

QGIS Application - Bug report #9242

spatial query not giving all matches

2013-12-20 09:56 AM - arturo emiliano melchiori

Status:	Closed	
Priority:	Normal	
Assignee:		
Category:	Python plugins	
Affected QGIS version:	2.0.1	Regression?: No
Operating System:	Linux Ubuntu	Easy fix?: No
Pull Request or Patch supplied:	No	Resolution: invalid
Crashes QGIS or corrupts data:	No	Copied to github as #: 17860
Description		
<p>I am using the spatial query to select all features in a layer that "touches" another feature in another layer. As it can be seen in the picture attached, not all features are selected. Many features are not been selected, I am just showing one. With several files it is doing the same thing. One file is obtained from the other by a difference operation, so they are actually touching features. What can be wrong?</p>		

History

#1 - 2013-12-20 10:29 AM - arturo emiliano melchiori

- File *referencia.prj* added
- File *omiss.shp* added
- File *omiss.prj* added
- File *omiss.dbf* added
- File *referencia.shx* added
- File *referencia.shp* added
- File *referencia.dbf* added
- File *omiss.shx* added

Here's a sample of the layers I am operating. If I try the spatial query selecting all features in "Omiss" that touch the "referencia" there are some of them that are excluded from the result.

#2 - 2013-12-22 09:03 AM - Jukka Rahkonen

I had a try with OpenJUMP and result was the same. There seems to be a topology error in a feature on the "omiss" layer. There is a ring self-intersection at point (257889.83459895354 8888074.88550037). I suggest to repeat the test after checking and correcting the topological errors. Here is the WKT of the invalid multipolygon in the omiss.shp

```
MULTIPOLYGON (((
    257859.83396876074 8888104.886263603,
    257889.83459895354 8888104.886263603,
    257889.83459895354 8888074.88550037,
    257919.83522914632 8888074.88550037,
    257919.83522914632 8888044.884737134,
    257949.8358593391 8888044.884737134,
    257949.8358593391 8888014.883973898,
    258009.83711972472 8888014.883973898,
    258009.83711972472 8887984.883210665,
    257979.8364895319 8887984.883210665,
    257919.83522914632 8887984.883210665,
```

```
257919.83522914632 8888014.883973898,
257859.83396876074 8888014.883973898,
257859.83396876074 8888044.884737134,
257889.83459895354 8888044.884737134,
257889.83459895354 8888074.88550037,
257859.83396876074 8888074.88550037,
257859.83396876074 8888104.886263603
)), ((
258009.83711972472 8887984.883210665,
258039.8377499175 8887984.883210665,
258069.83838011028 8887984.883210665,
258069.83838011028 8888044.884737134,
258099.83901030308 8888044.884737134,
258099.83901030308 8887954.882447429,
258069.83838011028 8887954.882447429,
258009.83711972472 8887954.882447429,
258009.83711972472 8887984.883210665
)))
```

#3 - 2013-12-25 11:51 PM - Giovanni Manghi

- Resolution set to invalid
- Status changed from Open to Closed
- File clean.tar.gz added

There is also an error in the "referencia" layer that seems to be the source of the problem, as once fixed (see attached layer) the operation works ok.

#4 - 2013-12-26 02:08 AM - arturo emiliano melchiori

The problem comes from the gdal.polygonize function with the 8CONNECTED=8 option set. Both layers are build from rasters with that function. Sorry from blaming QGIS.

Files			
spatialquery.jpg	115 KB	2013-12-20	arturo emiliano melchiori
referencia.prj	397 Bytes	2013-12-20	arturo emiliano melchiori
referencia.shp	780 Bytes	2013-12-20	arturo emiliano melchiori
referencia.shx	108 Bytes	2013-12-20	arturo emiliano melchiori
omiss.dbf	285 Bytes	2013-12-20	arturo emiliano melchiori
omiss.prj	397 Bytes	2013-12-20	arturo emiliano melchiori
omiss.shp	1.13 KB	2013-12-20	arturo emiliano melchiori
omiss.shx	132 Bytes	2013-12-20	arturo emiliano melchiori
referencia.dbf	168 Bytes	2013-12-20	arturo emiliano melchiori
clean.tar.gz	1020 Bytes	2013-12-25	Giovanni Manghi