

The data set (and description) can be downloaded here:

<http://cran.r-project.org/web/packages/locfit/>

Description:

Chemical Diabetes Dataset

Description:

Numeric variables are rw, fpg, ga, ina and sspg. Classifier cc is the Diabetic type.

Usage:

data(chemdiab)

Format:

Data frame with five numeric measurements and categorical response.

Source:

Reaven and Miller (1979).

References:

Reaven, G. M. and Miller, R. G. (1979). An attempt to define the nature of chemical diabetes using a multidimensional analysis. *Diabetologia* 16, 17-24.

Descriptive statistics:

Dataset= chemdiab_1vs3 : n= 69 , d= 5

Class1: n= 36

Covariance matrix:

	[,1]	[,2]	[,3]	[,4]	[,5]
[1,]	0.0102	-0.0673	-1.5228	1.0666	2.8913
[2,]	-0.0673	90.0468	319.5603	154.1143	-23.4484
[3,]	-1.5228	319.5603	3070.4540	1082.5143	-141.8302
[4,]	1.0666	154.1143	1082.5143	24910.8571	3262.2286
[5,]	2.8913	-23.4484	-141.8302	3262.2286	3595.1135

Correlation matrix:

	[,1]	[,2]	[,3]	[,4]	[,5]
[1,]	1.0000	-0.0702	-0.2720	0.0669	0.4773
[2,]	-0.0702	1.0000	0.6077	0.1029	-0.0412
[3,]	-0.2720	0.6077	1.0000	0.1238	-0.0427
[4,]	0.0669	0.1029	0.1238	1.0000	0.3447
[5,]	0.4773	-0.0412	-0.0427	0.3447	1.0000

Median: 1.0644 99.1745 483.8592 272.0724 218.0061

Mean: 1.0558 99.3056 493.9444 288 208.9722

MCD-estimated:

MDC-0.975-Mean: 1.05 99.2609 471.6522 277.2174 213.2174

MDC-0.750-Mean: 1.05 99.2609 471.6522 277.2174 213.2174

MDC-0.500-Mean: 1.05 99.2609 471.6522 277.2174 213.2174

Class2: n= 33

Covariance matrix:

	[,1]	[,2]	[,3]	[,4]	[,5]
[1,]	0.0145	-2.5746	-13.6678	3.5144	3.0211
[2,]	-2.5746	5861.9167	22623.1042	-4479.6250	3948.3021
[3,]	-13.6678	22623.1042	95725.4394	-19843.1875	15333.8134
[4,]	3.5144	-4479.6250	-19843.1875	8728.2500	-1653.8438
[5,]	3.0211	3948.3021	15333.8134	-1653.8438	7800.7973

Correlation matrix:

	[,1]	[,2]	[,3]	[,4]	[,5]
[1,]	1.0000	-0.2796	-0.3673	0.3127	0.2844
[2,]	-0.2796	1.0000	0.9550	-0.6263	0.5839
[3,]	-0.3673	0.9550	1.0000	-0.6865	0.5611
[4,]	0.3127	-0.6263	-0.6865	1.0000	-0.2004
[5,]	0.2844	0.5839	0.5611	-0.2004	1.0000

Median: 1.0098 202.1623 990.7503 104.0833 326.8165

Mean: 0.9839 217.6667 1043.758 106 318.8788

MCD-estimated:

MDC-0.975-Mean: 0.9724 226.72 1108.04 86.2 330.64

MDC-0.750-Mean: 0.9724 226.72 1108.04 86.2 330.64

MDC-0.500-Mean: 0.9795 228.0455 1109.591 71.9545 316.3182

Measures:

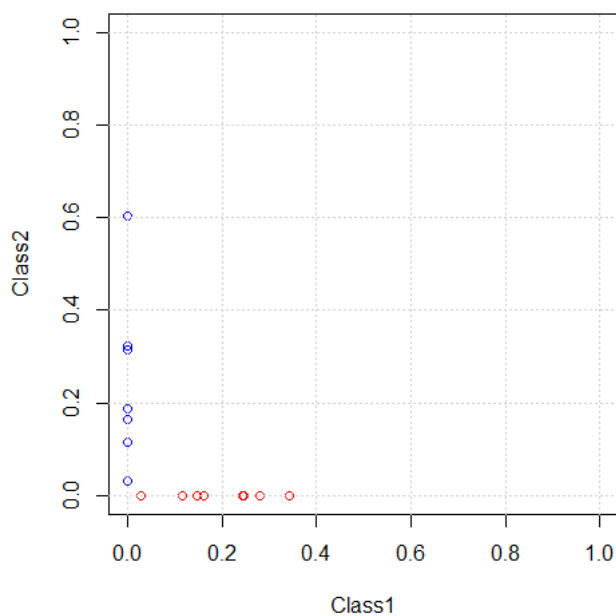
Mah.Dist: 2.7431

Mah.Dist-MCD-0.975: 3.3224

Mah.Dist-MCD-0.750: 3.2563

Mah.Dist-MCD-0.500: 3.3041

DD-Plot (zonoid): chemdiab_1vs3



DD-Plot (random Tukey): chemdiab_1vs3

