Subject: Re: Confusions with map_image!
Posted by David Fanning on Fri, 12 Jun 2009 15:05:30 GMT
View Forum Message <> Reply to Message

hethomas writes:

- > I am not surprised by the results that are in my original grid (the
- > one that I made as an amalgamation of my data). The thing that is
- > surprising me is that when I use map image on the image, the values
- > change significantly, depending on the window size (and more
- > obviously, whether the bilinear keyword is set) etc. It is this that
- > has made me wonder how valid the results of Map image are and what
- > variables I should be using to get a "correct" result!

Well, yes, if you are using BILINEAR your results *will* change with the size of the window! Those extra pixel values have to come from somewhere. BILINEAR interpolation will make them up for you. (Often in the way you *wish* they were, rather than the way they are.) Better in your case to use nearest-neighbor interpolation so pixels are replicated, but original values are not changed.

MAP_IMAGE is really a *display* technique (and a poor one at that). It would probably be much better to fit a map coordinate system to your image, rather than fit the image to your coordinate system. There are lots of articles on my web page and in the archives of this newsgroup that address this issue. (Including one this morning that points out how impossible this is to do!)

But I would steer well clear of MAP_SET and any of its associated routines if you really care about map projected images. :-)

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.")