Subject: Re: Map\_set limits

Posted by david on Tue, 25 Nov 1997 08:00:00 GMT

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- > I was trying to superimpose satellite images to a map in IDL 4, and had a
- > problem:

>

- > I have to set the map's dimensions to the image's to get a good match,
- > using the keyword "position" in map\_set.
- > After several tries I found out that the map limits are enlarged by 2% in
- > both directions (long/lat), while the dimensions are unchanged. The result
- > is that I get a map of a larger area in the dimensions of my image.

Unfortunately, IDL's map projection routines are not designed to put a map projection on an image. (I am, however, sympathetic to the argument that they \*should\* be.) Rather, they are designed to put an image on a map projection.

The proper sequence of commands to display an image that corresponds to the limits in the variable "mapLimits" might look something like this:

Map\_Set, /Cylindrical, Limits=mapLimits
warpedImage = Map\_Image(image, xloc, yloc, xsize, ysize)
TV, warpedImage, xloc, yloc, XSize=xsize, YSize=ysize
Map\_Grid
Map Continents

Cheers.

David

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Coyote's Guide to IDL Programming: http://www.dfanning.com/

Subject: Re: Map\_set limits

Posted by Erard on Thu, 27 Nov 1997 08:00:00 GMT

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davidf@dfanning.com (David Fanning) wrote:

>

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I've tried this one first, yes. But it looks more like a drawing function than anything else to me. The problem is that, when you work with remote sensing or space images for instance, you simply need to superpose a geographic grid to perform automatic measurements. You don't want to degrade the image quality at all because the information you need is in there, and it was expensive to get it. In short you need to do something like Image\_contour does for plots and images, and find out that map\_set has these weird peculiarities.

Yet, if somebody felt the need to change the maps limits in map\_set there was probably a good reason. So the question is: why? And are there situations in which you really have to perform this strange transformation. I find it very surprising that apparently nobody ran into this problem before.

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