

QGIS Application - Bug report #21023

Truncated decimals in raster data set pixel size

2019-01-17 04:39 PM - Nicolas Cadieux

Status: Closed	
Priority: Normal	
Assignee: Alexander Bruy	
Category: Rasters	
Affected QGIS version: 3.4.3	Regression?: No
Operating System:	Easy fix?: No
Pull Request or Patch supplied: Yes	Resolution: fixed/implemented
Crashes QGIS or corrupts data: No	Copied to github as #: 28842
Description	
<p>Reported data set pixel Size (Layer property -> Information -> Pixel Size) are truncated to 9 decimals. When this information is copied in order to create a new raster, it results in a significant shift in the raster for VERY large data sets (up to 30m on the right side of my data set). I imagine that this information is derived from GDAL's geotransform components which is stored as a IEEE-754 64bit number as confirmed to me by Even Rouault. Pixel size should be reported with 19 decimal significant figures ('%.19g' C formatting) to keep the original precision of a IEEE-754 64bit number. Layer extent should also be reported using the original decimal number if it is not already the case.</p> <p>In python, this would be the equivalent of using this: <code>xPixelSize= str(Decimal(geotransform¹).quantize(Decimal("1.00000000000000000000")))</code> instead of <code>xPixelSize= str(geotransform¹)</code></p>	

Associated revisions

Revision 3c2a20a9 - 2019-01-27 09:14 PM - Alexander Bruy

show pixel size in the raster layer properties with 19 significant digits (fix #21023)

Revision c05c2c71 - 2019-01-29 04:35 PM - Alexander Bruy

show pixel size in the raster layer properties with 19 significant digits (fix #21023)

(cherry picked from commit 3c2a20a9484cbe3f1117a692757e552e88e6195c)

History

#1 - 2019-01-17 05:23 PM - Giovanni Manghi

- Easy fix? changed from Yes to No
- Category changed from GUI to Rasters

#2 - 2019-01-27 10:29 AM - Alexander Bruy

- Operating System deleted (Windows 10_64)
- Pull Request or Patch supplied changed from No to Yes
- Assignee set to Alexander Bruy
- Status changed from Open to In Progress

PR <https://github.com/qgis/QGIS/pull/8996>

#3 - 2019-01-27 09:13 PM - Alexander Bruy

- % Done changed from 0 to 100

- Status changed from In Progress to Closed

Applied in changeset commit:qgis|3c2a20a9484cbe3f1117a692757e552e88e6195c.

#4 - 2019-01-28 07:34 AM - Alexander Bruy

- Resolution set to fixed/implemented