

## QGIS Application - Bug report #18219

### Delaunay Triangulation and Voronoi Polygons do not work

2018-02-26 11:45 AM - Basil Eric Rabi

<b>Status:</b>	Closed	
<b>Priority:</b>	High	
<b>Assignee:</b>		
<b>Category:</b>	Processing/QGIS	
<b>Affected QGIS version:</b>	3.0.0	<b>Regression?:</b> Yes
<b>Operating System:</b>		<b>Easy fix?:</b> No
<b>Pull Request or Patch supplied:</b>		<b>Resolution:</b>
<b>Crashes QGIS or corrupts data:</b>		<b>Copied to github as #:</b> 26110
<b>Description</b>		
<p>Delaunay Triangulation and Voronoi Polygon do not work.</p> <p>This previously worked flawlessly in 2.18.16.</p> <p>Built qgis rpm using rpm/buildrpms.sh.</p> <p>Sample data attached.</p>		

#### Associated revisions

##### Revision ca001741 - 2018-08-07 08:48 PM - Håvard Tveite

[processing] Update the comparison implementation in voronoi.py (fixes #18219)

When "translating" the cmp function of Site and Halfedge to Python 3, the *lt* function was forgotten. It has been added.

##### Revision ce3cba1f - 2018-08-08 11:28 AM - Håvard Tveite

[processing] Update the comparison implementation in voronoi.py (fixes #18219)

When "translating" the cmp function of Site and Halfedge to Python 3, the *lt* function was forgotten. It has been added.

(cherry-picked from ca00174)

#### History

##### #1 - 2018-02-26 12:40 PM - Basil Eric Rabi

- File DH.dbf added
- File DH.shp added
- File DH.prj added
- File DH.shx added
- File DH.qpj added
- File DH.cpg added

Re-uploading a sample data that works in 2.18.16 (Something's wrong with tmpDF shapefile).

Regression is also present in Windows. Tested the stand-alone 3.0.0 installer.

##### #2 - 2018-03-03 11:08 AM - Giovanni Manghi

- Category changed from Python plugins to Processing/QGIS

- Operating System deleted (fedora 27)
- Priority changed from Normal to High
- Subject changed from Geometry Tools Delaunay Triangulation and Voronoi Polygon do not work to Delaunay Triangulation and Voronoi Polygons do not work

Connfirmed.

#3 - 2018-08-03 04:34 PM - Håvard Tveite

The problem seems to be in python/plugins/processing/algs/qgis/voronoi.py.

#4 - 2018-08-07 09:49 AM - Håvard Tveite

I think I have found the error in voronoi.py.  
When translating the cmp method of Site and Halfedge from Python 2 to Python 3, the *gt* function that is used by the > operator in the cmp method was not implemented. I fixed this in <https://github.com/qgis/QGIS/pull/7554>. With this change, the Voronoi diagram of the DH dataset seems to be correctly generated.

#5 - 2018-08-07 03:46 PM - Basil Eric Rabi

I just tested the patch, it works great! I hope it will be merged soon. Thank you!

#6 - 2018-08-07 08:47 PM - Håvard Tveite

- % Done changed from 0 to 100
- Status changed from Open to Closed

Applied in changeset commit:qgis|ca0017410b8446c160b51121e546ac5fb118e6f0.

Files			
tmpDF.dbf	13.6 KB	2018-02-26	Basil Eric Rabi
tmpDF.prj	418 Bytes	2018-02-26	Basil Eric Rabi
tmpDF.qpj	681 Bytes	2018-02-26	Basil Eric Rabi
tmpDF.shx	220 Bytes	2018-02-26	Basil Eric Rabi
tmpDF.shp	1.04 KB	2018-02-26	Basil Eric Rabi
DH.cpg	5 Bytes	2018-02-26	Basil Eric Rabi
DH.prj	418 Bytes	2018-02-26	Basil Eric Rabi
DH.qpj	681 Bytes	2018-02-26	Basil Eric Rabi
DH.shp	47.7 KB	2018-02-26	Basil Eric Rabi
DH.shx	13.7 KB	2018-02-26	Basil Eric Rabi
DH.dbf	1.51 MB	2018-02-26	Basil Eric Rabi