Subject: Re: Mapping Functionality in IDL 8.1
Posted by KRDean on Wed, 13 Apr 2011 21:04:58 GMT
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On Apr 12, 5:40 pm, David Fanning <n...@dfanning.com> wrote:
> Folks,
>
> I promised to report back from the IDL User Group
> meeting about the new mapping functionality coming
> in IDL 8.1 (due out in the morning, as I heard it
> today at the meeting).
>
> I'm afraid I don't have much to report. The big
> news is the Map function can now draw a map whose
> boundaries cross the international date line. (An
> outstanding bug in the iTool map object since IDL
> 6.3, when the Map object was introduced.)
>
> The other big mapping news is that that Map object
> can now use the GSHHS database (when the HIRES keyword
> is set) in the MapContinents routine. This is a
> functionality I have been using since 2006 when
> I wrote Map_GSHHS_Shoreline to draw all my shorelines,
> and I highly recommend it.
>
> http://www.idlcoyote.com/map_tips/gshhs.html
>
> I wasn't able to determine if it is the implementation
> of the GSHHS data base that is slow, or if it is the map
> object that is slow, but we waited quite a long time
> after the command was typed to see the result. I've
> never experienced a delay like that with my implementation
> of GSHHS, so I don't know what to think. I am guessing
> they always use the full resolution of the GSHHS database,
> which is almost always unnecessary in practice and does
> take a LONG time to draw. (My routine allows you to choose
> the resolution of the GSHHS database you want to use.)
>
> The biggest problem I see with the Map function is that
> ITTVIS continues to insist that people want to warp an
> image onto a map projection. I've spent a number
> of years working professionally with people who did map
> projections for a living, and I have never once known
> anyone who wanted to do this. Everyone I know HAS an
> image (which they emphatically do NOT want to warp!),
> and they want to fit a map projection onto that.
>
> I'm told to expect more "communication" between the

> ENVI side of ITTVIS and the IDL side. Here is one case
> where listening to the folks who are working with ENVI
> could pay immediate dividends. As it is now, the Map
> function in IDL appears to me to be more toy than tool.
>
> Cheers,
>
> David
>
> --
> David Fanning, Ph.D.
> Fanning Software Consulting, Inc.
> Coyote's Guide to IDL Programming:http://www.dfanning.com/
> Sepore ma de ni thue. ("Perhaps thos speakest truth.")

Long ago, I had a request to compare GOES data with NOAA 15 AVHRR. I warped the GOES data to match the AVHRR projection. No IDL mapping routines were used in this case. I just used the PolyWarp/Poly2D combination and my in-house GOES and AVHRR navigation models.

Long ago, before there was MTSAT, there was GMS (Japan geostationary satellites). Near the end of its life span, imagery from GMS would not line up with GOES-West due to its wobble. I used PolyWarp/Poly2D so composites could be made with GOES-West with nice seams between the two sats.

Currently, I am taking large GeoTIFFs to make one degree cell composites (coordinates defined by MAP_SET projection). These are done with PolyWarp/Poly2D and overlay in Direct Graphics. I am looking into an Object Graphics version.

I was never a fan of IDL's Map_Patch when working with weather satellite imagery, too slow.

Sorry for bragging about my past accomplishments, but I warped in the past and plan to warp in the future. Not to take away what David has done. I refer to his pages whenever there is a demand for some mapping work.

Kelly Dean
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