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### **Plans for the Future:**

- Allow "scatter plots" of data, not just grid data.
- More font options for axis labels and better scale selection routines.
- Better contour routine. The current routine can generate contour lines that cross each other if the data resolution is too low.
- More functions in the parser (let me know what you want added).
- Ticks/scales/labels on contour/density plots to make them publication quality as well.

### **Changes since 2.01**

- MUCH improved color support. Now supports altitude based color mapping with a palette of up to 5 colors.
- Display options now include: Floor, backs, axes, ticks, "slicing planes", and labels.
- Color selection for above options.

- Support for user defined tick marks and labels.
- Contour plots with user settable number of levels, spacing, etc ...
- Surface mapping of contour plots, density plots, data meshes and tick meshes on final, photorealistic, output (no interactive support).
- Surface maps may be placed on the surface or the "floor".
- Custom shader to do high quality contour overlays on surfaces.
- High quality text support for scales and axis labels in photorealistic output. Interactive mode supports low quality scales only.
- Spherical plots with full surface mapping/contour support.
- More functions in equation parser including bessell functions and s-f spherical harmonics.
- Variable support. 4 misc variables (a,b,c,d) and time sliders supported for use as parameters in equations.
- Better data file support. Data files may now be in arbitrary order, and may be "incomplete" meshes.
- Larger grids supported (up to 120X120 now).
- Animation support. Program will automatically generate "Movie" compatible tiff animations.
- New "inspector" style user interface.

- Clicking/dragging in density/contour window now has coordinate display.
- Aspect ratio control for "flattening" plots.
- Orthographic as well as standard perspective projections supported.
- New color icons and buttons.
- Name changed from Plot3D to NXplot3d.

### **Changes since 2.0**

Fixed scaling problem when symbols are displayed

Added axes/plane switch

### **Changes since 1.1**

Uses Renderman instead of my 3d routines (this may actually be a bit slower in wireframe mode).

Standard help interface.

Viewing angles redefined to be more "standard".

Color works, but only in "shaded" mode (I think).

Hidden surface removal (thanks to renderman).

Since renderman does solid modeling, symbols have been replaced

with 3d objects.

Fixed scaling bug for small grid sizes.

Density plot now displays data files much better.

Printing of density plots improved.

### **Changes since 1.0**

Source included

Full mesh added (for functions only)

3d view can be resized

Printing works better (still won't print "dots")

Alt and az displayed in 3d window

Zoom In and Freeze added

ln() changed to log() and log10() added

Formula input larger

Formulas can contain '[' and ']' (treated like '(' and ')' )

Uppercase ok in functions, eg 'Sin(x)' is ok now

Fixed bug in expressions like : 'x+3.2'

Infinities/undefined results are dealt with gracefully.