Subject: Re: Projected Image Data

Posted by Liam E. Gumley on Thu, 28 Feb 2002 15:43:27 GMT

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David Fanning wrote:

- > Do any of you netCDF-types know of any "standards"
- > regarding how to store already-projected satellite image
- > data in netCDF files? Are lat/lon points typically
- > stored with the image, or just metadata that allows
- > you to navigate the image? We are looking for some
- > ideas that make sense. Most of the images we are
- > working with have already been projected into two
- > or three specific map projections.

You can search the discussions among netCDF users at

http://www.unidata.ucar.edu/packages/netcdf/

See "Searches" towards the bottom of the page. Try searching for "satellite" or "projection".

That said, I'm not aware of any well documented open (i.e. non proprietary) standards for describing a satellite projection in a netCDF file. I believe GeoTIFF provides some of these features, and someone in the GIS field would have a better understanding of that subject than I do.

I'm always happiest to work with satellite data where a lat/lon has been defined for each pixel, and the satellite data remains in the native "sensor" projection. Then I am free to resample it to whatever map projection I choose. Lately I have been using some very nice C routines from the National Snow and Ice Data Center (NSIDC) for this purpose:

http://eosdb.ssec.wisc.edu/modisdirect/

One of these days I intend to write up a guide to remapping satellite images using the NSIDC routines in conjunction with IDL.

Cheers, Liam. Practical IDL Programming http://www.gumley.com/