

## Boxplots

Also called "box & whiskers plots" diagrammatically represent the spread of the observations about the median. The upper or third (Q3) and lower or first (Q1) quartiles, and interquartile range (Q3-Q1) are also represented. Any data values lying beyond the Q1 or Q3 boundaries will also be drawn as stars or dots. The median, Q1 and Q3 are represented by horizontal lines joined by vertical lines making the boxes. Additional lines are drawn if data values exceed the inner (1.5 interquartile ranges beyond Q1 or Q3) or outer (3 interquartile ranges beyond Q1 & Q3) fences. The fences will actually only be drawn if there are data values beyond them. The whiskers are vertical lines extending to the minimum and maximum data values within the inner fences.

Up to 30 boxplots can be plotted side by side. The titles will alternate between the top and the bottom of the window. You can replot the boxplot with different colours and line thicknesses by double-clicking the graph window and changing the options, then clicking the "Update Plot" button.

See [Plotting Routines](#) for more general information as well.