## Subject: Reprojecting TIFF Images with Map\_Proj\_Image Posted by David Fanning on Mon, 05 Jul 2010 21:23:17 GMT

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Folks,

I learned another detail about re-projecting TIFF images in the usual way (i.e., much confusion and consternation) last week. It's worth making note of to avoid a day's journey down unfruitful paths.

We all know by now (I think) that if you read an image out of a TIFF file, it is almost always necessary to reverse the image in the Y direction before the image is displayed.

image = Read\_Tiff(tiffFile)
TV, Reverse(image,2)

But what about warping a TIFF image to a different map projection? Should the image be reversed before it is passed to Map\_Proj\_Image, reversed \*after\* it has passed through Map\_Proj\_Image, or even reversed at all if it is to be warped?

You might think it wouldn't matter one way or the other. You would be completely wrong. :-)

I am about 95% sure that the only way to \*correctly\* warp a TIFF image to another map projection is to reverse the image before it is passed to Map\_Proj\_Image and then to not reverse it for display. If this is not done, the image looks "correct", but the georeferencing is \*totally\* wrong! (The only way I know to recognize this for sure is to try to geonavigate the resulting warped image. I use grid lines for this purpose. Without them I would be hopelessly lost with respect to knowing if the warped image is in any sense of the word "correct".)

Anyway, I wanted to get this written down before I forget it, so I have added it to the second half of this article:

http://www.dfanning.com/map\_tips/warpimage.html

I mention it here just so there is some record of it, and for those of you who are interested in this sort of thing.

Cheers,

## David

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David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Covote's Guide to IDL Programmir

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

Sepore ma de ni thui. ("Perhaps thou speakest truth.")