

# Using Chart Builder in SPSS

## Cheatsheet

2024-07-29

### About

This cheat sheet provides a step-by-step guide to plotting various chart types, customising elements, and refining of the visualisations in SPSS.

#### Assumed knowledge

- You have SPSS installed, ideally version 28.0 or later.
- You can follow instructions to select, click and drag elements in SPSS.

#### Data structure

The data should be in a **long format** (also known as tidy data), where each row is an observation and each column is a variable (Figure 1). If your data is not already structured this way, reshape it manually in a spreadsheet program or in R using the `pivot_longer()` function from the `tidyr` package.

Sex	BW
F	2.15
M	2.55
F	2.95
F	2.70
M	2.20
F	1.85
M	2.55
M	2.60

F	M
2.15	2.55
2.95	2.20
2.70	2.55
1.85	2.60

Figure 1: Data should be in long format (left) where each row is an observation and each column is a variable. This is the preferred format for most statistical software. Wide format (right) is also common, but may require additional steps to analyse or visualise in some instances.

## Data

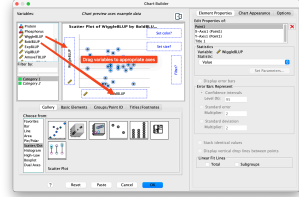
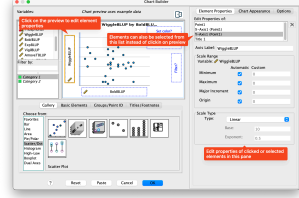

### Download data

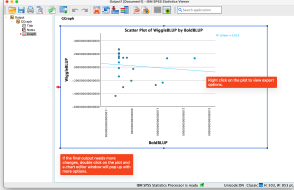
We have two separate datasets. The first dataset is part of the possums dataset used in [BIOL2022](#) labs. It contains two numerical variables: `ExpBLUP` and `AactiveTBLUP`. The data is available in the file `possums-blup.csv`.

The second dataset, `penguins.csv`, contains data collected by Dr. Kristen Gorman and the Palmer Station, Antarctica LTER. Details about the dataset can be found [here](#).

## Creating a plot/chart in SPSS



#	Step	Description	View
4	Choose variables	Drag and drop the variables you want to plot into the appropriate fields (e.g., X-Axis, Y-Axis).	
5	Customize chart	Adjust chart elements such as titles, labels, colors, and patterns using the options in the Chart Builder dialog box.	
6	Refine chart	Fine-tune the chart by adjusting axis scales, data point symbols, and other properties in the right panel.	

#	Step	Description	View
7	Create chart	Click OK to generate your chart. You can edit the chart again by double clicking on it. To export, right click on the chart and select Export...	

## Tips and Variations

- Use the **Dual Y-Axis** option for multiple scales.
- Experiment with different chart types and customizations.
- Save your chart as an image or copy it into another document.

## Examples

Under construction!

## Histogram

## Barplot

## Pie chart

## Resources

- [Building Charts](#) by IBM SPSS – Official documentation on creating charts in SPSS.
- [Charts](#) from Curtin University's Introduction to SPSS – sample data and instructions for creating various charts in SPSS.

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