

QGIS Application - Bug report #4415

Centroid in fTools different form centroid fill

2011-10-21 02:56 AM - Paolo Cavallini

Status: Closed	
Priority: Normal	
Assignee:	
Category: Documentation and Help	
Affected QGIS version: master	Regression?: No
Operating System:	Easy fix?: No
Pull Request or Patch supplied:	Resolution: fixed/implemented
Crashes QGIS or corrupts data:	Copied to github as #: 14347
Description	
the centroid, as calculated by fTools, is not in the same location as the centroid shown by the centroid fill. The difference is easily explained in the case of multipolygons, much less obvious in case of a compact single polygon	

History

#1 - 2011-10-21 02:57 AM - Paolo Cavallini

From the ML (thanks cfarmer):

IIRC, the centroid as returned by fTools is based on the GEOS centroid calculation, whose documentation states:

Based on the usual algorithm for calculating the centroid as a weighted sum of the centroids of a decomposition of the area into (possibly overlapping) triangles. The algorithm has been extended to handle holes and multi-polygons. See <http://www.faqs.org/faqs/graphics/algorithms-faq/> for further details of the basic approach.

Not sure how the centroid fill centroid is calculated, but obviously not the same?

#2 - 2011-10-24 06:39 AM - Giovanni Manghi

- Status changed from Open to Feedback

The explanation of the different behavior has been given in the dev mailing list, closing?

#3 - 2011-12-16 02:10 PM - Giovanni Manghi

- Target version set to Version 1.7.4

#4 - 2011-12-27 12:04 PM - Giovanni Manghi

- Affected QGIS version set to master

- Crashes QGIS or corrupts data set to No

Martin Dobias said:

"The centroid fill uses the same formula. The differences are:

1. centroid fill calculates the centroid for each polygon of multipolygon separately
2. centroid fill takes into account the polygons clipped to area visible for rendering
3. centroid fill does not consider holes."

Suggestion: document this difference and close this ticket. Leave feedback.

#5 - 2012-04-16 06:29 AM - Paolo Cavallini

- Target version changed from Version 1.7.4 to Version 1.8.0

#6 - 2012-09-04 11:56 AM - Paolo Cavallini

- Target version changed from Version 1.8.0 to Version 2.0.0

#7 - 2013-09-09 05:44 AM - Paolo Cavallini

- Status changed from Feedback to Open
- Category changed from Symbology to Documentation and Help

This can be closed when properly documented.

#8 - 2014-06-28 07:41 AM - Jürgen Fischer

- Target version changed from Version 2.0.0 to Future Release - Lower Priority

#9 - 2017-05-01 01:10 AM - Giovanni Manghi

- Regression? set to No
- Easy fix? set to No

#10 - 2017-05-14 08:49 AM - Harrissou Santanna

- Resolution set to fixed/implemented
- Status changed from Open to Closed

Fixed in <https://github.com/qgis/QGIS-Documentation/pull/1880>