.2	-5594.8
## + V5_J2_2	1	0.01	1451.2	-5594.8
## + V19_J1_2	1	0.01	1451.2	-5594.8
## + V23_J1_5	1	0.00	1451.2	-5594.8
## + V16_J1_7	1	0.00	1451.2	-5594.8
## + V13_2_J1_3	1	0.00	1451.2	-5594.7
## + V1_J1_2	1	0.00	1451.2	-5594.7
## + V29_J1_6	1	0.00	1451.2	-5594.7
## + V13_3_J1_7	1	0.00	1451.2	-5594.7
## + V1_J2_4	1	0.00	1451.2	-5594.7
## + V13_1_J1_6	1	0.00	1451.2	-5594.7
## + V13_1_J2_1	1	0.00	1451.2	-5594.7
## - V13_2_J1_4	1	3.74	1455.0	-5594.6
## - V13_2_J2_5	1	3.82	1455.1	-5594.3
## - V2_J1_6	1	3.88	1455.1	-5594.1
## - V13_2_J1_2	1	4.05	1455.3	-5593.5
## - V13_3_J1_2	1	4.25	1455.5	-5592.8
## - V13_3_J2_5	1	4.32	1455.6	-5592.5
## - V13_1_J2_2	1	4.53	1455.8	-5591.8
## - V13_1_J2_7	1	4.61	1455.9	-5591.5
## - V14_J2_7	1	4.72	1456.0	-5591.1
## - V29_J1_4	1	4.77	1456.0	-5590.9
## - V13_2_J1_5	1	4.77	1456.0	-5590.9
## - V26_J1_1	1	4.91	1456.2	-5590.5
## - V23_J1_4	1	5.11	1456.4	-5589.7
## - V1_J1_5	1	5.19	1456.4	-5589.4
## - V2_J1_5	1	6.01	1457.2	-5586.5
## - V26_J1_3	1	6.05	1457.3	-5586.4
## - V13_2_J1_6	1	6.05	1457.3	-5586.4
## - V29_J2_2	1	6.17	1457.4	-5585.9
## - V12_1_2_J1_2	1	6.23	1457.5	-5585.7
## - V29_J2_1	1	6.55	1457.8	-5584.6
## - V19_J1_3	1	6.84	1458.1	-5583.6

## - V20_J1_2	1	6.91	1458.2	-5583.3
## - V24_J2_3	1	7.82	1459.1	-5580.1
## - V23_J2_1	1	8.01	1459.3	-5579.4
## - V14_J1_3	1	8.03	1459.3	-5579.3
## - V30_J2_3	1	8.13	1459.4	-5579.0
## - V24_J1_7	1	8.60	1459.8	-5577.3
## - V26_J1_6	1	8.63	1459.9	-5577.2
## - V15_J2_3	1	8.70	1460.0	-5576.9
## - V29_J2_3	1	9.20	1460.5	-5575.1
## - V13_1_J1_5	1	9.49	1460.7	-5574.1
## - V24_J2_5	1	9.68	1460.9	-5573.4
## - V17_J1_5	1	10.01	1461.3	-5572.3
## - V1_J2_5	1	10.50	1461.8	-5570.5
## - V16_J2_3	1	12.41	1463.7	-5563.7
## - V15_J2_1	1	12.62	1463.9	-5563.0
## - V20_J2_1	1	13.23	1464.5	-5560.8
## - V20_J2_3	1	14.04	1465.3	-5557.9
## - V12_1_2_J1_6	1	15.16	1466.4	-5554.0
## - V24_J1_6	1	15.25	1466.5	-5553.6
## - V26_J1_5	1	16.52	1467.8	-5549.2
## - V29_J1_5	1	16.52	1467.8	-5549.2
## - V13_1_J1_2	1	19.18	1470.4	-5539.7
## - V13_1_J1_7	1	19.31	1470.6	-5539.3
## - V29_J1_3	1	19.31	1470.6	-5539.3
## - V4_J1_3	1	22.46	1473.7	-5528.1
## - V12_1_2_J1_7	1	24.55	1475.8	-5520.8
## - V30_J1_5	1	25.00	1476.2	-5519.2
## - V14_J2_5	1	25.24	1476.5	-5518.3
## - V3_J1_5	1	25.53	1476.8	-5517.3
## - V30_J2_5	1	25.85	1477.1	-5516.2
## - V14_J2_1	1	26.71	1478.0	-5513.2
## - V23_J2_7	1	27.51	1478.8	-5510.4
## - V2_J2_2	1	27.51	1478.8	-5510.3
## - V4_J1_5	1	28.29	1479.5	-5507.6
## - V15_J1_2	1	29.43	1480.7	-5503.6
## - V2_J2_7	1	30.19	1481.4	-5500.9
## - V15_J1_1	1	32.03	1483.3	-5494.5
## - V12_1_2_J2_7	1	34.85	1486.1	-5484.6
## - V5_J1_4	1	36.06	1487.3	-5480.4
## - V26_J1_4	1	36.23	1487.5	-5479.8
## - V19_J2_4	1	38.95	1490.2	-5470.3
## - V19_J2_5	1	39.90	1491.2	-5467.0
## - V4_J2_7	1	42.73	1494.0	-5457.1
## - V30_J1_3	1	45.01	1496.3	-5449.2
## - V14_J2_4	1	45.09	1496.3	-5448.9
## - V4_J1_4	1	46.01	1497.3	-5445.7
## - V16_J2_7	1	46.02	1497.3	-5445.7
## - V13_2_J1_7	1	46.39	1497.6	-5444.4
## - V5_J2_1	1	46.97	1498.2	-5442.4
## - V30_J1_2	1	47.05	1498.3	-5442.1
## - V12_1_2_J1_3	1	48.52	1499.8	-5437.0
## - V19_J2_1	1	48.81	1500.1	-5436.0
## - V15_J1_3	1	56.77	1508.0	-5408.5
## - V15_J1_6	1	59.81	1511.1	-5398.0

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## - V14_J2_3      1      60.14 1511.4 -5396.9
## - V5_J2_3       1      60.60 1511.8 -5395.3
## - V17_J2_2      1      64.26 1515.5 -5382.7
## - V15_J1_7      1      64.41 1515.7 -5382.2
## - V1_J2_2       1      66.14 1517.4 -5376.3
## - V17_J2_7      1      68.92 1520.2 -5366.8
## - V30_J2_2      1      69.77 1521.0 -5363.8
## - V30_J1_1      1      72.91 1524.2 -5353.1
## - V14_J1_5      1      76.21 1527.5 -5341.9
## - V16_J1_3      1      78.63 1529.9 -5333.6
## - V3_J1_4       1      79.05 1530.3 -5332.2
## - V1_J1_3       1      79.40 1530.6 -5331.0
## - V19_J2_3      1      83.40 1534.6 -5317.5
## - V23_J1_3      1      87.98 1539.2 -5301.9
## - V14_J1_4      1      89.47 1540.7 -5296.9
## - V2_J1_3       1      93.86 1545.1 -5282.1
## - V17_J1_3      1      95.52 1546.8 -5276.5
## - V1_J2_7       1      98.69 1549.9 -5265.9
## - V5_J1_5       1     100.96 1552.2 -5258.3
## - V12_1_2_J1_4  1     102.24 1553.5 -5254.0
## - V3_J2_1       1     103.63 1554.9 -5249.3
## - V26_J2_1      1     111.51 1562.8 -5223.1
## - V15_J2_7      1     113.67 1564.9 -5215.9
## - V4_J2_3       1     114.19 1565.4 -5214.1
## - V4_J2_5       1     114.98 1566.2 -5211.5
## - V4_J2_1       1     122.06 1573.3 -5188.1
## - V3_J2_5       1     127.44 1578.7 -5170.3
## - V19_J1_5      1     129.56 1580.8 -5163.4
## - V15_J2_2      1     135.02 1586.3 -5145.4
## - V26_J2_5      1     153.31 1604.6 -5085.8
## - V26_J2_4      1     153.81 1605.1 -5084.2
## - V4_J2_4       1     159.77 1611.0 -5064.9
## - V3_J2_3       1     170.62 1621.9 -5030.0
## - V12_1_2_J2_2  1     173.57 1624.8 -5020.6
## - V19_J1_4      1     179.99 1631.2 -5000.1
## - V3_J2_4       1     185.29 1636.5 -4983.2
## - J             12     271.92 1723.2 -4788.0
## - V20_J2_2      1     253.79 1705.0 -4770.0
## - V5_J2_5       1     265.30 1716.5 -4735.0
## - V26_J2_3      1     281.93 1733.2 -4684.8
## - V5_J2_4       1     300.87 1752.1 -4628.3
## - V16_J2_2      1     429.34 1880.6 -4260.4
## - V             19    1041.37 2492.6 -2914.7
##
## Step:  AIC=-5602.73
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +

```



```

##      V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
##      V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
##      V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 + V20_J2_3 +
##      V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
##      V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
##      V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
##      V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
##      V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V13_3_J2_5 + V20_J1_2 +
##      V13_2_J1_4 + V26_J1_6 + V13_1_J1_5 + V26_J1_1 + V2_J1_6 +
##      V15_J2_3 + V30_J2_3 + V24_J2_3 + V13_2_J1_5 + V13_1_J2_2 +
##      V19_J1_3 + V14_J1_3 + V19_J1_1 + V16_J2_1 + V3_J1_2 + V13_2_J2_5 +
##      V29_J2_3 + V1_J1_1 + V23_J2_3 + V13_1_J2_7 + V14_J2_7 + V29_J2_1 +
##      V29_J2_2 + V29_J1_4 + V13_3_J1_2 + V13_2_J1_2 + V16_J1_2 +
##      V24_J1_3 + V5_J1_2

```

```

##
##      Df Sum of Sq      RSS      AIC
## - V3_J1_2      1      1.12 1450.1 -5605.3
## + V30_J1_7      1      2.04 1447.0 -5603.4
## + V13_3_J1_1     1      1.99 1447.0 -5603.2
## + V20_J1_6      1      1.94 1447.1 -5603.1
## + V16_J1_4      1      1.93 1447.1 -5603.0
## + V5_J1_6       1      1.93 1447.1 -5603.0
## <none>                1449.0 -5602.7
## + V24_J1_5      1      1.83 1447.2 -5602.7
## + V23_J1_7      1      1.81 1447.2 -5602.6
## + V26_J1_7      1      1.76 1447.3 -5602.4
## + V13_3_J2_4     1      1.74 1447.3 -5602.4
## + V20_J1_4      1      1.73 1447.3 -5602.3
## + V13_2_J2_2     1      1.69 1447.3 -5602.2
## + V17_J2_1      1      1.68 1447.3 -5602.1
## + V20_J1_1      1      1.68 1447.3 -5602.1
## + V20_J1_7      1      1.67 1447.3 -5602.1
## + V15_J2_4      1      1.57 1447.5 -5601.7
## + V12_1_2_J1_1   1      1.54 1447.5 -5601.6
## + V20_J2_4      1      1.47 1447.5 -5601.4
## - V5_J1_2       1      2.23 1451.2 -5601.4
## + V13_1_J1_3     1      1.46 1447.6 -5601.3
## + V30_J2_7      1      1.38 1447.6 -5601.0
## + V1_J1_7       1      1.37 1447.7 -5601.0
## + V23_J2_2      1      1.34 1447.7 -5600.9
## + V4_J1_6       1      1.33 1447.7 -5600.9
## + V12_1_2_J1_5   1      1.33 1447.7 -5600.9
## - V1_J1_1       1      2.38 1451.4 -5600.8
## + V2_J1_7       1      1.29 1447.7 -5600.7
## + V30_J2_1      1      1.27 1447.8 -5600.7
## + V14_J1_2      1      1.23 1447.8 -5600.5
## - V19_J1_1      1      2.48 1451.5 -5600.5
## + V24_J1_1      1      1.19 1447.8 -5600.4
## + V20_J1_5      1      1.13 1447.9 -5600.2
## + V17_J1_7      1      1.11 1447.9 -5600.1
## + V19_J1_6      1      1.10 1447.9 -5600.1
## + V16_J1_6      1      1.02 1448.0 -5599.8
## - V16_J2_1      1      2.68 1451.7 -5599.8
## + V2_J2_1       1      0.98 1448.0 -5599.6

```

## + V1_J2_3	1	0.97	1448.0	-5599.6
## + V19_J2_7	1	0.93	1448.1	-5599.4
## + V29_J1_1	1	0.93	1448.1	-5599.4
## - V24_J1_3	1	2.81	1451.8	-5599.3
## + V23_J2_4	1	0.83	1448.2	-5599.1
## + V16_J2_4	1	0.81	1448.2	-5599.0
## + V13_1_J2_4	1	0.80	1448.2	-5599.0
## + V17_J2_4	1	0.80	1448.2	-5599.0
## + V24_J2_4	1	0.79	1448.2	-5598.9
## + V5_J1_7	1	0.77	1448.2	-5598.9
## + V13_1_J1_1	1	0.75	1448.3	-5598.8
## + V26_J2_2	1	0.70	1448.3	-5598.6
## + V29_J2_5	1	0.69	1448.3	-5598.6
## + V3_J1_6	1	0.68	1448.3	-5598.5
## + V17_J2_5	1	0.66	1448.4	-5598.5
## + V14_J1_7	1	0.64	1448.4	-5598.4
## + V30_J1_6	1	0.63	1448.4	-5598.4
## + V16_J2_5	1	0.63	1448.4	-5598.4
## + V17_J2_3	1	0.63	1448.4	-5598.4
## + V24_J2_2	1	0.61	1448.4	-5598.3
## + V13_1_J1_4	1	0.60	1448.4	-5598.3
## + V23_J2_5	1	0.60	1448.4	-5598.3
## + V13_2_J2_3	1	0.60	1448.4	-5598.2
## + V14_J1_6	1	0.55	1448.5	-5598.1
## + V3_J1_1	1	0.54	1448.5	-5598.0
## + V3_J1_3	1	0.53	1448.5	-5598.0
## + V13_3_J1_6	1	0.51	1448.5	-5597.9
## + V13_3_J2_3	1	0.47	1448.5	-5597.8
## + V13_2_J2_7	1	0.44	1448.6	-5597.7
## + V3_J1_7	1	0.43	1448.6	-5597.7
## + V5_J1_1	1	0.43	1448.6	-5597.6
## + V12_1_2_J2_3	1	0.40	1448.6	-5597.5
## + V13_2_J2_4	1	0.39	1448.6	-5597.5
## + V15_J1_5	1	0.37	1448.7	-5597.4
## + V14_J2_2	1	0.36	1448.7	-5597.4
## + V1_J2_1	1	0.35	1448.7	-5597.3
## + V16_J1_1	1	0.33	1448.7	-5597.3
## + V12_1_2_J2_1	1	0.32	1448.7	-5597.3
## + V13_3_J1_3	1	0.32	1448.7	-5597.3
## + V5_J2_7	1	0.30	1448.7	-5597.2
## + V13_3_J2_2	1	0.30	1448.7	-5597.2
## - V23_J2_3	1	3.41	1452.4	-5597.2
## + V2_J2_5	1	0.27	1448.7	-5597.1
## - V29_J1_7	1	3.43	1452.5	-5597.1
## + V29_J2_7	1	0.25	1448.8	-5597.0
## + V29_J1_2	1	0.24	1448.8	-5597.0
## + V24_J2_7	1	0.22	1448.8	-5596.9
## + V15_J1_4	1	0.20	1448.8	-5596.8
## + V20_J2_5	1	0.18	1448.8	-5596.8
## + V20_J1_3	1	0.18	1448.8	-5596.7
## + V13_3_J1_4	1	0.18	1448.8	-5596.7
## + V23_J1_6	1	0.18	1448.8	-5596.7
## + V16_J1_5	1	0.17	1448.8	-5596.7
## + V3_J2_7	1	0.17	1448.8	-5596.7

## + V17_J1_4	1	0.15	1448.9	-5596.6
## + V24_J1_2	1	0.15	1448.9	-5596.6
## + V24_J2_1	1	0.15	1448.9	-5596.6
## + V4_J1_1	1	0.14	1448.9	-5596.6
## + V5_J2_2	1	0.13	1448.9	-5596.6
## + V17_J1_1	1	0.12	1448.9	-5596.5
## + V12_1_2_J2_5	1	0.12	1448.9	-5596.5
## + V5_J1_3	1	0.12	1448.9	-5596.5
## + V1_J1_6	1	0.12	1448.9	-5596.5
## + V23_J1_2	1	0.10	1448.9	-5596.5
## + V4_J1_7	1	0.10	1448.9	-5596.5
## + V13_2_J2_1	1	0.10	1448.9	-5596.5
## + V26_J1_2	1	0.10	1448.9	-5596.4
## + V20_J2_7	1	0.09	1448.9	-5596.4
## + V2_J1_1	1	0.09	1448.9	-5596.4
## + V30_J1_4	1	0.09	1448.9	-5596.4
## + V17_J1_6	1	0.09	1448.9	-5596.4
## + V13_3_J2_1	1	0.08	1448.9	-5596.4
## + V30_J2_4	1	0.08	1448.9	-5596.4
## + V24_J1_4	1	0.08	1448.9	-5596.4
## + V4_J1_2	1	0.07	1449.0	-5596.4
## - V16_J1_2	1	3.63	1452.7	-5596.4
## + V12_1_2_J2_4	1	0.07	1449.0	-5596.4
## + V2_J2_4	1	0.07	1449.0	-5596.4
## + V2_J1_4	1	0.06	1449.0	-5596.3
## + V13_2_J1_1	1	0.06	1449.0	-5596.3
## + V19_J1_7	1	0.06	1449.0	-5596.3
## + V15_J2_5	1	0.05	1449.0	-5596.3
## + V13_1_J2_3	1	0.04	1449.0	-5596.2
## + V26_J2_7	1	0.04	1449.0	-5596.2
## + V19_J2_2	1	0.04	1449.0	-5596.2
## + V13_1_J2_5	1	0.04	1449.0	-5596.2
## + V3_J2_2	1	0.04	1449.0	-5596.2
## + V13_3_J2_7	1	0.04	1449.0	-5596.2
## + V4_J2_2	1	0.04	1449.0	-5596.2
## + V1_J1_4	1	0.04	1449.0	-5596.2
## + V1_J1_2	1	0.04	1449.0	-5596.2
## + V13_3_J1_5	1	0.03	1449.0	-5596.2
## + V2_J2_3	1	0.03	1449.0	-5596.2
## + V14_J1_1	1	0.02	1449.0	-5596.2
## + V29_J2_4	1	0.02	1449.0	-5596.2
## + V2_J1_2	1	0.02	1449.0	-5596.2
## + V23_J1_1	1	0.02	1449.0	-5596.2
## - V13_2_J1_4	1	3.69	1452.7	-5596.2
## + V17_J1_2	1	0.02	1449.0	-5596.2
## + V16_J1_7	1	0.00	1449.0	-5596.1
## + V19_J1_2	1	0.00	1449.0	-5596.1
## + V23_J1_5	1	0.00	1449.0	-5596.1
## + V13_3_J1_7	1	0.00	1449.0	-5596.1
## + V13_1_J2_1	1	0.00	1449.0	-5596.1
## + V1_J2_4	1	0.00	1449.0	-5596.1
## + V29_J1_6	1	0.00	1449.0	-5596.1
## + V13_2_J1_3	1	0.00	1449.0	-5596.1
## + V13_1_J1_6	1	0.00	1449.0	-5596.1

## - V13_2_J2_5	1	3.88	1452.9	-5595.5
## - V2_J1_6	1	3.99	1453.0	-5595.1
## - V13_3_J2_5	1	4.26	1453.3	-5594.1
## - V13_1_J2_2	1	4.49	1453.5	-5593.3
## - V13_1_J2_7	1	4.55	1453.6	-5593.1
## - V14_J2_7	1	4.56	1453.6	-5593.0
## - V13_2_J1_2	1	4.61	1453.6	-5592.8
## - V13_3_J1_2	1	4.83	1453.8	-5592.1
## - V13_2_J1_5	1	4.83	1453.8	-5592.1
## - V29_J1_4	1	4.83	1453.8	-5592.1
## - V26_J1_1	1	5.05	1454.1	-5591.3
## - V23_J1_4	1	5.07	1454.1	-5591.2
## - V1_J1_5	1	5.27	1454.3	-5590.5
## - V12_1_2_J1_2	1	5.55	1454.6	-5589.5
## - V26_J1_3	1	5.74	1454.8	-5588.8
## - V13_2_J1_6	1	6.05	1455.1	-5587.7
## - V2_J1_5	1	6.08	1455.1	-5587.6
## - V29_J2_2	1	6.33	1455.3	-5586.7
## - V19_J1_3	1	6.53	1455.5	-5586.0
## - V29_J2_1	1	6.62	1455.6	-5585.7
## - V20_J1_2	1	7.61	1456.6	-5582.1
## - V14_J1_3	1	7.69	1456.7	-5581.9
## - V24_J2_3	1	7.87	1456.9	-5581.2
## - V23_J2_1	1	8.06	1457.1	-5580.5
## - V30_J2_3	1	8.08	1457.1	-5580.5
## - V15_J2_3	1	8.70	1457.7	-5578.2
## - V24_J1_7	1	8.73	1457.8	-5578.1
## - V26_J1_6	1	8.81	1457.8	-5577.8
## - V29_J2_3	1	9.28	1458.3	-5576.2
## - V13_1_J1_5	1	9.53	1458.5	-5575.3
## - V24_J2_5	1	9.64	1458.7	-5574.9
## - V17_J1_5	1	10.09	1459.1	-5573.3
## - V1_J2_5	1	10.41	1459.4	-5572.1
## - V16_J2_3	1	12.45	1461.5	-5564.9
## - V15_J2_1	1	12.62	1461.6	-5564.3
## - V20_J2_1	1	13.32	1462.3	-5561.8
## - V20_J2_3	1	14.13	1463.2	-5558.9
## - V12_1_2_J1_6	1	15.06	1464.1	-5555.6
## - V24_J1_6	1	15.43	1464.5	-5554.3
## - V26_J1_5	1	16.35	1465.4	-5551.0
## - V29_J1_5	1	16.64	1465.7	-5550.0
## - V29_J1_3	1	18.77	1467.8	-5542.4
## - V13_1_J1_7	1	19.29	1468.3	-5540.6
## - V13_1_J1_2	1	20.24	1469.3	-5537.2
## - V4_J1_3	1	21.88	1470.9	-5531.4
## - V12_1_2_J1_7	1	24.45	1473.5	-5522.3
## - V30_J1_5	1	24.94	1474.0	-5520.6
## - V14_J2_5	1	25.12	1474.1	-5520.0
## - V3_J1_5	1	25.72	1474.7	-5517.9
## - V30_J2_5	1	25.75	1474.8	-5517.8
## - V14_J2_1	1	26.57	1475.6	-5514.9
## - V23_J2_7	1	27.16	1476.2	-5512.8
## - V2_J2_2	1	27.17	1476.2	-5512.8
## - V15_J1_2	1	27.91	1476.9	-5510.2

## - V4_J1_5	1	28.12	1477.1	-5509.4
## - V2_J2_7	1	29.77	1478.8	-5503.6
## - V15_J1_1	1	32.19	1481.2	-5495.1
## - V12_1_2_J2_7	1	34.61	1483.6	-5486.6
## - V26_J1_4	1	36.01	1485.0	-5481.7
## - V5_J1_4	1	37.90	1486.9	-5475.1
## - V19_J2_4	1	38.80	1487.8	-5472.0
## - V19_J2_5	1	39.77	1488.8	-5468.6
## - V4_J2_7	1	42.23	1491.2	-5460.0
## - V30_J1_3	1	44.48	1493.5	-5452.2
## - V30_J1_2	1	44.82	1493.8	-5451.0
## - V14_J2_4	1	44.90	1493.9	-5450.7
## - V16_J2_7	1	45.78	1494.8	-5447.6
## - V4_J1_4	1	45.82	1494.8	-5447.5
## - V13_2_J1_7	1	46.43	1495.5	-5445.4
## - V12_1_2_J1_3	1	47.88	1496.9	-5440.3
## - V19_J2_1	1	48.64	1497.7	-5437.7
## - V5_J2_1	1	48.95	1498.0	-5436.6
## - V15_J1_3	1	57.39	1506.4	-5407.4
## - V14_J2_3	1	59.92	1508.9	-5398.6
## - V15_J1_6	1	60.01	1509.0	-5398.3
## - V5_J2_3	1	62.68	1511.7	-5389.2
## - V17_J2_2	1	63.77	1512.8	-5385.4
## - V15_J1_7	1	64.59	1513.6	-5382.6
## - V1_J2_2	1	65.56	1514.6	-5379.3
## - V17_J2_7	1	68.33	1517.3	-5369.8
## - V30_J2_2	1	69.59	1518.6	-5365.4
## - V30_J1_1	1	73.01	1522.0	-5353.7
## - V14_J1_5	1	75.93	1525.0	-5343.8
## - V16_J1_3	1	77.85	1526.9	-5337.2
## - V1_J1_3	1	78.19	1527.2	-5336.1
## - V3_J1_4	1	79.41	1528.4	-5331.9
## - V19_J2_3	1	83.18	1532.2	-5319.1
## - V23_J1_3	1	86.83	1535.8	-5306.7
## - V14_J1_4	1	89.21	1538.2	-5298.7
## - V2_J1_3	1	92.57	1541.6	-5287.4
## - V17_J1_3	1	94.27	1543.3	-5281.6
## - V1_J2_7	1	97.87	1546.9	-5269.5
## - V12_1_2_J1_4	1	102.29	1551.3	-5254.7
## - V5_J1_5	1	103.18	1552.2	-5251.7
## - V3_J2_1	1	104.04	1553.1	-5248.8
## - V26_J2_1	1	111.12	1560.1	-5225.1
## - V4_J2_3	1	113.90	1562.9	-5215.9
## - V15_J2_7	1	114.12	1563.1	-5215.2
## - V4_J2_5	1	114.72	1563.7	-5213.2
## - V4_J2_1	1	121.75	1570.8	-5189.8
## - V3_J2_5	1	127.93	1577.0	-5169.4
## - V19_J1_5	1	129.23	1578.2	-5165.1
## - V15_J2_2	1	135.41	1584.4	-5144.8
## - V26_J2_5	1	152.89	1601.9	-5087.8
## - V26_J2_4	1	153.34	1602.4	-5086.3
## - V4_J2_4	1	159.42	1608.4	-5066.6
## - V3_J2_3	1	171.13	1620.2	-5028.9
## - V12_1_2_J2_2	1	173.12	1622.1	-5022.5

```

## - V19_J1_4      1      179.65 1628.7 -5001.6
## - V3_J2_4       1      185.85 1634.9 -4981.9
## - J             12      269.67 1718.7 -4794.8
## - V20_J2_2      1      253.58 1702.6 -4770.8
## - V5_J2_5       1      266.80 1715.8 -4730.5
## - V26_J2_3      1      281.30 1730.3 -4686.8
## - V5_J2_4       1      302.03 1751.0 -4624.9
## - V16_J2_2      1      428.77 1877.8 -4261.5
## - V             19     1033.80 2482.8 -2928.6
##
## Step:  AIC=-5605.33
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 + V20_J2_3 +
## V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
## V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
## V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V13_3_J2_5 + V20_J1_2 +
## V13_2_J1_4 + V26_J1_6 + V13_1_J1_5 + V26_J1_1 + V2_J1_6 +
## V15_J2_3 + V30_J2_3 + V24_J2_3 + V13_2_J1_5 + V13_1_J2_2 +
## V19_J1_3 + V14_J1_3 + V19_J1_1 + V16_J2_1 + V13_2_J2_5 +
## V29_J2_3 + V1_J1_1 + V23_J2_3 + V13_1_J2_7 + V14_J2_7 + V29_J2_1 +
## V29_J2_2 + V29_J1_4 + V13_3_J1_2 + V13_2_J1_2 + V16_J1_2 +
## V24_J1_3 + V5_J1_2
##
##
##      Df Sum of Sq    RSS    AIC
## + V30_J1_7      1      2.05 1448.1 -5606.0
## + V13_3_J1_1     1      1.99 1448.2 -5605.9
## + V5_J1_6        1      1.95 1448.2 -5605.7
## + V16_J1_4       1      1.95 1448.2 -5605.7
## + V20_J1_6       1      1.94 1448.2 -5605.7
## <none>                1450.1 -5605.3
## + V26_J1_7       1      1.84 1448.3 -5605.3
## + V24_J1_5       1      1.80 1448.3 -5605.2
## + V13_3_J2_4     1      1.77 1448.4 -5605.1
## + V23_J1_7       1      1.76 1448.4 -5605.0
## + V20_J1_4       1      1.70 1448.4 -5604.8
## + V13_2_J2_2     1      1.70 1448.5 -5604.8
## + V20_J1_1       1      1.68 1448.5 -5604.7
## + V20_J1_7       1      1.68 1448.5 -5604.7
## + V17_J2_1       1      1.66 1448.5 -5604.6
## + V15_J2_4       1      1.57 1448.6 -5604.3
## + V13_1_J1_3     1      1.55 1448.6 -5604.2
## + V12_1_2_J1_1   1      1.51 1448.6 -5604.1

```

## + V20_J2_4	1	1.50	1448.7	-5604.1
## + V1_J1_7	1	1.43	1448.7	-5603.8
## + V4_J1_6	1	1.39	1448.8	-5603.7
## - V1_J1_1	1	2.32	1452.5	-5603.7
## + V30_J2_7	1	1.34	1448.8	-5603.5
## + V12_1_2_J1_5	1	1.33	1448.8	-5603.5
## + V23_J2_2	1	1.28	1448.9	-5603.3
## - V19_J1_1	1	2.42	1452.6	-5603.3
## + V30_J2_1	1	1.25	1448.9	-5603.2
## + V2_J1_7	1	1.24	1448.9	-5603.1
## + V19_J1_6	1	1.15	1449.0	-5602.8
## + V17_J1_7	1	1.15	1449.0	-5602.8
## + V24_J1_1	1	1.15	1449.0	-5602.8
## + V3_J1_2	1	1.12	1449.0	-5602.7
## - V5_J1_2	1	2.58	1452.7	-5602.7
## + V20_J1_5	1	1.11	1449.0	-5602.7
## + V16_J1_6	1	1.04	1449.1	-5602.4
## - V24_J1_3	1	2.68	1452.8	-5602.4
## - V16_J2_1	1	2.70	1452.8	-5602.3
## + V2_J2_1	1	1.01	1449.1	-5602.3
## + V14_J1_2	1	0.99	1449.2	-5602.3
## + V1_J2_3	1	0.94	1449.2	-5602.1
## + V29_J1_1	1	0.88	1449.3	-5601.9
## + V19_J2_7	1	0.87	1449.3	-5601.8
## + V23_J2_4	1	0.85	1449.3	-5601.7
## + V24_J2_4	1	0.80	1449.3	-5601.6
## + V16_J2_4	1	0.80	1449.3	-5601.6
## + V13_1_J2_4	1	0.79	1449.4	-5601.5
## + V17_J2_4	1	0.78	1449.4	-5601.5
## + V3_J1_3	1	0.77	1449.4	-5601.5
## + V5_J1_7	1	0.75	1449.4	-5601.4
## + V13_1_J1_1	1	0.74	1449.4	-5601.4
## + V29_J2_5	1	0.71	1449.4	-5601.2
## + V3_J1_7	1	0.69	1449.5	-5601.2
## + V17_J2_5	1	0.65	1449.5	-5601.0
## + V24_J2_2	1	0.65	1449.5	-5601.0
## + V17_J2_3	1	0.64	1449.5	-5601.0
## + V16_J2_5	1	0.64	1449.5	-5601.0
## + V26_J2_2	1	0.64	1449.5	-5601.0
## + V30_J1_6	1	0.62	1449.5	-5600.9
## + V13_2_J2_3	1	0.62	1449.5	-5600.9
## + V13_1_J1_4	1	0.61	1449.5	-5600.9
## + V23_J2_5	1	0.61	1449.5	-5600.9
## + V14_J1_7	1	0.60	1449.5	-5600.9
## + V13_3_J1_6	1	0.51	1449.6	-5600.5
## + V14_J1_6	1	0.51	1449.6	-5600.5
## + V13_3_J2_3	1	0.45	1449.7	-5600.3
## + V13_2_J2_7	1	0.45	1449.7	-5600.3
## + V5_J1_1	1	0.42	1449.7	-5600.2
## + V13_2_J2_4	1	0.41	1449.7	-5600.2
## + V3_J1_6	1	0.40	1449.8	-5600.1
## + V14_J2_2	1	0.40	1449.8	-5600.1
## + V12_1_2_J2_3	1	0.40	1449.8	-5600.1
## + V15_J1_5	1	0.36	1449.8	-5600.0

## + V29_J1_2	1	0.36	1449.8	-5600.0
## - V29_J1_7	1	3.36	1453.5	-5599.9
## + V16_J1_1	1	0.34	1449.8	-5599.9
## + V3_J2_7	1	0.34	1449.8	-5599.9
## + V1_J2_1	1	0.33	1449.8	-5599.9
## + V12_1_2_J2_1	1	0.33	1449.8	-5599.9
## + V5_J2_7	1	0.30	1449.8	-5599.8
## + V3_J1_1	1	0.29	1449.8	-5599.8
## + V13_3_J2_2	1	0.29	1449.8	-5599.7
## + V29_J2_7	1	0.29	1449.9	-5599.7
## + V2_J2_5	1	0.29	1449.9	-5599.7
## + V13_3_J1_3	1	0.28	1449.9	-5599.7
## - V23_J2_3	1	3.43	1453.6	-5599.7
## + V24_J2_7	1	0.25	1449.9	-5599.6
## + V24_J1_2	1	0.24	1449.9	-5599.6
## + V20_J1_3	1	0.21	1449.9	-5599.5
## + V15_J1_4	1	0.20	1450.0	-5599.4
## + V20_J2_5	1	0.19	1450.0	-5599.4
## + V23_J1_6	1	0.19	1450.0	-5599.4
## + V16_J1_5	1	0.18	1450.0	-5599.3
## + V26_J1_2	1	0.17	1450.0	-5599.3
## + V13_3_J1_4	1	0.17	1450.0	-5599.3
## + V17_J1_4	1	0.16	1450.0	-5599.3
## + V24_J2_1	1	0.15	1450.0	-5599.2
## + V4_J1_2	1	0.14	1450.0	-5599.2
## + V17_J1_1	1	0.14	1450.0	-5599.2
## + V1_J1_6	1	0.14	1450.0	-5599.2
## + V5_J2_2	1	0.13	1450.0	-5599.2
## + V4_J1_1	1	0.12	1450.0	-5599.1
## + V12_1_2_J2_5	1	0.12	1450.0	-5599.1
## + V13_2_J2_1	1	0.11	1450.0	-5599.1
## + V5_J1_3	1	0.10	1450.0	-5599.1
## + V20_J2_7	1	0.10	1450.0	-5599.1
## + V17_J1_6	1	0.10	1450.0	-5599.1
## + V30_J1_4	1	0.10	1450.0	-5599.0
## + V4_J1_7	1	0.09	1450.1	-5599.0
## + V30_J2_4	1	0.09	1450.1	-5599.0
## + V1_J1_2	1	0.08	1450.1	-5599.0
## + V24_J1_4	1	0.08	1450.1	-5599.0
## + V2_J1_1	1	0.08	1450.1	-5599.0
## + V13_3_J2_1	1	0.08	1450.1	-5599.0
## + V12_1_2_J2_4	1	0.07	1450.1	-5599.0
## + V2_J1_4	1	0.07	1450.1	-5598.9
## + V2_J2_4	1	0.06	1450.1	-5598.9
## + V13_2_J1_1	1	0.06	1450.1	-5598.9
## - V13_2_J1_4	1	3.65	1453.8	-5598.9
## + V15_J2_5	1	0.05	1450.1	-5598.9
## + V19_J2_2	1	0.05	1450.1	-5598.9
## + V19_J1_7	1	0.05	1450.1	-5598.9
## + V13_1_J2_3	1	0.05	1450.1	-5598.9
## + V23_J1_2	1	0.04	1450.1	-5598.9
## + V13_1_J2_5	1	0.04	1450.1	-5598.9
## + V13_3_J2_7	1	0.04	1450.1	-5598.9
## + V1_J1_4	1	0.04	1450.1	-5598.8

## + V13_3_J1_5	1	0.03	1450.1	-5598.8
## + V19_J1_2	1	0.03	1450.1	-5598.8
## + V4_J2_2	1	0.03	1450.1	-5598.8
## + V26_J2_7	1	0.03	1450.1	-5598.8
## + V29_J2_4	1	0.02	1450.1	-5598.8
## + V2_J2_3	1	0.02	1450.1	-5598.8
## + V23_J1_1	1	0.02	1450.1	-5598.8
## + V14_J1_1	1	0.01	1450.1	-5598.8
## + V16_J1_7	1	0.01	1450.1	-5598.7
## + V23_J1_5	1	0.00	1450.1	-5598.7
## + V2_J1_2	1	0.00	1450.1	-5598.7
## + V13_3_J1_7	1	0.00	1450.1	-5598.7
## + V29_J1_6	1	0.00	1450.1	-5598.7
## + V13_2_J1_3	1	0.00	1450.1	-5598.7
## + V13_1_J2_1	1	0.00	1450.1	-5598.7
## + V1_J2_4	1	0.00	1450.1	-5598.7
## + V17_J1_2	1	0.00	1450.1	-5598.7
## + V3_J2_2	1	0.00	1450.1	-5598.7
## + V13_1_J1_6	1	0.00	1450.1	-5598.7
## - V13_2_J2_5	1	3.93	1454.1	-5597.9
## - V16_J1_2	1	4.04	1454.2	-5597.5
## - V2_J1_6	1	4.07	1454.2	-5597.4
## - V13_3_J2_5	1	4.22	1454.4	-5596.8
## - V14_J2_7	1	4.46	1454.6	-5596.0
## - V13_1_J2_2	1	4.46	1454.6	-5596.0
## - V13_1_J2_7	1	4.51	1454.7	-5595.8
## - V13_2_J1_5	1	4.87	1455.0	-5594.6
## - V29_J1_4	1	4.87	1455.0	-5594.5
## - V23_J1_4	1	5.04	1455.2	-5593.9
## - V13_2_J1_2	1	5.11	1455.2	-5593.7
## - V26_J1_1	1	5.15	1455.3	-5593.5
## - V12_1_2_J1_2	1	5.16	1455.3	-5593.5
## - V1_J1_5	1	5.32	1455.5	-5592.9
## - V13_3_J1_2	1	5.34	1455.5	-5592.9
## - V26_J1_3	1	5.54	1455.7	-5592.1
## - V13_2_J1_6	1	6.05	1456.2	-5590.3
## - V2_J1_5	1	6.13	1456.3	-5590.0
## - V19_J1_3	1	6.34	1456.5	-5589.3
## - V29_J2_2	1	6.45	1456.6	-5588.9
## - V29_J2_1	1	6.66	1456.8	-5588.1
## - V14_J1_3	1	7.47	1457.6	-5585.3
## - V24_J2_3	1	7.91	1458.0	-5583.7
## - V30_J2_3	1	8.05	1458.2	-5583.2
## - V23_J2_1	1	8.09	1458.2	-5583.0
## - V20_J1_2	1	8.26	1458.4	-5582.4
## - V15_J2_3	1	8.70	1458.8	-5580.9
## - V24_J1_7	1	8.82	1459.0	-5580.4
## - V26_J1_6	1	8.95	1459.1	-5580.0
## - V29_J2_3	1	9.34	1459.5	-5578.6
## - V13_1_J1_5	1	9.56	1459.7	-5577.8
## - V24_J2_5	1	9.61	1459.8	-5577.6
## - V17_J1_5	1	10.14	1460.3	-5575.7
## - V1_J2_5	1	10.36	1460.5	-5575.0
## - V16_J2_3	1	12.48	1462.6	-5567.4

## - V15_J2_1	1	12.62	1462.8	-5566.9
## - V20_J2_1	1	13.39	1463.5	-5564.2
## - V20_J2_3	1	14.20	1464.3	-5561.3
## - V12_1_2_J1_6	1	15.00	1465.1	-5558.5
## - V24_J1_6	1	15.57	1465.7	-5556.4
## - V26_J1_5	1	16.25	1466.4	-5554.0
## - V29_J1_5	1	16.73	1466.9	-5552.3
## - V29_J1_3	1	18.44	1468.6	-5546.3
## - V13_1_J1_7	1	19.27	1469.4	-5543.3
## - V13_1_J1_2	1	21.33	1471.5	-5536.1
## - V4_J1_3	1	21.52	1471.7	-5535.4
## - V12_1_2_J1_7	1	24.39	1474.5	-5525.3
## - V30_J1_5	1	24.90	1475.0	-5523.5
## - V14_J2_5	1	25.03	1475.2	-5523.0
## - V30_J2_5	1	25.68	1475.8	-5520.7
## - V14_J2_1	1	26.47	1476.6	-5517.9
## - V23_J2_7	1	26.93	1477.1	-5516.3
## - V2_J2_2	1	26.94	1477.1	-5516.2
## - V15_J1_2	1	27.18	1477.3	-5515.4
## - V3_J1_5	1	27.76	1477.9	-5513.4
## - V4_J1_5	1	28.01	1478.2	-5512.5
## - V2_J2_7	1	29.51	1479.7	-5507.2
## - V15_J1_1	1	32.30	1482.4	-5497.4
## - V12_1_2_J2_7	1	34.44	1484.6	-5489.9
## - V26_J1_4	1	35.86	1486.0	-5484.9
## - V5_J1_4	1	38.10	1488.2	-5477.1
## - V19_J2_4	1	38.70	1488.8	-5475.0
## - V19_J2_5	1	39.68	1489.8	-5471.6
## - V4_J2_7	1	41.92	1492.1	-5463.8
## - V30_J1_2	1	43.90	1494.0	-5456.9
## - V30_J1_3	1	44.15	1494.3	-5456.0
## - V14_J2_4	1	44.78	1494.9	-5453.8
## - V16_J2_7	1	45.62	1495.8	-5450.9
## - V4_J1_4	1	45.70	1495.8	-5450.6
## - V13_2_J1_7	1	46.45	1496.6	-5448.0
## - V12_1_2_J1_3	1	47.49	1497.6	-5444.4
## - V19_J2_1	1	48.53	1498.7	-5440.8
## - V5_J2_1	1	49.17	1499.3	-5438.6
## - V15_J1_3	1	57.92	1508.1	-5408.3
## - V14_J2_3	1	59.78	1509.9	-5401.9
## - V15_J1_6	1	60.17	1510.3	-5400.6
## - V5_J2_3	1	62.93	1513.1	-5391.1
## - V17_J2_2	1	63.46	1513.6	-5389.2
## - V15_J1_7	1	64.73	1514.9	-5384.9
## - V1_J2_2	1	65.21	1515.3	-5383.2
## - V17_J2_7	1	67.97	1518.1	-5373.8
## - V30_J2_2	1	69.47	1519.6	-5368.6
## - V30_J1_1	1	73.09	1523.2	-5356.3
## - V14_J1_5	1	75.75	1525.9	-5347.2
## - V16_J1_3	1	77.40	1527.5	-5341.6
## - V1_J1_3	1	77.56	1527.7	-5341.0
## - V19_J2_3	1	83.03	1533.2	-5322.5
## - V3_J1_4	1	83.84	1534.0	-5319.7
## - V23_J1_3	1	86.22	1536.4	-5311.6

```

## - V14_J1_4      1      89.03 1539.2 -5302.1
## - V2_J1_3       1      91.90 1542.0 -5292.4
## - V17_J1_3      1      93.63 1543.8 -5286.6
## - V1_J2_7       1      97.40 1547.5 -5273.9
## - V12_1_2_J1_4  1     102.32 1552.5 -5257.4
## - V5_J1_5       1     103.47 1553.6 -5253.6
## - V3_J2_1       1     109.35 1559.5 -5233.9
## - V26_J2_1      1     110.87 1561.0 -5228.9
## - V4_J2_3       1     113.70 1563.8 -5219.4
## - V15_J2_7      1     114.47 1564.6 -5216.9
## - V4_J2_5       1     114.55 1564.7 -5216.6
## - V4_J2_1       1     121.55 1571.7 -5193.4
## - V19_J1_5      1     129.02 1579.2 -5168.8
## - V3_J2_5       1     134.12 1584.3 -5152.0
## - V15_J2_2      1     135.72 1585.9 -5146.7
## - V26_J2_5      1     152.62 1602.8 -5091.6
## - V26_J2_4      1     153.05 1603.2 -5090.2
## - V4_J2_4       1     159.19 1609.3 -5070.4
## - V12_1_2_J2_2  1     172.84 1623.0 -5026.4
## - V3_J2_3       1     178.54 1628.7 -5008.2
## - V19_J1_4      1     179.44 1629.6 -5005.3
## - V3_J2_4       1     194.12 1644.3 -4958.7
## - V20_J2_2      1     253.44 1703.6 -4774.4
## - J             12     291.65 1741.8 -4732.0
## - V5_J2_5       1     267.40 1717.5 -4732.0
## - V26_J2_3      1     280.92 1731.1 -4691.2
## - V5_J2_4       1     302.64 1752.8 -4626.4
## - V16_J2_2      1     428.43 1878.6 -4266.0
## - V             19    1034.86 2485.0 -2930.6
##
## Step:  AIC=-5606.04
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 + V20_J2_3 +
## V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
## V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
## V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V13_3_J2_5 + V20_J1_2 +
## V13_2_J1_4 + V26_J1_6 + V13_1_J1_5 + V26_J1_1 + V2_J1_6 +
## V15_J2_3 + V30_J2_3 + V24_J2_3 + V13_2_J1_5 + V13_1_J2_2 +
## V19_J1_3 + V14_J1_3 + V19_J1_1 + V16_J2_1 + V13_2_J2_5 +
## V29_J2_3 + V1_J1_1 + V23_J2_3 + V13_1_J2_7 + V14_J2_7 + V29_J2_1 +
## V29_J2_2 + V29_J1_4 + V13_3_J1_2 + V13_2_J1_2 + V16_J1_2 +
## V24_J1_3 + V5_J1_2 + V30_J1_7

```

##	Df	Sum of Sq	RSS	AIC
##				
## + V26_J1_7	1	2.13	1446.0	-5607.1
## + V16_J1_4	1	2.06	1446.0	-5606.8
## + V5_J1_6	1	2.04	1446.1	-5606.7
## + V30_J2_1	1	2.04	1446.1	-5606.7
## + V13_3_J1_1	1	2.00	1446.1	-5606.6
## + V20_J1_6	1	1.98	1446.1	-5606.5
## <none>			1448.1	-5606.0
## + V13_3_J2_4	1	1.84	1446.3	-5606.0
## + V24_J1_5	1	1.77	1446.3	-5605.8
## + V17_J2_1	1	1.77	1446.3	-5605.8
## + V13_2_J2_2	1	1.76	1446.3	-5605.7
## + V1_J1_7	1	1.74	1446.4	-5605.7
## + V20_J1_1	1	1.68	1446.4	-5605.5
## - V30_J1_7	1	2.05	1450.1	-5605.3
## + V20_J1_4	1	1.61	1446.5	-5605.2
## + V13_1_J1_3	1	1.59	1446.5	-5605.1
## + V20_J2_4	1	1.57	1446.5	-5605.0
## + V15_J2_4	1	1.54	1446.5	-5605.0
## + V23_J1_7	1	1.50	1446.6	-5604.8
## + V12_1_2_J1_1	1	1.47	1446.6	-5604.7
## + V17_J1_7	1	1.43	1446.7	-5604.5
## + V20_J1_7	1	1.40	1446.7	-5604.4
## - V1_J1_1	1	2.32	1450.4	-5604.4
## + V12_1_2_J1_5	1	1.35	1446.8	-5604.3
## + V4_J1_6	1	1.29	1446.8	-5604.1
## + V23_J2_2	1	1.29	1446.8	-5604.0
## - V19_J1_1	1	2.46	1450.6	-5603.8
## + V3_J1_2	1	1.11	1447.0	-5603.4
## + V24_J1_1	1	1.11	1447.0	-5603.4
## + V20_J1_5	1	1.10	1447.0	-5603.4
## - V5_J1_2	1	2.60	1450.7	-5603.4
## + V19_J1_6	1	1.08	1447.0	-5603.3
## - V24_J1_3	1	2.65	1450.7	-5603.2
## + V2_J1_7	1	1.00	1447.1	-5603.0
## + V16_J1_6	1	0.99	1447.1	-5603.0
## + V19_J2_7	1	0.96	1447.1	-5602.9
## + V14_J1_2	1	0.96	1447.1	-5602.9
## + V5_J1_7	1	0.96	1447.1	-5602.8
## + V1_J2_3	1	0.95	1447.2	-5602.8
## + V2_J2_1	1	0.92	1447.2	-5602.7
## - V16_J2_1	1	2.81	1450.9	-5602.6
## + V29_J1_1	1	0.86	1447.2	-5602.5
## + V17_J2_4	1	0.83	1447.3	-5602.4
## + V3_J1_3	1	0.80	1447.3	-5602.3
## + V30_J2_7	1	0.78	1447.3	-5602.2
## + V24_J2_4	1	0.78	1447.3	-5602.2
## + V23_J2_4	1	0.78	1447.3	-5602.2
## + V13_1_J2_4	1	0.77	1447.3	-5602.2
## + V16_J2_4	1	0.74	1447.4	-5602.1
## + V29_J2_5	1	0.72	1447.4	-5602.0
## - V29_J1_7	1	2.98	1451.1	-5602.0
## + V13_1_J1_1	1	0.71	1447.4	-5602.0

## + V24_J2_2	1	0.69	1447.4	-5601.9
## + V26_J2_2	1	0.67	1447.4	-5601.8
## + V17_J2_5	1	0.66	1447.4	-5601.8
## + V16_J2_5	1	0.65	1447.4	-5601.8
## + V13_1_J1_4	1	0.65	1447.5	-5601.7
## + V17_J2_3	1	0.63	1447.5	-5601.7
## + V13_2_J2_3	1	0.61	1447.5	-5601.6
## + V23_J2_5	1	0.59	1447.5	-5601.5
## + V14_J1_6	1	0.57	1447.5	-5601.5
## + V13_3_J1_6	1	0.53	1447.6	-5601.3
## + V3_J1_7	1	0.53	1447.6	-5601.3
## + V14_J1_7	1	0.46	1447.6	-5601.1
## + V13_3_J2_3	1	0.45	1447.7	-5601.0
## + V13_2_J2_7	1	0.43	1447.7	-5601.0
## + V13_2_J2_4	1	0.43	1447.7	-5600.9
## + V12_1_2_J2_3	1	0.41	1447.7	-5600.9
## + V5_J1_1	1	0.41	1447.7	-5600.9
## + V3_J2_7	1	0.39	1447.7	-5600.8
## + V1_J2_1	1	0.38	1447.7	-5600.8
## + V14_J2_2	1	0.38	1447.7	-5600.8
## + V3_J1_6	1	0.36	1447.7	-5600.7
## + V12_1_2_J2_1	1	0.36	1447.7	-5600.7
## + V15_J1_5	1	0.35	1447.8	-5600.7
## + V16_J1_1	1	0.34	1447.8	-5600.6
## + V29_J1_2	1	0.34	1447.8	-5600.6
## - V23_J2_3	1	3.38	1451.5	-5600.6
## + V13_3_J1_3	1	0.28	1447.8	-5600.4
## + V3_J1_1	1	0.28	1447.8	-5600.4
## + V2_J2_5	1	0.28	1447.8	-5600.4
## + V13_3_J2_2	1	0.28	1447.8	-5600.4
## + V29_J2_7	1	0.27	1447.8	-5600.4
## + V5_J2_7	1	0.25	1447.8	-5600.3
## + V30_J1_6	1	0.25	1447.8	-5600.3
## + V24_J2_7	1	0.24	1447.9	-5600.3
## + V24_J1_2	1	0.22	1447.9	-5600.2
## + V15_J1_4	1	0.21	1447.9	-5600.2
## + V20_J1_3	1	0.21	1447.9	-5600.2
## + V20_J2_5	1	0.20	1447.9	-5600.1
## + V26_J1_2	1	0.19	1447.9	-5600.1
## + V16_J1_5	1	0.19	1447.9	-5600.1
## + V23_J1_6	1	0.17	1447.9	-5600.0
## + V4_J1_2	1	0.15	1447.9	-5600.0
## + V13_3_J1_4	1	0.14	1448.0	-5599.9
## + V4_J1_1	1	0.14	1448.0	-5599.9
## + V17_J1_1	1	0.14	1448.0	-5599.9
## + V5_J2_2	1	0.13	1448.0	-5599.9
## + V24_J2_1	1	0.13	1448.0	-5599.9
## + V17_J1_4	1	0.13	1448.0	-5599.9
## + V12_1_2_J2_5	1	0.13	1448.0	-5599.9
## + V13_2_J2_1	1	0.13	1448.0	-5599.9
## + V1_J1_6	1	0.12	1448.0	-5599.9
## - V13_2_J1_4	1	3.58	1451.7	-5599.8
## + V5_J1_3	1	0.11	1448.0	-5599.8
## + V17_J1_6	1	0.09	1448.0	-5599.7

## + V20_J2_7	1	0.08	1448.0	-5599.7
## + V2_J2_4	1	0.08	1448.0	-5599.7
## + V1_J1_2	1	0.08	1448.0	-5599.7
## + V12_1_2_J2_4	1	0.08	1448.0	-5599.7
## + V2_J1_1	1	0.08	1448.0	-5599.7
## + V24_J1_4	1	0.07	1448.0	-5599.7
## + V13_3_J2_1	1	0.06	1448.0	-5599.6
## + V13_2_J1_1	1	0.05	1448.0	-5599.6
## + V2_J1_4	1	0.05	1448.0	-5599.6
## + V19_J2_2	1	0.05	1448.0	-5599.6
## + V26_J2_7	1	0.05	1448.0	-5599.6
## + V15_J2_5	1	0.05	1448.0	-5599.6
## + V23_J1_2	1	0.04	1448.0	-5599.6
## + V13_1_J2_3	1	0.04	1448.1	-5599.6
## + V4_J1_7	1	0.04	1448.1	-5599.5
## + V13_1_J2_5	1	0.04	1448.1	-5599.5
## + V16_J1_7	1	0.04	1448.1	-5599.5
## + V13_3_J2_7	1	0.03	1448.1	-5599.5
## + V19_J1_2	1	0.03	1448.1	-5599.5
## + V4_J2_2	1	0.03	1448.1	-5599.5
## + V13_3_J1_5	1	0.03	1448.1	-5599.5
## + V1_J1_4	1	0.03	1448.1	-5599.5
## + V2_J2_3	1	0.03	1448.1	-5599.5
## + V14_J1_1	1	0.02	1448.1	-5599.5
## + V23_J1_1	1	0.02	1448.1	-5599.5
## + V29_J2_4	1	0.02	1448.1	-5599.5
## + V19_J1_7	1	0.01	1448.1	-5599.5
## + V13_3_J1_7	1	0.01	1448.1	-5599.4
## + V23_J1_5	1	0.00	1448.1	-5599.4
## + V13_1_J2_1	1	0.00	1448.1	-5599.4
## + V13_2_J1_3	1	0.00	1448.1	-5599.4
## + V2_J1_2	1	0.00	1448.1	-5599.4
## + V30_J1_4	1	0.00	1448.1	-5599.4
## + V17_J1_2	1	0.00	1448.1	-5599.4
## + V29_J1_6	1	0.00	1448.1	-5599.4
## + V3_J2_2	1	0.00	1448.1	-5599.4
## + V1_J2_4	1	0.00	1448.1	-5599.4
## + V13_1_J1_6	1	0.00	1448.1	-5599.4
## + V30_J2_4	1	0.00	1448.1	-5599.4
## - V13_2_J2_5	1	3.90	1452.0	-5598.7
## - V2_J1_6	1	4.01	1452.1	-5598.3
## - V16_J1_2	1	4.02	1452.1	-5598.2
## - V13_3_J2_5	1	4.22	1452.3	-5597.6
## - V13_1_J2_2	1	4.37	1452.5	-5597.0
## - V13_1_J2_7	1	4.54	1452.6	-5596.4
## - V14_J2_7	1	4.63	1452.7	-5596.1
## - V29_J1_4	1	4.78	1452.9	-5595.5
## - V13_2_J1_5	1	4.84	1452.9	-5595.3
## - V13_2_J1_2	1	5.03	1453.1	-5594.6
## - V26_J1_1	1	5.06	1453.2	-5594.5
## - V23_J1_4	1	5.20	1453.3	-5594.0
## - V12_1_2_J1_2	1	5.24	1453.3	-5593.9
## - V13_3_J1_2	1	5.29	1453.4	-5593.7
## - V1_J1_5	1	5.30	1453.4	-5593.7

## - V26_J1_3	1	5.64	1453.7	-5592.5
## - V13_2_J1_6	1	6.04	1454.1	-5591.1
## - V2_J1_5	1	6.11	1454.2	-5590.8
## - V19_J1_3	1	6.41	1454.5	-5589.7
## - V29_J2_2	1	6.53	1454.6	-5589.3
## - V29_J2_1	1	6.54	1454.6	-5589.2
## - V14_J1_3	1	7.57	1455.7	-5585.6
## - V23_J2_1	1	7.86	1456.0	-5584.5
## - V24_J2_3	1	7.94	1456.0	-5584.2
## - V20_J1_2	1	8.22	1456.3	-5583.2
## - V26_J1_6	1	8.75	1456.8	-5581.4
## - V15_J2_3	1	8.75	1456.8	-5581.4
## - V30_J2_3	1	9.19	1457.3	-5579.8
## - V29_J2_3	1	9.36	1457.5	-5579.2
## - V24_J1_7	1	9.42	1457.5	-5579.0
## - V13_1_J1_5	1	9.50	1457.6	-5578.7
## - V24_J2_5	1	9.56	1457.7	-5578.5
## - V17_J1_5	1	10.12	1458.2	-5576.5
## - V1_J2_5	1	10.38	1458.5	-5575.5
## - V15_J2_1	1	12.50	1460.6	-5568.0
## - V16_J2_3	1	12.54	1460.6	-5567.9
## - V20_J2_1	1	13.62	1461.7	-5564.0
## - V20_J2_3	1	14.24	1462.3	-5561.8
## - V12_1_2_J1_6	1	15.02	1463.1	-5559.0
## - V24_J1_6	1	15.55	1463.7	-5557.1
## - V26_J1_5	1	16.43	1464.5	-5554.0
## - V29_J1_5	1	16.77	1464.9	-5552.8
## - V13_1_J1_7	1	18.22	1466.3	-5547.7
## - V29_J1_3	1	18.37	1466.5	-5547.1
## - V13_1_J1_2	1	21.14	1469.2	-5537.3
## - V4_J1_3	1	21.70	1469.8	-5535.3
## - V12_1_2_J1_7	1	23.24	1471.3	-5529.9
## - V14_J2_5	1	25.25	1473.3	-5522.8
## - V30_J1_5	1	26.58	1474.7	-5518.1
## - V2_J2_2	1	26.87	1475.0	-5517.1
## - V14_J2_1	1	26.96	1475.1	-5516.8
## - V23_J2_7	1	27.24	1475.3	-5515.8
## - V15_J1_2	1	27.39	1475.5	-5515.3
## - V30_J2_5	1	27.39	1475.5	-5515.2
## - V3_J1_5	1	27.91	1476.0	-5513.4
## - V4_J1_5	1	28.24	1476.3	-5512.3
## - V2_J2_7	1	29.76	1477.8	-5506.9
## - V15_J1_1	1	32.47	1480.6	-5497.4
## - V12_1_2_J2_7	1	34.57	1482.7	-5490.0
## - V26_J1_4	1	36.39	1484.5	-5483.6
## - V5_J1_4	1	38.55	1486.7	-5476.1
## - V19_J2_4	1	39.13	1487.2	-5474.0
## - V19_J2_5	1	39.90	1488.0	-5471.3
## - V30_J1_3	1	39.97	1488.1	-5471.1
## - V4_J2_7	1	42.41	1490.5	-5462.6
## - V13_2_J1_7	1	44.78	1492.9	-5454.3
## - V14_J2_4	1	45.29	1493.4	-5452.5
## - V30_J1_2	1	45.87	1494.0	-5450.5
## - V16_J2_7	1	45.95	1494.0	-5450.2

```

## - V4_J1_4      1      46.28 1494.4 -5449.1
## - V12_1_2_J1_3 1      47.35 1495.5 -5445.4
## - V19_J2_1     1      49.12 1497.2 -5439.2
## - V5_J2_1      1      49.73 1497.8 -5437.1
## - V15_J1_3     1      58.11 1506.2 -5408.1
## - V14_J2_3     1      60.13 1508.2 -5401.1
## - V15_J1_6     1      60.19 1508.3 -5400.9
## - V5_J2_3      1      63.17 1511.3 -5390.6
## - V17_J2_2     1      63.33 1511.4 -5390.1
## - V30_J2_2     1      63.39 1511.5 -5389.9
## - V1_J2_2      1      65.08 1513.2 -5384.1
## - V15_J1_7     1      66.07 1514.2 -5380.7
## - V17_J2_7     1      68.31 1516.4 -5373.0
## - V30_J1_1     1      75.13 1523.2 -5349.7
## - V14_J1_5     1      76.12 1524.2 -5346.3
## - V16_J1_3     1      77.47 1525.6 -5341.7
## - V1_J1_3      1      77.57 1525.7 -5341.3
## - V19_J2_3     1      83.36 1531.5 -5321.6
## - V3_J1_4      1      84.49 1532.6 -5317.8
## - V23_J1_3     1      86.38 1534.5 -5311.4
## - V14_J1_4     1      89.81 1537.9 -5299.8
## - V2_J1_3      1      91.94 1540.0 -5292.6
## - V17_J1_3     1      93.63 1541.7 -5286.9
## - V1_J2_7      1      97.81 1545.9 -5272.8
## - V12_1_2_J1_4 1     102.65 1550.8 -5256.5
## - V5_J1_5      1     103.75 1551.8 -5252.8
## - V3_J2_1      1     110.15 1558.2 -5231.5
## - V26_J2_1     1     111.81 1559.9 -5225.9
## - V4_J2_3      1     114.17 1562.3 -5218.1
## - V15_J2_7     1     114.32 1562.4 -5217.6
## - V4_J2_5      1     115.00 1563.1 -5215.3
## - V4_J2_1      1     122.51 1570.6 -5190.4
## - V19_J1_5     1     129.41 1577.5 -5167.6
## - V3_J2_5      1     134.44 1582.5 -5151.0
## - V15_J2_2     1     136.19 1584.3 -5145.3
## - V26_J2_5     1     153.18 1601.3 -5089.8
## - V26_J2_4     1     153.96 1602.1 -5087.3
## - V4_J2_4      1     160.08 1608.2 -5067.4
## - V12_1_2_J2_2 1     172.32 1620.4 -5028.0
## - V3_J2_3      1     178.93 1627.0 -5006.8
## - V19_J1_4     1     180.41 1628.5 -5002.1
## - V3_J2_4      1     194.93 1643.0 -4956.0
## - V20_J2_2     1     253.17 1701.3 -4774.8
## - J            12     286.94 1735.0 -4745.6
## - V5_J2_5      1     267.85 1716.0 -4730.2
## - V26_J2_3     1     281.67 1729.8 -4688.4
## - V5_J2_4      1     303.62 1751.7 -4622.9
## - V16_J2_2     1     428.23 1876.3 -4265.5
## - V            19    1025.09 2473.2 -2948.8
##
## Step:  AIC=-5607.06
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##      V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##      V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +

```



```

##      V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
##      V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
##      V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
##      V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
##      V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
##      V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
##      V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
##      V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
##      V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 + V20_J2_3 +
##      V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
##      V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
##      V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
##      V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
##      V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V13_3_J2_5 + V20_J1_2 +
##      V13_2_J1_4 + V26_J1_6 + V13_1_J1_5 + V26_J1_1 + V2_J1_6 +
##      V15_J2_3 + V30_J2_3 + V24_J2_3 + V13_2_J1_5 + V13_1_J2_2 +
##      V19_J1_3 + V14_J1_3 + V19_J1_1 + V16_J2_1 + V13_2_J2_5 +
##      V29_J2_3 + V1_J1_1 + V23_J2_3 + V13_1_J2_7 + V14_J2_7 + V29_J2_1 +
##      V29_J2_2 + V29_J1_4 + V13_3_J1_2 + V13_2_J1_2 + V16_J1_2 +
##      V24_J1_3 + V5_J1_2 + V30_J1_7 + V26_J1_7
##
##      Df Sum of Sq    RSS    AIC
## + V16_J1_4      1      2.11 1443.9 -5608.0
## + V30_J2_1      1      2.06 1443.9 -5607.9
## + V1_J1_7       1      2.04 1443.9 -5607.8
## + V5_J1_6       1      2.04 1443.9 -5607.8
## + V20_J1_6      1      2.00 1444.0 -5607.6
## + V13_3_J1_1    1      2.00 1444.0 -5607.6
## <none>                1446.0 -5607.1
## + V13_3_J2_4    1      1.84 1444.1 -5607.0
## + V17_J2_1      1      1.79 1444.2 -5606.9
## + V24_J1_5      1      1.71 1444.3 -5606.6
## + V17_J1_7      1      1.70 1444.3 -5606.5
## + V20_J1_1      1      1.66 1444.3 -5606.4
## + V13_2_J2_2    1      1.66 1444.3 -5606.4
## + V20_J1_4      1      1.60 1444.4 -5606.2
## + V20_J2_4      1      1.58 1444.4 -5606.1
## + V13_1_J1_3    1      1.58 1444.4 -5606.1
## - V26_J1_7      1      2.13 1448.1 -5606.0
## + V15_J2_4      1      1.54 1444.4 -5606.0
## + V12_1_2_J1_1  1      1.48 1444.5 -5605.7
## + V23_J2_2      1      1.42 1444.5 -5605.5
## - V30_J1_7      1      2.33 1448.3 -5605.3
## + V12_1_2_J1_5  1      1.35 1444.6 -5605.3
## - V1_J1_1       1      2.34 1448.3 -5605.3
## + V4_J1_6       1      1.29 1444.7 -5605.1
## - V19_J1_1      1      2.44 1448.4 -5604.9
## + V23_J1_7      1      1.24 1444.7 -5604.9
## + V5_J1_7       1      1.21 1444.8 -5604.8
## + V20_J1_7      1      1.16 1444.8 -5604.6
## + V19_J1_6      1      1.10 1444.9 -5604.4
## - V24_J1_3      1      2.60 1448.6 -5604.3
## + V20_J1_5      1      1.09 1444.9 -5604.3
## - V29_J1_7      1      2.61 1448.6 -5604.3

```

## + V24_J1_1	1	1.07	1444.9	-5604.3
## + V19_J2_7	1	1.07	1444.9	-5604.3
## + V3_J1_2	1	1.03	1444.9	-5604.1
## - V5_J1_2	1	2.72	1448.7	-5603.9
## + V1_J2_3	1	0.97	1445.0	-5603.9
## + V16_J1_6	1	0.96	1445.0	-5603.9
## + V2_J2_1	1	0.90	1445.1	-5603.7
## + V30_J2_7	1	0.87	1445.1	-5603.6
## + V14_J1_2	1	0.86	1445.1	-5603.5
## + V17_J2_4	1	0.85	1445.1	-5603.5
## + V29_J1_1	1	0.83	1445.1	-5603.4
## - V16_J2_1	1	2.87	1448.8	-5603.4
## + V24_J2_4	1	0.82	1445.2	-5603.4
## + V2_J1_7	1	0.80	1445.2	-5603.3
## + V3_J1_3	1	0.79	1445.2	-5603.3
## + V23_J2_4	1	0.77	1445.2	-5603.2
## + V13_1_J2_4	1	0.76	1445.2	-5603.2
## + V29_J2_5	1	0.75	1445.2	-5603.1
## + V13_1_J1_1	1	0.71	1445.3	-5603.0
## + V16_J2_4	1	0.71	1445.3	-5603.0
## + V16_J2_5	1	0.68	1445.3	-5602.9
## + V17_J2_5	1	0.67	1445.3	-5602.8
## + V13_1_J1_4	1	0.64	1445.3	-5602.7
## + V24_J2_2	1	0.63	1445.3	-5602.7
## + V17_J2_3	1	0.62	1445.3	-5602.7
## + V23_J2_5	1	0.59	1445.4	-5602.5
## + V13_2_J2_3	1	0.58	1445.4	-5602.5
## + V14_J1_6	1	0.57	1445.4	-5602.5
## + V13_3_J1_6	1	0.53	1445.4	-5602.3
## + V3_J2_7	1	0.46	1445.5	-5602.1
## + V13_3_J2_3	1	0.45	1445.5	-5602.0
## + V12_1_2_J2_3	1	0.41	1445.6	-5601.9
## + V13_2_J2_4	1	0.41	1445.6	-5601.9
## + V5_J1_1	1	0.40	1445.6	-5601.9
## + V1_J2_1	1	0.40	1445.6	-5601.8
## + V13_2_J2_7	1	0.38	1445.6	-5601.8
## + V29_J1_2	1	0.37	1445.6	-5601.8
## + V3_J1_6	1	0.37	1445.6	-5601.8
## + V3_J1_7	1	0.37	1445.6	-5601.7
## + V12_1_2_J2_1	1	0.36	1445.6	-5601.7
## + V15_J1_5	1	0.35	1445.6	-5601.7
## + V13_3_J2_2	1	0.34	1445.6	-5601.6
## + V14_J1_7	1	0.32	1445.7	-5601.6
## - V23_J2_3	1	3.38	1449.3	-5601.6
## + V16_J1_1	1	0.31	1445.7	-5601.6
## + V14_J2_2	1	0.31	1445.7	-5601.5
## + V3_J1_1	1	0.29	1445.7	-5601.5
## + V13_3_J1_3	1	0.29	1445.7	-5601.4
## + V2_J2_5	1	0.27	1445.7	-5601.4
## + V24_J1_2	1	0.24	1445.7	-5601.3
## + V30_J1_6	1	0.24	1445.7	-5601.3
## + V29_J2_7	1	0.23	1445.7	-5601.2
## + V15_J1_4	1	0.21	1445.8	-5601.2
## + V20_J2_5	1	0.20	1445.8	-5601.2

## + V24_J2_7	1	0.20	1445.8	-5601.2
## + V16_J1_5	1	0.20	1445.8	-5601.1
## + V20_J1_3	1	0.20	1445.8	-5601.1
## + V5_J2_7	1	0.20	1445.8	-5601.1
## + V4_J1_2	1	0.20	1445.8	-5601.1
## + V5_J2_2	1	0.18	1445.8	-5601.1
## + V23_J1_6	1	0.17	1445.8	-5601.0
## + V24_J2_1	1	0.14	1445.8	-5600.9
## + V13_3_J1_4	1	0.14	1445.8	-5600.9
## + V4_J1_1	1	0.14	1445.8	-5600.9
## + V17_J1_1	1	0.13	1445.8	-5600.9
## + V12_1_2_J2_5	1	0.13	1445.8	-5600.9
## + V17_J1_4	1	0.12	1445.8	-5600.9
## + V26_J2_2	1	0.12	1445.8	-5600.9
## + V1_J1_6	1	0.12	1445.8	-5600.8
## + V5_J1_3	1	0.12	1445.8	-5600.8
## + V1_J1_2	1	0.12	1445.8	-5600.8
## + V13_2_J2_1	1	0.12	1445.8	-5600.8
## + V2_J2_4	1	0.09	1445.9	-5600.7
## + V17_J1_6	1	0.08	1445.9	-5600.7
## + V2_J1_1	1	0.08	1445.9	-5600.7
## + V24_J1_4	1	0.08	1445.9	-5600.7
## + V16_J1_7	1	0.08	1445.9	-5600.7
## + V12_1_2_J2_4	1	0.08	1445.9	-5600.7
## + V26_J2_7	1	0.08	1445.9	-5600.7
## - V13_2_J1_4	1	3.64	1449.6	-5600.6
## + V13_3_J2_1	1	0.06	1445.9	-5600.6
## + V4_J2_2	1	0.06	1445.9	-5600.6
## + V20_J2_7	1	0.05	1445.9	-5600.6
## + V13_2_J1_1	1	0.05	1445.9	-5600.6
## + V19_J1_2	1	0.05	1445.9	-5600.6
## + V2_J1_4	1	0.05	1445.9	-5600.6
## + V15_J2_5	1	0.05	1445.9	-5600.6
## + V13_3_J1_7	1	0.04	1445.9	-5600.6
## + V13_1_J2_3	1	0.04	1445.9	-5600.6
## + V13_1_J2_5	1	0.04	1445.9	-5600.6
## + V13_3_J1_5	1	0.03	1445.9	-5600.5
## + V19_J2_2	1	0.03	1445.9	-5600.5
## + V2_J2_3	1	0.03	1445.9	-5600.5
## + V1_J1_4	1	0.03	1445.9	-5600.5
## + V23_J1_2	1	0.03	1445.9	-5600.5
## + V29_J2_4	1	0.02	1445.9	-5600.5
## + V14_J1_1	1	0.02	1446.0	-5600.5
## + V23_J1_1	1	0.02	1446.0	-5600.5
## + V13_3_J2_7	1	0.02	1446.0	-5600.5
## + V4_J1_7	1	0.01	1446.0	-5600.4
## + V26_J1_2	1	0.00	1446.0	-5600.4
## + V23_J1_5	1	0.00	1446.0	-5600.4
## + V13_2_J1_3	1	0.00	1446.0	-5600.4
## + V13_1_J2_1	1	0.00	1446.0	-5600.4
## + V29_J1_6	1	0.00	1446.0	-5600.4
## + V3_J2_2	1	0.00	1446.0	-5600.4
## + V17_J1_2	1	0.00	1446.0	-5600.4
## + V1_J2_4	1	0.00	1446.0	-5600.4

## + V2_J1_2	1	0.00	1446.0	-5600.4
## + V19_J1_7	1	0.00	1446.0	-5600.4
## + V30_J1_4	1	0.00	1446.0	-5600.4
## + V30_J2_4	1	0.00	1446.0	-5600.4
## + V13_1_J1_6	1	0.00	1446.0	-5600.4
## - V26_J1_3	1	3.77	1449.7	-5600.1
## - V13_2_J2_5	1	3.84	1449.8	-5599.9
## - V2_J1_6	1	3.98	1450.0	-5599.4
## - V13_3_J2_5	1	4.23	1450.2	-5598.5
## - V16_J1_2	1	4.23	1450.2	-5598.5
## - V13_1_J2_2	1	4.55	1450.5	-5597.3
## - V13_1_J2_7	1	4.74	1450.7	-5596.7
## - V13_2_J1_5	1	4.78	1450.7	-5596.5
## - V14_J2_7	1	4.83	1450.8	-5596.4
## - V29_J1_4	1	4.85	1450.8	-5596.3
## - V12_1_2_J1_2	1	5.07	1451.0	-5595.5
## - V13_2_J1_2	1	5.14	1451.1	-5595.2
## - V23_J1_4	1	5.20	1451.2	-5595.0
## - V1_J1_5	1	5.27	1451.2	-5594.8
## - V13_3_J1_2	1	5.47	1451.4	-5594.1
## - V2_J1_5	1	6.08	1452.0	-5591.9
## - V13_2_J1_6	1	6.10	1452.1	-5591.8
## - V29_J2_2	1	6.38	1452.3	-5590.8
## - V19_J1_3	1	6.39	1452.4	-5590.8
## - V26_J1_1	1	6.49	1452.5	-5590.4
## - V29_J2_1	1	6.60	1452.6	-5590.0
## - V14_J1_3	1	7.59	1453.6	-5586.5
## - V23_J2_1	1	7.84	1453.8	-5585.6
## - V24_J2_3	1	8.04	1454.0	-5584.9
## - V20_J1_2	1	8.47	1454.4	-5583.3
## - V15_J2_3	1	8.75	1454.7	-5582.3
## - V30_J2_3	1	9.25	1455.2	-5580.5
## - V24_J2_5	1	9.44	1455.4	-5579.8
## - V29_J2_3	1	9.45	1455.4	-5579.8
## - V13_1_J1_5	1	9.50	1455.5	-5579.6
## - V24_J1_7	1	10.05	1456.0	-5577.7
## - V17_J1_5	1	10.08	1456.0	-5577.6
## - V1_J2_5	1	10.41	1456.4	-5576.4
## - V26_J1_6	1	10.45	1456.4	-5576.2
## - V15_J2_1	1	12.48	1458.5	-5569.0
## - V16_J2_3	1	12.62	1458.6	-5568.5
## - V26_J1_5	1	12.69	1458.7	-5568.2
## - V20_J2_1	1	13.67	1459.6	-5564.7
## - V20_J2_3	1	14.27	1460.2	-5562.6
## - V12_1_2_J1_6	1	15.02	1461.0	-5560.0
## - V24_J1_6	1	15.68	1461.7	-5557.6
## - V29_J1_5	1	16.88	1462.8	-5553.3
## - V13_1_J1_7	1	17.36	1463.3	-5551.6
## - V29_J1_3	1	18.28	1464.2	-5548.4
## - V13_1_J1_2	1	21.48	1467.4	-5537.0
## - V4_J1_3	1	21.73	1467.7	-5536.1
## - V12_1_2_J1_7	1	22.27	1468.2	-5534.2
## - V14_J2_5	1	25.25	1471.2	-5523.7
## - V30_J1_5	1	26.68	1472.7	-5518.6

## - V15_J1_2	1	26.98	1473.0	-5517.5
## - V14_J2_1	1	27.00	1473.0	-5517.5
## - V2_J2_2	1	27.37	1473.3	-5516.2
## - V30_J2_5	1	27.51	1473.5	-5515.7
## - V23_J2_7	1	27.71	1473.7	-5515.0
## - V3_J1_5	1	27.85	1473.8	-5514.5
## - V4_J1_5	1	28.25	1474.2	-5513.1
## - V26_J1_4	1	29.87	1475.8	-5507.4
## - V2_J2_7	1	30.30	1476.3	-5505.9
## - V15_J1_1	1	32.45	1478.4	-5498.3
## - V12_1_2_J2_7	1	35.07	1481.0	-5489.1
## - V5_J1_4	1	38.53	1484.5	-5476.9
## - V19_J2_4	1	39.05	1485.0	-5475.1
## - V19_J2_5	1	39.78	1485.8	-5472.6
## - V30_J1_3	1	39.88	1485.8	-5472.2
## - V4_J2_7	1	42.98	1489.0	-5461.4
## - V13_2_J1_7	1	43.14	1489.1	-5460.8
## - V14_J2_4	1	45.32	1491.3	-5453.2
## - V30_J1_2	1	45.48	1491.5	-5452.6
## - V4_J1_4	1	46.28	1492.2	-5449.9
## - V16_J2_7	1	46.68	1492.7	-5448.5
## - V12_1_2_J1_3	1	47.39	1493.4	-5446.0
## - V19_J2_1	1	49.05	1495.0	-5440.2
## - V5_J2_1	1	49.75	1495.7	-5437.8
## - V15_J1_3	1	58.06	1504.0	-5409.0
## - V14_J2_3	1	60.14	1506.1	-5401.8
## - V15_J1_6	1	60.18	1506.2	-5401.7
## - V5_J2_3	1	63.15	1509.1	-5391.4
## - V30_J2_2	1	63.89	1509.9	-5388.9
## - V17_J2_2	1	64.05	1510.0	-5388.3
## - V1_J2_2	1	65.83	1511.8	-5382.2
## - V15_J1_7	1	67.26	1513.2	-5377.3
## - V17_J2_7	1	69.10	1515.1	-5371.0
## - V30_J1_1	1	75.28	1521.2	-5349.8
## - V14_J1_5	1	76.14	1522.1	-5346.9
## - V16_J1_3	1	77.74	1523.7	-5341.4
## - V1_J1_3	1	77.74	1523.7	-5341.4
## - V19_J2_3	1	83.22	1529.2	-5322.7
## - V3_J1_4	1	84.36	1530.3	-5318.9
## - V23_J1_3	1	86.45	1532.4	-5311.7
## - V14_J1_4	1	89.82	1535.8	-5300.3
## - V2_J1_3	1	92.11	1538.1	-5292.6
## - V17_J1_3	1	93.79	1539.8	-5286.9
## - V26_J2_1	1	97.43	1543.4	-5274.6
## - V1_J2_7	1	98.75	1544.7	-5270.2
## - V12_1_2_J1_4	1	102.62	1548.6	-5257.2
## - V5_J1_5	1	103.74	1549.7	-5253.4
## - V3_J2_1	1	110.08	1556.0	-5232.2
## - V15_J2_7	1	113.26	1559.2	-5221.6
## - V4_J2_3	1	114.19	1560.2	-5218.4
## - V4_J2_5	1	114.99	1561.0	-5215.8
## - V4_J2_1	1	122.60	1568.6	-5190.5
## - V19_J1_5	1	129.23	1575.2	-5168.6
## - V3_J2_5	1	134.26	1580.2	-5152.0

```

## - V26_J2_5      1      134.68 1580.7 -5150.6
## - V15_J2_2      1      135.09 1581.1 -5149.2
## - V26_J2_4      1      135.12 1581.1 -5149.2
## - V4_J2_4       1      160.15 1606.1 -5067.5
## - V12_1_2_J2_2  1      173.30 1619.3 -5025.1
## - V3_J2_3       1      178.76 1624.7 -5007.6
## - V19_J1_4      1      180.18 1626.2 -5003.0
## - V3_J2_4       1      194.80 1640.8 -4956.5
## - V26_J2_3      1      252.44 1698.4 -4776.9
## - V20_J2_2      1      254.46 1700.4 -4770.8
## - J             12      287.92 1733.9 -4742.4
## - V5_J2_5       1      267.78 1713.7 -4730.2
## - V5_J2_4       1      303.65 1749.6 -4622.5
## - V16_J2_2      1      429.94 1875.9 -4260.1
## - V             19     1022.08 2468.1 -2952.9
##
## Step:  AIC=-5608.01
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 + V20_J2_3 +
## V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
## V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
## V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V13_3_J2_5 + V20_J1_2 +
## V13_2_J1_4 + V26_J1_6 + V13_1_J1_5 + V26_J1_1 + V2_J1_6 +
## V15_J2_3 + V30_J2_3 + V24_J2_3 + V13_2_J1_5 + V13_1_J2_2 +
## V19_J1_3 + V14_J1_3 + V19_J1_1 + V16_J2_1 + V13_2_J2_5 +
## V29_J2_3 + V1_J1_1 + V23_J2_3 + V13_1_J2_7 + V14_J2_7 + V29_J2_1 +
## V29_J2_2 + V29_J1_4 + V13_3_J1_2 + V13_2_J1_2 + V16_J1_2 +
## V24_J1_3 + V5_J1_2 + V30_J1_7 + V26_J1_7 + V16_J1_4
##
##
##      Df Sum of Sq    RSS    AIC
## + V1_J1_7      1      2.17 1441.7 -5609.2
## + V30_J2_1      1      2.13 1441.7 -5609.0
## + V13_3_J1_1    1      2.08 1441.8 -5608.9
## + V5_J1_6       1      2.02 1441.8 -5608.6
## + V20_J1_6      1      1.94 1441.9 -5608.4
## <none>                      1443.9 -5608.0
## + V17_J2_1      1      1.79 1442.1 -5607.8
## + V17_J1_7      1      1.79 1442.1 -5607.8
## + V13_3_J2_4    1      1.79 1442.1 -5607.8
## + V20_J1_1      1      1.72 1442.1 -5607.6
## + V13_2_J2_2    1      1.67 1442.2 -5607.4
## + V15_J2_4      1      1.64 1442.2 -5607.3

```

## + V13_1_J1_3	1	1.62	1442.2	-5607.2
## + V24_J1_5	1	1.59	1442.3	-5607.1
## - V16_J1_4	1	2.11	1446.0	-5607.1
## + V20_J2_4	1	1.54	1442.3	-5606.9
## - V26_J1_7	1	2.17	1446.0	-5606.8
## + V12_1_2_J1_1	1	1.46	1442.4	-5606.6
## + V23_J2_2	1	1.45	1442.4	-5606.6
## - V1_J1_1	1	2.25	1446.1	-5606.6
## + V12_1_2_J1_5	1	1.41	1442.5	-5606.4
## + V4_J1_6	1	1.30	1442.6	-5606.1
## - V19_J1_1	1	2.42	1446.3	-5605.9
## + V5_J1_7	1	1.24	1442.6	-5605.8
## + V23_J1_7	1	1.23	1442.6	-5605.8
## - V30_J1_7	1	2.46	1446.3	-5605.8
## + V20_J1_4	1	1.22	1442.6	-5605.8
## + V20_J1_5	1	1.17	1442.7	-5605.6
## + V16_J2_5	1	1.16	1442.7	-5605.6
## - V24_J1_3	1	2.57	1446.4	-5605.4
## + V19_J1_6	1	1.12	1442.7	-5605.4
## - V29_J1_7	1	2.59	1446.5	-5605.3
## + V20_J1_7	1	1.10	1442.8	-5605.3
## + V19_J2_7	1	1.09	1442.8	-5605.3
## + V3_J1_2	1	1.01	1442.8	-5605.0
## + V24_J1_1	1	1.01	1442.8	-5605.0
## - V5_J1_2	1	2.74	1446.6	-5604.8
## + V1_J2_3	1	0.94	1442.9	-5604.8
## + V13_1_J1_4	1	0.94	1442.9	-5604.8
## + V2_J2_1	1	0.91	1443.0	-5604.6
## + V24_J2_4	1	0.86	1443.0	-5604.5
## + V14_J1_2	1	0.84	1443.0	-5604.4
## + V29_J1_1	1	0.82	1443.0	-5604.3
## + V30_J2_7	1	0.81	1443.0	-5604.3
## + V13_1_J2_4	1	0.81	1443.0	-5604.3
## + V3_J1_3	1	0.81	1443.0	-5604.3
## + V17_J2_4	1	0.81	1443.0	-5604.3
## + V29_J2_5	1	0.78	1443.1	-5604.2
## + V23_J2_4	1	0.76	1443.1	-5604.1
## + V2_J1_7	1	0.74	1443.1	-5604.0
## + V24_J2_2	1	0.67	1443.2	-5603.8
## + V13_1_J1_1	1	0.66	1443.2	-5603.7
## + V17_J2_3	1	0.63	1443.2	-5603.6
## + V17_J2_5	1	0.61	1443.2	-5603.6
## + V23_J2_5	1	0.60	1443.3	-5603.5
## - V13_2_J1_4	1	3.09	1447.0	-5603.5
## + V13_2_J2_3	1	0.59	1443.3	-5603.5
## + V14_J1_6	1	0.57	1443.3	-5603.4
## + V16_J1_6	1	0.56	1443.3	-5603.4
## + V13_3_J1_6	1	0.49	1443.4	-5603.2
## + V16_J1_5	1	0.48	1443.4	-5603.1
## + V3_J2_7	1	0.47	1443.4	-5603.1
## + V13_3_J2_3	1	0.45	1443.4	-5603.0
## + V5_J1_1	1	0.42	1443.5	-5602.9
## + V13_2_J2_4	1	0.39	1443.5	-5602.8
## + V15_J1_4	1	0.39	1443.5	-5602.8

## + V12_1_2_J2_1	1	0.39	1443.5	-5602.8
## + V29_J1_2	1	0.39	1443.5	-5602.8
## + V1_J2_1	1	0.39	1443.5	-5602.8
## - V23_J2_3	1	3.31	1447.2	-5602.8
## + V12_1_2_J2_3	1	0.38	1443.5	-5602.8
## + V3_J1_6	1	0.38	1443.5	-5602.7
## + V13_2_J2_7	1	0.37	1443.5	-5602.7
## + V16_J2_4	1	0.36	1443.5	-5602.7
## + V3_J1_7	1	0.35	1443.5	-5602.6
## + V13_3_J2_2	1	0.32	1443.5	-5602.5
## + V2_J2_5	1	0.32	1443.5	-5602.5
## + V14_J1_7	1	0.31	1443.5	-5602.5
## + V14_J2_2	1	0.30	1443.6	-5602.5
## + V3_J1_1	1	0.30	1443.6	-5602.5
## + V13_3_J1_3	1	0.28	1443.6	-5602.4
## + V15_J1_5	1	0.27	1443.6	-5602.4
## + V24_J1_2	1	0.23	1443.6	-5602.2
## + V24_J2_7	1	0.21	1443.7	-5602.2
## + V29_J2_7	1	0.21	1443.7	-5602.1
## + V4_J1_2	1	0.21	1443.7	-5602.1
## + V20_J1_3	1	0.20	1443.7	-5602.1
## + V30_J1_6	1	0.19	1443.7	-5602.1
## + V5_J2_7	1	0.19	1443.7	-5602.1
## + V5_J2_2	1	0.18	1443.7	-5602.0
## + V20_J2_5	1	0.18	1443.7	-5602.0
## + V23_J1_6	1	0.17	1443.7	-5602.0
## + V17_J1_1	1	0.16	1443.7	-5601.9
## + V24_J2_1	1	0.15	1443.7	-5601.9
## + V1_J1_6	1	0.15	1443.7	-5601.9
## + V12_1_2_J2_5	1	0.14	1443.7	-5601.9
## + V4_J1_1	1	0.14	1443.7	-5601.9
## - V16_J2_1	1	3.56	1447.4	-5601.9
## + V13_2_J2_1	1	0.13	1443.7	-5601.8
## + V5_J1_3	1	0.12	1443.7	-5601.8
## + V26_J2_2	1	0.12	1443.7	-5601.8
## + V16_J1_1	1	0.11	1443.8	-5601.8
## + V17_J1_6	1	0.10	1443.8	-5601.7
## + V1_J1_2	1	0.10	1443.8	-5601.7
## + V12_1_2_J2_4	1	0.08	1443.8	-5601.7
## + V26_J2_7	1	0.08	1443.8	-5601.7
## + V2_J2_4	1	0.07	1443.8	-5601.6
## + V2_J1_1	1	0.07	1443.8	-5601.6
## + V4_J2_2	1	0.06	1443.8	-5601.6
## + V13_3_J2_1	1	0.06	1443.8	-5601.6
## + V13_3_J1_7	1	0.05	1443.8	-5601.6
## + V20_J2_7	1	0.05	1443.8	-5601.6
## + V19_J1_2	1	0.05	1443.8	-5601.6
## + V13_3_J1_4	1	0.05	1443.8	-5601.5
## + V13_3_J1_5	1	0.05	1443.8	-5601.5
## + V13_2_J1_1	1	0.04	1443.8	-5601.5
## + V13_1_J2_3	1	0.04	1443.8	-5601.5
## + V17_J1_4	1	0.04	1443.8	-5601.5
## + V19_J2_2	1	0.03	1443.8	-5601.5
## + V30_J1_4	1	0.03	1443.8	-5601.5

## + V2_J2_3	1	0.03	1443.8	-5601.5
## + V15_J2_5	1	0.03	1443.8	-5601.5
## + V29_J2_4	1	0.02	1443.8	-5601.5
## + V13_1_J2_5	1	0.02	1443.8	-5601.5
## + V23_J1_2	1	0.02	1443.8	-5601.5
## + V14_J1_1	1	0.02	1443.8	-5601.4
## + V23_J1_1	1	0.02	1443.8	-5601.4
## + V13_3_J2_7	1	0.02	1443.8	-5601.4
## + V24_J1_4	1	0.02	1443.8	-5601.4
## + V4_J1_7	1	0.00	1443.9	-5601.4
## + V26_J1_2	1	0.00	1443.9	-5601.4
## + V2_J1_4	1	0.00	1443.9	-5601.4
## + V13_2_J1_3	1	0.00	1443.9	-5601.4
## + V30_J2_4	1	0.00	1443.9	-5601.4
## + V16_J1_7	1	0.00	1443.9	-5601.4
## + V29_J1_6	1	0.00	1443.9	-5601.4
## + V13_1_J2_1	1	0.00	1443.9	-5601.4
## + V23_J1_5	1	0.00	1443.9	-5601.4
## + V3_J2_2	1	0.00	1443.9	-5601.4
## + V13_1_J1_6	1	0.00	1443.9	-5601.4
## + V19_J1_7	1	0.00	1443.9	-5601.4
## + V17_J1_2	1	0.00	1443.9	-5601.4
## + V1_J2_4	1	0.00	1443.9	-5601.4
## + V1_J1_4	1	0.00	1443.9	-5601.4
## + V2_J1_2	1	0.00	1443.9	-5601.4
## - V13_2_J2_5	1	3.77	1447.6	-5601.1
## - V26_J1_3	1	3.78	1447.6	-5601.0
## - V2_J1_6	1	4.08	1447.9	-5600.0
## - V29_J1_4	1	4.18	1448.0	-5599.6
## - V13_3_J2_5	1	4.34	1448.2	-5599.1
## - V13_1_J2_2	1	4.48	1448.3	-5598.5
## - V13_2_J1_5	1	4.67	1448.5	-5597.9
## - V13_1_J2_7	1	4.69	1448.5	-5597.8
## - V14_J2_7	1	4.88	1448.7	-5597.1
## - V16_J1_2	1	5.01	1448.9	-5596.6
## - V12_1_2_J1_2	1	5.03	1448.9	-5596.6
## - V13_2_J1_2	1	5.14	1449.0	-5596.2
## - V13_3_J1_2	1	5.43	1449.3	-5595.1
## - V1_J1_5	1	5.46	1449.3	-5595.0
## - V23_J1_4	1	5.86	1449.7	-5593.6
## - V13_2_J1_6	1	6.17	1450.0	-5592.5
## - V2_J1_5	1	6.26	1450.1	-5592.2
## - V29_J2_2	1	6.35	1450.2	-5591.8
## - V19_J1_3	1	6.43	1450.3	-5591.5
## - V29_J2_1	1	6.51	1450.4	-5591.3
## - V26_J1_1	1	6.56	1450.4	-5591.1
## - V14_J1_3	1	7.65	1451.5	-5587.2
## - V23_J2_1	1	7.71	1451.6	-5587.0
## - V24_J2_3	1	8.07	1451.9	-5585.7
## - V20_J1_2	1	8.44	1452.3	-5584.4
## - V15_J2_3	1	8.83	1452.7	-5582.9
## - V24_J2_5	1	9.24	1453.1	-5581.5
## - V13_1_J1_5	1	9.26	1453.1	-5581.4
## - V29_J2_3	1	9.35	1453.2	-5581.1

## - V30_J2_3	1	9.36	1453.2	-5581.1
## - V1_J2_5	1	10.18	1454.0	-5578.1
## - V24_J1_7	1	10.24	1454.1	-5577.9
## - V17_J1_5	1	10.30	1454.2	-5577.7
## - V26_J1_6	1	10.53	1454.4	-5576.9
## - V26_J1_5	1	12.53	1456.4	-5569.7
## - V15_J2_1	1	12.56	1456.4	-5569.6
## - V20_J2_1	1	13.71	1457.6	-5565.5
## - V16_J2_3	1	13.86	1457.7	-5565.0
## - V20_J2_3	1	14.28	1458.1	-5563.5
## - V12_1_2_J1_6	1	14.98	1458.8	-5561.0
## - V24_J1_6	1	15.89	1459.8	-5557.7
## - V29_J1_5	1	17.02	1460.9	-5553.7
## - V13_1_J1_7	1	17.10	1461.0	-5553.4
## - V29_J1_3	1	18.36	1462.2	-5548.9
## - V13_1_J1_2	1	21.35	1465.2	-5538.3
## - V4_J1_3	1	21.83	1465.7	-5536.6
## - V12_1_2_J1_7	1	22.19	1466.0	-5535.3
## - V14_J2_5	1	25.16	1469.0	-5524.8
## - V30_J1_5	1	27.16	1471.0	-5517.7
## - V14_J2_1	1	27.19	1471.0	-5517.6
## - V15_J1_2	1	27.20	1471.1	-5517.6
## - V2_J2_2	1	27.20	1471.1	-5517.6
## - V3_J1_5	1	27.64	1471.5	-5516.0
## - V23_J2_7	1	27.87	1471.7	-5515.2
## - V30_J2_5	1	27.95	1471.8	-5515.0
## - V4_J1_5	1	28.09	1472.0	-5514.5
## - V2_J2_7	1	30.19	1474.0	-5507.1
## - V26_J1_4	1	31.05	1474.9	-5504.0
## - V15_J1_1	1	32.82	1476.7	-5497.8
## - V12_1_2_J2_7	1	35.19	1479.0	-5489.4
## - V19_J2_4	1	39.03	1482.9	-5476.0
## - V30_J1_3	1	39.59	1483.5	-5474.0
## - V19_J2_5	1	39.62	1483.5	-5473.9
## - V5_J1_4	1	39.95	1483.8	-5472.7
## - V13_2_J1_7	1	42.91	1486.8	-5462.3
## - V4_J2_7	1	43.13	1487.0	-5461.6
## - V14_J2_4	1	45.35	1489.2	-5453.8
## - V30_J1_2	1	45.81	1489.7	-5452.2
## - V12_1_2_J1_3	1	47.52	1491.4	-5446.3
## - V4_J1_4	1	47.80	1491.7	-5445.3
## - V16_J2_7	1	48.56	1492.4	-5442.6
## - V19_J2_1	1	49.26	1493.1	-5440.2
## - V5_J2_1	1	49.99	1493.8	-5437.7
## - V15_J1_3	1	58.33	1502.2	-5408.7
## - V14_J2_3	1	60.38	1504.2	-5401.6
## - V15_J1_6	1	60.67	1504.5	-5400.6
## - V5_J2_3	1	63.37	1507.2	-5391.3
## - V30_J2_2	1	63.41	1507.3	-5391.1
## - V17_J2_2	1	63.84	1507.7	-5389.7
## - V1_J2_2	1	65.49	1509.3	-5384.0
## - V15_J1_7	1	67.82	1511.7	-5375.9
## - V17_J2_7	1	68.97	1512.8	-5372.0
## - V14_J1_5	1	75.86	1519.7	-5348.4

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## - V30_J1_1      1      75.91 1519.8 -5348.2
## - V1_J1_3       1      77.48 1521.3 -5342.8
## - V16_J1_3      1      79.79 1523.7 -5334.9
## - V19_J2_3      1      83.45 1527.3 -5322.5
## - V3_J1_4       1      86.18 1530.0 -5313.2
## - V23_J1_3      1      86.70 1530.6 -5311.4
## - V14_J1_4      1      91.68 1535.5 -5294.5
## - V2_J1_3       1      91.91 1535.8 -5293.7
## - V17_J1_3      1      93.65 1537.5 -5287.9
## - V26_J2_1      1      97.61 1541.5 -5274.5
## - V1_J2_7       1      98.45 1542.3 -5271.7
## - V5_J1_5       1     103.36 1547.2 -5255.1
## - V12_1_2_J1_4  1     104.55 1548.4 -5251.1
## - V3_J2_1       1     110.40 1554.3 -5231.5
## - V15_J2_7      1     113.63 1557.5 -5220.7
## - V4_J2_3       1     114.52 1558.4 -5217.8
## - V4_J2_5       1     114.79 1558.7 -5216.9
## - V4_J2_1       1     122.99 1566.8 -5189.5
## - V19_J1_5      1     128.80 1572.7 -5170.3
## - V3_J2_5       1     133.95 1577.8 -5153.3
## - V26_J2_5      1     134.27 1578.1 -5152.3
## - V26_J2_4      1     134.96 1578.8 -5150.0
## - V15_J2_2      1     135.61 1579.5 -5147.9
## - V4_J2_4       1     160.19 1604.0 -5067.5
## - V12_1_2_J2_2  1     173.43 1617.3 -5024.8
## - V3_J2_3       1     179.09 1623.0 -5006.6
## - V19_J1_4      1     182.27 1626.1 -4996.5
## - V3_J2_4       1     194.75 1638.6 -4956.7
## - V26_J2_3      1     252.66 1696.5 -4776.1
## - V20_J2_2      1     254.18 1698.0 -4771.5
## - J             12     285.91 1729.8 -4748.1
## - V5_J2_5       1     267.38 1711.2 -4731.2
## - V5_J2_4       1     303.62 1747.5 -4622.2
## - V16_J2_2      1     430.10 1874.0 -4258.8
## - V             19    1021.48 2465.3 -2952.0
##
## Step:  AIC=-5609.2
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 + V20_J2_3 +
## V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
## V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
## V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V13_3_J2_5 + V20_J1_2 +

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##      V13_2_J1_4 + V26_J1_6 + V13_1_J1_5 + V26_J1_1 + V2_J1_6 +
##      V15_J2_3 + V30_J2_3 + V24_J2_3 + V13_2_J1_5 + V13_1_J2_2 +
##      V19_J1_3 + V14_J1_3 + V19_J1_1 + V16_J2_1 + V13_2_J2_5 +
##      V29_J2_3 + V1_J1_1 + V23_J2_3 + V13_1_J2_7 + V14_J2_7 + V29_J2_1 +
##      V29_J2_2 + V29_J1_4 + V13_3_J1_2 + V13_2_J1_2 + V16_J1_2 +
##      V24_J1_3 + V5_J1_2 + V30_J1_7 + V26_J1_7 + V16_J1_4 + V1_J1_7
##
##      Df Sum of Sq    RSS    AIC
## + V17_J1_7      1      2.24 1439.5 -5610.6
## + V5_J1_6       1      2.13 1439.6 -5610.2
## + V13_3_J1_1    1      2.09 1439.6 -5610.1
## - V1_J1_1       1      1.59 1443.3 -5610.1
## + V30_J2_1      1      2.07 1439.6 -5610.0
## + V20_J1_6      1      1.99 1439.7 -5609.8
## + V17_J2_1      1      1.90 1439.8 -5609.4
## + V13_3_J2_4    1      1.86 1439.8 -5609.3
## <none>                      1441.7 -5609.2
## + V13_2_J2_2    1      1.74 1440.0 -5608.8
## + V20_J1_1      1      1.71 1440.0 -5608.7
## + V13_1_J1_3    1      1.68 1440.0 -5608.6
## + V20_J2_4      1      1.63 1440.1 -5608.4
## + V15_J2_4      1      1.62 1440.1 -5608.4
## + V24_J1_5      1      1.56 1440.1 -5608.2
## + V5_J1_7       1      1.54 1440.2 -5608.1
## - V1_J1_7       1      2.17 1443.9 -5608.0
## - V29_J1_7      1      2.19 1443.9 -5607.9
## + V23_J2_2      1      1.45 1440.2 -5607.8
## + V12_1_2_J1_5  1      1.45 1440.2 -5607.8
## - V16_J1_4      1      2.24 1443.9 -5607.8
## + V12_1_2_J1_1  1      1.40 1440.3 -5607.6
## + V16_J2_5      1      1.21 1440.5 -5606.9
## + V4_J1_6       1      1.21 1440.5 -5606.9
## - V19_J1_1      1      2.48 1444.2 -5606.9
## - V26_J1_7      1      2.49 1444.2 -5606.8
## - V24_J1_3      1      2.53 1444.2 -5606.7
## + V20_J1_5      1      1.15 1440.5 -5606.7
## + V19_J2_7      1      1.15 1440.5 -5606.7
## + V20_J1_4      1      1.12 1440.6 -5606.6
## + V19_J1_6      1      1.04 1440.7 -5606.3
## + V13_1_J1_4    1      0.97 1440.7 -5606.1
## + V24_J1_1      1      0.97 1440.7 -5606.1
## + V23_J1_7      1      0.96 1440.7 -5606.0
## + V3_J1_2       1      0.94 1440.8 -5606.0
## + V17_J2_4      1      0.85 1440.8 -5605.6
## + V3_J1_3       1      0.84 1440.8 -5605.6
## + V24_J2_4      1      0.84 1440.8 -5605.6
## + V20_J1_7      1      0.84 1440.8 -5605.6
## + V2_J2_1       1      0.83 1440.8 -5605.6
## - V5_J1_2       1      2.85 1444.5 -5605.6
## - V30_J1_7      1      2.87 1444.6 -5605.5
## + V13_1_J2_4    1      0.80 1440.9 -5605.5
## + V29_J1_1      1      0.79 1440.9 -5605.4
## + V29_J2_5      1      0.79 1440.9 -5605.4
## + V30_J2_7      1      0.77 1440.9 -5605.3

```

## + V14_J1_2	1	0.76	1440.9	-5605.3
## + V24_J2_2	1	0.71	1441.0	-5605.1
## + V23_J2_4	1	0.70	1441.0	-5605.1
## - V13_2_J1_4	1	3.02	1444.7	-5604.9
## + V13_2_J2_3	1	0.65	1441.0	-5604.9
## + V14_J1_6	1	0.63	1441.1	-5604.8
## + V13_1_J1_1	1	0.62	1441.1	-5604.8
## + V17_J2_5	1	0.61	1441.1	-5604.8
## + V23_J2_5	1	0.57	1441.1	-5604.6
## + V17_J2_3	1	0.56	1441.1	-5604.6
## + V1_J2_3	1	0.56	1441.1	-5604.6
## - V23_J2_3	1	3.13	1444.8	-5604.5
## + V16_J1_6	1	0.52	1441.2	-5604.4
## + V13_3_J1_6	1	0.51	1441.2	-5604.4
## + V16_J1_5	1	0.51	1441.2	-5604.4
## + V2_J1_7	1	0.51	1441.2	-5604.4
## + V3_J2_7	1	0.50	1441.2	-5604.4
## + V1_J1_6	1	0.43	1441.3	-5604.1
## + V15_J1_4	1	0.42	1441.3	-5604.1
## + V12_1_2_J2_1	1	0.42	1441.3	-5604.1
## + V13_2_J2_4	1	0.41	1441.3	-5604.0
## + V29_J1_2	1	0.40	1441.3	-5604.0
## + V13_2_J2_7	1	0.39	1441.3	-5604.0
## + V13_3_J2_3	1	0.39	1441.3	-5604.0
## + V5_J1_1	1	0.39	1441.3	-5604.0
## + V12_1_2_J2_3	1	0.35	1441.3	-5603.8
## + V3_J1_6	1	0.34	1441.3	-5603.8
## + V2_J2_5	1	0.32	1441.4	-5603.7
## + V16_J2_4	1	0.31	1441.4	-5603.7
## + V13_3_J2_2	1	0.31	1441.4	-5603.7
## + V3_J1_1	1	0.28	1441.4	-5603.6
## + V14_J2_2	1	0.28	1441.4	-5603.6
## + V13_3_J1_3	1	0.27	1441.4	-5603.6
## + V15_J1_5	1	0.26	1441.4	-5603.5
## + V4_J1_2	1	0.25	1441.4	-5603.5
## + V24_J1_2	1	0.23	1441.5	-5603.4
## + V24_J2_7	1	0.23	1441.5	-5603.4
## + V29_J2_7	1	0.22	1441.5	-5603.4
## + V3_J1_7	1	0.22	1441.5	-5603.3
## + V20_J1_3	1	0.20	1441.5	-5603.3
## + V5_J2_2	1	0.20	1441.5	-5603.3
## + V20_J2_5	1	0.19	1441.5	-5603.2
## + V14_J1_7	1	0.18	1441.5	-5603.2
## + V30_J1_6	1	0.18	1441.5	-5603.2
## + V5_J2_7	1	0.17	1441.5	-5603.2
## + V17_J1_1	1	0.16	1441.5	-5603.2
## + V4_J1_1	1	0.16	1441.5	-5603.1
## + V12_1_2_J2_5	1	0.15	1441.5	-5603.1
## + V1_J2_1	1	0.15	1441.5	-5603.1
## + V23_J1_6	1	0.15	1441.5	-5603.1
## + V13_2_J2_1	1	0.15	1441.5	-5603.1
## + V13_3_J1_7	1	0.14	1441.5	-5603.1
## + V5_J1_3	1	0.14	1441.5	-5603.1
## + V24_J2_1	1	0.13	1441.6	-5603.0

## + V26_J2_2	1	0.11	1441.6	-5603.0
## + V17_J1_6	1	0.10	1441.6	-5602.9
## + V16_J1_1	1	0.10	1441.6	-5602.9
## + V2_J2_4	1	0.08	1441.6	-5602.9
## + V12_1_2_J2_4	1	0.08	1441.6	-5602.9
## + V26_J2_7	1	0.08	1441.6	-5602.9
## + V19_J1_2	1	0.07	1441.6	-5602.8
## + V1_J2_4	1	0.07	1441.6	-5602.8
## + V4_J2_2	1	0.07	1441.6	-5602.8
## + V2_J1_1	1	0.06	1441.6	-5602.8
## + V1_J1_4	1	0.06	1441.6	-5602.8
## + V13_1_J2_3	1	0.05	1441.6	-5602.7
## + V20_J2_7	1	0.05	1441.6	-5602.7
## + V13_3_J1_5	1	0.05	1441.6	-5602.7
## + V2_J2_3	1	0.04	1441.6	-5602.7
## + V13_3_J2_1	1	0.04	1441.7	-5602.7
## + V13_2_J1_1	1	0.03	1441.7	-5602.7
## + V16_J1_7	1	0.03	1441.7	-5602.7
## + V30_J1_4	1	0.03	1441.7	-5602.7
## + V13_3_J1_4	1	0.03	1441.7	-5602.7
## + V14_J1_1	1	0.03	1441.7	-5602.7
## + V19_J1_7	1	0.02	1441.7	-5602.7
## + V17_J1_4	1	0.02	1441.7	-5602.7
## + V19_J2_2	1	0.02	1441.7	-5602.7
## + V15_J2_5	1	0.02	1441.7	-5602.6
## + V29_J2_4	1	0.02	1441.7	-5602.6
## + V13_1_J2_5	1	0.02	1441.7	-5602.6
## + V23_J1_1	1	0.02	1441.7	-5602.6
## + V13_3_J2_7	1	0.02	1441.7	-5602.6
## + V23_J1_2	1	0.01	1441.7	-5602.6
## + V24_J1_4	1	0.01	1441.7	-5602.6
## + V13_2_J1_3	1	0.00	1441.7	-5602.6
## + V13_1_J2_1	1	0.00	1441.7	-5602.6
## + V1_J1_2	1	0.00	1441.7	-5602.6
## + V23_J1_5	1	0.00	1441.7	-5602.6
## + V4_J1_7	1	0.00	1441.7	-5602.6
## + V3_J2_2	1	0.00	1441.7	-5602.6
## + V30_J2_4	1	0.00	1441.7	-5602.6
## + V13_1_J1_6	1	0.00	1441.7	-5602.6
## + V26_J1_2	1	0.00	1441.7	-5602.6
## + V29_J1_6	1	0.00	1441.7	-5602.6
## + V17_J1_2	1	0.00	1441.7	-5602.6
## + V2_J1_4	1	0.00	1441.7	-5602.6
## + V2_J1_2	1	0.00	1441.7	-5602.6
## - V16_J2_1	1	3.73	1445.4	-5602.4
## - V13_2_J2_5	1	3.74	1445.4	-5602.4
## - V26_J1_3	1	3.77	1445.5	-5602.3
## - V2_J1_6	1	4.06	1445.7	-5601.2
## - V29_J1_4	1	4.09	1445.8	-5601.1
## - V13_3_J2_5	1	4.32	1446.0	-5600.3
## - V13_1_J2_2	1	4.38	1446.1	-5600.1
## - V13_1_J2_7	1	4.61	1446.3	-5599.2
## - V13_2_J1_5	1	4.63	1446.3	-5599.2
## - V14_J2_7	1	4.96	1446.7	-5598.0

## - V12_1_2_J1_2	1	5.04	1446.7	-5597.7
## - V16_J1_2	1	5.14	1446.8	-5597.3
## - V13_2_J1_2	1	5.16	1446.8	-5597.3
## - V13_3_J1_2	1	5.50	1447.2	-5596.0
## - V23_J1_4	1	6.05	1447.7	-5594.0
## - V13_2_J1_6	1	6.17	1447.9	-5593.6
## - V2_J1_5	1	6.26	1448.0	-5593.3
## - V1_J1_5	1	6.36	1448.0	-5592.9
## - V29_J2_1	1	6.38	1448.1	-5592.9
## - V29_J2_2	1	6.43	1448.1	-5592.7
## - V19_J1_3	1	6.51	1448.2	-5592.4
## - V26_J1_1	1	6.58	1448.3	-5592.2
## - V23_J2_1	1	7.47	1449.2	-5589.0
## - V14_J1_3	1	7.75	1449.4	-5588.0
## - V24_J2_3	1	7.92	1449.6	-5587.4
## - V20_J1_2	1	8.55	1450.2	-5585.1
## - V1_J2_5	1	8.69	1450.4	-5584.6
## - V15_J2_3	1	8.69	1450.4	-5584.6
## - V29_J2_3	1	9.17	1450.9	-5582.9
## - V13_1_J1_5	1	9.17	1450.9	-5582.9
## - V24_J2_5	1	9.20	1450.9	-5582.8
## - V30_J2_3	1	9.24	1450.9	-5582.6
## - V17_J1_5	1	10.31	1452.0	-5578.8
## - V26_J1_6	1	10.48	1452.2	-5578.2
## - V24_J1_7	1	10.99	1452.7	-5576.3
## - V15_J2_1	1	12.43	1454.1	-5571.2
## - V26_J1_5	1	12.53	1454.2	-5570.8
## - V20_J2_1	1	13.99	1455.7	-5565.6
## - V16_J2_3	1	14.22	1455.9	-5564.8
## - V20_J2_3	1	14.60	1456.3	-5563.4
## - V12_1_2_J1_6	1	14.93	1456.6	-5562.3
## - V13_1_J1_7	1	15.88	1457.6	-5558.9
## - V24_J1_6	1	15.90	1457.6	-5558.8
## - V29_J1_5	1	17.06	1458.8	-5554.7
## - V29_J1_3	1	18.28	1460.0	-5550.3
## - V12_1_2_J1_7	1	20.81	1462.5	-5541.3
## - V13_1_J1_2	1	21.33	1463.0	-5539.5
## - V4_J1_3	1	21.99	1463.7	-5537.1
## - V14_J2_5	1	25.38	1467.1	-5525.1
## - V2_J2_2	1	27.09	1468.8	-5519.0
## - V15_J1_2	1	27.19	1468.9	-5518.7
## - V30_J1_5	1	27.33	1469.0	-5518.2
## - V14_J2_1	1	27.70	1469.4	-5516.9
## - V3_J1_5	1	27.81	1469.5	-5516.5
## - V23_J2_7	1	27.96	1469.6	-5516.0
## - V30_J2_5	1	28.10	1469.8	-5515.5
## - V4_J1_5	1	28.31	1470.0	-5514.7
## - V2_J2_7	1	30.14	1471.8	-5508.2
## - V26_J1_4	1	31.33	1473.0	-5504.0
## - V15_J1_1	1	33.00	1474.7	-5498.1
## - V12_1_2_J2_7	1	34.99	1476.7	-5491.1
## - V30_J1_3	1	39.33	1481.0	-5475.9
## - V19_J2_4	1	39.50	1481.2	-5475.3
## - V19_J2_5	1	39.90	1481.6	-5473.9

## - V5_J1_4	1	40.54	1482.2	-5471.6
## - V13_2_J1_7	1	40.95	1482.6	-5470.2
## - V4_J2_7	1	43.37	1485.1	-5461.7
## - V14_J2_4	1	45.86	1487.5	-5453.0
## - V30_J1_2	1	45.87	1487.6	-5453.0
## - V12_1_2_J1_3	1	47.27	1489.0	-5448.1
## - V4_J1_4	1	48.44	1490.1	-5444.0
## - V16_J2_7	1	48.74	1490.4	-5443.0
## - V19_J2_1	1	49.93	1491.6	-5438.8
## - V5_J2_1	1	50.66	1492.3	-5436.3
## - V15_J1_3	1	58.56	1500.2	-5408.8
## - V1_J2_2	1	60.51	1502.2	-5402.0
## - V15_J1_6	1	60.73	1502.4	-5401.3
## - V14_J2_3	1	61.17	1502.9	-5399.8
## - V30_J2_2	1	62.98	1504.7	-5393.5
## - V17_J2_2	1	63.65	1505.3	-5391.2
## - V5_J2_3	1	64.17	1505.9	-5389.4
## - V17_J2_7	1	68.90	1510.6	-5373.1
## - V15_J1_7	1	69.39	1511.1	-5371.4
## - V1_J1_3	1	72.28	1514.0	-5361.5
## - V14_J1_5	1	76.22	1517.9	-5348.0
## - V30_J1_1	1	76.26	1518.0	-5347.8
## - V16_J1_3	1	79.98	1521.7	-5335.1
## - V19_J2_3	1	84.34	1526.0	-5320.2
## - V23_J1_3	1	86.84	1528.5	-5311.7
## - V3_J1_4	1	86.95	1528.6	-5311.3
## - V2_J1_3	1	91.82	1533.5	-5294.8
## - V1_J2_7	1	92.18	1533.9	-5293.6
## - V14_J1_4	1	92.53	1534.2	-5292.4
## - V17_J1_3	1	93.54	1535.2	-5289.0
## - V26_J2_1	1	98.14	1539.8	-5273.4
## - V5_J1_5	1	103.77	1545.5	-5254.4
## - V12_1_2_J1_4	1	104.84	1546.5	-5250.8
## - V3_J2_1	1	111.29	1553.0	-5229.2
## - V15_J2_7	1	113.93	1555.6	-5220.3
## - V4_J2_5	1	115.25	1556.9	-5215.9
## - V4_J2_3	1	115.55	1557.2	-5214.9
## - V4_J2_1	1	123.99	1565.7	-5186.8
## - V19_J1_5	1	129.24	1570.9	-5169.4
## - V26_J2_5	1	134.30	1576.0	-5152.7
## - V3_J2_5	1	134.35	1576.0	-5152.5
## - V26_J2_4	1	135.35	1577.0	-5149.2
## - V15_J2_2	1	136.07	1577.8	-5146.8
## - V4_J2_4	1	161.10	1602.8	-5065.0
## - V12_1_2_J2_2	1	172.77	1614.5	-5027.3
## - V3_J2_3	1	180.26	1622.0	-5003.2
## - V19_J1_4	1	183.40	1625.1	-4993.2
## - V3_J2_4	1	195.64	1637.3	-4954.1
## - V26_J2_3	1	253.58	1695.3	-4773.3
## - V20_J2_2	1	254.11	1695.8	-4771.7
## - J	12	286.14	1727.8	-4747.4
## - V5_J2_5	1	268.06	1709.8	-4729.1
## - V5_J2_4	1	304.81	1746.5	-4618.5
## - V16_J2_2	1	430.33	1872.0	-4257.6


```

## - V          19      998.26 2439.9 -2999.2
##
## Step:  AIC=-5610.64
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##      V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##      V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
##      V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
##      V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
##      V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
##      V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
##      V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
##      V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
##      V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
##      V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
##      V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 + V20_J2_3 +
##      V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
##      V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
##      V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
##      V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
##      V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V13_3_J2_5 + V20_J1_2 +
##      V13_2_J1_4 + V26_J1_6 + V13_1_J1_5 + V26_J1_1 + V2_J1_6 +
##      V15_J2_3 + V30_J2_3 + V24_J2_3 + V13_2_J1_5 + V13_1_J2_2 +
##      V19_J1_3 + V14_J1_3 + V19_J1_1 + V16_J2_1 + V13_2_J2_5 +
##      V29_J2_3 + V1_J1_1 + V23_J2_3 + V13_1_J2_7 + V14_J2_7 + V29_J2_1 +
##      V29_J2_2 + V29_J1_4 + V13_3_J1_2 + V13_2_J1_2 + V16_J1_2 +
##      V24_J1_3 + V5_J1_2 + V30_J1_7 + V26_J1_7 + V16_J1_4 + V1_J1_7 +
##      V17_J1_7
##
##
##      Df Sum of Sq  RSS    AIC
## + V5_J1_6      1      2.24 1437.2 -5612.1
## - V1_J1_1       1      1.56 1441.0 -5611.6
## + V13_3_J1_1    1      2.05 1437.4 -5611.4
## + V20_J1_6      1      2.04 1437.4 -5611.4
## + V30_J2_1      1      2.02 1437.4 -5611.3
## + V5_J1_7       1      1.93 1437.5 -5611.0
## + V13_3_J2_4    1      1.93 1437.5 -5611.0
## - V29_J1_7      1      1.77 1441.2 -5610.9
## <none>                1439.5 -5610.6
## + V13_2_J2_2    1      1.81 1437.6 -5610.5
## + V13_1_J1_3    1      1.75 1437.7 -5610.3
## + V20_J2_4      1      1.71 1437.7 -5610.2
## + V20_J1_1      1      1.67 1437.8 -5610.0
## + V15_J2_4      1      1.61 1437.8 -5609.8
## + V24_J1_5      1      1.53 1437.9 -5609.5
## + V12_1_2_J1_5  1      1.50 1438.0 -5609.4
## + V17_J2_1      1      1.46 1438.0 -5609.3
## + V23_J2_2      1      1.45 1438.0 -5609.2
## - V17_J1_7      1      2.24 1441.7 -5609.2
## + V12_1_2_J1_1  1      1.37 1438.1 -5609.0
## - V16_J1_4      1      2.35 1441.8 -5608.8
## + V16_J2_5      1      1.32 1438.1 -5608.8
## + V19_J2_7      1      1.21 1438.2 -5608.4
## - V24_J1_3      1      2.48 1441.9 -5608.3
## + V20_J1_5      1      1.13 1438.3 -5608.1

```

## + V4_J1_6	1	1.13	1438.3	-5608.1
## - V19_J1_1	1	2.58	1442.0	-5608.0
## - V1_J1_7	1	2.62	1442.1	-5607.8
## + V20_J1_4	1	1.03	1438.4	-5607.7
## + V13_1_J1_4	1	1.00	1438.5	-5607.6
## + V24_J1_1	1	0.97	1438.5	-5607.5
## + V19_J1_6	1	0.95	1438.5	-5607.4
## + V3_J1_3	1	0.88	1438.6	-5607.2
## + V3_J1_2	1	0.87	1438.6	-5607.2
## + V17_J2_3	1	0.86	1438.6	-5607.1
## + V24_J2_4	1	0.82	1438.6	-5607.0
## + V13_1_J2_4	1	0.80	1438.7	-5606.9
## - V26_J1_7	1	2.88	1442.3	-5606.9
## + V29_J1_1	1	0.79	1438.7	-5606.9
## + V2_J2_1	1	0.77	1438.7	-5606.8
## + V29_J2_5	1	0.76	1438.7	-5606.7
## + V24_J2_2	1	0.75	1438.7	-5606.7
## + V30_J2_7	1	0.73	1438.7	-5606.6
## - V5_J1_2	1	2.96	1442.4	-5606.6
## - V13_2_J1_4	1	2.97	1442.4	-5606.6
## + V13_2_J2_3	1	0.70	1438.8	-5606.5
## - V23_J2_3	1	2.98	1442.4	-5606.5
## + V14_J1_6	1	0.69	1438.8	-5606.5
## + V23_J1_7	1	0.68	1438.8	-5606.5
## + V14_J1_2	1	0.68	1438.8	-5606.5
## + V23_J2_4	1	0.64	1438.8	-5606.3
## + V13_1_J1_1	1	0.60	1438.8	-5606.2
## + V1_J2_3	1	0.58	1438.9	-5606.1
## + V20_J1_7	1	0.58	1438.9	-5606.1
## + V17_J2_4	1	0.55	1438.9	-5606.0
## + V16_J1_5	1	0.54	1438.9	-5605.9
## + V13_3_J1_6	1	0.53	1438.9	-5605.9
## + V3_J2_7	1	0.52	1438.9	-5605.9
## + V23_J2_5	1	0.51	1438.9	-5605.9
## + V16_J1_6	1	0.48	1439.0	-5605.7
## + V1_J1_6	1	0.45	1439.0	-5605.6
## + V15_J1_4	1	0.44	1439.0	-5605.6
## + V12_1_2_J2_1	1	0.44	1439.0	-5605.6
## + V13_2_J2_4	1	0.42	1439.0	-5605.5
## + V13_2_J2_7	1	0.41	1439.0	-5605.5
## + V29_J1_2	1	0.40	1439.1	-5605.4
## + V17_J1_1	1	0.37	1439.1	-5605.3
## + V17_J2_5	1	0.36	1439.1	-5605.3
## + V5_J1_1	1	0.34	1439.1	-5605.2
## + V13_3_J2_3	1	0.33	1439.1	-5605.2
## - V30_J1_7	1	3.35	1442.8	-5605.2
## + V12_1_2_J2_3	1	0.32	1439.1	-5605.2
## + V3_J1_6	1	0.31	1439.1	-5605.1
## + V4_J1_2	1	0.30	1439.2	-5605.1
## + V13_3_J2_2	1	0.30	1439.2	-5605.1
## + V13_3_J1_7	1	0.30	1439.2	-5605.1
## + V2_J1_7	1	0.30	1439.2	-5605.1
## + V2_J2_5	1	0.29	1439.2	-5605.0
## + V13_3_J1_3	1	0.27	1439.2	-5605.0

## + V16_J2_4	1	0.27	1439.2	-5605.0
## + V17_J1_6	1	0.27	1439.2	-5605.0
## + V14_J2_2	1	0.26	1439.2	-5605.0
## + V3_J1_1	1	0.25	1439.2	-5604.9
## + V24_J2_7	1	0.25	1439.2	-5604.9
## + V29_J2_7	1	0.24	1439.2	-5604.9
## + V15_J1_5	1	0.23	1439.2	-5604.9
## + V24_J1_2	1	0.23	1439.2	-5604.8
## + V20_J2_5	1	0.22	1439.2	-5604.8
## + V5_J2_2	1	0.21	1439.2	-5604.8
## + V20_J1_3	1	0.20	1439.3	-5604.7
## + V4_J1_1	1	0.19	1439.3	-5604.7
## + V30_J1_6	1	0.17	1439.3	-5604.6
## + V13_2_J2_1	1	0.17	1439.3	-5604.6
## + V5_J1_3	1	0.16	1439.3	-5604.6
## + V1_J2_1	1	0.16	1439.3	-5604.6
## + V12_1_2_J2_5	1	0.15	1439.3	-5604.5
## + V5_J2_7	1	0.15	1439.3	-5604.5
## + V23_J1_6	1	0.14	1439.3	-5604.5
## + V16_J1_7	1	0.12	1439.3	-5604.4
## + V17_J1_4	1	0.11	1439.3	-5604.4
## + V24_J2_1	1	0.11	1439.3	-5604.4
## + V3_J1_7	1	0.10	1439.3	-5604.4
## + V19_J1_2	1	0.10	1439.3	-5604.4
## + V26_J2_2	1	0.10	1439.3	-5604.4
## + V2_J2_4	1	0.10	1439.4	-5604.4
## + V19_J1_7	1	0.09	1439.4	-5604.3
## + V12_1_2_J2_4	1	0.08	1439.4	-5604.3
## + V14_J1_7	1	0.08	1439.4	-5604.3
## + V26_J2_7	1	0.08	1439.4	-5604.3
## + V16_J1_1	1	0.08	1439.4	-5604.3
## + V4_J2_2	1	0.08	1439.4	-5604.3
## + V1_J2_4	1	0.07	1439.4	-5604.3
## + V2_J1_1	1	0.07	1439.4	-5604.2
## + V2_J2_3	1	0.06	1439.4	-5604.2
## + V13_1_J2_3	1	0.06	1439.4	-5604.2
## + V1_J1_4	1	0.06	1439.4	-5604.2
## + V20_J2_7	1	0.05	1439.4	-5604.2
## + V13_3_J1_5	1	0.04	1439.4	-5604.2
## + V14_J1_1	1	0.04	1439.4	-5604.2
## + V4_J1_7	1	0.04	1439.4	-5604.1
## + V30_J1_4	1	0.04	1439.4	-5604.1
## + V13_2_J1_1	1	0.03	1439.4	-5604.1
## + V17_J1_2	1	0.03	1439.4	-5604.1
## + V13_3_J2_1	1	0.02	1439.4	-5604.1
## + V15_J2_5	1	0.02	1439.4	-5604.1
## + V13_1_J2_5	1	0.02	1439.4	-5604.1
## + V13_3_J1_4	1	0.02	1439.4	-5604.1
## + V19_J2_2	1	0.02	1439.4	-5604.1
## + V13_3_J2_7	1	0.02	1439.4	-5604.1
## + V29_J2_4	1	0.02	1439.4	-5604.1
## + V23_J1_1	1	0.01	1439.4	-5604.0
## + V13_2_J1_3	1	0.01	1439.5	-5604.0
## + V23_J1_2	1	0.01	1439.5	-5604.0

## + V13_1_J2_1	1	0.01	1439.5	-5604.0
## + V24_J1_4	1	0.01	1439.5	-5604.0
## + V23_J1_5	1	0.01	1439.5	-5604.0
## + V13_1_J1_6	1	0.00	1439.5	-5604.0
## + V3_J2_2	1	0.00	1439.5	-5604.0
## + V29_J1_6	1	0.00	1439.5	-5604.0
## + V1_J1_2	1	0.00	1439.5	-5604.0
## + V30_J2_4	1	0.00	1439.5	-5604.0
## + V26_J1_2	1	0.00	1439.5	-5604.0
## + V2_J1_2	1	0.00	1439.5	-5604.0
## + V2_J1_4	1	0.00	1439.5	-5604.0
## - V26_J1_3	1	3.76	1443.2	-5603.7
## - V13_2_J2_5	1	3.79	1443.2	-5603.6
## - V16_J2_1	1	3.88	1443.3	-5603.3
## - V29_J1_4	1	4.02	1443.5	-5602.8
## - V2_J1_6	1	4.04	1443.5	-5602.7
## - V13_3_J2_5	1	4.22	1443.7	-5602.1
## - V13_1_J2_2	1	4.26	1443.7	-5601.9
## - V13_1_J2_7	1	4.52	1444.0	-5601.0
## - V13_2_J1_5	1	4.59	1444.0	-5600.7
## - V14_J2_7	1	5.05	1444.5	-5599.1
## - V12_1_2_J1_2	1	5.08	1444.5	-5599.0
## - V13_2_J1_2	1	5.15	1444.6	-5598.7
## - V16_J1_2	1	5.24	1444.7	-5598.4
## - V13_3_J1_2	1	5.56	1445.0	-5597.2
## - V13_2_J1_6	1	6.19	1445.7	-5594.9
## - V23_J1_4	1	6.23	1445.7	-5594.8
## - V2_J1_5	1	6.26	1445.7	-5594.7
## - V29_J2_1	1	6.28	1445.7	-5594.6
## - V1_J1_5	1	6.45	1445.9	-5594.0
## - V29_J2_2	1	6.53	1446.0	-5593.7
## - V26_J1_1	1	6.53	1446.0	-5593.7
## - V19_J1_3	1	6.62	1446.1	-5593.4
## - V23_J2_1	1	7.25	1446.7	-5591.1
## - V24_J2_3	1	7.78	1447.2	-5589.2
## - V14_J1_3	1	7.86	1447.3	-5589.0
## - V15_J2_3	1	8.61	1448.1	-5586.3
## - V20_J1_2	1	8.65	1448.1	-5586.1
## - V1_J2_5	1	8.70	1448.2	-5585.9
## - V29_J2_3	1	9.03	1448.5	-5584.8
## - V13_1_J1_5	1	9.08	1448.5	-5584.6
## - V30_J2_3	1	9.14	1448.6	-5584.4
## - V24_J2_5	1	9.27	1448.7	-5583.9
## - V26_J1_6	1	10.44	1449.9	-5579.7
## - V17_J1_5	1	11.26	1450.7	-5576.8
## - V24_J1_7	1	11.86	1451.3	-5574.6
## - V15_J2_1	1	12.35	1451.8	-5572.8
## - V26_J1_5	1	12.55	1452.0	-5572.1
## - V20_J2_1	1	14.25	1453.7	-5566.0
## - V13_1_J1_7	1	14.54	1454.0	-5565.0
## - V16_J2_3	1	14.55	1454.0	-5565.0
## - V12_1_2_J1_6	1	14.83	1454.3	-5564.0
## - V20_J2_3	1	14.90	1454.3	-5563.7
## - V24_J1_6	1	15.93	1455.4	-5560.0

## - V29_J1_5	1	17.13	1456.6	-5555.8
## - V29_J1_3	1	18.17	1457.6	-5552.1
## - V12_1_2_J1_7	1	19.27	1458.7	-5548.1
## - V13_1_J1_2	1	21.26	1460.7	-5541.0
## - V4_J1_3	1	22.17	1461.6	-5537.8
## - V14_J2_5	1	25.82	1465.3	-5524.8
## - V2_J2_2	1	26.95	1466.4	-5520.8
## - V15_J1_2	1	27.27	1466.7	-5519.7
## - V30_J1_5	1	27.46	1466.9	-5519.0
## - V3_J1_5	1	28.02	1467.5	-5517.0
## - V30_J2_5	1	28.02	1467.5	-5517.0
## - V23_J2_7	1	28.02	1467.5	-5517.0
## - V14_J2_1	1	28.21	1467.7	-5516.4
## - V4_J1_5	1	28.57	1468.0	-5515.1
## - V2_J2_7	1	30.09	1469.5	-5509.7
## - V26_J1_4	1	31.62	1471.1	-5504.3
## - V15_J1_1	1	33.11	1472.6	-5499.0
## - V12_1_2_J2_7	1	34.72	1474.2	-5493.3
## - V13_2_J1_7	1	38.78	1478.2	-5479.0
## - V30_J1_3	1	39.10	1478.5	-5477.9
## - V19_J2_4	1	40.02	1479.5	-5474.7
## - V19_J2_5	1	40.46	1479.9	-5473.1
## - V5_J1_4	1	41.12	1480.6	-5470.8
## - V4_J2_7	1	43.63	1483.1	-5462.0
## - V30_J1_2	1	45.95	1485.4	-5453.9
## - V14_J2_4	1	46.39	1485.8	-5452.3
## - V12_1_2_J1_3	1	46.97	1486.4	-5450.3
## - V16_J2_7	1	48.86	1488.3	-5443.7
## - V4_J1_4	1	49.07	1488.5	-5443.0
## - V19_J2_1	1	50.62	1490.1	-5437.6
## - V5_J2_1	1	51.33	1490.8	-5435.1
## - V15_J1_3	1	58.85	1498.3	-5408.9
## - V17_J2_2	1	59.93	1499.4	-5405.1
## - V1_J2_2	1	60.01	1499.5	-5404.9
## - V15_J1_6	1	60.90	1500.4	-5401.8
## - V14_J2_3	1	61.95	1501.4	-5398.2
## - V30_J2_2	1	62.56	1502.0	-5396.1
## - V5_J2_3	1	64.96	1504.4	-5387.7
## - V17_J2_7	1	65.19	1504.6	-5387.0
## - V15_J1_7	1	71.15	1510.6	-5366.4
## - V1_J1_3	1	71.86	1511.3	-5363.9
## - V30_J1_1	1	76.39	1515.8	-5348.4
## - V14_J1_5	1	76.63	1516.1	-5347.6
## - V16_J1_3	1	80.14	1519.6	-5335.6
## - V19_J2_3	1	85.27	1524.7	-5318.0
## - V23_J1_3	1	86.94	1526.4	-5312.3
## - V3_J1_4	1	87.70	1527.2	-5309.7
## - V17_J1_3	1	89.17	1528.6	-5304.7
## - V1_J2_7	1	91.71	1531.2	-5296.1
## - V2_J1_3	1	91.71	1531.2	-5296.1
## - V14_J1_4	1	93.38	1532.8	-5290.4
## - V26_J2_1	1	98.66	1538.1	-5272.6
## - V5_J1_5	1	104.24	1543.7	-5253.7
## - V12_1_2_J1_4	1	105.00	1544.5	-5251.2

```

## - V3_J2_1      1      112.16 1551.6 -5227.1
## - V15_J2_7     1      114.33 1553.8 -5219.8
## - V4_J2_5      1      116.13 1555.6 -5213.8
## - V4_J2_3      1      116.58 1556.0 -5212.3
## - V4_J2_1      1      124.99 1564.4 -5184.3
## - V19_J1_5     1      129.82 1569.3 -5168.3
## - V26_J2_5     1      134.79 1574.2 -5151.8
## - V3_J2_5      1      135.20 1574.7 -5150.5
## - V26_J2_4     1      135.76 1575.2 -5148.6
## - V15_J2_2     1      136.66 1576.1 -5145.6
## - V4_J2_4      1      162.04 1601.5 -5062.6
## - V12_1_2_J2_2 1      171.93 1611.4 -5030.6
## - V3_J2_3      1      181.42 1620.9 -5000.0
## - V19_J1_4     1      184.57 1624.0 -4989.9
## - V3_J2_4      1      196.56 1636.0 -4951.7
## - V20_J2_2     1      253.96 1693.4 -4772.4
## - V26_J2_3     1      254.47 1693.9 -4770.8
## - J            12     286.33 1725.8 -4746.9
## - V5_J2_5      1      269.29 1708.7 -4725.5
## - V5_J2_4      1      306.02 1745.5 -4614.9
## - V16_J2_2     1      430.40 1869.8 -4257.0
## - V            19     1000.44 2439.9 -2992.7
##
## Step: AIC=-5612.1
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 + V20_J2_3 +
## V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
## V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
## V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V13_3_J2_5 + V20_J1_2 +
## V13_2_J1_4 + V26_J1_6 + V13_1_J1_5 + V26_J1_1 + V2_J1_6 +
## V15_J2_3 + V30_J2_3 + V24_J2_3 + V13_2_J1_5 + V13_1_J2_2 +
## V19_J1_3 + V14_J1_3 + V19_J1_1 + V16_J2_1 + V13_2_J2_5 +
## V29_J2_3 + V1_J1_1 + V23_J2_3 + V13_1_J2_7 + V14_J2_7 + V29_J2_1 +
## V29_J2_2 + V29_J1_4 + V13_3_J1_2 + V13_2_J1_2 + V16_J1_2 +
## V24_J1_3 + V5_J1_2 + V30_J1_7 + V26_J1_7 + V16_J1_4 + V1_J1_7 +
## V17_J1_7 + V5_J1_6
##
##
## Df Sum of Sq RSS AIC
## + V20_J1_6      1      2.41 1434.8 -5614.2
## - V1_J1_1       1      1.47 1438.7 -5613.4
## + V13_3_J1_1    1      2.10 1435.1 -5613.1
## + V30_J2_1      1      2.07 1435.1 -5613.0

```

## - V29_J1_7	1	1.68	1438.9	-5612.7
## + V13_1_J1_3	1	1.95	1435.3	-5612.5
## + V13_3_J2_4	1	1.95	1435.3	-5612.5
## + V13_2_J2_2	1	1.86	1435.4	-5612.2
## <none>			1437.2	-5612.1
## + V20_J2_4	1	1.72	1435.5	-5611.7
## + V20_J1_1	1	1.72	1435.5	-5611.7
## + V15_J2_4	1	1.61	1435.6	-5611.3
## + V24_J1_5	1	1.56	1435.7	-5611.1
## + V12_1_2_J1_5	1	1.50	1435.7	-5610.9
## + V17_J2_1	1	1.43	1435.8	-5610.6
## - V5_J1_6	1	2.24	1439.5	-5610.6
## + V23_J2_2	1	1.35	1435.9	-5610.3
## - V16_J1_4	1	2.33	1439.5	-5610.3
## + V12_1_2_J1_1	1	1.32	1435.9	-5610.2
## - V17_J1_7	1	2.35	1439.6	-5610.2
## - V24_J1_3	1	2.36	1439.6	-5610.2
## + V16_J2_5	1	1.30	1435.9	-5610.2
## + V5_J1_7	1	1.22	1436.0	-5609.9
## - V19_J1_1	1	2.52	1439.7	-5609.6
## + V20_J1_5	1	1.12	1436.1	-5609.5
## + V19_J2_7	1	1.12	1436.1	-5609.5
## + V20_J1_4	1	1.02	1436.2	-5609.1
## + V13_1_J1_4	1	0.99	1436.2	-5609.1
## + V24_J1_1	1	0.95	1436.3	-5608.9
## - V1_J1_7	1	2.75	1440.0	-5608.8
## + V14_J1_6	1	0.91	1436.3	-5608.8
## + V4_J1_6	1	0.89	1436.3	-5608.7
## + V17_J2_3	1	0.89	1436.3	-5608.7
## + V3_J1_2	1	0.85	1436.4	-5608.5
## + V13_1_J2_4	1	0.81	1436.4	-5608.4
## + V24_J2_2	1	0.80	1436.4	-5608.4
## + V24_J2_4	1	0.80	1436.4	-5608.3
## + V3_J1_3	1	0.78	1436.4	-5608.3
## - V13_2_J1_4	1	2.89	1440.1	-5608.3
## - V26_J1_7	1	2.89	1440.1	-5608.3
## + V29_J2_5	1	0.77	1436.4	-5608.3
## + V2_J2_1	1	0.76	1436.5	-5608.2
## + V13_2_J2_3	1	0.74	1436.5	-5608.1
## + V19_J1_6	1	0.73	1436.5	-5608.1
## + V29_J1_1	1	0.73	1436.5	-5608.1
## + V13_3_J1_6	1	0.72	1436.5	-5608.1
## + V14_J1_2	1	0.69	1436.5	-5608.0
## - V23_J2_3	1	2.99	1440.2	-5607.9
## + V23_J2_4	1	0.64	1436.6	-5607.8
## + V30_J2_7	1	0.63	1436.6	-5607.7
## + V23_J1_7	1	0.62	1436.6	-5607.7
## + V5_J2_2	1	0.61	1436.6	-5607.7
## + V13_1_J1_1	1	0.56	1436.7	-5607.5
## + V1_J2_3	1	0.55	1436.7	-5607.5
## + V17_J2_4	1	0.53	1436.7	-5607.4
## + V20_J1_7	1	0.53	1436.7	-5607.4
## + V16_J1_5	1	0.52	1436.7	-5607.3
## + V23_J2_5	1	0.51	1436.7	-5607.3

## + V5_J1_3	1	0.50	1436.7	-5607.3
## + V3_J2_7	1	0.48	1436.7	-5607.2
## + V13_2_J2_4	1	0.46	1436.8	-5607.1
## + V15_J1_4	1	0.44	1436.8	-5607.1
## + V12_1_2_J2_1	1	0.44	1436.8	-5607.1
## + V13_2_J2_7	1	0.43	1436.8	-5607.0
## + V17_J1_1	1	0.41	1436.8	-5607.0
## + V29_J1_2	1	0.38	1436.8	-5606.8
## + V17_J2_5	1	0.35	1436.9	-5606.7
## + V16_J1_6	1	0.34	1436.9	-5606.7
## + V1_J1_6	1	0.33	1436.9	-5606.7
## + V13_3_J1_7	1	0.33	1436.9	-5606.6
## + V13_3_J2_3	1	0.32	1436.9	-5606.6
## + V12_1_2_J2_3	1	0.32	1436.9	-5606.6
## + V14_J2_2	1	0.31	1436.9	-5606.6
## + V4_J1_2	1	0.30	1436.9	-5606.5
## + V29_J2_7	1	0.29	1436.9	-5606.5
## + V16_J2_4	1	0.28	1436.9	-5606.5
## + V2_J2_5	1	0.28	1436.9	-5606.5
## + V24_J2_7	1	0.27	1436.9	-5606.5
## + V30_J1_6	1	0.27	1437.0	-5606.4
## + V2_J1_7	1	0.27	1437.0	-5606.4
## + V13_3_J2_2	1	0.26	1437.0	-5606.4
## + V3_J1_1	1	0.26	1437.0	-5606.4
## + V20_J1_3	1	0.25	1437.0	-5606.4
## + V24_J1_2	1	0.24	1437.0	-5606.3
## + V15_J1_5	1	0.23	1437.0	-5606.3
## + V20_J2_5	1	0.23	1437.0	-5606.3
## + V13_3_J1_3	1	0.22	1437.0	-5606.2
## + V13_2_J2_1	1	0.19	1437.0	-5606.1
## + V3_J1_6	1	0.18	1437.0	-5606.1
## - V30_J1_7	1	3.49	1440.7	-5606.1
## + V17_J1_6	1	0.17	1437.0	-5606.1
## + V4_J1_1	1	0.17	1437.0	-5606.1
## + V16_J1_7	1	0.15	1437.1	-5606.0
## + V12_1_2_J2_5	1	0.14	1437.1	-5606.0
## + V1_J2_1	1	0.14	1437.1	-5606.0
## + V17_J1_4	1	0.12	1437.1	-5605.9
## + V19_J1_7	1	0.11	1437.1	-5605.9
## + V24_J2_1	1	0.10	1437.1	-5605.8
## + V16_J1_1	1	0.10	1437.1	-5605.8
## + V2_J2_4	1	0.10	1437.1	-5605.8
## + V19_J1_2	1	0.10	1437.1	-5605.8
## + V26_J2_7	1	0.09	1437.1	-5605.8
## + V26_J2_2	1	0.09	1437.1	-5605.8
## + V3_J1_7	1	0.09	1437.1	-5605.8
## + V12_1_2_J2_4	1	0.09	1437.1	-5605.8
## + V1_J2_4	1	0.08	1437.1	-5605.8
## + V5_J1_1	1	0.07	1437.1	-5605.7
## + V2_J2_3	1	0.07	1437.2	-5605.7
## + V1_J1_4	1	0.07	1437.2	-5605.7
## + V23_J1_6	1	0.07	1437.2	-5605.7
## + V20_J2_7	1	0.06	1437.2	-5605.7
## + V14_J1_7	1	0.06	1437.2	-5605.7

## + V2_J1_1	1	0.06	1437.2	-5605.7
## + V4_J1_7	1	0.06	1437.2	-5605.7
## + V13_1_J2_3	1	0.06	1437.2	-5605.7
## + V4_J2_2	1	0.05	1437.2	-5605.7
## - V2_J1_6	1	3.63	1440.8	-5605.6
## + V13_3_J1_5	1	0.04	1437.2	-5605.6
## + V17_J1_2	1	0.03	1437.2	-5605.6
## + V30_J1_4	1	0.03	1437.2	-5605.6
## + V13_2_J1_1	1	0.03	1437.2	-5605.6
## + V14_J1_1	1	0.03	1437.2	-5605.6
## + V19_J2_2	1	0.03	1437.2	-5605.6
## + V13_3_J2_7	1	0.03	1437.2	-5605.6
## + V15_J2_5	1	0.02	1437.2	-5605.5
## + V13_3_J2_1	1	0.02	1437.2	-5605.5
## + V13_1_J2_5	1	0.02	1437.2	-5605.5
## + V29_J2_4	1	0.02	1437.2	-5605.5
## + V23_J1_1	1	0.02	1437.2	-5605.5
## + V13_3_J1_4	1	0.02	1437.2	-5605.5
## + V13_2_J1_3	1	0.02	1437.2	-5605.5
## - V26_J1_3	1	3.66	1440.9	-5605.5
## + V23_J1_2	1	0.01	1437.2	-5605.5
## + V5_J2_7	1	0.01	1437.2	-5605.5
## + V13_1_J2_1	1	0.01	1437.2	-5605.5
## + V23_J1_5	1	0.00	1437.2	-5605.5
## + V24_J1_4	1	0.00	1437.2	-5605.5
## + V30_J2_4	1	0.00	1437.2	-5605.5
## + V29_J1_6	1	0.00	1437.2	-5605.5
## + V13_1_J1_6	1	0.00	1437.2	-5605.5
## + V2_J1_2	1	0.00	1437.2	-5605.5
## + V3_J2_2	1	0.00	1437.2	-5605.5
## + V1_J1_2	1	0.00	1437.2	-5605.5
## + V2_J1_4	1	0.00	1437.2	-5605.5
## + V26_J1_2	1	0.00	1437.2	-5605.5
## - V5_J1_2	1	3.82	1441.0	-5604.9
## - V16_J2_1	1	3.85	1441.1	-5604.8
## - V13_2_J2_5	1	3.87	1441.1	-5604.8
## - V29_J1_4	1	4.04	1441.3	-5604.1
## - V13_1_J2_2	1	4.11	1441.3	-5603.9
## - V13_3_J2_5	1	4.18	1441.4	-5603.6
## - V13_1_J2_7	1	4.37	1441.6	-5602.9
## - V13_2_J1_5	1	4.67	1441.9	-5601.9
## - V14_J2_7	1	4.90	1442.1	-5601.0
## - V12_1_2_J1_2	1	5.07	1442.3	-5600.4
## - V16_J1_2	1	5.20	1442.4	-5600.0
## - V13_2_J1_2	1	5.24	1442.5	-5599.8
## - V13_3_J1_2	1	5.59	1442.8	-5598.6
## - V13_2_J1_6	1	5.61	1442.8	-5598.5
## - V23_J1_4	1	6.23	1443.4	-5596.2
## - V2_J1_5	1	6.24	1443.5	-5596.2
## - V29_J2_1	1	6.32	1443.5	-5595.9
## - V19_J1_3	1	6.37	1443.6	-5595.7
## - V26_J1_1	1	6.52	1443.7	-5595.2
## - V1_J1_5	1	6.53	1443.8	-5595.1
## - V29_J2_2	1	6.73	1444.0	-5594.4

## - V23_J2_1	1	7.27	1444.5	-5592.5
## - V14_J1_3	1	7.57	1444.8	-5591.4
## - V24_J2_3	1	7.73	1444.9	-5590.8
## - V15_J2_3	1	8.61	1445.8	-5587.7
## - V1_J2_5	1	8.62	1445.8	-5587.6
## - V20_J1_2	1	8.67	1445.9	-5587.5
## - V13_1_J1_5	1	9.05	1446.3	-5586.1
## - V29_J2_3	1	9.08	1446.3	-5586.0
## - V30_J2_3	1	9.21	1446.4	-5585.5
## - V24_J2_5	1	9.35	1446.6	-5585.0
## - V26_J1_6	1	9.71	1446.9	-5583.7
## - V17_J1_5	1	11.33	1448.5	-5577.9
## - V24_J1_7	1	11.98	1449.2	-5575.6
## - V15_J2_1	1	12.36	1449.6	-5574.2
## - V26_J1_5	1	12.68	1449.9	-5573.1
## - V20_J2_1	1	14.27	1451.5	-5567.3
## - V13_1_J1_7	1	14.29	1451.5	-5567.3
## - V16_J2_3	1	14.48	1451.7	-5566.6
## - V20_J2_3	1	14.92	1452.1	-5565.0
## - V24_J1_6	1	15.03	1452.2	-5564.6
## - V12_1_2_J1_6	1	15.51	1452.7	-5562.9
## - V29_J1_5	1	17.20	1454.4	-5556.9
## - V29_J1_3	1	17.68	1454.9	-5555.2
## - V12_1_2_J1_7	1	19.05	1456.3	-5550.2
## - V13_1_J1_2	1	21.22	1458.4	-5542.5
## - V4_J1_3	1	21.68	1458.9	-5540.9
## - V14_J2_5	1	25.81	1463.0	-5526.2
## - V2_J2_2	1	26.66	1463.9	-5523.1
## - V15_J1_2	1	27.29	1464.5	-5520.9
## - V30_J1_5	1	27.60	1464.8	-5519.8
## - V23_J2_7	1	27.66	1464.9	-5519.6
## - V3_J1_5	1	28.10	1465.3	-5518.0
## - V30_J2_5	1	28.13	1465.3	-5517.9
## - V14_J2_1	1	28.18	1465.4	-5517.8
## - V4_J1_5	1	28.52	1465.7	-5516.6
## - V2_J2_7	1	29.79	1467.0	-5512.0
## - V26_J1_4	1	31.85	1469.1	-5504.8
## - V15_J1_1	1	33.33	1470.5	-5499.5
## - V12_1_2_J2_7	1	34.39	1471.6	-5495.8
## - V30_J1_3	1	38.30	1475.5	-5482.0
## - V13_2_J1_7	1	38.67	1475.9	-5480.7
## - V19_J2_4	1	40.03	1477.2	-5475.9
## - V19_J2_5	1	40.48	1477.7	-5474.3
## - V4_J2_7	1	43.17	1480.4	-5464.8
## - V5_J1_4	1	43.22	1480.4	-5464.7
## - V30_J1_2	1	46.12	1483.3	-5454.5
## - V12_1_2_J1_3	1	46.31	1483.5	-5453.8
## - V14_J2_4	1	46.37	1483.6	-5453.6
## - V16_J2_7	1	48.29	1485.5	-5446.9
## - V4_J1_4	1	49.06	1486.3	-5444.2
## - V19_J2_1	1	50.61	1487.8	-5438.8
## - V5_J2_1	1	53.50	1490.7	-5428.7
## - V1_J2_2	1	59.22	1496.4	-5408.8
## - V17_J2_2	1	59.24	1496.5	-5408.7

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## - V15_J1_6      1      59.32 1496.5 -5408.4
## - V15_J1_3      1      59.51 1496.7 -5407.7
## - V30_J2_2      1      61.81 1499.0 -5399.8
## - V14_J2_3      1      61.90 1499.1 -5399.5
## - V17_J2_7      1      64.48 1501.7 -5390.5
## - V5_J2_3       1      67.19 1504.4 -5381.1
## - V1_J1_3       1      70.67 1507.9 -5369.1
## - V15_J1_7      1      71.58 1508.8 -5366.0
## - V14_J1_5      1      76.56 1513.8 -5348.9
## - V30_J1_1      1      76.91 1514.1 -5347.7
## - V16_J1_3      1      79.03 1516.2 -5340.4
## - V19_J2_3      1      85.26 1522.5 -5319.1
## - V23_J1_3      1      85.90 1523.1 -5316.9
## - V3_J1_4       1      87.91 1525.1 -5310.0
## - V17_J1_3      1      87.94 1525.2 -5309.9
## - V1_J2_7       1      90.73 1527.9 -5300.4
## - V2_J1_3       1      90.80 1528.0 -5300.2
## - V14_J1_4      1      93.36 1530.6 -5291.5
## - V26_J2_1      1      99.03 1536.2 -5272.2
## - V12_1_2_J1_4  1     105.10 1542.3 -5251.7
## - V5_J1_5       1     106.42 1543.6 -5247.3
## - V3_J2_1       1     112.36 1549.6 -5227.3
## - V15_J2_7      1     114.94 1552.2 -5218.7
## - V4_J2_5       1     116.11 1553.3 -5214.7
## - V4_J2_3       1     116.51 1553.7 -5213.4
## - V4_J2_1       1     124.93 1562.1 -5185.3
## - V19_J1_5      1     129.78 1567.0 -5169.2
## - V26_J2_5      1     135.26 1572.5 -5151.0
## - V3_J2_5       1     135.46 1572.7 -5150.4
## - V26_J2_4      1     136.22 1573.4 -5147.9
## - V15_J2_2      1     137.33 1574.5 -5144.2
## - V4_J2_4       1     161.99 1599.2 -5063.4
## - V12_1_2_J2_2  1     171.11 1608.3 -5033.8
## - V3_J2_3       1     181.65 1618.9 -4999.8
## - V19_J1_4      1     184.62 1621.8 -4990.3
## - V3_J2_4       1     196.85 1634.1 -4951.2
## - V20_J2_2      1     252.93 1690.2 -4775.8
## - V26_J2_3      1     255.04 1692.2 -4769.3
## - J             12     282.14 1719.3 -4759.7
## - V5_J2_5       1     269.70 1706.9 -4724.4
## - V5_J2_4       1     305.76 1743.0 -4615.7
## - V16_J2_2      1     428.44 1865.7 -4262.0
## - V             19     995.42 2432.6 -3001.6
##
## Step:  AIC=-5614.19
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +

```

```

##      V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
##      V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
##      V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 + V20_J2_3 +
##      V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
##      V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
##      V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
##      V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
##      V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V13_3_J2_5 + V20_J1_2 +
##      V13_2_J1_4 + V26_J1_6 + V13_1_J1_5 + V26_J1_1 + V2_J1_6 +
##      V15_J2_3 + V30_J2_3 + V24_J2_3 + V13_2_J1_5 + V13_1_J2_2 +
##      V19_J1_3 + V14_J1_3 + V19_J1_1 + V16_J2_1 + V13_2_J2_5 +
##      V29_J2_3 + V1_J1_1 + V23_J2_3 + V13_1_J2_7 + V14_J2_7 + V29_J2_1 +
##      V29_J2_2 + V29_J1_4 + V13_3_J1_2 + V13_2_J1_2 + V16_J1_2 +
##      V24_J1_3 + V5_J1_2 + V30_J1_7 + V26_J1_7 + V16_J1_4 + V1_J1_7 +
##      V17_J1_7 + V5_J1_6 + V20_J1_6
##
##      Df Sum of Sq    RSS    AIC
## + V20_J2_4      1      2.33 1432.5 -5616.0
## - V1_J1_1       1      1.41 1436.2 -5615.7
## + V13_3_J1_1    1      2.13 1432.7 -5615.3
## + V30_J2_1      1      2.12 1432.7 -5615.3
## + V13_1_J1_3    1      2.08 1432.7 -5615.1
## - V29_J1_7      1      1.62 1436.4 -5614.9
## + V13_3_J2_4    1      1.91 1432.9 -5614.5
## <none>                      1434.8 -5614.2
## + V13_2_J2_2    1      1.81 1433.0 -5614.1
## + V15_J2_4      1      1.59 1433.2 -5613.3
## + V12_1_2_J1_5  1      1.56 1433.2 -5613.2
## + V24_J1_5      1      1.49 1433.3 -5613.0
## + V17_J2_1      1      1.41 1433.4 -5612.7
## - V16_J1_4      1      2.26 1437.1 -5612.6
## - V24_J1_3      1      2.30 1437.1 -5612.5
## + V23_J2_2      1      1.35 1433.5 -5612.4
## + V12_1_2_J1_1  1      1.33 1433.5 -5612.4
## - V17_J1_7      1      2.41 1437.2 -5612.1
## - V20_J1_6      1      2.41 1437.2 -5612.1
## + V20_J1_1      1      1.25 1433.6 -5612.1
## - V19_J1_1      1      2.43 1437.2 -5612.0
## + V16_J2_5      1      1.22 1433.6 -5612.0
## + V5_J1_7       1      1.22 1433.6 -5612.0
## + V14_J1_6      1      1.17 1433.6 -5611.8
## - V5_J1_6       1      2.61 1437.4 -5611.4
## + V19_J2_7      1      1.03 1433.8 -5611.3
## + V13_3_J1_6    1      0.99 1433.8 -5611.2
## + V24_J1_1      1      0.94 1433.9 -5611.0
## + V13_1_J1_4    1      0.94 1433.9 -5611.0
## + V17_J2_3      1      0.91 1433.9 -5610.8
## + V20_J1_7      1      0.89 1433.9 -5610.8
## + V3_J1_2       1      0.85 1434.0 -5610.6
## + V29_J2_5      1      0.85 1434.0 -5610.6
## + V13_1_J2_4    1      0.84 1434.0 -5610.6
## - V1_J1_7       1      2.84 1437.6 -5610.5
## + V24_J2_4      1      0.80 1434.0 -5610.5
## + V20_J1_5      1      0.77 1434.0 -5610.4

```

## + V24_J2_2	1	0.77	1434.0	-5610.4
## + V13_2_J2_3	1	0.76	1434.0	-5610.3
## + V2_J2_1	1	0.74	1434.1	-5610.3
## - V26_J1_7	1	2.93	1437.7	-5610.2
## - V13_2_J1_4	1	2.93	1437.7	-5610.2
## + V14_J1_2	1	0.72	1434.1	-5610.2
## + V3_J1_3	1	0.69	1434.1	-5610.1
## + V29_J1_1	1	0.69	1434.1	-5610.0
## + V4_J1_6	1	0.68	1434.1	-5610.0
## + V23_J2_4	1	0.68	1434.1	-5610.0
## + V20_J1_4	1	0.67	1434.1	-5610.0
## - V23_J2_3	1	3.01	1437.8	-5609.9
## + V5_J2_2	1	0.64	1434.2	-5609.9
## + V23_J1_7	1	0.59	1434.2	-5609.7
## + V30_J2_7	1	0.57	1434.2	-5609.6
## + V23_J2_5	1	0.56	1434.2	-5609.6
## + V19_J1_6	1	0.54	1434.3	-5609.5
## + V13_1_J1_1	1	0.54	1434.3	-5609.5
## + V1_J2_3	1	0.52	1434.3	-5609.4
## - V2_J1_6	1	3.15	1438.0	-5609.4
## + V17_J2_4	1	0.50	1434.3	-5609.4
## + V5_J1_3	1	0.46	1434.3	-5609.2
## + V12_1_2_J2_1	1	0.46	1434.3	-5609.2
## + V20_J2_5	1	0.46	1434.3	-5609.2
## + V16_J1_5	1	0.45	1434.3	-5609.2
## + V13_2_J2_4	1	0.45	1434.3	-5609.2
## + V13_2_J2_7	1	0.44	1434.4	-5609.2
## + V15_J1_4	1	0.44	1434.4	-5609.2
## + V3_J2_7	1	0.44	1434.4	-5609.2
## + V17_J1_1	1	0.44	1434.4	-5609.2
## + V30_J1_6	1	0.43	1434.4	-5609.1
## + V29_J1_2	1	0.38	1434.4	-5608.9
## + V13_3_J1_7	1	0.34	1434.5	-5608.8
## + V14_J2_2	1	0.34	1434.5	-5608.8
## + V29_J2_7	1	0.33	1434.5	-5608.8
## + V13_3_J2_3	1	0.32	1434.5	-5608.7
## + V17_J2_5	1	0.31	1434.5	-5608.7
## + V12_1_2_J2_3	1	0.30	1434.5	-5608.7
## + V16_J2_4	1	0.30	1434.5	-5608.7
## + V2_J2_5	1	0.29	1434.5	-5608.6
## + V3_J1_1	1	0.28	1434.5	-5608.6
## + V24_J2_7	1	0.28	1434.5	-5608.6
## + V4_J1_2	1	0.28	1434.5	-5608.6
## + V13_3_J2_2	1	0.27	1434.5	-5608.5
## + V24_J1_2	1	0.27	1434.5	-5608.5
## + V2_J1_7	1	0.26	1434.5	-5608.5
## + V15_J1_5	1	0.22	1434.6	-5608.4
## + V1_J1_6	1	0.20	1434.6	-5608.3
## + V16_J1_6	1	0.20	1434.6	-5608.3
## + V13_2_J2_1	1	0.20	1434.6	-5608.3
## + V13_3_J1_3	1	0.18	1434.6	-5608.2
## + V16_J1_7	1	0.17	1434.6	-5608.2
## + V12_1_2_J2_5	1	0.15	1434.7	-5608.1
## + V17_J1_4	1	0.15	1434.7	-5608.1

## + V19_J1_7	1	0.14	1434.7	-5608.1
## + V4_J1_1	1	0.14	1434.7	-5608.1
## + V1_J2_1	1	0.13	1434.7	-5608.0
## + V16_J1_1	1	0.11	1434.7	-5608.0
## - V26_J1_3	1	3.56	1438.4	-5608.0
## + V1_J2_4	1	0.10	1434.7	-5607.9
## + V26_J2_7	1	0.10	1434.7	-5607.9
## + V20_J1_3	1	0.10	1434.7	-5607.9
## + V2_J2_4	1	0.10	1434.7	-5607.9
## + V24_J2_1	1	0.09	1434.7	-5607.9
## + V26_J2_2	1	0.09	1434.7	-5607.9
## + V19_J1_2	1	0.09	1434.7	-5607.9
## + V1_J1_4	1	0.09	1434.7	-5607.9
## + V12_1_2_J2_4	1	0.09	1434.7	-5607.9
## + V3_J1_6	1	0.09	1434.7	-5607.9
## - V30_J1_7	1	3.58	1438.4	-5607.9
## + V4_J1_7	1	0.08	1434.7	-5607.8
## + V17_J1_6	1	0.08	1434.7	-5607.8
## + V3_J1_7	1	0.07	1434.7	-5607.8
## + V5_J1_1	1	0.07	1434.7	-5607.8
## + V2_J2_3	1	0.07	1434.7	-5607.8
## + V2_J1_1	1	0.06	1434.8	-5607.8
## + V13_3_J1_5	1	0.06	1434.8	-5607.8
## + V13_1_J2_3	1	0.05	1434.8	-5607.8
## + V4_J2_2	1	0.04	1434.8	-5607.7
## + V14_J1_7	1	0.04	1434.8	-5607.7
## + V19_J2_2	1	0.04	1434.8	-5607.7
## + V29_J1_6	1	0.04	1434.8	-5607.7
## + V13_1_J1_6	1	0.04	1434.8	-5607.7
## + V17_J1_2	1	0.03	1434.8	-5607.7
## + V13_3_J2_7	1	0.03	1434.8	-5607.7
## + V13_2_J1_1	1	0.03	1434.8	-5607.7
## + V29_J2_4	1	0.03	1434.8	-5607.7
## + V13_2_J1_3	1	0.03	1434.8	-5607.6
## + V23_J1_1	1	0.02	1434.8	-5607.6
## + V13_3_J1_4	1	0.02	1434.8	-5607.6
## + V15_J2_5	1	0.02	1434.8	-5607.6
## + V13_3_J2_1	1	0.02	1434.8	-5607.6
## + V30_J1_4	1	0.02	1434.8	-5607.6
## + V14_J1_1	1	0.02	1434.8	-5607.6
## + V23_J1_6	1	0.01	1434.8	-5607.6
## + V13_1_J2_5	1	0.01	1434.8	-5607.6
## + V30_J2_4	1	0.01	1434.8	-5607.6
## + V23_J1_2	1	0.01	1434.8	-5607.6
## + V5_J2_7	1	0.01	1434.8	-5607.6
## + V24_J1_4	1	0.01	1434.8	-5607.6
## + V13_1_J2_1	1	0.01	1434.8	-5607.6
## + V2_J1_2	1	0.00	1434.8	-5607.6
## + V20_J2_7	1	0.00	1434.8	-5607.6
## + V3_J2_2	1	0.00	1434.8	-5607.6
## + V23_J1_5	1	0.00	1434.8	-5607.6
## + V1_J1_2	1	0.00	1434.8	-5607.6
## + V26_J1_2	1	0.00	1434.8	-5607.6
## + V2_J1_4	1	0.00	1434.8	-5607.6

## - V13_2_J2_5	1	3.82	1438.6	-5607.0
## - V16_J2_1	1	3.83	1438.6	-5607.0
## - V5_J1_2	1	3.90	1438.7	-5606.7
## - V13_1_J2_2	1	4.11	1438.9	-5605.9
## - V29_J1_4	1	4.16	1439.0	-5605.8
## - V13_3_J2_5	1	4.26	1439.1	-5605.4
## - V13_1_J2_7	1	4.30	1439.1	-5605.3
## - V13_2_J1_5	1	4.58	1439.4	-5604.2
## - V14_J2_7	1	4.74	1439.5	-5603.7
## - V12_1_2_J1_2	1	4.98	1439.8	-5602.8
## - V13_2_J1_6	1	5.00	1439.8	-5602.7
## - V16_J1_2	1	5.21	1440.0	-5602.0
## - V13_2_J1_2	1	5.32	1440.1	-5601.6
## - V13_3_J1_2	1	5.63	1440.4	-5600.5
## - V23_J1_4	1	6.11	1440.9	-5598.7
## - V19_J1_3	1	6.13	1440.9	-5598.7
## - V2_J1_5	1	6.35	1441.2	-5597.9
## - V29_J2_1	1	6.38	1441.2	-5597.8
## - V26_J1_1	1	6.56	1441.4	-5597.1
## - V1_J1_5	1	6.75	1441.5	-5596.4
## - V29_J2_2	1	6.76	1441.6	-5596.4
## - V14_J1_3	1	7.29	1442.1	-5594.5
## - V23_J2_1	1	7.30	1442.1	-5594.4
## - V24_J2_3	1	7.68	1442.5	-5593.1
## - V1_J2_5	1	8.42	1443.2	-5590.4
## - V15_J2_3	1	8.51	1443.3	-5590.1
## - V13_1_J1_5	1	8.85	1443.7	-5588.8
## - V26_J1_6	1	9.00	1443.8	-5588.3
## - V29_J2_3	1	9.15	1444.0	-5587.8
## - V24_J2_5	1	9.28	1444.1	-5587.3
## - V30_J2_3	1	9.29	1444.1	-5587.2
## - V20_J1_2	1	9.65	1444.5	-5586.0
## - V17_J1_5	1	11.57	1446.4	-5579.0
## - V24_J1_7	1	11.99	1446.8	-5577.5
## - V15_J2_1	1	12.22	1447.0	-5576.7
## - V26_J1_5	1	12.49	1447.3	-5575.8
## - V24_J1_6	1	13.97	1448.8	-5570.4
## - V13_1_J1_7	1	14.19	1449.0	-5569.7
## - V16_J2_3	1	14.44	1449.2	-5568.8
## - V20_J2_1	1	15.43	1450.2	-5565.2
## - V20_J2_3	1	16.08	1450.9	-5562.9
## - V12_1_2_J1_6	1	16.42	1451.2	-5561.7
## - V29_J1_3	1	17.33	1452.1	-5558.4
## - V29_J1_5	1	17.51	1452.3	-5557.7
## - V12_1_2_J1_7	1	19.06	1453.9	-5552.2
## - V4_J1_3	1	21.20	1456.0	-5544.6
## - V13_1_J1_2	1	21.27	1456.1	-5544.3
## - V14_J2_5	1	25.39	1460.2	-5529.6
## - V2_J2_2	1	26.79	1461.6	-5524.6
## - V15_J1_2	1	26.99	1461.8	-5523.9
## - V23_J2_7	1	27.43	1462.2	-5522.3
## - V3_J1_5	1	27.69	1462.5	-5521.4
## - V14_J2_1	1	27.95	1462.8	-5520.5
## - V4_J1_5	1	27.98	1462.8	-5520.4

## - V30_J1_5	1	28.02	1462.8	-5520.3
## - V30_J2_5	1	28.47	1463.3	-5518.7
## - V2_J2_7	1	29.71	1464.5	-5514.2
## - V26_J1_4	1	31.66	1466.5	-5507.3
## - V15_J1_1	1	33.20	1468.0	-5501.9
## - V12_1_2_J2_7	1	34.35	1469.2	-5497.8
## - V30_J1_3	1	37.75	1472.5	-5485.8
## - V13_2_J1_7	1	38.65	1473.5	-5482.6
## - V19_J2_4	1	39.61	1474.4	-5479.2
## - V19_J2_5	1	39.96	1474.8	-5478.0
## - V4_J2_7	1	42.68	1477.5	-5468.4
## - V5_J1_4	1	43.13	1477.9	-5466.8
## - V14_J2_4	1	45.90	1480.7	-5457.1
## - V12_1_2_J1_3	1	46.06	1480.9	-5456.5
## - V30_J1_2	1	46.19	1481.0	-5456.1
## - V16_J2_7	1	48.00	1482.8	-5449.7
## - V4_J1_4	1	48.48	1483.3	-5448.0
## - V19_J2_1	1	50.33	1485.1	-5441.6
## - V5_J2_1	1	53.67	1488.5	-5429.9
## - V15_J1_6	1	56.94	1491.7	-5418.5
## - V1_J2_2	1	59.05	1493.9	-5411.1
## - V17_J2_2	1	59.19	1494.0	-5410.6
## - V15_J1_3	1	59.66	1494.5	-5409.0
## - V14_J2_3	1	61.55	1496.4	-5402.4
## - V30_J2_2	1	61.67	1496.5	-5402.0
## - V17_J2_7	1	64.09	1498.9	-5393.6
## - V5_J2_3	1	67.37	1502.2	-5382.2
## - V1_J1_3	1	69.88	1504.7	-5373.5
## - V15_J1_7	1	71.44	1506.2	-5368.2
## - V14_J1_5	1	75.64	1510.4	-5353.7
## - V30_J1_1	1	77.29	1512.1	-5348.0
## - V16_J1_3	1	78.38	1513.2	-5344.3
## - V19_J2_3	1	84.87	1519.7	-5322.0
## - V23_J1_3	1	85.20	1520.0	-5320.9
## - V17_J1_3	1	87.19	1522.0	-5314.1
## - V3_J1_4	1	87.37	1522.2	-5313.5
## - V1_J2_7	1	90.13	1524.9	-5304.0
## - V2_J1_3	1	90.36	1525.2	-5303.2
## - V14_J1_4	1	92.55	1527.3	-5295.8
## - V26_J2_1	1	99.04	1533.8	-5273.7
## - V12_1_2_J1_4	1	104.95	1539.8	-5253.7
## - V5_J1_5	1	106.08	1540.9	-5249.9
## - V3_J2_1	1	112.17	1547.0	-5229.4
## - V15_J2_7	1	114.84	1549.6	-5220.4
## - V4_J2_5	1	115.17	1550.0	-5219.3
## - V4_J2_3	1	116.04	1550.8	-5216.4
## - V4_J2_1	1	124.44	1559.2	-5188.3
## - V19_J1_5	1	128.58	1563.4	-5174.5
## - V3_J2_5	1	134.75	1569.5	-5154.1
## - V26_J2_5	1	134.83	1569.6	-5153.8
## - V26_J2_4	1	135.96	1570.8	-5150.0
## - V15_J2_2	1	136.75	1571.6	-5147.4
## - V4_J2_4	1	161.08	1595.9	-5067.6
## - V12_1_2_J2_2	1	171.52	1606.3	-5033.6


```

## - V3_J2_3      1      181.40 1616.2 -5001.8
## - V19_J1_4     1      183.47 1618.3 -4995.1
## - V3_J2_4      1      196.22 1631.0 -4954.3
## - J            12     278.90 1713.7 -4770.1
## - V26_J2_3     1      255.04 1689.8 -4770.1
## - V20_J2_2     1      255.26 1690.1 -4769.4
## - V5_J2_5      1      269.45 1704.2 -4725.9
## - V5_J2_4      1      305.77 1740.6 -4616.3
## - V16_J2_2     1      428.41 1863.2 -4262.2
## - V            19     964.34 2399.2 -3067.0
##
## Step:  AIC=-5616.01
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 + V20_J2_3 +
## V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
## V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
## V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V13_3_J2_5 + V20_J1_2 +
## V13_2_J1_4 + V26_J1_6 + V13_1_J1_5 + V26_J1_1 + V2_J1_6 +
## V15_J2_3 + V30_J2_3 + V24_J2_3 + V13_2_J1_5 + V13_1_J2_2 +
## V19_J1_3 + V14_J1_3 + V19_J1_1 + V16_J2_1 + V13_2_J2_5 +
## V29_J2_3 + V1_J1_1 + V23_J2_3 + V13_1_J2_7 + V14_J2_7 + V29_J2_1 +
## V29_J2_2 + V29_J1_4 + V13_3_J1_2 + V13_2_J1_2 + V16_J1_2 +
## V24_J1_3 + V5_J1_2 + V30_J1_7 + V26_J1_7 + V16_J1_4 + V1_J1_7 +
## V17_J1_7 + V5_J1_6 + V20_J1_6 + V20_J2_4
##
##
##      Df Sum of Sq    RSS    AIC
## - V1_J1_1      1      1.34 1433.8 -5617.8
## + V13_3_J2_4    1      2.30 1430.2 -5617.7
## + V13_1_J1_3    1      2.25 1430.2 -5617.5
## + V13_3_J1_1    1      2.17 1430.3 -5617.2
## + V30_J2_1      1      2.15 1430.3 -5617.2
## - V29_J1_7      1      1.54 1434.0 -5617.1
## + V13_2_J2_2    1      1.85 1430.6 -5616.1
## <none>                                1432.5 -5616.0
## + V12_1_2_J1_5  1      1.68 1430.8 -5615.5
## - V24_J1_3      1      2.18 1434.7 -5614.7
## - V16_J1_4      1      2.21 1434.7 -5614.6
## + V24_J1_5      1      1.41 1431.1 -5614.5
## + V17_J2_1      1      1.40 1431.1 -5614.5
## + V20_J1_7      1      1.38 1431.1 -5614.4
## - V20_J2_4      1      2.33 1434.8 -5614.2
## + V23_J2_2      1      1.32 1431.2 -5614.2

```

## + V15_J2_4	1	1.30	1431.2	-5614.1
## + V12_1_2_J1_1	1	1.26	1431.2	-5613.9
## - V19_J1_1	1	2.42	1434.9	-5613.9
## + V5_J1_7	1	1.23	1431.2	-5613.8
## + V14_J1_6	1	1.19	1431.3	-5613.7
## + V16_J2_5	1	1.17	1431.3	-5613.6
## - V17_J1_7	1	2.51	1435.0	-5613.5
## + V13_3_J1_6	1	1.00	1431.5	-5613.0
## + V19_J2_7	1	1.00	1431.5	-5613.0
## - V5_J1_6	1	2.68	1435.2	-5612.9
## + V17_J2_3	1	0.91	1431.6	-5612.7
## + V24_J1_1	1	0.91	1431.6	-5612.7
## + V29_J2_5	1	0.90	1431.6	-5612.7
## + V13_1_J1_4	1	0.89	1431.6	-5612.6
## + V20_J2_5	1	0.84	1431.6	-5612.4
## + V3_J1_2	1	0.82	1431.7	-5612.3
## + V20_J1_1	1	0.81	1431.7	-5612.3
## + V24_J2_2	1	0.79	1431.7	-5612.3
## + V13_2_J2_3	1	0.77	1431.7	-5612.2
## + V2_J2_1	1	0.74	1431.7	-5612.1
## + V14_J1_2	1	0.70	1431.8	-5611.9
## - V26_J1_7	1	2.98	1435.5	-5611.9
## - V1_J1_7	1	2.98	1435.5	-5611.8
## + V17_J2_4	1	0.68	1431.8	-5611.8
## + V5_J2_2	1	0.67	1431.8	-5611.8
## - V23_J2_3	1	3.00	1435.5	-5611.8
## - V13_2_J1_4	1	3.00	1435.5	-5611.8
## + V4_J1_6	1	0.66	1431.8	-5611.8
## + V3_J1_3	1	0.64	1431.8	-5611.7
## - V20_J1_6	1	3.02	1435.5	-5611.7
## + V29_J1_1	1	0.64	1431.8	-5611.7
## + V13_1_J2_4	1	0.64	1431.8	-5611.7
## + V13_2_J2_4	1	0.63	1431.8	-5611.7
## + V24_J2_4	1	0.60	1431.9	-5611.6
## + V23_J2_5	1	0.60	1431.9	-5611.5
## + V23_J1_7	1	0.54	1431.9	-5611.3
## + V19_J1_6	1	0.52	1432.0	-5611.2
## + V13_1_J1_1	1	0.50	1432.0	-5611.2
## + V1_J2_3	1	0.50	1432.0	-5611.2
## + V30_J2_7	1	0.50	1432.0	-5611.2
## + V23_J2_4	1	0.50	1432.0	-5611.2
## - V2_J1_6	1	3.16	1435.6	-5611.2
## + V13_2_J2_7	1	0.49	1432.0	-5611.2
## + V17_J1_1	1	0.48	1432.0	-5611.1
## + V12_1_2_J2_1	1	0.46	1432.0	-5611.0
## + V20_J1_5	1	0.44	1432.0	-5611.0
## + V5_J1_3	1	0.43	1432.0	-5610.9
## + V3_J2_7	1	0.43	1432.0	-5610.9
## + V16_J1_5	1	0.41	1432.1	-5610.8
## + V30_J1_6	1	0.40	1432.1	-5610.8
## + V15_J1_4	1	0.40	1432.1	-5610.8
## + V29_J2_7	1	0.38	1432.1	-5610.8
## + V13_3_J1_7	1	0.38	1432.1	-5610.7
## + V29_J1_2	1	0.36	1432.1	-5610.7

## + V20_J1_4	1	0.35	1432.1	-5610.6
## + V14_J2_2	1	0.33	1432.1	-5610.6
## + V2_J2_5	1	0.32	1432.2	-5610.5
## + V24_J2_7	1	0.32	1432.2	-5610.5
## + V13_3_J2_3	1	0.31	1432.2	-5610.5
## + V12_1_2_J2_3	1	0.31	1432.2	-5610.5
## + V4_J1_2	1	0.29	1432.2	-5610.4
## + V3_J1_1	1	0.28	1432.2	-5610.4
## + V17_J2_5	1	0.27	1432.2	-5610.4
## + V13_3_J2_2	1	0.26	1432.2	-5610.3
## + V24_J1_2	1	0.26	1432.2	-5610.3
## + V2_J1_7	1	0.22	1432.2	-5610.2
## + V1_J1_6	1	0.22	1432.2	-5610.2
## + V16_J1_6	1	0.20	1432.3	-5610.1
## + V16_J1_7	1	0.20	1432.3	-5610.1
## + V13_2_J2_1	1	0.20	1432.3	-5610.1
## - V26_J1_3	1	3.46	1435.9	-5610.1
## + V2_J2_4	1	0.19	1432.3	-5610.1
## + V16_J2_4	1	0.18	1432.3	-5610.0
## + V12_1_2_J2_5	1	0.18	1432.3	-5610.0
## + V15_J1_5	1	0.18	1432.3	-5610.0
## + V17_J1_4	1	0.17	1432.3	-5610.0
## + V12_1_2_J2_4	1	0.17	1432.3	-5610.0
## + V19_J1_7	1	0.16	1432.3	-5609.9
## + V13_3_J1_3	1	0.15	1432.3	-5609.9
## + V4_J1_1	1	0.13	1432.3	-5609.9
## + V16_J1_1	1	0.13	1432.3	-5609.8
## + V1_J2_1	1	0.12	1432.3	-5609.8
## + V1_J1_4	1	0.12	1432.4	-5609.8
## + V26_J2_7	1	0.12	1432.4	-5609.8
## + V19_J1_2	1	0.10	1432.4	-5609.7
## + V26_J2_2	1	0.10	1432.4	-5609.7
## + V4_J1_7	1	0.09	1432.4	-5609.7
## + V24_J2_1	1	0.09	1432.4	-5609.7
## + V17_J1_6	1	0.08	1432.4	-5609.7
## + V3_J1_6	1	0.07	1432.4	-5609.6
## + V2_J2_3	1	0.07	1432.4	-5609.6
## + V13_3_J1_5	1	0.07	1432.4	-5609.6
## + V5_J1_1	1	0.07	1432.4	-5609.6
## + V3_J1_7	1	0.07	1432.4	-5609.6
## + V13_1_J2_3	1	0.06	1432.4	-5609.6
## + V2_J1_1	1	0.05	1432.4	-5609.5
## + V1_J2_4	1	0.05	1432.4	-5609.5
## + V13_2_J1_3	1	0.05	1432.4	-5609.5
## + V4_J2_2	1	0.05	1432.4	-5609.5
## + V13_3_J2_7	1	0.04	1432.4	-5609.5
## + V17_J1_2	1	0.04	1432.4	-5609.5
## + V19_J2_2	1	0.04	1432.4	-5609.5
## + V13_1_J1_6	1	0.04	1432.4	-5609.5
## + V29_J1_6	1	0.03	1432.4	-5609.5
## + V14_J1_7	1	0.03	1432.4	-5609.5
## + V23_J1_1	1	0.03	1432.4	-5609.5
## + V20_J2_7	1	0.03	1432.4	-5609.5
## + V13_3_J1_4	1	0.03	1432.4	-5609.5

## + V13_2_J1_1	1	0.02	1432.5	-5609.5
## + V13_3_J2_1	1	0.02	1432.5	-5609.4
## + V14_J1_1	1	0.02	1432.5	-5609.4
## + V23_J1_6	1	0.01	1432.5	-5609.4
## + V15_J2_5	1	0.01	1432.5	-5609.4
## + V20_J1_3	1	0.01	1432.5	-5609.4
## + V24_J1_4	1	0.01	1432.5	-5609.4
## + V30_J1_4	1	0.01	1432.5	-5609.4
## + V23_J1_2	1	0.01	1432.5	-5609.4
## + V13_1_J2_5	1	0.01	1432.5	-5609.4
## + V5_J2_7	1	0.01	1432.5	-5609.4
## + V13_1_J2_1	1	0.01	1432.5	-5609.4
## + V29_J2_4	1	0.00	1432.5	-5609.4
## + V2_J1_2	1	0.00	1432.5	-5609.4
## + V3_J2_2	1	0.00	1432.5	-5609.4
## + V26_J1_2	1	0.00	1432.5	-5609.4
## + V30_J2_4	1	0.00	1432.5	-5609.4
## + V2_J1_4	1	0.00	1432.5	-5609.4
## + V23_J1_5	1	0.00	1432.5	-5609.4
## + V1_J1_2	1	0.00	1432.5	-5609.4
## - V30_J1_7	1	3.73	1436.2	-5609.1
## - V13_2_J2_5	1	3.74	1436.2	-5609.1
## - V16_J2_1	1	3.85	1436.3	-5608.7
## - V5_J1_2	1	3.97	1436.5	-5608.2
## - V13_1_J2_2	1	4.07	1436.5	-5607.9
## - V13_1_J2_7	1	4.19	1436.7	-5607.5
## - V29_J1_4	1	4.26	1436.7	-5607.2
## - V13_3_J2_5	1	4.32	1436.8	-5607.0
## - V13_2_J1_5	1	4.46	1436.9	-5606.5
## - V14_J2_7	1	4.68	1437.2	-5605.7
## - V13_2_J1_6	1	5.02	1437.5	-5604.4
## - V12_1_2_J1_2	1	5.03	1437.5	-5604.4
## - V16_J1_2	1	5.19	1437.7	-5603.8
## - V13_2_J1_2	1	5.29	1437.8	-5603.5
## - V13_3_J1_2	1	5.64	1438.1	-5602.2
## - V19_J1_3	1	6.00	1438.5	-5600.9
## - V23_J1_4	1	6.02	1438.5	-5600.8
## - V29_J2_1	1	6.38	1438.9	-5599.5
## - V2_J1_5	1	6.49	1439.0	-5599.1
## - V26_J1_1	1	6.58	1439.0	-5598.8
## - V29_J2_2	1	6.84	1439.3	-5597.9
## - V1_J1_5	1	6.95	1439.4	-5597.5
## - V14_J1_3	1	7.14	1439.6	-5596.8
## - V23_J2_1	1	7.27	1439.7	-5596.3
## - V24_J2_3	1	7.66	1440.1	-5594.9
## - V1_J2_5	1	8.23	1440.7	-5592.9
## - V15_J2_3	1	8.53	1441.0	-5591.8
## - V13_1_J1_5	1	8.69	1441.2	-5591.2
## - V26_J1_6	1	8.94	1441.4	-5590.3
## - V29_J2_3	1	9.15	1441.6	-5589.5
## - V24_J2_5	1	9.16	1441.6	-5589.5
## - V30_J2_3	1	9.34	1441.8	-5588.9
## - V20_J1_2	1	10.73	1443.2	-5583.8
## - V17_J1_5	1	11.79	1444.3	-5580.0

## - V24_J1_7	1	12.19	1444.7	-5578.6
## - V15_J2_1	1	12.25	1444.7	-5578.4
## - V26_J1_5	1	12.40	1444.9	-5577.8
## - V13_1_J1_7	1	13.96	1446.4	-5572.2
## - V24_J1_6	1	13.99	1446.5	-5572.1
## - V16_J2_3	1	14.46	1446.9	-5570.4
## - V12_1_2_J1_6	1	16.34	1448.8	-5563.7
## - V20_J2_1	1	16.77	1449.2	-5562.1
## - V29_J1_3	1	16.95	1449.4	-5561.5
## - V20_J2_3	1	17.42	1449.9	-5559.8
## - V29_J1_5	1	17.77	1450.2	-5558.5
## - V12_1_2_J1_7	1	18.75	1451.2	-5555.0
## - V4_J1_3	1	20.94	1453.4	-5547.2
## - V13_1_J1_2	1	21.22	1453.7	-5546.2
## - V14_J2_5	1	25.32	1457.8	-5531.5
## - V2_J2_2	1	26.66	1459.1	-5526.7
## - V15_J1_2	1	27.11	1459.6	-5525.1
## - V23_J2_7	1	27.17	1459.6	-5524.9
## - V3_J1_5	1	27.60	1460.1	-5523.4
## - V4_J1_5	1	27.83	1460.3	-5522.6
## - V14_J2_1	1	28.12	1460.6	-5521.6
## - V30_J1_5	1	28.39	1460.9	-5520.6
## - V30_J2_5	1	28.77	1461.2	-5519.2
## - V2_J2_7	1	29.40	1461.9	-5517.0
## - V26_J1_4	1	31.61	1464.1	-5509.2
## - V15_J1_1	1	33.47	1466.0	-5502.5
## - V12_1_2_J2_7	1	33.96	1466.4	-5500.8
## - V30_J1_3	1	37.11	1469.6	-5489.7
## - V13_2_J1_7	1	38.26	1470.7	-5485.6
## - V19_J2_5	1	39.91	1472.4	-5479.8
## - V19_J2_4	1	40.79	1473.3	-5476.6
## - V4_J2_7	1	42.50	1475.0	-5470.6
## - V5_J1_4	1	43.21	1475.7	-5468.1
## - V12_1_2_J1_3	1	45.40	1477.9	-5460.4
## - V30_J1_2	1	46.39	1478.9	-5456.9
## - V14_J2_4	1	47.14	1479.6	-5454.3
## - V16_J2_7	1	47.63	1480.1	-5452.6
## - V4_J1_4	1	48.40	1480.9	-5449.8
## - V19_J2_1	1	50.57	1483.0	-5442.2
## - V5_J2_1	1	54.06	1486.5	-5430.0
## - V15_J1_6	1	57.09	1489.6	-5419.4
## - V1_J2_2	1	58.68	1491.2	-5413.9
## - V17_J2_2	1	58.94	1491.4	-5413.0
## - V15_J1_3	1	60.31	1492.8	-5408.2
## - V30_J2_2	1	61.34	1493.8	-5404.6
## - V14_J2_3	1	61.79	1494.3	-5403.1
## - V17_J2_7	1	63.56	1496.0	-5396.9
## - V5_J2_3	1	67.79	1500.3	-5382.2
## - V1_J1_3	1	68.93	1501.4	-5378.2
## - V15_J1_7	1	71.99	1504.5	-5367.7
## - V14_J1_5	1	75.39	1507.9	-5355.9
## - V16_J1_3	1	77.62	1510.1	-5348.2
## - V30_J1_1	1	77.75	1510.2	-5347.8
## - V23_J1_3	1	84.44	1516.9	-5324.8

```

## - V19_J2_3      1      85.18 1517.7 -5322.3
## - V17_J1_3      1      86.27 1518.7 -5318.5
## - V3_J1_4       1      87.37 1519.8 -5314.8
## - V1_J2_7       1      89.34 1521.8 -5308.1
## - V2_J1_3       1      89.49 1522.0 -5307.5
## - V14_J1_4      1      92.44 1524.9 -5297.5
## - V26_J2_1      1      99.35 1531.8 -5274.0
## - V12_1_2_J1_4  1     104.41 1536.9 -5256.8
## - V5_J1_5       1     106.02 1538.5 -5251.4
## - V3_J2_1       1     112.62 1545.1 -5229.1
## - V4_J2_5       1     115.03 1547.5 -5221.0
## - V15_J2_7      1     115.48 1548.0 -5219.5
## - V4_J2_3       1     116.35 1548.8 -5216.5
## - V4_J2_1       1     124.78 1557.2 -5188.3
## - V19_J1_5      1     128.29 1560.8 -5176.6
## - V26_J2_5      1     134.71 1567.2 -5155.3
## - V3_J2_5       1     134.73 1567.2 -5155.2
## - V15_J2_2      1     137.14 1569.6 -5147.2
## - V26_J2_4      1     137.75 1570.2 -5145.2
## - V4_J2_4       1     163.01 1595.5 -5062.2
## - V12_1_2_J2_2  1     171.06 1603.5 -5036.0
## - V3_J2_3       1     181.94 1614.4 -5000.9
## - V19_J1_4      1     183.37 1615.8 -4996.3
## - V3_J2_4       1     198.34 1630.8 -4948.3
## - V26_J2_3      1     255.50 1688.0 -4769.2
## - J             12     281.19 1713.7 -4763.6
## - V20_J2_2      1     257.38 1689.9 -4763.4
## - V5_J2_5       1     269.62 1702.1 -4725.9
## - V5_J2_4       1     308.07 1740.5 -4609.7
## - V16_J2_2      1     427.96 1860.4 -4263.3
## - V             19     946.56 2379.0 -3104.2
##
## Step:  AIC=-5617.77
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 + V20_J2_3 +
## V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
## V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
## V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V13_3_J2_5 + V20_J1_2 +
## V13_2_J1_4 + V26_J1_6 + V13_1_J1_5 + V26_J1_1 + V2_J1_6 +
## V15_J2_3 + V30_J2_3 + V24_J2_3 + V13_2_J1_5 + V13_1_J2_2 +
## V19_J1_3 + V14_J1_3 + V19_J1_1 + V16_J2_1 + V13_2_J2_5 +
## V29_J2_3 + V23_J2_3 + V13_1_J2_7 + V14_J2_7 + V29_J2_1 +

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##      V29_J2_2 + V29_J1_4 + V13_3_J1_2 + V13_2_J1_2 + V16_J1_2 +
##      V24_J1_3 + V5_J1_2 + V30_J1_7 + V26_J1_7 + V16_J1_4 + V1_J1_7 +
##      V17_J1_7 + V5_J1_6 + V20_J1_6 + V20_J2_4
##
##      Df Sum of Sq    RSS    AIC
## + V13_3_J1_1      1      2.40 1431.4 -5619.8
## + V13_3_J2_4      1      2.34 1431.5 -5619.6
## + V13_1_J1_3      1      2.28 1431.5 -5619.4
## - V29_J1_7        1      1.54 1435.3 -5618.8
## + V30_J2_1        1      2.12 1431.7 -5618.8
## + V13_2_J2_2      1      1.86 1432.0 -5617.9
## <none>                        1433.8 -5617.8
## + V12_1_2_J1_5    1      1.68 1432.1 -5617.2
## - V24_J1_3        1      2.16 1436.0 -5616.6
## + V17_J2_1        1      1.45 1432.4 -5616.4
## - V19_J1_1        1      2.22 1436.0 -5616.3
## + V24_J1_5        1      1.41 1432.4 -5616.2
## + V20_J1_7        1      1.38 1432.4 -5616.2
## - V16_J1_4        1      2.29 1436.1 -5616.1
## + V1_J1_1         1      1.34 1432.5 -5616.0
## + V23_J2_2        1      1.32 1432.5 -5615.9
## + V15_J2_4        1      1.29 1432.5 -5615.8
## + V14_J1_6        1      1.26 1432.6 -5615.7
## - V20_J2_4        1      2.40 1436.2 -5615.7
## + V5_J1_7         1      1.20 1432.6 -5615.5
## + V16_J2_5        1      1.19 1432.6 -5615.4
## - V17_J1_7        1      2.55 1436.4 -5615.2
## + V12_1_2_J1_1    1      1.08 1432.7 -5615.0
## + V13_3_J1_6      1      1.03 1432.8 -5614.9
## + V19_J2_7        1      0.98 1432.8 -5614.7
## + V20_J1_1        1      0.94 1432.9 -5614.5
## + V13_1_J1_4      1      0.94 1432.9 -5614.5
## + V29_J2_5        1      0.89 1432.9 -5614.4
## - V5_J1_6         1      2.78 1436.6 -5614.3
## + V20_J2_5        1      0.86 1433.0 -5614.3
## + V17_J2_3        1      0.86 1433.0 -5614.3
## + V13_2_J2_3      1      0.83 1433.0 -5614.1
## + V24_J2_2        1      0.80 1433.0 -5614.0
## + V3_J1_2         1      0.77 1433.0 -5613.9
## - V23_J2_3        1      2.89 1436.7 -5613.9
## + V24_J1_1        1      0.75 1433.1 -5613.9
## - V13_2_J1_4      1      2.91 1436.7 -5613.8
## + V2_J2_1         1      0.70 1433.1 -5613.7
## + V5_J2_2         1      0.70 1433.1 -5613.7
## + V17_J2_4        1      0.69 1433.1 -5613.7
## + V13_2_J2_4      1      0.67 1433.2 -5613.6
## - V26_J1_7        1      3.00 1436.8 -5613.5
## + V3_J1_3         1      0.65 1433.2 -5613.5
## + V14_J1_2        1      0.65 1433.2 -5613.5
## + V13_1_J2_4      1      0.62 1433.2 -5613.4
## + V4_J1_6         1      0.61 1433.2 -5613.4
## + V17_J1_1        1      0.61 1433.2 -5613.3
## + V23_J2_5        1      0.59 1433.2 -5613.3
## + V24_J2_4        1      0.58 1433.2 -5613.2

```

## - V20_J1_6	1	3.09	1436.9	-5613.2
## + V23_J1_7	1	0.54	1433.3	-5613.1
## - V2_J1_6	1	3.13	1437.0	-5613.1
## + V29_J1_1	1	0.52	1433.3	-5613.0
## + V12_1_2_J2_1	1	0.50	1433.3	-5612.9
## + V19_J1_6	1	0.50	1433.3	-5612.9
## + V13_2_J2_7	1	0.49	1433.3	-5612.9
## + V30_J2_7	1	0.47	1433.3	-5612.8
## + V23_J2_4	1	0.46	1433.3	-5612.8
## + V5_J1_3	1	0.45	1433.4	-5612.8
## + V1_J1_6	1	0.44	1433.4	-5612.7
## + V3_J2_7	1	0.44	1433.4	-5612.7
## + V20_J1_5	1	0.43	1433.4	-5612.7
## + V15_J1_4	1	0.42	1433.4	-5612.7
## + V16_J1_5	1	0.42	1433.4	-5612.6
## + V30_J1_6	1	0.40	1433.4	-5612.6
## + V29_J1_2	1	0.39	1433.4	-5612.6
## + V13_1_J1_1	1	0.39	1433.4	-5612.5
## + V13_3_J1_7	1	0.39	1433.4	-5612.5
## + V29_J2_7	1	0.38	1433.4	-5612.5
## + V3_J1_1	1	0.36	1433.5	-5612.4
## + V2_J2_5	1	0.33	1433.5	-5612.3
## + V14_J2_2	1	0.33	1433.5	-5612.3
## + V4_J1_2	1	0.32	1433.5	-5612.3
## + V24_J2_7	1	0.32	1433.5	-5612.3
## + V20_J1_4	1	0.30	1433.5	-5612.2
## + V1_J1_4	1	0.28	1433.5	-5612.2
## + V24_J1_2	1	0.28	1433.5	-5612.1
## + V13_3_J2_3	1	0.28	1433.5	-5612.1
## + V12_1_2_J2_3	1	0.27	1433.5	-5612.1
## + V17_J2_5	1	0.27	1433.5	-5612.1
## + V13_3_J2_2	1	0.26	1433.6	-5612.1
## + V1_J2_3	1	0.26	1433.6	-5612.1
## + V13_2_J2_1	1	0.23	1433.6	-5612.0
## - V26_J1_3	1	3.44	1437.2	-5611.9
## + V2_J1_7	1	0.21	1433.6	-5611.9
## + V2_J2_4	1	0.20	1433.6	-5611.9
## + V16_J1_7	1	0.20	1433.6	-5611.9
## + V16_J1_1	1	0.19	1433.6	-5611.8
## + V12_1_2_J2_4	1	0.19	1433.6	-5611.8
## + V16_J1_6	1	0.18	1433.6	-5611.8
## + V12_1_2_J2_5	1	0.18	1433.6	-5611.8
## + V1_J2_4	1	0.17	1433.7	-5611.7
## + V19_J1_7	1	0.17	1433.7	-5611.7
## + V15_J1_5	1	0.16	1433.7	-5611.7
## + V16_J2_4	1	0.16	1433.7	-5611.7
## + V17_J1_4	1	0.15	1433.7	-5611.7
## + V13_3_J1_3	1	0.14	1433.7	-5611.6
## + V26_J2_7	1	0.12	1433.7	-5611.6
## + V19_J1_2	1	0.11	1433.7	-5611.5
## + V5_J1_1	1	0.10	1433.7	-5611.5
## + V26_J2_2	1	0.09	1433.7	-5611.5
## + V4_J1_7	1	0.09	1433.7	-5611.5
## + V2_J2_3	1	0.09	1433.7	-5611.5

## + V4_J1_1	1	0.09	1433.7	-5611.4
## + V17_J1_6	1	0.08	1433.7	-5611.4
## + V24_J2_1	1	0.08	1433.7	-5611.4
## + V13_3_J1_5	1	0.07	1433.7	-5611.4
## + V13_1_J2_3	1	0.07	1433.8	-5611.4
## + V3_J1_7	1	0.07	1433.8	-5611.4
## + V23_J1_1	1	0.06	1433.8	-5611.4
## + V3_J1_6	1	0.06	1433.8	-5611.4
## + V4_J2_2	1	0.05	1433.8	-5611.3
## + V13_2_J1_3	1	0.05	1433.8	-5611.3
## + V13_3_J2_7	1	0.04	1433.8	-5611.3
## + V1_J1_2	1	0.04	1433.8	-5611.3
## + V29_J1_6	1	0.04	1433.8	-5611.3
## + V13_1_J1_6	1	0.04	1433.8	-5611.3
## + V19_J2_2	1	0.04	1433.8	-5611.3
## + V14_J1_7	1	0.04	1433.8	-5611.3
## + V17_J1_2	1	0.03	1433.8	-5611.3
## + V20_J2_7	1	0.03	1433.8	-5611.3
## + V1_J2_1	1	0.02	1433.8	-5611.2
## + V13_3_J1_4	1	0.02	1433.8	-5611.2
## + V2_J1_1	1	0.02	1433.8	-5611.2
## + V30_J1_4	1	0.01	1433.8	-5611.2
## + V13_3_J2_1	1	0.01	1433.8	-5611.2
## + V20_J1_3	1	0.01	1433.8	-5611.2
## + V15_J2_5	1	0.01	1433.8	-5611.2
## + V13_1_J2_1	1	0.01	1433.8	-5611.2
## + V23_J1_6	1	0.01	1433.8	-5611.2
## + V13_1_J2_5	1	0.01	1433.8	-5611.2
## + V13_2_J1_1	1	0.01	1433.8	-5611.2
## + V24_J1_4	1	0.01	1433.8	-5611.2
## + V23_J1_2	1	0.00	1433.8	-5611.1
## + V5_J2_7	1	0.00	1433.8	-5611.1
## + V14_J1_1	1	0.00	1433.8	-5611.1
## + V2_J1_2	1	0.00	1433.8	-5611.1
## + V26_J1_2	1	0.00	1433.8	-5611.1
## + V3_J2_2	1	0.00	1433.8	-5611.1
## + V29_J2_4	1	0.00	1433.8	-5611.1
## + V30_J2_4	1	0.00	1433.8	-5611.1
## + V2_J1_4	1	0.00	1433.8	-5611.1
## + V23_J1_5	1	0.00	1433.8	-5611.1
## - V1_J1_7	1	3.70	1437.5	-5611.0
## - V13_2_J2_5	1	3.75	1437.6	-5610.8
## - V30_J1_7	1	3.80	1437.6	-5610.6
## - V16_J2_1	1	3.96	1437.8	-5610.1
## - V13_1_J2_2	1	4.04	1437.9	-5609.8
## - V5_J1_2	1	4.09	1437.9	-5609.6
## - V29_J1_4	1	4.15	1438.0	-5609.4
## - V13_1_J2_7	1	4.17	1438.0	-5609.3
## - V13_3_J2_5	1	4.32	1438.1	-5608.7
## - V13_2_J1_5	1	4.46	1438.3	-5608.2
## - V14_J2_7	1	4.72	1438.5	-5607.3
## - V13_2_J1_6	1	4.95	1438.8	-5606.5
## - V12_1_2_J1_2	1	4.96	1438.8	-5606.4
## - V16_J1_2	1	5.29	1439.1	-5605.3

## - V13_2_J1_2	1	5.36	1439.2	-5605.0
## - V13_3_J1_2	1	5.70	1439.5	-5603.8
## - V19_J1_3	1	5.96	1439.8	-5602.8
## - V23_J1_4	1	6.16	1440.0	-5602.1
## - V29_J2_1	1	6.25	1440.1	-5601.8
## - V2_J1_5	1	6.52	1440.3	-5600.8
## - V29_J2_2	1	6.84	1440.7	-5599.7
## - V26_J1_1	1	6.93	1440.8	-5599.3
## - V23_J2_1	1	7.13	1441.0	-5598.6
## - V14_J1_3	1	7.17	1441.0	-5598.5
## - V1_J2_5	1	7.44	1441.3	-5597.5
## - V24_J2_3	1	7.52	1441.3	-5597.2
## - V1_J1_5	1	8.03	1441.8	-5595.3
## - V15_J2_3	1	8.44	1442.2	-5593.9
## - V13_1_J1_5	1	8.66	1442.5	-5593.1
## - V26_J1_6	1	8.89	1442.7	-5592.3
## - V29_J2_3	1	8.98	1442.8	-5591.9
## - V24_J2_5	1	9.16	1443.0	-5591.3
## - V30_J2_3	1	9.27	1443.1	-5590.9
## - V20_J1_2	1	10.88	1444.7	-5585.1
## - V17_J1_5	1	11.84	1445.7	-5581.6
## - V15_J2_1	1	12.17	1446.0	-5580.5
## - V24_J1_7	1	12.23	1446.0	-5580.2
## - V26_J1_5	1	12.37	1446.2	-5579.7
## - V13_1_J1_7	1	13.89	1447.7	-5574.3
## - V24_J1_6	1	13.89	1447.7	-5574.3
## - V16_J2_3	1	14.72	1448.5	-5571.3
## - V12_1_2_J1_6	1	16.45	1450.3	-5565.1
## - V29_J1_3	1	16.95	1450.8	-5563.3
## - V20_J2_1	1	17.03	1450.8	-5563.0
## - V20_J2_3	1	17.72	1451.5	-5560.5
## - V29_J1_5	1	17.75	1451.6	-5560.4
## - V12_1_2_J1_7	1	18.71	1452.5	-5557.0
## - V4_J1_3	1	20.99	1454.8	-5548.8
## - V13_1_J1_2	1	21.32	1455.1	-5547.6
## - V14_J2_5	1	25.41	1459.2	-5533.0
## - V2_J2_2	1	26.58	1460.4	-5528.9
## - V15_J1_2	1	27.06	1460.9	-5527.2
## - V23_J2_7	1	27.20	1461.0	-5526.7
## - V3_J1_5	1	27.66	1461.5	-5525.0
## - V4_J1_5	1	27.91	1461.7	-5524.2
## - V14_J2_1	1	28.46	1462.3	-5522.2
## - V30_J1_5	1	28.55	1462.4	-5521.9
## - V30_J2_5	1	28.92	1462.7	-5520.6
## - V2_J2_7	1	29.34	1463.2	-5519.1
## - V26_J1_4	1	31.82	1465.6	-5510.3
## - V12_1_2_J2_7	1	33.94	1467.8	-5502.7
## - V15_J1_1	1	34.43	1468.2	-5501.0
## - V30_J1_3	1	36.90	1470.7	-5492.3
## - V13_2_J1_7	1	38.21	1472.0	-5487.6
## - V19_J2_5	1	39.86	1473.7	-5481.8
## - V19_J2_4	1	40.94	1474.8	-5478.0
## - V4_J2_7	1	42.61	1476.4	-5472.1
## - V5_J1_4	1	43.75	1477.6	-5468.1

## - V12_1_2_J1_3	1	45.35	1479.2	-5462.5
## - V30_J1_2	1	46.39	1480.2	-5458.8
## - V14_J2_4	1	47.48	1481.3	-5455.0
## - V16_J2_7	1	47.70	1481.5	-5454.2
## - V4_J1_4	1	48.87	1482.7	-5450.1
## - V19_J2_1	1	50.84	1484.7	-5443.2
## - V5_J2_1	1	54.66	1488.5	-5429.9
## - V15_J1_6	1	57.03	1490.8	-5421.6
## - V1_J2_2	1	57.34	1491.2	-5420.5
## - V17_J2_2	1	58.79	1492.6	-5415.4
## - V15_J1_3	1	60.52	1494.3	-5409.4
## - V30_J2_2	1	61.07	1494.9	-5407.5
## - V14_J2_3	1	62.38	1496.2	-5403.0
## - V17_J2_7	1	63.44	1497.3	-5399.3
## - V1_J1_3	1	67.59	1501.4	-5384.9
## - V5_J2_3	1	68.54	1502.4	-5381.6
## - V15_J1_7	1	72.23	1506.0	-5368.8
## - V14_J1_5	1	75.52	1509.3	-5357.5
## - V16_J1_3	1	77.67	1511.5	-5350.1
## - V30_J1_1	1	79.49	1513.3	-5343.8
## - V23_J1_3	1	84.43	1518.2	-5326.9
## - V19_J2_3	1	85.61	1519.4	-5322.8
## - V17_J1_3	1	86.08	1519.9	-5321.2
## - V3_J1_4	1	87.99	1521.8	-5314.7
## - V1_J2_7	1	88.05	1521.9	-5314.5
## - V2_J1_3	1	89.34	1523.2	-5310.1
## - V14_J1_4	1	93.10	1526.9	-5297.3
## - V26_J2_1	1	99.73	1533.5	-5274.8
## - V12_1_2_J1_4	1	104.92	1538.7	-5257.2
## - V5_J1_5	1	106.33	1540.1	-5252.4
## - V3_J2_1	1	113.32	1547.1	-5228.9
## - V4_J2_5	1	115.23	1549.0	-5222.4
## - V15_J2_7	1	115.70	1549.5	-5220.9
## - V4_J2_3	1	117.19	1551.0	-5215.9
## - V4_J2_1	1	125.55	1559.4	-5187.9
## - V19_J1_5	1	128.20	1562.0	-5179.1
## - V26_J2_5	1	134.65	1568.5	-5157.7
## - V3_J2_5	1	134.91	1568.7	-5156.8
## - V15_J2_2	1	137.44	1571.3	-5148.4
## - V26_J2_4	1	138.02	1571.8	-5146.5
## - V4_J2_4	1	163.69	1597.5	-5062.3
## - V12_1_2_J2_2	1	170.97	1604.8	-5038.6
## - V3_J2_3	1	182.98	1616.8	-4999.8
## - V19_J1_4	1	183.92	1617.7	-4996.8
## - V3_J2_4	1	199.05	1632.9	-4948.4
## - V26_J2_3	1	256.27	1690.1	-4769.3
## - V20_J2_2	1	257.51	1691.3	-4765.5
## - J	12	286.01	1719.8	-4751.6
## - V5_J2_5	1	270.17	1704.0	-4726.7
## - V5_J2_4	1	309.35	1743.2	-4608.5
## - V16_J2_2	1	428.09	1861.9	-4265.8
## - V	19	948.45	2382.3	-3103.7

##

Step: AIC=-5619.85

```

## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 + V20_J2_3 +
## V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
## V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
## V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V13_3_J2_5 + V20_J1_2 +
## V13_2_J1_4 + V26_J1_6 + V13_1_J1_5 + V26_J1_1 + V2_J1_6 +
## V15_J2_3 + V30_J2_3 + V24_J2_3 + V13_2_J1_5 + V13_1_J2_2 +
## V19_J1_3 + V14_J1_3 + V19_J1_1 + V16_J2_1 + V13_2_J2_5 +
## V29_J2_3 + V23_J2_3 + V13_1_J2_7 + V14_J2_7 + V29_J2_1 +
## V29_J2_2 + V29_J1_4 + V13_3_J1_2 + V13_2_J1_2 + V16_J1_2 +
## V24_J1_3 + V5_J1_2 + V30_J1_7 + V26_J1_7 + V16_J1_4 + V1_J1_7 +
## V17_J1_7 + V5_J1_6 + V20_J1_6 + V20_J2_4 + V13_3_J1_1
##
##
## Df Sum of Sq RSS AIC
## + V13_1_J1_3 1 2.19 1429.2 -5621.2
## + V30_J2_1 1 2.11 1429.3 -5620.9
## - V29_J1_7 1 1.59 1433.0 -5620.7
## + V13_3_J2_4 1 1.89 1429.5 -5620.1
## <none> 1431.4 -5619.8
## + V13_2_J2_2 1 1.82 1429.6 -5619.8
## - V19_J1_1 1 1.94 1433.3 -5619.5
## + V12_1_2_J1_5 1 1.60 1429.8 -5619.0
## + V17_J2_1 1 1.51 1429.9 -5618.7
## + V24_J1_5 1 1.47 1430.0 -5618.5
## - V24_J1_3 1 2.23 1433.6 -5618.4
## + V20_J1_7 1 1.42 1430.0 -5618.4
## + V23_J2_2 1 1.37 1430.0 -5618.2
## + V14_J1_6 1 1.32 1430.1 -5618.0
## + V15_J2_4 1 1.29 1430.1 -5617.9
## - V16_J1_4 1 2.37 1433.8 -5617.9
## - V13_3_J1_1 1 2.40 1433.8 -5617.8
## - V20_J2_4 1 2.44 1433.8 -5617.6
## + V16_J2_5 1 1.20 1430.2 -5617.6
## + V20_J1_1 1 1.17 1430.2 -5617.5
## + V5_J1_7 1 1.15 1430.3 -5617.4
## - V17_J1_7 1 2.51 1433.9 -5617.4
## + V1_J1_1 1 1.11 1430.3 -5617.2
## + V19_J2_7 1 1.00 1430.4 -5616.8
## + V13_1_J1_4 1 0.98 1430.4 -5616.8
## + V29_J2_5 1 0.88 1430.5 -5616.4
## + V13_2_J2_3 1 0.88 1430.5 -5616.4
## + V12_1_2_J1_1 1 0.87 1430.5 -5616.4

```

## + V20_J2_5	1	0.86	1430.6	-5616.3
## - V23_J2_3	1	2.82	1434.2	-5616.3
## - V5_J1_6	1	2.83	1434.2	-5616.2
## + V17_J2_3	1	0.81	1430.6	-5616.2
## - V13_2_J1_4	1	2.86	1434.3	-5616.1
## + V17_J1_1	1	0.79	1430.6	-5616.1
## + V24_J2_2	1	0.78	1430.6	-5616.0
## + V3_J1_2	1	0.77	1430.7	-5616.0
## + V5_J2_2	1	0.74	1430.7	-5615.9
## + V13_3_J1_6	1	0.73	1430.7	-5615.9
## + V17_J2_4	1	0.72	1430.7	-5615.8
## + V3_J1_3	1	0.71	1430.7	-5615.8
## + V13_2_J2_4	1	0.69	1430.7	-5615.7
## - V26_J1_7	1	3.00	1434.4	-5615.6
## + V2_J2_1	1	0.66	1430.8	-5615.6
## + V14_J1_2	1	0.63	1430.8	-5615.5
## + V13_3_J1_7	1	0.63	1430.8	-5615.5
## + V13_1_J2_4	1	0.60	1430.8	-5615.4
## + V23_J2_5	1	0.58	1430.8	-5615.3
## + V24_J1_1	1	0.58	1430.8	-5615.3
## + V4_J1_6	1	0.57	1430.8	-5615.3
## - V2_J1_6	1	3.09	1434.5	-5615.3
## + V23_J1_7	1	0.56	1430.8	-5615.3
## + V24_J2_4	1	0.56	1430.9	-5615.2
## + V12_1_2_J2_1	1	0.54	1430.9	-5615.2
## - V20_J1_6	1	3.13	1434.5	-5615.1
## + V5_J1_3	1	0.51	1430.9	-5615.1
## + V3_J1_1	1	0.51	1430.9	-5615.1
## + V19_J1_6	1	0.50	1430.9	-5615.0
## + V30_J2_7	1	0.47	1430.9	-5614.9
## + V3_J2_7	1	0.47	1430.9	-5614.9
## + V13_3_J2_3	1	0.47	1430.9	-5614.9
## + V13_2_J2_7	1	0.47	1431.0	-5614.9
## + V16_J1_5	1	0.46	1431.0	-5614.9
## + V23_J2_4	1	0.44	1431.0	-5614.8
## + V15_J1_4	1	0.43	1431.0	-5614.8
## + V1_J1_6	1	0.42	1431.0	-5614.7
## + V29_J1_2	1	0.40	1431.0	-5614.7
## + V30_J1_6	1	0.40	1431.0	-5614.7
## + V20_J1_5	1	0.39	1431.0	-5614.6
## + V29_J1_1	1	0.39	1431.0	-5614.6
## + V4_J1_2	1	0.34	1431.1	-5614.4
## + V29_J2_7	1	0.34	1431.1	-5614.4
## + V2_J2_5	1	0.33	1431.1	-5614.4
## + V24_J2_7	1	0.30	1431.1	-5614.3
## + V14_J2_2	1	0.29	1431.1	-5614.3
## + V16_J1_1	1	0.29	1431.1	-5614.3
## + V1_J2_3	1	0.29	1431.1	-5614.3
## + V20_J1_4	1	0.28	1431.1	-5614.2
## + V24_J1_2	1	0.28	1431.1	-5614.2
## + V17_J2_5	1	0.27	1431.2	-5614.2
## + V13_1_J1_1	1	0.26	1431.2	-5614.2
## + V1_J1_4	1	0.25	1431.2	-5614.1
## + V13_2_J2_1	1	0.25	1431.2	-5614.1

## + V12_1_2_J2_3	1	0.24	1431.2	-5614.1
## + V2_J1_7	1	0.23	1431.2	-5614.0
## + V2_J2_4	1	0.22	1431.2	-5614.0
## + V12_1_2_J2_4	1	0.20	1431.2	-5613.9
## + V5_J1_1	1	0.19	1431.2	-5613.9
## + V13_3_J1_5	1	0.18	1431.2	-5613.9
## + V16_J1_7	1	0.18	1431.2	-5613.9
## + V12_1_2_J2_5	1	0.18	1431.2	-5613.9
## + V15_J1_5	1	0.17	1431.2	-5613.8
## - V26_J1_3	1	3.48	1434.9	-5613.8
## + V19_J1_7	1	0.17	1431.2	-5613.8
## + V16_J1_6	1	0.16	1431.2	-5613.8
## + V1_J2_4	1	0.16	1431.3	-5613.8
## + V16_J2_4	1	0.14	1431.3	-5613.7
## + V13_3_J2_7	1	0.14	1431.3	-5613.7
## + V17_J1_4	1	0.13	1431.3	-5613.7
## + V23_J1_1	1	0.13	1431.3	-5613.7
## + V13_3_J2_2	1	0.12	1431.3	-5613.6
## + V26_J2_7	1	0.11	1431.3	-5613.6
## + V2_J2_3	1	0.11	1431.3	-5613.6
## + V19_J1_2	1	0.10	1431.3	-5613.6
## + V26_J2_2	1	0.09	1431.3	-5613.6
## + V13_3_J1_4	1	0.09	1431.3	-5613.5
## + V13_1_J2_3	1	0.08	1431.3	-5613.5
## + V3_J1_7	1	0.08	1431.3	-5613.5
## + V4_J1_7	1	0.07	1431.3	-5613.5
## + V13_3_J2_1	1	0.07	1431.3	-5613.5
## + V17_J1_6	1	0.07	1431.3	-5613.5
## + V24_J2_1	1	0.06	1431.3	-5613.4
## + V4_J2_2	1	0.06	1431.3	-5613.4
## + V29_J1_6	1	0.05	1431.4	-5613.4
## + V3_J1_6	1	0.05	1431.4	-5613.4
## + V13_3_J1_3	1	0.05	1431.4	-5613.4
## + V14_J1_7	1	0.05	1431.4	-5613.4
## + V13_1_J1_6	1	0.05	1431.4	-5613.4
## + V1_J1_2	1	0.04	1431.4	-5613.4
## + V20_J2_7	1	0.04	1431.4	-5613.4
## + V19_J2_2	1	0.04	1431.4	-5613.4
## + V4_J1_1	1	0.04	1431.4	-5613.3
## + V13_2_J1_3	1	0.04	1431.4	-5613.3
## + V17_J1_2	1	0.03	1431.4	-5613.3
## + V1_J2_1	1	0.03	1431.4	-5613.3
## + V13_1_J2_1	1	0.01	1431.4	-5613.3
## + V30_J1_4	1	0.01	1431.4	-5613.3
## - V1_J1_7	1	3.64	1435.1	-5613.3
## + V15_J2_5	1	0.01	1431.4	-5613.2
## + V23_J1_6	1	0.01	1431.4	-5613.2
## + V13_1_J2_5	1	0.01	1431.4	-5613.2
## + V20_J1_3	1	0.01	1431.4	-5613.2
## + V23_J1_2	1	0.00	1431.4	-5613.2
## + V3_J2_2	1	0.00	1431.4	-5613.2
## + V2_J1_2	1	0.00	1431.4	-5613.2
## + V24_J1_4	1	0.00	1431.4	-5613.2
## + V14_J1_1	1	0.00	1431.4	-5613.2

## + V5_J2_7	1	0.00	1431.4	-5613.2
## + V13_2_J1_1	1	0.00	1431.4	-5613.2
## + V2_J1_4	1	0.00	1431.4	-5613.2
## + V26_J1_2	1	0.00	1431.4	-5613.2
## + V23_J1_5	1	0.00	1431.4	-5613.2
## + V2_J1_1	1	0.00	1431.4	-5613.2
## + V30_J2_4	1	0.00	1431.4	-5613.2
## + V29_J2_4	1	0.00	1431.4	-5613.2
## - V13_2_J2_5	1	3.74	1435.2	-5612.9
## - V30_J1_7	1	3.82	1435.2	-5612.6
## - V29_J1_4	1	4.04	1435.5	-5611.8
## - V16_J2_1	1	4.05	1435.5	-5611.8
## - V13_1_J2_2	1	4.09	1435.5	-5611.7
## - V5_J1_2	1	4.10	1435.5	-5611.6
## - V13_1_J2_7	1	4.23	1435.6	-5611.2
## - V13_2_J1_5	1	4.54	1436.0	-5610.0
## - V14_J2_7	1	4.83	1436.2	-5609.0
## - V13_3_J2_5	1	4.91	1436.3	-5608.7
## - V13_2_J1_6	1	4.92	1436.3	-5608.7
## - V12_1_2_J1_2	1	4.96	1436.4	-5608.5
## - V13_3_J1_2	1	4.97	1436.4	-5608.5
## - V16_J1_2	1	5.31	1436.7	-5607.2
## - V13_2_J1_2	1	5.35	1436.8	-5607.1
## - V19_J1_3	1	6.03	1437.4	-5604.6
## - V29_J2_1	1	6.13	1437.5	-5604.3
## - V23_J1_4	1	6.26	1437.7	-5603.8
## - V2_J1_5	1	6.41	1437.8	-5603.3
## - V29_J2_2	1	6.73	1438.1	-5602.1
## - V23_J2_1	1	7.02	1438.4	-5601.0
## - V14_J1_3	1	7.34	1438.8	-5599.9
## - V26_J1_1	1	7.39	1438.8	-5599.7
## - V24_J2_3	1	7.42	1438.8	-5599.6
## - V1_J2_5	1	7.45	1438.9	-5599.5
## - V1_J1_5	1	7.91	1439.3	-5597.8
## - V15_J2_3	1	8.40	1439.8	-5596.1
## - V13_1_J1_5	1	8.77	1440.2	-5594.7
## - V29_J2_3	1	8.81	1440.2	-5594.6
## - V26_J1_6	1	8.88	1440.3	-5594.3
## - V24_J2_5	1	9.15	1440.6	-5593.4
## - V30_J2_3	1	9.24	1440.7	-5593.0
## - V20_J1_2	1	10.87	1442.3	-5587.2
## - V17_J1_5	1	11.69	1443.1	-5584.2
## - V15_J2_1	1	12.13	1443.5	-5582.6
## - V24_J1_7	1	12.15	1443.6	-5582.5
## - V26_J1_5	1	12.45	1443.9	-5581.5
## - V24_J1_6	1	13.82	1445.2	-5576.5
## - V13_1_J1_7	1	13.97	1445.4	-5576.0
## - V16_J2_3	1	14.91	1446.3	-5572.6
## - V12_1_2_J1_6	1	16.56	1448.0	-5566.7
## - V20_J2_1	1	17.17	1448.6	-5564.5
## - V29_J1_3	1	17.19	1448.6	-5564.4
## - V29_J1_5	1	17.50	1448.9	-5563.3
## - V20_J2_3	1	17.88	1449.3	-5561.9
## - V12_1_2_J1_7	1	18.83	1450.2	-5558.5

## - V4_J1_3	1	21.28	1452.7	-5549.8
## - V13_1_J1_2	1	21.29	1452.7	-5549.7
## - V14_J2_5	1	25.51	1456.9	-5534.6
## - V2_J2_2	1	26.74	1458.2	-5530.3
## - V15_J1_2	1	27.20	1458.6	-5528.6
## - V23_J2_7	1	27.40	1458.8	-5527.9
## - V3_J1_5	1	27.89	1459.3	-5526.1
## - V4_J1_5	1	28.22	1459.6	-5525.0
## - V30_J1_5	1	28.49	1459.9	-5524.0
## - V14_J2_1	1	28.74	1460.2	-5523.1
## - V30_J2_5	1	29.09	1460.5	-5521.9
## - V2_J2_7	1	29.53	1461.0	-5520.3
## - V26_J1_4	1	31.91	1463.3	-5511.8
## - V12_1_2_J2_7	1	34.17	1465.6	-5503.8
## - V15_J1_1	1	35.44	1466.9	-5499.3
## - V30_J1_3	1	37.00	1468.4	-5493.8
## - V13_2_J1_7	1	38.33	1469.7	-5489.1
## - V19_J2_5	1	39.73	1471.1	-5484.1
## - V19_J2_4	1	40.96	1472.4	-5479.8
## - V4_J2_7	1	42.94	1474.4	-5472.8
## - V5_J1_4	1	44.04	1475.5	-5468.9
## - V12_1_2_J1_3	1	45.68	1477.1	-5463.1
## - V30_J1_2	1	46.61	1478.0	-5459.9
## - V14_J2_4	1	47.78	1479.2	-5455.8
## - V16_J2_7	1	48.00	1479.4	-5455.0
## - V4_J1_4	1	49.25	1480.7	-5450.6
## - V19_J2_1	1	50.94	1482.4	-5444.6
## - V5_J2_1	1	54.96	1486.4	-5430.6
## - V15_J1_6	1	57.06	1488.5	-5423.2
## - V1_J2_2	1	57.56	1489.0	-5421.5
## - V17_J2_2	1	59.02	1490.4	-5416.4
## - V15_J1_3	1	60.36	1491.8	-5411.7
## - V30_J2_2	1	61.05	1492.5	-5409.3
## - V14_J2_3	1	62.82	1494.2	-5403.1
## - V17_J2_7	1	63.73	1495.1	-5400.0
## - V1_J1_3	1	67.97	1499.4	-5385.2
## - V5_J2_3	1	68.91	1500.3	-5382.0
## - V15_J1_7	1	72.25	1503.7	-5370.4
## - V14_J1_5	1	76.02	1507.4	-5357.4
## - V16_J1_3	1	78.14	1509.5	-5350.1
## - V30_J1_1	1	80.97	1512.4	-5340.4
## - V23_J1_3	1	84.88	1516.3	-5326.9
## - V19_J2_3	1	85.78	1517.2	-5323.8
## - V17_J1_3	1	86.52	1517.9	-5321.3
## - V3_J1_4	1	88.36	1519.8	-5315.0
## - V1_J2_7	1	88.38	1519.8	-5314.9
## - V2_J1_3	1	89.78	1521.2	-5310.1
## - V14_J1_4	1	93.62	1525.0	-5297.1
## - V26_J2_1	1	99.87	1531.3	-5275.8
## - V12_1_2_J1_4	1	105.34	1536.8	-5257.2
## - V5_J1_5	1	106.80	1538.2	-5252.3
## - V3_J2_1	1	113.70	1545.1	-5229.0
## - V4_J2_5	1	115.43	1546.8	-5223.2
## - V15_J2_7	1	115.62	1547.0	-5222.6


```

## - V4_J2_3      1      117.79 1549.2 -5215.3
## - V4_J2_1      1      126.12 1557.5 -5187.4
## - V19_J1_5     1      128.42 1559.8 -5179.7
## - V26_J2_5     1      134.42 1565.8 -5159.7
## - V3_J2_5      1      134.93 1566.3 -5158.0
## - V15_J2_2     1      137.42 1568.8 -5149.8
## - V26_J2_4     1      138.07 1569.5 -5147.7
## - V4_J2_4      1      164.22 1595.6 -5061.7
## - V12_1_2_J2_2 1      171.38 1602.8 -5038.4
## - V3_J2_3      1      183.53 1614.9 -4999.2
## - V19_J1_4     1      184.14 1615.6 -4997.2
## - V3_J2_4      1      199.42 1630.8 -4948.2
## - V26_J2_3     1      256.57 1688.0 -4769.2
## - V20_J2_2     1      257.91 1689.3 -4765.0
## - J            12      287.07 1718.5 -4749.0
## - V5_J2_5      1      270.28 1701.7 -4727.1
## - V5_J2_4      1      309.87 1741.3 -4607.5
## - V16_J2_2     1      428.81 1860.2 -4263.9
## - V            19      950.85 2382.3 -3097.1
##
## Step: AIC=-5621.19
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 + V20_J2_3 +
## V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
## V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
## V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V13_3_J2_5 + V20_J1_2 +
## V13_2_J1_4 + V26_J1_6 + V13_1_J1_5 + V26_J1_1 + V2_J1_6 +
## V15_J2_3 + V30_J2_3 + V24_J2_3 + V13_2_J1_5 + V13_1_J2_2 +
## V19_J1_3 + V14_J1_3 + V19_J1_1 + V16_J2_1 + V13_2_J2_5 +
## V29_J2_3 + V23_J2_3 + V13_1_J2_7 + V14_J2_7 + V29_J2_1 +
## V29_J2_2 + V29_J1_4 + V13_3_J1_2 + V13_2_J1_2 + V16_J1_2 +
## V24_J1_3 + V5_J1_2 + V30_J1_7 + V26_J1_7 + V16_J1_4 + V1_J1_7 +
## V17_J1_7 + V5_J1_6 + V20_J1_6 + V20_J2_4 + V13_3_J1_1 + V13_1_J1_3
##
##
##           Df Sum of Sq    RSS    AIC
## - V24_J1_3      1         1.48 1430.7 -5622.5
## - V29_J1_7      1         1.53 1430.8 -5622.3
## + V30_J2_1      1         2.07 1427.2 -5622.1
## + V13_3_J2_4     1         2.03 1427.2 -5622.0
## <none>                                1429.2 -5621.2
## + V13_2_J2_2     1         1.77 1427.5 -5621.0
## - V19_J1_1       1         1.97 1431.2 -5620.7

```

## + V12_1_2_J1_5	1	1.66	1427.6	-5620.6
## + V17_J2_1	1	1.53	1427.7	-5620.1
## + V20_J1_7	1	1.48	1427.7	-5619.9
## - V13_1_J1_3	1	2.19	1431.4	-5619.8
## + V24_J1_5	1	1.45	1427.8	-5619.8
## + V14_J1_6	1	1.37	1427.8	-5619.6
## - V13_3_J1_1	1	2.31	1431.5	-5619.4
## + V23_J2_2	1	1.31	1427.9	-5619.3
## + V15_J2_4	1	1.28	1427.9	-5619.2
## + V16_J2_5	1	1.25	1428.0	-5619.1
## - V16_J1_4	1	2.41	1431.6	-5619.1
## + V1_J1_1	1	1.08	1428.1	-5618.5
## + V20_J1_1	1	1.07	1428.2	-5618.4
## - V20_J2_4	1	2.60	1431.8	-5618.4
## - V17_J1_7	1	2.61	1431.8	-5618.3
## + V13_2_J2_3	1	1.03	1428.2	-5618.3
## + V5_J1_7	1	1.02	1428.2	-5618.3
## - V26_J1_3	1	2.64	1431.9	-5618.2
## + V20_J2_5	1	1.01	1428.2	-5618.2
## - V13_2_J1_4	1	2.68	1431.9	-5618.1
## + V19_J2_7	1	0.97	1428.2	-5618.1
## + V13_1_J2_4	1	0.97	1428.3	-5618.1
## - V23_J2_3	1	2.74	1432.0	-5617.9
## + V5_J2_2	1	0.85	1428.4	-5617.6
## + V12_1_2_J1_1	1	0.84	1428.4	-5617.6
## + V29_J2_5	1	0.83	1428.4	-5617.6
## + V24_J2_2	1	0.82	1428.4	-5617.6
## + V17_J1_1	1	0.81	1428.4	-5617.5
## + V13_3_J1_6	1	0.81	1428.4	-5617.5
## + V13_2_J2_4	1	0.80	1428.4	-5617.5
## + V17_J2_3	1	0.79	1428.4	-5617.4
## + V17_J2_4	1	0.73	1428.5	-5617.2
## + V3_J1_2	1	0.68	1428.5	-5617.0
## - V26_J1_7	1	3.00	1432.2	-5616.9
## + V2_J2_1	1	0.64	1428.6	-5616.9
## + V13_1_J1_4	1	0.64	1428.6	-5616.9
## + V14_J1_2	1	0.62	1428.6	-5616.8
## + V13_3_J1_7	1	0.61	1428.6	-5616.8
## + V24_J1_1	1	0.58	1428.6	-5616.7
## - V5_J1_6	1	3.07	1432.3	-5616.7
## - V2_J1_6	1	3.09	1432.3	-5616.6
## + V12_1_2_J2_1	1	0.55	1428.7	-5616.6
## + V23_J2_5	1	0.54	1428.7	-5616.5
## + V4_J1_6	1	0.54	1428.7	-5616.5
## + V23_J1_7	1	0.53	1428.7	-5616.5
## + V24_J2_4	1	0.53	1428.7	-5616.5
## + V3_J2_7	1	0.51	1428.7	-5616.4
## + V19_J1_6	1	0.46	1428.8	-5616.2
## + V16_J1_5	1	0.45	1428.8	-5616.2
## + V13_2_J2_7	1	0.44	1428.8	-5616.2
## + V15_J1_4	1	0.44	1428.8	-5616.2
## + V3_J1_1	1	0.42	1428.8	-5616.1
## + V1_J1_6	1	0.42	1428.8	-5616.1
## + V30_J2_7	1	0.42	1428.8	-5616.1

## + V23_J2_4	1	0.41	1428.8	-5616.1
## + V30_J1_6	1	0.40	1428.8	-5616.0
## + V29_J1_2	1	0.39	1428.8	-5616.0
## + V13_3_J2_3	1	0.39	1428.8	-5616.0
## + V29_J1_1	1	0.38	1428.8	-5615.9
## + V29_J2_7	1	0.38	1428.8	-5615.9
## - V13_1_J2_2	1	3.27	1432.5	-5615.9
## - V20_J1_6	1	3.30	1432.5	-5615.8
## + V4_J1_2	1	0.34	1428.9	-5615.8
## + V20_J1_5	1	0.34	1428.9	-5615.8
## + V24_J2_7	1	0.33	1428.9	-5615.8
## + V13_2_J2_1	1	0.32	1428.9	-5615.7
## + V14_J2_2	1	0.31	1428.9	-5615.7
## + V3_J1_3	1	0.31	1428.9	-5615.7
## + V2_J2_5	1	0.31	1428.9	-5615.7
## + V1_J2_3	1	0.30	1428.9	-5615.7
## + V16_J1_1	1	0.29	1428.9	-5615.6
## + V17_J2_5	1	0.28	1429.0	-5615.6
## + V24_J1_2	1	0.27	1429.0	-5615.5
## - V13_1_J2_7	1	3.39	1432.6	-5615.5
## + V13_2_J1_3	1	0.26	1429.0	-5615.5
## + V1_J1_4	1	0.25	1429.0	-5615.4
## + V12_1_2_J2_3	1	0.22	1429.0	-5615.4
## + V2_J2_4	1	0.22	1429.0	-5615.4
## + V20_J1_4	1	0.21	1429.0	-5615.3
## + V12_1_2_J2_4	1	0.20	1429.0	-5615.3
## + V16_J1_7	1	0.20	1429.0	-5615.3
## + V5_J1_3	1	0.20	1429.0	-5615.3
## + V2_J1_7	1	0.20	1429.0	-5615.3
## + V19_J1_7	1	0.17	1429.0	-5615.2
## + V12_1_2_J2_5	1	0.17	1429.1	-5615.2
## + V13_3_J1_5	1	0.16	1429.1	-5615.1
## + V16_J1_6	1	0.16	1429.1	-5615.1
## + V15_J1_5	1	0.15	1429.1	-5615.1
## + V1_J2_4	1	0.15	1429.1	-5615.1
## + V20_J1_3	1	0.15	1429.1	-5615.1
## + V13_3_J2_7	1	0.14	1429.1	-5615.0
## + V16_J2_4	1	0.13	1429.1	-5615.0
## + V17_J1_4	1	0.13	1429.1	-5615.0
## + V23_J1_1	1	0.13	1429.1	-5615.0
## + V13_3_J2_2	1	0.12	1429.1	-5615.0
## + V5_J1_1	1	0.12	1429.1	-5615.0
## + V26_J2_7	1	0.12	1429.1	-5615.0
## + V2_J2_3	1	0.12	1429.1	-5615.0
## + V19_J1_2	1	0.10	1429.1	-5614.9
## + V3_J1_7	1	0.10	1429.1	-5614.9
## + V26_J2_2	1	0.09	1429.1	-5614.9
## + V13_1_J1_1	1	0.09	1429.1	-5614.9
## + V4_J1_7	1	0.08	1429.1	-5614.8
## + V17_J1_6	1	0.07	1429.2	-5614.8
## + V13_3_J1_4	1	0.06	1429.2	-5614.8
## + V29_J1_6	1	0.06	1429.2	-5614.8
## + V4_J2_2	1	0.05	1429.2	-5614.7
## + V1_J1_2	1	0.05	1429.2	-5614.7

## + V24_J2_1	1	0.05	1429.2	-5614.7
## + V20_J2_7	1	0.05	1429.2	-5614.7
## + V13_3_J2_1	1	0.05	1429.2	-5614.7
## + V19_J2_2	1	0.04	1429.2	-5614.7
## + V17_J1_2	1	0.04	1429.2	-5614.7
## + V4_J1_1	1	0.04	1429.2	-5614.7
## + V14_J1_7	1	0.04	1429.2	-5614.7
## + V1_J2_1	1	0.03	1429.2	-5614.7
## + V3_J1_6	1	0.03	1429.2	-5614.6
## + V30_J1_4	1	0.02	1429.2	-5614.6
## + V13_1_J2_5	1	0.01	1429.2	-5614.6
## + V15_J2_5	1	0.01	1429.2	-5614.6
## + V13_3_J1_3	1	0.01	1429.2	-5614.6
## + V13_1_J2_3	1	0.01	1429.2	-5614.6
## + V3_J2_2	1	0.01	1429.2	-5614.6
## + V13_1_J2_1	1	0.01	1429.2	-5614.6
## + V23_J1_2	1	0.01	1429.2	-5614.6
## + V23_J1_6	1	0.00	1429.2	-5614.6
## + V26_J1_2	1	0.00	1429.2	-5614.6
## + V2_J1_4	1	0.00	1429.2	-5614.6
## + V2_J1_2	1	0.00	1429.2	-5614.6
## + V14_J1_1	1	0.00	1429.2	-5614.6
## + V24_J1_4	1	0.00	1429.2	-5614.6
## + V30_J2_4	1	0.00	1429.2	-5614.6
## + V23_J1_5	1	0.00	1429.2	-5614.6
## + V5_J2_7	1	0.00	1429.2	-5614.6
## + V29_J2_4	1	0.00	1429.2	-5614.6
## + V2_J1_1	1	0.00	1429.2	-5614.6
## + V13_2_J1_1	1	0.00	1429.2	-5614.6
## + V13_1_J1_6	1	0.00	1429.2	-5614.6
## - V1_J1_7	1	3.76	1433.0	-5614.2
## - V30_J1_7	1	3.92	1433.1	-5613.6
## - V13_2_J2_5	1	3.95	1433.2	-5613.5
## - V29_J1_4	1	3.98	1433.2	-5613.4
## - V16_J2_1	1	4.11	1433.3	-5612.9
## - V5_J1_2	1	4.34	1433.6	-5612.1
## - V13_2_J1_5	1	4.67	1433.9	-5610.9
## - V13_3_J2_5	1	4.70	1433.9	-5610.7
## - V13_2_J1_6	1	4.71	1433.9	-5610.7
## - V14_J2_7	1	4.76	1434.0	-5610.5
## - V19_J1_3	1	4.78	1434.0	-5610.5
## - V12_1_2_J1_2	1	5.03	1434.2	-5609.5
## - V13_3_J1_2	1	5.06	1434.3	-5609.4
## - V16_J1_2	1	5.27	1434.5	-5608.7
## - V13_2_J1_2	1	5.49	1434.7	-5607.9
## - V14_J1_3	1	5.91	1435.1	-5606.4
## - V29_J2_1	1	6.05	1435.3	-5605.8
## - V23_J1_4	1	6.36	1435.6	-5604.7
## - V2_J1_5	1	6.48	1435.7	-5604.3
## - V29_J2_2	1	6.85	1436.1	-5603.0
## - V23_J2_1	1	6.92	1436.1	-5602.7
## - V24_J2_3	1	7.30	1436.5	-5601.3
## - V26_J1_1	1	7.30	1436.5	-5601.3
## - V1_J2_5	1	7.50	1436.7	-5600.6

## - V13_1_J1_5	1	7.64	1436.9	-5600.1
## - V1_J1_5	1	8.00	1437.2	-5598.8
## - V15_J2_3	1	8.34	1437.6	-5597.6
## - V29_J2_3	1	8.70	1437.9	-5596.3
## - V26_J1_6	1	8.73	1438.0	-5596.1
## - V30_J2_3	1	9.15	1438.4	-5594.6
## - V24_J2_5	1	9.28	1438.5	-5594.2
## - V20_J1_2	1	11.09	1440.3	-5587.6
## - V17_J1_5	1	11.81	1441.0	-5585.0
## - V15_J2_1	1	12.09	1441.3	-5584.0
## - V24_J1_7	1	12.28	1441.5	-5583.3
## - V13_1_J1_7	1	12.34	1441.6	-5583.1
## - V26_J1_5	1	12.52	1441.7	-5582.5
## - V24_J1_6	1	13.75	1443.0	-5578.0
## - V29_J1_3	1	14.68	1443.9	-5574.7
## - V16_J2_3	1	15.05	1444.3	-5573.4
## - V12_1_2_J1_6	1	16.54	1445.8	-5568.0
## - V29_J1_5	1	17.57	1446.8	-5564.3
## - V20_J2_1	1	17.61	1446.8	-5564.1
## - V20_J2_3	1	18.36	1447.6	-5561.4
## - V12_1_2_J1_7	1	18.56	1447.8	-5560.7
## - V4_J1_3	1	18.57	1447.8	-5560.7
## - V13_1_J1_2	1	19.37	1448.6	-5557.8
## - V14_J2_5	1	25.77	1455.0	-5534.9
## - V2_J2_2	1	26.41	1455.6	-5532.6
## - V23_J2_7	1	27.15	1456.4	-5530.0
## - V15_J1_2	1	27.37	1456.6	-5529.2
## - V4_J1_5	1	28.23	1457.5	-5526.1
## - V3_J1_5	1	28.29	1457.5	-5525.9
## - V30_J1_5	1	28.62	1457.8	-5524.7
## - V30_J2_5	1	28.94	1458.2	-5523.6
## - V14_J2_1	1	29.00	1458.2	-5523.4
## - V2_J2_7	1	29.17	1458.4	-5522.8
## - V26_J1_4	1	32.26	1461.5	-5511.8
## - V30_J1_3	1	32.92	1462.1	-5509.4
## - V12_1_2_J2_7	1	33.75	1463.0	-5506.5
## - V15_J1_1	1	35.56	1464.8	-5500.0
## - V13_2_J1_7	1	38.54	1467.8	-5489.5
## - V19_J2_5	1	40.11	1469.3	-5483.9
## - V12_1_2_J1_3	1	40.84	1470.1	-5481.3
## - V19_J2_4	1	41.27	1470.5	-5479.8
## - V4_J2_7	1	42.73	1472.0	-5474.6
## - V5_J1_4	1	44.98	1474.2	-5466.7
## - V30_J1_2	1	46.77	1476.0	-5460.4
## - V16_J2_7	1	47.62	1476.8	-5457.4
## - V14_J2_4	1	48.05	1477.3	-5455.9
## - V4_J1_4	1	49.57	1478.8	-5450.5
## - V19_J2_1	1	51.34	1480.6	-5444.3
## - V5_J2_1	1	56.00	1485.2	-5428.0
## - V1_J2_2	1	57.04	1486.3	-5424.3
## - V15_J1_6	1	57.09	1486.3	-5424.1
## - V17_J2_2	1	58.46	1487.7	-5419.3
## - V30_J2_2	1	60.59	1489.8	-5411.9
## - V1_J1_3	1	61.61	1490.8	-5408.4

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## - V15_J1_3      1      62.53 1491.8 -5405.1
## - V17_J2_7      1      63.12 1492.3 -5403.1
## - V14_J2_3      1      63.24 1492.5 -5402.7
## - V5_J2_3       1      70.08 1499.3 -5378.9
## - V16_J1_3      1      71.47 1500.7 -5374.1
## - V15_J1_7      1      72.72 1501.9 -5369.8
## - V14_J1_5      1      76.04 1505.3 -5358.3
## - V23_J1_3      1      77.81 1507.0 -5352.2
## - V17_J1_3      1      78.90 1508.1 -5348.4
## - V30_J1_1      1      81.07 1510.3 -5340.9
## - V2_J1_3       1      82.09 1511.3 -5337.4
## - V19_J2_3      1      86.35 1515.6 -5322.8
## - V1_J2_7       1      87.69 1516.9 -5318.2
## - V3_J1_4       1      89.39 1518.6 -5312.4
## - V14_J1_4      1      94.06 1523.3 -5296.4
## - V26_J2_1      1     100.46 1529.7 -5274.6
## - V12_1_2_J1_4  1     105.46 1534.7 -5257.6
## - V5_J1_5       1     107.82 1537.0 -5249.6
## - V3_J2_1       1     114.86 1544.1 -5225.9
## - V4_J2_5       1     115.96 1545.2 -5222.1
## - V15_J2_7      1     116.27 1545.5 -5221.1
## - V4_J2_3       1     118.35 1547.6 -5214.1
## - V4_J2_1       1     126.63 1555.9 -5186.4
## - V19_J1_5      1     128.56 1557.8 -5179.9
## - V26_J2_5      1     135.14 1564.4 -5158.0
## - V3_J2_5       1     136.20 1565.4 -5154.5
## - V15_J2_2      1     138.10 1567.3 -5148.2
## - V26_J2_4      1     138.68 1567.9 -5146.2
## - V4_J2_4       1     164.71 1593.9 -5060.6
## - V12_1_2_J2_2  1     170.44 1599.7 -5042.0
## - V19_J1_4      1     184.85 1614.1 -4995.3
## - V3_J2_3       1     184.97 1614.2 -4995.0
## - V3_J2_4       1     200.80 1630.0 -4944.2
## - V26_J2_3      1     257.55 1686.8 -4766.2
## - V20_J2_2      1     258.43 1687.7 -4763.5
## - J             12     287.00 1716.2 -4749.2
## - V5_J2_5       1     272.16 1701.4 -4721.4
## - V5_J2_4       1     311.76 1741.0 -4601.8
## - V16_J2_2      1     427.66 1856.9 -4266.6
## - V             19     925.72 2354.9 -3150.4
##
## Step:  AIC=-5622.46
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 + V20_J2_3 +

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##      V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
##      V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
##      V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V29_J1_7 + V2_J1_5 +
##      V23_J1_4 + V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 +
##      V23_J2_1 + V26_J1_3 + V13_2_J1_6 + V13_3_J2_5 + V20_J1_2 +
##      V13_2_J1_4 + V26_J1_6 + V13_1_J1_5 + V26_J1_1 + V2_J1_6 +
##      V15_J2_3 + V30_J2_3 + V24_J2_3 + V13_2_J1_5 + V13_1_J2_2 +
##      V19_J1_3 + V14_J1_3 + V19_J1_1 + V16_J2_1 + V13_2_J2_5 +
##      V29_J2_3 + V23_J2_3 + V13_1_J2_7 + V14_J2_7 + V29_J2_1 +
##      V29_J2_2 + V29_J1_4 + V13_3_J1_2 + V13_2_J1_2 + V16_J1_2 +
##      V5_J1_2 + V30_J1_7 + V26_J1_7 + V16_J1_4 + V1_J1_7 + V17_J1_7 +
##      V5_J1_6 + V20_J1_6 + V20_J2_4 + V13_3_J1_1 + V13_1_J1_3
##
##      Df Sum of Sq  RSS    AIC
## - V29_J1_7      1      1.50 1432.2 -5623.7
## + V13_3_J2_4     1      2.13 1428.6 -5623.6
## + V30_J2_1       1      2.05 1428.7 -5623.3
## <none>                      1430.7 -5622.5
## - V19_J1_1       1      1.98 1432.7 -5621.9
## + V13_2_J2_2     1      1.67 1429.0 -5621.9
## + V12_1_2_J1_5   1      1.63 1429.1 -5621.7
## - V26_J1_3       1      2.10 1432.8 -5621.5
## + V17_J2_1       1      1.55 1429.2 -5621.5
## + V20_J1_7       1      1.53 1429.2 -5621.4
## + V24_J1_3       1      1.48 1429.2 -5621.2
## - V13_3_J1_1     1      2.25 1433.0 -5620.9
## + V14_J1_6       1      1.37 1429.3 -5620.8
## + V23_J2_2       1      1.30 1429.4 -5620.5
## + V15_J2_4       1      1.28 1429.4 -5620.5
## + V16_J2_5       1      1.25 1429.5 -5620.4
## - V16_J1_4       1      2.44 1433.1 -5620.2
## + V24_J2_2       1      1.11 1429.6 -5619.9
## + V24_J1_5       1      1.11 1429.6 -5619.9
## - V13_2_J1_4     1      2.55 1433.2 -5619.8
## + V13_2_J2_3     1      1.10 1429.6 -5619.8
## + V20_J2_5       1      1.09 1429.6 -5619.8
## + V1_J1_1        1      1.07 1429.6 -5619.7
## - V17_J1_7       1      2.66 1433.4 -5619.4
## + V20_J1_1       1      0.99 1429.7 -5619.4
## + V19_J2_7       1      0.97 1429.7 -5619.3
## + V5_J2_2        1      0.96 1429.7 -5619.3
## + V13_1_J2_4     1      0.95 1429.8 -5619.3
## + V5_J1_7        1      0.93 1429.8 -5619.2
## - V20_J2_4       1      2.73 1433.4 -5619.2
## - V23_J2_3       1      2.76 1433.5 -5619.1
## + V13_2_J2_4     1      0.89 1429.8 -5619.0
## + V13_3_J1_6     1      0.85 1429.8 -5618.9
## + V29_J2_5       1      0.84 1429.9 -5618.9
## + V12_1_2_J1_1   1      0.83 1429.9 -5618.8
## + V17_J1_1       1      0.82 1429.9 -5618.8
## + V17_J2_3       1      0.81 1429.9 -5618.7
## + V24_J2_4       1      0.75 1430.0 -5618.5
## + V17_J2_4       1      0.74 1430.0 -5618.5
## - V13_1_J1_3     1      2.94 1433.6 -5618.4

```

## + V13_1_J1_4	1	0.65	1430.0	-5618.2
## + V2_J2_1	1	0.62	1430.1	-5618.1
## - V26_J1_7	1	3.05	1433.8	-5618.0
## + V14_J1_2	1	0.60	1430.1	-5618.0
## + V13_3_J1_7	1	0.60	1430.1	-5618.0
## + V3_J1_2	1	0.59	1430.1	-5618.0
## + V3_J2_7	1	0.57	1430.1	-5617.9
## + V12_1_2_J2_1	1	0.56	1430.1	-5617.9
## + V13_2_J1_3	1	0.56	1430.1	-5617.8
## - V2_J1_6	1	3.11	1433.8	-5617.8
## + V23_J2_5	1	0.55	1430.2	-5617.8
## + V4_J1_6	1	0.54	1430.2	-5617.8
## + V24_J2_7	1	0.53	1430.2	-5617.7
## + V23_J1_7	1	0.50	1430.2	-5617.6
## + V16_J1_5	1	0.47	1430.2	-5617.5
## + V19_J1_6	1	0.46	1430.2	-5617.5
## + V15_J1_4	1	0.45	1430.2	-5617.5
## + V1_J1_6	1	0.44	1430.3	-5617.4
## - V5_J1_6	1	3.23	1433.9	-5617.4
## + V30_J2_7	1	0.40	1430.3	-5617.3
## + V29_J1_2	1	0.40	1430.3	-5617.3
## + V23_J2_4	1	0.40	1430.3	-5617.3
## + V13_2_J2_7	1	0.40	1430.3	-5617.3
## - V13_1_J2_2	1	3.26	1434.0	-5617.3
## + V20_J1_3	1	0.39	1430.3	-5617.3
## + V30_J1_6	1	0.39	1430.3	-5617.2
## + V29_J2_7	1	0.39	1430.3	-5617.2
## + V13_2_J2_1	1	0.38	1430.3	-5617.2
## + V29_J1_1	1	0.38	1430.3	-5617.2
## + V3_J1_1	1	0.37	1430.3	-5617.2
## + V13_3_J2_3	1	0.37	1430.3	-5617.2
## + V24_J1_1	1	0.37	1430.3	-5617.2
## + V4_J1_2	1	0.36	1430.3	-5617.1
## + V2_J2_5	1	0.31	1430.4	-5617.0
## + V14_J2_2	1	0.31	1430.4	-5617.0
## + V16_J1_1	1	0.29	1430.4	-5616.9
## + V1_J2_3	1	0.29	1430.4	-5616.9
## - V13_1_J2_7	1	3.37	1434.1	-5616.9
## + V20_J1_5	1	0.28	1430.4	-5616.8
## + V17_J2_5	1	0.27	1430.4	-5616.8
## - V20_J1_6	1	3.40	1434.1	-5616.7
## + V1_J1_4	1	0.24	1430.5	-5616.7
## + V12_1_2_J2_3	1	0.24	1430.5	-5616.7
## + V2_J2_4	1	0.23	1430.5	-5616.6
## + V16_J1_7	1	0.22	1430.5	-5616.6
## + V12_1_2_J2_4	1	0.21	1430.5	-5616.6
## + V19_J1_7	1	0.19	1430.5	-5616.5
## + V2_J1_7	1	0.18	1430.5	-5616.5
## + V12_1_2_J2_5	1	0.17	1430.5	-5616.4
## + V20_J1_4	1	0.16	1430.5	-5616.4
## + V16_J1_6	1	0.16	1430.5	-5616.4
## + V15_J1_5	1	0.16	1430.5	-5616.4
## + V1_J2_4	1	0.15	1430.5	-5616.4
## + V13_3_J2_2	1	0.14	1430.6	-5616.3

## + V24_J1_2	1	0.14	1430.6	-5616.3
## + V24_J2_1	1	0.14	1430.6	-5616.3
## + V13_3_J1_5	1	0.13	1430.6	-5616.3
## + V23_J1_1	1	0.13	1430.6	-5616.3
## + V16_J2_4	1	0.12	1430.6	-5616.3
## + V13_3_J1_3	1	0.12	1430.6	-5616.3
## + V26_J2_7	1	0.12	1430.6	-5616.3
## + V17_J1_4	1	0.12	1430.6	-5616.3
## + V13_3_J2_7	1	0.12	1430.6	-5616.3
## + V3_J1_7	1	0.12	1430.6	-5616.2
## + V19_J1_2	1	0.11	1430.6	-5616.2
## + V2_J2_3	1	0.11	1430.6	-5616.2
## + V4_J1_7	1	0.09	1430.6	-5616.2
## + V3_J1_3	1	0.09	1430.6	-5616.1
## + V26_J2_2	1	0.09	1430.6	-5616.1
## + V13_1_J1_1	1	0.09	1430.6	-5616.1
## + V5_J1_1	1	0.08	1430.6	-5616.1
## + V17_J1_6	1	0.08	1430.6	-5616.1
## + V20_J2_7	1	0.07	1430.6	-5616.1
## + V4_J2_2	1	0.05	1430.6	-5616.0
## + V29_J1_6	1	0.05	1430.6	-5616.0
## + V1_J1_2	1	0.05	1430.7	-5616.0
## + V13_3_J1_4	1	0.04	1430.7	-5616.0
## + V19_J2_2	1	0.04	1430.7	-5616.0
## + V4_J1_1	1	0.04	1430.7	-5616.0
## + V5_J1_3	1	0.04	1430.7	-5616.0
## + V17_J1_2	1	0.04	1430.7	-5616.0
## + V1_J2_1	1	0.04	1430.7	-5616.0
## + V14_J1_7	1	0.03	1430.7	-5615.9
## + V13_3_J2_1	1	0.03	1430.7	-5615.9
## + V24_J1_4	1	0.03	1430.7	-5615.9
## + V30_J1_4	1	0.02	1430.7	-5615.9
## + V3_J2_2	1	0.02	1430.7	-5615.9
## + V13_1_J2_5	1	0.02	1430.7	-5615.9
## + V3_J1_6	1	0.01	1430.7	-5615.9
## + V15_J2_5	1	0.01	1430.7	-5615.8
## + V13_1_J2_3	1	0.01	1430.7	-5615.8
## + V5_J2_7	1	0.01	1430.7	-5615.8
## + V23_J1_6	1	0.01	1430.7	-5615.8
## + V13_1_J2_1	1	0.00	1430.7	-5615.8
## + V23_J1_2	1	0.00	1430.7	-5615.8
## + V26_J1_2	1	0.00	1430.7	-5615.8
## + V2_J1_4	1	0.00	1430.7	-5615.8
## + V13_2_J1_1	1	0.00	1430.7	-5615.8
## + V2_J1_2	1	0.00	1430.7	-5615.8
## + V23_J1_5	1	0.00	1430.7	-5615.8
## + V30_J2_4	1	0.00	1430.7	-5615.8
## + V14_J1_1	1	0.00	1430.7	-5615.8
## + V29_J2_4	1	0.00	1430.7	-5615.8
## + V2_J1_1	1	0.00	1430.7	-5615.8
## + V13_1_J1_6	1	0.00	1430.7	-5615.8
## - V1_J1_7	1	3.83	1434.5	-5615.2
## - V29_J1_4	1	3.95	1434.6	-5614.8
## - V30_J1_7	1	3.98	1434.7	-5614.6

## - V19_J1_3	1	4.05	1434.8	-5614.4
## - V13_2_J2_5	1	4.07	1434.8	-5614.3
## - V16_J2_1	1	4.15	1434.8	-5614.0
## - V5_J1_2	1	4.58	1435.3	-5612.5
## - V13_2_J1_6	1	4.60	1435.3	-5612.4
## - V13_3_J2_5	1	4.62	1435.3	-5612.3
## - V14_J2_7	1	4.75	1435.5	-5611.8
## - V13_2_J1_5	1	4.85	1435.5	-5611.5
## - V12_1_2_J1_2	1	5.01	1435.7	-5610.9
## - V14_J1_3	1	5.11	1435.8	-5610.5
## - V13_3_J1_2	1	5.20	1435.9	-5610.2
## - V16_J1_2	1	5.30	1436.0	-5609.8
## - V13_2_J1_2	1	5.68	1436.4	-5608.5
## - V29_J2_1	1	6.01	1436.7	-5607.3
## - V23_J1_4	1	6.40	1437.1	-5605.9
## - V2_J1_5	1	6.43	1437.1	-5605.8
## - V29_J2_2	1	6.86	1437.6	-5604.2
## - V23_J2_1	1	6.87	1437.6	-5604.2
## - V26_J1_1	1	7.31	1438.0	-5602.6
## - V1_J2_5	1	7.47	1438.2	-5602.0
## - V13_1_J1_5	1	7.69	1438.4	-5601.2
## - V1_J1_5	1	7.96	1438.7	-5600.3
## - V24_J2_3	1	8.07	1438.8	-5599.8
## - V15_J2_3	1	8.41	1439.1	-5598.6
## - V24_J2_5	1	8.63	1439.3	-5597.8
## - V29_J2_3	1	8.74	1439.4	-5597.4
## - V26_J1_6	1	8.76	1439.5	-5597.4
## - V30_J2_3	1	9.20	1439.9	-5595.7
## - V20_J1_2	1	11.36	1442.1	-5588.0
## - V17_J1_5	1	11.75	1442.5	-5586.6
## - V15_J2_1	1	12.07	1442.8	-5585.4
## - V13_1_J1_7	1	12.23	1442.9	-5584.8
## - V26_J1_5	1	12.58	1443.3	-5583.6
## - V24_J1_7	1	13.41	1444.1	-5580.6
## - V29_J1_3	1	13.53	1444.2	-5580.2
## - V24_J1_6	1	14.86	1445.6	-5575.4
## - V16_J2_3	1	15.01	1445.7	-5574.8
## - V12_1_2_J1_6	1	16.48	1447.2	-5569.5
## - V4_J1_3	1	17.35	1448.0	-5566.4
## - V29_J1_5	1	17.48	1448.2	-5565.9
## - V20_J2_1	1	17.97	1448.7	-5564.2
## - V12_1_2_J1_7	1	18.42	1449.1	-5562.6
## - V20_J2_3	1	18.58	1449.3	-5562.0
## - V13_1_J1_2	1	19.42	1450.1	-5559.0
## - V14_J2_5	1	25.78	1456.5	-5536.2
## - V2_J2_2	1	26.37	1457.1	-5534.1
## - V23_J2_7	1	27.11	1457.8	-5531.5
## - V15_J1_2	1	27.35	1458.0	-5530.6
## - V4_J1_5	1	28.38	1459.1	-5527.0
## - V30_J1_5	1	28.54	1459.2	-5526.4
## - V3_J1_5	1	28.80	1459.5	-5525.5
## - V30_J2_5	1	29.00	1459.7	-5524.7
## - V2_J2_7	1	29.11	1459.8	-5524.3
## - V14_J2_1	1	29.13	1459.8	-5524.3

## - V30_J1_3	1	31.50	1462.2	-5515.8
## - V26_J1_4	1	32.35	1463.0	-5512.8
## - V12_1_2_J2_7	1	33.66	1464.4	-5508.2
## - V15_J1_1	1	35.65	1466.3	-5501.1
## - V13_2_J1_7	1	38.75	1469.5	-5490.1
## - V12_1_2_J1_3	1	39.38	1470.1	-5487.9
## - V19_J2_5	1	40.13	1470.8	-5485.3
## - V19_J2_4	1	41.41	1472.1	-5480.7
## - V4_J2_7	1	42.71	1473.4	-5476.1
## - V5_J1_4	1	45.82	1476.5	-5465.2
## - V30_J1_2	1	46.71	1477.4	-5462.0
## - V16_J2_7	1	47.57	1478.3	-5459.0
## - V14_J2_4	1	48.19	1478.9	-5456.8
## - V4_J1_4	1	49.75	1480.5	-5451.3
## - V19_J2_1	1	51.52	1482.2	-5445.1
## - V5_J2_1	1	56.95	1487.6	-5426.1
## - V1_J2_2	1	56.96	1487.7	-5426.1
## - V15_J1_6	1	57.25	1488.0	-5425.1
## - V17_J2_2	1	58.39	1489.1	-5421.1
## - V1_J1_3	1	60.16	1490.8	-5414.9
## - V30_J2_2	1	60.51	1491.2	-5413.7
## - V17_J2_7	1	63.01	1493.7	-5405.0
## - V14_J2_3	1	63.20	1493.9	-5404.3
## - V15_J1_3	1	67.73	1498.4	-5388.6
## - V16_J1_3	1	70.04	1500.7	-5380.6
## - V5_J2_3	1	70.84	1501.5	-5377.8
## - V15_J1_7	1	73.07	1503.8	-5370.1
## - V14_J1_5	1	76.28	1507.0	-5359.0
## - V23_J1_3	1	76.43	1507.1	-5358.5
## - V17_J1_3	1	77.54	1508.2	-5354.6
## - V2_J1_3	1	80.75	1511.5	-5343.6
## - V30_J1_1	1	81.15	1511.8	-5342.2
## - V19_J2_3	1	86.31	1517.0	-5324.5
## - V1_J2_7	1	87.55	1518.2	-5320.2
## - V3_J1_4	1	90.32	1521.0	-5310.8
## - V14_J1_4	1	94.30	1525.0	-5297.2
## - V26_J2_1	1	100.63	1531.3	-5275.6
## - V12_1_2_J1_4	1	105.60	1536.3	-5258.8
## - V5_J1_5	1	109.23	1539.9	-5246.5
## - V3_J2_1	1	115.91	1546.6	-5224.0
## - V4_J2_5	1	115.99	1546.7	-5223.7
## - V15_J2_7	1	116.50	1547.2	-5222.0
## - V4_J2_3	1	118.29	1549.0	-5216.0
## - V4_J2_1	1	126.91	1557.6	-5187.2
## - V19_J1_5	1	128.89	1559.6	-5180.5
## - V26_J2_5	1	135.10	1565.8	-5159.9
## - V3_J2_5	1	137.04	1567.7	-5153.5
## - V15_J2_2	1	138.30	1569.0	-5149.3
## - V26_J2_4	1	138.83	1569.5	-5147.5
## - V4_J2_4	1	164.97	1595.7	-5061.6
## - V12_1_2_J2_2	1	170.30	1601.0	-5044.3
## - V19_J1_4	1	185.22	1615.9	-4996.1
## - V3_J2_3	1	185.81	1616.5	-4994.1
## - V3_J2_4	1	202.19	1632.9	-4941.7

```

## - V26_J2_3      1      257.38 1688.1 -4768.9
## - V20_J2_2      1      259.51 1690.2 -4762.3
## - V5_J2_5       1      274.00 1704.7 -4717.9
## - J             12     306.31 1737.0 -4693.3
## - V5_J2_4       1      314.27 1745.0 -4596.5
## - V16_J2_2      1      427.60 1858.3 -4269.3
## - V             19     924.29 2355.0 -3157.0
##
## Step:  AIC=-5623.66
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 + V20_J2_3 +
## V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V2_J1_5 + V23_J1_4 +
## V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 + V23_J2_1 +
## V26_J1_3 + V13_2_J1_6 + V13_3_J2_5 + V20_J1_2 + V13_2_J1_4 +
## V26_J1_6 + V13_1_J1_5 + V26_J1_1 + V2_J1_6 + V15_J2_3 + V30_J2_3 +
## V24_J2_3 + V13_2_J1_5 + V13_1_J2_2 + V19_J1_3 + V14_J1_3 +
## V19_J1_1 + V16_J2_1 + V13_2_J2_5 + V29_J2_3 + V23_J2_3 +
## V13_1_J2_7 + V14_J2_7 + V29_J2_1 + V29_J2_2 + V29_J1_4 +
## V13_3_J1_2 + V13_2_J1_2 + V16_J1_2 + V5_J1_2 + V30_J1_7 +
## V26_J1_7 + V16_J1_4 + V1_J1_7 + V17_J1_7 + V5_J1_6 + V20_J1_6 +
## V20_J2_4 + V13_3_J1_1 + V13_1_J1_3
##
##
##          Df Sum of Sq    RSS      AIC
## + V13_3_J2_4      1      2.22 1430.0 -5625.1
## + V30_J2_1        1      2.07 1430.1 -5624.5
## <none>                1432.2 -5623.7
## + V13_2_J2_2      1      1.71 1430.5 -5623.2
## + V12_1_2_J1_5    1      1.66 1430.5 -5623.1
## - V19_J1_1        1      2.05 1434.2 -5622.9
## - V26_J1_3        1      2.07 1434.3 -5622.8
## + V17_J2_1        1      1.54 1430.7 -5622.6
## + V29_J1_7        1      1.50 1430.7 -5622.5
## + V14_J1_6        1      1.45 1430.7 -5622.3
## - V13_3_J1_1      1      2.21 1434.4 -5622.3
## + V24_J1_3        1      1.44 1430.8 -5622.3
## + V16_J2_5        1      1.33 1430.9 -5621.9
## + V23_J2_2        1      1.29 1430.9 -5621.7
## + V15_J2_4        1      1.26 1430.9 -5621.6
## + V20_J1_7        1      1.23 1431.0 -5621.5
## + V29_J2_5        1      1.21 1431.0 -5621.4
## - V16_J1_4        1      2.48 1434.7 -5621.3
## + V20_J2_5        1      1.17 1431.0 -5621.3

```

## + V5_J1_7	1	1.16	1431.0	-5621.2
## + V24_J2_2	1	1.15	1431.0	-5621.2
## - V13_2_J1_4	1	2.55	1434.8	-5621.0
## + V24_J1_5	1	1.10	1431.1	-5621.0
## + V13_2_J2_3	1	1.09	1431.1	-5621.0
## + V1_J1_1	1	1.07	1431.1	-5620.9
## + V19_J2_7	1	1.04	1431.2	-5620.8
## + V5_J2_2	1	0.99	1431.2	-5620.6
## + V20_J1_1	1	0.94	1431.2	-5620.4
## + V13_1_J2_4	1	0.94	1431.3	-5620.4
## - V23_J2_3	1	2.73	1434.9	-5620.4
## + V13_2_J2_4	1	0.91	1431.3	-5620.3
## + V13_3_J1_6	1	0.89	1431.3	-5620.2
## - V20_J2_4	1	2.82	1435.0	-5620.1
## + V12_1_2_J1_1	1	0.83	1431.4	-5620.0
## + V17_J1_1	1	0.83	1431.4	-5620.0
## + V17_J2_3	1	0.82	1431.4	-5620.0
## + V13_3_J1_7	1	0.80	1431.4	-5619.9
## + V17_J2_4	1	0.75	1431.5	-5619.7
## + V24_J2_4	1	0.72	1431.5	-5619.6
## + V29_J2_7	1	0.67	1431.5	-5619.4
## - V13_1_J1_3	1	3.00	1435.2	-5619.4
## + V13_1_J1_4	1	0.64	1431.6	-5619.3
## + V3_J2_7	1	0.62	1431.6	-5619.3
## - V2_J1_6	1	3.05	1435.2	-5619.2
## + V2_J2_1	1	0.61	1431.6	-5619.2
## + V13_2_J1_3	1	0.58	1431.6	-5619.1
## - V17_J1_7	1	3.09	1435.3	-5619.1
## + V12_1_2_J2_1	1	0.55	1431.6	-5619.0
## + V3_J1_2	1	0.55	1431.7	-5619.0
## + V14_J1_2	1	0.54	1431.7	-5619.0
## + V24_J2_7	1	0.51	1431.7	-5618.9
## + V23_J2_5	1	0.50	1431.7	-5618.8
## + V4_J1_6	1	0.49	1431.7	-5618.8
## + V16_J1_5	1	0.48	1431.7	-5618.8
## - V13_1_J2_2	1	3.20	1435.4	-5618.7
## + V15_J1_4	1	0.44	1431.8	-5618.6
## + V1_J1_6	1	0.43	1431.8	-5618.6
## + V19_J1_6	1	0.41	1431.8	-5618.5
## + V30_J2_7	1	0.41	1431.8	-5618.5
## + V4_J1_2	1	0.40	1431.8	-5618.5
## + V30_J1_6	1	0.39	1431.8	-5618.4
## + V20_J1_3	1	0.39	1431.8	-5618.4
## + V13_2_J2_7	1	0.39	1431.8	-5618.4
## + V13_2_J2_1	1	0.38	1431.8	-5618.4
## + V24_J1_1	1	0.37	1431.8	-5618.4
## + V23_J2_4	1	0.37	1431.8	-5618.4
## + V16_J1_7	1	0.35	1431.8	-5618.3
## + V13_3_J2_3	1	0.35	1431.8	-5618.3
## + V3_J1_1	1	0.34	1431.8	-5618.3
## + V23_J1_7	1	0.33	1431.9	-5618.2
## - V5_J1_6	1	3.34	1435.5	-5618.2
## + V19_J1_7	1	0.30	1431.9	-5618.1
## + V14_J2_2	1	0.30	1431.9	-5618.1

## + V17_J2_5	1	0.29	1431.9	-5618.1
## + V1_J2_3	1	0.28	1431.9	-5618.1
## + V2_J2_5	1	0.28	1431.9	-5618.0
## - V13_1_J2_7	1	3.38	1435.6	-5618.0
## + V16_J1_1	1	0.27	1431.9	-5618.0
## + V20_J1_5	1	0.26	1431.9	-5618.0
## + V2_J2_4	1	0.25	1431.9	-5617.9
## + V1_J1_4	1	0.24	1432.0	-5617.9
## + V12_1_2_J2_3	1	0.24	1432.0	-5617.9
## + V12_1_2_J2_4	1	0.22	1432.0	-5617.8
## - V26_J1_7	1	3.45	1435.7	-5617.8
## - V20_J1_6	1	3.48	1435.7	-5617.7
## + V29_J1_2	1	0.18	1432.0	-5617.7
## + V4_J1_7	1	0.18	1432.0	-5617.7
## + V29_J1_1	1	0.16	1432.0	-5617.6
## + V12_1_2_J2_5	1	0.16	1432.0	-5617.6
## + V20_J1_4	1	0.15	1432.0	-5617.6
## + V24_J1_2	1	0.15	1432.0	-5617.6
## + V15_J1_5	1	0.15	1432.0	-5617.6
## + V1_J2_4	1	0.14	1432.0	-5617.5
## + V16_J1_6	1	0.14	1432.0	-5617.5
## + V19_J1_2	1	0.14	1432.0	-5617.5
## + V13_3_J2_2	1	0.14	1432.0	-5617.5
## + V24_J2_1	1	0.14	1432.1	-5617.5
## + V17_J1_4	1	0.13	1432.1	-5617.5
## + V13_3_J1_5	1	0.13	1432.1	-5617.5
## + V13_3_J1_3	1	0.12	1432.1	-5617.5
## + V2_J2_3	1	0.12	1432.1	-5617.5
## + V26_J2_7	1	0.12	1432.1	-5617.4
## + V23_J1_1	1	0.11	1432.1	-5617.4
## + V13_3_J2_7	1	0.10	1432.1	-5617.4
## + V16_J2_4	1	0.10	1432.1	-5617.4
## + V3_J1_3	1	0.09	1432.1	-5617.4
## + V13_1_J1_1	1	0.09	1432.1	-5617.3
## + V2_J1_7	1	0.08	1432.1	-5617.3
## + V20_J2_7	1	0.08	1432.1	-5617.3
## + V17_J1_6	1	0.08	1432.1	-5617.3
## + V26_J2_2	1	0.08	1432.1	-5617.3
## + V4_J2_2	1	0.06	1432.1	-5617.2
## + V5_J1_1	1	0.06	1432.1	-5617.2
## + V4_J1_1	1	0.06	1432.1	-5617.2
## + V5_J1_3	1	0.05	1432.1	-5617.2
## + V1_J1_2	1	0.05	1432.2	-5617.2
## + V3_J1_7	1	0.05	1432.2	-5617.2
## + V17_J1_2	1	0.04	1432.2	-5617.2
## + V19_J2_2	1	0.04	1432.2	-5617.2
## + V13_3_J1_4	1	0.04	1432.2	-5617.2
## + V1_J2_1	1	0.03	1432.2	-5617.1
## + V29_J2_4	1	0.03	1432.2	-5617.1
## + V24_J1_4	1	0.03	1432.2	-5617.1
## + V13_3_J2_1	1	0.03	1432.2	-5617.1
## + V3_J2_2	1	0.02	1432.2	-5617.1
## + V30_J1_4	1	0.02	1432.2	-5617.1
## + V5_J2_7	1	0.01	1432.2	-5617.1

## + V13_1_J2_5	1	0.01	1432.2	-5617.1
## + V15_J2_5	1	0.01	1432.2	-5617.1
## + V3_J1_6	1	0.01	1432.2	-5617.1
## + V13_1_J2_3	1	0.01	1432.2	-5617.0
## + V13_1_J2_1	1	0.01	1432.2	-5617.0
## + V2_J1_2	1	0.00	1432.2	-5617.0
## + V14_J1_7	1	0.00	1432.2	-5617.0
## + V2_J1_4	1	0.00	1432.2	-5617.0
## + V26_J1_2	1	0.00	1432.2	-5617.0
## + V13_2_J1_1	1	0.00	1432.2	-5617.0
## + V23_J1_6	1	0.00	1432.2	-5617.0
## + V23_J1_2	1	0.00	1432.2	-5617.0
## + V23_J1_5	1	0.00	1432.2	-5617.0
## + V30_J2_4	1	0.00	1432.2	-5617.0
## + V2_J1_1	1	0.00	1432.2	-5617.0
## + V29_J1_6	1	0.00	1432.2	-5617.0
## + V14_J1_1	1	0.00	1432.2	-5617.0
## + V13_1_J1_6	1	0.00	1432.2	-5617.0
## - V19_J1_3	1	4.09	1436.3	-5615.5
## - V13_2_J2_5	1	4.13	1436.3	-5615.3
## - V16_J2_1	1	4.21	1436.4	-5615.0
## - V1_J1_7	1	4.33	1436.5	-5614.6
## - V30_J1_7	1	4.49	1436.7	-5614.0
## - V13_3_J2_5	1	4.50	1436.7	-5614.0
## - V13_2_J1_6	1	4.57	1436.8	-5613.7
## - V5_J1_2	1	4.72	1436.9	-5613.2
## - V29_J1_4	1	4.72	1436.9	-5613.2
## - V13_2_J1_5	1	4.82	1437.0	-5612.8
## - V14_J2_7	1	4.89	1437.1	-5612.6
## - V12_1_2_J1_2	1	5.00	1437.2	-5612.2
## - V14_J1_3	1	5.16	1437.3	-5611.6
## - V13_3_J1_2	1	5.29	1437.5	-5611.1
## - V16_J1_2	1	5.40	1437.6	-5610.7
## - V13_2_J1_2	1	5.71	1437.9	-5609.6
## - V2_J1_5	1	6.41	1438.6	-5607.1
## - V23_J1_4	1	6.45	1438.7	-5606.9
## - V23_J2_1	1	6.82	1439.0	-5605.6
## - V29_J2_1	1	6.97	1439.2	-5605.0
## - V26_J1_1	1	7.29	1439.5	-5603.9
## - V1_J2_5	1	7.54	1439.7	-5603.0
## - V13_1_J1_5	1	7.63	1439.8	-5602.7
## - V29_J2_2	1	8.00	1440.2	-5601.3
## - V1_J1_5	1	8.01	1440.2	-5601.3
## - V24_J2_3	1	8.07	1440.3	-5601.1
## - V15_J2_3	1	8.44	1440.6	-5599.8
## - V24_J2_5	1	8.73	1440.9	-5598.7
## - V26_J1_6	1	8.73	1440.9	-5598.7
## - V30_J2_3	1	9.24	1441.4	-5596.9
## - V29_J2_3	1	9.91	1442.1	-5594.4
## - V20_J1_2	1	11.51	1443.7	-5588.7
## - V13_1_J1_7	1	11.54	1443.7	-5588.6
## - V17_J1_5	1	11.83	1444.0	-5587.5
## - V15_J2_1	1	12.10	1444.3	-5586.5
## - V26_J1_5	1	12.54	1444.7	-5585.0

## - V29_J1_3	1	12.54	1444.7	-5585.0
## - V24_J1_7	1	14.38	1446.6	-5578.3
## - V24_J1_6	1	14.81	1447.0	-5576.8
## - V16_J2_3	1	15.11	1447.3	-5575.7
## - V12_1_2_J1_6	1	16.50	1448.7	-5570.7
## - V4_J1_3	1	17.43	1449.6	-5567.4
## - V12_1_2_J1_7	1	17.60	1449.8	-5566.8
## - V20_J2_1	1	18.10	1450.3	-5565.0
## - V20_J2_3	1	18.70	1450.9	-5562.8
## - V29_J1_5	1	19.29	1451.5	-5560.7
## - V13_1_J1_2	1	19.44	1451.6	-5560.2
## - V14_J2_5	1	26.17	1458.4	-5536.1
## - V2_J2_2	1	26.34	1458.5	-5535.5
## - V23_J2_7	1	27.32	1459.5	-5532.0
## - V15_J1_2	1	27.33	1459.5	-5532.0
## - V4_J1_5	1	28.54	1460.7	-5527.7
## - V30_J1_5	1	28.66	1460.8	-5527.3
## - V30_J2_5	1	28.89	1461.1	-5526.4
## - V3_J1_5	1	28.90	1461.1	-5526.4
## - V2_J2_7	1	29.31	1461.5	-5524.9
## - V14_J2_1	1	29.36	1461.6	-5524.8
## - V30_J1_3	1	31.33	1463.5	-5517.8
## - V26_J1_4	1	32.33	1464.5	-5514.2
## - V12_1_2_J2_7	1	33.71	1465.9	-5509.3
## - V15_J1_1	1	35.66	1467.9	-5502.4
## - V13_2_J1_7	1	37.68	1469.9	-5495.2
## - V12_1_2_J1_3	1	39.20	1471.4	-5489.9
## - V19_J2_5	1	40.60	1472.8	-5484.9
## - V19_J2_4	1	41.84	1474.0	-5480.5
## - V4_J2_7	1	43.12	1475.3	-5476.0
## - V5_J1_4	1	46.14	1478.3	-5465.4
## - V30_J1_2	1	46.68	1478.9	-5463.5
## - V16_J2_7	1	47.89	1480.1	-5459.3
## - V14_J2_4	1	48.68	1480.9	-5456.5
## - V4_J1_4	1	50.04	1482.2	-5451.7
## - V19_J2_1	1	51.82	1484.0	-5445.5
## - V1_J2_2	1	56.73	1488.9	-5428.3
## - V15_J1_6	1	57.24	1489.4	-5426.5
## - V5_J2_1	1	57.33	1489.5	-5426.2
## - V17_J2_2	1	58.13	1490.3	-5423.4
## - V1_J1_3	1	59.94	1492.1	-5417.1
## - V30_J2_2	1	60.25	1492.5	-5416.0
## - V17_J2_7	1	63.07	1495.3	-5406.2
## - V14_J2_3	1	63.54	1495.7	-5404.6
## - V15_J1_3	1	67.99	1500.2	-5389.1
## - V16_J1_3	1	70.08	1502.3	-5381.9
## - V5_J2_3	1	71.25	1503.5	-5377.8
## - V15_J1_7	1	75.61	1507.8	-5362.8
## - V23_J1_3	1	76.43	1508.6	-5360.0
## - V14_J1_5	1	76.56	1508.8	-5359.5
## - V17_J1_3	1	77.27	1509.5	-5357.0
## - V2_J1_3	1	80.72	1512.9	-5345.2
## - V30_J1_1	1	81.18	1513.4	-5343.6
## - V19_J2_3	1	86.69	1518.9	-5324.7


```

## - V1_J2_7      1      87.65 1519.8 -5321.4
## - V3_J1_4      1      90.60 1522.8 -5311.3
## - V14_J1_4     1      94.71 1526.9 -5297.3
## - V26_J2_1     1     100.61 1532.8 -5277.3
## - V12_1_2_J1_4 1     105.49 1537.7 -5260.7
## - V5_J1_5      1     109.62 1541.8 -5246.8
## - V3_J2_1      1     116.28 1548.5 -5224.4
## - V15_J2_7     1     116.43 1548.6 -5223.9
## - V4_J2_5      1     116.86 1549.0 -5222.4
## - V4_J2_3      1     118.77 1551.0 -5216.0
## - V4_J2_1      1     127.42 1559.6 -5187.1
## - V19_J1_5     1     129.22 1561.4 -5181.1
## - V26_J2_5     1     135.42 1567.6 -5160.5
## - V3_J2_5      1     137.85 1570.0 -5152.4
## - V15_J2_2     1     138.72 1570.9 -5149.6
## - V26_J2_4     1     139.07 1571.3 -5148.4
## - V4_J2_4      1     165.93 1598.1 -5060.3
## - V12_1_2_J2_2 1     169.91 1602.1 -5047.3
## - V19_J1_4     1     185.77 1618.0 -4996.1
## - V3_J2_3      1     186.25 1618.4 -4994.6
## - V3_J2_4      1     203.08 1635.3 -4940.8
## - V26_J2_3     1     257.34 1689.5 -4771.0
## - V20_J2_2     1     259.57 1691.8 -4764.1
## - V5_J2_5      1     275.56 1707.8 -4715.2
## - J            12     306.38 1738.6 -4695.2
## - V5_J2_4      1     315.80 1748.0 -4594.1
## - V16_J2_2     1     427.64 1859.8 -4271.6
## - V            19     924.55 2356.8 -3159.7
##
## Step:  AIC=-5625.08
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 + V20_J2_3 +
## V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V2_J1_5 + V23_J1_4 +
## V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 + V23_J2_1 +
## V26_J1_3 + V13_2_J1_6 + V13_3_J2_5 + V20_J1_2 + V13_2_J1_4 +
## V26_J1_6 + V13_1_J1_5 + V26_J1_1 + V2_J1_6 + V15_J2_3 + V30_J2_3 +
## V24_J2_3 + V13_2_J1_5 + V13_1_J2_2 + V19_J1_3 + V14_J1_3 +
## V19_J1_1 + V16_J2_1 + V13_2_J2_5 + V29_J2_3 + V23_J2_3 +
## V13_1_J2_7 + V14_J2_7 + V29_J2_1 + V29_J2_2 + V29_J1_4 +
## V13_3_J1_2 + V13_2_J1_2 + V16_J1_2 + V5_J1_2 + V30_J1_7 +
## V26_J1_7 + V16_J1_4 + V1_J1_7 + V17_J1_7 + V5_J1_6 + V20_J1_6 +
## V20_J2_4 + V13_3_J1_1 + V13_1_J1_3 + V13_3_J2_4

```

##		Df	Sum of Sq	RSS	AIC
##	+ V30_J2_1	1	2.15	1427.8	-5626.3
##	- V13_3_J1_1	1	1.75	1431.7	-5625.4
##	<none>			1430.0	-5625.1
##	+ V13_2_J2_2	1	1.80	1428.2	-5625.0
##	+ V12_1_2_J1_5	1	1.77	1428.2	-5624.9
##	- V26_J1_3	1	2.02	1432.0	-5624.4
##	- V19_J1_1	1	2.09	1432.1	-5624.1
##	+ V17_J2_1	1	1.48	1428.5	-5623.8
##	+ V14_J1_6	1	1.45	1428.5	-5623.7
##	- V13_3_J2_4	1	2.22	1432.2	-5623.7
##	+ V29_J1_7	1	1.41	1428.6	-5623.6
##	+ V24_J1_3	1	1.34	1428.6	-5623.3
##	+ V16_J2_5	1	1.32	1428.7	-5623.3
##	+ V13_3_J1_6	1	1.26	1428.7	-5623.0
##	- V16_J1_4	1	2.41	1432.4	-5623.0
##	+ V20_J2_5	1	1.23	1428.8	-5622.9
##	+ V29_J2_5	1	1.22	1428.8	-5622.9
##	+ V23_J2_2	1	1.21	1428.8	-5622.9
##	+ V24_J2_2	1	1.21	1428.8	-5622.8
##	+ V20_J1_7	1	1.21	1428.8	-5622.8
##	+ V13_2_J2_4	1	1.21	1428.8	-5622.8
##	+ V5_J1_7	1	1.16	1428.8	-5622.7
##	- V13_2_J1_4	1	2.59	1432.6	-5622.3
##	+ V24_J1_5	1	1.06	1428.9	-5622.3
##	+ V13_2_J2_3	1	1.05	1428.9	-5622.3
##	+ V1_J1_1	1	1.05	1428.9	-5622.3
##	+ V19_J2_7	1	1.03	1429.0	-5622.2
##	+ V15_J2_4	1	1.02	1429.0	-5622.1
##	+ V17_J2_4	1	0.99	1429.0	-5622.0
##	+ V5_J2_2	1	0.98	1429.0	-5622.0
##	+ V20_J1_1	1	0.91	1429.1	-5621.7
##	+ V17_J2_3	1	0.87	1429.1	-5621.6
##	- V23_J2_3	1	2.79	1432.8	-5621.6
##	+ V17_J1_1	1	0.84	1429.1	-5621.5
##	+ V12_1_2_J1_1	1	0.80	1429.2	-5621.4
##	+ V29_J2_7	1	0.73	1429.2	-5621.1
##	+ V13_1_J2_4	1	0.71	1429.3	-5621.0
##	+ V13_2_J1_3	1	0.65	1429.3	-5620.8
##	+ V2_J2_1	1	0.64	1429.3	-5620.8
##	+ V3_J2_7	1	0.61	1429.4	-5620.6
##	+ V13_1_J1_4	1	0.60	1429.4	-5620.6
##	- V13_1_J2_2	1	3.08	1433.1	-5620.5
##	+ V24_J2_7	1	0.55	1429.4	-5620.4
##	+ V13_3_J1_7	1	0.54	1429.4	-5620.4
##	- V2_J1_6	1	3.12	1433.1	-5620.4
##	+ V14_J1_2	1	0.53	1429.5	-5620.4
##	+ V3_J1_2	1	0.52	1429.5	-5620.3
##	+ V24_J2_4	1	0.51	1429.5	-5620.3
##	- V13_1_J1_3	1	3.14	1433.1	-5620.3
##	+ V12_1_2_J2_1	1	0.51	1429.5	-5620.3
##	+ V23_J2_5	1	0.49	1429.5	-5620.2
##	+ V4_J1_6	1	0.49	1429.5	-5620.2

## - V17_J1_7	1	3.18	1433.2	-5620.1
## + V1_J1_6	1	0.47	1429.5	-5620.1
## + V16_J1_5	1	0.43	1429.5	-5620.0
## - V20_J2_4	1	3.23	1433.2	-5620.0
## + V20_J1_3	1	0.42	1429.6	-5620.0
## + V13_2_J2_7	1	0.42	1429.6	-5620.0
## + V4_J1_2	1	0.42	1429.6	-5620.0
## + V19_J1_6	1	0.41	1429.6	-5619.9
## + V16_J1_7	1	0.40	1429.6	-5619.9
## + V2_J2_4	1	0.40	1429.6	-5619.9
## - V13_1_J2_7	1	3.27	1433.2	-5619.8
## + V15_J1_4	1	0.38	1429.6	-5619.8
## + V24_J1_1	1	0.37	1429.6	-5619.8
## + V13_2_J2_1	1	0.37	1429.6	-5619.8
## + V30_J2_7	1	0.36	1429.6	-5619.7
## + V12_1_2_J2_4	1	0.35	1429.6	-5619.7
## + V30_J1_6	1	0.35	1429.6	-5619.7
## + V3_J1_1	1	0.32	1429.7	-5619.6
## + V14_J2_2	1	0.32	1429.7	-5619.6
## + V19_J1_7	1	0.31	1429.7	-5619.6
## + V23_J1_7	1	0.30	1429.7	-5619.5
## + V13_3_J2_2	1	0.29	1429.7	-5619.5
## - V5_J1_6	1	3.36	1433.3	-5619.5
## + V16_J1_1	1	0.29	1429.7	-5619.5
## + V17_J2_5	1	0.29	1429.7	-5619.5
## + V12_1_2_J2_3	1	0.28	1429.7	-5619.5
## + V2_J2_5	1	0.28	1429.7	-5619.5
## + V1_J1_4	1	0.27	1429.7	-5619.4
## + V20_J1_5	1	0.27	1429.7	-5619.4
## + V1_J2_3	1	0.25	1429.7	-5619.4
## + V23_J2_4	1	0.23	1429.8	-5619.3
## - V26_J1_7	1	3.46	1433.4	-5619.1
## + V4_J1_7	1	0.18	1429.8	-5619.1
## + V13_3_J2_3	1	0.17	1429.8	-5619.1
## - V20_J1_6	1	3.48	1433.5	-5619.1
## + V12_1_2_J2_5	1	0.17	1429.8	-5619.0
## + V16_J1_6	1	0.16	1429.8	-5619.0
## + V29_J1_2	1	0.16	1429.8	-5619.0
## + V19_J1_2	1	0.15	1429.8	-5619.0
## + V29_J1_1	1	0.15	1429.8	-5619.0
## + V17_J1_4	1	0.15	1429.8	-5619.0
## + V20_J1_4	1	0.15	1429.8	-5619.0
## + V24_J2_1	1	0.15	1429.8	-5619.0
## + V24_J1_2	1	0.14	1429.8	-5619.0
## + V26_J2_7	1	0.12	1429.9	-5618.9
## + V23_J1_1	1	0.12	1429.9	-5618.9
## + V15_J1_5	1	0.11	1429.9	-5618.8
## + V2_J2_3	1	0.10	1429.9	-5618.8
## + V17_J1_6	1	0.09	1429.9	-5618.8
## + V3_J1_3	1	0.08	1429.9	-5618.7
## + V13_1_J1_1	1	0.08	1429.9	-5618.7
## + V20_J2_7	1	0.08	1429.9	-5618.7
## + V26_J2_2	1	0.07	1429.9	-5618.7
## + V2_J1_7	1	0.07	1429.9	-5618.7

## + V4_J1_1	1	0.06	1429.9	-5618.7
## + V1_J2_4	1	0.06	1429.9	-5618.7
## + V1_J1_2	1	0.06	1429.9	-5618.6
## + V4_J2_2	1	0.05	1429.9	-5618.6
## + V5_J1_1	1	0.05	1429.9	-5618.6
## + V17_J1_2	1	0.04	1429.9	-5618.6
## + V3_J1_7	1	0.04	1429.9	-5618.6
## + V19_J2_2	1	0.04	1429.9	-5618.6
## + V5_J1_3	1	0.04	1429.9	-5618.6
## + V13_3_J1_3	1	0.04	1429.9	-5618.6
## + V16_J2_4	1	0.04	1429.9	-5618.6
## + V13_3_J1_5	1	0.03	1429.9	-5618.6
## + V24_J1_4	1	0.03	1429.9	-5618.6
## + V30_J2_4	1	0.03	1430.0	-5618.5
## + V1_J2_1	1	0.03	1430.0	-5618.5
## + V13_3_J2_7	1	0.03	1430.0	-5618.5
## + V3_J2_2	1	0.02	1430.0	-5618.5
## + V5_J2_7	1	0.01	1430.0	-5618.5
## + V13_1_J2_5	1	0.01	1430.0	-5618.5
## + V13_1_J2_1	1	0.01	1430.0	-5618.5
## + V30_J1_4	1	0.01	1430.0	-5618.5
## + V3_J1_6	1	0.01	1430.0	-5618.5
## + V26_J1_2	1	0.01	1430.0	-5618.5
## + V15_J2_5	1	0.01	1430.0	-5618.5
## + V23_J1_6	1	0.01	1430.0	-5618.5
## + V2_J1_2	1	0.00	1430.0	-5618.5
## + V14_J1_7	1	0.00	1430.0	-5618.5
## + V13_2_J1_1	1	0.00	1430.0	-5618.5
## + V23_J1_2	1	0.00	1430.0	-5618.4
## + V29_J2_4	1	0.00	1430.0	-5618.4
## + V13_1_J2_3	1	0.00	1430.0	-5618.4
## + V2_J1_4	1	0.00	1430.0	-5618.4
## + V13_1_J1_6	1	0.00	1430.0	-5618.4
## + V14_J1_1	1	0.00	1430.0	-5618.4
## + V13_3_J2_1	1	0.00	1430.0	-5618.4
## + V13_3_J1_4	1	0.00	1430.0	-5618.4
## + V2_J1_1	1	0.00	1430.0	-5618.4
## + V23_J1_5	1	0.00	1430.0	-5618.4
## + V29_J1_6	1	0.00	1430.0	-5618.4
## - V13_3_J2_5	1	3.80	1433.8	-5617.9
## - V19_J1_3	1	4.02	1434.0	-5617.1
## - V16_J2_1	1	4.12	1434.1	-5616.8
## - V13_2_J2_5	1	4.16	1434.1	-5616.6
## - V1_J1_7	1	4.44	1434.4	-5615.6
## - V30_J1_7	1	4.61	1434.6	-5615.0
## - V13_2_J1_6	1	4.63	1434.6	-5614.9
## - V13_2_J1_5	1	4.75	1434.7	-5614.5
## - V5_J1_2	1	4.79	1434.8	-5614.3
## - V29_J1_4	1	4.81	1434.8	-5614.3
## - V14_J2_7	1	4.84	1434.8	-5614.1
## - V14_J1_3	1	5.06	1435.0	-5613.3
## - V12_1_2_J1_2	1	5.07	1435.0	-5613.3
## - V16_J1_2	1	5.33	1435.3	-5612.4
## - V13_2_J1_2	1	5.69	1435.7	-5611.1

## - V13_3_J1_2	1	5.94	1435.9	-5610.1
## - V23_J1_4	1	6.37	1436.3	-5608.6
## - V2_J1_5	1	6.53	1436.5	-5608.0
## - V23_J2_1	1	6.90	1436.9	-5606.7
## - V29_J2_1	1	7.08	1437.0	-5606.0
## - V26_J1_1	1	7.21	1437.2	-5605.5
## - V13_1_J1_5	1	7.49	1437.5	-5604.5
## - V1_J2_5	1	7.54	1437.5	-5604.4
## - V1_J1_5	1	8.15	1438.1	-5602.2
## - V24_J2_3	1	8.15	1438.1	-5602.2
## - V29_J2_2	1	8.18	1438.2	-5602.0
## - V15_J2_3	1	8.64	1438.6	-5600.4
## - V26_J1_6	1	8.71	1438.7	-5600.1
## - V24_J2_5	1	8.78	1438.8	-5599.9
## - V30_J2_3	1	9.38	1439.4	-5597.7
## - V29_J2_3	1	10.05	1440.0	-5595.3
## - V13_1_J1_7	1	11.34	1441.3	-5590.6
## - V20_J1_2	1	11.58	1441.6	-5589.8
## - V17_J1_5	1	11.99	1442.0	-5588.3
## - V29_J1_3	1	12.24	1442.2	-5587.4
## - V15_J2_1	1	12.32	1442.3	-5587.1
## - V26_J1_5	1	12.54	1442.5	-5586.3
## - V24_J1_7	1	14.52	1444.5	-5579.2
## - V24_J1_6	1	14.90	1444.9	-5577.8
## - V16_J2_3	1	14.91	1444.9	-5577.8
## - V12_1_2_J1_6	1	16.30	1446.3	-5572.8
## - V4_J1_3	1	17.26	1447.2	-5569.3
## - V12_1_2_J1_7	1	17.34	1447.3	-5569.0
## - V20_J2_1	1	18.12	1448.1	-5566.2
## - V20_J2_3	1	18.69	1448.7	-5564.2
## - V13_1_J1_2	1	19.33	1449.3	-5561.9
## - V29_J1_5	1	19.50	1449.5	-5561.3
## - V2_J2_2	1	26.01	1456.0	-5538.0
## - V14_J2_5	1	26.36	1456.3	-5536.7
## - V23_J2_7	1	27.03	1457.0	-5534.3
## - V15_J1_2	1	27.58	1457.6	-5532.4
## - V4_J1_5	1	28.49	1458.5	-5529.1
## - V3_J1_5	1	28.90	1458.9	-5527.7
## - V30_J2_5	1	28.92	1458.9	-5527.6
## - V30_J1_5	1	28.93	1458.9	-5527.6
## - V2_J2_7	1	28.99	1459.0	-5527.3
## - V14_J2_1	1	29.37	1459.3	-5526.0
## - V30_J1_3	1	30.84	1460.8	-5520.8
## - V26_J1_4	1	32.38	1462.4	-5515.3
## - V12_1_2_J2_7	1	33.31	1463.3	-5512.0
## - V15_J1_1	1	35.91	1465.9	-5502.7
## - V13_2_J1_7	1	37.44	1467.4	-5497.3
## - V12_1_2_J1_3	1	38.62	1468.6	-5493.1
## - V19_J2_5	1	40.88	1470.9	-5485.1
## - V4_J2_7	1	43.00	1473.0	-5477.7
## - V19_J2_4	1	43.15	1473.1	-5477.1
## - V5_J1_4	1	46.25	1476.2	-5466.2
## - V30_J1_2	1	46.86	1476.8	-5464.0
## - V16_J2_7	1	47.42	1477.4	-5462.1

```

## - V14_J2_4      1      50.02 1480.0 -5452.9
## - V4_J1_4       1      50.05 1480.0 -5452.8
## - V19_J2_1      1      51.89 1481.9 -5446.4
## - V1_J2_2       1      56.22 1486.2 -5431.2
## - V5_J2_1       1      57.46 1487.4 -5426.8
## - V17_J2_2      1      57.62 1487.6 -5426.3
## - V15_J1_6      1      57.71 1487.7 -5426.0
## - V1_J1_3       1      59.28 1489.2 -5420.5
## - V30_J2_2      1      59.71 1489.7 -5419.0
## - V17_J2_7      1      62.58 1492.5 -5409.0
## - V14_J2_3      1      63.49 1493.5 -5405.8
## - V15_J1_3      1      68.76 1498.7 -5387.5
## - V16_J1_3      1      69.30 1499.3 -5385.6
## - V5_J2_3       1      71.32 1501.3 -5378.6
## - V23_J1_3      1      75.72 1505.7 -5363.4
## - V15_J1_7      1      76.24 1506.2 -5361.6
## - V14_J1_5      1      76.48 1506.5 -5360.8
## - V17_J1_3      1      76.51 1506.5 -5360.7
## - V2_J1_3       1      79.95 1509.9 -5348.8
## - V30_J1_1      1      81.37 1511.3 -5343.9
## - V19_J2_3      1      86.70 1516.7 -5325.6
## - V1_J2_7       1      87.06 1517.0 -5324.4
## - V3_J1_4       1      90.69 1520.7 -5311.9
## - V14_J1_4      1      94.71 1524.7 -5298.2
## - V26_J2_1      1     100.71 1530.7 -5277.8
## - V12_1_2_J1_4  1     104.99 1535.0 -5263.3
## - V5_J1_5       1     109.69 1539.7 -5247.4
## - V3_J2_1       1     116.39 1546.4 -5224.8
## - V15_J2_7      1     117.23 1547.2 -5222.0
## - V4_J2_5       1     117.25 1547.2 -5221.9
## - V4_J2_3       1     118.69 1548.7 -5217.1
## - V4_J2_1       1     127.44 1557.4 -5187.8
## - V19_J1_5      1     129.21 1559.2 -5181.9
## - V26_J2_5      1     135.90 1565.9 -5159.6
## - V3_J2_5       1     138.37 1568.3 -5151.4
## - V15_J2_2      1     139.62 1569.6 -5147.3
## - V26_J2_4      1     140.96 1570.9 -5142.8
## - V4_J2_4       1     167.93 1597.9 -5054.3
## - V12_1_2_J2_2  1     168.89 1598.9 -5051.2
## - V19_J1_4      1     185.89 1615.9 -4996.2
## - V3_J2_3       1     186.27 1616.2 -4995.0
## - V3_J2_4       1     205.21 1635.2 -4934.4
## - V26_J2_3      1     257.37 1687.3 -4771.1
## - V20_J2_2      1     259.23 1689.2 -4765.4
## - V5_J2_5       1     276.35 1706.3 -4712.9
## - J             12     308.46 1738.4 -4689.0
## - V5_J2_4       1     318.02 1748.0 -4587.5
## - V16_J2_2      1     425.97 1856.0 -4275.9
## - V             19     923.12 2353.1 -3161.1
##
## Step:  AIC=-5626.26
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
##       V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
##       V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +

```

```

##      V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
##      V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
##      V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
##      V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
##      V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
##      V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
##      V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
##      V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
##      V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 + V20_J2_3 +
##      V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
##      V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
##      V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V2_J1_5 + V23_J1_4 +
##      V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 + V23_J2_1 +
##      V26_J1_3 + V13_2_J1_6 + V13_3_J2_5 + V20_J1_2 + V13_2_J1_4 +
##      V26_J1_6 + V13_1_J1_5 + V26_J1_1 + V2_J1_6 + V15_J2_3 + V30_J2_3 +
##      V24_J2_3 + V13_2_J1_5 + V13_1_J2_2 + V19_J1_3 + V14_J1_3 +
##      V19_J1_1 + V16_J2_1 + V13_2_J2_5 + V29_J2_3 + V23_J2_3 +
##      V13_1_J2_7 + V14_J2_7 + V29_J2_1 + V29_J2_2 + V29_J1_4 +
##      V13_3_J1_2 + V13_2_J1_2 + V16_J1_2 + V5_J1_2 + V30_J1_7 +
##      V26_J1_7 + V16_J1_4 + V1_J1_7 + V17_J1_7 + V5_J1_6 + V20_J1_6 +
##      V20_J2_4 + V13_3_J1_1 + V13_1_J1_3 + V13_3_J2_4 + V30_J2_1
##
##      Df Sum of Sq    RSS    AIC
## - V13_3_J1_1      1      1.73 1429.6 -5626.6
## <none>                        1427.8 -5626.3
## + V13_2_J2_2      1      1.73 1426.1 -5625.9
## + V12_1_2_J1_5     1      1.68 1426.2 -5625.8
## - V26_J1_3         1      1.98 1429.8 -5625.7
## - V19_J1_1         1      2.04 1429.9 -5625.5
## + V14_J1_6         1      1.52 1426.3 -5625.2
## - V30_J2_1         1      2.15 1430.0 -5625.1
## + V29_J1_7         1      1.39 1426.4 -5624.7
## + V13_3_J1_6       1      1.36 1426.5 -5624.6
## + V24_J1_3         1      1.36 1426.5 -5624.6
## - V13_3_J2_4       1      2.30 1430.1 -5624.5
## + V13_2_J2_4       1      1.31 1426.5 -5624.4
## + V16_J2_5         1      1.29 1426.5 -5624.3
## + V29_J2_5         1      1.26 1426.6 -5624.2
## + V23_J2_2         1      1.20 1426.6 -5624.0
## + V20_J1_7         1      1.20 1426.6 -5624.0
## + V20_J2_5         1      1.20 1426.6 -5624.0
## - V13_2_J1_4       1      2.45 1430.3 -5624.0
## + V24_J2_2         1      1.18 1426.7 -5623.9
## - V16_J1_4         1      2.47 1430.3 -5623.9
## + V5_J1_7          1      1.17 1426.7 -5623.9
## + V17_J2_1         1      1.09 1426.7 -5623.6
## + V19_J2_7         1      1.08 1426.8 -5623.6
## + V1_J1_1          1      1.08 1426.8 -5623.6
## + V24_J1_5         1      1.07 1426.8 -5623.5
## + V17_J2_4         1      1.07 1426.8 -5623.5
## + V13_2_J2_3       1      1.06 1426.8 -5623.5
## + V15_J2_4         1      0.99 1426.8 -5623.2
## + V5_J2_2          1      0.97 1426.9 -5623.2
## + V2_J2_1          1      0.97 1426.9 -5623.1

```

## + V20_J1_1	1	0.94	1426.9	-5623.0
## + V17_J2_3	1	0.88	1427.0	-5622.8
## + V12_1_2_J1_1	1	0.86	1427.0	-5622.7
## + V17_J1_1	1	0.82	1427.0	-5622.6
## - V23_J2_3	1	2.86	1430.7	-5622.5
## + V29_J2_7	1	0.69	1427.1	-5622.1
## + V13_1_J1_4	1	0.68	1427.1	-5622.1
## - V2_J1_6	1	2.97	1430.8	-5622.1
## + V3_J2_7	1	0.66	1427.2	-5622.0
## + V13_1_J2_4	1	0.64	1427.2	-5622.0
## + V13_2_J1_3	1	0.62	1427.2	-5621.9
## - V13_1_J1_3	1	3.10	1430.9	-5621.6
## + V3_J1_2	1	0.54	1427.3	-5621.6
## + V14_J1_2	1	0.54	1427.3	-5621.6
## - V17_J1_7	1	3.12	1431.0	-5621.5
## + V13_3_J1_7	1	0.52	1427.3	-5621.5
## + V23_J2_5	1	0.51	1427.3	-5621.5
## - V13_1_J2_2	1	3.14	1431.0	-5621.5
## + V24_J2_7	1	0.48	1427.3	-5621.4
## + V24_J2_4	1	0.46	1427.4	-5621.3
## + V2_J2_4	1	0.46	1427.4	-5621.3
## + V4_J1_6	1	0.45	1427.4	-5621.3
## + V20_J1_3	1	0.44	1427.4	-5621.2
## + V12_1_2_J2_4	1	0.42	1427.4	-5621.2
## + V16_J1_5	1	0.42	1427.4	-5621.1
## + V4_J1_2	1	0.41	1427.4	-5621.1
## + V15_J1_4	1	0.41	1427.4	-5621.1
## + V16_J1_7	1	0.41	1427.4	-5621.1
## + V1_J1_6	1	0.40	1427.4	-5621.1
## + V19_J1_6	1	0.39	1427.4	-5621.0
## + V24_J1_1	1	0.38	1427.5	-5621.0
## - V20_J2_4	1	3.27	1431.1	-5621.0
## + V13_2_J2_7	1	0.34	1427.5	-5620.9
## + V3_J1_1	1	0.34	1427.5	-5620.9
## + V24_J2_1	1	0.32	1427.5	-5620.8
## + V14_J2_2	1	0.32	1427.5	-5620.8
## + V19_J1_7	1	0.32	1427.5	-5620.8
## + V12_1_2_J2_1	1	0.31	1427.5	-5620.7
## + V13_3_J2_2	1	0.31	1427.5	-5620.7
## + V16_J1_1	1	0.30	1427.5	-5620.7
## + V17_J2_5	1	0.30	1427.5	-5620.7
## + V23_J1_7	1	0.30	1427.5	-5620.7
## + V20_J1_5	1	0.28	1427.5	-5620.7
## + V12_1_2_J2_3	1	0.26	1427.6	-5620.6
## + V2_J2_5	1	0.26	1427.6	-5620.6
## + V1_J2_3	1	0.25	1427.6	-5620.5
## + V1_J1_4	1	0.22	1427.6	-5620.4
## - V5_J1_6	1	3.43	1431.3	-5620.4
## + V23_J2_4	1	0.21	1427.6	-5620.4
## - V13_1_J2_7	1	3.44	1431.3	-5620.4
## + V13_2_J2_1	1	0.19	1427.6	-5620.3
## + V4_J1_7	1	0.19	1427.6	-5620.3
## + V13_3_J2_3	1	0.18	1427.7	-5620.3
## - V16_J2_1	1	3.47	1431.3	-5620.3

## - V26_J1_7	1	3.49	1431.3	-5620.2
## + V24_J1_2	1	0.15	1427.7	-5620.2
## + V29_J1_2	1	0.15	1427.7	-5620.2
## + V16_J1_6	1	0.15	1427.7	-5620.2
## + V12_1_2_J2_5	1	0.14	1427.7	-5620.1
## + V19_J1_2	1	0.14	1427.7	-5620.1
## + V29_J1_1	1	0.14	1427.7	-5620.1
## + V20_J1_4	1	0.13	1427.7	-5620.1
## + V23_J1_1	1	0.13	1427.7	-5620.1
## + V17_J1_4	1	0.11	1427.7	-5620.0
## + V26_J2_7	1	0.10	1427.7	-5620.0
## + V2_J2_3	1	0.10	1427.7	-5620.0
## - V20_J1_6	1	3.55	1431.4	-5620.0
## + V15_J1_5	1	0.10	1427.7	-5620.0
## + V20_J2_7	1	0.10	1427.7	-5620.0
## + V13_1_J1_1	1	0.09	1427.7	-5619.9
## + V2_J1_7	1	0.08	1427.8	-5619.9
## + V13_1_J2_1	1	0.08	1427.8	-5619.9
## + V30_J1_4	1	0.07	1427.8	-5619.9
## + V3_J1_3	1	0.07	1427.8	-5619.9
## + V17_J1_6	1	0.06	1427.8	-5619.9
## + V26_J2_2	1	0.06	1427.8	-5619.9
## + V30_J2_7	1	0.06	1427.8	-5619.9
## + V4_J1_1	1	0.06	1427.8	-5619.8
## + V30_J1_6	1	0.06	1427.8	-5619.8
## + V5_J1_1	1	0.05	1427.8	-5619.8
## + V4_J2_2	1	0.05	1427.8	-5619.8
## + V19_J2_2	1	0.05	1427.8	-5619.8
## + V1_J1_2	1	0.05	1427.8	-5619.8
## + V30_J2_4	1	0.04	1427.8	-5619.8
## + V1_J2_4	1	0.04	1427.8	-5619.8
## + V3_J1_7	1	0.04	1427.8	-5619.8
## + V17_J1_2	1	0.04	1427.8	-5619.8
## + V5_J1_3	1	0.04	1427.8	-5619.8
## + V13_3_J1_3	1	0.04	1427.8	-5619.8
## + V16_J2_4	1	0.03	1427.8	-5619.7
## + V13_3_J1_5	1	0.03	1427.8	-5619.7
## + V13_3_J2_1	1	0.03	1427.8	-5619.7
## + V5_J2_7	1	0.02	1427.8	-5619.7
## + V24_J1_4	1	0.02	1427.8	-5619.7
## + V3_J2_2	1	0.01	1427.8	-5619.7
## + V13_3_J2_7	1	0.01	1427.8	-5619.7
## + V13_1_J2_5	1	0.01	1427.8	-5619.7
## + V2_J1_4	1	0.01	1427.8	-5619.7
## + V2_J1_2	1	0.01	1427.8	-5619.6
## + V13_2_J1_1	1	0.00	1427.8	-5619.6
## + V3_J1_6	1	0.00	1427.8	-5619.6
## + V26_J1_2	1	0.00	1427.8	-5619.6
## + V15_J2_5	1	0.00	1427.8	-5619.6
## + V23_J1_2	1	0.00	1427.8	-5619.6
## + V14_J1_7	1	0.00	1427.8	-5619.6
## + V23_J1_6	1	0.00	1427.8	-5619.6
## + V13_1_J2_3	1	0.00	1427.8	-5619.6
## + V29_J2_4	1	0.00	1427.8	-5619.6

## + V2_J1_1	1	0.00	1427.8	-5619.6
## + V13_3_J1_4	1	0.00	1427.8	-5619.6
## + V13_1_J1_6	1	0.00	1427.8	-5619.6
## + V1_J2_1	1	0.00	1427.8	-5619.6
## + V29_J1_6	1	0.00	1427.8	-5619.6
## + V14_J1_1	1	0.00	1427.8	-5619.6
## + V23_J1_5	1	0.00	1427.8	-5619.6
## - V13_3_J2_5	1	3.78	1431.6	-5619.2
## - V19_J1_3	1	3.96	1431.8	-5618.5
## - V13_2_J2_5	1	4.22	1432.0	-5617.6
## - V1_J1_7	1	4.36	1432.2	-5617.0
## - V13_2_J1_6	1	4.44	1432.3	-5616.8
## - V29_J1_4	1	4.74	1432.6	-5615.7
## - V5_J1_2	1	4.76	1432.6	-5615.6
## - V13_2_J1_5	1	4.81	1432.6	-5615.4
## - V12_1_2_J1_2	1	4.94	1432.8	-5614.9
## - V14_J2_7	1	4.96	1432.8	-5614.9
## - V14_J1_3	1	5.03	1432.9	-5614.6
## - V16_J1_2	1	5.31	1433.1	-5613.6
## - V30_J1_7	1	5.71	1433.5	-5612.1
## - V13_2_J1_2	1	5.78	1433.6	-5611.9
## - V13_3_J1_2	1	5.99	1433.8	-5611.1
## - V2_J1_5	1	6.46	1434.3	-5609.4
## - V23_J1_4	1	6.48	1434.3	-5609.4
## - V26_J1_1	1	7.29	1435.1	-5606.4
## - V13_1_J1_5	1	7.56	1435.4	-5605.5
## - V1_J2_5	1	7.60	1435.4	-5605.3
## - V23_J2_1	1	7.66	1435.5	-5605.1
## - V29_J2_1	1	7.87	1435.7	-5604.3
## - V1_J1_5	1	8.08	1435.9	-5603.6
## - V24_J2_3	1	8.19	1436.0	-5603.2
## - V29_J2_2	1	8.23	1436.1	-5603.0
## - V26_J1_6	1	8.64	1436.5	-5601.5
## - V15_J2_3	1	8.78	1436.6	-5601.0
## - V24_J2_5	1	8.81	1436.6	-5600.9
## - V29_J2_3	1	10.21	1438.0	-5595.8
## - V30_J2_3	1	10.87	1438.7	-5593.5
## - V13_1_J1_7	1	11.47	1439.3	-5591.3
## - V20_J1_2	1	11.53	1439.4	-5591.1
## - V17_J1_5	1	11.92	1439.7	-5589.7
## - V29_J1_3	1	12.16	1440.0	-5588.8
## - V26_J1_5	1	12.45	1440.3	-5587.8
## - V15_J2_1	1	13.27	1441.1	-5584.8
## - V24_J1_7	1	14.42	1442.2	-5580.7
## - V24_J1_6	1	14.62	1442.5	-5579.9
## - V16_J2_3	1	14.74	1442.6	-5579.5
## - V20_J2_1	1	16.61	1444.4	-5572.8
## - V12_1_2_J1_6	1	16.69	1444.5	-5572.5
## - V4_J1_3	1	17.19	1445.0	-5570.7
## - V12_1_2_J1_7	1	17.58	1445.4	-5569.3
## - V20_J2_3	1	18.49	1446.3	-5566.0
## - V13_1_J1_2	1	19.46	1447.3	-5562.5
## - V29_J1_5	1	19.61	1447.4	-5562.0
## - V2_J2_2	1	26.19	1454.0	-5538.4

## - V14_J2_5	1	26.27	1454.1	-5538.1
## - V30_J1_3	1	26.73	1454.5	-5536.5
## - V23_J2_7	1	27.30	1455.1	-5534.4
## - V14_J2_1	1	27.44	1455.3	-5533.9
## - V15_J1_2	1	27.67	1455.5	-5533.1
## - V4_J1_5	1	28.41	1456.2	-5530.5
## - V3_J1_5	1	28.79	1456.6	-5529.1
## - V2_J2_7	1	29.48	1457.3	-5526.6
## - V30_J1_5	1	30.92	1458.8	-5521.5
## - V30_J2_5	1	30.93	1458.8	-5521.5
## - V26_J1_4	1	32.54	1460.4	-5515.7
## - V12_1_2_J2_7	1	33.93	1461.8	-5510.8
## - V15_J1_1	1	36.07	1463.9	-5503.2
## - V13_2_J1_7	1	37.69	1465.5	-5497.4
## - V12_1_2_J1_3	1	38.90	1466.7	-5493.1
## - V19_J2_5	1	40.68	1468.5	-5486.8
## - V19_J2_4	1	43.22	1471.0	-5477.8
## - V4_J2_7	1	43.32	1471.2	-5477.5
## - V5_J1_4	1	46.51	1474.3	-5466.2
## - V16_J2_7	1	47.75	1475.6	-5461.8
## - V30_J1_2	1	49.00	1476.8	-5457.4
## - V19_J2_1	1	49.04	1476.9	-5457.3
## - V14_J2_4	1	50.20	1478.0	-5453.2
## - V4_J1_4	1	50.33	1478.2	-5452.8
## - V30_J2_2	1	53.24	1481.1	-5442.5
## - V5_J2_1	1	54.57	1482.4	-5437.9
## - V1_J2_2	1	56.46	1484.3	-5431.2
## - V15_J1_6	1	57.48	1485.3	-5427.7
## - V17_J2_2	1	57.84	1485.7	-5426.4
## - V1_J1_3	1	59.45	1487.3	-5420.8
## - V14_J2_3	1	63.15	1491.0	-5407.9
## - V17_J2_7	1	63.23	1491.1	-5407.6
## - V15_J1_3	1	68.94	1496.8	-5387.7
## - V16_J1_3	1	69.16	1497.0	-5386.9
## - V5_J2_3	1	70.95	1498.8	-5380.7
## - V23_J1_3	1	75.59	1503.4	-5364.6
## - V15_J1_7	1	76.34	1504.2	-5362.1
## - V14_J1_5	1	76.34	1504.2	-5362.0
## - V17_J1_3	1	76.69	1504.5	-5360.9
## - V2_J1_3	1	80.18	1508.0	-5348.8
## - V30_J1_1	1	83.38	1511.2	-5337.8
## - V19_J2_3	1	86.16	1514.0	-5328.2
## - V1_J2_7	1	87.84	1515.7	-5322.4
## - V3_J1_4	1	91.03	1518.9	-5311.5
## - V14_J1_4	1	95.09	1522.9	-5297.6
## - V26_J2_1	1	96.70	1524.5	-5292.1
## - V12_1_2_J1_4	1	105.93	1533.8	-5260.8
## - V5_J1_5	1	109.51	1537.3	-5248.6
## - V3_J2_1	1	111.67	1539.5	-5241.3
## - V15_J2_7	1	116.75	1544.6	-5224.2
## - V4_J2_5	1	117.06	1544.9	-5223.2
## - V4_J2_3	1	118.22	1546.0	-5219.2
## - V4_J2_1	1	122.69	1550.5	-5204.2
## - V19_J1_5	1	128.87	1556.7	-5183.5

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## - V26_J2_5      1      135.57 1563.4 -5161.2
## - V3_J2_5       1      138.09 1565.9 -5152.8
## - V15_J2_2      1      139.80 1567.6 -5147.2
## - V26_J2_4      1      141.11 1568.9 -5142.8
## - V4_J2_4       1      168.24 1596.1 -5053.7
## - V12_1_2_J2_2  1      169.55 1597.4 -5049.4
## - V3_J2_3       1      185.58 1613.4 -4997.5
## - V19_J1_4      1      186.24 1614.1 -4995.4
## - V3_J2_4       1      205.49 1633.3 -4933.7
## - V26_J2_3      1      256.50 1684.3 -4773.8
## - V20_J2_2      1      259.05 1686.9 -4765.9
## - V5_J2_5       1      276.03 1703.8 -4713.9
## - J             12     300.51 1728.3 -4712.7
## - V5_J2_4       1      318.42 1746.2 -4586.1
## - V16_J2_2      1      425.79 1853.6 -4275.8
## - V             19     905.00 2332.8 -3199.5
##
## Step:  AIC=-5626.6
## value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 + V5_J2_4 + V5_J2_5 +
## V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 + V26_J2_4 + V26_J2_1 +
## V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 + V19_J1_5 + V5_J1_5 +
## V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 + V15_J1_3 + V13_2_J1_7 +
## V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 + V1_J2_2 + V1_J2_7 + V4_J2_1 +
## V4_J2_5 + V4_J2_3 + V19_J2_3 + V5_J2_3 + V17_J2_7 + V17_J1_3 +
## V30_J1_3 + V2_J1_3 + V23_J1_3 + V1_J1_3 + V16_J1_3 + V2_J2_2 +
## V14_J1_5 + V14_J1_4 + V14_J2_3 + V5_J2_1 + V30_J1_1 + V3_J1_5 +
## V15_J1_7 + V19_J2_1 + V26_J1_4 + V5_J1_4 + V26_J1_5 + V30_J1_2 +
## V19_J2_5 + V19_J2_4 + V14_J2_4 + V15_J1_6 + V4_J1_4 + V4_J1_5 +
## V12_1_2_J1_2 + V14_J2_1 + V14_J2_5 + V15_J1_2 + V15_J1_1 +
## V4_J2_7 + V16_J2_7 + V2_J2_7 + V30_J2_5 + V23_J2_7 + V20_J2_3 +
## V20_J2_1 + V16_J2_3 + V30_J1_5 + V24_J2_5 + V12_1_2_J2_7 +
## V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 + V12_1_2_J1_6 + V4_J1_3 +
## V29_J1_5 + V17_J1_5 + V1_J1_5 + V13_1_J1_7 + V2_J1_5 + V23_J1_4 +
## V24_J1_6 + V13_1_J1_2 + V15_J2_1 + V1_J2_5 + V24_J1_7 + V23_J2_1 +
## V26_J1_3 + V13_2_J1_6 + V13_3_J2_5 + V20_J1_2 + V13_2_J1_4 +
## V26_J1_6 + V13_1_J1_5 + V26_J1_1 + V2_J1_6 + V15_J2_3 + V30_J2_3 +
## V24_J2_3 + V13_2_J1_5 + V13_1_J2_2 + V19_J1_3 + V14_J1_3 +
## V19_J1_1 + V16_J2_1 + V13_2_J2_5 + V29_J2_3 + V23_J2_3 +
## V13_1_J2_7 + V14_J2_7 + V29_J2_1 + V29_J2_2 + V29_J1_4 +
## V13_3_J1_2 + V13_2_J1_2 + V16_J1_2 + V5_J1_2 + V30_J1_7 +
## V26_J1_7 + V16_J1_4 + V1_J1_7 + V17_J1_7 + V5_J1_6 + V20_J1_6 +
## V20_J2_4 + V13_1_J1_3 + V13_3_J2_4 + V30_J2_1
##
##              Df Sum of Sq    RSS    AIC
## <none>                1429.6 -5626.6
## + V13_2_J2_2      1         1.77 1427.8 -5626.4
## + V12_1_2_J1_5    1         1.76 1427.8 -5626.4
## + V13_3_J1_1      1         1.73 1427.8 -5626.3
## + V13_3_J1_6      1         1.73 1427.8 -5626.3
## - V26_J1_3        1         1.95 1431.5 -5626.1
## - V30_J2_1        1         2.16 1431.7 -5625.4
## + V14_J1_6        1         1.46 1428.1 -5625.3
## - V19_J1_1        1         2.30 1431.9 -5624.9
## + V29_J1_7        1         1.34 1428.2 -5624.9

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## + V13_2_J2_4	1	1.32	1428.2	-5624.7
## + V24_J1_3	1	1.30	1428.3	-5624.7
## + V16_J2_5	1	1.28	1428.3	-5624.6
## + V1_J1_1	1	1.27	1428.3	-5624.6
## + V29_J2_5	1	1.27	1428.3	-5624.6
## - V16_J1_4	1	2.40	1432.0	-5624.5
## + V20_J2_5	1	1.21	1428.3	-5624.4
## + V24_J2_2	1	1.21	1428.3	-5624.4
## + V5_J1_7	1	1.20	1428.4	-5624.3
## + V20_J1_7	1	1.18	1428.4	-5624.2
## + V23_J2_2	1	1.16	1428.4	-5624.2
## - V13_2_J1_4	1	2.50	1432.1	-5624.2
## + V17_J2_4	1	1.07	1428.5	-5623.8
## + V19_J2_7	1	1.07	1428.5	-5623.8
## + V17_J2_1	1	1.04	1428.5	-5623.8
## + V24_J1_5	1	1.03	1428.5	-5623.7
## + V12_1_2_J1_1	1	1.03	1428.5	-5623.7
## + V13_2_J2_3	1	1.01	1428.5	-5623.6
## + V2_J2_1	1	1.01	1428.5	-5623.6
## + V15_J2_4	1	0.97	1428.6	-5623.5
## + V17_J2_3	1	0.93	1428.6	-5623.3
## + V5_J2_2	1	0.93	1428.6	-5623.3
## - V13_3_J2_4	1	2.77	1432.3	-5623.2
## + V20_J1_1	1	0.76	1428.8	-5622.7
## + V29_J2_7	1	0.73	1428.8	-5622.6
## - V23_J2_3	1	2.93	1432.5	-5622.6
## + V13_2_J1_3	1	0.67	1428.9	-5622.4
## + V17_J1_1	1	0.67	1428.9	-5622.4
## + V13_1_J2_4	1	0.65	1428.9	-5622.3
## + V13_1_J1_4	1	0.64	1428.9	-5622.3
## - V2_J1_6	1	3.01	1432.6	-5622.3
## + V3_J2_7	1	0.62	1428.9	-5622.2
## - V13_1_J2_2	1	3.08	1432.6	-5622.0
## + V14_J1_2	1	0.55	1429.0	-5622.0
## + V3_J1_2	1	0.54	1429.0	-5621.9
## + V23_J2_5	1	0.51	1429.0	-5621.8
## + V24_J1_1	1	0.51	1429.0	-5621.8
## + V24_J2_7	1	0.50	1429.1	-5621.8
## + V13_3_J2_2	1	0.49	1429.1	-5621.7
## - V17_J1_7	1	3.17	1432.7	-5621.7
## + V4_J1_6	1	0.49	1429.1	-5621.7
## + V20_J1_3	1	0.48	1429.1	-5621.7
## - V13_1_J1_3	1	3.19	1432.8	-5621.7
## + V24_J2_4	1	0.46	1429.1	-5621.6
## + V2_J2_4	1	0.45	1429.1	-5621.6
## + V16_J1_7	1	0.43	1429.1	-5621.5
## + V1_J1_6	1	0.42	1429.1	-5621.5
## + V12_1_2_J2_4	1	0.42	1429.1	-5621.5
## + V4_J1_2	1	0.40	1429.2	-5621.4
## + V15_J1_4	1	0.39	1429.2	-5621.4
## + V19_J1_6	1	0.39	1429.2	-5621.4
## - V20_J2_4	1	3.27	1432.8	-5621.3
## + V16_J1_5	1	0.37	1429.2	-5621.3
## + V13_2_J2_7	1	0.37	1429.2	-5621.3

## + V14_J2_2	1	0.36	1429.2	-5621.3
## - V13_3_J2_5	1	3.30	1432.9	-5621.2
## + V24_J2_1	1	0.34	1429.2	-5621.2
## + V19_J1_7	1	0.32	1429.2	-5621.1
## + V13_3_J1_7	1	0.31	1429.2	-5621.1
## + V20_J1_5	1	0.31	1429.2	-5621.1
## + V17_J2_5	1	0.30	1429.3	-5621.0
## + V12_1_2_J2_3	1	0.29	1429.3	-5621.0
## - V13_1_J2_7	1	3.37	1432.9	-5621.0
## + V23_J1_7	1	0.28	1429.3	-5621.0
## + V12_1_2_J2_1	1	0.28	1429.3	-5621.0
## - V16_J2_1	1	3.39	1433.0	-5620.9
## + V2_J2_5	1	0.26	1429.3	-5620.9
## - V5_J1_6	1	3.39	1433.0	-5620.9
## + V1_J1_4	1	0.24	1429.3	-5620.8
## + V3_J1_1	1	0.24	1429.3	-5620.8
## + V1_J2_3	1	0.22	1429.3	-5620.8
## + V23_J2_4	1	0.22	1429.3	-5620.7
## + V16_J1_1	1	0.21	1429.3	-5620.7
## + V29_J1_1	1	0.21	1429.3	-5620.7
## + V4_J1_7	1	0.21	1429.3	-5620.7
## + V13_2_J2_1	1	0.17	1429.4	-5620.6
## - V26_J1_7	1	3.49	1433.0	-5620.6
## + V16_J1_6	1	0.16	1429.4	-5620.5
## + V24_J1_2	1	0.16	1429.4	-5620.5
## + V19_J1_2	1	0.15	1429.4	-5620.5
## + V29_J1_2	1	0.15	1429.4	-5620.5
## + V13_1_J1_1	1	0.15	1429.4	-5620.5
## + V12_1_2_J2_5	1	0.14	1429.4	-5620.5
## + V20_J1_4	1	0.14	1429.4	-5620.5
## - V20_J1_6	1	3.52	1433.1	-5620.4
## + V17_J1_4	1	0.13	1429.4	-5620.4
## + V26_J2_7	1	0.11	1429.5	-5620.4
## + V4_J1_1	1	0.11	1429.5	-5620.3
## + V13_1_J2_1	1	0.09	1429.5	-5620.3
## + V15_J1_5	1	0.09	1429.5	-5620.3
## + V2_J2_3	1	0.08	1429.5	-5620.3
## + V20_J2_7	1	0.08	1429.5	-5620.3
## + V30_J1_4	1	0.08	1429.5	-5620.2
## + V13_3_J2_3	1	0.07	1429.5	-5620.2
## + V17_J1_6	1	0.07	1429.5	-5620.2
## + V2_J1_7	1	0.07	1429.5	-5620.2
## + V23_J1_1	1	0.07	1429.5	-5620.2
## + V26_J2_2	1	0.06	1429.5	-5620.2
## + V30_J2_7	1	0.06	1429.5	-5620.2
## + V30_J1_6	1	0.06	1429.5	-5620.2
## + V3_J1_3	1	0.06	1429.5	-5620.2
## + V19_J2_2	1	0.05	1429.5	-5620.1
## + V1_J1_2	1	0.05	1429.5	-5620.1
## + V1_J2_4	1	0.04	1429.5	-5620.1
## + V30_J2_4	1	0.04	1429.5	-5620.1
## + V4_J2_2	1	0.04	1429.5	-5620.1
## + V17_J1_2	1	0.04	1429.5	-5620.1
## + V3_J1_7	1	0.04	1429.5	-5620.1

## + V16_J2_4	1	0.04	1429.5	-5620.1
## + V13_3_J1_4	1	0.03	1429.5	-5620.1
## + V13_2_J1_1	1	0.03	1429.5	-5620.1
## + V5_J1_3	1	0.02	1429.5	-5620.0
## + V24_J1_4	1	0.02	1429.5	-5620.0
## + V5_J1_1	1	0.02	1429.5	-5620.0
## + V5_J2_7	1	0.02	1429.5	-5620.0
## + V2_J1_1	1	0.01	1429.5	-5620.0
## + V3_J2_2	1	0.01	1429.5	-5620.0
## + V13_1_J2_5	1	0.01	1429.5	-5620.0
## + V14_J1_1	1	0.01	1429.5	-5620.0
## + V26_J1_2	1	0.01	1429.5	-5620.0
## + V3_J1_6	1	0.01	1429.5	-5620.0
## + V15_J2_5	1	0.01	1429.5	-5620.0
## + V2_J1_2	1	0.01	1429.5	-5620.0
## + V2_J1_4	1	0.01	1429.5	-5620.0
## + V23_J1_6	1	0.00	1429.6	-5620.0
## + V23_J1_2	1	0.00	1429.6	-5620.0
## + V29_J2_4	1	0.00	1429.6	-5620.0
## + V13_3_J2_7	1	0.00	1429.6	-5620.0
## + V13_3_J1_3	1	0.00	1429.6	-5620.0
## + V1_J2_1	1	0.00	1429.6	-5620.0
## + V14_J1_7	1	0.00	1429.6	-5620.0
## + V23_J1_5	1	0.00	1429.6	-5620.0
## + V13_3_J1_5	1	0.00	1429.6	-5620.0
## + V13_1_J2_3	1	0.00	1429.6	-5620.0
## + V13_3_J2_1	1	0.00	1429.6	-5620.0
## + V13_1_J1_6	1	0.00	1429.6	-5620.0
## + V29_J1_6	1	0.00	1429.6	-5620.0
## - V19_J1_3	1	3.91	1433.5	-5619.0
## - V13_2_J2_5	1	4.23	1433.8	-5617.9
## - V1_J1_7	1	4.42	1434.0	-5617.2
## - V13_2_J1_6	1	4.47	1434.0	-5617.0
## - V13_2_J1_5	1	4.74	1434.3	-5616.0
## - V5_J1_2	1	4.76	1434.3	-5616.0
## - V29_J1_4	1	4.84	1434.4	-5615.7
## - V14_J2_7	1	4.85	1434.4	-5615.6
## - V14_J1_3	1	4.90	1434.5	-5615.4
## - V12_1_2_J1_2	1	4.96	1434.5	-5615.2
## - V16_J1_2	1	5.28	1434.8	-5614.0
## - V30_J1_7	1	5.71	1435.3	-5612.5
## - V13_2_J1_2	1	5.79	1435.3	-5612.2
## - V23_J1_4	1	6.38	1435.9	-5610.1
## - V2_J1_5	1	6.57	1436.1	-5609.4
## - V13_3_J1_2	1	6.76	1436.3	-5608.7
## - V26_J1_1	1	6.90	1436.5	-5608.2
## - V13_1_J1_5	1	7.44	1437.0	-5606.2
## - V1_J2_5	1	7.59	1437.2	-5605.7
## - V23_J2_1	1	7.77	1437.3	-5605.0
## - V29_J2_1	1	7.99	1437.5	-5604.3
## - V1_J1_5	1	8.20	1437.8	-5603.5
## - V24_J2_3	1	8.27	1437.8	-5603.2
## - V29_J2_2	1	8.35	1437.9	-5603.0
## - V26_J1_6	1	8.64	1438.2	-5601.9

## - V15_J2_3	1	8.83	1438.4	-5601.2
## - V24_J2_5	1	8.84	1438.4	-5601.2
## - V29_J2_3	1	10.37	1439.9	-5595.7
## - V30_J2_3	1	10.91	1440.5	-5593.7
## - V13_1_J1_7	1	11.38	1440.9	-5592.0
## - V20_J1_2	1	11.55	1441.1	-5591.4
## - V29_J1_3	1	11.97	1441.5	-5589.9
## - V17_J1_5	1	12.07	1441.6	-5589.5
## - V26_J1_5	1	12.39	1442.0	-5588.4
## - V15_J2_1	1	13.33	1442.9	-5585.0
## - V24_J1_7	1	14.47	1444.0	-5580.9
## - V16_J2_3	1	14.56	1444.1	-5580.5
## - V24_J1_6	1	14.67	1444.2	-5580.1
## - V20_J2_1	1	16.49	1446.0	-5573.6
## - V12_1_2_J1_6	1	16.59	1446.2	-5573.2
## - V4_J1_3	1	16.96	1446.5	-5571.9
## - V12_1_2_J1_7	1	17.47	1447.0	-5570.1
## - V20_J2_3	1	18.36	1447.9	-5566.9
## - V13_1_J1_2	1	19.45	1449.0	-5563.0
## - V29_J1_5	1	19.84	1449.4	-5561.6
## - V2_J2_2	1	26.03	1455.6	-5539.4
## - V14_J2_5	1	26.20	1455.8	-5538.8
## - V30_J1_3	1	26.61	1456.2	-5537.3
## - V23_J2_7	1	27.11	1456.7	-5535.6
## - V14_J2_1	1	27.21	1456.8	-5535.2
## - V15_J1_2	1	27.58	1457.1	-5533.9
## - V4_J1_5	1	28.14	1457.7	-5531.9
## - V3_J1_5	1	28.59	1458.2	-5530.3
## - V2_J2_7	1	29.29	1458.8	-5527.8
## - V30_J2_5	1	30.80	1460.4	-5522.4
## - V30_J1_5	1	31.01	1460.6	-5521.6
## - V26_J1_4	1	32.46	1462.0	-5516.5
## - V12_1_2_J2_7	1	33.71	1463.3	-5512.0
## - V15_J1_1	1	35.25	1464.8	-5506.6
## - V13_2_J1_7	1	37.59	1467.2	-5498.3
## - V12_1_2_J1_3	1	38.59	1468.2	-5494.7
## - V19_J2_5	1	40.82	1470.4	-5486.8
## - V4_J2_7	1	43.02	1472.6	-5479.0
## - V19_J2_4	1	43.35	1472.9	-5477.9
## - V5_J1_4	1	46.27	1475.8	-5467.6
## - V16_J2_7	1	47.46	1477.0	-5463.4
## - V30_J1_2	1	48.85	1478.4	-5458.5
## - V19_J2_1	1	48.96	1478.5	-5458.1
## - V4_J1_4	1	50.00	1479.6	-5454.5
## - V14_J2_4	1	50.09	1479.7	-5454.2
## - V30_J2_2	1	53.20	1482.8	-5443.2
## - V5_J2_1	1	54.32	1483.9	-5439.3
## - V1_J2_2	1	56.23	1485.8	-5432.6
## - V15_J1_6	1	57.50	1487.1	-5428.2
## - V17_J2_2	1	57.61	1487.2	-5427.8
## - V1_J1_3	1	59.10	1488.7	-5422.6
## - V14_J2_3	1	62.78	1492.3	-5409.8
## - V17_J2_7	1	62.95	1492.5	-5409.1
## - V16_J1_3	1	68.72	1498.3	-5389.1


```
## - V15_J1_3      1      69.17 1498.7 -5387.5
## - V5_J2_3       1      70.65 1500.2 -5382.4
## - V23_J1_3      1      75.17 1504.7 -5366.7
## - V14_J1_5      1      75.91 1505.5 -5364.2
## - V17_J1_3      1      76.28 1505.8 -5362.9
## - V15_J1_7      1      76.36 1505.9 -5362.6
## - V2_J1_3       1      79.77 1509.3 -5350.9
## - V30_J1_1      1      82.20 1511.8 -5342.5
## - V19_J2_3      1      86.03 1515.6 -5329.4
## - V1_J2_7       1      87.52 1517.1 -5324.3
## - V3_J1_4       1      90.72 1520.3 -5313.3
## - V14_J1_4      1      94.66 1524.2 -5299.8
## - V26_J2_1      1      96.59 1526.2 -5293.2
## - V12_1_2_J1_4  1     105.54 1535.1 -5262.8
## - V5_J1_5       1     109.11 1538.7 -5250.8
## - V3_J2_1       1     111.35 1540.9 -5243.2
## - V15_J2_7      1     116.91 1546.5 -5224.5
## - V4_J2_5       1     116.92 1546.5 -5224.4
## - V4_J2_3       1     117.73 1547.3 -5221.7
## - V4_J2_1       1     122.21 1551.8 -5206.7
## - V19_J1_5      1     128.67 1558.2 -5185.1
## - V26_J2_5      1     135.82 1565.4 -5161.3
## - V3_J2_5       1     138.12 1567.7 -5153.6
## - V15_J2_2      1     139.92 1569.5 -5147.7
## - V26_J2_4      1     141.34 1570.9 -5143.0
## - V4_J2_4       1     168.04 1597.6 -5055.3
## - V12_1_2_J2_2  1     169.13 1598.7 -5051.8
## - V3_J2_3       1     185.14 1614.7 -5000.0
## - V19_J1_4      1     186.06 1615.6 -4997.0
## - V3_J2_4       1     205.49 1635.0 -4934.8
## - V26_J2_3      1     256.27 1685.8 -4775.8
## - V20_J2_2      1     258.68 1688.2 -4768.4
## - J             12     300.02 1729.6 -4715.5
## - V5_J2_5       1     276.01 1705.6 -4715.3
## - V5_J2_4       1     318.35 1747.9 -4587.7
## - V16_J2_2      1     425.07 1854.6 -4279.6
## - V             19     903.27 2332.8 -3206.1
```

```
DNA160609.steps$both.summary$call
```

```
## lm(formula = value ~ V + J + V16_J2_2 + V20_J2_2 + V26_J2_3 +
##     V5_J2_4 + V5_J2_5 + V12_1_2_J2_2 + V30_J2_2 + V26_J2_5 +
##     V26_J2_4 + V26_J2_1 + V3_J2_4 + V3_J2_3 + V3_J2_5 + V19_J1_4 +
##     V19_J1_5 + V5_J1_5 + V3_J2_1 + V15_J2_7 + V15_J2_2 + V4_J2_4 +
##     V15_J1_3 + V13_2_J1_7 + V12_1_2_J1_4 + V3_J1_4 + V17_J2_2 +
##     V1_J2_2 + V1_J2_7 + V4_J2_1 + V4_J2_5 + V4_J2_3 + V19_J2_3 +
##     V5_J2_3 + V17_J2_7 + V17_J1_3 + V30_J1_3 + V2_J1_3 + V23_J1_3 +
##     V1_J1_3 + V16_J1_3 + V2_J2_2 + V14_J1_5 + V14_J1_4 + V14_J2_3 +
##     V5_J2_1 + V30_J1_1 + V3_J1_5 + V15_J1_7 + V19_J2_1 + V26_J1_4 +
##     V5_J1_4 + V26_J1_5 + V30_J1_2 + V19_J2_5 + V19_J2_4 + V14_J2_4 +
##     V15_J1_6 + V4_J1_4 + V4_J1_5 + V12_1_2_J1_2 + V14_J2_1 +
##     V14_J2_5 + V15_J1_2 + V15_J1_1 + V4_J2_7 + V16_J2_7 + V2_J2_7 +
##     V30_J2_5 + V23_J2_7 + V20_J2_3 + V20_J2_1 + V16_J2_3 + V30_J1_5 +
##     V24_J2_5 + V12_1_2_J2_7 + V12_1_2_J1_3 + V29_J1_3 + V12_1_2_J1_7 +
```

```
##      V12_1_2_J1_6 + V4_J1_3 + V29_J1_5 + V17_J1_5 + V1_J1_5 +
##      V13_1_J1_7 + V2_J1_5 + V23_J1_4 + V24_J1_6 + V13_1_J1_2 +
##      V15_J2_1 + V1_J2_5 + V24_J1_7 + V23_J2_1 + V26_J1_3 + V13_2_J1_6 +
##      V13_3_J2_5 + V20_J1_2 + V13_2_J1_4 + V26_J1_6 + V13_1_J1_5 +
##      V26_J1_1 + V2_J1_6 + V15_J2_3 + V30_J2_3 + V24_J2_3 + V13_2_J1_5 +
##      V13_1_J2_2 + V19_J1_3 + V14_J1_3 + V19_J1_1 + V16_J2_1 +
##      V13_2_J2_5 + V29_J2_3 + V23_J2_3 + V13_1_J2_7 + V14_J2_7 +
##      V29_J2_1 + V29_J2_2 + V29_J1_4 + V13_3_J1_2 + V13_2_J1_2 +
##      V16_J1_2 + V5_J1_2 + V30_J1_7 + V26_J1_7 + V16_J1_4 + V1_J1_7 +
##      V17_J1_7 + V5_J1_6 + V20_J1_6 + V20_J2_4 + V13_1_J1_3 + V13_3_J2_4 +
##      V30_J2_1, data = batch$log2)
```

```
DNA160609.steps$both$adj.r.squared
```

```
## NULL
```

The full model used in the step function is `lm(value ~ V + J + V1_J1-1 + V1_J1-2 + ...)` where ... contains all 260 primer combinations. From the call, we see that a majority of the VJ combinations contribute to the model. There are 164 significant factors total. Of those, 132 are VJ combinations. They are:

```
names(DNA160609.steps$both$coefficients)[names(DNA160609.steps$both$coefficients) %in% vj.combos]
```

```
##      [1] "V16_J2_2"      "V20_J2_2"      "V26_J2_3"      "V5_J2_4"
##      [5] "V5_J2_5"       "V12_1_2_J2_2"  "V30_J2_2"      "V26_J2_5"
##      [9] "V26_J2_4"      "V26_J2_1"      "V3_J2_4"       "V3_J2_3"
##     [13] "V3_J2_5"       "V19_J1_4"      "V19_J1_5"      "V5_J1_5"
##     [17] "V3_J2_1"       "V15_J2_7"      "V15_J2_2"      "V4_J2_4"
##     [21] "V15_J1_3"      "V13_2_J1_7"    "V12_1_2_J1_4"  "V3_J1_4"
##     [25] "V17_J2_2"      "V1_J2_2"       "V1_J2_7"       "V4_J2_1"
##     [29] "V4_J2_5"       "V4_J2_3"       "V19_J2_3"      "V5_J2_3"
##     [33] "V17_J2_7"      "V17_J1_3"      "V30_J1_3"      "V2_J1_3"
##     [37] "V23_J1_3"      "V1_J1_3"       "V16_J1_3"      "V2_J2_2"
##     [41] "V14_J1_5"      "V14_J1_4"      "V14_J2_3"      "V5_J2_1"
##     [45] "V30_J1_1"      "V3_J1_5"       "V15_J1_7"      "V19_J2_1"
##     [49] "V26_J1_4"      "V5_J1_4"       "V26_J1_5"      "V30_J1_2"
##     [53] "V19_J2_5"      "V19_J2_4"      "V14_J2_4"      "V15_J1_6"
##     [57] "V4_J1_4"       "V4_J1_5"       "V12_1_2_J1_2"  "V14_J2_1"
##     [61] "V14_J2_5"      "V15_J1_2"      "V15_J1_1"      "V4_J2_7"
##     [65] "V16_J2_7"      "V2_J2_7"       "V30_J2_5"      "V23_J2_7"
##     [69] "V20_J2_3"      "V20_J2_1"      "V16_J2_3"      "V30_J1_5"
##     [73] "V24_J2_5"      "V12_1_2_J2_7"  "V12_1_2_J1_3"  "V29_J1_3"
##     [77] "V12_1_2_J1_7"  "V12_1_2_J1_6"  "V4_J1_3"       "V29_J1_5"
##     [81] "V17_J1_5"      "V1_J1_5"       "V13_1_J1_7"    "V2_J1_5"
##     [85] "V23_J1_4"      "V24_J1_6"      "V13_1_J1_2"    "V15_J2_1"
##     [89] "V1_J2_5"       "V24_J1_7"      "V23_J2_1"      "V26_J1_3"
##     [93] "V13_2_J1_6"    "V13_3_J2_5"    "V20_J1_2"      "V13_2_J1_4"
##     [97] "V26_J1_6"      "V13_1_J1_5"    "V26_J1_1"      "V2_J1_6"
##    [101] "V15_J2_3"      "V30_J2_3"      "V24_J2_3"      "V13_2_J1_5"
##    [105] "V13_1_J2_2"    "V19_J1_3"      "V14_J1_3"      "V19_J1_1"
##    [109] "V16_J2_1"      "V13_2_J2_5"    "V29_J2_3"      "V23_J2_3"
##    [113] "V13_1_J2_7"    "V14_J2_7"      "V29_J2_1"      "V29_J2_2"
##    [117] "V29_J1_4"      "V13_3_J1_2"    "V13_2_J1_2"    "V16_J1_2"
```

## [121]	"V5_J1_2"	"V30_J1_7"	"V26_J1_7"	"V16_J1_4"
## [125]	"V1_J1_7"	"V17_J1_7"	"V5_J1_6"	"V20_J1_6"
## [129]	"V20_J2_4"	"V13_1_J1_3"	"V13_3_J2_4"	"V30_J2_1"

Of these VJ combinations, almost all (132) have p-values less than 0.05, and 71 are extremely significant ($p < 2e-16$). We can also see that of the 31 individual V and J identities chosen by the model, 28 have p-values less than 0.05 and 16 have p-values less than $2e-16$.

These results suggest that primer combinations are indeed important for determining spike counts. We must then use all 260 scaling factors during our normalization, but further analysis may suggest to us a way to adjust primer concentration appropriately using these results.