Statistical Transforms – Center and Normalize

With SigmaPlot's Statistical Transforms, you can center and normalize your data.

Center
The center transform <u>subtracts the mean</u> of a column from all values in that column and places the result in a specified output column.

Standardize
The standardize transform <u>subtracts the mean</u> of a column from all values in that column, <u>then divides the centered values by the standard deviation</u>.
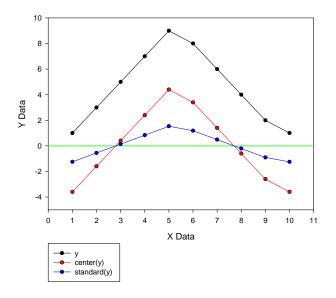
To run the transforms:
From the worksheet, on the Analysis tab, in the Transform group, select Statistical > Center, or Statistical > Standardize, and select the input and output columns.

Here is an example worksheet of both transforms:

	1-y	2-center(y)	3-standard(y)	4	5	6	7	8	
1	1,0000	-3,6000	-1,2521		y	center	standardize	
2	3,0000	-1,6000	-0,5565		Mean	4,6000	0,0000	0,0000
3	5,0000	0,4000	0,1391		Median	4,5000	-0,1000	-0,0348
4	7,0000	2,4000	0,8347		StdDev	2,8752	2,8752	1,0000
5	9,0000	4,4000	1,5303					
6	8,0000	3,4000	1,1825					
7	6,0000	1,4000	0,4869					
8	4,0000	-0,6000	-0,2087					
9	2,0000	-2,6000	-0,9043					
10	1,0000	-3,6000	-1,2521					
11								

Columns 5-8 show the mean and standard deviation for the source and result data. These values are copied from SigmaPlot's Column Statistics worksheet (Worksheet tab > View Column Statistics, or F6). This worksheet is always updated from the actual worksheet. You can copy from it, but you cannot write to it, for obvious reason.

And here is a graph showing the curves from the raw and transformed values in columns 1-3.

Center and Standardize Transforms