
Subject: Re: An object graphics problem
Posted by [Karl Schultz](#) on Mon, 11 Aug 2003 17:49:01 GMT
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"Gethyn Lewis" <grl@mssl.ucl.ac.uk> wrote in message
news:b2007222.0308110253.46f57d7d@posting.google.com...

> Hi IDL Experts
> I'm new to IDL programming and am stuck. My problem is this:
> I have a (360, 18) array of numbers which I can wrap around a sphere
> to display them with 360 cells of longitude and 18 cells of latitude.
> I do this by using a spherical mesh_grid and wrap that around an
> IDLgrPolygon object using the original array as vert_colors having
> converted it to bytscl. This works fine. Then I draw a vector that
> starts at the sphere's centre and exits the sphere through one of the
> mesh_grid cells. I do this using IDLgrPolyline centered on [0,0,0] and
> make it long enough to come through the sphere. This also works fine.
> Now I want to cut the sphere with a plane that is perpendicular to the
> vector and goes through the spheres centre and then be able to look
> down the vector and see the data around the edge of the newly cut
> sphere. Eventually there will be other spheres within the original, 60
> of them in fact, so that eventually, I will be able to see 60
> concentric circles about the vector that are colored according to the
> original array. Any ideas?

You may want to take a look at the CLIP_PLANES property. It will be very
easy to position a clipping plane at your origin and orient it as you
describe. You can use this plane to clip the "front" half of the spheres
and then you'll see the concentric half-spheres nested behind the clip
plane. This might give you what you want if you want filled rings or bands.
If you want really narrow rings, then maybe a second clip plane located a
bit behind the front plane that clips almost the entire back half of the
spheres might work.
