

## QGIS Application - Bug report #21567

### QGIS intersection reporting incorrect intersections & Unions

2019-03-12 02:52 PM - Glenn Fishbine

<b>Status:</b>	Closed	
<b>Priority:</b>	Normal	
<b>Assignee:</b>		
<b>Category:</b>	Processing/QGIS	
<b>Affected QGIS version:</b>	3.6.0	<b>Regression?:</b> No
<b>Operating System:</b>		<b>Easy fix?:</b> No
<b>Pull Request or Patch supplied:</b>	No	<b>Resolution:</b> invalid
<b>Crashes QGIS or corrupts data:</b>	No	<b>Copied to github as #:</b> 29383
<b>Description</b>		
<p>Issue with both QGIS Desktop with Grass 3.4.4 and 3.6.0</p> <p>I have two datasets: The U.S. county shapefile set <a href="http://www2.census.gov/geo/tiger/GENZ2017/shp/cb_2017_us_county_500k.zip">http://www2.census.gov/geo/tiger/GENZ2017/shp/cb_2017_us_county_500k.zip</a></p> <p>and the U.S. Climate Division shapefile set <a href="ftp://ftp.ncdc.noaa.gov/pub/data/cirs/climdiv/CONUS_CLIMATE_DIVISIONS.shp.zip">ftp://ftp.ncdc.noaa.gov/pub/data/cirs/climdiv/CONUS_CLIMATE_DIVISIONS.shp.zip</a></p> <p>I'm trying to use intersection (or Union) to identify for each county, what climate division(s) it is part of.</p> <p>Climate divisions do not cross state lines by definition.</p> <p>With intersection, my expectation is that a county will be in one or more climate divisions since climate divisions do not always enclose a county.</p> <p>When I do the intersection I get some strange results.</p> <p>Vector--&gt;Geoprocessing Tools--&gt;Intersection, input layer is counties, overlay layer is Climate divisions.</p> <p>I also have an error report of an invalid geometry so I've turned on ignore features with invalid geometries.</p> <p>Processing--&gt;Processing--&gt;General--&gt;Invalid features filtering Skip (ignore) features with invalid geometries. There appears to be one invalid geometry in the Climate file.</p> <p>Example:</p> <p>Barbour County is a county in Alabama.</p> <p>When I look at the resulting database from the intersection or union, I get three records.</p> <p>2 of them appear to be correct in Alabama, and there is a 3rd that appears to be incorrect in Georgia.</p> <p>When I look at Choctaw county, which is in Alabama, I get 3 records</p> <p>2 of them appear to be correct in Alabama, but there is a 3rd that appears to be incorrect in Mississippi</p> <p>Overall there are of 7,404 polygons generated by the intersection, over 1,000 which have a state mismatch.</p>		

#### History

#1 - 2019-03-12 03:12 PM - Giovanni Manghi

- Resolution set to invalid
- Crashes QGIS or corrupts data changed from Yes to No
- Status changed from Open to Closed

- Category changed from Processing/Core to Processing/QGIS

*Example:*

*Barbour County is a county in Alabama.*

*When I look at the resulting database from the intersection or union, I get three records.*

*2 of them appear to be correct in Alabama, and there is a 3rd that appears to be incorrect in Georgia.*

*When I look at Choctaw county, which is in Alabama, I get 3 records*

*2 of them appear to be correct in Alabama, but there is a 3rd that appears to be incorrect in Mississippi*

*Overall there are of 7,404 polygons generated by the intersection, over 1,000 which have a state mismatch.*

there is no error,

the borders of your input layers do not match perfectly, so for example you have small parts of your climate divisions that instead of matching perfectly a state border do overshoot them...