

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\_2vs3 : n= 109 , d= 5

Class1: 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:	0.9208	91.1429	346.6667	162.4127	97
MDC-0.750-Mean:	0.9231	91.377	348.7705	159.6393	95.082
MDC-0.500-Mean:	0.9187	91.3	348.5167	162.25	94.1833

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: 0.9724 226.72 1108.04 86.2 330.64

Measures:

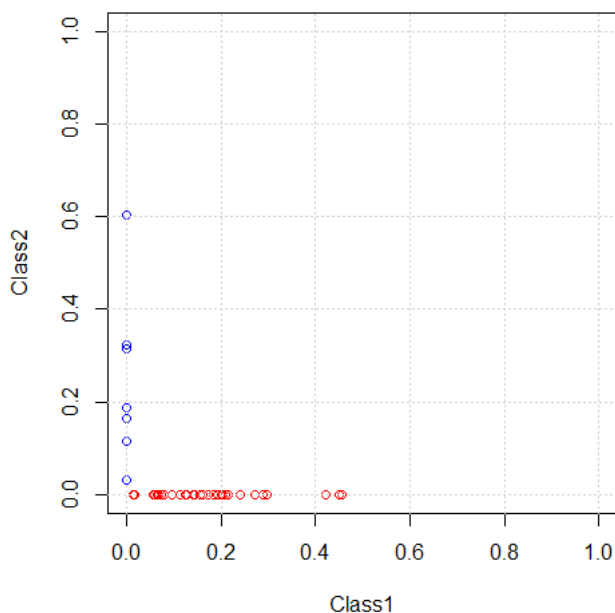
Mah.Dist: 4.9407

Mah.Dist-MCD-0.975: 5.2906

Mah.Dist-MCD-0.750: 5.314

Mah.Dist-MCD-0.500: 5.2906

DD-Plot (zonoid): chemdiab\_2vs3



DD-Plot (random Tukey): chemdiab\_2vs3

