Subject: Re: AVHRR Image Mapping Problem
Posted by Matt[1] on Fri, 15 Dec 2006 19:21:08 GMT
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There is no right and wrong standard parallels. The standard parallels are lines along which the distortion of the map projection is the smallest, getting progressively larger as you move away from the lines. Thus, you can change your standard parallels to ANYTHING you want, depending on many factors, mainly, which area on the Earth's surface you want to study.

So, by changing the stadard parallels all you are doing is telling your projection engine (or whatever it's called) to center on a different part of the globe/map. Your vector data is not reading these standard parallel parameters in the same way as the raster data, becasue if it was, it would be changing along with your raster data. My veredict is that you have too many data types/parameters for the software to deal with accurately:

Raster data in Albers centered on Africa
Vector data for the world in some other projection, probably centered on the prime meridian

If you get all this data to a single format (extent of African continent only - not the world, both datasets in Albers with same std parallels), this this could resolve the misalignment...

Matt

On Dec 15, 1:50 pm, David Fanning <n...@dfanning.com> wrote:
> kuy...@wizard.net writes:
>> Actually, yes. I have no idea why the standard parrallels might be
>> incorrect, but given the symptoms you describe, it might be worthwile
>> to try 19.99999 and -20.00001. IDL doesn't like it when the standard
>> parallels add up to exactly zero. That is unfortunate, because a Albers
>> projection with standard parallels adding up to zero is a different way
>> of describing the cylindrical equal-area projection, one of my favorite
>> map projections, and one that IDL doesn't support.Here are the results. Possibly a bit better.
>
> Here are the results with parallels at "normal"
> -19 and 21.
>
> http://www.dfanning/misc/normal.png
>
> Here are the results with parallels at -19.9999 and 20.0001.
>
> http://www.dfanning/misc/kuyper.png
>

> The results using parallels of 19.9999 and -20.001 are
> identical to that above. As are the results if I switch
> the values for STANDARD_PAR1 and STANDARD_PAR2.
>
> If you load these in your browser and hit your back
> and forward buttons, you can see a little movie of
> these projections switching back and forth. Don't know
> what that shows, but it distracts me from the real
> problem. :-)
>
> 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.")
