The data set (and description) can be downloaded here:
http://stat.ethz.ch/Teaching/Datasets/tips.dat

Description:

Data from Di Cook's "Xgobi Book" page
http://www.public.iastate.edu/~dicook/xgobi-book/

In one restaurant, a foodserver recorded the following data on all
customers he had served during an interval of two and a half months in
early 1990. The restaurant, located in a suburban shopping mall, was
one of a national chain and served a varied menu.

TOTBILL Total bill, including tax, in dollars

TIP Tip in dollars

SEX Sex of person paying the bill (0=male, 1=female)

SMOKER Smoker in the party? (0=no, 1=yes)

DAY 3=Thursday, 4=Friday, 5=Saturday, 6=Sunday

TIME 0=day, 1=night

SIZE Size of the party

Descriptive statistics:

Dataset= tips_MvsF : n= 244 , d= 6

Class1: n= 87

Covariance matrix:
```
        [,1]    [,2]     [,3]    [,4]    [,5]     [,6]
[1,] 64.1474 6.3428 -0.0303 1.7877 0.6991  4.8949
[2,]  6.3428 1.3444  0.0376 0.3091 0.1020  0.6155
[3,] -0.0303 0.0376  0.2382 0.0449 0.0381 -0.0834
[4,]  1.7877 0.3091  0.0449 1.3980 0.5102  0.1312
[5,]  0.6991 0.1020  0.0381 0.5102 0.2433  0.0011
[6,]  4.8949 0.6155 -0.0834 0.1312 0.0011  0.8792
```

Correlation matrix:
```
        [,1]    [,2]     [,3]    [,4]    [,5]     [,6]
[1,]  1.0000 0.6830 -0.0078 0.1888 0.1770  0.6518
[2,]  0.6830 1.0000  0.0665 0.2254 0.1783  0.5661
[3,] -0.0078 0.0665  1.0000 0.0778 0.1583 -0.1823
[4,]  0.1888 0.2254  0.0778 1.0000 0.8748  0.1184
[5,]  0.1770 0.1783  0.1583 0.8748 1.0000  0.0023
[6,]  0.6518 0.5661 -0.1823 0.1184 0.0023  1.0000
```

Median: 16.2619 2.7171 0.3531 4.357 0.5909 2.2893

Mean: 18.0569 2.8334 0.3793 4.3678 0.5977 2.4598
MCD-estimated:
MDC-0.975-Mean: 18.1052 2.7735 0   4.2963 0.537 2.5926
MDC-0.750-Mean: 18.1052 2.7735 0   4.2963 0.537 2.5926
MDC-0.500-Mean: 18.1052 2.7735 0   4.2963 0.537 2.5926

```
Class2: n= 157

Covariance matrix:
        [,1]     [,2]     [,3]     [,4]     [,5]     [,6]
[1,] 85.4972   9.2218   0.5925   1.2624   0.5702   5.0281
[2,]  9.2218   2.2174  -0.0148   0.1161   0.0439   0.6480
[3,]  0.5925  -0.0148   0.2376  -0.0539  -0.0025  -0.0502
[4,]  1.2624   0.1161  -0.0539   1.1992   0.3877   0.1767
[5,]  0.5702   0.0439  -0.0025   0.3877   0.1671   0.0565
[6,]  5.0281   0.6480  -0.0502   0.1767   0.0565   0.9139

Correlation matrix:
        [,1]     [,2]     [,3]     [,4]     [,5]     [,6]
[1,] 1.0000   0.6698   0.1314   0.1247   0.1509   0.5688
[2,] 0.6698   1.0000  -0.0204   0.0712   0.0721   0.4552
[3,] 0.1314  -0.0204   1.0000  -0.1010  -0.0125  -0.1078
[4,] 0.1247   0.0712  -0.1010   1.0000   0.8661   0.1688
[5,] 0.1509   0.0721  -0.0125   0.8661   1.0000   0.1445
[6,] 0.5688   0.4552  -0.1078   0.1688   0.1445   1.0000

Median:          18.7213 2.9277 0.3091 4.9739 0.8273 2.5249

Mean:            20.7441 3.0896 0.3822 4.9236 0.7898 2.6306
MCD-estimated:
MDC-0.975-Mean:  20.8025 3.0839 0.4576 5      1      2.6441
MDC-0.750-Mean:  20.8025 3.0839 0.4576 5      1      2.6441
MDC-0.500-Mean:  20.8025 3.0839 0.4576 5      1      2.6441

Measures:
Mah.Dist:                     0.5488
Mah.Dist-MCD-0.975:           1.6399
Mah.Dist-MCD-0.750:           1.6399
Mah.Dist-MCD-0.500:           1.6399
```
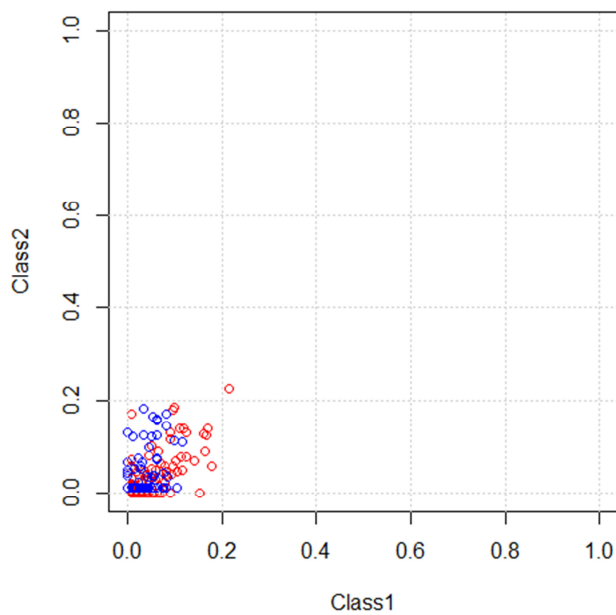

DD-Plot (zonoid): tips_MvsF

DD-Plot (random Tukey): tips_MvsF