
Subject: Re: reading shapefiles & IDL objects

Posted by [David Fanning](#) on Wed, 21 Dec 2011 20:12:24 GMT

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desertdryad writes:

- > Ok, I've managed to read in my shapefile (I seemed to have to put my
- > shapefile where the 'states.shp' file was, at least for now).

This suggests to me that your "shape" file doesn't have all the other pieces that a shape file needs. In other words, the *.shx and *.dbf files have to be in the same directory as the *.shp file, or the shape file ain't a shape file!

- > But I'm
- > not sure how to do what I want to do with it! I want to correlate the
- > location of the entities in my shapefile with an image that covers the
- > same geographic extent. In other words, I want to know what the
- > coordinates of the entities are so that I can extract the data in the
- > image that they overlay - I don't need to draw the shapefile on the
- > image/map, but I do need to know where on the map its entities are.
- > I'm not seeing an obvious way to do that?

The simplest way is just to march through the entities and keep track of the entities's bounds. This is how cgDrawShapes works, when you set the AutoDraw keyword.

```
FOR j=0,N_Elements(*entities)-1 DO BEGIN
  thisEntity = (*entities)[j]
  entityMinX[j] = thisEntity.bounds[0]
  entityMaxX[j] = thisEntity.bounds[4]
  entityMinY[j] = thisEntity.bounds[1]
  entityMaxY[j] = thisEntity.bounds[5]
ENDFOR
xrange = [Min(entityMinX), Max(entityMaxX)]
yrange = [Min(entityMinY), Max(entityMaxY)]
cgPlot, xrange, yrange, ....
```

Cheers,

David

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Coyote's Guide to IDL Programming: <http://www.idlcoyote.com/>

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