
Subject: Re: 3D plotting

Posted by [eric :\)](#) on Thu, 09 Nov 2006 07:46:58 GMT

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wow, i had no idea you could make an array of objects. that fixed everything

thanks a lot!

Eric

David Fanning wrote:

> Eric writes:

>

>> 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.

>

> I managed to get color working by doing something like this:

>

```
> zcolors = BytScl(z)
> thisPalette = Obj_New('IDLgrPalette')
> thisPalette->LoadCT, 5
> thisPalette->GetProperty, Red=r, Green=g, Blue=b
> Obj_Destroy, thisPalette
>
> ; Create the symbols for each point.
> npts = N_Elements(x)
> theseSymbols=ObjArr(npts)
> FOR j=0,npts-1 DO BEGIN
>
>   oOrb = obj_new('RHTgrPSolid', /TETRAHEDRON, $
>     Color=[r[zcolors[j]], g[zcolors[j]], b[zcolors[j]])
>   theseSymbols[j] = OBJ_NEW('IDLgrSymbol', oOrb, $
>     Size=[0.05, 0.05, 0.05])
> ENDFOR
>
```

```
> ; Create Polyline object..
> thisPolyline = OBJ_NEW('IDLgrPolyline', x, y, z, $
>   LineStyle=6, Symbol=theseSymbols)
>
>
>
> You can find the complete program here
>
>   http://www.dfanning.com/misc/scatter\_surface.pro
>
> I tried it with 300 points and it seems to rotate OK.
>
> Cheers,
>
> David
> --
> David Fanning, Ph.D.
> Fanning Software Consulting, Inc.
> Coyote's Guide to IDL Programming: http://www.dfanning.com/
> Sepore ma de ni thui. ("Perhaps thou speakest truth.")
```
