
Subject: Re: ENVI Navigating GeoTiff Image Incorrectly?
Posted by guillermo.castilla.ca on Fri, 28 Oct 2011 14:20:57 GMT
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Hi David,

I think the problem could be that your tiff image does not use the upper left corner of the tie point pixel as the reference. To make sure that pixel coordinates refer to the center of the pixel as in the ENVI convention, I do the following (assuming there is no rotation):

```
ok = QUERY_TIFF(myTiff, imginfo, GEOTIFF= mapinfo)
psz=mapinfo.ModelPixelSCALETAG[0] ; pixel size
x0= mapinfo.ModelTiePointTag[3] - mapinfo.ModelTiePointTag[0]*psz
y0= mapinfo.ModelTiePointTag[4] + mapinfo.ModelTiePointTag[1]*psz
```

ModelTiePointTag[0:1] indicate whether the coordinates of the tie point refer to:

- (1) the upper left corner of the pixel
(and in this case ModelTiePointTag[0:1]=[0,0]);
- (2) the center of the pixel (ModelTiePointTag[0:1]=[0.5,0.5]); or
- (3) the lower left corner of the pixel
(ModelTiePointTag[0:1]=[0,0.5])

See if your ModelTiePointTag[0:1]=[0,0]. If not, you were wrongly assuming that the geotiff coordinates referred to the upper left corner of the tie point pixel. This might not be necessarily be the case.

Cheers

Guillermo
