
Subject: Re: Plotting 'continents' in object graphics...
Posted by [Rick Towler](#) on Mon, 04 Oct 2004 17:40:50 GMT
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George Millward wrote:

> I am plotting data on a sphere - using the 'Orb' object - and i want
> to add the continents boundaries - just like the 'continents' command
> in direct graphics. Only there isn't a continents command for
> objects. Has anyone done this / know how to do it ?

Randall Skelton wrote:

> I don't believe it is possible. I know it was on my feature request
> list that I sent them back in the IDL 5.x days...

Come on people! If there is one thing we have learned is that you can do just about anything in OG if you are willing to waste the time :)

Someone with some mapping skills could whip up a set of verts and connectivity given the many coastline databases on the web. It just needs to be done once and it has probably been done already. Anybody care to share?

Lacking said mapping skills, I chose to look for some canned geometry. A while back I created a .dxf file from some continents geometry I found. The file contains polygon meshes of the continents, not quite the outlines you were looking for but it is a quick solution.

You can use it with my DXF model object which makes it a bit easier to play with dxf files. Note that the object only handles polyline and polygon DXF primitives (which are all I care about) but could easily be extended if need be. For the continents, you'll have to set the colors of the primitives manually since there is no color information in the DXF file. Use the GetPrimitive method to get the obj references.

```
IDL> orb=obj_new('orb', color=[180,180,250], radius=0.99)
% Compiled module: ORB__DEFINE.
IDL> continents=obj_new('rhtgrdxmodel','continents.dxf', $
alpha_channel=0.3)
% Compiled module: LINKEDLIST__DEFINE.
% Loaded DLM: DXF.
IDL> orb->add, continents
IDL> orb->add, continents
IDL> xobjview, orb
```

The DXF file is here:

http://www.acoustics.washington.edu/~towler/programs/contine_nts.zip

The RHTgrDXFModel object is here:

http://www.acoustics.washington.edu/~towler/programs/rhtgrdx_fmodel__define.pro

You'll need David's linkedlist__define.pro available from his website

<http://www.dfanning.com>.

-Rick
