Subject: Re: Isurface, inverting the axis without changing default lighting direction
Posted by Kenneth P. Bowman on Tue, 04 May 2010 13:58:00 GMT
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In article
<0b7ca13f-9430-4824-ac14-6d0b1186722d@40g2000pry.googlegroups.com>,
 cameron bowles <cameronbowles79@gmail.com> wrote:

> Hi everyone, long time reader first time poster.
>
> I have run into this problem where I want to plot a surface using the
> iSurface functionality of IDL 7.0. I want the Y-axis to be inverted
> (ie. showing the maximum value at the common axes point. I can simply
> do this with Yrange = [max[Y], min[Y]], but when I do this the
> lighting vector for the surface flips around the Y=0 plane and the
> surface is highlighted from some strange angle that doesnt highlight
> the surface at all.

One solution is to modify the properties of the lighting. To get started
interactively, double click in the background of the plot. This
should open the Visualization Browser, which will show you the
object hierarchy. By default you should find an ambient and a
directional light. Click on each to adjust its properties.
Changing the Distance property of the directional light to
negative moves it "above" the surface to give natural looking light.

Once you have things the way you want, you can do then do it
programmatically using something like this

```
lights_id  = itool_obj -> FindIdentifiers('*LIGHTS', /VISUALIZATIONS)   ;Get lights ID
lights_obj = itool_obj -> GetByIdentifier(lights_id)                    ;Get lights object reference
lights_obj -> SetProperty, INTENSITY   = 0.7                             ;Set lighting intensity
itool_obj  -> RefreshCurrentWindow                                      ;Refresh window
```

It would be nice, however, if there was an easy way to reverse
the direction of the surface normals so that this was not necessary.
That might be possible, but I don't know how to do it.

Ken Bowman