
Subject: Projected Image Data

Posted by [David Fanning](#) on Wed, 27 Feb 2002 23:55:26 GMT

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Folks,

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.

Thanks,

David

--

David W. Fanning, Ph.D.

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Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Toll-Free IDL Book Orders: 1-888-461-0155

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/>

Subject: Re: Projected Image Data
Posted by [K. Bowman](#) on Thu, 28 Feb 2002 15:47:32 GMT
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In article <MPG.16e71fd78ddf401f989826@news.frii.com>,
David Fanning <david@dfanning.com> wrote:

> Folks,
>
> 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.

Have you tried the netCDF web site and mailing list?

<http://www.unidata.ucar.edu/Community.html>

Many netCDF users don't use IDL, but there may be existing standards for satellite images.

Ken

Subject: Re: Projected Image Data

Posted by [James Kuyper](#) on Thu, 28 Feb 2002 16:05:57 GMT

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Liam E. Gumley wrote:

...

- > I'm always happiest to work with satellite data where a lat/lon has been
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- > 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:
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- >
- > One of these days I intend to write up a guide to remapping satellite
- > images using the NSIDC routines in conjunction with IDL.

I'm looking forward to that; I've been spending most of the last month developing an IDL widget-based application (specialized for my own particular needs) for mapping MODIS image data.
