

Chapter II-13 — Graphs

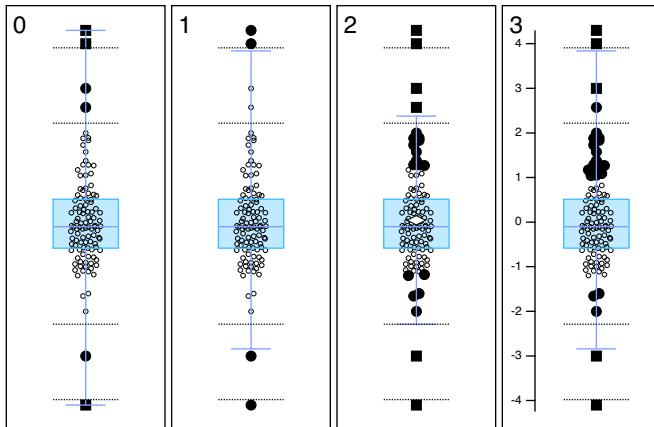
of the box width. If the specified width is insufficient to separate the points, they will overlap as needed. If the width is greater than necessary, only as much offset as necessary is applied.

In usual practice the fences are not shown.

Box Plot Outlier Methods

By default, Igor follows Tukey's definition of outliers and far outliers based on the fences, with "outliers" being points outside the inner fences and "far outliers" being points beyond the outer fences. While not usually shown in practice, you can tell Igor to include the fences on the plot using the command `ModifyBoxPlot showFences=1`. The outliers are shown as filled circles and the far outliers are large filled squares.

Igor offers four options to control which data points are outliers and far outliers:



Option 0: Tukey's definition. Outliers are any data points beyond the inner fences, far outliers are any data points beyond the outer fences.

Option 1: Any points beyond the ends of the whiskers are outliers. There are no far outliers. For this option, the whiskers were set to option 6, 2nd and 98th percentiles.

Option 2: Outliers and far outliers are points beyond an arbitrary factor times the standard deviation of the mean. In this case, those factors are 1 and 2. The whisker lengths are set to option 7, arbitrary factor times the standard deviation of the mean. The factor is set to 2. The white diamond shows the mean value.

Option 3: Outliers and far outliers are determined by four arbitrary data values. In this case the values are -2, -1.5, 1 and 2.6.