

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

<http://stat.ethz.ch/Teaching/Datasets/groessen.dat>

**Description:**

TITLE : groessen  
KEYWORDS (statist) : correlation, regression  
APPLICATION AREA : biology

SHORT DESCRIPTION :  
The body sizes of twenty-years-old people and their parents has been measured. The average size of the parents and the sex of the children are included.

SPEC. CHARACT. : groupings

DIM.(VAR./OBS.) : 5 / 230

/ LITERATURE : /  
Galton (1885): Regression towards mediocrity.

**Descriptive statistics:**

Dataset= groessen\_MvsF : n= 230 , d= 3

Class1: n= 116

Covariance matrix:

	[,1]	[,2]	[,3]
[1,]	3676.735	1334.864	1540.476
[2,]	1334.864	2982.635	1148.038
[3,]	1540.476	1148.038	4565.544

Correlation matrix:

	[,1]	[,2]	[,3]
[1,]	1.0000	0.4031	0.3760
[2,]	0.4031	1.0000	0.3111
[3,]	0.3760	0.3111	1.0000

Median: 1775.807 1619.381 1732.367

Mean: 1775.172 1620.629 1726.612

MCD-estimated:

MDC-0.975-Mean: 1775.913 1621.864 1733.233

MDC-0.750-Mean: 1775.913 1621.864 1733.233

MDC-0.500-Mean: 1775.913 1621.864 1733.233

Class2: n= 114

Covariance matrix:

	[,1]	[,2]	[,3]
[1,]	3108.712	2373.302	1834.755
[2,]	2373.302	4404.700	1258.324
[3,]	1834.755	1258.324	4717.698

Correlation matrix:

	[,1]	[,2]	[,3]
[1,]	1.0000	0.6414	0.4791
[2,]	0.6414	1.0000	0.2760
[3,]	0.4791	0.2760	1.0000

Median:                    1650.271 1619.323 1730.878

Mean:                      1649.175 1620.246 1734.833

MCD-estimated:

MDC-0.975-Mean:    1649.612 1621.447 1730.534

MDC-0.750-Mean:    1649.612 1621.447 1730.534

MDC-0.500-Mean:    1652.755 1624.349 1733.566

Measures:

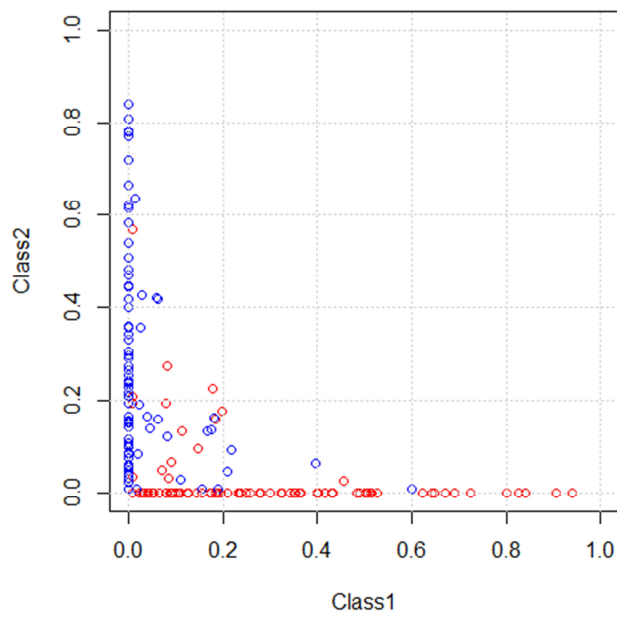
Mah.Dist:    2.7359

Mah.Dist-MCD-0.975:                                2.5659

Mah.Dist-MCD-0.750:                                2.5659

Mah.Dist-MCD-0.500:                                2.5659

**DD-Plot (zonoid): groessen\_MvsF**



**DD-Plot (random Tukey): groessen\_MvsF**

