QGIS Application - Bug report #14301

simplification makes geometry-based expression values (such as \$area) vary for symbology and labels

2016-02-15 07:06 PM - Mathieu Pellerin - nIRV

Status: Closed Priority: Normal

Assignee:

Category: Simplification

Affected QGIS version:masterRegression?:NoOperating System:Easy fix?:No

Pull Request or Patch supplied: Resolution:

Crashes QGIS or corrupts data: Copied to github as #: 22292

Description

When simplification is activated for a given vector layer, geometry-based expression values - such as \$area - will vary within a symbology or label context when the zoom level in changed. I haven't looked at the code, but what I'm assuming happens here is that the expression is run against the simplified geometry, leading to varying values as the geometry is morphed.

That's a significant shortcoming that would be worth addressing. I discovered this when a number of polygons were going missing in a project using a density-based expression to make a graduated symbology.

I'm attaching a small test project to this issue that shows a polygon disappearing when zooming out (due to simplified polygon having an erroneous \$area value).

Steps to reproduce

- 1. Open the attached project
- 2. Notice the rule-based expression being used: (\$area / 10000) > 1309 AND (\$area / 10000) < 1310
- 3. Zoom out onto the canvas a couple of times, you'll see the polygon go missing

If you change the symbology to a single symbol, you can zoom in and out and notice the label (which shows the result of the following expression: \$area / 10000) value varies as the simplified polygon returns different \$area values.

Associated revisions

Revision d4a482b9 - 2016-05-27 04:34 PM - Nyall Dawson

Merge pull request #2900 from ahuarte47/Issue_QPainterSimplification

[Bugfix] QPainter simplification (fixes #14301)

History

#1 - 2016-03-11 03:16 AM - Alvaro Huarte

Hi, I would like to propose this pull [https://github.com/qgis/QGIS/pull/2900] to fix the issue.

Best regards

Alvaro

#2 - 2016-05-27 07:35 AM - Nyall Dawson

- Status changed from Open to Closed

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Files

expression_area_simplification.zip 311 KB 2016-02-15 Mathieu Pellerin - nIRV

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