Subject: Image and Maps with IDL8 Posted by David Fanning on Wed, 22 Sep 2010 18:43:24 GMT View Forum Message <> Reply to Message

Folks,

Well, I have spent another fruitless morning trying to figure out how to display a gridded, map projected image with map annotations (continents and grids) on it in the new IDL8 graphics. I have gotten, sad to say, just about nowhere. :-(

Here is what I am trying to do:

http://www.dfanning.com/catalyst/maponimage.html

I guess any question at all would be as good as any.

How do I know where the image function located the image in the window? I need to know this so I could position the map function. (I mean, hypothetically.) The on-line help says the image function has a property image_location. But when I try to access that, the image function glares at me:

IDL> img = image(image)
IDL> print, img.image_location
% PRINT: Variable is undefined: <UNDEFINED>.

There is a "location", but that doesn't tell me what I want to know. "Position" works (or doesn't, in this case) like image_location.

The real problem appears to be that the map function seems to work in lat/lon space. But, when professionals do map projections, they *always* work in XY space. My *image* is in XY space. That's the only space with a regular grid! Help! I need a map function that knows how to set up an XY data space or mapping is generally hopeless, it seems to me. :-(

I do note that the map function has XRANGE and YRANGE keywords, but when filled with the proper XY values, they appear to be completely ignored by the map function. (The documentation doesn't indicate what units the ranges are suppose to be given in.)

Any and all help welcome.

Cheers,

David

P.S. I did get one bit of good news this morning. The programmer who wrote CTLOAD was on the ball and had already anticipated the new IDL graphics and their lack of support for Brewer color tables. :-)

If you want to use Brewer colors, you can try this:

```
IDL> CTLoad, 4, /Brewer, RGB_TABLE=rgb
IDL> img = Image(my_2d_image, RGB_TABLE=rgb)
```

Of course, you will need other things, but you probably already have those, too. :-)

http://www.dfanning.com/color_tips/brewer.html

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Coyote's Guide to IDL Programming: http://www.dfanning.com/
Sepore ma de ni thui. ("Perhaps thou speakest truth.")