On Mar 17, 3:06 pm, David Fanning <n...@dfanning.com> wrote:
> Bob Crawford writes:
>> In addition to what paul said there appears to be lat/lon info for
>> each pixel available from e.g.http://goes.gsfc.nasa.gov/goeseast-lzw/peru/m=
>> aps/
>
> Yes, I have the navigation data. What do I do with it? :-)
>
> Suppose, for example, I wished to put state boundaries
> and rivers on this map. How would I go about doing so?
>
> I suppose I could use the navigation data to establish
> a limit for a map projection, but what map projection?
> Satellite? Guess I could try it.
>
> Cheers,
>
> David
>
> Cheers,
>
> David
>
> --
> David Fanning, Ph.D.
> Fanning Software Consulting, Inc.
> Coyote's Guide to IDL Programming:http://www.dfanning.com/
> Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Your are on the right track, you can use MAP_SET, Nadir_lat, and
Nadir_long, /Satellite, the four corners (LIMIT) and along with [P,
Omega, Gamma], which are [~6.5, 0.0, 0.0]. These numbers are
variable depending on the satellite (GOES-E, GOES-W). They get you
in the ball park, but get worse the farther you get from nadir along
the equator.

My first choice (although slow) are to use MAP_PATCH, WARP_TRI, or
combination Poly2D and POLYWARP. MAP_IMAGE doesn't work. Use either of
these routines to remap the satellite image, latitude, longitude
navigation arrays from NASA GSFC into the desire map projection that
is set by MAP_SET, then you can use the MAP_GRID and MAP_CONTINENTS to
get the desire geo-political boundaries provided by ITTVIS on top.

I had web pages providing examples of each of these remapping methods,
but they have been removed by my previous employer.

Kelly Dean
(was an IDL GOES Image expert at one time)
Fort Collins, CO

P.S. NASA GSFC would not be my first chioce for GOES data. I like to
get my GOES data from www.class.noaa.gov.