

QGIS Application - Bug report #14582

The extent of the raster layers is not preserved and rounded to integer with GRASS7 tools in the Processing Toolbox.

2016-03-29 05:45 AM - Olivier ATHIMON

Status:	Closed	
Priority:	Normal	
Assignee:		
Category:	Processing/GRASS	
Affected QGIS version:	master	Regression?: No
Operating System:		Easy fix?: No
Pull Request or Patch supplied:		Resolution:
Crashes QGIS or corrupts data:		Copied to github as #: 22553
Description		
<u>With QGIS 2.14.0/1... and GRASS 7.0.3</u> (and GRASS 6.4.4 without problem)		
In the calculations made with the " <u>Processing Toolbox > GRASS7 > Raster (r.*)</u> ", the raster layer extent is rounded to integer.		
So, if i have a dem, the extent before processing can be this:		
"Layer Extent (layer original source projection) 358759.5 0000000000000000, 6290967.5 0000000000000000 : 359280.5 0000000000000000, 6291316.5 0000000000000000"		
and provide, for a processing (r.resample, r.mapcalculator, r. ...) with GRASS7, this result:		
"Layer Extent (layer original source projection) 358759.0 0000000000000000, 6290967.0 0000000000000000 : 359281.0 0000000000000000, 6291317.0 0000000000000000"		
For information: i have choosen to keep the input coordinates with this option: [Leave blank to use min covering extent]		
<u>On the contrary, the extent (with decimal) seems to be kept with the same functions under "Processing Toolbox/GRASS6".</u>		

Associated revisions

Revision 75c76f51 - 2016-05-23 08:49 AM - ninsbl

[processing] Don't round grass7 extent and resolution to integer

fix #14582

See: <https://hub.qgis.org/issues/14582>

The commit removes the a-flag when the grass region for raster analysis is set. The a-flag causes in some cases unwanted rounding of raster extend / resolution, and should not be set hardcoded in processing. It is usually used in combination with the "res" option.

For aligning the pixels of the GRASS region to a specific raster, the align option should be used (and not the a-flag). See:

<https://grass.osgeo.org/grass70/manuals/g.region.html>

GRASS 6.4 algs do not use the a-flag either, which explains why this bug appears only for GRASS 7.

History

#1 - 2016-04-08 04:28 AM - Alexander Bruy

- Status changed from Open to Feedback

Does it works if you run this command directly in GRASS?

#2 - 2016-04-14 07:06 AM - Giovanni Manghi

- Affected QGIS version changed from 2.14.0 to master
- Target version deleted (Future Release - High Priority)
- Priority changed from High to Normal
- Status changed from Feedback to Open

apparently in native GRASS there is no rounding in outputs extent.

#3 - 2016-05-22 02:56 AM - Stefan Blumentrath

Rounding happens because -a flag is given in the g.region command in Grass7Algorithm.py. The -a flag is most useful for rasterizing vector input (e.g. LiDAR point clouds). If you want to align the processing to the cells of an input raster, use the "align" option.

See: <https://grass.osgeo.org/grass70/manuals/g.region.html>

#4 - 2016-05-22 03:01 PM - Stefan Blumentrath

See: PR 3090

#5 - 2016-05-22 11:50 PM - Anonymous

- Status changed from Open to Closed

Fixed in changeset commit:"75c76f51f17d88226fb86826e9aa8c4d96eedb5a".

#6 - 2016-05-23 12:55 AM - Olivier ATHIMON

- Assignee deleted (Victor Olaya)

Thank you very much.

Files

Dem.tif	187 KB	2016-03-29	Olivier ATHIMON
dem_r_resample6.tif	412 KB	2016-03-29	Olivier ATHIMON
dem_r_resample7.tif	413 KB	2016-03-29	Olivier ATHIMON