QGIS Application - Bug report #16820
Wrong area calculations in 2.18.10 - they are correct in 2.18.1

2017-07-09 03:27 PM - magerlin -

Status:	Closed		
Priority:	High		
Assignee:			
Category:	Field calculator		
Affected QGIS version:	2.18.10	**Regression?:**	Yes
Operating System:	Win 7, 64 bit	**Easy fix?:**	No
Pull Request or Patch supplied:	No	**Resolution:**	
Crashes QGIS or corrupts data:	Yes	**Copied to github as #:**	24719

Description

Calculating polygon areas in version 2.18.10 in the field calculator using $area may lead to areas that are far wrong (factor 100) compared to calculation using Area($geometry). Version 2.18.1 does not have this error - See attached screenshot of attribute table where the area calculations are:

Area: $area in version 2.18.10
Area_planM: area($geometry) in version 2.18.10

Area_21801: $area in version 2.18.1
Ar_21801_PL: ea($geometry) in version 2.18.1

Associated revisions

Revision d8503936 - 2017-07-10 01:31 AM - Nyall Dawson

Fix incorrect area calculation in corner cases (fix #16820)

In certain circumstances very proximal nodes could cause instability
in the ellipsoidal area calculation.

Port (slightly tweaked) fix from grass changeset 71167 for same issue,
and add a unit test

Revision 61bb2ac0 - 2017-07-10 02:06 AM - Nyall Dawson

Merge pull request #4828 from nyalldawson/fix_16820

Fix incorrect area calculation in corner cases (fix #16820)

Revision a0d64129 - 2017-07-10 02:40 AM - Nyall Dawson

Fix incorrect area calculation in corner cases (fix #16820)

In certain circumstances very proximal nodes could cause instability
in the ellipsoidal area calculation.

Port (slightly tweaked) fix from grass changeset 71167 for same issue,
and add a unit test

(cherry-picked from d850393)

Revision e6dc103c - 2017-07-10 03:59 AM - Nyall Dawson

Merge pull request #4829 from nyalldawson/fix_16820_218

Fix incorrect area calculation in corner cases (fix #16820)

History

#1 - 2017-07-09 03:29 PM - Giovanni Manghi

- Status changed from Open to Feedback

Can you say if the area values were right in any 2.18 release after 2.18.1 and before 2.18.10? thanks.

#2 - 2017-07-09 04:12 PM - Giovanni Manghi

- File Screenshot_20170709_151130.png added

Just made a test on 2.18.10 in Linux and results are identical with the two formulas and identical to the ones you show for 2.18.1

#3 - 2017-07-09 04:16 PM - Giovanni Manghi

- File Screenshot_20170709_151638.png added

Did the same on Win7, same results.

#4 - 2017-07-10 02:06 AM - Nyall Dawson

- % Done changed from 0 to 100

- Status changed from Feedback to Closed

Applied in changeset commit:qgis|d85039363a552b901da81467f45925f183bd50a6.

Files

Test_Area[1].zip	4.56 KB	2017-07-09	magerlin -
Screenshot_2017-07-06_18.png	43.8 KB	2017-07-09	magerlin -
Screenshot_20170709_151130.png	174 KB	2017-07-09	Giovanni Manghi
Screenshot_20170709_151638.png	172 KB	2017-07-09	Giovanni Manghi