QGIS Application - Bug report #15943
Hillshade renderer artifacts

2016-12-06 12:22 PM - Paolo Cavallini

Status:	Open			
Priority:	Normal			
Assignee:				
Category:	Symbology			
Affected QGIS version:	3.0.0		**Regression?:**	No
Operating System:	Debian		**Easy fix?:**	No
Pull Request or Patch supplied:	No		**Resolution:**	
Crashes QGIS or corrupts data:	No		**Copied to github as #:**	23859

Description

Borders of cells are visible. See attached.

Possibly more apparent in master, but present since the beginning.

History

#1 - 2017-05-01 01:02 AM - Giovanni Manghi

- Regression? set to No

- Easy fix? set to No

#2 - 2018-01-12 10:52 AM - Johannes Kroeger

That's a highly zoomed-in view (much closer than 1:1 scale) of a hillshaded raster with Nearest Neighbor resampling. I am not sure if this is a bug.

A simple workaround (or solution?) is to set the resampling to Bilinear or Cubic.

#3 - 2018-01-12 10:57 AM - Johannes Kroeger

- File nn vs bilinear.png added

Example image at about 3:1 scale.

#4 - 2018-02-15 06:40 AM - Alister Hood

- Description updated

Also affects 2.18.16.

I am pretty sure we can call it a bug - there is no reason a hillshade should need cell borders, and if you create an actual hillshade layer (e.g. using the gdal hillshade tool) it won't have them.

#5 - 2018-02-20 07:43 AM - Alister Hood

Johannes Kroeger wrote:

> *A simple workaround (or solution?) is to set the resampling to Bilinear or Cubic.*

It is a workaround, not a solution ;)

Also, unless I'm missing something there is no way to get rid of these artefacts in a 3D map in master.

#6 - 2018-02-20 08:33 AM - Alister Hood

Alister Hood wrote:

> *there is no reason a hillshade should need cell borders*

Except they aren't borders as such, they are hillshading applied at the edges of the individual raster cells. I haven't looked at how hillshading algorithms work in gdal or wherever - maybe they actually incorporate smoothing, in which case the solution here would probably be to always enable smoothing for the hillshade renderer.

#7 - 2018-02-25 11:14 PM - Giovanni Manghi

- Affected QGIS version changed from master to 3.0.0

Files

hillshade.png	221 KB	2016-12-06	Paolo Cavallini
nn vs bilinear.png	126 KB	2018-01-12	Johannes Kroeger