
Subject: Re: Understanding IDLanROI

Posted by guillermo.castilla.ca on Wed, 20 Oct 2010 17:01:32 GMT

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kBob writes:

- > I am attempting to use IDLanROI to determine if Shapefiles overlap
- > another Shapefile...
- > When I tried to use the US shapefile in IDLanROI (and IDLgrROI) there
- > was a line running across the United States from the Northeast to
- > Hawaii.

I think what happened is that when you created those ROI objects, you provided the entire set of vertices that define the shape of the US as a single part, and then the last vertex of the ring defining the conterminous US got connected with the 1st vertex in Hawaii, hence the line you mention. I think the IDLanROIGroup::ContainsPoints method should work properly if you create the corresponding object by adding sequentially the parts in the US shapefile entity, providing neither of the parts are holes (e.g., imagine that Colorado had successfully opted out of the Union; the ring defining its shape would be a hole, and its vertices would be listed counterclockwise in the shapefile entity). Since afaik there are no holes in the US territory, the above method should work without having to resort to the tessellator or other graphic object classes.

But in a more general application (i.e., where there are polygons with holes), I wonder what would be the way to find out whether a point is inside a polygon that contain holes. The IDLanROIGroup cannot be used for that, as there is no way to specify that a given ROI within the groups is actually a hole. The easiest solution would be that the ITTVIS folks implement the IDLffShape::ContainsPoints method. Now that there is a larger interest to integrate image analysis with vector GIS, there is some hope that this will happen in a future release...

Guillermo
