Subject: Re: Best routines for mapping satellite images
Posted by David Fanning on Wed, 29 Oct 2014 21:45:12 GMT
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Steve Super writes:

> Sorry I missed all these replies, I put this problem aside for while and forgot to check back.
>
> To answer some of the questions:
>
> -Yes the coordinates are in degrees and are not evenly spaced (non-gridded data).
> -The lat/lon arrays have the same dimensions as the image data.
>
> The data I am working with is NPP VIIRS M-band data, which I am attempting to use to create a true-color image. My desired outcome is to have a warped image that retains the original dimensions of the data. I want to then focus on a subset of the image and highlight pixels of interest, as well as plot the path of CALIPSO overpass, which is based on lat/lon as well.
>
> So far the closest I have come to what I believe is a good result was done using the 'map_set' and 'map_patch' procedures. However, in this case boundaries and coastlines do not quite match up, and there is no way to specify that the image dimensions remain the same as the input array.
>
> Thanks for the comments and help.

I've had reasonably good luck using cgWarpToMap using data like this. It uses either GridData or Interpolation (much faster!) to grid the data, depending upon the input data.

http://www.idlcoyote.com/idldoc/cg/cgwarptomap.html
http://www.idlcoyote.com/code_tips/usegriddata.html
http://www.idlcoyote.com/code_tips/griddata.html

Cheers,

David

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David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
Sepore ma de ni thue. ("Perhaps thou speakest truth.")