Subject: 3D plotting
Posted by Eric[3] on Wed, 08 Nov 2006 05:18:58 GMT

Hello,

I'm trying to find the most efficient way to make a 3D plot. I'm
going into my plot code with 5 variables, r_x, r_y, r_z, count and
color_scale.

r_x, r_y and r_z are arrays with the data points, count is the number
of points to plot and color_scale is an array of colors for each point.
The way I'm doing it right now (using XPLOT3D) is taking A LONG time
to plot (around 230 data points) and is also very difficult to rotate
the plot the way I want after it is already created. I tried using
iPlot, but it doesn't seem to like me using an array with a color
from a color table (it seems to prefer RGB?). Is there a way of doing
this in iPlot? Any other suggestions are welcome as well.

The code:

```
  x = fltarr(300) & y = fltarr(300) & z = fltarr(300)

  thisPalette = Obj_New('IDLgrPalette')
  thisPalette->LoadCT, 34


  for ii = 0, count-1 do begin

     oOrb = obj_new('RHTgrPSolid', /TETRAHEDRON,
color=color_scale[ii])
     oOrb -> GetProperty, OBJECT=pObj
     oOrb -> SetProperty, palette=thispalette
     oSymbol = OBJ_NEW('IDLgrSymbol', pObj)
     x[ii] = r_x[ii]
     y[ii] = r_y[ii]
     z[ii] = r_z[ii]
     XPLOT3D, x, y, z, xrange=[-10, 10], yrange=[-10, 10],
zrange=[-10,10], linestyle=6, SYMBOL=oSymbol, THICK=2, /OVERPLOT

  endfor
```

Thanks in advance,
Eric