15 Plotting

15.1 Introduction to Plotting

Earlier versions of Octave provided plotting through the use of gnuplot. This capability is still available. But, a newer plotting capability is provided by access to OpenGL. Which plotting system is used is controlled by the `backend` function.

`backend("fltk")` selects the FLTK_OpenGL system, and `backend("gnuplot")` selects the gnuplot system. The two systems may be used selectively through the use of the `backend` property of the the graphics handle for each figure. This is more fully explained in Section 15.3 [Graphics Data Structures], page 244.

15.2 Basic Plotting

Octave provides simple means to create many different types of two- and three-dimensional plots using a few high-level functions.

If you need finer control over graphics, see Section 15.4 [Advanced Plotting], page 260.

15.2.1 Two-Dimensional Plots

The `plot` function allows you to create simple x-y plots with linear axes. For example,

```
x = -10:0.1:10;
plot (x, sin (x));
```

displays a sine wave shown in Figure 15.1. On most systems, this command will open a separate plot window to display the graph.

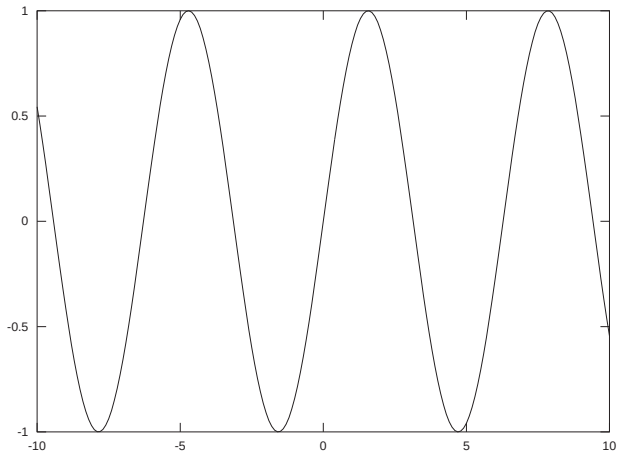

Figure 15.1: Simple Two-Dimensional Plot.

`plot` (*y*) [Function File]
`plot` (*x*, *y*) [Function File]
`plot` (*x*, *y*, *property*, *value*, ...) [Function File]