
Subject: Re: Plot and Plots

Posted by Paul.Bowyer@gmail.com on Thu, 31 Jan 2008 21:53:13 GMT

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On Jan 31, 7:27 pm, David Fanning <n...@dfanning.com> wrote:

> pb24 writes:

>> I am trying to produce a graphic showing continent outlines,
>> coastlines etc, with a graticule and the footprint of a satellite
>> image. I can do all this by using MAP_SET, and then I use PLOTS to
>> plot a vector of the image coordinates. Using MAP_SET however, I can
>> only specify a STEREOGRAPHIC projection, when I want a POLAR
>> STEREOGRAPHIC projection.

>

>> To get a POLAR STEREOGRAPHIC projection I need to use MAP_PROJ_INIT
>> and then PLOT to display the graticule. However when I do this I cant
>> seem to get PLOTS to display the image footprint. I have converted my
>> image footprint coordinates from lat./long. to cartesian using
>> MAP_PROJ_FORWARD, but using PLOTS just doesnt work. Any ideas from
>> anyone would be gratefully received. Is it not possible to use PLOT
>> and PLOTS together??

>

> I suspect the problem is the way you are using PLOT to set
> up your UV data coordinate space. The code will look something
> like this:

>

```
> polar = Map_Proj_Init(1, CENTER_LAT=90, CENTER_LON=0)
> uvgraticule = Map_Proj_Forward(graticule, MAP_STRUCTURE=polar)
> uv_box = polar.uv_box
> Plot, uv_box[[0, 2]], uv_box[[1, 3]], Position=[0.1,0.1,0.9,0.9], $
>   /Nodata, XStyle=5, YStyle=5, /NoErase
> Oplot, uvgraticule ; Or MAP_grid, MAP_STRUCT=polar, /LABEL, etc.
```

>

> Cheers,

>

> David

> --

> David Fanning, Ph.D.

> Fanning Software Consulting, Inc.

> Coyote's Guide to IDL Programming (www.dfanning.com)

> Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Hi David,

Thanks for your reply.

I have no trouble displaying the graticule and the continents using MAP_GRID, and MAP_CONTINENTS. The problem is that once I have these displayed, I'd like to plot the satellite image footprint on top by taking the four image corner coordinates and using PLOTS. I have done

this using PLOTS when used in combination with MAP_SET (and with a stereographic projection), but I want ideally, to have a *polar stereographic* projection (they are not the same sadly - map projections!!). That is why I am having to use MAP_PROJ_INIT with 106 projection number a GCTP type. Hope that makes my initial post a little clearer.

Thanks again,
Paul
