Subject: Re: GRIB data question Posted by David Fanning on Thu, 10 Nov 2011 23:08:59 GMT View Forum Message <> Reply to Message

## Kenneth P. Bowman writes:

- > A quick and simple sanity check is to plot a global map of
- > surface temperature or air temperature at the lowest level
- > (typically 1000 hPa). The continents stand out quite clearly.

## Sigh...

OK, I'm an old man (well, a hell of a lot older than I was when I started worrying about map projections about three weeks ago for a new book I am writing!), and I've been around the block a couple of times, so problems with data don't particularly surprise me. But, in the example Mark presents, the only "clue" to how to apply the map projection information in the file to the extremely limited-spatial-extent data that is in the file (nothing like something where continents are going to stand out!) is the word "Alaska" in his description of the data set. One would presume that you might find an outline of Alaska somewhere near the image data!

I have every confidence that Mark has displayed the data correctly. My only concern is how he knew to display it in that particular way. Relying on the word "Alaska" seems particularly fraught with unpleasant possibilities. :-(

This is an issue that I would like to address in the book, because I used to run into it over and over again when I was working at NSIDC. How do you know whether or not your data is upside down!? It seems a simple thing, but it really is not. And it is MOST embarrassing to have this pointed out to you in the middle of an important presentation reporting your results!

The problem, as you suggest, is easier to manage with global data sets. It is a LOT harder when the spatial extent of the data is limited. When you are in the middle of the ocean, as we appear to be with this data set, the bets as to which way is up get iffy, at best.

Cheers.

David

David Fanning, Ph.D. Fanning Software Consulting, Inc. Coyote's Guide to IDL Programming: http://www.idlcoyote.com/ Sepore ma de ni thui. ("Perhaps thou speakest truth.")