Contents

Question 1

```
s1 = [1, -1, 1, -1, 1, -1, 1, -1]';
s2 = [1, 1, 1, 1, -1, -1, -1, -1]';
s3 = [1, 1, -1, -1, 1, 1, -1, -1]';
T1 = [0, 2, 2]';
T2 = [-2, 0, 2]';
T3 = [1, 1, 1]';
disp('Input Signals:');
disp(s1);
disp(s2);
disp(s3);
s1_normalized = s1 / norm(s1);
s2_normalized = s2 / norm(s2);
s3_normalized = s3 / norm(s3);
disp('Normalized Values:');
disp(s1_normalized);
disp(s2_normalized);
disp(s3_normalized);
dot1 = s1_normalized' * s2_normalized;
dot2 = s1_normalized' * s3_normalized;
dot3 = s2_normalized' * s3_normalized;
disp('Dot Products:');
disp(dot1);
disp(dot2);
disp(dot3);
disp('Since all the corresponding dot products are zeros, all the three
vectors S1,S2 and S3 are orthogonal');
w1 = T1 * s1_normalized';
w2 = T2 * s2_normalized';
w3 = T3 * s3_normalized';
w = w1 + w2 + w3;
disp('The weighted Associative Matrix:');
disp(w);
response_s1 = w * s1_normalized;
response_s2 = w * s2_normalized;
response_s3 = w * s3_normalized;
disp('Response Values:');
disp('Response Vector 1:');
disp(response_s1);
disp('Response Vector 2:');
disp(response_s2);
disp('Response Vector 3:');
```

```
disp(response_s3);

disp('Given Target Values:');
disp('Target Vector 1:');
disp(T1);
disp('Target Vector 2:');
disp('Target Vector 3:');
disp('Target Vector 3:');
disp(T3);

disp('Avg Vector:');
average_normalized = (s1_normalized + s2_normalized) / 2;
ans2=w*average_normalized;
disp(average_normalized);
disp('Response from avarage vector of S1,S2 and the weighted matrix:');
disp(ans2);
```

Output:

```
Input Signals:
    1
    -1
    1
    -1
    1
    -1
    1
    -1
    1
    1
    1
    1
    -1
    -1
    -1
    -1
    1
    1
    -1
    -1
    1
    1
    -1
    -1
Normalized Values:
   0.3536
   -0.3536
    0.3536
```

```
-0.3536
    0.3536
   -0.3536
    0.3536
   -0.3536
    0.3536
    0.3536
    0.3536
    0.3536
   -0.3536
   -0.3536
   -0.3536
   -0.3536
    0.3536
    0.3536
   -0.3536
   -0.3536
   0.3536
   0.3536
   -0.3536
   -0.3536
Dot Products:
     0
     0
```

0

Since all the corresponding dot products are zeros, all the three vectors $\mathsf{S1},\mathsf{S2}$ and $\mathsf{S3}$ are orthogonal

The weighted Associative Matrix:

-0.3536	-0.3536	-1.0607	-1.0607	1.0607	1.0607	0.3536	0.3536
1.0607	-0.3536	0.3536	-1.0607	1.0607	-0.3536	0.3536	-1.0607
1.7678	0.3536	1.0607	-0.3536	0.3536	-1.0607	-0.3536	-1.7678

Response Values:

Response Vector 1:

6

2.0000

2.0000

Response Vector 2:

-2.0000

0

2.0000

Response Vector 3: 1.0000 1.0000 1.0000 Given Target Values: Target Vector 1: 0 2 2 Target Vector 2: -2 0 2 Target Vector 3: 1 1 1

Screenshots:

```
s1 = [1, -1, 1, -1, 1, -1, 1, -1]';
s2 = [1, 1, 1, -1, -1, -1, -1, -1]';
s3 = [1, 1, -1, -1, 1, 1, -1, -1, -1]';
T1 = [0, 2, 2]';
T2 = [-2, 0, 2]';
T3 = [1, 1, 1]';
disp('Input Signals:');
disp(s1);
disp(s1);
disp(s1);
disp(s3);
s1_normalized = s1 / norm(s1);
s2_normalized = s2 / norm(s2);
s3_normalized = s3 / norm(s3);
disp('Normalized Values:');
disp(s1_normalized);
disp(s2_normalized);
disp(s2_normalized);
dot1 = s1_normalized' * s2_normalized;
dot3 = s2_normalized' * s3_normalized;
dot0 = s1_normalized' * s3_normalized;
dot1;
disp('Dot Products:');
disp(dot01);
disp(dot1);
disp(dot2);
disp('since all the corresponding dot products are zeros, all the three vectors S1,52 and S3 are orthogonal');
w1 = T1 * s1_normalized';
w2 = T2 * s2_normalized';
w3 = T3 * s3_normalized';
```

```
w = w1 + w2 + w3;
disp('The weighted Associative Matrix:');
disp(w);
response_s1 = w * s1_normalized;
response_s2 = w * s2_normalized;
response_s3 = w * s3_normalized;
disp('Response Values:');
disp('Response Vector 1:');
disp(response_s1);
disp('Response Vector 2:');
disp(response_s2);
disp('Response Vector 3:');
disp(response_s3);
disp('Given Target Values:');
disp('Target Vector 1:');
disp(T1);
disp('Target Vector 2:');
disp(T2);
disp('Target Vector 3:');
disp(T3);
disp('Avg Vector:');
average_normalized = (s1_normalized + s2_normalized) / 2;
ans2=w*average_normalized;
disp(average_normalized);
disp('Response from avarage vector of S1,S2 and the weighted matrix:');
disp(ans2);
```

Command Window	Command Window
>> Q1Q2	Normalized Values:
Input Signals:	0.3536
1 -1	-0.3536
1	0.3536
-1	-0.3536
1	0.3536
-1 1	-0.3536
-1	0.3536
-	-0.3536
1	-0.3330
1	0. 3536
1 1	0.3536
-1	0.3536
-1	0.3536
-1	0.3536
-1	-0.3536
1	-0.3536
1	-0.3536
- 1	-0.3536
-1	
1	0.3536
1 -1	0.3536
-1	-0.3536
	-0.3536
Normalized Values:	0.3536
0.3536	0.3536
-0.3536 0.3536	-0.3536
-0.3536	-0.3536
0.3536	

```
Command Window
Dot Products:
    0
     0
Since all the corresponding dot products are zeros, all the three vectors S1,S2 and S3 are orthogonal
The weighted Associative Matrix:
   -0.3536 -0.3536 -1.0607 -1.0607
1.0607 -0.3536 0.3536 -1.0607
                                            1.0607
                                                     1.0607
                                                                0.3536
                                                                          0.3536
                                                     -0.3536
                                            1.0607
                                                                0.3536
                                                                          -1.0607
    1.7678 0.3536
                      1.0607 -0.3536
                                            0.3536
                                                    -1.0607
                                                               -0.3536
                                                                         -1.7678
Response Values:
Response Vector 1:
        0
   2.0000
    2.0000
Response Vector 2:
  -2.0000
    2.0000
Response Vector 3:
    1.0000
    1.0000
    1.0000
```

```
Command Window
    1.0000
    1.0000
Given Target Values:
Target Vector 1:
    0
     2
Target Vector 2:
    0
Target Vector 3:
    1
     1
Avg Vector:
   0.3536
   0.3536
        0
        0
   -0.3536
       0
   -0.3536
Response from avarage vector of S1,S2 and the weighted matrix:
   -1.0000
   1.0000
    2.0000
```

Question 2:

We get 'w' from the previous code,

Explanation: The response vector that we get from the average vector of s1 and s2, is the average of the target vector 1 and target vector 2, since we multiply the average vector to the weighted associative matrix.

```
disp('Avg Vector:');
average_normalized = (s1_normalized + s2_normalized) / 2;
ans2=w*average_normalized;
disp(average_normalized);
disp('Response from avarage vector of S1,S2 and the weighted matrix:');
disp(ans2);
Output:
```

```
Avg Vector:
0.3536
0
0.3536
0
-0.3536
0
-0.3536
```

Response from avarage vector of S1,S2 and the weighted matrix:

- -1.0000
- 1.0000
- 2.0000

Screenshots:

```
disp('Avg Vector:');
average_normalized = (s1_normalized + s2_normalized) / 2;
ans2=w*average_normalized;
disp(average_normalized);
disp('Response from avarage vector of S1,S2 and the weighted matrix:');
disp(ans2);
```

```
Avg Vector:
    0.3536
    0
    0.3536
    0
    0
    -0.3536
    0
    -0.3536
    0
    -0.3536

Response from avarage vector of S1,S2 and the weighted matrix:
    -1.0000
    1.0000
    2.0000
```

Question 3:

Part 1:

```
s1_new=randn(1,100)';
s2_new=randn(1,100)';
s3_new=randn(1,100)';
T1 = [0, 2, 2]';
T2 = [-2, 0, 2]';
T3 = [1, 1, 1]';
disp('The input signal vectors:');
disp(s1_new);
disp(s2_new);
disp(s3_new);
disp('Normalized input signal vectors:');
s1_new_norm=s1_new/norm(s1_new);
s2_new_norm=s2_new/norm(s2_new);
s3_new_norm=s3_new/norm(s3_new);
disp(s1_new_norm);
disp(s2_new_norm);
disp(s3_new_norm);
disp('The cosine matrix:');
cosine_matrix = [dot(s1_new_norm, s1_new_norm), dot(s1_new_norm,
s2_new_norm), dot(s1_new_norm, s3_new_norm);
                 dot(s2_new_norm, s1_new_norm), dot(s2_new_norm,
s2_new_norm), dot(s2_new_norm, s3_new_norm);
                 dot(s3_new_norm, s1_new_norm), dot(s3_new_norm,
s2_new_norm), dot(s3_new_norm, s3_new_norm)];
disp(cosine_matrix);
disp('The associative weight matrix:');
w1 = T1 * s1_new_norm';
w2 = T2 * s2_new_norm';
w3 = T3 * s3_new_norm';
w=w1+w2+w3;
disp(w)
response_s1 = w * s1_new_norm;
response_s2 = w * s2_new_norm;
response_s3 = w * s3_new_norm;
disp('The responses we get:')
disp(response_s1);
disp(response_s2);
disp(response_s3);
disp('Given Target Values:')
disp(T1);
disp(T2);
```

```
disp(T3);

cosine_sim1 = dot(T1, response_s1) / (norm(T1) * norm(response_s1));
cosine_sim2 = dot(T2, response_s2) / (norm(T2) * norm(response_s2));
cosine_sim3 = dot(T3, response_s3) / (norm(T3) * norm(response_s3));

disp('Similarity between responses and corresponding targets:')
disp(cosine_sim1);
disp(cosine_sim2);
disp(cosine_sim3);
```

Output:

```
The input signal vectors:
    0.5377
    1.8339
   -2.2588
    0.8622
    0.3188
   -1.3077
   -0.4336
    0.3426
    3.5784
    2.7694
   -1.3499
    3.0349
    0.7254
   -0.0631
    0.7147
   -0.2050
   -0.1241
    1.4897
    1.4090
    1.4172
    0.6715
   -1.2075
    0.7172
    1.6302
    0.4889
    1.0347
    0.7269
   -0.3034
    0.2939
   -0.7873
    0.8884
   -1.1471
   -1.0689
   -0.8095
   -2.9443
   1.4384
   0.3252
   -0.7549
```

1.3703

- -1.7115
- -0.1022
- -0.2414
- 0.3192
- 0.3129
- -0.8649
- 0.0045
- -0.0301
- -0.1649
- 0.6277
- 1.0933
- 1.1093
- -0.8637
- 0.0057
- 0.0774
- -1.2141
- -1.1135
- -0.0068
- 1.5326
- -0.7697
- 0.3714
- -0.2256
- 1.1174
- -1.0891
- 1.0001
- 0.0326
- 0.5525
- 1.1006
- 1.5442
- 0.0859
- -1.4916
- -0.7423
- -1.0616
- 2.3505
- -0.6156
- 0.7481
- -0.1924
- 0.8886
- -0.7648
- -1.4023
- -1.4224
- 0.4882
- -0.1774
- -0.1961
- 1.4193
- 0.2916
- 0.1978
- 1.5877
- -0.8045
- 0.6966
- 0.8351
- -0.2437
- 0.2157
- -1.1658
- -1.1480
- 0.1049
- 0.72232.5855
- -0.6669
- 0.1873
- -0.0825

- -1.9330
- -0.4390
- -1.7947
 - 0.8404
- -0.8880
- 0.1001
- -0.5445
- 0.3035
- -0.6003
- 0.4900
- 0.7394
- 1.7119
- -0.1941
- -2.1384
- -0.8396
- 1.3546
- -1.0722
- 0.9610
- 0.1240
- 1.4367
- -1.9609
- -0.1977
- -1.2078
- 2.9080
- 0.8252
- 1.3790
- -1.0582
- -0.4686
- -0.2725
- 1.0984
- -0.2779
- 0.7015
- -2.0518
- -0.3538
- -0.8236
- -1.5771
- 0.5080
- 0.2820
- 0.0335
- -1.3337
- 1.1275
- 0.3502 -0.2991
- 0.0229
- -0.2620
- -1.7502
- -0.2857
- -0.8314
- -0.9792
- -1.1564
- -0.5336
- -2.0026
- 0.9642
- 0.5201
- -0.0200
- -0.0348

- -0.7982
- 1.0187
- -0.1332
- -0.7145
- 1.3514
- -0.2248
- -0.5890
- -0.2938
- -0.8479
- -1.1201
- 2.5260
- 2.5200
- 1.6555
- 0.3075
- -1.2571
- -0.8655
- -0.1765
- 0.7914
- -1.3320
- -2.3299
- -1.4491
- 0.3335
- 0.3914
- 0.4517
- -0.1303
- 0.1837
- 0.1057
- -0.4762
- 0.8620
- -1.3617
- 0.4550 -0.8487
- -0.3349
- 0.5528
- 1.0391
- -1.1176
- 1.2607
- 0.6601
- -0.0679
- -0.1952
- -0.2176 -0.3031
- 0.0230
- 0.0513
- 0.8261
- 1.5270
- 0.4669
- -0.2097
- 0.6252
- 0.1832
- -1.0298
- 0.9492
- 0.3071
- 0.1352
 0.5152
- 0.2614
- -0.9415
- -0.1623

- -0.1461
- -0.5320
- 1.6821
- -0.8757
- -0.4838
- -0.7120
- -1.1742
- -0.1922
- -0.2741
- 1.5301
- -0.2490
- -1.0642
- 1.6035
- 1.2347
- -0.2296
- -1.5062
- -0.4446
- -0.1559
- 0.2761
- -0.2612
- 0.4434
- 0.3919
- -1.2507
- -0.9480
- -0.7411
- -0.5078
- -0.3206
- 0.0125
- -3.0292
- -0.4570
- 1.2424
- -1.0667
- 0.9337
- 0.3503
- -0.0290
- 0.1825
- -1.5651
- -0.0845
- 1.6039
- 0.0983
- 0.0414
- -0.7342
- -0.0308
- 0.2323 0.4264
- -0.3728
- -0.2365
- 2.0237
- -2.2584
 - 2.2294
- 0.3376 1.0001
- -1.6642
- -0.5900
- -0.2781
- 0.4227
- -1.6702
- 0.4716

- -1.2128
- 0.0662
- 0.6524
- 0.3271
- 1.0826
- 1.0061
- -0.6509
- 0.2571
- -0.9444
- -1.3218
- 0.9248
- 0.0000
- -0.0549
- 0.9111
- 0.5946
- 0.3502
- 1.2503
- 0.9298
- 0.2398
- -0.6904
- -0.6516
- 1.1921
- -1.6118
- -0.0245
- -1.9488
- 1.0205
- 0.8617
- 0.0012
- -0.0708
- -2.4863
- 0.5812
- -2.1924
- -2.3193

Normalized input signal vectors:

- 0.0462
- 0.1577
- -0.1942
- 0.0741
- 0.0274
- -0.1124
- -0.0373
- 0.0295 0.3077
- 0.2381
- -0.1161 0.2609
- 0.0624 -0.0054
- 0.0615
- -0.0176
- -0.0107
- 0.1281
- 0.1211
- 0.1218 0.0577
- -0.1038

- 0.0617
- 0.1402
- 0.0420
- 0.0890
- 0.0625
- -0.0261
- 0.0253
- -0.0677
- 0.0764
- -0.0986
- -0.0919
- -0.0696
- -0.2531
- 0.1237
- 0.0280
- -0.0649
- 0.1178
- -0.1472
- -0.0088
- -0.0208
- 0.0274
- 0.0269
- -0.0744
- -0.0026
- -0.0142
- 0.0540
- 0.0940
- 0.0954
- -0.0743
- 0.0067
- -0.1044
- -0.0957
- -0.0006
- 0.1318
- -0.0662
- 0.0319 -0.0194
- 0.0961
- -0.0936
- 0.0028
- 0.0475
- 0.0946
- 0.1328
- 0.0074
- -0.1282
- -0.0638
- -0.0913
- 0.2021
- -0.0529
 - 0.0643
- -0.0165
- 0.0764
- -0.0658
- -0.1206
- -0.1223
- 0.0420
- -0.0153 -0.0169

- 0.1220
- 0.0251
- 0.0170
- 0.1365
- -0.0692
- 0.0599
- 0.0718
- -0.0210
- 0.0185
- -0.1002
- -0.0987
- 0.0090
- 0.0621
- 0.2223
- -0.0573
- 0.0161
- -0.0071
- -0.1662
- -0.0377 -0.1543
- 0.0838
- -0.0886
- 0.0100
- -0.0543
- 0.0303
- -0.0599
- 0.0489
- 0.0737
- 0.1707
- -0.0194
- -0.2133
- -0.0837 0.1351
- -0.1069
- 0.0958
- 0.0124
- 0.1433
- -0.1956
- -0.0197
- -0.1205
- 0.2900
- 0.0823
- 0.1375
- -0.1055
- -0.0467
- -0.0272
- 0.1096 -0.0277
- 0.0700
- -0.2046
- -0.0353
- -0.0821
- -0.1573
- 0.0507
- 0.0281
- 0.0033

- -0.1330
- 0.1125
- 0.0349
- -0.0298
- 0.0023
- -0.0261
- -0.1746
- -0.0285
- -0.0829
- -0.0977
- -0.1153
- -0.0532
- -0.1997
- 0.0962
- 0.0519
- -0.0020
- -0.0035
- -0.0796
- 0.1016
- -0.0133
- -0.0713
- 0.1348
- -0.0224
- -0.0587
- -0.0293
- -0.0846
- -0.1117
- 0.2519
- 0.1651
- 0.0307
- -0.1254
- -0.0863
- -0.0176
- 0.0789
- -0.1328
- -0.2324
- -0.1445 0.0333
- 0.0390
- 0.0450
- -0.0130
- 0.0183
- -0.0475
- 0.0860
- -0.1358
- 0.0454
- -0.0846
- -0.0334
- 0.0551
- 0.1036
- -0.1115
- 0.1257
- 0.0658
- -0.0068 -0.0195
- -0.0217
- -0.0302
- 0.0023

- 0.0051
- 0.0824
- 0.1523
- 0.0466
- -0.0209
- 0.0624
- 0.0180
- -0.1012
- 0.0933
- 0.0302
- 0.0133
- 0.0506
- 0.0257
- -0.0926
- -0.0160
- -0.0144
- -0.0523
- 0.1654
- -0.0861
- -0.0476
- -0.0700
- -0.1154
- -0.0189
- -0.0269
- 0.1504
- -0.0245
- -0.1046
- 0.1576
- 0.1214
- -0.0226
- -0.1481
- -0.0437
- -0.0153
- 0.0271
- -0.0257 0.0436
- 0.0385 -0.1229
- -0.0932
- -0.0729
- -0.0499
- -0.0315
- 0.0012
- -0.2978
- -0.0449
- 0.1221
- -0.1049
- 0.0918
- 0.0344
- -0.0029
- 0.0179
- -0.1538
- -0.0083
- 0.1577 0.0097
- 0.0041

- -0.0722
- -0.0030
- 0.0228
- 0.0419
- -0.0366
- -0.0232
- 0.1989
- -0.2220
- 0.2192
- 0.0332
- 0.0000
- 0.0983
- -0.1636
- -0.0580
- -0.0273
- 0.0416
- -0.1642
- 0.0464
- -0.1192
- 0.0065
- 0.0641
- 0.0322
- 0.1064
- 0.1004
- 0.0989
- -0.0640
- 0.0253
- -0.0928
- -0.1299
- 0.0909
- 0.0000
- -0.0054
- 0.0896
- 0.0584
- 0.0344
- 0.1229
- 0.0914
- 0.0236
- -0.0679
- -0.0640
- 0.1172
- -0.1584 -0.0024
- -0.1916
- 0.1003
- 0.0847
- 0.0001
- -0.0070
- -0.2444
- 0.0571
- -0.2155
- -0.2280

The cosine matrix:

- 1.0000 0.0671 0.1187 0.0671 1.0000 -0.1734
 - 0.1187 -0.1734 1.0000

The	associ	lat	tive	wei	ght	matrix:
Co	lumns	1	thro	ough	15	

-0.1496	0.0759	0.0733	0.1388	-0.0473	0.1704	-0.0720	-0.2400
-0.3574	0.0244	0.3742	0.3328 -	0.3563	0.1663 -	0.2617	
0.1105	0.2141	-0.2951	0.1784	0.0681	-0.1742	-0.0489	-0.0336
0.5994	0.4619 -0	ð.2844 <i>6</i>	0.6872 0	.0386 -6	0.0584 0	.0529	
0.2781	0.0370	-0.2751	0.0698	0.1286	-0.2940	0.0489	0.1138
0.9408	0.4231 -0	a.7110 6	0.5197 0	.3089 -6	0.2723 0	. 2446	

Columns 16 through 30

0.1898 0.2165 -0.68	847 -0.0070 -0.1537
2344 0.0826 -0.1656	0.4529
0.3927 0.2192 0.03	109 -0.0500 0.2447
L097 -0.0250 0.0249	-0.0918
0.3533 -0.0217 0.59	909 0.1146 0.5198
3288 -0.0805 0.1648	-0.5011

Columns 31 through 45

0.1091	0.0413	0.2214 -0	0.1742 -0.1	.062 -0.0382	0.2673	-0.5227
-0.1148	0.1818 -0	0.1094 0.14	140 0.3836	0.0541	0.1838	
0.1913	-0.3202	-0.2770 -0	0.2120 -0.5	5562 0.2158	0.0571	-0.4276
0.1907 -	0.1722 -0.	1224 0.056	0.0893	0.0509 -	0.1308	
0.1207	-0.4845	-0.5916 -0	0.1107 -0.5	0.2225	-0.2089	-0.2027
0.2606 -	0.2318 -0.	1179 -0.002	20 -0.2598	-0.0060 -	0.2966	

Columns 46 through 60

0.0415	0.2224	0.2641	0.4091	-0.1883	-0.1759	0.0010	0.0298
0.2011 -0	0.2398	0.0033 (0.3415 -	0.4916	0.2640	0.1507	
-0.1590	-0.0367	0.2656	0.1977	0.1948	-0.2207	0.0103	-0.1859
-0.1496	-0.0378	0.2403	0.0666	-0.1581	0.1804	0.2253	
-0.3543	-0.2673	0.1592	-0.2018	0.3871	-0.1169	0.0063	-0.1929
-0.3088	0.1654	0.2137	-0.0759	0.1114	0.1355	0.1078	

Columns 61 through 75

0.1569	0.005	5 0.1654	4 -0.5312	-0.2887	-0.2255	0.2971	0.0534
0.0417 -0	0.0937	0.2978	0.5712 0	.3880 -0	.1305 -0.	.0528	
-0.0890	-0.158	0.037	0.1619	0.3071	-0.1494	-0.2101	-0.2469
-0.1760	0.4683	-0.0737	0.2351	0.0658	0.0888 -0	0.1062	
-0.1476	-0.327	1 -0.186	4 0.6658	0.6373	-0.0881	-0.4609	-0.4195
-0.2112	0.6262	-0.3394	-0.2297 -	0.2232	0.1553 -0	0.0282	

Columns 76 through 90

-0.1829	9 -0.103	9 0.054	3 0.095	0 -0.17	73 0.36	-0.0323	0.2037
0.1897	-0.0189	-0.1837	0.1551	-0.3155	-0.0145	-0.1449	
-0.3340	0.374	15 0.174	9 -0.030	5 -0.03	91 0.33	336 0.1086	0.0684
0.3959	-0.0469	0.1434	0.0757	-0.1060	0.1543	-0.3589	
-0.2439	9 -0.400	0.211	5 -0.125	5 0.13	28 0.06	0.1994	-0.1009
0.3291	0.0633	0.3506	-0.1472	0.1455	0.2860	-0.3725	

Columns 91 through 100

 $0.0365 \quad -0.1482 \quad 0.1608 \quad 0.0801 \quad -0.0101 \quad -0.1717 \quad -0.5490 \quad -0.0360$

-0.1737 -0.3527						
-0.1998 -0.1735	0.2245	0.5293	-0.1146	0.0252	-0.2586	-0.2753
-0.2910 -0.5366						
-0.2387 -0.2169	0.1641	0.5339	-0.1043	0.1900	0.0460	-0.1821
-0.3328 -0.4119						

The responses we get:

- -0.0156
 - 2.1187
- 2.2529
- -2.1734
- -0.0391
- 1.9609
- 1.3468
- 1.2373
- 0.8905

Given Target Values:

- 0
- 2
- 2
- -2
- 0
- 2
- 1
- 1
- 1

Similarity between responses and corresponding targets:

- 0.9995
- 0.9986
- 0.9862

Screenshots:

```
s1_new=randn(1,100)';
s2_new=randn(1,100)';
s3_new=randn(1,100)';
T1 = [0, 2, 2]';
T2 = [-2, 0, 2]';
T3 = [1, 1, 1]';
disp('The input signal vectors:');
disp(s1_new);
disp(s2_new);
disp(s3_new);
disp('Normalized input signal vectors:');
s1_new_norm=s1_new/norm(s1_new);
s2_new_norm=s2_new/norm(s2_new);
s3_new_norm=s3_new/norm(s3_new);
disp(s1_new_norm);
disp(s2_new_norm);
disp(s3_new_norm);
disp('The cosine matrix:');
cosine_matrix = [dot(s1_new_norm, s1_new_norm), dot(s1_new_norm, s2_new_norm), dot(s1_new_norm, s3_new_norm);
                   dot(s2_new_norm, s1_new_norm), dot(s2_new_norm, s2_new_norm), dot(s2_new_norm, s3_new_norm);
                   dot(s3_new_norm, s1_new_norm), dot(s3_new_norm, s2_new_norm), dot(s3_new_norm, s3_new_norm)];
disp(cosine_matrix);
disp('The associative weight matrix:');
w1 = T1 * s1_new_norm';
w2 = T2 * s2_new_norm';
w3 = T3 * s3_new_norm';
w=w1+w2+w3;
disp(w)
response_s1 = w * s1_new_norm;
response_s2 = w * s2_new_norm;
response_s3 = w * s3_new_norm;
disp('The responses we get:')
disp(response_s1);
disp(response_s2);
disp(response_s3);
disp('Given Target Values:')
disp(T1);
disp(T2);
disp(T3);
```

```
cosine_sim1 = dot(T1, response_s1) / (norm(T1) * norm(response_s1));
cosine_sim2 = dot(T2, response_s2) / (norm(T2) * norm(response_s2));
cosine_sim3 = dot(T3, response_s3) / (norm(T3) * norm(response_s3));

disp('Similarity between responses and corresponding targets:')
disp(cosine_sim1);
disp(cosine_sim2);
disp(cosine_sim3);
```

The cosine m 1.0000 0.0671 0.1187	natrix: 0.0671 1.0000 -0.1734	0.1187 -0.1734 1.0000												
The associat Columns 1														
-0.1496 0.1105 0.2781	0.0759 0.2141 0.0370	0.0733 -0.2951 -0.2751	0.1388 0.1784 0.0698	-0.0473 0.0681 0.1286	0.1704 -0.1742 -0.2940	-0.0720 -0.0489 0.0489	-0.2400 -0.0336 0.1138	-0.3574 0.5994 0.9408	0.0244 0.4619 0.4231	0.3742 -0.2844 -0.7110	0.3328 0.6872 0.5197	-0.3563 0.0386 0.3089	0.1663 -0.0584 -0.2723	-0.2617 0.0529 0.2446
Columns 16	through :	30												
-0.1402 -0.1507 -0.1259	-0.3055 -0.0402 0.2463	0.3642 0.2292 -0.1619	0.1898 0.3927 0.3533	0.2165 0.2192 -0.0217	-0.6847 0.0109 0.5909	-0.0070 -0.0500 0.1146	-0.1537 0.2447 0.5198	0.1885 0.2578 0.0467	-0.0546 -0.0640 -0.1575	0.0106 0.1342 0.0799	-0.2344 0.1097 0.3288	0.0826 -0.0250 -0.0805	-0.1656 0.0249 0.1648	0.4529 -0.0918 -0.5011
Columns 31			0.4743	0.4053	0.0202	0.0673	0 5227	0.4440	0.4040	0.4004	0.4440	0. 2026	0.0544	0.4030
0.1091 0.1913 0.1207	0.0413 -0.3202 -0.4845	0.2214 -0.2770 -0.5916	-0.1742 -0.2120 -0.1107	-0.1062 -0.5562 -0.5000	-0.0382 0.2158 0.2225	0.2673 0.0571 -0.2089	-0.5227 -0.4276 -0.2027	-0.1148 0.1907 0.2606	0.1818 -0.1722 -0.2318	-0.1094 -0.1224 -0.1179	0.1440 0.0503 -0.0020	0.3836 0.0893 -0.2598	0.0541 0.0509 -0.0060	0.1838 -0.1308 -0.2966
Columns 46														
0.0415 -0.1590 -0.3543	0.2224 -0.0367 -0.2673	0.2641 0.2656 0.1592	0.4091 0.1977 -0.2018	-0.1883 0.1948 0.3871	-0.1759 -0.2207 -0.1169	0.0010 0.0103 0.0063	0.0298 -0.1859 -0.1929	0.2011 -0.1496 -0.3088	-0.2398 -0.0378 0.1654	0.0033 0.2403 0.2137	0.3415 0.0666 -0.0759	-0.4916 -0.1581 0.1114	0.2640 0.1804 0.1355	0.1507 0.2253 0.1078
Columns 61														
0.1569 -0.0890 -0.1476	0.0055 -0.1580 -0.3271	0.1654 0.0370 -0.1864	-0.5312 0.1619 0.6658	-0.2887 0.3071 0.6373	-0.2255 -0.1494 -0.0881	0.2971 -0.2101 -0.4609	0.0534 -0.2469 -0.4195	0.0417 -0.1760 -0.2112	-0.0937 0.4683 0.6262	0.2978 -0.0737 -0.3394	0.5712 0.2351 -0.2297	0.3880 0.0658 -0.2232	-0.1305 0.0888 0.1553	-0.0528 -0.1062 -0.0282
Columns 70	6 through	90												
-0.1829 -0.3340 -0.2439	-0.1039 -0.3745 -0.4005	0.0543 0.1749 0.2115	0.0950 -0.0305 -0.1255	-0.1773 -0.0391 0.1328	0.3612 0.3336 0.0620	-0.0323 0.1086 0.1994	0.2037 0.0684 -0.1009	0.1897 0.3959 0.3291	-0.0189 -0.0469 0.0633	-0.1837 0.1434 0.3506	0.1551 0.0757 -0.1472	-0.3155 -0.1060 0.1455	-0.0145 0.1543 0.2860	-0.1449 -0.3589 -0.3725
Columns 9	1 through	100												
0.0365 -0.1998 -0.2387	-0.1482 -0.1735 -0.2169	0.1608 0.2245 0.1641	0.0801 0.5293 0.5339	-0.0101 -0.1146 -0.1043	-0.1717 0.0252 0.1900	-0.5490 -0.2586 0.0460	-0.0360 -0.2753 -0.1821	-0.1737 -0.2910 -0.3328	-0.3527 -0.5366 -0.4119					
The response -0.0156 2.1187 2.2529	es we get:													
-2.1734 -0.0391 1.9609														
1.3468 1.2373 0.8905														
Given Targe 0 2 2	t Values:													
-2 0 2														
1														

```
Given Target Values:

0
2
2
-2
0
2
1
1
1
Similarity between responses and corresponding targets:
0.9995
0.9986
0.9862
```

Question 3:

Part 2:

```
s1_new=randn(1,10000)';
s2_new=randn(1,10000)';
s3_new=randn(1,10000)';
T1 = [0, 2, 2]';
T2 = [-2, 0, 2]';
T3 = [1, 1, 1]';
disp('The input signal vectors:');
disp(s1_new);
disp(s2_new);
disp(s3_new);
disp('Normalized input signal vectors:');
s1_new_norm=s1_new/norm(s1_new);
s2_new_norm=s2_new/norm(s2_new);
s3_new_norm=s3_new/norm(s3_new);
disp(s1_new_norm);
disp(s2_new_norm);
disp(s3_new_norm);
disp('The cosine matrix:');
cosine_matrix = [dot(s1_new_norm, s1_new_norm), dot(s1_new_norm,
s2_new_norm), dot(s1_new_norm, s3_new_norm);
                 dot(s2_new_norm, s1_new_norm), dot(s2_new_norm,
s2_new_norm), dot(s2_new_norm, s3_new_norm);
                 dot(s3_new_norm, s1_new_norm), dot(s3_new_norm,
s2_new_norm), dot(s3_new_norm, s3_new_norm)];
disp(cosine_matrix);
disp('The associative weight matrix:');
w1 = T1 * s1_new_norm';
w2 = T2 * s2_new_norm';
w3 = T3 * s3_new_norm';
w=w1+w2+w3;
disp(w)
response_s1 = w * s1_new_norm;
response_s2 = w * s2_new_norm;
response_s3 = w * s3_new_norm;
disp('The responses we get:')
disp(response_s1);
disp(response_s2);
disp(response_s3);
disp('Given Target Values:')
disp(T1);
disp(T2);
disp(T3);
```

```
cosine_sim1 = dot(T1, response_s1) / (norm(T1) * norm(response_s1));
cosine_sim2 = dot(T2, response_s2) / (norm(T2) * norm(response_s2));
cosine_sim3 = dot(T3, response_s3) / (norm(T3) * norm(response_s3));
disp('Similarity between response and corresponding targets:')
disp(cosine_sim1);
disp(cosine_sim2);
disp(cosine_sim3);
Output:
The cosine matrix:
   1.0000 0.0086 0.0001
   0.0086 1.0000 -0.0020
   0.0001 -0.0020 1.0000
The associative weight matrix:
 Columns 1 through 15
   0.0116 -0.0182 0.0027 0.0215 -0.0116 0.0096 -0.0119
                                                       0.0019
0.0341 0.0011 -0.0236 -0.0152 0.0167 0.0006 0.0035
   0.0257 -0.0154 0.0021 0.0094 0.0190 -0.0003 0.0063
                                                       0.0037
0.0337 0.0217 0.0134 -0.0120 0.0094 0.0201 -0.0441
   0.0034
0.0166 0.0314 0.0323 -0.0061 0.0051 0.0193 -0.0487
 Columns 16 through 30
   0.0141 -0.0319 -0.0302 0.0130 0.0064 -0.0219 -0.0279
                                                      -0.0022
-0.0177 -0.0284 0.0043 0.0085 -0.0094 0.0127 -0.0096
  -0.0240 -0.0523 -0.0166 0.0273 0.0118 -0.0291 -0.0131
                                                       0.0098
-0.0137 -0.0178 0.0008 -0.0077 0.0098 -0.0316 0.0279
  -0.0518 -0.0469 0.0049 0.0285 0.0004 -0.0157 0.0113
                                                       0.0190
-0.0037 -0.0133 -0.0108 -0.0050 0.0325 -0.0327 0.0421
 Columns 31 through 45
   0.0030 -0.0226 0.0196 0.0163 0.0539 -0.0285 -0.0082
                                                      -0.0021
-0.0146 0.0399 -0.0028 -0.0432 -0.0162 -0.0020 0.0152
  -0.0109 -0.0350 0.0020 -0.0366 0.0043 -0.0250 0.0429
                                                       0.0356
-0.0122 -0.0231 -0.0105 -0.0606 -0.0448 -0.0103 0.0499
                                                       0.0503
-0.0421 -0.0228 -0.0269 0.0297 0.0246 0.0071 -0.0092
 Columns 46 through 60
   0.0004 -0.0133 -0.0081 0.0278 0.0140 0.0148 -0.0004
                                                      -0.0241
-0.0116 0.0340 -0.0067 -0.0099 0.0113 0.0346 0.0142
   0.0249 -0.0178 0.0023 0.0232 0.0066 0.0270 0.0283
                                                      -0.0195
-0.0420 0.0462 -0.0141 0.0080 0.0188 0.0106 -0.0195
   0.0175 -0.0126 0.0061 0.0052 -0.0026 0.0212 0.0504
                                                       0.0011
```

Columns 61 through 75

0.0038	-0.0000	-0.0228	-0.0126	-0.0073	-0.0053	-0.0125	0.0061
-0.0060	0.0178	-0.0085	-0.0246 -	0.0188 -	0.0242	0.0188	
0.0101	-0.0039	0.0148	-0.0237	0.0238	0.0203	-0.0083	-0.0041
-0.0043	-0.0070 -	-0.0195	0.0004 -	0.0288 -	0.0310	0.0142	
0.0259	-0.0053	0.0226	-0.0174	0.0390	0.0396	0.0006	0.0071
0.0031 -0	0.0301 -0	0.0008	0.0215 -0	.0221 -0	0.0358 6	0.0027	

Columns 76 through 90

	0.0370	-0.0105	-0.0242	2 -0.0417	-0.0058	0.0040	-0.0255	-0.0361
-	-0.0273	0.0122	0.0147	-0.0059	-0.0060 -	0.0122	0.0116	
	-0.0129	-0.0157	-0.0049	-0.0594	0.0126	0.0433	0.0286	-0.0080
6	0.0 296 -	0.0277	0.0268	0.0164).0178 -0	.0161 0	.0081	
	-0.0444	-0.0151	0.0073	-0.0401	0.0101	0.0335	0.0633	0.0265
(0.0 779 -	0.0466	0.0009	0.0197	0.0256 -0	.0023 -0	.0018	

Columns 91 through 105

0.0083	0.0120	0.0364	0.0058	-0.0004	0.0198	0.0047	-0.0134
-0.0197	-0.0287	-0.0485 -	0.0079 -0	.0571 -	0.0512 -	0.0213	
-0.0070	-0.0005	-0.0149	-0.0315	-0.0174	0.0072	-0.0127	0.0109
-0.0160	-0.0020	-0.0016 -	0.0029 -0	.0334 -	0.0343 -	0.0048	
-0.0110	-0.0067	-0.0546	-0.0481	-0.0161	-0.0012	0.0043	0.0228
-0.0100	0.0105	0.0398 -	0.0080	0.0204	0.0031	0.0207	

Columns 106 through 120

0.0560	0.0235	0.0281	-0.0002	0.0190	-0.0023	-0.0424	0.0180
0.0396 -0.							0.0200
					0.0126		-0.0201
-0.0276 -0	.0142 6	0.0127 -6	0.0040 -	0.0068	-0.0001 -	0.0007	
-0.0212	0.0235	-0.0310	0.0334	-0.0141	0.0037	0.0198	-0.0448
-0.0649 -0	.0293 6	0.0075	0.0098 -	0.0045	-0.0072	0.0040	

Columns 121 through 135

0.0171	-0.0005	-0.0370	0.0098	-0.0291	0.0144	0.0070	0.0188
-0.0043	0.0061	0.0354	0.0342	0.0077 -	0.0027 -0	.0375	
-0.0158	0.0019	-0.0152	0.0081	0.0072	0.0099	0.0642	-0.0020
0.0331	0.0030	0.0249 -	a.0009 (0.0080	.0041 -0.	0544	
-0.0388	0.0086	0.0057	0.0077	0.0311	0.0032	0.0848	-0.0291
0.0340	0.0145	0.0038 -0	a.0306 -6	0.0040 -0	.0011 -0.	0270	

Columns 136 through 150

0.0121	-0.0183	0.0081	0.0292	0.0076	-0.0378	0.0055	-0.0289
-0.0142	0.0174	-0.0290	-0.0012	0.0121	-0.0058	0.0155	
-0.0351	-0.0263	0.0110	0.0464	-0.0061	0.0217	0.0041	-0.0197
-0.0044	-0.0080	0.0159	0.0006	0.0434	-0.0047	0.0179	
-0.0554	-0.0053	0.0058	0.0339	-0.0132	0.0648	-0.0083	0.0109
-0.0027	-0.0181	0.0301	0.0030	0.0417	0.0051	0.0083	

Columns 151 through 165

-0.0476	-0.029	0 -0.0211	-0.0166	0.0034	-0.0379	-0.0033	0.0140
-0.0056	0.0034	-0.0253	0.0100	-0.0360	-0.0052	-0.0085	

-0.0061 -0.0679 -0.0247 0.0164 -0.0165 -0.0308 0.0038 -0.0194 0.0047 -0.0134 0.0461 -0.0395 0.0001 -0.0339 0.0366 -0.0659 -0.0084 0.0369 -0.0353 -0.0011 0.0237 -0.0130 -0.0138 0.0114 0.0456 -0.0212 0.0013 -0.0285	
Columns 166 through 180	
0.0138 0.0227 0.0210 -0.0437 -0.0021 -0.0175 -0.0136 0.0132 -0.0319 0.0170 -0.0035 0.0254 -0.0268 -0.0044	
-0.0108 0.0015 0.0253 0.0243 0.0216 -0.0137 0.0139 0.0248 -0.0071 0.0130 -0.0238 0.0199 -0.0291 -0.0301 -0.0208 -0.0078 0.0215 0.0732 0.0391 -0.0024 0.0250	
0.0340 0.0061 0.0006 -0.0242 -0.0011 -0.0181 -0.0436	0.0332
Columns 181 through 195	
-0.0245 -0.0000 0.0062 0.0136 0.0204 -0.0138 -0.0235 -0.0515 -0.0155 -0.0035 0.0218 -0.0128 0.0134 -0.0123	
0.0066 0.0135 0.0022 0.0184 0.0139 -0.0007 0.0004 -0.0044 0.0054 -0.0039 0.0279 0.0149 0.0003 0.0208	-0.0116
0.0341 0.0333 0.0009 0.0112 -0.0138 0.0165 0.0177 0.0380 0.0174 0.0083 0.0283 0.0304 -0.0147 0.0188	-0.0136
Columns 196 through 210	
0.0281 0.0308 0.0283 -0.0236 0.0543 -0.0524 -0.0156 -0.0008 -0.0122 0.0099 -0.0161 0.0006 -0.0124 -0.0312	0.0576
-0.0042 -0.0090 -0.0442 0.0269 0.0308 -0.0066 0.0180 0.0032 0.0080 0.0049 0.0020 0.0361 -0.0340 -0.0380	0.0187
-0.0243 -0.0338 -0.0812 0.0590 -0.0101 0.0409 0.0334 0.0014 0.0258 -0.0090 0.0181 0.0151 -0.0320 -0.0073	-0.0240
Columns 211 through 225	
-0.0149 -0.0440 0.0048 0.0089 -0.0028 -0.0109 -0.0654 -0.0061 0.0289 -0.0395 -0.0170 -0.0148 0.0161 -0.0163	0.0317
-0.0304 -0.0411 -0.0027 -0.0082 0.0031 0.0011 -0.0145 0.0319 0.0241 -0.0327 -0.0508 0.0320 -0.0262 -0.0058	0.0303
-0.0229 -0.0161 -0.0014 -0.0219 0.0135 0.0022 0.0284 0.0339 -0.0054 0.0001 -0.0375 0.0606 -0.0313 0.0033	0.0138
Columns 226 through 240	
-0.0215	0.0395
0.0055 0.0411 -0.0042 -0.0151 -0.0004 0.0224 -0.0002 -0.0227 0.0128 -0.0261 -0.0248 0.0259 0.0126 -0.0012	-0.0046
0.0317 0.0352 0.0073 -0.0435 -0.0063 0.0200 -0.0143 -0.0169 0.0176 -0.0136 -0.0053 0.0083 0.0179 0.0017	-0.0364
Columns 241 through 255	
-0.0306 -0.0218	0.0107
0.0117 -0.0092 0.0386 -0.0190 0.0190 0.0049 -0.0204 -0.0148 0.0021 -0.0005 -0.0131 0.0234 -0.0205 0.0015	-0.0110
0.0359 0.0095 0.0228 -0.0556 0.0026 0.0248 -0.0205 -0.0289 -0.0105 0.0088 0.0021 0.0336 -0.0169 0.0251	-0.0151

Columns 256 through 270

Columns 346 through 360

-0.0029

Columns 256 through 270	
0.0019 0.0153 0.0052 -0.0088 0.0194 0.0419 0.0041 -0.0459 -0.0043 -0.0164 0.0147 0.0241 0.0147 -0.0057	
-0.0125	
-0.0161 0.0343 -0.0449 0.0028 0.0331 -0.0077 0.0176 0.0565 0.0078 0.0176 0.0003 -0.0057 -0.0046 -0.0245	0.0528
Columns 271 through 285	
-0.0220 0.0083 -0.0335 0.0024 -0.0030 0.0134 0.0187 0.0423 0.0474 -0.0218 0.0044 -0.0201 0.0051 0.0076	-0.0187
0.0298	-0.0105
0.0607 0.0530 0.0059 0.0179 0.0128 -0.0223 -0.0576 0.0454 -0.0759 0.0647 -0.0193 -0.0017 -0.0463 -0.0014	0.0045
Columns 286 through 300	
0.0141 -0.0182 0.0169 0.0265 0.0198 0.0109 -0.0205 -0.0696 0.0077 0.0088 0.0234 0.0162 0.0059 -0.0148	-0.0193
-0.0077 -0.0089 0.0079 -0.0191 0.0103 0.0029 -0.0379 -0.0049 0.0005 0.0091 0.0058 0.0076 0.0175 0.0159	0.0304
-0.0130 -0.0102 -0.0009 -0.0414 0.0011 0.0088 -0.0419 0.0575 -0.0147 -0.0085 -0.0154 -0.0121 0.0152 0.0228	0.0626
Columns 301 through 315	
0.0136	0.0105
0.0264 0.0303 -0.0108 0.0011 0.0333 0.0005 -0.0069 0.0081 0.0463 0.0203 0.0196 -0.0179 0.0205 -0.0405	0.0279
0.0295 0.0039 0.0200 0.0205 0.0134 -0.0043 -0.0167 -0.0049 0.0319 0.0239 0.0135 -0.0179 0.0134 -0.0434	0.0266
Columns 316 through 330	
-0.0090 0.0136 -0.0219 -0.0205 0.0510 0.0016 0.0140 0.0267 -0.0530 -0.0100 0.0308 0.0002 0.0163 -0.0207	-0.0265
0.0003 0.0168 0.0104 0.0095 0.0367 0.0069 0.0323 0.0066 -0.0440 -0.0192 0.0252 -0.0092 0.0150 -0.0094	0.0053
0.0046 0.0036 0.0383 0.0217 -0.0189 -0.0065 0.0453 -0.0222 -0.0083 -0.0200 -0.0051 -0.0178 0.0019 0.0223	0.0242
Columns 331 through 345	
0.0401 0.0278 0.0037 0.0027 0.0389 -0.0271 0.0484 0.0062 -0.0213 -0.0133 -0.0026 -0.0256 0.0106 -0.0257	
-0.0028	-0.0312
-0.0469	-0.0490
0.0221 0.0221 0.0231 0.0034	

0.0268 0.0121 0.0249 0.0304 -0.0057

0.0163

-0.0049

-0.0101 0.0117 -0.0126 0.0025 -0.0299 0.0106 -0.0081 0.0012 0.0056 -0.0062 0.0069 -0.0001 -0.0224 -0.0090 0.0226 -0.0126 -0.0433 -0.0083 0.0150 -0.0245 -0.0260 0.0031 -0.0316 -0.0244 -0.0129 -0.0229 -0.0091 -0.0334 0.0202 -0.0282 -0.0411 -0.0225 0.0522 -0.0550 -0.0206	
Columns 361 through 375	
0.0164 0.0041 0.0371 -0.0136 0.0259 -0.0282 -0.0066 0.0346 0.0177 -0.0005 0.0183 0.0007 0.0530 0.0249	
0.0473 -0.0478 -0.0081 -0.0234 0.0173 0.0003 0.0087 0.0257 0.0199 0.0231 -0.0126 0.0169 0.0223 0.0558	
0.0372 -0.0520 -0.0430 -0.0064 0.0217 0.0224 0.0213 0.0010 0.0096 0.0335 -0.0349 0.0120 -0.0218 0.0360	-0.0422
Columns 376 through 390	
0.0060 -0.0081 -0.0016 0.0064 -0.0207 0.0048 0.0351 -0.0137 0.0026 -0.0009 0.0022 -0.0093 -0.0135 0.0044	
0.0371 0.0318 0.0276 -0.0112 -0.0210 -0.0303 -0.0162 -0.0141 -0.0066 0.0040 -0.0099 0.0217 -0.0134 0.0050 0.0466 0.0483 0.0556 -0.0027 -0.0137 -0.0500 -0.0561	
-0.0032	0.0104
Columns 391 through 405	
0.0206 0.0148 -0.0166 -0.0234 -0.0182 0.0345 -0.0011 0.0450 0.0180 -0.0085 0.0003 0.0015 -0.0253 0.0236	
0.0097 0.0406 -0.0075 -0.0030 -0.0219 -0.0317 0.0111 0.0229 -0.0172 0.0310 0.0016 0.0202 -0.0090 0.0226	
-0.0027 0.0396 0.0060 0.0202 -0.0020 -0.0699 0.0170 -0.0093 -0.0342 0.0319 0.0005 0.0177 0.0119 0.0250	-0.0620
Columns 406 through 420	
-0.0213 0.0021 0.0119 0.0238 -0.0279 0.0091 -0.0072 0.0135 0.0176 0.0291 -0.0107 -0.0351 -0.0299 -0.0023	-0.0028
0.0104 0.0118 -0.0292 -0.0311 -0.0259 -0.0279 0.0038 -0.0045 -0.0006 0.0278 0.0168 -0.0112 0.0275 -0.0064	-0.0113
0.0282 0.0103 -0.0477 -0.0550 -0.0017 -0.0363 0.0135 -0.0151 0.0087 0.0109 0.0353 0.0146 0.0642 0.0073	-0.0114
Columns 421 through 435	
-0.0416 -0.0132 0.0467 -0.0074 -0.0194 0.0365 -0.0109 0.0089 -0.0080 -0.0078 -0.0128 -0.0249 0.0042 -0.0305	0.0239
-0.0143	-0.0290
0.0045 0.0256 0.0131 -0.0268 0.0041 -0.0200 -0.0380 0.0193 -0.0159 0.0022 -0.0097 0.0087 -0.0699 -0.0137	-0.0575
Columns 436 through 450	
-0.0415	0.0229
-0.0495 -0.0097 -0.0239 -0.0119 0.0556 -0.0342 -0.0037 0.0083 -0.0278 -0.0018 -0.0031 0.0108 -0.0221 -0.0406	-0.0218
-0.0286 -0.0128 -0.0216 0.0065 0.0542 -0.0488 -0.0139	-0.0348

-0.0136 -0.0030 -0.0439 -0.0050 0.0135 -0.0180 -0.0449 Columns 451 through 465 0.0341 0.0094 0.0146 -0.0261 0.0090 -0.0184 -0.0066 0.0277 0.0243 0.0177 0.0075 0.0023 -0.0183 -0.0136 0.0218 -0.0152 -0.0433 0.0101 0.0033 0.0020 0.0001 0.0129 0.0020 0.0289 -0.0244 -0.0184 0.0173 -0.0112 -0.0186 0.0105 -0.0300 -0.0712 -0.0060 -0.0090 -0.0002 0.0085 0.0175 Columns 466 through 480 -0.0212 0.0130 -0.0284 -0.0010 0.0200 -0.0267 -0.0006 -0.0110 0.0085 0.0053 0.0242 0.0021 -0.0106 -0.0344 0.0207 0.0157 0.0025 0.0087 -0.0012 0.0039 -0.0344 0.0190 0.0003 -0.0139 -0.0249 0.0017 -0.0079 0.0221 0.0280 -0.0088 -0.0169 -0.0426 -0.0022 -0.0040 0.0542 0.0191 Columns 481 through 495 0.0277 -0.0013 0.0083 -0.0085 0.0007 0.0528 -0.0256 -0.0038 0.0307 0.0160 0.0417 0.0217 -0.0257 0.0233 0.0405 -0.0119 -0.0077 -0.0340 0.0129 0.0679 0.0156 -0.0195 0.0047 -0.0053 -0.0267 0.0223 0.0010 0.0048 0.0203 0.0320 -0.0073 -0.0048 -0.0338 0.0151 0.0266 0.0421 -0.0070 -0.0038 -0.0185 -0.0406 -0.0115 -0.0040 0.0288 -0.0113 Columns 496 through 510 0.0344 -0.0162 0.0175 0.0073 0.0134 0.0083 0.0164 -0.0041 -0.0050 -0.0071 0.0055 0.0408 0.0027 0.0212 0.0074 0.0021 -0.0422 0.0149 0.0415 0.0279 -0.0235 -0.0024 -0.0057 0.0109 0.0110 0.0078 -0.0164 -0.0043 -0.0095 0.0000 0.0027 0.0191 0.0207 0.0019 -0.0662 0.0007 -0.0282 Columns 511 through 525 -0.0220 0.0195 -0.0236 0.0090 0.0153 -0.0071 -0.0577 0.0375 -0.0561 -0.0146 0.0264 0.0014 -0.0150 0.0034 0.0267 0.0060 -0.0447 -0.0071 -0.0037 -0.0111 0.0105 -0.0118 -0.0005 -0.0168 -0.0101 0.0001 0.0024 -0.0093 -0.0435 0.0098 0.0167 -0.0715 0.0135 -0.0219 -0.0243 0.0186 0.0355 -0.0196 0.0193 -0.0002 -0.0180 0.0178 -0.0048 -0.0529 0.0010 Columns 526 through 540 0.0449 -0.0063 -0.0078 -0.0212 -0.0090 -0.0156 -0.0104 0.0354 -0.0053 0.0174 -0.0029 -0.0170 0.0029 -0.0402 -0.0075 -0.0280 0.0161 -0.0307 -0.0047 0.0256 -0.0216 0.0018 0.0250 -0.0109 0.0341 -0.0139 0.0062 -0.0102 -0.0518 -0.0489 -0.0312 0.0268 -0.0254 -0.0114 0.0471 -0.0296 0.0142 0.0016 -0.0148 0.0399 0.0006 0.0070 -0.0032 -0.0265

Columns 541 through 555

-0.0364 0.0306 0.0054 -0.0109 0.0092 0.0021 -0.0132 0.0184 -0.0044 0.0233 0.0162 -0.0021 0.0211 -0.0301 0.0167 0.0180 0.0192 0.0130 -0.0081 -0.0594 0.0281 0.0012 0.0038 -0.0281 -0.0036 0.0393 0.0072 -0.0354 0.0418 0.0066 0.0240 0.0442 -0.0047 -0.0588 0.0567	-0.0228
-0.0121 0.0039 -0.0508 -0.0086 0.0574 -0.0188 -0.0148 Columns 556 through 570	
0.0056 0.0214 0.0134 0.0420 0.0093 0.0164 0.0429 0.0094 0.0260 -0.0209 0.0113 0.0068 -0.0069 0.0111 -0.0467 -0.0043 0.0029 0.0181 0.0093 -0.0295 0.0152 -0.0219 0.0047 -0.0432 0.0092 -0.0185 -0.0185 -0.0063 -0.0545 -0.0183 -0.0119 -0.0248 0.0073 -0.0528 -0.0186	-0.0169
-0.0337 -0.0033 -0.0407 0.0125 -0.0256 -0.0242 -0.0143 Columns 571 through 585	
-0.0066 0.0429 0.0326 0.0037 -0.0182 -0.0002 -0.0228 -0.0041 0.0316 0.0214 -0.0068 -0.0215 -0.0047 -0.0059 -0.0201 0.0138 0.0312 -0.0067 -0.0063 -0.0298 -0.0376 0.0332 0.0299 -0.0109 -0.0307 -0.0308 0.0366 0.0273 -0.0253 -0.0051 0.0049 -0.0294 0.0043 -0.0297 -0.0194 0.0178 0.0086 -0.0484 -0.0350 -0.0168 0.0668 0.0288	-0.0346
Columns 586 through 600	
0.0228 -0.0146 0.0156 0.0139 -0.0037 0.0329 0.0150 -0.0384 -0.0143 -0.0331 0.0102 -0.0078 0.0229 0.0043 -0.0208 -0.0192 -0.0027 -0.0245 0.0117 -0.0005 0.0469 -0.0014 -0.0264 -0.0066 -0.0274 0.0038 0.0458 -0.0048 -0.0302 -0.0148 -0.0193 -0.0227 0.0101 -0.0255 0.0401 0.0273 -0.0153 0.0326 -0.0414 0.0076 0.0425 -0.0018	-0.0029
Columns 601 through 615	
0.0251 -0.0073 0.0119 -0.0093 0.0151 0.0117 0.0017 -0.0003 0.0183 0.0330 -0.0089 0.0148 -0.0057 -0.0191 0.0123 -0.0195 0.0076 0.0074 0.0102 -0.0145 -0.0154 -0.0118 0.0007 0.0034 0.0205 0.0113 -0.0229 -0.0562 -0.0094 -0.0216 0.0012 -0.0002 0.0028 -0.0197 -0.0152 -0.0195 0.0006 -0.0298 0.0242 0.0129 -0.0360 -0.0487	0.0122
Columns 616 through 630	
0.0051 0.0187 0.0282 -0.0130 0.0143 -0.0339 -0.0186 -0.0149 0.0387 -0.0207 -0.0034 0.0232 0.0164 0.0129 -0.0164 -0.0150 -0.0024 0.0153 0.0265 0.0047 -0.0185 0.0166 0.0213 0.0208 0.0239 -0.0259 0.0074 0.0028 -0.0222 -0.0205 -0.0252 0.0330 0.0079 0.0068 -0.0161 0.0315 -0.0060 0.0468 0.0355 -0.0450 -0.0126 -0.0055	-0.0057
Columns 631 through 645	
0.0171 -0.0235 -0.0177 0.0046 -0.0238 -0.0105 -0.0070 0.0554 -0.0155 -0.0156 -0.0018 -0.0257 0.0125 0.0083 -0.0090 -0.0181 0.0288 -0.0075 -0.0281 -0.0039 0.0604	

0.0361 -0.0176 0.0257 -0.0037 0.0020 -0.0159 0.0141 -0.0199 0.0014 0.0494 -0.0032 -0.0074 -0.0017 0.0872 0.0105 -0.0007 0.0331 -0.0081 0.0190 -0.0249 0.0027	0.0171
Columns 646 through 660	
-0.0155	0.0135
0.0038 -0.0249 0.0082 0.0002 -0.0054 -0.0207 -0.0157 -0.0134 0.0027 0.0288 -0.0211 0.0543 0.0314 0.0096	
0.0153 -0.0270 0.0102 0.0233 -0.0154 -0.0158 -0.0002 -0.0113 -0.0007 0.0380 -0.0159 0.0549 0.0148 0.0282	-0.0544
Columns 661 through 675	
-0.0389 -0.0160 -0.0209 -0.0091 0.0044 -0.0052 0.0199 -0.0054 0.0507 0.0355 -0.0197 0.0073 0.0018 0.0373	
-0.0149 -0.0202 0.0130 -0.0221 -0.0129 0.0163 -0.0026 0.0236 0.0056 -0.0014 0.0080 -0.0095 0.0252 0.0210	
0.0152 -0.0103 0.0301 -0.0212 -0.0209 0.0199 -0.0339 0.0424 -0.0314 -0.0279 0.0196 -0.0127 0.0246 -0.0113	0.0699
Columns 676 through 690	
0.0136 -0.0095 -0.0021 0.0354 -0.0155 0.0199 -0.0143 -0.0358 -0.0114 -0.0036 0.0076 -0.0237 -0.0089 0.0084	-0.0348
0.0219 -0.0058 0.0181 0.0770 0.0028 -0.0330 0.0257 -0.0221 0.0494 0.0290 -0.0097 -0.0228 -0.0120 -0.0482	0.0081
0.0245 -0.0022 0.0310 0.0473 0.0234 -0.0544 0.0269 0.0047 0.0572 0.0504 -0.0329 -0.0062 0.0064 -0.0689	0.0386
Columns 691 through 705	
0.0091 -0.0509 -0.0089 -0.0087 -0.0032 0.0047 0.0391 -0.0086 0.0221 0.0015 -0.0093 -0.0328 0.0048 -0.0063	0.0101
0.0033 -0.0145 0.0236 0.0100 0.0448 0.0119 0.0041 -0.0057 -0.0303 0.0123 -0.0141 0.0045 -0.0181 0.0071	0.0028
0.0061 0.0431 0.0430 0.0351 0.0571 -0.0115 -0.0342 -0.0262 -0.0594 0.0095 -0.0054 0.0499 -0.0273 0.0090	0.0012
Columns 706 through 720	
-0.0565 0.0181 -0.0241 0.0134 -0.0264 0.0004 -0.0259 -0.0141 0.0533 0.0192 0.0265 0.0452 -0.0106 -0.0234	-0.0147
-0.0196 -0.0244 -0.0078 -0.0005 0.0075 -0.0044 0.0052 0.0106 0.0570 0.0254 0.0183 0.0099 0.0114 0.0026	-0.0583
0.0330 -0.0453 -0.0027 -0.0059 0.0340 -0.0022 0.0308 0.0259 0.0233 0.0106 -0.0084 -0.0206 0.0298 0.0237	-0.0500
Columns 721 through 735	
-0.0026 0.0134 -0.0267 -0.0544 -0.0184 0.0072 0.0476 -0.0035 -0.0277 0.0183 -0.0281 0.0185 0.0290 0.0162	-0.0296
-0.0034 -0.0234 -0.0127 -0.0212 -0.0140 0.0076 0.0899 0.0004 -0.0362 0.0248 0.0314 -0.0209 0.0539 -0.0294	-0.0422
-0.0062 -0.0433 0.0083 0.0156 0.0002 -0.0090 0.0808 0.0016 -0.0155 0.0050 0.0624 -0.0267 0.0396 -0.0531	-0.0280

Columns	736	through	750
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COIDINIS 750 CITI OUGH 750	
-0.0159 0.0012 -0.0026 0.0204 0.0348 0.0127 0.0025 0.0125 -0.0261 0.0019 -0.0067 -0.0138 -0.0139 0.0015	
0.0059 0.0167 -0.0052 0.0593 0.0695 0.0012 -0.0385 -0.0122 -0.0255 -0.0399 0.0125 0.0469 -0.0140 0.0033	-0.0147
0.0232 0.0099 -0.0107 0.0517 0.0485 -0.0131 -0.0409 -0.0198 -0.0094 -0.0589 0.0301 0.0650 0.0005 0.0108	0.0291
Columns 751 through 765	
0.0355 -0.0079 0.0007 0.0145 0.0097 -0.0014 -0.0145 0.0006 -0.0082 -0.0038 -0.0090 0.0253 0.0277 0.0106	
0.0223	-0.0060
-0.0145	0.0214
Columns 766 through 780	
0.0159 0.0542 0.0086 0.0082 0.0264 0.0303 -0.0117 0.0154 -0.0230 0.0128 0.0434 0.0177 0.0001 0.0509	-0.0157
0.0126 0.0230 0.0005 -0.0147 0.0250 0.0336 -0.0180 -0.0044 -0.0012 -0.0151 -0.0126 -0.0011 0.0236 0.0449	0.0301
0.0054 -0.0138 -0.0086 -0.0219 0.0078 0.0085 -0.0136 -0.0206 0.0255 -0.0250 -0.0526 -0.0006 0.0400 0.0066	0.0368
Columns 781 through 795	
-0.0387	0.0092
0.0159 0.0387 0.0354 0.0062 0.0338 0.0219 -0.0037 0.0099 0.0257 0.0086 -0.0455 -0.0138 -0.0057 0.0088	-0.0084
-0.0046	0.0005
-0.0047 -0.0141 0.0023 0.0182 -0.0662 -0.0537 0.0177	
Columns 796 through 810	
0.0238	0.0178
0.0231 0.0463 -0.0291 -0.0440 -0.0107 0.0049 0.0029	0.0307
-0.0270 -0.0178 -0.0119 0.0168 -0.0114 -0.0418 0.0007 -0.0018 0.0308 -0.0230 -0.0402 -0.0083 0.0541 0.0164	0.0170
-0.0261 0.0056 0.0246 0.0306 -0.0271 -0.0280 0.0122	
Columns 811 through 825	
-0.0049 -0.0010 0.0011 -0.0122 0.0068 -0.0064 0.0048 -0.0109 -0.0091 -0.0396 -0.0306 -0.0168 0.0235 -0.0419	-0.0375
-0.0274 -0.0017 0.0135 -0.0058 -0.0439 -0.0053 -0.0023 0.0226 -0.0057 0.0137 -0.0342 -0.0170 0.0337 0.0154	0.0261
-0.0168 -0.0028 0.0091 -0.0038 -0.0560 0.0067 -0.0033 0.0377 -0.0011 0.0406 -0.0167 -0.0102 0.0153 0.0423	0.0529
Columns 826 through 840	

-0.0077 0.0056 -0.0237 -0.0286 0.0178 0.0248 0.0109

-0.0241 0.0138 -0.0276 0.0236 0.0100 0.0112 -0.0281

0.0304

0.0045 0.0085 -0.0350 0.0080 0.0034 0.0135 0.0110 -0.0382 0.0014 -0.0044 -0.0016 -0.0046 0.0318 -0.0002 0.0020 0.0014 -0.0344 0.0296 0.0058 -0.0094 0.0053 -0.0437 -0.0238 0.0028 -0.0085 -0.0225 0.0200 0.0254	
Columns 841 through 855	
0.0182 -0.0105 0.0057 0.0220 -0.0027 0.0049 -0.0077 -0.0046 0.0260 0.0324 0.0244 -0.0021 -0.0097 -0.0342	
-0.0122 0.0085 0.0035 0.0069 -0.0046 -0.0141 0.0185 0.0021 0.0394 -0.0191 0.0052 0.0097 -0.0015 -0.0447 -0.0363 0.0183 0.0070 -0.0172 -0.0038 -0.0328 0.0354	
-0.0002 0.0195 -0.0296 -0.0048 0.0167 0.0237 -0.0294	0.0054
Columns 856 through 870	
0.0098 0.0553 0.0058 -0.0191 0.0126 -0.0088 -0.0272 -0.0003 -0.0404 -0.0053 -0.0194 -0.0077 0.0148 -0.0174	
0.0133 0.0297 -0.0032 -0.0039 -0.0264 -0.0190 0.0004 0.0099 0.0432 -0.0036 0.0080 -0.0174 0.0319 -0.0330 0.0044 -0.0083 -0.0180 0.0032 -0.0478 -0.0191 0.0301	
0.0135	0.0142
Columns 871 through 885	
-0.0028 -0.0210 0.0637 0.0278 -0.0094 -0.0072 0.0076 -0.0108 0.0354 -0.0144 0.0347 0.0161 0.0009 -0.0488	
0.0119 -0.0096 0.0222 0.0108 0.0177 0.0656 -0.0008 0.0674 -0.0068 0.0051 -0.0250 0.0396 0.0095 -0.0102	
0.0223 0.0143 -0.0296 -0.0064 0.0456 0.0787 0.0036 0.0913 -0.0259 0.0134 -0.0629 0.0423 0.0114 0.0152	0.0037
Columns 886 through 900	
0.0390 -0.0172 -0.0006 0.0111 -0.0006 0.0168 0.0030 0.0130 0.0249 0.0117 0.0212 0.0035 -0.0331 -0.0007	-0.0134
0.0185 -0.0013 0.0485 -0.0492 -0.0274 0.0262 -0.0138 -0.0306 -0.0170 -0.0058 -0.0122 -0.0150 -0.0101 -0.0258	-0.0294
0.0037 0.0097 0.0677 -0.0634 -0.0211 0.0272 -0.0173 -0.0440 -0.0406 -0.0151 -0.0310 -0.0159 0.0215 -0.0317	-0.0395
Columns 901 through 915	
-0.0349	-0.0275
0.0118 -0.0059 0.0285 -0.0207 -0.0210 -0.0172 0.0303 -0.0171 0.0139 0.0282 -0.0205 -0.0034 -0.0309 -0.0042	0.0349
0.0314 0.0040 0.0558 -0.0209 -0.0230 -0.0203 0.0057 -0.0459 0.0114 0.0208 -0.0190 -0.0322 -0.0152 -0.0051	0.0759
Columns 916 through 930	
0.0177 -0.0266 0.0006 -0.0443 -0.0134 0.0107 0.0213 0.0042 -0.0085 0.0097 -0.0025 -0.0376 -0.0005 0.0304	-0.0373
0.0323	-0.0240
0.0277 0.0453 0.0741 0.0284 -0.0040 0.0228 0.0370 -0.0081 0.0042 -0.0007 0.0284 0.0035 -0.0259 0.0119	0.0012

Columns 931 through 945

Columns 931 through 945	
-0.0122 -0.0306 -0.0365 0.0164 0.0073 -0.0092 0.0096 0.0100 -0.0135 -0.0246 -0.0224 0.0186 0.0141 -0.0122 -0.0089 0.0327 -0.0172 0.0026 -0.0114 -0.0246 0.0092	
-0.0012 0.0231 0.0078 -0.0370 -0.0086 -0.0083 -0.0074	
0.0103 0.0672 0.0020 -0.0251 -0.0128 -0.0183 0.0107 -0.0366 0.0474 0.0292 -0.0225 -0.0162 -0.0348 0.0043	0.0024
Columns 946 through 960	
0.0250 0.0209 -0.0178 -0.0272 0.0253 -0.0032 0.0171 -0.0094 0.0308 -0.0188 0.0011 0.0120 -0.0057 -0.0394	0.0209
0.0337	0.0266
0.0163	0.0107
Columns 961 through 975	
0.0119 -0.0014 -0.0247 -0.0227 -0.0139 -0.0024 -0.0025 -0.0005 0.0003 0.0140 0.0309 0.0034 0.0225 -0.0004	
0.0442 -0.0016 0.0462 0.0011 0.0151 0.0323 0.0634 -0.0255 0.0032 -0.0286 0.0083 0.0092 0.0206 0.0261	0.0131
0.0407 -0.0062 0.0619 0.0309 0.0326 0.0350 0.0741 -0.0345 -0.0100 -0.0444 -0.0088 0.0094 -0.0114 0.0235	0.0136
Columns 976 through 990	
0.0070 0.0009 0.0035 -0.0062 -0.0293 0.0316 0.0006 0.0084 0.0022 0.0088 -0.0015 -0.0120 -0.0002 -0.0027	
-0.0241 0.0142 -0.0216 0.0101 0.0291 0.0008 -0.0206 0.0136 0.0253 0.0331 -0.0056 0.0114 -0.0101 0.0198	
-0.0546 0.0087 -0.0401 0.0130 0.0487 -0.0330 -0.0357 0.0043 0.0214 0.0143 -0.0108 0.0314 -0.0072 0.0097	-0.0276
Columns 991 through 1,005	
-0.0111 -0.0075 0.0368 0.0271 -0.0529 0.0101 -0.0112 0.0385 -0.0176 0.0047 -0.0021 0.0062 -0.0065 0.0206	-0.0198
	0.0225
-0.0003	0.0543
Columns 1,006 through 1,020	
-0.0196	0.0001
-0.0128	0.0040
0.0002 0.0001 0.0070 0.0291 0.0103 0.0175 -0.0406 0.0344 0.0268 0.0261 -0.0081 0.0059 -0.0069 -0.0145	0.0126
Columns 1,021 through 1,035	

0.0204 0.0092 0.0143 -0.0161 -0.0395 0.0096 -0.0194

0.0159

0.0014 -0.0015 0.0027 0.0286 0.0099 0.0012 0.0206	-0.0066
-0.0086 0.0335 -0.0248 0.0023 0.0502 0.0210 0.0254	-0.0247
Columns 1,036 through 1,050	
-0.0040 -0.0290 -0.0249 -0.0108 -0.0258 -0.0210 0.0115 -0.0334 0.0256 0.0566 0.0005 -0.0031 0.0207 -0.0013	
-0.0191 -0.0074 0.0187 0.0240 0.0492 0.0149 0.0029	0.0105
-0.0064 -0.0200 -0.0462 -0.0152 0.0273 0.0183 0.0066 0.0085 -0.0276 -0.0316 0.0317 0.0522 0.0030 0.0059	-0.0168
Columns 1,051 through 1,065	
-0.0326 0.0040 -0.0065 -0.0152 0.0374 0.0273 0.0244 -0.0250 -0.0260 -0.0322 0.0244 0.0093 -0.0212 -0.0072 -0.0163 0.0070 -0.0133 -0.0486 -0.0012 0.0124 -0.0087	
0.0396	
Columns 1,066 through 1,080	
0.0141 0.0287 -0.0414 -0.0570 0.0246 -0.0306 0.0058 0.0295 0.0251 0.0106 0.0223 0.0067 0.0256 0.0043	0.0110
0.0056 0.0014 0.0235 -0.0131 -0.0123 -0.0091 -0.0043 0.0169 0.0269 0.0169 -0.0140 0.0103 -0.0010 -0.0274	0.0167
-0.0029 -0.0347 0.0657 0.0277 -0.0339 0.0161 -0.0103 -0.0041 0.0177 0.0203 -0.0429 0.0126 -0.0320 -0.0309	0.0042
Columns 1,081 through 1,095	
0.0023 -0.0277 0.0094 0.0087 -0.0121 0.0089 0.0224 0.0099 -0.0180 -0.0164 0.0155 -0.0345 0.0063 -0.0152	
-0.0133	0.0039
-0.0327 0.0417 -0.0211 0.0314 0.0165 -0.0080 -0.0040 -0.0011 0.0433 -0.0054 -0.0219 0.0396 0.0196 0.0313	-0.0317
Columns 1,096 through 1,110	
-0.0075 0.0474 0.0141 -0.0463 0.0115 0.0147 -0.0085 -0.0054 -0.0028 0.0254 0.0121 0.0182 0.0132 -0.0313	
-0.0209 -0.0102 -0.0025 -0.0161 -0.0253 -0.0283 0.0178 0.0220 -0.0416 0.0090 -0.0017 -0.0097 0.0252 -0.0087	-0.0083
-0.0179 -0.0569 -0.0240 0.0161 -0.0291 -0.0407 0.0233 0.0073 -0.0354 -0.0166 -0.0155 -0.0223 0.0290 0.0299	0.0033
Columns 1,111 through 1,125	
-0.0002 0.0053 0.0378 0.0165 -0.0319 -0.0135 0.0270 0.0221 0.0073 0.0168 -0.0039 0.0104 0.0144 0.0047	
0.0293 -0.0117 -0.0293 -0.0484 -0.0075 0.0202 0.0087 0.0190 -0.0216 0.0315 -0.0222 -0.0026 -0.0079 -0.0073	0.0078
0.0413 -0.0301 -0.0631 -0.0642 0.0227 0.0307 -0.0132	0.0347

```
0.0019 -0.0224 0.0173 -0.0225 -0.0165 -0.0229 -0.0222
 Columns 1,126 through 1,140
 0.0065 0.0180 0.0007 -0.0008 -0.0198 0.0111 0.0026
 -0.0419 0.0333 0.0121 0.0373 0.0293 -0.0048 -0.0239 -0.0356
0.0017 0.0017 0.0212 -0.0219 0.0025 0.0206 -0.0192
 -0.0009 -0.0071 0.0328 0.0280 0.0404 0.0160 -0.0535
-0.0034 -0.0191 0.0206 -0.0237 0.0087 0.0288 -0.0253
Columns 1,141 through 1,155
 -0.0110 -0.0032 -0.0201 -0.0266 0.0145 0.0094 -0.0229 -0.0554
-0.0368 -0.0024 0.0115 -0.0241 0.0272 0.0061 0.0211
  0.0197 0.0084 0.0009 0.0401 0.0169 0.0016 0.0043 -0.0127
-0.0071 0.0068 0.0036 -0.0077 0.0118 0.0393 -0.0010
  0.0191 0.0067 0.0079 0.0247 -0.0108 0.0343 -0.0170
Columns 1,156 through 1,170
 -0.0261 0.0320 -0.0099 -0.0071 -0.0025 0.0038 0.0232 0.0195
-0.0016 0.0364 0.0327 -0.0065 -0.0161 -0.0323 0.0080
 -0.0184 0.0020 -0.0302 -0.0125 0.0137 -0.0069 -0.0093 0.0038
-0.0349 -0.0049 -0.0229 -0.0128 -0.0240 -0.0359 0.0019
  0.0098 -0.0232 -0.0407 -0.0113 0.0204 -0.0149 -0.0298 -0.0029
-0.0415 -0.0288 -0.0499 -0.0087 -0.0100 -0.0251 0.0019
Columns 1,171 through 1,185
  -0.0049 0.0240 -0.0043 0.0152 0.0192 0.0076 -0.0102
 -0.0050 -0.0310 -0.0003 -0.0217 -0.0146 -0.0493 0.0137
 -0.0221 -0.0254 -0.0246 -0.0370 0.0068 -0.0422 -0.0103 -0.0023
0.0019 -0.0593 0.0154 -0.0436 -0.0243 -0.0644 0.0262
 Columns 1,186 through 1,200
  0.0434 -0.0186 0.0266 0.0305 0.0342 0.0126 0.0286
-0.0230 -0.0097 0.0214 -0.0326 -0.0040 -0.0064 -0.0035
  0.0479 0.0380 0.0012 0.0116 -0.0028 -0.0034 -0.0157
-0.0009 -0.0392 -0.0394 0.0383 0.0026 0.0085 0.0087 0.0121 0.0496 -0.0142 -0.0064 -0.0304 -0.0209 -0.0413
0.0219 -0.0440 -0.0618 0.0612 0.0139 0.0153 -0.0033
 Columns 1,201 through 1,215
 0.0089 0.0359 -0.0195 -0.0422 0.0096 -0.0384 0.0053
 -0.0363 0.0219 0.0178 0.0072 -0.0127 -0.0168 0.0253
-0.0174 0.0206 0.0381 -0.0184 -0.0145 -0.0133 0.0375
 -0.0236 0.0079 0.0010 -0.0059 -0.0228 -0.0071 0.0426
-0.0275 -0.0094 0.0616 0.0132 -0.0284 0.0034 0.0479
```

Columns 1,216 through 1,230

-0.0198 -0.0247 -0.0099 -0.0122 0.0158 -0.0374 0.0220 0.0195 -0.0288 -0.0121 -0.0279 -0.0163 0.0257 0.0094 0.0070 -0.0013 -0.0082 0.0047 -0.0011 0.0205 -0.0271	
0.0383 -0.0189 -0.0009 -0.0209 0.0064 -0.0070 0.0194 0.0141 0.0166 0.0063 0.0089 -0.0164 0.0505 -0.0478	
0.0309 0.0011 0.0228 0.0051 0.0347 -0.0357 0.0267 Columns 1,231 through 1,245	
	0.0400
-0.0007 0.0140 -0.0184 0.0079 0.0159 0.0231 0.0202 0.0186 -0.0067 0.0120 0.0301 0.0234 -0.0197 -0.0281 -0.0184 0.0029 -0.0269 -0.0059 -0.0260 0.0011 0.0729	0.0129 0.0636
0.0391 0.0132 -0.0337 -0.0131 -0.0104 0.0033 -0.0009	
-0.0183 -0.0098 -0.0233 -0.0123 -0.0510 -0.0152 0.0534 0.0364 0.0172 -0.0536 -0.0444 -0.0317 0.0155 0.0164	0.0455
Columns 1,246 through 1,260	
0.0145 -0.0082 0.0007 0.0155 -0.0028 0.0388 0.0399 0.0533 -0.0018 0.0321 0.0387 0.0144 0.0074 -0.0030	
-0.0120 -0.0081 -0.0273 -0.0033 0.0259 0.0193 0.0157 0.0182 -0.0510 0.0053 -0.0060 -0.0447 -0.0188 -0.0160 -0.0408 -0.0011 -0.0365 -0.0221 0.0316 -0.0088 -0.0122	
-0.0287 -0.0675 -0.0219 -0.0421 -0.0627 -0.0181 -0.0225	0.0049
Columns 1,261 through 1,275	
-0.0391 -0.0003 -0.0002 -0.0070 -0.0114 0.0066 0.0005 0.0062 0.0150 -0.0474 -0.0019 0.0333 0.0206 0.0150	
0.0218 -0.0086 -0.0130 -0.0110 -0.0427 -0.0107 -0.0213 0.0336 0.0008 0.0190 0.0309 -0.0193 -0.0094 0.0057	0.0236
0.0660 -0.0122 -0.0311 0.0031 -0.0304 -0.0299 -0.0238 0.0260 -0.0058 0.0613 0.0444 -0.0433 -0.0387 -0.0089	-0.0003
Columns 1,276 through 1,290	
-0.0071 -0.0456 0.0116 0.0016 0.0184 -0.0010 -0.0082 -0.0046 0.0229 -0.0039 -0.0296 0.0043 0.0094 -0.0406	-0.0171
0.0103 0.0057 0.0127 0.0116 -0.0201 0.0309 -0.0419 0.0344 -0.0326 0.0253 -0.0005 -0.0262 -0.0194 -0.0287	-0.0231
0.0171 0.0433 0.0001 0.0080 -0.0523 0.0551 -0.0301 0.0491 -0.0748 0.0478 -0.0019 -0.0387 -0.0288 -0.0068	-0.0054
Columns 1,291 through 1,305	
-0.0458 -0.0068 -0.0355 0.0155 0.0319 0.0154 0.0196 0.0152 0.0226 0.0098 -0.0137 -0.0046 0.0358 0.0063	0.0083
0.0015 0.0095 -0.0188 -0.0273 -0.0064 0.0029 -0.0131	-0.0194
-0.0147 0.0034 -0.0526 -0.0131 0.0111 0.0026 -0.0003 0.0398 0.0299 0.0177 -0.0383 -0.0373 -0.0050 -0.0350 -0.0223 -0.0269 -0.0709 -0.0154 0.0133 -0.0134 -0.0057	-0.0418
Columns 1,306 through 1,320	
-0.0109 0.0027 -0.0143 0.0242 -0.0217 -0.0282 -0.0041 -0.0100 0.0159 -0.0196 0.0396 0.0396 0.0163 0.0408	0.0084
-0.0057 -0.0170 -0.0005 0.0142 -0.0316 0.0190 0.0517	0.0043
0.0004 -0.0274 -0.0001 -0.0187 0.0370 0.0084 0.0092	

-0.0063 -0.0243 0.0136 -0.0041 -0.0224 0.0493 0.0854 -0.0063 0.0105 -0.0472 0.0094 -0.0524 0.0022 -0.0102 -0.0278 Columns 1,321 through 1,335 -0.0150 -0.0068 -0.0176 -0.0247 0.0019 0.0269 -0.0208 -0.0075 0.0165 -0.0011 -0.0117 -0.0082 0.0113 -0.0001 0.0083 -0.0129 -0.0494 -0.0218 -0.0111 0.0638 0.0219 0.0029 -0.0028 -0.0480 -0.0019 -0.0049 0.0769 0.0020 0.0204 -0.0195 Columns 1,336 through 1,350 -0.0068 0.0019 0.0046 -0.0141 -0.0039 0.0113 -0.0305 -0.0421 0.0079 -0.0016 -0.0051 0.0026 0.0258 0.0194 -0.0142 -0.0379 0.0024 -0.0095 0.0022 -0.0071 0.0192 0.0530 -0.0601 -0.0075 0.0072 0.0145 -0.0382 0.0273 0.0202 0.0534 Columns 1,351 through 1,365 0.0062 0.0244 0.0274 0.0031 0.0218 -0.0312 0.0240 0.0200 -0.0107 -0.0330 0.0511 0.0564 -0.0007 -0.0078 0.0190 0.0094 0.0359 -0.0289 -0.0006 -0.0136 0.0334 -0.0038 -0.0324 -0.0345 0.0385 0.0981 -0.0238 0.0202 -0.0077 0.0122 -0.0114 0.0209 -0.0426 -0.0278 0.0171 0.0170 Columns 1,366 through 1,380 0.0217 -0.0131 0.0118 0.0207 0.0048 0.0071 -0.0162 0.0094 -0.0141 -0.0145 0.0052 0.0129 0.0039 -0.0083 -0.0031 -0.0188 0.0101 -0.0105 -0.0409 -0.0399 -0.0006 0.0168 0.0029 -0.0386 -0.0142 0.0056 -0.0150 -0.0057 -0.0034 0.0229 -0.0259 0.0287 -0.0432 -0.0491 -0.0364 -0.0493 0.0213 -0.0097 Columns 1,381 through 1,395 0.0205 -0.0235 -0.0155 0.0137 -0.0023 0.0335 0.0230 -0.0407 -0.0460 -0.0044 0.0051 0.0106 0.0173 0.0010 -0.0037 -0.0331 -0.0312 0.0080 -0.0044 -0.0176 0.0310 -0.0144 0.0029 0.0275 -0.0270 0.0247 0.0620 -0.0438 0.0250 -0.0555 -0.0075 0.0139 -0.0196 -0.0250 0.0019 -0.0356 Columns 1,396 through 1,410 -0.0601 0.0035 -0.0150 0.0186 0.0248 -0.0014 -0.0229 0.0086 -0.0066 -0.0294 0.0200 0.0234 0.0098 0.0253 0.0085 -0.0246 -0.0076 -0.0120 0.0146 0.0662 -0.0243 0.0148 0.0339 -0.0062 0.0086 0.0172 0.0052 0.0332 -0.0062 0.0157 -0.0021 0.0078 0.0006 0.0608 -0.0311 0.0416 -0.0208

Columns 1,411 through 1,425

-0.0141 0.0097 -0.0143 0.0417 -0.0108 0.0286 -0.0100 -0.0150 -0.0097 -0.0037 0.0081 -0.0149 -0.0215 0.0101	
-0.0191 0.0125 0.0339 -0.0100 -0.0177 0.0239 -0.0491 0.0068 0.0114 -0.0279 0.0112 0.0043 0.0106 0.0245	
-0.0015 0.0102 0.0504 -0.0374 -0.0197 -0.0012 -0.0493 0.0132 0.0281 -0.0365 0.0146 0.0216 0.0238 0.0254	-0.0235
Columns 1,426 through 1,440	
0.0276 0.0052 0.0433 0.0067 -0.0010 -0.0150 -0.0345 -0.0089 -0.0057 0.0308 0.0014 0.0128 0.0134 0.0216	
-0.0128	0.0225
0.0210 0.0490 -0.0408 -0.0057 -0.0119 -0.0220 0.0267	0.0186
Columns 1,441 through 1,455	
-0.0096 -0.0612 0.0173 0.0198 0.0124 -0.0069 -0.0386 0.0418 -0.0004 -0.0276 0.0507 -0.0170 -0.0427 -0.0191	0.0599
-0.0092 -0.0103 0.0080 0.0211 -0.0161 0.0022 -0.0471 -0.0267 -0.0153 -0.0018 -0.0208 -0.0215 -0.0482 -0.0607	0.0349
-0.0132 0.0431 -0.0026 0.0071 -0.0307 0.0021 -0.0240 -0.0763 -0.0171 0.0183 -0.0695 -0.0059 -0.0229 -0.0572	0.0115
Columns 1,456 through 1,470	
0.0337 0.0149 -0.0159 -0.0111 -0.0075 -0.0028 -0.0144 -0.0152 0.0377 0.0223 -0.0007 -0.0246 0.0161 0.0098	0.0304
-0.0089 0.0388 -0.0082 0.0010 -0.0144 0.0441 0.0032 0.0130 -0.0031 0.0453 0.0257 -0.0047 0.0226 0.0495	0.0324
-0.0484 0.0392 0.0032 0.0178 -0.0001 0.0588 0.0259 0.0339 -0.0385 0.0464 0.0323 0.0174 0.0029 0.0532	0.0082
Columns 1,471 through 1,485	
-0.0189 -0.0134 -0.0172 -0.0086 0.0079 -0.0187 -0.0186 -0.0014 0.0026 -0.0231 0.0069 -0.0067 -0.0010 -0.0450	-0.0277
-0.0070 0.0068 -0.0274 -0.0383 -0.0249 -0.0166 -0.0168	0.0154
0.0336 -0.0027 0.0214 -0.0027 0.0002 0.0168 0.0203 -0.0161 0.0079 -0.0063 -0.0598 -0.0134 -0.0071 0.0145	0.0374
Columns 1,486 through 1,500	
-0.0495 -0.0336 -0.0068 0.0347 0.0340 -0.0019 0.0287 -0.0100 -0.0047 0.0404 0.0037 0.0154 0.0012 -0.0097	0.0135
-0.0424 0.0383 -0.0146 -0.0402 -0.0164 0.0105 -0.0166 0.0083 -0.0101 0.0116 -0.0161 -0.0178 -0.0430 0.0159	
-0.0027 0.0647 -0.0373 -0.0732 -0.0435 0.0251 -0.0273 0.0045 -0.0122 -0.0159 -0.0155 -0.0398 -0.0599 0.0341	-0.0390
Columns 1,501 through 1,515	
0.0082 0.0028 -0.0265 -0.0251 -0.0042 -0.0148 0.0295 -0.0147 -0.0069 0.0193 -0.0461 0.0253 0.0030 0.0235	

-0.0147 -0.0069 0.0193 -0.0461 0.0253 0.0030 0.0235

```
0.0206 -0.0125 0.0049 0.0081 0.0308 -0.0392 0.0176
 -0.0226 -0.0095 0.0591 0.0381 0.0126 -0.0124 -0.0319 -0.0195
0.0364 -0.0113 -0.0060 0.0499 0.0190 -0.0527 0.0076
Columns 1,516 through 1,530
  0.0508 -0.0069 -0.0319 -0.0077 0.0421 0.0345 -0.0215
-0.0298 0.0211 0.0002 0.0199 0.0195 0.0097 -0.0307
  0.0066 0.0006 0.0075 -0.0042 0.0011 0.0150 0.0053
0.0096 -0.0325 -0.0107 -0.0617 0.0192 -0.0240 -0.0105
 -0.0415 0.0112 0.0288 0.0066 -0.0231 -0.0101 0.0229
0.0329 -0.0554 0.0001 -0.0811 0.0085 -0.0377 0.0147
 Columns 1,531 through 1,545
 -0.0030 -0.0091 -0.0260 0.0241 0.0315 -0.0180 -0.0103 -0.0167
0.0168 -0.0190 -0.0145 0.0280 0.0029 -0.0203 -0.0223
  0.0336 -0.0042 -0.0090 -0.0124 -0.0080 0.0030 -0.0398 -0.0167
0.0140 -0.0335 0.0091 0.0151 -0.0159 -0.0263 -0.0154
  0.0498 -0.0003 0.0170 -0.0317 -0.0426 0.0118 -0.0385 -0.0153
-0.0047 -0.0192 0.0192 -0.0115 -0.0167 -0.0019 -0.0173
Columns 1,546 through 1,560
  -0.0498 0.0009 0.0211 0.0364 0.0004 -0.0207 -0.0279
0.0152 -0.0018 -0.0108 -0.0059 -0.0327 0.0072 0.0093
  0.0332 0.0033 0.0163 0.0333 -0.0259 0.0346 -0.0023
  0.0482 0.0155 0.0266 -0.0392 0.0131 -0.0083 0.0368
0.0290 0.0048 0.0231 0.0420 0.0040 0.0489 -0.0136
 Columns 1,561 through 1,575
 -0.0535 -0.0009 -0.0077 -0.0474 -0.0166 0.0315 0.0023 0.0057
0.0156 -0.0051 0.0268 -0.0056 -0.0145 -0.0007 0.0173
  0.0597 0.0002 0.0054 0.0144 -0.0167 0.0205 0.0052
  0.0619 -0.0007 0.0260 -0.0038 0.0438 -0.0038 0.0593
0.0569 -0.0030 -0.0203 0.0221 -0.0082 0.0166 -0.0038
Columns 1,576 through 1,590
  0.0091 0.0566 0.0268 -0.0000 -0.0158 -0.0052 0.0205 -0.0044
-0.0148 -0.0175 -0.0100 -0.0115 -0.0086 -0.0051 -0.0294
 -0.0255 0.0295 -0.0286 -0.0557 -0.0069 -0.0200 -0.0063
-0.0196 -0.0048 -0.0053 -0.0332 -0.0209 -0.0470 -0.0157
 -0.0323 -0.0152 -0.0523 -0.0741 -0.0039 -0.0155 -0.0148 0.0159
-0.0145 0.0124 -0.0061 -0.0313 -0.0083 -0.0464 0.0059
Columns 1,591 through 1,605
 -0.0007 0.0146 -0.0006 -0.0012 0.0211 -0.0005 0.0582
-0.0532 -0.0187 0.0067 0.0050 -0.0010 0.0198 -0.0139
  0.0002 0.0097 0.0065 0.0185 0.0242 0.0357 -0.0043
-0.0086 0.0013 0.0374 0.0125 -0.0108 -0.0026 0.0078
 -0.0124 0.0189 0.0035 0.0272 0.0074 0.0518 -0.0528 -0.0303
0.0351 0.0347 0.0388 -0.0078 -0.0226 -0.0164 0.0191
```

Columns 1,606 through 1,620

Columns 1,621 through 1,635

Columns 1,636 through 1,650

Columns 1,651 through 1,665

Columns 1,666 through 1,680

Columns 1,681 through 1,695

Columns 1,696 through 1,710

0.0095 -0.0315 0.0127 0.0057 -0.0267 0.0110 0.0195	
0.0243 0.0450 -0.0028 0.0012 0.0021 0.0195 0.0253 -0.0096 -0.0062 0.0214 0.0121 0.0197 -0.0023 0.0098	0.0378
0.0412 0.0390 0.0205 -0.0078 -0.0203 0.0425 0.0441	0.0273
-0.0215 0.0216 0.0153 0.0160 0.0430 -0.0016 -0.0095	
Columns 1,711 through 1,725	
0.0032 -0.0276 0.0229 -0.0114 0.0140 0.0191 0.0155	-0.0073
-0.0104 -0.0126 0.0200 -0.0120 0.0149 -0.0085 -0.0300 0.0035 0.0239 -0.0185 0.0116 0.0119 -0.0478 0.0227	0 0678
-0.0084 -0.0013 -0.0193 0.0199 0.0045 -0.0022 0.0298	0.0070
-0.0020 0.0472 -0.0327 0.0346 0.0087 -0.0673 0.0047	0.0862
-0.0017 0.0041 -0.0492 0.0440 0.0019 0.0062 0.0569	
Columns 1,726 through 1,740	
0.0295 -0.0146 0.0231 0.0375 -0.0305 -0.0086 0.0049	0.0360
-0.0287	0 0007
-0.0111 -0.0176 -0.0052 -0.0040 0.0246 0.0340 -0.0062 -0.0110 -0.0037 0.0368 0.0164 0.0091 0.0011 -0.0063	0.0027
-0.0346 -0.0090 -0.0321 -0.0428 0.0506 0.0356 0.0025	-0.0175
-0.0039 -0.0196 0.0465 -0.0010 0.0166 0.0560 0.0105	
Columns 1,741 through 1,755	
0.0111 0.0097 0.0494 -0.0144 -0.0184 -0.0013 0.0317	-0.0095
-0.0150 0.0153 0.0137 0.0120 -0.0026 0.0014 0.0087	
0.0171 0.0278 0.0217 0.0268 0.0165 0.0198 0.0264	0.0201
-0.0169 0.0147 0.0475 -0.0122 0.0167 0.0096 0.0323 0.0076 0.0230 -0.0089 0.0290 0.0379 0.0431 0.0136	0 0275
-0.0107 0.0159 0.0333 -0.0268 0.0168 0.0011 0.0236	0.0273
Columns 1,756 through 1,770	
-0.0228 -0.0253 -0.0059 0.0015 -0.0294 0.0118 -0.0018	-0.0247
0.0008 0.0103 0.0069 0.0045 -0.0299 0.0043 0.0328	
-0.0014 -0.0608 -0.0243 0.0181 0.0010 0.0397 0.0342 -0.0024 -0.0258 0.0442 -0.0080 -0.0315 0.0131 0.0195	-0.0046
0.0093 -0.0464 -0.0254 0.0244 0.0261 0.0280 0.0416	0.0055
-0.0074 -0.0305 0.0438 -0.0233 -0.0018 0.0132 0.0040	
Columns 1,771 through 1,785	
0.0124 -0.0223 0.0381 -0.0370 -0.0248 0.0093 0.0262	-0.0204
0.0246 0.0011 0.0208 0.0244 0.0327 0.0127 0.0124	
-0.0057	0.0247
-0.0120 0.0027 -0.0221 0.0600 0.0027 0.0301 0.0062 -0.0122 0.0464 -0.0482 -0.0432 -0.0259 0.0320 -0.0419	0.0608
-0.0181 0.0086 -0.0346 0.0591 -0.0250 0.0228 -0.0100	0.0000
Columns 1,786 through 1,800	
0.0013 -0.0157 -0.0040 -0.0023 -0.0088 0.0685 0.0015	-0.0306
-0.0216 -0.0259 0.0034 -0.0516 -0.0082 -0.0161 -0.0194 0.0141 -0.0321 0.0227 0.0463 -0.0486 0.0099 -0.0216	-0.0048
-0.0176 0.0197 0.0005 -0.0196 -0.0072 -0.0280 -0.0118	0.0040
0.0086 -0.0253 0.0239 0.0655 -0.0465 -0.0451 -0.0316	0.0177

Columns 1,801 through 1,815 -0.0138 -0.0117 0.0168 0.0504 0.0364 0.0224 0.0101 0.0361 -0.0100 -0.0205 0.0243 0.0103 0.0182 0.0135 -0.0083 -0.0157 -0.0330 0.0068 -0.0018 0.0153 0.0112 0.0121 0.0129 -0.0177 -0.0184 -0.0077 0.0359 0.0343 0.0014 -0.0042 -0.0069 -0.0284 -0.0021 -0.0497 -0.0097 -0.0199 0.0025 Columns 1,816 through 1,830 0.0092 0.0125 0.0285 0.0004 0.0070 0.0090 -0.0130 -0.0226 -0.0232 0.0073 -0.0134 -0.0197 0.0184 0.0064 0.0259 -0.0261 0.0145 0.0068 -0.0213 0.0061 -0.0258 0.0028 0.0305 -0.0321 0.0080 -0.0075 0.0211 0.0279 0.0294 0.0035 0.0513 -0.0440 0.0098 0.0017 0.0222 0.0348 0.0088 Columns 1,831 through 1,845 -0.0231 0.0128 -0.0062 -0.0400 0.0144 -0.0161 0.0540 -0.0300 0.0121 0.0071 0.0210 0.0485 0.0199 -0.0052 -0.0322 0.0297 -0.0343 -0.0225 -0.0009 0.0049 -0.0175 0.0131 0.0107 -0.0081 0.0138 -0.0177 0.0284 -0.0052 0.0087 -0.0196 0.0200 -0.0379 0.0168 -0.0025 0.0111 -0.0674 0.0310 0.0430 -0.0314 0.0093 -0.0327 -0.0121 -0.0326 0.0078 Columns 1,846 through 1,860 -0.0041 0.0004 0.0046 0.0267 -0.0220 0.0096 0.0106 -0.0034 0.0041 -0.0144 0.0082 0.0010 -0.0240 0.0036 -0.0239 0.0314 -0.0057 -0.0038 0.0327 0.0022 0.0253 -0.0172 -0.0231 0.0293 0.0085 0.0338 0.0391 -0.0574 -0.0442 0.0215 0.0427 -0.0064 -0.0035 0.0189 0.0269 0.0294 -0.0020 Columns 1,861 through 1,875 -0.0458 -0.0059 0.0214 -0.0138 0.0039 -0.0035 -0.0119 -0.0453 -0.0071 0.0134 -0.0020 -0.0146 0.0162 0.0223 0.0161 -0.0375 -0.0122 0.0111 0.0187 0.0079 0.0204 0.0217 -0.0231 0.0366 -0.0412 0.0666 -0.0285 -0.0325 0.0276 -0.0068 -0.0060 0.0252 0.0159 0.0185 0.0198 0.0162 Columns 1,876 through 1,890 -0.0337 0.0022 0.0274 -0.0152 0.0099 -0.0038 0.0146 0.0008 0.0257 0.0270 -0.0174 -0.0073 0.0096 0.0289 -0.0289 0.0210 0.0124 -0.0090 -0.0094 -0.0182 -0.0144 0.0319 0.0534 0.0307 -0.0221 -0.0069 -0.0206 -0.0268 $-0.0074 \qquad 0.0197 \quad -0.0097 \qquad 0.0025 \quad -0.0249 \quad -0.0306 \quad -0.0255 \qquad 0.0488$ 0.0347 0.0310 0.0241 -0.0101 -0.0105 -0.0304 -0.0700

Columns 1,891 through 1,905

0.0190 0.0163 0.0289 -0.0128 -0.0010 -0.0003 0.0218 0.0340 -0.0083 0.0206 -0.0030 -0.0022 -0.0045 -0.0690	-0.0172
-0.0185 -0.0009 0.0001 -0.0450 0.0021 0.0020 0.0238 0.0124 0.0428 0.0156 -0.0120 0.0463 -0.0454 -0.0153	-0.0006
-0.0426 -0.0011 -0.0364 -0.0547 -0.0082 -0.0119 0.0048 -0.0218 0.0574 0.0096 -0.0175 0.0591 -0.0355 0.0477	0.0164
Columns 1,906 through 1,920	
0.0353 -0.0002 -0.0036 -0.0239 -0.0181 -0.0176 0.0498	-0.0234
-0.0161 -0.0243 0.0269 0.0026 -0.0083 0.0405 -0.0249 0.0562 0.0062 0.0071 -0.0349 0.0022 -0.0477 -0.0225	0.0040
-0.0085 0.0072 0.0227 0.0177 -0.0359 0.0153 -0.0238 0.0280 0.0221 0.0292 -0.0211 0.0063 -0.0351 -0.0786	0.0200
-0.0010 0.0261 0.0160 0.0190 -0.0376 -0.0145 0.0089	0.0200
Columns 1,921 through 1,935	
0.0470 0.0001 0.0107 -0.0200 -0.0108 0.0359 -0.0499 0.0215 0.0172 -0.0191 0.0080 0.0636 -0.0259 0.0050	0.0217
0.0215 -0.0053 0.0088 -0.0159 -0.0026 0.0134 -0.0621 -0.0447 0.0188 0.0013 -0.0133 0.0378 0.0061 -0.0340	-0.0313
-0.0198 -0.0044 -0.0063 -0.0009 -0.0011 -0.0304 -0.0344	-0.0465
-0.0738	
Columns 1,936 through 1,950	
-0.0384 -0.0233 -0.0071 -0.0099 -0.0414 0.0301 0.0322 0.0312 0.0341 -0.0290 -0.0061 -0.0144 -0.0111 -0.0478	0.0207
-0.0390 -0.0294 0.0215 -0.0202 -0.0363 -0.0106 0.0020 0.0314 0.0103 0.0061 -0.0018 -0.0228 0.0120 -0.0304	0.0120
-0.0190 -0.0075 0.0308 -0.0182 -0.0075 -0.0395 -0.0112	-0.0139
0.0219 -0.0197 0.0328 0.0016 -0.0120 0.0241 0.0036	
Columns 1,951 through 1,965	
0.0048 0.0152 0.0212 -0.0118 0.0009 -0.0084 -0.0080	-0.0134
0.0483 -0.0245 -0.0107 0.0173 -0.0318 -0.0221 0.0301 -0.0302 -0.0346 0.0162 0.0191 -0.0312 -0.0058 0.0016	-0.0318
0.0290 -0.0154 0.0186 -0.0179 0.0023 0.0228 0.0227 -0.0435 -0.0626 -0.0063 0.0302 -0.0278 -0.0002 0.0061	-0.0378
-0.0057 -0.0114 0.0510 -0.0418 0.0227 0.0506 0.0057	0.0370
Columns 1,966 through 1,980	
0.0103 -0.0006 -0.0227 -0.0296 -0.0035 -0.0031 0.0116	0.0047
0.0297 0.0004 -0.0450 -0.0363 0.0364 -0.0167 0.0194 0.0050 0.0233 -0.0188 -0.0046 0.0273 -0.0042 -0.0165	0.0479
-0.0110	0.0517
-0.0466 0.0306 0.0317 0.0150 -0.0143 0.0358 -0.0411	
Columns 1,981 through 1,995	
-0.0273	0.0057
0.0092 -0.0151 -0.0195 0.0018 -0.0370 0.0158 -0.0105 0.0227 -0.0197 -0.0030 -0.0405 -0.0059 0.0273 0.0177	-0.0171
-0.0111 0.0105 0.0199 0.0037 0.0249 -0.0031 -0.0383	

0.0483 -0.0186 -0.0331 -0.0626 -0.0018 0.0466 0.0021 -0.0245 0.0254 0.0380 0.0052 0.0542 -0.0055 -0.0257	-0.0399
Columns 1,996 through 2,010	
0.0351 -0.0271 -0.0142 0.0114 -0.0037 -0.0049 -0.0433 0.0218 -0.0394 -0.0087 -0.0306 0.0233 -0.0001 0.0268	
0.0009 -0.0255 -0.0170 -0.0150 0.0161 -0.0242 -0.0350 0.0013 -0.0251 0.0132 -0.0108 -0.0004 -0.0016 0.0446	
-0.0182 -0.0198 -0.0123 -0.0242 0.0088 -0.0109 -0.0167 -0.0096 0.0026 0.0254 0.0301 -0.0075 -0.0052 0.0405	-0.0516
Columns 2,011 through 2,025	
-0.0016 -0.0072 -0.0382 -0.0946 -0.0426 0.0198 0.0187 0.0173 0.0088 -0.0178 0.0210 0.0276 0.0036 0.0253	
-0.0423	
-0.0455	0.0103
Columns 2,026 through 2,040	
-0.0040 0.0579 -0.0016 0.0083 -0.0154 -0.0014 0.0174 -0.0002 0.0146 0.0241 0.0133 0.0403 0.0381 0.0363	
0.0019 0.0217 -0.0081 -0.0059 -0.0150 -0.0008 -0.0209 0.0055 -0.0122 0.0077 0.0061 0.0207 0.0194 -0.0286	-0.0473
0.0079 -0.0290 -0.0052 -0.0094 -0.0077 -0.0115 -0.0429 0.0100 -0.0303 -0.0144 -0.0028 -0.0137 -0.0175 -0.0666	-0.0506
Columns 2,041 through 2,055	
-0.0118 -0.0200 -0.0019 -0.0700 -0.0049 -0.0066 -0.0014 -0.0218 -0.0258 0.0046 0.0505 -0.0149 -0.0237 -0.0406	0.0214
-0.0361 -0.0063 0.0055 -0.0239 0.0292 0.0069 -0.0027 0.0199 0.0285 0.0084 -0.0257 0.0195 -0.0357 0.0276	-0.0058
-0.0297 -0.0028 0.0067 0.0412 0.0383 0.0197 -0.0066 0.0463 0.0520 0.0175 -0.0667 0.0333 -0.0289 0.0707	-0.0385
Columns 2,056 through 2,070	
-0.0081 0.0096 0.0132 -0.0030 -0.0042 -0.0220 -0.0480 -0.0023 -0.0035 0.0379 0.0050 0.0232 0.0072 -0.0270	0.0400
-0.0187	
-0.0175 0.0118 -0.0410 -0.0378 -0.0025 -0.0061 0.0571 -0.0129 -0.0190 0.0074 0.0045 -0.0010 -0.0364 0.0042	-0.0006
Columns 2,071 through 2,085	
-0.0103	0.0157
-0.0088	0.0202
0.0045 0.0197 0.0039 -0.0148 -0.0203 0.0222 -0.0492 -0.0301 -0.0109 -0.0525 0.0551 0.0289 -0.0119 0.0229	0.0120

Columns 2,086 through 2,100

-0.0127 -0.0199 -0.0068 0.0268 -0.0079 -0.0101 0.0149 -0.0313 -0.0021 -0.0306 0.0216 -0.0400 -0.0098 0.0117 -0.0116 0.0088 -0.0149 -0.0159 -0.0148 0.0088 -0.0074 -0.0078 0.0018 0.0019 -0.0364 0.0136 0.0033 -0.0181 0.0094 Columns 2,101 through 2,115 -0.0012 -0.0300 -0.0506 -0.0024 -0.0616 0.0026 0.0077 0.0027 0.0323 -0.0260 0.0080 -0.0121 -0.0154 0.0124 0.0306 0.0140 0.0064 -0.0209 -0.0149 -0.0416 -0.0063 -0.0156 -0.0166 -0.0472 0.0178 0.0012 -0.0131 0.0184 -0.0250 0.0188 Columns 2,116 through 2,130 $0.0274 \quad -0.0086 \quad -0.0024 \quad -0.0195 \quad 0.0515 \quad -0.0318 \quad 0.0191 \quad -0.0415$ 0.0511 -0.0115 0.0329 -0.0499 -0.0060 -0.0078 -0.0080 0.0146 -0.0221 -0.0651 0.0080 -0.0165 -0.0070 0.0049 0.0272 0.0049 -0.0115 0.0143 0.0043 0.0195 -0.0421 -0.0027 -0.0179 -0.0699 0.0247 -0.0776 0.0299 -0.0178 -0.0220 -0.0102 0.0182 -0.0358 0.0615 0.0051 0.0215 -0.0581 Columns 2,131 through 2,145 0.0133 0.0233 0.0005 0.0092 0.0387 0.0267 0.0020 0.0058 -0.0292 0.0110 -0.0290 0.0173 -0.0235 0.0063 -0.0125 0.0303 0.0144 0.0225 0.0119 -0.0017 0.0239 0.0067 0.0074 -0.0001 0.0107 -0.0065 0.0136 0.0272 -0.0202 0.0310 0.0149 0.0190 -0.0150 -0.0253 0.0326 0.0620 -0.0103 0.0423 0.0003 0.0402 -0.0206 0.0459 0.0324 Columns 2,146 through 2,160 -0.0120 0.0315 -0.0183 -0.0319 -0.0162 0.0013 -0.0185 -0.0200 0.0052 0.0031 -0.0129 -0.0062 0.0088 -0.0191 -0.0167 0.0199 0.0177 0.0113 0.0435 -0.0541 -0.0330 -0.0182 -0.0462 $0.0331 \quad -0.0080 \quad 0.0130 \quad 0.0814 \quad -0.0536 \quad -0.0313 \quad 0.0008 \quad -0.0320$ -0.0056 0.0084 0.0220 -0.0001 -0.0462 0.0104 0.0085 Columns 2,161 through 2,175 -0.0104 -0.0226 0.0171 -0.0259 -0.0223 0.0076 -0.0176 0.0345 -0.0381 0.0167 0.0463 0.0450 -0.0173 -0.0241 -0.0003 -0.0168 -0.0274 -0.0187 0.0026 -0.0272 0.0312 0.0062 -0.0019 -0.0001 0.0232 -0.0085 -0.0095 0.0053 -0.0179 0.0089 -0.0154 -0.0045 -0.0547 0.0270 -0.0238 0.0414 0.0254 -0.0341 Columns 2,176 through 2,190

-0.0071 0.0076 -0.0009 0.0024 0.0119 -0.0111 0.0017 -0.0262 -0.0027 -0.0245 0.0316 -0.0096 0.0324 0.0277 -0.0008 -0.0121 0.0065 -0.0079 0.0171 0.0212 0.0144 -0.0024 -0.0007 -0.0280 0.0459 -0.0332 0.0297 0.0387	
Columns 2,191 through 2,205	
-0.0222	-0.0426
0.0266	-0.0220
0.0378 0.0010 0.0029 -0.0098 -0.0235 -0.0091 0.0280 -0.0155 0.0410 -0.0110 -0.0098 0.0015 0.0236 0.0388	-0.0005
Columns 2,206 through 2,220	
0.0043 -0.0313 0.0081 0.0305 -0.0041 -0.0058 0.0126 0.0348 0.0139 0.0166 0.0221 -0.0242 -0.0045 -0.0196	
0.0058 -0.0136 0.0053 -0.0683 -0.0025 0.0169 -0.0271 0.0171 -0.0302 -0.0336 0.0335 -0.0282 0.0321 -0.0246	
0.0112 0.0070 0.0047 -0.1104 -0.0089 0.0196 -0.0405 -0.0133 -0.0437 -0.0497 0.0289 -0.0189 0.0435 -0.0035	-0.0423
Columns 2,221 through 2,235	
-0.0277 -0.0005 -0.0492 -0.0135 -0.0007 0.0160 0.0221 -0.0331 0.0032 -0.0242 0.0199 -0.0309 -0.0089 0.0217	0.0290
-0.0198 -0.0044 -0.0071 -0.0021 -0.0168 -0.0076 -0.0089 -0.0148 0.0065 0.0182 -0.0360 0.0345 -0.0146 0.0292	0.0127
0.0005 -0.0131 0.0238 -0.0003 -0.0367 -0.0266 -0.0282 0.0114 0.0012 0.0387 -0.0463 0.0633 -0.0076 0.0102	-0.0132
Columns 2,236 through 2,250	
-0.0126 -0.0467 0.0131 0.0282 0.0068 0.0070 0.0129 -0.0285 -0.0202 0.0021 -0.0363 0.0050 -0.0074 0.0048	-0.0302
0.0349 -0.0642 -0.0148 0.0702 0.0052 0.0027 0.0091 -0.0004 -0.0181 -0.0008 0.0001 -0.0033 0.0467 0.0124	0.0108
0.0510 -0.0520 -0.0463 0.0420 0.0080 -0.0115 -0.0014 0.0056 0.0031 0.0051 0.0295 -0.0104 0.0495 0.0111	0.0262
Columns 2,251 through 2,265	
0.0007 0.0118 0.0142 0.0110 0.0154 -0.0611 0.0288 0.0062 0.0346 -0.0399 -0.0198 -0.0114 -0.0045 -0.0160	0.0456
0.0122 -0.0272 0.0018 0.0142 -0.0090 0.0037 -0.0089 -0.0364 0.0486 0.0137 -0.0073 -0.0294 -0.0207 -0.0120	0.0174
0.0149 -0.0492 0.0158 0.0013 -0.0294 0.0554 -0.0298 -0.0423 0.0308 0.0502 0.0030 -0.0238 -0.0289 -0.0132	-0.0289
Columns 2,266 through 2,280	
0.0446 0.0259 -0.0187 0.0428 -0.0001 -0.0238 0.0026 -0.0173 0.0084 -0.0362 0.0076 -0.0223 -0.0035 -0.0010	0.0036
0.0325 -0.0083 0.0297 0.0746 -0.0258 -0.0040 -0.0043 0.0312 0.0158 0.0013 0.0071 -0.0091 -0.0358 -0.0541	-0.0153
-0.0040 -0.0215 0.0519 0.0504 -0.0415 0.0063 0.0021 0.0500 0.0091 0.0492 0.0043 0.0088 -0.0385 -0.0488	0.0005

Columns 2,281 through 2,295

Columns 2,371 through 2,385

0.0241 -0.0217 0.0077 0.0348 0.0002 0.0598 -0.0105 -0.0151 0.0021 0.0181 -0.0016 0.0086 -0.0071 0.0308 -0.0230 -0.0062 -0.0235 -0.0099 -0.0121 -0.0309 0.0026 0.0005 -0.0161 -0.0012 0.0212 0.0028 -0.0337 -0.0209 0.0152 -0.0251 -0.0355 -0.0160 -0.0159 -0.0419 -0.0253 -0.0442 0.0083 0.0044 Columns 2,296 through 2,310 -0.0213 -0.0058 0.0094 -0.0310 0.0336 -0.0250 -0.0300 -0.0098 0.0016 0.0337 0.0149 0.0300 0.0465 0.0278 -0.0040 -0.0151 -0.0014 0.0368 0.0189 -0.0005 0.0219 -0.0006 0.0213 0.0331 0.0042 0.0701 0.0116 0.0568 0.0139 0.0752 0.0113 -0.0521 0.0463 0.0197 0.0003 0.0073 -0.0333 Columns 2,311 through 2,325 0.0260 0.0068 -0.0029 -0.0074 -0.0220 0.0242 -0.0307 -0.0196 0.0181 -0.0419 -0.0232 -0.0031 0.0011 -0.0109 0.0163 0.0006 0.0065 -0.0129 -0.0146 -0.0075 -0.0098 -0.0019 -0.0046 0.0221 -0.0153 -0.0071 0.0147 0.0327 0.0023 0.0373 0.0056 0.0055 0.0142 0.0106 0.0071 0.0345 0.0148 0.0241 Columns 2,326 through 2,340 0.0372 -0.0188 -0.0023 0.0074 -0.0344 -0.0067 -0.0149 -0.0131 0.0170 0.0237 0.0355 0.0067 -0.0175 0.0194 0.0219 0.0088 -0.0027 0.0435 0.0141 0.0115 0.0120 -0.0268 -0.0039 0.0558 -0.0295 -0.0120 -0.0058 -0.0075 -0.0366 0.0121 -0.0292 0.0060 0.0449 -0.0104 0.0390 0.0225 -0.0278 0.0076 0.0578 -0.0418 -0.0466 -0.0144 -0.0005 -0.0565 -0.0084 Columns 2,341 through 2,355 -0.0309 -0.0163 -0.0217 0.0493 0.0213 -0.0432 -0.0041 0.0477 -0.0318 -0.0016 -0.0263 0.0355 -0.0034 0.0186 0.0125 $0.0111 \quad -0.0216 \quad -0.0123 \quad -0.0186 \quad 0.0431 \quad -0.0112 \quad -0.0024 \quad -0.0123$ -0.0119 0.0343 0.0005 0.0074 -0.0094 0.0133 0.0371 0.0384 -0.0079 0.0022 -0.0619 0.0319 0.0133 0.0045 -0.0535 0.0060 0.0361 0.0218 -0.0278 0.0089 0.0047 0.0460 Columns 2,356 through 2,370 0.0499 -0.0126 0.0687 -0.0114 -0.0060 -0.0089 0.0024 0.0072 0.0040 0.0094 -0.0430 0.0158 0.0137 0.0219 -0.0410 -0.0183 0.0210 0.0705 -0.0365 -0.0477 -0.0091 0.0351 -0.0075 0.0135 -0.0364 -0.0269 0.0313 -0.0013 -0.0328 -0.0586 0.0317 0.0223 -0.0301 -0.0476 -0.0078 0.0525 -0.0106

-0.0137 0.0016 -0.0328 -0.0135 0.0247 0.0085 0.0018 -0.0343

-0.0101 0.0057 -0.0022 -0.0098 -0.0111 0.0265 -0.0077 0.0225 -0.0162 -0.0063 0.0061 -0.0061 -0.0061 0.0158 0.0135 -0.0077 -0.0069 -0.0069 0.0095 -0.0105 -0.0387 0.0370 -0.0078 0.0228 0.0106 -0.0199 -0.0136 0.0293	
0.0278 -0.0130 -0.0070 0.0016 0.0036 -0.0417 -0.0537 Columns 2,386 through 2,400	
0.0194 0.0178 -0.0205 -0.0088 0.0337 0.0271 -0.0196 -0.0095 0.0142 -0.0163 0.0151 -0.0016 0.0538 -0.0053	-0.0007
0.0102 -0.0058 -0.0150 0.0117 0.0361 0.0342 0.0108 -0.0239 0.0040 -0.0405 0.0194 -0.0037 0.0018 -0.0337	
-0.0040 -0.0276 -0.0257 0.0129 0.0165 0.0282 0.0285 -0.0149 0.0009 -0.0304 0.0051 -0.0063 -0.0442 -0.0273	0.0581
Columns 2,401 through 2,415	
0.0358 0.0056 -0.0440 -0.0330 -0.0205 0.0445 0.0205 -0.0006 0.0072 -0.0264 0.0013 -0.0266 -0.0112 -0.0046 -0.0010 -0.0148 -0.0450 -0.0228 -0.0044 0.0175 -0.0283	
0.0127 -0.0024 -0.0248 0.0077 0.0166 -0.0126 -0.0086 -0.0414 -0.0300 -0.0186 0.0110 0.0271 -0.0045 -0.0437	
0.0136 -0.0044 -0.0092 0.0079 0.0375 -0.0051 -0.0031	
Columns 2,416 through 2,430	
0.0072 -0.0174 -0.0298 -0.0337 -0.0205 0.0378 -0.0413 -0.0074 0.0539 -0.0702 0.0315 0.0162 0.0087 0.0142	
-0.0314 -0.0279 0.0005 -0.0086 0.0065 0.0199 0.0036 0.0377 0.0083 -0.0119 0.0071 -0.0231 -0.0083 0.0270	0.0225
-0.0409 -0.0188 0.0185 0.0189 0.0180 -0.0115 0.0409 0.0519 -0.0490 0.0378 -0.0164 -0.0373 -0.0151 0.0331	0.0113
Columns 2,431 through 2,445	
0.0083 -0.0034 0.0305 -0.0125 -0.0137 0.0131 0.0279 0.0203 -0.0213 0.0122 -0.0064 -0.0007 -0.0233 -0.0128	0.0009
-0.0356 0.0260 -0.0038 -0.0111 -0.0054 0.0074 -0.0092 0.0198 -0.0099 -0.0461 0.0001 0.0177 0.0013 0.0200	0.0073
-0.0569 0.0460 -0.0447 -0.0116 -0.0033 0.0012 -0.0459 0.0006 0.0034 -0.0508 0.0166 0.0321 0.0065 0.0249	0.0139
Columns 2,446 through 2,460	
0.0059 -0.0263 0.0308 0.0020 -0.0026 0.0097 0.0018 -0.0178 -0.0324 -0.0168 0.0209 -0.0122 -0.0116 0.0124	0.0183
-0.0181	0.0119
-0.0230 0.0173 -0.0007 -0.0079 -0.0068 -0.0081 -0.0120 -0.0096 0.0052 0.0475 -0.0365 0.0217 -0.0144 -0.0343	0.0006
Columns 2,461 through 2,475	
0.0006 -0.0112 0.0120 0.0080 -0.0115 -0.0017 -0.0181 0.0189 -0.0334 0.0000 0.0302 0.0208 0.0136 0.0319	-0.0111
	0.0310
0.0229 0.0446 -0.0479 0.0109 0.0527 0.0212 -0.0013	0.0403

Columns 2,566 through 2,580

Columns 2,476 through 2,490 0.0039 -0.0021 -0.0266 -0.0017 0.0024 0.0102 0.0127 -0.0123 0.0036 -0.0076 0.0137 0.0041 -0.0090 0.0052 0.0383 0.0055 -0.0011 -0.0169 -0.0046 0.0534 0.0076 -0.0081 0.0171 -0.0103 -0.0071 -0.0092 -0.0132 0.0450 0.0084 -0.0111 $0.0032 \qquad 0.0035 \quad -0.0070 \qquad 0.0048 \qquad 0.0625 \quad -0.0079 \quad -0.0304 \qquad 0.0237$ -0.0235 -0.0046 -0.0209 -0.0180 0.0665 -0.0039 -0.0623 Columns 2,491 through 2,505 0.0052 0.0071 -0.0109 -0.0071 -0.0092 0.0011 -0.0032 -0.0381 -0.0002 -0.0018 0.0077 -0.0163 -0.0262 0.0204 -0.0167 -0.0109 -0.0084 -0.0120 -0.0090 0.0045 -0.0244 -0.0102 0.0240 0.0149 0.0400 -0.0489 -0.0002 -0.0071 0.0017 0.0253 Columns 2,506 through 2,520 -0.0206 0.0255 -0.0136 0.0116 0.0120 0.0116 0.0134 -0.0190 0.0241 -0.0049 0.0219 0.0060 0.0218 0.0109 -0.0159 0.0101 0.0506 -0.0097 0.0520 0.0211 -0.0054 -0.0581 0.0008 -0.0208 -0.0146 -0.0266 -0.0247 0.0145 0.0658 0.0038 -0.0032 0.0664 -0.0304 0.0632 0.0038 -0.0227 Columns 2,521 through 2,535 0.0064 0.0396 0.0142 0.0049 0.0105 -0.0039 0.0271 -0.0029 0.0295 0.0156 -0.0161 0.0096 -0.0038 0.0174 0.0404 0.0139 -0.0241 0.0057 -0.0164 0.0445 -0.0385 -0.0106 0.0181 0.0213 -0.0080 -0.0152 -0.0105 -0.0410 0.0109 0.0053 0.0107 -0.0724 -0.0098 -0.0235 0.0377 -0.0369 -0.0349 Columns 2,536 through 2,550 0.0089 0.0142 0.0197 -0.0832 -0.0349 -0.0209 0.0055 0.0428 0.0211 0.0005 -0.0172 0.0282 -0.0043 -0.0173 -0.0067 0.0274 0.0011 0.0057 0.0023 0.0145 -0.0210 0.0024 -0.0043 0.0015 -0.0042 -0.0246 0.0281 0.0088 -0.0105 -0.0076 0.0302 0.0046 -0.0086 0.0745 0.0384 -0.0024 0.0027 -0.0159 -0.0163 -0.0195 0.0118 0.0132 0.0057 -0.0140 Columns 2,551 through 2,565 0.0326 -0.0027 -0.0093 0.0418 -0.0299 -0.0110 0.0135 -0.0176 -0.0087 -0.0047 0.0161 0.0022 0.0087 0.0017 0.0269 0.0204 0.0118 0.0118 -0.0182 -0.0073 -0.0100 0.0197 0.0205 0.0048 0.0442 -0.0226 -0.0117 0.0078 0.0012 0.0235 0.0194 -0.0168 0.0060 -0.0081 -0.0240 0.0382 0.0206 0.0022 0.0308 -0.0165 -0.0325 0.0119

-0.0722 0.0092 0.0149 -0.0133 0.0293 0.0131 -0.0101 -0.0008 -0.0056 0.0038 0.0190 -0.0103 0.0082 -0.0030	
0.0292 0.0179 -0.0042 0.0141 0.0276 0.0043 -0.0561 -0.0670 0.0066 -0.0255 -0.0064 0.0112 -0.0080 0.0297 0.0980 0.0164 -0.0168 0.0304 0.0129 -0.0083 -0.0610	
-0.0626 0.0167 -0.0234 -0.0247 0.0045 -0.0138 0.0237	0.0330
Columns 2,581 through 2,595	
-0.0167 -0.0571 0.0264 -0.0041 -0.0267 -0.0268 0.0104 -0.0174 0.0327 -0.0316 0.0328 0.0448 0.0340 -0.0087	
0.0270 -0.0140 -0.0042 -0.0126 -0.0104 -0.0477 0.0266 0.0081 0.0473 -0.0332 0.0045 0.0344 0.0397 -0.0175	0.0116
0.0548 0.0340 -0.0164 -0.0112 -0.0017 -0.0207 0.0304 0.0171 0.0204 -0.0283 -0.0039 0.0002 0.0273 -0.0235	0.0087
Columns 2,596 through 2,610	
0.0073 0.0216 -0.0220 -0.0086 0.0047 0.0349 -0.0310 0.0189 0.0102 0.0113 0.0017 0.0028 -0.0208 -0.0190	
-0.0068 0.0141 -0.0312 -0.0040 -0.0338 -0.0090 0.0054 0.0301 -0.0319 0.0111 -0.0220 0.0166 0.0359 0.0306	0.0144
-0.0088 0.0015 -0.0176 -0.0008 -0.0594 -0.0364 0.0222 0.0140 -0.0521 0.0059 -0.0246 0.0179 0.0661 0.0594	0.0273
Columns 2,611 through 2,625	
0.0192 -0.0133 -0.0040 0.0019 -0.0075 0.0139 -0.0054 0.0095 -0.0124 -0.0250 0.0284 0.0053 -0.0128 0.0043	
-0.0383 0.0160 0.0144 0.0263 -0.0058 -0.0103 0.0058 0.0085 0.0039 0.0397 0.0447 -0.0304 -0.0130 0.0242	
-0.0530 0.0315 0.0326 0.0439 0.0069 -0.0011 -0.0011 0.0142 0.0167 0.0530 0.0146 -0.0394 -0.0037 0.0241	-0.0372
Columns 2,626 through 2,640	
0.0088 -0.0054 0.0110 -0.0158 0.0245 0.0330 -0.0092 0.0005 -0.0070 -0.0200 0.0234 0.0059 -0.0017 0.0231	
-0.0404 0.0151 -0.0134 0.0341 0.0016 -0.0078 0.0407 -0.0015 -0.0319 0.0200 0.0026 -0.0423 -0.0151 0.0674	0.0118
-0.0477 0.0104 -0.0313 0.0557 -0.0034 -0.0298 0.0439 0.0028 -0.0360 0.0377 -0.0250 -0.0446 -0.0102 0.0516	-0.0078
Columns 2,641 through 2,655	
-0.0060 -0.0125 0.0180 -0.0065 -0.0234 -0.0039 0.0583 -0.0490 -0.0004 -0.0196 0.0002 0.0044 0.0018 -0.0029	-0.0084
-0.0063 -0.0419 -0.0232 -0.0047 0.0180 -0.0064 0.0239 -0.0346 0.0082 -0.0063 -0.0164 -0.0078 0.0016 -0.0201	-0.0164
-0.0064 -0.0309 -0.0463 0.0056 0.0454 -0.0057 -0.0125 -0.0009 -0.0068 0.0145 -0.0235 -0.0240 0.0027 -0.0268	-0.0239
Columns 2,656 through 2,670	
-0.0240 0.0066 0.0300 0.0013 0.0101 -0.0450 -0.0002 -0.0212 -0.0088 0.0155 0.0443 -0.0150 0.0192 0.0015	-0.0182
-0.0054 0.0428 0.0122 -0.0204 -0.0316 -0.0183 -0.0183 0.0043 -0.0313 0.0104 -0.0273 0.0243 0.0073 0.0112	0.0300

0.0256 -0.0303 0.0028 -0.0697 0.0517 -0.0010 0.0200 Columns 2,671 through 2,685 0.0092 -0.0243 0.0003 0.0088 -0.0046 -0.0304 0.0171 -0.0265 -0.0481 -0.0188 -0.0325 0.0257 -0.0183 -0.0143 -0.0296 0.0073 0.0024 -0.0353 0.0012 0.0135 0.0427 -0.0103 0.0454 0.0175 -0.0156 -0.0169 0.0284 0.0507 0.0161 Columns 2,686 through 2,700 -0.0279 -0.0008 -0.0133 0.0045 0.0301 -0.0171 0.0022 0.0088 0.0013 -0.0117 0.0091 0.0072 -0.0197 0.0054 0.0448 -0.0191 0.0145 0.0295 0.0021 0.0047 -0.0325 -0.0079 0.0276 0.0113 0.0141 -0.0034 -0.0035 -0.0268 0.0015 Columns 2,701 through 2,715 -0.0163 -0.0149 0.0320 0.0128 0.0144 0.0062 -0.0344 -0.0072 -0.0116 -0.0017 -0.0603 0.0479 0.0370 -0.0268 0.0320 -0.0004 0.0126 0.0487 0.0209 -0.0279 -0.0520 -0.0370 0.0039 -0.0018 -0.0184 -0.0999 0.0204 0.0374 -0.0119 Columns 2,716 through 2,730 -0.0177 -0.0125 -0.0055 0.0040 0.0337 0.0351 -0.0103 0.0294 0.0617 -0.0106 0.0124 -0.0179 0.0287 0.0039 -0.0044 0.0020 0.0313 0.0132 -0.0402 0.0242 0.0029 -0.0183 0.0501 0.0226 0.0244 -0.0149 0.0239 -0.0666 0.0445 -0.0511 0.0556 0.0115 -0.0321 0.0010 -0.0015 -0.0158 Columns 2,731 through 2,745 -0.0355 -0.0132 0.0189 0.0147 0.0263 -0.0361 0.0162 -0.0321 0.0035 0.0076 0.0110 0.0068 -0.0180 -0.0180 -0.0090 -0.0440 -0.0000 -0.0165 0.0076 -0.0517 0.0212 -0.0210 0.0630 0.0288 0.0344 0.0008 -0.0248 -0.0025 -0.0387 0.0323 -0.0499 -0.0022 -0.0384 -0.0088 -0.0294 0.0418 -0.0225 Columns 2,746 through 2,760 -0.0124 -0.0020 0.0362 0.0218 0.0202 0.0080 -0.0124 0.0330 -0.0070 0.0288 -0.0185 0.0375 0.0100 -0.0187 -0.0149 0.0032 0.0134 -0.0055 -0.0252 0.0251 -0.0043 0.0445 0.0068 -0.0176 0.0005 -0.0366 -0.0146 0.0027

Columns 2,761 through 2,775

-0.0033 -0.0372 -0.0086 0.0030 0.0029 -0.0136 -0.0171 0.0478 0.0048 -0.0211 0.0051 -0.0023 -0.0051 -0.0038 0.0080 -0.0077 -0.0529 0.0235 0.0193 0.0046 -0.0147 -0.0036 0.0080 -0.0057 -0.0205 -0.0042 0.0166 0.0236 0.0109 0.0204 -0.0581 0.0274 0.0103 -0.0008 -0.0008	-0.0060
-0.0345 0.0062 0.0046 -0.0304 -0.0246 0.0209 0.0378 Columns 2,776 through 2,790	0.0010
-0.0077 -0.0576 -0.0269 0.0013 -0.0032 -0.0132 -0.0023	0.0098
0.0380 0.0139 0.0142 -0.0172 0.0170 0.0060 -0.0347	0.0030
0.0171 0.0153 0.0311 0.0500 -0.0063 -0.0248 0.0513 -0.0085 0.0346 -0.0703 -0.0333 -0.0205 0.0027 0.0533	-0.0025
Columns 2,791 through 2,805	
-0.0214 -0.0548 0.0153 0.0327 -0.0137 -0.0044 0.0003 -0.0062 0.0012 -0.0075 0.0215 -0.0006 -0.0246 -0.0263	0.0166
0.0039 -0.0575 0.0320 -0.0035 0.0032 -0.0373 0.0116 0.0022 -0.0383 -0.0262 -0.0122 0.0248 -0.0082 0.0098	-0.0041
0.0280 -0.0178 0.0236 -0.0397 0.0293 -0.0277 0.0152 0.0038 -0.0560 -0.0300 -0.0273 0.0141 0.0248 0.0498	-0.0299
Columns 2,806 through 2,820	
0.0201 -0.0041 0.0023 -0.0230 0.0165 0.0074 0.0260 -0.0193 0.0052 -0.0086 0.0129 0.0133 -0.0271 -0.0092	
-0.0088 0.0037 0.0161 -0.0053 0.0036 0.0054 0.0189 0.0111 0.0172 0.0108 0.0162 0.0472 0.0240 -0.0279	-0.0381
-0.0196 -0.0069 0.0302 0.0109 -0.0283 -0.0104 -0.0042 0.0370 0.0096 0.0230 0.0012 0.0381 0.0497 -0.0239	-0.0288
Columns 2,821 through 2,835	
-0.0122 -0.0139 0.0389 -0.0135 0.0031 -0.0185 -0.0142 -0.0156 -0.0237 0.0165 0.0188 0.0088 -0.0111 0.0185	
-0.0178 0.0014 0.0045 0.0019 0.0127 -0.0094 -0.0020 0.0069 0.0128 0.0047 -0.0174 0.0174 0.0174 0.0192	
-0.0066 0.0192 -0.0170 0.0189 -0.0026 0.0104 0.0160 0.0158 0.0283 -0.0040 -0.0471 0.0071 0.0313 0.0100	0.0295
Columns 2,836 through 2,850	
0.0012 -0.0342 -0.0435 0.0072 0.0105 0.0180 -0.0300 0.0091 -0.0063 0.0185 0.0265 0.0294 -0.0303 0.0512	0.0442
0.0697 -0.0119 -0.0049 0.0040 0.0062 -0.0069 0.0283 0.0151 -0.0142 0.0052 -0.0189 -0.0347 0.0006 -0.0021	0.0439
0.0722 0.0098 0.0268 0.0024 -0.0106 -0.0212 0.0663 0.0193 -0.0208 0.0034 -0.0548 -0.0642 0.0325 -0.0375	0.0066
Columns 2,851 through 2,865	
-0.0260 0.0055 -0.0110 0.0026 0.0313 -0.0121 -0.0085 -0.0130 -0.0019 -0.0210 -0.0264 0.0276 0.0092 -0.0037	
0.0300 0.0023 -0.0148 0.0235 -0.0232 0.0087 -0.0367	-0.0077

```
0.0116 0.0230 -0.0386 0.0110 0.0334 -0.0278 -0.0274
  0.0606 -0.0040 -0.0197 0.0160 -0.0419 0.0229 -0.0436 -0.0000
0.0310 0.0299 -0.0392 0.0373 0.0096 -0.0475 -0.0311
 Columns 2,866 through 2,880
  0.0291 -0.0315 0.0106 0.0194 0.0072 -0.0440 0.0196 0.0167
0.0221 -0.0175 -0.0214 -0.0071 0.0247 -0.0035 0.0473
  -0.0084 -0.0069 -0.0011 -0.0040 -0.0021 0.0003 -0.0017
0.0208 -0.0139 -0.0278 -0.0050 -0.0094 -0.0280 -0.0104
  -0.0456 0.0051 -0.0128 -0.0109 -0.0136 0.0404 -0.0139
                                                  -0.0066
0.0107 -0.0106 -0.0269 0.0099 -0.0334 -0.0350 -0.0470
Columns 2,881 through 2,895
 -0.0012 -0.0331 0.0030 0.0256 -0.0136 0.0299 -0.0120 -0.0118
0.0341 0.0204 -0.0088 -0.0257 -0.0077 0.0043 0.0108
 0.0297 -0.0191 -0.0238 -0.0012 0.0182 0.0084 0.0207 -0.0178
-0.0140 -0.0185 0.0057 -0.0321 -0.0038 -0.0322 -0.0106
  0.0350 -0.0002 -0.0155 -0.0180 0.0286 -0.0023 0.0175 -0.0079
-0.0469 -0.0364 -0.0033 -0.0267 -0.0083 -0.0354 -0.0203
 Columns 2,896 through 2,910
 -0.0285 0.0101 0.0071 -0.0089 0.0549 -0.0214 0.0356 -0.0209
0.0404 0.0164 0.0100 -0.0024 0.0173 0.0154 -0.0416
  0.0218 -0.0094 -0.0114 0.0106 0.0478 0.0100 0.0112 -0.0160
-0.0052 0.0132 -0.0346 0.0249 0.0194 0.0259 0.0188
  0.0587 -0.0029 -0.0310 0.0191 0.0047 0.0283 -0.0324 -0.0039
-0.0390 0.0087 -0.0610 0.0295 0.0058 0.0169 0.0536
Columns 2,911 through 2,925
  0.0463 -0.0163 0.0176 -0.0041 -0.0255 0.0013 -0.0055 -0.0341
0.0238 -0.0108 0.0127 0.0111 0.0175 0.0301 0.0339
0.0034 0.0063 -0.0027 0.0031 0.0431 0.0397 0.0428
0.0129 0.0101 0.0036 -0.0262 0.0513 -0.0776 -0.0053
Columns 2,926 through 2,940
  -0.0182 0.0191 0.0100 0.0262 -0.0033 0.0215 0.0031
  -0.0082 -0.0080 0.0072 0.0188 0.0193 0.0036 0.0160
-0.0336 -0.0392 0.0191 0.0099 -0.0020 -0.0004 -0.0190
0.0241 -0.0279 0.0709 -0.0243 0.0305 -0.0126 0.0136
 Columns 2,941 through 2,955
  -0.0061 -0.0367 -0.0268 -0.0006 0.0052 -0.0093 -0.0408
0.0430 0.0210 0.0178 0.0232 -0.0184 0.0072 -0.0380
  -0.0155 -0.0275 0.0151 0.0039 0.0230 -0.0172 0.0133
0.0090 0.0403 0.0241 -0.0413 0.0033 -0.0195 -0.0118
 -0.0072 -0.0028 0.0397 -0.0047 0.0194 -0.0123 0.0468
-0.0241 0.0255 0.0014 -0.0603 0.0178 -0.0290 0.0205
```

Columns 2,956 through 2,970

-0.0131 -0.0213 -0.0506 -0.0017 -0.0199 -0.0042 0.0129 -0.0229 0.0206 -0.0291 -0.0265 -0.0009 0.0570 -0.0485 0.0247 -0.0153 0.0181 0.0168 0.0017 0.0018 0.0174 0.0137 -0.0116 0.0020 0.0055 -0.0027 0.0074 -0.0124 -0.0010 -0.0047 0.0246 0.0590 -0.0062 0.0092 0.0297 0.0008 -0.0103 -0.0402 0.0228 0.0438 0.0036 -0.0368 0.0256 -0.0268 Columns 2,971 through 2,985 0.0141 0.0283 0.0013 0.0346 -0.0546 0.0140 -0.0101 0.0397 -0.0138 -0.0258 0.0116 0.0059 -0.0195 0.0143 0.0139 -0.0256 -0.0201 -0.0429 0.0106 -0.0039 -0.0127 -0.0256 0.0141 -0.0312 -0.0313 -0.0164 0.0674 -0.0383 0.0322 -0.0426 -0.0387 -0.0090 0.0252 -0.0261 -0.0183 -0.0278 Columns 2,986 through 3,000 -0.0197 -0.0245 -0.0235 -0.0214 -0.0250 -0.0116 -0.0005 -0.0126 -0.0464 -0.0067 0.0121 -0.0125 0.0104 -0.0026 -0.0008 -0.0077 0.0248 0.0044 -0.0299 0.0177 -0.0283 -0.0093 -0.0495 -0.0153 0.0196 0.0118 0.0233 0.0434 0.0120 0.0120 0.0451 0.0241 -0.0239 0.0517 -0.0453 0.0719 0.0044 -0.0201 -0.0197 0.0040 0.0227 0.0330 0.0533 Columns 3,001 through 3,015 0.0154 -0.0278 -0.0119 0.0041 0.0264 -0.0167 -0.0051 0.0076 -0.0089 -0.0194 -0.0273 -0.0082 0.0056 0.0399 -0.0503 -0.0117 0.0028 0.0177 0.0110 -0.0006 0.0213 Columns 3,016 through 3,030 -0.0015 0.0308 0.0110 0.0028 0.0096 -0.0037 -0.0383 0.0396 -0.0042 -0.0237 0.0010 0.0139 0.0069 0.0002 -0.0194 0.0165 -0.0016 0.0133 -0.0356 0.0272 0.0182 0.0257 -0.0214 0.0116 -0.0023 0.0010 0.0125 0.0141 0.0066 -0.0041 0.0223 -0.0180 -0.0031 -0.0466 0.0286 0.0280 0.0674 Columns 3,031 through 3,045 -0.0114 -0.0229 0.0198 -0.0052 -0.0023 -0.0451 0.0118 -0.0043 -0.0571 0.0052 0.0102 -0.0105 -0.0202 -0.0328 -0.0086 0.0274 -0.0150 0.0202 -0.0050 -0.0055 0.0057 -0.0272 -0.0265 0.0094 -0.0282 -0.0345 0.0145 -0.0166 -0.0425 0.0323 -0.0006 0.0186 0.0068 -0.0075 0.0419 -0.0414 0.0292 0.0190 -0.0023 -0.0267 -0.0190 0.0163 0.0026 -0.0365 Columns 3,046 through 3,060

-0.0332 -0.0093 0.0347 -0.0162 0.0095 0.0070 -0.0238 0.0296

0.0170 -0.0116 0.0391 0.0116 0.0229 0.0075 -0.0126	
-0.0398 -0.0154 0.0061 0.0066 0.0238 0.0147 -0.0126 0.0514 0.0008 -0.0118 0.0101 -0.0039 -0.0323 -0.0014	0.0116
-0.0122 -0.0198 -0.0288 0.0225 0.0165 0.0157 0.0001 0.0441 0.0127 -0.0578 -0.0124 -0.0203 -0.0421 0.0120	-0.0275
Columns 3,061 through 3,075	
0.0177 0.0195 -0.0026 -0.0082 0.0020 -0.0044 -0.0198	-0.0173
-0.0479 -0.0428 0.0105 0.0091 -0.0204 0.0002 0.0408 -0.0041 0.0199 -0.0124 -0.0108 -0.0104 0.0261 0.0093	
-0.0030 -0.0104 -0.0393 0.0086 0.0061 -0.0302 0.0071 -0.0309 0.0174 0.0003 -0.0013 -0.0091 0.0373 0.0411	0.0009
0.0298 0.0259 -0.0490 0.0006 0.0183 -0.0453 -0.0263	
Columns 3,076 through 3,090	
-0.0094 -0.0082 -0.0003 0.0335 -0.0118 -0.0217 -0.0042 0.0113 0.0197 -0.0157 -0.0257 0.0181 -0.0006 -0.0037	0.0006
-0.0128 0.0350 0.0031 0.0182 -0.0409 -0.0158 -0.0280 0.0120 -0.0044 0.0433 -0.0009 0.0121 0.0181 -0.0525	0.0115
-0.0073 0.0438 0.0070 -0.0012 -0.0488 0.0050 -0.0244 0.0005 -0.0118 0.0439 0.0052 -0.0020 -0.0020 -0.0516	0.0076
Columns 3,091 through 3,105	
-0.0113 0.0202 0.0154 0.0329 0.0080 -0.0291 -0.0413	-0.0185
-0.0009 -0.0174 -0.0052 0.0014 0.0247 0.0337 -0.0132 -0.0099 0.0204 0.0070 -0.0215 0.0152 -0.0565 -0.0026 0.0051 -0.0007 -0.0184 -0.0038 0.0049 -0.0231 -0.0224	0.0008
-0.0066	0.0112
Columns 3,106 through 3,120	
, ,	
-0.0074 -0.0220 0.0105 0.0230 -0.0185 0.0272 0.0151 -0.0039 -0.0093 0.0000 0.0123 -0.0132 -0.0106 0.0101	
-0.0162 -0.0257 0.0124 0.0045 -0.0171 -0.0128 0.0279 -0.0066 -0.0010 0.0103 0.0439 0.0222 -0.0125 -0.0073	0.0333
-0.0125 -0.0088 0.0042 -0.0149 -0.0105 -0.0418 0.0069 -0.0054 0.0056 -0.0101 0.0391 0.0353 -0.0078 -0.0130	0.0009
Columns 3,121 through 3,135	
0.0081 0.0196 0.0365 -0.0158 -0.0065 -0.0068 -0.0246 -0.0206 0.0297 0.0191 -0.0032 -0.0413 0.0385 0.0196	-0.0129
0.0246 -0.0013 -0.0111 -0.0128 0.0285 0.0015 -0.0126	0.0178
-0.0090 -0.0025 0.0442 0.0164 -0.0153 -0.0040 -0.0224 0.0259 -0.0048 -0.0369 -0.0026 0.0441 0.0066 -0.0055	0.0258
-0.0021 -0.0117 0.0523 0.0264 0.0125 -0.0381 -0.0533	
Columns 3,136 through 3,150	
-0.0038 -0.0169 -0.0159 0.0128 0.0039 -0.0194 -0.0123 0.0260 -0.0185 0.0333 -0.0007 0.0015 -0.0383 0.0038	0.0067
0.0089 -0.0102 -0.0199 -0.0414 -0.0182 -0.0129 0.0242 0.0173 0.0118 0.0078 0.0149 0.0143 -0.0378 0.0181	0.0504
0.0221 0.0126 -0.0135 -0.0656 -0.0297 0.0075 0.0491	0.0647

-0.0124 0.0209 -0.0314 0.0195 0.0118 -0.0225 0.0155 Columns 3,151 through 3,165 0.0222 0.0194 0.0018 0.0591 -0.0003 0.0186 -0.0216 -0.0063 -0.0229 0.0259 -0.0176 0.0093 -0.0032 -0.0255 0.0012 0.0260 0.0027 0.0013 0.0021 0.0253 0.0243 -0.0107 0.0515 $-0.0438 \qquad 0.0198 \quad -0.0200 \quad -0.0209 \qquad 0.0030 \quad -0.0433 \qquad 0.0237 \qquad 0.0358$ -0.0074 -0.0212 -0.0318 0.0433 0.0509 -0.0054 0.0396 Columns 3,166 through 3,180 -0.0077 -0.0158 -0.0051 -0.0480 -0.0010 0.0071 0.0185 0.0158 0.0347 -0.0325 0.0286 0.0029 -0.0089 0.0177 -0.0113 -0.0214 0.0451 0.0241 -0.0695 -0.0060 0.0351 0.0099 0.0203 Columns 3,181 through 3,195 0.0101 -0.0084 -0.0088 -0.0044 -0.0074 -0.0013 -0.0037 0.0014 0.0026 -0.0076 0.0148 -0.0250 -0.0130 -0.0188 0.0237 -0.0073 0.0058 0.0247 0.0064 -0.0174 0.0043 0.0018 0.0510 -0.0453 -0.0051 -0.0443 0.0095 -0.0099 0.0330 0.0213 0.0012 0.0151 0.0146 0.0303 -0.0091 0.0251 Columns 3,196 through 3,210 0.0311 0.0338 -0.0092 -0.0131 -0.0104 -0.0378 -0.0141 0.0044 0.0222 0.0045 -0.0244 -0.0430 0.0198 -0.0151 -0.0171 0.0110 0.0053 0.0291 -0.0033 -0.0097 -0.0333 -0.0102 -0.0280 -0.0322 0.0103 -0.0392 -0.0258 0.0208 0.0133 0.0291 -0.0027 -0.0110 0.0401 0.0105 0.0028 -0.0135 -0.0087 -0.0302 Columns 3,211 through 3,225 -0.0373 0.0001 0.0127 0.0282 0.0224 -0.0004 0.0182 0.0210 -0.0356 0.0147 -0.0025 0.0450 0.0109 0.0157 0.0081 -0.0006 0.0004 -0.0074 0.0143 -0.0097 -0.0228 0.0126 -0.0087 -0.0115 0.0081 0.0340 0.0008 -0.0360 0.0008 -0.0432 Columns 3,226 through 3,240 -0.0113 0.0294 -0.0207 0.0270 0.0015 0.0069 -0.0235 -0.0442 -0.0003 -0.0126 0.0324 0.0304 -0.0237 -0.0106 -0.0105 0.0066 0.0080 0.0125 0.0271 -0.0193 -0.0005 0.0056 $0.0333 \quad -0.0292 \quad 0.0292 \quad 0.0041 \quad -0.0183 \quad -0.0052 \quad 0.0215 \quad -0.0140$ 0.0284 0.0458 -0.0364 -0.0030 0.0102 0.0136 -0.0181

Columns 3,241 through 3,255

0.0199 -0.0074 -0.0116 -0.0167 0.0060 0.0026 0.0115 -0.0005 0.0039 -0.0067 0.0242 0.0117 0.0027 0.0260 -0.0490 -0.0113 -0.0000 -0.0045 0.0150 -0.0343 0.0240	
-0.0012 -0.0155 0.0228 0.0061 -0.0167 -0.0173 0.0045 -0.0821 0.0043 0.0246 -0.0014 0.0115 -0.0553 0.0197 0.0005 -0.0157 0.0341 -0.0094 -0.0245 -0.0424 -0.0276	0.0351
Columns 3,256 through 3,270	
-0.0000 -0.0169 0.0224 -0.0165 0.0224 -0.0156 0.0232 -0.0045 0.0208 0.0166 0.0797 0.0305 -0.0253 -0.0465 -0.0368 0.0385 -0.0295 -0.0317 0.0302 -0.0112 -0.0005	
0.0218 -0.0077 0.0181 0.0355 -0.0002 -0.0039 -0.0186	
-0.0439 0.0561 -0.0379 -0.0137 0.0132 -0.0134 -0.0155 0.0332 -0.0186 0.0008 -0.0228 -0.0300 0.0136 0.0221	-0.0021
Columns 3,271 through 3,285	
-0.0240 -0.0053 0.0007 0.0224 -0.0162 -0.0186 0.0125 0.0021 -0.0008 -0.0188 -0.0236 0.0130 -0.0432 0.0522	
-0.0330 -0.0124 0.0323 -0.0159 -0.0040 -0.0348 -0.0274 0.0245 0.0261 0.0118 -0.0273 0.0079 -0.0067 0.0254	
-0.0247 -0.0116 0.0431 -0.0493 0.0173 -0.0311 -0.0443 0.0258 0.0282 0.0310 -0.0248 0.0103 0.0225 -0.0204	-0.0045
Columns 3,286 through 3,300	
0.0107 0.0195 0.0023 -0.0225 0.0450 0.0038 0.0244 -0.0091 0.0056 -0.0174 -0.0153 0.0331 0.0129 -0.0096	
0.0383 -0.0523 0.0059 -0.0105 0.0012 0.0411 -0.0069 0.0008 -0.0212 -0.0134 0.0186 0.0254 0.0087 0.0131	-0.0205
0.0463 -0.0813 0.0104 0.0210 -0.0331 0.0434 -0.0225 0.0072 -0.0455 -0.0011 0.0347 0.0062 -0.0032 0.0413	-0.0037
Columns 3,301 through 3,315	
-0.0087 -0.0122 -0.0183 0.0008 -0.0435 0.0027 -0.0286 -0.0290 -0.0240 0.0223 -0.0107 -0.0154 -0.0011 -0.0296	-0.0159
-0.0087 -0.0000 0.0157 0.0314 -0.0083 -0.0200 -0.0214 0.0146 0.0121 -0.0253 0.0191 -0.0219 0.0127 0.0245	-0.0063
-0.0157	0.0243
Columns 3,316 through 3,330	
-0.0217 -0.0144 0.0109 -0.0018 -0.0192 0.0039 0.0036 -0.0183 -0.0391 0.0248 -0.0192 -0.0065 0.0564 0.0101	-0.0341
-0.0025 -0.0051 -0.0092 0.0410 -0.0111 0.0108 0.0011 0.0180 -0.0223 0.0074 0.0357 0.0092 -0.0125 -0.0203	0.0046
-0.0022 0.0075 -0.0270 0.0446 0.0005 0.0116 -0.0080 0.0500 -0.0129 -0.0165 0.0363 0.0072 -0.0636 -0.0261	0.0247
Columns 3,331 through 3,345	
-0.0087 -0.0135 0.0563 0.0086 -0.0163 0.0102 -0.0124 -0.0178 -0.0146 -0.0081 -0.0320 0.0046 0.0003 0.0118	0.0205
-0.0286 0.0380 -0.0010 0.0231 0.0111 -0.0335 0.0423 0.0382 0.0207 0.0120 -0.0562 0.0045 -0.0099 -0.0278	0.0108

-0.0159 0.0522 -0.0417 0.0176 0.0276 -0.0462 0.0561 -0.0101 Columns 3,346 through 3,360 -0.0082 0.0084 -0.0015 -0.0297 -0.0057 0.0060 -0.0065 -0.0032 0.0261 0.0061 -0.0284 0.0154 0.0360 -0.0160 0.0193 0.0040 0.0133 -0.0130 -0.0039 -0.0184 -0.0010 0.0156 0.0087 -0.0031 -0.0082 0.0296 0.0244 -0.0005 0.0241 $0.0166 \qquad 0.0150 \qquad -0.0100 \qquad 0.0136 \qquad -0.0067 \qquad 0.0036 \qquad 0.0355 \qquad -0.0128$ -0.0174 -0.0050 0.0296 0.0250 0.0007 0.0034 0.0151 Columns 3,361 through 3,375 -0.0136 -0.0179 -0.0233 -0.0143 0.0093 0.0080 0.0240 -0.0254 -0.0143 -0.0002 0.0259 0.0019 -0.0242 -0.0121 0.0242 0.0085 -0.0234 0.0095 -0.0108 -0.0122 -0.0613 0.0409 0.0507 -0.0262 0.0165 -0.0065 0.0127 -0.0586 -0.0222 Columns 3,376 through 3,390 -0.0037 -0.0061 0.0178 0.0290 -0.0349 0.0131 0.0516 0.0155 -0.0080 -0.0001 0.0010 0.0058 -0.0053 -0.0174 -0.0219 -0.0323 -0.0031 -0.0148 0.0135 0.0037 0.0121 0.0267 -0.0177 -0.0037 -0.0201 0.0104 0.0115 0.0201 0.0424 Columns 3,391 through 3,405 0.0185 0.0128 -0.0209 0.0031 0.0157 0.0286 0.0226 0.0220 -0.0002 0.0367 -0.0368 -0.0144 -0.0126 -0.0122 -0.0007 $0.0057 \quad -0.0314 \quad 0.0007 \quad 0.0251 \quad -0.0004 \quad 0.0132 \quad -0.0179 \quad 0.0448$ -0.0096 -0.0504 0.0173 0.0188 -0.0146 -0.0100 -0.0388 0.0309 -0.0161 -0.0092 0.0318 0.0169 -0.0179 -0.0109 Columns 3,406 through 3,420 -0.0215 -0.0131 0.0035 -0.0284 0.0188 -0.0264 0.0109 0.0171 0.0067 0.0226 0.0065 0.0181 -0.0125 0.0180 0.0280 0.0164 -0.0095 0.0109 0.0007 0.0366 0.0037 0.0035 0.0031 -0.0096 0.0077 -0.0084 0.0041 0.0207 0.0328 0.0376 -0.0091 0.0166 0.0222 0.0008 0.0270 -0.0068 -0.0024 -0.0282 -0.0099 -0.0278 0.0165 0.0057 0.0212 Columns 3,421 through 3,435 0.0039 0.0271 -0.0288 0.0466 0.0117 0.0191 -0.0019 -0.0101 0.0197 -0.0269 0.0174 0.0101 0.0113 -0.0190 -0.0256 -0.0484 -0.0251 0.0267 0.0086 0.0039 0.0092 0.0086 0.0192 -0.0317 0.0043 0.0105 -0.0201 0.0063 -0.0227 -0.0761 -0.0071 -0.0267 0.0008 -0.0082 0.0236 0.0253 0.0206 0.0090 0.0057 -0.0052 0.0106 -0.0341 0.0320

Columns 3,436 through 3,450

```
0.0218 0.0209 0.0034 -0.0319 -0.0102 0.0101 0.0014 -0.0137
0.0022 -0.0097 0.0236 0.0370 0.0752 -0.0187 -0.0170
 -0.0097 0.0096 -0.0144 0.0360 -0.0165 0.0131 0.0479 -0.0078
0.0265 -0.0216 0.0294 -0.0164 0.0021 -0.0237 -0.0112
 -0.0290 -0.0192 -0.0207 0.0775 -0.0218 -0.0021 0.0481 -0.0033
0.0206 -0.0119 -0.0017 -0.0453 -0.0696 -0.0221 0.0179
 Columns 3,451 through 3,465
  0.0110 0.0079 -0.0139 0.0399 0.0072 0.0008 -0.0096 -0.0117
0.0306 0.0106 0.0307 0.0069 0.0093 0.0010 -0.0217
 -0.0107 0.0234 -0.0250 0.0058 0.0178 0.0063 0.0127 -0.0086
0.0042 0.0120 -0.0039 0.0392 -0.0187 0.0066 0.0042
 -0.0059 0.0259 -0.0080 -0.0010 0.0055 0.0118 0.0273
                                                      0.0128
-0.0183 0.0071 -0.0418 0.0353 -0.0340 0.0152 0.0134
 Columns 3,466 through 3,480
 -0.0243 -0.0337 -0.0338 0.0379 -0.0020 0.0241 0.0002 0.0159
0.0250 0.0064 0.0211 0.0059 -0.0128 -0.0079 0.0042
  0.0146 -0.0467 -0.0119 -0.0161 -0.0016 0.0087 0.0240
0.0211 0.0012 0.0218 0.0071 -0.0177 0.0096 -0.0272
  0.0342 -0.0197 0.0179 -0.0564 -0.0008 -0.0172 0.0388
0.0082 -0.0104 0.0033 -0.0003 0.0043 0.0249 -0.0251
Columns 3,481 through 3,495
 -0.0013 0.0452 0.0060 0.0027 0.0117 -0.0161 0.0282 0.0218
-0.0083 -0.0202 -0.0265 -0.0326 0.0106 -0.0093 0.0161 0.0159 -0.0602 -0.0178 0.0117 0.0192 0.0281 0.0078
-0.0110 -0.0204 0.0126 -0.0096 -0.0001 -0.0090 -0.0258
 0.0107 -0.1229 -0.0305 0.0188 0.0275 0.0341 -0.0138
                                                       0.0055
-0.0256 0.0039 0.0407 0.0083 -0.0028 0.0039 -0.0436
Columns 3,496 through 3,510
  -0.0311 -0.0241 0.0023 -0.0035 0.0011 -0.0153 0.0070
                                                      -0.0024
0.0289 0.0217 0.0031 0.0122 -0.0145 0.0164 -0.0292
 -0.0408 -0.0171 0.0102 -0.0052 0.0318 -0.0210 0.0363 -0.0115
0.0172 0.0238 0.0142 -0.0129 0.0158 -0.0278 -0.0511
 -0.0125 -0.0015 0.0025 0.0075 0.0303 -0.0088 0.0223
0.0034 -0.0032 0.0004 -0.0227 0.0311 -0.0494 -0.0384
 Columns 3,511 through 3,525
  0.0164 -0.0189 -0.0156 0.0037 0.0376 0.0277 0.0119 -0.0157
0.0113 -0.0326 -0.0571 -0.0004 0.0413 0.0293 -0.0228
0.0252 0.0289 0.0193 0.0403 0.0379 -0.0185 -0.0045
 -0.0073 -0.0113 -0.0554 -0.0033 0.0171 0.0063 -0.0272 0.0363
0.0264 0.0085 0.0373 0.0382 0.0554 -0.0297 -0.0007
Columns 3,526 through 3,540
  -0.0191 -0.0373 -0.0345 -0.0025 0.0106 0.0242 0.0111
```

-0.0186 0.0154 0.0512 -0.0593 0.0200 -0.0158 -0.0043 0.0226 -0.0067 -0.0050 0.0212 0.0280 -0.0202 -0.0183 -0.0470 -0.0013 0.0653 -0.0486 0.0442 -0.0056 -0.0007 0.0387 0.0160 0.0270 0.0364 0.0249 -0.0469 -0.0317	
Columns 3,541 through 3,555	
0.0228	0.0115
0.0202 0.0403 0.0344 -0.0055 -0.0448 -0.0344 -0.0193 0.0009 0.0123 -0.0023 -0.0513 0.0318 0.0466 -0.0113	0.0327
0.0036 0.0290 0.0640 -0.0241 -0.0313 -0.0643 -0.0254 -0.0104 0.0327 -0.0090 -0.0263 0.0184 0.0227 0.0010	0.0310
Columns 3,556 through 3,570	
-0.0499 -0.0411 -0.0474 -0.0200 -0.0539 -0.0207 0.0022 0.0008 0.0139 -0.0021 0.0061 0.0099 -0.0325 -0.0122	-0.0052
0.0085 -0.0294 -0.0136 0.0360 0.0066 -0.0072 -0.0248 -0.0218 0.0095 0.0396 0.0188 0.0230 -0.0082 0.0054	
0.0468 -0.0024 0.0080 0.0491 0.0406 0.0205 -0.0311 -0.0396 0.0065 0.0556 0.0271 0.0026 0.0171 0.0256	0.0017
Columns 3,571 through 3,585	
-0.0262 0.0016 -0.0138 -0.0209 -0.0011 0.0026 -0.0000 -0.0080 0.0146 0.0075 0.0155 -0.0044 0.0151 -0.0156	0.0346
0.0135	
0.0372 0.0230 0.0212 -0.0323 -0.0014 0.0125 -0.0039 -0.0105 -0.0008 -0.0458 -0.0192 0.0364 -0.0757 0.0008	-0.0502
Columns 3,586 through 3,600	
0.0140 0.0620 0.0512 -0.0080 0.0301 -0.0179 -0.0056 -0.0094 0.0039 0.0029 -0.0247 -0.0102 -0.0069 0.0326	0.0091
0.0274 -0.0091 -0.0007 -0.0137 0.0231 -0.0130 -0.0334 0.0192 0.0079 0.0168 -0.0319 -0.0275 -0.0153 0.0071	0.0105
0.0209 -0.0440 -0.0500 0.0043 0.0142 0.0003 -0.0279 0.0357 0.0245 0.0200 -0.0118 -0.0199 -0.0003 -0.0162	-0.0006
Columns 3,601 through 3,615	
-0.0253	0.0109
-0.0142	0.0233
0.0074 -0.0015 -0.0170 0.0254 0.0073 0.0334 0.0138 0.0105 0.0260 0.0137 -0.0188 0.0127 -0.0100 0.0547	0.0106
Columns 3,616 through 3,630	
-0.0299	0.0217
-0.0235	-0.0290
-0.0086	-0.0558

Columns 3,631 through 3,645

-0.0485 -0.0024 -0.0363 0.0103 0.0182 -0.0161 -0.0020 0.0268 -0.0339 -0.0182 -0.0153 -0.0404 0.0181 0.0328 0.0364 -0.0312 0.0098 -0.0642 -0.0547 0.0064 0.0283 -0.0230 Columns 3,646 through 3,660 -0.0097 0.0034 0.0014 -0.0334 -0.0200 -0.0138 0.0305 0.0099 -0.0070 -0.0313 0.0082 0.0226 -0.0487 -0.0166 0.0003 0.0035 -0.0050 -0.0003 0.0177 -0.0142 -0.0498 -0.0184 0.0054 0.0205 -0.0006 0.0075 0.0098 0.0462 -0.0177 -0.0282 -0.0095 0.0309 0.0215 -0.0459 -0.0167 -0.0084 0.0057 Columns 3,661 through 3,675 0.0107 -0.0146 0.0204 -0.0399 0.0134 0.0192 0.0184 -0.0011 0.0000 0.0101 0.0197 -0.0180 0.0075 -0.0112 0.0086 0.0062 0.0221 0.0483 -0.0292 0.0235 0.0023 -0.0097 -0.0214 -0.0016 0.0162 0.0140 -0.0390 0.0102 -0.0006 0.0416 -0.0036 0.0465 0.0312 0.0150 0.0198 -0.0173 -0.0369 -0.0006 0.0085 -0.0004 -0.0276 -0.0054 0.0050 0.0362 Columns 3,676 through 3,690 -0.0106 0.0399 -0.0257 0.0067 0.0185 -0.0309 -0.0305 0.0134 -0.0130 0.0231 0.0324 -0.0287 -0.0129 0.0003 0.0081 -0.0204 -0.0062 -0.0418 -0.0140 0.0215 -0.0202 -0.0063 -0.0010 -0.0120 0.0196 0.0002 -0.0148 0.0151 -0.0280 0.0098 $-0.0076 \quad -0.0376 \quad -0.0224 \quad -0.0348 \quad 0.0043 \quad 0.0003 \quad 0.0285 \quad -0.0095$ -0.0077 -0.0045 -0.0323 0.0089 0.0302 -0.0287 -0.0007 Columns 3,691 through 3,705 0.0034 0.0376 -0.0057 0.0066 0.0028 -0.0217 0.0205 -0.0445 -0.0092 0.0172 0.0061 -0.0232 0.0002 -0.0145 -0.0217 0.0263 0.0245 0.0017 0.0143 -0.0198 -0.0065 -0.0614 -0.0233 -0.0047 0.0746 0.0030 -0.0101 0.0032 -0.0275 Columns 3,706 through 3,720 0.0194 0.0284 -0.0058 0.0008 0.0376 -0.0051 0.0087 0.0230 0.0154 -0.0111 0.0030 0.0035 -0.0476 -0.0309 0.0077 0.0506 -0.0031 0.0290 0.0086 -0.0218 0.0074 -0.0090 -0.0384 -0.0238 -0.0302 -0.0199 -0.0262 0.0036 -0.0088 0.0303 0.0173 0.0177 -0.0109 -0.0253 -0.0063 0.0132 -0.0467 -0.0626 -0.0226 -0.0458 -0.0329 0.0111 0.0295 Columns 3,721 through 3,735

```
0.0034 0.0289 0.0418 0.0200 -0.0046 -0.0148 0.0033
  0.0168 -0.0118 -0.0079 0.0333 -0.0138 0.0065 0.0021 -0.0283
-0.0177 0.0172 0.0019 -0.0064 0.0018 -0.0030 0.0061
 0.0123 -0.0361 -0.0269 0.0779 -0.0164 0.0119 0.0027 -0.0055
Columns 3,736 through 3,750
  0.0170 -0.0231 0.0011 -0.0562 -0.0098 0.0094 0.0069
0.0247 -0.0416 -0.0311 0.0145 -0.0291 -0.0283 0.0234
  0.0042 -0.0090 0.0086 -0.0117 -0.0475 0.0149 0.0181
                                         0.0015
0.0141 -0.0126 -0.0406 0.0262 0.0004 -0.0252 -0.0253
 -0.0061 0.0002 0.0237 0.0272 -0.0492 0.0112 0.0199
0.0106 0.0253 -0.0156 0.0157 0.0171 -0.0001 -0.0441
Columns 3,751 through 3,765
  -0.0093 0.0101 0.0044 0.0249 -0.0179 -0.0046 0.0155
 -0.0121 0.0139 0.0099 0.0237 0.0146 0.0524 -0.0422 0.0041
-0.0034 -0.0090 0.0105 -0.0098 0.0106 -0.0179 -0.0297
 0.0036 -0.0130 0.0021 -0.0444 0.0148 -0.0102 -0.0578
Columns 3,766 through 3,780
  0.0126 0.0098 -0.0080 0.0203 0.0098 0.0236 0.0336 0.0031
0.0173 -0.0087 0.0108 -0.0028 0.0190 0.0160 -0.0106 -0.0085
0.0054 0.0551 0.0160 -0.0113 -0.0205 0.0278 -0.0235
  0.0132 -0.0093 0.0272 -0.0177 0.0061 -0.0005 -0.0465
Columns 3,781 through 3,795
  0.0594 -0.0120 0.0010 -0.0181 -0.0219 -0.0219 -0.0068 0.0009
-0.0055 -0.0222 0.0103 0.0199 -0.0164 -0.0203 0.0099
  0.0362 -0.0056 -0.0191 -0.0057 -0.0171 0.0174 -0.0077
0.0022 -0.0010 0.0157 -0.0220 -0.0052 0.0049 0.0125
 0.0060 0.0086 0.0083 -0.0524 0.0062 0.0175 0.0044
Columns 3,796 through 3,810
  -0.0100 -0.0566 -0.0022 -0.0164 0.0262 0.0079 0.0077
Columns 3,811 through 3,825
 -0.0047 -0.0120 0.0336 0.0009 0.0161 -0.0101 0.0083
-0.0185 0.0042 0.0085 0.0033 0.0388 -0.0165 0.0021
  0.0249 -0.0172 -0.0177 0.0419 0.0034 -0.0215 -0.0155
0.0298 0.0351 0.0091 0.0134 0.0165 -0.0263 0.0020
  0.0463 -0.0154 -0.0492 0.0453 -0.0156 -0.0230 -0.0253 -0.0071
```

Columns 3,916 through 3,930

0.0527 0.0274 0.0091 0.0149 -0.0124 -0.0027 -0.0010 Columns 3,826 through 3,840 -0.0131 0.0020 -0.0248 0.0068 0.0430 0.0050 0.0085 0.0282 -0.0431 -0.0071 -0.0179 0.0432 0.0312 -0.0433 0.0006 -0.0070 -0.0012 -0.0050 -0.0667 -0.0065 0.0100 -0.0019 -0.0067 -0.0270 -0.0101 -0.0154 -0.0053 -0.0076 -0.0000 0.0018 0.0092 0.0043 0.0177 -0.0816 -0.0412 -0.0004 -0.0148 -0.0040 0.0089 0.0012 -0.0419 -0.0426 0.0314 0.0035 Columns 3,841 through 3,855 -0.0170 -0.0066 0.0320 0.0182 -0.0047 -0.0623 0.0154 0.0136 0.0281 -0.0412 -0.0258 0.0109 0.0091 0.0119 -0.0058 -0.0080 -0.0304 0.0172 0.0218 0.0014 -0.0037 0.0085 -0.0002 0.0097 0.0022 -0.0139 0.0543 -0.0339 -0.0221 0.0025 -0.0373 -0.0174 0.0207 -0.0040 0.0504 -0.0148 0.0287 -0.0197 0.0497 0.0164 -0.0384 0.0607 -0.0599 -0.0285 Columns 3,856 through 3,870 -0.0696 -0.0087 0.0267 -0.0106 0.0198 0.0230 0.0125 -0.0137 0.0019 0.0312 0.0072 -0.0297 0.0263 0.0114 -0.0067 -0.0013 0.0004 -0.0155 0.0229 0.0012 -0.0226 0.0190 0.0204 0.0305 0.0046 0.0306 0.0246 -0.0235 -0.0234 0.0360 0.0291 -0.0215 0.0152 0.0604 -0.0368 -0.0326 Columns 3,871 through 3,885 -0.0196 -0.0091 0.0052 0.0227 -0.0161 0.0136 -0.0404 0.0257 -0.0006 0.0119 0.0067 0.0371 0.0041 0.0068 0.0330 -0.0130 -0.0138 -0.0241 -0.0155 -0.0039 -0.0148 -0.0442 0.0510 -0.0274 0.0261 -0.0021 0.0225 0.0235 0.0096 0.0396 -0.0062 -0.0095 -0.0413 -0.0389 0.0067 -0.0257 -0.0104 Columns 3,886 through 3,900 -0.0030 -0.0109 -0.0356 0.0120 -0.0094 -0.0007 -0.0283 -0.0350 0.0056 0.0243 0.0354 0.0446 -0.0265 0.0302 -0.0235 -0.0155 0.0241 -0.0089 -0.0353 0.0305 0.0239 -0.0410 0.0133 0.0622 0.0345 0.0518 -0.0303 0.0611 -0.0001 -0.0227 -0.0084 -0.0095 -0.0111 0.0457 0.0194 Columns 3,901 through 3,915 -0.0010 -0.0131 -0.0213 -0.0280 0.0013 -0.0125 0.0043 -0.0089 -0.0257 0.0016 -0.0123 -0.0231 0.0080 -0.0476 -0.0011 -0.0319 -0.0071 -0.0444 0.0080 -0.0353 0.0061 0.0305 -0.0065 -0.0175 -0.0039 -0.0377 0.0029 0.0381 -0.0406

```
-0.0088 -0.0090 0.0192 -0.0166 -0.0175 0.0398 -0.0115 0.0198
0.0115 0.0158 0.0092 -0.0205 0.0207 -0.0166 0.0105
  0.0075 -0.0083 -0.0163 -0.0008 -0.0090 0.0104 -0.0070
0.0295 0.0122 0.0134 0.0136 0.0165 -0.0001 0.0192
 0.0153 -0.0018 -0.0444 0.0018 0.0057 -0.0145 0.0152
0.0274 -0.0053 0.0067 0.0331 -0.0017 0.0086 0.0152
Columns 3,931 through 3,945
 -0.0206 -0.0025 -0.0185 -0.0309 -0.0018 0.0241 -0.0099
-0.0044 -0.0156 0.0014 0.0707 0.0176 0.0096 0.0072
 -0.0307 -0.0103 0.0172 -0.0148 -0.0005 -0.0186 0.0165
0.0209 -0.0104 0.0198 0.0083 0.0155 -0.0124 0.0072
 -0.0263 -0.0188 0.0418 0.0159 0.0007 -0.0576 0.0177 0.0485
0.0241 -0.0177 0.0178 -0.0522 0.0110 -0.0218 -0.0007
Columns 3,946 through 3,960
 -0.0223 0.0130 0.0112 -0.0098 0.0308 -0.0259 -0.0364
  0.0551 0.0090 -0.0121 0.0038 -0.0368 0.0321 -0.0260 0.0141
0.0539 -0.0189 -0.0441 0.0158 -0.0508 0.0223 -0.0117 0.0077
0.0116 0.0212 -0.0156 -0.0059 0.0137 0.0129 0.0329
 Columns 3,961 through 3,975
 -0.0081 -0.0127 0.0039 0.0443 -0.0020 -0.0003 -0.0137 0.0031
0.0401 0.0289 0.0111 0.0149 0.0043 0.0235 0.0328
 -0.0221 -0.0048 -0.0376 0.0132 -0.0014 0.0092 0.0248 -0.0153
-0.0081 0.0027 -0.0517 -0.0202 -0.0118 0.0343 0.0373 -0.0240
0.0137 -0.0204 -0.0407 -0.0103 -0.0408 0.0215 -0.0613
Columns 3,976 through 3,990
  0.0013 -0.0045 0.0110 0.0358 0.0428 -0.0188 0.0053
-0.0406 -0.0305 -0.0160 0.0031 0.0062 -0.0332 0.0265
  -0.0262 -0.0404 -0.0198 -0.0578 0.0218 -0.0097 -0.0230
                                                -0.0190
-0.0189 -0.0140 -0.0443 0.0110 0.0015 0.0022 0.0210
 -0.0276 -0.0361 -0.0234 -0.0950 -0.0114 -0.0013 -0.0303
Columns 3,991 through 4,005
 -0.0310 -0.0154 -0.0126 -0.0030 -0.0465 -0.0272 0.0185 -0.0206
-0.0072 -0.0118 0.0003 -0.0075 -0.0228 0.0173 0.0120 -0.0128
-0.0275 -0.0144 0.0017 0.0081 -0.0151 0.0057 -0.0149
  0.0096 -0.0012 0.0126 -0.0092 0.0135 0.0394 -0.0187
-0.0158 -0.0179 0.0055 0.0344 -0.0106 0.0400 -0.0331
Columns 4,006 through 4,020
 -0.0152 -0.0273 0.0339 0.0038 0.0412 -0.0370 0.0055
 -0.0042 -0.0210 -0.0497 -0.0085 -0.0195 0.0361 0.0286 -0.0172
-0.0078 -0.0153 -0.0054 0.0141 -0.0047 0.0255 0.0238
```

Columns 4,111 through 4,125

```
-0.0135 -0.0263 -0.0402 -0.0002 -0.0005 0.0483 0.0351 -0.0031
Columns 4,021 through 4,035
  0.0097 \qquad 0.0261 \quad -0.0008 \quad -0.0056 \qquad 0.0547 \quad -0.0401 \qquad 0.0333 \qquad 0.0306
-0.0009 0.0229 0.0447 -0.0070 0.0168 0.0178 0.0218
  0.0590 -0.0174 -0.0260 0.0475 0.0181 -0.0416 0.0050
0.0004 -0.0149 -0.0327 0.0379 -0.0034 -0.0035 0.0202
  0.0573 -0.0532 -0.0416 0.0666 -0.0037 -0.0063 -0.0249 -0.0093
0.0091 -0.0456 -0.0826 0.0480 -0.0275 -0.0136 0.0104
 Columns 4,036 through 4,050
 -0.0095 -0.0140 0.0129 -0.0108 0.0318 0.0176 -0.0054
0.0178 -0.0097 0.0510 0.0437 0.0027 0.0365 0.0147
  0.0323 -0.0322 0.0186 -0.0169 0.0238 0.0085 -0.0268 -0.0096
0.0127 0.0351 0.0009 0.0130 0.0223 0.0109 -0.0153
  0.0573 -0.0291 0.0197 -0.0132 -0.0176 -0.0039 -0.0255 -0.0173
-0.0015 0.0374 -0.0501 -0.0294 0.0176 -0.0249 -0.0277
Columns 4,051 through 4,065
  0.0065 \qquad 0.0210 \qquad -0.0119 \qquad 0.0113 \qquad -0.0194 \qquad -0.0027 \qquad -0.0169 \qquad -0.0483
-0.0123 -0.0232 0.0061 -0.0043 -0.0140 -0.0318 0.0215
 -0.0115 0.0488 0.0100 0.0212 -0.0186 -0.0180 0.0033
 -0.0169 -0.0062 0.0137 0.0453 0.0125 0.0122 0.0129 -0.0121
-0.0071 0.0879 0.0080 0.0312 -0.0163 0.0086 -0.0229
Columns 4,066 through 4,080
  0.0090 0.0060 -0.0005 -0.0093 -0.0063 0.0067 0.0178 0.0256
-0.0257 -0.0278 -0.0093 0.0193 -0.0242 -0.0060 -0.0250 -0.0486
-0.0438 -0.0341 -0.0119 0.0155 -0.0342 -0.0232 -0.0558 -0.0813
0.0022 -0.0100 -0.0047 -0.0263 -0.0063 -0.0159 -0.0063
Columns 4,081 through 4,095
 -0.0195 -0.0171 0.0343 -0.0322 -0.0146 -0.0174 0.0025 0.0117
-0.0075 -0.0257 -0.0051 -0.0120 -0.0241 0.0264 0.0376
  0.0005 -0.0061 -0.0201 -0.0036 0.0214 0.0072 0.0291
0.0265 0.0236 0.0431 -0.0088 -0.0154 0.0085 0.0204
  0.0007 0.0106 -0.0323 0.0339 0.0430 0.0110 0.0297 -0.0062
Columns 4,096 through 4,110
  0.0089 -0.0138 -0.0224 0.0309 0.0105 0.0170 0.0165
-0.0020 -0.0225 0.0212 -0.0068 -0.0008 0.0505 -0.0138
  0.0128 0.0110 0.0212 -0.0090 -0.0039 0.0159 -0.0023
-0.0068 0.0086 0.0098 0.0221 -0.0523 0.0166 0.0094
```

0.0061 -0.0390 -0.0303 0.0213 -0.0028 0.0149 0.0225 0.0211 0.0135 -0.0029 0.0307 0.0168 -0.0360 -0.0147	0.0031
0.0418 -0.0005 0.0285 0.0362 -0.0040 -0.0308 0.0189 -0.0116 -0.0210 0.0022 0.0166 -0.0008 -0.0047 -0.0129	
0.0385 0.0327 0.0514 0.0127 0.0073 -0.0524 -0.0020 -0.0412 -0.0440 0.0052 -0.0096 -0.0328 0.0239 0.0081	-0.0279
Columns 4,126 through 4,140	
-0.0298 -0.0058 0.0097 -0.0370 -0.0271 0.0092 -0.0374 0.0353 0.0066 0.0132 -0.0181 -0.0291 0.0117 -0.0271	0.0227
-0.0240 0.0108 -0.0359 -0.0341 -0.0251 -0.0079 0.0134 0.0030 -0.0268 -0.0065 0.0015 0.0060 -0.0119 -0.0080	
-0.0012 0.0214 -0.0373 -0.0075 0.0086 -0.0183 0.0543 -0.0291 -0.0386 -0.0170 0.0118 0.0205 -0.0262 0.0111	0.0034
Columns 4,141 through 4,155	
-0.0106	-0.0369
0.0274 -0.0002 0.0104 -0.0046 -0.0124 0.0230 -0.0079 -0.0208 -0.0180 0.0129 0.0169 0.0019 -0.0210 -0.0048	0.0064
0.0415 -0.0295 0.0222 0.0172 -0.0329 0.0118 0.0123 -0.0278 -0.0246 0.0235 0.0117 -0.0155 -0.0462 -0.0383	0.0507
Columns 4,156 through 4,170	
-0.0418 -0.0038 -0.0095 -0.0154 0.0141 -0.0183 -0.0267 -0.0058 -0.0104 0.0125 0.0121 -0.0024 0.0141 -0.0132	0.0175
-0.0299 -0.0024 0.0435 0.0252 0.0156 0.0013 0.0141 0.0204 0.0173 -0.0021 0.0081 0.0051 -0.0194 -0.0233	-0.0075
0.0079 0.0059 0.0499 0.0320 -0.0004 0.0121 0.0381 0.0277 0.0206 0.0040 0.0079 0.0131 -0.0417 -0.0132	-0.0403
Columns 4,171 through 4,185	
-0.0092 0.0173 0.0045 0.0174 0.0182 0.0086 0.0113 0.0289 0.0175 -0.0568 -0.0481 0.0072 0.0312 -0.0025	0.0209
0.0205 0.0236 -0.0040 -0.0146 0.0173 0.0038 -0.0217 -0.0206 0.0188 0.0276 -0.0362 0.0228 0.0084 -0.0194	-0.0154
0.0244 0.0164 0.0058 -0.0253 0.0078 0.0129 -0.0305 -0.0529 0.0029 0.0653 0.0102 0.0214 -0.0230 -0.0193	-0.0466
Columns 4,186 through 4,200	
-0.0169 -0.0402 -0.0296 0.0063 0.0159 0.0361 0.0137 0.0110 0.0008 0.0226 -0.0287 0.0174 -0.0187 0.0233	-0.0212
	0.0155
0.0304 0.0456 0.0020 -0.0326 -0.0208 0.0245 -0.0117 0.0194 -0.0470 -0.0189 -0.0094 -0.0210 0.0322 -0.0307	0.0423
Columns 4,201 through 4,215	
0.0059 0.0199 -0.0210 0.0253 0.0001 0.0162 0.0057	-0.0063
-0.0085 -0.0377 -0.0400 0.0022 -0.0214 -0.0156 -0.0430 0.0167 -0.0285 -0.0246 0.0296 -0.0497 0.0246 -0.0067	-0.0057

```
-0.0547 0.0152 0.0122 0.0134 0.0447 0.0037 0.0114
 Columns 4,216 through 4,230
  0.0264 0.0131 -0.0074 -0.0217 -0.0381 0.0007 -0.0340
-0.0030 -0.0288 0.0082 0.0102 -0.0205 -0.0003 0.0043
  0.0460 -0.0037 -0.0211 0.0109 -0.0104 0.0004 -0.0162
-0.0269 -0.0136 0.0057 -0.0022 -0.0007 -0.0009 -0.0437
  0.0257 -0.0139 -0.0022 0.0244 0.0168 0.0073 -0.0089
-0.0380 -0.0006 0.0094 -0.0029 0.0094 -0.0161 -0.0641
Columns 4,231 through 4,245
 -0.0079 -0.0243 0.0213 0.0185 0.0392 -0.0071 -0.0171 -0.0018
-0.0107 0.0309 0.0051 -0.0096 -0.0201 -0.0118 -0.0111
  0.0279 -0.0155 -0.0190 -0.0287 -0.0063 0.0053 -0.0056 -0.0076
0.0413 -0.0098 -0.0545 -0.0437 -0.0467 0.0191 0.0038 -0.0045
Columns 4,246 through 4,260
 -0.0245 0.0010 0.0257 -0.0310 -0.0188 0.0018 0.0313 0.0213
-0.0326 -0.0221 -0.0070 -0.0033 0.0006 -0.0261 -0.0143
 -0.0022 -0.0119 0.0151 0.0199 -0.0162 -0.0352 0.0371
-0.0250 -0.0248 0.0226 -0.0062 0.0082 0.0082 -0.0119
  0.0205 -0.0128 0.0032 0.0382 -0.0098 -0.0574 0.0151
-0.0068 -0.0127 0.0238 -0.0098 0.0121 0.0354 0.0033
Columns 4,261 through 4,275
  0.0207 -0.0081 -0.0056 0.0266 -0.0184 0.0021 -0.0182 0.0187
-0.0034 -0.0418 0.0234 0.0089 -0.0349 -0.0212 0.0252
  0.0210 0.0321 -0.0344 0.0154 0.0461 0.0002 0.0415 0.0125
-0.0319 0.0531 -0.0155 -0.0168 0.0063 0.0201 0.0006
Columns 4,276 through 4,290
  0.0155 -0.0101 -0.0268 -0.0380 -0.0013 0.0017 -0.0249 -0.0080
0.0365 -0.0103 -0.0003 0.0205 0.0219 -0.0000 -0.0211
  0.0302 0.0150 0.0238 -0.0285 0.0020 -0.0128 -0.0031
0.0276 -0.0265 -0.0214 -0.0347 0.0394 0.0027 0.0125
  0.0467 0.0312 0.0506 -0.0129 0.0092 -0.0290 0.0232 -0.0039
0.0089 -0.0135 -0.0363 -0.0614 0.0306 0.0037 0.0364
 Columns 4,291 through 4,305
  0.0107 -0.0123 -0.0129 0.0175 0.0199 0.0061 0.0046
0.0010 0.0222 -0.0140 0.0172 0.0373 -0.0112 -0.0012
0.0520 -0.0167 -0.0206 0.0025 -0.0434 -0.0206 0.0075
 -0.0035 0.0247 -0.0070 -0.0063 0.0313 -0.0180 -0.0158 -0.0246
0.0296 -0.0235 -0.0337 0.0319 -0.0578 -0.0200 -0.0000
```

Columns 4,306 through 4,320

-0.0377 -0.0181 -0.0043 -0.0122 0.0105 -0.0452 -0.0244 -0.0034 0.0190 0.0322 -0.0283 -0.0008 -0.0095 -0.0046 0.0261 0.0260 -0.0053 -0.0035 0.0437 -0.0083 -0.0318 0.0268 0.0001 0.0618 -0.0184 0.0457 -0.0218 0.0102 0.0402 -0.0127 0.0102 -0.0296 0.0195 0.0552 0.0087 -0.0365 0.0086 Columns 4,321 through 4,335 0.0094 -0.0059 0.0238 0.0184 0.0107 -0.0264 -0.0014 -0.0155 0.0130 -0.0486 -0.0094 -0.0164 0.0062 0.0134 0.0117 -0.0029 -0.0406 -0.0121 0.0256 0.0099 -0.0113 -0.0068 0.0121 -0.0221 -0.0163 -0.0207 0.0102 -0.0278 0.0353 -0.0097 -0.0148 -0.0531 -0.0300 0.0259 0.0042 0.0110 -0.0167 0.0283 -0.0424 0.0225 -0.0173 0.0096 -0.0360 0.0244 -0.0195 Columns 4,336 through 4,350 0.0097 -0.0362 -0.0228 -0.0129 0.0171 0.0269 -0.0353 0.0269 -0.0069 0.0256 -0.0278 0.0136 -0.0125 0.0265 0.0016 0.0026 0.0092 0.0029 -0.0196 0.0147 -0.0312 0.0293 0.0475 -0.0094 0.0109 0.0044 -0.0113 0.0163 -0.0072 0.0177 -0.0046 0.0353 0.0137 -0.0195 -0.0056 -0.0654 0.0659 0.0445 -0.0122 -0.0119 0.0167 -0.0295 0.0342 -0.0548 0.0262 Columns 4,351 through 4,365 0.0079 -0.0054 -0.0012 0.0620 0.0207 -0.0608 -0.0330 -0.0171 -0.0021 -0.0478 0.0055 -0.0147 -0.0080 -0.0056 -0.0004 0.0106 0.0142 0.0305 -0.0062 0.0056 -0.0032 0.0094 0.0200 -0.0356 0.0240 -0.0471 0.0290 0.0159 Columns 4,366 through 4,380 -0.0445 -0.0323 0.0106 0.0060 -0.0119 -0.0177 -0.0031 0.0113 0.0288 -0.0024 0.0130 -0.0096 -0.0173 -0.0204 -0.0236 0.0176 -0.0045 -0.0033 0.0062 -0.0072 -0.0453 0.0153 0.0217 0.0210 0.0054 -0.0272 -0.0222 0.0453 0.0546 0.0050 Columns 4,381 through 4,395 0.0076 -0.0161 -0.0048 0.0279 -0.0259 0.0582 0.0346 -0.0079 -0.0290 0.0096 -0.0094 -0.0084 0.0095 -0.0026 -0.0200 -0.0119 -0.0539 -0.0135 0.0145 -0.0230 0.0049 -0.0032 0.0149 0.0397 -0.0282 0.0155 0.0276 0.0005 -0.0499 -0.0000 -0.0815 -0.0144 0.0246 -0.0298 0.0186 0.0097 Columns 4,396 through 4,410 -0.0377 0.0300 0.0099 -0.0173 0.0141 0.0019 0.0061 -0.0273

-0.0012 -0.0105 -0.0148 0.0401 -0.0522 0.0316 -0.0312

-0.0001 0.0334 0.0146 -0.0092 0.0177 0.0195 -0.0031 0.0274 0.0221 -0.0375 -0.0096 -0.0164 -0.0169 -0.0483 0.0480 0.0050 0.0038 0.0105 0.0147 0.0144 -0.0173 0.0430 0.0397 -0.0335 -0.0457 0.0265 -0.0330 -0.0371	
Columns 4,411 through 4,425	
-0.0483	-0.0034
-0.0089 0.0155 0.0133 0.0114 -0.0209 0.0012 -0.0353 -0.0299 0.0026 0.0079 0.0128 -0.0180 0.0044 -0.0008	0.0100
0.0232 0.0185 0.0110 0.0257 -0.0278 -0.0133 -0.0802 -0.0268 0.0331 0.0219 0.0338 -0.0223 0.0325 0.0178	0.0057
Columns 4,426 through 4,440	
-0.0011 -0.0024 0.0396 0.0265 -0.0191 0.0302 0.0094 0.0113 0.0079 0.0438 -0.0170 -0.0077 0.0470 0.0256	-0.0075
-0.0387 0.0093 0.0193 -0.0059 0.0132 -0.0219 -0.0030 -0.0171 -0.0079 0.0319 -0.0198 0.0049 0.0081 0.0056	
-0.0456	0.0342
Columns 4,441 through 4,455	
0.0130 0.0738 0.0330 -0.0055 -0.0127 -0.0029 0.0125 -0.0189 0.0149 0.0112 -0.0700 -0.0272 -0.0149 -0.0711	-0.0015
0.0409 0.0094 0.0254 -0.0206 -0.0010 -0.0461 0.0102 -0.0127 0.0130 -0.0176 0.0277 -0.0446 0.0043 -0.0115	
0.0297 -0.0440 -0.0002 -0.0365 0.0101 -0.0507 -0.0127 0.0023 0.0104 -0.0442 0.0884 -0.0396 0.0349 0.0428	-0.0088
Columns 4,456 through 4,470	
-0.0331 0.0207 0.0434 0.0484 0.0093 -0.0063 -0.0418 -0.0182 0.0413 0.0137 -0.0379 -0.0146 0.0137 0.0332	
0.0295 0.0236 0.0245 0.0326 0.0144 0.0227 0.0413 -0.0068 0.0198 0.0036 -0.0396 -0.0165 0.0158 0.0059	
0.0546 0.0213 -0.0168 0.0017 0.0050 0.0258 0.0781 0.0105 -0.0055 -0.0003 0.0054 -0.0160 0.0145 -0.0139	0.0336
Columns 4,471 through 4,485	
0.0052 0.0015 0.0000 -0.0045 -0.0173 0.0033 -0.0520 0.0183 -0.0351 -0.0051 0.0149 -0.0241 -0.0100 -0.0042	-0.0491
0.0077 0.0155 0.0105 0.0179 0.0049 -0.0083 -0.0044 0.0091 0.0316 0.0322 -0.0278 0.0371 -0.0108 0.0597	-0.0100
0.0146 0.0046 0.0193 0.0408 0.0405 -0.0087 0.0452 -0.0080 0.0653 0.0420 -0.0464 0.0627 0.0083 0.0716	0.0265
Columns 4,486 through 4,500	
0.0152 0.0305 -0.0414 -0.0252 -0.0418 -0.0075 -0.0098 0.0374 -0.0153 0.0235 0.0067 -0.0094 -0.0220 0.0144	-0.0319
0.0213 -0.0001 -0.0337 -0.0072 0.0238 -0.0059 -0.0272 -0.0142 -0.0178 0.0162 -0.0344 0.0175 -0.0129 0.0235	
0.0234 -0.0218 0.0148 0.0189 0.0581 0.0040 -0.0354 -0.0420 -0.0085 0.0016 -0.0338 0.0309 0.0059 0.0164	-0.0105

Columns 4,501 through 4,515

Columns 4,516 through 4,530

Columns 4,531 through 4,545

Columns 4,546 through 4,560

Columns 4,561 through 4,575

Columns 4,576 through 4,590

Columns 4,591 through 4,605

```
0.0041 0.0393 0.0218 -0.0347 -0.0103 0.0538 -0.0132 -0.0545
0.0052 0.0149 0.0031 0.0157 -0.0142 -0.0652 0.0207
 -0.0189 -0.0063 0.0170 0.0292 -0.0028 0.0086 -0.0160 -0.0032
-0.0379 -0.0119 0.0302 0.0079 -0.0338 -0.0028 0.0125
 -0.0334 -0.0489 0.0060 0.0693 0.0015 -0.0314 -0.0017 0.0364
-0.0387 -0.0149 0.0425 -0.0089 -0.0275 0.0487 -0.0053
Columns 4,606 through 4,620
  0.0042 -0.0006 -0.0129 -0.0211 -0.0013 0.0165 -0.0033 0.0458
0.0033 -0.0523 0.0140 -0.0006 -0.0032 0.0069 0.0083
  -0.0182 0.0064 0.0285 -0.0133 -0.0327 0.0046 -0.0159 -0.0005
0.0072 -0.0084 -0.0051 -0.0140 -0.0094 -0.0055 -0.0023
 Columns 4,621 through 4,635
  0.0103 -0.0047 0.0006 -0.0154 -0.0027 -0.0028 0.0400
-0.0180 -0.0335 0.0067 0.0234 0.0275 -0.0183 -0.0129
  0.0329 0.0057 -0.0053 -0.0145 0.0149 -0.0006 0.0224
-0.0106 -0.0052 -0.0186 -0.0415 -0.0049 0.0312 -0.0012
  Columns 4,636 through 4,650
 -0.0009 -0.0206 -0.0004 -0.0083 -0.0209 -0.0151 -0.0462 0.0162
-0.0037 -0.0124 0.0238 0.0238 -0.0062 0.0254 -0.0273
  0.0360 0.0116 -0.0131 0.0337 0.0115 0.0222 -0.0121
0.0117 0.0210 -0.0005 0.0279 -0.0054 0.0254 -0.0273
  0.0522 0.0316 -0.0136 0.0369 0.0263 0.0412 0.0404
                                                -0.0366
0.0140 0.0300 -0.0243 -0.0026 -0.0020 0.0109 -0.0273
 Columns 4,651 through 4,665
  0.0155 -0.0134 0.0032 0.0564 -0.0037 0.0452 0.0036
0.0081 -0.0570 0.0137 0.0083 0.0203 -0.0216 -0.0135
  0.0180 -0.0220 0.0047 -0.0198 0.0180 0.0055 0.0196
                                                 0.0082
-0.0007 -0.0122 0.0347 -0.0188 0.0235 -0.0013 -0.0047
 -0.0016 -0.0240 0.0068 -0.0655 0.0336 -0.0360 0.0248
0.0041 0.0192 0.0030 -0.0330 0.0078 0.0307 0.0224
Columns 4,666 through 4,680
 -0.0330 0.0445 0.0281 -0.0104 -0.0211 0.0437 -0.0396 0.0175
-0.0116 -0.0399 -0.0171 -0.0032 -0.0046 -0.0178 0.0272
 -0.0411 0.0241 0.0193 0.0181 -0.0177 0.0065 -0.0125
0.0088 -0.0232 -0.0186 0.0020 -0.0047 0.0069 0.0188
 -0.0265 -0.0080 0.0098 0.0290 -0.0104 -0.0069 0.0185
0.0168 0.0181 0.0172 -0.0020 0.0109 0.0416 -0.0008
Columns 4,681 through 4,695
 -0.0127 -0.0260 -0.0245 -0.0278 -0.0051 0.0370 0.0236 -0.0232
-0.0168 -0.0235 0.0132 0.0207 0.0398 -0.0086 0.0513
```

```
0.0330 0.0318 -0.0241 -0.0748 -0.0696 -0.0078 -0.1123
 Columns 4,696 through 4,710
 -0.0200 -0.0330 -0.0038 -0.0249 0.0059 0.0510 -0.0101 0.0137
-0.0204 -0.0240 0.0027 0.0107 0.0423 0.0028 0.0168
  0.0053 -0.0298 0.0284 -0.0065 0.0544 -0.0043 -0.0041
  0.0472 \qquad 0.0392 \qquad 0.0108 \qquad 0.0107 \qquad 0.0290 \quad -0.0317 \quad -0.0269 \qquad 0.0051
0.0308 -0.0228 0.0367 -0.0141 0.0363 0.0014 -0.0129
Columns 4,711 through 4,725
 -0.0126 0.0043 0.0278 0.0030 -0.0159 0.0129 -0.0009
-0.0025 0.0089 0.0095 -0.0027 -0.0027 0.0058 -0.0532
  0.0028 0.0041 0.0382 0.0060 0.0215 0.0269 -0.0054
0.0308 -0.0033 0.0221 0.0016 0.0433 0.0155 -0.0074 -0.0206
-0.0000 0.0359 -0.0033 -0.0079 0.0004 -0.0091 0.0373
Columns 4,726 through 4,740
 -0.0126 -0.0343 -0.0387 0.0219 0.0081 0.0294 0.0121 0.0045
0.0025 -0.0105 -0.0040 0.0117 0.0001 -0.0464 0.0065
  0.0081 -0.0171 0.0077 0.0125 0.0071 0.0072 0.0101
  0.0062 -0.0106 0.0108 -0.0115 0.0005 0.0423 0.0040
 Columns 4,741 through 4,755
  0.0277 -0.0005 -0.0157 -0.0027 0.0142 0.0093 -0.0227 -0.0058
0.0001 0.0288 0.0194 -0.0125 0.0045 -0.0004 0.0030
 -0.0214 -0.0211 0.0125 -0.0145 0.0107 0.0136 -0.0193 0.0151
-0.0239 -0.0162 -0.0079 -0.0067 -0.0078 -0.0324 -0.0056
 -0.0400 -0.0262 0.0193 -0.0224 0.0021 0.0066 0.0048 0.0321
-0.0391 -0.0313 -0.0432 0.0162 -0.0100 -0.0373 -0.0020
Columns 4,756 through 4,770
  0.0354 0.0162 0.0051 0.0233 0.0527 0.0297 -0.0141 -0.0330
-0.0199 0.0068 0.0018 -0.0131 -0.0228 0.0161 -0.0265
  0.0179 0.0293 -0.0141 0.0238 0.0216 0.0351 0.0168 -0.0336
-0.0168 0.0346 0.0030 0.0195 0.0128 0.0452 -0.0582
 -0.0085 0.0106 -0.0104 0.0173 -0.0202 0.0195 0.0221 -0.0119
-0.0150 0.0376 -0.0067 0.0238 0.0238 0.0269 -0.0368
Columns 4,771 through 4,785
  0.0360 -0.0096 0.0016 -0.0319 0.0225 -0.0534 0.0023
-0.0373 -0.0080 -0.0007 -0.0057 0.0347 0.0270 0.0260
  -0.0045 -0.0174 -0.0319 -0.0090 0.0449 0.0134 0.0162
0.0041 -0.0167 -0.0326 -0.0084 -0.0001 -0.0071 0.0083
 -0.0382 -0.0183 -0.0366 0.0244 0.0386 0.0790 0.0107 0.0341
0.0515 -0.0170 -0.0378 -0.0054 -0.0205 -0.0368 -0.0048
```

Columns 4,786 through 4,800

-0.0024 -0.0024 -0.0082 -0.0287 -0.0156 -0.0584 -0.0295 0.0182 -0.0292 0.0364 0.0099 0.0230 -0.0019 -0.0506	
-0.0157 -0.0024 0.0088 -0.0186 -0.0094 0.0021 -0.0191 0.0305 0.0418 0.0306 0.0161 0.0056 -0.0106 0.0017	-0.0122
	0.0074
0.0244 0.0662 0.0077 0.0094 -0.0118 -0.0220 0.0422	
Columns 4,801 through 4,815	
0.0014 0.0060 -0.0230 0.0176 -0.0141 -0.0048 0.0065 -0.0370 0.0167 -0.0096 -0.0470 -0.0185 -0.0104 -0.0386	-0.0038
-0.0139 -0.0328 0.0067 -0.0030 0.0004 -0.0104 -0.0365	-0.0394
0.0078	-0.0466
0.0470 0.0618 0.0315 0.0149 0.0080 -0.0006 0.0615	
Columns 4,816 through 4,830	
0.0387 -0.0244 0.0273 0.0289 0.0058 -0.0084 0.0380	-0.0249
0.0013 0.0150 0.0068 0.0138 0.0151 0.0068 0.0075	0,02.15
-0.0028 -0.0030 -0.0292 0.0175 0.0022 -0.0168 0.0198	-0.0294
0.0022 -0.0033 0.0144 0.0051 -0.0013 -0.0230 -0.0233 -0.0284 0.0216 -0.0721 -0.0082 -0.0065 -0.0185 -0.0135	-0.0136
0.0006 -0.0256 -0.0099 -0.0145 -0.0184 -0.0256 -0.0244	
Columns 4,831 through 4,845	
0.0069 0.0038 0.0092 -0.0024 -0.0455 -0.0120 0.0072	-0.0046
0.0106 -0.0028 0.0142 -0.0333 0.0142 -0.0062 -0.0172	0.0010
0.0069 -0.0121 -0.0089 -0.0164 -0.0102 0.0102 0.0341	0.0351
0.0289	0.0381
0.0256 0.0017 -0.0223 0.0378 -0.0271 -0.0307 0.0720	0.0301
Columns 4,846 through 4,860	
0.0276	0 0100
0.0079 0.0083 0.0223 -0.0539 0.0448 0.0019 -0.0040	0.0190
0.0130 -0.0033 0.0054 0.0034 -0.0433 -0.0330 -0.0013	0.0114
-0.0348 -0.0119 -0.0030 0.0035 -0.0355 0.0126 0.0270 -0.0081 -0.0340 0.0211 0.0113 -0.0542 -0.0100 0.0051	0 0031
-0.0438 -0.0221 -0.0253 0.0591 -0.0818 0.0182 0.0272	0.0031
Columns 4,861 through 4,875	
0.0137 0.0090 0.0078 -0.0260 0.0071 -0.0136 -0.0356	0 0063
0.0005 0.0340 0.0320 0.0070 0.0305 0.0466 0.0033	
-0.0446 0.0149 0.0429 0.0026 0.0213 -0.0114 -0.0037	-0.0191
-0.0076 -0.0054 -0.0189 0.0259 0.0001 0.0309 0.0081 -0.0707 0.0120 0.0509 0.0235 0.0236 0.0005 0.0320	0 0212
-0.0193 -0.0345 -0.0016 0.0155 0.0291 0.0323 0.0053	-0.0213
Columns 4,876 through 4,890	
0.0021 0.0228 0.0246 -0.0042 0.0047 -0.0165 0.0242	0 0000
0.0021 0.0228 0.0246 -0.0042 0.0047 -0.0165 0.0242 0.0231 0.0208 -0.0018 -0.0075 -0.0296 -0.0187 -0.0091	פטטט. ט
-0.0299 -0.0259 -0.0301 0.0135 -0.0100 0.0118 -0.0179	-0.0188

```
0.0065 0.0112 -0.0012 0.0013 -0.0172 0.0320 0.0017
 -0.0413 -0.0364 -0.0558 0.0258 -0.0185 0.0249 -0.0523 -0.0118
-0.0121 -0.0206 -0.0060 0.0138 0.0038 0.0571 -0.0059
 Columns 4,891 through 4,905
  0.0277 -0.0665 0.0071 0.0247 -0.0175 0.0108 0.0288 0.0225
0.0099 0.0290 -0.0048 0.0006 0.0091 0.0171 0.0197
  -0.0005 -0.0320 -0.0225 0.0171 -0.0300 -0.0189 0.0128
-0.0200 0.0297 -0.0337 0.0028 -0.0203 -0.0407 -0.0008
                                                    -0.0529
-0.0108 -0.0213 -0.0001 -0.0189 -0.0052 -0.0171 0.0175
Columns 4,906 through 4,920
  0.0002 -0.0065 -0.0117 0.0115 0.0014 0.0136 0.0379
-0.0170 -0.0190 -0.0266 -0.0360 -0.0212 -0.0437 -0.0019
 -0.0033 -0.0261 0.0200 -0.0004 0.0052 -0.0065 -0.0142
0.0001 -0.0394 0.0255 -0.0176 0.0171 -0.0098 -0.0557 0.0273
0.0385 0.0332 -0.0273 0.0308 0.0204 0.0331 0.0381
Columns 4,921 through 4,935
 -0.0087 -0.0185 0.0060 -0.0096 -0.0165 0.0326 0.0237
-0.0042 0.0304 -0.0140 -0.0164 0.0268 -0.0116 0.0257
 0.0168 0.0207 -0.0329 -0.0075 -0.0500 0.0061 0.0195
  0.0034 0.0173 0.0482 0.0253 0.0249 0.0103 -0.0652
                                                   0.0276
0.0364 0.0035 -0.0339 0.0300 -0.0734 0.0128 -0.0086
Columns 4,936 through 4,950
 -0.0085 -0.0121 0.0142 -0.0005 0.0154 -0.0181 -0.0137 -0.0029
0.0109 0.0124 -0.0329 -0.0325 -0.0004 -0.0017 0.0150
 -0.0140 0.0423 -0.0025 -0.0079 0.0097 0.0081 0.0223 -0.0061
0.0007 -0.0141 -0.0252 -0.0349 0.0303 -0.0032 -0.0404
  -0.0105 0.0485 -0.0062 0.0112 0.0069 0.0322 0.0445
0.0060 -0.0099 -0.0056 -0.0097 0.0464 -0.0026 -0.0584
Columns 4,951 through 4,965
  0.0034 -0.0222 -0.0453 -0.0106 -0.0137 -0.0136 0.0626 -0.0001
0.0399 -0.0045 -0.0076 -0.0009 0.0091 0.0321 -0.0205
  -0.0152 -0.0186 0.0225 -0.0040 -0.0104 -0.0106 0.0391
0.0038 -0.0023 0.0060 -0.0435 0.0038 0.0156 -0.0043
 -0.0412 0.0037 0.0629 0.0015 -0.0118 0.0084 0.0051 -0.0093
-0.0366  0.0064  0.0066  -0.0369  -0.0049  -0.0222  0.0159
Columns 4,966 through 4,980
  0.0202 -0.0128 -0.0177 -0.0107 0.0087 0.0179 -0.0080
-0.0349 0.0196 0.0316 0.0003 -0.0184 -0.0121 0.0123
  0.0187 -0.0212 0.0050 -0.0109 0.0151 0.0222 0.0154
-0.0100 0.0044 0.0404 -0.0454 -0.0523 0.0176 0.0294
  0.0055 -0.0176 0.0243 0.0007 -0.0016 0.0169 0.0111 0.0269
0.0160 -0.0171 0.0198 -0.0427 -0.0524 0.0217 0.0081
```

Columns 4,981 through 4,995

 $0.0180 \qquad 0.0059 \qquad -0.0230 \qquad -0.0261 \qquad 0.0360 \qquad 0.0090 \qquad 0.0041 \qquad -0.0200$ -0.0233 -0.0048 -0.0164 0.0074 -0.0151 -0.0333 0.0345 -0.0133 0.0317 0.0460 -0.0094 0.0244 -0.0084 -0.0238 -0.0094 0.0331 -0.0155 -0.0015 0.0147 0.0047 0.0082 -0.0404 0.0301 0.0710 0.0034 0.0220 -0.0162 -0.0465 0.0326 0.0079 0.0298 -0.0076 0.0040 0.0335 0.0380 -0.0274 Columns 4,996 through 5,010 0.0067 -0.0025 0.0156 -0.0126 -0.0149 0.0111 0.0337 0.0178 -0.0015 0.0155 -0.0120 0.0174 0.0032 0.0140 -0.0204 -0.0418 -0.0071 -0.0474 -0.0147 0.0170 0.0196 0.0064 0.0200 -0.0011 0.0064 0.0267 0.0298 -0.0076 -0.0440 -0.0481 -0.0087 -0.0732 -0.0206 0.0335 0.0043 -0.0362 -0.0136 0.0258 -0.0165 0.0256 0.0154 0.0345 -0.0197 -0.0312 Columns 5,011 through 5,025 0.0547 -0.0162 -0.0077 0.0047 0.0109 0.0119 0.0021 -0.0411 -0.0632 -0.0028 -0.0167 -0.0037 -0.0115 -0.0050 -0.0249 -0.0158 -0.0324 0.0110 -0.0336 0.0101 0.0081 -0.0378 -0.0462 -0.0376 0.0050 -0.0269 0.0235 -0.0174 0.0175 -0.0581 0.0174 -0.0368 0.0082 -0.0625 0.0101 0.0067 -0.0341 0.0031 0.0291 -0.0281 0.0348 -0.0131 0.0260 Columns 5,026 through 5,040 0.0529 0.0245 0.0171 -0.0093 -0.0119 0.0227 0.0552 0.0161 -0.0386 0.0050 0.0034 0.0095 -0.0565 0.0076 0.0060 $0.0180 \qquad 0.0100 \qquad 0.0311 \qquad 0.0469 \qquad 0.0252 \quad -0.0114 \qquad 0.0222 \quad -0.0380$ -0.0522 -0.0167 -0.0404 -0.0203 0.0297 -0.0159 0.0574 -0.0238 -0.0083 0.0254 0.0597 0.0326 -0.0135 -0.0215 -0.0668 -0.0251 -0.0139 -0.0400 -0.0271 0.0885 -0.0298 0.0545 Columns 5,041 through 5,055 0.0093 -0.0285 -0.0097 -0.0432 -0.0127 -0.0043 0.0298 -0.0158 -0.0155 -0.0198 0.0376 0.0030 0.0143 0.0385 0.0267 0.0281 0.0186 -0.0153 -0.0293 -0.0084 0.0042 -0.0268 -0.0168 -0.0350 0.0150 0.0513 0.0466 -0.0314 0.0083 -0.0078 0.0389 0.0454 -0.0179 -0.0097 0.0117 0.0095 -0.0534 -0.0005 Columns 5,056 through 5,070

Columns 5,071 through 5,085

 $0.0124 \quad -0.0171 \quad 0.0054 \quad 0.0046 \quad 0.0072 \quad -0.0109 \quad -0.0042 \quad -0.0111$

```
-0.0245 -0.0243 0.0232 -0.0410 0.0249 0.0403 -0.0329
 -0.0089 -0.0359 -0.0175 0.0114 -0.0015 -0.0029 -0.0102
-0.0047 -0.0224 -0.0233 -0.0056 0.0185 -0.0039 0.0041
 -0.0247 -0.0222 -0.0220 0.0220 -0.0117 0.0090 -0.0033 0.0367
0.0191 -0.0047 -0.0544 0.0313 -0.0066 -0.0396 0.0234
 Columns 5,086 through 5,100
  0.0319 0.0361 -0.0007 -0.0245 -0.0212 -0.0081 0.0156
-0.0170 -0.0300 -0.0130 -0.0256 0.0301 -0.0012 -0.0180
  0.0207 \quad -0.0136 \quad -0.0181 \quad 0.0162 \quad -0.0052 \quad -0.0124 \quad -0.0221 \quad -0.0049
0.0122 -0.0095 0.0263 -0.0214 0.0071 0.0201 -0.0041
  0.0050 -0.0520 -0.0190 0.0534 0.0129 0.0016 -0.0437 -0.0212
Columns 5,101 through 5,115
 -0.0223 -0.0056 -0.0018 -0.0150 0.0167 -0.0148 0.0094 -0.0139
0.0131 0.0155 0.0084 -0.0373 0.0047 -0.0154 0.0325
 -0.0351 -0.0235 0.0064 -0.0123 0.0629 -0.0259 0.0092 -0.0033
-0.0174   0.0440   0.0111   0.0267   0.0132   -0.0727   -0.0262
 -0.0065 -0.0154 0.0087 -0.0052 0.0534 -0.0085 0.0139 0.0064
-0.0202 0.0506 -0.0012 0.0595 0.0078 -0.0582 -0.0654
Columns 5,116 through 5,130
 -0.0149 0.0064 -0.0097 0.0049 0.0129 0.0186 0.0149 0.0249
0.0236 -0.0031 -0.0343 0.0165 0.0214 0.0020 0.0237
  0.0118 -0.0173 0.0088 -0.0048 0.0158 0.0094 0.0168

      -0.0247
      -0.0058
      -0.0263
      0.0371
      0.0401
      0.0004
      0.0313

      0.0321
      -0.0245
      0.0215
      -0.0132
      0.0298
      -0.0011
      0.0084

Columns 5,131 through 5,145
 0.0241 0.0093 0.0221 -0.0363 -0.0452 -0.0362 0.0017
  0.0019 -0.0115 0.0144 0.0420 0.0103 0.0103 -0.0311
-0.0040 0.0060 0.0281 -0.0218 0.0263 -0.0238 -0.0042
  0.0381 -0.0093 -0.0073 0.0195 -0.0046 0.0061 0.0101 0.0227
-0.0291 -0.0086 0.0084 0.0057 0.0673 0.0078 -0.0110
Columns 5,146 through 5,160
  -0.0022 0.0296 0.0011 0.0318 -0.0205 0.0150 0.0228
  0.0562 0.0423 -0.0196 -0.0406 0.0168 0.0119 -0.0225
-0.0498 -0.0179 0.0510 -0.0232 -0.0249 0.0150 -0.0214
Columns 5,161 through 5,175
  0.0462 -0.0036 -0.0253 -0.0497 -0.0076 0.0293 0.0156
                                                    -0.0489
-0.0076 -0.0352 -0.0363 -0.0101 -0.0033 0.0197 0.0103
-0.0377 0.0015 0.0026 -0.0106 0.0244 -0.0393 -0.0020
 -0.0449 -0.0411 -0.0177 0.0239 0.0077 -0.0058 0.0060 -0.0084
```

Columns 5,266 through 5,280

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-0.0274 -0.0109 0.0073 0.0077 0.0168 -0.0543 -0.0181
 Columns 5,176 through 5,190
  -0.0092 -0.0204 0.0159 0.0331 0.0021 -0.0052 0.0108 -0.0332
-0.0027 0.0320 -0.0359 -0.0041 0.0101 -0.0088 0.0277
  0.0037 -0.0249 0.0085 0.0362 -0.0168 -0.0177 -0.0162 0.0103
-0.0209 -0.0021 0.0362 -0.0010 -0.0151 0.0230 -0.0132
  0.0142 \quad -0.0148 \quad -0.0012 \quad 0.0058 \quad -0.0145 \quad -0.0230 \quad -0.0145 \quad 0.0390
-0.0147 -0.0188 0.0795 -0.0145 -0.0250 0.0342 -0.0408
Columns 5,191 through 5,205
 -0.0131 0.0058 -0.0446 -0.0269 0.0019 0.0172 -0.0159 0.0001
0.0131 0.0349 0.0248 -0.0139 -0.0048 0.0066 -0.0131
 -0.0081 0.0421 0.0427 -0.0106 0.0093 0.0163 0.0069 -0.0118
-0.0017 -0.0185 -0.0674 -0.0100 -0.0199 -0.0056 0.0497
 -0.0053 0.0413 0.0843 0.0147 0.0173 -0.0057 0.0174 -0.0190
-0.0124 -0.0560 -0.1136 -0.0030 -0.0108 -0.0132 0.0625
Columns 5,206 through 5,220
  0.0167 0.0134 0.0273 -0.0370 -0.0195 0.0059 0.0093
-0.0005 0.0442 -0.0027 -0.0057 0.0008 0.0146 -0.0250
  0.0020 -0.0150 -0.0084 -0.0191 -0.0131 -0.0238 -0.0110
  0.0302 -0.0120 -0.0448 0.0363 -0.0348 -0.0126 -0.0270 0.0176
0.0069 -0.0524 0.0107 -0.0178 -0.0063 -0.0504 0.0222
 Columns 5,221 through 5,235
 -0.0172 0.0157 0.0018 0.0101 -0.0003 -0.0239 -0.0018 -0.0049
-0.0421 0.0029 -0.0181 0.0189 0.0057 -0.0069 -0.0230
  0.0416 -0.0122 -0.0007 -0.0318 0.0221 0.0152 -0.0059 -0.0099
-0.0313 -0.0189 -0.0037 0.0013 0.0181 -0.0289 -0.0008
Columns 5,236 through 5,250
  -0.0131 -0.0090 0.0238 -0.0178 0.0239 0.0269 0.0064
-0.0064 -0.0145 0.0009 0.0098 0.0158 -0.0202 -0.0330
 -0.0092 0.0008 0.0375 -0.0254 0.0046 0.0410 0.0095
                                                    -0.0173
0.0355 -0.0739 -0.0132 0.0477 0.0124 0.0252 -0.0136
 0.0613 -0.0786 -0.0174 0.0540 -0.0012 0.0545 0.0076
 Columns 5,251 through 5,265
  -0.0029 0.0201 0.0419 0.0126 -0.0062 0.0125 0.0079
-0.0048 -0.0129 -0.0051 0.0395 -0.0323 0.0002 0.0048
  0.0084 0.0248 0.0568 -0.0103 0.0315 -0.0113 0.0055
-0.0190 0.0024 -0.0312 -0.0431 -0.0090 0.0029 0.0383
  0.0274 0.0155 0.0249 -0.0277 0.0400 -0.0241 0.0118
-0.0149 -0.0014 -0.0232 -0.0767 0.0176 -0.0011 0.0461
```

```
-0.0396 -0.0114 -0.0288 0.0002 -0.0155 -0.0113 0.0096 0.0042
0.0451 -0.0243 -0.0010 -0.0100 0.0059 0.0494 0.0185
  0.0563 -0.0432 -0.0194 0.0098 0.0192 0.0608 0.0107
 Columns 5,281 through 5,295
 0.0159 -0.0025 -0.0187 -0.0014 0.0262 0.0386 0.0280
 -0.0339 -0.0401 0.0180 -0.0058 -0.0369 -0.0004 -0.0493
-0.0009 0.0040 -0.0021 0.0204 -0.0019 0.0370 0.0101
 -0.0337 -0.0696 -0.0083 0.0025 -0.0585 0.0024 -0.0807
                                                 0.0222
-0.0198 0.0152 -0.0019 0.0259 -0.0250 0.0130 -0.0153
Columns 5,296 through 5,310
 -0.0190 -0.0022 -0.0033 0.0072 0.0209 -0.0216 -0.0301 0.0094
-0.0300 0.0332 -0.0191 -0.0107 0.0017 0.0287 -0.0033
  0.0249 0.0153 -0.0034 0.0266 -0.0166 0.0112 0.0209 -0.0211
0.0161 0.0041 -0.0196 0.0029 0.0173 0.0563 0.0198
  0.0465 0.0274 0.0004 0.0107 -0.0383 0.0312 0.0309
0.0493 -0.0315 -0.0130 0.0165 0.0204 0.0369 0.0249
Columns 5,311 through 5,325
  -0.0126 0.0372 -0.0123 0.0165 -0.0299 -0.0080 -0.0197
  0.0021 -0.0279 -0.0176 0.0169 -0.0249 0.0226 0.0175
-0.0055 -0.0090 -0.0128 -0.0278 -0.0224 0.0258 -0.0449
 -0.0021 -0.0238 -0.0239 0.0273 -0.0350 -0.0036 0.0358
0.0114 -0.0413 -0.0039 -0.0497 -0.0044 0.0448 -0.0245
Columns 5,326 through 5,340
 0.0027 -0.0186 0.0199 0.0097 -0.0103 -0.0112 0.0186
 -0.0337 -0.0026 0.0224 -0.0346 -0.0029 0.0376 -0.0006
                                                 -0.0489
-0.0067 -0.0115 -0.0078 -0.0207 -0.0264 0.0314 -0.0072
  0.0030 -0.0314 0.0302 -0.0028 -0.0023 0.0382 -0.0148
-0.0014 0.0130 -0.0286 -0.0374 -0.0256 0.0353 -0.0264
Columns 5,341 through 5,355
 -0.0021 -0.0000 -0.0417 -0.0008 -0.0127 0.0212 0.0117 0.0387
-0.0356 -0.0217 -0.0157 0.0104 0.0232 0.0241 0.0235
  0.0035 -0.0068 0.0165 -0.0037 -0.0453 -0.0015 -0.0320
  0.0098 \quad -0.0054 \quad -0.0255 \quad -0.0217 \quad 0.0075 \quad -0.0078 \quad -0.0793 \quad -0.0323
0.0441 0.0052 0.0465 -0.0066 -0.0768 -0.0245 -0.0559
Columns 5,356 through 5,370
  0.0352 -0.0121 0.0233 0.0065 0.0069 -0.0037 -0.0202 0.0052
0.0262 -0.0062 -0.0020 0.0076 -0.0111 -0.0290 -0.0135
 -0.0167 0.0059 0.0081 -0.0155 0.0172 -0.0416 0.0105
0.0277 -0.0494 0.0208 -0.0058 -0.0059 -0.0147 0.0002
```

Columns 5,461 through 5,475

```
-0.0652 0.0197 -0.0111 -0.0095 0.0202 -0.0551 0.0361 0.0299
-0.0032 -0.0512 0.0268 -0.0159 0.0009 0.0110 0.0092
Columns 5,371 through 5,385
 -0.0433 -0.0496 -0.0291 -0.0069 -0.0251 0.0086 0.0163 -0.0236
-0.0018 0.0024 0.0400 0.0124 0.0267 0.0111 -0.0396
 -0.0263 -0.0234 -0.0065 0.0127 0.0177 -0.0001 0.0244
-0.0179 0.0032 -0.0087 0.0177 0.0192 -0.0113 -0.0326
 -0.0040 0.0154 0.0271 0.0198 0.0506 -0.0311 0.0252 -0.0011
-0.0111 -0.0022 -0.0512 0.0184 -0.0060 -0.0238 -0.0159
Columns 5,386 through 5,400
  0.0145 -0.0298 0.0122 -0.0497 -0.0174 0.0200 -0.0281
-0.0079 -0.0085 0.0379 -0.0281 0.0309 -0.0068 0.0050 -0.0032
-0.0075 -0.0083 0.0097 0.0310 0.0234 -0.0192 -0.0277
 -0.0251 0.0085 0.0224 0.0111 0.0520 -0.0293 0.0199 0.0425
-0.0609 -0.0181 -0.0161 0.0378 0.0411 -0.0153 -0.0276
 Columns 5,401 through 5,415
 -0.0118 0.0121 0.0120 -0.0359 0.0148 -0.0018 -0.0173 0.0265
0.0071 -0.0264 -0.0100 -0.0078 -0.0134 -0.0687 -0.0020
  0.0030 0.0014 -0.0592 -0.0197 0.0463 0.0249 -0.0099
-0.0221 -0.0216 0.0000 -0.0396 0.0127 0.0099 -0.0126
  0.0097 -0.0201 -0.0796 -0.0041 0.0354 0.0553 0.0106 -0.0326
-0.0146 -0.0070 0.0039 -0.0514 0.0337 0.0726 -0.0111
 Columns 5,416 through 5,430
 -0.0323 -0.0181 0.0170 0.0123 0.0255 0.0301 0.0040 0.0258
-0.0116 0.0048 0.0149 0.0059 0.0054 -0.0283 0.0050
 -0.0118 0.0259 0.0070 0.0347 0.0030 -0.0081 -0.0319 -0.0070
0.0179 0.0166 0.0001 0.0220 -0.0246 0.0033 -0.0130
 Columns 5,431 through 5,445
  0.0267 -0.0051 -0.0056 -0.0145 0.0051 0.0135 -0.0073 -0.0081
-0.0083 -0.0437 0.0178 0.0389 0.0031 0.0137 -0.0006
-0.0330 -0.0129 0.0336 0.0106 0.0100 -0.0418 -0.0662
Columns 5,446 through 5,460
 -0.0363 -0.0229 -0.0145 -0.0460 -0.0357 -0.0029 0.0352
0.0247 -0.0008 0.0019 -0.0277 0.0124 -0.0187 -0.0085
 -0.0444 -0.0218 -0.0003 0.0352 -0.0013 -0.0117 0.0248
-0.0481 -0.0264 -0.0133 -0.0158 -0.0440 -0.0264 -0.0232
 -0.0196 -0.0064 -0.0015 0.0818 0.0233 -0.0225 -0.0073 -0.0027
-0.0714 -0.0159 -0.0116 0.0138 -0.0680 -0.0204 -0.0191
```

0.0139	
0.0279 -0.0111 -0.0214 -0.0085 -0.0020 -0.0088 0.0258 0.0027 -0.0127 -0.0418 -0.0082 0.0206 0.0011 -0.0127	
0.0197 -0.0363 -0.0006 0.0324 0.0159 0.0048 0.0015 0.0330 0.0050 -0.0388 -0.0140 0.0324 -0.0194 -0.0408	-0.0169
Columns 5,476 through 5,490	
0.0419 0.0253 0.0222 -0.0146 0.0177 -0.0073 0.0421 0.0131 -0.0235 -0.0227 -0.0613 -0.0389 -0.0463 0.0100	0.0142
0.0516 0.0124 0.0106 0.0169 -0.0121 0.0342 0.0022 0.0212 -0.0041 -0.0476 -0.0033 0.0248 0.0080 0.0070	0.0044
0.0175 0.0065 -0.0064 0.0411 -0.0155 0.0510 -0.0428 0.0019 0.0121 -0.0376 0.0549 0.0648 0.0377 -0.0013	-0.0082
Columns 5,491 through 5,505	
0.0564 -0.0102 0.0068 -0.0094 -0.0493 0.0675 -0.0056 0.0290 -0.0142 -0.0258 0.0223 0.0049 -0.0222 0.0010	
-0.0326 0.0239 0.0043 -0.0113 0.0108 0.0140 -0.0910 -0.0134 -0.0321 -0.0024 0.0193 -0.0260 0.0347 -0.0055	-0.0342
-0.0873 0.0358 0.0030 -0.0170 0.0450 -0.0475 -0.1012 -0.0391 -0.0239 0.0178 0.0133 -0.0428 0.0680 0.0039	-0.0760
Columns 5,506 through 5,520	
-0.0307 -0.0361 -0.0209 -0.0613 -0.0111 -0.0162 0.0040 0.0016 0.0126 -0.0112 0.0560 -0.0420 -0.0105 -0.0081	-0.0012
-0.0189 -0.0272 -0.0119 -0.0083 -0.0241 -0.0082 0.0282 -0.0382 0.0210 -0.0155 0.0192 -0.0142 -0.0028 -0.0020	0.0273
-0.0002 -0.0048 0.0151 0.0436 -0.0089 0.0061 0.0357 -0.0386 0.0212 -0.0106 -0.0267 0.0102 0.0114 0.0043	0.0394
Columns 5,521 through 5,535	
-0.0122 0.0130 0.0165 -0.0252 -0.0292 -0.0183 -0.0001 -0.0210 -0.0187 -0.0138 -0.0165 -0.0060 -0.0116 0.0140	
0.0167 0.0167 -0.0182 -0.0399 -0.0144 0.0140 0.0008 -0.0113 -0.0223 0.0558 -0.0079 -0.0144 -0.0075 0.0201	0.0058
0.0333 0.0056 -0.0377 -0.0278 0.0088 0.0256 -0.0052 0.0073 -0.0104 0.0833 0.0027 -0.0220 0.0022 0.0247	-0.0250
Columns 5,536 through 5,550	
0.0088 0.0002 0.0049 -0.0094 -0.0004 0.0221 0.0113 0.0065 0.0188 -0.0358 -0.0253 0.0179 0.0081 0.0275	-0.0103
-0.0263 -0.0289 0.0022 0.0094 -0.0021 -0.0118 0.0173	0.0170
0.0341 -0.0179 0.0040 -0.0057 0.0072 0.0238 0.0060 -0.0550 -0.0368 -0.0105 -0.0009 -0.0075 -0.0306 0.0223	0.0237
0.0256 -0.0262 0.0416 0.0227 -0.0147 0.0360 -0.0037 Columns 5,551 through 5,565	
-0.0042 0.0128 0.0274 -0.0144 0.0336 0.0091 -0.0176	0.0342
-0.0130 -0.0169 -0.0009 0.0199 0.0271 -0.0087 0.0399 -0.0484 -0.0268 -0.0149 0.0041 0.0185 -0.0054 -0.0056	0.0190

```
0.0087 -0.0112 -0.0169 0.0265 0.0541 0.0139 0.0081
 -0.0561 -0.0419 -0.0448 0.0281 -0.0205 -0.0079 -0.0010 -0.0144
0.0258 -0.0073 -0.0206 0.0161 0.0481 0.0269 -0.0298
 Columns 5,566 through 5,580
  -0.0061 -0.0148 0.0156 -0.0263 -0.0219 0.0447 -0.0295
  0.0193 -0.0039 -0.0171 -0.0006 0.0072 -0.0108 -0.0152
  0.0281 -0.0046 -0.0172 0.0106 0.0205 -0.0197 0.0302 -0.0615
0.0179 0.0217 -0.0547 0.0346 0.0219 -0.0376 0.0207
Columns 5,581 through 5,595
 -0.0233 -0.0274 0.0021 -0.0122 -0.0205 0.0233 0.0221 0.0106
-0.0011 0.0199 -0.0051 -0.0066 -0.0217 -0.0173 -0.0086
  0.0228 -0.0289 -0.0059 -0.0118 -0.0132 0.0031 0.0114
0.0329 -0.0296 -0.0062 -0.0102 0.0053 -0.0164 -0.0476
  0.0359 \quad -0.0107 \quad 0.0002 \quad -0.0127 \quad 0.0103 \quad -0.0200 \quad -0.0230 \quad 0.0041
0.0319 -0.0498 -0.0017 0.0039 0.0247 0.0101 -0.0509
 Columns 5,596 through 5,610
  0.0094 -0.0080 -0.0060 0.0083 -0.0010 0.0054 -0.0050 0.0307
0.0174 -0.0266 0.0145 0.0471 0.0162 0.0416 0.0179
 -0.0080 -0.0476 -0.0325 -0.0045 -0.0142 0.0151 0.0012 -0.0107
-0.0174 -0.0504 -0.0409 -0.0062 0.0063 0.0133 0.0011 -0.0394
Columns 5,611 through 5,625
 -0.0158 -0.0135 -0.0221 0.0413 -0.0252 0.0284 -0.0479 0.0154
0.0213 -0.0573 -0.0144 -0.0469 0.0040 -0.0512 -0.0146
  Columns 5,626 through 5,640
  0.0060 0.0242 -0.0319 -0.0093 0.0045 -0.0247 -0.0473
0.0112 0.0299 -0.0146 0.0087 -0.0055 -0.0050 -0.0203
 -0.0225 -0.0172 -0.0009 -0.0140 0.0261 0.0326 -0.0161
-0.0021 0.0234 0.0033 -0.0318 0.0396 -0.0356 -0.0000
 -0.0294 -0.0603 0.0260 -0.0039 0.0211 0.0669 0.0187
-0.0081 -0.0031 0.0224 -0.0373 0.0467 -0.0447 0.0187
Columns 5,641 through 5,655
  -0.0050 0.0023 -0.0262 -0.0030 0.0450 -0.0260 -0.0077
-0.0100 -0.0107 -0.0382 -0.0046 0.0043 -0.0251 0.0110
  0.0387 0.0230 0.0080 -0.0092 0.0043 0.0310 -0.0075
-0.0084 -0.0024 -0.0171 0.0101 -0.0078 -0.0146 0.0355
  0.0437 0.0307 0.0347 -0.0124 -0.0414 0.0498 0.0019
0.0024 0.0143 0.0075 0.0123 -0.0217 0.0114 0.0267
```

Columns 5,656 through 5,670

0.0151 -0.0036 -0.0123 0.0228 -0.0126 0.0122 -0.0327 -0.0032 -0.0154 -0.0502 0.0135 0.0133 -0.0143 -0.0300 -0.0207 0.0077 0.0093 -0.0212 -0.0106 -0.0077 -0.0484	
-0.0184 0.0031 -0.0051 -0.0162 0.0077 0.0004 -0.0431 -0.0389 0.0257 0.0293 -0.0312 0.0117 -0.0014 -0.0101 -0.0189 0.0046 0.0396 -0.0259 0.0030 0.0069 -0.0331	0.0496
Columns 5,671 through 5,685	
0.0269 0.0190 0.0270 0.0246 0.0007 0.0162 0.0465 0.0144 0.0139 0.0143 -0.0085 0.0078 -0.0066 -0.0028	-0.0002
0.0291 0.0326 -0.0076 0.0211 -0.0270 0.0164 -0.0003 -0.0287 0.0340 0.0152 -0.0040 0.0350 0.0189 -0.0171	0.0276
0.0071 0.0219 -0.0401 0.0052 -0.0301 0.0050 -0.0446 -0.0523 0.0133 0.0157 -0.0085 0.0329 0.0221 -0.0136	0.0227
Columns 5,686 through 5,700	
0.0620 0.0184 0.0172 -0.0156 0.0100 0.0056 -0.0128	0.0111
-0.0255 -0.0092 0.0188 -0.0076 -0.0168 0.0008 0.0261 0.0223 -0.0472 -0.0228 -0.0318 -0.0107 -0.0028 -0.0052	-0.0036
-0.0372 0.0127 0.0591 -0.0338 -0.0415 -0.0029 -0.0174 -0.0236 -0.0661 -0.0492 -0.0264 -0.0184 0.0041 0.0108	-0.0151
Columns 5,701 through 5,715	
-0.0162 0.0261 -0.0218 -0.0037 -0.0313 -0.0187 0.0287 -0.0127 0.0016 -0.0055 0.0052 -0.0604 0.0124 0.0247	
-0.0074	
0.0114 -0.0082 0.0546 -0.0442 0.0566 0.0510 0.0124 0.0387 -0.0074 0.0001 0.0633 -0.0099 -0.0397 0.0104	0.0787
Columns 5,716 through 5,730	
-0.0051 -0.0040 -0.0263 -0.0227 0.0205 -0.0475 -0.0266 -0.0090 -0.0317 -0.0327 -0.0016 0.0094 0.0410 0.0348	-0.0163
0.0014 -0.0227 0.0147 -0.0144 -0.0161 -0.0157 -0.0217 -0.0219 -0.0109 0.0051 -0.0069 0.0071 -0.0088 0.0186	0.0107
0.0085 -0.0138	0.0187
Columns 5,731 through 5,745	
0.0268	
-0.0000 -0.0204 -0.0365 0.0400 0.0182 0.0195 0.0181 -0.0159 0.0086 0.0241 -0.0097 -0.0470 0.0108 -0.0023	
-0.0227 -0.0437 0.0300 0.0004 0.0163 -0.0299 0.0134 -0.0358 -0.0058 0.0560 0.0095 -0.0334 0.0382 0.0153 -0.0456 -0.0310 0.0623 -0.0333 -0.0043 -0.0647 -0.0037	0.0286
Columns 5,746 through 5,760	
0.0439 -0.0370 0.0151 0.0286 -0.0248 -0.0476 0.0337	

0.0320 -0.0019 0.0010 -0.0113 -0.0047 -0.0031 -0.0062

0.0386 0.0172 0.0109 0.0082 -0.0080 -0.0185 -0.0067 -0.0028 -0.0486 0.0020 -0.0113 -0.0020 0.0369 0.0202 0.0164 0.0509 -0.0035 -0.0114 0.0059 0.0046 -0.0321	
-0.0160 -0.0567 -0.0002 -0.0154 -0.0037 0.0411 0.0216	
Columns 5,761 through 5,775	
0.0119 -0.0151 0.0048 0.0060 -0.0217 0.0380 -0.0005 0.0038 0.0091 -0.0118 0.0186 0.0008 0.0111 0.0008	
0.0499 0.0050 0.0122 -0.0017 -0.0248 -0.0349 0.0070 -0.0144 -0.0058 -0.0052 -0.0165 -0.0013 0.0002 0.0071	
0.0501 0.0206 0.0012 0.0024 -0.0232 -0.0725 0.0131 -0.0112 -0.0162 0.0162 -0.0352 -0.0217 -0.0119 -0.0017	0.0124
Columns 5,776 through 5,790	
-0.0205 0.0016 0.0307 -0.0259 0.0206 0.0120 0.0260 0.0083 0.0346 0.0166 -0.0587 0.0095 0.0184 0.0090	-0.0143
-0.0014 0.0152 -0.0534 -0.0227 0.0099 0.0192 0.0390 -0.0095 0.0140 0.0198 -0.0080 0.0303 -0.0060 0.0046	-0.0194
0.0096 0.0098 -0.0919 0.0012 0.0028 0.0194 0.0288 -0.0150 -0.0009 0.0090 0.0406 0.0283 -0.0148 -0.0081	-0.0115
Columns 5,791 through 5,805	
-0.0159	-0.0275
0.0006 -0.0296 0.0135 0.0398 -0.0401 -0.0156 -0.0346 -0.0037 0.0136 -0.0322 -0.0430 0.0307 0.0031 -0.0127	
0.0093 -0.0363 0.0258 0.0458 -0.0436 -0.0342 -0.0172 -0.0096 -0.0096 0.0026 -0.0164 0.0523 0.0008 0.0142	0.0250
Columns 5,806 through 5,820	
-0.0202 -0.0004 -0.0009 0.0332 0.0103 0.0227 -0.0340 0.0051 0.0196 -0.0362 0.0022 -0.0130 -0.0245 -0.0152	-0.0202
0.0236 0.0062 0.0025 0.0047 0.0004 -0.0264 -0.0167 0.0143 0.0175 -0.0035 0.0074 0.0048 0.0222 0.0117	
0.0479 0.0113 0.0030 -0.0061 -0.0097 -0.0533 0.0185 0.0208 -0.0171 0.0215 0.0044 0.0117 0.0445 0.0268	0.0015
Columns 5,821 through 5,835	
-0.0167 0.0383 0.0369 0.0053 -0.0087 0.0421 0.0011 -0.0192 0.0079 -0.0186 0.0047 -0.0198 0.0282 0.0232	0.0007
0.0148 -0.0016 -0.0002 -0.0442 -0.0027 0.0398 -0.0121 -0.0014 0.0097 -0.0341 0.0417 -0.0028 0.0135 -0.0124	
0.0450 -0.0326 -0.0494 -0.0596 0.0025 0.0184 -0.0207 0.0129 -0.0005 -0.0395 0.0448 0.0062 -0.0040 -0.0238	0.0008
Columns 5,836 through 5,850	
0.0012 0.0422 -0.0214 -0.0116 -0.0151 -0.0134 -0.0533 0.0122 -0.0255 -0.0260 0.0560 -0.0149 -0.0391 0.0027	0.0186
0.0351 0.0327 0.0073 0.0241 -0.0095 -0.0046 -0.0166	0.0389
-0.0420 -0.0460 -0.0073 -0.0399 0.0061 -0.0027 0.0076 0.0303 0.0623 0.0286 -0.0237 0.0092 0.0273 -0.0131	0.0262

Columns 5,851 through 5,865

-0.0039 -0.0200 0.0234 -0.0074 0.0138 0.0208 -0.0184 -0.0010 0.0464 -0.0175 -0.0051 0.0199 -0.0060 0.0379 0.0070 -0.0044 0.0098 -0.0218 -0.0014 -0.0425 0.0290 0.0212 0.0315 -0.0217 -0.0348 -0.0197 0.0032 -0.0208 -0.0274 0.0129 -0.0690 -0.0378 -0.0322 -0.0055 -0.0249 -0.0417 0.0058 Columns 5,866 through 5,880 -0.0174 -0.0073 0.0132 -0.0304 0.0483 0.0152 -0.0049 0.0049 0.0104 -0.0023 -0.0491 -0.0146 -0.0030 0.0052 0.0068 0.0098 0.0233 0.0307 -0.0174 0.0501 0.0031 -0.0069 0.0019 0.0138 -0.0499 -0.0270 -0.0092 0.0181 0.0163 0.0204 0.0220 0.0148 0.0521 -0.0646 0.0426 0.0067 Columns 5,881 through 5,895 -0.0187 -0.0000 -0.0059 0.0406 0.0140 0.0176 -0.0134 -0.0140 -0.0175 0.0115 -0.0078 0.0181 0.0067 0.0001 -0.0201 -0.0221 -0.0109 -0.0039 0.0229 0.0174 0.0029 -0.0144 0.0066 -0.0210 0.0096 0.0018 0.0504 -0.0064 -0.0014 -0.0125 -0.0116 -0.0064 0.0101 -0.0021 0.0140 -0.0072 0.0048 Columns 5,896 through 5,910 0.0001 0.0274 -0.0028 -0.0078 -0.0091 0.0333 0.0260 -0.0103 0.0009 0.0252 0.0003 0.0197 -0.0247 -0.0102 -0.0083 0.0007 -0.0066 -0.0430 -0.0281 -0.0238 -0.0023 -0.0190 0.0010 -0.0123 0.0158 0.0257 -0.0051 0.0133 0.0107 -0.0002 0.0016 -0.0139 -0.0674 -0.0466 -0.0041 -0.0019 -0.0248 Columns 5,911 through 5,925 0.0219 -0.0168 0.0204 -0.0000 0.0081 -0.0006 0.0218 0.0196 0.0232 0.0173 -0.0542 -0.0134 0.0197 -0.0279 -0.0309 0.0100 0.0188 0.0029 0.0195 0.0101 0.0469 0.0249 -0.0417 0.0100 0.0090 0.0168 0.0212 -0.0069 0.0037 0.0125 -0.0728 -0.0092 -0.0127 0.0688 0.0393 -0.0235 0.0346 0.0488 Columns 5,926 through 5,940 0.0152 0.0250 0.0480 0.0124 0.0285 -0.0413 0.0178 -0.0141 0.0532 -0.0031 0.0225 -0.0028 -0.0051 0.0289 0.0030 -0.0020 -0.0104 0.0474 -0.0061 0.0060 -0.0304 -0.0247 -0.0003 0.0347 -0.0864 0.0178 0.0292 0.0144 -0.0049 -0.0363 -0.0197 0.0385 -0.0013 0.0043 -0.0669 -0.0337 Columns 5,941 through 5,955

-0.0149 0.0272 0.0150 -0.0052 0.0015 -0.0218 0.0156 0.0460

```
-0.0369 -0.0323 -0.0258 -0.0022 0.0030 -0.0332 -0.0082
                                              -0.0111
-0.0338 -0.0629 -0.0475 0.0189 0.0134 -0.0114 -0.0217 -0.0526
-0.0106 -0.0050 0.0036 0.0075 0.0179 0.0658 0.0266
 Columns 5,956 through 5,970
 -0.0081 -0.0085 -0.0214 0.0096 -0.0047 0.0102 0.0275
-0.0065 0.0570 -0.0357 -0.0282 -0.0199 0.0122 -0.0031
 -0.0049 0.0253 0.0422 -0.0068 0.0294 -0.0208 -0.0048
                                               -0.0189
-0.0062 -0.0321 -0.0378 -0.0121 0.0068 0.0276 0.0078
 -0.0045 -0.0816 -0.0076 0.0052 0.0214 0.0272 0.0098
 Columns 5,971 through 5,985
  0.0192 0.0008 -0.0171 0.0047 0.0060 0.0141 0.0115 -0.0217
0.0352 -0.0111 0.0066 -0.0059 0.0114 -0.0263 0.0101
 -0.0060 0.0167 0.0437 0.0551 -0.0097 0.0421 0.0012 -0.0168
-0.0031 0.0164 -0.0102 0.0165 0.0048 -0.0041 -0.0184
 -0.0275 0.0218 0.0541 0.0655 -0.0241 0.0414 0.0034
                                               -0.0191
Columns 5,986 through 6,000
  0.0269 0.0365 -0.0311 0.0071 0.0219 -0.0233 0.0309 0.0064
-0.0007 -0.0136 -0.0203 -0.0253 -0.0007 -0.0035 0.0233
                                               -0.0205
-0.0095 0.0044 0.0429 -0.0362 0.0298 -0.0363 0.0178
 Columns 6,001 through 6,015
 -0.0313 0.0370 0.0034 0.0136 -0.0195 0.0098 0.0195
                                              0.0291
-0.0152 0.0019 -0.0044 -0.0230 -0.0213 -0.0083 -0.0275
  0.0052 0.0003 0.0034 0.0232 -0.0586 0.0044 -0.0115
                                               -0.0306
-0.0527 0.0099 -0.0138 0.0225 -0.0419 0.0145 0.0106
  0.0230 -0.0294 -0.0021 0.0226 -0.0479 0.0115 -0.0346
                                               -0.0672
-0.0450 0.0010 -0.0108 0.0443 -0.0430 0.0180 0.0345
 Columns 6,016 through 6,030
 -0.0013 -0.0058 0.0082 -0.0036 0.0352 0.0009 -0.0054
                                               0.0345
-0.0054 -0.0127 -0.0059 0.0075 0.0293 0.0053 -0.0108
  0.0287 -0.0136 -0.0121 -0.0162 0.0048 0.0002 -0.0231 0.0048
-0.0150 -0.0246 0.0131 -0.0123 -0.0105 0.0098 0.0088
  0.0474 -0.0004 -0.0287 -0.0193 -0.0061 0.0086 -0.0080
                                               -0.0219
-0.0205 -0.0197 0.0192 -0.0109 -0.0453 0.0037 0.0240
Columns 6,031 through 6,045
 -0.0256 -0.0023 0.0261 -0.0099 -0.0276 -0.0170 0.0163
-0.0171 -0.0288 -0.0115 0.0092 -0.0243 -0.0279 0.0107
 -0.0345 -0.0028 -0.0135 -0.0130 -0.0342 -0.0067 -0.0063
```

0.0050 0.0123 -0.0449 -0.0049 -0.0135 0.0044 -0.0254 -0.0005 0.0387 -0.0172 -0.0282 -0.0080 0.0031 0.0164	0.0098
Columns 6,046 through 6,060	
0.0197 0.0192 -0.0168 -0.0247 -0.0214 0.0220 -0.0060 -0.0080 0.0080 -0.0179 0.0209 -0.0118 0.0171 -0.0268	
0.0081 -0.0082 -0.0169 -0.0002 -0.0219 -0.0117 -0.0122 0.0226 0.0008 0.0287 0.0029 0.0239 0.0103 -0.0050	
-0.0152 -0.0187 -0.0042 0.0191 -0.0111 -0.0206 -0.0073 0.0392 -0.0108 0.0642 -0.0057 0.0167 0.0013 0.0354	-0.0621
Columns 6,061 through 6,075	
-0.0225	0.0168
-0.0395 0.0159 -0.0100 -0.0135 -0.0084 -0.0447 0.0196 0.0101 -0.0094 0.0161 0.0116 -0.0290 -0.0119 0.0077	0.0423
-0.0297 -0.0152 -0.0362 0.0085 -0.0031 -0.0313 -0.0041 0.0168 -0.0448 0.0163 0.0206 -0.0488 -0.0187 0.0311	0.0284
Columns 6,076 through 6,090	
-0.0301 0.0140 -0.0044 -0.0130 0.0143 -0.0216 -0.0035 0.0257 0.0131 0.0049 0.0010 0.0099 -0.0093 0.0219	-0.0122
0.0106 -0.0104 0.0270 -0.0369 0.0419 0.0246 -0.0190 -0.0170 -0.0061 0.0204 0.0307 0.0186 0.0447 0.0003	0.0061
0.0400 -0.0315	0.0186
Columns 6,091 through 6,105	
0.0237 -0.0031 -0.0218 -0.0130 0.0312 -0.0092 -0.0097 0.0091 0.0115 -0.0186 0.0006 -0.0010 0.0081 -0.0093	0.0032
-0.0033 -0.0521 -0.0132 -0.0015 0.0125 -0.0103 -0.0327 0.0478 -0.0125 0.0017 -0.0337 0.0073 0.0275 0.0042	-0.0045
-0.0259 -0.0458 0.0017 0.0070 -0.0070 0.0017 -0.0296 0.0420 -0.0178 0.0220 -0.0446 -0.0080 0.0309 0.0144	-0.0040
Columns 6,106 through 6,120	
-0.0104 -0.0360 -0.0317 -0.0167 -0.0104 -0.0022 0.0572 0.0170 -0.0391 -0.0080 0.0281 0.0254 0.0155 -0.0033	-0.0124
-0.0150 0.0261 -0.0016 0.0070 0.0156 0.0238 0.0114 0.0182 -0.0017 -0.0222 0.0130 -0.0340 -0.0097 0.0153	0.0184
-0.0187 0.0582 0.0168 0.0307 0.0387 0.0187 -0.0445 0.0079 0.0378 -0.0165 -0.0096 -0.0605 -0.0209 0.0124	0.0438
Columns 6,121 through 6,135	
-0.0120 0.0308 -0.0447 -0.0128 -0.0011 0.0443 -0.0005 -0.0178 0.0187 0.0038 -0.0170 -0.0249 0.0101 -0.0117	0.0065
-0.0158	0.0325
-0.0055 -0.0012 0.0078 0.0295 -0.0083 -0.0500 -0.0464 0.0037 0.0033 -0.0083 -0.0110 0.0368 0.0067 0.0095	0.0378

Columns 6,136 through 6,150

-0.0124 -0.0084 0.0046 0.0138 0.0303 -0.0124 -0.0004 -0.0089 0.0086 -0.0248 0.0123 0.0077 -0.0235 0.0130 -0.0223 0.0179 0.0147 0.0063 0.0656 0.0017 0.0313 0.0400 -0.0106 -0.0214 0.0073 -0.0385 0.0209 -0.0151 -0.0249 0.0199 0.0158 -0.0120 0.0464 0.0045 0.0392 0.0524 -0.0278 0.0022 0.0027 -0.0501 0.0398 -0.0193	-0.0096
Columns 6,151 through 6,165	
0.0068 0.0384 0.0177 -0.0128 0.0180 0.0111 -0.0302 -0.0085 0.0054 0.0152 -0.0198 0.0356 -0.0272 -0.0057 0.0132 0.0192 -0.0024 0.0037 -0.0153 0.0148 -0.0027	
-0.0189 0.0032 0.0228 -0.0091 0.0164 -0.0363 -0.0254 0.0139 -0.0184 -0.0322 0.0126 -0.0311 0.0195 0.0060 -0.0043 0.0151 0.0131 0.0072 -0.0073 -0.0101 -0.0295	-0.0410
Columns 6,166 through 6,180	
0.0500 0.0297 0.0098 -0.0097 0.0151 0.0188 -0.0332 0.0222 -0.0208 0.0175 -0.0214 0.0021 -0.0113 0.0157	0.0194
-0.0027 -0.0243 0.0211 0.0188 -0.0406 0.0166 -0.0367 0.0065 0.0373 0.0145 -0.0308 0.0243 0.0123 0.0104	0.0036
-0.0412 -0.0526 0.0087 0.0262 -0.0646 0.0093 -0.0208 -0.0102 0.0609 0.0041 -0.0268 0.0297 0.0183 0.0024	-0.0087
Columns 6,181 through 6,195	
-0.0142	0.0269
0.0216 0.0021 -0.0309 0.0080 -0.0178 -0.0008 -0.0157 0.0080 0.0110 0.0235 0.0247 -0.0059 -0.0309 -0.0510	0.0338
0.0119 -0.0174 0.0022 0.0061 -0.0416 0.0224 -0.0037 -0.0247 0.0194 0.0293 0.0290 -0.0495 -0.0198 -0.0415	0.0131
Columns 6,196 through 6,210	
-0.0253 -0.0084 0.0313 0.0190 0.0337 -0.0315 0.0109 0.0366 -0.0294 -0.0143 0.0294 -0.0134 0.0162 0.0037	
-0.0007 0.0308 0.0307 0.0224 0.0413 -0.0091 -0.0106 -0.0098 0.0405 0.0213 0.0031 -0.0017 0.0149 0.0068	0.0163
0.0232 0.0363 0.0134 0.0047 0.0126 0.0231 -0.0192 -0.0416 0.0659 0.0388 -0.0103 0.0175 0.0031 -0.0045	0.0001
Columns 6,211 through 6,225	
0.0214 0.0258 0.0097 -0.0067 0.0178 0.0154 0.0024 -0.0153 0.0152 -0.0246 -0.0170 -0.0132 -0.0496 -0.0504	-0.0234
0.0371 0.0063 -0.0286 -0.0049 -0.0207 0.0218 0.0226 -0.0258 0.0228 0.0124 -0.0195 -0.0353 0.0148 0.0134	-0.0061
0.0292 -0.0201 -0.0464 -0.0050 -0.0282 0.0165 0.0313 -0.0176 0.0046 0.0295 -0.0077 -0.0304 0.0589 0.0649	0.0083
Columns 6,226 through 6,240	
-0.0271 0.0042 -0.0107 -0.0256 -0.0167 0.0108 -0.0469	0.0030
-0.0008 0.0045 0.0135 -0.0030 0.0093 -0.0264 -0.0017 0.0026 -0.0135 0.0136 -0.0154 0.0325 0.0158 -0.0119	-0.0242

0.0246 -0.0302 -0.0217 0.0130 0.0077 0.0380 -0.0083 0.0315 -0.0363 0.0238 0.0036 0.0503 0.0139 0.0387 0.0196 -0.0518 -0.0356 0.0056 -0.0004 0.0578 -0.0095 Columns 6,241 through 6,255	-0.0414
-0.0147 -0.0039 -0.0353 -0.0113 0.0285 0.0009 -0.0086	0.0222
0.0190 -0.0078 0.0177 -0.0051 0.0111 0.0120 0.0403	0.0052
0.0017 -0.0043 0.0320 0.0023 -0.0099 0.0379 0.0235 -0.0257 -0.0543 0.0343 -0.0007 0.0183 0.0084 -0.0225	-0.0045
Columns 6,256 through 6,270	
0.0307 0.0023 -0.0023 0.0352 -0.0053 -0.0701 -0.0103 -0.0054 -0.0174 -0.0100 -0.0294 -0.0353 0.0102 0.0054	0.0325
0.0420 -0.0291 -0.0177 0.0264 -0.0104 -0.0045 -0.0349 0.0090 -0.0469 -0.0046 -0.0379 -0.0154 -0.0027 0.0303	0.0224
0.0246 -0.0378 -0.0317 -0.0042 -0.0153 0.0482 -0.0268 0.0015 -0.0311 0.0055 -0.0210 0.0252 -0.0276 0.0332	0.0053
Columns 6,271 through 6,285	
0.0051 -0.0028 0.0043 0.0180 0.0099 0.0560 0.0051 -0.0126 0.0271 0.0038 0.0011 0.0081 0.0085 0.0159	0.0226
-0.0107 -0.0195 0.0281 0.0036 0.0067 0.0029 0.0061 -0.0099 0.0128 0.0100 0.0156 0.0391 -0.0023 0.0155	-0.0235
-0.0223 -0.0256 0.0155 -0.0092 -0.0042 -0.0432 -0.0032 -0.0076 0.0165 0.0201 0.0161 0.0305 -0.0041 0.0044	-0.0449
Columns 6,286 through 6,300	
-0.0179 -0.0431 0.0222 -0.0058 0.0199 0.0207 -0.0035	-0.0233
-0.0143	-0.0207
-0.0077 -0.0006	0.0126
0.0117 -0.0170 0.0262 0.0312 -0.0316 0.0400 -0.0215	
Columns 6,301 through 6,315	
-0.0268 -0.0472 0.0170 0.0273 0.0260 -0.0236 0.0322 0.0285 0.0073 -0.0103 -0.0099 0.0130 0.0262 0.0118	-0.0013
-0.0393 -0.0038 -0.0325 0.0282 -0.0024 -0.0036 -0.0222 -0.0072 0.0060 -0.0161 0.0101 0.0524 0.0158 0.0228	0.0127
-0.0347 0.0319 -0.0594 0.0124 -0.0265 0.0018 -0.0564 -0.0374 0.0060 -0.0164 0.0166 0.0554 -0.0126 0.0332	0.0109
Columns 6,316 through 6,330	
-0.0220 0.0070 -0.0314 0.0152 -0.0416 0.0102 0.0160 0.0010 0.0060 -0.0162 -0.0056 0.0697 -0.0148 0.0059	-0.0017
-0.0196	-0.0133
-0.0020 0.0090 0.0168 -0.0325 0.0441 0.0125 -0.0103 -0.0167 0.0180 0.0108 -0.0244 -0.0033 -0.0139 -0.0135	-0.0147

Columns 6,331 through 6,345

 $0.0052 \quad -0.0167 \quad -0.0122 \quad -0.0093 \quad 0.0074 \quad 0.0028 \quad 0.0057 \quad -0.0026$ -0.0183 -0.0255 0.0127 0.0050 0.0088 0.0192 -0.0239 -0.0091 -0.0367 -0.0164 0.0235 0.0023 0.0114 -0.0038 -0.0048 0.0172 -0.0389 -0.0131 0.0236 0.0438 -0.0101 0.0002 -0.0036 -0.0368 -0.0019 0.0396 -0.0029 0.0125 -0.0020 -0.0045 0.0358 -0.0263 -0.0235 0.0215 0.0446 -0.0219 0.0154 Columns 6,346 through 6,360 0.0297 0.0128 0.0083 0.0066 0.0209 0.0204 0.0033 0.0136 -0.0081 -0.0197 -0.0273 -0.0150 -0.0115 -0.0226 0.0010 -0.0200 0.0256 -0.0065 -0.0112 0.0273 0.0218 0.0020 -0.0167 -0.0275 -0.0283 0.0018 -0.0074 -0.0248 -0.0006 -0.0167 -0.0445 0.0251 -0.0241 -0.0085 0.0235 -0.0025 0.0039 -0.0242 -0.0118 0.0229 -0.0067 -0.0222 0.0061 -0.0128 Columns 6,361 through 6,375 -0.0159 -0.0053 -0.0422 0.0052 0.0093 0.0196 -0.0152 0.0096 -0.0024 0.0217 -0.0383 -0.0280 -0.0069 0.0128 -0.0126 0.0447 -0.0468 -0.0124 0.0191 0.0032 -0.0081 -0.0129 0.0477 -0.0007 0.0192 0.0186 -0.0178 0.0302 0.0139 -0.0344 0.0751 -0.0453 0.0229 0.0177 -0.0031 -0.0368 -0.0003 0.0461 0.0103 0.0027 0.0510 -0.0008 0.0381 0.0060 -0.0260 Columns 6,376 through 6,390 0.0158 -0.0177 0.0233 0.0058 -0.0249 -0.0515 -0.0138 -0.0011 0.0263 0.0116 -0.0124 0.0161 -0.0030 -0.0227 0.0027 0.0048 0.0116 0.0191 0.0177 -0.0386 -0.0415 0.0200 0.0091 0.0281 0.0263 -0.0104 -0.0019 -0.0007 -0.0008 0.0302 -0.0130 0.0180 0.0463 0.0036 -0.0383 0.0506 0.0245 -0.0164 0.0133 0.0276 -0.0213 -0.0016 0.0126 Columns 6,391 through 6,405 0.0014 0.0294 0.0128 -0.0032 -0.0212 -0.0086 0.0236 0.0178 0.0294 -0.0032 -0.0294 0.0066 0.0160 -0.0173 -0.0158 0.0212 0.0069 0.0074 0.0132 -0.0497 -0.0014 -0.0017 0.0175 -0.0003 -0.0163 0.0102 -0.0276 -0.0270 -0.0105 0.0386 -0.0198 -0.0019 0.0077 -0.0225 0.0059 -0.0220 -0.0157 0.0028 -0.0082 0.0026 0.0134 -0.0378 -0.0140 0.0024 Columns 6,406 through 6,420 -0.0111 -0.0115 -0.0013 0.0216 0.0054 -0.0071 -0.0119 0.0031 -0.0229 -0.0073 0.0190 -0.0149 0.0257 0.0080 -0.0128 -0.0440 -0.0112 -0.0062 0.0268 0.0168 -0.0132 0.0064 -0.0449 -0.0275 0.0379 0.0269 -0.0315 0.0190 0.0295 -0.0319 -0.0137 -0.0065 0.0207 0.0097 -0.0152 0.0217 Columns 6,421 through 6,435

-0.0467 -0.0150 -0.0049 -0.0024 0.0134 0.0204 0.0059

0.0020 0.0273 -0.0113 -0.0010 0.0117 0.0449 0.0210 0.0010 -0.0002 0.0044 -0.0063 0.0430 -0.0060 -0.0061	
0.0222 0.0126 -0.0134 -0.0095 -0.0056 0.0761 0.0243 0.0418 0.0055 0.0041 -0.0104 0.0379 -0.0275 -0.0010	0.0010
Columns 6,436 through 6,450	
-0.0341 0.0493 -0.0376 -0.0268 -0.0173 -0.0058 -0.0042 0.0063 0.0612 -0.0096 0.0025 -0.0173 0.0458 0.0316	
-0.0052	
0.0320 -0.0255 0.0212 0.0305 0.0314 0.0131 -0.0321 -0.0276 -0.0600 0.0165 -0.0226 0.0392 -0.0394 -0.0276	0.0403
Columns 6,451 through 6,465	
0.0149 -0.0066 -0.0246 -0.0097 -0.0248 -0.0058 0.0031 0.0231 0.0288 -0.0348 -0.0233 -0.0112 0.0042 -0.0014	-0.0185
0.0252 -0.0047 -0.0396 -0.0113 0.0523 0.0053 0.0070 -0.0197 -0.0055 -0.0578 -0.0230 -0.0353 -0.0075 0.0254	
0.0246 0.0015 -0.0229 -0.0020 0.0705 0.0064 0.0065 -0.0257 -0.0426 -0.0185 -0.0039 -0.0298 -0.0149 0.0305	0.0060
Columns 6,466 through 6,480	
-0.0377 -0.0219 -0.0284 0.0140 -0.0028 0.0270 -0.0036 -0.0110 -0.0248 0.0504 0.0246 -0.0477 0.0124 -0.0382	0.0310
-0.0070 -0.0081 -0.0396 -0.0161 -0.0143 0.0254 -0.0288 -0.0007 -0.0299 0.0080 0.0156 -0.0190 0.0154 -0.0058	0.0227
0.0133 0.0147 -0.0179 -0.0353 -0.0019 0.0152 -0.0422 0.0120 -0.0043 -0.0361 -0.0078 0.0198 0.0060 0.0197	-0.0143
Columns 6,481 through 6,495	
0.0076 -0.0130 0.0072 -0.0011 0.0292 0.0249 -0.0102 0.0033 -0.0049 -0.0525 0.0224 0.0160 0.0198 -0.0169	
0.0031 0.0043 -0.0071 0.0075 0.0047 -0.0271 0.0070 0.0093 -0.0173 0.0142 0.0219 -0.0236 0.0475 0.0329	-0.0223
-0.0091 0.0282 -0.0188 0.0188 -0.0172 -0.0496 0.0246 0.0127 -0.0062 0.0533 0.0048 -0.0523 0.0335 0.0596	-0.0257
Columns 6,496 through 6,510	
0.0206 -0.0134 -0.0348 -0.0387 -0.0245 0.0150 -0.0114	-0.0058
-0.0447 0.0290 -0.0129 -0.0199 -0.0116 0.0013 -0.0226 0.0158 -0.0533 -0.0411 -0.0069 -0.0242 -0.0241 0.0078	-0.0123
-0.0074 -0.0136 0.0147 0.0366 -0.0267 -0.0114 -0.0114 -0.0063 -0.0512 -0.0219 0.0390 -0.0172 -0.0366 0.0138	-0.0082
0.0331 -0.0452 0.0440 0.0655 -0.0048 -0.0047 0.0092	
Columns 6,511 through 6,525	0.0000
0.0283	
0.0025 -0.0156 -0.0348 0.0306 -0.0220 0.0295 0.0126 -0.0177 -0.0131 -0.0485 -0.0041 0.0162 0.0134 -0.0024 -0.0346 -0.0292 -0.0125 0.0574 -0.0415 0.0447 0.0012	0.0073 -0.0252
0.0272 0.0125 0.0374 -0.0415 0.0447 0.0012	0.0232

Columns 6,616 through 6,630

0.0157 -0.0208 -0.0316 -0.0409 0.0190 0.0564 0.0005 Columns 6,526 through 6,540 -0.0062 0.0091 -0.0095 0.0107 -0.0047 0.0033 -0.0194 -0.0162 0.0194 -0.0047 0.0077 -0.0484 0.0060 -0.0096 -0.0104 0.0519 -0.0002 0.0022 0.0061 -0.0022 0.0150 0.0196 0.0171 0.0086 -0.0293 -0.0168 -0.0216 0.0060 0.0241 0.0186 $0.0766 \quad -0.0134 \quad 0.0220 \quad -0.0007 \quad 0.0127 \quad 0.0129 \quad 0.0272 \quad 0.0294$ -0.0071 -0.0264 -0.0284 -0.0029 0.0075 0.0298 0.0343 Columns 6,541 through 6,555 -0.0115 -0.0044 -0.0032 0.0263 -0.0335 -0.0555 -0.0571 0.0411 -0.0014 -0.0007 0.0207 -0.0273 -0.0125 0.0446 -0.0187 -0.0241 0.0170 0.0254 0.0463 0.0098 -0.0155 -0.0388 -0.0007 -0.0267 -0.0102 -0.0103 -0.0242 -0.0058 -0.0137 0.0213 -0.0077 0.0255 0.0405 0.0310 0.0514 0.0192 0.0114 -0.0331 -0.0217 -0.0167 -0.0256 0.0050 0.0011 -0.0549 0.0356 Columns 6,556 through 6,570 0.0243 -0.0222 0.0251 -0.0144 0.0230 -0.0025 -0.0061 0.0208 0.0131 -0.0444 -0.0135 0.0247 0.0041 -0.0294 0.0043 0.0486 0.0119 0.0047 -0.0476 0.0510 -0.0192 0.0137 -0.0023 0.0217 -0.0063 0.0032 -0.0078 -0.0006 -0.0395 -0.0013 Columns 6,571 through 6,585 -0.0280 -0.0088 0.0222 -0.0230 0.0180 -0.0285 0.0149 -0.0209 0.0072 -0.0244 -0.0233 0.0127 0.0099 0.0270 0.0029 0.0064 0.0006 0.0228 0.0145 -0.0445 -0.0301 -0.0042 -0.0047 0.0030 -0.0256 0.0244 0.0458 -0.0069 -0.0059 -0.0374 0.0371 0.0157 0.0168 0.0341 -0.0747 -0.0022 -0.0107 0.0028 -0.0082 -0.0197 0.0605 0.0369 -0.0018 -0.0216 -0.0407 Columns 6,586 through 6,600 -0.0229 -0.0012 -0.0281 -0.0220 -0.0027 0.0375 0.0263 0.0082 -0.0204 -0.0004 -0.0151 -0.0160 0.0168 -0.0299 -0.0159 0.0168 -0.0108 0.0261 0.0115 0.0411 0.0434 -0.0011 0.0163 -0.0280 -0.0041 -0.0005 0.0071 -0.0179 -0.0116 0.0188 0.0139 0.0521 0.0304 0.0399 0.0401 -0.0168 0.0242 -0.0371 0.0164 0.0091 0.0047 0.0055 Columns 6,601 through 6,615 -0.0130 -0.0112 0.0475 0.0196 0.0191 -0.0109 0.0060 0.0107 0.0230 0.0160 -0.0125 -0.0406 0.0321 -0.0132 0.0213 -0.0162 0.0123 0.0008 -0.0133 -0.0026 -0.0025 -0.0035 -0.0303 0.0120 -0.0242 -0.0068 0.0304 0.0181 $0.0411 \quad -0.0108 \quad -0.0309 \quad -0.0143 \quad -0.0367 \quad -0.0035 \quad -0.0169 \quad -0.0765$ -0.0108 -0.0617 0.0057 -0.0213 0.0274 0.0034 0.0149

-0.0383	.0021
	.0294
0.0328 -0.0376 0.0630 0.0108 -0.0330 0.0405 0.0113 0 0.0111 -0.0187 -0.0218 0.0119 0.0045 0.0268 -0.0540	.0204
Columns 6,631 through 6,645	
-0.0291 0.0075 -0.0179 0.0054 -0.0023 0.0473 0.0151 -0 -0.0211 -0.0260 0.0070 0.0179 -0.0413 0.0382 0.0174	.0086
	.0249
-0.0259 -0.0324 -0.0017 -0.0014 0.0136 -0.0823 -0.0136 -0 0.0221 0.0500 0.0488 -0.0068 0.0058 -0.0476 0.0058	.0315
Columns 6,646 through 6,660	
-0.0290 -0.0004 -0.0004 0.0236 0.0050 0.0069 0.0079 0 -0.0267 0.0423 -0.0093 0.0404 0.0092 -0.0149 -0.0080	.0126
0.0095 -0.0466 0.0138 -0.0050 0.0126 0.0172 0.0176 0 -0.0202 -0.0023 -0.0285 0.0352 -0.0152 -0.0561 -0.0003	.0130
0.0325 -0.0618 0.0308 -0.0228 0.0080 0.0044 0.0029 0 -0.0051 -0.0372 -0.0240 0.0064 -0.0213 -0.0580 0.0242	.0036
Columns 6,661 through 6,675	
0.0112 -0.0046 -0.0248 0.0136 0.0397 -0.0252 0.0175 -0 0.0136 0.0082 0.0078 -0.0086 0.0035 0.0072 0.0207	.0279
0.0181 -0.0047 -0.0098 -0.0064 0.0109 -0.0054 0.0045 0 0.0144 -0.0412 -0.0041 -0.0093 0.0103 -0.0206 0.0086	.0522
-0.0042 -0.0100 0.0127 -0.0305 -0.0258 0.0056 -0.0049 0 -0.0063 -0.0406 0.0034 -0.0094 0.0071 -0.0425 -0.0026	.0860
Columns 6,676 through 6,690	
0.0043 -0.0029 0.0027 -0.0121 -0.0384 -0.0432 0.0193 -0 0.0164 0.0308 -0.0116 -0.0231 -0.0168 0.0035 0.0289	.0019
	.0301
0.0260 0.0147 0.0517 -0.0014 0.0311 0.0201 -0.0094 -0 -0.0500 0.0124 0.0093 -0.0211 0.0083 0.0125 0.0069	.0319
Columns 6,691 through 6,705	
-0.0217 -0.0053 -0.0086 0.0657 0.0226 0.0255 0.0158 0	.0240
-0.0028 -0.0048 0.0229 -0.0102 0.0097 0.0119 0.0129 -0.0249 0.0162 -0.0463 0.0256 -0.0293 -0.0264 -0.0131 0 -0.0152 0.0071 -0.0343 -0.0146 0.0352 0.0063 0.0222	.0365
-0.0132 0.0071 -0.0343 -0.0146 0.0332 0.0003 0.0222 -0.0126 0.0062 -0.0525 -0.0205 -0.0507 -0.0637 -0.0202 0 -0.0243 0.0124 -0.0623 0.0004 0.0537 0.0027 0.0183	.0177
Columns 6,706 through 6,720	
0.0041 -0.0180 -0.0110 -0.0033 0.0145 -0.0085 0.0165 0 -0.0100 0.0087 -0.0165 0.0156 -0.0174 0.0107 -0.0175	.0173
0.0240 -0.0245 -0.0289 -0.0093 -0.0040 -0.0181 -0.0135 -0 0.0020 0.0280 -0.0062 0.0320 0.0179 0.0241 0.0267	.0108

```
0.0206 -0.0124 -0.0272 -0.0245 -0.0201 -0.0280 -0.0256 -0.0197
0.0050 0.0158 0.0112 0.0259 0.0255 0.0158 0.0403
Columns 6,721 through 6,735
  0.0140 -0.0081 -0.0280 -0.0131 -0.0389 0.0213 0.0441
 -0.0159 -0.0511 -0.0350 -0.0021 -0.0182 -0.0207 0.0157
0.0131 0.0025 0.0396 -0.0048 0.0031 -0.0271 -0.0183
 -0.0418 -0.0820 -0.0498 0.0431 0.0156 -0.0062 0.0120 -0.0207
0.0081 0.0075 0.0699 0.0085 0.0320 -0.0507 -0.0629
Columns 6,736 through 6,750
  -0.0383 0.0276 0.0111 0.0388 0.0295 -0.0205 0.0101
  -0.0031 0.0343 -0.0179 0.0138 -0.0386 0.0086 0.0191
  0.0120 -0.0095 -0.0064 -0.0325 -0.0004 -0.0131 -0.0271 0.0093
0.0249 0.0120 -0.0245 -0.0155 -0.0717 0.0351 0.0123
 Columns 6,751 through 6,765
  -0.0378
0.0014 -0.0041 -0.0006 -0.0267 0.0464 -0.0236 0.0165
  0.0007 0.0048 0.0199 0.0271 0.0023 0.0377 -0.0052 -0.0253
0.0145 -0.0355 -0.0348 -0.0344 0.0314 0.0008 0.0522
  0.0021 -0.0080 0.0261 0.0232 0.0053 0.0190 -0.0121 0.0048
0.0296 -0.0315 -0.0523 -0.0296 -0.0115 0.0207 0.0465
 Columns 6,766 through 6,780
  0.0009 -0.0405 -0.0019 -0.0298 -0.0190 0.0108 0.0088 0.0181
0.0120 -0.0019 0.0352 -0.0086 0.0111 0.0332 -0.0061
  0.0012 -0.0013 -0.0131 0.0065 -0.0041 0.0078 -0.0041
  0.0115 0.0526 0.0167 -0.0019 0.0240 -0.0109 -0.0250 0.0303
-0.0062 -0.0059 -0.0509 0.0077 -0.0072 -0.0248 -0.0156
Columns 6,781 through 6,795
  0.0323 0.0006 0.0354 -0.0087 0.0019 -0.0051 -0.0049 0.0169
0.0028 -0.0145 0.0190 0.0215 -0.0453 0.0072 0.0127
-0.0244 0.0155 -0.0268 0.0065 0.0296 -0.0006 -0.0111
 -0.0242 -0.0109 -0.0022 0.0298 -0.0485 0.0173 0.0273
-0.0278 -0.0188 -0.0445 0.0068 0.0179 0.0166 -0.0358
Columns 6,796 through 6,810
  0.0111 -0.0346 -0.0179 0.0310 0.0123 -0.0021 0.0280
0.0336 -0.0077 -0.0207 0.0075 -0.0037 -0.0077 0.0177
 -0.0045 0.0051 -0.0078 0.0261 0.0019 -0.0087 0.0371
0.0305 0.0348 -0.0134 0.0143 0.0175 -0.0123 0.0021
 0.0166 0.0503 0.0073 0.0249 0.0212 -0.0009 -0.0184
```

Columns 6,811 through 6,825

-0.0071	0.0095 -0.0022 -0.0063
-0.0092 -0.0110 -0.0167 -0.0210 0.0108 -0.0266 -0.0460 Columns 6,826 through 6,840	
0.0456 -0.0037 0.0119 -0.0054 0.0266 -0.0157 -0.0298	-0.0293
-0.0065 -0.0472 0.0096 0.0038 -0.0104 -0.0394 0.0043 -0.0016 -0.0521 -0.0178 0.0025 0.0106 -0.0356 -0.0605	-0.0033
0.0100 -0.0123 -0.0155 -0.0196 0.0512 -0.0138 0.0056	
-0.0139 -0.0654 -0.0479 0.0013 -0.0188 -0.0339 -0.0505 0.0282 0.0230 -0.0324 -0.0366 0.0745 0.0149 -0.0034	0.0108
Columns 6,841 through 6,855	
-0.0094	0.0021
-0.0671 -0.0260 -0.0208 0.0026 0.0359 0.0412 -0.0190	-0.0361
0.0111 -0.0251 0.0030 0.0040 0.0026 0.0168 -0.0007 -0.0808 -0.0363 -0.0501 0.0077 0.0492 0.0879 -0.0264	-0.0394
0.0186 -0.0194 0.0487 0.0108 0.0434 0.0345 0.0292	-0.0334
Columns 6,856 through 6,870	
0.0250 -0.0101 0.0180 -0.0152 0.0316 -0.0681 -0.0250 -0.0099 -0.0072 -0.0027 -0.0141 0.0046 0.0240 0.0028	0.0003
-0.0273 0.0364 -0.0050 -0.0019 0.0050 -0.0047 0.0115	0.0072
-0.0481 0.0111 -0.0111 0.0258 0.0237 0.0159 -0.0125 -0.0471 0.0675 -0.0228 0.0249 -0.0186 0.0507 0.0256	0.0121
-0.0514 0.0124 -0.0084 0.0284 0.0304 -0.0055 -0.0209	
Columns 6,871 through 6,885	
-0.0087 -0.0062 0.0088 0.0030 -0.0400 -0.0113 0.0184	-0.0152
0.0037 0.0175 -0.0373 -0.0327 0.0165 -0.0256 0.0414	0 0270
-0.0166 -0.0200 -0.0254 0.0006 0.0022 -0.0301 -0.0029 -0.0115 0.0013 0.0122 -0.0069 0.0076 0.0018 0.0039	0.0378
-0.0074 -0.0190 -0.0333 0.0149 0.0205 -0.0367 -0.0229 -0.0167 -0.0107 0.0477 0.0149 -0.0107 0.0369 -0.0300	0.0592
-0.0107 -0.0107 0.0477 0.0149 -0.0107 0.0309 -0.0300	
Columns 6,886 through 6,900	
-0.0096 -0.0296 0.0082 0.0307 0.0059 0.0051 0.0088	0.0138
0.0058 -0.0065 0.0155 0.0044 -0.0028 0.0053 0.0205 0.0350 0.0325 0.0026 -0.0175 -0.0090 -0.0178 0.0073	-0.0270
-0.0252 0.0124 -0.0106 0.0147 -0.0459 -0.0405 0.0068	
0.0469 0.0537 -0.0024 -0.0500 -0.0220 -0.0291 0.0204 -0.0248 0.0318 -0.0237 -0.0017 -0.0516 -0.0675 -0.0170	-0.0278
Columns 6,901 through 6,915	
0.0118 0.0091 0.0121 0.0110 -0.0315 -0.0382 -0.0120	0.0004
0.0051 0.0251 0.0167 -0.0120 -0.0183 -0.0071 0.0022 0.0165 -0.0152 -0.0256 -0.0447 -0.0153 -0.0036 -0.0096	-0.0230

0.0091 0.0193 -0.0007 0.0121 0.0024 0.0135 0.0102 0.0116 -0.0307 -0.0429 -0.0525 0.0105 0.0216 -0.0048 -0.0063 -0.0014 -0.0143 0.0346 0.0216 0.0306 0.0027 Columns 6,916 through 6,930	-0.0186
-0.0100 0.0030 0.0062 -0.0105 0.0123 0.0016 0.0181 0.0281 -0.0110 0.0031 -0.0273 -0.0183 -0.0029 -0.0250	-0.0189
0.0027 0.0360 -0.0395 0.0046 -0.0176 -0.0239 -0.0273 0.0049 -0.0074 0.0086 -0.0278 -0.0138 0.0358 -0.0050	0.0282
0.0226	0.0516
Columns 6,931 through 6,945	
0.0204 -0.0188 -0.0077 -0.0279 -0.0276 -0.0234 0.0216 -0.0121 0.0002 0.0174 0.0114 -0.0260 -0.0289 -0.0009	
0.0230 0.0163 0.0153 -0.0140 -0.0153 0.0026 -0.0043 -0.0325 0.0266 0.0372 -0.0131 -0.0024 0.0087 0.0060	0.0148
0.0153 0.0381 0.0175 0.0108 0.0120 0.0209 -0.0112 -0.0311 0.0310 0.0242 -0.0115 -0.0027 0.0359 0.0104	0.0199
Columns 6,946 through 6,960	
0.0258 0.0123 0.0018 0.0299 0.0094 -0.0372 -0.0060 0.0018 0.0190 0.0058 -0.0080 -0.0210 0.0378 -0.0145	0.0102
-0.0141 -0.0095 0.0249 -0.0068 -0.0095 0.0477 0.0386 0.0362 0.0065 -0.0483 0.0025 0.0145 0.0130 0.0329	0.0244
-0.0491 -0.0276 0.0302 -0.0305 -0.0161 0.0700 0.0509 0.0512 -0.0055 -0.0671 0.0169 0.0346 -0.0254 0.0478	0.0165
Columns 6,961 through 6,975	
0.0286 -0.0119 -0.0414 -0.0219 -0.0100 -0.0074 0.0367	0.0252
-0.0200 0.0050 -0.0157 -0.0022 0.0090 -0.0403 -0.0117 0.0222 0.0050 -0.0192 -0.0230 0.0177 -0.0291 0.0086	0.0231
-0.0049 -0.0364 -0.0408 0.0048 -0.0237 -0.0313 -0.0052 -0.0090 0.0127 0.0143 -0.0185 0.0351 -0.0412 -0.0106	-0.0085
0.0129 -0.0457 -0.0215 0.0068 -0.0467 -0.0143 0.0041	
Columns 6,976 through 6,990	
-0.0030 0.0317 0.0226 -0.0177 -0.0094 -0.0573 -0.0148 0.0196 0.0075 -0.0452 0.0136 -0.0118 -0.0271 0.0293	0.0015
-0.0007 -0.0059 -0.0048 -0.0417 -0.0127 -0.0222 0.0130 0.0135 0.0328 0.0041 0.0057 0.0078 0.0321 0.0345	0.0042
0.0009 -0.0229 -0.0316 -0.0212 0.0029 0.0210 0.0352 -0.0182 0.0240 0.0443 0.0145 0.0167 0.0660 0.0170	0.0013
Columns 6,991 through 7,005	
0.0236	-0.0014
0.0160 -0.0443 -0.0328 -0.0244 0.0098 -0.0034 -0.0288 0.0091 0.0141 0.0232 -0.0263 0.0110 0.0215 0.0192	0.0159
0.0063 -0.0677 -0.0085 0.0122 0.0323 -0.0304 -0.0137 0.0132 0.0026 0.0405 -0.0461 0.0190 0.0548 -0.0016	0.0065

Columns 7,006 through 7,020

-0.0261 0.0199 0.0388 -0.0197 0.0041 -0.0370 -0.0134 0.0276 0.0022 -0.0346 -0.0216 0.0215 -0.0014 0.0363	-0.0158
-0.0127 -0.0002 -0.0082 -0.0170 0.0228 -0.0096 0.0070 -0.0226 -0.0208 -0.0037 -0.0051 -0.0190 -0.0114 -0.0396	-0.0061
0.0148 -0.0268 -0.0343 -0.0005 0.0146 0.0248 0.0183 -0.0415 -0.0341 0.0385 0.0073 -0.0493 -0.0417 -0.0739	0.0135
Columns 7,021 through 7,035	
0.0142 -0.0527 0.0379 -0.0029 -0.0316 -0.0119 -0.0409 -0.0131 0.0202 -0.0029 -0.0316 0.0015 -0.0004 -0.0372	0.0353
0.0169 -0.0100 0.0204 0.0013 0.0401 -0.0005 -0.0032 0.0067 -0.0178 -0.0672 -0.0094 -0.0054 0.0362 -0.0182	0.0097
0.0117 0.0435 -0.0166 0.0041 0.0788 0.0192 0.0410	-0.0256
0.0051 -0.0314 -0.0779 0.0166 -0.0174 0.0419 0.0060	
Columns 7,036 through 7,050	
-0.0128 -0.0239 0.0227 -0.0252 0.0318 -0.0171 -0.0209 -0.0082 0.0568 -0.0435 0.0295 -0.0204 -0.0090 0.0367	0.0161
-0.0003	-0.0130
0.0103	-0.0210
-0.0151 -0.0376 0.0401 -0.0131 0.0077 0.0309 -0.0152	
Columns 7,051 through 7,065	
-0.0076 0.0410 0.0005 0.0108 -0.0249 0.0228 -0.0214 -0.0034 -0.0189 0.0285 0.0328 0.0125 0.0220 0.0077	-0.0141
-0.0214 0.0132 0.0050 0.0430 -0.0150 -0.0205 -0.0160	-0.0231
-0.0323 -0.0222 0.0328 0.0229 -0.0144 0.0256 -0.0217	
-0.0309 -0.0201 0.0207 0.0445 0.0095 -0.0405 0.0020	-0.0181
-0.0354 0.0004 0.0021 0.0117 -0.0225 0.0077 -0.0318	
Columns 7,066 through 7,080	
-0.0466 -0.0207 0.0074 -0.0142 0.0014 -0.0087 0.0021 0.0273 -0.0130 0.0334 -0.0103 -0.0224 0.0181 -0.0047	0.0115
0.0303 -0.0152 -0.0028 0.0164 -0.0151 -0.0064 0.0307	0.0147
-0.0155 -0.0429 -0.0118 0.0088 0.0140 0.0135 0.0236 0.0762 -0.0038 0.0026 0.0203 -0.0204 -0.0042 0.0445	0.0121
-0.0453 -0.0302 -0.0412 0.0140 0.0287 0.0039 0.0331	****
Columns 7,081 through 7,095	
-0.0305 0.0103 -0.0084 -0.0191 0.0238 -0.0189 -0.0367	-0.0054
-0.0049	0.0021
-0.0030 -0.0083 -0.0500 -0.0065 -0.0215 0.0009 -0.0067	0.0021
0.0461 0.0442 0.0169 0.0191 -0.0001 0.0603 0.0659 0.0093 -0.0285 -0.0516 0.0286 -0.0154 -0.0021 0.0309	0.0066
Columns 7,096 through 7,110	
0.0104 0.0061 -0.0099 -0.0341 -0.0233 0.0095 -0.0258	-0.0011
0 0/12 0 0/14 0 0100 0 02/1 0 0011 0 021/ 0 0122	

0.0249 0.0088 -0.0332 0.0056 -0.0291 0.0050 0.0388 -0.0005 0.0233 -0.0301 0.0237 -0.0129 0.0243 -0.0042	
0.0163 0.0076 -0.0337 0.0365 -0.0148 -0.0037 0.0539 0.0372 -0.0220 -0.0216 0.0461 -0.0122 0.0003 0.0147	-0.0301
Columns 7,111 through 7,125	
0.0229 -0.0311 -0.0091 0.0076 -0.0026 -0.0172 0.0185 -0.0407 -0.0163 0.0081 0.0039 0.0230 -0.0319 -0.0211	-0.0490
0.0475 0.0080 -0.0281 0.0567 -0.0120 0.0172 0.0099 0.0262 -0.0318 -0.0356 0.0360 -0.0274 0.0200 0.0204	-0.0009
0.0370 0.0230 -0.0333 0.0687 -0.0157 0.0353 -0.0023 0.0520 -0.0163 -0.0487 0.0516 -0.0339 0.0553 0.0354	0.0472
Columns 7,126 through 7,140	
-0.0270 0.0060 -0.0012 0.0041 0.0070 0.0002 -0.0367 -0.0056 -0.0187 0.0183 -0.0226 -0.0191 0.0216 0.0067	0.0314
-0.0290 0.0017 -0.0229 0.0282 -0.0145 0.0021 -0.0255 0.0067 -0.0095 -0.0279 0.0020 -0.0610 0.0212 0.0127	0.0330
-0.0010 -0.0018 -0.0325 0.0334 -0.0233 -0.0123 0.0013 0.0115 0.0237 -0.0508 0.0255 -0.0628 0.0024 -0.0112	0.0128
Columns 7,141 through 7,155	
-0.0228 -0.0556 0.0015 0.0067 -0.0423 0.0262 0.0082	-0.0196
0.0422 0.0139 0.0011 -0.0110 0.0207 0.0112 -0.0116 0.0028 -0.0196 0.0214 0.0437 0.0254 0.0230 0.0193 0.0024 -0.0093 -0.0009 0.0007 -0.0035 0.0001 -0.0275	0.0262
0.0151 0.0396 0.0364 0.0354 0.0677 0.0089 0.0127 -0.0413 -0.0303 0.0026 0.0093 -0.0230 0.0045 -0.0247	0.0447
Columns 7,156 through 7,170	
-0.0063 -0.0138 0.0111 -0.0049 0.0290 0.0126 -0.0104 0.0012 0.0083 0.0106 -0.0142 -0.0177 -0.0019 -0.0101	0.0730
0.0067 -0.0071 -0.0149 -0.0252 -0.0099 0.0045 -0.0097 0.0164 -0.0092 0.0336 0.0510 -0.0025 -0.0037 -0.0149	0.0066
0.0075 0.0111 -0.0218 -0.0179 -0.0212 -0.0176 -0.0017 0.0069 -0.0214 0.0419 0.0575 0.0195 -0.0145 -0.0134	-0.0724
Columns 7,171 through 7,185	
0.0170 -0.0406 -0.0006 0.0124 -0.0217 0.0184 0.0153	0.0123
0.0181 -0.0042 -0.0108 -0.0098 -0.0320 0.0037 -0.0079 0.0316 -0.0137 -0.0116 0.0076 0.0108 -0.0316 -0.0416 -0.0060 -0.0004 0.0321 0.0070 0.0412 -0.0108 -0.0018	-0.0352
0.0235	-0.0542
Columns 7,186 through 7,200	
0.0039 -0.0346 -0.0015 0.0056 0.0074 -0.0260 -0.0093	-0.0020
-0.0089 -0.0286 -0.0518 -0.0021 0.0088 -0.0059 0.0132 0.0018 -0.0009 -0.0007 0.0253 -0.0274 0.0488 -0.0059	-0.0325
-0.0298	-0.0381
-0.02/3 0.0002 0.0039 -0.0000 0.0039 -0.0039	

Columns 7,201 through 7,215

0.0079 0.0194 0.0471 0.0126 -0.0027 -0.0333 0.0061 -0.0083 -0.0189 0.0533 0.0097 0.0214 -0.0033 0.0084 0.0480 -0.0133 -0.0412 0.0155 0.0011 0.0190 0.0073 0.0064 0.0151 -0.0070 -0.0401 0.0033 0.0422 -0.0033 0.0018 Columns 7,216 through 7,230 0.0173 -0.0013 -0.0117 0.0120 0.0285 0.0188 0.0079 0.0243 -0.0454 0.0174 -0.0341 -0.0031 0.0127 -0.0359 -0.0015 0.0585 -0.0559 0.0056 -0.0671 0.0190 0.0235 -0.0266 -0.0219 Columns 7,231 through 7,245 0.0072 -0.0045 0.0484 0.0468 -0.0036 0.0143 -0.0290 -0.0059 0.0354 0.0037 -0.0241 0.0027 -0.0046 0.0055 0.0358 0.0037 0.0054 0.0094 0.0352 0.0389 -0.0212 -0.0359 0.0130 0.0394 -0.0414 -0.0253 0.0205 -0.0331 0.0227 0.0487 -0.0004 -0.0210 0.0119 0.0494 0.0460 -0.0287 -0.0396 Columns 7,246 through 7,260 -0.0344 -0.0177 -0.0124 0.0122 0.0633 0.0290 0.0232 -0.0064 -0.0212 0.0167 -0.0324 0.0020 0.0003 0.0519 -0.0041 -0.0113 -0.0082 0.0065 0.0372 -0.0280 0.0464 $0.0087 \qquad 0.0259 \quad -0.0304 \quad -0.0154 \quad -0.0132 \quad -0.0074 \quad -0.0226 \qquad 0.0026$ -0.0167 0.0012 -0.0220 0.0402 0.0348 -0.0268 0.0062 Columns 7,261 through 7,275 0.0271 0.0338 0.0084 -0.0342 -0.0078 0.0487 0.0547 -0.0048 -0.0275 -0.0333 0.0117 0.0022 0.0026 0.0121 -0.0039 -0.0282 0.0304 -0.0133 0.0107 0.0390 -0.0088 0.0085 0.0308 -0.0450 -0.0834 0.0033 0.0161 0.0305 -0.0208 -0.0460 -0.0205 0.0332 -0.0331 0.0231 0.0364 -0.0007 0.0001 0.0134 Columns 7,276 through 7,290 -0.0137 -0.0491 -0.0195 0.0321 -0.0106 0.0088 0.0229 -0.0178 0.0086 -0.0191 0.0532 0.0273 -0.0032 0.0025 0.0190 0.0106 -0.0512 0.0243 0.0231 -0.0225 0.0311 0.0148 -0.0306 -0.0101 0.0407 -0.0075 0.0021 -0.0055 0.0005 0.0300 -0.0290 0.0533 0.0140 -0.0325 0.0380 0.0028 -0.0127 -0.0454 -0.0142 0.0121 -0.0463 0.0056 -0.0117 -0.0155 Columns 7,291 through 7,305

0.0028 -0.0068 -0.0262 0.0084 -0.0288 0.0183 0.0102 0.0256

```
-0.0116 -0.0140 -0.0453 -0.0396 -0.0305 -0.0018 -0.0242
 -0.0035 0.0149 0.0234 -0.0075 0.0112 -0.0088 -0.0219
0.0008 -0.0180 -0.0421 0.0233 -0.0123 0.0054 0.0083
 0.0089 -0.0106 -0.0099 0.0701 0.0149 0.0122 0.0290
 Columns 7,306 through 7,320
  0.0021 0.0090 0.0123 -0.0269 -0.0095 0.0118 -0.0064
-0.0072 0.0033 0.0005 0.0037 0.0149 -0.0238 -0.0212
  0.0059 0.0068 0.0078 -0.0012 -0.0147 -0.0031 0.0171
                                            0.0030
-0.0381 0.0291 -0.0118 0.0277 -0.0136 0.0009 0.0213
  0.0080 0.0041 -0.0040 0.0134 -0.0082 -0.0251 0.0285
-0.0381 0.0316 -0.0031 0.0123 -0.0287 0.0300 0.0416
 Columns 7,321 through 7,335
 -0.0089 0.0067 0.0209 -0.0012 -0.0217 0.0136 -0.0132 0.0090
0.0106 -0.0012 -0.0222 0.0187 -0.0182 0.0050 -0.0502
  0.0155 -0.0065 0.0422 0.0179 -0.0040 0.0088 -0.0109 0.0515
0.0206 -0.0320 -0.0256 -0.0209 -0.0034 -0.0117 -0.0523
Columns 7,336 through 7,350
 0.0242 -0.0204 0.0073 -0.0155 -0.0007 0.0019 -0.0265
  0.0085 -0.0237 0.0028 0.0083 -0.0057 0.0090 -0.0098
  0.0152 0.0526 -0.0480 0.0247 -0.0162 -0.0377 0.0495
-0.0213 -0.0096 -0.0043 0.0262 -0.0133 0.0102 0.0154
Columns 7,351 through 7,365
 -0.0150 -0.0376 -0.0017 -0.0053 0.0022 -0.0031 -0.0059 -0.0063
-0.0021 0.0237 0.0040 -0.0029 -0.0277 -0.0100 -0.0021
 -0.0383 -0.0033 -0.0248 0.0145 0.0045 0.0061 0.0362
-0.0219 0.0262 0.0016 -0.0081 -0.0117 -0.0245 0.0384
 -0.0295 0.0062 -0.0072 -0.0140 0.0013 -0.0239 0.0577
Columns 7,366 through 7,380
 -0.0005 -0.0156 -0.0282 -0.0038 0.0061 -0.0152 0.0190
-0.0009 -0.0211 0.0398 -0.0040 0.0217 0.0343 0.0108
 -0.0250 0.0159 -0.0214 0.0371 -0.0032 -0.0672 0.0035
-0.0174 -0.0151 0.0129 0.0295 0.0337 0.0153 0.0238
 -0.0402 0.0250 -0.0047 0.0485 -0.0185 -0.0564 -0.0083 0.0349
Columns 7,381 through 7,395
 -0.0128 -0.0247 0.0368 -0.0162 -0.0188 0.0500 -0.0307
0.0013 -0.0338 0.0051 0.0564 0.0222 -0.0314 0.0140
 -0.0101 -0.0072 0.0056 -0.0111 0.0063 0.0198 -0.0429
-0.0082 0.0021 -0.0281 0.0137 0.0222 0.0048 0.0371
```

0.0071 0.0360 -0.0152 -0.0266 0.0008 0.0322 0.0316 Columns 7,396 through 7,410 0.0144 -0.0034 -0.0092 -0.0148 0.0240 0.0104 -0.0006 -0.0069 -0.0126 -0.0251 0.0432 -0.0011 0.0303 -0.0076 -0.0074 -0.0526 -0.0219 -0.0125 -0.0139 0.0101 0.0013 $-0.0290 \quad -0.0554 \quad -0.0494 \quad 0.0290 \quad 0.0106 \quad 0.0428 \quad 0.0259 \quad 0.0219$ -0.0228 -0.0506 -0.0142 -0.0015 -0.0385 -0.0049 -0.0059 Columns 7,411 through 7,425 0.0123 -0.0358 -0.0033 0.0258 -0.0039 -0.0041 0.0072 -0.0318 -0.0346 -0.0137 -0.0055 0.0257 -0.0069 0.0346 -0.0073 -0.0001 -0.0240 0.0204 0.0040 0.0050 0.0034 0.0019 0.0098 -0.0100 -0.0213 0.0020 0.0324 0.0092 0.0058 -0.0023 0.0117 0.0283 -0.0161 0.0072 0.0039 -0.0010 0.0402 0.0496 -0.0071 -0.0154 -0.0226 0.0531 -0.0079 0.0109 Columns 7,426 through 7,440 -0.0123 -0.0074 -0.0155 -0.0014 -0.0563 -0.0352 -0.0384 0.0076 -0.0103 -0.0241 -0.0225 0.0098 -0.0060 0.0101 0.0061 0.0569 -0.0203 -0.0041 -0.0212 -0.0358 0.0092 0.0208 0.0025 -0.0073 -0.0221 -0.0101 -0.0138 -0.0141 -0.0246 0.0117 0.0538 -0.0105 -0.0027 0.0227 -0.0053 0.0531 0.0407 0.0048 -0.0033 -0.0180 0.0084 -0.0200 -0.0076 -0.0408 Columns 7,441 through 7,455 -0.0262 0.0144 0.0407 0.0119 -0.0113 0.0090 0.0010 -0.0219 0.0085 0.0039 0.0205 -0.0079 -0.0658 -0.0074 0.0019 -0.0230 0.0096 0.0034 -0.0003 -0.0213 0.0364 -0.0295 0.0291 -0.0060 -0.0063 -0.0135 -0.0764 -0.0248 -0.0099 0.0269 -0.0244 -0.0222 0.0327 0.0042 -0.0058 0.0135 -0.0327 Columns 7,456 through 7,470 -0.0249 0.0147 -0.0020 -0.0361 0.0169 0.0475 0.0411 0.0021 -0.0191 0.0160 -0.0083 0.0216 0.0069 -0.0056 -0.0121 0.0024 0.0010 -0.0334 0.0056 0.0320 -0.0000 -0.0056 0.0257 -0.0217 -0.0247 0.0384 0.0177 -0.0417 -0.0463 Columns 7,471 through 7,485 0.0166 -0.0322 0.0044 0.0300 0.0150 -0.0224 -0.0174 -0.0490 -0.0232 -0.0137 -0.0015 0.0091 0.0142 0.0147 0.0137 -0.0041 -0.0158 -0.0027 0.0217 -0.0089 -0.0029 -0.0006 0.0256 -0.0188 -0.0366 0.0175 0.0192 0.0068

Columns 7,486 through 7,500

-0.0315	-0.0154
Columns 7,501 through 7,515	0.0570
-0.0024 -0.0069 -0.0351 -0.0059 -0.0202 -0.0176 -0.0219 -0.0100 0.0578 -0.0163 0.0011 -0.0331 -0.0144 0.0151 0.0013 -0.0257 -0.0740 -0.0063 0.0238 -0.0010 0.0405	
-0.0449 0.0550 0.0299 -0.0418 -0.0078 0.0026 -0.0093 -0.0166 -0.0351 -0.0536 0.0153 0.0518 0.0113 0.0650 -0.0436 0.0020 0.0542 -0.0552 0.0130 0.0204 -0.0183	-0.0128
Columns 7,516 through 7,530	
0.0030 0.0170 -0.0000 -0.0211 0.0077 0.0040 0.0192 0.0147 -0.0101 0.0049 0.0102 0.0085 -0.0015 -0.0277	
-0.0510 -0.0084 0.0013 -0.0296 -0.0151 0.0139 0.0501 0.0231 -0.0245 -0.0400 -0.0233 0.0229 0.0061 -0.0149 -0.0683 -0.0146 -0.0029 -0.0269 -0.0205 0.0229 0.0282	
0.0159 -0.0280 -0.0534 -0.0339 0.0264 0.0127 -0.0013	0.0100
Columns 7,531 through 7,545	
0.0174 -0.0113 0.0003 0.0027 -0.0005 -0.0238 0.0573 -0.0130 0.0182 -0.0456 -0.0043 -0.0253 -0.0564 0.0071	-0.0440
0.0312 0.0440 0.0282 -0.0126 -0.0040 0.0093 0.0123 0.0252 0.0063 -0.0360 -0.0299 -0.0232 0.0236 -0.0077	
0.0276 0.0572 0.0365 -0.0212 -0.0137 0.0234 -0.0341 0.0385 -0.0177 0.0051 -0.0313 -0.0007 0.0825 -0.0220	0.0332
Columns 7,546 through 7,560	
-0.0125	
0.0291 -0.0173 -0.0110 0.0089 0.0215 0.0054 -0.0051 -0.0087 -0.0067 0.0103 0.0338 0.0261 0.0130 -0.0404	
0.0321 -0.0780 -0.0324 -0.0026 0.0409 -0.0053 -0.0016 0.0056 0.0474 0.0082 0.0155 0.0153 0.0022 -0.0529	-0.0120
Columns 7,561 through 7,575	
-0.0444 -0.0037 0.0033 0.0117 -0.0006 -0.0351 0.0268 0.0187 0.0154 -0.0456 0.0072 -0.0581 -0.0101 0.0397	-0.0126
0.0188 -0.0008 -0.0089 -0.0096 -0.0146 -0.0197 0.0314 0.0115 0.0290 0.0146 0.0210 -0.0028 0.0409 0.0028	0.0011
0.0617 -0.0004 -0.0068 -0.0269 -0.0256 -0.0044 0.0332 0.0133 0.0177 0.0456 0.0238 0.0511 0.0632 -0.0265	0.0175
Columns 7,576 through 7,590	
0.0295 0.0229 0.0057 0.0183 -0.0161 -0.0422 -0.0166 0.0082 -0.0190 -0.0090 -0.0021 -0.0190 0.0223 -0.0185	-0.0001
0.0006 0.0047 0.0181 0.0163 0.0098 -0.0143 -0.0081	-0.0386

0.0200 0.0042 -0.0248 -0.0437 0.0432 0.0004 0.0116 -0.0222 -0.0147 0.0104 0.0164 0.0246 0.0157 -0.0041 0.0036 0.0071 -0.0192 -0.0352 0.0718 -0.0227 0.0228	-0.0370
Columns 7,591 through 7,605	
0.0232 -0.0402 -0.0511 -0.0273 0.0194 -0.0077 0.0054	0.0309
0.0181 0.0518 0.0092 -0.0166 -0.0189 0.0379 -0.0425 0.0070 -0.0065 0.0259 0.0019 -0.0409 0.0090 -0.0096	0.0076
0.0039 0.0191 -0.0152 -0.0061 -0.0330 0.0102 -0.0173 -0.0211 0.0189 0.0792 0.0214 -0.0667 0.0120 -0.0178 -0.0147 -0.0204 -0.0282 0.0160 -0.0254 -0.0398 0.0061	-0.0196
Columns 7,606 through 7,620	
-0.0235 0.0240 0.0118 -0.0038 0.0300 0.0110 0.0370 0.0059 0.0092 0.0382 0.0138 0.0307 -0.0355 0.0518	0.0005
0.0038	-0.0045
0.0219 -0.0042 -0.0404 -0.0121 -0.0280 -0.0184 -0.0224 0.0190 -0.0104 0.0020 0.0138 0.0137 -0.0146 -0.0246	0.0058
Columns 7,621 through 7,635	
0.0107 0.0202 -0.0364 -0.0214 0.0009 0.0025 -0.0189 0.0704 0.0349 0.0089 -0.0331 0.0015 0.0072 0.0018	0.0040
0.0055 -0.0416 -0.0082 0.0144 -0.0469 -0.0052 -0.0213 -0.0075 -0.0282 0.0248 0.0004 0.0381 0.0039 0.0262	0.0233
-0.0072 -0.0690 0.0180 0.0285 -0.0639 -0.0138 -0.0120 -0.0626 -0.0684 0.0145 0.0242 0.0470 -0.0171 0.0381	0.0282
Columns 7,636 through 7,650	
0.0204 0.0047 -0.0073 0.0047 0.0088 0.0322 -0.0009	0.0089
-0.0041 -0.0254 0.0114 0.0182 -0.0212 0.0197 -0.0173 0.0089 -0.0458 -0.0056 0.0001 0.0155 -0.0061 0.0012	
-0.0371 -0.0040 0.0148 -0.0260 0.0132 0.0081 -0.0635 -0.0051 -0.0697 -0.0038 -0.0086 0.0120 -0.0258 0.0014	
-0.0590 0.0153 0.0145 -0.0515 0.0403 -0.0078 -0.0616	
Columns 7,651 through 7,665	
0.0202 -0.0311 -0.0347 0.0068 0.0150 -0.0292 -0.0024 -0.0353 -0.0399 -0.0033 -0.0208 0.0165 -0.0033 0.0018	0.0034
0.0424 0.0363 0.0293 0.0237 -0.0064 -0.0336 -0.0048 0.0358 -0.0357 0.0380 -0.0299 0.0325 0.0031 -0.0214	0.0120
0.0198 0.0758 0.0688 0.0234 -0.0209 -0.0137 0.0023 0.0684 -0.0112 0.0415 -0.0176 0.0321 0.0110 -0.0051	0.0104
Columns 7,666 through 7,680	
-0.0223	0.0131
-0.0064	0.0495
0.0277 0.0344 -0.0270 0.0248 -0.0143 -0.0112 0.0107 0.0750 -0.0449 -0.0178 -0.0013 -0.0379 0.0161 -0.0181 0.0330 0.0199 -0.0105 0.0280 0.0170 -0.0127 0.0052	0.0436

Columns 7,681 through 7,695

-0.0095 -0.0077 -0.0226 0.0251 -0.0257 0.0235 -0.0193 0.0230 -0.0004 -0.0230 -0.0020 0.0257 0.0231 -0.0155 -0.0223 -0.0292 -0.0450 -0.0082 -0.0138 0.0027 -0.0088 0.0239 -0.0110 0.0120 0.0180 0.0091 -0.0075 0.0128 -0.0167 -0.0233 -0.0246 -0.0336 0.0145 -0.0357 0.0138 -0.0359 0.0380 -0.0343 0.0118 0.0491 0.0123 -0.0211 0.0013 -0.0154 -0.0127 Columns 7,696 through 7,710 0.0068 -0.0070 0.0022 0.0018 -0.0015 0.0047 -0.0030 -0.0001 -0.0143 -0.0080 -0.0184 -0.0151 -0.0208 -0.0145 -0.0101 0.0368 -0.0212 -0.0039 -0.0209 0.0282 -0.0076 -0.0600 0.0356 Columns 7,711 through 7,725 0.0101 0.0445 -0.0097 0.0088 0.0079 0.0090 0.0086 -0.0083 0.0281 -0.0664 -0.0008 -0.0053 -0.0040 -0.0181 -0.0026 -0.0650 0.0379 0.0433 0.0188 0.0164 0.0126 -0.0224 -0.0052 -0.0025 -0.0259 0.0073 0.0020 -0.0170 -0.0104 -0.0950 0.0243 0.0508 0.0322 0.0150 0.0025 -0.0458 0.0143 Columns 7,726 through 7,740 -0.0481 -0.0044 -0.0027 0.0127 -0.0185 -0.0239 0.0041 0.0378 0.0117 0.0446 0.0270 -0.0057 0.0213 -0.0361 -0.0229 -0.0432 -0.0327 -0.0279 0.0016 0.0216 0.0014 0.0263 -0.0160 -0.0181 -0.0012 -0.0045 0.0281 -0.0236 0.0218 -0.0084 -0.0278 -0.0236 0.0068 0.0446 0.0256 0.0232 -0.0229 -0.0340 -0.0533 -0.0300 0.0038 0.0101 0.0037 0.0344 Columns 7,741 through 7,755 0.0078 -0.0210 -0.0130 0.0027 0.0275 -0.0494 0.0069 -0.0507 -0.0307 -0.0062 -0.0116 0.0244 -0.0287 -0.0286 -0.0157 -0.0003 -0.0124 -0.0085 -0.0126 0.0098 -0.0155 -0.0179 -0.0126 -0.0221 0.0063 0.0027 -0.0330 -0.0146 -0.0064 -0.0605 -0.0136 -0.0132 0.0104 -0.0074 -0.0044 0.0179 -0.0131 0.0233 0.0022 0.0103 -0.0027 -0.0521 0.0141 0.0214 -0.0597 Columns 7,756 through 7,770 0.0162 -0.0069 0.0294 0.0216 0.0047 -0.0006 0.0131 -0.0084 0.0184 -0.0005 -0.0145 0.0014 -0.0108 0.0112 -0.0046 -0.0476 -0.0384 0.0327 0.0466 -0.0142 -0.0073 0.0155 0.0297 -0.0588 -0.0357 0.0179 0.0388 -0.0202 -0.0048 0.0143 0.0514 0.0015 0.0979 0.0408 0.0010 0.0485 -0.0601 0.0120 Columns 7,771 through 7,785

0.0245 0.0107 -0.0069 -0.0060 -0.0161 -0.0301 -0.0185 0.0014 -0.0525 -0.0148 -0.0030 -0.0081 0.0162 0.0201	
0.0258 0.0023 0.0061 0.0080 0.0261 -0.0260 -0.0505 -0.0239 -0.0782 -0.0258 0.0161 -0.0203 0.0013 -0.0126	-0.0240
Columns 7,786 through 7,800	
-0.0109 -0.0002 0.0099 -0.0122 0.0259 -0.0160 -0.0382 -0.0046 0.0050 0.0052 -0.0489 0.0212 0.0131 -0.0162	
0.0080 -0.0104 -0.0042 -0.0211 0.0196 0.0065 0.0379 0.0059 0.0117 0.0307 -0.0120 0.0060 -0.0119 -0.0060	
0.0166 -0.0082 -0.0113 -0.0213 0.0098 0.0187 0.0808 0.0290 0.0220 0.0327 0.0330 -0.0281 -0.0219 0.0216	-0.0072
Columns 7,801 through 7,815	
0.0037 -0.0254 0.0290 -0.0417 -0.0020 0.0184 0.0081 -0.0095 0.0436 -0.0126 0.0390 0.0517 -0.0051 -0.0239	
0.0353 0.0028 0.0317 -0.0124 0.0038 0.0314 0.0255 -0.0192 -0.0116 0.0353 0.0134 0.0356 -0.0224 0.0120	
0.0303 0.0136 0.0230 0.0168 0.0218 0.0207 0.0199 -0.0056 -0.0594 0.0532 -0.0202 -0.0069 -0.0280 0.0383	-0.0470
Columns 7,816 through 7,830	
-0.0350 -0.0084 0.0110 -0.0122 0.0052 0.0402 -0.0098 0.0342 0.0567 0.0134 -0.0386 0.0290 -0.0476 0.0143	0.0318
-0.0139 -0.0187 -0.0114 0.0074 -0.0212 -0.0217 -0.0026 -0.0122 0.0340 0.0009 -0.0169 -0.0180 -0.0272 -0.0103	
0.0198 0.0090 -0.0401 0.0261 -0.0321 -0.0724 0.0203 -0.0376 -0.0006 -0.0057 0.0097 -0.0472 0.0102 -0.0213	-0.0023
Columns 7,831 through 7,845	
0.0033 -0.0045 -0.0245 0.0334 -0.0428 -0.0040 0.0168 0.0248 0.0044 -0.0389 0.0493 -0.0749 0.0589 -0.0044	
-0.0195 -0.0087 -0.0051 -0.0145 -0.0408 -0.0566 -0.0002 0.0142 -0.0155 0.0170 0.0266 0.0155 0.0080 0.0010	
-0.0238	-0.0393
Columns 7,846 through 7,860	
-0.0010 0.0032 -0.0033 0.0283 0.0056 0.0218 0.0093 -0.0172 0.0360 -0.0296 0.0001 0.0005 -0.0231 -0.0114	-0.0402
-0.0163 -0.0099 -0.0295 -0.0174 0.0496 -0.0391 0.0024 0.0156 0.0105 -0.0043 0.0092 -0.0050 -0.0086 0.0207	-0.0083
-0.0241 -0.0045 -0.0209 -0.0354 0.0580 -0.0738 -0.0148 0.0344 -0.0104 0.0264 0.0055 -0.0042 0.0010 0.0242	0.0223
Columns 7,861 through 7,875	
-0.0461 -0.0124 -0.0151 0.0279 0.0353 -0.0172 -0.0205 -0.0210 -0.0320 0.0321 -0.0048 -0.0107 0.0113 -0.0092	-0.0150
-0.0210 -0.0320 0.0321 -0.0048 -0.0107 0.0113 -0.0092 0.0131 -0.0230 -0.0179 0.0508 -0.0297 -0.0030 0.0220 -0.0044 0.0078 0.0632 0.0258 -0.0100 0.0024 -0.0237	-0.0037
0.0599 -0.0217 -0.0152 0.0450 -0.0586 0.0048 0.0332 0.0081 0.0280 0.0476 0.0371 0.0022 -0.0065 -0.0242	0.0074

Columns 7,876 through 7,890

Columns 7,966 through 7,980

0.0098 -0.0063 -0.0021 -0.0280 -0.0237 0.0128 0.0088 0.0664 -0.0064 -0.0478 -0.0293 0.0220 -0.0046 -0.0203 0.0045 0.0167 0.0259 -0.0036 -0.0202 -0.0170 -0.0167 -0.0023 0.0233 -0.0228 -0.0400 -0.0362 0.0607 0.0048 -0.0264 -0.0101 0.0305 -0.0194 -0.0155 -0.0474 -0.0009 -0.0157 0.0315 Columns 7,891 through 7,905 $0.0120 \qquad 0.0088 \quad -0.0148 \qquad 0.0178 \quad -0.0154 \quad -0.0313 \qquad 0.0286 \quad -0.0167$ -0.0215 -0.0252 -0.0017 -0.0492 0.0006 0.0299 -0.0203 -0.0121 0.0009 -0.0015 -0.0254 -0.0344 -0.0145 0.0262 -0.0246 -0.0245 0.0272 0.0104 -0.0222 0.0287 0.0029 -0.0275 -0.0006 0.0229 -0.0240 -0.0279 0.0108 0.0173 -0.0153 -0.0031 -0.0015 0.0400 0.0645 -0.0478 0.0117 0.0088 Columns 7,906 through 7,920 0.0105 -0.0066 0.0327 0.0130 -0.0346 0.0264 0.0138 0.0115 -0.0148 -0.0325 -0.0288 0.0056 0.0111 0.0239 -0.0113 -0.0315 -0.0245 0.0328 -0.0078 -0.0222 -0.0015 0.0160 -0.0029 -0.0099 -0.0232 0.0189 0.0006 -0.0203 -0.0447 -0.0205 -0.0216 -0.0523 0.0344 0.0095 -0.0426 -0.0084 -0.0197 -0.0037 0.0028 0.0442 0.0058 -0.0325 -0.0736 Columns 7,921 through 7,935 -0.0164 -0.0150 0.0106 0.0142 -0.0088 0.0058 0.0206 0.0023 0.0147 -0.0135 -0.0019 -0.0272 -0.0634 -0.0031 0.0082 0.0104 0.0177 0.0169 -0.0258 -0.0086 -0.0247 0.0189 -0.0010 0.0457 0.0216 -0.0141 0.0348 -0.0322 0.0130 Columns 7,936 through 7,950 0.0181 -0.0196 0.0098 0.0167 0.0055 0.0294 0.0490 -0.0350 -0.0500 -0.0159 0.0296 0.0074 -0.0378 -0.0137 -0.0055 0.0050 -0.0041 -0.0214 -0.0319 0.0065 0.0041 -0.0341 0.0092 0.0096 -0.0119 -0.0104 -0.0216 0.0071 -0.0150 0.0009 Columns 7,951 through 7,965 -0.0023 -0.0216 0.0008 0.0043 -0.0461 -0.0295 -0.0152 -0.0211 0.0346 0.0175 0.0192 0.0132 -0.0168 0.0268 -0.0219 0.0020 -0.0242 -0.0111 0.0175 -0.0495 -0.0027 0.0061 $-0.0093 \quad -0.0315 \quad -0.0172 \quad -0.0024 \quad -0.0091 \quad 0.0170 \quad 0.0138 \quad 0.0416$ 0.0233 0.0035 0.0246 -0.0064 -0.0077 0.0443 -0.0063

-0.0341 0.0114 -0.0372 -0.0062 -0.0028 -0.0128 -0.0055 0.0401

```
-0.0066 -0.0242 -0.0273 0.0297 -0.0011 -0.0324 -0.0272
 -0.0247 0.0287 0.0028 0.0171 0.0206 -0.0134 -0.0435
0.0191 -0.0453 0.0011 -0.0281 -0.0027 -0.0106 -0.0090
 -0.0106 0.0171 0.0317 0.0405 0.0388 0.0043 -0.0512 -0.0614
0.0325 -0.0275 0.0215 -0.0492 -0.0145 0.0057 0.0058
 Columns 7,981 through 7,995
  -0.0202 0.0226 -0.0371 -0.0080 -0.0272 0.0554 0.0204
-0.0131 0.0344 0.0044 0.0537 0.0108 -0.0029 -0.0022
  -0.0106 0.0304 -0.0033 -0.0250 -0.0231 0.0141 -0.0056
                                                  0.0239
-0.0161 0.0110 0.0042 0.0131 0.0197 -0.0327 0.0175
  0.0066 0.0128 0.0135 -0.0171 -0.0085 -0.0356 -0.0239
0.0064 -0.0229 -0.0107 -0.0345 0.0236 -0.0351 0.0034
 Columns 7,996 through 8,010
  0.0130 0.0427 0.0325 0.0184 -0.0166 -0.0123 -0.0323 -0.0070
0.0105 -0.0061 0.0165 0.0272 0.0121 0.0054 0.0281
  -0.0077 -0.0003 -0.0232 -0.0395 -0.0257 0.0045 -0.0165
0.0241 -0.0261 0.0044 0.0107 0.0026 0.0048 -0.0121
  -0.0256 -0.0177 -0.0589 -0.0682 -0.0160 0.0090 0.0059
                                                  0.0180
0.0215 -0.0326 -0.0231 -0.0021 -0.0009 -0.0024 -0.0488
 Columns 8.011 through 8.025
  0.0511
-0.0134 0.0372 0.0071 -0.0123 0.0067 -0.0360 0.0405
0.0024 -0.0026 0.0172 -0.0244 -0.0286 -0.0029 0.0149
 -0.0305 0.0151 0.0139 -0.0139 -0.0044 -0.0571 0.0200
                                                  -0.0597
0.0299 -0.0222 -0.0329 -0.0321 -0.0171 -0.0206 0.0093
 Columns 8,026 through 8,040
  -0.0024 -0.0074 -0.0179 0.0394 -0.0389 -0.0208 -0.0097
                                                   0.0189
0.0251 0.0069 0.0066 0.0025 -0.0156 -0.0072 -0.0192
 -0.0044 -0.0355 0.0258 -0.0006 0.0372 0.0082 -0.0038
                                                   0.0021
0.0051 0.0082 0.0510 -0.0310 -0.0173 -0.0017 0.0075
 -0.0165
-0.0194 -0.0015 0.0424 -0.0251 0.0016 0.0177 0.0280
 Columns 8,041 through 8,055
 -0.0130 0.0091 -0.0085 -0.0210 0.0165 -0.0025 -0.0123
                                                  0.0419
0.0082 -0.0051 -0.0169 -0.0165 0.0036 -0.0194 -0.0058
 -0.0060
-0.0008 -0.0190 0.0085 -0.0169 -0.0051 0.0055 -0.0193
  -0.0225 0.0145 -0.0304 0.0205 -0.0186 0.0313 -0.0393
-0.0131 -0.0175 0.0174 -0.0044 0.0021 0.0210 -0.0148
 Columns 8,056 through 8,070
 -0.0042 -0.0317 -0.0032 0.0066 0.0238 -0.0231 0.0133 -0.0088
0.0071 -0.0410 -0.0170 0.0462 -0.0168 -0.0163 0.0034
                                                   0.0158
0.0571 0.0432 -0.0193 -0.0010 0.0316 -0.0050 -0.0500
```

```
-0.0012 -0.0196 -0.0160 0.0446 -0.0402 -0.0001 -0.0120 0.0332
0.0312 0.0479 -0.0274 -0.0029 0.0034 -0.0163 -0.0307
Columns 8,071 through 8,085
 -0.0455 0.0020 0.0267 0.0120 0.0019 0.0062 -0.0420 0.0132
-0.0358 -0.0020 -0.0060 -0.0340 0.0315 0.0303 0.0161
 -0.0052 -0.0103 0.0012 0.0004 0.0316 -0.0282 0.0229
0.0207 0.0074 0.0196 -0.0259 0.0247 0.0082 -0.0467
  0.0466 0.0132 0.0211 0.0111 0.0004 -0.0018 -0.0783
Columns 8,086 through 8,100
 -0.0032 -0.0110 -0.0136 -0.0253 0.0130 -0.0287 0.0425
0.0648 -0.0326 -0.0041 -0.0097 -0.0263 -0.0417 0.0134
  0.0163 -0.0027 -0.0013 0.0173 -0.0218 -0.0094 0.0179
  -0.0227 0.0136 0.0037 0.0416 -0.0082 0.0166 0.0059
Columns 8,101 through 8,115
  -0.0040 0.0032 0.0101 -0.0407 0.0165 -0.0082 0.0042
 -0.0214 -0.0334 -0.0021 -0.0079 -0.0591 0.0032 -0.0024
-0.0019 0.0107 0.0012 0.0483 -0.0077 0.0005 0.0456
 -0.0535 -0.0739 0.0388 0.0149 -0.0437 0.0138 -0.0222 0.0158
-0.0072 0.0199 -0.0102 0.0981 -0.0328 0.0163 0.0589
Columns 8,116 through 8,130
 -0.0141 -0.0651 0.0093 -0.0082 -0.0231 -0.0358 0.0485 -0.0325
-0.0109 -0.0163 -0.0127 0.0186 0.0235 0.0246 -0.0033
  -0.0021 0.0930 0.0112 -0.0021 0.0931 0.0292 -0.0174 -0.0037
Columns 8,131 through 8,145
  0.0248 -0.0137 -0.0016 -0.0044 0.0285 -0.0088 0.0464 0.0149
-0.0003 -0.0540 0.0180 -0.0136 -0.0260 0.0177 0.0180
 -0.0250 -0.0247 -0.0272 0.0092 -0.0373 0.0159 0.0043
-0.0074 -0.0253 -0.0032 0.0211 0.0165 -0.0121 0.0140
-0.0488 -0.0044 -0.0222 0.0137 -0.0619 0.0306 -0.0464
Columns 8,146 through 8,160
 0.0070 0.0269 0.0140 0.0123 0.0217 0.0206 0.0073
  0.0138 -0.0168 0.0181 -0.0269 -0.0423 0.0019 0.0119
0.0605 \quad -0.0144 \quad 0.0411 \quad -0.0207 \quad -0.0272 \quad 0.0152 \quad 0.0207 \quad -0.0301
-0.0224 0.0225 -0.0240 -0.0230 0.0244 -0.0232 0.0286
```

Columns 8,161 through 8,175

0.0162 0.0021 0.0280 -0.0180 0.0416 0.0028 0.0029 0.0048 -0.0210 -0.0245 -0.0035 -0.0002 -0.0122 -0.0026 0.0101 -0.0263 0.0062 -0.0034 -0.0204 0.0230 0.0027 -0.0059 -0.0273 0.0330 -0.0312 -0.0280 0.0097 -0.0208 -0.0058 -0.0417 -0.0267 0.0143 -0.0577 0.0390 0.0026	-0.0007
-0.0191 -0.0165 0.0519 -0.0267 -0.0247 0.0103 -0.0235 Columns 8,176 through 8,190	
0.0188 0.0126 0.0441 -0.0349 0.0122 -0.0136 0.0025	-0.0109
-0.0159	0.0063
-0.0237	0 0191
0.0066 -0.0087 0.0209 0.0094 -0.0784 0.0170 0.0122	0.0131
Columns 8,191 through 8,205	
-0.0353	-0.0249
0.0328 -0.0040 -0.0426 -0.0080 -0.0105 -0.0041 -0.0032 0.0506 -0.0235 -0.0147 0.0239 0.0422 -0.0407 -0.0344	-0.0065
0.0778 -0.0335 -0.0036 -0.0074 0.0063 -0.0128 -0.0245	0.0068
0.0664 -0.0050 -0.0195 0.0439 0.0382 -0.0141 -0.0315	
Columns 8,206 through 8,220	
0.0019 0.0383 -0.0574 -0.0198 -0.0011 -0.0104 0.0059	0.0141
0.0184	-0.0070
-0.0283	-0.0197
-0.0448 -0.0193 0.0179 0.0757 -0.0028 -0.0068 0.0173	
Columns 8,221 through 8,235	
0.0472 0.0713 0.0208 0.0255 -0.0305 -0.0040 0.0357 0.0054 0.0062 0.0629 -0.0026 0.0112 -0.0250 -0.0527	0.0111
0.0075 0.0384 -0.0246 -0.0095 0.0184 -0.0117 -0.0028	0.0077
-0.0065 0.0395 0.0109 0.0230 0.0124 0.0117 -0.0283 -0.0297 -0.0192 -0.0419 -0.0289 0.0467 -0.0289 -0.0374	-0.0231
-0.0165 0.0536 -0.0410 0.0125 -0.0031 0.0352 0.0135	
Columns 8,236 through 8,250	
-0.0105 -0.0129 0.0067 0.0173 0.0065 -0.0083 -0.0438	-0.0092
0.0284	-0.0271
0.0382 -0.0132 -0.0221 -0.0008 0.0310 0.0159 -0.0482 0.0024 0.0247 -0.0133 -0.0530 0.0086 0.0292 0.0097	-0.0217
0.0185 -0.0328 -0.0447 0.0122 0.0387 0.0189 -0.0385	3.0217
Columns 8,251 through 8,265	
0.0191 0.0102 -0.0102 -0.0123 0.0105 0.0441 0.0183	0.0330
0.0027 -0.0210 0.0016 -0.0211 -0.0447 0.0091 0.0189 0.0061 -0.0328 -0.0137 -0.0389 0.0032 0.0179 0.0222	0.0299

```
0.0097 -0.0178 -0.0240 -0.0514 -0.0266 -0.0093 -0.0277
   0.0042 \quad -0.0437 \quad -0.0048 \quad -0.0271 \quad -0.0175 \quad -0.0290 \quad 0.0089 \quad 0.0066
-0.0085 0.0019 -0.0393 -0.0536 0.0313 -0.0089 -0.0478
 Columns 8,266 through 8,280
   0.0134 0.0290 0.0203 0.0168 -0.0042 -0.0416 0.0031 0.0032
0.0189 -0.0076 0.0138 -0.0131 0.0029 -0.0133 -0.0269
-0.0604 -0.0197 0.0052 -0.0016 -0.0281 -0.0068 -0.0439
   0.0233 -0.0367 -0.0016 -0.0241 0.0031 0.0110 -0.0237
                                                      -0.0443
-0.0558 -0.0439 0.0135 -0.0143 -0.0182 -0.0140 -0.0622
 Columns 8,281 through 8,295
   0.0279 -0.0047 -0.0032 -0.0018 0.0295 0.0254 -0.0268
-0.0086 -0.0024 -0.0261 0.0158 0.0064 -0.0431 -0.0083
   0.0292 -0.0174 0.0138 -0.0459 -0.0080 0.0213 -0.0306
-0.0268 0.0103 0.0040 0.0021 0.0431 -0.0407 0.0174
  -0.0056 -0.0141 0.0232 -0.0577 -0.0355 -0.0022 -0.0098 -0.0085
-0.0211 0.0100 0.0241 -0.0090 0.0435 -0.0057 0.0323
 Columns 8,296 through 8,310
  -0.0600 -0.0071 -0.0107 -0.0331 -0.0100 0.0121 0.0276 0.0033
0.0237 -0.0340 0.0252 -0.0292 -0.0082 -0.0229 0.0189
   0.0202 0.0039 0.0175 -0.0145 0.0275 -0.0431 -0.0368
-0.0167 0.0574 0.0712 -0.0276 0.0154 -0.0331 -0.0015
   0.0644 0.0086 0.0315 0.0079 0.0472 -0.0619 -0.0782
                                                     0.0048
Columns 8,311 through 8,325
   -0.0217 0.0114 0.0139 0.0021 0.0281 0.0370 -0.0296
   0.0079 0.0188 0.0281 0.0007 -0.0085 0.0290 0.0065
0.0201 -0.0352 -0.0068 -0.0057 -0.0421 0.0282 -0.0106
   0.0066 0.0232 0.0495 0.0106 -0.0190 0.0482 0.0122
0.0207 -0.0580 -0.0218 0.0063 -0.0806 -0.0007 0.0176
Columns 8,326 through 8,340
  0.0097 -0.0078 -0.0245 -0.0271 0.0032 -0.0077 0.0180
                                                     0.0237
0.0007 0.0337 0.0020 -0.0134 0.0202 -0.0030 0.0028
  -0.0162 -0.0155 0.0166 0.0113 0.0116 -0.0227 -0.0077
0.0211 0.0065 0.0086 0.0300 0.0426 0.0127 -0.0313
  -0.0076 -0.0025 0.0377 0.0366 0.0176 -0.0056 -0.0229
0.0145 -0.0073 -0.0019 0.0391 0.0380 0.0158 -0.0393
 Columns 8,341 through 8,355
   0.0006 -0.0264 0.0458 -0.0380 -0.0234 -0.0277 -0.0173
0.0054 0.0043 0.0309 -0.0392 0.0311 0.0024 -0.0265
   0.0489 -0.0338 -0.0028 -0.0108 0.0033 0.0065 -0.0122
-0.0276 -0.0129 -0.0039 -0.0098 0.0164 0.0077 -0.0107
   0.0502 -0.0145 -0.0375 0.0167 0.0148 0.0353 0.0092
-0.0302 -0.0224 -0.0329 0.0224 0.0093 0.0029 0.0080
```

Columns 8,356 through	columns	8.370	l l
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0.0055 0.0087 0.0006 -0.0082 0.0052 -0.0150 0.0030 0.0215 0.0434 -0.0482 0.0073 -0.0315 -0.0220 -0.0164 -0.0090 -0.0090 0.0006 0.0431 0.0064 0.0431 -0.0108 0.0057 0.0203 -0.0207 0.0231 -0.0044 0.0079 0.0008 0.0016 -0.0117 -0.0020 0.0524 0.0198 0.0596 0.0011 0.0225 0.0336 -0.0152 0.0191 0.0111 0.0274 0.0391 0.0191 0.0154 Columns 8,371 through 8,385 0.0022 -0.0198 0.0081 0.0312 -0.0371 -0.0199 -0.0309 0.0020 -0.0263 0.0023 -0.0533 0.0127 -0.0180 -0.0094 -0.0147 0.0118 -0.0156 -0.0057 0.0173 -0.0184 0.0014 -0.0364 0.0060 -0.0300 -0.0065 -0.0661 0.0008 0.0163 -0.0509 Columns 8,386 through 8,400 0.0001 -0.0019 -0.0057 -0.0103 0.0424 -0.0440 0.0011 0.0135 0.0158 -0.0066 -0.0206 -0.0232 0.0171 -0.0221 -0.0049 0.0197 -0.0042 -0.0171 0.0057 0.0014 -0.0301 -0.0042 0.0023 0.0220 0.0035 -0.0263 0.0338 -0.0361 -0.0003 -0.0199 -0.0143 0.0395 0.0123 0.0082 0.0051 -0.0058 0.0036 0.0154 Columns 8,401 through 8,415 -0.0091 -0.0127 -0.0114 0.0212 -0.0013 -0.0294 0.0274 0.0058 0.0266 -0.0159 0.0136 -0.0182 0.0148 -0.0006 -0.0263 0.0108 -0.0172 -0.0322 -0.0079 -0.0128 -0.0037 0.0080 -0.0063 0.0046 -0.0069 0.0209 0.0018 0.0214 0.0281 -0.0253 $0.0250 \quad -0.0136 \quad -0.0262 \quad -0.0249 \quad -0.0130 \quad 0.0124 \quad -0.0221 \quad -0.0142$ -0.0221 0.0201 0.0301 0.0280 0.0139 0.0394 -0.0131 Columns 8,416 through 8,430 -0.0120 -0.0075 -0.0090 0.0174 -0.0084 0.0096 0.0099 0.0342 0.0091 0.0062 0.0048 -0.0011 0.0080 -0.0233 0.0182 -0.0303 -0.0013 0.0253 0.0070 0.0290 0.0197 -0.0227 0.0204 0.0047 -0.0122 0.0261 0.0298 0.0036 0.0147 -0.0095 0.0037 0.0359 -0.0260 0.0538 0.0097 -0.0364 -0.0584 0.0224 0.0063 -0.0051 0.0391 0.0238 0.0253 0.0056 Columns 8,431 through 8,445 0.0211 0.0050 0.0212 0.0031 -0.0049 0.0201 -0.0134 0.0086 -0.0105 -0.0126 -0.0138 0.0234 0.0008 -0.0182 0.0251 -0.0007 -0.0177 0.0076 0.0236 -0.0194 0.0166 0.0180 -0.0035 0.0055 0.0004 -0.0059 0.0222 -0.0074 -0.0241 0.0012 -0.0251 -0.0260 -0.0064 0.0269 -0.0107 -0.0061 0.0239

Columns 8,446 through 8,460

0.0124 0.0126 0.0295 -0.0148 -0.0003 -0.0102 0.0103 -0.0280 0.0059 -0.0298 -0.0187 -0.0171 -0.0378 0.0262 0.0026

0.0237 -0.0144 -0.0077 0.0119 -0.0126 -0.0135 -0.0137

```
-0.0070 -0.0258 0.0017 -0.0201 -0.0233 0.0376 0.0121 -0.0252
0.0175 -0.0158 0.0023 -0.0045 0.0071 0.0050 -0.0019
-0.0349 -0.0456 -0.0255 -0.0105 -0.0192 0.0525 -0.0036 -0.0183
0.0058 -0.0036 0.0138 -0.0006 0.0459 -0.0164 -0.0062
Columns 8,461 through 8,475
 -0.0036 0.0051 0.0085 0.0209 0.0084 -0.0230 -0.0124
 -0.0150 0.0312 -0.0122 0.0106 -0.0262 0.0047 0.0295 -0.0287
0.0137 -0.0250 0.0067 0.0203 0.0032 -0.0243 0.0296
 -0.0149 0.0350 0.0028 0.0395 -0.0396 0.0080 -0.0111 -0.0619
0.0164 -0.0254 -0.0059 -0.0114 -0.0044 -0.0021 0.0369
Columns 8,476 through 8,490
  0.0083 0.0010 -0.0168 0.0143 0.0570 0.0168 -0.0181 0.0050
0.0287 -0.0113 -0.0218 -0.0044 -0.0062 -0.0047 -0.0146
 -0.0298 -0.0135 0.0139 0.0357 0.0094 0.0266 0.0067 -0.0016
0.0110 -0.0157 -0.0234 -0.0243 -0.0110 -0.0254 -0.0198
 -0.0466 -0.0143 0.0357 0.0496 -0.0367 0.0314 0.0227 -0.0049
-0.0121 -0.0125 -0.0145 -0.0338 -0.0174 -0.0256 -0.0108
Columns 8,491 through 8,505
 -0.0014 -0.0140 -0.0061 0.0038 -0.0128 -0.0287 0.0181
                                               -0.0005
0.0200 0.0309 0.0152 0.0200 -0.0020 0.0003 0.0142
  0.0329 0.0178 0.0433 0.0231 -0.0302 0.0066 0.0373
 Columns 8,506 through 8,520
 -0.0032 -0.0157 -0.0225 -0.0146 -0.0028 0.0057 -0.0112 -0.0007
-0.0316 -0.0365 0.0161 -0.0106 -0.0289 -0.0186 -0.0153
-0.0042 0.0095 0.0342 -0.0100 0.0283 0.0360 -0.0015
 -0.0463 -0.0415 0.0436 0.0053 -0.0338 -0.0270 -0.0065
0.0021 -0.0049 0.0358 0.0003 0.0578 0.0634 -0.0044
Columns 8,521 through 8,535
  0.0045 -0.0073 -0.0384 -0.0187 -0.0660 -0.0192 -0.0122 0.0321
0.0238 -0.0021 0.0071 0.0326 0.0118 -0.0329 0.0148
 -0.0088 -0.0094 0.0045 -0.0133 -0.0271 -0.0283 -0.0190
-0.0143 -0.0159 0.0433 0.0088 0.0095 -0.0255 -0.0036
Columns 8,536 through 8,550
 -0.0016 -0.0396 -0.0279 0.0279 0.0062 0.0431 -0.0043
-0.0085 -0.0180 -0.0019 0.0194 0.0347 -0.0037 0.0297
  0.0077 0.0060 0.0447 -0.0139 -0.0238 -0.0235 0.0087
-0.0057 0.0280 0.0066 0.0014 0.0349 0.0235 0.0072
  0.0026 0.0519 0.0795 -0.0294 -0.0235 -0.0687 0.0190
0.0020 0.0552 0.0181 -0.0270 0.0023 0.0272 -0.0055
```

Columns 8,551 through 8,565

0.0033 -0.0367 -0.0009 0.0128 -0.0018 0.0275 -0.0071 0.0051 0.0329 0.0047 0.0186 0.0334 -0.0149 -0.0223 0.0148 -0.0314 -0.0290 -0.0220 0.0446 -0.0010 -0.0016 0.0023 0.0576 -0.0171 0.0259 0.0365 -0.0502 -0.0160 Columns 8,566 through 8,580 0.0081 0.0041 -0.0184 0.0219 0.0266 -0.0005 0.0023 -0.0054 0.0079 -0.0113 0.0142 -0.0036 0.0089 0.0005 0.0002 0.0020 -0.0133 -0.0384 0.0125 0.0201 0.0189 0.0308 -0.0082 0.0022 0.0351 0.0543 -0.0028 0.0200 -0.0186 0.0043 -0.0089 Columns 8,581 through 8,595 -0.0139 0.0323 -0.0058 -0.0029 0.0236 0.0089 0.0515 -0.0192 -0.0092 0.0105 0.0003 -0.0031 0.0167 0.0037 -0.0223 -0.0331 -0.0400 -0.0077 0.0056 0.0065 -0.0179 -0.0405 -0.0029 -0.0012 0.0029 0.0046 0.0145 -0.0075 -0.0068 -0.0702 -0.0198 -0.0176 -0.0043 0.0502 -0.0139 -0.0726 0.0220 Columns 8,596 through 8,610 -0.0247 -0.0229 -0.0249 0.0539 0.0205 -0.0519 0.0090 -0.0052 -0.0295 0.0043 -0.0471 0.0121 0.0217 -0.0044 -0.0507 -0.0030 -0.0218 0.0154 0.0025 -0.0023 -0.0100 0.0328 -0.0019 -0.0087 -0.0242 -0.0085 -0.0263 -0.0283 -0.0336 $-0.0421 \qquad 0.0219 \qquad 0.0046 \quad -0.0321 \quad -0.0026 \qquad 0.0459 \quad -0.0095 \qquad 0.0215$ Columns 8,611 through 8,625 0.0237 -0.0100 -0.0439 0.0441 0.0400 0.0134 0.0276 0.0127 -0.0103 0.0161 -0.0100 0.0209 0.0072 -0.0135 0.0078 -0.0011 -0.0184 0.0287 0.0305 0.0303 -0.0571 -0.0114 -0.0125 -0.0142 0.0676 0.0038 -0.0068 -0.0734 -0.0449 0.0165 Columns 8,626 through 8,640 -0.0026 0.0167 0.0128 -0.0043 -0.0017 0.0094 0.0126 -0.0136 0.0420 0.0038 -0.0006 -0.0102 -0.0577 -0.0107 -0.0121 -0.0177 -0.0068 0.0145 0.0081 -0.0334 -0.0022 -0.0186 0.0211 0.0462 0.0003 -0.0113 0.0240 -0.0106 0.0153 0.0020 -0.0616 -0.0165 0.0162 0.0066 0.0041 0.0158 -0.0073 Columns 8,641 through 8,655

0.0014 0.0079 0.0109 0.0222 -0.0266 0.0331 -0.0072 -0.0048 0.0257 0.0054 0.0224 -0.0104 0.0291 -0.0004 0.0258 -0.0026 -0.0056 -0.0419 -0.0278 -0.0081 0.0012	0.0003
0.0100 0.0048 0.0187 0.0162 -0.0500 -0.0143 0.0146 0.0253 -0.0094 -0.0266 -0.0527 -0.0194 -0.0534 0.0074	-0.0128
Columns 8,656 through 8,670	
0.0193 -0.0303 0.0116 0.0007 0.0106 0.0235 -0.0280 -0.0411 -0.0191 -0.0079 -0.0249 0.0146 0.0146 -0.0352	0.0021
0.0346 -0.0051 0.0105 0.0082 -0.0352 -0.0086 0.0048 -0.0688 0.0167 -0.0337 -0.0403 0.0152 -0.0009 -0.0249	-0.0238
0.0163 0.0133 0.0094 0.0051 -0.0548 -0.0313 0.0276 -0.0480 0.0379 -0.0319 -0.0300 0.0073 -0.0115 0.0011	-0.0450
Columns 8,671 through 8,685	
0.0646 0.0019 0.0037 0.0130 -0.0244 0.0134 -0.0075 -0.0049 0.0417 -0.0276 -0.0268 0.0246 -0.0212 -0.0329	0.0121
-0.0206 -0.0189 -0.0452 0.0044 0.0019 -0.0139 -0.0008 0.0059 0.0003 0.0300 -0.0043 0.0101 -0.0006 -0.0061	0.0622
-0.0738 -0.0272 -0.0498 -0.0114 0.0298 -0.0149 0.0098 0.0122 -0.0491 0.0550 0.0103 -0.0047 0.0186 0.0143	0.0528
Columns 8,686 through 8,700	
0.0326 -0.0106 -0.0003 0.0121 -0.0085 -0.0530 -0.0009 -0.0237 -0.0165 0.0089 0.0080 -0.0111 -0.0283 0.0037	0.0227
0.0290 0.0090 0.0294 -0.0008 0.0064 -0.0261 0.0127 -0.0207 -0.0058 0.0442 -0.0171 -0.0144 0.0111 -0.0253	-0.0154
0.0036 0.0225 0.0353 -0.0116 0.0046 0.0114 0.0091 -0.0085 0.0152 0.0431 -0.0217 0.0073 0.0451 -0.0299	-0.0297
Columns 8,701 through 8,715	
-0.0262	0 0000
-0.0396 -0.0021 -0.0260 0.0021 -0.0406 -0.0050 -0.0091	
-0.0328 -0.0133 0.0049 0.0155 0.0119 0.0419 0.0145 -0.0145 -0.0424 -0.0160 0.0032 0.0007 -0.0020 0.0148	
-0.0182 -0.0515 -0.0093 0.0023 -0.0160 0.0427 -0.0025 0.0079 -0.0406 0.0070 0.0093 0.0381 0.0105 0.0279	0.0003
Columns 8,716 through 8,730	
-0.0062 0.0239 0.0099 -0.0189 -0.0370 0.0067 -0.0036 -0.0087 -0.0186 0.0515 -0.0124 0.0069 0.0078 -0.0359	-0.0082
0.0177 0.0457 -0.0371 0.0029 -0.0261 0.0159 0.0051 0.0008 0.0068 0.0527 -0.0072 -0.0094 0.0132 -0.0437	0.0079
0.0366 0.0281 -0.0583 0.0246 -0.0079 -0.0006 0.0029 0.0125 0.0137 0.0231 0.0121 -0.0075 0.0172 -0.0375	0.0076
Columns 8,731 through 8,745	
-0.0089 0.0058 0.0262 0.0248 0.0121 -0.0155 -0.0354 -0.0193 -0.0184 -0.0204 -0.0207 -0.0154 -0.0072 0.0264	0.0168
0.0201 -0.0053 -0.0163 0.0205 -0.0122 -0.0284 0.0211	-0.0087
0.0054 0.0140 -0.0182 -0.0184 0.0008 0.0130 0.0089 0.0242 -0.0108 -0.0364 0.0146 -0.0207 -0.0116 0.0696	-0.0228

Columns 8,836 through 8,850

0.0224 0.0227 -0.0151 -0.0033 0.0103 0.0153 -0.0171 Columns 8,746 through 8,760 0.0268 -0.0349 -0.0304 -0.0103 -0.0349 0.0076 0.0092 0.0321 0.0008 0.0079 0.0352 0.0002 -0.0179 0.0014 -0.0128 0.0103 -0.0083 -0.0347 -0.0035 -0.0091 0.0289 0.0266 -0.0258 -0.0217 0.0066 -0.0099 0.0128 -0.0496 0.0033 $-0.0054 \qquad 0.0196 \quad -0.0185 \qquad 0.0060 \qquad 0.0176 \qquad 0.0379 \qquad 0.0282 \qquad 0.0243$ -0.0361 -0.0233 -0.0239 -0.0156 0.0405 -0.0531 0.0068 Columns 8,761 through 8,775 -0.0028 -0.0530 0.0140 0.0260 -0.0131 -0.0239 -0.0042 0.0220 0.0181 0.0174 -0.0199 0.0049 0.0643 0.0130 0.0231 0.0090 -0.0104 -0.0151 0.0105 0.0043 -0.0218 -0.0149 -0.0158 -0.0015 0.0339 -0.0477 -0.0157 0.0507 0.0174 0.0113 -0.0053 0.0195 -0.0376 -0.0117 -0.0165 0.0199 -0.0086 Columns 8,776 through 8,790 0.0012 -0.0100 0.0267 0.0394 -0.0021 0.0174 0.0046 0.0197 0.0135 -0.0448 0.0498 0.0338 -0.0273 -0.0032 0.0047 -0.0016 -0.0403 0.0373 0.0068 -0.0313 -0.0182 -0.0041 -0.0655 -0.0112 0.0040 0.0018 -0.0310 -0.0007 0.0404 0.0237 Columns 8,791 through 8,805 -0.0316 -0.0271 -0.0091 -0.0004 0.0175 -0.0250 -0.0257 0.0327 -0.0315 -0.0004 -0.0064 -0.0110 -0.0213 0.0171 0.0139 -0.0242 0.0039 0.0053 0.0129 0.0100 -0.0069 -0.0418 0.0297 -0.0015 0.0153 0.0089 0.0133 0.0042 0.0128 -0.0308 0.0209 0.0089 0.0381 0.0045 0.0328 -0.0301 0.0300 Columns 8,806 through 8,820 0.0025 -0.0585 -0.0475 0.0043 0.0095 0.0457 -0.0019 0.0007 -0.0317 0.0018 -0.0116 -0.0236 0.0234 0.0379 -0.0222 -0.0024 0.0205 0.0269 0.0242 0.0468 -0.0055 0.0138 0.0014 0.0183 -0.0073 -0.0050 -0.0088 -0.0000 -0.0376 -0.0284 0.0273 0.0673 0.0196 0.0331 0.0185 -0.0080 0.0107 0.0590 -0.0080 0.0028 0.0112 -0.0191 -0.0700 Columns 8,821 through 8,835 0.0046 0.0175 0.0025 0.0266 0.0057 -0.0135 0.0029 -0.0009 -0.0289 -0.0026 0.0034 -0.0193 0.0060 0.0158 0.0413 0.0326 -0.0095 0.0200 0.0126 0.0307 -0.0187 -0.0016 -0.0464 0.0246 0.0323 -0.0330 0.0319 -0.0108

-0.0208	0.0127
0.0149 0.0033 -0.0083 -0.0351 -0.0260 0.0026 0.0228 -0.0102 -0.0267 0.0331 0.0337 0.0347 -0.0272 -0.0324	0.0160
0.0358 -0.0095 -0.0270 -0.0316 -0.0350 0.0217 -0.0064 -0.0084 -0.0381 0.0133 0.0553 0.0527 0.0070 -0.0195	0.0055
Columns 8,851 through 8,865	
0.0136 0.0056 0.0045 -0.0271 0.0109 0.0365 0.0363 0.0096 -0.0102 -0.0099 0.0412 -0.0090 0.0198 0.0107	-0.0057
0.0082 0.0213 -0.0064 -0.0092 -0.0022 0.0013 0.0068 -0.0217 0.0495 -0.0288 0.0330 0.0396 -0.0088 0.0127	0.0227
-0.0030 0.0157 0.0009 0.0146 -0.0060 -0.0326 -0.0135 -0.0216 0.0683 -0.0202 0.0045 0.0649 -0.0340 0.0110	0.0357
Columns 8,866 through 8,880	
-0.0105 -0.0190 -0.0333 -0.0138 0.0350 0.0194 -0.0255 -0.0074 0.0003 -0.0083 0.0195 -0.0379 -0.0070 0.0146	-0.0069
-0.0170 0.0054 0.0022 0.0120 0.0325 -0.0017 0.0194 0.0103 0.0009 0.0141 0.0138 0.0174 -0.0164 0.0382	0.0053
-0.0143 0.0139 0.0314 0.0331 0.0126 -0.0210 0.0400 0.0139 0.0001 0.0261 0.0044 0.0607 -0.0173 0.0376	0.0180
Columns 8,881 through 8,895	
0.0093 0.0029 -0.0070 0.0151 -0.0343 0.0121 0.0400 0.0325 0.0101 0.0296 0.0072 -0.0056 0.0028 -0.0119	-0.0059
-0.0050 0.0150 -0.0271 0.0247 0.0016 -0.0077 0.0042 0.0307 0.0129 0.0138 -0.0168 0.0078 -0.0050 -0.0253	-0.0040
-0.0125 0.0197 -0.0242 0.0065 0.0203 -0.0214 -0.0136 0.0212 0.0070 -0.0156 -0.0297 0.0204 -0.0095 -0.0263	0.0055
Columns 8,896 through 8,910	
0.0245 0.0544 0.0189 0.0095 0.0165 -0.0467 0.0031 -0.0569 0.0041 0.0108 -0.0011 0.0066 0.0096 -0.0109	-0.0462
0.0213	-0.0215
0.0011 -0.0063 -0.0216 -0.0202 -0.0018 -0.0179 -0.0272 -0.0037 0.0042 -0.0015 0.0387 -0.0269 0.0384 0.0205	0.0047
Columns 8,911 through 8,925	
-0.0063 0.0295 0.0211 -0.0173 0.0171 0.0121 -0.0262 -0.0197 0.0039 -0.0311 0.0122 0.0170 0.0221 0.0123	-0.0044
-0.0042	0.0174
0.0115 -0.0093 -0.0162 0.0225 -0.0004 -0.0393 -0.0167 0.0083 -0.0040 0.0469 0.0148 0.0348 0.0032 0.0131	0.0332
Columns 8,926 through 8,940	
-0.0104 -0.0133 0.0208 0.0312 0.0177 0.0111 0.0298 0.0253 0.0249 0.0429 0.0377 -0.0193 0.0181 -0.0034	0.0241
0.0291 0.0015 0.0057 0.0346 -0.0221 0.0572 -0.0121 0.0199 -0.0067 -0.0389 -0.0137 -0.0075 0.0043 0.0003	0.0417

```
-0.0125 -0.0247 -0.0809 -0.0466 0.0011 -0.0189 -0.0025
 Columns 8,941 through 8,955
  0.0049 -0.0067 0.0511 0.0111 -0.0300 0.0006 -0.0177 0.0136
-0.0505 -0.0174 -0.0005 -0.0277 -0.0084 0.0130 0.0116
  -0.0195 0.0084 0.0400 0.0201 -0.0030 0.0193 0.0152
0.0347 -0.0356 0.0059 -0.0092 -0.0505 0.0425 0.0294
 0.1030 -0.0375 0.0267 0.0254 -0.0558 0.0430 0.0221
Columns 8,956 through 8,970
  0.0177 -0.0124 0.0129 0.0286 0.0062 -0.0329 0.0262
0.0037 0.0413 0.0084 0.0113 0.0396 0.0476 0.0021
 -0.0166 0.0130 0.0386 -0.0269 -0.0145 -0.0191 0.0420
-0.0030 0.0224 -0.0245 -0.0141 0.0094 0.0167 0.0236
 -0.0370 0.0277 0.0370 -0.0651 -0.0154 0.0032 0.0380
-0.0064 -0.0187 -0.0351 -0.0182 -0.0211 -0.0217 0.0388
Columns 8,971 through 8,985
 -0.0202 0.0130 0.0355 -0.0343 -0.0126 0.0083 -0.0072
-0.0022 -0.0264 -0.0334 0.0059 -0.0310 -0.0283 0.0299
  -0.0315 -0.0111 -0.0040 -0.0087 0.0098 0.0007 -0.0237
                                                    0.0266
0.0138 -0.0272 -0.0025 0.0160 -0.0222 0.0251 -0.0012
 -0.0236 -0.0268 -0.0383 0.0130 0.0292 -0.0114 -0.0252
0.0085 -0.0240 0.0353 0.0160 0.0033 0.0434 -0.0163
Columns 8,986 through 9,000
 -0.0447 -0.0015 -0.0336 0.0022 0.0017 -0.0211 -0.0126 0.0037
-0.0254 -0.0009 -0.0169 0.0067 0.0251 0.0004 -0.0292
 -0.0187 -0.0297 -0.0338 -0.0015 0.0151 -0.0066 -0.0030 -0.0027
0.0159 -0.0287 0.0094 0.0083 -0.0419 0.0081 -0.0070
 0.0068 -0.0421 -0.0249 -0.0021 0.0080 0.0161 0.0072
0.0330 -0.0158 0.0243 0.0084 -0.0793 0.0151 0.0167
 Columns 9,001 through 9,015
  0.0172 -0.0545 -0.0020 -0.0175 0.0159 0.0141 -0.0483
  0.0188 0.0021 -0.0152 0.0038 0.0280 0.0171 0.0006 -0.0066
0.0265 -0.0120 0.0262 0.0210 0.0125 0.0189 -0.0245
  0.0097 -0.0106 -0.0172 0.0144 0.0348 0.0087 0.0313
-0.0016 0.0381 0.0331 0.0422 -0.0046 0.0159 0.0108
 Columns 9,016 through 9,030
  -0.0136 0.0210 -0.0165 0.0321 -0.0123 0.0143 0.0194
0.0012 0.0176 0.0764 0.0035 0.0069 0.0266 0.0024
  0.0004 0.0081 -0.0149 -0.0134 -0.0033 -0.0212 -0.0094
0.0352 0.0028 0.0487 -0.0040 -0.0280 0.0107 -0.0276
 -0.0012 -0.0024 -0.0136 -0.0582 0.0148 -0.0327 -0.0297 0.0303
0.0287 -0.0113 0.0082 -0.0203 -0.0295 -0.0090 -0.0393
```

Columns 9,031 through 9,045

0.0107 -0.0100 0.0031 0.0161 0.0142 0.0419 -0.0238 0.0107 -0.0200 -0.0001 -0.0141 -0.0138 0.0109 -0.0061 -0.0156 -0.0285 -0.0212 0.0386 0.0055 -0.0314 0.0315 -0.0060 -0.0052 -0.0354 -0.0181 0.0401 -0.0068 -0.0553 0.0067 0.0019 -0.0148 Columns 9,046 through 9,060 -0.0299 -0.0179 0.0004 0.0282 -0.0238 0.0275 -0.0245 0.0070 -0.0022 -0.0313 0.0096 -0.0158 0.0272 0.0101 -0.0411 0.0153 -0.0028 0.0366 0.0190 -0.0187 -0.0298 -0.0203 0.0053 -0.0225 -0.0408 0.0460 -0.0245 0.0037 0.0127 -0.0489 0.0475 0.0091 0.0465 0.0059 0.0013 -0.0458 0.0044 Columns 9,061 through 9,075 0.0309 -0.0328 -0.0007 0.0226 -0.0019 -0.0149 -0.0058 -0.0346 0.0109 -0.0050 -0.0304 0.0160 0.0270 0.0019 0.0040 -0.0379 0.0004 -0.0422 -0.0094 -0.0019 0.0299 -0.0175 -0.0377 -0.0179 -0.0081 0.0178 0.0225 0.0278 0.0150 -0.0394 -0.0128 0.0032 0.0231 0.0175 0.0399 -0.0036 Columns 9,076 through 9,090 -0.0008 -0.0074 -0.0177 -0.0233 0.0058 0.0209 0.0032 0.0121 0.0380 -0.0061 -0.0139 0.0287 0.0553 0.0081 -0.0217 -0.0475 -0.0059 -0.0318 -0.0241 -0.0565 -0.0221 0.0282 0.0218 0.0106 0.0077 -0.0433 -0.0056 0.0057 0.0126 0.0411 -0.0553 0.0043 -0.0312 -0.0112 -0.0667 -0.0386 0.0288 0.0177 Columns 9,091 through 9,105 -0.0210 -0.0293 0.0273 0.0106 0.0284 -0.0211 0.0206 -0.0129 0.0011 0.0394 -0.0303 0.0095 0.0189 -0.0039 0.0202 -0.0302 0.0330 0.0086 0.0381 0.0257 -0.0056 0.0347 -0.0384 -0.0217 0.0733 -0.0113 0.0397 0.0030 0.0287 0.0102 -0.0348 0.0251 0.0289 -0.0139 -0.0240 -0.0423 0.0042 0.0230 Columns 9,106 through 9,120 -0.0151 0.0098 -0.0285 -0.0091 -0.0149 0.0269 -0.0232 0.0021 -0.0305 0.0247 0.0053 0.0580 0.0215 -0.0093 -0.0070 -0.0200 0.0092 0.0375 0.0239 0.0323 0.0083 -0.0136 -0.0013 -0.0191 -0.0002 0.0596 0.0254 0.0446 -0.0213 0.0099 Columns 9,121 through 9,135

-0.0367 0.0021 0.0269 -0.0117 -0.0036 -0.0361 -0.0033 -0.0014

```
-0.0031 0.0431 -0.0001 0.0156 -0.0293 0.0273 0.0090 0.0436
0.0263 -0.0111 -0.0191 -0.0464 0.0018 -0.0082 -0.0071
  0.0202 0.0528 -0.0251 0.0243 -0.0301 0.0636 0.0197
                                                     0.0635
0.0362 -0.0201 -0.0047 -0.0304 0.0206 -0.0128 -0.0358
Columns 9,136 through 9,150
 -0.0176 -0.0005 0.0140 0.0201 -0.0133 -0.0076 0.0356
  0.0129 -0.0059 0.0076 0.0231 0.0122 -0.0196 0.0229
-0.0270 0.0261 0.0448 -0.0231 0.0117 0.0248 -0.0394
  0.0258 -0.0164 0.0323 0.0131 0.0404 0.0165 0.0027 0.0028
-0.0070 0.0329 0.0262 -0.0500 0.0365 0.0323 -0.0712
Columns 9,151 through 9,165
  0.0319 -0.0272 0.0061 -0.0175 -0.0242 0.0025 -0.0130 -0.0206
0.0418 -0.0176 -0.0188 -0.0177 0.0030 -0.0078 0.0204
 -0.0297 -0.0116 0.0148 0.0706 0.0605 0.0072 0.0228 -0.0162
-0.0253 -0.0131 0.0012 0.0033 0.0277 0.0134 0.0264
  -0.0524 0.0091 0.0023 0.0902 0.0803 -0.0086 0.0457 -0.0001
-0.0564 -0.0065 0.0177 0.0223 0.0188 0.0323 0.0001
Columns 9,166 through 9,180
 -0.0016 0.0074 -0.0202 -0.0001 -0.0257 -0.0154 0.0069
-0.0262 -0.0185 0.0144 0.0212 -0.0042 0.0097 0.0187
 -0.0063 0.0264 -0.0518 0.0071 0.0066 -0.0134 0.0023
                                                     0.0174
0.0112 0.0066 0.0284 -0.0034 0.0115 -0.0006 0.0165
 -0.0266 0.0292 -0.0550 -0.0019 0.0255 0.0027 -0.0100
Columns 9,181 through 9,195
  0.0249 -0.0087 -0.0031 0.0136 0.0067 -0.0029 0.0108 -0.0136
0.0242 -0.0240 -0.0124 0.0014 -0.0434 0.0317 -0.0142
  0.0107 0.0125 -0.0255 0.0187 0.0061 0.0044 0.0021
                                                     -0.0144
0.0233 0.0205 0.0166 -0.0076 0.0129 0.0020 0.0009
  0.0086 \qquad 0.0125 \quad -0.0234 \qquad 0.0058 \qquad 0.0082 \qquad 0.0054 \qquad 0.0003 \quad -0.0126
0.0161 0.0475 0.0276 -0.0237 0.0438 -0.0353 -0.0087
Columns 9,196 through 9,210
 -0.0169 -0.0461 0.0240 -0.0236 -0.0373 -0.0169 0.0006 -0.0157
-0.0304 -0.0381 -0.0295 -0.0015 -0.0362 -0.0171 -0.0167
  0.0378 \quad -0.0345 \quad -0.0109 \quad 0.0437 \quad -0.0091 \quad 0.0117 \quad 0.0287 \quad -0.0276
-0.0136 -0.0083 -0.0193 0.0129 0.0054 -0.0326 -0.0199
  0.0540 0.0009 -0.0230 0.0858 0.0222 0.0307 0.0251
0.0229 0.0198 -0.0129 0.0167 0.0369 -0.0193 -0.0190
 Columns 9,211 through 9,225
 -0.0014 -0.0149 0.0065 0.0014 0.0216 0.0087 -0.0137
-0.0026 -0.0513 -0.0319 0.0085 -0.0163 0.0207 -0.0529
0.0012 -0.0404 -0.0438 -0.0000 -0.0319 0.0278 -0.0565 0.0202
-0.0087 0.0063 0.0188 -0.0137 0.0419 0.0316 -0.0015
```

Columns 9,226 through 9,240

-0.0131 0.0227 -0.0018 0.0151 -0.0026 -0.0027 -0.0001 -0.0092 0.0063 -0.0125 0.0310 -0.0028 0.0002 -0.0194 -0.0114 0.0019 0.0244 0.0173 -0.0083 0.0234 -0.0039 0.0415 0.0062 0.0411 -0.0083 -0.0106 0.0345 0.0075 0.0575 Columns 9,241 through 9,255 -0.0081 -0.0016 0.0246 -0.0194 0.0006 -0.0138 -0.0148 0.0034 0.0041 -0.0098 -0.0065 0.0433 -0.0086 0.0216 -0.0073 -0.0071 0.0180 0.0371 -0.0033 0.0276 0.0235 0.0465 -0.0203 -0.0185 -0.0017 -0.0416 -0.0232 -0.0277 0.0017 -0.0223 -0.0010 0.0119 0.0256 0.0236 0.0409 0.0425 0.0747 Columns 9,256 through 9,270 -0.0061 0.0100 -0.0019 -0.0046 0.0072 -0.0101 0.0242 0.0769 0.0202 0.0201 -0.0010 0.0074 0.0290 0.0310 0.0234 0.0195 -0.0088 -0.0177 -0.0049 0.0006 -0.0011 0.0723 -0.0191 0.0109 0.0091 0.0243 0.0095 0.0046 0.0587 0.0251 0.0069 -0.0151 -0.0302 0.0008 0.0141 -0.0344 Columns 9,271 through 9,285 -0.0299 0.0099 -0.0067 0.0343 -0.0018 0.0007 -0.0133 -0.0136 -0.0695 0.0090 -0.0146 0.0626 -0.0063 -0.0050 -0.0344 0.0159 -0.0021 0.0040 -0.0196 -0.0219 -0.0384 -0.0187 -0.0045 Columns 9,286 through 9,300 -0.0147 -0.0442 0.0236 0.0477 -0.0322 -0.0003 -0.0330 0.0153 0.0183 -0.0129 0.0129 -0.0246 -0.0174 0.0160 0.0296 -0.0308 -0.0080 -0.0398 -0.0117 -0.0079 0.0148 0.0227 -0.0131 -0.0457 -0.0046 -0.0488 0.0196 0.0031 0.0056 0.0092 Columns 9,301 through 9,315 0.0123 -0.0172 -0.0208 -0.0090 0.0152 0.0019 -0.0260 -0.0249 0.0259 -0.0092 0.0011 -0.0456 0.0110 -0.0315 -0.0312 0.0067 0.0075 -0.0090 0.0127 -0.0170 -0.0203 -0.0024 0.0146 0.0138 0.0065 -0.0162 0.0209 -0.0055 -0.0390 0.0210 0.0196 0.0072 -0.0103 -0.0246 0.0025 0.0068 -0.0061 0.0309 -0.0000 0.0194 0.0170 0.0080 Columns 9,316 through 9,330

-0.0216	-0.0278
-0.0608 -0.0129 0.0223 -0.0568 -0.0011 -0.0179 0.0124 0.0689 0.0063 -0.0087 -0.0311 -0.0300 0.0254 0.0489	-0.0237
Columns 9,331 through 9,345	
0.0054 0.0120 -0.0015 -0.0057 0.0045 0.0025 -0.0261 0.0393 -0.0222 0.0115 -0.0179 0.0274 -0.0052 0.0189	-0.0212
0.0095 -0.0046 -0.0082 0.0178 0.0265 0.0229 -0.0050 0.0470 -0.0000 0.0210 -0.0281 0.0382 -0.0101 -0.0139	0.0127
0.0112 -0.0247 -0.0231 0.0340 0.0242 0.0300 0.0144 0.0163 0.0171 0.0104 -0.0162 0.0257 -0.0036 -0.0399	0.0268
Columns 9,346 through 9,360	
-0.0297 0.0182 0.0364 0.0301 0.0052 -0.0215 0.0218 0.0113 -0.0030 -0.0042 -0.0425 -0.0088 0.0338 0.0364	-0.0030
0.0153 -0.0197 -0.0374 -0.0314 -0.0238 0.0070 0.0117 -0.0302 0.0278 0.0010 -0.0134 -0.0153 -0.0301 0.0028	-0.0044
0.0465 -0.0493 -0.0671 -0.0527 -0.0248 0.0245 0.0117 -0.0501 0.0207 0.0111 0.0320 -0.0269 -0.0621 -0.0202	0.0009
Columns 9,361 through 9,375	
0.0029 -0.0000 -0.0168 -0.0205 -0.0003 -0.0035 -0.0052 -0.0382 0.0142 0.0264 -0.0227 -0.0071 0.0061 -0.0167	-0.0142
0.0149 0.0635 0.0158 0.0082 0.0217 0.0423 -0.0014 -0.0529 0.0047 -0.0125 -0.0254 -0.0117 -0.0254 0.0322	0.0010
0.0249 0.0847 0.0423 0.0306 0.0278 0.0670 0.0131 -0.0334 -0.0144 -0.0284 -0.0249 -0.0205 -0.0398 0.0553	0.0090
Columns 9,376 through 9,390	
0.0188 -0.0046 0.0391 -0.0324 0.0295 0.0559 0.0223 -0.0142 -0.0043 0.0211 -0.0067 0.0131 0.0181 -0.0310	0.0115
0.0002 -0.0027 0.0175 0.0113 0.0216 -0.0110 0.0309 -0.0343 -0.0161 0.0416 0.0387 0.0123 0.0185 -0.0502	-0.0091
-0.0080 0.0121 -0.0178 0.0284 0.0100 -0.0566 0.0184 -0.0135 -0.0078 0.0309 0.0424 0.0072 0.0171 -0.0334	-0.0145
Columns 9,391 through 9,405	
-0.0184	0.0224
-0.0408	0.0045
-0.0268 -0.0205 0.0088 0.0003 -0.0156 -0.0281 -0.0051 -0.0113 -0.0023 0.0134 0.0115 0.0370 0.0071 0.0396	0.0088
Columns 9,406 through 9,420	
0.0224 0.0224 -0.0253 0.0249 0.0087 -0.0333 0.0188 -0.0079 0.0330 -0.0238 0.0397 0.0034 -0.0019 0.0009	-0.0031
-0.0044	0.0088
-0.0220 0.0147 0.0190 -0.0160 -0.0316 0.0289 -0.0231	0.0239

```
0.0285 -0.0232 0.0061 -0.0404 -0.0612 -0.0085 -0.0053
 Columns 9,421 through 9,435
 -0.0091 \quad -0.0167 \quad -0.0212 \quad 0.0231 \quad 0.0016 \quad -0.0139 \quad -0.0253 \quad -0.0230
0.0160 -0.0245 -0.0491 0.0254 -0.0024 -0.0214 -0.0060
 -0.0173 -0.0265 -0.0160 -0.0015 -0.0249 -0.0106 0.0151 -0.0291
0.0267 -0.0190 0.0332 0.0006 0.0261 0.0196 0.0025
 -0.0103 -0.0233 0.0015 -0.0252 -0.0349 0.0180 0.0244
0.0265 0.0102 0.0755 -0.0244 0.0310 0.0450 0.0111
 Columns 9,436 through 9,450
  -0.0145 0.0197 0.0219 -0.0149 0.0021 0.0162 -0.0135
  0.0069 -0.0083 -0.0073 0.0099 -0.0079 -0.0085 -0.0036
-0.0095 -0.0119 0.0021 -0.0175 0.0269 0.0140 -0.0193
 -0.0471 -0.0239 -0.0165 0.0047 0.0177 0.0325 0.0060 0.0515
0.0155 -0.0222 -0.0118 -0.0147 0.0378 -0.0101 -0.0035
 Columns 9,451 through 9,465
  0.0035 -0.0027 -0.0314 0.0026 0.0149 0.0161 0.0208
-0.0393 -0.0465 -0.0349 -0.0213 0.0064 0.0012 0.0462
                                               0.0263
-0.0040 -0.0305 0.0273 0.0051 -0.0029 -0.0286 -0.0141
 -0.0436 -0.0585 -0.0142 -0.0190 -0.0003 -0.0053 0.0392 0.0466
-0.0399 -0.0402 -0.0120 0.0246 -0.0313 -0.0453 -0.0341
 Columns 9,466 through 9,480
 -0.0099 0.0081 0.0044 0.0051 -0.0181 0.0384 0.0285 -0.0041
0.0420 -0.0013 0.0102 -0.0404 -0.0234 0.0043 0.0111
  0.0430 -0.0043 0.0004 0.0072 -0.0007 -0.0054 0.0481 -0.0484
0.0641 -0.0056 -0.0043 -0.0047 0.0162 -0.0337 0.0347 -0.0362
Columns 9,481 through 9,495
  0.0115 -0.0479 -0.0023 0.0485 0.0250 0.0172 0.0405
-0.0453 0.0127 0.0157 0.0157 -0.0001 -0.0050 0.0485
  -0.0208
Columns 9,496 through 9,510
 -0.0058 -0.0213 0.0445 -0.0099 -0.0349 -0.0160 0.0099
0.0270 0.0529 -0.0221 -0.0032 -0.0159 0.0071 -0.0332
  0.0012 -0.0269 0.0244 0.0034 -0.0267 0.0021 -0.0158
                                                -0.0157
-0.0120 0.0172 -0.0007 -0.0420 -0.0219 -0.0208 -0.0050
  0.0126 -0.0152 -0.0121 0.0067 -0.0114 0.0135 -0.0243
-0.0385 -0.0226 0.0197 -0.0398 -0.0082 -0.0389 0.0275
```

Columns 9,511 through 9,525

0.0367 -0.0040 0.0096 0.0092 -0.0225 -0.0172 0.0169	0.0201 -0.0168 0.0152 0.0157 0.0251 0.0050 -0.0032 -0.0238 -0.0110 -0.0093 0.0062 0.0024 0.0042 -0.0124 -0.0022 0.0098 0.0187 0.0160 0.0146 0.0212 0.0297	
Columns 9,526 through 9,540 0.0038	0.0367 -0.0040 0.0096 -0.0082 -0.0225 -0.0172 -0.0169 -0.0141 0.0232 -0.0040 -0.0041 -0.0037 0.0155 0.0388	
0.0359		
0.0359	0 0029 0 0216 0 0459 0 0245 0 0002 0 0226 0 0407	0 0161
-0.0452	0 0250	
-0.0509	-0.0235 0.0271 0.0234 0.0169 0.0117 -0.0307 -0.0052	
-0.0176 -0.0071 -0.0390 0.0181 0.0660 -0.0107 0.0246 -0.0239 0.0042 -0.0297 0.0301 -0.0166 -0.0012 0.0376 -0.0089 -0.0055 -0.0124 0.0138 -0.0151 0.0051 -0.0168 0.0123 0.0123 0.0432 0.0433 -0.0273 -0.0223 0.0521 0.0189 0.0013 0.0087 -0.0330 0.0517 -0.0326 -0.0493 -0.0140 -0.0085 0.0229 0.0462 0.0741 -0.0644 -0.0131 0.0661 -0.0073 0.0227 0.0462 0.0741 -0.0644 -0.0131 0.0661 -0.0073 0.0227 0.0462 0.0741 -0.0644 -0.0131 0.0661 -0.0073 0.0227 0.0462 0.0741 -0.0644 -0.0131 0.0661 -0.0073 0.0227 0.0462 0.0256 -0.0185 0.0404 -0.0378 -0.0122 -0.0207 -0.0362 0.0236 -0.0185 0.0404 -0.0133 0.0306 0.0605 0.0151 0.0284 0.0299 0.0115 -0.0033 0.0134 0.0084 -0.0482 -0.0281 0.0684 -0.0207 0.0106 -0.0094 -0.0000 0.0721 0.0048 0.0215 0.0307 0.0274 -0.0367 0.0462 0.0224 -0.0530 -0.0086 0.0215 0.0215 0.0236 -0.0125 -0.0367 0.0462 0.0224 -0.0530 -0.0086 0.0005 0.0113 0.0013 0.0109 0.0236 -0.0175 -0.0203 0.0042 -0.0036 0.0396 0.0411 0.0048 0.0215 0.0307 0.0128 -0.0000 -0.0118 -0.0113 -0.0362 -0.0183 0.0095 0.0013 0.0095 0.0018 0.0436 0.0004 -0.0018 -0.00113 -0.0362 -0.0183 0.0095 0.0018 0.0436 0.0004 -0.0118 -0.0113 -0.0362 -0.0183 0.0095 0.0018 0.0436 0.0004 -0.0114 0.0010 -0.0398 0.0043 0.0151 -0.0026 0.0021 0.0782 0.0106 -0.0254 0.0086 -0.0788 -0.0322 0.0036 0.0041 0.00782 0.0106 -0.0254 0.0086 -0.0788 -0.0322 0.0036 0.0041 0.0038 0.0078 0.0012 0.0036 0.0043 0.0047 0.0026 0.0043 0.0047 -0.0012 0.0358 -0.0124 -0.0333 0.00025 -0.0124 0.0338 0.0077 -0.0012 0.0036 0.0047 0.0012 0.0358 -0.0124 -0.0333 0.00025 -0.0124 0.0236 -0.0788 -0.0322 0.0035 -0.0124 0.0036 -0.0077 -0.0167 -0.0075 -0.0074 0.0035 0.0045 0.0047 -0.0012 0.0358 -0.0124 -0.0253 0.0295 0.0297 -0.0745 -0.0004 0.0745 0.0026 0.0048 0.0044 0.0133 0.0025 0.0295 0.0297 -0.0745 0.0004 0.0745 0.0026 0.0048 0.0044 0.0133 0.0025 0.0295 0.0297 -0.0745 0.0004 0.0745 0.0026 0.0048 0.0033 -0.0159 0.0158 0.0178 0.0047 -0.00123 0.0045 0.0044 0.0033 0.0044 0.0015 0.0026 0.0075 0.00174 0.0035 0.00415 0.0068 0.0064 0.0013 0.0028 0.0559 0.0271 0.0262		-0.0273
0.0042	Columns 9,541 through 9,555	
0.0432		-0.0239
Columns 9,556 through 9,570 -0.0495	-0.0055 -0.0124 0.0138 -0.0151 0.0051 -0.0168 0.0123	0.0123
-0.0495		0.0229
-0.0205	Columns 9,556 through 9,570	
0.0236		0.0049
0.0307 0.0274 -0.0367 0.0462 0.0224 -0.0530 -0.0086 Columns 9,571 through 9,585 0.0237 0.0128 -0.0243 0.0109 -0.0176 0.0015 0.0013 0.0109 0.0236 -0.0175 -0.0203 0.0042 -0.0036 0.0396 0.0411 0.0346 -0.0095 -0.0000 -0.0118 -0.0113 -0.0362 -0.0183 0.0095 0.0018 0.0436 0.0004 -0.0141 -0.0010 -0.0398 0.0043 0.0151 -0.0084 0.0177 -0.0191 -0.0163 -0.0539 -0.0125 0.0036 -0.0021 0.0782 0.0106 -0.0254 0.0086 -0.0788 -0.0322 Columns 9,586 through 9,600 0.0166 0.0217 0.0136 -0.0114 0.0016 0.0263 0.0025 -0.0293 0.0241 0.0638 0.0314 0.0318 -0.0150 0.0147 0.0026 0.0483 0.0078 -0.0162 0.0124 0.0230 -0.0374 0.0064 0.0371 0.0133 0.0014 -0.0333 0.0082 -0.0215 -0.0047 -0.0012 0.0358 -0.0124 -0.0253 0.0295 0.0297 -0.0745 -0.0004 0.0745 -0.0020 -0.0549 -0.0775 -0.0167 -0.0075 -0.0174 0.0035 Columns 9,601 through 9,615 0.0082 0.0033 -0.0159 0.0158 0.0178 0.0047 -0.0123 -0.0415 0.0163 0.0044 0.0133 -0.0028 0.0559 0.0271 0.0262	0.0236 -0.0248 -0.0104 -0.0133 0.0306 0.0605 0.0151	0.0284
0.0237 0.0128 -0.0243 0.0109 -0.0176 0.0015 0.0013 0.0109 0.0236 -0.0175 -0.0203 0.0042 -0.0036 0.0396 0.0411 0.0346 -0.0095 -0.0000 -0.0118 -0.0113 -0.0362 -0.0183 0.0095 0.0018 0.0436 0.0004 -0.0141 -0.0010 -0.0398 0.0043 0.0151 -0.0084 0.0177 -0.0191 -0.0163 -0.0539 -0.0125 0.0036 -0.0021 0.0782 0.0106 -0.0254 0.0086 -0.0788 -0.0322 Columns 9,586 through 9,600 0.0166 0.0217 0.0136 -0.0114 0.0016 0.0263 0.0025 -0.0293 0.0241 0.0638 0.0314 0.0318 -0.0150 0.0147 0.0026 0.0483 0.0078 -0.0162 0.0124 0.0230 -0.0374 0.0064 0.0371 0.0133 0.0014 -0.0333 0.0082 -0.0215 -0.0047 -0.0012 0.0358 -0.0124 -0.0253 0.0295 0.0297 -0.0745 -0.0004 0.0745 -0.0020 -0.0549 -0.0775 -0.0167 -0.0075 -0.0174 0.0035 Columns 9,601 through 9,615 0.0082 0.0033 -0.0159 0.0158 0.0178 0.0047 -0.0123 -0.0415 0.0163 0.0044 0.0133 -0.0028 0.0559 0.0271 0.0262		0.0215
0.0236 -0.0175 -0.0203	Columns 9,571 through 9,585	
0.0346 -0.0095 -0.0000 -0.0118 -0.0113 -0.0362 -0.0183 0.0095 0.0018 0.0436 0.0004 -0.0141 -0.0010 -0.0398 0.0043 0.0151 -0.0084 0.0177 -0.0191 -0.0163 -0.0539 -0.0125 0.0036 -0.0021 0.0782 0.0106 -0.0254 0.0086 -0.0788 -0.0322 Columns 9,586 through 9,600 0.0166 0.0217 0.0136 -0.0114 0.0016 0.0263 0.0025 -0.0293 0.0241 0.0638 0.0314 0.0318 -0.0150 0.0147 0.0026 0.0483 0.0078 -0.0162 0.0124 0.0230 -0.0374 0.0064 0.0371 0.0133 0.0014 -0.0333 0.0082 -0.0215 -0.0047 -0.0012 0.0358 -0.0124 -0.0253 0.0295 0.0297 -0.0745 -0.0004 0.0745 -0.0020 -0.0549 -0.0775 -0.0167 -0.0075 -0.0174 0.0035 Columns 9,601 through 9,615 0.0082 0.0033 -0.0159 0.0158 0.0178 0.0047 -0.0123 -0.0415 0.0163 0.0044 0.0133 -0.0028 0.0559 0.0271 0.0262		0.0109
0.0151 -0.0084 0.0177 -0.0191 -0.0163 -0.0539 -0.0125 0.0036 -0.0021 0.0782 0.0106 -0.0254 0.0086 -0.0788 -0.0322 Columns 9,586 through 9,600 0.0166 0.0217 0.0136 -0.0114 0.0016 0.0263 0.0025 -0.0293 0.0241 0.0638 0.0314 0.0318 -0.0150 0.0147 0.0026 0.0483 0.0078 -0.0162 0.0124 0.0230 -0.0374 0.0064 0.0371 0.0133 0.0014 -0.0333 0.0082 -0.0215 -0.0047 -0.0012 0.0358 -0.0124 -0.0253 0.0295 0.0297 -0.0745 -0.0004 0.0745 -0.0020 -0.0549 -0.0775 -0.0167 -0.0075 -0.0174 0.0035 Columns 9,601 through 9,615 0.0082 0.0033 -0.0159 0.0158 0.0178 0.0047 -0.0123 -0.0415 0.0163 0.0044 0.0133 -0.0028 0.0559 0.0271 0.0262	0.0346 -0.0095 -0.0000 -0.0118 -0.0113 -0.0362 -0.0183	0.0095
0.0166 0.0217 0.0136 -0.0114 0.0016 0.0263 0.0025 -0.0293 0.0241 0.0638 0.0314 0.0318 -0.0150 0.0147 0.0026 0.0483 0.0078 -0.0162 0.0124 0.0230 -0.0374 0.0064 0.0371 0.0133 0.0014 -0.0333 0.0082 -0.0215 -0.0047 -0.0012 0.0358 -0.0124 -0.0253 0.0295 0.0297 -0.0745 -0.0004 0.0745 -0.0020 -0.0549 -0.0775 -0.0167 -0.0075 -0.0174 0.0035 Columns 9,601 through 9,615 0.0082 0.0033 -0.0159 0.0158 0.0178 0.0047 -0.0123 -0.0415 0.0163 0.0044 0.0133 -0.0028 0.0559 0.0271 0.0262	0.0151 -0.0084 0.0177 -0.0191 -0.0163 -0.0539 -0.0125	0.0036
0.0241 0.0638 0.0314 0.0318 -0.0150 0.0147 0.0026 0.0483 0.0078 -0.0162 0.0124 0.0230 -0.0374 0.0064 0.0371 0.0133 0.0014 -0.0333 0.0082 -0.0215 -0.0047 -0.0012 0.0358 -0.0124 -0.0253 0.0295 0.0297 -0.0745 -0.0004 0.0745 -0.0020 -0.0549 -0.0775 -0.0167 -0.0075 -0.0174 0.0035 Columns 9,601 through 9,615 0.0082 0.0033 -0.0159 0.0158 0.0178 0.0047 -0.0123 -0.0415 0.0163 0.0044 0.0133 -0.0028 0.0559 0.0271 0.0262	Columns 9,586 through 9,600	
0.0483 0.0078 -0.0162 0.0124 0.0230 -0.0374 0.0064 0.0371 0.0133 0.0014 -0.0333 0.0082 -0.0215 -0.0047 -0.0012 0.0358 -0.0124 -0.0253 0.0295 0.0297 -0.0745 -0.0004 0.0745 -0.0020 -0.0549 -0.0775 -0.0167 -0.0075 -0.0174 0.0035 Columns 9,601 through 9,615 0.0082 0.0033 -0.0159 0.0158 0.0178 0.0047 -0.0123 -0.0415 0.0163 0.0044 0.0133 -0.0028 0.0559 0.0271 0.0262		-0.0293
0.0358 -0.0124 -0.0253 0.0295 0.0297 -0.0745 -0.0004 0.0745 -0.0020 -0.0549 -0.0775 -0.0167 -0.0075 -0.0174 0.0035 Columns 9,601 through 9,615 0.0082 0.0033 -0.0159 0.0158 0.0178 0.0047 -0.0123 -0.0415 0.0163 0.0044 0.0133 -0.0028 0.0559 0.0271 0.0262	0.0483 0.0078 -0.0162 0.0124 0.0230 -0.0374 0.0064	0.0371
Columns 9,601 through 9,615 0.0082	0.0358 -0.0124 -0.0253 0.0295 0.0297 -0.0745 -0.0004	0.0745
0.0163 0.0044 0.0133 -0.0028 0.0559 0.0271 0.0262		
0.0163 0.0044 0.0133 -0.0028 0.0559 0.0271 0.0262	0.0082 0.0033 -0.0159 0.0158 0.0178 0.0047 -0.0123	-0.0415
	0.0163 0.0044 0.0133 -0.0028 0.0559 0.0271 0.0262	

```
-0.0620 0.0451 -0.0361 -0.0144 -0.0351 -0.0110 -0.0105
 Columns 9,616 through 9,630
  0.0241 -0.0241 -0.0175 -0.0139 0.0245 0.0238 -0.0042
0.0049 0.0042 -0.0151 -0.0136 0.0067 0.0128 -0.0038
-0.0203 -0.0355 0.0302 -0.0216 -0.0120 -0.0217 -0.0284
 -0.0223 -0.0510 0.0376 -0.0460 -0.0158 -0.0580 -0.0270
Columns 9,631 through 9,645
 -0.0051 0.0493 0.0050 -0.0206 0.0212 -0.0170 0.0181 0.0456
-0.0035 0.0401 0.0194 0.0187 -0.0236 0.0258 0.0141
 -0.0303 -0.0244 -0.0122 0.0009 -0.0236 0.0412 -0.0265 -0.0621
-0.0130 0.0272 -0.0144 -0.0180 0.0042 -0.0428 -0.0166
 Columns 9,646 through 9,660
  0.0204 -0.0086 0.0243 -0.0184 -0.0149 -0.0207 0.0104 0.0044
-0.0090 -0.0389 -0.0107 0.0442 -0.0153 -0.0205 0.0430
  0.0361 -0.0241 -0.0023 -0.0262 -0.0124 -0.0314 0.0044
-0.0284 0.0059 0.0022 -0.0004 -0.0060 -0.0315 0.0273
  0.0301 -0.0135 -0.0223 -0.0182 0.0058 -0.0364 -0.0044
                                              0.0270
Columns 9,661 through 9,675
  0.0084 -0.0362 0.0167 0.0026 -0.0132 0.0381 -0.0217 -0.0043
-0.0425 -0.0353 0.0236 0.0014 0.0123 -0.0285 0.0399
  0.0283 -0.0048 -0.0057 0.0025 -0.0050 0.0261 -0.0146 -0.0053
0.0248 -0.0241 0.0239 0.0348 0.0290 -0.0104 0.0213
  0.0150 0.0114 -0.0257 -0.0092 -0.0006 0.0024 -0.0099
0.0599 -0.0154 0.0113 0.0525 0.0189 0.0107 -0.0099
Columns 9,676 through 9,690
 -0.0191 -0.0094 -0.0022 -0.0122 -0.0066 0.0144 0.0004
0.0032 -0.0109 0.0079 -0.0085 -0.0069 0.0449 0.0448
-0.0058 0.0214 0.0035 0.0260 0.0135 0.0351 -0.0168
  0.0242 -0.0026 0.0201 -0.0170 0.0080 0.0433 0.0512 -0.0132
0.0093 0.0199 0.0193 0.0406 -0.0059 0.0092 -0.0374
Columns 9,691 through 9,705
  0.0230 0.0219 0.0219 -0.0123 0.0019 -0.0514 0.0052
-0.0083 -0.0250 -0.0143 0.0278 0.0492 0.0033 0.0068
  0.0208 -0.0099 -0.0416 0.0056 0.0193 0.0499 0.0049
 -0.0132 -0.0156 -0.0317 -0.0141 -0.0334 0.0046 0.0293 0.0601
0.0297 0.0030 -0.0301 -0.0139 0.0050 0.0481 0.0014
```

Columns 9,706 through 9,720

-0.0127 -0.0001 0.0237 -0.0155 -0.0043 -0.0578 -0.0426 -0.0168 0.0117 0.0019 0.0000 -0.0456 0.0433 -0.0004 -0.0306 -0.0095 0.0285 -0.0040 -0.0214 -0.0386 0.0485 0.0497 -0.0025 0.0024 0.0762 0.0142 -0.0297 0.0070 -0.0457 0.0129 0.0017 Columns 9,721 through 9,735 0.0065 -0.0088 -0.0258 0.0228 -0.0212 0.0225 -0.0059 -0.0038 0.0090 0.0110 0.0204 0.0018 0.0084 -0.0327 -0.0172 -0.0023 -0.0002 0.0046 0.0153 -0.0363 -0.0163 0.0122 0.0133 0.0020 0.0287 0.0124 0.0072 0.0071 -0.0261 0.0301 -0.0052 -0.0082 0.0312 0.0017 -0.0370 -0.0412 0.0186 Columns 9,736 through 9,750 -0.0033 0.0076 0.0010 -0.0128 0.0104 0.0447 -0.0124 -0.0240 -0.0189 -0.0142 0.0164 0.0020 0.0212 -0.0342 0.0125 0.0161 -0.0078 -0.0294 0.0201 -0.0000 0.0066 -0.0160 0.0157 0.0138 -0.0275 0.0094 -0.0015 -0.0139 0.0270 0.0461 0.0323 -0.0388 0.0164 -0.0235 -0.0018 0.0353 Columns 9,751 through 9,765 0.0253 -0.0058 -0.0395 0.0426 0.0106 0.0343 0.0224 0.0342 0.0039 0.0196 0.0092 -0.0159 0.0028 -0.0126 0.0095 -0.0306 -0.0094 -0.0267 -0.0050 -0.0005 0.0219 0.0107 0.0063 -0.0174 0.0030 0.0349 -0.0460 0.0057 -0.0497 -0.0009 -0.0613 -0.0157 0.0063 -0.0453 -0.0137 -0.0098 -0.0105 -0.0100 -0.0159 0.0369 -0.0333 -0.0008 -0.0371 -0.0052 Columns 9,766 through 9,780 0.0090 -0.0011 -0.0248 0.0250 -0.0228 0.0096 0.0316 -0.0236 0.0113 -0.0288 0.0103 0.0222 0.0298 -0.0057 -0.0203 -0.0124 -0.0047 -0.0496 0.0013 0.0256 0.0136 0.0106 -0.0100 0.0055 -0.0219 0.0301 0.0153 0.0630 -0.0308 -0.0631 -0.0079 -0.0515 -0.1081 -0.0019 0.0279 0.0051 0.0034 -0.0009 Columns 9,781 through 9,795 0.0182 0.0092 0.0017 0.0053 -0.0401 -0.0291 -0.0123 -0.0143 -0.0277 0.0521 0.0507 -0.0178 -0.0141 0.0399 -0.0218 -0.0076 -0.0026 0.0353 -0.0001 -0.0289 -0.0166 -0.0144 -0.0554 0.0453 -0.0339 -0.0288 0.0475 0.0353 -0.0252 0.0308 0.0177 -0.0346 -0.0135 0.0238 -0.0280 -0.0457 -0.0005 Columns 9,796 through 9,810

-0.0133 -0.0527 0.0005 -0.0051 0.0130 0.0497 0.0147 -0.0077

0.0087 -0.0223 0.0185 -0.0368 -0.0255 0.0125 0.0548

0.0328 -0.0018 -0.0247 -0.0134 0.0075 0.0291 -0.0022 -0.0073 -0.0405 0.0064 -0.0266 -0.0123 -0.0452 0.0142	
0.0476 0.0363 -0.0291 -0.0176 -0.0155 -0.0230 -0.0165 -0.0291 -0.0358 -0.0235 0.0026 0.0135 -0.0626 -0.0071	0.0216
Columns 9,811 through 9,825	
-0.0202 -0.0172 -0.0242 0.0040 -0.0081 -0.0275 0.0021 0.0220 0.0273 0.0053 -0.0153 0.0333 0.0329 0.0006	-0.0172
0.0045 0.0285 0.0167 -0.0280 -0.0091 -0.0182 -0.0069 0.0068 0.0019 0.0011 -0.0277 -0.0024 0.0260 -0.0387	
0.0240 0.0500 0.0351 -0.0275 -0.0028 -0.0088 -0.0155 -0.0120 -0.0130 0.0016 -0.0261 -0.0242 0.0002 -0.0535	0.0661
Columns 9,826 through 9,840	
-0.0014 -0.0061 0.0143 0.0143 0.0195 0.0287 -0.0398 -0.0119 -0.0135 -0.0286 0.0083 -0.0178 0.0143 0.0168	
-0.0162 -0.0305 0.0011 -0.0220 -0.0245 -0.0189 -0.0087 -0.0306 0.0351 0.0275 0.0301 0.0356 -0.0022 0.0283	
-0.0236 -0.0310 -0.0251 -0.0362 -0.0341 -0.0404 0.0114 -0.0376 0.0671 0.0508 0.0273 0.0563 -0.0067 0.0187	0.0488
Columns 9,841 through 9,855	
0.0073 -0.0277 -0.0295 -0.0398 0.0183 -0.0342 0.0090 0.0020 0.0112 0.0086 0.0074 0.0119 -0.0126 -0.0270	0.0055
-0.0147 -0.0307 -0.0056 -0.0110 0.0527 0.0112 0.0120 -0.0091 -0.0241 0.0003 -0.0114 0.0112 -0.0122 0.0022	
-0.0319 -0.0038 0.0256 0.0107 0.0499 0.0384 0.0099 -0.0097 -0.0329 0.0060 -0.0061 -0.0092 -0.0091 0.0554	0.0339
Columns 9,856 through 9,870	
-0.0162 -0.0402 -0.0107 0.0066 0.0072 0.0246 0.0168 -0.0037 0.0226 -0.0660 -0.0346 0.0086 0.0068 -0.0094	
-0.0104 -0.0278 -0.0112 0.0277 0.0332 -0.0191 -0.0064 0.0101 0.0087 0.0106 -0.0279 0.0596 -0.0033 0.0122	
-0.0004 0.0018 -0.0054 0.0199 0.0290 -0.0478 -0.0221 0.0217 0.0051 0.0665 0.0076 0.0590 -0.0061 0.0257	0.0245
Columns 9,871 through 9,885	
0.0193 -0.0173 -0.0152 -0.0248 0.0218 0.0122 -0.0114 0.0194 0.0079 -0.0033 -0.0065 0.0351 -0.0083 0.0427	
-0.0057 -0.0160 0.0126 -0.0140 0.0024 0.0179 0.0094 0.0084 -0.0007 0.0365 0.0262 -0.0242 -0.0111 -0.0229	
-0.0165 0.0059 0.0174 -0.0040 -0.0217 0.0210 0.0160 -0.0160 -0.0233 0.0513 0.0406 -0.0602 -0.0086 -0.0557	0.0082
Columns 9,886 through 9,900	
-0.0140 -0.0113 0.0454 -0.0344 0.0002 0.0342 -0.0379 -0.0101 0.0056 -0.0289 0.0018 0.0468 0.0140 0.0361	
-0.0018 0.0352 0.0377 0.0110 -0.0201 -0.0050 0.0149 0.0152 0.0282 -0.0139 0.0182 0.0201 0.0054 -0.0270	
-0.0013	0.0410

Columns 9,901 through 9,915

Columns 9,991 through 10,000

 $0.0090 \quad -0.0150 \quad 0.0249 \quad 0.0218 \quad -0.0075 \quad 0.0625 \quad -0.0337 \quad 0.0213$ -0.0179 -0.0079 -0.0322 0.0092 0.0087 0.0300 0.0106 0.0025 -0.0284 0.0115 0.0247 -0.0353 0.0198 0.0208 -0.0102 -0.0284 0.0144 -0.0625 0.0002 0.0223 -0.0306 0.0406 -0.0308 0.0067 0.0274 -0.0215 -0.0115 0.0456 -0.0109 Columns 9,916 through 9,930 0.0149 0.0280 0.0093 0.0026 0.0007 0.0317 0.0158 0.0183 -0.0203 -0.0156 -0.0220 -0.0001 -0.0050 -0.0046 -0.0077 0.0231 0.0393 -0.0242 0.0044 -0.0216 0.0054 0.0156 $0.0219 \quad -0.0442 \quad -0.0166 \quad -0.0150 \quad 0.0021 \quad 0.0046 \quad -0.0293 \quad -0.0532$ Columns 9,931 through 9,945 -0.0277 0.0000 0.0305 -0.0045 -0.0255 -0.0104 0.0184 -0.0093 -0.0361 0.0071 0.0308 -0.0160 -0.0236 0.0050 -0.0065 -0.0269 -0.0407 0.0014 0.0513 -0.0190 -0.0088 -0.0004 -0.0329 -0.0182 -0.0056 -0.0581 0.0070 0.0253 0.0159 -0.0191 Columns 9,946 through 9,960 0.0287 0.0141 0.0251 0.0220 -0.0223 0.0019 0.0158 0.0109 0.0246 0.0030 -0.0229 -0.0422 0.0434 -0.0185 0.0109 -0.0134 0.0148 0.0043 0.0707 -0.0295 -0.0203 -0.0355 -0.0151 0.0202 -0.0207 -0.0337 -0.0203 0.0480 -0.0275 Columns 9,961 through 9,975 -0.0088 0.0098 0.0186 0.0195 -0.0256 0.0073 -0.0436 0.0129 -0.0393 -0.0131 -0.0052 0.0317 0.0097 0.0013 -0.0108 0.0181 0.0121 0.0088 -0.0183 0.0221 0.0052 -0.0320 -0.0147 -0.0037 0.0036 0.0076 -0.0561 -0.0218 0.0067 0.0260 0.0179 0.0006 -0.0438 0.0583 0.0062 0.0012 0.0047 0.0102 0.0083 0.0035 -0.0247 -0.0710 -0.0288 0.0265 Columns 9,976 through 9,990 -0.0175 0.0016 0.0093 0.0020 0.0053 -0.0272 0.0180 0.0181 0.0347 -0.0044 -0.0238 0.0182 0.0328 0.0117 0.0105 0.0210 0.0186 0.0047 0.0235 -0.0229 -0.0263 0.0351 0.0242 0.0125 0.0192 -0.0069 0.0305 0.0342 0.0289 0.0265 0.0171 0.0151 0.0125 -0.0021 -0.0409 -0.0179 0.0325 -0.0060 0.0187 0.0445 -0.0352 -0.0035 0.0292

0.0067 -0.0265 0.0112 -0.0272 0.0083 0.0011 -0.0094 -0.0077

1.0000

1.0000

3 6						
-0.0013 0 0.0068 0.0178 0. 0.0051 0.0125 -0.	0.0128 0034 0.0363	0.0402 0.0466	0.0118 0.0204			
The response -0.0171 2.0001 2.0173	s we get:					
-2.0020 0.0152 2.0152						
1.0039 1.0002 0.9963						
Given Target 0 2 2	Values:					
-2 0 2						
1 1 1						
Similarity b 1.0000	etween res	ponse and	correspond	ding target	s:	

Screenshots:

```
s1_new=randn(1,10000)';
s2_new=randn(1,10000)';
s3 new=randn(1,10000)';
T1 = [0, 2, 2]';
T2 = [-2, 0, 2]';
T3 = [1, 1, 1]';
disp('The input signal vectors:');
disp(s1_new);
disp(s2_new);
disp(s3_new);
disp('Normalized input signal vectors:');
s1_new_norm=s1_new/norm(s1_new);
s2_new_norm=s2_new/norm(s2_new);
s3_new_norm=s3_new/norm(s3_new);
disp(s1_new_norm);
disp(s2_new_norm);
disp(s3_new_norm);
disp('The cosine matrix:');
cosine_matrix = [dot(s1_new_norm, s1_new_norm), dot(s1_new_norm, s2_new_norm), dot(s1_new_norm, s3_new_norm);
                  dot(s2_new_norm, s1_new_norm), dot(s2_new_norm, s2_new_norm), dot(s2_new_norm, s3_new_norm);
                  dot(s3_new_norm, s1_new_norm), dot(s3_new_norm, s2_new_norm), dot(s3_new_norm, s3_new_norm)];
disp(cosine_matrix);
disp('The associative weight matrix:');
w1 = T1 * s1_new_norm';
w2 = T2 * s2_new_norm';
w3 = T3 * s3_new_norm';
w=w1+w2+w3;
disp(w)
response_s1 = w * s1_new_norm;
response_s2 = w * s2_new_norm;
response_s3 = w * s3_new_norm;
disp('The responses we get:')
disp(response_s1);
disp(response_s2);
disp(response_s3);
disp('Given Target Values:')
disp(T1);
disp(T2);
disp(T3);
```

```
cosine_sim1 = dot(T1, response_s1) / (norm(T1) * norm(response_s1));
cosine_sim2 = dot(T2, response_s2) / (norm(T2) * norm(response_s2));
cosine_sim3 = dot(T3, response_s3) / (norm(T3) * norm(response_s3));

disp('Similarity between response and corresponding targets:')
disp(cosine_sim1);
disp(cosine_sim2);
disp(cosine_sim3);
```

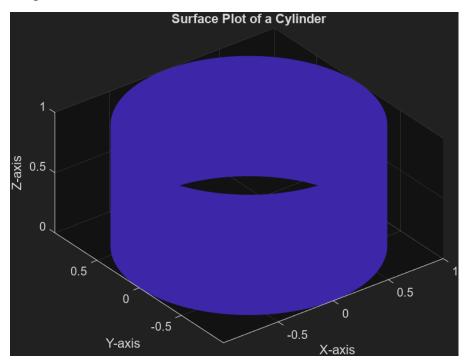
Command Wind	iow													
The cosine ma	atrix:													
1.0000	0.0086	0.0001												
0.0086	1.0000	-0.0020												
0.0001	-0.0020	1.0000												
The associati	ive weight	matrix:												
Columns 1 t	through 15													
0.0116	-0.0182	0.0027	0.0215	-0.0116	0.0096	-0.0119	0.0019	0.0341	0.0011	-0.0236	-0.0152	0.0167	0.0006	0.0035
	-0.0154	0.0021	0.0094	0.0190	-0.0003	0.0063	0.0037	0.0337	0.0217	0.0134	-0.0120	0.0094	0.0201	-0.0441
0.0382	0.0066	-0.0068	-0.0165	0.0323	0.0037	0.0154	0.0034	0.0166	0.0314	0.0323	-0.0061	0.0051	0.0193	-0.0487
Columns 16	through 3	0												
0.0141	-0.0319	-0.0302	0.0130	0.0064	-0.0219	-0.0279	-0.0022	-0.0177	-0.0284	0.0043	0.0085	-0.0094	0.0127	-0.0096
-0.0240	-0.0523	-0.0166	0.0273	0.0118	-0.0291	-0.0131	0.0098	-0.0137	-0.0178	0.0008	-0.0077	0.0098	-0.0316	0.0279
-0.0518	-0.0469	0.0049	0.0285	0.0004	-0.0157	0.0113	0.0190	-0.0037	-0.0133	-0.0108	-0.0050	0.0325	-0.0327	0.0421
Columns 31	through 4	5												
0.0030	-0.0226	0.0196	0.0163	0.0539	-0.0285	-0.0082	-0.0021	-0.0146	0.0399	-0.0028	-0.0432	-0.0162	-0.0020	0.0152
-0.0109	-0.0350	0.0020	-0.0366	0.0043	-0.0250	0.0429	0.0356	-0.0536	0.0130	-0.0290	-0.0094	0.0059	0.0101	0.0002
-0.0122	-0.0231	-0.0105	-0.0606	-0.0448	-0.0103	0.0499	0.0503	-0.0421	-0.0228	-0.0269	0.0297	0.0246	0.0071	-0.0092
Columns 46	through 6	0												
0.0004	-0.0133	-0.0081	0.0278	0.0140	0.0148	-0.0004	-0.0241	-0.0116	0.0340	-0.0067	-0.0099	0.0113	0.0346	0.0142
0.0249	-0.0178	0.0023	0.0232	0.0066	0.0270	0.0283	-0.0195	-0.0420	0.0462	-0.0141	0.0080	0.0188	0.0106	-0.0195
0.0175	-0.0126	0.0061	0.0052	-0.0026	0.0212	0.0504	0.0011	-0.0359	0.0207	-0.0092	0.0238	0.0149	-0.0158	-0.0350
Columns 61	through 7	5												
0.0038	-0.0000	-0.0228	-0.0126	-0.0073	-0.0053	-0.0125	0.0061	-0.0060	0.0178	-0.0085	-0.0246	-0.0188	-0.0242	0.0188
0.0101	-0.0039	0.0148	-0.0237	0.0238	0.0203	-0.0083	-0.0041	-0.0043	-0.0070	-0.0195	0.0004	-0.0288	-0.0310	0.0142
0.0259	-0.0053	0.0226	-0.0174	0.0390	0.0396	0.0006	0.0071	0.0031	-0.0301	-0.0008	0.0215	-0.0221	-0.0358	0.0027

Command Window The responses we get: -0.0171 2.0001 2.0173 -2.0020 0.0152 2.0152 1.0039 1.0002 0.9963 Given Target Values: -2 0 2 1 1 Similarity between response and corresponding targets: 1.0000 1.0000 1.0000

Question 4:

```
theta = linspace(0, 2*pi, 100); % Angles for circle points
radius = 1; % Radius of the cylinder
height = 1; % Height of the cylinder
% Create circle points at z=0
x_circle = radius * cos(theta);
y_circle = radius * sin(theta);
z_circle = zeros(size(theta));
% Create circle points at z=1
z_top_circle = ones(size(theta));
% Combine points for the surface plot
x_surface = [x_circle; x_circle];
y_surface = [y_circle; y_circle];
z_surface = [z_circle; z_top_circle];
% Create the surface plot
figure;
surf(x_surface, y_surface, z_surface, 'EdgeColor', 'none');
title('Surface Plot of a Cylinder');
xlabel('X-axis');
ylabel('Y-axis');
zlabel('Z-axis');
axis equal;
```

Output:



Code Screenshot:

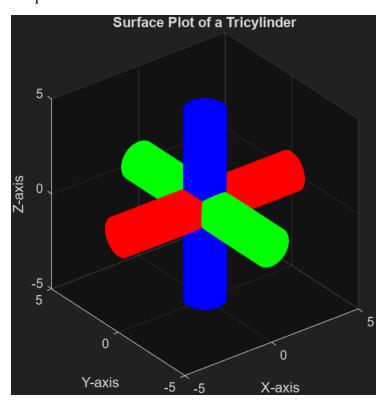
```
theta = linspace(0, 2*pi, 100); % Angles for circle points
radius = 1; % Radius of the cylinder
height = 1; % Height of the cylinder
% Create circle points at z=0
x_circle = radius * cos(theta);
y_circle = radius * sin(theta);
z_circle = zeros(size(theta));
% Create circle points at z=1
z_top_circle = ones(size(theta));
\ensuremath{\mathrm{\%}} Combine points for the surface plot
x_surface = [x_circle; x_circle];
y_surface = [y_circle; y_circle];
z_surface = [z_circle; z_top_circle];
% Create the surface plot
surf(x_surface, y_surface, z_surface, 'EdgeColor', 'none');
title('Surface Plot of a Cylinder');
xlabel('X-axis');
ylabel('Y-axis');
zlabel('Z-axis');
axis equal;
```

Question 5:

```
% Define parameters
theta = linspace(0, 2*pi, 100); % Angles for circle points
radius = 1; % Radius of the cylinder
height = 10; % Height of the cylinder
% Create circle points at z=0
x_circle = radius * cos(theta);
y_circle = radius * sin(theta);
z_circle = zeros(size(theta));
% Create circle points at x=0
x_circle1 = zeros(size(theta));
y_circle1 = radius * cos(theta);
z_circle1 = radius * sin(theta);
% Create circle points at y=0
x_{circle2} = radius * sin(theta);
y_circle2 = zeros(size(theta));
z_circle2 = radius * cos(theta);
% Create circle points at z=height
z_top_circle = height.*ones(size(theta));
x_top_circle = height.*ones(size(theta));
y_top_circle = height.*ones(size(theta));
% Translate the blue cylinder along the negative x-axis by height/2 units
z_circle = z_circle - height/2;
z_top_circle = z_top_circle - height/2;
% Translate the green cylinder along the negative y-axis by height/2
units
y_circle2 = y_circle2 - height/2;
y_top_circle = y_top_circle - height/2;
% Translate the red cylinder along the negative x-axis by height/2 units
x_{circle1} = x_{circle1} - height/2;
x_top_circle = x_top_circle - height/2;
% Combine points for the surface plot
x_surface = [x_circle; x_circle];
y_surface = [y_circle; y_circle];
z_surface = [z_circle; z_top_circle];
% Combine points for the surface plot
x_surface1 = [x_circle1; x_top_circle];
y_surface1 = [y_circle1; y_circle1];
z_surface1 = [z_circle1; z_circle1];
```

```
% Combine points for the surface plot
x_surface2 = [x_circle2; x_circle2];
y_surface2 = [y_circle2; y_top_circle];
z_surface2 = [z_circle2; z_circle2];
% Create the surface plot
figure;
surf(x_surface, y_surface, z_surface, 'EdgeColor', 'none','FaceColor',
'blue');
hold on; % Fix: Add hold on to keep all surfaces on the same plot
surf(x_surface1, y_surface1, z_surface1, 'EdgeColor', 'none','FaceColor',
'red');
surf(x_surface2, y_surface2, z_surface2, 'EdgeColor', 'none','FaceColor',
'green');
hold off; % Fix: Add hold off to release the hold
title('Surface Plot of a Tricylinder'); % Fix: Update the title
xlabel('X-axis');
ylabel('Y-axis');
zlabel('Z-axis');
axis equal;
```

Output:



Code Screenshot:

```
% Define parameters
theta = linspace(0, 2*pi, 100); % Angles for circle points
radius = 1; % Radius of the cylinder
height = 10; % Height of the cylinder
% Create circle points at z=0
x_circle = radius * cos(theta);
y_circle = radius * sin(theta);
z_circle = zeros(size(theta));
% Create circle points at x=0
x_circle1 = zeros(size(theta));
y_circle1 = radius * cos(theta);
z_circle1 = radius * sin(theta);
% Create circle points at y=0
x_circle2 = radius * sin(theta);
y_circle2 = zeros(size(theta));
z_circle2 = radius * cos(theta);
% Create circle points at z=height
z_top_circle = height.*ones(size(theta));
x_top_circle = height.*ones(size(theta));
y_top_circle = height.*ones(size(theta));
% Translate the blue cylinder along the negative x-axis by height/2 units
z_circle = z_circle - height/2;
z_top_circle = z_top_circle - height/2;
% Translate the green cylinder along the negative y-axis by height/2 units
y_circle2 = y_circle2 - height/2;
y_top_circle = y_top_circle - height/2;
```

```
% Translate the red cylinder along the negative x-axis by height/2 units
x_circle1 = x_circle1 - height/2;
x_top_circle = x_top_circle - height/2;
% Combine points for the surface plot
x_surface = [x_circle; x_circle];
y_surface = [y_circle; y_circle];
z_surface = [z_circle; z_top_circle];
% Combine points for the surface plot
x_surface1 = [x_circle1; x_top_circle];
y_surface1 = [y_circle1; y_circle1];
z_surface1 = [z_circle1; z_circle1];
% Combine points for the surface plot
x_surface2 = [x_circle2; x_circle2];
y_surface2 = [y_circle2; y_top_circle];
z_surface2 = [z_circle2; z_circle2];
% Create the surface plot
figure;
surf(x_surface, y_surface, z_surface, 'EdgeColor', 'none', 'FaceColor', 'blue');
hold on; % Fix: Add hold on to keep all surfaces on the same plot
surf(x_surface1, y_surface1, z_surface1, 'EdgeColor', 'none', 'FaceColor', 'red');
surf(x_surface2, y_surface2, z_surface2, 'EdgeColor', 'none', 'FaceColor', 'green');
hold off; % Fix: Add hold off to release the hold
title('Surface Plot of a Tricylinder'); % Fix: Update the title
xlabel('X-axis');
ylabel('Y-axis');
zlabel('Z-axis');
axis equal;
```