MAT Cousulting for Chem R US by Thomas Wagner, Alexander Allen, MingYi Wang

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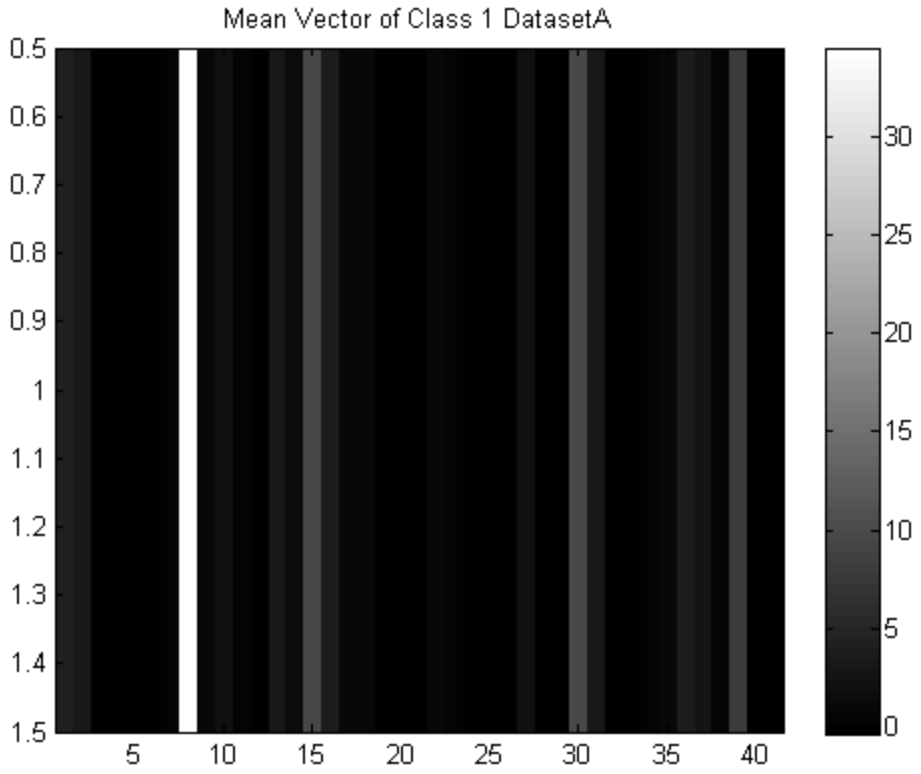
DatasetA processing

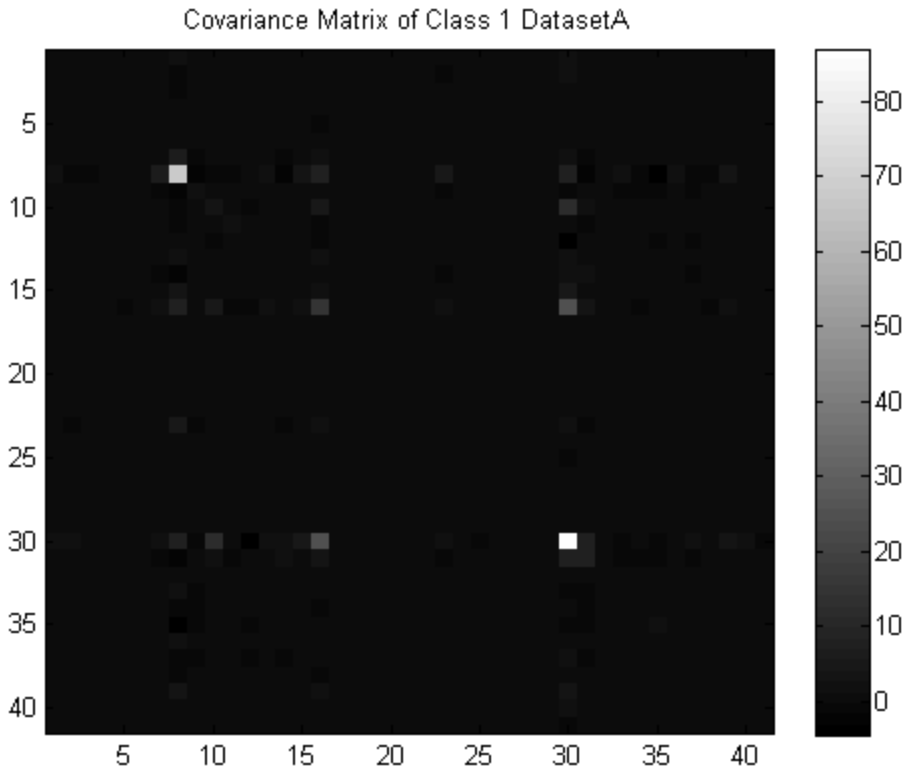
```
%read in D
Doriginal = csvread('DatasetA.csv');

%Break D into id's, class, and features
IDA=Doriginal(:,1); %id column
Class=Doriginal(:,end);   % Y contains the class labels 1 or -1
DA=Doriginal(:,2:(end-1));  % All the rest are the featuresUnIDA=Doriginal(:,2:end
```

define positive class and calculate mean and covariance

```
DAp = DA(Class==1,:); %Class 1 of DSA;
[mp,np]=size(DAp);
DAp_mean = (1/mp)*ones(1,mp)*DAp;

figure
imagesc(DAp_mean)
title('Mean Vector of Class 1 DatasetA')
colormap(gray)
colorbar

DAp_centered= DAp - (1/mp)*(ones(mp,mp)*DAp);
```

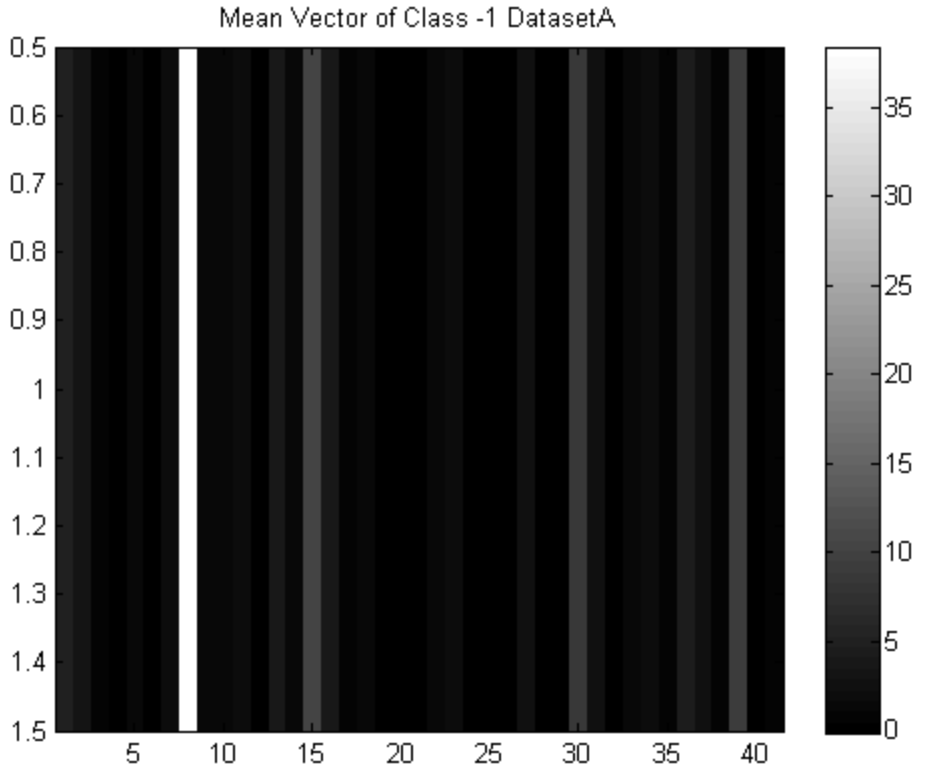
```
CovAp = (1/(mp-1))*DAp_centered'*DAp_centered; %Covariance of class 1

figure
imagesc(CovAp)
title('Covariance Matrix of Class 1 DatasetA')
colormap(gray)
colorbar
```

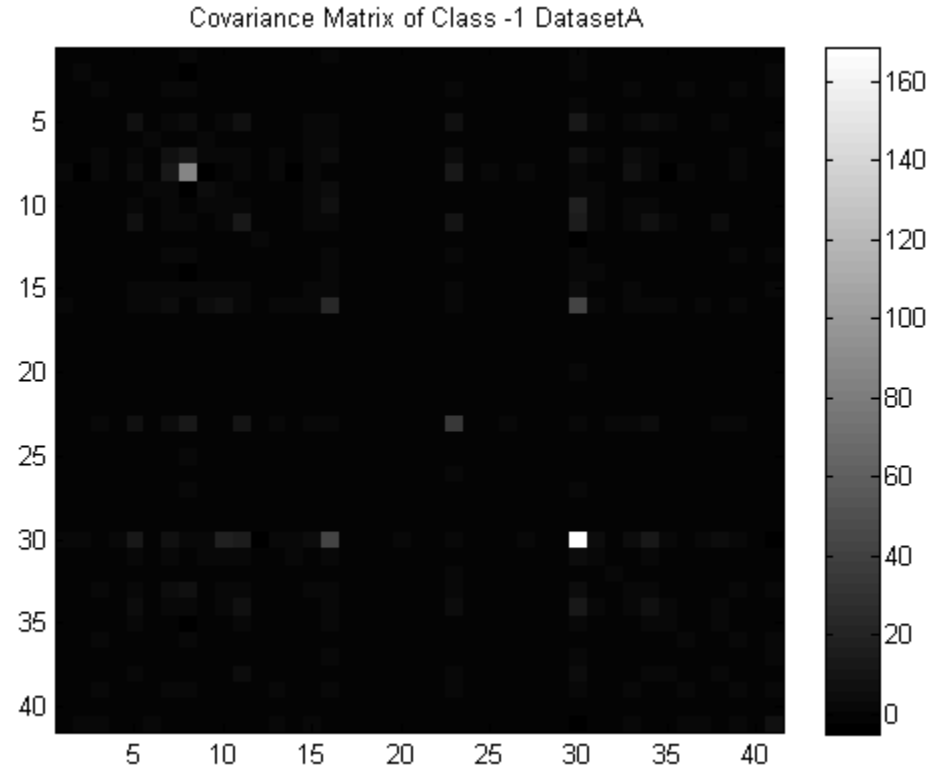




define negative class and caluclate mean and covariance

```
DAn = DA(Class==-1,:);
[mn,nn]=size(DAn);
DAn_mean=(1/mn)*ones(1,mn)*DAn;

figure
imagesc(DAn_mean)
title('Mean Vector of Class -1 DatasetA')
colormap(gray)
colorbar

DAn_centered=DAn - (1/mn)*(ones(mn,mn)*DAn);

CovAn = (1/(mn-1))*DAn_centered'*DAn_centered;

figure
imagesc(CovAn)
title('Covariance Matrix of Class -1 DatasetA')
colormap(gray)
colorbar
```


Mean Vector of Class -1 DatasetA
0.5
0.6
0.7
0.8
0.9
1
1.1
1.2
1.3
1.4
1.5
5
10
15
20
25
30
35
40
35
30
25
20
15
10
5
0


Covariance Matrix of Class -1 DatasetA
5
10
15
20
25
30
35
40
5
10
15
20
25
30
35
40
160
140
120
100
80
60
40
20
0

Define testing and trianing sets

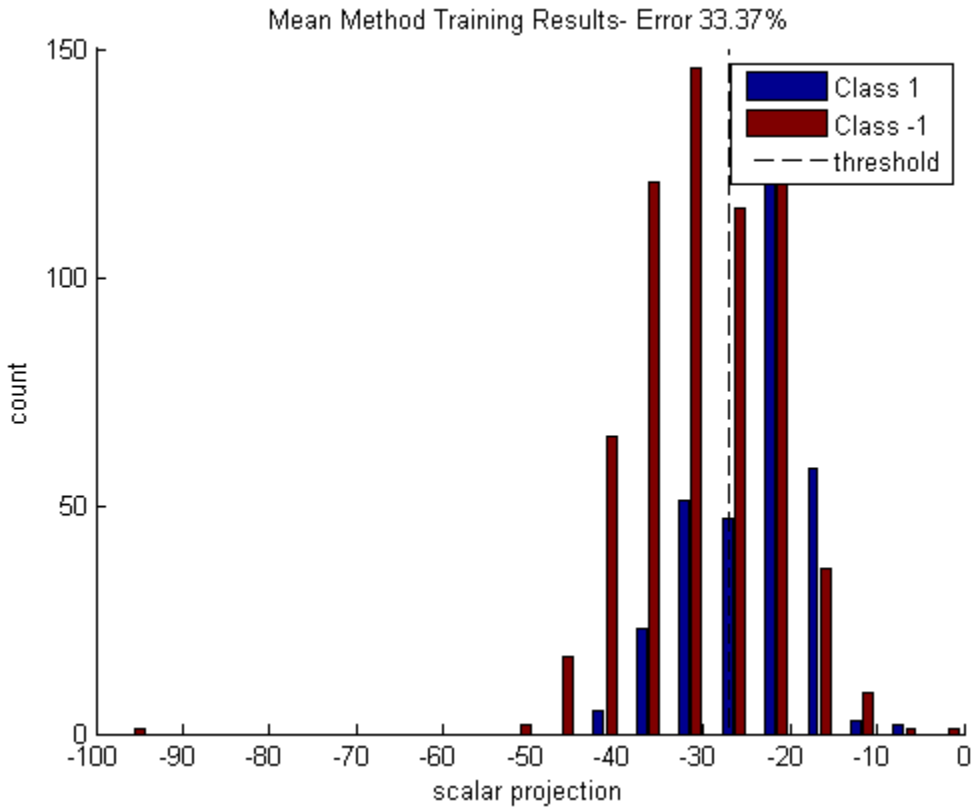
```
% Training and testing matrices for DatasetA

% Classp_train  := Class 1 training data
% Classm_train  := Class -1 training data
% Classp_test   := Class 1 testing data
% Classm_test   := Class -1 testing  data


% Set random number to an initial seed
[r,c]=size(DA);
s=RandStream('mt19937ar','Seed',550);
%generate a permutation of the data
p=randperm(s,r);
DA=DA(p,:);
Y=Class(p);
%Use trainpct percent of the data for training and the rest for testing.
trainpct=.90;
train_size=ceil(r*trainpct);

% Grab training and test data
Train = DA(1:train_size,:);
Test = DA(train_size+1:end,:);
YTrain = Y(1:train_size,:);
YTest = Y(train_size+1:end,:);

%Break them up into Class 1 and Class -1
Classp_train = Train(YTrain==1,:);
Classm_train = Train(YTrain==-1,:);

Classp_test = Test(YTest==1,:);
Classm_test = Test(YTest==-1,:);
```

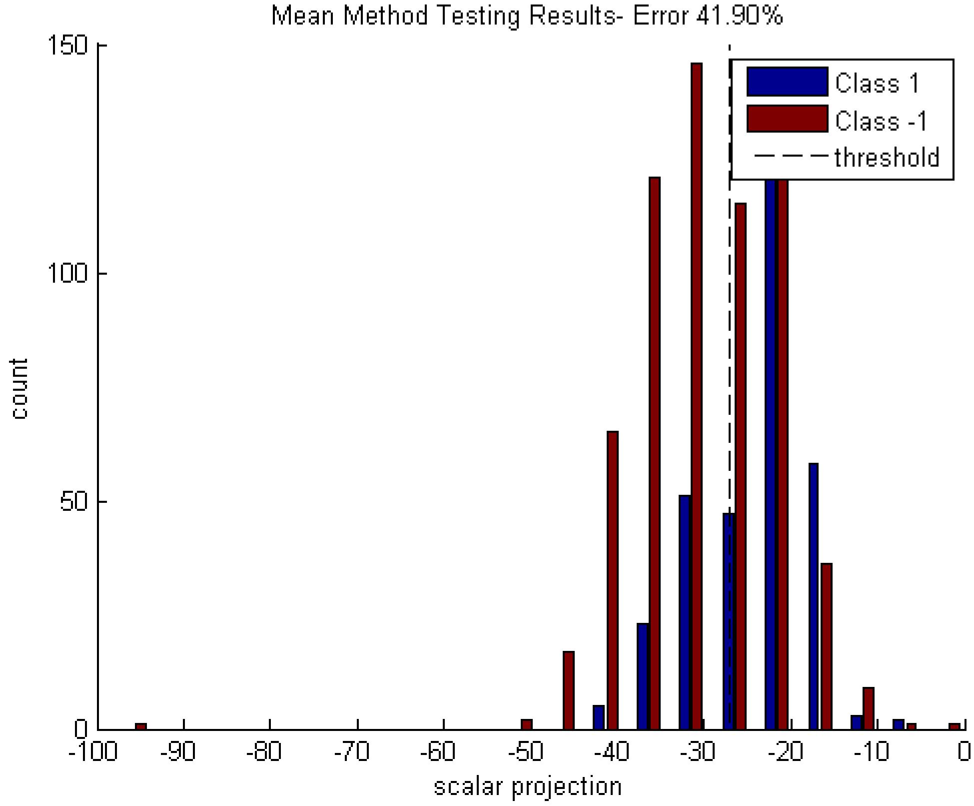
Mean Method on DatasetA

```
%Calculate the mean classifier

% Calculate w as difference of the class means
meanp=mean(Classp_train);
meanm=mean(Classm_train);
w=(meanp-meanm)';
w=w/norm(w);

t= (meanp+meanm)./2*w;
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

% Count the number of training  points missclassified in each class.

MeanPosErrorTrain = sum(Classp_train*w <= t);
MeanNegErrorTrain = sum(Classm_train*w >= t);
```

```
MeanTrainError = ((MeanPosErrorTrain + MeanNegErrorTrain)/(size(Train,1)))

%Calculate the testing error of the Mean Method

MeanPosErrorTest = sum(Classp_test*w <= t);
MeanNegErrorTest = sum(Classm_test*w >= t);

MeanTestError = ((MeanPosErrorTest + MeanNegErrorTest)/(size(Test,1)))

HistClass(Classp_train,Classm_train,w,t,...
    'Mean Method Training Results',MeanTrainError); %Histogram of Mean Training Re

HistClass(Classp_train,Classm_train,w,t,...
    'Mean Method Testing Results',MeanTestError); %Histogram of Mean Testing Resul
```

```
MeanTrainError =

    0.3337


MeanTestError =

    0.4190
```





Fisher method on DatasetA

```
meanp=mean(Classp_train);
meanm=mean(Classm_train);

psize=size(Classp_train,1)
nsize=size(Classm_train,1)
Bp=Classp_train-ones(psize,1)*meanp
Bn=Classm_train-ones(nsize,1)*meanm;

Sw=Bp'*Bp+Bn'*Bn;
wfisher = Sw\(meanp-meanm)';
wfisher=wfisher/norm(wfisher)

tfisher=(meanp+meanm)./2*wfisher%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

% Analyze training data  results of the Fisher Linear Discriminant

FisherPosErrorTrain = sum(Classp_train*wfisher <= tfisher)%
FisherNegErrorTrain = sum(Classm_train*wfisher >= tfisher)%

FisherTrainError= ((FisherPosErrorTrain + FisherNegErrorTrain)/(size(Train,1)))

HistClass(Classp_train,Classm_train,wfisher,tfisher,...
```

```
    'Fisher Method Training Results',FisherTrainError); % Histogram of Fisher Trai
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%


FisherPosErrorTest = sum(Classp_test*wfisher <= tfisher);
FisherNegErrorTest = sum(Classm_test*wfisher >= tfisher);

FisherTestError= ((FisherPosErrorTest + FisherNegErrorTest)/(size(Test,1)))

HistClass(Classp_test,Classm_test,wfisher,tfisher,...
    'Fisher Method Testing Results',FisherTestError); % Histogram of Fisher Testin
```

```
psize =

   315


nsize =

   635


Bp =

  Columns 1 through 7

   -0.1026    0.4837   -0.1048   -0.0063   -0.2095   -0.0286   -0.6127
    0.4954    0.4953    2.8952   -0.0063   -0.2095   -0.0286    3.3873
   -0.1716   -0.1159   -0.1048   -0.0063   -0.2095   -0.0286   -0.6127
   -0.6726   -0.3409   -0.1048   -0.0063   -0.2095   -0.0286   -0.6127
    0.2774    0.9233   -0.1048   -0.0063   -0.2095   -0.0286   -0.6127
    0.4074    0.3185   -0.1048   -0.0063   -0.2095   -0.0286   -0.6127
    0.3544   -0.1671    0.8952   -0.0063    0.7905   -0.0286    1.3873
   -0.2396   -0.2869   -0.1048   -0.0063   -0.2095   -0.0286   -0.6127
    0.1694    0.0503   -0.1048   -0.0063   -0.2095   -0.0286   -0.6127
   -0.3046   -0.1066   -0.1048   -0.0063   -0.2095   -0.0286   -0.6127
    0.6234    0.0621    0.8952   -0.0063   -0.2095   -0.0286   -0.6127
   -0.6266   -0.2196   -0.1048   -0.0063   -0.2095   -0.0286   -0.6127
   -0.5016   -0.0554   -0.1048   -0.0063   -0.2095   -0.0286   -0.6127
    0.6244   -0.8194   -0.1048   -0.0063   -0.2095    0.9714   -0.6127
   -0.2386    0.3569   -0.1048   -0.0063   -0.2095   -0.0286   -0.6127
   -0.7426   -0.6655   -0.1048   -0.0063   -0.2095   -0.0286   -0.6127
    0.1844    0.6459    1.8952   -0.0063   -0.2095   -0.0286   -0.6127
    0.1324    0.0670   -0.1048   -0.0063    1.7905   -0.0286    1.3873
    0.3674   -0.6146   -0.1048   -0.0063   -0.2095   -0.0286    1.3873
   -0.7426   -0.6956   -0.1048   -0.0063    0.7905   -0.0286   -0.6127
   -0.0896    0.9191   -0.1048   -0.0063   -0.2095   -0.0286   -0.6127
    0.0464   -0.3593   -0.1048   -0.0063   -0.2095   -0.0286    0.3873
   -0.4746   -0.9575   -0.1048   -0.0063   -0.2095   -0.0286   -0.6127
   -0.5086   -0.2197    0.8952   -0.0063   -0.2095   -0.0286   -0.6127
   -0.5726   -0.3433   -0.1048   -0.0063    0.7905   -0.0286   -0.6127
   -0.2416    0.3322   -0.1048   -0.0063   -0.2095   -0.0286   -0.6127
    0.5724   -0.3340   -0.1048   -0.0063   -0.2095   -0.0286    2.3873
```

0.1664	0.0136	-0.1048	-0.0063	-0.2095	-0.0286	1.3873
0.1694	0.9131	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.2606	0.4464	0.8952	-0.0063	-0.2095	-0.0286	-0.6127
-0.1406	0.6226	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.4746	0.0952	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.2954	-0.1779	-0.1048	-0.0063	-0.2095	-0.0286	1.3873
0.0424	-0.3050	-0.1048	-0.0063	1.7905	-0.0286	0.3873
0.5994	0.0203	-0.1048	-0.0063	-0.2095	-0.0286	1.3873
-0.0606	-0.7000	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.5254	1.9759	0.8952	-0.0063	-0.2095	-0.0286	-0.6127
0.8354	0.3902	0.8952	-0.0063	-0.2095	-0.0286	0.3873
0.2954	-0.5332	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.7004	0.6813	-0.1048	-0.0063	-0.2095	0.9714	-0.6127
-0.2386	-1.4727	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.0424	-0.1737	-0.1048	-0.0063	-0.2095	-0.0286	0.3873
-0.1966	0.0953	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.5024	-0.9884	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.4746	-0.5616	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.2644	-0.5281	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.0816	0.5741	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.2606	-0.0660	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.1316	0.5807	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.0484	0.9524	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.2386	-0.0863	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.4354	-0.1928	-0.1048	-0.0063	-0.2095	-0.0286	2.3873
-0.3046	0.3104	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.0606	0.3420	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.3534	-0.8250	-0.1048	-0.0063	-0.2095	-0.0286	1.3873
0.0424	-0.4295	-0.1048	-0.0063	1.7905	-0.0286	0.3873
-0.2416	0.5486	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.2574	0.2602	-0.1048	-0.0063	-0.2095	-0.0286	1.3873
-1.4746	-0.3619	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-1.4746	-1.2490	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.1764	-0.3979	-0.1048	-0.0063	1.7905	-0.0286	0.3873
0.0014	0.6701	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-1.4746	-0.7607	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.1544	0.9344	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.5326	-0.2998	0.8952	-0.0063	-0.2095	-0.0286	-0.6127
0.2574	-0.0567	-0.1048	-0.0063	-0.2095	-0.0286	0.3873
-0.1286	0.3855	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.4484	-0.3426	-0.1048	-0.0063	-0.2095	-0.0286	1.3873
-0.6726	-0.2292	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.2954	0.0470	-0.1048	-0.0063	0.7905	-0.0286	1.3873
-0.3046	0.1722	0.8952	-0.0063	-0.2095	-0.0286	-0.6127
0.4014	0.0147	-0.1048	-0.0063	-0.2095	-0.0286	1.3873
-0.2606	-0.4445	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.1714	0.8902	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.5426	0.1795	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.2164	0.8422	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.4214	0.3306	-0.1048	-0.0063	-0.2095	-0.0286	2.3873
0.2954	0.0151	-0.1048	-0.0063	-0.2095	-0.0286	1.3873
-0.2386	-0.0038	-0.1048	-0.0063	0.7905	-0.0286	-0.6127
0.0684	-0.4782	-0.1048	-0.0063	1.7905	-0.0286	0.3873
0.1704	-1.3142	0.8952	-0.0063	-0.2095	-0.0286	2.3873

0.1324	-0.0295	-0.1048	-0.0063	-0.2095	-0.0286	1.3873
0.0244	0.0061	-0.1048	-0.0063	-0.2095	-0.0286	0.3873
-0.3046	-0.4088	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.3046	-0.4647	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.7426	-0.3151	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-2.4746	-1.9196	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.6266	-0.4968	-0.1048	-0.0063	1.7905	-0.0286	-0.6127
-1.0606	-0.6988	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.0606	-0.0254	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.5074	-0.2692	-0.1048	-0.0063	1.7905	-0.0286	1.3873
-0.2606	-0.0260	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.2954	0.0728	-0.1048	-0.0063	-0.2095	-0.0286	1.3873
-0.5246	-0.2728	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.0244	-0.1989	-0.1048	-0.0063	1.7905	-0.0286	0.3873
-0.0606	-0.8917	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.3694	-0.6932	-0.1048	-0.0063	-0.2095	-0.0286	2.3873
-0.1316	0.3134	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.3084	0.2009	-0.1048	-0.0063	1.7905	-0.0286	1.3873
0.5464	0.4608	-0.1048	-0.0063	-0.2095	-0.0286	3.3873
0.2644	-0.4263	-0.1048	-0.0063	1.7905	-0.0286	0.3873
0.2174	-0.3502	-0.1048	-0.0063	1.7905	-0.0286	1.3873
-0.0606	-0.2029	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.1276	0.0552	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.5074	-0.2178	-0.1048	-0.0063	-0.2095	-0.0286	1.3873
0.0004	0.4691	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.3464	-0.4851	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.5974	-0.5477	-0.1048	-0.0063	-0.2095	-0.0286	1.3873
0.3274	-0.0491	-0.1048	-0.0063	0.7905	-0.0286	1.3873
0.4884	-0.2246	-0.1048	-0.0063	0.7905	-0.0286	1.3873
0.6214	0.0986	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.1126	0.5742	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.3046	0.3736	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.5956	-0.4443	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.1804	-0.6627	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.2386	0.1152	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.0306	0.0685	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.4024	-0.3762	-0.1048	-0.0063	-0.2095	-0.0286	2.3873
0.3184	-0.9473	-0.1048	-0.0063	-0.2095	-0.0286	1.3873
0.7004	0.8299	-0.1048	-0.0063	-0.2095	0.9714	-0.6127
0.4534	-0.5874	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.1694	0.6326	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.0916	0.0681	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.4074	0.1785	-0.1048	-0.0063	-0.2095	-0.0286	1.3873
0.0874	0.7405	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.0874	0.1396	-0.1048	-0.0063	-0.2095	-0.0286	1.3873
0.5604	-0.8042	-0.1048	-0.0063	-0.2095	-0.0286	1.3873
0.2574	-0.1291	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.2954	-0.5763	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.8566	-0.8309	-0.1048	-0.0063	0.7905	-0.0286	-0.6127
0.0854	1.3406	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.0014	0.6483	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.1784	-1.2669	-0.1048	-0.0063	-0.2095	-0.0286	1.3873
-0.1716	-0.0083	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-1.4746	-1.2512	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127

-0.5556	-0.3808	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.5024	-1.1265	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.3944	0.1968	-0.1048	-0.0063	-0.2095	-0.0286	2.3873
0.0874	0.5431	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.5556	0.1422	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.2396	0.3202	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.2574	0.0119	-0.1048	-0.0063	-0.2095	-0.0286	0.3873
-0.0946	0.3279	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
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0.0504	0.7584	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.1704	0.5745	-0.1048	-0.0063	3.7905	-0.0286	-0.6127
-0.8566	-0.6193	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.5974	-0.1040	-0.1048	-0.0063	-0.2095	-0.0286	1.3873
-0.1716	-0.0249	0.8952	-0.0063	-0.2095	-0.0286	-0.6127
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-0.0286	0.6268	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
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-0.3046	-0.1754	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-1.0606	-0.6276	0.8952	-0.0063	-0.2095	-0.0286	-0.6127
0.8354	-0.7002	-0.1048	-0.0063	-0.2095	-0.0286	3.3873
0.6814	-0.6193	-0.1048	-0.0063	-0.2095	-0.0286	3.3873
-0.0126	0.2381	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.3046	0.5489	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.3704	-0.2841	-0.1048	-0.0063	-0.2095	-0.0286	1.3873
0.0244	-0.1772	0.8952	-0.0063	-0.2095	-0.0286	0.3873
-0.1716	0.1110	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.3046	-0.2675	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.0606	0.1358	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.3164	1.4599	-0.1048	-0.0063	1.7905	-0.0286	-0.6127
0.5934	0.3266	-0.1048	-0.0063	-0.2095	-0.0286	1.3873
-0.0626	0.3303	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.5186	-0.2638	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.2004	-0.3766	-0.1048	-0.0063	-0.2095	-0.0286	0.3873
0.0874	1.0875	0.8952	-0.0063	-0.2095	-0.0286	-0.6127
-0.2116	0.1196	0.8952	-0.0063	-0.2095	-0.0286	-0.6127
0.4074	-0.1997	-0.1048	-0.0063	-0.2095	-0.0286	1.3873
-0.8566	-0.8811	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.2574	-0.1172	1.8952	-0.0063	-0.2095	-0.0286	0.3873
-0.1276	0.1179	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.2044	0.1071	-0.1048	-0.0063	-0.2095	-0.0286	1.3873
-0.0756	0.3098	0.8952	-0.0063	-0.2095	-0.0286	-0.6127
0.4484	0.1740	-0.1048	-0.0063	-0.2095	-0.0286	1.3873
-0.5086	-0.2157	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.3046	0.2006	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.0636	0.5149	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.3046	0.3426	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.1324	-0.1274	-0.1048	-0.0063	-0.2095	-0.0286	1.3873
0.4484	0.2416	-0.1048	-0.0063	-0.2095	-0.0286	1.3873
0.4884	-0.3357	-0.1048	-0.0063	-0.2095	-0.0286	2.3873
0.4784	0.2179	-0.1048	-0.0063	0.7905	-0.0286	1.3873
-0.7426	-0.5772	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.3046	0.1181	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.8564	-0.8970	0.8952	-0.0063	-0.2095	-0.0286	2.3873

0.9174	1.5164	-0.1048	-0.0063	-0.2095	0.9714	-0.6127
0.7314	0.3130	-0.1048	-0.0063	0.7905	-0.0286	-0.6127
0.8384	0.3284	0.8952	-0.0063	-0.2095	-0.0286	1.3873
-0.0606	0.1557	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.4996	-0.1611	-0.1048	-0.0063	0.7905	-0.0286	-0.6127
-0.0756	0.3833	0.8952	-0.0063	-0.2095	-0.0286	-0.6127
-0.1716	-0.0954	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.0606	0.0633	-0.1048	-0.0063	-0.2095	-0.0286	0.3873
-0.0606	-0.7909	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.1674	-0.0683	-0.1048	-0.0063	-0.2095	-0.0286	1.3873
0.5974	-0.5864	-0.1048	-0.0063	-0.2095	-0.0286	1.3873
-0.4886	-0.1137	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.7426	-0.5947	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.4746	-0.4453	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.2606	0.3222	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.0594	0.9303	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.4746	-0.7018	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.1434	1.6516	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.1276	-0.0640	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.1184	-0.1963	-0.1048	-0.0063	0.7905	-0.0286	0.3873
0.6454	0.2068	-0.1048	-0.0063	-0.2095	-0.0286	2.3873
-0.1316	0.8682	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.0606	-0.0502	-0.1048	-0.0063	-0.2095	-0.0286	0.3873
-0.0926	0.1526	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.4746	-0.1524	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.0424	-0.4075	-0.1048	-0.0063	-0.2095	-0.0286	0.3873
-0.0606	0.0965	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.0874	0.2508	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.9644	-0.7088	1.8952	-0.0063	1.7905	-0.0286	-0.6127
0.9464	1.8316	-0.1048	-0.0063	-0.2095	0.9714	-0.6127
-0.1126	-0.0432	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.2386	0.3227	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.4974	0.3218	-0.1048	-0.0063	-0.2095	-0.0286	1.3873
-0.0606	-0.9174	-0.1048	-0.0063	0.7905	-0.0286	-0.6127
0.4004	-0.3147	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.5974	0.1222	-0.1048	-0.0063	-0.2095	-0.0286	1.3873
0.3134	-0.3514	-0.1048	-0.0063	1.7905	-0.0286	0.3873
-0.4746	-0.0717	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.4746	-0.6412	0.8952	-0.0063	-0.2095	-0.0286	-0.6127
0.2954	-0.4030	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.3534	0.2669	-0.1048	-0.0063	-0.2095	-0.0286	1.3873
-0.2396	0.0068	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.8384	-0.4989	-0.1048	-0.0063	-0.2095	0.9714	-0.6127
-0.1316	0.8682	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.8566	0.3884	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.8566	-0.6806	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.5084	1.1914	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.2574	-0.7303	-0.1048	-0.0063	-0.2095	-0.0286	0.3873
0.9164	0.6329	0.8952	-0.0063	-0.2095	-0.0286	-0.6127
0.1764	-0.3561	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.6004	-0.1514	-0.1048	-0.0063	-0.2095	-0.0286	1.3873
0.6504	0.6066	-0.1048	-0.0063	-0.2095	0.9714	-0.6127
-0.5956	-0.4766	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.0706	0.4615	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127

0.0524	0.7225	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.3324	0.1769	-0.1048	-0.0063	-0.2095	-0.0286	2.3873
0.4434	-0.6784	-0.1048	1.9937	5.7905	-0.0286	-0.6127
0.1324	0.0482	-0.1048	-0.0063	0.7905	-0.0286	1.3873
0.1754	0.9596	-0.1048	-0.0063	0.7905	-0.0286	-0.6127
-1.0606	-0.8869	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.4996	-0.1820	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.3214	0.0856	-0.1048	-0.0063	-0.2095	-0.0286	1.3873
0.2954	-0.0407	-0.1048	-0.0063	-0.2095	-0.0286	1.3873
0.3084	0.2377	-0.1048	-0.0063	-0.2095	-0.0286	1.3873
-0.5956	-0.4492	0.8952	-0.0063	-0.2095	-0.0286	-0.6127
-0.5556	0.0466	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.4746	0.0063	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.1134	0.9558	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-1.4746	-0.5053	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.4354	-0.3303	-0.1048	-0.0063	-0.2095	-0.0286	1.3873
0.1804	0.9309	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
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-0.0626	0.3718	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.6144	-1.2409	-0.1048	-0.0063	-0.2095	-0.0286	1.3873
0.2004	-1.3014	-0.1048	-0.0063	1.7905	-0.0286	-0.6127
0.2164	0.9368	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-1.0606	-0.5998	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.3046	-0.4034	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.0254	1.0471	0.8952	-0.0063	-0.2095	-0.0286	-0.6127
-0.0916	0.1574	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.4014	0.9071	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.4234	0.1259	-0.1048	-0.0063	-0.2095	-0.0286	2.3873
-1.0606	-0.8192	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.1286	0.5670	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.3046	0.4405	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.5084	1.1914	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.0204	0.5802	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.5024	-1.1245	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.5024	-1.1742	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.3884	0.2882	-0.1048	-0.0063	-0.2095	-0.0286	2.3873
0.3674	0.0524	-0.1048	-0.0063	-0.2095	-0.0286	1.3873
-0.0606	0.6658	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.2316	-0.0315	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.4394	0.1536	-0.1048	-0.0063	-0.2095	-0.0286	1.3873
0.1214	0.0060	-0.1048	-0.0063	-0.2095	-0.0286	1.3873
-0.2386	-0.0838	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.3164	-0.1078	-0.1048	-0.0063	-0.2095	-0.0286	1.3873
0.1324	0.0800	-0.1048	-0.0063	-0.2095	-0.0286	1.3873
-0.7426	-0.7326	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.0244	-0.0072	-0.1048	-0.0063	1.7905	-0.0286	0.3873
-0.7426	-0.5833	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.6894	0.2230	0.8952	-0.0063	-0.2095	-0.0286	-0.6127
0.6894	-0.0225	-0.1048	-0.0063	0.7905	-0.0286	-0.6127
1.3394	-0.6389	-0.1048	-0.0063	-0.2095	1.9714	-0.6127
0.0694	0.9219	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
-0.8566	-0.4802	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127
0.5974	0.2037	-0.1048	-0.0063	-0.2095	-0.0286	1.3873
0.4724	1.3558	-0.1048	-0.0063	-0.2095	-0.0286	-0.6127

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   -1.4746   -0.5593   -0.1048   -0.0063   -0.2095   -0.0286   -0.6127
   -0.2376   -0.0565   -0.1048   -0.0063   -0.2095   -0.0286   -0.6127
    0.2314    1.2085   -0.1048   -0.0063   -0.2095   -0.0286   -0.6127
    0.2994   -0.1926   -0.1048   -0.0063   -0.2095   -0.0286    0.3873
   -0.0606   -0.1652   -0.1048   -0.0063   -0.2095   -0.0286   -0.6127
   -0.2606    0.2659   -0.1048   -0.0063   -0.2095   -0.0286   -0.6127
    0.3614    2.6252   -0.1048   -0.0063   -0.2095   -0.0286   -0.6127
   -0.1716    0.2600   -0.1048   -0.0063   -0.2095   -0.0286   -0.6127
   -0.0626    0.6591   -0.1048   -0.0063   -0.2095   -0.0286   -0.6127
   -1.0606   -0.1157   -0.1048   -0.0063   -0.2095   -0.0286   -0.6127
    0.7314    0.5077   -0.1048   -0.0063    0.7905   -0.0286   -0.6127
    0.1324    0.0399   -0.1048   -0.0063   -0.2095   -0.0286    1.3873
   -0.1126   -0.6792   -0.1048   -0.0063   -0.2095   -0.0286   -0.6127
   -0.1026    0.3912   -0.1048   -0.0063   -0.2095   -0.0286   -0.6127
    0.1214    0.1926   -0.1048   -0.0063   -0.2095   -0.0286    1.3873
    0.3674    0.2154   -0.1048   -0.0063    0.7905   -0.0286    1.3873
    0.0244   -0.1659   -0.1048   -0.0063   -0.2095   -0.0286    0.3873
    0.3514   -0.3407   -0.1048   -0.0063    5.7905   -0.0286   -0.6127

Columns 8 through 14

   -5.3333    0.7810    0.7492   -0.3714    0.0870   -0.0650    0.2442
   11.6667   -1.2190   -1.2508   -0.3714    0.3200    0.4570   -0.8168
   -9.5333    0.7810   -0.2508   -0.3714    0.3200   -0.5950   -0.2188
  -12.3333    0.7810   -0.2508   -0.3714    0.3200   -0.4500    0.2722
   -3.5333    2.7810    3.7492   -0.3714    0.0130    0.7840    1.3442
    6.6667   -1.2190    1.7492    0.6286   -2.1560    0.2560   -0.4198
    4.7667    0.7810    0.7492    1.6286   -0.3440    0.5830    0.1972
   -4.9333    0.7810   -1.2508   -0.3714    0.3200   -0.2570    0.2972
   -1.2333    0.7810   -0.2508   -0.3714    0.5580    0.7360    1.7402
   -1.2333    0.7810   -2.2508    1.6286    0.3200   -0.7040   -0.7068
   -7.2333   -0.2190    1.7492   -0.3714    0.3200    0.5170    1.2332
   -7.2333    0.7810   -0.2508   -0.3714    0.3200   -0.3450    0.3222
   -1.8333    0.7810   -1.2508   -0.3714    0.3200    0.4770    1.6232
    0.5667    0.7810   -0.2508   -0.3714    1.7900    0.3300    0.2602
   -5.9333    0.7810    1.7492   -0.3714    0.0450    0.1100    0.8442
   -6.7333    0.7810   -1.2508   -0.3714    0.3200   -0.6480   -0.0928
  -11.4333   -1.2190    1.7492   -0.3714   -1.8180    0.5110    0.4502
   15.4667   -1.2190   -1.2508    1.6286    0.3200   -0.0350   -0.4908
   19.9667   -1.2190   -2.2508   -0.3714    0.3200    0.2110   -1.6778
   -8.2333    0.7810   -2.2508    0.6286    0.3200   -0.6710   -0.0928
   -2.1333   -1.2190    4.7492   -0.3714   -1.2490    0.6160    1.4122
   10.4667   -0.2190   -1.2508   -0.3714    0.3200    0.0000   -0.0168
   -5.1333   -1.2190   -2.2508    0.6286    0.3200   -0.6180   -1.6778
   -2.5333    0.7810   -2.2508   -0.3714    0.3200    0.8720    1.4682
   -1.2333   -0.2190   -2.2508    0.6286    0.3200   -0.1110    0.6442
   -6.7333   -0.2190    0.7492   -0.3714    0.0580   -0.2650    0.2282
   15.4667   -1.2190    2.7492   -0.3714   -2.3650    0.4310   -0.6178
    9.8667   -1.2190   -0.2508   -0.3714    0.3200    0.0300   -0.4168
    2.2667   -0.2190   -0.2508   -0.3714    0.3680   -0.1130    0.1592
   -7.2333   -0.2190   -0.2508   -0.3714   -0.4180   -0.2500   -0.2188
   -1.2333   -0.2190   -0.2508   -0.3714    0.0790   -0.3650   -0.1208
   10.9667   -1.2190   -2.2508    0.6286    0.3200   -0.4660   -1.6778
    7.1667    1.7810   -2.2508   -0.3714    0.3200   -0.0390   -0.4928
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15.4667	-1.2190	-2.2508	0.6286	0.3200	-0.0660	-0.2688
3.5667	2.7810	1.7492	-0.3714	-0.6600	0.6660	0.3882
-5.1333	-0.2190	-0.2508	-0.3714	0.3200	-0.4140	-0.4748
-23.4333	-1.2190	0.7492	-0.3714	0.3200	-0.3310	-0.9558
2.9667	-1.2190	0.7492	-0.3714	0.3200	0.2220	-0.4928
3.9667	1.7810	-2.2508	-0.3714	3.4400	-0.0720	-0.4928
-0.0333	1.7810	-1.2508	-0.3714	1.6160	0.0080	0.1812
-1.7333	-0.2190	-1.2508	-0.3714	0.3200	0.5770	2.2962
7.5667	-0.2190	-1.2508	-0.3714	0.3200	-0.1170	-0.2688
-4.5333	-1.2190	1.7492	-0.3714	-1.4200	-0.0110	0.2442
-3.5333	-0.2190	3.7492	-0.3714	-0.0230	0.7850	1.6592
-9.5333	0.7810	-1.2508	-0.3714	0.3200	-1.0040	-0.8668
1.1667	-0.2190	-0.2508	-0.3714	0.5860	0.1330	0.0172
2.4667	1.7810	-1.2508	-0.3714	2.8070	0.0300	0.5092
-9.5333	-0.2190	-0.2508	-0.3714	0.3200	-0.5950	-0.2188
-3.2333	-0.2190	0.7492	-0.3714	-0.1810	-0.2260	0.2282
-2.9333	0.7810	0.7492	-0.3714	-0.5930	-0.1210	0.1592
-2.4333	0.7810	-0.2508	-0.3714	-0.3340	0.5480	1.4442
18.0667	-1.2190	-1.2508	-0.3714	0.3200	0.1540	-1.0488
5.4667	-0.2190	-2.2508	1.6286	0.8800	-0.6440	-0.7068
-1.2333	0.7810	-0.2508	-0.3714	0.1950	-0.3560	-0.2988
15.4667	-1.2190	1.7492	-0.3714	-1.0970	0.6350	-1.0938
5.4667	-0.2190	-2.2508	0.6286	0.3200	-0.1300	-0.2688
2.9667	-0.2190	-0.2508	-0.3714	-0.5940	-0.2200	0.2282
8.3667	-1.2190	-0.2508	-0.3714	0.3200	-0.1780	-0.8028
-14.5333	-1.2190	-0.2508	-0.3714	0.3200	-1.1030	-0.7598
-14.5333	-1.2190	-2.2508	-0.3714	0.3200	-1.3200	-0.7598
7.1667	-0.2190	-0.2508	2.6286	-0.0760	0.2790	0.2332
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12.5667	-0.2190	-1.2508	-0.3714	0.4410	-0.0760	-0.4908
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15.4667	-1.2190	-0.2508	-0.3714	0.1210	0.0630	-1.0138
-2.9333	0.7810	-1.2508	-0.3714	0.3200	-0.4570	0.2722
6.6667	-1.2190	-0.2508	1.6286	-0.6110	0.0460	-0.4928
-9.5333	-0.2190	-0.2508	-0.3714	-0.6600	-0.3610	-0.7068
7.1667	-1.2190	1.7492	-0.3714	-0.5380	0.3680	-0.0878
-4.5333	1.7810	-2.2508	-0.3714	0.3200	-0.6800	-0.2188
-0.2333	0.7810	2.7492	-0.3714	0.1310	0.5040	0.9092
-7.8333	0.7810	1.7492	-0.3714	0.3200	0.0760	0.9072
-7.8333	-1.2190	2.7492	-0.3714	-2.5250	-0.0650	-0.2418
6.3667	-1.2190	0.7492	-0.3714	0.3200	0.2010	-0.3788
9.8667	-0.2190	-0.2508	-0.3714	-0.5550	0.0360	-0.4928
-1.7333	-0.2190	-1.2508	0.6286	0.1640	0.7260	1.8762
6.3667	-0.2190	-1.2508	1.6286	0.3280	0.0950	0.0272
11.1667	-1.2190	0.7492	-0.3714	0.3200	0.9700	-1.6778
12.5667	-0.2190	-1.2508	-0.3714	0.3200	-0.0760	-0.4908
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-17.8333	-0.2190	-1.2508	-0.3714	0.3200	-1.6540	-1.6778

-9.5333	0.7810	-2.2508	1.6286	0.3200	-0.3790	0.3222
-4.5333	-0.2190	-1.2508	-0.3714	0.3200	-0.9400	-0.6778
3.9667	-0.2190	-0.2508	-0.3714	0.3200	-0.3080	-0.4748
15.4667	-1.2190	-0.2508	1.6286	-0.2810	0.1770	-0.9158
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9.2667	-1.2190	0.7492	-0.3714	-0.6660	0.0580	-0.4928
-3.5333	0.7810	-1.2508	-0.3714	0.3200	0.1610	1.1292
6.6667	-0.2190	-2.2508	1.6286	0.3200	-0.2270	-0.5528
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15.4667	-1.2190	0.7492	-0.3714	-0.1190	0.5130	-1.0528
-5.9333	-1.2190	1.7492	-0.3714	-1.8330	-0.1900	-0.1778
4.3667	-1.2190	-1.2508	1.6286	0.3200	-0.0980	-0.4908
4.3667	-1.2190	2.7492	-0.3714	-0.9710	0.2470	-0.5538
4.5667	-1.2190	-0.2508	0.6286	-0.6390	0.1910	0.0172
6.1667	0.7810	-0.2508	2.6286	-0.0730	0.3440	0.1982
7.1667	-1.2190	-1.2508	0.6286	0.2670	-0.3050	-0.8758
-1.2333	-0.2190	-0.2508	-0.3714	0.2440	0.6060	1.6312
18.7667	-1.2190	0.7492	-0.3714	-0.7810	0.1870	-0.9158
-2.1333	0.7810	1.7492	-0.3714	-0.5350	0.9000	1.9862
-1.2333	0.7810	-0.2508	-0.3714	0.1850	0.0290	-0.2228
1.8667	0.7810	1.7492	-0.3714	-0.5680	0.9510	1.3422
15.4667	-1.2190	-2.2508	1.6286	0.3200	-0.0290	-1.6778
15.4667	-1.2190	-0.2508	2.6286	-0.6750	0.3360	-0.6928
5.4667	0.7810	1.7492	-0.3714	-1.1800	0.2300	-0.5538
-1.2333	-0.2190	-0.2508	0.6286	-0.1290	-0.2060	0.2282
-7.2333	-0.2190	-0.2508	-0.3714	0.0750	-0.6910	-0.7068
-4.9333	0.7810	-1.2508	-0.3714	0.3200	-0.2650	0.6032
0.4667	-0.2190	0.7492	-0.3714	0.4140	0.0010	0.5042
0.0667	-0.2190	-0.2508	-0.3714	-0.3510	0.5770	1.6062
-4.9333	1.7810	-1.2508	-0.3714	0.3200	-0.2570	0.2132
12.5667	-1.2190	0.7492	-0.3714	0.3200	0.1560	-0.7348
15.4667	-1.2190	-0.2508	-0.3714	0.0320	0.4960	-1.1778
-4.9333	1.7810	0.7492	-0.3714	0.0810	0.0240	0.1812
-0.3333	-0.2190	0.7492	-0.3714	0.4910	0.4030	0.4472
-1.2333	0.7810	-0.2508	-0.3714	0.5050	-0.0570	0.2442
-2.9333	-0.2190	0.7492	-0.3714	-0.3580	0.6060	1.5712
9.8667	-1.2190	1.7492	-0.3714	-1.9340	0.2480	-0.4198
-1.2333	-0.2190	-0.2508	-0.3714	-0.4390	-0.4800	-0.7598
8.3667	-1.2190	-0.2508	-0.3714	0.3200	-0.1780	-0.8028
15.4667	-1.2190	-0.2508	-0.3714	0.0490	0.5000	-1.0528
5.4667	-1.2190	-0.2508	-0.3714	0.7370	-0.4360	-0.7188
3.9667	0.7810	-2.2508	-0.3714	3.2240	-0.0700	-0.4928
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1.6667	-0.2190	-1.2508	-0.3714	0.3200	0.6710	1.6772
-13.1333	0.7810	0.7492	-0.3714	0.3200	-0.5550	-0.2188
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6.3667	-0.2190	0.7492	-0.3714	0.3200	0.2010	-0.1498
-9.5333	-0.2190	0.7492	-0.3714	-0.8650	-0.4930	-0.7598
-8.6333	-0.2190	1.7492	-0.3714	0.3200	-0.0020	0.8722
-5.9333	0.7810	0.7492	-0.3714	0.0650	-0.1640	0.2972

12.1667	-1.2190	-0.2508	-0.3714	-0.5590	-0.0520	-0.4908
-3.7333	-0.2190	1.7492	-0.3714	-0.7480	0.1420	0.5742
-1.2333	-0.2190	-0.2508	-0.3714	-0.3440	0.5610	1.6062
-1.2333	-0.2190	-0.2508	-0.3714	0.1430	-0.0640	0.5682
-2.9333	1.7810	-0.2508	-0.3714	0.2810	0.2150	0.7902
-11.4333	-1.2190	-0.2508	3.6286	-0.6670	0.1440	0.4392
-3.7333	-0.2190	-1.2508	-0.3714	0.3200	-0.7510	-0.1558
3.5667	0.7810	1.7492	-0.3714	-0.6220	0.6600	0.6632
-11.4333	0.7810	-0.2508	-0.3714	0.3200	-0.2900	-0.2188
-16.9333	-1.2190	0.7492	-0.3714	0.3200	-0.0270	-0.1778
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23.7667	-1.2190	-0.2508	-0.3714	0.1920	0.5420	-1.0528
21.0667	-1.2190	3.7492	-0.3714	-2.9760	0.5850	-0.9278
-2.2333	0.7810	1.7492	-0.3714	0.0330	0.7940	1.8462
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5.4667	-0.2190	1.7492	-0.3714	-0.4260	0.4750	0.4472
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-9.5333	0.7810	-0.2508	1.6286	0.3200	-0.2070	0.1592
-11.4333	0.7810	-0.2508	-0.3714	0.3200	-0.7540	-0.7068
9.8667	-1.2190	0.7492	-0.3714	-0.8370	-0.2490	-0.7608
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7.1667	-1.2190	1.7492	-0.3714	-0.7800	0.3680	-0.0878
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9.4667	-0.2190	-0.2508	-0.3714	0.4030	0.2710	0.2332
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2.9667	0.7810	3.7492	-0.3714	-0.8200	0.5970	0.4452
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-1.2333	-0.2190	-0.2508	-0.3714	0.0080	0.1680	0.8872
9.8667	-1.2190	-0.2508	-0.3714	0.3200	0.0300	-0.4168
-1.9333	0.7810	1.7492	-0.3714	0.1060	1.4290	2.8132
9.8667	-0.2190	-0.2508	-0.3714	-0.5430	0.0360	-0.4928
-3.1333	0.7810	-1.2508	-0.3714	0.3200	0.3500	1.4682
-12.3333	-0.2190	0.7492	-0.3714	-0.8700	-0.6480	-0.7068
-2.7333	0.7810	1.7492	-0.3714	-0.0080	0.4960	1.2702
-4.5333	-1.2190	-1.2508	0.6286	-0.1610	-0.6550	-0.7068
7.5667	-0.2190	-1.2508	-0.3714	0.3200	-0.1100	-0.4908
9.2667	-1.2190	0.7492	-0.3714	-0.7930	0.0580	-0.4928
17.8667	-1.2190	-0.2508	-0.3714	-0.5640	0.3290	-0.6928
5.4667	-1.2190	-0.2508	2.6286	-0.5870	0.1210	-0.4048
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12.8667	-1.2190	1.7492	-0.3714	0.3200	0.9300	-1.2848
-3.7333	4.7810	0.7492	-0.3714	0.1110	0.3140	0.2292
-3.7333	-0.2190	-0.2508	0.6286	-0.6270	0.5100	1.2222
2.2667	-0.2190	0.7492	-0.3714	0.3200	0.2900	-0.5178
10.9667	-1.2190	-0.2508	-0.3714	0.3200	-0.2680	-0.4748
-1.2333	-0.2190	-2.2508	0.6286	0.3200	0.5370	1.6442
-2.2333	0.7810	1.7492	-0.3714	0.0920	1.1600	2.3662

-4.5333	-1.2190	0.7492	-0.3714	-0.2260	-0.4580	-0.8158
11.6667	-1.2190	-1.2508	-0.3714	0.3200	-0.3190	-0.8758
0.7667	-1.2190	-1.2508	-0.3714	0.7840	-0.4020	-0.8758
7.5667	-0.2190	-1.2508	-0.3714	0.3200	-0.1100	-0.4908
1.5667	2.7810	1.7492	-0.3714	-0.5720	1.0170	1.2942
-2.4333	0.7810	-1.2508	-0.3714	0.3200	0.8050	2.1142
-9.5333	0.7810	-0.2508	-0.3714	0.3200	-0.6060	-0.0928
-11.4333	-1.2190	-2.2508	-0.3714	0.3200	-1.0360	-0.8668
-5.9333	0.7810	-0.2508	-0.3714	0.1090	-0.5410	-0.2188
-2.1333	2.7810	1.7492	-0.3714	0.0400	0.8360	1.5032
-4.5333	-0.2190	-1.2508	-0.3714	0.3200	-0.9300	-0.6778
-1.2333	0.7810	1.7492	-0.3714	-0.7150	0.1020	0.1122
-2.8333	-0.2190	-0.2508	-0.3714	0.2490	0.2740	1.1122
7.5667	-0.2190	-1.2508	1.6286	0.2840	0.0190	-0.2168
2.2667	1.7810	3.7492	-0.3714	-1.4550	0.9530	0.7412
-1.2333	-1.2190	1.7492	-0.3714	-2.1940	-0.1560	-0.1778
12.1667	-0.2190	-2.2508	-0.3714	0.3200	-0.3500	-0.8758
-1.2333	0.7810	-0.2508	-0.3714	0.3070	0.7320	1.8762
-4.5333	0.7810	-1.2508	-0.3714	0.4870	-0.9240	-0.8668
7.5667	-0.2190	-1.2508	-0.3714	0.3200	-0.1170	-0.2688
-2.9333	1.7810	-1.2508	-0.3714	0.6070	-0.4350	-0.2988
-3.2333	1.7810	-1.2508	-0.3714	0.5790	-0.5690	-0.7598
-11.0333	-1.2190	8.7492	6.6286	-0.6250	1.1780	0.1932
-5.9333	-1.2190	4.7492	-0.3714	-4.6990	0.3010	-0.0088
-7.2333	1.7810	-0.2508	-0.3714	0.3200	-0.3360	0.2282
-5.1333	0.7810	1.7492	-0.3714	0.0490	0.2460	1.0752
8.3667	-0.2190	1.7492	-0.3714	-1.3280	0.3100	-0.1698
-4.5333	-1.2190	-2.2508	1.6286	0.3200	-0.4670	-0.8758
0.7667	-0.2190	0.7492	-0.3714	-0.1240	-0.0830	-0.4448
9.2667	-1.2190	1.7492	-0.3714	-0.8450	0.6050	0.4452
6.3667	-1.2190	0.7492	1.6286	-1.1040	0.2960	0.2332
15.4667	-1.2190	-2.2508	-0.3714	0.3200	-0.4830	-1.6778
-7.2333	0.7810	-2.2508	-0.3714	0.3200	0.2910	-0.8668
3.9667	1.7810	-2.2508	-0.3714	5.0420	-0.0720	-0.4928
5.4667	-1.2190	-0.2508	-0.3714	0.3200	0.0000	-0.4168
-6.5333	0.7810	-0.2508	-0.3714	0.3200	-0.2280	0.2972
-0.0333	1.7810	-1.2508	-0.3714	1.7970	0.0120	-0.5178
-1.2333	-1.2190	1.7492	-0.3714	-2.1940	-0.1560	-0.1778
-1.2333	-1.2190	-2.2508	-0.3714	0.3200	-0.6120	-1.6778
-9.5333	0.7810	-2.2508	-0.3714	0.3200	-0.8440	-0.1558
-11.4333	0.7810	3.7492	-0.3714	0.3200	0.1390	0.1142
12.5667	-1.2190	-1.2508	-0.3714	0.3200	-0.0790	-1.6778
-7.8333	6.7810	1.7492	-0.3714	0.3200	0.6350	0.0572
-3.2333	-1.2190	-1.2508	-0.3714	0.6120	-0.3770	-0.7608
1.8667	2.7810	1.7492	-0.3714	-0.5680	0.9560	1.0032
-4.5333	1.7810	-0.2508	-0.3714	0.3450	-0.2780	-0.3788
-3.5333	0.7810	-2.2508	-0.3714	0.3200	-0.2950	0.6032
-4.1333	-1.2190	1.7492	-0.3714	-0.2750	0.0690	0.5092
-2.0333	2.7810	1.7492	-0.3714	0.2030	0.9370	1.7492
7.5667	0.7810	-1.2508	-0.3714	0.3200	-0.1030	-0.7968
-12.8333	-1.2190	-0.2508	9.6286	0.3200	0.2790	-0.5618
4.3667	-1.2190	-1.2508	1.6286	0.3200	-0.0980	-0.4908
-3.2333	1.7810	-0.2508	-0.3714	0.4790	0.1870	0.4562
-16.3333	0.7810	-1.2508	-0.3714	0.3200	-0.9920	-0.6778

-2.2333	0.7810	-2.2508	-0.3714	0.3200	0.4960	1.6442
9.8667	-0.2190	-0.2508	-0.3714	-0.5520	0.0360	-0.4928
10.4667	0.7810	-1.2508	-0.3714	0.4450	0.0140	-0.4928
6.6667	-1.2190	-0.2508	-0.3714	0.3200	-0.0850	-0.4908
-3.7333	0.7810	-2.2508	-0.3714	0.3200	-0.0610	0.6032
-6.9333	0.7810	0.7492	-0.3714	0.3200	-0.0250	0.8722
-12.3333	-0.2190	-1.2508	-0.3714	-0.0130	-0.8970	-0.8668
-2.5333	1.7810	0.7492	-0.3714	-0.2590	0.0530	0.1812
-5.9333	-1.2190	-1.2508	-0.3714	0.3200	-1.1810	-1.6778
18.3667	-1.2190	-0.2508	-0.3714	0.0180	0.1610	-1.0488
-2.7333	0.7810	0.7492	-0.3714	0.2100	-0.0270	0.0832
-3.7333	-0.2190	-1.2508	-0.3714	0.3200	-0.7420	-0.2848
-0.6333	0.7810	1.7492	-0.3714	0.0520	1.3840	2.7592
5.4667	-1.2190	1.7492	-0.3714	-0.4890	0.8460	-1.1878
-1.2333	-1.2190	-2.2508	3.6286	0.3200	0.1400	-1.6778
-1.2333	-1.2190	1.7492	-0.3714	-2.4280	-0.0570	-0.2418
-4.5333	-0.2190	-1.2508	-0.3714	0.3200	-0.9400	-0.6778
-7.8333	0.7810	-1.2508	-0.3714	0.3200	-0.8030	-0.7068
-2.5333	1.7810	0.7492	-0.3714	0.3200	1.6050	2.6222
-1.9333	0.7810	-0.2508	-0.3714	0.3420	0.9330	2.2042
-11.8333	0.7810	2.7492	-0.3714	0.3200	-0.0430	0.0832
6.1667	-1.2190	-0.2508	-0.3714	0.3200	0.2480	-0.1318
-14.5333	0.7810	-0.2508	-0.3714	0.3200	-0.9600	-0.6778
-2.9333	-1.2190	0.7492	-0.3714	-0.0900	-0.1290	0.2972
-1.2333	-1.2190	-0.2508	-0.3714	-0.6610	-0.6330	-0.7068
-11.4333	0.7810	3.7492	-0.3714	0.3200	0.1390	0.1142
-2.5333	0.7810	0.7492	-0.3714	-0.2380	0.0470	0.5092
-3.1333	-0.2190	3.7492	-0.3714	-0.0180	0.9240	2.0282
-2.9333	-0.2190	3.7492	-0.3714	-0.0160	0.9870	2.1882
7.5667	-1.2190	0.7492	-0.3714	0.3200	0.1320	-0.4048
9.8667	-1.2190	1.7492	-0.3714	-1.8060	0.2480	-0.4198
0.7667	1.7810	-1.2508	-0.3714	1.5080	-0.3910	-0.2988
-3.2333	-1.2190	1.7492	-0.3714	-1.1600	0.2740	0.8442
7.1667	-1.2190	1.7492	-0.3714	-0.6320	0.3680	-0.0878
9.8667	0.7810	-2.2508	-0.3714	0.3200	-0.2330	-0.8028
-1.2333	-1.2190	-0.2508	-0.3714	-0.3330	0.7710	1.8962
10.4667	-1.2190	-1.2508	-0.3714	0.3200	0.0080	-0.2168
6.6667	-1.2190	-0.2508	-0.3714	0.3200	-0.0850	-0.4908
-4.5333	0.7810	-2.2508	-0.3714	0.3200	-0.6920	-0.0928
19.2667	-1.2190	-2.2508	1.6286	0.3200	-0.1560	-0.5528
-1.2333	-0.2190	-2.2508	-0.3714	0.3200	-0.6330	-0.0928
-11.4333	-1.2190	0.7492	-0.3714	0.3200	-0.0950	-0.7608
-7.8333	0.7810	3.7492	0.6286	-0.1420	0.3890	-0.2408
-0.0333	1.7810	-1.2508	-0.3714	0.3200	0.0240	-0.8328
-4.1333	0.7810	1.7492	-0.3714	-0.7520	0.0690	0.5092
-11.4333	-0.2190	-0.2508	-0.3714	0.3200	-0.7680	-0.1558
5.4667	0.7810	1.7492	-0.3714	-0.6960	0.4750	0.1972
-9.5333	-1.2190	3.7492	-0.3714	-3.2170	0.0460	-0.3068
-1.2333	-0.2190	-2.2508	-0.3714	0.3200	-1.1220	-0.7598
-2.7333	-1.2190	1.7492	-0.3714	-1.0760	0.4960	1.2702
-4.5333	0.7810	1.7492	-0.3714	-1.5330	-0.0110	0.2442
10.4667	-0.2190	-1.2508	-0.3714	0.5290	0.0080	-0.2168
-3.7333	-0.2190	0.7492	-0.3714	-0.2290	-0.3280	-0.7608
-1.2333	-1.2190	-0.2508	0.6286	-0.7520	-0.4290	-0.2188

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   -2.0333    4.7810    3.7492   -0.3714   -0.5310    1.0900    1.2512
    0.2667    1.7810   -1.2508   -0.3714    1.8790   -0.1760    0.1592
   -3.9333    0.7810    5.7492   -0.3714   -0.2340    0.9980    2.0962
   -1.2333   -1.2190   -0.2508   -0.3714    0.3200   -0.8130   -0.6778
   -3.9333   -0.2190    0.7492    2.6286   -0.5990    0.7620    1.5112
   12.1667   -1.2190   -0.2508   -0.3714    0.3200   -0.0520   -0.4908
   -2.9333   -1.2190   -1.2508    1.6286    0.5450   -0.2730   -0.9278
    3.9667    0.7810   -2.2508   -0.3714    2.8150   -0.0740    0.2442
    8.3667   -1.2190   -0.2508   -0.3714    0.3200   -0.1780   -0.8028
    6.6667   -1.2190    1.7492    1.6286   -0.7730    0.2800   -0.4198
    9.2667   -0.2190   -1.2508   -0.3714    0.3200   -0.2130   -0.5528
   -9.5333    1.7810    0.7492    8.6286    0.3200    0.3220   -0.0238

Columns 15 through 21

    0.0017   -0.6127    0.0003    0.0105         0   -0.0032         0
    0.5677   -1.6127    0.0663   -0.0375         0   -0.0032         0
   -0.6773   -1.6127   -0.0017    0.0195         0   -0.0032         0
   -1.0983   -3.6127    0.0033    0.0295         0   -0.0032         0
    0.9727    6.3873   -0.0067    0.0065         0   -0.0032         0
    0.6437    0.3873    0.0623   -0.0095         0   -0.0032         0
    0.7887    2.3873    0.0183   -0.0095         0   -0.0032         0
   -0.3743   -2.6127   -0.0337    0.0095         0   -0.0032         0
    0.7027    2.3873   -0.0337    0.0015         0   -0.0032         0
   -0.8953   -3.6127   -0.0277    0.0085         0   -0.0032         0
    0.7367    0.3873   -0.0147    0.0085         0   -0.0032         0
   -0.9083   -2.6127   -0.0137    0.0145         0   -0.0032         0
    0.1567   -2.6127   -0.0387    0.0035         0   -0.0032         0
    0.9767   -0.6127   -0.0237   -0.0015         0   -0.0032         0
   -0.1093   -2.6127    0.0073    0.0125         0   -0.0032         0
   -1.3323   -2.6127   -0.0277    0.0135         0   -0.0032         0
    0.6017    0.3873    0.0353    0.0075         0   -0.0032         0
    0.1387   -1.6127    0.0073   -0.0265         0   -0.0032         0
    0.4627   -3.6127   -0.0327   -0.0425         0   -0.0032         0
   -1.3323   -3.6127   -0.0377    0.0205         0   -0.0032         0
    0.5067    6.3873    0.0273    0.0045         0   -0.0032         0
   -0.0263   -2.6127   -0.0197   -0.0225         0   -0.0032         0
   -0.8693   -3.6127   -0.0347    0.0145         0   -0.0032         0
    0.0297   -3.6127   -0.0417    0.0015         0   -0.0032         0
   -0.6113   -3.6127   -0.0377    0.0045         0   -0.0032         0
   -0.4813   -2.6127    0.0153    0.0135         0   -0.0032         0
    1.0387    8.3873    0.0713   -0.0325         0   -0.0032         0
    0.2217    0.3873    0.0043   -0.0205         0   -0.0032         0
   -0.0253    2.3873   -0.0027   -0.0055         0   -0.0032         0
   -0.7373   -2.6127    0.0503    0.0095         0   -0.0032         0
   -0.5483   -0.6127    0.0063    0.0025         0   -0.0032         0
   -0.8693   -3.6127   -0.0187   -0.0155         0   -0.0032         0
    0.3897   -3.6127   -0.0407   -0.0155         0   -0.0032         0
   -0.1013   -3.6127   -0.0217   -0.0275         0   -0.0032         0
    1.0977   10.3873   -0.0057   -0.0075         0   -0.0032         0
   -0.2833   -2.6127   -0.0027    0.0105         0   -0.0032         0
    0.1647   -3.6127    0.0853    0.0165         0   -0.0032         0
    0.7577    2.3873    0.0373   -0.0245         0   -0.0032         0
    0.3897   -3.6127   -0.0427   -0.0085         0   -0.0032         0
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0.6727	-1.6127	-0.0317	-0.0005	0	-0.0032	0
0.4567	-2.6127	-0.0397	0.0035	0	-0.0032	0
-0.1013	-1.6127	-0.0197	-0.0165	0	-0.0032	0
-0.0283	0.3873	0.0293	0.0095	0	-0.0032	0
1.1137	5.3873	-0.0067	0.0065	0	-0.0032	0
-1.1743	-3.6127	-0.0187	0.0195	0	-0.0032	0
0.4797	3.3873	-0.0167	-0.0025	0	-0.0032	0
0.0697	-2.6127	-0.0287	-0.0055	0	-0.0032	0
-0.7373	-2.6127	-0.0017	0.0195	0	-0.0032	0
-0.4343	-0.6127	0.0253	0.0065	0	-0.0032	0
-0.0383	2.3873	0.0143	0.0055	0	-0.0032	0
0.5117	-1.6127	-0.0327	0.0045	0	-0.0032	0
0.5677	-1.6127	-0.0137	-0.0385	0	-0.0032	0
-0.8953	-3.6127	-0.0197	-0.0035	0	-0.0032	0
-0.2703	-1.6127	0.0063	0.0025	0	-0.0032	0
0.9317	6.3873	0.0193	-0.0325	0	-0.0032	0
-0.1013	-3.6127	-0.0307	-0.0075	0	-0.0032	0
-0.4813	-1.6127	0.0053	-0.0065	0	-0.0032	0
0.0867	0.3873	0.0153	-0.0175	0	-0.0032	0
-2.8983	-3.6127	0.1013	0.0305	0	-0.0032	0
-2.8983	-3.6127	-0.0317	0.0375	0	-0.0032	0
0.4967	-0.6127	0.0003	-0.0115	0	-0.0032	0
-0.1473	-1.6127	-0.0087	0.0095	0	-0.0032	0
-2.8983	-3.6127	0.0073	0.0125	0	-0.0032	0
-0.1803	1.3873	0.0063	0.0025	0	-0.0032	0
-0.2853	-3.6127	-0.0377	0.0045	0	-0.0032	0
0.1497	-1.6127	-0.0147	-0.0265	0	-0.0032	0
-0.3323	0.3873	-0.0087	0.0025	0	-0.0032	0
0.5447	1.3873	0.0123	-0.0325	0	-0.0032	0
-1.0983	-2.6127	-0.0267	0.0055	0	-0.0032	0
0.3897	0.3873	0.0173	-0.0095	0	-0.0032	0
-0.8953	-3.6127	0.0863	0.0125	0	-0.0032	0
0.7437	6.3873	0.0233	-0.0155	0	-0.0032	0
-0.7373	-3.6127	-0.0477	0.0085	0	-0.0032	0
0.7097	6.3873	0.0103	0.0005	0	-0.0032	0
-0.3823	-3.6127	0.0023	0.0155	0	-0.0032	0
0.1737	1.3873	0.0793	0.0165	0	-0.0032	0
0.5347	2.3873	0.0113	-0.0135	0	-0.0032	0
0.3897	0.3873	0.0043	-0.0205	0	-0.0032	0
0.5497	-2.6127	-0.0367	0.0045	0	-0.0032	0
0.2297	-2.6127	-0.0137	-0.0095	0	-0.0032	0
1.1497	8.3873	-0.0137	-0.0295	0	-0.0032	0
0.1387	-1.6127	-0.0147	-0.0265	0	-0.0032	0
-0.1813	-1.6127	-0.0157	-0.0195	0	-0.0032	0
-0.8953	-1.6127	-0.0237	0.0155	0	-0.0032	0
-0.8953	-3.6127	-0.0367	0.0245	0	-0.0032	0
-1.3323	-3.6127	-0.0017	0.0195	0	-0.0032	0
-5.3183	-3.6127	0.0093	0.0365	0	-0.0032	0
-0.9083	-3.6127	-0.0317	0.0265	0	-0.0032	0
-2.0843	-2.6127	-0.0087	0.0095	0	-0.0032	0
-0.2833	-2.6127	0.0163	-0.0085	0	-0.0032	0
0.7337	2.3873	0.0263	-0.0275	0	-0.0032	0
-0.7373	-1.6127	0.0243	0.0295	0	-0.0032	0
0.3897	2.3873	0.0333	-0.0195	0	-0.0032	0

-0.1963	-2.6127	-0.0377	0.0065	0	-0.0032	0
-0.1813	-3.6127	-0.0277	-0.0095	0	-0.0032	0
-0.3093	-1.6127	-0.0267	0.0055	0	-0.0032	0
0.8577	5.3873	0.0083	-0.0325	0	-0.0032	0
-0.1833	0.3873	0.0623	0.0125	0	-0.0032	0
0.1757	-1.6127	-0.0087	-0.0045	0	-0.0032	0
0.7847	6.3873	0.0653	-0.0095	0	-0.0032	0
0.4797	-1.6127	0.0013	-0.0065	0	-0.0032	0
0.6717	-0.6127	-0.0047	-0.0105	0	-0.0032	0
-0.3093	-1.6127	0.0093	-0.0085	0	-0.0032	0
0.4407	-0.6127	-0.0317	0.0015	0	-0.0032	0
0.7337	4.3873	0.0433	-0.0395	0	-0.0032	0
0.8277	2.3873	-0.0247	0.0035	0	-0.0032	0
0.4357	0.3873	-0.0167	0.0025	0	-0.0032	0
1.1397	8.3873	-0.0207	-0.0045	0	-0.0032	0
0.3127	-3.6127	-0.0217	-0.0275	0	-0.0032	0
0.7847	-1.6127	0.0133	-0.0285	0	-0.0032	0
0.7857	6.3873	0.0353	-0.0115	0	-0.0032	0
-0.4333	-0.6127	0.0203	0.0075	0	-0.0032	0
-0.8953	-2.6127	0.0213	0.0145	0	-0.0032	0
-0.7493	-2.6127	-0.0337	0.0095	0	-0.0032	0
0.2727	2.3873	0.0133	-0.0015	0	-0.0032	0
0.3747	-1.6127	-0.0297	-0.0005	0	-0.0032	0
-0.2903	-1.6127	-0.0337	0.0095	0	-0.0032	0
0.5777	2.3873	0.0303	-0.0265	0	-0.0032	0
0.7467	3.3873	-0.0087	-0.0325	0	-0.0032	0
0.6727	-0.6127	-0.0047	0.0095	0	-0.0032	0
0.8027	2.3873	-0.0147	0.0005	0	-0.0032	0
0.0437	2.3873	-0.0137	0.0025	0	-0.0032	0
0.5707	0.3873	-0.0267	0.0055	0	-0.0032	0
0.6437	4.3873	0.0463	-0.0205	0	-0.0032	0
-0.3083	0.3873	0.0183	0.0025	0	-0.0032	0
0.0477	0.3873	0.0153	-0.0175	0	-0.0032	0
0.8927	2.3873	-0.0087	-0.0325	0	-0.0032	0
-0.0283	-2.6127	0.0353	-0.0115	0	-0.0032	0
0.3897	-3.6127	-0.0427	-0.0085	0	-0.0032	0
-1.6393	-3.6127	-0.0367	0.0245	0	-0.0032	0
0.9397	6.3873	-0.0197	0.0025	0	-0.0032	0
-0.1473	0.3873	0.0253	0.0065	0	-0.0032	0
0.7207	-1.6127	-0.0367	-0.0045	0	-0.0032	0
-0.6773	-1.6127	0.0303	0.0275	0	-0.0032	0
-2.8983	-3.6127	-0.0087	0.0255	0	-0.0032	0
-0.4903	-3.6127	-0.0467	0.0055	0	-0.0032	0
1.2427	5.3873	-0.0147	0.0035	0	-0.0032	0
0.5167	2.3873	0.0113	-0.0135	0	-0.0032	0
-0.3083	-1.6127	0.0463	0.0195	0	-0.0032	0
-0.4903	-3.6127	0.0073	0.0175	0	-0.0032	0
-0.3743	-2.6127	0.0073	0.0125	0	-0.0032	0
0.1497	0.3873	0.0133	-0.0255	0	-0.0032	0
0.1327	1.3873	0.0123	0.0075	0	-0.0032	0
0.3747	-1.6127	-0.0317	0.0015	0	-0.0032	0
-0.2393	-0.6127	-0.0137	0.0025	0	-0.0032	0
0.2937	1.3873	-0.0267	0.0055	0	-0.0032	0
0.3357	-1.6127	0.0113	0.0365	0	-0.0032	0

-1.6393	-2.6127	-0.0177	0.0075	0	-0.0032	0
0.9427	8.3873	-0.0057	-0.0075	0	-0.0032	0
-0.6773	-2.6127	0.0323	0.0195	0	-0.0032	0
0.3797	-0.6127	0.0343	0.0225	0	-0.0032	0
0.0307	2.3873	0.0293	0.0095	0	-0.0032	0
-0.6013	-1.6127	-0.0027	0.0105	0	-0.0032	0
-0.8953	-1.6127	-0.0177	0.0075	0	-0.0032	0
-2.0843	-3.6127	-0.0097	-0.0045	0	-0.0032	0
1.1887	4.3873	0.0013	-0.0495	0	-0.0032	0
1.3207	12.3873	0.0963	-0.0435	0	-0.0032	0
0.7317	1.3873	-0.0227	0.0045	0	-0.0032	0
-0.8953	-3.6127	0.1173	0.0125	0	-0.0032	0
0.7887	4.3873	0.0093	-0.0115	0	-0.0032	0
-0.1813	-3.6127	-0.0157	-0.0295	0	-0.0032	0
-0.1033	-3.6127	-0.0087	0.0225	0	-0.0032	0
-0.8953	-2.6127	0.0083	0.0235	0	-0.0032	0
-0.0333	0.3873	0.0893	-0.0205	0	-0.0032	0
0.4977	-1.6127	0.0113	0.0365	0	-0.0032	0
0.7647	6.3873	0.0233	-0.0155	0	-0.0032	0
1.1827	2.3873	-0.0327	0.0035	0	-0.0032	0
-0.1153	-3.6127	-0.0467	0.0045	0	-0.0032	0
0.5217	3.3873	-0.0087	-0.0205	0	-0.0032	0
-0.3083	-3.6127	0.0753	0.0385	0	-0.0032	0
0.0407	0.3873	0.0313	-0.0015	0	-0.0032	0
0.8687	6.3873	0.0293	-0.0065	0	-0.0032	0
-1.6393	-3.6127	-0.0477	0.0105	0	-0.0032	0
0.1497	-3.6127	0.0053	-0.0335	0	-0.0032	0
-0.0033	0.3873	-0.0217	0.0025	0	-0.0032	0
0.2227	0.3873	0.0043	-0.0205	0	-0.0032	0
1.2837	4.3873	-0.0327	0.0015	0	-0.0032	0
0.4187	0.3873	0.0043	-0.0205	0	-0.0032	0
0.0297	-2.6127	-0.0387	0.0065	0	-0.0032	0
-0.8953	-3.6127	0.0763	0.0255	0	-0.0032	0
0.4637	4.3873	-0.0117	0.0055	0	-0.0032	0
-0.8953	-2.6127	0.0133	0.0175	0	-0.0032	0
0.1387	-1.6127	-0.0197	-0.0165	0	-0.0032	0
0.4187	3.3873	0.0333	-0.0195	0	-0.0032	0
0.7847	0.3873	0.0023	-0.0375	0	-0.0032	0
0.4827	0.3873	0.0083	-0.0075	0	-0.0032	0
-1.3323	-3.6127	-0.0277	0.0345	0	-0.0032	0
-0.8953	-3.6127	0.0453	0.0385	0	-0.0032	0
1.3747	11.3873	0.0023	-0.0345	0	-0.0032	0
1.1407	9.3873	-0.0177	0.0075	0	-0.0032	0
0.9237	-3.6127	-0.0277	0.0085	0	-0.0032	0
0.8957	2.3873	0.0243	-0.0205	0	-0.0032	0
-0.2833	-2.6127	0.0313	-0.0225	0	-0.0032	0
0.2147	-3.6127	-0.0417	0.0035	0	-0.0032	0
1.0207	4.3873	-0.0277	0.0015	0	-0.0032	0
-0.4253	-1.6127	0.0683	0.0095	0	-0.0032	0
-0.3093	-1.6127	-0.0087	-0.0245	0	-0.0032	0
-0.3093	-1.6127	-0.0217	-0.0025	0	-0.0032	0
0.1387	-1.6127	-0.0197	-0.0165	0	-0.0032	0
1.3067	8.3873	-0.0227	-0.0035	0	-0.0032	0
0.5467	-2.6127	-0.0417	0.0045	0	-0.0032	0

-1.3323	-1.6127	-0.0017	0.0195	0	-0.0032	0
-1.1743	-3.6127	-0.0347	0.0295	0	-0.0032	0
-0.7373	-2.6127	0.0073	0.0125	0	-0.0032	0
0.9927	6.3873	-0.0237	0.0045	0	-0.0032	0
-1.0103	-3.6127	-0.0087	0.0095	0	-0.0032	0
0.2757	2.3873	0.0283	0.0025	0	-0.0032	0
0.1267	-0.6127	-0.0277	0.0055	0	-0.0032	0
0.1727	-2.6127	-0.0087	-0.0115	0	-0.0032	0
1.2857	14.3873	-0.0027	-0.0055	0	-0.0032	0
-0.1833	0.3873	0.0833	0.0025	0	-0.0032	0
-0.3093	-3.6127	-0.0377	-0.0255	0	-0.0032	0
0.5677	0.3873	-0.0337	0.0015	0	-0.0032	0
-1.1743	-3.6127	-0.0087	0.0095	0	-0.0032	0
-0.1013	-2.6127	-0.0197	-0.0165	0	-0.0032	0
-0.2703	-2.6127	-0.0267	0.0055	0	-0.0032	0
-0.3083	-1.6127	-0.0227	0.0065	0	-0.0032	0
2.0167	8.3873	0.0483	0.0185	0	-0.0032	0
0.9947	6.3873	0.0803	0.0125	0	-0.0032	0
-0.4333	-1.6127	-0.0137	0.0145	0	-0.0032	0
0.0357	-1.6127	-0.0027	0.0105	0	-0.0032	0
0.6807	4.3873	0.0333	-0.0175	0	-0.0032	0
-0.3093	-3.6127	-0.0367	0.0125	0	-0.0032	0
0.3637	2.3873	0.0233	-0.0015	0	-0.0032	0
0.8867	8.3873	0.0083	-0.0195	0	-0.0032	0
0.5217	-0.6127	0.0213	-0.0095	0	-0.0032	0
-0.8693	-3.6127	-0.0357	-0.0325	0	-0.0032	0
-1.1743	-3.6127	-0.0277	0.0005	0	-0.0032	0
0.3897	-3.6127	-0.0427	-0.0085	0	-0.0032	0
0.2567	0.3873	-0.0027	-0.0115	0	-0.0032	0
-0.3743	-1.6127	-0.0177	0.0135	0	-0.0032	0
0.8957	-1.6127	-0.0317	-0.0005	0	-0.0032	0
-0.1833	0.3873	0.0833	0.0025	0	-0.0032	0
-1.0803	-3.6127	0.0033	0.0205	0	-0.0032	0
-1.6393	-3.6127	-0.0367	0.0245	0	-0.0032	0
0.5817	4.3873	0.0373	0.0235	0	-0.0032	0
0.1957	-1.6127	-0.0147	-0.0265	0	-0.0032	0
1.1557	8.3873	-0.0277	0.0025	0	-0.0032	0
0.0097	-0.6127	-0.0087	0.0115	0	-0.0032	0
1.3017	10.3873	-0.0207	-0.0045	0	-0.0032	0
0.5177	-1.6127	-0.0087	0.0095	0	-0.0032	0
-0.7493	-3.6127	-0.0467	0.0065	0	-0.0032	0
0.0967	2.3873	0.0203	0.0085	0	-0.0032	0
1.0677	6.3873	-0.0257	0.0035	0	-0.0032	0
0.3407	-0.6127	-0.0197	-0.0165	0	-0.0032	0
0.7737	0.3873	0.0383	0.0475	0	-0.0032	0
0.1387	-1.6127	-0.0087	-0.0045	0	-0.0032	0
0.4237	1.3873	-0.0157	0.0085	0	-0.0032	0
-2.0843	-3.6127	0.0003	0.0415	0	-0.0032	0
0.2147	-3.6127	-0.0457	0.0045	0	-0.0032	0
0.3897	0.3873	0.0043	-0.0205	0	-0.0032	0
0.3897	-1.6127	-0.0197	-0.0225	0	-0.0032	0
0.1757	0.3873	0.0043	-0.0145	0	-0.0032	0
-0.7493	-3.6127	-0.0347	0.0055	0	-0.0032	0
-0.4903	-2.6127	-0.0087	0.0145	0	-0.0032	0

-1.1743	-3.6127	0.0153	0.0345	0	-0.0032	0
0.2757	1.3873	0.0003	0.0045	0	-0.0032	0
-2.2063	-3.6127	0.0073	0.0125	0	-0.0032	0
0.5677	1.3873	0.0113	-0.0385	0	-0.0032	0
0.2307	2.3873	0.0063	0.0055	0	-0.0032	0
-0.7693	-2.6127	-0.0177	0.0075	0	-0.0032	0
1.2647	4.3873	-0.0327	0.0005	0	-0.0032	0
1.3107	10.3873	-0.0107	-0.0115	0	-0.0032	0
0.4787	-3.6127	-0.0397	0.0045	0	-0.0032	0
0.1737	2.3873	0.0573	0.0025	0	-0.0032	0
-2.0843	-2.6127	-0.0087	0.0095	0	-0.0032	0
-0.8953	-2.6127	-0.0237	0.0155	0	-0.0032	0
1.4267	5.3873	-0.0397	0.0035	0	-0.0032	0
0.7797	0.3873	-0.0367	0.0035	0	-0.0032	0
0.3087	2.3873	0.0363	0.0245	0	-0.0032	0
0.5747	0.3873	-0.0127	-0.0135	0	-0.0032	0
-2.0843	-3.6127	0.0243	0.0295	0	-0.0032	0
-0.3323	-0.6127	0.0143	0.0055	0	-0.0032	0
-0.8953	-1.6127	0.0403	0.0025	0	-0.0032	0
0.5817	4.3873	0.0373	0.0235	0	-0.0032	0
0.0697	1.3873	0.0003	0.0045	0	-0.0032	0
1.2017	5.3873	-0.0137	0.0065	0	-0.0032	0
1.2427	5.3873	-0.0157	0.0055	0	-0.0032	0
0.4747	2.3873	0.0203	-0.0165	0	-0.0032	0
0.6437	4.3873	0.0463	-0.0205	0	-0.0032	0
-0.2703	-2.6127	-0.0217	-0.0025	0	-0.0032	0
0.2237	0.3873	0.0013	0.0065	0	-0.0032	0
0.7437	6.3873	0.0233	-0.0155	0	-0.0032	0
0.0477	-3.6127	-0.0387	-0.0215	0	-0.0032	0
0.5897	-1.6127	-0.0347	0.0015	0	-0.0032	0
0.2327	-0.6127	-0.0197	-0.0225	0	-0.0032	0
0.1387	0.3873	0.0043	-0.0145	0	-0.0032	0
-1.3323	-3.6127	-0.0477	0.0085	0	-0.0032	0
-0.1813	-3.6127	-0.0167	-0.0345	0	-0.0032	0
-1.3323	-3.6127	-0.0457	0.0015	0	-0.0032	0
0.4757	0.3873	0.0483	0.0015	0	-0.0032	0
1.0007	5.3873	0.0353	0.0185	0	-0.0032	0
1.4337	0.3873	-0.0317	-0.0005	0	-0.0032	0
0.0977	2.3873	0.0203	0.0085	0	-0.0032	0
-1.6393	-3.6127	0.0083	0.0235	0	-0.0032	0
0.8277	6.3873	0.0093	-0.0115	0	-0.0032	0
0.4637	2.3873	0.0943	0.0195	0	-0.0032	0
-2.8983	-3.6127	-0.0087	0.0155	0	-0.0032	0
0.4247	0.3873	-0.0117	0.0055	0	-0.0032	0
0.0727	-1.6127	0.0293	0.0095	0	-0.0032	0
0.2317	-0.6127	-0.0197	-0.0225	0	-0.0032	0
-0.0333	-0.6127	0.0423	0.0075	0	-0.0032	0
-0.7373	-1.6127	0.0643	0.0115	0	-0.0032	0
1.4137	13.3873	-0.0177	0.0035	0	-0.0032	0
-0.1033	-2.6127	-0.0277	-0.0015	0	-0.0032	0
0.8867	4.3873	-0.0047	0.0075	0	-0.0032	0
-2.0843	-3.6127	0.0833	0.0025	0	-0.0032	0
1.1347	-1.6127	-0.0217	0.0105	0	-0.0032	0
0.1387	0.3873	0.0133	-0.0255	0	-0.0032	0

-0.2203	-1.6127	-0.0147	0.0105	0	-0.0032	0
0.0017	-3.6127	-0.0427	-0.0085	0	-0.0032	0
0.0477	0.3873	0.0153	-0.0175	0	-0.0032	0
0.6437	4.3873	0.0623	-0.0095	0	0.9968	0
-0.1813	-1.6127	-0.0157	-0.0195	0	-0.0032	0
0.6287	-3.6127	0.0003	0.0265	0	-0.0032	0

Columns 22 through 28

-0.0531	-0.6032	-0.0063	-0.0254	-0.0063	-0.0581	-0.0252
0.1449	0.3968	-0.0063	0.9746	-0.0063	0.2179	0.0158
-0.1331	-0.6032	-0.0063	-0.0254	-0.0063	-0.1571	-0.2282
-0.1311	-0.6032	-0.0063	-0.0254	-0.0063	-0.2411	0.1418
-0.0401	-0.6032	-0.0063	-0.0254	-0.0063	0.0719	0.0008
-0.0101	0.3968	-0.0063	-0.0254	-0.0063	0.1989	0.0058
0.0379	0.3968	-0.0063	-0.0254	-0.0063	0.1949	0.0008
-0.0211	-0.6032	-0.0063	-0.0254	-0.0063	-0.1271	0.0398
0.0209	-0.6032	-0.0063	-0.0254	-0.0063	0.0049	0.0008
0.0819	-0.6032	-0.0063	-0.0254	-0.0063	-0.2411	0.3688
-0.0211	-0.6032	-0.0063	-0.0254	-0.0063	0.0319	0.0008
-0.0721	-0.6032	-0.0063	-0.0254	-0.0063	-0.2101	-0.0752
0.0129	-0.6032	-0.0063	-0.0254	-0.0063	-0.1141	0.0008
0.0199	0.3968	-0.0063	-0.0254	-0.0063	0.1469	-0.0002
-0.0701	-0.6032	-0.0063	-0.0254	-0.0063	-0.1091	-0.0072
-0.0551	-0.6032	-0.0063	-0.0254	-0.0063	-0.2871	-0.2042
-0.0151	-0.6032	-0.0063	-0.0254	-0.0063	0.0359	-0.0012
0.1059	0.3968	-0.0063	-0.0254	-0.0063	0.1049	-0.0262
0.1469	1.3968	-0.0063	-0.0254	-0.0063	0.1889	-0.0012
-0.0371	-0.6032	-0.0063	-0.0254	-0.0063	-0.2871	-0.1942
-0.0541	-0.6032	-0.0063	-0.0254	-0.0063	-0.0281	0.0008
0.0789	0.3968	-0.0063	-0.0254	-0.0063	0.0649	0.0148
-0.0511	0.3968	-0.0063	-0.0254	-0.0063	-0.0891	0.1128
0.0539	-0.6032	0.9937	-0.0254	-0.0063	-0.1191	0.0008
0.0439	-0.6032	-0.0063	-0.0254	-0.0063	-0.1701	-0.0212
-0.0701	-0.6032	-0.0063	-0.0254	-0.0063	-0.1391	-0.0862
0.0219	2.3968	-0.0063	-0.0254	-0.0063	0.3649	-0.0002
0.0599	0.3968	-0.0063	-0.0254	-0.0063	0.1249	0.0148
0.0339	-0.6032	-0.0063	-0.0254	-0.0063	-0.0051	0.0488
-0.0151	-0.6032	-0.0063	0.9746	-0.0063	-0.1871	-0.2622
-0.0251	-0.6032	-0.0063	-0.0254	-0.0063	-0.1191	0.1498
0.0979	0.3968	-0.0063	-0.0254	-0.0063	-0.0891	0.1378
0.1099	0.3968	-0.0063	-0.0254	-0.0063	0.1469	0.0128
0.1499	0.3968	-0.0063	-0.0254	-0.0063	0.0599	-0.0242
0.0259	0.3968	-0.0063	-0.0254	-0.0063	0.2649	0.0008
-0.0481	0.3968	-0.0063	-0.0254	-0.0063	0.0629	-0.0732
-0.0641	-0.6032	-0.0063	-0.0254	-0.0063	-0.0891	0.4468
0.0569	0.3968	-0.0063	-0.0254	-0.0063	0.1989	0.0158
0.0849	0.3968	-0.0063	-0.0254	-0.0063	0.1469	0.0128
0.0349	-0.6032	-0.0063	-0.0254	-0.0063	0.0859	0.0138
-0.0001	0.3968	-0.0063	-0.0254	-0.0063	0.1469	0.0008
0.0629	0.3968	-0.0063	-0.0254	-0.0063	0.0599	-0.0242
-0.0751	-0.6032	-0.0063	-0.0254	-0.0063	-0.0891	-0.0262
-0.0471	0.3968	-0.0063	-0.0254	-0.0063	0.2719	0.0008
-0.0711	-0.6032	-0.0063	-0.0254	-0.0063	-0.3571	-0.5512

0.0159	0.3968	-0.0063	-0.0254	-0.0063	0.1229	0.0048
0.0699	-0.6032	-0.0063	-0.0254	-0.0063	-0.0411	0.0138
-0.0851	-0.6032	-0.0063	-0.0254	-0.0063	-0.1871	-0.2352
-0.0631	-0.6032	-0.0063	-0.0254	-0.0063	-0.1001	-0.0882
-0.0681	-0.6032	-0.0063	-0.0254	-0.0063	-0.0151	0.0488
0.0039	-0.6032	-0.0063	-0.0254	-0.0063	-0.0891	0.0008
0.1299	2.3968	-0.0063	-0.0254	-0.0063	0.2439	0.0048
0.1429	-0.6032	-0.0063	-0.0254	-0.0063	-0.2411	0.4018
0.0199	-0.6032	-0.0063	-0.0254	-0.0063	-0.0891	0.1448
0.0589	1.3968	-0.0063	-0.0254	-0.0063	0.1759	0.0008
0.0769	0.3968	-0.0063	-0.0254	-0.0063	0.0599	-0.0232
0.0179	-0.6032	-0.0063	-0.0254	-0.0063	-0.1391	-0.0852
0.0299	0.3968	-0.0063	-0.0254	-0.0063	0.1049	0.0478
-0.1651	-0.6032	-0.0063	-0.0254	-0.0063	-0.6751	1.0738
-0.0631	-0.6032	-0.0063	-0.0254	-0.0063	-0.6751	0.7648
0.0669	0.3968	-0.0063	-0.0254	-0.0063	0.1129	-0.0012
-0.0361	-0.6032	-0.0063	-0.0254	-0.0063	-0.0471	-0.0782
-0.0121	-0.6032	-0.0063	-0.0254	-0.0063	-0.6751	0.9038
-0.0001	-0.6032	-0.0063	-0.0254	-0.0063	-0.0361	0.1498
0.0309	-0.6032	-0.0063	0.9746	-0.0063	-0.1391	0.0038
0.0969	0.3968	-0.0063	-0.0254	-0.0063	0.1049	-0.0242
-0.0081	-0.6032	-0.0063	-0.0254	-0.0063	-0.0891	0.0468
0.0769	2.3968	-0.0063	-0.0254	-0.0063	0.2869	-0.0072
-0.0201	-0.6032	-0.0063	-0.0254	-0.0063	-0.2411	0.1298
0.0299	0.3968	-0.0063	-0.0254	-0.0063	0.1469	0.0158
-0.0791	-0.6032	-0.0063	-0.0254	-0.0063	-0.2411	0.4428
0.0139	0.3968	-0.0063	-0.0254	-0.0063	0.2079	0.0018
0.0239	-0.6032	-0.0063	-0.0254	-0.0063	-0.1871	-0.1802
-0.0051	-0.6032	-0.0063	-0.0254	-0.0063	0.0179	0.0008
-0.0971	-0.6032	-0.0063	-0.0254	-0.0063	-0.1471	-0.0072
-0.1231	-0.6032	-0.0063	-0.0254	-0.0063	0.0279	0.0538
0.0299	0.3968	-0.0063	-0.0254	-0.0063	0.2119	0.0048
0.0589	0.3968	-0.0063	-0.0254	-0.0063	0.1469	0.0148
0.0199	-0.6032	-0.0063	-0.0254	-0.0063	-0.0941	0.0008
0.0639	0.3968	-0.0063	-0.0254	-0.0063	0.0769	-0.0072
0.1079	2.3968	-0.0063	-0.0254	-0.0063	0.1469	0.0008
0.1099	0.3968	-0.0063	-0.0254	-0.0063	0.1049	-0.0242
0.0639	0.3968	-0.0063	-0.0254	-0.0063	0.0469	0.0458
-0.0691	-0.6032	-0.0063	-0.0254	-0.0063	-0.2411	0.3428
-0.0561	-0.6032	-0.0063	-0.0254	-0.0063	-0.2411	0.3228
-0.1121	-0.6032	-0.0063	-0.0254	-0.0063	-0.2871	-0.2362
-0.2591	-0.6032	-0.0063	-0.0254	-0.0063	-1.0891	-1.0982
-0.0551	-0.6032	-0.0063	-0.0254	-0.0063	-0.2101	-0.0692
-0.0471	-0.6032	-0.0063	-0.0254	-0.0063	-0.4711	-0.5882
0.0519	0.3968	-0.0063	-0.0254	-0.0063	0.0629	-0.0822
0.0719	2.3968	-0.0063	-0.0254	-0.0063	0.3349	0.0048
-0.1091	-0.6032	-0.0063	-0.0254	-0.0063	-0.1871	-0.2542
0.0179	0.3968	-0.0063	-0.0254	-0.0063	0.1469	0.0158
-0.0091	-0.6032	-0.0063	-0.0254	-0.0063	-0.1331	-0.0012
0.0679	0.3968	-0.0063	-0.0254	-0.0063	0.0469	0.0438
-0.0401	0.3968	-0.0063	-0.0254	-0.0063	0.0119	-0.0652
0.0769	1.3968	-0.0063	-0.0254	-0.0063	0.1969	0.0008
-0.1141	-0.6032	-0.0063	-0.0254	-0.0063	-0.0891	-0.0912
0.0409	0.3968	-0.0063	-0.0254	-0.0063	0.1329	-0.0242

-0.0421	0.3968	-0.0063	-0.0254	-0.0063	0.2539	0.0058
0.0289	0.3968	-0.0063	-0.0254	-0.0063	0.1229	0.0048
0.0699	0.3968	-0.0063	-0.0254	-0.0063	0.1469	0.0018
0.0609	0.3968	-0.0063	-0.0254	-0.0063	0.0119	-0.0812
0.0129	-0.6032	-0.0063	-0.0254	-0.0063	-0.0701	0.0008
0.0599	2.3968	-0.0063	-0.0254	-0.0063	0.3349	0.0048
-0.0081	-0.6032	-0.0063	-0.0254	-0.0063	0.0159	0.0008
-0.0001	0.3968	-0.0063	-0.0254	-0.0063	0.1599	-0.0062
0.0229	0.3968	-0.0063	-0.0254	-0.0063	0.2619	0.0008
0.1699	2.3968	-0.0063	-0.0254	0.9937	0.2339	0.0138
0.0879	2.3968	-0.0063	-0.0254	-0.0063	0.2699	0.0018
0.0339	0.3968	-0.0063	-0.0254	-0.0063	0.2689	0.0048
0.0159	-0.6032	-0.0063	-0.0254	-0.0063	-0.0891	-0.0882
-0.0771	-0.6032	-0.0063	-0.0254	-0.0063	-0.2411	0.4258
-0.0281	-0.6032	-0.0063	-0.0254	-0.0063	-0.1871	0.0398
-0.0321	0.3968	-0.0063	-0.0254	-0.0063	0.1669	0.0148
0.0229	-0.6032	-0.0063	-0.0254	-0.0063	-0.0961	0.0008
-0.0291	-0.6032	-0.0063	-0.0254	-0.0063	-0.0471	0.0388
0.0539	2.3968	-0.0063	-0.0254	-0.0063	0.2709	0.0048
0.0909	1.3968	-0.0063	-0.0254	-0.0063	0.1579	0.0008
-0.0431	-0.6032	-0.0063	-0.0254	-0.0063	0.0859	0.0148
0.0099	0.3968	-0.0063	-0.0254	-0.0063	0.2709	0.0008
0.0079	-0.6032	-0.0063	-0.0254	-0.0063	-0.0001	-0.0242
-0.0161	-0.6032	-0.0063	-0.0254	-0.0063	-0.0351	0.0008
0.0049	0.3968	-0.0063	-0.0254	-0.0063	0.1989	0.0058
-0.0101	-0.6032	-0.0063	-0.0254	-0.0063	-0.0891	-0.2572
0.0199	0.3968	-0.0063	-0.0254	-0.0063	0.0809	0.0478
0.0879	1.3968	-0.0063	-0.0254	-0.0063	0.2389	0.0008
0.0189	0.3968	-0.0063	-0.0254	-0.0063	0.1469	0.1458
0.0829	0.3968	-0.0063	-0.0254	-0.0063	0.1469	0.0128
-0.0561	-0.6032	-0.0063	-0.0254	-0.0063	-0.3571	0.3238
-0.0061	-0.6032	-0.0063	-0.0254	-0.0063	0.0669	0.0008
-0.0331	-0.6032	-0.0063	-0.0254	-0.0063	-0.0471	-0.0872
0.0469	0.3968	-0.0063	-0.0254	-0.0063	0.1249	0.0008
-0.1941	-0.6032	-0.0063	-0.0254	-0.0063	-0.1571	-0.2522
-0.1291	-0.6032	-0.0063	-0.0254	-0.0063	-0.6751	0.8268
0.0119	-0.6032	-0.0063	-0.0254	-0.0063	-0.1571	0.0118
-0.0231	0.3968	-0.0063	-0.0254	-0.0063	0.2719	0.0008
0.0309	0.3968	-0.0063	-0.0254	-0.0063	0.2009	0.0048
-0.1231	-0.6032	-0.0063	-0.0254	-0.0063	-0.0891	-0.2642
-0.0981	-0.6032	-0.0063	-0.0254	-0.0063	-0.1571	0.0158
-0.0651	-0.6032	-0.0063	-0.0254	-0.0063	-0.1271	0.0488
0.0459	0.3968	-0.0063	-0.0254	-0.0063	0.1049	-0.0252
-0.0511	-0.6032	-0.0063	-0.0254	-0.0063	-0.0451	-0.0072
0.0099	-0.6032	-0.0063	-0.0254	-0.0063	-0.0961	0.0008
-0.0031	-0.6032	-0.0063	-0.0254	-0.0063	-0.0651	-0.0242
-0.0101	-0.6032	-0.0063	-0.0254	-0.0063	0.0299	-0.0012
-0.0851	-0.6032	-0.0063	-0.0254	-0.0063	0.0089	-0.0072
-0.0001	-0.6032	-0.0063	-0.0254	-0.0063	-0.3571	0.3638
0.0169	0.3968	-0.0063	-0.0254	-0.0063	0.2619	0.0008
-0.0991	-0.6032	-0.0063	0.9746	-0.0063	-0.1571	-0.2432
-0.0581	-0.6032	-0.0063	-0.0254	-0.0063	0.0229	-0.0842
-0.0731	-0.6032	-0.0063	-0.0254	-0.0063	-0.0281	-0.0272
-0.0491	-0.6032	-0.0063	-0.0254	-0.0063	-0.1571	0.1428

0.0069	-0.6032	-0.0063	-0.0254	-0.0063	-0.2411	0.3638
0.1019	-0.6032	-0.0063	0.9746	-0.0063	-0.4711	-0.5742
0.1229	5.3968	-0.0063	-0.0254	-0.0063	0.4099	0.0008
0.0359	5.3968	-0.0063	-0.0254	-0.0063	0.4429	0.0008
-0.0161	-0.6032	-0.0063	-0.0254	-0.0063	-0.0011	0.0008
-0.0941	-0.6032	-0.0063	-0.0254	-0.0063	-0.2411	0.4818
0.0279	0.3968	-0.0063	-0.0254	-0.0063	0.1929	0.0008
0.1339	0.3968	-0.0063	0.9746	-0.0063	0.0469	0.0438
-0.0771	-0.6032	-0.0063	-0.0254	-0.0063	-0.0891	0.0448
-0.1451	-0.6032	-0.0063	-0.0254	-0.0063	-0.2411	0.3918
-0.0061	0.3968	-0.0063	-0.0254	-0.0063	0.1099	-0.0902
-0.0721	-0.6032	-0.0063	-0.0254	-0.0063	0.1049	-0.0072
0.0129	0.3968	-0.0063	-0.0254	-0.0063	0.2539	0.0018
0.0039	-0.6032	-0.0063	-0.0254	-0.0063	-0.0031	0.0008
0.0189	-0.6032	-0.0063	-0.0254	-0.0063	-0.1271	0.0018
0.0749	0.3968	-0.0063	-0.0254	-0.0063	0.0999	-0.0012
-0.0371	-0.6032	-0.0063	-0.0254	-0.0063	-0.0891	-0.2732
-0.0301	-0.6032	-0.0063	-0.0254	-0.0063	-0.0891	0.0158
-0.0281	0.3968	-0.0063	-0.0254	-0.0063	0.2159	0.0008
-0.0111	-0.6032	-0.0063	-0.0254	-0.0063	-0.3571	0.2948
0.1469	0.3968	-0.0063	0.9746	-0.0063	0.1049	-0.0242
0.0059	-0.6032	-0.0063	-0.0254	-0.0063	-0.0741	0.0048
0.0569	0.3968	-0.0063	-0.0254	-0.0063	0.1329	0.0148
0.0169	-0.6032	-0.0063	-0.0254	-0.0063	-0.0091	0.0008
0.0589	0.3968	-0.0063	-0.0254	-0.0063	0.1779	0.0148
-0.0021	-0.6032	-0.0063	-0.0254	-0.0063	-0.1191	0.0008
-0.1711	-0.6032	-0.0063	-0.0254	-0.0063	-0.2411	0.4608
-0.0251	-0.6032	-0.0063	-0.0254	-0.0063	-0.0091	0.0008
-0.0151	-0.6032	-0.0063	-0.0254	-0.0063	-0.2411	0.4258
0.0529	0.3968	-0.0063	-0.0254	-0.0063	0.1049	-0.0232
0.0179	0.3968	-0.0063	-0.0254	-0.0063	0.1779	0.0158
0.1069	2.3968	-0.0063	-0.0254	-0.0063	0.2699	0.0018
0.0249	0.3968	-0.0063	-0.0254	-0.0063	0.1989	-0.0072
-0.0701	-0.6032	-0.0063	-0.0254	-0.0063	-0.2871	-0.2112
-0.1571	-0.6032	-0.0063	-0.0254	-0.0063	-0.2411	0.4418
0.1109	2.3968	-0.0063	-0.0254	-0.0063	0.2809	0.0008
-0.0201	-0.6032	-0.0063	-0.0254	-0.0063	0.2249	0.0018
-0.0021	-0.6032	-0.0063	-0.0254	-0.0063	0.1289	0.0008
0.0679	0.3968	-0.0063	-0.0254	-0.0063	0.2219	-0.0072
0.1069	0.3968	-0.0063	-0.0254	-0.0063	0.0629	-0.0842
0.0389	-0.6032	-0.0063	-0.0254	-0.0063	-0.1111	0.0008
0.0129	-0.6032	-0.0063	-0.0254	-0.0063	-0.0091	0.0008
-0.0881	0.3968	-0.0063	-0.0254	-0.0063	0.0259	0.1538
0.0749	0.3968	-0.0063	-0.0254	-0.0063	0.0119	-0.0792
0.0079	0.3968	-0.0063	-0.0254	-0.0063	0.0119	-0.0682
0.0669	0.3968	-0.0063	-0.0254	-0.0063	0.1109	-0.0232
0.0309	0.3968	-0.0063	-0.0254	-0.0063	0.2619	0.0008
0.0089	-0.6032	-0.0063	-0.0254	-0.0063	-0.1021	0.0008
-0.1201	-0.6032	-0.0063	-0.0254	-0.0063	-0.2871	-0.2282
-0.0071	-0.6032	-0.0063	-0.0254	-0.0063	-0.3571	-0.5212
-0.0511	-0.6032	-0.0063	-0.0254	-0.0063	-0.1871	-0.2482
-0.0091	-0.6032	-0.0063	-0.0254	-0.0063	0.0509	0.0008
-0.0991	0.3968	-0.0063	-0.0254	-0.0063	0.0809	0.3408
-0.0261	-0.6032	-0.0063	-0.0254	-0.0063	0.0469	0.0168

-0.0111	-0.6032	-0.0063	-0.0254	-0.0063	-0.0721	0.0018
0.0749	0.3968	-0.0063	-0.0254	-0.0063	0.0859	0.0148
0.0059	0.3968	-0.0063	-0.0254	-0.0063	0.3109	0.0008
-0.0811	-0.6032	-0.0063	-0.0254	-0.0063	-0.0891	-0.0962
0.1339	0.3968	-0.0063	-0.0254	-0.0063	0.0119	-0.0732
0.0139	-0.6032	-0.0063	-0.0254	-0.0063	-0.0381	0.0008
0.0059	-0.6032	-0.0063	-0.0254	-0.0063	-0.3571	-0.5952
0.0669	0.3968	-0.0063	-0.0254	-0.0063	0.0599	-0.0232
0.0349	-0.6032	-0.0063	-0.0254	-0.0063	-0.0891	0.1268
0.0169	-0.6032	-0.0063	-0.0254	-0.0063	-0.0891	-0.2172
-0.0351	1.3968	-0.0063	-0.0254	-0.0063	0.3769	0.0008
-0.1051	-0.6032	-0.0063	-0.0254	-0.0063	0.2379	0.0058
-0.0661	-0.6032	-0.0063	-0.0254	-0.0063	-0.0891	-0.0732
-0.0521	-0.6032	-0.0063	-0.0254	-0.0063	-0.1041	-0.0012
0.0219	0.3968	-0.0063	-0.0254	-0.0063	0.2179	-0.0012
-0.0241	0.3968	-0.0063	-0.0254	-0.0063	0.0119	-0.0632
0.0009	0.3968	-0.0063	-0.0254	-0.0063	0.1989	-0.0252
0.0459	0.3968	-0.0063	-0.0254	-0.0063	0.2619	0.0008
0.0119	0.3968	-0.0063	-0.0254	-0.0063	0.1409	-0.0012
0.1269	0.3968	-0.0063	-0.0254	-0.0063	-0.0891	0.1308
0.1969	-0.6032	0.9937	-0.0254	-0.0063	-0.3571	-0.4792
0.0749	0.3968	-0.0063	-0.0254	-0.0063	0.1469	0.0128
0.0299	0.3968	-0.0063	-0.0254	-0.0063	0.1579	0.0148
-0.0521	-0.6032	-0.0063	-0.0254	-0.0063	-0.1271	0.0438
0.0219	0.3968	-0.0063	-0.0254	-0.0063	0.2219	-0.0062
-0.0811	-0.6032	-0.0063	-0.0254	-0.0063	-0.0891	-0.0962
0.1169	0.3968	-0.0063	-0.0254	0.9937	-0.0891	-0.2372
-0.0601	-0.6032	-0.0063	-0.0254	-0.0063	-0.3571	0.3308
-0.1781	-0.6032	-0.0063	-0.0254	-0.0063	0.1579	-0.0072
0.0539	1.3968	-0.0063	-0.0254	-0.0063	0.2589	0.0138
0.3429	-0.6032	-0.0063	-0.0254	-0.0063	0.2689	0.0008
0.0009	0.3968	-0.0063	-0.0254	-0.0063	0.1249	-0.0732
0.0209	0.3968	-0.0063	-0.0254	-0.0063	0.2679	0.0008
-0.0121	-0.6032	-0.0063	-0.0254	-0.0063	0.0599	-0.0772
0.0129	-0.6032	-0.0063	-0.0254	-0.0063	-0.1871	0.0368
-0.0611	-0.6032	-0.0063	-0.0254	-0.0063	-0.0361	0.0158
-0.0051	-0.6032	-0.0063	-0.0254	-0.0063	0.0409	0.0008
0.0829	0.3968	-0.0063	-0.0254	-0.0063	0.1569	-0.0232
-0.0531	2.3968	-0.0063	-0.0254	-0.0063	0.2869	0.0018
0.0379	0.3968	-0.0063	-0.0254	-0.0063	0.1049	-0.0242
-0.0051	-0.6032	-0.0063	-0.0254	-0.0063	0.0329	0.0048
-0.1901	-0.6032	-0.0063	-0.0254	-0.0063	-0.4711	-0.6022
0.0199	-0.6032	-0.0063	-0.0254	-0.0063	-0.1111	0.0008
0.0589	0.3968	-0.0063	-0.0254	-0.0063	0.1539	0.0148
0.1049	0.3968	-0.0063	-0.0254	-0.0063	0.1469	0.0148
0.0269	0.3968	-0.0063	-0.0254	-0.0063	0.1329	-0.0252
0.0339	-0.6032	-0.0063	0.9746	-0.0063	-0.1871	0.0378
-0.0731	-0.6032	-0.0063	-0.0254	-0.0063	-0.1571	0.0148
-0.0761	-0.6032	-0.0063	-0.0254	-0.0063	-0.3571	-0.6492
-0.0151	-0.6032	-0.0063	-0.0254	-0.0063	0.0309	0.0148
-0.2431	0.3968	-0.0063	-0.0254	-0.0063	-0.0891	-0.5402
0.0899	2.3968	-0.0063	-0.0254	-0.0063	0.2439	0.0048
-0.0281	-0.6032	-0.0063	-0.0254	-0.0063	0.0179	-0.0262
-0.0851	0.3968	-0.0063	-0.0254	-0.0063	0.1249	-0.2032

0.0189	-0.6032	-0.0063	-0.0254	-0.0063	-0.0031	0.0008
0.0239	2.3968	-0.0063	-0.0254	-0.0063	0.2839	0.0008
-0.0041	1.3968	-0.0063	-0.0254	-0.0063	0.1469	0.0018
-0.0481	-0.6032	-0.0063	-0.0254	-0.0063	0.0279	0.0538
-0.0481	-0.6032	-0.0063	-0.0254	-0.0063	-0.4711	-0.6102
-0.0861	-0.6032	-0.0063	-0.0254	-0.0063	-0.2411	0.3438
0.0219	-0.6032	-0.0063	-0.0254	-0.0063	0.0319	0.0008
0.0099	-0.6032	-0.0063	-0.0254	-0.0063	-0.0311	0.0008
-0.1811	-0.6032	-0.0063	-0.0254	-0.0063	0.0999	-0.0262
0.0589	0.3968	-0.0063	-0.0254	-0.0063	0.2159	-0.0012
-0.2091	-0.6032	-0.0063	-0.0254	-0.0063	-0.4711	-0.6412
-0.0361	-0.6032	-0.0063	-0.0254	-0.0063	-0.0891	0.0508
-0.0421	-0.6032	-0.0063	-0.0254	-0.0063	-0.2411	0.4448
-0.1781	-0.6032	-0.0063	-0.0254	-0.0063	0.1579	-0.0072
-0.0171	-0.6032	-0.0063	-0.0254	-0.0063	-0.0151	0.0148
-0.0361	0.3968	-0.0063	-0.0254	-0.0063	0.2719	0.0008
-0.0321	0.3968	-0.0063	-0.0254	-0.0063	0.2719	0.0008
0.0269	0.3968	-0.0063	-0.0254	-0.0063	0.1939	-0.0072
0.0049	0.3968	-0.0063	-0.0254	-0.0063	0.1889	0.0058
0.0689	-0.6032	-0.0063	-0.0254	-0.0063	-0.0891	0.1358
-0.0501	-0.6032	-0.0063	-0.0254	-0.0063	-0.0891	-0.0012
0.0129	0.3968	-0.0063	-0.0254	-0.0063	0.2179	0.0018
0.1389	0.3968	-0.0063	-0.0254	-0.0063	0.0859	0.0418
0.0159	-0.6032	-0.0063	-0.0254	-0.0063	-0.0931	0.0008
0.1009	0.3968	-0.0063	-0.0254	-0.0063	0.1419	0.0148
0.0249	0.3968	-0.0063	-0.0254	-0.0063	0.1049	-0.0252
0.0069	-0.6032	-0.0063	-0.0254	-0.0063	-0.2871	-0.1802
0.1479	0.3968	-0.0063	-0.0254	-0.0063	0.0469	0.0468
0.0579	-0.6032	-0.0063	-0.0254	-0.0063	-0.2871	-0.1962
-0.0011	0.3968	-0.0063	-0.0254	-0.0063	0.1669	-0.0802
-0.1061	0.3968	-0.0063	-0.0254	-0.0063	0.3129	-0.0002
0.0339	2.3968	-0.0063	-0.0254	-0.0063	0.5309	0.0038
-0.0471	-0.6032	-0.0063	-0.0254	-0.0063	0.0119	0.0158
-0.1241	-0.6032	-0.0063	-0.0254	-0.0063	-0.3571	0.4028
0.0209	0.3968	-0.0063	-0.0254	-0.0063	0.2599	0.0008
-0.1531	-0.6032	-0.0063	-0.0254	-0.0063	0.1249	-0.0292
0.1139	-0.6032	-0.0063	-0.0254	-0.0063	-0.6751	0.9178
-0.0311	-0.6032	-0.0063	-0.0254	-0.0063	-0.0891	0.0008
-0.0591	-0.6032	-0.0063	-0.0254	-0.0063	0.0379	-0.0272
0.0749	0.3968	-0.0063	-0.0254	-0.0063	0.1249	0.0148
-0.0701	0.3968	-0.0063	-0.0254	-0.0063	0.1099	-0.0842
-0.0021	-0.6032	-0.0063	-0.0254	-0.0063	-0.1871	-0.2762
-0.0111	-0.6032	-0.0063	-0.0254	-0.0063	0.1729	0.0008
0.0469	-0.6032	-0.0063	-0.0254	-0.0063	-0.0891	0.0428
-0.0431	-0.6032	-0.0063	-0.0254	-0.0063	-0.0041	0.0008
-0.0181	-0.6032	-0.0063	-0.0254	-0.0063	-0.4711	-0.7222
-0.0091	-0.6032	-0.0063	-0.0254	-0.0063	0.1309	0.0008
0.0639	0.3968	-0.0063	-0.0254	-0.0063	0.1049	-0.0252
-0.0121	0.3968	-0.0063	-0.0254	-0.0063	0.0019	0.0418
0.0989	-0.6032	-0.0063	-0.0254	-0.0063	-0.0581	-0.0222
0.0339	0.3968	-0.0063	-0.0254	-0.0063	0.0859	0.0478
0.0099	0.3968	-0.0063	-0.0254	-0.0063	0.1889	0.0058
0.0539	0.3968	-0.0063	-0.0254	-0.0063	0.0469	0.0448
-0.0691	0.3968	-0.0063	-0.0254	-0.0063	0.2139	-0.0002

```
Columns 29 through 35

 -0.0032    0.6343    0.1684   -0.0286   -0.2063   -0.3905   -0.9111
 -0.0032   -9.6167   -2.2816   -0.0286    3.7937   -0.3905    0.0889
 -0.0032   -9.6167   -1.4986   -0.0286   -0.2063   -0.3905    1.0889
 -0.0032   -9.6167   -0.3586   -0.0286   -0.2063    1.6095    2.0889
 -0.0032   13.6133    5.2424   -0.0286   -0.2063   -0.3905   -0.9111
 -0.0032   11.0243   -1.2326   -0.0286   -0.2063    3.6095    1.0889
 -0.0032   12.6543    0.0664   -0.0286    0.7937    2.6095    0.0889
 -0.0032   -9.6167    0.2054   -0.0286   -0.2063   -0.3905    0.0889
 -0.0032    1.5643    6.2764   -0.0286   -0.2063   -0.3905   -0.9111
 -0.0032   -9.6167   -1.7016   -0.0286   -0.2063    0.6095   -0.9111
 -0.0032    0.7473    3.4074   -0.0286   -0.2063   -0.3905    1.0889
 -0.0032   -9.6167    0.0404   -0.0286   -0.2063   -0.3905    0.0889
 -0.0032   -9.6167    4.4744   -0.0286   -0.2063   -0.3905    0.0889
 -0.0032    0.9333    0.6354    0.9714   -0.2063   -0.3905    0.0889
 -0.0032    0.6593    1.5024   -0.0286   -0.2063   -0.3905   -0.9111
 -0.0032   -9.6167   -0.7556   -0.0286   -0.2063   -0.3905    0.0889
 -0.0032   10.9213    1.3164   -0.0286   -0.2063    3.6095    5.0889
 -0.0032   -9.6167   -1.6996   -0.0286    0.7937    0.6095    0.0889
 -0.0032   -9.6167   -1.1306   -0.0286   -0.2063   -0.3905   -0.9111
 -0.0032   -9.6167   -0.7556   -0.0286   -0.2063    0.6095    1.0889
 -0.0032   12.0613    3.6404   -0.0286   -0.2063   -0.3905   -0.9111
 -0.0032   -9.6167   -0.6506   -0.0286   -0.2063   -0.3905    0.0889
 -0.0032   -9.6167   -2.5766   -0.0286   -0.2063    1.6095    0.0889
  0.9968   -9.6167    3.6654   -0.0286   -0.2063   -0.3905   -0.9111
 -0.0032   -9.6167    0.8424   -0.0286   -0.2063    0.6095   -0.9111
 -0.0032    0.4243   -0.2446   -0.0286   -0.2063   -0.3905   -0.9111
 -0.0032   22.9163   -1.4936   -0.0286   -0.2063   -0.3905    0.0889
 -0.0032    0.5483   -1.4606   -0.0286    0.7937   -0.3905   -0.9111
 -0.0032    0.9153   -0.5116   -0.0286   -0.2063   -0.3905   -0.9111
 -0.0032   -0.0297   -1.1916   -0.0286   -0.2063   -0.3905   -0.9111
 -0.0032    0.5013   -1.0486   -0.0286   -0.2063   -0.3905   -0.9111
 -0.0032   -9.6167   -2.5766   -0.0286   -0.2063    1.6095   -0.9111
 -0.0032   -9.6167   -1.5036   -0.0286   -0.2063   -0.3905   -0.9111
 -0.0032   -9.6167   -1.2076   -0.0286   -0.2063    0.6095   -0.9111
 -0.0032   14.3483    0.6294   -0.0286   -0.2063   -0.3905   -0.9111
 -0.0032   -9.6167   -1.7476   -0.0286   -0.2063   -0.3905    0.0889
 -0.0032    8.7583   -2.4436   -0.0286   -0.2063   -0.3905    0.0889
 -0.0032   11.1603   -1.5176   -0.0286    0.7937   -0.3905    0.0889
 -0.0032   -9.6167   -1.5036   -0.0286   -0.2063   -0.3905   -0.9111
 -0.0032   -9.6167    0.0974   -0.0286   -0.2063   -0.3905    0.0889
 -0.0032   -9.6167    5.2314   -0.0286   -0.2063   -0.3905   -0.9111
 -0.0032   -9.6167   -1.2076   -0.0286    0.7937   -0.3905   -0.9111
 -0.0032   10.1763    0.4334   -0.0286   -0.2063   -0.3905    1.0889
 -0.0032    2.0123    4.4494   -0.0286   -0.2063   -0.3905    2.0889
 -0.0032   -9.6167   -2.2436   -0.0286   -0.2063   -0.3905    0.0889
 -0.0032    1.4723   -0.4286   -0.0286   -0.2063   -0.3905   -0.9111
 -0.0032    0.4033    0.4404   -0.0286   -0.2063   -0.3905   -0.9111
 -0.0032   -9.6167   -1.1916   -0.0286   -0.2063   -0.3905    0.0889
 -0.0032    0.5023   -0.5616   -0.0286   -0.2063   -0.3905    0.0889
 -0.0032   11.0593   -0.6736   -0.0286   -0.2063   -0.3905   -0.9111
 -0.0032    0.7173    4.7644   -0.0286   -0.2063   -0.3905    0.0889
```

-0.0032	-9.6167	-2.0366	-0.0286	0.7937	-0.3905	0.0889
-0.0032	-9.6167	-1.7016	-0.0286	-0.2063	0.6095	-0.9111
-0.0032	10.4503	-1.1106	-0.0286	-0.2063	-0.3905	-0.9111
-0.0032	13.3453	1.1574	-0.0286	-0.2063	-0.3905	-0.9111
-0.0032	-9.6167	-1.2076	-0.0286	-0.2063	0.6095	1.0889
-0.0032	0.1363	-0.2446	-0.0286	-0.2063	-0.3905	0.0889
-0.0032	-9.6167	-2.3896	-0.0286	1.7937	-0.3905	1.0889
-0.0032	-1.2557	-1.9106	-0.0286	-0.2063	-0.3905	0.0889
-0.0032	-9.6167	-1.9106	-0.0286	-0.2063	-0.3905	0.0889
-0.0032	12.0573	0.0234	-0.0286	0.7937	2.6095	0.0889
-0.0032	0.5743	-0.9036	-0.0286	-0.2063	-0.3905	-0.9111
-0.0032	-0.8107	-1.9106	-0.0286	-0.2063	-0.3905	-0.9111
-0.0032	0.5733	-1.4676	-0.0286	-0.2063	-0.3905	-0.9111
-0.0032	-9.6167	2.0504	-0.0286	-0.2063	-0.3905	-0.9111
-0.0032	1.0283	-1.5846	-0.0286	-0.2063	-0.3905	-0.9111
-0.0032	0.7293	-0.0786	-0.0286	-0.2063	-0.3905	-0.9111
-0.0032	1.2263	-2.1866	-0.0286	-0.2063	-0.3905	-0.9111
-0.0032	-9.6167	-0.3586	-0.0286	-0.2063	-0.3905	0.0889
-0.0032	0.6543	-1.5036	-0.0286	0.7937	1.6095	2.0889
-0.0032	-0.3807	-1.7016	-0.0286	-0.2063	-0.3905	0.0889
-0.0032	12.4343	-0.6706	-0.0286	-0.2063	-0.3905	-0.9111
-0.0032	-9.6167	-1.1916	-0.0286	-0.2063	-0.3905	-0.9111
-0.0032	12.2623	2.8424	-0.0286	-0.2063	-0.3905	-0.9111
-0.0032	-9.6167	1.6474	-0.0286	-0.2063	-0.3905	0.0889
-0.0032	9.7953	-0.8156	-0.0286	-0.2063	-0.3905	2.0889
-0.0032	0.7613	-1.7026	-0.0286	1.7937	-0.3905	-0.9111
-0.0032	0.6953	-1.5036	-0.0286	-0.2063	-0.3905	0.0889
-0.0032	0.9823	6.4574	-0.0286	-0.2063	0.6095	1.0889
-0.0032	0.8893	-0.3386	-0.0286	-0.2063	1.6095	0.0889
-0.0032	-9.6167	0.3604	-0.0286	-0.2063	-0.3905	-0.9111
-0.0032	0.5013	-1.6996	-0.0286	-0.2063	-0.3905	-0.9111
-0.0032	-9.6167	-1.7626	-0.0286	0.7937	-0.3905	-0.9111
-0.0032	-9.6167	-1.7016	-0.0286	-0.2063	-0.3905	0.0889
-0.0032	-9.6167	-1.7016	-0.0286	-0.2063	0.6095	1.0889
-0.0032	-9.6167	-0.7556	-0.0286	-0.2063	-0.3905	0.0889
-0.0032	-9.6167	-2.2436	-0.0286	-0.2063	-0.3905	0.0889
-0.0032	-9.6167	0.0404	-0.0286	-0.2063	1.6095	3.0889
-0.0032	-0.4427	-1.5366	-0.0286	-0.2063	-0.3905	-0.9111
-0.0032	-9.6167	-1.7476	-0.0286	-0.2063	-0.3905	0.0889
-0.0032	12.2713	-2.2166	-0.0286	-0.2063	1.6095	0.0889
-0.0032	-0.0977	-1.1916	-0.0286	-0.2063	0.6095	2.0889
-0.0032	0.6143	-1.5036	-0.0286	0.7937	-0.3905	1.0889
-0.0032	-9.6167	2.4544	-0.0286	-0.2063	-0.3905	0.0889
-0.0032	-9.6167	-1.7626	-0.0286	-0.2063	0.6095	1.0889
-0.0032	-9.6167	-2.2686	-0.0286	-0.2063	-0.3905	0.0889
-0.0032	2.0053	0.1614	-0.0286	1.7937	-0.3905	0.0889
-0.0032	9.6643	-0.5616	-0.0286	-0.2063	-0.3905	1.0889
-0.0032	-9.6167	-1.8856	-0.0286	1.7937	1.6095	1.0889
-0.0032	0.6963	-1.6206	-0.0286	2.7937	-0.3905	3.0889
-0.0032	0.7623	-0.4286	-0.0286	-0.2063	1.6095	2.0889
-0.0032	12.1973	0.1124	-0.0286	0.7937	2.6095	0.0889
-0.0032	0.5973	-2.2686	-0.0286	-0.2063	1.6095	0.0889
-0.0032	1.2973	5.1514	-0.0286	-0.2063	-0.3905	-0.9111
-0.0032	12.0493	-2.2166	-0.0286	-0.2063	-0.3905	-0.9111

-0.0032	13.5403	6.6034	-0.0286	-0.2063	-0.3905	-0.9111
-0.0032	1.0183	-1.0346	0.9714	-0.2063	-0.3905	-0.9111
-0.0032	15.0873	3.7244	-0.0286	-0.2063	-0.3905	-0.9111
-0.0032	-9.6167	-2.2936	-0.0286	-0.2063	2.6095	0.0889
-0.0032	0.9653	-1.4816	-0.0286	-0.2063	3.6095	0.0889
-0.0032	23.1693	-1.7616	0.9714	-0.2063	-0.3905	-0.9111
-0.0032	0.5813	-0.7196	-0.0286	-0.2063	0.6095	-0.9111
-0.0032	-0.0267	-1.7016	-0.0286	-0.2063	-0.3905	-0.9111
-0.0032	-9.6167	0.4414	-0.0286	-0.2063	-0.3905	0.0889
-0.0032	1.0813	-0.2546	-0.0286	-0.2063	-0.3905	-0.9111
-0.0032	0.7023	4.8224	-0.0286	-0.2063	-0.3905	0.0889
-0.0032	-9.6167	-0.6416	-0.0286	-0.2063	-0.3905	0.0889
-0.0032	0.6933	-1.7476	-0.0286	1.7937	-0.3905	-0.9111
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-0.0032	1.0793	-0.0066	-0.0286	-0.2063	-0.3905	-0.9111
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-0.0032	11.1493	-1.2326	-0.0286	-0.2063	-0.3905	1.0889
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-0.0032	-9.6167	-1.1496	-0.0286	-0.2063	0.6095	1.0889
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-0.0032	-9.6167	4.8994	-0.0286	0.7937	-0.3905	0.0889
-0.0032	-9.6167	-1.4986	-0.0286	-0.2063	-0.3905	2.0889
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-0.0032	-9.6167	1.2454	-0.0286	-0.2063	-0.3905	-0.9111
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Columns 36 through 41

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3.3600	-1.0501	-0.2730	3.5869	-0.1238	0.9524
-0.2660	-0.5531	0.7270	-0.3741	-0.1238	-0.0476
-0.1570	0.1799	-0.2730	-0.3811	-0.1238	-0.0476
0.4000	0.6679	-0.2730	0.8049	1.8762	-0.0476
0.1580	-0.0701	-0.2730	0.2009	-0.1238	-0.0476
0.0230	0.1619	-0.2730	-0.0331	-0.1238	-0.0476
0.3090	0.6429	-0.2730	0.1809	-0.1238	0.9524
-0.1160	0.2989	-0.2730	-0.3951	-0.1238	-0.0476
-0.0240	-0.4861	0.7270	-0.3641	-0.1238	-0.0476
0.1400	-0.7861	-0.2730	0.0919	-0.1238	-0.0476
0.0720	-0.2461	0.7270	0.1369	-0.1238	-0.0476
0.2890	-0.1861	-0.2730	0.7979	1.8762	-0.0476
-0.2680	-0.2481	-0.2730	-0.7481	-0.1238	-0.0476
1.2060	1.9299	-0.2730	1.3119	-0.1238	-0.0476
1.2280	0.6049	-0.2730	1.4829	-0.1238	-0.0476
0.0150	-0.8861	-0.2730	-0.0571	-0.1238	-0.0476
-0.1050	-0.3881	-0.2730	-0.0281	-0.1238	-0.0476
-0.1840	-1.0421	-0.2730	0.2199	-0.1238	-0.0476
0.0680	-0.5791	-0.2730	-0.0631	-0.1238	-0.0476
-0.1470	0.8799	-0.2730	0.0029	-0.1238	-0.0476
-0.0090	-0.1951	-0.2730	0.5879	-0.1238	-0.0476
-0.5360	0.1799	-0.2730	-1.4521	-0.1238	-0.0476
0.0410	-0.3471	-0.2730	0.1169	-0.1238	-0.0476
-0.1160	-0.3501	-0.2730	0.0379	-0.1238	-0.0476
-0.4190	0.0689	-0.2730	-1.0021	-0.1238	-0.0476
-0.0830	0.6179	-0.2730	-0.2941	-0.1238	-0.0476
-0.0120	0.4399	-0.2730	-0.0791	-0.1238	-0.0476
-0.1770	-0.6031	-0.2730	0.2249	-0.1238	-0.0476
0.3540	-0.3801	-0.2730	0.4959	-0.1238	-0.0476
-0.0540	0.3799	0.7270	-0.4271	-0.1238	-0.0476
-0.0800	0.6089	-0.2730	-0.2331	-0.1238	-0.0476
0.2090	-0.0051	-0.2730	0.8889	-0.1238	-0.0476
0.0470	-0.5791	0.7270	-0.1071	-0.1238	-0.0476
-0.0620	0.4299	-0.2730	-0.1631	-0.1238	-0.0476

0.1640	0.2639	-0.2730	0.0169	-0.1238	-0.0476
-0.4600	2.3469	-0.2730	-1.3011	-0.1238	-0.0476
-0.8640	-0.4861	0.7270	-2.1571	-0.1238	-0.0476
0.1050	0.0389	0.7270	0.4699	-0.1238	-0.0476
-0.1170	-0.0281	-0.2730	-0.3631	-0.1238	-0.0476
-0.5150	1.0139	-0.2730	-1.4131	-0.1238	-0.0476
0.0170	0.3229	-0.2730	-0.2441	-0.1238	-0.0476
0.0360	-0.9141	-0.2730	0.1359	-0.1238	0.9524
0.1460	-0.1721	-0.2730	0.1409	-0.1238	-0.0476
-0.0830	-0.0231	-0.2730	-0.2611	-0.1238	-0.0476
0.2770	-0.1531	-0.2730	0.3389	0.8762	-0.0476
-0.4020	-0.2961	-0.2730	-0.8721	-0.1238	-0.0476
0.2010	0.3469	0.7270	0.2969	-0.1238	-0.0476
0.1380	1.4029	-0.2730	0.0479	-0.1238	0.9524
0.2490	0.1799	-0.2730	0.5999	1.8762	-0.0476
-0.5080	-0.9311	-0.2730	-1.2211	-0.1238	-0.0476
0.0290	0.1219	-0.2730	0.5869	-0.1238	-0.0476
-0.4300	-0.2361	-0.2730	-0.3901	-0.1238	-0.0476
-0.0160	1.5879	-0.2730	0.0389	-0.1238	-0.0476
0.2380	-0.0701	-0.2730	0.3779	-0.1238	-0.0476
0.1980	0.1469	-0.2730	0.2859	-0.1238	-0.0476
-0.1970	-0.7501	0.7270	0.3909	-0.1238	-0.0476
0.0610	-0.2591	0.7270	0.2319	-0.1238	-0.0476
0.4510	-0.6101	-0.2730	1.3179	-0.1238	-0.0476
0.1450	-0.1721	-0.2730	0.1249	-0.1238	-0.0476
0.0670	-0.5071	-0.2730	-0.1131	-0.1238	-0.0476
-0.5060	-0.0861	-0.2730	-1.3081	-0.1238	-0.0476
-0.5230	-0.4861	0.7270	-1.3561	-0.1238	-0.0476
-0.5450	0.0139	-0.2730	-1.1891	-0.1238	-0.0476
-1.2270	1.3469	-0.2730	-3.0431	-0.1238	-0.0476
-0.5880	-0.5281	1.7270	-1.0371	-0.1238	-0.0476
-0.4680	0.4719	-0.2730	-1.2561	-0.1238	-0.0476
0.1310	0.0139	-0.2730	-0.1191	-0.1238	-0.0476
0.3470	0.1799	0.7270	0.5169	-0.1238	-0.0476
-0.1780	0.9579	0.7270	-0.6261	-0.1238	-0.0476
0.2060	0.5469	-0.2730	0.3089	-0.1238	-0.0476
-0.5300	-0.7961	-0.2730	-0.4391	-0.1238	-0.0476
0.0480	-0.5071	0.7270	-0.1611	-0.1238	-0.0476
-0.3470	-0.5341	-0.2730	-0.8721	-0.1238	-0.0476
0.2300	-0.0801	-0.2730	0.7739	0.8762	-0.0476
-0.0980	1.3889	-0.2730	-0.0981	-0.1238	-0.0476
0.1600	-0.3381	0.7270	0.0549	-0.1238	-0.0476
0.3280	0.9579	-0.2730	0.5459	-0.1238	-0.0476
0.0790	0.1109	0.7270	0.3279	-0.1238	-0.0476
0.1530	-0.0341	0.7270	0.5569	-0.1238	-0.0476
0.0170	0.0849	0.7270	-0.1831	-0.1238	-0.0476
-0.1480	-0.6931	-0.2730	0.3069	-0.1238	-0.0476
0.3600	0.2709	-0.2730	0.5359	1.8762	-0.0476
-0.0320	-0.5701	-0.2730	0.6309	-0.1238	-0.0476
-0.0720	-0.3951	-0.2730	-0.0611	-0.1238	-0.0476
0.2880	-0.4861	-0.2730	0.9129	1.8762	-0.0476
0.3620	-0.6721	0.7270	0.3659	-0.1238	-0.0476
0.3930	0.0139	0.7270	0.7109	-0.1238	-0.0476
0.2360	0.5549	-0.2730	0.4959	-0.1238	-0.0476

-0.0650	0.5549	0.7270	-0.1231	-0.1238	-0.0476
-0.1690	0.5799	-0.2730	-0.6971	-0.1238	-0.0476
-0.5700	-0.5971	-0.2730	-0.9041	-0.1238	-0.0476
0.0360	0.0139	-0.2730	0.1939	-0.1238	-0.0476
-0.1760	-0.5201	-0.2730	0.3459	-0.1238	-0.0476
-0.4100	-0.5601	-0.2730	-0.7941	-0.1238	-0.0476
0.2690	-0.0621	-0.2730	0.3949	-0.1238	-0.0476
0.1750	-0.3401	-0.2730	0.7089	0.8762	-0.0476
-0.1170	-0.1151	-0.2730	-0.0121	-0.1238	-0.0476
0.0320	-0.2781	-0.2730	0.3509	-0.1238	-0.0476
0.0190	-0.1201	-0.2730	-0.0781	-0.1238	-0.0476
-0.1770	-0.4391	-0.2730	0.2789	-0.1238	-0.0476
0.2560	0.7359	-0.2730	0.5379	-0.1238	-0.0476
0.0050	0.9029	-0.2730	-0.3151	-0.1238	-0.0476
0.1400	0.2639	-0.2730	0.0119	-0.1238	-0.0476
0.2240	-0.1951	-0.2730	0.7269	-0.1238	-0.0476
0.0970	0.4029	-0.2730	-0.1621	-0.1238	-0.0476
-0.0520	-0.8361	-0.2730	-0.0711	-0.1238	-0.0476
-0.6950	-0.5531	0.7270	-1.6061	-0.1238	-0.0476
0.0360	-0.4031	-0.2730	0.6399	-0.1238	-0.0476
-0.0480	0.6389	-0.2730	-0.1271	-0.1238	-0.0476
0.1340	-0.8201	-0.2730	0.4949	-0.1238	-0.0476
-0.4040	1.0689	-0.2730	-1.0131	-0.1238	-0.0476
-0.8550	0.5139	-0.2730	-2.1311	-0.1238	-0.0476
-0.5570	-1.0621	-0.2730	-0.7381	-0.1238	-0.0476
-0.0090	-0.3531	-0.2730	0.7869	-0.1238	-0.0476
0.2370	0.0969	-0.2730	0.3709	-0.1238	-0.0476
-0.0820	1.3469	-0.2730	-0.4841	-0.1238	-0.0476
-0.4370	-0.1531	-0.2730	-0.4621	-0.1238	-0.0476
-0.1560	0.0319	-0.2730	-0.3141	-0.1238	-0.0476
0.1570	0.2729	-0.2730	0.1699	-0.1238	-0.0476
-0.1270	0.3749	-0.2730	0.0989	-0.1238	-0.0476
-0.1770	-0.5701	-0.2730	0.2659	-0.1238	-0.0476
-0.1120	-0.1361	-0.2730	-0.2031	-0.1238	-0.0476
-0.1270	-0.5101	-0.2730	-0.0411	-0.1238	-0.0476
-0.0740	0.4439	3.7270	0.1519	-0.1238	-0.0476
-0.4480	0.1469	-0.2730	-1.1021	-0.1238	-0.0476
0.2880	-0.2201	-0.2730	0.7459	1.8762	-0.0476
0.0730	0.7539	-0.2730	-0.0921	-0.1238	0.9524
1.1860	0.8989	0.7270	1.3239	-0.1238	-0.0476
-0.0750	0.4799	-0.2730	0.0169	-0.1238	-0.0476
-0.1600	0.0849	-0.2730	-0.5261	-0.1238	-0.0476
-0.3260	0.2139	-0.2730	-0.9351	-0.1238	-0.0476
0.0610	-0.0001	-0.2730	-0.2161	-0.1238	0.9524
0.4360	-0.1531	-0.2730	0.9099	-0.1238	-0.0476
0.4800	0.6179	-0.2730	1.0159	3.8762	-0.0476
-0.1220	-0.4331	-0.2730	0.5009	-0.1238	-0.0476
-0.0790	2.0799	-0.2730	-0.4701	-0.1238	-0.0476
0.2120	0.0139	-0.2730	0.6439	-0.1238	-0.0476
0.1860	-0.4931	-0.2730	0.3459	-0.1238	0.9524
-0.3670	0.0319	0.7270	-0.5611	-0.1238	-0.0476
-0.4590	0.7139	-0.2730	-1.2091	-0.1238	-0.0476
0.1520	0.8949	-0.2730	0.0239	-0.1238	-0.0476
-0.0390	0.4299	3.7270	0.1989	-0.1238	-0.0476

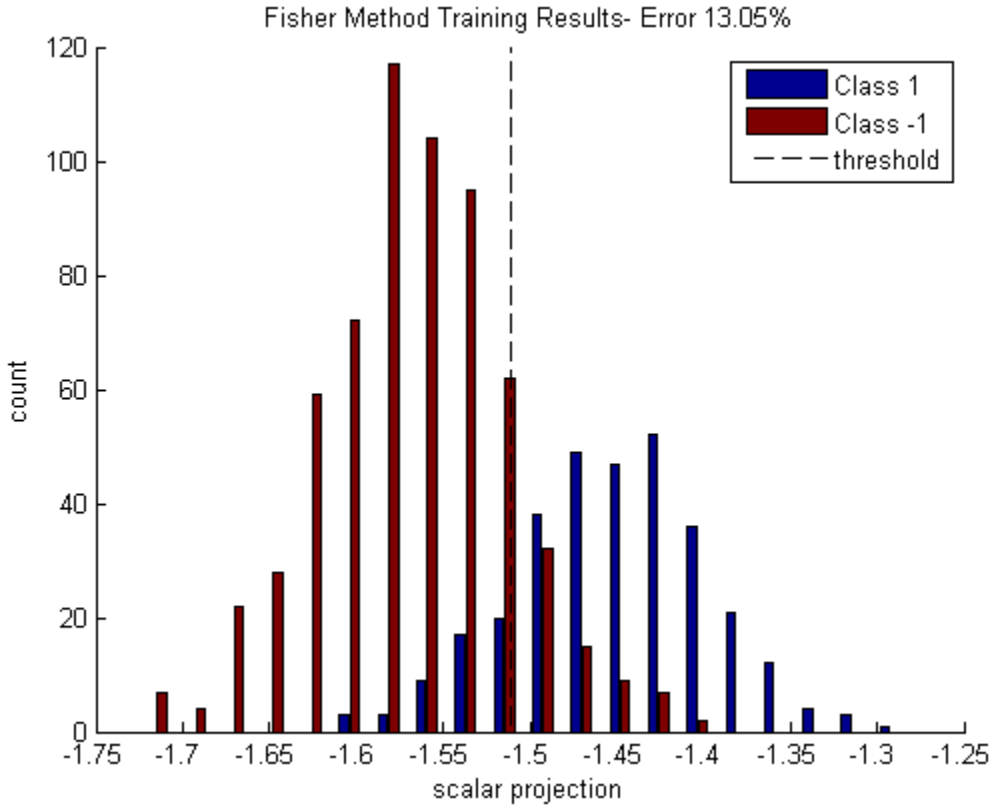
0.2870	0.1799	-0.2730	0.6019	1.8762	-0.0476
-0.1010	-0.7641	-0.2730	0.9349	-0.1238	-0.0476
-0.5300	-1.0861	-0.2730	-0.4011	-0.1238	-0.0476
0.0940	-0.1911	-0.2730	0.4539	-0.1238	-0.0476
0.8010	1.4949	1.7270	0.8389	-0.1238	-0.0476
0.1370	0.7259	-0.2730	0.4869	-0.1238	-0.0476
0.2490	0.3279	-0.2730	0.7199	1.8762	-0.0476
-0.7120	-0.9531	-0.2730	-1.6581	-0.1238	-0.0476
0.4750	-0.2951	-0.2730	0.7829	-0.1238	1.9524
-0.0830	-0.3711	-0.2730	-0.0391	-0.1238	-0.0476
0.1640	-0.0701	-0.2730	0.2009	-0.1238	-0.0476
0.1400	-0.7981	-0.2730	1.2129	-0.1238	-0.0476
0.2240	0.1469	-0.2730	0.2889	-0.1238	-0.0476
-0.5180	-0.8591	-0.2730	-0.2381	-0.1238	-0.0476
-0.1730	1.7799	-0.2730	-0.6921	-0.1238	-0.0476
-0.1130	-0.2461	-0.2730	0.3339	-0.1238	-0.0476
-0.1270	0.8799	0.7270	-0.5871	-0.1238	-0.0476
0.1290	-0.3381	-0.2730	0.0179	-0.1238	-0.0476
0.2350	0.5469	-0.2730	0.3119	-0.1238	-0.0476
0.3750	-0.0631	-0.2730	0.6889	-0.1238	-0.0476
0.2300	0.1199	0.7270	0.3329	-0.1238	-0.0476
-0.6160	-0.4861	1.7270	-1.3161	-0.1238	-0.0476
-0.1800	1.3799	0.7270	-0.7181	-0.1238	-0.0476
0.9340	-0.3351	-0.2730	1.5849	-0.1238	-0.0476
-0.0030	-0.1921	-0.2730	0.2779	-0.1238	-0.0476
-0.0360	-0.4861	0.7270	0.3039	-0.1238	-0.0476
1.2290	0.4609	-0.2730	1.5149	-0.1238	-0.0476
0.1640	0.2279	-0.2730	0.0109	-0.1238	-0.0476
-0.2660	-0.8531	0.7270	0.1549	-0.1238	-0.0476
0.1390	-0.6771	-0.2730	1.0259	-0.1238	-0.0476
-0.0420	0.4579	-0.2730	-0.4261	-0.1238	-0.0476
0.0600	-0.1291	-0.2730	-0.1801	-0.1238	-0.0476
-0.1620	-0.3431	-0.2730	-0.5451	-0.1238	-0.0476
0.1330	-0.3381	-0.2730	0.0179	-0.1238	-0.0476
0.2880	-0.5091	-0.2730	0.9929	1.8762	-0.0476
-0.4960	-0.9681	-0.2730	0.2369	-0.1238	-0.0476
-0.6090	0.3469	-0.2730	-1.2591	-0.1238	-0.0476
-0.5150	-0.6531	0.7270	-1.4121	-0.1238	-0.0476
-0.1620	0.2909	-0.2730	-0.6091	-0.1238	-0.0476
-0.0980	-0.4991	-0.2730	0.6279	-0.1238	-0.0476
-0.2040	-0.5701	-0.2730	-0.8171	-0.1238	-0.0476
-0.0130	0.4989	-0.2730	0.2109	-0.1238	-0.0476
-0.1490	-0.5751	-0.2730	-0.0371	-0.1238	-0.0476
0.0930	-0.1701	0.7270	0.1959	-0.1238	-0.0476
0.3460	-0.1721	-0.2730	1.0409	2.8762	-0.0476
0.0130	1.5139	-0.2730	0.0249	-0.1238	-0.0476
0.0430	-0.7011	-0.2730	-0.2181	-0.1238	-0.0476
-0.1400	-0.7501	-0.2730	0.4059	-0.1238	-0.0476
-0.2450	0.5139	-0.2730	-0.8941	-0.1238	-0.0476
0.0470	-0.3571	-0.2730	-0.0931	-0.1238	-0.0476
-0.1810	-0.1531	-0.2730	-0.5181	-0.1238	-0.0476
-0.1310	0.0139	-0.2730	-0.5881	-0.1238	-0.0476
1.1040	0.5289	3.7270	2.0019	-0.1238	-0.0476
0.1230	1.5199	-0.2730	0.4799	-0.1238	-0.0476

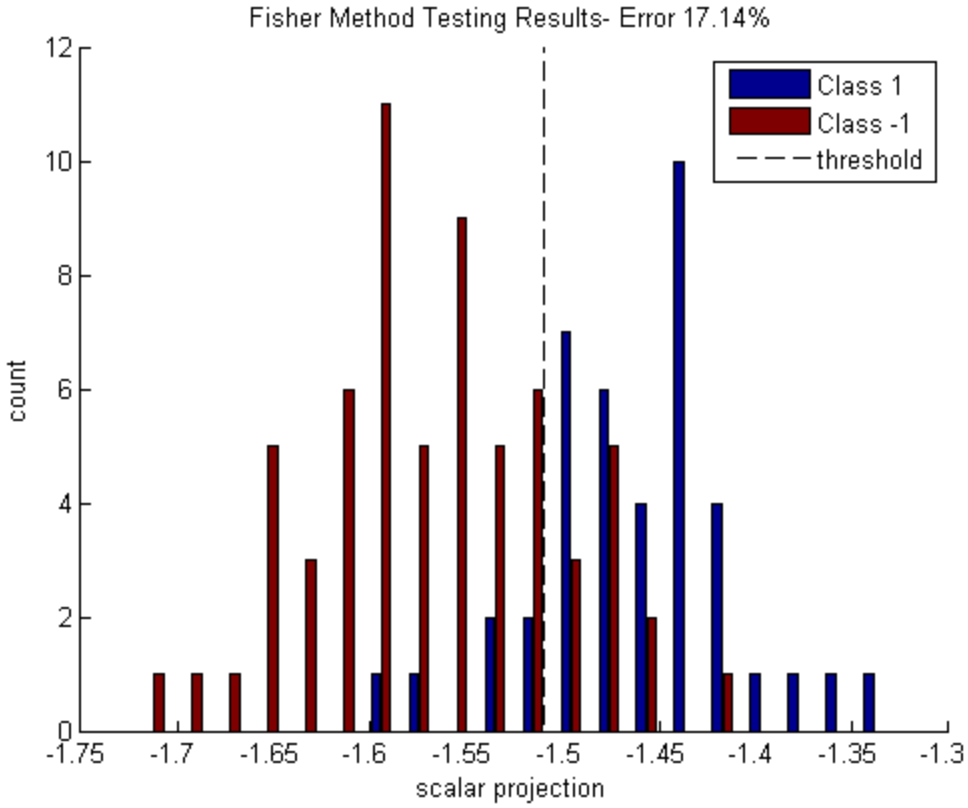
-0.4300	0.0139	-0.2730	-0.8421	-0.1238	-0.0476
-0.1550	-0.2481	-0.2730	0.0119	-0.1238	-0.0476
0.2550	0.4369	-0.2730	0.5759	-0.1238	-0.0476
-0.3630	-0.8201	0.7270	-0.9081	-0.1238	-0.0476
0.0820	0.3659	-0.2730	0.0519	-0.1238	-0.0476
0.2890	0.0509	-0.2730	0.7849	1.8762	-0.0476
0.1580	0.3469	0.7270	0.4939	-0.1238	-0.0476
-0.0540	-0.6531	-0.2730	-0.4181	-0.1238	-0.0476
3.3680	-0.6321	-0.2730	3.5779	-0.1238	0.9524
0.0270	-0.9031	-0.2730	-0.0101	-0.1238	-0.0476
0.1710	-0.4201	-0.2730	0.1229	-0.1238	-0.0476
-0.3940	-0.3381	-0.2730	-0.6751	-0.1238	-0.0476
-0.0280	-0.5851	-0.2730	-0.0161	-0.1238	-0.0476
0.0130	1.5139	-0.2730	0.0249	-0.1238	-0.0476
0.0140	-0.3531	1.7270	-0.4011	-0.1238	-0.0476
-0.6580	-0.7531	0.7270	-1.5591	-0.1238	-0.0476
-0.1090	1.0409	-0.2730	-0.1111	-0.1238	-0.0476
0.1330	-0.6531	-0.2730	0.1669	-0.1238	-0.0476
1.6210	-0.5451	-0.2730	1.9299	-0.1238	-0.0476
-0.0240	-0.2011	0.7270	-0.3671	-0.1238	-0.0476
0.2890	-0.4631	-0.2730	0.9499	1.8762	-0.0476
-0.0840	0.2739	-0.2730	-0.2431	-0.1238	-0.0476
-0.5820	-1.0421	-0.2730	-0.9621	-0.1238	-0.0476
-0.1040	0.3319	-0.2730	0.0629	-0.1238	-0.0476
-0.1130	-0.5671	-0.2730	0.7019	-0.1238	-0.0476
0.2040	-0.3201	-0.2730	0.1229	-0.1238	-0.0476
0.0290	0.0779	5.7270	0.3229	-0.1238	-0.0476
0.1370	-0.3381	0.7270	0.0509	-0.1238	-0.0476
0.0210	-0.2811	0.7270	0.1399	-0.1238	-0.0476
-0.7160	0.5969	0.7270	-1.7401	-0.1238	-0.0476
-0.5120	-1.1031	-0.2730	-0.0951	-0.1238	-0.0476
0.2040	0.1469	-0.2730	0.2859	-0.1238	-0.0476
0.1890	-0.2531	-0.2730	0.2599	-0.1238	-0.0476
0.1680	-0.1161	-0.2730	0.0709	-0.1238	-0.0476
0.0360	-0.8071	-0.2730	-0.0471	-0.1238	0.9524
-0.4500	-0.3351	-0.2730	-0.5351	-0.1238	-0.0476
-0.2250	1.0139	0.7270	-0.8561	-0.1238	-0.0476
-0.0260	0.1799	-0.2730	0.0749	-0.1238	-0.0476
-0.3870	-0.4861	-0.2730	-1.1641	-0.1238	-0.0476
0.2610	-0.1531	-0.2730	0.4359	-0.1238	-0.0476
0.0250	0.3139	-0.2730	0.0099	-0.1238	-0.0476
-0.1910	-0.6861	-0.2730	-0.7341	-0.1238	-0.0476
-0.1110	-0.7541	-0.2730	1.0839	-0.1238	-0.0476
0.2940	-0.4311	-0.2730	0.9189	1.8762	-0.0476
-0.2370	-1.1021	0.7270	-0.2271	-0.1238	-0.0476
0.0580	1.2909	-0.2730	0.1369	-0.1238	-0.0476
-0.5320	0.4719	-0.2730	-1.3601	-0.1238	-0.0476
-0.4840	-0.0861	-0.2730	-1.2891	-0.1238	-0.0476
0.4330	-1.0311	-0.2730	1.3349	-0.1238	-0.0476
-0.1400	-0.8641	-0.2730	0.5189	-0.1238	-0.0476
-0.1650	1.0469	-0.2730	-0.3311	-0.1238	-0.0476
0.2230	-0.4611	-0.2730	0.3729	-0.1238	-0.0476
-0.6890	1.0969	-0.2730	-1.6711	-0.1238	-0.0476
-0.0820	0.1989	-0.2730	-0.2061	-0.1238	-0.0476

```
   -0.1100    1.2799   -0.2730   -0.5551   -0.1238   -0.0476
   -0.1090    1.0409   -0.2730   -0.1111   -0.1238   -0.0476
   -0.0450    0.1499   -0.2730    0.0219   -0.1238   -0.0476
   -0.0090   -0.3321   -0.2730    0.6889   -0.1238   -0.0476
   -0.0090   -0.3861   -0.2730    0.7359   -0.1238   -0.0476
    0.2370    0.2109   -0.2730    0.3389   -0.1238   -0.0476
    0.2470    0.7359   -0.2730    0.5379   -0.1238   -0.0476
   -0.0390   -0.0341   -0.2730   -0.2771   -0.1238   -0.0476
   -0.1690    0.2989   -0.2730    0.1779   -0.1238   -0.0476
    0.2580    0.1799   -0.2730    0.5999    1.8762   -0.0476
    0.1200   -0.7361   -0.2730   -0.0521   -0.1238   -0.0476
   -0.1770   -0.6661   -0.2730    0.4229   -0.1238   -0.0476
    0.1550   -0.2701   -0.2730    0.1489   -0.1238   -0.0476
    0.1430   -0.1161   -0.2730    0.0669   -0.1238   -0.0476
   -0.6600   -0.9861   -0.2730   -1.4341   -0.1238   -0.0476
    0.1300   -0.1321    0.7270    0.1029   -0.1238   -0.0476
   -0.5150   -0.7361   -0.2730   -1.1111   -0.1238   -0.0476
    1.1750    0.6209   -0.2730    1.2979   -0.1238   -0.0476
    0.0450    0.6029    0.7270    0.3469   -0.1238   -0.0476
    0.1870   -0.6831   -0.2730    0.0589   -0.1238   -0.0476
   -0.0200    0.3319   -0.2730    0.0599   -0.1238   -0.0476
   -0.5870    0.2469   -0.2730   -1.3571   -0.1238   -0.0476
    0.2870    0.0139   -0.2730    0.6509    1.8762   -0.0476
    0.0590    1.7469   -0.2730    0.1609   -0.1238   -0.0476
   -0.3050    0.8469    0.7270   -1.0071   -0.1238   -0.0476
   -0.1710   -0.0231   -0.2730    0.3259   -0.1238   -0.0476
    0.0800    0.4799   -0.2730    0.0249   -0.1238   -0.0476
    0.1460   -0.2701   -0.2730    0.1709   -0.1238   -0.0476
    0.0060    0.2759   -0.2730   -0.2781   -0.1238   -0.0476
   -0.0830    1.4579    0.7270   -0.2451   -0.1238   -0.0476
    0.0200   -0.3851   -0.2730    0.9599   -0.1238   -0.0476
   -0.1570   -0.2831   -0.2730   -0.1641   -0.1238   -0.0476
   -0.1090   -0.3421   -0.2730    0.7609   -0.1238   -0.0476
   -0.2880    1.8469   -0.2730   -0.8461   -0.1238   -0.0476
   -0.0330   -0.3471    1.7270    0.6199   -0.1238   -0.0476
    0.1560    0.2729   -0.2730    0.1519   -0.1238   -0.0476
   -0.1510   -0.3201    0.7270   -0.4351   -0.1238   -0.0476
   -0.1430   -0.6201   -0.2730   -0.0821   -0.1238   -0.0476
    0.1450    0.2639   -0.2730    0.0119   -0.1238   -0.0476
    0.3430    0.8469    0.7270    0.7129   -0.1238   -0.0476
    0.0500   -0.2571   -0.2730   -0.1461   -0.1238   -0.0476
   -0.1100   -0.1531    2.7270    0.0319   -0.1238   -0.0476


wfisher =

   -0.1355
   -0.0189
    0.0073
    0.0372
   -0.0022
   -0.0098
   -0.0106
    0.0022
```

```
    0.0045
    0.0205
    0.0054
    0.0085
   -0.0744
    0.0266
    0.1076
   -0.0055
   -0.6455
   -0.7027
   -0.0909
   -0.0331
   -0.0002
   -0.0729
    0.0007
    0.1079
   -0.0414
    0.0225
   -0.0551
   -0.0083
   -0.0614
    0.0009
    0.0013
   -0.0125
    0.0028
   -0.0086
    0.0006
    0.0518
    0.0790
   -0.0150
   -0.0589
    0.0477
    0.0136


tfisher =

   -1.5104


FisherPosErrorTrain =

    45


FisherNegErrorTrain =

    79


FisherTrainError =

    0.1305
```

```
FisherTestError =

    0.1714
```





KNN classifier on Test set

```
classifier=knnsearch(Train,Test);
total_error=0;
[s,z]=size(Test)
for i=1:s,
    if(YTest(i)~=YTrain(classifier(i)))
        total_error=total_error+1;
    end
end
error_percent = total_error/s
```

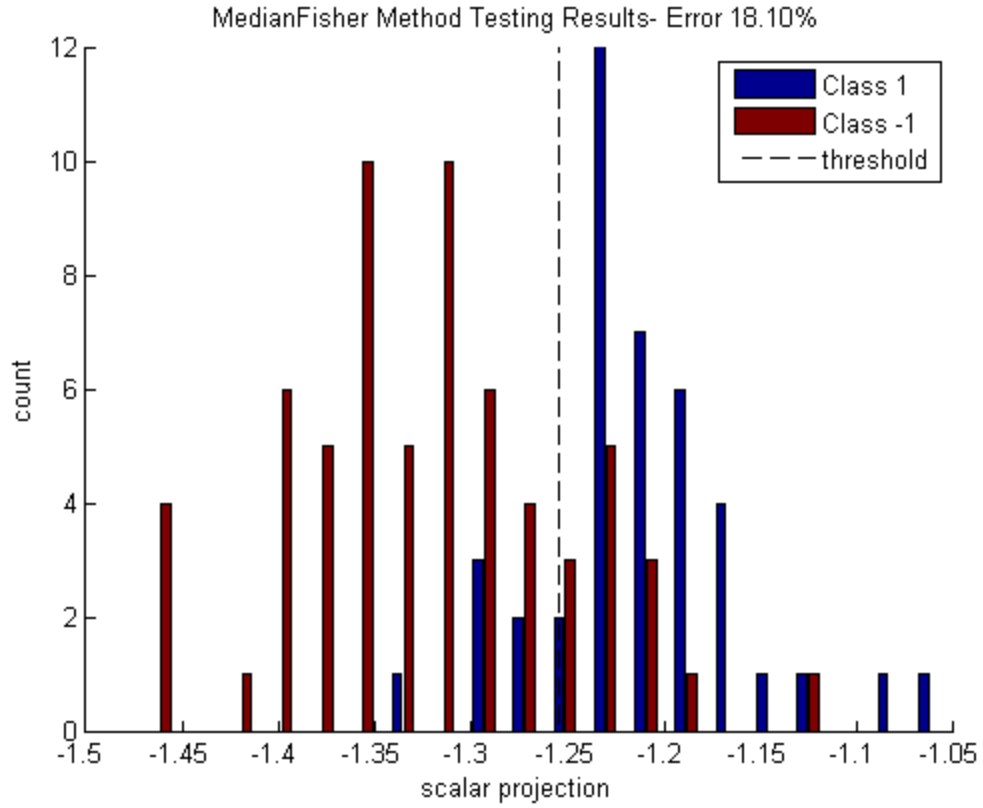
```
s =

   105


z =

    41


error_percent =

    0.2571
```

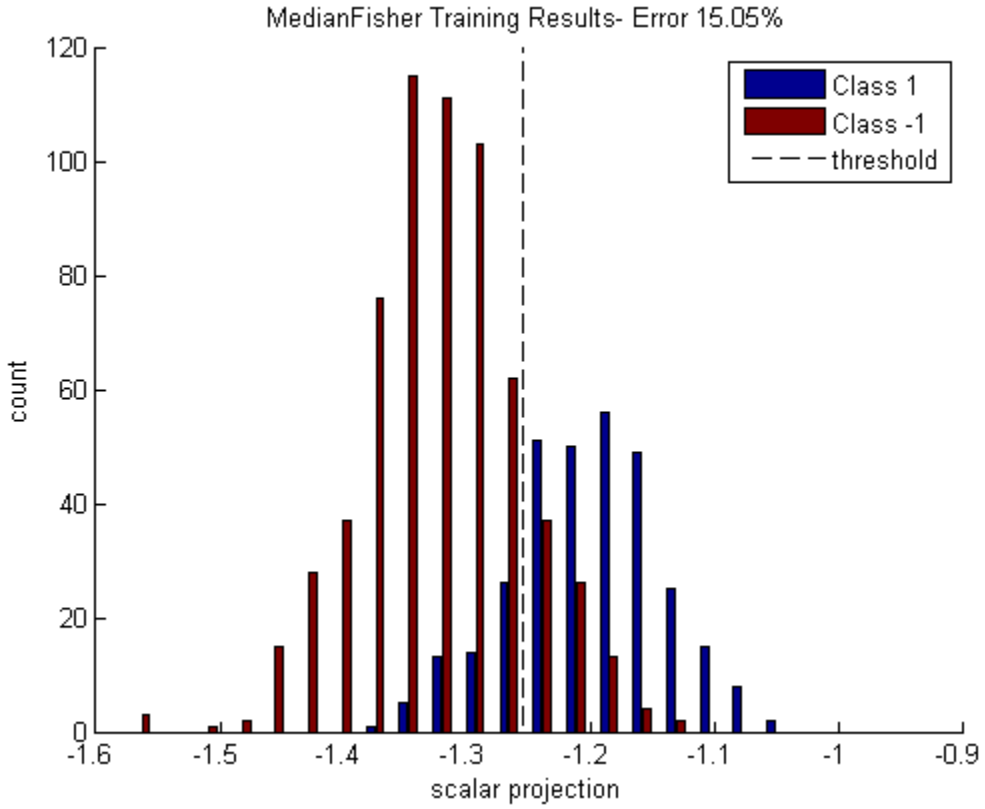
FisherMedian DatasetA

```
medianp=median(Classp_train);
medianm=median(Classm_train);


BMp=Classp_train-ones(psize,1)*medianp;
BMn=Classm_train-ones(nsize,1)*medianm;

Sw=BMp'*BMp+BMn'*BMn;
wFishMed = Sw\(medianp-medianm)';
wFishMed=wFishMed/norm(wFishMed)

tFishMed=(medianp+medianm)./2*wFishMed

MedFishPosErrorTrain = sum(Classp_train*wFishMed <= tFishMed);
MedFishNegErrorTrain = sum(Classm_train*wFishMed >= tFishMed);
MedFishTrainError = ((MedFishPosErrorTrain + MedFishNegErrorTrain)/(size(Train,1))

MedFishPosErrorTest = sum(Classp_test*wFishMed <= tFishMed);
MedFishNegErrorTest = sum(Classm_test*wFishMed >= tFishMed);
MedFishTestError= ((MedFishPosErrorTest + MedFishNegErrorTest)/(size(Test,1)));

HistClass(Classp_test,Classm_test,wFishMed,tFishMed,...
    'MedianFisher Method Testing Results',MedFishTestError);

HistClass(Classp_train,Classm_train,wFishMed,tFishMed,...
    'MedianFisher Training Results',MedFishTrainError);
```

```
wFishMed =

   -0.2013
   -0.0320
    0.0185
    0.0443
   -0.0029
    0.0060
   -0.0301
    0.0040
    0.0058
    0.0307
    0.0071
    0.0213
   -0.0684
    0.0278
    0.1941
   -0.0116
   -0.8250
   -0.3367
   -0.0907
```

```
   -0.0416
    0.0080
   -0.0898
    0.0011
    0.1394
   -0.0428
    0.0509
   -0.2176
   -0.0117
   -0.0843
    0.0039
   -0.0157
   -0.0278
    0.0221
   -0.0140
    0.0072
    0.0706
    0.0573
   -0.0194
   -0.0809
    0.0533
    0.0132


tFishMed =

   -1.2551
```


MedianFisher Method Testing Results- Error 18.10%
Class 1
Class -1
threshold
count
scalar projection
0
2
4
6
8
10
12
-1.5
-1.45
-1.4
-1.35
-1.3
-1.25
-1.2
-1.15
-1.1
-1.05


MedianFisher Training Results- Error 15.05%
Class 1
Class -1
threshold
count
scalar projection
0
20
40
60
80
100
120
-1.6
-1.5
-1.4
-1.3
-1.2
-1.1
-1
-0.9

DatasetV Analysis

```
DV = csvread('DatasetV.csv');

IDV=DV(:,1); %id column
DV=DV(:,2:end);

[m,n] = size(DV);

DVmean = (1/m)*ones(1,m)*DV %mean for DatasetV

% image for mean
figure
imagesc(DVmean)
title('Mean Vector DatasetV')
colormap(gray)
colorbar

%Prediction by fisher LDA method
PClassCount = sum(DV*wfisher > tfisher)
NClassCount = sum(DV*wfisher < tfisher)

classes=ones(m,1);
for i=1:m,
    if(DV(i,:)*wfisher <= tfisher)
        classes(i,1)=-1;
    end
end

DVLabels = cat(2,IDV,classes);
csvwrite('MAT_Consulting_DSV_prediction.csv',DVLabels);

%Covariance of DV
DV_centered = (DV - (1/m)*(ones(m,m)*DV));
CovDV = (1/(m-1))*DV_centered'*DV_centered


%image of covariance of DatasetV
figure
imagesc(CovDV)
title('Covariance Matrix of DatasetV')
colormap(gray)
colorbar


DV_labeled = csvread('MAT_Consulting_DSV_prediction.csv');

DVPos = sum(DV_labeled(:,2)==1) %Number of points in DV estimated to be class 1
DVNeg = sum(DV_labeled(:,2)==-1) %Number of points in DB estimated to be class -1

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
```

```
DVmean =

  Columns 1 through 7

    4.9229    2.8658    0.8775    0.1775    3.1175    0.4000    2.9325

  Columns 8 through 14

   38.7750    1.4825    2.1925    3.7525   -0.2778    3.8215    1.4113

  Columns 15 through 21

   10.3688    4.6825    1.0140    1.1301    0.0050    0.1400    0.0350

  Columns 22 through 28

    1.2498    2.4525    0.0650    0.2000    0.0600    2.2886    0.0065

  Columns 29 through 35

    0.0625   12.5599    3.6270    0.1350    1.7450    3.2825    1.1225

  Columns 36 through 41

    4.1658    2.5212    1.4200    9.1148    0.0250    1.0650


PClassCount =

   120


NClassCount =

   280


CovDV =

  Columns 1 through 7

    0.3352    0.1100    0.1903    0.0255    0.7072    0.3794    0.7578
    0.1100    1.0426    0.0568   -0.1097   -1.7984    0.7564   -1.4664
    0.1903    0.0568    2.0025    0.0143   -0.0482   -0.1038    1.0393
    0.0255   -0.1097    0.0143    0.2015    1.6608   -0.0586    0.6687
    0.7072   -1.7984   -0.0482    1.6608   26.2694   -0.7038    9.1709
    0.3794    0.7564   -0.1038   -0.0586   -0.7038    1.9599   -0.5419
    0.7578   -1.4664    1.0393    0.6687    9.1709   -0.5419   10.0330
    1.7369   -3.8389    1.1756    0.6180   10.4794   -2.2634   18.1687
    0.0954    0.1464   -0.5097   -0.0006   -0.2097    0.7965   -0.4611
    0.5203   -0.1936    0.1565    0.1913    3.3959    0.2662    2.4516
    0.8153   -1.9878    0.0348    2.0390   28.9515   -0.8506   10.7251
   -0.0839   -0.0621    0.0792   -0.0083   -0.3943   -0.0371   -0.1836
    0.2321   -0.0916    0.3388    0.0942    1.6423    0.1855    1.2327
```

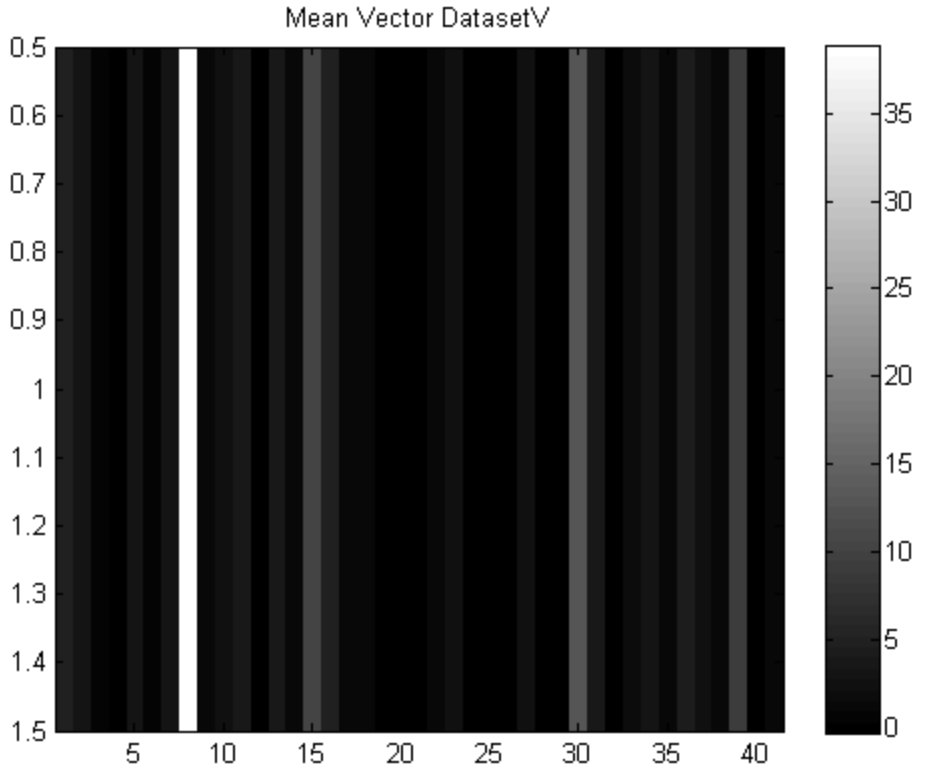
```
   -0.1659    0.2707   -0.1714   -0.0473   -0.7769    0.0141   -1.1460
    0.5091   -0.0135    0.2864    0.1206    2.2580    0.5217    1.7569
    1.5314   -1.1805    0.2492    0.2921    6.9046    1.0546    7.9735
    0.0127    0.0271    0.0214    0.0009    0.0135    0.0361    0.0126
    0.0015    0.0237   -0.0129   -0.0007   -0.0126    0.0326   -0.0474
    0.0019    0.0009    0.0006    0.0066    0.0220    0.0030    0.0079
    0.0273   -0.0238    0.0097    0.0753    1.0161   -0.0461    0.5157
    0.0370    0.1053   -0.0032   -0.0062   -0.0668    0.1789   -0.0778
    0.0060   -0.0433    0.0617    0.0039    0.0532   -0.0593    0.1232
    0.8737   -1.8178   -0.1625    0.2303    9.1597   -0.1689    7.8878
    0.0091   -0.0163    0.1032    0.0210    0.2329   -0.0185    0.2325
    0.0158   -0.0197    0.3353    0.0246    0.1895   -0.0652    0.3093
    0.0147   -0.0497   -0.0327   -0.0057    0.2360   -0.0216    0.2146
    0.1279   -0.0013    0.0775    0.0186    0.4213    0.1106    0.4108
   -0.0057    0.0031   -0.0069   -0.0002   -0.0202   -0.0032   -0.0200
    0.0106   -0.0165    0.0979    0.0215    0.2408   -0.0175    0.2398
    3.5742   -1.0108    0.6812    2.2276   38.0097    0.4602   22.9314
   -0.1848   -0.4269   -0.4443    0.2604    3.4546    0.2888    0.5787
    0.0873   -0.1070   -0.0436   -0.0190   -0.0635    0.2341   -0.1237
    0.3926   -0.7166    1.2394    0.5466    6.5739   -0.4366    5.9627
    0.6882   -1.5226   -0.0129    1.6490   22.0093   -0.3965    8.0692
    0.1538   -0.1395   -0.1103    0.0208    2.2362    0.0837    0.7501
    0.2463    0.0864    0.6739    0.0641    0.9565    0.0053    1.0920
    0.1425    0.4078    0.0977    0.0022    0.0263    0.4888   -0.1076
    0.2576   -0.5449    0.0040    0.5994    9.2112   -0.1935    2.8329
    0.4186   -0.0305    0.9694    0.1375    2.2612    0.1450    2.1207
    0.0072   -0.0027   -0.0019   -0.0044   -0.0706   -0.0050    0.0343
    0.6308    1.7752    1.5243   -0.0492   -0.8698    3.0742   -0.0783

Columns 8 through 14

    1.7369    0.0954    0.5203    0.8153   -0.0839    0.2321   -0.1659
   -3.8389    0.1464   -0.1936   -1.9878   -0.0621   -0.0916    0.2707
    1.1756   -0.5097    0.1565    0.0348    0.0792    0.3388   -0.1714
    0.6180   -0.0006    0.1913    2.0390   -0.0083    0.0942   -0.0473
   10.4794   -0.2097    3.3959   28.9515   -0.3943    1.6423   -0.7769
   -2.2634    0.7965    0.2662   -0.8506   -0.0371    0.1855    0.0141
   18.1687   -0.4611    2.4516   10.7251   -0.1836    1.2327   -1.1460
   80.2768   -4.8451   -0.7383   11.0868   -0.0332    2.0169   -3.9372
   -4.8451    3.0473    0.3856   -0.2186    0.0340    0.1075    0.3995
   -0.7383    0.3856    4.4365    3.8021   -0.7323    0.5956   -0.1520
   11.0868   -0.2186    3.8021   34.8784   -0.3585    1.8627   -0.9339
   -0.0332    0.0340   -0.7323   -0.3585    0.6419   -0.0694    0.0022
    2.0169    0.1075    0.5956    1.8627   -0.0694    0.4061   -0.0141
   -3.9372    0.3995   -0.1520   -0.9339    0.0022   -0.0141    0.7008
    3.4298    0.2453    1.0165    2.5996   -0.1380    0.5350   -0.1327
    7.9973    1.4117    9.8683    7.3247   -1.5432    1.6814   -0.8674
   -0.0189   -0.0230    0.0251    0.0192   -0.0106    0.0065   -0.0082
   -0.2005    0.0131    0.0010   -0.0117   -0.0038   -0.0027    0.0101
    0.0134    0.0051   -0.0035    0.0464    0.0016    0.0008   -0.0011
    0.1569   -0.0326    0.4041    1.3230    0.0021    0.0728   -0.0139
   -0.2182    0.0031   -0.0193   -0.0916   -0.0073    0.0144    0.0072
    0.4980   -0.0324   -0.0303    0.0601    0.0151    0.0191   -0.0297
   21.2066   -1.0961    1.2460    8.6010   -0.0744    0.9992   -1.4396
```

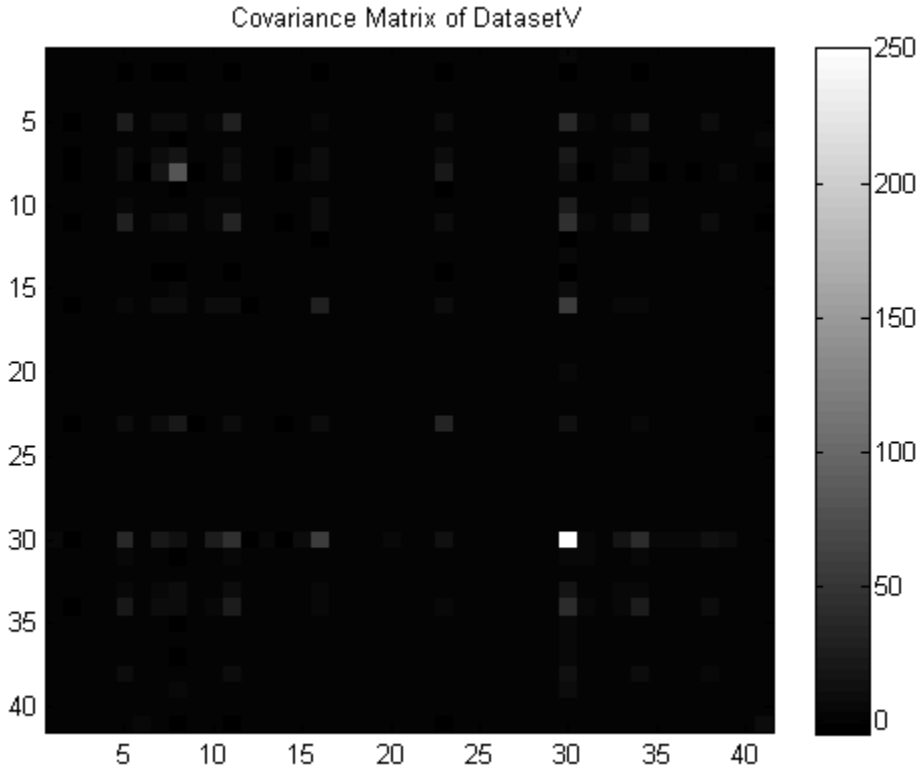
```
    0.2345   -0.0089    0.0551    0.3069    0.0039    0.0545   -0.0079
    0.8910   -0.1343   -0.0662    0.2902    0.0097    0.0397   -0.0492
    0.4211   -0.0591    0.0210    0.3056    0.0018    0.0177   -0.0377
    1.0733    0.0053    0.2008    0.4790   -0.0319    0.1073   -0.0735
   -0.1285   -0.0052   -0.0041   -0.0242    0.0022   -0.0105    0.0005
    0.2632   -0.0102    0.0606    0.3163    0.0032    0.0536   -0.0080
   11.8679   -0.0031   25.5781   45.1471   -4.9250    4.4118   -1.0546
   -3.3126    1.1377    0.6153    3.8968   -0.0141    0.7006    1.3078
   -0.1678    0.3633    0.3574   -0.0818   -0.0706    0.0619   -0.0532
    8.3648   -0.6386    1.9540    8.2124   -0.0512    0.8161   -0.5631
    7.4359    0.3070    3.4041   26.4385   -0.3997    1.5209   -0.6435
   -1.3578    0.0260    1.1343    2.3236   -0.3271    0.1542   -0.1009
    1.7211   -0.0751    0.4035    1.1714   -0.0177    0.4599   -0.1577
   -1.2106   -0.2464    0.4255    0.0934   -0.1613    0.0015   -0.1032
    1.7030   -0.0403    1.1871   11.0065   -0.1552    0.5781   -0.2360
    3.5888   -0.0723    0.8831    2.6427   -0.0772    0.7274   -0.1999
    0.0432    0.0330    0.0628   -0.0715   -0.0201    0.0099    0.0133
   -1.9001   -0.3347   -0.2557   -0.9438   -0.0387    0.5210    0.0111

Columns 15 through 21

    0.5091    1.5314    0.0127    0.0015    0.0019    0.0273    0.0370
   -0.0135   -1.1805    0.0271    0.0237    0.0009   -0.0238    0.1053
    0.2864    0.2492    0.0214   -0.0129    0.0006    0.0097   -0.0032
    0.1206    0.2921    0.0009   -0.0007    0.0066    0.0753   -0.0062
    2.2580    6.9046    0.0135   -0.0126    0.0220    1.0161   -0.0668
    0.5217    1.0546    0.0361    0.0326    0.0030   -0.0461    0.1789
    1.7569    7.9735    0.0126   -0.0474    0.0079    0.5157   -0.0778
    3.4298    7.9973   -0.0189   -0.2005    0.0134    0.1569   -0.2182
    0.2453    1.4117   -0.0230    0.0131    0.0051   -0.0326    0.0031
    1.0165    9.8683    0.0251    0.0010   -0.0035    0.4041   -0.0193
    2.5996    7.3247    0.0192   -0.0117    0.0464    1.3230   -0.0916
   -0.1380   -1.5432   -0.0106   -0.0038    0.0016    0.0021   -0.0073
    0.5350    1.6814    0.0065   -0.0027    0.0008    0.0728    0.0144
   -0.1327   -0.8674   -0.0082    0.0101   -0.0011   -0.0139    0.0072
    0.9938    2.8877    0.0141    0.0001    0.0035    0.0927    0.0438
    2.8877   30.2222    0.0465   -0.0180    0.0041    0.6235   -0.0540
    0.0141    0.0465    0.0023    0.0009   -0.0000    0.0041    0.0056
    0.0001   -0.0180    0.0009    0.0012    0.0000    0.0001    0.0045
    0.0035    0.0041   -0.0000    0.0000    0.0050   -0.0007   -0.0002
    0.0927    0.6235    0.0041    0.0001   -0.0007    0.2159   -0.0049
    0.0438   -0.0540    0.0056    0.0045   -0.0002   -0.0049    0.0339
    0.0141   -0.0277   -0.0015   -0.0027    0.0001   -0.0002   -0.0080
    1.7984    7.1415   -0.0074   -0.0486    0.0178    0.0117   -0.0560
    0.0259    0.1009    0.0009   -0.0013   -0.0003    0.0285   -0.0023
    0.0309   -0.1594    0.0040   -0.0032    0.0015    0.0170   -0.0045
    0.0372    0.1620   -0.0001   -0.0007   -0.0003    0.0166    0.0004
    0.2171    0.6232    0.0041   -0.0007    0.0006    0.0164    0.0098
   -0.0116   -0.0228    0.0001    0.0001   -0.0001   -0.0008   -0.0002
    0.0298    0.1126    0.0009   -0.0013   -0.0003    0.0288   -0.0022
    7.1798   56.8435    0.2408    0.0056    0.0354    4.4074    0.0050
    0.6679    1.1726   -0.0248    0.0145    0.0017    0.0908    0.0117
    0.1459    1.2936   -0.0014   -0.0001   -0.0007   -0.0089   -0.0047
    1.0013    4.7259    0.0233   -0.0244    0.0013    0.5521   -0.0512
```

```
    2.1587    5.6112    0.0177   -0.0048    0.0487    1.1734   -0.0525
    0.3165    2.5954    0.0073    0.0046    0.0019   -0.0172   -0.0168
    0.3469    0.9319    0.0086   -0.0074   -0.0017    0.0922    0.0063
    0.0994    0.6139    0.0298    0.0140    0.0004    0.0524    0.0759
    0.8260    1.9958    0.0090    0.0022    0.0154    0.4273   -0.0223
    0.7679    2.3405    0.0157   -0.0104    0.0000    0.1395    0.0143
    0.0137    0.2461   -0.0001   -0.0002   -0.0001   -0.0035   -0.0009
    0.8370   -0.6710    0.1058    0.0587   -0.0003   -0.0292    0.3912

Columns 22 through 28

    0.0060    0.8737    0.0091    0.0158    0.0147    0.1279   -0.0057
   -0.0433   -1.8178   -0.0163   -0.0197   -0.0497   -0.0013    0.0031
    0.0617   -0.1625    0.1032    0.3353   -0.0327    0.0775   -0.0069
    0.0039    0.2303    0.0210    0.0246   -0.0057    0.0186   -0.0002
    0.0532    9.1597    0.2329    0.1895    0.2360    0.4213   -0.0202
   -0.0593   -0.1689   -0.0185   -0.0652   -0.0216    0.1106   -0.0032
    0.1232    7.8878    0.2325    0.3093    0.2146    0.4108   -0.0200
    0.4980   21.2066    0.2345    0.8910    0.4211    1.0733   -0.1285
   -0.0324   -1.0961   -0.0089   -0.1343   -0.0591    0.0053   -0.0052
   -0.0303    1.2460    0.0551   -0.0662    0.0210    0.2008   -0.0041
    0.0601    8.6010    0.3069    0.2902    0.3056    0.4790   -0.0242
    0.0151   -0.0744    0.0039    0.0097    0.0018   -0.0319    0.0022
    0.0191    0.9992    0.0545    0.0397    0.0177    0.1073   -0.0105
   -0.0297   -1.4396   -0.0079   -0.0492   -0.0377   -0.0735    0.0005
    0.0141    1.7984    0.0259    0.0309    0.0372    0.2171   -0.0116
   -0.0277    7.1415    0.1009   -0.1594    0.1620    0.6232   -0.0228
   -0.0015   -0.0074    0.0009    0.0040   -0.0001    0.0041    0.0001
   -0.0027   -0.0486   -0.0013   -0.0032   -0.0007   -0.0007    0.0001
    0.0001    0.0178   -0.0003    0.0015   -0.0003    0.0006   -0.0001
   -0.0002    0.0117    0.0285    0.0170    0.0166    0.0164   -0.0008
   -0.0080   -0.0560   -0.0023   -0.0045    0.0004    0.0098   -0.0002
    0.0087    0.1179    0.0058    0.0115    0.0022    0.0053   -0.0002
    0.1179   32.3637    0.0056   -0.0356    0.6821    0.4956   -0.0170
    0.0058    0.0056    0.0609   -0.0005   -0.0039    0.0061   -0.0016
    0.0115   -0.0356   -0.0005    0.1604   -0.0070    0.0102   -0.0007
    0.0022    0.6821   -0.0039   -0.0070    0.0766    0.0106   -0.0003
    0.0053    0.4956    0.0061    0.0102    0.0106    0.0554   -0.0033
   -0.0002   -0.0170   -0.0016   -0.0007   -0.0003   -0.0033    0.0144
    0.0054    0.0117    0.0586   -0.0025   -0.0038    0.0070   -0.0011
   -0.1418   14.6689    0.6871    0.0328    0.8788    1.5255   -0.0193
   -0.0451   -0.8463   -0.0013   -0.0791   -0.0095   -0.0355   -0.0125
   -0.0027    0.3974   -0.0013   -0.0195   -0.0056    0.0362   -0.0008
    0.0667    1.6395    0.2271    0.3494    0.0805    0.2138   -0.0126
    0.0352    6.4157    0.2823    0.2015    0.2437    0.4024   -0.0165
   -0.0258    0.6562   -0.0180   -0.0246    0.0302    0.0616   -0.0030
    0.0540    0.3321    0.1778    0.0306   -0.0103    0.0942   -0.0082
   -0.0320   -0.3735   -0.0019    0.0151   -0.0067    0.0333    0.0071
    0.0076    1.9974    0.0929    0.0887    0.0850    0.1508   -0.0061
    0.0655    1.2476    0.1973    0.0879    0.0108    0.1777   -0.0161
   -0.0004    0.0263    0.0009   -0.0025    0.0010    0.0037   -0.0001
   -0.0783   -1.0320    0.0810    0.2677   -0.0440    0.1973   -0.0106

Columns 29 through 35
```

```
    0.0106    3.5742   -0.1848    0.0873    0.3926    0.6882    0.1538
   -0.0165   -1.0108   -0.4269   -0.1070   -0.7166   -1.5226   -0.1395
    0.0979    0.6812   -0.4443   -0.0436    1.2394   -0.0129   -0.1103
    0.0215    2.2276    0.2604   -0.0190    0.5466    1.6490    0.0208
    0.2408   38.0097    3.4546   -0.0635    6.5739   22.0093    2.2362
   -0.0175    0.4602    0.2888    0.2341   -0.4366   -0.3965    0.0837
    0.2398   22.9314    0.5787   -0.1237    5.9627    8.0692    0.7501
    0.2632   11.8679   -3.3126   -0.1678    8.3648    7.4359   -1.3578
   -0.0102   -0.0031    1.1377    0.3633   -0.6386    0.3070    0.0260
    0.0606   25.5781    0.6153    0.3574    1.9540    3.4041    1.1343
    0.3163   45.1471    3.8968   -0.0818    8.2124   26.4385    2.3236
    0.0032   -4.9250   -0.0141   -0.0706   -0.0512   -0.3997   -0.3271
    0.0536    4.4118    0.7006    0.0619    0.8161    1.5209    0.1542
   -0.0080   -1.0546    1.3078   -0.0532   -0.5631   -0.6435   -0.1009
    0.0298    7.1798    0.6679    0.1459    1.0013    2.1587    0.3165
    0.1126   56.8435    1.1726    1.2936    4.7259    5.6112    2.5954
    0.0009    0.2408   -0.0248   -0.0014    0.0233    0.0177    0.0073
   -0.0013    0.0056    0.0145   -0.0001   -0.0244   -0.0048    0.0046
   -0.0003    0.0354    0.0017   -0.0007    0.0013    0.0487    0.0019
    0.0288    4.4074    0.0908   -0.0089    0.5521    1.1734   -0.0172
   -0.0022    0.0050    0.0117   -0.0047   -0.0512   -0.0525   -0.0168
    0.0054   -0.1418   -0.0451   -0.0027    0.0667    0.0352   -0.0258
    0.0117   14.6689   -0.8463    0.3974    1.6395    6.4157    0.6562
    0.0586    0.6871   -0.0013   -0.0013    0.2271    0.2823   -0.0180
   -0.0025    0.0328   -0.0791   -0.0195    0.3494    0.2015   -0.0246
   -0.0038    0.8788   -0.0095   -0.0056    0.0805    0.2437    0.0302
    0.0070    1.5255   -0.0355    0.0362    0.2138    0.4024    0.0616
   -0.0011   -0.0193   -0.0125   -0.0008   -0.0126   -0.0165   -0.0030
    0.0587    0.7185    0.0034   -0.0009    0.2315    0.2906   -0.0152
    0.7185  250.7395    4.5397    1.1309   16.4896   40.6472    5.7800
    0.0034    4.5397    6.7537    0.0178    0.5824    3.2357    0.4431
   -0.0009    1.1309    0.0178    0.4028   -0.0958    0.1598    0.1589
    0.2315   16.4896    0.5824   -0.0958    5.2230    6.6462    0.5050
    0.2906   40.6472    3.2357    0.1598    6.6462   23.5315    1.5342
   -0.0152    5.7800    0.4431    0.1589    0.5050    1.5342    2.0175
    0.1709    4.1780   -0.4402   -0.0243    0.9010    0.9860   -0.0160
   -0.0014    3.8242   -0.4590   -0.0161    0.0992    0.1279    0.1779
    0.0965   14.5548    1.3531    0.0033    2.3655    8.7808    1.0637
    0.1894    7.4573    0.1619    0.0362    1.5731    2.1465    0.1356
    0.0009    0.3410    0.0023    0.0041    0.0014   -0.0422   -0.0156
    0.0761    0.3640    0.0344   -0.0890    0.5454   -0.6324   -0.1784

Columns 36 through 41

    0.2463    0.1425    0.2576    0.4186    0.0072    0.6308
    0.0864    0.4078   -0.5449   -0.0305   -0.0027    1.7752
    0.6739    0.0977    0.0040    0.9694   -0.0019    1.5243
    0.0641    0.0022    0.5994    0.1375   -0.0044   -0.0492
    0.9565    0.0263    9.2112    2.2612   -0.0706   -0.8698
    0.0053    0.4888   -0.1935    0.1450   -0.0050    3.0742
    1.0920   -0.1076    2.8329    2.1207    0.0343   -0.0783
    1.7211   -1.2106    1.7030    3.5888    0.0432   -1.9001
   -0.0751   -0.2464   -0.0403   -0.0723    0.0330   -0.3347
```

```
    0.4035    0.4255    1.1871    0.8831    0.0628   -0.2557
    1.1714    0.0934   11.0065    2.6427   -0.0715   -0.9438
   -0.0177   -0.1613   -0.1552   -0.0772   -0.0201   -0.0387
    0.4599    0.0015    0.5781    0.7274    0.0099    0.5210
   -0.1577   -0.1032   -0.2360   -0.1999    0.0133    0.0111
    0.3469    0.0994    0.8260    0.7679    0.0137    0.8370
    0.9319    0.6139    1.9958    2.3405    0.2461   -0.6710
    0.0086    0.0298    0.0090    0.0157   -0.0001    0.1058
   -0.0074    0.0140    0.0022   -0.0104   -0.0002    0.0587
   -0.0017    0.0004    0.0154    0.0000   -0.0001   -0.0003
    0.0922    0.0524    0.4273    0.1395   -0.0035   -0.0292
    0.0063    0.0759   -0.0223    0.0143   -0.0009    0.3912
    0.0540   -0.0320    0.0076    0.0655   -0.0004   -0.0783
    0.3321   -0.3735    1.9974    1.2476    0.0263   -1.0320
    0.1778   -0.0019    0.0929    0.1973    0.0009    0.0810
    0.0306    0.0151    0.0887    0.0879   -0.0025    0.2677
   -0.0103   -0.0067    0.0850    0.0108    0.0010   -0.0440
    0.0942    0.0333    0.1508    0.1777    0.0037    0.1973
   -0.0082    0.0071   -0.0061   -0.0161   -0.0001   -0.0106
    0.1709   -0.0014    0.0965    0.1894    0.0009    0.0761
    4.1780    3.8242   14.5548    7.4573    0.3410    0.3640
   -0.4402   -0.4590    1.3531    0.1619    0.0023    0.0344
   -0.0243   -0.0161    0.0033    0.0362    0.0041   -0.0890
    0.9010    0.0992    2.3655    1.5731    0.0014    0.5454
    0.9860    0.1279    8.7808    2.1465   -0.0422   -0.6324
   -0.0160    0.1779    1.0637    0.1356   -0.0156   -0.1784
    1.9382    0.0502    0.3303    1.8095   -0.0004    0.5800
    0.0502    0.4597    0.0810    0.0715   -0.0025    1.2293
    0.3303    0.0810    3.9184    0.7904   -0.0256   -0.2404
    1.8095    0.0715    0.7904    2.0523    0.0072    0.9914
   -0.0004   -0.0025   -0.0256    0.0072    0.0445   -0.0066
    0.5800    1.2293   -0.2404    0.9914   -0.0066    8.3065


DVPos =

   120


DVNeg =

   280
```


Mean Vector DatasetV
0.5
0.6
0.7
0.8
0.9
1
1.1
1.2
1.3
1.4
1.5
5
10
15
20
25
30
35
40
35
30
25
20
15
10
5
0


Covariance Matrix of DatasetV
5
10
15
20
25
30
35
40
5
10
15
20
25
30
35
40
250
200
150
100
50
0

DA ErrorsFisher

```
DApmis = sum(DAp*wfisher <= tfisher); %Number of erroneous class 1 points using fi
DAnmis = sum(DAn*wfisher >= tfisher); %Number of erroneous class -1 points
DAPosError = DApmis/size(DAp,1)
DANegError = DAnmis/size(DAn,1)

TotalDAError = (DApmis+DAnmis)/size(DA,1)%Total error of Fisher on DatasetA
```

```
DAPosError =

    0.1433


DANegError =

    0.1302


TotalDAError =

    0.1346
```

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