Subject: Re: How to extract pixel values from a GeoTIFF using an Esri Shapefile
Posted by David Fanning on Tue, 04 Jan 2011 00:25:55 GMT
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Guillermo writes:

```
>  ; populate the mask (assumes is in the same projection
>  ;and covers the same extent as the geotiff)
>  myshape->IDLffShape::GetProperty, N_ENTITIES=n
>  FOR i=0L, n-1 DO BEGIN
>    feati=  myshape->IDLffShape::GetEntity(i)
>    featix= Round((Reform((*feati.vertices)[0,*])-x0)/psz)
>    featiy= Round((y0-Reform((*feati.vertices)[1,*]))/psz)
>    featis= POLYFILLV(featix, featiy, ns, nl)
>    IF featis[0] NE -1 THEN mask[featis]= feati.ishape +1
>  ENDFOR
```

This is nearly identical to the solution I sent Paul earlier today. The problem with IDLanROI is that it can't be used in the native projected meter coordinates that the image and shape files are in. The projected meter coordinates have to be "converted" to "pixel" coordinates by subtracting the offset and dividing by the image range, before they can be loaded in the object.

I didn't round my values, and I don't think you need to do so here, even with PolyFillV. In fact, I think you might get slightly more accurate values by not rounding, although this is a quibble with Paul's image.

I've made myself a note to write an article when I get some time. :-)

Cheers,

David

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Coyote's Guide to IDL Programming: http://www.dfanning.com/
Sepore ma de ni thui. ("Perhaps thou speakest truth.")