Subject: Re: Image Warp Success?
Posted by David Fanning on Tue, 09 Feb 2010 20:52:42 GMT
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David Fanning writes:

> Has anyone ever had any success using MAP_PROJ_IMAGE to
> warp an image in one map projection into another map
> projection?
>
> Given what I know about the non-reentrant nature of the
> MAP_PROJ_*** routines, I can't image this ever working
> properly, but I thought I would give it a try. I have
> an image in a UTM map projection that I want to convert
> to a Lambert Equal Area projection. The result looks
> like a disaster. I'd pursue this further if someone
> could give me hope. :-(

My inability to get a reasonable result with MAP_PROJ_IMAGE has turned out to be at least partly due to an incredibly embarrassing error in my MapCoord object, which I use to work around many of the reentrant limitations of the MAP_PROJ_*** routines.

If the desired map projection was passed into the object as a string (e.g., 'UTM') rather than as an index (e.g., 101), then the wrong map projection information was saved in the object. I rarely use map projection names, which is probably why it took me so long to discover this grievous error. :-(

In any case, this is fixed now, and I have confirmed that the output map structure from my object and from MAP_PROJ_INIT are identical no matter how the map projection is selected.

http://www.dfanning.com/programs/catalyst/source/coordinates /mapcoord__define.pro

Once this problem was fixed, I obtained what appear to be reasonable results from MAP_PROJ_IMAGE. My apologies for casting aspertion on code that possibly doesn't deserve it. I do note that the documenation is not clear as to what the "range" parameter should be, and that you only get "correct" results if you specify the range in UV coordinates, rather than the lat/lon coordinates specified in the on-line help. I learned this only by comparing the results from the results from ENVI.

Cheers,

David

--
David Fanning, Ph.D.
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Coyote's Guide to IDL Programming: http://www.dfanning.com/
Sepore ma de ni thue. ("Perhaps thos speakest truth.")
