

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_1vs2 : n= 112 , 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: 1.0404 99.7391 474.3043 285.4348 214.8696

Class2: n= 76

Covariance matrix:

	[,1]	[,2]	[,3]	[,4]	[,5]
[1,]	0.0165	0.3150	0.9785	0.5182	3.2957
[2,]	0.3150	67.6989	86.2716	19.0796	46.8133
[3,]	0.9785	86.2716	1359.4393	574.6572	446.0267
[4,]	0.5182	19.0796	574.6572	4740.8454	1955.9200
[5,]	3.2957	46.8133	446.0267	1955.9200	3310.0267

Correlation matrix:

	[,1]	[,2]	[,3]	[,4]	[,5]
[1,]	1.0000	0.2979	0.2064	0.0585	0.4456
[2,]	0.2979	1.0000	0.2844	0.0337	0.0989
[3,]	0.2064	0.2844	1.0000	0.2264	0.2103
[4,]	0.0585	0.0337	0.2264	1.0000	0.4938
[5,]	0.4456	0.0989	0.2103	0.4938	1.0000

Median: 0.9429 91.4532 348.2076 164.5472 105.3576

Mean: 0.9372 91.1842 349.9737 172.6447 114

MCD-estimated:

MDC-0.975-Mean: 0.9303 91.5224 347.8955 163.4776 98.5373

MDC-0.750-Mean: 0.9187 91.3 348.5167 162.25 94.1833

MDC-0.500-Mean: 0.9187 91.3 348.5167 162.25 94.1833

Measures:

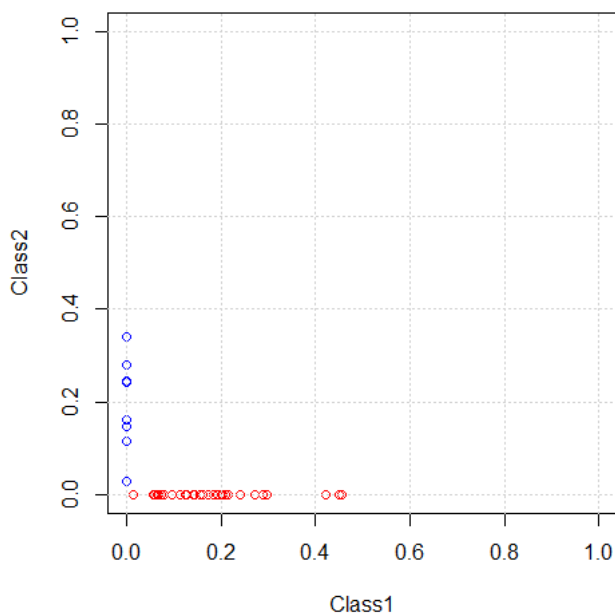
Mah.Dist: 3.6143

Mah.Dist-MCD-0.975: 3.5032

Mah.Dist-MCD-0.750: 3.4364

Mah.Dist-MCD-0.500: 3.4259

DD-Plot (zonoid): chemdiab_1vs2



DD-Plot (random Tukey): chemdiab_1vs2

