

## Chapter II-16 — Image Plots

### Image Axis Preferences

Only axes used by the image plot have their settings captured. Axes used solely for an XY, category, or contour plot are ignored.

The image axis preferences are applied only when axes having the same name as the captured axis are created by an AppendImage command. If the axes existed before AppendImage is executed, they are not affected by the image axis preferences.

The names of captured image axes are listed in the X Axis and Y Axis pop-up menus of the New Image Plot and Append Image Plot dialogs. This is similar to the way XY plot axis preferences work.

For example, suppose you capture preferences for an image plot using axes named "myRightAxis" and "myTopAxis". These names will appear in the X Axis and Y Axis pop-up menus in image plot dialogs.

If you choose them in the New Image Plot dialog and click Do It, a graph will be created containing *newly-created* axes named "myRightAxis" and "myTopAxis" and having the axis settings you captured.

If you have a graph which already uses axes named "myRightAxis" and "myTopAxis" and choose these axes in the Append Image Plot dialog, the image will be appended to those axes, as usual, but no captured axis settings will be applied to these *already-existing* axes.

You can capture image axis settings for the standard left and bottom axes, and Igor will save these separately from left and bottom axis preferences captured for XY, category, and contour plots. Igor will use the image axis settings for AppendImage commands only.

### How to Use Image Preferences

Here is our recommended strategy for using image preferences:

1. Create a new graph containing a single image plot. Use the axes you will normally use, even if they are left and bottom. You can use other axes, too (select New Axis in the New Image Plot and Append Image Plot dialogs).
2. Use the Modify Image Appearance, Modify Graph, and Modify Axis dialogs to make the image plot appear as you prefer.
3. Choose Capture Graph Prefs from the Graph menu. Select the Image Plots category, and click Capture Prefs.

### Image Plot Shortcuts

Since image plots are drawn in a normal graph, all of the **Graph Shortcuts** (see page II-353) apply. Here we list those which apply specifically to image plots.

| Action  | Shortcut (Macintosh)  | Shortcut (Windows)  |
|---|---|---|
| To modify the appearance of the image plot as a whole | Control-click in the plot area of the graph and choose Modify Image from the pop-up menu. | Right-click in the plot area of the graph and choose Modify Image from the pop-up menu. |

### References

Light, Adam, and Patrick J. Bartlein, The End of the Rainbow? Color Schemes for Improved Data Graphics, *Eos*, 85, 385-391, 2004.

Wyszecki, Gunter, and W. S. Stiles, *Color Science: Concepts and Methods, Quantitative Data and Formula*, 628 pp., John Wiley & Sons, 1982.