
Subject: An IDL Satellite Image Mapping Tool

Posted by [Liam Gumley](#) on Tue, 30 Jul 1996 07:00:00 GMT

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If you've ever tried to display a large (say 1000x1000 pixel) satellite image on a base map in IDL, then you've probably been frustrated at the lack of an easy-to-use tool. I spent many hours playing with TRIANGULATE, TRIGRID, POLY_2D, and POLYWARP, and never found a satisfactory way to do it.

In response to a question I posted to the IDL newsgroup, Hermann Mannstein suggested a solution. First, MAP_SET is used to define a map projection in the current display window. CONVERT_COORD is then used to copy pixel values from the input image to the corresponding location on the map projection. Finally DILATE is used to fill any holes in the resampled image.

The command is named IMAGEMAP, and the required input is a 2D array of satellite image values, and corresponding 2D arrays of latitude and longitude for each pixel. The image is resampled and displayed in the current graphics window. I like to use the ESRG routine W8X11 or W11X8 to create a large graphics window.

Check out <http://cimss.ssec.wisc.edu/~gumley/imagemap.html> for details, a link to the IDL source, and some example images.

Cheers,
Liam.
