
Subject: Re: how to use map_set in object graphics programming
Posted by [Rick Towler](#) on Wed, 05 Oct 2005 16:29:56 GMT
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shengbaojun wrote:

> Could you please tell me Where can I find IMap tool?

iMap is one of the iTools that shipped with IDL 6.1. If you have IDL 6.1 or newer there is information regarding it in the documentation.

> I hope I can use map_set to draw a background map in
> IDLWidgetContro when IDLWidgetControl's Graphics_Level is set to 2.
> But I can not sucess.

As Mark mentioned you can not use MAP_SET and object graphics. Either you develop your application using the direct graphics system (GRAPHICS_LEVEL=1) and use MAP_SET *or* you use the object graphics system (GRAPHICS_LEVEL=2) and the MAP_PROJ_* functions.

> IF the above idea is not fillfull,It means I must use Map_proj* and
> IDLgr* to draw map,Could you please give me something advice.

Again, as Mark said, the MAP_PROJ_* functions operate at a lower level and require you to do more coding to get your map on the screen. Check out the IDL documentation for MAP_PROJ_FORWARD for some example code.

The basic steps will be:

You will read in your coastline data.

use MAP_PROJ_INIT to set up your projection

use MAP_PROJ_FORWARD to convert your coastline data from lat/lon to cartesian coordinates X,Y.

At the very least pass X,Y to IDLgrPolyline and plot as a collection of points. If you want to plot the coastline as lines, you may need to generate the connectivity which tells IDLgrPolyline how to connect your vertices X,Y into lines. Read the documentation on IDLgrPolyline.

add your IDLgrPolyline object to an IDLgrModel

use XOBJVIEW to view the IDLgrModel to verify that things worked as expected.

Once you have done this then you can work on doing it using the ActiveX control.

As I mentioned, you will still have one other issue to contend with. I'm guessing that you are contouring with a 2d array of Z values. When you try to overlay your coastline on your contour it will most likely not line up correctly (in fact you will probably not even see it). You will need to use the [XYZ]COORD_CONV keywords of IDLgrContour and IDLgrPolyline to plot your data in the same place in the object graphics coordinate system.

-Rick
