## Subject: Re: Coastal boundaries over sat data Posted by Liam E. Gumley on Wed, 16 Aug 2000 07:00:00 GMT

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Daniel Peduzzi wrote:
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> Paul van Delst wrote in message <399AF599.44D0AC5A@ncep.noaa.gov>...
>> Daniel Peduzzi wrote:
>>>
>>> I have some satellite imagery in its native projection (DMSP,
>>> GOES, Meteosat, and GMS) with accompanying latitude/longitude
>>> pairs for each pixel. I'd like to display these images in their
>>> native projections using 0-100% grayshades, but overlayed with
>>> coastal boundaries in some non-grayshade color.
>>>
>>> Is this possible using the standard map routines available in
>>> V5.2? I've found plenty of ways to draw boundaries over data
>>> which have been remapped to some other projection, but not in
>>> the raw satellite projection.
>>> Alternatively, does somebody have a routine to do this?
>> checkout Gumley's IMAGEMAP program:
>>
>> http://cimss.ssec.wisc.edu/~gumley/imagemap.html
>>
>> I have used for exactly what you describe.
>
> Thanks...that is a handy program, and I've used it before in the past.
> I'm not sure that it can be used for what I want to do, though, since
> I don't want to remap the data...only display it in its *native*
  projection with coastal boundaries.
>
> In other words, if I have 1000 scanlines of DMSP data (1465 elements
> wide), and accompanying 1465x1000 lat/lon arrays, I'd like to display
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> Did I miss something?

a 1465x1000 image overlaid with coastlines.

You are correct: IMAGEMAP will not solve the problem you pose. It is possible that you could get MAP\_SET to produce a map projection which corresponds to a geostationary satellite image (e.g. GOES, Meteosat, GMS). However MAP\_SET won't work for DMSP or other polar orbiters, since as far as MAP\_SET is concerned the map projection in this case changes at every point along the satellite ground track.

There is nothing built-in to IDL to solve this problem. Unless someone

responds with custom code, you'll have to invent your own. I'd sure like to see code to solve this problem.

Cheers, Liam. http://cimss.ssec.wisc.edu/~gumley