Subject: Re: map_proj_* help
Posted by David Fanning on Fri, 12 Jun 2009 19:32:39 GMT

David Fanning writes:

> I've come to the tentative conclusion that it is NOT
> possible to navigate this image with IDL map projections.
> I do note that ENVI (which uses its own map projection
> software) *is* able to navigate the image correctly.
>
> This is MOST disconcerting. But not, unfortunately,
> all that surprising to me. I could still be wrong
> (I *hope* I am), but the current seems to be running
> in the other direction. :-(

Oh, never mind. I figured it out. :-(

Here you go. The good news is I probably got another
web page article out of it. :-)

```
;****************************************************
file = 'G:\data\pine_2009084_1545_modis_ch02.tif'
image = Read_Tiff(file, Geo=geotag)
image = BytScl(Reverse(image,2))

; Display map in window.
pos = [0.1, 0.1, 0.9, 0.9]
TVImage, image, POSITION=pos, /KEEP_ASPECT, /NOINTERP, /ERASE

; Set up Map Projection. Polar Stereographic, WGS-84 Datum.
map = Map_Proj_Init(106, DATUM=8, CENTER_LAT=-70, CENTER_LON=-100)

; Set the limits of the image.
s = Size(image, /Dimensions)
xscale  = geotag.ModelPixelScaleTag[0]
yscale  = geotag.ModelPixelScaleTag[1]
tp      = geotag.ModelTiePointTag[3:4]
xOrigin = tp[0]
yOrigin = tp[1] - (yscale * s[1])
xEnd = xOrigin + (xscale * s[0])
yEnd = tp[1]

; Set up the map coordinate space.
Plot, [xorigin, xend], [yorigin, yend], $
    XStyle=5, YStyle=5, /NoData, POSITION=pos, /NOERASE

; Draw map grids.
```

```
Map_Grid, MAP_STRUCTURE=map, LONDEL=5, LATDEL=1, $
   LATLAB=-110, LONLAB=-75, /LABEL
;**************************************************
```
;

Didn't I tell you we would probably have it whipped by Friday!
This is pretty much how map projections go. At least for me.

Cheers,

David

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