The Column Statistics Window

- 1- Overview of your data
- 2- Copy and paste statistical data
- 3- Customize the Column Statistics
- 4- More

SigmaPlot automatically calculates a number of basic statistical values for all the data in your worksheet. and displays them in the *Column Statistics*. These values are updated whenever you change a value in your *data worksheet*.

To open the Column Statistics window, select "View Column Statistics" from the Worksheet ribbon, or press the function key F6.

1. Overview of your data

You can use it for an overview of your data set, e.g. to identify outliers or implausible values. Select Worksheet > View Column Statistics, or press F6.

| 4 | Box Plot - Data 5 Data 5 - Column Statistics | | | | | | | | | |
|----------|--|--------------|----------|----------|----------|----------|---|--|--|--|
| | 1-X Data | 2-Box Widths | 3-Data 1 | 4-Data 2 | 5-Data 3 | 6-Data 4 | 7 | | | |
| Mean | | 62,5000 | 10,1250 | 10,8571 | 16,7500 | 15,2222 | | | | |
| Median | | 62,5000 | 11,0000 | 11,0000 | 17,5000 | 13,0000 | | | | |
| Std.Dev | | 32,2749 | 5,0267 | 4,8795 | 6,9230 | 6,2805 | | | | |
| Std.Err | | 16,1374 | 1,7772 | 1,8443 | 2,4477 | 2,0935 | | | | |
| 95% Conf | | 51,3452 | 4,2025 | 4,5129 | 5,7879 | 4,8277 | | | | |
| 99% Conf | | 94,0933 | 6,2199 | 6,8380 | 8,5663 | 7,0251 | | | | |
| Size | 4,0000 | 4,0000 | 8,0000 | 7,0000 | 8,0000 | 9,0000 | | | | |
| Total | 0,0000 | 250,0000 | 81,0000 | 76,0000 | 134,0000 | 137,0000 | | | | |
| Min | | 25,0000 | 2,0000 | 3,0000 | 5,0000 | 7,0000 | | | | |
| Мах | | 100,0000 | 17,0000 | 18,0000 | 27,0000 | 25,0000 | | | | |
| Min.Pos | | 25,0000 | 2,0000 | 3,0000 | 5,0000 | 7,0000 | | | | |
| Missing | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | | | | |
| Other | 4,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | | | | |
| 14 | | | | | | | | | | |

(This is from Example 5 from the Samples.JNB notebook file, opened from Help > SigmaPlot Sample Graphs.)

To see both the data and the statistical values, rightclick on the tab of one of the windows, and select "New Horizontal Tab Group". You can drag windows from group to group, and you can arrange the windows like this:

| Notebook Manager 🛛 📮 🗙 | ۹ 📄 | Data 5* | | | | | | |
|--|--|---|--------------|----------|----------|----------|----------|---|
| Notebook | | 1-X Data | 2-Box Widths | 3-Data 1 | 4-Data 2 | 5-Data 3 | 6-Data 4 | 7 |
| III Open Notebooks | 1 (| Group A | 100,0000 | 8,0000 | 3,0000 | 5,0000 | 15,0000 | |
| 1 Samples.jnb* | 2 (| Group B | 25,0000 | 13,0000 | 8,0000 | 12,0000 | 13,0000 | |
| Example 1: Scatter Plot with Error Bars | 3 (| Group C | 75,0000 | 5,0000 | 9,0000 | 17,0000 | 25,0000 | |
| Example 2: Grouped Bar Chart with Error Bars | | Group D | 50,0000 | 9,0000 | 12,0000 | 12,0000 | 21,0000 | |
| Example 3: Population Pyramid | 5 | aroop o | 00,0000 | 14,0000 | 11,0000 | 21,0000 | 7,0000 | |
| Example 4: Bar and Line Chart with Two Y Axes | 6 | | | | 15,0000 | | 11,0000 | |
| ia ↓ Example 5: Box Plot | | | | 13,0000 | | 18,0000 | | |
| | 7 | | | 2,0000 | 18,0000 | 27,0000 | 11,0000 | |
| | 8 | | | 17,0000 | | 22,0000 | 23,0000 | |
| ⊕ | 9 | | | | | | 11,0000 | |
| Cxample 7: Polar Plot Example 8: Quartile Plot | 10 | | | | | | | |
| Complete St. Quartie Plot Example 9: World Population Timeline | 11 | | | | | | | |
| | 12 | | | | | | | |
| | 10 | | | | | | | |
| | | | | | | | | |
| | Box Plot - Data 5 Data 5 - Column Statistics | | | | | | | |
| Example 14: Ribbon Plot | | | | | | | | |
| Example 15: Color Wheels | | 1-X Data | 2-Box Widths | 3-Data 1 | 4-Data 2 | 5-Data 3 | 6-Data 4 | 7 |
| 🖃 🔟 Example 16: Trajectory Plot | Mear | a harrow and | 62,5000 | 10,1250 | 10,8571 | 16,7500 | 15,2222 | |
| 표 🔟 Example 17: Enzyme Kinetics Graphs | Media | n | 62,5000 | 11,0000 | 11,0000 | 17,5000 | 13,0000 | |
| 🗉 🧕 Example 18: Border Plots | Std.De | v | 32,2749 | 5,0267 | 4,8795 | 6,9230 | 6,2805 | |
| 🛓 🧾 Example 19: Climograph | Std.Er | r | 16,1374 | 1,7772 | 1,8443 | 2,4477 | 2,0935 | |
| 🛓 📋 Example 20: California Map | 95% Con | f | 51,3452 | 4,2025 | 4,5129 | 5,7879 | 4,8277 | |
| 🗉 💋 Example 21: Category Plots | 99% Con | f | 94,0933 | 6,2199 | 6,8380 | 8,5663 | 7,0251 | |
| 🗉 💋 Example 22: Symbols | Siz | e 4,0000 | 4,0000 | 8,0000 | 7,0000 | 8,0000 | 9,0000 | |
| 🗄 💭 Example 23: Area Plot Background, Custom Legend | Tota | | 250,0000 | 81,0000 | 76,0000 | 134,0000 | 137,0000 | |
| Example 24: Vector Field Plus Contour | Mi | · · · | 25,0000 | 2,0000 | 3,0000 | 5,0000 | 7,0000 | |
| Example 25: Bicolored Lines | Ma: | | 100,0000 | 17,0000 | 18,0000 | 27,0000 | 25,0000 | |
| Example 26: Weibull Failure Graph | | | | | · · · | · · · | · · | |
| Example 27: 5PL Standard Curve | Min.Po | | 25,0000 | 2,0000 | 3,0000 | 5,0000 | 7,0000 | |
| ■ | Missin | | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | |
| Example 29: Probability Functions | Othe | | 0,0000 | 0,0000 | 0,0000 | 0,0000 | 0,0000 | |
| 🗉 🕖 Example 30: Piecewise Linear Fit | 1. | 4 | | | | | | |

2. Copy and paste statistical data

You can also copy data from the column statistics, and paste them into the data worksheet or into another application. You can – of course – not paste into the column statistics.

Example

Copy the mean values for the group data columns in this example (col 3-6), paste them transposed (row <-> column) into a new worksheet, and create a simple bar graph of the mean values.

2.1 Select the values in the Column Statistics, and copy them (rightclick > copy, or Ctrl-C).

| 4 Box Plot - Data 5 Data 5 - Column Statistics | | | | | | | | | |
|--|----------|--------------|----------|----------|----------|----------|--|--|--|
| | 1-X Data | 2-Box Widths | 3-Data 1 | 4-Data 2 | 5-Data 3 | 6-Data 4 | | | |
| Mean | | 62,5000 | 10,1250 | 10,8571 | 16,7500 | 15,2222 | | | |
| Median | | 62,5000 | 11,0000 | 11,0000 | 17,5000 | 13,0000 | | | |
| Std.Dev | | 32,2749 | 5,0267 | 4,8795 | 6,9230 | 6,2805 | | | |
| Std.Err | | 16,1374 | 1,7772 | 1,8443 | 2,4477 | 2,0935 | | | |
| | | | | | | | | | |

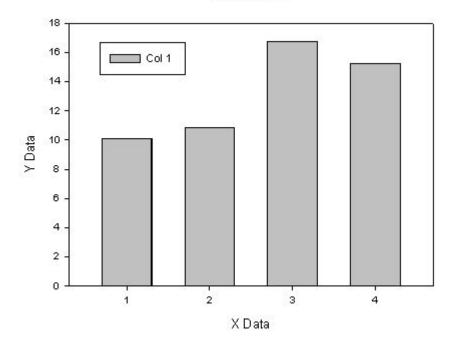
2.2 Paste them into a new worksheet:

Worksheet > Paste > Transpose Paste, or rightclick > Transpose Paste.

| ۹ / 🕻 | Box Plot - Dat | :a5 🗋 D | ata 5 - Column St | atistics | Data 1* |
|-------|----------------|---------|-------------------|----------|---------|
| | 1 | 2 | 3 | 4 | 5 |
| 1 | 10,1250 | | | | |
| 2 | 10,8571 | | | | |
| 3 | 16,7500 | | | | |
| 4 | 15,2222 | | | | |

2.3 Create a bar graph:

Vertical Bar Chart > Simple Bar > Single Y > Column 1



2D Graph 1

3. Customize the Column Statistics

You can limit the range of statistical values which are displayed in the Column Statistics. Start with the Column Statistics window selected. Click on the "Main" button in the top left corner, then on Options.

In the Worksheet tab, select Statistics. Now you can use the Show and Hide buttons to move parameters to Shown/Not Shown.

| Worksheet | Page | General | Report | Macro | Graph |
|--|------|---------|--------|---------|-------|
| Settings for | | | | | |
| General Numeric Date and 1 Statistics Appearance | | | | | |
| Shown | | | | Not Sho | wn |
| 95% Conf 99% Conf Max Mean Median | < | < Sh | | | |

4. More

For more statistical values, see

- Statistical Transforms
- User-Defined Transforms and
- Quick Transforms
 - in the "Transforms" section of the Analysis ribbon, and
- Descriptive Statistics in the "SigmaStat" section of the Analysis ribbon.