Task 1

12/21/2020

Task 1

Introduction

In the present part of the report, we will investigate to what extent we will be able to classify respondents in their country, and then we will compare the performance of different classifiers.

Data

The data have been obtained from the 6th Wave of the World Value Survey, which was carried out between 2010 and 2013. The data include the standardized scores of 3929 respondents of 3 countries on 32 variables, that have been summarized with 7 factors obtained using exploratory factor analysis with oblique rotation. The 7 factors related to the 32 variables are:

1. **Rights**, that it's related to homosexuality, prostitution, abortion, divorce, sex before marriage, suicide;
2. **Steal**, that it's related to claiming benefits, avoiding fare, stealing property, cheating taxes, accept a bribe;
3. **Crime**, that it's related to robberies, alcohol, police-military, racist behavior, drug sale;
4. **Religion**, that it's related to: attend religious services, pray, the importance of God;
5. **Realize self**, that it's related to creative, rich, spoil oneself, be successful, exciting life;
6. **Do good**, that it's related to security, do good, behave properly, protect environment, tradition;
7. **Violence**, that it's related to beat wife, parents beating children, violence;

Methodology

To investigate the possibility to classify the respondents in their country based on the 7 factors we have used the canonical discriminant analysis. We have applied the linear regression function with 7 predictors and 1 dependent variable, the Country. Then to the output, we have applied the Canonical Discriminant Analysis.

```
lm.out<-lm(cbind(F_rights, F_steal, F_crime,F_religion,F_realizeself,F_dogood,
                 F_violence)~as.factor(country), data=dwvs)
candisc.out<-candisc(lm.out)
print(candisc.out)


Canonical Discriminant Analysis for as.factor(country):

  CanRsq Eigenvalue Difference Percent Cumulative
1 0.80691    4.17882     3.5622  87.142     87.142
2 0.38142    0.61661     3.5622  12.858    100.000


Test of H0: The canonical correlations in the
```

```
current row and all that follow are zero

  LR test stat approx F numDF denDF   Pr(> F)
1      0.11944  1059.53    14  7834 < 2.2e-16 ***
2      0.61858   402.65     6  3918 < 2.2e-16 ***
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

As we can see both the Square Canonical Correlation are significant, but the discriminating power to separate between the groups is higher for the first than for the second discriminant function: 0.81 and 0.38 respectively. The LR test indicates that the discriminant analysis is meaningful. The first test's null hypothesis is H_0 : $\lambda_1 = \lambda_2 = 0$ and this hypothesis as we can see from the *p-value* is rejected. The *null* hypothesis of the first test it's equivalent to the test for $H_0 : \mu Netherlands = \mu Nigeria = \mu Philippines$.

The second LR test indicates that $H_0 : \lambda_2 = 0$, and also this null hypothesis is rejected. So even if the second discriminant function has less discriminant power cannot be omitted and it's statistically meaningful.

On our analysis, we have also applied two different tests for centroids and to test the equal covariance.

To see if the three-country has different centroids and confirm the results of the canonical discriminant analysis we have applied on the linear regression the function *Manova*:

```
summary(Manova(lm.out), test="Wilks")


Type II MANOVA Tests:

Sum of squares and products for error:
                  F_rights      F_steal      F_crime F_religion F_realizeself
F_rights       2144.25752  1220.99047    24.197889 -516.74466     190.94559
F_steal        1220.99047  2897.38038   235.937809  -77.66905      99.99545
F_crime          24.19789   235.93781  3216.820606  -61.84878      40.72785
F_religion     -516.74466   -77.66905   -61.848780 1417.68129    -215.01914
F_realizeself   190.94559    99.99545    40.727853 -215.01914    2098.88393
F_dogood       -281.98487  -431.66636  -224.176736  355.46395     634.31039
F_violence     1270.23698  1552.67341     3.264745  -31.35059      50.25643
                 F_dogood  F_violence
F_rights        -281.9849 1270.236978
F_steal         -431.6664 1552.673408
F_crime         -224.1767    3.264745
F_religion       355.4640  -31.350590
F_realizeself    634.3104   50.256434
F_dogood        2777.8489 -481.800194
F_violence      -481.8002 3394.491184


-------------------------------------------


Term: as.factor(country)

Sum of squares and products for the hypothesis:
                  F_rights      F_steal     F_crime F_religion F_realizeself
F_rights        1780.7425   -503.8490   -819.5963 -2050.7548    -1753.4222
F_steal         -503.8490   1027.6196    773.1158   939.2366      199.2226
F_crime         -819.5963    773.1158    708.1794  1163.3941      625.4688
F_religion     -2050.7548    939.2366   1163.3941  2507.3187     1898.8676
F_realizeself  -1753.4222    199.2226    625.4688  1898.8676     1826.1161
```

2

```
F_dogood       -1293.7342  794.3235  857.3368  1663.6129    1130.2208
F_violence      -852.6546  570.1760  593.5765  1115.3566     729.2346
              F_dogood F_violence
F_rights      -1293.7342  -852.6546
F_steal         794.3235   570.1760
F_crime         857.3368   593.5765
F_religion     1663.6129  1115.3566
F_realizeself  1130.2208   729.2346
F_dogood       1147.1511   778.6277
F_violence      778.6277   530.5088


Multivariate Test: as.factor(country)
                  Df test stat approx F num Df den Df     Pr(>F)
as.factor(country)  2 0.1194435 1059.531      14   7834 < 2.22e-16 ***
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

The *p-value* is small, and the test confirms that the analysis is meaningful and that at least there is a pair of centroids that differs significantly. The function *Manova* in r doing the *Wilks Lambda test* uses the Rao approximation. To test the assumption on equal population covariance we have applied to the linear regression the function *boxM*:

```
boxM(lm.out)
```

```
    Box's M-test for Homogeneity of Covariance Matrices

data:  Y
Chi-Sq (approx.) = 5479.2, df = 56, p-value < 2.2e-16
```
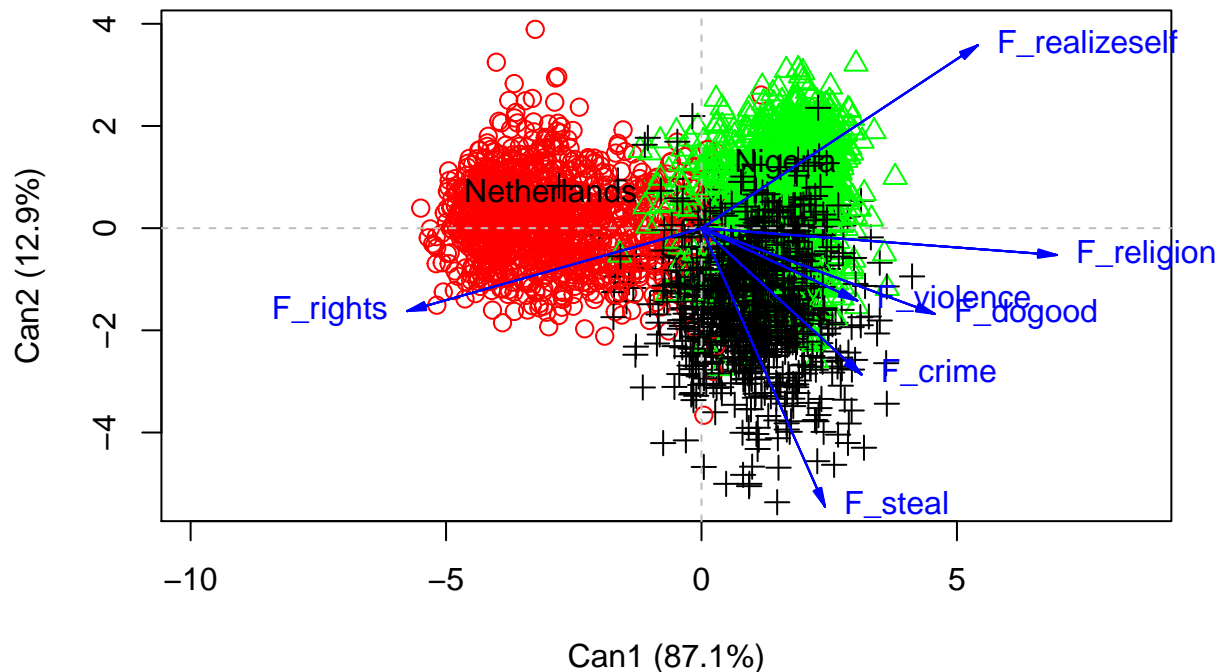
The test of Box indicates that H_0 of equal covariance matrices across groups is not supported by data.

Plot

To complete the Canonical Discriminant analysis, we have plotted the three countries and the 7 variables.

```
plot(candisc.out,col=c("red","green","black"),pch=c(1,2,3),cex=1.2)
```

```
## Vector scale factor set to 7.827
```

We can see that the group of individuals in *red* are Netherlands citizens, the group of individuals in *green* are Nigerians citizens and the group of individuals in *black* are Philippines citizens. In blue we can see the 7 explanatory variables. The plot shows a clear separation between Netherlands and the other two countries on the first discriminant function while the second discriminant function could help to separate Nigeria and the Philippines. The first discriminant function especially correlates with the factors: rights, religion, realize self, and do good; whereas the second discriminant function correlates with the factors: steal and realize self. The two-factor crime and violence have a lower correlation on the two factors and so has in this analysis lower importance on separate the 3 countries.

Compare the performance of different classifiers

We are going now to compare the performance of different classifiers to classify respondents in their country based on the 7 factors. To be able to do that we are going to compute the training error and the leave-one-out cross-validation error. The classification method that we are going to compare are: - Linear discriminant analysis; - Quadratic discriminant analysis; - K-nearest neighbors with k ranging from *1 to 100*; - High Dimensional Discriminant Analysis;

Linear discriminant analysis

This method aims to separate in the clearest possible way different groups using the linear combination of observed independent variables. The linear discriminant analysis method assumes that the covariance structure of the independent variable is the same across groups. In our analysis, we know from the Box test previously computed that this assumption is not supported by the data. It will be an interesting test if in this case the Quadratic discriminant analysis, where the assumption on the equality of covariance matrix

is relaxed, will perform better. In the linear discriminant analysis, we have applied the method of Fisher correcting for the different prior probability.

```
lda.out3<-lda(country ~ F_rights+F_steal+F_crime+F_religion+F_realizeself+F_dogood+F_violence,data=dwvs)
print(lda.out3)
```

```
Call:
lda(country ~ F_rights + F_steal + F_crime + F_religion + F_realizeself +
    F_dogood + F_violence, data = dwvs)

Prior probabilities of groups:
Netherlands     Nigeria Philippines
  0.3209373   0.4019358   0.2771268

Group means:
               F_rights     F_steal      F_crime F_religion F_realizeself
Netherlands   0.9327125 -0.4751187 -0.55844404 -1.1598095    -0.8475502
Nigeria      -0.6483553 -0.1722352  0.08090767  0.6023959     0.7577233
Philippines  -0.1398099  0.8000337  0.52938161  0.4694661    -0.1174394
               F_dogood F_violence
Netherlands  -0.7798327 -0.5250967
Nigeria       0.2989281  0.1782593
Philippines   0.4695595  0.3495667

Coefficients of linear discriminants:
                     LD1          LD2
F_rights      -0.8401075  0.01027642
F_steal        0.3423645  0.91386283
F_crime        0.2143323  0.33598819
F_religion     0.8731477 -0.07647045
F_realizeself  0.6587618 -0.90847523
F_dogood       0.1503357  0.59800284
F_violence     0.3752515 -0.15983345

Proportion of trace:
   LD1    LD2
0.8714 0.1286
```

```
pred.train3 <- predict(lda.out3,dwvs, prior=c(1,1,1)/3)
tab3 <- table(dwvs$country,pred.train3$class)
print(tab3)
```

```
            Netherlands Nigeria Philippines
  Netherlands        1145      39          76
  Nigeria              10    1327         241
  Philippines          17     220         851
```

```
#training hit rate
sum(diag(tab3))/sum(tab3)
```

```
[1] 0.8464086
```

```
#classify test observations using LDA
pred.loocv4<-lda(country~F_rights+F_steal+F_crime+F_religion+F_realizeself+F_dogood+F_violence,data=dwvs
tab4<-table(dwvs$country,pred.loocv4$class)
print(tab4)
```

```
             Netherlands Nigeria Philippines
  Netherlands       1145      39          76
  Nigeria             11    1326         241
  Philippines         17     224         847
```

```
#LOOCV hit rate
sum(diag(tab4))/sum(tab4)
```

```
[1] 0.845135
```

We can see that in that case, the difference between the performance for training error and LOOCV error is really small, so there is no evidence for overfitting.

Quadratic discriminant analysis

The second method that we have applied is Quadratic discriminant analysis. It should perform better considering the difference in the covariance matrix for the different groups. QDA even if has a lower bias with a different covariance matrix, has a larger variance, and as in our case with a small dataset can be problematic.

Even in this case, we have applied the method of Fisher correcting for prior probabilities.

```
qda.out7<-qda(country~F_rights+F_steal+F_crime+F_religion+F_realizeself+F_dogood +F_violence,data=dwvs)
pred.train7<-predict(qda.out7,dwvs, prior=c(1,1,1)/3)

tab7<-table(dwvs$country,pred.train7$class)
print(tab7)
```

```
             Netherlands Nigeria Philippines
  Netherlands       1210      21          29
  Nigeria             40    1319         219
  Philippines         41     219         828
```

```
#training hit rate
sum(diag(tab7))/sum(tab7)
```

```
[1] 0.8550688
```

```
#classify test observations
#use equal population sizes classes
pred.test8 <- qda(country~
                  F_rights + F_steal + F_crime + F_religion + F_realizeself + F_dogood + F_violence,
                data=dwvs,prior=c(1,1,1)/3,CV=TRUE)
tab8<-table(dwvs$country,pred.test8$class)
#LOOCV hit rate
sum(diag(tab8))/sum(tab8)
```

```
[1] 0.8525217
```

Also in that case there is no evidence of overfitting. We can see from the results that the QDA performs better than the LDA but with not a significant improvement.

K-nearest Neighbors

The third model that we had analyzed is the K-nearest Neighbors. We have computed the model using all the 3926 observations and to choose which is the correct number ok parameters k to use we have compared the training error with the Leave one out cross-validation error.

```
#str(dwvs)
table(dwvs$country)
```

```
Netherlands      Nigeria Philippines
       1260         1578        1088
```
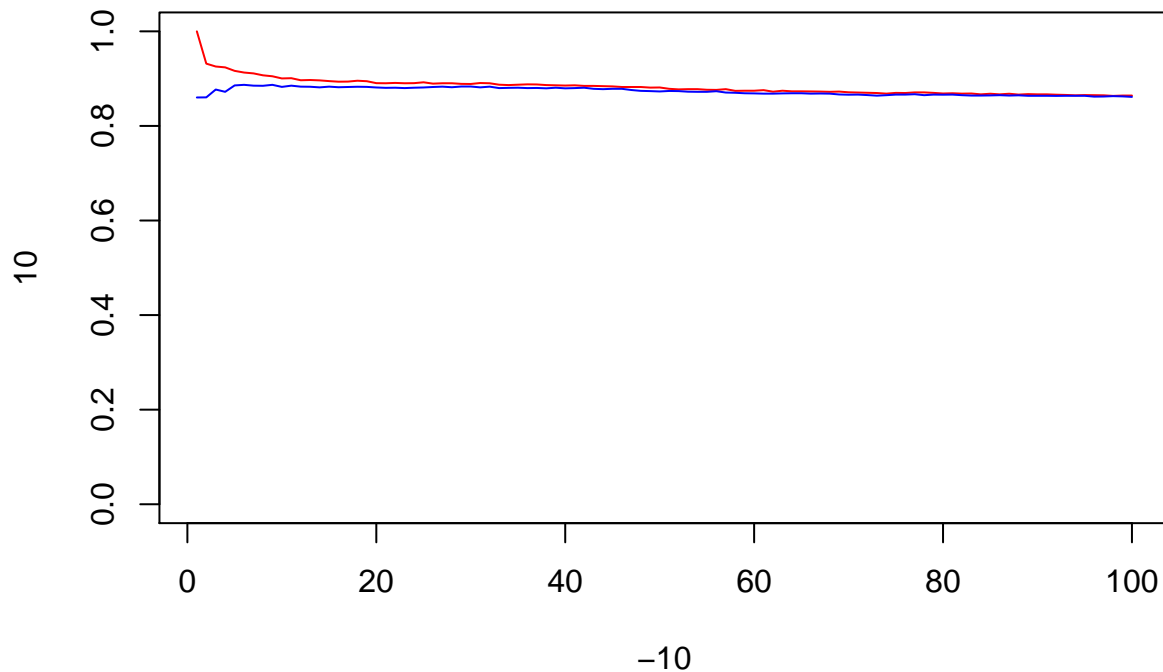
```
set.seed(9850)    # -> random number generator
gp<-runif(nrow(dwvs))
dwvs2<-dwvs[order(gp),]
#str(dwvs)
#str(dwvs2)
#head(dwvs)
#head(dwvs2)

hitratknn<-function(observed,predicted)
{tab<-table(observed,predicted)
hitratknn<-sum(diag(tab))/sum(tab)
return(hitratknn)
}

knnmax<-100
err<-matrix(rep(0,knnmax*2), nrow=knnmax)
for(j in 1:knnmax) {
predknn.train<-knn(dwvs2[,2:8], dwvs2[,2:8], dwvs2$country, k=j)
err[j,1]<-hitratknn(dwvs2$country,predknn.train)
}

for(j in 1:knnmax) {
predknn.train<-knn.cv(dwvs2[,2:8], dwvs2$country, k=j)
err [j,2]<-hitratknn(dwvs2$country,predknn.train)
}

plot(-10, 10,xlim=c(1,knnmax),ylim=c(0,1))
lines(c(1:knnmax),err[,1],col="red") # -> training error
lines(c(1:knnmax),err[,2],col="blue")
```

We can see that with $K = 1$ the model is flexible and we have by definition training hit rate *(red line)* of 0 but the *LOOCV* hit rate *(blue line)* it's higher, while with model lex flexible as with $k = 98$ the two errors are similar. Since as increasing the parameter K both the errors increase, probably the model that better describes the dataset is with $K = 30$ or $K = 66$.

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High Dimensional Discriminant Analysis

The fourth method that we have used to discriminate between different groups is the *HDDA* method. This method could be useful when the number of parameters is high compared to the number of data.
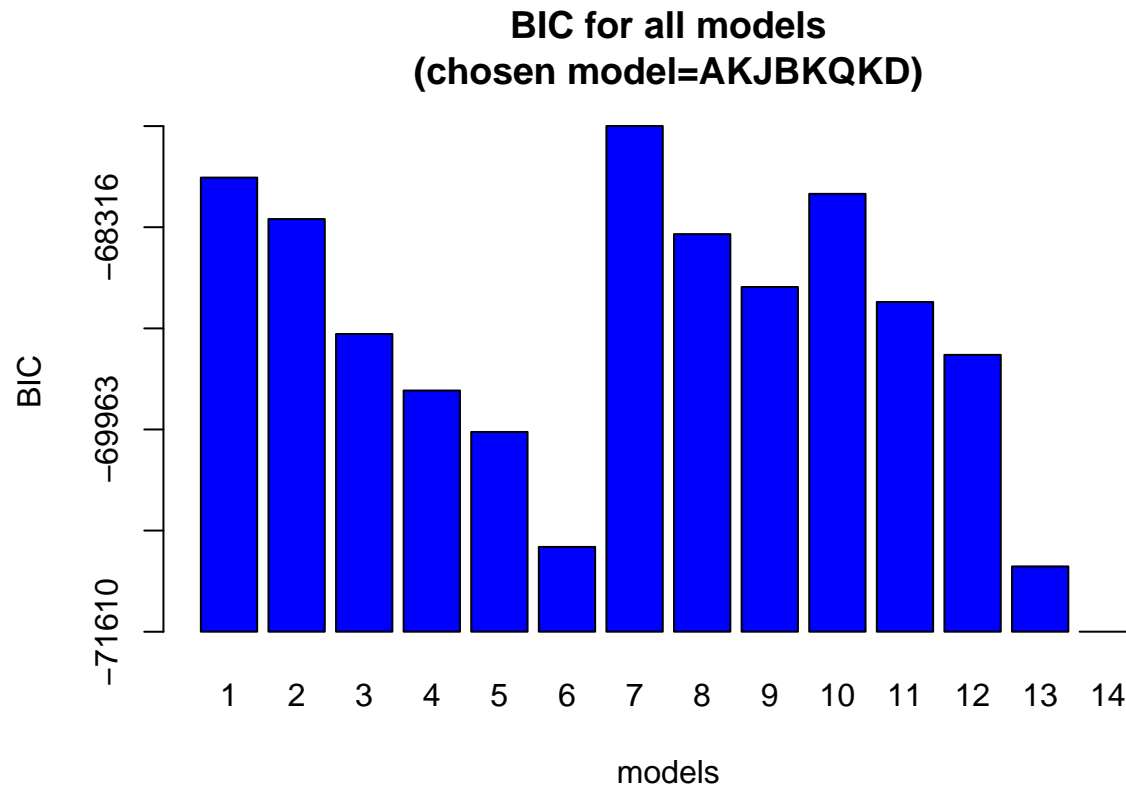
```
w <- dwvs[,-1]
cls <- dwvs[,1]
#HDDA on the learning dataset:
hdda.out11 <- hdda(w, cls, scaling=TRUE, model="all", d="BIC",graph=TRUE,show=TRUE)
```

```
# :      Model       BIC
1 :      AKJBKQKDK    -67912.32
2 :      AKBKQKDK     -68249.76
3 :      ABKQKDK      -69185.72
4 :      AKJBQKDK     -69646.01
5 :      AKBQKDK      -69983.46
6 :      ABQKDK       -70919.41
7 :      AKJBKQKD     -67492.38
8 :      AKBKQKD      -68372.73
```

8

```
 9 :       ABKQKD       -68803.13
10 :       AKJBQKD      -68044.89
11 :       AKBQKD       -68925.24
12 :       ABQKD        -69355.63
13 :       AJBQD        -71078.02
14 :       ABQD         -71609.34

SELECTED: Model AKJBKQKD, BIC=-67492.38.
```
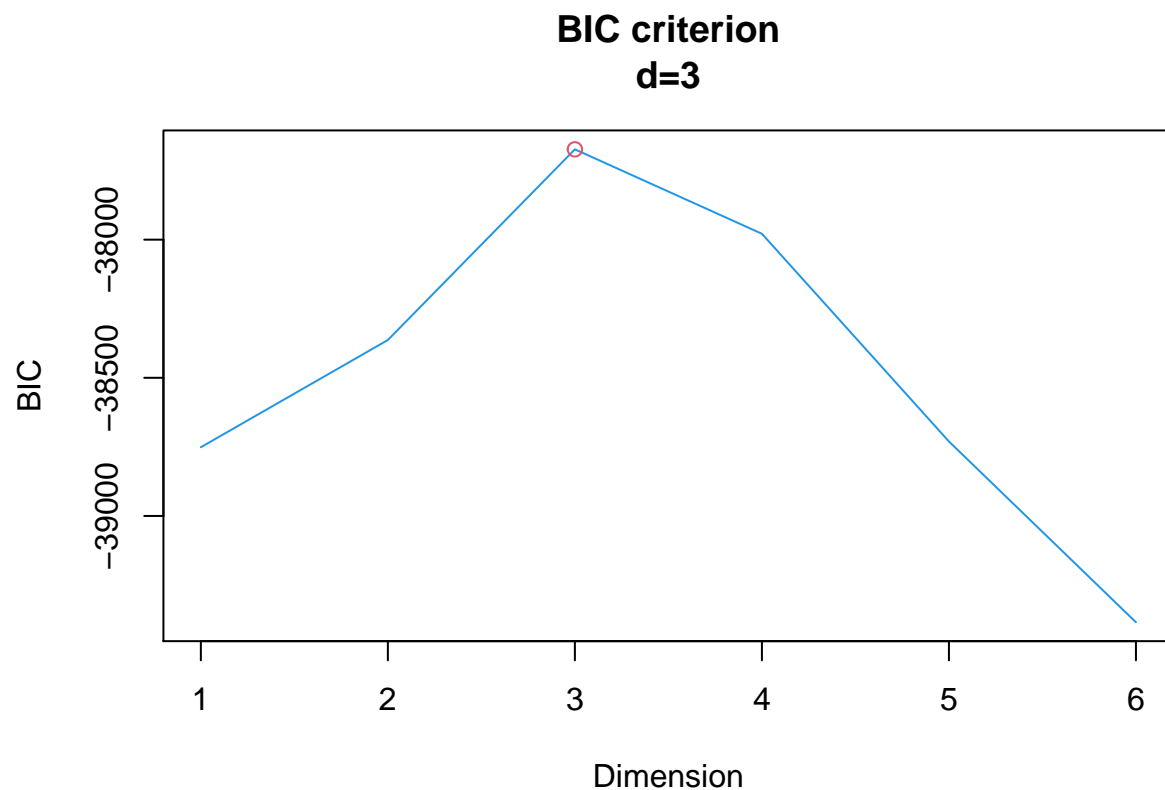
BIC for all models
(chosen model=AKJBKQKD)

The model used from the HDDA analysis applying the BIC criterion is model $7(A_{kj}K_jB_kQ_kd)$. The decision following the *BIC* criteria is to choose the model with the lowest value, in that case, the reference system is negative, so the lowest value is for model 7.

```
plot(hdda.out11,method="BIC")
```

BIC criterion
d=3

The dimension choose for the model is 3. The model chosen by the *BIC* criteria has the same number of principal components for all the three different classes.

```
pred.train11<-predict(hdda.out11,w,cls)
```

```
Correct classification rate: 0.8530311.
                Initial class
Predicted class Netherlands Nigeria Philippines
    Netherlands        1196      20          40
    Nigeria              26    1356         251
    Philippines          38     202         797
```

```
tab11<-table(dwvs$country,pred.train11$class)
print(tab11)
```

```
            Netherlands Nigeria Philippines
    Netherlands        1196      26          38
    Nigeria              20    1356         202
    Philippines          40     251         797
```

```
#training hit rate
sum(diag(tab11))/sum(tab11)
```

```
[1] 0.8530311
```

```
pred.loocv12 <- hdda(w, cls,scaling=TRUE, d="BIC", LOO=TRUE)
tab12<-table(cls,pred.loocv12$class)
print(tab12)
```

```
cls          Netherlands Nigeria Philippines
  Netherlands       1197      26          37
  Nigeria             22    1378         178
  Philippines         44     285         759
```

```
#LOOCV hit rate
sum(diag(tab12))/sum(tab12)
```

```
[1] 0.8492104
```

Also with the *HDDA* model, there is rather small evidence of overfitting, but the HDDA model does not perform better than the other models.

Error comparison for the different models

We have computed for all 4 models the hit rate, for the comparison in the table we will present the training and LOOCV errors computing $1 - *hit$ rate:

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In all the present models there is little evidence of overfitting, the two errors computed are in all the cases similar. The K-nearest Neighbors is a good model to compare the others and we can see that even if it performs betters it has not a huge difference. The model that performs better between the other 3 is the Quadratic discriminant analysis, it is the most complex one with the highest number of parameters used.

Confronting the results, we can say that even if there is a difference between the models, no one of the computed ones has outstanding results.

Table of *QDA LOOCV* rate:

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As we were expecting in the analysis of the canonical discriminant analysis, the model has a high ability to differentiate between Netherland and the two other countries, when it has a high error rate discriminating between Nigeria and the Philippines.

Multinomial logistic regression model

```
m1<- multinom(country~F_rights+F_steal+F_crime+F_religion+F_realizeself+F_dogood +F_violence, family=mul
```

```
# weights:  27 (16 variable)
initial  value 4313.151845
iter  10 value 1376.724330
iter  20 value 1352.584896
final  value 1346.617148
converged
```

```
summary(m1)
```

```
Call:
multinom(formula = country ~ F_rights + F_steal + F_crime + F_religion +
    F_realizeself + F_dogood + F_violence, data = dwvs, family = multinomial,
    maxit = 3926, hess = TRUE)

Coefficients:
            (Intercept)  F_rights    F_steal     F_crime F_religion F_realizeself
Nigeria       0.6472240 -2.122889 0.5537755 0.5976742   2.887712     2.8922393
Philippines   0.9959826 -1.466848 1.5556448 1.0662700   1.932117     0.9680894
             F_dogood F_violence
Nigeria     -0.01110756  1.2844737
Philippines  1.16765772  0.7560728

Std. Errors:
            (Intercept)  F_rights    F_steal     F_crime F_religion F_realizeself
Nigeria       0.1612100 0.1642741 0.1735127 0.1334749  0.2143403     0.1695936
Philippines   0.1510987 0.1475679 0.1685630 0.1296852  0.1866007     0.1556415
             F_dogood F_violence
Nigeria     0.1218099  0.1534901
Philippines 0.1197516  0.1470007

Residual Deviance: 2693.234
AIC: 2725.234
```

Coefficients: (Intercept) F_rights F_steal F_crime F_religion F_realizeself F_dogood F_violence Nigeria 0.6472240 -2.122889 0.5537755 0.5976742 2.887712 2.8922393 -0.01110756 1.2844737 Philippines 0.9959826 -1.466848 1.5556448 1.0662700 1.932117 0.9680894 1.16765772 0.7560728

Std. Errors: (Intercept) F_rights F_steal F_crime F_religion F_realizeself F_dogood F_violence Nigeria 0.1612100 0.1642741 0.1735127 0.1334749 0.2143403 0.1695936 0.1218099 0.1534901 Philippines 0.1510987 0.1475679 0.1685630 0.1296852 0.1866007 0.1556415 0.1197516 0.1470007 4 12 3.23 4..42 13 0.091 8.53

We can see that there are 2 different regression model estimates: the first one compares the probability of Nigeria to the probability of the Netherlands, the second model compares the probability of the Philippines to the probability of the Netherlands. All the parameters are significant except *F_dogood* for Nigeria, which's not significantly different from 0. The sign of the parameters is the same for all the parameters in both the regressions, except for *F_dogood* where the Nigeria coefficient is not significant. This could be explained because have we analyzed previously Netherlands strongly differs from the other two countries, while Nigeria and the Philippines have not a clear separation.

```
#### compute hitrate training data####
train.pred<-predict(m1,newdata=dwvs)
tab<-table(dwvs$country, train.pred)
sum(diag(tab))/sum(tab)
```

```
[1] 0.8571065
```

Error rate: 0.1428935

```
########compute LOOCV
nobs<- 3926
hit<-rep(0,nobs)
for (i in 1:nobs){
train<-c(1:nobs)

mod<- multinom(country~F_rights+F_steal+F_crime+F_religion+F_realizeself+F_dogood +F_violence,data=dwvs
pred<- predict(mod, newdata=dwvs[i,])
hit[i]<-ifelse(pred==dwvs$country[i],1,0)}
```

```
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.778027
iter  20 value 1352.524311
final  value 1346.617116
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.733061
iter  20 value 1352.643585
final  value 1346.616548
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.731915
iter  20 value 1352.654855
final  value 1346.616181
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.755038
iter  20 value 1352.585793
final  value 1346.616208
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.763535
iter  20 value 1352.573464
final  value 1346.617000
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.755500
iter  20 value 1352.603018
final  value 1346.617108
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.753121
iter  20 value 1352.520386
final  value 1346.616277
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.720410
iter  20 value 1352.490462
final  value 1346.607928
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.749143
iter  20 value 1352.602187
final  value 1346.616800
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.722256
iter  20 value 1352.610488
final  value 1346.613547
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.752543
iter  20 value 1352.538359
final  value 1346.617119
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.749553
iter  20 value 1352.556060
final  value 1346.615772
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.754235
iter  20 value 1352.551755
final  value 1346.616675
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.725200
iter  20 value 1352.622872
final  value 1346.612871
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.054711
iter  20 value 1348.346302
final  value 1343.053483
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.576793
iter  20 value 1352.698763
final  value 1346.512288
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.759622
iter  20 value 1352.591577
final  value 1346.616621
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.741322
iter  20 value 1352.541734
final  value 1346.617032
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.671376
iter  20 value 1352.655022
final  value 1346.579281
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.772296
iter  20 value 1352.487844
final  value 1346.616575
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.738260
iter  20 value 1352.529057
final  value 1346.614182
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.688500
iter  20 value 1352.471725
final  value 1346.599139
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.772762
iter  20 value 1352.500856
final  value 1346.616858
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.768217
iter  20 value 1352.509208
final  value 1346.615392
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.747747
iter  20 value 1352.544335
final  value 1346.617003
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.761062
iter  20 value 1352.585607
final  value 1346.617095
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.725674
iter  20 value 1352.486510
final  value 1346.608012
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.741100
iter  20 value 1352.569200
final  value 1346.617078
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.761213
iter  20 value 1352.535944
final  value 1346.617123
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.725909
iter  20 value 1352.547048
final  value 1346.615459
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.761354
iter  20 value 1352.559879
final  value 1346.616976
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.762162
iter  20 value 1352.485908
final  value 1346.614369
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.738774
iter  20 value 1352.601550
final  value 1346.613557
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.761837
iter  20 value 1352.552325
final  value 1346.614129
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.741638
iter  20 value 1352.587006
final  value 1346.613827
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.775667
iter  20 value 1352.510583
final  value 1346.617073
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.742650
iter  20 value 1352.542397
final  value 1346.615306
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.680053
iter  20 value 1352.530407
final  value 1346.593466
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.709845
iter  20 value 1352.528694
final  value 1346.601240
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.756102
iter  20 value 1352.589436
final  value 1346.617021
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.740242
iter  20 value 1352.539265
final  value 1346.616160
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.334501
iter  20 value 1352.988175
final  value 1346.243443
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.710457
iter  20 value 1352.464465
final  value 1346.600098
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.701567
iter  20 value 1351.135591
final  value 1345.574005
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.751023
iter  20 value 1352.554319
final  value 1346.616757
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.682631
iter  20 value 1352.507779
final  value 1346.600004
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.721943
iter  20 value 1352.545254
final  value 1346.613886
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.750651
iter  20 value 1352.607414
final  value 1346.611955
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.736188
iter  20 value 1352.570168
final  value 1346.616011
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.676619
iter  20 value 1352.568971
final  value 1346.592763
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.678164
iter  20 value 1352.515770
final  value 1346.602336
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.755504
iter  20 value 1352.539929
final  value 1346.617038
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.730093
iter  20 value 1352.580066
final  value 1346.614817
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.254540
iter  20 value 1349.956090
final  value 1344.803260
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.742750
iter  20 value 1352.560050
final  value 1346.615535
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.676192
iter  20 value 1352.541493
final  value 1346.595190
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.476801
iter  20 value 1352.083209
final  value 1346.405221
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.754428
iter  20 value 1352.528820
final  value 1346.616589
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.762409
iter  20 value 1352.533717
final  value 1346.616954
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.771312
iter  20 value 1352.532227
final  value 1346.617095
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.730647
iter  20 value 1352.549400
final  value 1346.616644
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.672904
iter  20 value 1352.666310
final  value 1346.589110
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.761425
iter  20 value 1352.506250
final  value 1346.617016
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.781070
iter  20 value 1352.515960
final  value 1346.617047
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.537873
iter  20 value 1352.570459
final  value 1346.492761
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.748779
iter  20 value 1352.564127
final  value 1346.615410
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.719267
iter  20 value 1352.580416
final  value 1346.614681
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.750730
iter  20 value 1352.462015
final  value 1346.611988
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.749478
iter  20 value 1352.577563
final  value 1346.616881
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.764460
iter  20 value 1352.524673
final  value 1346.616819
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.960326
iter  20 value 1351.444440
final   value 1345.919050
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.758453
iter  20 value 1352.526864
final   value 1346.616522
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.703911
iter  20 value 1352.516862
final   value 1346.605023
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.626040
iter  20 value 1352.343685
final   value 1346.577622
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1370.712214
iter  20 value 1346.344968
final   value 1339.979309
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.772641
iter  20 value 1352.512274
final   value 1346.616842
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.763325
iter  20 value 1352.525885
final   value 1346.616805
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.768849
iter  20 value 1352.515302
final   value 1346.616890
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.764404
iter  20 value 1352.531309
final   value 1346.617095
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.763853
iter  20 value 1352.549270
final  value 1346.616982
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.626309
iter  20 value 1352.355879
final  value 1346.546047
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.748038
iter  20 value 1352.594096
final  value 1346.617115
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.768308
iter  20 value 1352.523557
final  value 1346.616929
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.757391
iter  20 value 1352.565618
final  value 1346.616293
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.750590
iter  20 value 1352.540308
final  value 1346.616138
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.826002
iter  20 value 1351.888069
final  value 1345.612908
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.768493
iter  20 value 1352.507923
final  value 1346.616639
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.369049
iter  20 value 1352.034352
final  value 1346.382096
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.725876
iter  20 value 1352.527860
final  value 1346.613103
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.716222
iter  20 value 1352.529827
final  value 1346.610348
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.637348
iter  20 value 1350.219225
final  value 1344.129402
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.444799
iter  20 value 1352.249669
final  value 1346.391285
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.770360
iter  20 value 1352.493071
final  value 1346.617055
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.776202
iter  20 value 1352.513844
final  value 1346.616405
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.739510
iter  20 value 1352.511511
final  value 1346.614950
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.763017
iter  20 value 1352.577208
final  value 1346.616206
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.765320
iter  20 value 1352.522029
final  value 1346.616836
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.768609
iter  20 value 1352.537548
final  value 1346.616968
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.731313
iter  20 value 1352.639833
final  value 1346.610408
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.720067
iter  20 value 1352.574311
final  value 1346.612544
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.741315
iter  20 value 1352.522951
final  value 1346.614441
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.744476
iter  20 value 1352.522121
final  value 1346.616632
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.779903
iter  20 value 1352.501173
final  value 1346.616788
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.762761
iter  20 value 1352.535530
final  value 1346.617038
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.769013
iter  20 value 1352.511065
final  value 1346.615693
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.700186
iter  20 value 1352.458816
final  value 1346.596060
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.755541
iter  20 value 1352.575295
final  value 1346.616626
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.737113
iter  20 value 1352.492889
final  value 1346.614338
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.214385
iter  20 value 1352.123977
final  value 1346.210327
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.755508
iter  20 value 1352.534454
final  value 1346.616715
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.750897
iter  20 value 1352.550922
final  value 1346.616349
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.360818
iter  20 value 1352.563655
final  value 1346.365617
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.339525
iter  20 value 1352.361397
final  value 1346.313658
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.778139
iter  20 value 1352.481618
final  value 1346.616595
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.745651
iter  20 value 1352.552208
final  value 1346.616249
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.757756
iter  20 value 1352.573754
final  value 1346.616503
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.709431
iter  20 value 1352.591472
final  value 1346.605604
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.757977
iter  20 value 1352.527263
final  value 1346.617057
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.761691
iter  20 value 1352.542098
final  value 1346.616950
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.690820
iter  20 value 1352.506409
final  value 1346.604437
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.960647
iter  20 value 1351.594337
final  value 1345.999289
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.774245
iter  20 value 1352.507875
final  value 1346.616959
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.747695
iter  20 value 1352.536770
final  value 1346.616637
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.771456
iter  20 value 1352.524178
final  value 1346.617101
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.763302
iter  20 value 1352.442886
final  value 1346.609980
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.721638
iter  20 value 1352.601386
final  value 1346.613064
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.752822
iter  20 value 1352.554240
final  value 1346.617098
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.776919
iter  20 value 1352.516121
final  value 1346.615636
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.753099
iter  20 value 1352.511310
final  value 1346.614913
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.766178
iter  20 value 1352.540309
final  value 1346.617085
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.747401
iter  20 value 1352.613157
final  value 1346.616145
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.716858
iter  20 value 1352.549282
final  value 1346.612497
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.727513
iter  20 value 1352.519484
final  value 1346.613592
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.742652
iter  20 value 1352.530932
final  value 1346.616794
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.761163
iter  20 value 1352.538821
final  value 1346.617043
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.739487
iter  20 value 1352.588511
final  value 1346.614611
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.658105
iter  20 value 1352.036647
final  value 1346.591461
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.667158
iter  20 value 1352.807504
final  value 1346.587864
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.752736
iter  20 value 1352.572440
final  value 1346.616530
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.767370
iter  20 value 1352.532681
final  value 1346.616629
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.744633
iter  20 value 1352.607101
final  value 1346.616008
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.778382
iter  20 value 1352.444822
final  value 1346.614447
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.700693
iter  20 value 1352.521708
final  value 1346.604133
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.187263
iter  20 value 1350.194089
final  value 1343.712890
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.664443
iter  20 value 1352.106580
final  value 1346.573490
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.737044
iter  20 value 1352.559925
final  value 1346.616807
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.719200
iter  20 value 1352.237538
final  value 1346.585438
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.753432
iter  20 value 1352.520282
final  value 1346.617100
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.728693
iter  20 value 1352.563260
final  value 1346.613430
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.747350
iter  20 value 1352.591229
final  value 1346.616966
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.700842
iter  20 value 1352.528887
final  value 1346.602009
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.753899
iter  20 value 1352.527564
final  value 1346.617008
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.752510
iter  20 value 1352.588369
final  value 1346.616783
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.755658
iter  20 value 1352.578436
final  value 1346.617022
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.503923
iter  20 value 1351.158240
final  value 1345.157794
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.734914
iter  20 value 1352.593684
final  value 1346.616780
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.665300
iter  20 value 1352.611417
final  value 1346.582833
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.754796
iter  20 value 1352.561891
final  value 1346.616674
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.556372
iter  20 value 1352.504334
final  value 1346.500547
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.751815
iter  20 value 1352.551906
final  value 1346.617086
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.731662
iter  20 value 1352.596126
final  value 1346.614794
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.741828
iter  20 value 1352.516381
final  value 1346.616332
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.478151
iter  20 value 1352.181549
final  value 1346.417456
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.774476
iter  20 value 1352.530549
final  value 1346.615906
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.743328
iter  20 value 1352.555708
final  value 1346.613092
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.470332
iter  20 value 1352.572055
final  value 1346.418758
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.762558
iter  20 value 1352.528622
final  value 1346.617008
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.758374
iter  20 value 1352.532090
final  value 1346.616889
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.752868
iter  20 value 1352.521467
final  value 1346.617042
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.741870
iter  20 value 1352.511489
final  value 1346.616981
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.758967
iter  20 value 1352.541791
final  value 1346.617085
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.768518
iter  20 value 1352.540790
final  value 1346.617119
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.529361
iter  20 value 1352.304105
final  value 1346.479466
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.323365
iter  20 value 1353.173212
final  value 1346.240761
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.753255
iter  20 value 1352.515143
final  value 1346.616998
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.768683
iter  20 value 1352.539763
final  value 1346.615750
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.762704
iter  20 value 1352.568120
final  value 1346.617084
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.719247
iter  20 value 1352.571479
final  value 1346.615303
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.727592
iter  20 value 1352.559879
final  value 1346.613925
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.203429
iter  20 value 1350.911175
final  value 1344.911325
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.754923
iter  20 value 1352.523994
final  value 1346.617069
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.774828
iter  20 value 1352.515717
final  value 1346.617038
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.722284
iter  20 value 1352.535655
final  value 1346.616845
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.754134
iter  20 value 1352.580086
final  value 1346.617048
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.774354
iter  20 value 1352.522057
final  value 1346.616108
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.729962
iter  20 value 1352.511651
final  value 1346.612405
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.415917
iter  20 value 1352.615128
final  value 1346.363615
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.726290
iter  20 value 1352.538801
final   value 1346.614343
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.752107
iter  20 value 1352.544935
final   value 1346.613698
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.711410
iter  20 value 1352.494362
final   value 1346.604324
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.715507
iter  20 value 1352.527645
final   value 1346.613901
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.761014
iter  20 value 1352.538813
final   value 1346.617001
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.720542
iter  20 value 1352.625756
final   value 1346.602835
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.711464
iter  20 value 1352.504436
final   value 1346.610377
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.742635
iter  20 value 1352.570406
final   value 1346.614398
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.889977
iter  20 value 1351.215712
final   value 1344.606358
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.930533
iter  20 value 1351.664740
final  value 1345.925541
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.728994
iter  20 value 1352.567605
final  value 1346.615896
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.532654
iter  20 value 1352.001757
final  value 1345.347203
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.854399
iter  20 value 1351.238428
final  value 1345.591421
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.755219
iter  20 value 1352.539478
final  value 1346.617061
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.757716
iter  20 value 1352.536954
final  value 1346.615599
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.702300
iter  20 value 1352.540663
final  value 1346.603312
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.741828
iter  20 value 1352.569342
final  value 1346.613673
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.610249
iter  20 value 1352.405184
final  value 1346.558257
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.748967
iter  20 value 1352.519699
final  value 1346.614471
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.735103
iter  20 value 1352.621076
final  value 1346.615196
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.771949
iter  20 value 1352.527043
final  value 1346.617095
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.766816
iter  20 value 1352.520203
final  value 1346.617099
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.772566
iter  20 value 1352.539538
final  value 1346.617129
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.761273
iter  20 value 1352.571395
final  value 1346.616843
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.707860
iter  20 value 1352.525306
final  value 1346.611210
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.388109
iter  20 value 1351.943653
final  value 1346.318270
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.742196
iter  20 value 1352.568201
final  value 1346.616963
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.736272
iter  20 value 1352.474863
final  value 1346.616620
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.687228
iter  20 value 1352.534346
final  value 1346.604950
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.306350
iter  20 value 1352.010138
final  value 1346.282317
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.750012
iter  20 value 1352.530914
final  value 1346.615894
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.734640
iter  20 value 1352.407341
final  value 1346.600574
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.761330
iter  20 value 1352.556461
final  value 1346.617060
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.099599
iter  20 value 1351.605495
final  value 1346.115386
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.742582
iter  20 value 1352.518366
final  value 1346.615320
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.753519
iter  20 value 1352.550235
final  value 1346.616061
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.728448
iter  20 value 1352.511051
final  value 1346.614706
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.237863
iter  20 value 1351.929578
final  value 1346.201365
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.759204
iter  20 value 1352.562805
final  value 1346.616981
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.555572
iter  20 value 1352.459480
final  value 1346.498939
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.355907
iter  20 value 1351.985559
final  value 1346.349999
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.753317
iter  20 value 1352.540012
final  value 1346.616318
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.610736
iter  20 value 1352.381116
final  value 1346.530281
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.776378
iter  20 value 1352.517102
final  value 1346.617079
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.758664
iter  20 value 1352.520653
final  value 1346.616845
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.770029
iter  20 value 1352.538660
final  value 1346.617069
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.990909
iter  20 value 1352.011011
final  value 1345.993285
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.758410
iter  20 value 1352.523243
final  value 1346.617096
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.723960
iter  20 value 1352.560016
final  value 1346.611244
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.741942
iter  20 value 1352.551989
final  value 1346.616269
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.735015
iter  20 value 1352.564908
final  value 1346.616422
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.761950
iter  20 value 1352.509456
final  value 1346.615711
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.754972
iter  20 value 1352.586813
final  value 1346.616809
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.733772
iter  20 value 1352.492564
final  value 1346.614074
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.751844
iter  20 value 1352.539152
final  value 1346.615082
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.759306
iter  20 value 1352.528891
final  value 1346.616915
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.731001
iter  20 value 1352.493521
final  value 1346.609769
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.668719
iter  20 value 1352.719707
final  value 1346.587394
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.724221
iter  20 value 1352.526249
final  value 1346.611905
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.759247
iter  20 value 1352.530475
final  value 1346.612175
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.735051
iter  20 value 1352.525528
final  value 1346.613270
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.751194
iter  20 value 1352.515178
final  value 1346.616974
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.716436
iter  20 value 1352.539451
final  value 1346.606486
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.755980
iter  20 value 1352.543479
final  value 1346.616989
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.721993
iter  20 value 1352.519003
final  value 1346.609674
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.765076
iter  20 value 1352.548028
final  value 1346.616569
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.525545
iter  20 value 1352.300096
final  value 1346.455348
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.767424
iter  20 value 1352.524320
final  value 1346.617083
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.411491
iter  20 value 1352.461196
final  value 1346.372867
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.756515
iter  20 value 1352.569297
final  value 1346.617125
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.740514
iter  20 value 1352.510591
final  value 1346.616822
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.745043
iter  20 value 1352.571335
final  value 1346.616994
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.761580
iter  20 value 1352.574434
final  value 1346.616916
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.773283
iter  20 value 1352.531973
final  value 1346.617041
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.760892
iter  20 value 1352.552478
final  value 1346.617088
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.743695
iter  20 value 1352.539503
final  value 1346.616952
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.289224
iter  20 value 1351.841603
final  value 1345.057002
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.771715
iter  20 value 1352.548783
final  value 1346.616927
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.757372
iter  20 value 1352.515938
final  value 1346.616886
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.765324
iter  20 value 1352.539083
final  value 1346.616781
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.765990
iter  20 value 1352.524010
final  value 1346.617127
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.772200
iter  20 value 1352.515435
final  value 1346.617019
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.715093
iter  20 value 1352.551399
final  value 1346.610492
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.734476
iter  20 value 1352.481477
final  value 1346.605946
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.712986
iter  20 value 1352.526226
final  value 1346.605659
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.759461
iter  20 value 1352.521846
final  value 1346.616845
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.382301
iter  20 value 1352.455456
final  value 1346.320760
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.746117
iter  20 value 1352.527490
final  value 1346.615670
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.757299
iter  20 value 1352.550987
final  value 1346.614677
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.755232
iter  20 value 1352.563392
final  value 1346.617010
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.767865
iter  20 value 1352.513881
final  value 1346.617073
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.735654
iter  20 value 1352.544808
final  value 1346.615939
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.767555
iter  20 value 1352.523689
final  value 1346.616205
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.525399
iter  20 value 1352.256670
final  value 1346.494320
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.737435
iter  20 value 1352.617617
final  value 1346.615628
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.746120
iter  20 value 1352.571596
final  value 1346.617079
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.764772
iter  20 value 1352.528448
final  value 1346.617065
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.539119
iter  20 value 1354.007258
final  value 1346.507643
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.688110
iter  20 value 1352.664581
final  value 1346.596481
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.641929
iter  20 value 1352.461360
final  value 1346.569486
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.762661
iter  20 value 1352.475274
final  value 1346.616669
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.635311
iter  20 value 1352.035533
final  value 1346.511128
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.753811
iter  20 value 1352.582140
final  value 1346.616848
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.595976
iter  20 value 1352.384185
final  value 1346.517852
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.363940
iter  20 value 1352.646534
final  value 1346.346971
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.775617
iter  20 value 1352.526764
final  value 1346.616952
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.756811
iter  20 value 1352.554275
final  value 1346.616972
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.669035
iter  20 value 1352.500045
final  value 1346.593425
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.046168
iter  20 value 1351.974368
final  value 1345.961615
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.748452
iter  20 value 1352.596051
final  value 1346.617038
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.743254
iter  20 value 1352.563527
final  value 1346.616506
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.774123
iter  20 value 1352.514169
final  value 1346.616489
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.764626
iter  20 value 1352.510737
final  value 1346.616739
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.757491
iter  20 value 1352.512414
final  value 1346.616965
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.759335
iter  20 value 1352.554897
final  value 1346.616965
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.747517
iter  20 value 1352.561727
final  value 1346.616695
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.739170
iter  20 value 1352.535015
final  value 1346.613867
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.770975
iter  20 value 1352.537338
final  value 1346.616205
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.757409
iter  20 value 1352.527695
final  value 1346.617109
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.760929
iter  20 value 1352.555309
final  value 1346.617058
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.732094
iter  20 value 1352.543723
final  value 1346.614735
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1370.843697
iter  20 value 1345.952798
final  value 1338.837684
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.765515
iter  20 value 1352.525297
final  value 1346.617128
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.743336
iter  20 value 1352.564382
final  value 1346.615613
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.758938
iter  20 value 1352.571196
final  value 1346.616499
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.765616
iter  20 value 1352.518225
final  value 1346.616324
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.779172
iter  20 value 1352.514689
final  value 1346.616996
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.757071
iter  20 value 1352.552847
final  value 1346.617033
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.727001
iter  20 value 1352.614200
final  value 1346.608921
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.763881
iter  20 value 1352.539513
final  value 1346.617123
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.752104
iter  20 value 1352.537841
final  value 1346.615471
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.691636
iter  20 value 1352.460782
final  value 1346.599445
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.717001
iter  20 value 1352.550159
final  value 1346.612256
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.746061
iter  20 value 1352.521171
final  value 1346.615990
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.557609
iter  20 value 1351.988937
final  value 1346.493133
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.741176
iter  20 value 1353.078861
final  value 1346.610653
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.741967
iter  20 value 1352.581327
final  value 1346.610463
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.658223
iter  20 value 1352.586975
final  value 1346.571026
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.753402
iter  20 value 1352.567052
final  value 1346.614349
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.758069
iter  20 value 1352.545815
final  value 1346.616026
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.755639
iter  20 value 1352.561082
final  value 1346.617125
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.735510
iter  20 value 1352.484256
final  value 1346.615318
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.741077
iter  20 value 1352.491930
final  value 1346.607751
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.775147
iter  20 value 1352.521389
final  value 1346.617038
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.730195
iter  20 value 1352.590387
final  value 1346.612604
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.745170
iter  20 value 1352.554484
final  value 1346.616887
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.729772
iter  20 value 1352.534450
final  value 1346.616868
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.735081
iter  20 value 1352.568100
final  value 1346.616643
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.703741
iter  20 value 1352.507729
final  value 1346.604154
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.496249
iter  20 value 1352.533374
final  value 1346.478718
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.749220
iter  20 value 1352.570579
final  value 1346.616216
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.092532
iter  20 value 1351.490162
final  value 1346.059933
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.777024
iter  20 value 1352.528248
final  value 1346.617061
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.757715
iter  20 value 1352.536482
final  value 1346.617089
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.719783
iter  20 value 1352.430064
final  value 1346.616818
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.774675
iter  20 value 1352.511931
final  value 1346.616662
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.670576
iter  20 value 1352.657410
final  value 1346.590722
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.757841
iter  20 value 1352.516558
final  value 1346.617070
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.766817
iter  20 value 1352.538117
final  value 1346.617061
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.759783
iter  20 value 1352.519605
final  value 1346.617035
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.754385
iter  20 value 1352.561638
final  value 1346.617051
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.698781
iter  20 value 1352.487971
final  value 1346.602821
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.158074
iter  20 value 1352.494889
final  value 1346.019113
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.768135
iter  20 value 1352.543838
final  value 1346.617035
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.752666
iter  20 value 1352.515809
final  value 1346.616391
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.736227
iter  20 value 1352.618372
final  value 1346.616707
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.716491
iter  20 value 1352.590098
final  value 1346.614990
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1372.084090
iter  20 value 1346.718615
final  value 1340.643672
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.759411
iter  20 value 1352.556045
final  value 1346.616973
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.747902
iter  20 value 1352.523364
final  value 1346.616863
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.681358
iter  20 value 1350.769066
final  value 1345.451463
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.734682
iter  20 value 1352.552492
final  value 1346.615818
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.732621
iter  20 value 1352.615295
final  value 1346.612578
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.753275
iter  20 value 1352.549725
final  value 1346.616728
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.712000
iter  20 value 1352.594846
final  value 1346.603846
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.741508
iter  20 value 1352.522278
final  value 1346.613548
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.754740
iter  20 value 1352.543118
final  value 1346.617049
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.700291
iter  20 value 1352.524862
final  value 1346.598710
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.545830
iter  20 value 1352.491958
final  value 1346.492071
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.757425
iter  20 value 1352.544224
final  value 1346.617116
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.746673
iter  20 value 1352.536243
final  value 1346.616860
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.719234
iter  20 value 1352.533101
final  value 1346.616779
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.747554
iter  20 value 1352.598615
final  value 1346.613149
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.732749
iter  20 value 1352.605932
final  value 1346.611288
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.691044
iter  20 value 1352.520110
final  value 1346.599641
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.781708
iter  20 value 1352.488941
final  value 1346.616667
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.735980
iter  20 value 1352.558621
final  value 1346.606144
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.764267
iter  20 value 1352.583614
final  value 1346.616508
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.422047
iter  20 value 1352.187931
final  value 1346.443579
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.577539
iter  20 value 1352.465448
final  value 1346.516028
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.725425
iter  20 value 1352.600384
final  value 1346.614401
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.718522
iter  20 value 1352.537271
final  value 1346.610182
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.750333
iter  20 value 1352.550076
final  value 1346.617030
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.742474
iter  20 value 1352.541200
final  value 1346.616850
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.773381
iter  20 value 1352.539311
final  value 1346.616955
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.270380
iter  20 value 1352.152344
final  value 1346.171678
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.566345
iter  20 value 1352.542955
final  value 1346.502359
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.734041
iter  20 value 1352.565542
final  value 1346.612715
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.783719
iter  20 value 1352.502668
final  value 1346.616208
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.737383
iter  20 value 1352.518541
final  value 1346.614357
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.730090
iter  20 value 1352.583985
final  value 1346.613892
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.693718
iter  20 value 1352.532172
final  value 1346.592218
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.206285
iter  20 value 1351.891002
final  value 1346.133412
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.325620
iter  20 value 1351.983981
final  value 1346.260963
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.674054
iter  20 value 1352.556957
final  value 1346.582516
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.776494
iter  20 value 1352.495618
final  value 1346.616709
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.112930
iter  20 value 1351.835502
final  value 1346.068222
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.763203
iter  20 value 1352.487904
final  value 1346.616062
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.765160
iter  20 value 1352.537757
final  value 1346.616454
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.761649
iter  20 value 1352.543058
final  value 1346.617137
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.630785
iter  20 value 1352.311774
final  value 1346.550279
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.722956
iter  20 value 1352.526002
final  value 1346.613381
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.762505
iter  20 value 1352.558303
final  value 1346.617075
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.764402
iter  20 value 1352.537263
final  value 1346.617070
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.752818
iter  20 value 1352.514723
final  value 1346.616773
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.724585
iter  20 value 1352.419004
final  value 1346.600641
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.755429
iter  20 value 1352.535157
final  value 1346.615796
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.657496
iter  20 value 1352.529171
final  value 1346.573815
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.718058
iter  20 value 1352.523494
final  value 1346.613998
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.685028
iter  20 value 1352.463815
final  value 1346.586504
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.755989
iter  20 value 1352.546421
final  value 1346.617041
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.739121
iter  20 value 1352.559431
final  value 1346.617062
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.704769
iter  20 value 1352.671440
final  value 1346.611092
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.614249
iter  20 value 1352.492869
final  value 1346.564973
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.767881
iter  20 value 1352.490279
final  value 1346.616722
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.717029
iter  20 value 1351.262220
final  value 1345.587042
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.690929
iter  20 value 1352.502900
final  value 1346.600015
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.761917
iter  20 value 1352.534175
final  value 1346.616515
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.764048
iter  20 value 1352.561189
final  value 1346.616806
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.752638
iter  20 value 1352.580367
final  value 1346.616956
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.754056
iter  20 value 1352.597890
final  value 1346.616376
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.779880
iter  20 value 1352.510648
final  value 1346.617060
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.698914
iter  20 value 1352.489023
final  value 1346.599184
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.781393
iter  20 value 1352.487063
final  value 1346.616034
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1373.553729
iter  20 value 1348.476506
final  value 1342.715090
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.868858
iter  20 value 1351.473702
final  value 1345.713531
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.723907
iter  20 value 1352.597987
final  value 1346.614249
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.739891
iter  20 value 1352.552923
final  value 1346.616702
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.757747
iter  20 value 1352.524636
final  value 1346.617088
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.712884
iter  20 value 1352.533871
final  value 1346.612428
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.749857
iter  20 value 1352.531045
final  value 1346.616754
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.753212
iter  20 value 1352.543057
final  value 1346.617095
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.744711
iter  20 value 1352.542669
final  value 1346.616679
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.759947
iter  20 value 1352.518747
final  value 1346.616957
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.777826
iter  20 value 1352.513642
final  value 1346.617106
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.081523
iter  20 value 1351.293249
final  value 1346.014487
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.774504
iter  20 value 1352.528681
final  value 1346.616956
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.650936
iter  20 value 1352.516498
final  value 1346.545206
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.749807
iter  20 value 1352.555878
final  value 1346.617124
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.712870
iter  20 value 1352.538784
final  value 1346.612783
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.754721
iter  20 value 1352.504381
final  value 1346.616691
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.746676
iter  20 value 1352.527664
final  value 1346.616874
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.755155
iter  20 value 1352.547007
final  value 1346.616726
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.514896
iter  20 value 1352.258203
final  value 1346.470535
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.716447
iter  20 value 1352.580109
final  value 1346.603173
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.744680
iter  20 value 1352.570108
final  value 1346.617116
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.701837
iter  20 value 1352.444092
final  value 1346.598320
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.759978
iter  20 value 1352.562154
final  value 1346.615544
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.756549
iter  20 value 1352.518144
final  value 1346.616208
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.758161
iter  20 value 1352.528425
final  value 1346.616803
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.767878
iter  20 value 1352.545560
final  value 1346.617130
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.760944
iter  20 value 1352.515720
final  value 1346.615255
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.773394
iter  20 value 1352.522157
final  value 1346.617057
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.760300
iter  20 value 1352.533555
final  value 1346.617121
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.747014
iter  20 value 1352.550970
final  value 1346.616902
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.766591
iter  20 value 1352.516313
final  value 1346.616641
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.733932
iter  20 value 1352.576216
final  value 1346.616509
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.769226
iter  20 value 1352.534863
final  value 1346.617135
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.770694
iter  20 value 1352.490666
final  value 1346.616319
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.658272
iter  20 value 1352.474662
final  value 1346.555288
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.779312
iter  20 value 1352.511963
final  value 1346.616557
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.534782
iter  20 value 1352.391365
final  value 1346.483915
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.670304
iter  20 value 1352.436001
final  value 1346.588922
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.757707
iter  20 value 1352.530457
final  value 1346.617016
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.747651
iter  20 value 1352.545361
final  value 1346.616071
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.751969
iter  20 value 1352.603163
final  value 1346.616429
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.738976
iter  20 value 1352.437559
final  value 1346.608510
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.742577
iter  20 value 1352.513912
final  value 1346.614630
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.750545
iter  20 value 1352.548231
final  value 1346.616991
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.292273
iter  20 value 1350.622895
final  value 1345.275449
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.749467
iter  20 value 1352.534987
final  value 1346.614572
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.709138
iter  20 value 1352.565828
final  value 1346.612446
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.768175
iter  20 value 1352.509693
final  value 1346.616498
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.759879
iter  20 value 1352.545581
final  value 1346.616668
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.703183
iter  20 value 1352.527565
final  value 1346.608433
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.760010
iter  20 value 1352.561780
final  value 1346.616131
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.765069
iter  20 value 1352.555268
final  value 1346.617098
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.741331
iter  20 value 1352.531658
final  value 1346.615566
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.758368
iter  20 value 1352.525679
final  value 1346.616999
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.748668
iter  20 value 1352.533697
final  value 1346.616958
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.704612
iter  20 value 1352.456246
final  value 1346.598598
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.575674
iter  20 value 1352.346216
final  value 1346.539029
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.730650
iter  20 value 1352.571823
final  value 1346.615213
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.757566
iter  20 value 1352.524285
final  value 1346.615525
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.887171
iter  20 value 1349.541352
final  value 1344.311541
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.776835
iter  20 value 1352.510499
final  value 1346.616928
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.742132
iter  20 value 1352.519770
final  value 1346.614963
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.720784
iter  20 value 1352.562883
final  value 1346.611214
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.733407
iter  20 value 1352.555775
final  value 1346.615623
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.739502
iter  20 value 1352.593634
final  value 1346.609033
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.692528
iter  20 value 1352.489866
final  value 1346.605433
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.762792
iter  20 value 1352.545908
final  value 1346.616974
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.738711
iter  20 value 1352.629716
final  value 1346.609808
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.766341
iter  20 value 1352.524486
final  value 1346.617065
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.761960
iter  20 value 1352.550145
final  value 1346.616858
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.706245
iter  20 value 1352.641357
final  value 1346.608903
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.729032
iter  20 value 1352.529117
final  value 1346.611420
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.743416
iter  20 value 1352.535223
final  value 1346.616065
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.765087
iter  20 value 1352.533104
final  value 1346.615250
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.750368
iter  20 value 1352.587314
final  value 1346.616951
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.739636
iter  20 value 1352.576065
final  value 1346.615822
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.697628
iter  20 value 1352.576516
final  value 1346.591337
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.606273
iter  20 value 1352.437770
final  value 1346.525400
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.758378
iter  20 value 1352.571206
final  value 1346.617082
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.737704
iter  20 value 1352.589781
final  value 1346.612766
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1373.639364
iter  20 value 1349.334020
final  value 1342.554487
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.767854
iter  20 value 1352.509090
final  value 1346.616737
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.694639
iter  20 value 1352.474652
final  value 1346.596597
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.761645
iter  20 value 1352.539746
final  value 1346.617069
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.749797
iter  20 value 1352.589224
final  value 1346.617066
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.793694
iter  20 value 1351.174385
final  value 1344.546065
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.517262
iter  20 value 1352.080389
final  value 1346.506099
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.749702
iter  20 value 1352.553847
final  value 1346.615997
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.748847
iter  20 value 1352.526361
final  value 1346.616189
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.767930
iter  20 value 1352.533721
final  value 1346.617015
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.758722
iter  20 value 1352.577108
final  value 1346.616646
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.726579
iter  20 value 1352.655498
final  value 1346.612906
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.719236
iter  20 value 1352.757438
final  value 1346.604112
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.706118
iter  20 value 1352.585385
final  value 1346.607389
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.727636
iter  20 value 1352.477531
final  value 1346.607346
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.764542
iter  20 value 1352.542383
final  value 1346.616890
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.749889
iter  20 value 1352.528952
final  value 1346.616797
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.765557
iter  20 value 1352.546125
final  value 1346.616738
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.717284
iter  20 value 1352.533151
final  value 1346.613045
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.921469
iter  20 value 1351.560990
final  value 1345.892225
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.745808
iter  20 value 1352.575244
final  value 1346.616844
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.757083
iter  20 value 1352.566745
final  value 1346.615948
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.766970
iter  20 value 1352.532270
final  value 1346.617108
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.744062
iter  20 value 1352.530268
final  value 1346.615812
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.738644
iter  20 value 1352.554145
final  value 1346.615226
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.764702
iter  20 value 1352.541266
final  value 1346.617055
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.753922
iter  20 value 1352.461608
final  value 1346.616910
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.762227
iter  20 value 1352.520069
final  value 1346.617081
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.723734
iter  20 value 1352.595462
final  value 1346.612694
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.741938
iter  20 value 1352.566759
final  value 1346.613992
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.697406
iter  20 value 1352.536824
final  value 1346.600583
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.760313
iter  20 value 1352.533832
final  value 1346.616864
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.768313
iter  20 value 1352.546516
final  value 1346.617043
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.724989
iter  20 value 1352.544315
final  value 1346.614133
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.772042
iter  20 value 1352.496334
final  value 1346.616973
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.751185
iter  20 value 1352.543985
final  value 1346.617119
converged
# weights:  27 (16 variable)
```

```
initial   value 4312.053233
iter  10 value 1376.587637
iter  20 value 1352.491619
final   value 1346.553351
converged
# weights:  27 (16 variable)
initial   value 4312.053233
iter  10 value 1376.660234
iter  20 value 1353.065090
final   value 1346.586563
converged
# weights:  27 (16 variable)
initial   value 4312.053233
iter  10 value 1376.764263
iter  20 value 1352.497848
final   value 1346.616448
converged
# weights:  27 (16 variable)
initial   value 4312.053233
iter  10 value 1373.936968
iter  20 value 1349.152804
final   value 1343.243462
converged
# weights:  27 (16 variable)
initial   value 4312.053233
iter  10 value 1376.193531
iter  20 value 1352.053557
final   value 1346.153727
converged
# weights:  27 (16 variable)
initial   value 4312.053233
iter  10 value 1376.736448
iter  20 value 1352.518910
final   value 1346.613025
converged
# weights:  27 (16 variable)
initial   value 4312.053233
iter  10 value 1376.762354
iter  20 value 1352.555128
final   value 1346.617112
converged
# weights:  27 (16 variable)
initial   value 4312.053233
iter  10 value 1376.745082
iter  20 value 1352.510958
final   value 1346.606986
converged
# weights:  27 (16 variable)
initial   value 4312.053233
iter  10 value 1376.770508
iter  20 value 1352.534447
final   value 1346.616942
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.706935
iter  20 value 1352.528475
final  value 1346.606378
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.749825
iter  20 value 1352.563832
final  value 1346.613462
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.213123
iter  20 value 1352.150475
final  value 1346.148159
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.746968
iter  20 value 1352.580005
final  value 1346.616579
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.768550
iter  20 value 1352.538243
final  value 1346.617007
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.763046
iter  20 value 1352.532224
final  value 1346.616838
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.756409
iter  20 value 1352.569929
final  value 1346.616958
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.690706
iter  20 value 1352.342144
final  value 1346.603606
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.727830
iter  20 value 1352.600888
final  value 1346.615852
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.755088
iter  20 value 1352.524171
final  value 1346.617085
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.766917
iter  20 value 1352.503230
final  value 1346.616983
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.753982
iter  20 value 1352.519420
final  value 1346.617064
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.725139
iter  20 value 1352.544109
final  value 1346.616778
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.721419
iter  20 value 1352.670969
final  value 1346.612364
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.504532
iter  20 value 1353.220763
final  value 1346.462749
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.598906
iter  20 value 1352.794249
final  value 1346.528717
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.755270
iter  20 value 1352.544064
final  value 1346.617043
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.766014
iter  20 value 1352.549991
final  value 1346.616465
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.769765
iter  20 value 1352.552103
final  value 1346.617056
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.769396
iter  20 value 1352.567527
final  value 1346.617028
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.766038
iter  20 value 1352.534063
final  value 1346.616802
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.732431
iter  20 value 1352.627707
final  value 1346.616563
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.765531
iter  20 value 1352.512812
final  value 1346.617004
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.771191
iter  20 value 1352.520765
final  value 1346.617126
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.631746
iter  20 value 1352.494329
final  value 1346.563185
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.405911
iter  20 value 1352.398990
final  value 1346.358948
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.720905
iter  20 value 1352.508912
final  value 1346.615958
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.759045
iter  20 value 1352.547547
final  value 1346.616929
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.767336
iter  20 value 1352.517527
final  value 1346.616526
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.647125
iter  20 value 1352.469539
final  value 1346.553316
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.725157
iter  20 value 1352.419516
final  value 1346.599759
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.762968
iter  20 value 1352.563168
final  value 1346.616881
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.738358
iter  20 value 1352.558259
final  value 1346.615653
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.745506
iter  20 value 1352.541644
final  value 1346.604385
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.749153
iter  20 value 1352.540971
final  value 1346.616612
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.573667
iter  20 value 1353.227583
final  value 1346.511469
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.493970
iter  20 value 1351.374941
final  value 1345.416529
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.226624
iter  20 value 1351.771308
final  value 1346.202090
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.748077
iter  20 value 1352.505846
final  value 1346.615079
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.756680
iter  20 value 1352.532959
final  value 1346.616911
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.689339
iter  20 value 1352.487426
final  value 1346.600276
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.769848
iter  20 value 1352.545893
final  value 1346.615771
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.727263
iter  20 value 1352.557194
final  value 1346.612855
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.716518
iter  20 value 1352.597535
final  value 1346.604779
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.711669
iter  20 value 1352.592837
final  value 1346.615875
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.768984
iter  20 value 1352.520237
final  value 1346.616718
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.750766
iter  20 value 1352.539250
final  value 1346.617003
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.765273
iter  20 value 1352.529869
final  value 1346.617051
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.768547
iter  20 value 1352.492542
final  value 1346.616895
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.751407
iter  20 value 1352.576216
final  value 1346.616960
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.623240
iter  20 value 1352.606533
final  value 1346.553476
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.761943
iter  20 value 1352.539358
final  value 1346.617101
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.564260
iter  20 value 1352.334385
final  value 1346.534199
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.733039
iter  20 value 1352.527957
final  value 1346.616024
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.781184
iter  20 value 1352.515880
final  value 1346.616895
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.757842
iter  20 value 1352.477398
final  value 1346.610728
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.755627
iter  20 value 1352.586178
final  value 1346.617075
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.743359
iter  20 value 1352.619278
final  value 1346.616575
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.710361
iter  20 value 1352.531152
final  value 1346.607023
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.764349
iter  20 value 1352.563382
final  value 1346.616869
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.752047
iter  20 value 1352.573464
final  value 1346.616211
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.726621
iter  20 value 1352.947336
final  value 1346.561226
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.713933
iter  20 value 1352.597442
final  value 1346.606418
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.771820
iter  20 value 1352.536387
final  value 1346.616865
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.766601
iter  20 value 1352.565491
final  value 1346.616997
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.761240
iter  20 value 1352.534634
final  value 1346.616821
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.296449
iter  20 value 1353.152638
final  value 1346.285901
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.244938
iter  20 value 1352.342851
final  value 1346.186475
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.744152
iter  20 value 1352.578480
final  value 1346.615867
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.599985
iter  20 value 1352.617762
final  value 1346.544060
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.765086
iter  20 value 1352.513781
final  value 1346.617071
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.764070
iter  20 value 1352.541984
final  value 1346.617005
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1374.897225
iter  20 value 1350.761259
final  value 1344.749140
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.754009
iter  20 value 1352.499093
final  value 1346.616082
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.734586
iter  20 value 1352.610971
final  value 1346.614237
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.767216
iter  20 value 1352.536552
final  value 1346.617054
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.739055
iter  20 value 1352.545071
final  value 1346.611196
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.736774
iter  20 value 1352.586203
final  value 1346.615899
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.752653
iter  20 value 1352.573478
final  value 1346.616974
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.754846
iter  20 value 1352.551027
final  value 1346.617048
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.754963
iter  20 value 1352.525898
final  value 1346.617082
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.747015
iter  20 value 1352.583861
final  value 1346.617070
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.714725
iter  20 value 1352.553247
final  value 1346.610178
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.752230
iter  20 value 1352.539221
final  value 1346.616151
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.727626
iter  20 value 1352.503221
final  value 1346.612272
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.766485
iter  20 value 1352.524905
final  value 1346.617092
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.751561
iter  20 value 1352.568343
final  value 1346.617122
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.736402
iter  20 value 1352.554782
final  value 1346.616229
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.751576
iter  20 value 1352.531514
final  value 1346.616982
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.380431
iter  20 value 1352.194841
final  value 1346.312400
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.948321
iter  20 value 1351.682503
final  value 1345.911009
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.688419
iter  20 value 1352.526751
final  value 1346.569840
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.548661
iter  20 value 1352.430445
final  value 1346.444467
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.531586
iter  20 value 1352.387795
final  value 1346.453273
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.824373
iter  20 value 1351.909501
final  value 1345.820242
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.609931
iter  20 value 1352.445588
final  value 1346.508898
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.598060
iter  20 value 1352.435350
final  value 1346.494835
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.606706
iter  20 value 1352.434419
final  value 1346.432054
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.758496
iter  20 value 1352.402389
final  value 1346.446700
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.259568
iter  20 value 1352.058721
final  value 1346.226757
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.622435
iter  20 value 1352.187493
final  value 1346.499753
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.785624
iter  20 value 1351.279061
final  value 1345.693877
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.648962
iter  20 value 1350.818736
final  value 1345.480510
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.547911
iter  20 value 1352.391716
final  value 1346.411346
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.507107
iter  20 value 1352.414421
final  value 1346.430895
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.558689
iter  20 value 1352.398032
final  value 1346.474841
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.478466
iter  20 value 1352.376346
final  value 1346.436158
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.158057
iter  20 value 1351.988683
final  value 1346.064003
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.221522
iter  20 value 1349.864136
final  value 1344.833512
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.706512
iter  20 value 1351.515009
final  value 1345.698733
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.367764
iter  20 value 1352.260852
final  value 1346.312894
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.186744
iter  20 value 1352.157303
final  value 1346.202351
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.597707
iter  20 value 1351.770517
final  value 1345.685078
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.382793
iter  20 value 1352.273730
final  value 1346.282764
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.228240
iter  20 value 1352.131769
final  value 1346.196718
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.593170
iter  20 value 1352.457373
final  value 1346.485206
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.636632
iter  20 value 1352.535056
final  value 1346.526201
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.642523
iter  20 value 1352.575594
final  value 1346.561036
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.598117
iter  20 value 1352.445539
final  value 1346.476486
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.603631
iter  20 value 1350.646160
final  value 1344.572031
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.620988
iter  20 value 1351.519305
final  value 1345.616326
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.512238
iter  20 value 1351.397029
final  value 1345.529592
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.422994
iter  20 value 1352.533436
final  value 1346.207669
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.539571
iter  20 value 1352.019114
final  value 1346.413461
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.644313
iter  20 value 1352.513264
final  value 1346.550316
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.154000
iter  20 value 1351.983340
final  value 1346.019762
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.410001
iter  20 value 1352.289029
final  value 1346.328530
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.437758
iter  20 value 1352.393302
final  value 1346.316324
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.577218
iter  20 value 1352.490298
final  value 1346.433142
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.509812
iter  20 value 1352.267783
final  value 1346.345874
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.467389
iter  20 value 1352.281929
final  value 1346.375777
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.460327
iter  20 value 1351.862546
final  value 1346.376337
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.294505
iter  20 value 1352.301580
final  value 1346.156836
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.576907
iter  20 value 1352.434840
final  value 1346.448605
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.634000
iter  20 value 1350.660504
final  value 1345.497207
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.512831
iter  20 value 1352.339637
final  value 1346.427862
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.479273
iter  20 value 1352.382060
final  value 1346.464691
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.702025
iter  20 value 1350.804837
final  value 1345.664457
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.433030
iter  20 value 1352.290820
final  value 1346.342355
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.339073
iter  20 value 1351.385105
final  value 1344.942359
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.569420
iter  20 value 1352.335258
final  value 1346.445414
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.522156
iter  20 value 1352.047222
final  value 1346.416605
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.268956
iter  20 value 1351.614493
final  value 1346.141325
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.538176
iter  20 value 1352.393225
final  value 1346.474341
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.405850
iter  20 value 1351.769403
final  value 1346.324688
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.501785
iter  20 value 1352.472790
final  value 1346.357349
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.728618
iter  20 value 1352.532817
final  value 1346.570228
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.698726
iter  20 value 1350.887705
final  value 1344.565598
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.144729
iter  20 value 1351.872028
final  value 1346.023507
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.199339
iter  20 value 1352.011227
final  value 1346.096915
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.648055
iter  20 value 1352.516533
final  value 1346.496411
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.676952
iter  20 value 1352.508711
final  value 1346.550674
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.601426
iter  20 value 1352.479392
final  value 1346.484716
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.652791
iter  20 value 1352.566129
final  value 1346.542725
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.160539
iter  20 value 1351.847451
final  value 1346.118126
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.681452
iter  20 value 1352.585013
final  value 1346.545684
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.602123
iter  20 value 1352.236499
final  value 1346.486708
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.499738
iter  20 value 1352.781145
final  value 1345.955337
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.202938
iter  20 value 1352.168020
final  value 1346.344751
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.470537
iter  20 value 1352.337009
final  value 1346.436879
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.696326
iter  20 value 1352.335395
final  value 1346.518711
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.448688
iter  20 value 1352.421645
final  value 1346.483837
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.336318
iter  20 value 1352.369268
final  value 1346.427769
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.882383
iter  20 value 1351.953223
final  value 1345.776955
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.480498
iter  20 value 1352.637865
final  value 1346.339540
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.557896
iter  20 value 1351.056983
final  value 1345.550795
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.016983
iter  20 value 1352.053404
final  value 1345.944100
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.702934
iter  20 value 1352.543774
final  value 1346.468292
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.485449
iter  20 value 1352.284101
final  value 1346.397399
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.602068
iter  20 value 1352.434805
final  value 1346.501743
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.738944
iter  20 value 1352.641388
final  value 1346.493183
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.520428
iter  20 value 1352.392962
final  value 1346.432729
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.442209
iter  20 value 1352.312739
final  value 1346.346339
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.271388
iter  20 value 1352.197182
final  value 1346.361021
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.600061
iter  20 value 1352.474356
final  value 1346.484259
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.622346
iter  20 value 1352.558737
final  value 1346.540522
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.620948
iter  20 value 1352.854954
final  value 1346.350166
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.004623
iter  20 value 1351.972497
final  value 1345.648955
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.327509
iter  20 value 1352.409126
final  value 1345.986836
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.226824
iter  20 value 1351.630329
final  value 1346.170618
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.175857
iter  20 value 1351.205053
final  value 1345.157835
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.377872
iter  20 value 1351.924221
final  value 1346.308447
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.504097
iter  20 value 1352.386011
final  value 1346.380498
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.959964
iter  20 value 1351.878919
final  value 1345.646607
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.980310
iter  20 value 1351.160501
final  value 1345.010957
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.495226
iter  20 value 1351.508352
final  value 1345.473355
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.325915
iter  20 value 1351.230173
final  value 1344.998162
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.661927
iter  20 value 1352.708779
final  value 1346.373926
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.353963
iter  20 value 1352.094790
final  value 1346.205623
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.949597
iter  20 value 1351.724198
final  value 1345.928174
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.166622
iter  20 value 1351.989208
final  value 1346.092114
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.717603
iter  20 value 1352.644926
final  value 1346.593395
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.274795
iter  20 value 1351.661541
final  value 1344.598935
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.139341
iter  20 value 1351.400699
final  value 1344.521812
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.621479
iter  20 value 1352.189439
final  value 1344.991775
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.294770
iter  20 value 1351.430018
final  value 1344.704183
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.690136
iter  20 value 1352.613419
final  value 1346.580938
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.411088
iter  20 value 1353.034849
final  value 1346.274210
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.336927
iter  20 value 1352.459660
final  value 1346.155027
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.713071
iter  20 value 1352.642030
final  value 1346.605276
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.039718
iter  20 value 1351.404310
final  value 1344.344708
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.407626
iter  20 value 1351.735762
final  value 1344.598624
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.647058
iter  20 value 1352.578103
final  value 1346.575401
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.700184
iter  20 value 1352.624153
final  value 1346.578085
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.696912
iter  20 value 1352.603893
final  value 1346.569845
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.945699
iter  20 value 1351.433008
final  value 1345.754588
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.217203
iter  20 value 1352.065400
final  value 1346.156763
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.503207
iter  20 value 1352.475396
final  value 1346.390828
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.684696
iter  20 value 1352.623824
final  value 1346.586976
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.724565
iter  20 value 1352.558671
final  value 1346.573795
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.306813
iter  20 value 1352.171579
final  value 1346.207983
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.574875
iter  20 value 1352.501851
final  value 1346.484480
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.217203
iter  20 value 1352.065400
final  value 1346.156763
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.637902
iter  20 value 1352.543958
final  value 1346.534001
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.696912
iter  20 value 1352.603893
final  value 1346.569845
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.654159
iter  20 value 1352.549574
final  value 1346.549497
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.700184
iter  20 value 1352.624153
final  value 1346.578085
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.683466
iter  20 value 1352.618239
final  value 1346.585043
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.684563
iter  20 value 1352.616829
final  value 1346.585224
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.544750
iter  20 value 1352.407403
final  value 1346.440454
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.679246
iter  20 value 1352.632848
final  value 1346.593605
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.658771
iter  20 value 1352.573657
final  value 1346.567658
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.505434
iter  20 value 1352.366813
final  value 1346.395698
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.678147
iter  20 value 1352.621839
final  value 1346.594295
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.933480
iter  20 value 1351.617413
final  value 1345.697849
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.689346
iter  20 value 1352.666874
final  value 1346.599872
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.975933
iter  20 value 1351.892818
final  value 1345.904815
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.623720
iter  20 value 1352.507293
final  value 1346.511887
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.505434
iter  20 value 1352.366813
final  value 1346.395698
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.832608
iter  20 value 1351.857269
final  value 1345.805478
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.658771
iter  20 value 1352.573657
final  value 1346.567658
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.678147
iter  20 value 1352.621839
final  value 1346.594295
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.711798
iter  20 value 1352.595211
final  value 1346.469079
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.979863
iter  20 value 1352.985519
final  value 1345.934023
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.671615
iter  20 value 1352.624930
final  value 1346.593852
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.531663
iter  20 value 1352.437715
final  value 1346.436583
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.673066
iter  20 value 1352.545069
final  value 1346.554770
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.662489
iter  20 value 1352.646442
final  value 1346.590867
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.685061
iter  20 value 1352.648965
final  value 1346.600508
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.722370
iter  20 value 1352.653663
final  value 1346.612007
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.616377
iter  20 value 1352.525248
final  value 1346.533782
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.631881
iter  20 value 1352.546954
final  value 1346.499631
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.574954
iter  20 value 1352.529802
final  value 1346.531417
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.638848
iter  20 value 1352.603534
final  value 1346.579451
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.629759
iter  20 value 1352.586025
final  value 1346.572952
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.390985
iter  20 value 1352.294562
final  value 1346.286847
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.629641
iter  20 value 1352.615144
final  value 1346.569715
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.685917
iter  20 value 1352.604408
final  value 1346.602585
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.632402
iter  20 value 1352.618565
final  value 1346.514785
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.712120
iter  20 value 1352.606001
final  value 1346.610648
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.668979
iter  20 value 1352.632129
final  value 1346.596272
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.562898
iter  20 value 1352.604919
final  value 1346.425524
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.669095
iter  20 value 1352.553518
final  value 1346.561939
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.662427
iter  20 value 1352.636617
final  value 1346.594493
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.555655
iter  20 value 1352.470397
final  value 1346.470908
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.615344
iter  20 value 1352.545362
final  value 1346.541007
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.652148
iter  20 value 1352.567276
final  value 1346.542115
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.679137
iter  20 value 1352.675621
final  value 1346.601162
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.657138
iter  20 value 1352.651710
final  value 1346.583850
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.725440
iter  20 value 1352.705735
final  value 1346.612205
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.694252
iter  20 value 1352.597679
final  value 1346.596534
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.718099
iter  20 value 1352.749633
final  value 1346.549386
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.754266
iter  20 value 1352.669172
final  value 1346.601178
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.766251
iter  20 value 1352.698644
final  value 1346.602468
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.617746
iter  20 value 1352.578720
final  value 1346.580625
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.664646
iter  20 value 1352.673386
final  value 1346.595641
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.616485
iter  20 value 1352.517151
final  value 1346.529507
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.618996
iter  20 value 1352.559191
final  value 1346.568725
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.354834
iter  20 value 1352.377718
final  value 1346.467125
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.691578
iter  20 value 1352.612132
final  value 1346.595103
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.643364
iter  20 value 1352.480251
final  value 1346.524089
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.566999
iter  20 value 1352.475059
final  value 1346.443733
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.709659
iter  20 value 1352.604717
final  value 1346.602752
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.654321
iter  20 value 1352.603004
final  value 1346.584834
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.492061
iter  20 value 1352.468735
final  value 1346.441466
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.666181
iter  20 value 1352.663641
final  value 1346.593676
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.661353
iter  20 value 1352.651923
final  value 1346.595993
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.630603
iter  20 value 1352.614903
final  value 1346.578286
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.496037
iter  20 value 1352.385957
final  value 1346.394835
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.430127
iter  20 value 1352.204525
final  value 1346.313878
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.679987
iter  20 value 1352.645332
final  value 1346.600267
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.608755
iter  20 value 1352.556953
final  value 1346.547932
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.689091
iter  20 value 1352.621864
final  value 1346.574885
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.350129
iter  20 value 1352.249154
final  value 1346.329768
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.523808
iter  20 value 1352.399813
final  value 1346.474548
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.379407
iter  20 value 1352.303994
final  value 1346.378163
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.245197
iter  20 value 1352.069047
final  value 1346.204433
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.399895
iter  20 value 1352.238976
final  value 1346.351931
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.568591
iter  20 value 1352.371764
final  value 1346.473637
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.568434
iter  20 value 1352.528691
final  value 1346.533857
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.509432
iter  20 value 1352.421401
final  value 1346.406292
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.188811
iter  20 value 1352.007575
final  value 1346.030489
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.564762
iter  20 value 1351.494737
final  value 1345.431911
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.606147
iter  20 value 1352.510271
final  value 1346.467334
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.611331
iter  20 value 1352.468383
final  value 1346.467219
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.600085
iter  20 value 1351.613726
final  value 1345.548810
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.586139
iter  20 value 1352.582937
final  value 1346.498144
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.283264
iter  20 value 1352.091880
final  value 1346.204984
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.151234
iter  20 value 1351.987585
final  value 1345.988217
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.552161
iter  20 value 1352.432613
final  value 1346.422356
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.558435
iter  20 value 1352.522055
final  value 1346.433995
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.420665
iter  20 value 1352.362971
final  value 1346.294148
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.461251
iter  20 value 1352.353511
final  value 1346.343671
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.540528
iter  20 value 1352.439319
final  value 1346.388046
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.689195
iter  20 value 1352.495439
final  value 1346.564093
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.625129
iter  20 value 1352.480967
final  value 1346.536957
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.660092
iter  20 value 1352.500937
final  value 1346.546857
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.618344
iter  20 value 1352.411570
final  value 1346.525480
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.475488
iter  20 value 1352.378420
final  value 1346.481562
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.560421
iter  20 value 1352.430038
final  value 1346.446714
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.517692
iter  20 value 1353.001464
final  value 1345.985659
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.343357
iter  20 value 1352.676587
final  value 1345.839805
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.295842
iter  20 value 1352.599860
final  value 1345.821893
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.295842
iter  20 value 1352.599860
final  value 1345.821893
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.749339
iter  20 value 1352.170208
final  value 1345.228741
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.648391
iter  20 value 1353.011469
final  value 1346.091873
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1377.078533
iter  20 value 1353.084373
final  value 1346.470575
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.516250
iter  20 value 1352.379279
final  value 1346.424135
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.507709
iter  20 value 1352.517431
final  value 1346.330694
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.716365
iter  20 value 1352.705150
final  value 1346.430829
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.509944
iter  20 value 1352.770315
final  value 1346.040320
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.542173
iter  20 value 1351.752752
final  value 1345.132031
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.397450
iter  20 value 1352.285257
final  value 1346.229441
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.563430
iter  20 value 1352.492215
final  value 1346.503637
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.052193
iter  20 value 1352.248231
final  value 1345.831212
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.854741
iter  20 value 1352.784246
final  value 1346.564321
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.952864
iter  20 value 1351.998915
final  value 1345.806916
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.468765
iter  20 value 1352.556384
final  value 1346.128926
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.498033
iter  20 value 1352.329411
final  value 1346.393904
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.392393
iter  20 value 1352.845245
final  value 1345.886270
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.665407
iter  20 value 1352.237830
final  value 1345.128701
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.334737
iter  20 value 1351.800407
final  value 1344.750960
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.516900
iter  20 value 1352.875662
final  value 1345.980104
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.624139
iter  20 value 1352.599740
final  value 1346.555912
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.457703
iter  20 value 1352.720479
final  value 1345.961913
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.295842
iter  20 value 1352.599860
final  value 1345.821893
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.295842
iter  20 value 1352.599860
final  value 1345.821893
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.295842
iter  20 value 1352.599860
final  value 1345.821893
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.829683
iter  20 value 1352.768175
final  value 1346.557477
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.736186
iter  20 value 1352.612939
final  value 1346.610796
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.628125
iter  20 value 1352.470765
final  value 1346.515769
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.521504
iter  20 value 1352.372026
final  value 1346.434614
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.657334
iter  20 value 1352.568942
final  value 1346.550946
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.667852
iter  20 value 1352.599022
final  value 1346.561093
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.623929
iter  20 value 1352.536597
final  value 1346.509576
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.696674
iter  20 value 1352.658803
final  value 1346.554909
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.687393
iter  20 value 1352.618119
final  value 1346.575544
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.638411
iter  20 value 1352.477566
final  value 1346.520947
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.551922
iter  20 value 1352.467763
final  value 1346.418827
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.757763
iter  20 value 1352.706540
final  value 1346.613085
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.666329
iter  20 value 1352.650090
final  value 1346.581555
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.558246
iter  20 value 1352.484920
final  value 1346.491481
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.617351
iter  20 value 1352.482824
final  value 1346.520448
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.743738
iter  20 value 1352.601967
final  value 1346.612043
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.647228
iter  20 value 1352.462814
final  value 1346.517392
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.657019
iter  20 value 1352.619106
final  value 1346.526042
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.631384
iter  20 value 1352.535745
final  value 1346.524958
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.476943
iter  20 value 1352.447473
final  value 1346.360931
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.667932
iter  20 value 1352.585973
final  value 1346.555343
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.708982
iter  20 value 1352.644728
final  value 1346.602106
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.577707
iter  20 value 1352.502885
final  value 1346.470598
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.569404
iter  20 value 1352.549530
final  value 1346.454482
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.776259
iter  20 value 1352.775491
final  value 1346.607699
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.740834
iter  20 value 1352.684743
final  value 1346.603425
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.589588
iter  20 value 1352.525832
final  value 1346.504426
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.688333
iter  20 value 1352.600900
final  value 1346.513051
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.778693
iter  20 value 1352.720633
final  value 1346.600212
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.743021
iter  20 value 1352.566514
final  value 1346.602724
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.668491
iter  20 value 1352.514033
final  value 1346.555293
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.720824
iter  20 value 1352.577241
final  value 1346.601580
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.637136
iter  20 value 1352.588144
final  value 1346.557332
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.680800
iter  20 value 1352.619904
final  value 1346.589077
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.627279
iter  20 value 1352.509303
final  value 1346.545637
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.614835
iter  20 value 1352.467256
final  value 1346.488431
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.587051
iter  20 value 1352.440866
final  value 1346.458863
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.657600
iter  20 value 1352.552383
final  value 1346.544316
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.695329
iter  20 value 1352.679580
final  value 1346.574546
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.709130
iter  20 value 1352.601704
final  value 1346.582651
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.701996
iter  20 value 1352.699735
final  value 1346.608286
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.625717
iter  20 value 1352.538475
final  value 1346.545637
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.714106
iter  20 value 1352.669210
final  value 1346.604093
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.215727
iter  20 value 1352.031456
final  value 1346.138888
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.719789
iter  20 value 1351.541383
final  value 1345.703720
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.716113
iter  20 value 1352.629769
final  value 1346.604666
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.651307
iter  20 value 1352.557056
final  value 1346.557301
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.711322
iter  20 value 1352.588773
final  value 1346.588186
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.633263
iter  20 value 1352.485643
final  value 1346.527423
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.684170
iter  20 value 1352.603016
final  value 1346.584977
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.663263
iter  20 value 1352.564097
final  value 1346.543601
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.723469
iter  20 value 1352.594013
final  value 1346.587371
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.633600
iter  20 value 1352.562217
final  value 1346.564592
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.695436
iter  20 value 1352.616328
final  value 1346.597773
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.713866
iter  20 value 1352.640588
final  value 1346.605782
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.706309
iter  20 value 1352.687066
final  value 1346.606229
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.676263
iter  20 value 1352.599063
final  value 1346.567900
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.665920
iter  20 value 1352.639988
final  value 1346.560078
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.701824
iter  20 value 1352.609669
final  value 1346.590134
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.322366
iter  20 value 1352.308032
final  value 1346.195420
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.302948
iter  20 value 1352.214590
final  value 1346.221579
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.543662
iter  20 value 1352.291933
final  value 1346.358143
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.166303
iter  20 value 1352.054168
final  value 1345.930929
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.550393
iter  20 value 1352.367611
final  value 1346.456534
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.664537
iter  20 value 1352.437227
final  value 1346.521284
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.827839
iter  20 value 1352.501518
final  value 1346.604021
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.677250
iter  20 value 1352.452791
final  value 1346.534396
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.750925
iter  20 value 1352.590787
final  value 1346.611633
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.497958
iter  20 value 1352.024449
final  value 1346.274473
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.535131
iter  20 value 1352.355859
final  value 1346.392310
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.502554
iter  20 value 1352.319790
final  value 1346.378541
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.686865
iter  20 value 1352.562376
final  value 1346.546081
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.675479
iter  20 value 1352.538364
final  value 1346.577371
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.448189
iter  20 value 1352.336565
final  value 1346.351526
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.506778
iter  20 value 1352.381925
final  value 1346.407823
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.661370
iter  20 value 1352.545260
final  value 1346.580766
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.393369
iter  20 value 1352.265469
final  value 1346.274398
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.604262
iter  20 value 1352.476118
final  value 1346.515026
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.610853
iter  20 value 1352.516258
final  value 1346.496287
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.417481
iter  20 value 1352.305917
final  value 1346.304059
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.654189
iter  20 value 1352.546247
final  value 1346.545297
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.655162
iter  20 value 1352.553452
final  value 1346.544094
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.685797
iter  20 value 1352.597145
final  value 1346.572828
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.437134
iter  20 value 1352.292075
final  value 1346.331583
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.368821
iter  20 value 1352.234156
final  value 1346.270315
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.689945
iter  20 value 1352.553801
final  value 1346.569303
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.274902
iter  20 value 1352.490837
final  value 1345.875020
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.176939
iter  20 value 1352.080698
final  value 1346.141702
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.469380
iter  20 value 1352.307676
final  value 1346.384441
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.668963
iter  20 value 1352.543897
final  value 1346.573225
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.623924
iter  20 value 1352.445596
final  value 1346.524284
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.617643
iter  20 value 1352.450163
final  value 1346.518288
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.617263
iter  20 value 1352.435864
final  value 1346.516995
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.668492
iter  20 value 1352.540062
final  value 1346.571845
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.104871
iter  20 value 1352.182443
final  value 1346.122782
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.553974
iter  20 value 1352.380133
final  value 1346.466176
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.640679
iter  20 value 1352.449103
final  value 1346.530070
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.406404
iter  20 value 1352.358555
final  value 1346.284345
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.692375
iter  20 value 1352.618416
final  value 1346.582280
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.689540
iter  20 value 1352.561145
final  value 1346.597139
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.409074
iter  20 value 1352.263975
final  value 1346.329915
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.685917
iter  20 value 1352.573187
final  value 1346.589865
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.490029
iter  20 value 1352.416375
final  value 1346.372389
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.722680
iter  20 value 1352.620285
final  value 1346.597230
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.483279
iter  20 value 1351.288949
final  value 1345.347024
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.709878
iter  20 value 1352.597655
final  value 1346.587030
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.669272
iter  20 value 1352.532522
final  value 1346.523588
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.710175
iter  20 value 1352.600230
final  value 1346.578084
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.691290
iter  20 value 1352.561644
final  value 1346.575293
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.625362
iter  20 value 1352.507920
final  value 1346.539807
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.648149
iter  20 value 1352.563843
final  value 1346.568048
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.625089
iter  20 value 1352.542175
final  value 1346.551831
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.592443
iter  20 value 1352.441517
final  value 1346.502098
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.613379
iter  20 value 1352.495538
final  value 1346.531312
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.661707
iter  20 value 1352.566108
final  value 1346.571283
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.954630
iter  20 value 1352.067436
final  value 1345.765818
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.340839
iter  20 value 1351.581422
final  value 1344.878278
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.641414
iter  20 value 1352.401491
final  value 1346.515120
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.965131
iter  20 value 1351.844376
final  value 1345.875494
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.425431
iter  20 value 1349.960241
final  value 1344.040189
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.557469
iter  20 value 1352.438185
final  value 1346.443112
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.332076
iter  20 value 1351.080855
final  value 1345.158827
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.761346
iter  20 value 1352.912709
final  value 1346.403619
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.116368
iter  20 value 1352.053108
final  value 1345.811359
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.020144
iter  20 value 1351.949988
final  value 1345.773639
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.236011
iter  20 value 1351.983873
final  value 1345.917687
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.996115
iter  20 value 1351.994310
final  value 1345.746947
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.245466
iter  20 value 1352.147901
final  value 1346.082547
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.707144
iter  20 value 1352.596966
final  value 1346.417070
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.335263
iter  20 value 1351.336324
final  value 1345.070699
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.578400
iter  20 value 1352.409331
final  value 1346.316842
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.760808
iter  20 value 1352.558296
final  value 1346.584731
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.569004
iter  20 value 1352.399242
final  value 1346.315287
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.439416
iter  20 value 1350.427094
final  value 1344.356835
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.365296
iter  20 value 1352.240663
final  value 1346.265713
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.281797
iter  20 value 1352.109770
final  value 1346.241053
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.700577
iter  20 value 1352.592426
final  value 1346.604692
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.533590
iter  20 value 1352.430350
final  value 1346.435711
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1373.571465
iter  20 value 1349.982243
final  value 1343.299588
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.652149
iter  20 value 1352.593615
final  value 1346.581126
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.525275
iter  20 value 1352.392357
final  value 1346.415772
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.322109
iter  20 value 1350.744535
final  value 1345.120651
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.574139
iter  20 value 1352.431628
final  value 1346.469645
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.414720
iter  20 value 1352.261885
final  value 1346.310427
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.467542
iter  20 value 1352.332145
final  value 1346.361744
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.645978
iter  20 value 1351.387265
final  value 1345.552487
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.633317
iter  20 value 1349.851758
final  value 1344.385758
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.751850
iter  20 value 1352.599934
final  value 1346.576446
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.700863
iter  20 value 1352.582456
final  value 1346.588456
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.645345
iter  20 value 1352.409982
final  value 1346.473633
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.488332
iter  20 value 1352.293780
final  value 1346.361914
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.653516
iter  20 value 1352.577126
final  value 1346.563823
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.533929
iter  20 value 1352.736512
final  value 1346.408666
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.680544
iter  20 value 1352.587246
final  value 1346.583063
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.642963
iter  20 value 1352.587799
final  value 1346.565017
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.596107
iter  20 value 1352.751598
final  value 1346.458409
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.689670
iter  20 value 1352.531363
final  value 1346.578426
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.626191
iter  20 value 1352.388741
final  value 1346.499712
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.621032
iter  20 value 1352.474096
final  value 1346.501428
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.698547
iter  20 value 1352.543233
final  value 1346.601261
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.653504
iter  20 value 1352.549112
final  value 1346.539145
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.889162
iter  20 value 1351.797901
final  value 1345.794573
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.646008
iter  20 value 1352.493509
final  value 1346.533745
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.704455
iter  20 value 1352.552254
final  value 1346.583558
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.672293
iter  20 value 1352.564368
final  value 1346.571405
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.673185
iter  20 value 1352.515410
final  value 1346.558652
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.033912
iter  20 value 1351.905885
final  value 1345.981161
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.655475
iter  20 value 1352.559006
final  value 1346.567448
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.648451
iter  20 value 1352.519747
final  value 1346.574793
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.274203
iter  20 value 1352.096412
final  value 1346.259457
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.547768
iter  20 value 1352.295248
final  value 1346.422303
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.713335
iter  20 value 1352.553666
final  value 1346.595822
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.673027
iter  20 value 1352.549035
final  value 1346.541788
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.680501
iter  20 value 1352.668728
final  value 1346.581909
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.523930
iter  20 value 1352.362389
final  value 1346.457202
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.616994
iter  20 value 1352.482585
final  value 1346.514998
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.022168
iter  20 value 1351.761063
final  value 1346.039789
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.613906
iter  20 value 1352.570246
final  value 1346.580252
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.451677
iter  20 value 1352.296426
final  value 1346.377745
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.701486
iter  20 value 1352.580834
final  value 1346.591173
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.627381
iter  20 value 1352.638255
final  value 1346.584203
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.698440
iter  20 value 1352.537525
final  value 1346.578139
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.456221
iter  20 value 1352.293488
final  value 1346.372131
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.136014
iter  20 value 1351.994691
final  value 1346.083661
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.507306
iter  20 value 1352.334107
final  value 1346.457727
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.441637
iter  20 value 1352.341910
final  value 1346.331526
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.716232
iter  20 value 1352.623175
final  value 1346.586767
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.676491
iter  20 value 1352.554966
final  value 1346.571118
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.647816
iter  20 value 1352.504194
final  value 1346.536748
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.695072
iter  20 value 1352.546450
final  value 1346.589671
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.660426
iter  20 value 1352.563561
final  value 1346.579589
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.680112
iter  20 value 1352.574673
final  value 1346.578243
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.617619
iter  20 value 1352.551954
final  value 1346.565224
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.062395
iter  20 value 1352.043883
final  value 1346.050869
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.577841
iter  20 value 1352.527187
final  value 1346.488952
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.302154
iter  20 value 1352.966843
final  value 1346.156175
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.657802
iter  20 value 1352.556325
final  value 1346.566310
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.464327
iter  20 value 1351.523150
final  value 1345.392753
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.216780
iter  20 value 1353.753430
final  value 1346.097941
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.285336
iter  20 value 1351.039316
final  value 1344.934133
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.233591
iter  20 value 1352.163861
final  value 1346.185905
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.419430
iter  20 value 1352.474541
final  value 1346.259290
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.247141
iter  20 value 1352.478288
final  value 1345.979580
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.683797
iter  20 value 1352.592910
final  value 1346.593700
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.573943
iter  20 value 1352.530415
final  value 1346.540141
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.564337
iter  20 value 1351.777190
final  value 1345.664658
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.221956
iter  20 value 1352.160129
final  value 1346.186108
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.195319
iter  20 value 1352.118308
final  value 1346.140160
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.491980
iter  20 value 1352.515319
final  value 1346.341343
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.261163
iter  20 value 1352.307356
final  value 1346.105513
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.202051
iter  20 value 1353.837970
final  value 1345.982089
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.804793
iter  20 value 1351.672676
final  value 1345.918811
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.457314
iter  20 value 1352.329884
final  value 1346.375907
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.640425
iter  20 value 1352.591318
final  value 1346.571722
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.516098
iter  20 value 1352.379190
final  value 1346.409817
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.115242
iter  20 value 1352.072411
final  value 1346.078798
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.534613
iter  20 value 1349.952042
final  value 1344.219583
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.618812
iter  20 value 1352.546622
final  value 1346.542043
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.460254
iter  20 value 1352.377838
final  value 1346.406234
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.752721
iter  20 value 1351.802032
final  value 1345.725692
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.664565
iter  20 value 1352.524697
final  value 1346.570317
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.319164
iter  20 value 1352.215366
final  value 1346.241850
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1373.571224
iter  20 value 1349.790579
final  value 1343.237644
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.101217
iter  20 value 1352.068796
final  value 1346.075450
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.601416
iter  20 value 1352.429649
final  value 1346.531018
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.737390
iter  20 value 1352.669199
final  value 1346.609456
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.763397
iter  20 value 1352.621944
final  value 1346.615252
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.660667
iter  20 value 1352.965079
final  value 1346.283952
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.718065
iter  20 value 1353.000056
final  value 1346.583748
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.583858
iter  20 value 1352.485656
final  value 1346.560009
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.518797
iter  20 value 1352.447710
final  value 1346.506313
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.487435
iter  20 value 1352.336206
final  value 1346.417079
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.734666
iter  20 value 1352.568611
final  value 1346.584846
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.834683
iter  20 value 1350.543462
final  value 1344.599658
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.763133
iter  20 value 1352.625272
final  value 1346.611948
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.672458
iter  20 value 1352.624282
final  value 1346.585529
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.971093
iter  20 value 1351.739370
final  value 1345.932808
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.741791
iter  20 value 1352.628388
final  value 1346.613968
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.650134
iter  20 value 1352.554805
final  value 1346.571240
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.492916
iter  20 value 1352.716956
final  value 1346.361595
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.752513
iter  20 value 1352.593348
final  value 1346.601844
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.707678
iter  20 value 1352.582202
final  value 1346.606433
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.537446
iter  20 value 1352.396466
final  value 1346.500390
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.166682
iter  20 value 1352.243471
final  value 1346.137694
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.709670
iter  20 value 1352.556986
final  value 1346.588691
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.625978
iter  20 value 1352.402812
final  value 1346.515696
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.665129
iter  20 value 1352.480388
final  value 1346.565057
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.696394
iter  20 value 1352.550713
final   value 1346.589125
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.706752
iter  20 value 1352.541789
final   value 1346.588069
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.694555
iter  20 value 1352.539385
final   value 1346.584695
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.773303
iter  20 value 1352.635188
final   value 1346.615317
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.722815
iter  20 value 1352.576475
final   value 1346.596151
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.768074
iter  20 value 1352.630956
final   value 1346.614992
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.518520
iter  20 value 1352.366403
final   value 1346.435046
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.669454
iter  20 value 1352.558787
final   value 1346.542769
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.681606
iter  20 value 1352.600812
final   value 1346.585652
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.696107
iter  20 value 1352.636707
final   value 1346.602153
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.727543
iter  20 value 1352.543084
final   value 1346.589428
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.729474
iter  20 value 1352.573416
final   value 1346.607931
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.346804
iter  20 value 1352.370734
final   value 1346.184807
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.722480
iter  20 value 1352.596400
final   value 1346.607870
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.639116
iter  20 value 1352.548822
final   value 1346.549173
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.728312
iter  20 value 1352.571298
final   value 1346.592270
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.633402
iter  20 value 1352.371877
final   value 1346.510995
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.399379
iter  20 value 1352.378589
final   value 1346.238662
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.629064
iter  20 value 1352.467172
final  value 1346.523824
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.667183
iter  20 value 1352.485341
final  value 1346.549313
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.431284
iter  20 value 1352.176954
final  value 1346.310321
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.633807
iter  20 value 1352.436297
final  value 1346.419329
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.696865
iter  20 value 1352.575596
final  value 1346.585445
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.114840
iter  20 value 1352.003149
final  value 1345.877823
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.500768
iter  20 value 1352.396278
final  value 1346.417485
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.696962
iter  20 value 1352.634782
final  value 1346.597957
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.680997
iter  20 value 1352.603859
final  value 1346.582878
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.826453
iter  20 value 1353.243420
final  value 1346.072689
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.614966
iter  20 value 1352.572405
final  value 1346.569049
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.704064
iter  20 value 1352.616697
final  value 1346.600286
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.686357
iter  20 value 1352.585090
final  value 1346.584273
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.696865
iter  20 value 1352.575596
final  value 1346.585445
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.664999
iter  20 value 1352.513225
final  value 1346.549824
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.723642
iter  20 value 1352.554594
final  value 1346.594760
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.523954
iter  20 value 1352.463836
final  value 1346.461421
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.501611
iter  20 value 1352.441343
final  value 1346.482936
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.563098
iter  20 value 1351.570015
final  value 1346.415882
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.727543
iter  20 value 1352.543084
final  value 1346.589428
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.563497
iter  20 value 1352.441902
final  value 1346.460092
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.644510
iter  20 value 1352.544625
final  value 1346.531353
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.484403
iter  20 value 1352.378791
final  value 1346.375765
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.644510
iter  20 value 1352.544625
final  value 1346.531353
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.619096
iter  20 value 1352.576572
final  value 1346.564133
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.696865
iter  20 value 1352.575596
final  value 1346.585445
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.624208
iter  20 value 1352.502892
final  value 1346.508412
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.718644
iter  20 value 1352.548354
final  value 1346.594002
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.731696
iter  20 value 1352.642236
final  value 1346.603539
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.692159
iter  20 value 1352.614173
final  value 1346.598092
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.689394
iter  20 value 1352.637937
final  value 1346.599393
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.696865
iter  20 value 1352.575596
final  value 1346.585445
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.590199
iter  20 value 1352.501846
final  value 1346.511727
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.674125
iter  20 value 1352.628897
final  value 1346.589992
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.750961
iter  20 value 1352.593535
final  value 1346.601285
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.269259
iter  20 value 1352.063206
final  value 1346.253591
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.863199
iter  20 value 1351.614663
final  value 1345.864289
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.116696
iter  20 value 1351.967870
final  value 1346.138596
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.023087
iter  20 value 1350.792303
final  value 1344.948087
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.237192
iter  20 value 1351.088204
final  value 1345.244117
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.680919
iter  20 value 1352.553619
final  value 1346.554588
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.552642
iter  20 value 1352.239220
final  value 1346.352594
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.738736
iter  20 value 1351.664233
final  value 1345.682526
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.411246
iter  20 value 1352.194823
final  value 1346.271238
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.312437
iter  20 value 1352.065000
final  value 1346.209342
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.993955
iter  20 value 1351.777381
final  value 1345.845807
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.741266
iter  20 value 1352.536027
final  value 1346.608658
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.545985
iter  20 value 1351.371862
final  value 1345.400955
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.495477
iter  20 value 1352.340058
final  value 1346.379461
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.890661
iter  20 value 1351.786401
final  value 1345.819684
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.102500
iter  20 value 1351.725432
final  value 1345.951344
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.669396
iter  20 value 1352.460542
final  value 1346.556484
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.085533
iter  20 value 1350.909108
final  value 1344.862192
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.711098
iter  20 value 1352.359389
final  value 1346.558888
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.094860
iter  20 value 1351.881232
final  value 1346.015301
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.679100
iter  20 value 1352.331277
final  value 1346.510278
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.734494
iter  20 value 1352.508190
final  value 1346.577908
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.574873
iter  20 value 1352.621552
final  value 1346.495028
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.539378
iter  20 value 1351.314681
final  value 1345.439270
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.423671
iter  20 value 1351.044404
final  value 1345.235331
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.080879
iter  20 value 1350.918923
final  value 1344.984879
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.605593
iter  20 value 1351.493915
final  value 1345.524695
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.598247
iter  20 value 1352.374687
final  value 1346.512839
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.475498
iter  20 value 1351.438430
final  value 1345.494111
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.715607
iter  20 value 1351.848663
final  value 1345.793411
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.877075
iter  20 value 1351.607324
final  value 1345.782719
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.453223
iter  20 value 1352.307319
final  value 1346.375997
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.434557
iter  20 value 1352.757375
final  value 1346.421891
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.577785
iter  20 value 1352.622058
final  value 1346.380841
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.263176
iter  20 value 1352.103773
final  value 1346.242358
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.880965
iter  20 value 1351.633495
final  value 1345.870081
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.231728
iter  20 value 1352.014689
final  value 1346.082738
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.595666
iter  20 value 1352.887875
final  value 1346.538417
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.360322
iter  20 value 1352.133921
final  value 1346.198622
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.641056
iter  20 value 1351.433112
final  value 1345.613941
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.187373
iter  20 value 1351.972848
final  value 1346.212984
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.465453
iter  20 value 1352.162449
final  value 1346.362833
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.154335
iter  20 value 1352.132390
final  value 1346.056844
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.435491
iter  20 value 1352.199980
final  value 1346.326839
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.848670
iter  20 value 1351.687056
final  value 1345.800671
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.702462
iter  20 value 1352.611341
final  value 1346.592808
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.123236
iter  20 value 1351.303735
final  value 1344.833622
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.766812
iter  20 value 1351.652285
final  value 1345.805951
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.725631
iter  20 value 1352.557818
final  value 1346.604280
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.679224
iter  20 value 1352.553038
final  value 1346.604551
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.702760
iter  20 value 1351.535579
final  value 1345.635820
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.938766
iter  20 value 1352.588594
final  value 1345.985781
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.326220
iter  20 value 1351.614779
final  value 1346.153844
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.616838
iter  20 value 1352.395316
final  value 1346.488191
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.507515
iter  20 value 1352.348697
final  value 1346.430993
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.776592
iter  20 value 1352.528301
final  value 1346.602627
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.684070
iter  20 value 1352.384357
final  value 1346.537576
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.254603
iter  20 value 1351.971538
final  value 1346.179613
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.485425
iter  20 value 1351.741849
final  value 1346.363725
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.320849
iter  20 value 1352.582838
final  value 1346.253591
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.561346
iter  20 value 1352.389837
final  value 1346.454282
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.269928
iter  20 value 1351.913623
final  value 1346.033864
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.556216
iter  20 value 1352.571520
final  value 1346.450532
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.694786
iter  20 value 1352.331530
final  value 1346.546585
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.451294
iter  20 value 1352.239717
final  value 1346.349437
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.473093
iter  20 value 1352.235313
final  value 1346.395540
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.644200
iter  20 value 1352.555709
final  value 1346.533141
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.991885
iter  20 value 1351.911451
final  value 1346.038814
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.710630
iter  20 value 1352.553502
final  value 1346.614291
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.351751
iter  20 value 1352.168003
final  value 1346.269566
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.046896
iter  20 value 1351.946900
final  value 1346.083198
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.156680
iter  20 value 1350.818177
final  value 1344.885291
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.288959
iter  20 value 1351.227483
final  value 1345.053846
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.957427
iter  20 value 1351.898271
final  value 1345.929555
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.262632
iter  20 value 1350.204416
final  value 1344.073754
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.693395
iter  20 value 1352.621636
final  value 1346.588786
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.478235
iter  20 value 1352.538284
final  value 1346.479170
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.367105
iter  20 value 1350.434640
final  value 1344.235052
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.503446
iter  20 value 1352.518397
final  value 1346.400195
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.045322
iter  20 value 1352.147045
final  value 1346.120508
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.240341
iter  20 value 1352.004745
final  value 1346.106981
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.434131
iter  20 value 1352.030701
final  value 1345.186048
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.210582
iter  20 value 1350.890489
final  value 1345.684183
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.610494
iter  20 value 1353.895501
final  value 1346.467658
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.500188
iter  20 value 1352.086035
final  value 1346.291168
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.764066
iter  20 value 1352.592278
final  value 1346.603048
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.629785
iter  20 value 1353.399397
final  value 1346.411860
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.685005
iter  20 value 1352.495132
final  value 1346.540912
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.571565
iter  20 value 1352.444736
final  value 1346.454321
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.607515
iter  20 value 1352.381775
final  value 1346.498330
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.967392
iter  20 value 1351.808918
final  value 1345.920266
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.679473
iter  20 value 1352.615002
final  value 1346.599013
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.512239
iter  20 value 1352.516122
final  value 1346.509292
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.304027
iter  20 value 1352.133218
final  value 1346.282951
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.305026
iter  20 value 1352.158400
final  value 1346.300002
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.820805
iter  20 value 1351.315775
final  value 1345.832814
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.419283
iter  20 value 1352.247059
final  value 1346.343152
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.634182
iter  20 value 1352.478493
final  value 1346.570677
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.333698
iter  20 value 1351.220047
final  value 1345.310563
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.667933
iter  20 value 1352.418084
final  value 1346.553818
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.364796
iter  20 value 1352.177369
final  value 1346.310438
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.176547
iter  20 value 1352.637192
final  value 1346.175542
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.214083
iter  20 value 1352.156371
final  value 1346.158081
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.294694
iter  20 value 1352.265228
final  value 1346.205709
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.470378
iter  20 value 1352.379979
final  value 1346.249154
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.665553
iter  20 value 1352.649387
final  value 1346.560143
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.507111
iter  20 value 1352.305672
final  value 1346.440645
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.865720
iter  20 value 1351.749413
final  value 1345.824896
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.779719
iter  20 value 1351.619411
final  value 1345.685208
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.536139
iter  20 value 1351.404841
final  value 1345.457451
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.527892
iter  20 value 1352.256801
final  value 1346.386564
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.899361
iter  20 value 1351.772427
final  value 1345.755365
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.701549
iter  20 value 1350.728085
final  value 1344.555375
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.679876
iter  20 value 1352.498571
final  value 1346.569974
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.531030
iter  20 value 1352.408201
final  value 1346.376556
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.777276
iter  20 value 1352.734594
final  value 1346.510364
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.748241
iter  20 value 1352.411764
final  value 1346.562552
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.453567
iter  20 value 1352.216564
final  value 1346.358896
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.373689
iter  20 value 1352.122105
final  value 1346.187927
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.585134
iter  20 value 1351.280117
final  value 1345.379900
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.311688
iter  20 value 1352.258632
final  value 1346.180854
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.361310
iter  20 value 1352.190715
final  value 1346.351593
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.917267
iter  20 value 1351.947085
final  value 1345.894907
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.519246
iter  20 value 1351.317322
final  value 1345.464102
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.420867
iter  20 value 1351.395602
final  value 1345.371585
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.032745
iter  20 value 1352.092594
final  value 1345.953193
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.779012
iter  20 value 1351.457379
final  value 1345.683326
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.614761
iter  20 value 1352.556638
final   value 1346.543323
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1373.890653
iter  20 value 1349.887261
final   value 1343.785711
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.234334
iter  20 value 1352.241795
final   value 1346.172457
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.644538
iter  20 value 1352.486038
final   value 1346.540321
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.714495
iter  20 value 1352.647440
final   value 1346.601391
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.661118
iter  20 value 1351.474494
final   value 1345.557234
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.272213
iter  20 value 1352.235586
final   value 1346.257355
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.589759
iter  20 value 1352.463645
final   value 1346.513742
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.476800
iter  20 value 1352.388675
final   value 1346.326168
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.824939
iter  20 value 1351.650559
final  value 1345.853014
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.983861
iter  20 value 1351.938489
final  value 1345.881944
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.169170
iter  20 value 1351.083097
final  value 1344.947184
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.269180
iter  20 value 1350.691864
final  value 1345.060328
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.601426
iter  20 value 1352.562382
final  value 1346.412699
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.429357
iter  20 value 1352.270717
final  value 1346.370358
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.808561
iter  20 value 1351.749848
final  value 1345.865748
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.247742
iter  20 value 1352.336756
final  value 1346.371684
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.043812
iter  20 value 1351.797356
final  value 1346.174549
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.285116
iter  20 value 1352.420344
final  value 1346.270530
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.358801
iter  20 value 1350.269973
final  value 1344.359311
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.740694
iter  20 value 1351.705395
final  value 1345.590849
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.247033
iter  20 value 1352.092317
final  value 1346.195318
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.649800
iter  20 value 1352.442996
final  value 1346.473399
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.003311
iter  20 value 1350.832694
final  value 1344.978179
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.664712
iter  20 value 1352.497324
final  value 1346.554991
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.662984
iter  20 value 1352.472202
final  value 1346.554320
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.619397
iter  20 value 1352.182201
final  value 1346.552106
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.333178
iter  20 value 1350.960205
final  value 1345.115183
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.190920
iter  20 value 1351.623905
final  value 1346.117388
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.578358
iter  20 value 1352.334635
final  value 1346.397430
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.630888
iter  20 value 1352.504631
final  value 1346.535169
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.747120
iter  20 value 1352.418672
final  value 1346.542006
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.094994
iter  20 value 1352.190782
final  value 1346.184877
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.755490
iter  20 value 1352.502909
final  value 1346.604263
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.009284
iter  20 value 1351.374054
final  value 1345.969040
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.628284
iter  20 value 1352.564938
final  value 1346.556311
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.150485
iter  20 value 1351.934726
final  value 1345.980292
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.625207
iter  20 value 1352.564286
final  value 1346.559653
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.868941
iter  20 value 1351.689557
final  value 1345.756396
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.229050
iter  20 value 1352.101377
final  value 1346.248623
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.671754
iter  20 value 1352.631919
final  value 1346.588803
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.604565
iter  20 value 1352.370299
final  value 1346.481235
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.644938
iter  20 value 1352.320168
final  value 1346.446814
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.582899
iter  20 value 1352.324134
final  value 1346.474349
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.879340
iter  20 value 1352.460407
final  value 1346.597588
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.628089
iter  20 value 1352.645506
final  value 1346.511087
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.561810
iter  20 value 1352.439744
final  value 1346.448011
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.581166
iter  20 value 1352.955391
final  value 1346.495979
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.561103
iter  20 value 1352.436389
final  value 1346.483740
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.682967
iter  20 value 1352.562465
final  value 1346.561443
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.569789
iter  20 value 1351.102233
final  value 1345.463957
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.073886
iter  20 value 1352.017744
final  value 1345.969320
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.364801
iter  20 value 1352.193786
final  value 1346.292485
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.231475
iter  20 value 1349.955214
final  value 1343.774222
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.623785
iter  20 value 1352.464574
final  value 1346.471208
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.653205
iter  20 value 1352.627377
final  value 1346.586763
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.780142
iter  20 value 1352.539863
final  value 1346.604671
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.396672
iter  20 value 1352.254257
final  value 1346.299399
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.582259
iter  20 value 1351.554831
final  value 1345.434754
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.528305
iter  20 value 1352.227459
final  value 1346.438715
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.504454
iter  20 value 1352.253965
final  value 1346.421596
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.358173
iter  20 value 1352.318007
final  value 1346.243090
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.698056
iter  20 value 1352.524612
final  value 1346.500159
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.628776
iter  20 value 1352.477091
final   value 1346.444396
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.419248
iter  20 value 1352.534678
final   value 1346.405566
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.512203
iter  20 value 1352.066691
final   value 1346.318075
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.653308
iter  20 value 1352.570636
final   value 1346.566494
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.499413
iter  20 value 1352.499179
final   value 1346.492421
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.690287
iter  20 value 1352.536594
final   value 1346.615437
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.463728
iter  20 value 1352.115021
final   value 1345.369502
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.568369
iter  20 value 1352.352778
final   value 1346.429424
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.728656
iter  20 value 1352.521387
final   value 1346.614630
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1374.779138
iter  20 value 1350.583969
final  value 1344.607794
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.017341
iter  20 value 1351.738258
final  value 1345.862875
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.735463
iter  20 value 1352.511113
final  value 1346.596722
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.659451
iter  20 value 1352.446306
final  value 1346.536286
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.153687
iter  20 value 1351.962312
final  value 1346.108242
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.600703
iter  20 value 1352.552201
final  value 1346.516299
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.674660
iter  20 value 1352.501908
final  value 1346.562355
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.546451
iter  20 value 1351.407344
final  value 1345.516080
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.578197
iter  20 value 1352.231202
final  value 1346.447892
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.875233
iter  20 value 1352.300779
final  value 1345.463248
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.215959
iter  20 value 1350.949367
final  value 1345.033543
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.394672
iter  20 value 1352.219948
final  value 1346.309948
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.460749
iter  20 value 1352.244569
final  value 1346.343124
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.480044
iter  20 value 1352.469638
final  value 1346.465575
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.116982
iter  20 value 1351.984609
final  value 1346.046123
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.700607
iter  20 value 1351.883428
final  value 1345.718638
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.153928
iter  20 value 1351.880976
final  value 1345.890398
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.952633
iter  20 value 1350.811361
final  value 1344.696418
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.413810
iter  20 value 1351.349820
final   value 1345.330201
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.614443
iter  20 value 1352.573678
final   value 1346.584952
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.928174
iter  20 value 1350.749482
final   value 1344.849202
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.251201
iter  20 value 1352.113681
final   value 1346.182954
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.852615
iter  20 value 1350.769926
final   value 1344.605401
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.281080
iter  20 value 1352.042370
final   value 1346.078890
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.399116
iter  20 value 1352.902168
final   value 1346.385254
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.909861
iter  20 value 1351.623135
final   value 1346.022343
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.747831
iter  20 value 1352.507550
final   value 1346.608419
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.619139
iter  20 value 1352.458469
final  value 1346.527986
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.069641
iter  20 value 1352.017263
final  value 1346.088511
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.108534
iter  20 value 1348.825045
final  value 1343.830290
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.070838
iter  20 value 1352.168791
final  value 1346.191354
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.155792
iter  20 value 1350.947120
final  value 1344.923412
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.512328
iter  20 value 1350.071010
final  value 1344.175355
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.746224
iter  20 value 1352.600948
final  value 1346.608460
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.579495
iter  20 value 1351.139105
final  value 1344.077095
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.395091
iter  20 value 1350.257937
final  value 1344.191495
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.111733
iter  20 value 1351.068032
final  value 1344.896224
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.654832
iter  20 value 1350.568227
final  value 1344.420906
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.203598
iter  20 value 1353.025442
final  value 1346.249038
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.215225
iter  20 value 1349.862456
final  value 1343.986939
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.041553
iter  20 value 1352.067088
final  value 1345.124185
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.737562
iter  20 value 1352.518523
final  value 1346.615539
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.515970
iter  20 value 1350.775160
final  value 1345.088318
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.131832
iter  20 value 1351.756211
final  value 1345.922824
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.285477
iter  20 value 1352.224185
final  value 1346.167657
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.668773
iter  20 value 1352.406252
final  value 1346.471925
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.597706
iter  20 value 1352.351124
final  value 1346.419353
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1373.865475
iter  20 value 1349.919556
final  value 1343.599918
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.680247
iter  20 value 1352.480594
final  value 1346.426934
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.029721
iter  20 value 1352.409849
final  value 1346.108999
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.202167
iter  20 value 1352.218023
final  value 1346.168490
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.948292
iter  20 value 1352.001357
final  value 1345.881548
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.702829
iter  20 value 1351.314403
final  value 1345.345026
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.488839
iter  20 value 1352.618232
final  value 1346.510508
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.984130
iter  20 value 1351.845124
final  value 1346.020855
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.112766
iter  20 value 1352.210397
final  value 1346.151623
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.766710
iter  20 value 1352.469313
final  value 1346.595793
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.287164
iter  20 value 1351.985699
final  value 1346.156857
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.625610
iter  20 value 1352.447109
final  value 1346.475114
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.544797
iter  20 value 1352.602188
final  value 1346.492227
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.652575
iter  20 value 1352.509148
final  value 1346.488518
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.675899
iter  20 value 1352.552389
final  value 1346.549213
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.796006
iter  20 value 1350.562648
final  value 1344.586509
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.504528
iter  20 value 1352.589769
final  value 1346.469976
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.017384
iter  20 value 1351.804479
final  value 1345.857510
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.700089
iter  20 value 1352.438657
final  value 1346.574162
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.901812
iter  20 value 1351.791473
final  value 1345.826224
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.623390
iter  20 value 1352.614520
final  value 1346.563679
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.423541
iter  20 value 1351.698252
final  value 1346.193162
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.233854
iter  20 value 1351.101644
final  value 1345.118432
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.273025
iter  20 value 1352.370707
final  value 1346.198906
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.836876
iter  20 value 1352.564943
final  value 1345.899144
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.514729
iter  20 value 1352.382228
final  value 1346.414129
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.510508
iter  20 value 1352.212640
final  value 1346.303723
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.241167
iter  20 value 1351.606971
final  value 1346.077662
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.794169
iter  20 value 1351.715405
final  value 1345.736895
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.914422
iter  20 value 1351.614171
final  value 1345.976131
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.468506
iter  20 value 1352.191094
final  value 1346.394569
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.574505
iter  20 value 1351.456303
final  value 1345.421811
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.729310
iter  20 value 1351.859000
final  value 1345.781475
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.730029
iter  20 value 1352.508586
final  value 1346.606563
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.563465
iter  20 value 1352.193311
final  value 1346.434985
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.753897
iter  20 value 1352.535950
final  value 1346.594932
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.513757
iter  20 value 1352.541733
final  value 1346.459944
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.693913
iter  20 value 1352.481077
final  value 1346.578549
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.594023
iter  20 value 1351.411856
final  value 1345.422351
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.050573
iter  20 value 1352.040044
final  value 1346.020037
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.675816
iter  20 value 1352.569880
final  value 1346.585650
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.500363
iter  20 value 1352.074439
final  value 1346.378820
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.946899
iter  20 value 1351.810648
final  value 1345.901982
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.649319
iter  20 value 1352.371477
final  value 1346.502185
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.442134
iter  20 value 1352.003853
final  value 1346.302199
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.424966
iter  20 value 1353.173275
final  value 1346.448262
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.584648
iter  20 value 1352.480949
final  value 1346.458220
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.374397
iter  20 value 1352.508302
final  value 1346.443933
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.305385
iter  20 value 1352.257565
final  value 1346.293943
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.690041
iter  20 value 1352.461965
final  value 1346.547585
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.571801
iter  20 value 1352.249270
final  value 1346.448055
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.632112
iter  20 value 1352.610836
final  value 1346.509636
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.026990
iter  20 value 1352.539726
final  value 1346.109532
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.932564
iter  20 value 1351.678755
final  value 1345.713984
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.333012
iter  20 value 1352.269414
final  value 1346.358771
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.634211
iter  20 value 1352.522588
final  value 1346.538069
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.662354
iter  20 value 1352.396225
final  value 1346.526827
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.107946
iter  20 value 1351.992608
final  value 1346.004224
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.562267
iter  20 value 1352.535476
final  value 1346.475200
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.518265
iter  20 value 1352.416736
final  value 1346.448255
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.365211
iter  20 value 1352.105637
final  value 1346.225666
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.564611
iter  20 value 1352.432362
final  value 1346.480918
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.504387
iter  20 value 1351.288210
final  value 1345.361338
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.358307
iter  20 value 1352.343207
final  value 1346.156291
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.468029
iter  20 value 1352.638162
final  value 1346.456736
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.495514
iter  20 value 1352.298486
final  value 1346.438270
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.424320
iter  20 value 1352.120353
final  value 1346.345365
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.677406
iter  20 value 1352.514755
final  value 1346.545723
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.523817
iter  20 value 1352.530928
final  value 1346.474071
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.682809
iter  20 value 1352.821440
final  value 1346.570636
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.112494
iter  20 value 1351.940369
final  value 1346.033368
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.638995
iter  20 value 1353.095072
final  value 1346.548407
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.340649
iter  20 value 1352.239116
final  value 1346.193010
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.558190
iter  20 value 1352.158982
final  value 1346.371125
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.459531
iter  20 value 1352.349417
final  value 1346.313330
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.702041
iter  20 value 1352.499917
final  value 1346.578761
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.411408
iter  20 value 1352.363551
final  value 1346.273723
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.637750
iter  20 value 1351.826520
final  value 1345.671262
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.386115
iter  20 value 1352.470806
final  value 1346.294868
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.572576
iter  20 value 1352.701715
final  value 1346.479284
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.208132
iter  20 value 1351.110373
final  value 1345.014481
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.341664
iter  20 value 1351.263280
final  value 1345.195040
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.203421
iter  20 value 1352.241088
final  value 1346.040741
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.018121
iter  20 value 1352.022880
final  value 1345.928783
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.739476
iter  20 value 1352.545451
final  value 1346.609742
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.526018
iter  20 value 1351.458016
final  value 1345.309897
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.482159
iter  20 value 1352.803907
final  value 1346.371099
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.301551
iter  20 value 1352.698403
final  value 1346.298405
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.634046
iter  20 value 1351.485688
final  value 1345.505686
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.614931
iter  20 value 1352.563102
final  value 1346.525678
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.590980
iter  20 value 1352.606862
final  value 1346.534753
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.708882
iter  20 value 1352.485909
final  value 1346.586550
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.576859
iter  20 value 1352.310662
final  value 1346.411053
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.771401
iter  20 value 1352.584812
final  value 1346.612862
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.736219
iter  20 value 1352.546555
final  value 1346.616414
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.347512
iter  20 value 1352.328365
final  value 1346.232960
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.645023
iter  20 value 1352.547426
final  value 1346.523215
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.349605
iter  20 value 1351.782506
final  value 1346.314748
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.460428
iter  20 value 1352.369634
final  value 1346.381455
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.614631
iter  20 value 1352.329895
final  value 1345.675865
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.078259
iter  20 value 1351.694314
final  value 1346.001992
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.461751
iter  20 value 1352.474077
final  value 1346.410718
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.663812
iter  20 value 1352.609610
final  value 1346.608243
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.314854
iter  20 value 1352.077175
final  value 1346.275316
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.567973
iter  20 value 1352.777948
final  value 1346.494194
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.745472
iter  20 value 1351.861336
final  value 1345.810805
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.347265
iter  20 value 1352.419228
final  value 1346.251251
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.611561
iter  20 value 1352.499054
final  value 1346.505525
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.484772
iter  20 value 1352.276990
final  value 1346.450783
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.636742
iter  20 value 1351.933755
final  value 1346.459912
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.471497
iter  20 value 1352.434718
final  value 1346.369920
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.486500
iter  20 value 1352.337337
final  value 1346.489160
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.743159
iter  20 value 1351.537804
final  value 1345.724797
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.962430
iter  20 value 1351.844393
final  value 1346.060907
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.337540
iter  20 value 1352.264580
final  value 1346.235572
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.738951
iter  20 value 1352.498996
final  value 1346.610979
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.768896
iter  20 value 1352.558104
final  value 1346.614882
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.449171
iter  20 value 1352.467562
final  value 1346.285074
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.676126
iter  20 value 1352.588118
final  value 1346.600557
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.646210
iter  20 value 1352.630341
final  value 1346.549445
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.713582
iter  20 value 1353.134949
final  value 1345.575241
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.548450
iter  20 value 1352.484943
final  value 1346.522464
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.666616
iter  20 value 1352.514195
final  value 1346.571597
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.964328
iter  20 value 1352.772558
final  value 1345.785818
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.327890
iter  20 value 1350.994967
final  value 1345.012918
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.659992
iter  20 value 1352.778354
final  value 1346.467022
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.775753
iter  20 value 1350.603169
final  value 1344.940230
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.949890
iter  20 value 1352.396463
final  value 1346.104615
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1373.310898
iter  20 value 1349.085708
final  value 1342.804936
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1373.675808
iter  20 value 1349.737129
final  value 1343.594187
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.518044
iter  20 value 1351.492143
final  value 1345.579183
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.709336
iter  20 value 1352.522769
final  value 1346.580739
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.645082
iter  20 value 1352.134316
final  value 1345.326405
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.471835
iter  20 value 1352.611624
final  value 1346.342317
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.720717
iter  20 value 1352.484135
final  value 1346.602463
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.744300
iter  20 value 1351.390741
final  value 1345.683702
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.602265
iter  20 value 1352.823594
final  value 1346.482063
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.750226
iter  20 value 1352.618910
final  value 1346.607042
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.652019
iter  20 value 1352.289639
final  value 1346.500412
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.435559
iter  20 value 1352.281220
final  value 1346.312414
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.539173
iter  20 value 1352.461720
final  value 1346.475218
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.631267
iter  20 value 1352.667253
final  value 1346.504383
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.220238
iter  20 value 1351.124942
final  value 1345.172686
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.648497
iter  20 value 1351.411001
final  value 1345.511799
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.644543
iter  20 value 1352.757118
final  value 1346.580055
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.086459
iter  20 value 1352.107943
final  value 1345.878407
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.629731
iter  20 value 1352.795120
final  value 1346.580853
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.560392
iter  20 value 1352.485814
final  value 1346.522035
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.556454
iter  20 value 1352.536387
final  value 1346.476166
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.451408
iter  20 value 1352.389533
final  value 1346.375012
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.246674
iter  20 value 1351.976329
final  value 1346.118116
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1374.282797
iter  20 value 1350.149175
final   value 1344.106539
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.215691
iter  20 value 1351.047327
final   value 1345.007806
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.700125
iter  20 value 1352.553962
final   value 1346.596536
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.439131
iter  20 value 1352.231785
final   value 1346.285470
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.175373
iter  20 value 1352.009639
final   value 1346.149267
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.230376
iter  20 value 1352.065897
final   value 1346.180581
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.586806
iter  20 value 1352.491011
final   value 1346.521969
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.222612
iter  20 value 1351.950594
final   value 1346.134382
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.395706
iter  20 value 1352.241251
final   value 1346.289499
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.526858
iter  20 value 1352.399377
final  value 1346.523208
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.261321
iter  20 value 1352.237295
final  value 1346.367332
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.630674
iter  20 value 1352.536045
final  value 1346.568119
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.529499
iter  20 value 1352.502562
final  value 1346.515798
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.648305
iter  20 value 1352.546399
final  value 1346.581450
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.657404
iter  20 value 1352.535508
final  value 1346.573545
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.515961
iter  20 value 1352.837072
final  value 1346.467643
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.528865
iter  20 value 1352.358483
final  value 1346.414291
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.702768
iter  20 value 1352.440197
final  value 1346.555881
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.730018
iter  20 value 1352.582586
final  value 1346.601151
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.192899
iter  20 value 1352.074456
final  value 1346.176064
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.718387
iter  20 value 1352.598164
final  value 1346.573625
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.720099
iter  20 value 1352.594126
final  value 1346.605577
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.657634
iter  20 value 1352.483207
final  value 1346.540365
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.756543
iter  20 value 1352.212511
final  value 1346.512239
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.231028
iter  20 value 1352.287925
final  value 1346.156045
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.642556
iter  20 value 1352.674591
final  value 1346.556252
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.741663
iter  20 value 1352.629534
final  value 1346.583361
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.609273
iter  20 value 1352.451959
final  value 1346.507360
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.350553
iter  20 value 1352.345784
final  value 1346.366943
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.690453
iter  20 value 1352.670266
final  value 1346.608164
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.628973
iter  20 value 1352.603783
final  value 1346.583530
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.427178
iter  20 value 1351.236494
final  value 1345.328020
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.493661
iter  20 value 1352.388934
final  value 1346.470602
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.524238
iter  20 value 1352.332742
final  value 1346.353876
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.360236
iter  20 value 1351.892598
final  value 1346.227772
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.578661
iter  20 value 1352.625905
final  value 1346.537429
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.940539
iter  20 value 1352.207434
final  value 1345.596137
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.428318
iter  20 value 1352.225164
final  value 1346.422004
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.609265
iter  20 value 1351.179683
final  value 1345.112869
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.490501
iter  20 value 1352.420891
final  value 1346.324727
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.041188
iter  20 value 1351.853291
final  value 1345.874196
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.447569
iter  20 value 1351.448705
final  value 1346.157079
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.648969
iter  20 value 1352.630863
final  value 1346.564767
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.713324
iter  20 value 1352.554570
final  value 1346.616308
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.696311
iter  20 value 1352.487317
final  value 1346.584155
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.283461
iter  20 value 1352.231460
final  value 1346.287990
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.310441
iter  20 value 1352.655207
final  value 1346.233175
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.599627
iter  20 value 1351.304704
final  value 1345.445774
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.106598
iter  20 value 1350.784522
final  value 1344.921432
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.517262
iter  20 value 1352.718697
final  value 1346.485599
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.155027
iter  20 value 1351.834598
final  value 1346.020469
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.723879
iter  20 value 1352.536223
final  value 1346.599512
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.123613
iter  20 value 1351.147124
final  value 1344.962933
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.565994
iter  20 value 1351.522841
final  value 1345.582329
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.707573
iter  20 value 1352.795529
final  value 1346.595230
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.354580
iter  20 value 1349.175705
final  value 1344.011452
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.429699
iter  20 value 1351.118564
final  value 1345.412412
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.414734
iter  20 value 1352.121726
final  value 1346.334221
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.462475
iter  20 value 1352.369232
final  value 1346.418042
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.223159
iter  20 value 1353.345969
final  value 1346.020125
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.309820
iter  20 value 1352.536628
final  value 1346.283332
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.653804
iter  20 value 1352.167802
final  value 1346.395245
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.576109
iter  20 value 1352.478979
final  value 1346.472927
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.727109
iter  20 value 1352.096964
final  value 1346.410585
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.552705
iter  20 value 1352.545149
final  value 1346.420800
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.881027
iter  20 value 1351.709562
final  value 1345.709421
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.377865
iter  20 value 1352.442527
final  value 1346.286803
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.942455
iter  20 value 1351.738584
final  value 1345.789508
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.965840
iter  20 value 1351.742754
final  value 1345.864975
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.981580
iter  20 value 1352.102156
final  value 1345.972237
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.822523
iter  20 value 1351.725703
final  value 1345.660158
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.885022
iter  20 value 1350.885646
final  value 1344.659168
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.131700
iter  20 value 1351.092696
final  value 1344.879956
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.603977
iter  20 value 1352.483709
final  value 1346.454501
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.829188
iter  20 value 1351.768563
final  value 1345.615337
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.643633
iter  20 value 1351.514760
final  value 1345.562643
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1373.891714
iter  20 value 1349.862137
final  value 1343.589975
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.669183
iter  20 value 1352.567866
final  value 1346.566518
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.966888
iter  20 value 1351.820981
final  value 1345.858647
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.397135
iter  20 value 1352.666573
final  value 1346.441460
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1373.457966
iter  20 value 1349.490774
final  value 1343.145410
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1373.644749
iter  20 value 1349.741630
final  value 1343.404609
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.599991
iter  20 value 1352.647297
final  value 1346.564200
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.572721
iter  20 value 1352.712458
final  value 1346.506666
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.662189
iter  20 value 1352.664858
final  value 1346.544332
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.533950
iter  20 value 1352.729673
final  value 1346.474776
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.220096
iter  20 value 1352.516020
final  value 1346.300620
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.580858
iter  20 value 1352.462049
final  value 1346.522760
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.486369
iter  20 value 1352.408817
final  value 1346.411111
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.644064
iter  20 value 1352.482035
final  value 1346.494507
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.110934
iter  20 value 1352.299202
final  value 1346.090107
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.737174
iter  20 value 1351.694685
final  value 1345.867548
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.761369
iter  20 value 1352.597955
final  value 1346.605895
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.501615
iter  20 value 1352.434009
final  value 1346.468272
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.717992
iter  20 value 1352.565770
final  value 1346.601660
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.965241
iter  20 value 1351.371763
final  value 1345.984905
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.388441
iter  20 value 1352.240040
final  value 1346.290443
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.183124
iter  20 value 1352.843386
final  value 1346.046616
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.600342
iter  20 value 1352.586218
final  value 1346.518589
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.202947
iter  20 value 1351.829020
final  value 1346.162588
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.666290
iter  20 value 1352.516579
final  value 1346.533245
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.418935
iter  20 value 1352.205998
final  value 1346.256235
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.126438
iter  20 value 1351.669229
final  value 1345.932082
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.310127
iter  20 value 1352.121995
final  value 1346.245343
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.654378
iter  20 value 1352.503249
final  value 1346.549591
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.413208
iter  20 value 1351.366383
final  value 1345.459676
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.392328
iter  20 value 1352.629381
final  value 1346.329470
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.608107
iter  20 value 1352.606083
final  value 1346.558907
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.354041
iter  20 value 1352.023922
final   value 1346.140032
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.203412
iter  20 value 1351.096997
final   value 1345.185821
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.712371
iter  20 value 1352.482636
final   value 1346.567473
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.723579
iter  20 value 1350.025380
final   value 1344.516360
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.282269
iter  20 value 1352.625076
final   value 1346.433179
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.467148
iter  20 value 1352.208151
final   value 1346.382935
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.775729
iter  20 value 1351.214571
final   value 1345.813435
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.010136
iter  20 value 1350.768638
final   value 1344.777634
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.995589
iter  20 value 1351.812422
final   value 1345.846138
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.555351
iter  20 value 1352.613072
final  value 1346.578843
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.126751
iter  20 value 1350.971168
final  value 1345.050900
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.694859
iter  20 value 1352.483334
final  value 1346.562018
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.377976
iter  20 value 1351.097046
final  value 1345.293526
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.360079
iter  20 value 1352.232847
final  value 1346.163528
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.452979
iter  20 value 1352.263651
final  value 1346.513202
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.096406
iter  20 value 1351.968188
final  value 1346.092474
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.753497
iter  20 value 1352.528493
final  value 1346.607130
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.518607
iter  20 value 1352.539553
final  value 1346.525068
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.106704
iter  20 value 1351.931713
final  value 1346.096634
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.911749
iter  20 value 1349.990086
final  value 1344.779908
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.375635
iter  20 value 1352.656389
final  value 1346.419190
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.510311
iter  20 value 1351.282719
final  value 1345.433895
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.405024
iter  20 value 1352.343102
final  value 1346.365857
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.648411
iter  20 value 1352.604247
final  value 1346.590037
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.780996
iter  20 value 1352.524107
final  value 1346.603087
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.226109
iter  20 value 1352.902716
final  value 1346.251253
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.299003
iter  20 value 1350.150885
final  value 1344.107820
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.609441
iter  20 value 1352.482735
final  value 1346.527269
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.551885
iter  20 value 1352.548309
final  value 1346.382859
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.288093
iter  20 value 1352.532384
final  value 1346.146736
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.665200
iter  20 value 1351.635140
final  value 1345.425561
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.663136
iter  20 value 1352.495266
final  value 1346.566716
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.720726
iter  20 value 1352.502902
final  value 1346.600555
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.535315
iter  20 value 1351.446727
final  value 1345.429467
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.310500
iter  20 value 1351.769314
final  value 1345.911383
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.694548
iter  20 value 1352.394024
final  value 1346.517499
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.520333
iter  20 value 1352.412746
final  value 1346.423455
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.335800
iter  20 value 1352.110292
final  value 1346.165166
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.629089
iter  20 value 1352.425264
final  value 1346.532980
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.714103
iter  20 value 1352.619449
final  value 1346.596239
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.915391
iter  20 value 1351.854810
final  value 1345.861013
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.054828
iter  20 value 1349.645642
final  value 1343.713010
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.379058
iter  20 value 1352.081482
final  value 1346.256617
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.650890
iter  20 value 1352.474482
final  value 1346.535084
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.290801
iter  20 value 1351.858116
final  value 1346.035444
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.528454
iter  20 value 1352.729044
final  value 1346.560421
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.357179
iter  20 value 1352.379378
final  value 1346.326206
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.294455
iter  20 value 1351.122004
final  value 1345.224581
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.345765
iter  20 value 1351.212076
final  value 1345.247252
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.774623
iter  20 value 1350.765299
final  value 1344.533126
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1373.706703
iter  20 value 1349.549861
final  value 1343.483783
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.356528
iter  20 value 1352.260062
final  value 1346.252847
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.996325
iter  20 value 1352.039407
final  value 1345.547907
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.483538
iter  20 value 1352.141639
final  value 1346.351176
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.450780
iter  20 value 1352.539936
final  value 1346.477858
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.250278
iter  20 value 1350.115368
final  value 1344.112331
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.560759
iter  20 value 1350.570175
final  value 1344.261005
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.501176
iter  20 value 1352.528414
final  value 1346.410574
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.624886
iter  20 value 1352.521271
final  value 1346.366173
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.594778
iter  20 value 1352.336116
final  value 1346.501193
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.065065
iter  20 value 1350.876453
final  value 1344.789985
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.491637
iter  20 value 1352.649177
final  value 1346.541757
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.356561
iter  20 value 1352.280864
final  value 1346.344166
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.762981
iter  20 value 1352.517750
final  value 1346.616197
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.740019
iter  20 value 1352.617133
final  value 1346.616814
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.756739
iter  20 value 1352.544888
final  value 1346.616748
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.752335
iter  20 value 1352.545774
final  value 1346.616878
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1372.788571
iter  20 value 1348.825288
final  value 1341.806721
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.738940
iter  20 value 1352.532656
final  value 1346.614290
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.745443
iter  20 value 1352.520186
final  value 1346.616578
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.755882
iter  20 value 1352.554664
final  value 1346.616974
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.560473
iter  20 value 1352.327546
final  value 1346.530791
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.738713
iter  20 value 1352.623202
final  value 1346.611083
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.745871
iter  20 value 1352.591901
final  value 1346.617006
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.739195
iter  20 value 1352.718340
final  value 1346.600767
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.758589
iter  20 value 1352.534215
final  value 1346.617133
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.763658
iter  20 value 1352.547252
final  value 1346.617109
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.469300
iter  20 value 1352.578505
final  value 1346.483177
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.753894
iter  20 value 1352.529698
final  value 1346.616706
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.750539
iter  20 value 1352.518934
final  value 1346.616989
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.652265
iter  20 value 1351.192956
final  value 1345.109625
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1374.869080
iter  20 value 1349.691876
final  value 1344.408221
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.750912
iter  20 value 1352.584070
final  value 1346.617116
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.053351
iter  20 value 1351.458927
final  value 1345.963088
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.715008
iter  20 value 1352.528847
final  value 1346.614599
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.745922
iter  20 value 1352.572652
final  value 1346.616658
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.263531
iter  20 value 1351.748155
final  value 1346.181824
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.742007
iter  20 value 1352.595202
final  value 1346.615150
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.770349
iter  20 value 1352.504962
final  value 1346.616955
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.733228
iter  20 value 1352.535009
final  value 1346.615525
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.575175
iter  20 value 1352.375226
final  value 1346.519834
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.749293
iter  20 value 1352.526222
final  value 1346.616971
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.727251
iter  20 value 1352.549316
final  value 1346.615389
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.747852
iter  20 value 1352.534493
final  value 1346.615967
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.734882
iter  20 value 1352.537759
final  value 1346.615813
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.425461
iter  20 value 1352.484095
final  value 1346.364924
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.388344
iter  20 value 1352.034854
final  value 1346.319352
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.771079
iter  20 value 1352.555281
final  value 1346.617106
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.722195
iter  20 value 1352.531880
final  value 1346.613615
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.745491
iter  20 value 1352.565597
final  value 1346.617030
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.770170
iter  20 value 1352.506563
final  value 1346.617044
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1372.183805
iter  20 value 1346.063568
final  value 1341.007125
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.613782
iter  20 value 1352.466352
final  value 1346.570831
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.009119
iter  20 value 1351.573662
final  value 1345.958609
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.714380
iter  20 value 1352.578404
final  value 1346.610016
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.725085
iter  20 value 1352.519984
final  value 1346.610040
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.749106
iter  20 value 1352.530066
final  value 1346.616559
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.766048
iter  20 value 1352.530733
final  value 1346.616403
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.707225
iter  20 value 1352.524659
final  value 1346.610693
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.675503
iter  20 value 1350.399260
final  value 1344.526581
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.681038
iter  20 value 1352.526539
final  value 1346.602358
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.735140
iter  20 value 1352.563309
final  value 1346.616227
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.757209
iter  20 value 1352.591392
final  value 1346.616081
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.747099
iter  20 value 1352.553374
final  value 1346.616727
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.724844
iter  20 value 1352.540486
final  value 1346.614898
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.760794
iter  20 value 1352.534487
final  value 1346.616907
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.709963
iter  20 value 1352.541661
final  value 1346.609475
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.728247
iter  20 value 1352.520298
final  value 1346.612919
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.696064
iter  20 value 1352.564732
final  value 1346.602740
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.666845
iter  20 value 1352.186189
final  value 1346.587341
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.748269
iter  20 value 1352.605030
final  value 1346.610733
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.756422
iter  20 value 1352.535511
final  value 1346.616976
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.712074
iter  20 value 1353.112204
final  value 1346.597000
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.757430
iter  20 value 1352.515084
final  value 1346.614825
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.681123
iter  20 value 1352.553617
final  value 1346.615584
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.646285
iter  20 value 1352.487680
final  value 1346.585149
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.715406
iter  20 value 1352.407546
final  value 1346.610185
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.671824
iter  20 value 1352.758577
final  value 1346.589595
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.761642
iter  20 value 1352.512358
final  value 1346.614393
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.248511
iter  20 value 1351.906816
final  value 1345.029887
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.721772
iter  20 value 1352.636027
final  value 1346.610855
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.755534
iter  20 value 1352.517434
final  value 1346.616948
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.751682
iter  20 value 1352.568339
final  value 1346.616814
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.634313
iter  20 value 1351.038478
final  value 1345.124352
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.754611
iter  20 value 1352.557124
final  value 1346.617130
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.745319
iter  20 value 1352.607923
final  value 1346.616483
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.765458
iter  20 value 1352.530008
final  value 1346.617110
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.756418
iter  20 value 1352.530982
final  value 1346.617139
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.680600
iter  20 value 1353.228592
final  value 1346.589437
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.760724
iter  20 value 1352.573229
final  value 1346.617130
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.744672
iter  20 value 1352.494144
final  value 1346.610659
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.763409
iter  20 value 1352.512095
final  value 1346.616827
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.751446
iter  20 value 1352.491989
final  value 1346.614436
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.590058
iter  20 value 1352.377426
final  value 1346.554538
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.719951
iter  20 value 1352.561358
final  value 1346.616381
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.720667
iter  20 value 1352.555973
final  value 1346.614934
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.733970
iter  20 value 1352.555189
final  value 1346.609931
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.743034
iter  20 value 1352.527879
final  value 1346.614365
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.699315
iter  20 value 1352.483658
final  value 1346.615184
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.746017
iter  20 value 1352.624229
final  value 1346.616742
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.756855
iter  20 value 1352.504340
final  value 1346.616224
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.673298
iter  20 value 1348.917991
final  value 1344.019423
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.723152
iter  20 value 1352.582936
final  value 1346.614739
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1373.547104
iter  20 value 1348.519818
final  value 1342.368223
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.731856
iter  20 value 1352.604522
final  value 1346.616959
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.008713
iter  20 value 1351.679068
final  value 1346.034676
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.234490
iter  20 value 1352.088027
final  value 1346.290874
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.957870
iter  20 value 1351.898827
final  value 1345.959594
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.747409
iter  20 value 1352.603958
final  value 1346.616838
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.718476
iter  20 value 1352.550477
final  value 1346.614684
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.657198
iter  20 value 1352.471110
final  value 1346.553608
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.394295
iter  20 value 1352.167092
final  value 1346.384200
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.740796
iter  20 value 1352.542241
final  value 1346.616142
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.388182
iter  20 value 1351.823210
final  value 1346.343410
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.595521
iter  20 value 1352.908992
final  value 1346.540797
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.756833
iter  20 value 1352.560792
final  value 1346.616980
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.707435
iter  20 value 1350.153616
final  value 1344.287180
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.756078
iter  20 value 1352.544778
final  value 1346.617076
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.772240
iter  20 value 1352.547021
final  value 1346.616573
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.712267
iter  20 value 1352.530265
final  value 1346.612619
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.595962
iter  20 value 1352.528160
final  value 1346.541894
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.613006
iter  20 value 1352.292126
final  value 1346.532192
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.569635
iter  20 value 1352.279151
final  value 1346.529546
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.720659
iter  20 value 1352.527745
final  value 1346.615558
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.726073
iter  20 value 1352.520905
final  value 1346.612373
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.695591
iter  20 value 1352.452057
final  value 1346.596779
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.546186
iter  20 value 1352.612280
final  value 1346.492985
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.747512
iter  20 value 1352.497399
final  value 1346.617087
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.761568
iter  20 value 1352.549554
final  value 1346.616771
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.719974
iter  20 value 1352.598442
final  value 1346.612698
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1374.897594
iter  20 value 1349.666035
final  value 1344.322332
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.749414
iter  20 value 1352.550382
final  value 1346.617031
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.404010
iter  20 value 1349.578466
final  value 1343.139817
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.725949
iter  20 value 1352.550739
final  value 1346.616809
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.765639
iter  20 value 1352.529361
final  value 1346.616376
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.751161
iter  20 value 1352.538747
final  value 1346.617002
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.755930
iter  20 value 1352.548648
final  value 1346.617125
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.707477
iter  20 value 1352.523585
final  value 1346.614140
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.347003
iter  20 value 1352.016029
final  value 1346.344445
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.751330
iter  20 value 1352.547304
final  value 1346.617031
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.741629
iter  20 value 1352.562513
final  value 1346.616511
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.441521
iter  20 value 1353.827728
final  value 1346.423328
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.757940
iter  20 value 1352.525306
final  value 1346.616793
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.732309
iter  20 value 1352.547077
final  value 1346.615867
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.763988
iter  20 value 1352.529468
final  value 1346.616757
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.746912
iter  20 value 1352.634242
final  value 1346.616665
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.738046
iter  20 value 1352.597150
final  value 1346.614295
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.038124
iter  20 value 1352.477835
final  value 1345.781120
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.670863
iter  20 value 1352.203688
final  value 1346.589185
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.713764
iter  20 value 1352.609349
final  value 1346.591793
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.512560
iter  20 value 1352.179232
final  value 1346.447970
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.445038
iter  20 value 1352.215351
final  value 1346.450840
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.699417
iter  20 value 1352.445630
final  value 1346.607518
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.098025
iter  20 value 1351.870834
final  value 1346.072860
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.732507
iter  20 value 1352.548158
final  value 1346.615784
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.711668
iter  20 value 1352.550931
final  value 1346.609930
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.713439
iter  20 value 1352.654085
final  value 1346.611502
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.757527
iter  20 value 1352.534137
final  value 1346.617105
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.723028
iter  20 value 1352.570018
final  value 1346.609684
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.439916
iter  20 value 1350.429941
final  value 1345.188670
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.744206
iter  20 value 1352.594048
final  value 1346.616675
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.728885
iter  20 value 1352.565433
final  value 1346.615477
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.702580
iter  20 value 1352.550610
final  value 1346.603629
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.741462
iter  20 value 1352.559239
final  value 1346.616707
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.674003
iter  20 value 1352.370692
final  value 1346.553514
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.748118
iter  20 value 1352.566572
final  value 1346.616716
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.762468
iter  20 value 1352.560000
final  value 1346.616929
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.571498
iter  20 value 1352.560184
final  value 1346.500363
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.724054
iter  20 value 1352.509424
final  value 1346.616041
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.766777
iter  20 value 1352.521712
final  value 1346.616977
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.758485
iter  20 value 1352.558834
final  value 1346.616962
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.525896
iter  20 value 1352.508728
final  value 1346.532945
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.649738
iter  20 value 1352.566014
final  value 1346.588133
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.314000
iter  20 value 1352.174275
final  value 1346.308451
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.735761
iter  20 value 1352.559418
final  value 1346.616438
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.955590
iter  20 value 1351.799740
final  value 1345.905516
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.729467
iter  20 value 1352.543091
final  value 1346.609907
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.120376
iter  20 value 1351.747150
final  value 1346.063203
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.123802
iter  20 value 1351.306407
final  value 1346.040824
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.741918
iter  20 value 1352.544397
final  value 1346.617096
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.085560
iter  20 value 1351.949197
final  value 1346.102458
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.581516
iter  20 value 1352.624868
final  value 1346.546749
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.430375
iter  20 value 1352.095371
final  value 1346.420337
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.757284
iter  20 value 1352.544536
final  value 1346.617108
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.523145
iter  20 value 1352.295862
final  value 1346.509929
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.768609
iter  20 value 1352.533581
final  value 1346.617081
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.722868
iter  20 value 1352.570129
final  value 1346.614974
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.965782
iter  20 value 1351.214120
final  value 1345.763552
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.754900
iter  20 value 1352.525050
final  value 1346.616205
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.741586
iter  20 value 1352.583375
final  value 1346.616879
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.525855
iter  20 value 1351.468151
final  value 1346.346717
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.743415
iter  20 value 1352.514803
final  value 1346.616117
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.753541
iter  20 value 1352.550982
final  value 1346.617137
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.711488
iter  20 value 1352.532533
final  value 1346.612631
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.707715
iter  20 value 1352.544010
final  value 1346.608068
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.758577
iter  20 value 1352.554215
final  value 1346.617134
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.755834
iter  20 value 1352.550567
final  value 1346.616997
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.753957
iter  20 value 1352.614445
final  value 1346.616876
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.752485
iter  20 value 1352.537701
final  value 1346.617033
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1372.087636
iter  20 value 1347.826493
final  value 1341.079551
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.747536
iter  20 value 1352.552973
final  value 1346.616657
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.713652
iter  20 value 1352.564242
final  value 1346.614107
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.763762
iter  20 value 1352.555524
final  value 1346.617118
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.759336
iter  20 value 1352.545991
final  value 1346.617110
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.696853
iter  20 value 1352.556112
final  value 1346.608038
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.524618
iter  20 value 1352.156018
final  value 1346.480098
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.773478
iter  20 value 1352.515056
final  value 1346.616830
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.925922
iter  20 value 1351.243375
final  value 1345.761898
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.738243
iter  20 value 1352.569590
final  value 1346.616550
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.724531
iter  20 value 1352.596636
final  value 1346.612661
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.374982
iter  20 value 1352.408734
final  value 1346.330664
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.762433
iter  20 value 1352.491135
final  value 1346.615684
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.511716
iter  20 value 1352.431097
final  value 1346.485303
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.759894
iter  20 value 1352.548568
final  value 1346.617102
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.744779
iter  20 value 1352.615629
final  value 1346.616502
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.642774
iter  20 value 1352.455695
final  value 1346.567697
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.760972
iter  20 value 1352.560741
final  value 1346.616911
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.766369
iter  20 value 1352.534854
final  value 1346.616849
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.780861
iter  20 value 1352.492162
final  value 1346.616460
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.627805
iter  20 value 1352.406178
final  value 1346.564025
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.714264
iter  20 value 1352.653262
final  value 1346.606294
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.736909
iter  20 value 1352.602523
final  value 1346.615929
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.750172
iter  20 value 1352.535897
final  value 1346.612579
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.756248
iter  20 value 1352.532326
final  value 1346.616996
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.770354
iter  20 value 1349.566613
final  value 1344.178462
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.739602
iter  20 value 1352.506806
final  value 1346.615935
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.755041
iter  20 value 1352.543587
final  value 1346.617114
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.748265
iter  20 value 1352.580011
final  value 1346.616830
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.724113
iter  20 value 1352.555787
final  value 1346.614970
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.658004
iter  20 value 1353.415408
final  value 1346.579546
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.747066
iter  20 value 1352.601280
final  value 1346.617029
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.739948
iter  20 value 1352.623375
final  value 1346.614492
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.716418
iter  20 value 1352.430455
final  value 1346.613875
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.712614
iter  20 value 1352.615385
final  value 1346.606947
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.760595
iter  20 value 1352.517420
final  value 1346.617098
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.733685
iter  20 value 1352.529301
final  value 1346.616912
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.642664
iter  20 value 1352.431385
final  value 1346.557606
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.710076
iter  20 value 1352.557721
final  value 1346.609107
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.694706
iter  20 value 1352.246959
final  value 1346.603772
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.696893
iter  20 value 1352.587116
final  value 1346.605018
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.736979
iter  20 value 1352.590049
final  value 1346.617138
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.464105
iter  20 value 1350.405547
final  value 1345.407613
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.758442
iter  20 value 1352.546668
final  value 1346.617063
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.741439
iter  20 value 1352.586134
final  value 1346.614348
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.737186
iter  20 value 1352.591745
final  value 1346.615194
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.755639
iter  20 value 1352.492716
final  value 1346.616950
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.593668
iter  20 value 1352.668264
final  value 1346.541331
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.686947
iter  20 value 1353.226131
final  value 1346.593145
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.484505
iter  20 value 1352.238356
final  value 1346.441683
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.695317
iter  20 value 1352.490096
final  value 1346.606493
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.712367
iter  20 value 1352.491551
final  value 1346.611043
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.730180
iter  20 value 1352.605401
final  value 1346.612431
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.732534
iter  20 value 1352.535885
final  value 1346.613373
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.749619
iter  20 value 1352.522981
final  value 1346.616902
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.713060
iter  20 value 1352.522096
final  value 1346.607567
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.612901
iter  20 value 1352.350780
final  value 1346.555497
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.724823
iter  20 value 1352.512820
final  value 1346.616526
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.740262
iter  20 value 1352.560820
final  value 1346.617100
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.759496
iter  20 value 1352.528998
final  value 1346.617134
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.682924
iter  20 value 1352.623339
final  value 1346.590868
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.745303
iter  20 value 1352.525906
final  value 1346.617084
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.769298
iter  20 value 1352.490164
final  value 1346.616576
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.754183
iter  20 value 1352.575090
final  value 1346.617066
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.720315
iter  20 value 1352.533686
final  value 1346.606805
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.760019
iter  20 value 1352.595791
final  value 1346.616288
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.696828
iter  20 value 1352.539246
final  value 1346.610837
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.762413
iter  20 value 1352.506435
final  value 1346.616774
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.717784
iter  20 value 1352.506730
final  value 1346.612991
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.468017
iter  20 value 1352.466638
final  value 1346.481643
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.554024
iter  20 value 1352.047778
final  value 1346.473864
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.713070
iter  20 value 1352.609299
final  value 1346.611341
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.719932
iter  20 value 1352.617299
final  value 1346.605789
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.754104
iter  20 value 1352.583269
final  value 1346.616435
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.756715
iter  20 value 1352.544918
final  value 1346.616955
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.692166
iter  20 value 1352.666605
final  value 1346.600146
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.740789
iter  20 value 1352.543559
final  value 1346.616727
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.764436
iter  20 value 1352.561220
final  value 1346.616929
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.608320
iter  20 value 1352.614653
final  value 1346.557453
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.670533
iter  20 value 1352.457373
final  value 1346.587657
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.744842
iter  20 value 1352.548779
final  value 1346.617030
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.757965
iter  20 value 1352.563935
final  value 1346.616937
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.723467
iter  20 value 1352.532485
final  value 1346.615235
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.610407
iter  20 value 1353.275382
final  value 1346.551873
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.750754
iter  20 value 1352.563137
final  value 1346.616476
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.665178
iter  20 value 1352.303540
final  value 1346.582047
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.777873
iter  20 value 1352.514282
final  value 1346.616900
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.756277
iter  20 value 1352.537130
final  value 1346.617102
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.816055
iter  20 value 1350.452380
final  value 1345.484052
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.714734
iter  20 value 1352.549047
final  value 1346.615690
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.757268
iter  20 value 1352.548789
final  value 1346.617102
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.658916
iter  20 value 1352.519724
final  value 1346.580033
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.701286
iter  20 value 1352.652063
final  value 1346.605798
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.746520
iter  20 value 1352.485349
final  value 1346.616233
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.750273
iter  20 value 1352.646358
final  value 1346.617064
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.721115
iter  20 value 1352.537831
final  value 1346.613833
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.769446
iter  20 value 1352.504923
final  value 1346.617104
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.758147
iter  20 value 1352.537594
final  value 1346.615863
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.434521
iter  20 value 1350.831936
final  value 1345.284678
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.743560
iter  20 value 1352.585809
final  value 1346.615349
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.710984
iter  20 value 1352.572227
final  value 1346.615478
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.752392
iter  20 value 1352.597424
final  value 1346.616894
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.734682
iter  20 value 1352.573227
final  value 1346.616824
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.604957
iter  20 value 1352.355435
final  value 1346.552008
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.737511
iter  20 value 1352.550748
final  value 1346.616332
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.765910
iter  20 value 1352.571647
final  value 1346.616410
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.756349
iter  20 value 1352.583548
final  value 1346.616786
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.754499
iter  20 value 1352.570904
final  value 1346.617020
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.763938
iter  20 value 1352.567153
final  value 1346.616035
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.483294
iter  20 value 1352.493595
final  value 1346.478258
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.769130
iter  20 value 1352.517897
final  value 1346.616663
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.169795
iter  20 value 1351.953478
final  value 1346.224087
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.748210
iter  20 value 1352.577230
final  value 1346.616758
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.778942
iter  20 value 1352.518140
final  value 1346.616386
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.746088
iter  20 value 1352.570175
final  value 1346.617041
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.679777
iter  20 value 1352.555636
final  value 1346.603746
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.675906
iter  20 value 1352.533925
final  value 1346.591695
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.666223
iter  20 value 1352.681491
final  value 1346.583135
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.722274
iter  20 value 1352.577773
final  value 1346.614463
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.738545
iter  20 value 1352.534611
final  value 1346.616510
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.722524
iter  20 value 1352.605755
final  value 1346.615677
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.734613
iter  20 value 1352.604164
final  value 1346.612956
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.746115
iter  20 value 1352.590489
final  value 1346.616896
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.449253
iter  20 value 1352.397359
final  value 1346.446147
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.741442
iter  20 value 1352.601110
final  value 1346.617105
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.739646
iter  20 value 1352.582667
final  value 1346.616995
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.661726
iter  20 value 1350.359403
final  value 1344.308488
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.747108
iter  20 value 1352.587760
final  value 1346.616293
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.717355
iter  20 value 1352.579836
final  value 1346.611655
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.058115
iter  20 value 1351.406840
final  value 1345.955903
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.693954
iter  20 value 1352.128369
final  value 1346.598243
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.496780
iter  20 value 1351.201442
final  value 1346.405410
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.757570
iter  20 value 1352.575575
final  value 1346.617045
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.724018
iter  20 value 1352.553198
final  value 1346.613608
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.739028
iter  20 value 1352.628156
final  value 1346.616608
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.750194
iter  20 value 1352.574927
final  value 1346.616536
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.664016
iter  20 value 1352.477066
final  value 1346.568699
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.765111
iter  20 value 1352.560485
final  value 1346.616901
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.765211
iter  20 value 1352.534197
final  value 1346.610602
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.651350
iter  20 value 1352.701149
final  value 1346.565954
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.880500
iter  20 value 1350.882777
final  value 1345.670717
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.706371
iter  20 value 1352.612037
final  value 1346.613085
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.763222
iter  20 value 1352.532484
final  value 1346.616077
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.738021
iter  20 value 1352.669747
final  value 1346.613299
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.614921
iter  20 value 1351.046685
final  value 1345.372362
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.744519
iter  20 value 1352.536315
final  value 1346.616126
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.749894
iter  20 value 1352.526983
final  value 1346.616347
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.564595
iter  20 value 1352.083030
final  value 1346.518129
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.329658
iter  20 value 1352.307645
final  value 1346.351219
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.742216
iter  20 value 1352.567984
final  value 1346.616886
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.736621
iter  20 value 1352.558450
final  value 1346.613512
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.743021
iter  20 value 1352.563913
final  value 1346.615775
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.756402
iter  20 value 1352.514219
final  value 1346.617022
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.741836
iter  20 value 1352.637815
final  value 1346.616949
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.300103
iter  20 value 1352.233178
final  value 1346.295211
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.691336
iter  20 value 1352.581020
final  value 1346.603137
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.759064
iter  20 value 1352.550925
final  value 1346.617131
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.742639
iter  20 value 1352.543787
final  value 1346.616860
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.267914
iter  20 value 1351.822511
final  value 1346.214217
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.742261
iter  20 value 1352.549330
final  value 1346.617069
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.759929
iter  20 value 1352.490113
final  value 1346.616839
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.763358
iter  20 value 1352.504793
final  value 1346.616731
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.756125
iter  20 value 1352.531161
final  value 1346.616710
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.769220
iter  20 value 1352.522833
final  value 1346.616845
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.773029
iter  20 value 1352.556484
final  value 1346.616784
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.688791
iter  20 value 1352.513988
final  value 1346.598624
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.921866
iter  20 value 1351.638302
final  value 1345.730644
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.503084
iter  20 value 1352.234248
final  value 1346.473264
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.732695
iter  20 value 1352.527683
final  value 1346.613154
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.718792
iter  20 value 1352.531566
final  value 1346.605740
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.582080
iter  20 value 1352.794017
final  value 1346.533883
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.758461
iter  20 value 1352.576208
final  value 1346.617056
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.775578
iter  20 value 1352.501974
final  value 1346.617034
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.740274
iter  20 value 1352.540051
final  value 1346.616378
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.681095
iter  20 value 1352.511674
final  value 1346.595416
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.536026
iter  20 value 1352.446136
final  value 1346.492757
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.757290
iter  20 value 1352.531358
final  value 1346.617087
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.773401
iter  20 value 1352.496090
final  value 1346.616922
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.721099
iter  20 value 1352.497845
final  value 1346.608700
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.744133
iter  20 value 1352.530144
final  value 1346.616082
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.748549
iter  20 value 1352.589790
final  value 1346.617109
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.602034
iter  20 value 1353.402550
final  value 1346.534677
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.768829
iter  20 value 1352.536293
final  value 1346.617132
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.695626
iter  20 value 1352.626889
final  value 1346.597868
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.747913
iter  20 value 1352.565554
final  value 1346.617061
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.740099
iter  20 value 1352.612248
final  value 1346.616331
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.747569
iter  20 value 1352.590390
final  value 1346.616466
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.740742
iter  20 value 1352.559349
final  value 1346.614363
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.973343
iter  20 value 1351.686174
final  value 1345.885690
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.750916
iter  20 value 1352.536888
final  value 1346.617130
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.760850
iter  20 value 1352.545589
final  value 1346.617091
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.750103
iter  20 value 1352.526891
final  value 1346.616767
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.663598
iter  20 value 1352.764412
final  value 1346.593403
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.724730
iter  20 value 1352.528193
final  value 1346.613333
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.758402
iter  20 value 1352.484163
final  value 1346.613588
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.576909
iter  20 value 1352.616829
final  value 1346.525806
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.151793
iter  20 value 1351.766247
final  value 1346.095490
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.740160
iter  20 value 1352.577303
final  value 1346.615656
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.762908
iter  20 value 1352.555059
final  value 1346.616971
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.036929
iter  20 value 1351.319740
final  value 1346.119420
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.687023
iter  20 value 1352.497720
final  value 1346.590665
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.736984
iter  20 value 1352.626212
final  value 1346.616797
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.757922
iter  20 value 1352.534721
final  value 1346.617067
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.661428
iter  20 value 1352.652198
final  value 1346.581620
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.771919
iter  20 value 1352.538750
final  value 1346.616814
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.712189
iter  20 value 1352.570791
final  value 1346.605347
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.751619
iter  20 value 1352.606796
final  value 1346.616740
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.680916
iter  20 value 1352.477246
final  value 1346.597794
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.770389
iter  20 value 1352.511119
final  value 1346.617068
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.741484
iter  20 value 1352.572252
final  value 1346.613327
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.681714
iter  20 value 1352.454421
final  value 1346.592078
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.756951
iter  20 value 1352.521581
final  value 1346.616898
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.731203
iter  20 value 1352.543800
final  value 1346.616974
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.739204
iter  20 value 1352.473068
final  value 1346.611549
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.769423
iter  20 value 1352.531223
final  value 1346.616893
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.747909
iter  20 value 1352.548497
final  value 1346.617121
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.747928
iter  20 value 1352.573482
final  value 1346.615996
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1373.902114
iter  20 value 1348.726550
final  value 1343.558078
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.761326
iter  20 value 1352.560364
final  value 1346.614372
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.068379
iter  20 value 1351.615056
final  value 1346.095691
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.743477
iter  20 value 1352.612529
final  value 1346.616101
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.741858
iter  20 value 1352.550244
final  value 1346.616917
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.764982
iter  20 value 1352.534752
final  value 1346.617124
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.726687
iter  20 value 1352.518253
final  value 1346.612464
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.738126
iter  20 value 1352.555512
final  value 1346.614909
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.730119
iter  20 value 1352.586392
final  value 1346.614631
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.341842
iter  20 value 1349.143182
final  value 1343.651999
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.719635
iter  20 value 1352.528371
final  value 1346.616500
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.723420
iter  20 value 1352.553331
final  value 1346.615008
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.567505
iter  20 value 1350.932345
final  value 1345.352885
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.761766
iter  20 value 1352.551428
final  value 1346.617101
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.700900
iter  20 value 1352.521177
final  value 1346.608864
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.707741
iter  20 value 1352.496525
final  value 1346.608673
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.740145
iter  20 value 1352.529135
final  value 1346.616793
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.649748
iter  20 value 1352.449658
final  value 1346.581980
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.717918
iter  20 value 1352.607422
final  value 1346.615275
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.750953
iter  20 value 1352.536607
final  value 1346.616984
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.763173
iter  20 value 1352.512096
final  value 1346.616947
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.732653
iter  20 value 1352.504014
final  value 1346.611221
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.730247
iter  20 value 1352.544073
final  value 1346.615422
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.712506
iter  20 value 1352.567743
final  value 1346.617126
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.723739
iter  20 value 1352.612315
final  value 1346.614794
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.719993
iter  20 value 1352.667476
final  value 1346.610641
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.754641
iter  20 value 1352.550491
final  value 1346.614341
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.765191
iter  20 value 1352.513829
final  value 1346.616824
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.735688
iter  20 value 1352.580353
final  value 1346.616953
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.735187
iter  20 value 1352.542060
final  value 1346.613876
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.751631
iter  20 value 1352.564335
final  value 1346.617065
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.756221
iter  20 value 1352.617490
final  value 1346.614898
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.591399
iter  20 value 1353.274856
final  value 1346.520067
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.655929
iter  20 value 1352.972083
final  value 1346.578554
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.711626
iter  20 value 1352.599743
final  value 1346.607819
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.707616
iter  20 value 1352.427970
final  value 1346.611360
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.011157
iter  20 value 1351.244236
final  value 1345.841978
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.744085
iter  20 value 1352.546199
final  value 1346.615794
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.751831
iter  20 value 1352.522094
final  value 1346.616756
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.658166
iter  20 value 1352.250601
final  value 1346.588947
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.667854
iter  20 value 1352.679313
final  value 1346.588231
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.753345
iter  20 value 1352.578654
final  value 1346.617145
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.752300
iter  20 value 1352.586254
final  value 1346.616245
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.746896
iter  20 value 1352.507971
final  value 1346.616390
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.760859
iter  20 value 1352.563987
final  value 1346.616717
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.615045
iter  20 value 1352.387580
final  value 1346.547859
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.649760
iter  20 value 1352.510374
final  value 1346.587523
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.764406
iter  20 value 1352.570602
final  value 1346.617124
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.743878
iter  20 value 1352.566093
final  value 1346.616644
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.757363
iter  20 value 1352.591667
final  value 1346.616098
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.627598
iter  20 value 1352.562391
final  value 1346.563988
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.727476
iter  20 value 1352.550590
final  value 1346.617104
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.761532
iter  20 value 1352.500113
final  value 1346.617019
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.741571
iter  20 value 1352.521760
final  value 1346.616975
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.621289
iter  20 value 1352.113646
final  value 1346.541490
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.731593
iter  20 value 1352.559090
final  value 1346.613777
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.717853
iter  20 value 1352.584879
final  value 1346.614467
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.750415
iter  20 value 1352.531633
final  value 1346.616829
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.694191
iter  20 value 1352.504664
final  value 1346.603509
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.757599
iter  20 value 1352.573183
final  value 1346.617093
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.729543
iter  20 value 1352.570279
final  value 1346.615462
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.736111
iter  20 value 1352.519260
final  value 1346.617133
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.758146
iter  20 value 1352.564954
final  value 1346.616635
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.756446
iter  20 value 1352.558636
final  value 1346.616566
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.761825
iter  20 value 1352.503309
final  value 1346.615918
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.637981
iter  20 value 1351.825481
final  value 1346.569725
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.732249
iter  20 value 1352.624170
final  value 1346.609867
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.518600
iter  20 value 1351.058883
final  value 1345.309609
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.715994
iter  20 value 1352.664380
final  value 1346.610422
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.748258
iter  20 value 1352.584167
final  value 1346.617139
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.778018
iter  20 value 1352.534203
final  value 1346.616763
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.758979
iter  20 value 1352.582247
final  value 1346.616948
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.766637
iter  20 value 1352.528279
final  value 1346.617012
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.450572
iter  20 value 1352.156448
final  value 1346.440433
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.754550
iter  20 value 1352.564001
final  value 1346.616931
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.750348
iter  20 value 1352.617981
final  value 1346.616875
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.715138
iter  20 value 1352.572664
final  value 1346.615184
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.756665
iter  20 value 1352.549861
final  value 1346.617071
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.755402
iter  20 value 1352.576902
final  value 1346.616897
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.303868
iter  20 value 1351.842582
final  value 1346.289406
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.766446
iter  20 value 1352.510445
final  value 1346.616695
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.747719
iter  20 value 1352.553585
final  value 1346.616566
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.765334
iter  20 value 1352.546855
final  value 1346.616819
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.718035
iter  20 value 1352.605679
final  value 1346.615993
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.303960
iter  20 value 1352.036419
final  value 1346.330315
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.739259
iter  20 value 1352.563968
final  value 1346.615793
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.769739
iter  20 value 1352.528206
final  value 1346.615941
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.730734
iter  20 value 1352.522983
final  value 1346.610549
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.755663
iter  20 value 1352.550546
final  value 1346.617122
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.732030
iter  20 value 1352.546851
final  value 1346.615200
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.759172
iter  20 value 1352.552391
final  value 1346.617120
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.751378
iter  20 value 1352.564171
final  value 1346.617127
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.994245
iter  20 value 1351.258315
final  value 1345.559724
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.447152
iter  20 value 1352.462429
final  value 1346.408176
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.745351
iter  20 value 1352.543561
final  value 1346.616314
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.745634
iter  20 value 1352.539633
final  value 1346.617058
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.753396
iter  20 value 1352.564751
final  value 1346.617137
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.764214
iter  20 value 1352.516336
final  value 1346.616603
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.781346
iter  20 value 1352.494318
final  value 1346.616955
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.691094
iter  20 value 1352.533158
final  value 1346.601771
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.743012
iter  20 value 1352.530728
final  value 1346.616433
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.749872
iter  20 value 1352.555226
final  value 1346.614448
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.743477
iter  20 value 1352.481261
final  value 1346.614035
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.682303
iter  20 value 1352.442379
final  value 1346.587777
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.743431
iter  20 value 1352.554032
final  value 1346.617008
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.742146
iter  20 value 1352.643267
final  value 1346.616491
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.088116
iter  20 value 1352.673270
final  value 1345.973277
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.759826
iter  20 value 1352.529333
final  value 1346.616796
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.402004
iter  20 value 1352.115626
final  value 1346.397822
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.558917
iter  20 value 1352.677812
final  value 1346.507239
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.757098
iter  20 value 1352.546464
final  value 1346.616856
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.692555
iter  20 value 1352.476240
final  value 1346.603346
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.692670
iter  20 value 1352.685889
final  value 1346.604891
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.741599
iter  20 value 1352.556184
final  value 1346.616901
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.924670
iter  20 value 1350.081099
final  value 1344.771425
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.689236
iter  20 value 1353.075276
final  value 1346.582844
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.759702
iter  20 value 1352.542913
final  value 1346.617092
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.749083
iter  20 value 1352.553252
final  value 1346.615930
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.704531
iter  20 value 1352.618454
final  value 1346.607413
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.654511
iter  20 value 1353.565417
final  value 1346.576222
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.666886
iter  20 value 1353.619979
final  value 1346.582467
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.744859
iter  20 value 1352.639431
final  value 1346.616932
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.741274
iter  20 value 1352.491427
final  value 1346.616794
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.380133
iter  20 value 1352.627500
final  value 1346.393829
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.737542
iter  20 value 1352.540025
final  value 1346.616914
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.714010
iter  20 value 1352.969746
final  value 1346.584450
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.756078
iter  20 value 1352.522905
final  value 1346.616862
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.636885
iter  20 value 1352.549166
final  value 1346.583131
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.364414
iter  20 value 1352.286402
final  value 1346.281805
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.660051
iter  20 value 1352.459512
final  value 1346.577446
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.745043
iter  20 value 1352.531700
final  value 1346.617109
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.756862
iter  20 value 1352.523366
final  value 1346.617039
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.196423
iter  20 value 1352.245508
final  value 1346.245283
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.739840
iter  20 value 1352.549743
final  value 1346.616503
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.734859
iter  20 value 1352.588224
final  value 1346.614324
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.724972
iter  20 value 1352.554004
final  value 1346.616475
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.746993
iter  20 value 1352.530653
final  value 1346.615949
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.760316
iter  20 value 1352.554678
final   value 1346.617078
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.748598
iter  20 value 1351.579339
final   value 1345.579045
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.170511
iter  20 value 1352.491520
final   value 1346.181883
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.252853
iter  20 value 1352.043542
final   value 1346.229304
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.737287
iter  20 value 1352.464065
final   value 1346.610947
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.727965
iter  20 value 1352.596391
final   value 1346.612922
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.746803
iter  20 value 1352.599581
final   value 1346.613756
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.566603
iter  20 value 1352.467209
final   value 1346.545502
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.751049
iter  20 value 1352.543981
final   value 1346.616965
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.714545
iter  20 value 1352.567458
final  value 1346.615283
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.732802
iter  20 value 1352.618159
final  value 1346.616989
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.538366
iter  20 value 1352.464831
final  value 1346.473781
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.107377
iter  20 value 1352.005851
final  value 1346.249631
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.614695
iter  20 value 1352.430378
final  value 1346.575820
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.684400
iter  20 value 1352.510759
final  value 1346.588038
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.734015
iter  20 value 1352.573230
final  value 1346.613181
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.700651
iter  20 value 1352.541595
final  value 1346.612448
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.725546
iter  20 value 1352.536746
final  value 1346.614352
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.751860
iter  20 value 1352.555981
final  value 1346.616697
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.750322
iter  20 value 1352.547430
final  value 1346.616334
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.626268
iter  20 value 1352.354984
final  value 1346.535469
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.722900
iter  20 value 1352.531049
final  value 1346.613192
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.762763
iter  20 value 1352.502609
final  value 1346.617060
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.753321
iter  20 value 1352.582412
final  value 1346.611842
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.693007
iter  20 value 1352.486739
final  value 1346.594112
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1373.267260
iter  20 value 1348.384298
final  value 1342.516792
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.462046
iter  20 value 1352.419614
final  value 1346.490295
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.507668
iter  20 value 1352.523968
final  value 1346.456793
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1373.123426
iter  20 value 1348.210591
final  value 1342.443644
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.753226
iter  20 value 1352.536810
final  value 1346.617131
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.774934
iter  20 value 1352.500878
final  value 1346.616591
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.607402
iter  20 value 1352.236337
final  value 1346.530820
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.554997
iter  20 value 1352.478027
final  value 1346.500302
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.776295
iter  20 value 1352.509673
final  value 1346.616614
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.748100
iter  20 value 1352.547769
final  value 1346.616349
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.744684
iter  20 value 1352.545359
final  value 1346.615374
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.744600
iter  20 value 1352.495897
final  value 1346.616272
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.661781
iter  20 value 1352.554025
final  value 1346.595977
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.736754
iter  20 value 1351.697199
final  value 1345.601583
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.734991
iter  20 value 1352.582227
final  value 1346.616565
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.765260
iter  20 value 1352.536977
final  value 1346.617109
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.729197
iter  20 value 1352.577301
final  value 1346.615125
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.752001
iter  20 value 1352.552871
final  value 1346.616940
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.743420
iter  20 value 1352.572369
final  value 1346.616460
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.371440
iter  20 value 1350.945164
final  value 1345.024246
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.512905
iter  20 value 1352.272313
final  value 1346.462579
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.408533
iter  20 value 1350.449498
final  value 1345.161392
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.748100
iter  20 value 1352.620806
final  value 1346.616384
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.755627
iter  20 value 1352.544549
final  value 1346.617114
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.728998
iter  20 value 1352.535003
final  value 1346.616707
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.765570
iter  20 value 1352.517878
final  value 1346.616556
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.751353
iter  20 value 1352.546353
final  value 1346.617093
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.760650
iter  20 value 1352.564590
final  value 1346.616893
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.761605
iter  20 value 1352.554327
final  value 1346.616002
converged
# weights:  27 (16 variable)
```

273

```
initial  value 4312.053233
iter  10 value 1376.713638
iter  20 value 1352.548267
final  value 1346.606779
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.749419
iter  20 value 1352.599221
final  value 1346.617081
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.740881
iter  20 value 1352.617652
final  value 1346.613133
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.747719
iter  20 value 1352.567835
final  value 1346.616658
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.716852
iter  20 value 1352.523778
final  value 1346.607390
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.767508
iter  20 value 1352.546448
final  value 1346.617106
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.729448
iter  20 value 1352.572765
final  value 1346.616953
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.708141
iter  20 value 1352.745374
final  value 1346.606619
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.681540
iter  20 value 1352.496540
final  value 1346.597254
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.742263
iter  20 value 1352.590090
final  value 1346.616761
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.741022
iter  20 value 1352.547737
final  value 1346.616440
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.761969
iter  20 value 1352.519529
final  value 1346.616214
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.765007
iter  20 value 1352.506514
final  value 1346.616784
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.008171
iter  20 value 1350.891874
final  value 1344.699336
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.601609
iter  20 value 1352.297693
final  value 1346.536668
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.759074
iter  20 value 1352.548651
final  value 1346.616716
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.026884
iter  20 value 1351.883720
final  value 1345.980664
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.291536
iter  20 value 1352.475029
final  value 1346.294788
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.760044
iter  20 value 1352.530646
final  value 1346.617131
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.513058
iter  20 value 1352.172255
final  value 1346.478573
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.738191
iter  20 value 1352.547818
final  value 1346.615690
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.723322
iter  20 value 1352.571394
final  value 1346.607722
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.513846
iter  20 value 1352.014287
final  value 1346.513352
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.750749
iter  20 value 1352.500390
final  value 1346.616977
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.816865
iter  20 value 1351.442512
final  value 1345.799667
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.424146
iter  20 value 1350.382481
final  value 1343.557654
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.678381
iter  20 value 1352.427060
final  value 1346.604787
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.763427
iter  20 value 1352.576638
final  value 1346.616729
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.766069
iter  20 value 1352.558204
final  value 1346.616942
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.608080
iter  20 value 1352.345394
final  value 1346.463820
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.287344
iter  20 value 1352.004900
final  value 1346.178981
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.744947
iter  20 value 1352.720448
final  value 1346.553727
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.827955
iter  20 value 1352.095845
final  value 1345.510396
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.086436
iter  20 value 1351.687461
final  value 1345.908769
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.382791
iter  20 value 1352.425742
final  value 1346.302933
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.354940
iter  20 value 1351.253375
final  value 1345.173238
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.373103
iter  20 value 1352.163093
final  value 1346.230490
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.552533
iter  20 value 1352.377939
final  value 1346.480481
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.702232
iter  20 value 1352.528388
final  value 1346.574507
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.660670
iter  20 value 1352.459981
final  value 1346.546518
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.665973
iter  20 value 1352.581380
final  value 1346.572498
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.387984
iter  20 value 1352.292626
final  value 1346.281204
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.779147
iter  20 value 1352.559085
final  value 1346.505196
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.559987
iter  20 value 1352.470475
final  value 1346.396636
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.405395
iter  20 value 1351.659095
final  value 1345.309814
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.727783
iter  20 value 1352.553525
final  value 1346.590271
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.391865
iter  20 value 1352.167753
final  value 1346.320867
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.704171
iter  20 value 1352.572538
final  value 1346.583464
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.719649
iter  20 value 1352.536331
final  value 1346.594287
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.491382
iter  20 value 1352.386653
final  value 1346.341107
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.224980
iter  20 value 1352.106853
final  value 1346.162068
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.497560
iter  20 value 1352.126874
final  value 1346.338087
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.301366
iter  20 value 1352.122892
final  value 1346.222386
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.071125
iter  20 value 1352.034187
final  value 1346.092271
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.258464
iter  20 value 1352.257217
final  value 1346.199284
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.249000
iter  20 value 1351.856266
final  value 1346.114085
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.402392
iter  20 value 1352.065448
final  value 1346.266629
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.418630
iter  20 value 1352.303125
final  value 1346.318413
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.630144
iter  20 value 1352.540029
final  value 1346.540990
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.715189
iter  20 value 1352.541537
final  value 1346.588498
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.385450
iter  20 value 1352.214064
final  value 1346.296947
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.311555
iter  20 value 1352.174245
final  value 1346.311800
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.996712
iter  20 value 1351.700040
final  value 1345.954907
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.572799
iter  20 value 1352.402832
final  value 1346.484323
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.570492
iter  20 value 1352.568154
final  value 1346.453719
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.940811
iter  20 value 1351.860970
final  value 1345.773522
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.428358
iter  20 value 1352.314989
final  value 1346.373810
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.624222
iter  20 value 1352.435223
final  value 1346.526134
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.674355
iter  20 value 1352.560734
final  value 1346.557175
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.488612
iter  20 value 1352.409648
final  value 1346.394086
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.447460
iter  20 value 1352.388575
final  value 1346.349746
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.583080
iter  20 value 1352.358937
final  value 1346.482274
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.522401
iter  20 value 1350.788559
final  value 1345.314286
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.497051
iter  20 value 1352.394706
final  value 1346.349951
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.503620
iter  20 value 1351.963798
final  value 1346.384857
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.644006
iter  20 value 1352.070357
final  value 1346.445638
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.789576
iter  20 value 1351.794489
final  value 1346.365446
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.430294
iter  20 value 1350.761460
final  value 1345.396161
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.311463
iter  20 value 1352.215128
final  value 1346.175003
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.492938
iter  20 value 1352.179051
final  value 1346.358526
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.368935
iter  20 value 1352.355475
final  value 1346.250393
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.348095
iter  20 value 1352.150958
final  value 1346.279318
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.649789
iter  20 value 1352.564860
final  value 1346.559185
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.623583
iter  20 value 1352.524669
final  value 1346.540949
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.683558
iter  20 value 1352.482479
final  value 1346.560221
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.107484
iter  20 value 1352.175128
final  value 1346.168391
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.226619
iter  20 value 1352.125426
final  value 1346.119339
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.967804
iter  20 value 1351.896629
final  value 1345.858712
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.421130
iter  20 value 1351.931874
final  value 1346.260512
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.449416
iter  20 value 1352.149006
final  value 1346.312570
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1374.940229
iter  20 value 1351.256360
final  value 1344.603821
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.506352
iter  20 value 1352.353620
final  value 1346.382602
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.550043
iter  20 value 1352.395311
final  value 1346.429347
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.996494
iter  20 value 1351.322332
final  value 1345.954882
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.351506
iter  20 value 1351.607701
final  value 1346.298441
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.504610
iter  20 value 1352.425532
final  value 1346.326535
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.654490
iter  20 value 1352.488346
final  value 1346.514122
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.565014
iter  20 value 1352.213450
final  value 1346.395261
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.391682
iter  20 value 1351.765911
final  value 1346.201005
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.574706
iter  20 value 1352.432431
final  value 1346.463574
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.065756
iter  20 value 1352.133655
final  value 1346.009541
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.571912
iter  20 value 1350.875820
final  value 1345.549671
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.992694
iter  20 value 1352.041700
final  value 1345.888265
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.864418
iter  20 value 1351.558919
final  value 1345.682557
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.684597
iter  20 value 1352.538365
final  value 1346.572370
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.606902
iter  20 value 1352.403139
final  value 1346.518843
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.709476
iter  20 value 1352.536946
final  value 1346.579281
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.682795
iter  20 value 1352.383948
final  value 1346.469047
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.649484
iter  20 value 1352.525768
final  value 1346.540691
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.578721
iter  20 value 1352.446601
final  value 1346.530166
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.669931
iter  20 value 1352.590128
final  value 1346.544236
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.664566
iter  20 value 1352.570834
final  value 1346.560139
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.632905
iter  20 value 1352.282706
final  value 1346.522596
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.662435
iter  20 value 1352.549949
final  value 1346.551491
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.505973
iter  20 value 1352.067143
final  value 1346.364046
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.661691
iter  20 value 1352.591069
final  value 1346.590527
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.658345
iter  20 value 1352.561698
final  value 1346.529981
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.632474
iter  20 value 1352.535402
final  value 1346.494823
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.458333
iter  20 value 1352.347774
final  value 1346.428322
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.556347
iter  20 value 1352.420950
final  value 1346.452846
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.838230
iter  20 value 1351.809435
final  value 1345.803198
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.548586
iter  20 value 1352.222931
final  value 1346.428947
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.653484
iter  20 value 1352.006251
final  value 1346.518797
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.730894
iter  20 value 1352.567741
final  value 1346.543893
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.559465
iter  20 value 1352.536516
final  value 1346.304884
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.010434
iter  20 value 1351.062425
final  value 1344.964503
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.635368
iter  20 value 1352.487735
final  value 1346.454496
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.490524
iter  20 value 1352.429617
final  value 1346.349570
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.815374
iter  20 value 1351.113134
final  value 1345.636058
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.682629
iter  20 value 1352.518506
final  value 1346.487750
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.756873
iter  20 value 1352.501705
final  value 1346.556160
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.669704
iter  20 value 1352.238814
final  value 1346.530190
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.360006
iter  20 value 1352.201953
final  value 1346.329377
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.557237
iter  20 value 1352.461552
final  value 1346.441194
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.980457
iter  20 value 1351.242508
final  value 1345.986971
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.276407
iter  20 value 1352.138279
final  value 1346.163158
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.289535
iter  20 value 1351.392778
final  value 1345.259461
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.192653
iter  20 value 1351.790064
final  value 1345.967641
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.044440
iter  20 value 1352.038978
final  value 1345.980449
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.119823
iter  20 value 1352.336299
final  value 1346.043514
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.637506
iter  20 value 1352.544542
final  value 1346.461853
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.640396
iter  20 value 1352.446004
final  value 1346.343414
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.734882
iter  20 value 1352.591143
final  value 1346.567361
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.795196
iter  20 value 1352.366187
final  value 1346.499349
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.921399
iter  20 value 1352.120832
final  value 1345.521112
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.785862
iter  20 value 1352.980815
final  value 1346.487709
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.408538
iter  20 value 1351.562989
final  value 1345.298700
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.471917
iter  20 value 1351.457894
final  value 1345.293043
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.847573
iter  20 value 1351.625518
final  value 1345.815686
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.093688
iter  20 value 1352.531297
final  value 1345.523986
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.968438
iter  20 value 1351.825886
final  value 1345.857072
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.974583
iter  20 value 1351.790633
final  value 1346.068863
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.297810
iter  20 value 1351.871735
final  value 1346.147036
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.508727
iter  20 value 1352.149896
final  value 1346.375073
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.158781
iter  20 value 1350.296847
final  value 1344.822967
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.685443
iter  20 value 1352.342919
final  value 1346.527774
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.413223
iter  20 value 1349.286266
final  value 1343.904189
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.655310
iter  20 value 1352.535744
final  value 1346.544234
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.998310
iter  20 value 1351.737308
final  value 1345.975335
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.606812
iter  20 value 1352.504250
final  value 1346.493923
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.866611
iter  20 value 1351.125498
final  value 1345.797071
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.182438
iter  20 value 1352.084600
final  value 1346.210035
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.546282
iter  20 value 1352.310777
final  value 1346.441473
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.717974
iter  20 value 1352.670391
final  value 1346.600439
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.717603
iter  20 value 1352.644926
final  value 1346.593395
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.571782
iter  20 value 1352.292645
final  value 1346.481537
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.557637
iter  20 value 1352.395724
final  value 1346.457187
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.693090
iter  20 value 1352.573348
final  value 1346.576841
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.179865
iter  20 value 1351.520235
final  value 1344.361709
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.640645
iter  20 value 1352.520801
final  value 1346.525578
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.727488
iter  20 value 1352.556991
final  value 1346.583046
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.738793
iter  20 value 1352.617718
final  value 1346.584212
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.747669
iter  20 value 1352.625913
final  value 1346.600801
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.075794
iter  20 value 1351.392113
final  value 1344.594597
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.075794
iter  20 value 1351.392113
final  value 1344.594597
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.690277
iter  20 value 1352.607529
final  value 1346.577451
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.710320
iter  20 value 1352.637947
final  value 1346.607030
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.653172
iter  20 value 1352.572115
final  value 1346.533172
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.360510
iter  20 value 1352.322476
final  value 1346.296783
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.690207
iter  20 value 1352.557228
final  value 1346.568342
converged
# weights:  27 (16 variable)
```

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```
initial  value 4312.053233
iter  10 value 1376.683934
iter  20 value 1352.599282
final  value 1346.569552
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.704728
iter  20 value 1352.631738
final  value 1346.597176
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.546881
iter  20 value 1350.196300
final  value 1344.027106
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.690136
iter  20 value 1352.613419
final  value 1346.580938
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.625524
iter  20 value 1352.478436
final  value 1346.511731
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.522435
iter  20 value 1352.313893
final  value 1346.442111
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.697390
iter  20 value 1352.611621
final  value 1346.597428
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.719146
iter  20 value 1352.593945
final  value 1346.590503
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.153100
iter  20 value 1351.412443
final  value 1344.543233
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.688156
iter  20 value 1352.611564
final  value 1346.587495
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.680735
iter  20 value 1351.704279
final  value 1345.193238
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.358546
iter  20 value 1352.168562
final  value 1346.017092
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.368612
iter  20 value 1351.730041
final  value 1344.717106
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.207922
iter  20 value 1352.850524
final  value 1345.552823
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.208784
iter  20 value 1352.589206
final  value 1345.493013
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.223794
iter  20 value 1352.088858
final  value 1346.116776
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.673059
iter  20 value 1352.572435
final  value 1346.565914
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.486182
iter  20 value 1352.576306
final  value 1346.333587
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.872222
iter  20 value 1351.860830
final  value 1346.017226
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.677501
iter  20 value 1352.499708
final  value 1346.544695
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.710320
iter  20 value 1352.637947
final  value 1346.607030
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.712575
iter  20 value 1352.644878
final  value 1346.608099
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.662932
iter  20 value 1352.588204
final  value 1346.541750
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.690546
iter  20 value 1352.618484
final  value 1346.585251
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.443824
iter  20 value 1351.857338
final  value 1344.711978
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.211312
iter  20 value 1351.949240
final  value 1345.911770
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.679688
iter  20 value 1352.553697
final  value 1346.564107
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1374.247504
iter  20 value 1351.055631
final  value 1343.622571
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.492851
iter  20 value 1351.976910
final  value 1344.782876
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.405445
iter  20 value 1353.184008
final  value 1345.832127
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.425688
iter  20 value 1352.030629
final  value 1344.893667
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.717687
iter  20 value 1352.595154
final  value 1346.593015
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.297697
iter  20 value 1351.962767
final  value 1346.177589
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.388389
iter  20 value 1351.935406
final  value 1344.743781
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.266455
iter  20 value 1351.633730
final  value 1344.589608
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.606201
iter  20 value 1352.120658
final  value 1344.956794
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.714064
iter  20 value 1352.632769
final  value 1346.583114
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.697363
iter  20 value 1352.618270
final  value 1346.571892
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.217203
iter  20 value 1352.065400
final  value 1346.156763
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.595128
iter  20 value 1352.513709
final  value 1346.537391
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.696912
iter  20 value 1352.603893
final  value 1346.569845
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.588165
iter  20 value 1352.474128
final  value 1346.493707
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.628708
iter  20 value 1352.579246
final  value 1346.571692
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.611003
iter  20 value 1352.512598
final  value 1346.523633
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.631886
iter  20 value 1352.544939
final  value 1346.541662
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.255901
iter  20 value 1352.052581
final  value 1346.200110
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.631886
iter  20 value 1352.544939
final  value 1346.541662
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.631886
iter  20 value 1352.544939
final  value 1346.541662
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.541930
iter  20 value 1352.412620
final  value 1346.463430
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.637902
iter  20 value 1352.543958
final  value 1346.534001
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.638772
iter  20 value 1352.523472
final  value 1346.535649
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.349925
iter  20 value 1352.179149
final  value 1346.281112
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.462613
iter  20 value 1352.357040
final  value 1346.339017
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.651873
iter  20 value 1352.582715
final  value 1346.536944
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.710201
iter  20 value 1352.554409
final  value 1346.571548
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.595730
iter  20 value 1352.646001
final  value 1346.418454
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.543975
iter  20 value 1352.405729
final  value 1346.477390
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.732783
iter  20 value 1352.684612
final  value 1346.598248
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.544832
iter  20 value 1352.516062
final  value 1346.467926
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.722544
iter  20 value 1352.672511
final  value 1346.576001
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.426588
iter  20 value 1352.309648
final  value 1346.386256
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.528572
iter  20 value 1352.386609
final  value 1346.416752
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.534632
iter  20 value 1352.523006
final  value 1346.418212
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.636551
iter  20 value 1352.617606
final  value 1346.567173
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.696782
iter  20 value 1352.679488
final  value 1346.564919
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.665364
iter  20 value 1352.563413
final  value 1346.531015
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.668074
iter  20 value 1351.006559
final  value 1344.694247
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.645623
iter  20 value 1352.588914
final  value 1346.576379
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.637902
iter  20 value 1352.543958
final  value 1346.534001
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.628708
iter  20 value 1352.579246
final  value 1346.571692
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.622442
iter  20 value 1352.567334
final  value 1346.566461
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.616040
iter  20 value 1352.508165
final  value 1346.482229
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.909810
iter  20 value 1351.879258
final  value 1345.890250
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.611543
iter  20 value 1352.542703
final  value 1346.551729
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.658113
iter  20 value 1352.641319
final  value 1346.593611
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.654705
iter  20 value 1352.625949
final  value 1346.586654
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.654656
iter  20 value 1352.625312
final  value 1346.587181
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.640743
iter  20 value 1352.602257
final  value 1346.573322
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.659801
iter  20 value 1352.566898
final  value 1346.534777
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.599659
iter  20 value 1352.535144
final  value 1346.526634
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.527794
iter  20 value 1352.488800
final  value 1346.521325
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.659801
iter  20 value 1352.566898
final   value 1346.534777
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.647454
iter  20 value 1352.552615
final   value 1346.529328
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.712354
iter  20 value 1352.667737
final   value 1346.612155
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.483416
iter  20 value 1352.346466
final   value 1346.366410
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.691683
iter  20 value 1352.665383
final   value 1346.601209
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.691967
iter  20 value 1352.391118
final   value 1346.573561
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.495651
iter  20 value 1352.571427
final   value 1346.514994
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.715529
iter  20 value 1352.655237
final   value 1346.583819
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.718595
iter  20 value 1352.585010
final   value 1346.602277
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.714759
iter  20 value 1352.695879
final  value 1346.600821
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.660938
iter  20 value 1352.662342
final  value 1346.586151
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.745667
iter  20 value 1352.663061
final  value 1346.613954
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.377602
iter  20 value 1352.280887
final  value 1346.415984
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.609402
iter  20 value 1352.475916
final  value 1346.490312
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.657126
iter  20 value 1352.515018
final  value 1346.540518
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.508619
iter  20 value 1352.602059
final  value 1346.532507
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.470472
iter  20 value 1352.523802
final  value 1346.527531
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.615078
iter  20 value 1352.473695
final  value 1346.507091
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.289773
iter  20 value 1352.167197
final  value 1346.233223
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.697356
iter  20 value 1352.585093
final  value 1346.586962
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.901414
iter  20 value 1351.848320
final  value 1345.893033
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.702781
iter  20 value 1352.635808
final  value 1346.589200
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.738519
iter  20 value 1352.661032
final  value 1346.610351
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.703309
iter  20 value 1352.586818
final  value 1346.591521
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.670872
iter  20 value 1352.648667
final  value 1346.577215
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.121642
iter  20 value 1350.243114
final  value 1343.118204
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.464001
iter  20 value 1352.043099
final  value 1346.355271
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.710401
iter  20 value 1352.583523
final  value 1346.579871
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.478069
iter  20 value 1352.344196
final  value 1346.377801
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.503644
iter  20 value 1352.358109
final  value 1346.398553
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.521832
iter  20 value 1352.406530
final  value 1346.445662
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.704679
iter  20 value 1352.581827
final  value 1346.574401
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.674487
iter  20 value 1352.561132
final  value 1346.567601
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.687387
iter  20 value 1352.563295
final  value 1346.565196
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.681566
iter  20 value 1352.570679
final  value 1346.564459
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.603809
iter  20 value 1352.479753
final  value 1346.492135
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.647010
iter  20 value 1352.530508
final  value 1346.530248
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.637602
iter  20 value 1352.550370
final  value 1346.532295
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.486755
iter  20 value 1352.351049
final  value 1346.387904
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.592770
iter  20 value 1352.511611
final  value 1346.461226
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.686484
iter  20 value 1352.603141
final  value 1346.589015
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.977157
iter  20 value 1353.536405
final  value 1346.515737
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.689981
iter  20 value 1352.630823
final  value 1346.600042
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.661924
iter  20 value 1352.576084
final  value 1346.561487
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.661572
iter  20 value 1352.541588
final  value 1346.544768
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.668221
iter  20 value 1352.645981
final  value 1346.595132
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.758757
iter  20 value 1351.446265
final  value 1345.522242
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.598363
iter  20 value 1352.495456
final  value 1346.482037
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.685297
iter  20 value 1352.518560
final  value 1346.566698
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.646573
iter  20 value 1352.421894
final  value 1346.538400
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.691695
iter  20 value 1352.628217
final  value 1346.597327
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.706127
iter  20 value 1352.618999
final  value 1346.580236
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.691331
iter  20 value 1352.567153
final  value 1346.577947
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.552585
iter  20 value 1352.438635
final  value 1346.478807
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.730982
iter  20 value 1352.717486
final  value 1346.609952
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.594444
iter  20 value 1352.600030
final  value 1346.531518
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.562004
iter  20 value 1352.447642
final  value 1346.485955
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.667611
iter  20 value 1352.593750
final  value 1346.581655
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.589880
iter  20 value 1352.563178
final  value 1346.510979
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.614209
iter  20 value 1352.571442
final  value 1346.563973
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.670563
iter  20 value 1352.664689
final  value 1346.603886
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.501563
iter  20 value 1352.383943
final  value 1346.412105
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.654512
iter  20 value 1352.570915
final  value 1346.582493
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.667923
iter  20 value 1352.516266
final  value 1346.557810
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.692686
iter  20 value 1352.555521
final  value 1346.576484
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.721601
iter  20 value 1352.590285
final  value 1346.595324
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.432594
iter  20 value 1352.314338
final  value 1346.335670
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.663192
iter  20 value 1352.668647
final  value 1346.597900
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.688169
iter  20 value 1352.626517
final  value 1346.587142
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.680464
iter  20 value 1352.678786
final  value 1346.601091
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.643062
iter  20 value 1352.582938
final  value 1346.563396
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.739967
iter  20 value 1352.719731
final  value 1346.578375
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.564285
iter  20 value 1352.507704
final   value 1346.529155
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.626790
iter  20 value 1352.603441
final   value 1346.589490
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.669986
iter  20 value 1352.655933
final   value 1346.591326
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.671489
iter  20 value 1352.650321
final   value 1346.601357
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.733137
iter  20 value 1352.608827
final   value 1346.601253
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.433946
iter  20 value 1352.312631
final   value 1346.332571
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.715907
iter  20 value 1352.639141
final   value 1346.606037
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.581967
iter  20 value 1351.628616
final   value 1345.425705
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.635691
iter  20 value 1352.481801
final   value 1346.532782
converged
# weights:  27 (16 variable)
```

```
initial   value 4312.053233
iter  10 value 1376.723455
iter  20 value 1352.868741
final   value 1346.587160
converged
# weights:  27 (16 variable)
initial   value 4312.053233
iter  10 value 1376.605429
iter  20 value 1352.541440
final   value 1346.559676
converged
# weights:  27 (16 variable)
initial   value 4312.053233
iter  10 value 1376.337652
iter  20 value 1352.389980
final   value 1346.354070
converged
# weights:  27 (16 variable)
initial   value 4312.053233
iter  10 value 1376.632153
iter  20 value 1352.582268
final   value 1346.566198
converged
# weights:  27 (16 variable)
initial   value 4312.053233
iter  10 value 1376.552888
iter  20 value 1352.479873
final   value 1346.530858
converged
# weights:  27 (16 variable)
initial   value 4312.053233
iter  10 value 1376.532066
iter  20 value 1352.418460
final   value 1346.439097
converged
# weights:  27 (16 variable)
initial   value 4312.053233
iter  10 value 1376.628330
iter  20 value 1352.498635
final   value 1346.551304
converged
# weights:  27 (16 variable)
initial   value 4312.053233
iter  10 value 1376.579317
iter  20 value 1352.457825
final   value 1346.515569
converged
# weights:  27 (16 variable)
initial   value 4312.053233
iter  10 value 1376.592458
iter  20 value 1352.528674
final   value 1346.543778
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.651368
iter  20 value 1352.545390
final  value 1346.573491
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.565470
iter  20 value 1352.449257
final  value 1346.533468
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.580249
iter  20 value 1352.480535
final  value 1346.502595
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.608088
iter  20 value 1352.455098
final  value 1346.460886
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.161853
iter  20 value 1351.504970
final  value 1345.100786
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.752207
iter  20 value 1352.422806
final  value 1346.527957
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.643150
iter  20 value 1352.347126
final  value 1346.452322
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.575842
iter  20 value 1350.656434
final  value 1344.265853
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.673053
iter  20 value 1352.499749
final  value 1346.501450
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.694856
iter  20 value 1352.545602
final  value 1346.562886
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.556416
iter  20 value 1352.402906
final  value 1346.432902
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.949180
iter  20 value 1351.964797
final  value 1345.928615
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.510744
iter  20 value 1352.383701
final  value 1346.404382
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.766691
iter  20 value 1350.760328
final  value 1344.496460
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.715280
iter  20 value 1352.571618
final  value 1346.521738
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.623198
iter  20 value 1351.961972
final  value 1345.259699
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.709364
iter  20 value 1352.478556
final  value 1346.548486
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.660135
iter  20 value 1352.528456
final  value 1346.557678
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.521046
iter  20 value 1352.438924
final  value 1346.450375
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.569112
iter  20 value 1352.399389
final  value 1346.462579
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.639445
iter  20 value 1352.533466
final  value 1346.570593
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.560486
iter  20 value 1352.386764
final  value 1346.481468
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.697993
iter  20 value 1352.637649
final  value 1346.570105
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.552664
iter  20 value 1352.413287
final  value 1346.417930
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.540528
iter  20 value 1352.439319
final  value 1346.388046
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.608088
iter  20 value 1352.455098
final  value 1346.460886
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.709423
iter  20 value 1351.815954
final  value 1345.698811
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.055932
iter  20 value 1352.067886
final  value 1345.790163
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.508018
iter  20 value 1352.307465
final  value 1346.355797
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.616545
iter  20 value 1351.634311
final  value 1345.380310
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.724718
iter  20 value 1352.521037
final  value 1346.560333
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.540528
iter  20 value 1352.439319
final  value 1346.388046
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.668425
iter  20 value 1352.573049
final  value 1346.534341
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.752207
iter  20 value 1352.422806
final  value 1346.527957
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.508018
iter  20 value 1352.307465
final  value 1346.355797
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.616545
iter  20 value 1351.634311
final  value 1345.380310
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.223708
iter  20 value 1352.220781
final  value 1345.997884
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.685924
iter  20 value 1352.479546
final  value 1346.520305
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.257361
iter  20 value 1352.220751
final  value 1346.229261
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.643150
iter  20 value 1352.347126
final  value 1346.452322
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.949180
iter  20 value 1351.964797
final  value 1345.928615
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.618012
iter  20 value 1352.551157
final  value 1346.533934
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.708935
iter  20 value 1352.566886
final  value 1346.598129
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.717707
iter  20 value 1352.581593
final  value 1346.597762
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.615455
iter  20 value 1352.424892
final  value 1346.462852
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.664234
iter  20 value 1352.613058
final  value 1346.581773
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.675373
iter  20 value 1352.554001
final  value 1346.574621
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.554457
iter  20 value 1352.428737
final  value 1346.463113
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.460646
iter  20 value 1352.308219
final  value 1346.439900
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.659535
iter  20 value 1352.517083
final  value 1346.564465
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.348876
iter  20 value 1352.210319
final  value 1346.319054
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.662629
iter  20 value 1352.654705
final  value 1346.590940
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.631689
iter  20 value 1352.786699
final  value 1346.251684
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.383644
iter  20 value 1352.444744
final  value 1346.263663
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.163840
iter  20 value 1352.244178
final  value 1345.841995
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.904409
iter  20 value 1352.038580
final  value 1345.725167
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.646964
iter  20 value 1352.587504
final  value 1346.570320
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.454567
iter  20 value 1352.307750
final  value 1346.369138
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.848393
iter  20 value 1352.918273
final  value 1346.256762
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.056231
iter  20 value 1352.353377
final  value 1345.592684
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.225871
iter  20 value 1352.584615
final  value 1345.790741
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.171591
iter  20 value 1351.944485
final  value 1346.043401
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.570178
iter  20 value 1352.470296
final  value 1346.482485
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.693613
iter  20 value 1352.561230
final  value 1346.571804
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.695399
iter  20 value 1352.542183
final  value 1346.564270
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.647542
iter  20 value 1352.574246
final  value 1346.543267
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.678051
iter  20 value 1352.575415
final  value 1346.586741
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.479695
iter  20 value 1351.850221
final  value 1345.428453
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.714323
iter  20 value 1352.632140
final  value 1346.437958
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.451332
iter  20 value 1352.531218
final  value 1346.190457
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.428223
iter  20 value 1352.300397
final  value 1346.333436
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.549602
iter  20 value 1352.457353
final  value 1346.398962
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.376648
iter  20 value 1352.319519
final  value 1346.248191
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.635437
iter  20 value 1352.401926
final  value 1346.525828
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.486211
iter  20 value 1352.407050
final  value 1346.401843
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.511140
iter  20 value 1352.349200
final  value 1346.400597
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.560747
iter  20 value 1352.442173
final  value 1346.509617
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.365863
iter  20 value 1352.188165
final  value 1346.312849
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.660780
iter  20 value 1352.617077
final  value 1346.564148
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.507569
iter  20 value 1352.347829
final  value 1346.383749
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.638944
iter  20 value 1352.587555
final  value 1346.565227
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.649107
iter  20 value 1352.601910
final  value 1346.575158
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.384394
iter  20 value 1352.555524
final  value 1346.127354
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.763128
iter  20 value 1353.923074
final  value 1346.165573
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.652743
iter  20 value 1352.512668
final  value 1346.533776
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.635611
iter  20 value 1352.573798
final  value 1346.555890
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.605171
iter  20 value 1352.538089
final  value 1346.518407
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.616673
iter  20 value 1352.561001
final  value 1346.543576
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.654065
iter  20 value 1352.633573
final  value 1346.579033
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.555269
iter  20 value 1352.802889
final  value 1346.482179
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.750079
iter  20 value 1352.608622
final  value 1346.613748
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.652671
iter  20 value 1352.949673
final  value 1346.539206
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.737977
iter  20 value 1352.615817
final  value 1346.604710
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.731155
iter  20 value 1352.576224
final  value 1346.606108
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.695801
iter  20 value 1352.627256
final  value 1346.568501
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.770727
iter  20 value 1352.639277
final  value 1346.600398
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.686103
iter  20 value 1352.615816
final  value 1346.556025
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.734608
iter  20 value 1352.572794
final  value 1346.589106
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.716310
iter  20 value 1352.566152
final  value 1346.597280
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.659321
iter  20 value 1352.564195
final  value 1346.522199
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.741323
iter  20 value 1352.690767
final  value 1346.610569
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.700101
iter  20 value 1352.586497
final  value 1346.593961
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.651176
iter  20 value 1352.590065
final  value 1346.534588
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.084721
iter  20 value 1351.074190
final  value 1345.049175
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.666969
iter  20 value 1352.500763
final  value 1346.563924
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.689566
iter  20 value 1352.545899
final  value 1346.552685
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.704319
iter  20 value 1352.625516
final  value 1346.599161
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.743051
iter  20 value 1352.607245
final  value 1346.590538
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.718728
iter  20 value 1352.659999
final  value 1346.604203
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.051726
iter  20 value 1351.777783
final  value 1345.952745
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.547987
iter  20 value 1352.428559
final  value 1346.497345
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.602781
iter  20 value 1352.478143
final  value 1346.524511
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.667955
iter  20 value 1352.589931
final  value 1346.585315
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.621486
iter  20 value 1352.468362
final  value 1346.542338
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.502401
iter  20 value 1352.332836
final  value 1346.435920
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.701031
iter  20 value 1352.687984
final  value 1346.585091
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.491562
iter  20 value 1352.382673
final  value 1346.443623
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.644370
iter  20 value 1352.498012
final  value 1346.533428
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.720378
iter  20 value 1352.561690
final  value 1346.597042
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.594911
iter  20 value 1352.476986
final  value 1346.498568
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.643863
iter  20 value 1352.469768
final  value 1346.531367
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.736183
iter  20 value 1352.671395
final  value 1346.607002
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.633993
iter  20 value 1352.703729
final  value 1346.548086
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.716393
iter  20 value 1352.770796
final  value 1346.579803
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.795488
iter  20 value 1352.748882
final  value 1346.616467
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.761060
iter  20 value 1352.729148
final  value 1346.606546
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.709399
iter  20 value 1352.568858
final  value 1346.592924
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.657019
iter  20 value 1352.619106
final  value 1346.526042
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.708855
iter  20 value 1352.553813
final  value 1346.587274
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.710216
iter  20 value 1352.642275
final  value 1346.582427
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.743779
iter  20 value 1352.758783
final  value 1346.596038
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.733331
iter  20 value 1352.712632
final  value 1346.599542
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.771012
iter  20 value 1352.784583
final  value 1346.603304
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.595450
iter  20 value 1352.557310
final  value 1346.528140
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.663781
iter  20 value 1352.545016
final  value 1346.556170
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.698796
iter  20 value 1352.591690
final  value 1346.595345
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.746247
iter  20 value 1352.629770
final  value 1346.614491
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.718343
iter  20 value 1352.587569
final  value 1346.609411
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.697616
iter  20 value 1352.571509
final  value 1346.595867
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.565285
iter  20 value 1352.447591
final  value 1346.482287
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.604718
iter  20 value 1352.461104
final  value 1346.500268
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.240545
iter  20 value 1352.138365
final  value 1346.216048
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.234319
iter  20 value 1352.104914
final  value 1346.191680
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.691156
iter  20 value 1352.654124
final  value 1346.598942
converged
# weights:  27 (16 variable)
```

```
initial   value 4312.053233
iter  10 value 1374.571607
iter  20 value 1350.544546
final   value 1344.459876
converged
# weights:  27 (16 variable)
initial   value 4312.053233
iter  10 value 1375.629679
iter  20 value 1351.414720
final   value 1345.559709
converged
# weights:  27 (16 variable)
initial   value 4312.053233
iter  10 value 1376.692614
iter  20 value 1352.699793
final   value 1346.605257
converged
# weights:  27 (16 variable)
initial   value 4312.053233
iter  10 value 1376.688176
iter  20 value 1352.619569
final   value 1346.598525
converged
# weights:  27 (16 variable)
initial   value 4312.053233
iter  10 value 1376.692028
iter  20 value 1352.689472
final   value 1346.604089
converged
# weights:  27 (16 variable)
initial   value 4312.053233
iter  10 value 1376.709245
iter  20 value 1352.682681
final   value 1346.607706
converged
# weights:  27 (16 variable)
initial   value 4312.053233
iter  10 value 1376.682870
iter  20 value 1352.555081
final   value 1346.572178
converged
# weights:  27 (16 variable)
initial   value 4312.053233
iter  10 value 1376.741908
iter  20 value 1352.604466
final   value 1346.603390
converged
# weights:  27 (16 variable)
initial   value 4312.053233
iter  10 value 1376.697122
iter  20 value 1352.682667
final   value 1346.605386
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.701334
iter  20 value 1352.667284
final  value 1346.608301
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.710082
iter  20 value 1352.673654
final  value 1346.603685
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.561480
iter  20 value 1352.413047
final  value 1346.494526
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.930338
iter  20 value 1351.729737
final  value 1345.917280
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.592978
iter  20 value 1352.481749
final  value 1346.504576
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.545588
iter  20 value 1352.390769
final  value 1346.458413
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.536031
iter  20 value 1352.399124
final  value 1346.460583
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.228111
iter  20 value 1352.030056
final  value 1346.155783
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.554019
iter  20 value 1352.434334
final  value 1346.495821
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.750908
iter  20 value 1352.548962
final  value 1346.584418
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.660093
iter  20 value 1352.498326
final  value 1346.549652
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.671220
iter  20 value 1352.536668
final  value 1346.554886
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.692266
iter  20 value 1352.614507
final  value 1346.584779
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.528596
iter  20 value 1352.262894
final  value 1346.397426
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.717072
iter  20 value 1352.578561
final  value 1346.581610
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.727922
iter  20 value 1352.641985
final  value 1346.602468
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.716774
iter  20 value 1352.688371
final  value 1346.611426
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.689829
iter  20 value 1352.548907
final  value 1346.576581
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.577467
iter  20 value 1352.461487
final  value 1346.508090
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.601730
iter  20 value 1352.477756
final  value 1346.503998
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.561239
iter  20 value 1352.433857
final  value 1346.504319
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.604379
iter  20 value 1352.501424
final  value 1346.516766
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.619728
iter  20 value 1352.448769
final  value 1346.502801
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.712283
iter  20 value 1352.533229
final  value 1346.566474
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.411925
iter  20 value 1352.270311
final  value 1346.341594
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.675288
iter  20 value 1352.590107
final  value 1346.560862
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.671377
iter  20 value 1352.610711
final  value 1346.593238
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.702045
iter  20 value 1352.609769
final  value 1346.577822
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.678005
iter  20 value 1352.563272
final  value 1346.562201
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.684129
iter  20 value 1352.536520
final  value 1346.561858
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.692512
iter  20 value 1352.666178
final  value 1346.595501
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.666664
iter  20 value 1352.505260
final  value 1346.542996
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.723442
iter  20 value 1352.766150
final  value 1346.609181
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.705329
iter  20 value 1352.692166
final  value 1346.609427
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.709082
iter  20 value 1352.657762
final  value 1346.601060
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.059479
iter  20 value 1351.253388
final  value 1345.876699
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.055113
iter  20 value 1350.969329
final  value 1344.714750
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.630557
iter  20 value 1352.475174
final  value 1346.476967
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.222469
iter  20 value 1352.159798
final  value 1346.127936
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.208625
iter  20 value 1352.129009
final  value 1346.120900
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.641641
iter  20 value 1352.575622
final  value 1346.530784
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.482585
iter  20 value 1352.325736
final  value 1346.379602
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.699831
iter  20 value 1352.640960
final  value 1346.594170
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.725129
iter  20 value 1352.561609
final  value 1346.575553
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.681559
iter  20 value 1352.496950
final  value 1346.547990
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.221937
iter  20 value 1352.101058
final  value 1346.115821
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.665411
iter  20 value 1352.600939
final  value 1346.563607
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.536607
iter  20 value 1351.700963
final  value 1345.404018
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.526671
iter  20 value 1352.260037
final  value 1346.426610
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.625729
iter  20 value 1352.508444
final  value 1346.521338
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.661129
iter  20 value 1352.514108
final  value 1346.540782
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.680319
iter  20 value 1352.604270
final  value 1346.589496
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.213661
iter  20 value 1351.386148
final  value 1344.732798
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.227315
iter  20 value 1352.260335
final  value 1346.167210
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.301889
iter  20 value 1352.254297
final  value 1346.264951
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.580980
iter  20 value 1351.875619
final  value 1344.997377
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.186334
iter  20 value 1352.040007
final  value 1346.061037
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.477667
iter  20 value 1352.371959
final  value 1346.377016
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.511569
iter  20 value 1352.380383
final  value 1346.406969
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.622653
iter  20 value 1352.532322
final  value 1346.502669
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.629153
iter  20 value 1352.500632
final  value 1346.521216
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.175664
iter  20 value 1352.038657
final  value 1346.058519
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.635016
iter  20 value 1352.510460
final  value 1346.526602
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.152183
iter  20 value 1352.437581
final  value 1345.716582
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.574033
iter  20 value 1352.479094
final  value 1346.477650
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.492014
iter  20 value 1352.429292
final  value 1346.402552
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.551698
iter  20 value 1352.414113
final  value 1346.444769
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.607034
iter  20 value 1352.488384
final  value 1346.493655
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.347342
iter  20 value 1352.271537
final  value 1346.287210
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.612429
iter  20 value 1352.493717
final  value 1346.498541
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.691943
iter  20 value 1352.582673
final  value 1346.581334
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.565665
iter  20 value 1352.451706
final  value 1346.493186
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.715186
iter  20 value 1352.638903
final  value 1346.607147
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.691946
iter  20 value 1352.586177
final  value 1346.574648
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.380428
iter  20 value 1352.178076
final  value 1346.322162
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.499127
iter  20 value 1352.333173
final  value 1346.378121
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.431450
iter  20 value 1352.260232
final  value 1346.322258
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.080863
iter  20 value 1351.924566
final  value 1345.973064
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.635475
iter  20 value 1352.499125
final  value 1346.549577
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.587577
iter  20 value 1352.452107
final  value 1346.511378
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.735030
iter  20 value 1352.627640
final  value 1346.599258
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.714769
iter  20 value 1352.595206
final  value 1346.604844
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.681987
iter  20 value 1352.571046
final  value 1346.583794
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.659301
iter  20 value 1352.524762
final  value 1346.568565
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.347856
iter  20 value 1352.176613
final  value 1346.281146
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.279684
iter  20 value 1352.110712
final  value 1346.224745
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.588647
iter  20 value 1352.449554
final  value 1346.503876
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.650881
iter  20 value 1352.525212
final  value 1346.564633
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.685700
iter  20 value 1352.514598
final  value 1346.551851
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.683658
iter  20 value 1352.574531
final  value 1346.563775
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.618264
iter  20 value 1352.581709
final  value 1346.488208
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.657060
iter  20 value 1352.556026
final  value 1346.542025
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.717143
iter  20 value 1352.599794
final  value 1346.594550
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.654797
iter  20 value 1352.543387
final  value 1346.535786
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.491187
iter  20 value 1352.375422
final  value 1346.364502
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.671351
iter  20 value 1352.540035
final  value 1346.544923
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.461227
iter  20 value 1352.570217
final  value 1346.323769
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.672807
iter  20 value 1352.598640
final  value 1346.542057
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.618415
iter  20 value 1352.508653
final  value 1346.486359
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.161652
iter  20 value 1351.932663
final  value 1346.080640
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.587563
iter  20 value 1352.443350
final  value 1346.513684
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.638133
iter  20 value 1352.524724
final  value 1346.565149
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.595336
iter  20 value 1352.429598
final  value 1346.503497
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.596238
iter  20 value 1352.463592
final  value 1346.520443
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.677265
iter  20 value 1352.552042
final  value 1346.551054
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.929667
iter  20 value 1351.710521
final  value 1345.882616
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.557042
iter  20 value 1352.361329
final  value 1346.492151
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.679141
iter  20 value 1352.554740
final  value 1346.588658
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.696789
iter  20 value 1352.557842
final   value 1346.578085
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.695876
iter  20 value 1352.575091
final   value 1346.576377
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.505304
iter  20 value 1352.319082
final   value 1346.395351
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.687331
iter  20 value 1352.513847
final   value 1346.557216
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.694534
iter  20 value 1352.554799
final   value 1346.560108
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.645903
iter  20 value 1352.517437
final   value 1346.567824
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.586559
iter  20 value 1352.455371
final   value 1346.513834
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.672333
iter  20 value 1352.583374
final   value 1346.588436
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.524564
iter  20 value 1352.385791
final   value 1346.470008
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.633973
iter  20 value 1352.483656
final  value 1346.539108
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.617856
iter  20 value 1352.533265
final  value 1346.567714
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.584138
iter  20 value 1352.563986
final  value 1346.155474
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.295915
iter  20 value 1351.143536
final  value 1344.917764
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.552139
iter  20 value 1351.653867
final  value 1345.112798
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.643102
iter  20 value 1351.221815
final  value 1345.466810
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.674044
iter  20 value 1351.810988
final  value 1345.243774
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.247484
iter  20 value 1351.475707
final  value 1344.731959
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.286172
iter  20 value 1350.419869
final  value 1344.769810
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1374.546301
iter  20 value 1350.911395
final   value 1344.104694
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.580627
iter  20 value 1352.882336
final   value 1346.215041
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.258678
iter  20 value 1351.976021
final   value 1346.074603
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.740225
iter  20 value 1352.666848
final   value 1346.591987
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.740225
iter  20 value 1352.666848
final   value 1346.591987
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.397711
iter  20 value 1352.310254
final   value 1346.307373
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.273991
iter  20 value 1352.299781
final   value 1346.115683
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.826539
iter  20 value 1352.566377
final   value 1346.571304
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.765818
iter  20 value 1352.604591
final   value 1346.580779
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.828697
iter  20 value 1352.618657
final  value 1346.524711
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.438731
iter  20 value 1351.449422
final  value 1345.499532
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.624065
iter  20 value 1352.560326
final  value 1346.569776
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.402920
iter  20 value 1352.244704
final  value 1346.282807
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.354195
iter  20 value 1352.301504
final  value 1346.412382
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.454132
iter  20 value 1352.408008
final  value 1346.492786
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.508164
iter  20 value 1349.879882
final  value 1344.472101
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.058619
iter  20 value 1351.447416
final  value 1344.728841
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.071997
iter  20 value 1350.091187
final  value 1344.014396
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.998635
iter  20 value 1351.926279
final  value 1346.138982
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.348567
iter  20 value 1350.208954
final  value 1344.397594
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.270310
iter  20 value 1352.296422
final  value 1346.216744
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.546955
iter  20 value 1352.372342
final  value 1346.468834
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.195301
iter  20 value 1348.980630
final  value 1343.909480
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.435110
iter  20 value 1352.500695
final  value 1346.521072
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.669071
iter  20 value 1351.222194
final  value 1345.539622
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.535390
iter  20 value 1350.976193
final  value 1344.642154
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1371.888626
iter  20 value 1347.842894
final  value 1341.781397
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.207663
iter  20 value 1350.834662
final   value 1345.009092
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.219128
iter  20 value 1352.051523
final   value 1346.178633
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.520300
iter  20 value 1352.408872
final   value 1346.481914
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.146324
iter  20 value 1352.143756
final   value 1346.102345
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.528454
iter  20 value 1352.414960
final   value 1346.421343
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1373.686300
iter  20 value 1349.616515
final   value 1343.568857
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.433088
iter  20 value 1349.671828
final   value 1344.250951
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.965199
iter  20 value 1350.549104
final   value 1344.833359
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.687882
iter  20 value 1352.657320
final   value 1346.589265
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.402668
iter  20 value 1352.602495
final  value 1346.227291
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.197863
iter  20 value 1351.157470
final  value 1345.300466
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.666089
iter  20 value 1352.488944
final  value 1346.551399
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.306099
iter  20 value 1350.604746
final  value 1344.172122
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1373.173793
iter  20 value 1350.251726
final  value 1343.039109
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.438450
iter  20 value 1352.333308
final  value 1346.413451
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.085467
iter  20 value 1350.211414
final  value 1344.031005
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.263660
iter  20 value 1352.162512
final  value 1346.179152
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1373.841754
iter  20 value 1349.250833
final  value 1343.595598
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.792916
iter  20 value 1352.224511
final  value 1346.578598
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.615141
iter  20 value 1352.420412
final  value 1346.532832
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.336574
iter  20 value 1350.029631
final  value 1344.227273
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.049256
iter  20 value 1351.879611
final  value 1345.912483
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.672010
iter  20 value 1352.520084
final  value 1346.555829
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.165290
iter  20 value 1352.015003
final  value 1346.040999
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.979837
iter  20 value 1351.876954
final  value 1345.885859
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.713270
iter  20 value 1351.863608
final  value 1346.356683
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.514716
iter  20 value 1352.413291
final  value 1346.496001
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.504479
iter  20 value 1352.340821
final  value 1346.381591
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.496280
iter  20 value 1352.488969
final  value 1346.498608
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.020495
iter  20 value 1351.814601
final  value 1345.977014
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.535609
iter  20 value 1352.465137
final  value 1346.539813
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1372.489036
iter  20 value 1347.603847
final  value 1341.917109
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.413416
iter  20 value 1351.874815
final  value 1346.321698
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.214531
iter  20 value 1352.174562
final  value 1346.245356
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.425670
iter  20 value 1351.725499
final  value 1345.535359
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.616596
iter  20 value 1352.464040
final  value 1346.536430
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.818387
iter  20 value 1352.403182
final  value 1346.605531
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.071446
iter  20 value 1352.008565
final  value 1346.069700
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.975506
iter  20 value 1351.818762
final  value 1345.934755
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.088782
iter  20 value 1351.963503
final  value 1345.989444
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.627932
iter  20 value 1352.555209
final  value 1346.533047
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.686916
iter  20 value 1352.586852
final  value 1346.585269
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.767306
iter  20 value 1352.454810
final  value 1346.583221
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.745984
iter  20 value 1352.587353
final  value 1346.595324
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.659845
iter  20 value 1352.489217
final  value 1346.539578
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.583005
iter  20 value 1352.425545
final   value 1346.481389
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.589740
iter  20 value 1352.450064
final   value 1346.496437
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.755741
iter  20 value 1352.676361
final   value 1346.591275
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.819274
iter  20 value 1352.648677
final   value 1346.600922
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.534794
iter  20 value 1352.432136
final   value 1346.459102
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.194702
iter  20 value 1352.192654
final   value 1346.174606
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.674813
iter  20 value 1352.556045
final   value 1346.575712
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.169946
iter  20 value 1351.114346
final   value 1346.038133
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.381730
iter  20 value 1352.302141
final   value 1346.314888
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.678160
iter  20 value 1351.739491
final  value 1346.422424
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.643431
iter  20 value 1352.455831
final  value 1346.513711
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.579357
iter  20 value 1352.581490
final  value 1346.447128
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.783721
iter  20 value 1352.744145
final  value 1346.614802
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.801597
iter  20 value 1351.722190
final  value 1345.794762
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.017473
iter  20 value 1351.907286
final  value 1346.059384
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.592289
iter  20 value 1352.471410
final  value 1346.514838
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.281506
iter  20 value 1352.142620
final  value 1346.228668
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.625729
iter  20 value 1352.437387
final  value 1346.513096
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.230943
iter  20 value 1352.109486
final  value 1346.185921
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.453241
iter  20 value 1352.321969
final  value 1346.370074
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.739394
iter  20 value 1352.703755
final  value 1346.604999
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.612820
iter  20 value 1352.533290
final  value 1346.541025
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.572343
iter  20 value 1352.465999
final  value 1346.472798
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.559534
iter  20 value 1352.628045
final  value 1346.375004
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.679810
iter  20 value 1352.638484
final  value 1346.596172
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.727609
iter  20 value 1352.670296
final  value 1346.609168
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.582129
iter  20 value 1352.502910
final  value 1346.541751
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.494594
iter  20 value 1352.357110
final  value 1346.402192
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.279792
iter  20 value 1352.190744
final  value 1346.081725
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.535657
iter  20 value 1352.355014
final  value 1346.458390
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.979578
iter  20 value 1351.930281
final  value 1345.968796
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.337320
iter  20 value 1352.364461
final  value 1346.167116
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.668189
iter  20 value 1352.502890
final  value 1346.557429
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.434096
iter  20 value 1352.287851
final  value 1346.355710
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.487752
iter  20 value 1352.290860
final  value 1346.419579
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.733085
iter  20 value 1352.529413
final  value 1346.603765
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.768865
iter  20 value 1352.443873
final  value 1346.577758
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.978138
iter  20 value 1351.835997
final  value 1346.011917
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.530080
iter  20 value 1352.441636
final  value 1346.431472
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.687171
iter  20 value 1352.612631
final  value 1346.571846
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.703517
iter  20 value 1352.725328
final  value 1346.608046
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.352574
iter  20 value 1352.212435
final  value 1346.305432
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.602011
iter  20 value 1352.533099
final  value 1346.556445
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.632676
iter  20 value 1352.548969
final  value 1346.566150
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.017640
iter  20 value 1351.993944
final  value 1345.694935
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.774883
iter  20 value 1352.546247
final  value 1346.579867
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.658136
iter  20 value 1352.381004
final  value 1346.543664
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.575459
iter  20 value 1352.516696
final  value 1346.462237
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.614686
iter  20 value 1352.557269
final  value 1346.563435
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.828408
iter  20 value 1351.773939
final  value 1345.872954
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.793789
iter  20 value 1351.753104
final  value 1345.796134
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1373.669344
iter  20 value 1349.771494
final  value 1343.440151
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.682648
iter  20 value 1352.473108
final  value 1346.555124
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.541326
iter  20 value 1352.381382
final  value 1346.488536
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.704965
iter  20 value 1352.595438
final  value 1346.585236
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.828929
iter  20 value 1351.776416
final  value 1345.635779
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.657228
iter  20 value 1352.593282
final  value 1346.584625
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.034423
iter  20 value 1351.964168
final  value 1345.782439
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.373304
iter  20 value 1351.396708
final  value 1345.174052
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.859131
iter  20 value 1352.735117
final  value 1346.596216
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.034313
iter  20 value 1351.953075
final  value 1346.042033
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.522471
iter  20 value 1352.375930
final  value 1346.453261
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.564582
iter  20 value 1352.447970
final  value 1346.524002
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.750109
iter  20 value 1352.615303
final  value 1346.611096
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.741381
iter  20 value 1352.563575
final  value 1346.594739
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.741520
iter  20 value 1352.560679
final  value 1346.606868
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.757494
iter  20 value 1352.583298
final  value 1346.607806
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.685358
iter  20 value 1352.578191
final  value 1346.575556
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.420250
iter  20 value 1352.284659
final  value 1346.404898
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.710998
iter  20 value 1352.551268
final  value 1346.588240
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.577432
iter  20 value 1352.441759
final  value 1346.493405
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.658400
iter  20 value 1352.530575
final  value 1346.577555
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.625979
iter  20 value 1352.542157
final  value 1346.537658
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.688144
iter  20 value 1352.531082
final  value 1346.562660
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.657970
iter  20 value 1352.559597
final  value 1346.553267
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.726237
iter  20 value 1352.573184
final  value 1346.594872
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.605276
iter  20 value 1352.459129
final  value 1346.492311
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.630193
iter  20 value 1352.475801
final  value 1346.532769
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.425850
iter  20 value 1352.339057
final  value 1346.368166
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.715554
iter  20 value 1352.610126
final  value 1346.596250
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.044952
iter  20 value 1352.202997
final  value 1346.161469
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.689703
iter  20 value 1352.546304
final  value 1346.574452
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.563035
iter  20 value 1352.440140
final  value 1346.484225
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.594520
iter  20 value 1352.406058
final  value 1346.491809
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.556834
iter  20 value 1352.410586
final  value 1346.497138
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.595868
iter  20 value 1352.451700
final  value 1346.490501
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.700274
iter  20 value 1352.534016
final  value 1346.582058
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.685365
iter  20 value 1352.553750
final  value 1346.576371
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.733854
iter  20 value 1352.601833
final  value 1346.601694
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.481660
iter  20 value 1352.328171
final  value 1346.400024
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.662263
iter  20 value 1352.512012
final  value 1346.557031
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.721383
iter  20 value 1352.572155
final  value 1346.598883
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.616463
iter  20 value 1352.468016
final  value 1346.527132
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.704526
iter  20 value 1352.642177
final  value 1346.609652
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.609471
iter  20 value 1352.447161
final  value 1346.505992
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.597928
iter  20 value 1352.474216
final  value 1346.516373
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.703885
iter  20 value 1352.576564
final  value 1346.580428
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.705253
iter  20 value 1350.818576
final  value 1344.732468
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.575755
iter  20 value 1352.483885
final  value 1346.505802
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.753275
iter  20 value 1352.653949
final  value 1346.603083
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.129061
iter  20 value 1351.442580
final  value 1345.262525
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.745177
iter  20 value 1352.545757
final  value 1346.605870
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.678251
iter  20 value 1351.821643
final  value 1345.718539
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.884049
iter  20 value 1351.296033
final  value 1344.999216
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.770813
iter  20 value 1351.875584
final  value 1345.800162
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.723364
iter  20 value 1352.614984
final  value 1346.610253
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.551815
iter  20 value 1352.405361
final  value 1346.460558
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.525560
iter  20 value 1352.358182
final  value 1346.438433
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.448672
iter  20 value 1352.290115
final   value 1346.398185
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.460117
iter  20 value 1352.301880
final   value 1346.393613
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.581526
iter  20 value 1352.394901
final   value 1346.488521
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.162263
iter  20 value 1351.971358
final   value 1346.110810
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.344959
iter  20 value 1352.207745
final   value 1346.316285
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.523940
iter  20 value 1352.074274
final   value 1346.388176
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.406652
iter  20 value 1352.238363
final   value 1346.352835
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.582634
iter  20 value 1352.544984
final   value 1346.541462
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.448384
iter  20 value 1352.411537
final   value 1346.441996
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.636803
iter  20 value 1351.809809
final  value 1345.715474
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.146206
iter  20 value 1352.110149
final  value 1346.119633
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.638425
iter  20 value 1352.449549
final  value 1346.526402
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.512226
iter  20 value 1352.360106
final  value 1346.438424
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.576021
iter  20 value 1352.387384
final  value 1346.475695
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.251410
iter  20 value 1353.059498
final  value 1345.983769
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.374315
iter  20 value 1352.263062
final  value 1346.325958
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.529880
iter  20 value 1352.369390
final  value 1346.448277
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.578527
iter  20 value 1352.410032
final  value 1346.480318
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.555177
iter  20 value 1352.422965
final  value 1346.447885
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.173206
iter  20 value 1352.101217
final  value 1346.110772
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.611364
iter  20 value 1352.540531
final  value 1346.558847
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.459744
iter  20 value 1352.462621
final  value 1346.456722
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.144916
iter  20 value 1352.107755
final  value 1346.152258
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.588557
iter  20 value 1352.478907
final  value 1346.488913
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.791394
iter  20 value 1351.876520
final  value 1345.817616
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.413408
iter  20 value 1351.682134
final  value 1345.538832
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.858607
iter  20 value 1351.948849
final  value 1345.917146
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.853505
iter  20 value 1351.926386
final  value 1345.874563
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.681215
iter  20 value 1351.797764
final  value 1345.722982
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.382123
iter  20 value 1352.284313
final  value 1346.328037
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.692198
iter  20 value 1352.529755
final  value 1346.573602
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.676759
iter  20 value 1352.621543
final  value 1346.550598
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.362595
iter  20 value 1352.280819
final  value 1346.259812
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.599084
iter  20 value 1352.393147
final  value 1346.491906
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.659628
iter  20 value 1352.561306
final  value 1346.580940
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.564656
iter  20 value 1352.515119
final  value 1346.490191
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.621298
iter  20 value 1352.573564
final  value 1346.548896
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.504971
iter  20 value 1352.487725
final  value 1346.510290
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.577681
iter  20 value 1352.415477
final  value 1346.482660
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.586640
iter  20 value 1352.403875
final  value 1346.480484
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.024885
iter  20 value 1352.001854
final  value 1345.995015
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.947014
iter  20 value 1351.991864
final  value 1345.966116
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.977555
iter  20 value 1351.974512
final  value 1345.956045
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.791394
iter  20 value 1351.876520
final  value 1345.817616
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.431810
iter  20 value 1352.308487
final  value 1346.344648
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.032888
iter  20 value 1352.111300
final  value 1346.010849
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.585671
iter  20 value 1352.396427
final  value 1346.501418
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.241641
iter  20 value 1352.186841
final  value 1346.179379
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1373.167468
iter  20 value 1350.130552
final  value 1342.770466
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.150737
iter  20 value 1351.842034
final  value 1346.153049
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.018650
iter  20 value 1351.752143
final  value 1346.028501
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.549140
iter  20 value 1352.358879
final  value 1346.447849
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.606353
iter  20 value 1352.423870
final  value 1346.499468
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.565009
iter  20 value 1352.493308
final  value 1346.504335
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.642386
iter  20 value 1352.591728
final  value 1346.569698
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.398937
iter  20 value 1352.332306
final  value 1346.338046
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.566969
iter  20 value 1352.508605
final  value 1346.519976
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.626136
iter  20 value 1352.458986
final  value 1346.519089
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.078977
iter  20 value 1352.116216
final  value 1346.034431
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.607783
iter  20 value 1352.409162
final  value 1346.502560
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.690228
iter  20 value 1352.550351
final  value 1346.572641
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.715582
iter  20 value 1352.557525
final  value 1346.591807
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.173486
iter  20 value 1352.014253
final  value 1346.167884
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.660465
iter  20 value 1352.488881
final  value 1346.543518
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.815427
iter  20 value 1351.903570
final  value 1345.845675
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.736264
iter  20 value 1352.528813
final  value 1346.592627
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.661247
iter  20 value 1352.612913
final  value 1346.567116
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.397254
iter  20 value 1352.292294
final  value 1346.353135
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.540947
iter  20 value 1352.480994
final  value 1346.483916
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.608725
iter  20 value 1352.503720
final  value 1346.521059
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.293586
iter  20 value 1350.483258
final  value 1344.055932
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1373.907671
iter  20 value 1349.791998
final  value 1343.573449
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.707458
iter  20 value 1352.529102
final  value 1346.589401
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.330984
iter  20 value 1350.836320
final  value 1345.255068
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.422248
iter  20 value 1351.771509
final  value 1346.326747
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.681769
iter  20 value 1352.556841
final  value 1346.569361
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.156541
iter  20 value 1352.161658
final  value 1346.016179
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.134102
iter  20 value 1351.237231
final  value 1345.146978
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.324376
iter  20 value 1351.936074
final  value 1346.391653
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.723967
iter  20 value 1352.683526
final  value 1346.589934
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.722534
iter  20 value 1351.623938
final  value 1345.748159
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1373.402543
iter  20 value 1349.224261
final  value 1343.049654
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.395183
iter  20 value 1351.577010
final  value 1345.435658
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.679124
iter  20 value 1352.510326
final  value 1346.558338
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.352712
iter  20 value 1352.236401
final  value 1346.266189
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.834756
iter  20 value 1351.593196
final  value 1345.755081
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.190492
iter  20 value 1352.016219
final  value 1345.811929
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1377.450683
iter  20 value 1352.352519
final  value 1346.467374
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.704297
iter  20 value 1352.602638
final  value 1346.568224
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.064179
iter  20 value 1350.827667
final  value 1344.829326
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.845684
iter  20 value 1352.145658
final  value 1346.137171
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.707915
iter  20 value 1352.612982
final  value 1346.594712
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.632579
iter  20 value 1352.539420
final  value 1346.534914
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.646754
iter  20 value 1352.449432
final  value 1346.526257
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.679653
iter  20 value 1352.530083
final  value 1346.556838
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.752436
iter  20 value 1351.891878
final  value 1345.309697
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.602036
iter  20 value 1352.325758
final  value 1346.475027
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.387286
iter  20 value 1351.369553
final  value 1345.120367
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.556772
iter  20 value 1352.433663
final  value 1346.435030
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.602979
iter  20 value 1352.264132
final  value 1346.440911
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.731963
iter  20 value 1352.537985
final  value 1346.587133
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.708203
iter  20 value 1352.591741
final  value 1346.604256
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.884696
iter  20 value 1351.640571
final  value 1345.485595
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.325603
iter  20 value 1352.090271
final  value 1346.260282
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.773404
iter  20 value 1352.593054
final  value 1346.596835
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.170807
iter  20 value 1349.913213
final  value 1343.782087
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.878958
iter  20 value 1351.781482
final  value 1345.554187
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.674917
iter  20 value 1352.998625
final  value 1346.194062
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.392647
iter  20 value 1352.274694
final  value 1346.285356
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.577111
iter  20 value 1352.437593
final  value 1346.536613
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.703954
iter  20 value 1352.571957
final  value 1346.584986
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.532230
iter  20 value 1352.348694
final  value 1346.458921
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.683210
iter  20 value 1352.568109
final  value 1346.566509
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.623679
iter  20 value 1352.508609
final  value 1346.514496
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.293127
iter  20 value 1352.028393
final  value 1346.097678
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.748762
iter  20 value 1352.586209
final  value 1346.602912
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.680551
iter  20 value 1351.881037
final  value 1346.294616
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.755272
iter  20 value 1352.565871
final  value 1346.601652
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.567974
iter  20 value 1351.794981
final  value 1346.208307
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.775956
iter  20 value 1354.226057
final  value 1346.372812
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.337361
iter  20 value 1351.966261
final  value 1345.917953
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.374257
iter  20 value 1352.216026
final  value 1346.215028
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.682413
iter  20 value 1352.111932
final  value 1346.373827
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.706862
iter  20 value 1352.498788
final  value 1346.567195
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.771907
iter  20 value 1352.665039
final  value 1346.605463
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.438933
iter  20 value 1352.062910
final  value 1346.271399
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1374.460878
iter  20 value 1350.855294
final  value 1343.723839
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.682375
iter  20 value 1352.444031
final  value 1346.545639
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.661984
iter  20 value 1352.518393
final  value 1346.557864
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.677994
iter  20 value 1352.647740
final  value 1346.609066
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.640070
iter  20 value 1352.481064
final  value 1346.546437
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.671374
iter  20 value 1352.509488
final  value 1346.573154
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.499768
iter  20 value 1352.209723
final  value 1346.394842
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.582723
iter  20 value 1352.403834
final  value 1346.503988
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.699906
iter  20 value 1352.628312
final  value 1346.600492
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.670701
iter  20 value 1352.568861
final  value 1346.564047
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.632905
iter  20 value 1352.512290
final  value 1346.520036
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.737750
iter  20 value 1352.606184
final  value 1346.604551
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.705502
iter  20 value 1352.618369
final  value 1346.589515
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.693329
iter  20 value 1352.574643
final  value 1346.577786
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.683524
iter  20 value 1352.613106
final  value 1346.575996
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.620582
iter  20 value 1352.426555
final  value 1346.536845
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.748377
iter  20 value 1352.505161
final  value 1346.595139
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.711831
iter  20 value 1352.548702
final  value 1346.596074
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.606986
iter  20 value 1352.473933
final  value 1346.500464
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.701615
iter  20 value 1352.588161
final  value 1346.585610
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.709211
iter  20 value 1352.616899
final  value 1346.585262
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.736360
iter  20 value 1352.512902
final  value 1346.594276
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.707095
iter  20 value 1352.588706
final  value 1346.604353
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.619447
iter  20 value 1352.511793
final  value 1346.531742
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.773303
iter  20 value 1352.635188
final  value 1346.615317
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.746590
iter  20 value 1352.594181
final  value 1346.608655
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.676198
iter  20 value 1352.474105
final  value 1346.573941
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.727270
iter  20 value 1352.567376
final  value 1346.602680
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.714667
iter  20 value 1352.582536
final  value 1346.608001
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.690525
iter  20 value 1352.462148
final  value 1346.571692
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.783314
iter  20 value 1352.563061
final  value 1346.608624
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.723424
iter  20 value 1352.552727
final  value 1346.602689
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.754962
iter  20 value 1352.584511
final  value 1346.603733
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.747424
iter  20 value 1352.527449
final  value 1346.594246
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.781677
iter  20 value 1352.580069
final  value 1346.612426
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.775165
iter  20 value 1352.584567
final  value 1346.610410
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.689408
iter  20 value 1352.633848
final  value 1346.583711
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.715894
iter  20 value 1352.649144
final  value 1346.596808
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.690273
iter  20 value 1352.625536
final  value 1346.583993
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.657182
iter  20 value 1352.569531
final  value 1346.548198
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.657137
iter  20 value 1352.585665
final  value 1346.550149
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.698315
iter  20 value 1352.602021
final  value 1346.581108
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.627240
iter  20 value 1352.512365
final  value 1346.517668
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.666529
iter  20 value 1352.585631
final  value 1346.556255
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.850745
iter  20 value 1352.107358
final  value 1346.406383
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.799987
iter  20 value 1352.152404
final  value 1346.469707
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.488785
iter  20 value 1352.327147
final  value 1346.404755
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.207065
iter  20 value 1351.898515
final  value 1346.086025
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.824355
iter  20 value 1351.619795
final  value 1345.639037
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.977250
iter  20 value 1352.682486
final  value 1346.546484
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.886009
iter  20 value 1352.416052
final  value 1346.501607
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.949120
iter  20 value 1351.801063
final  value 1345.530190
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.990606
iter  20 value 1351.915852
final  value 1346.375173
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.474390
iter  20 value 1352.290189
final  value 1346.416097
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.566353
iter  20 value 1351.899910
final  value 1346.256343
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.658577
iter  20 value 1352.534927
final  value 1346.548695
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.178853
iter  20 value 1351.516858
final  value 1346.174720
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.699979
iter  20 value 1352.592881
final  value 1346.588517
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.720903
iter  20 value 1352.632038
final  value 1346.583981
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.436075
iter  20 value 1352.363205
final  value 1346.312137
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.740016
iter  20 value 1352.653833
final  value 1346.607357
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.676014
iter  20 value 1352.631341
final  value 1346.595228
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.688489
iter  20 value 1352.731968
final  value 1346.605290
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.703440
iter  20 value 1352.548781
final  value 1346.548387
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.638421
iter  20 value 1352.451817
final  value 1346.515816
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.773493
iter  20 value 1352.550155
final  value 1346.596677
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.713001
iter  20 value 1352.810502
final  value 1346.613138
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.679721
iter  20 value 1352.613230
final  value 1346.593256
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.698954
iter  20 value 1352.646195
final  value 1346.600953
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.695163
iter  20 value 1352.666590
final  value 1346.604535
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.685022
iter  20 value 1352.644860
final  value 1346.580011
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.693218
iter  20 value 1352.656355
final  value 1346.609267
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.694610
iter  20 value 1352.698110
final  value 1346.609573
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.554579
iter  20 value 1352.401093
final  value 1346.399212
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.436075
iter  20 value 1352.363205
final  value 1346.312137
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.710215
iter  20 value 1352.739617
final  value 1346.605886
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.694610
iter  20 value 1352.698110
final  value 1346.609573
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.436075
iter  20 value 1352.363205
final  value 1346.312137
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.211374
iter  20 value 1352.277049
final  value 1346.077961
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.436818
iter  20 value 1352.319957
final  value 1346.304536
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.679074
iter  20 value 1352.605437
final  value 1346.586738
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.701815
iter  20 value 1352.678391
final  value 1346.605566
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.436075
iter  20 value 1352.363205
final  value 1346.312137
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.694610
iter  20 value 1352.698110
final  value 1346.609573
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.462423
iter  20 value 1352.349153
final  value 1346.304828
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.691214
iter  20 value 1352.690715
final  value 1346.608936
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.647542
iter  20 value 1352.530435
final  value 1346.545757
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.733863
iter  20 value 1352.646525
final  value 1346.607083
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.739587
iter  20 value 1352.653627
final  value 1346.608065
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.735144
iter  20 value 1352.646956
final  value 1346.607265
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.677249
iter  20 value 1352.606365
final  value 1346.579890
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.669843
iter  20 value 1352.540482
final  value 1346.560431
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.696865
iter  20 value 1352.575596
final  value 1346.585445
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.588009
iter  20 value 1352.412037
final  value 1346.489765
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.495463
iter  20 value 1351.376470
final  value 1345.302370
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.722249
iter  20 value 1352.550074
final  value 1346.583063
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.669987
iter  20 value 1352.609839
final  value 1346.593713
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.723028
iter  20 value 1352.588896
final  value 1346.581545
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.674953
iter  20 value 1352.612748
final  value 1346.597593
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.692067
iter  20 value 1352.618159
final  value 1346.597391
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.054081
iter  20 value 1352.012797
final  value 1345.782052
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.666559
iter  20 value 1352.577965
final  value 1346.577236
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.708440
iter  20 value 1352.611595
final  value 1346.576640
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.704565
iter  20 value 1352.435876
final  value 1346.549938
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.408683
iter  20 value 1352.347446
final  value 1346.243195
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.575058
iter  20 value 1352.547065
final  value 1346.288566
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.238349
iter  20 value 1352.344577
final  value 1346.162800
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.550476
iter  20 value 1352.446069
final  value 1346.393740
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.701285
iter  20 value 1352.606888
final  value 1346.600935
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.937440
iter  20 value 1351.927835
final  value 1345.689547
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.214161
iter  20 value 1352.134953
final  value 1346.041372
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.704270
iter  20 value 1352.630648
final  value 1346.607521
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.650599
iter  20 value 1352.546207
final  value 1346.565654
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.341238
iter  20 value 1352.261498
final  value 1346.082535
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.801236
iter  20 value 1351.618389
final  value 1345.591589
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.495463
iter  20 value 1351.376470
final  value 1345.302370
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.704650
iter  20 value 1352.646970
final  value 1346.602864
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.675595
iter  20 value 1352.616094
final  value 1346.593025
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.644510
iter  20 value 1352.544625
final  value 1346.531353
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.195230
iter  20 value 1352.007772
final  value 1346.122209
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.326726
iter  20 value 1352.120221
final  value 1346.235637
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.735144
iter  20 value 1352.646956
final  value 1346.607265
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.281151
iter  20 value 1352.323752
final  value 1346.094963
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.039699
iter  20 value 1351.790651
final  value 1345.996430
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.738783
iter  20 value 1352.497812
final  value 1346.584409
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.716640
iter  20 value 1352.465506
final  value 1346.552396
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.870084
iter  20 value 1351.689749
final  value 1345.712427
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.225617
iter  20 value 1352.102073
final  value 1346.207107
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.613437
iter  20 value 1352.098342
final  value 1346.417918
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.679751
iter  20 value 1352.699570
final  value 1346.567478
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.497133
iter  20 value 1352.758593
final  value 1346.462930
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.241140
iter  20 value 1351.185429
final  value 1345.155910
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.304153
iter  20 value 1352.368866
final  value 1346.330257
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.487876
iter  20 value 1352.982094
final  value 1346.453658
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.493327
iter  20 value 1352.377873
final  value 1346.387399
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.568202
iter  20 value 1352.358572
final  value 1346.489561
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.724152
iter  20 value 1352.607367
final  value 1346.604875
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.722845
iter  20 value 1351.664964
final  value 1345.687813
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.479644
iter  20 value 1351.578613
final  value 1345.532818
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.591180
iter  20 value 1352.606520
final  value 1346.543460
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.991564
iter  20 value 1352.681141
final  value 1345.963206
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.765120
iter  20 value 1352.583767
final  value 1346.610014
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1373.178027
iter  20 value 1348.700868
final  value 1343.266268
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.256851
iter  20 value 1352.008915
final  value 1346.123547
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.740555
iter  20 value 1351.462489
final  value 1345.540118
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.338751
iter  20 value 1352.133603
final  value 1346.269781
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.554250
iter  20 value 1350.371235
final  value 1344.458494
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.213395
iter  20 value 1352.477089
final  value 1346.281650
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.131808
iter  20 value 1352.043498
final  value 1346.038351
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.126842
iter  20 value 1352.032845
final  value 1346.144195
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.539600
iter  20 value 1351.310461
final  value 1345.471752
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.685059
iter  20 value 1352.397220
final  value 1346.520709
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.700208
iter  20 value 1352.377589
final  value 1346.588749
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.510139
iter  20 value 1352.307807
final   value 1346.385678
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.651024
iter  20 value 1350.552778
final   value 1344.542519
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.919912
iter  20 value 1352.834612
final   value 1345.889017
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.814734
iter  20 value 1349.964221
final   value 1344.556214
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.722146
iter  20 value 1352.499556
final   value 1346.588751
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.113686
iter  20 value 1351.717780
final   value 1345.994478
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.722733
iter  20 value 1352.443844
final   value 1346.569933
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.664313
iter  20 value 1351.423929
final   value 1345.473976
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.503470
iter  20 value 1352.400621
final   value 1346.349931
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.532395
iter  20 value 1352.263955
final  value 1346.378987
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.550001
iter  20 value 1351.427723
final  value 1345.415502
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.375837
iter  20 value 1351.285178
final  value 1345.226607
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.582070
iter  20 value 1352.550946
final  value 1346.537136
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.783286
iter  20 value 1352.572574
final  value 1346.612963
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.488794
iter  20 value 1352.511239
final  value 1346.424687
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.645018
iter  20 value 1352.501490
final  value 1346.555852
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.634879
iter  20 value 1352.439480
final  value 1346.510568
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.009456
iter  20 value 1350.546653
final  value 1344.771727
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.161982
iter  20 value 1352.092033
final  value 1346.030567
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.585753
iter  20 value 1350.606976
final  value 1344.475091
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.509026
iter  20 value 1352.321638
final  value 1346.457015
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.701566
iter  20 value 1352.459778
final  value 1346.553957
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.255206
iter  20 value 1352.114123
final  value 1346.156686
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.435305
iter  20 value 1352.605519
final  value 1346.338400
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.709286
iter  20 value 1352.491770
final  value 1346.572414
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.513629
iter  20 value 1352.282650
final  value 1346.382179
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.301987
iter  20 value 1352.814554
final  value 1346.344498
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.281284
iter  20 value 1352.013632
final  value 1346.193850
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.389932
iter  20 value 1352.007953
final  value 1346.257164
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.651621
iter  20 value 1352.777994
final  value 1346.590388
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.723789
iter  20 value 1352.519441
final  value 1346.600481
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.569179
iter  20 value 1352.412161
final  value 1346.493942
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.676353
iter  20 value 1352.550285
final  value 1346.599498
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.536586
iter  20 value 1352.931985
final  value 1346.482549
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.257079
iter  20 value 1351.856190
final  value 1346.114638
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.242605
iter  20 value 1352.106905
final  value 1346.118838
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.698585
iter  20 value 1352.697759
final  value 1346.558093
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.411521
iter  20 value 1352.218781
final  value 1346.338781
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.652585
iter  20 value 1352.521413
final  value 1346.538040
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.038722
iter  20 value 1351.794149
final  value 1346.083339
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.960193
iter  20 value 1352.188013
final  value 1345.924607
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.028460
iter  20 value 1352.503583
final  value 1346.141615
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.266212
iter  20 value 1352.522010
final  value 1346.088567
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.453379
iter  20 value 1352.502859
final  value 1346.492870
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.297283
iter  20 value 1352.187253
final  value 1346.223941
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.513736
iter  20 value 1352.596440
final  value 1346.516057
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.060118
iter  20 value 1352.249432
final  value 1346.095362
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.095139
iter  20 value 1351.693615
final  value 1346.001213
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.472325
iter  20 value 1352.624966
final  value 1346.499999
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.053602
iter  20 value 1350.827286
final  value 1344.901857
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.046054
iter  20 value 1352.620775
final  value 1345.776963
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.280527
iter  20 value 1352.250543
final  value 1346.304827
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.518209
iter  20 value 1352.740404
final  value 1346.538176
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.793671
iter  20 value 1352.436228
final  value 1346.576091
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.006454
iter  20 value 1351.881321
final  value 1345.838602
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.212875
iter  20 value 1352.182418
final  value 1346.231186
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.456940
iter  20 value 1352.104200
final  value 1346.388996
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.442405
iter  20 value 1352.597668
final  value 1346.479835
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.027979
iter  20 value 1349.372440
final  value 1344.094914
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1372.891577
iter  20 value 1348.461329
final  value 1342.435740
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.278668
iter  20 value 1351.061866
final  value 1345.179373
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.694582
iter  20 value 1352.543501
final  value 1346.615819
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.036493
iter  20 value 1351.581956
final  value 1344.863241
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.997926
iter  20 value 1351.991055
final   value 1345.748290
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.150309
iter  20 value 1352.328790
final   value 1346.074189
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.411144
iter  20 value 1352.293137
final   value 1346.321401
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.535947
iter  20 value 1352.935943
final   value 1346.519427
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.101700
iter  20 value 1351.899829
final   value 1346.031899
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.935996
iter  20 value 1351.111379
final   value 1345.361699
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.619859
iter  20 value 1352.240862
final   value 1346.361712
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.257999
iter  20 value 1352.301695
final   value 1346.291156
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.502372
iter  20 value 1352.234239
final   value 1346.354173
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.413767
iter  20 value 1352.325370
final  value 1346.477184
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.758968
iter  20 value 1352.492597
final  value 1346.599265
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.727699
iter  20 value 1352.503532
final  value 1346.592243
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.867465
iter  20 value 1350.825209
final  value 1344.688614
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.577843
iter  20 value 1352.427685
final  value 1346.446172
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.420656
iter  20 value 1352.346991
final  value 1346.417730
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.512129
iter  20 value 1351.435898
final  value 1345.284586
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.016656
iter  20 value 1352.162713
final  value 1346.042761
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1373.640933
iter  20 value 1349.521319
final  value 1343.348894
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.505090
iter  20 value 1352.793816
final   value 1346.494874
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.622314
iter  20 value 1350.701306
final   value 1344.470453
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.734085
iter  20 value 1350.302686
final   value 1345.576144
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.375316
iter  20 value 1352.296742
final   value 1346.364364
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.459149
iter  20 value 1351.479347
final   value 1345.479508
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.433636
iter  20 value 1352.205392
final   value 1346.235990
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.813558
iter  20 value 1351.898517
final   value 1345.694148
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.640943
iter  20 value 1352.385496
final   value 1346.469380
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.911520
iter  20 value 1351.849471
final   value 1345.829039
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1372.502159
iter  20 value 1348.502153
final  value 1342.747235
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1373.972797
iter  20 value 1349.400567
final  value 1344.284411
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.996823
iter  20 value 1351.768638
final  value 1345.965204
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.735559
iter  20 value 1351.594288
final  value 1345.573032
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.590703
iter  20 value 1352.531589
final  value 1346.534134
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.489210
iter  20 value 1352.364388
final  value 1346.394751
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.264118
iter  20 value 1351.097612
final  value 1345.126809
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.005680
iter  20 value 1352.027492
final  value 1345.881970
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.487004
iter  20 value 1352.571239
final  value 1346.470350
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.518966
iter  20 value 1351.758499
final  value 1345.510258
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.040822
iter  20 value 1352.090995
final  value 1345.968623
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.154633
iter  20 value 1352.000052
final  value 1346.013710
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.205362
iter  20 value 1353.628715
final  value 1346.118603
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.441840
iter  20 value 1352.382496
final  value 1346.395656
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.116664
iter  20 value 1352.060148
final  value 1346.179126
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.720519
iter  20 value 1351.495631
final  value 1345.552806
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.560938
iter  20 value 1352.752194
final  value 1346.542331
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.535682
iter  20 value 1352.324826
final  value 1346.428682
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.434927
iter  20 value 1351.383314
final  value 1345.504544
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.653791
iter  20 value 1352.569072
final  value 1346.586005
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.464466
iter  20 value 1352.412071
final  value 1346.477031
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.651135
iter  20 value 1352.337850
final  value 1346.568696
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.731851
iter  20 value 1350.460727
final  value 1344.514737
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.249435
iter  20 value 1351.971459
final  value 1346.225860
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.201091
iter  20 value 1352.197018
final  value 1346.275990
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.410097
iter  20 value 1352.172010
final  value 1346.337706
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.172613
iter  20 value 1352.051294
final  value 1346.177365
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.617772
iter  20 value 1352.433488
final  value 1346.505196
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.226690
iter  20 value 1351.042613
final  value 1345.085184
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.709926
iter  20 value 1352.228452
final  value 1346.520758
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.201267
iter  20 value 1352.245254
final  value 1346.174775
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.067155
iter  20 value 1350.001872
final  value 1343.881108
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.474331
iter  20 value 1350.382282
final  value 1344.311625
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.730314
iter  20 value 1352.538739
final  value 1346.598620
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.630456
iter  20 value 1352.343007
final  value 1346.507816
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.404203
iter  20 value 1352.346207
final  value 1346.456732
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.040496
iter  20 value 1351.747698
final   value 1346.031937
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.528146
iter  20 value 1352.317472
final   value 1346.387841
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.068088
iter  20 value 1351.920548
final   value 1346.004874
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.149170
iter  20 value 1350.996552
final   value 1345.030705
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.135160
iter  20 value 1353.183973
final   value 1346.204276
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.950336
iter  20 value 1351.868964
final   value 1345.944852
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.634235
iter  20 value 1352.481020
final   value 1346.511071
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.507186
iter  20 value 1352.305640
final   value 1346.463816
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.794670
iter  20 value 1351.751404
final   value 1345.914298
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.658106
iter  20 value 1353.806914
final  value 1346.293595
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.394412
iter  20 value 1352.864354
final  value 1346.424322
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.374345
iter  20 value 1352.691620
final  value 1346.429566
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.316027
iter  20 value 1352.688443
final  value 1346.318156
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.578826
iter  20 value 1352.506187
final  value 1346.433488
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.546695
iter  20 value 1352.341962
final  value 1346.433518
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.768576
iter  20 value 1352.488063
final  value 1346.601320
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.505387
iter  20 value 1352.193318
final  value 1346.438317
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.320405
iter  20 value 1352.187927
final  value 1346.274896
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.472441
iter  20 value 1352.368345
final  value 1346.364288
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.467249
iter  20 value 1351.302340
final  value 1345.252500
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.570331
iter  20 value 1352.509060
final  value 1346.545203
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.426140
iter  20 value 1352.319313
final  value 1346.370907
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.543141
iter  20 value 1352.713865
final  value 1346.458573
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.543775
iter  20 value 1351.300023
final  value 1345.465953
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.289868
iter  20 value 1352.268527
final  value 1346.254241
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.621899
iter  20 value 1352.447454
final  value 1346.504552
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.684649
iter  20 value 1352.493618
final  value 1346.560806
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.725582
iter  20 value 1352.506817
final   value 1346.603744
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.688150
iter  20 value 1352.351467
final   value 1346.528168
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.758224
iter  20 value 1351.612408
final   value 1345.756103
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.411961
iter  20 value 1352.244265
final   value 1346.379847
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.550086
iter  20 value 1352.819539
final   value 1346.557610
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.946771
iter  20 value 1351.743342
final   value 1345.705238
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.421055
iter  20 value 1352.239777
final   value 1346.356062
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.778106
iter  20 value 1350.779438
final   value 1344.399796
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.262594
iter  20 value 1351.165641
final   value 1345.226363
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.677620
iter  20 value 1352.533002
final  value 1346.569844
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.744778
iter  20 value 1352.526997
final  value 1346.597491
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.535895
iter  20 value 1352.843783
final  value 1346.496809
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.696912
iter  20 value 1352.435617
final  value 1346.484538
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.529294
iter  20 value 1352.434917
final  value 1346.452222
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.475255
iter  20 value 1351.271034
final  value 1345.310670
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.740860
iter  20 value 1352.510810
final  value 1346.611382
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.499166
iter  20 value 1352.426538
final  value 1346.452459
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.602666
iter  20 value 1352.455548
final  value 1346.479475
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.706791
iter  20 value 1352.431817
final  value 1346.558386
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.984375
iter  20 value 1351.625313
final  value 1345.616447
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.690510
iter  20 value 1352.528542
final  value 1346.583188
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.639190
iter  20 value 1352.372839
final  value 1346.491939
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.152139
iter  20 value 1352.162296
final  value 1346.003271
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.897580
iter  20 value 1350.836971
final  value 1344.754369
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.323415
iter  20 value 1351.281367
final  value 1345.200136
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.756494
iter  20 value 1350.580292
final  value 1344.737917
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.410146
iter  20 value 1352.815340
final  value 1346.387982
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.631873
iter  20 value 1352.419604
final  value 1346.517344
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.448691
iter  20 value 1352.524293
final  value 1346.451713
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.334015
iter  20 value 1352.269678
final  value 1346.151599
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.532512
iter  20 value 1352.500470
final  value 1346.522601
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.717274
iter  20 value 1352.536796
final  value 1346.609684
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.570213
iter  20 value 1352.671011
final  value 1346.428326
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.564359
iter  20 value 1351.173813
final  value 1345.452686
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.997374
iter  20 value 1351.819134
final  value 1345.843392
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.596793
iter  20 value 1353.262362
final  value 1346.549622
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.566927
iter  20 value 1352.584954
final   value 1346.532848
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.649393
iter  20 value 1352.472511
final   value 1346.542159
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.376622
iter  20 value 1352.501965
final   value 1346.340802
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.668554
iter  20 value 1352.609073
final   value 1346.597253
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.697517
iter  20 value 1352.583983
final   value 1346.602915
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.170571
iter  20 value 1352.111238
final   value 1345.776254
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.349319
iter  20 value 1352.405567
final   value 1345.154377
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.651958
iter  20 value 1352.528348
final   value 1346.546302
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.383707
iter  20 value 1352.804249
final   value 1346.344377
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.804089
iter  20 value 1351.590641
final  value 1345.817391
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.500425
iter  20 value 1352.413525
final  value 1346.433145
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.109636
iter  20 value 1352.236030
final  value 1346.175183
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.694104
iter  20 value 1352.582279
final  value 1346.604879
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.630358
iter  20 value 1352.478069
final  value 1346.552081
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.710484
iter  20 value 1352.499718
final  value 1346.595518
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.612166
iter  20 value 1351.973299
final  value 1346.369173
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.783624
iter  20 value 1352.473127
final  value 1346.609008
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.812990
iter  20 value 1352.413236
final  value 1346.602406
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.761182
iter  20 value 1352.530986
final  value 1346.614337
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.987179
iter  20 value 1352.580182
final  value 1346.007231
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.938636
iter  20 value 1351.900372
final  value 1345.825690
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.432194
iter  20 value 1352.351504
final  value 1346.415504
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.736505
iter  20 value 1352.811162
final  value 1345.861516
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.555787
iter  20 value 1352.601614
final  value 1345.759274
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.359232
iter  20 value 1352.123782
final  value 1346.244952
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.422461
iter  20 value 1353.308352
final  value 1346.414617
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.573362
iter  20 value 1352.769594
final  value 1346.540943
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.487669
iter  20 value 1350.853603
final   value 1345.083377
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.606501
iter  20 value 1352.821519
final   value 1346.551007
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.545225
iter  20 value 1351.425134
final   value 1345.570879
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.379426
iter  20 value 1352.322606
final   value 1346.377190
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1373.996401
iter  20 value 1349.112764
final   value 1344.127151
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.605742
iter  20 value 1352.677089
final   value 1346.579678
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.532946
iter  20 value 1352.688578
final   value 1346.515807
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.375301
iter  20 value 1352.619638
final   value 1346.418585
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.671219
iter  20 value 1352.527441
final   value 1346.605150
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.643449
iter  20 value 1352.532261
final  value 1346.578612
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.429420
iter  20 value 1352.474020
final  value 1346.273433
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.548010
iter  20 value 1351.541315
final  value 1345.500546
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.411898
iter  20 value 1352.263720
final  value 1346.453126
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.535535
iter  20 value 1352.521294
final  value 1346.280564
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.677862
iter  20 value 1352.567101
final  value 1346.596328
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.779185
iter  20 value 1351.084692
final  value 1345.787157
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.379819
iter  20 value 1351.236729
final  value 1345.132885
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.828967
iter  20 value 1351.123531
final  value 1345.003312
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.624982
iter  20 value 1352.691080
final  value 1346.568756
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.196282
iter  20 value 1352.016296
final  value 1345.935508
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.580171
iter  20 value 1352.617766
final  value 1346.550601
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.613749
iter  20 value 1352.677243
final  value 1346.563450
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.582773
iter  20 value 1352.748346
final  value 1346.543281
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.628054
iter  20 value 1352.671088
final  value 1346.568664
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.610502
iter  20 value 1352.792013
final  value 1346.563919
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.473414
iter  20 value 1352.451821
final  value 1346.457545
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.435930
iter  20 value 1352.618259
final  value 1346.341789
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.052687
iter  20 value 1351.857413
final  value 1345.917698
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.706654
iter  20 value 1352.589814
final  value 1346.593133
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.427795
iter  20 value 1352.184622
final  value 1346.407789
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.633263
iter  20 value 1352.411979
final  value 1346.498686
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.707622
iter  20 value 1352.544041
final  value 1346.585769
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.344338
iter  20 value 1351.254383
final  value 1345.364000
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.693450
iter  20 value 1352.429364
final  value 1346.536962
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.138236
iter  20 value 1350.259565
final  value 1345.068985
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.699257
iter  20 value 1352.615134
final  value 1346.597853
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.534583
iter  20 value 1352.383947
final  value 1346.444682
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.697724
iter  20 value 1352.510671
final  value 1346.571423
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.681998
iter  20 value 1352.647155
final  value 1346.588518
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.536075
iter  20 value 1352.340694
final  value 1346.425013
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.335793
iter  20 value 1351.772424
final  value 1345.992140
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.687314
iter  20 value 1352.394390
final  value 1346.559500
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.673958
iter  20 value 1352.573095
final  value 1346.598026
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.289417
iter  20 value 1352.108143
final  value 1346.168700
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.442066
iter  20 value 1352.472857
final  value 1346.403175
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.631962
iter  20 value 1352.018389
final  value 1346.517021
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.421429
iter  20 value 1351.065111
final  value 1345.215101
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.223767
iter  20 value 1351.961533
final  value 1346.136477
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.574144
iter  20 value 1352.406431
final  value 1346.490336
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.177956
iter  20 value 1351.981988
final  value 1346.123164
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.570444
iter  20 value 1352.345430
final  value 1346.391861
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.431009
iter  20 value 1352.306879
final  value 1346.356511
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.216435
iter  20 value 1351.094964
final  value 1345.060930
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.658094
iter  20 value 1352.486612
final  value 1346.558353
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.663899
iter  20 value 1352.551259
final  value 1346.574367
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.251593
iter  20 value 1351.119042
final  value 1345.131268
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.644433
iter  20 value 1352.478347
final  value 1346.555429
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.703756
iter  20 value 1352.543751
final  value 1346.591449
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.226911
iter  20 value 1351.987840
final  value 1346.112464
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.776553
iter  20 value 1351.772681
final  value 1345.867152
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.122721
iter  20 value 1351.985419
final  value 1346.080123
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.631892
iter  20 value 1352.605379
final  value 1346.563589
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.527084
iter  20 value 1352.342874
final  value 1346.455585
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.556852
iter  20 value 1352.654238
final  value 1346.517176
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.758286
iter  20 value 1352.570593
final  value 1346.608129
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.608693
iter  20 value 1352.543899
final  value 1346.551520
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.618926
iter  20 value 1352.601342
final  value 1346.553698
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.620704
iter  20 value 1352.501913
final  value 1346.550860
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.558403
iter  20 value 1352.661708
final  value 1346.520970
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.728082
iter  20 value 1352.562469
final  value 1346.611823
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.744003
iter  20 value 1352.508520
final  value 1346.590180
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.417861
iter  20 value 1352.844178
final  value 1346.338206
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.622815
iter  20 value 1352.526849
final  value 1346.557115
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.712206
iter  20 value 1352.548551
final  value 1346.616269
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.332221
iter  20 value 1352.111216
final  value 1346.217973
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.668532
iter  20 value 1352.540622
final  value 1346.586325
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.722405
iter  20 value 1352.476290
final  value 1346.578374
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.698964
iter  20 value 1352.563381
final  value 1346.570185
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.243768
iter  20 value 1352.162723
final  value 1346.179112
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.408784
iter  20 value 1351.135217
final  value 1345.215113
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.447228
iter  20 value 1350.106521
final  value 1344.244365
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.666006
iter  20 value 1352.609466
final  value 1346.551636
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.308485
iter  20 value 1352.108631
final  value 1344.988632
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.223016
iter  20 value 1351.061244
final  value 1345.060541
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.329713
iter  20 value 1352.714677
final  value 1346.405837
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1371.247631
iter  20 value 1346.399462
final  value 1340.392172
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.350291
iter  20 value 1352.069123
final  value 1346.241544
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.420272
iter  20 value 1351.304646
final  value 1345.312287
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.895380
iter  20 value 1351.355150
final  value 1345.819379
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.895679
iter  20 value 1350.859176
final  value 1344.816953
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.400740
iter  20 value 1352.645241
final  value 1346.424453
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.431247
iter  20 value 1351.861917
final  value 1346.211519
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.562143
iter  20 value 1352.471789
final  value 1346.476033
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.580558
iter  20 value 1352.350052
final  value 1346.404386
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.881515
iter  20 value 1352.036723
final  value 1345.987765
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.676046
iter  20 value 1352.512304
final  value 1346.560388
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.637698
iter  20 value 1352.120808
final  value 1346.390263
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.079575
iter  20 value 1351.779729
final  value 1345.930728
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.883788
iter  20 value 1351.631171
final  value 1345.657867
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.262962
iter  20 value 1352.294796
final  value 1346.155920
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.716547
iter  20 value 1350.771168
final  value 1344.569799
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.723753
iter  20 value 1352.536828
final  value 1346.610482
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.281256
iter  20 value 1350.876077
final  value 1345.389184
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.537096
iter  20 value 1352.259444
final  value 1346.427610
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.719670
iter  20 value 1352.557421
final  value 1346.603717
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.701740
iter  20 value 1352.565459
final  value 1346.607145
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.463282
iter  20 value 1352.030178
final  value 1346.378975
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.423633
iter  20 value 1352.042726
final  value 1346.376434
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.668398
iter  20 value 1352.453431
final  value 1346.526445
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.781626
iter  20 value 1351.573823
final  value 1345.638442
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.319493
iter  20 value 1352.136137
final  value 1346.280111
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.214031
iter  20 value 1352.567837
final  value 1346.335799
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.602567
iter  20 value 1352.016298
final  value 1345.324391
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.157132
iter  20 value 1351.104734
final  value 1345.002759
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.661807
iter  20 value 1352.555448
final  value 1346.584835
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.312162
iter  20 value 1353.671492
final  value 1346.346580
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.239536
iter  20 value 1352.365025
final  value 1346.207428
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.635668
iter  20 value 1352.240197
final  value 1346.423021
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.528143
iter  20 value 1350.564689
final  value 1344.293976
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.216515
iter  20 value 1352.801770
final  value 1346.243905
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.914928
iter  20 value 1351.865306
final  value 1345.834592
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.399676
iter  20 value 1352.762491
final  value 1346.448671
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.064145
iter  20 value 1352.108230
final  value 1345.971477
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.578995
iter  20 value 1352.492684
final  value 1346.391110
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.250124
iter  20 value 1352.262542
final  value 1346.236416
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.250039
iter  20 value 1352.028023
final  value 1346.249832
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.429380
iter  20 value 1352.666606
final  value 1346.399026
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.174145
iter  20 value 1352.378313
final  value 1346.179605
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.344770
iter  20 value 1351.288750
final  value 1345.128898
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.225614
iter  20 value 1351.159989
final  value 1345.008509
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.817183
iter  20 value 1351.711873
final  value 1345.628936
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.992318
iter  20 value 1350.920028
final  value 1344.769200
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.343120
iter  20 value 1351.989968
final  value 1346.232953
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.267129
iter  20 value 1352.458296
final  value 1346.289489
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.484499
iter  20 value 1352.155339
final  value 1346.317308
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.590563
iter  20 value 1352.385917
final  value 1346.461285
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.597600
iter  20 value 1352.424841
final  value 1346.435942
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.540888
iter  20 value 1352.397895
final  value 1346.443457
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.761336
iter  20 value 1352.582620
final  value 1346.600776
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.460071
iter  20 value 1352.283348
final  value 1346.358007
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.810784
iter  20 value 1352.455261
final  value 1345.707623
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.240629
iter  20 value 1352.148459
final  value 1346.129901
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.620342
iter  20 value 1352.610722
final  value 1346.565393
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.550444
iter  20 value 1352.465024
final  value 1346.477082
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.647043
iter  20 value 1352.555136
final  value 1346.569015
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.649807
iter  20 value 1352.395918
final  value 1346.561719
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.545473
iter  20 value 1352.111988
final  value 1346.387382
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.038731
iter  20 value 1352.228130
final  value 1346.038773
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.568020
iter  20 value 1352.496538
final  value 1346.532975
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.664752
iter  20 value 1352.587319
final  value 1346.562769
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.746366
iter  20 value 1352.557582
final  value 1346.614156
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.246415
iter  20 value 1352.292833
final  value 1346.255789
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.664968
iter  20 value 1352.653674
final  value 1346.590053
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.699264
iter  20 value 1352.664796
final  value 1346.605856
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.232067
iter  20 value 1352.143649
final  value 1346.154623
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.278449
iter  20 value 1352.138216
final  value 1346.161321
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.681595
iter  20 value 1352.559839
final  value 1346.570708
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.719455
iter  20 value 1352.565116
final  value 1346.604121
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.324203
iter  20 value 1352.366400
final  value 1346.180666
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.975428
iter  20 value 1350.386281
final  value 1345.063187
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.772318
iter  20 value 1352.548173
final  value 1346.595406
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.746376
iter  20 value 1352.567803
final  value 1346.599648
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.495324
iter  20 value 1352.435170
final  value 1346.518883
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.542427
iter  20 value 1352.306080
final  value 1346.432122
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.604992
iter  20 value 1353.418090
final  value 1346.546102
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.690174
iter  20 value 1352.528218
final  value 1346.571669
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.475366
iter  20 value 1351.995401
final  value 1346.273526
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.502184
iter  20 value 1352.584702
final  value 1346.459751
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.744130
iter  20 value 1352.492309
final  value 1346.595695
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.610415
iter  20 value 1352.740259
final  value 1346.521872
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.705585
iter  20 value 1352.579125
final  value 1346.610012
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.710247
iter  20 value 1351.788541
final  value 1345.625230
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.890816
iter  20 value 1351.651399
final  value 1345.727531
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.624074
iter  20 value 1352.412061
final  value 1346.481686
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.732858
iter  20 value 1352.564101
final  value 1346.599807
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.824035
iter  20 value 1352.531376
final  value 1346.572209
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.457543
iter  20 value 1352.009559
final  value 1346.318646
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.886738
iter  20 value 1351.691396
final  value 1345.854016
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.951961
iter  20 value 1349.856482
final  value 1344.709733
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.778233
iter  20 value 1350.876949
final  value 1345.476558
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.514480
iter  20 value 1352.599278
final  value 1346.510273
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.661548
iter  20 value 1352.495707
final  value 1346.551937
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.694425
iter  20 value 1352.434433
final  value 1346.549922
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.787147
iter  20 value 1352.454311
final  value 1346.586642
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.890401
iter  20 value 1351.671450
final  value 1345.833368
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.436446
iter  20 value 1352.054534
final  value 1346.406761
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.777685
iter  20 value 1351.329604
final  value 1345.829356
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.636829
iter  20 value 1352.315951
final  value 1346.517054
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.520483
iter  20 value 1351.329267
final  value 1345.467699
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.591098
iter  20 value 1352.737233
final  value 1346.564137
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.813534
iter  20 value 1351.515191
final  value 1345.832209
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.830622
iter  20 value 1351.466533
final  value 1345.471172
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.778357
iter  20 value 1351.004063
final  value 1345.661308
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.236641
iter  20 value 1354.093256
final  value 1346.294259
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.053949
iter  20 value 1351.720211
final  value 1345.953608
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.955463
iter  20 value 1351.758290
final  value 1346.008478
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.767506
iter  20 value 1352.576670
final  value 1346.606303
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.245356
iter  20 value 1352.100406
final  value 1346.218471
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.739356
iter  20 value 1352.313764
final  value 1346.540164
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.248617
iter  20 value 1351.897850
final  value 1346.068143
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.624520
iter  20 value 1352.777469
final  value 1346.511981
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.498397
iter  20 value 1352.265929
final  value 1346.352197
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.734463
iter  20 value 1350.560340
final  value 1344.547852
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.583006
iter  20 value 1351.117576
final  value 1345.700310
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.700761
iter  20 value 1352.552395
final  value 1346.612307
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.107339
iter  20 value 1351.086699
final  value 1345.124519
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.935990
iter  20 value 1351.798280
final  value 1345.892096
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.498562
iter  20 value 1352.495170
final  value 1346.437531
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.121670
iter  20 value 1352.042087
final  value 1346.028980
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.883143
iter  20 value 1351.778678
final  value 1345.878171
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.547536
iter  20 value 1352.346851
final  value 1346.447873
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.275900
iter  20 value 1352.050254
final  value 1346.108019
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.375868
iter  20 value 1352.223313
final  value 1346.377075
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.680440
iter  20 value 1352.591847
final  value 1346.612225
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.727803
iter  20 value 1351.532035
final  value 1345.547359
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.622409
iter  20 value 1352.271568
final  value 1346.466220
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.686116
iter  20 value 1352.417026
final  value 1346.576919
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.580676
iter  20 value 1352.498984
final  value 1346.493107
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.515881
iter  20 value 1352.371271
final  value 1346.408962
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.688153
iter  20 value 1352.383356
final  value 1346.534513
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.606926
iter  20 value 1352.372713
final  value 1346.524807
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.658710
iter  20 value 1350.479571
final  value 1344.611679
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.505026
iter  20 value 1352.316412
final  value 1346.436048
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.403071
iter  20 value 1351.221789
final  value 1345.233127
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.432710
iter  20 value 1352.074842
final  value 1346.303076
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.324627
iter  20 value 1351.080247
final  value 1345.259007
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.071636
iter  20 value 1351.013764
final  value 1345.024943
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.611070
iter  20 value 1352.395909
final  value 1346.488952
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.565475
iter  20 value 1351.347836
final  value 1345.509644
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.628696
iter  20 value 1352.383410
final  value 1346.497180
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1373.550268
iter  20 value 1349.510760
final  value 1343.384994
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.964092
iter  20 value 1352.354651
final  value 1345.603090
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.502210
iter  20 value 1352.439636
final  value 1346.386499
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.667596
iter  20 value 1352.464823
final  value 1346.477114
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.637992
iter  20 value 1352.622252
final  value 1346.525089
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.606300
iter  20 value 1352.480217
final  value 1346.530123
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.630969
iter  20 value 1352.490991
final  value 1346.541977
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.753814
iter  20 value 1351.812343
final  value 1345.365260
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.528602
iter  20 value 1352.449537
final  value 1346.495491
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.735847
iter  20 value 1352.443462
final  value 1346.574322
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.579338
iter  20 value 1351.380778
final  value 1345.529075
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.580921
iter  20 value 1352.345224
final  value 1346.509202
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.656356
iter  20 value 1350.459984
final  value 1344.462694
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.855309
iter  20 value 1352.517530
final  value 1346.302667
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.059613
iter  20 value 1352.264278
final  value 1345.559120
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.416529
iter  20 value 1352.284777
final  value 1346.247580
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.684076
iter  20 value 1352.463599
final  value 1346.586131
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.601375
iter  20 value 1352.509041
final  value 1346.558532
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.643116
iter  20 value 1352.500372
final  value 1346.577717
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.800259
iter  20 value 1350.962191
final  value 1344.842239
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.555316
iter  20 value 1351.344269
final  value 1345.329886
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.565742
iter  20 value 1352.407119
final  value 1346.541458
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.216328
iter  20 value 1351.068518
final  value 1345.043376
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1373.779265
iter  20 value 1349.861552
final  value 1343.497743
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.608008
iter  20 value 1352.357378
final  value 1346.476886
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.613122
iter  20 value 1352.005902
final  value 1345.682035
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1373.899074
iter  20 value 1349.934144
final  value 1343.606358
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.290300
iter  20 value 1352.265180
final  value 1346.320115
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1371.579606
iter  20 value 1347.616256
final  value 1341.376132
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.852435
iter  20 value 1351.968613
final  value 1345.866217
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.377357
iter  20 value 1351.345367
final  value 1345.082860
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1375.613459
iter  20 value 1351.139609
final  value 1345.275265
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.504617
iter  20 value 1352.606178
final  value 1346.540682
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.215127
iter  20 value 1351.799498
final  value 1346.116670
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1374.185308
iter  20 value 1350.184333
final  value 1343.959370
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.393544
iter  20 value 1352.635326
final  value 1346.469968
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.373058
iter  20 value 1352.600875
final  value 1346.341863
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.265275
iter  20 value 1352.901812
final  value 1346.173670
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.254550
iter  20 value 1351.133066
final  value 1345.076795
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1375.095096
iter  20 value 1350.915559
final  value 1345.044258
converged
# weights:  27 (16 variable)
```

```
initial  value 4312.053233
iter  10 value 1376.619180
iter  20 value 1352.688034
final  value 1346.534378
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.549267
iter  20 value 1352.552783
final  value 1346.517956
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.407467
iter  20 value 1352.464827
final  value 1346.399057
converged
# weights:  27 (16 variable)
initial  value 4312.053233
iter  10 value 1376.380989
iter  20 value 1352.098989
final  value 1346.303957
converged
```

```r
#hitrate
mean(hit)  #### LOOCV
```

```
[1] 0.8555782
```

Error rate: 0.1444218

The Multinomial logistic regression model has slightly better error values than the other models, except for KNN.