Subject: Re: isotropic keyword for surface?
Posted by David Fanning on Thu, 23 Sep 2010 13:17:41 GMT
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anand writes:

> I am using the SURFACE procedure to define the axes. I want to plot a
> unit sphere, and an array of data points. I am faced with two issues,
> which although are not stopping me from going ahead with my task, are
> important if I have to make the plot look neat.
>
> 1) Like the ISOTROPIC keyword for PLOT command, is there a
> corresponding command for SURFACE that would force equal scaling for
> all the 3 axes? This is really necessary, because otherwise the sphere
> of unit radius extends well beyond 1.0 along at least 2 axes at a
> time. More importantly, is it just an issue with the scaling, or am I
> missing something here.

I think what you are probably missing is that in direct graphics you are dealing with a 2.5D system, not a true 3D system. In other words, the deck has been stacked completely against you.

To do this correctly, you probably want to work in the object graphics system, which is a true 3D system.

I don't have time to put an example together this morning, but if I were going to do it, I would use simple_surface and the orb object that you can find somewhere in the IDL distribution (orb__define.pro) to do it.

http://www.dfanning.com/simple_surface.pro

It will be very easy to create a unit cube data space in object graphics.

Cheers,

David

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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.")