
Subject: Understanding IDLanROI

Posted by [KRDean](#) on Fri, 08 Oct 2010 21:13:28 GMT

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I am attempting to use IDLanROI to determine if Shapefiles overlap another Shapefile.

Sometimes it works, sometimes it doesn't. Especially, if the polygon lies within the interior.

I put together a test program that retrieves the States and uses IDLanROI to determine if it lies within the US.

Why does Colorado not considered to be in the United States, among some other interior States?

Is IDLanROI not the IDL routine to use to perform this check?

Kelly Dean
Milliken, CO

```
;+  
;  
;  
;  
;  
;  
;  
;-----  
PRO ITT_PolyOverlap
```

```
states_path = FILEPATH('states.shp',SUBDIR=['resource', 'maps',  
'shape' ])  
country_path = FILEPATH('country.shp',SUBDIR=['resource', 'maps',  
'shape' ])
```

```
PRINT, states_path  
PRINT, country_path
```

```
oSHP = OBJ_NEW('IDLffShape', country_path )  
ent1 = oSHP -> GetEntity( 34, /ATTRIBUTES ) ; USA  
OBJ_DESTROY, oSHP
```

```
PRINT, ' -- Working with country : ', (*ent1.attributes).attribute_4
```

```
oSHP = OBJ_NEW('IDLffShape', states_path )  
oSHP -> GetProperty, N_ENTITIES = num_ent  
FOR staten = 0, num_ent DO BEGIN
```

```
    oSHP = OBJ_NEW('IDLffShape', states_path )
```

```
ent0 = oSHP -> GetEntity( staten, /ATTRIBUTES )

oROI = OBJ_NEW('IDLanROI', (*ent1.vertices) )
pttest = oROI -> ContainsPoints( (*ent0.vertices) )
OBJ_DESTROY, oROI

overlap = WHERE( ptTest GT 0, count )

IF ( count GT 0 ) THEN BEGIN
  PRINT, ' === ', (*ent0.attributes).attribute_1, ' inside ',
(*ent1.attributes).attribute_4, ' === ', count
ENDIF ELSE BEGIN
  PRINT, ' <<< ', (*ent0.attributes).attribute_1, ' outside ',
(*ent1.attributes).attribute_4, ' >>> ', count
ENDELSE

ENDFOR

OBJ_DESTROY, oSHP

END
```
