QGIS Application - Bug report #8607
saga grid volume algorithm

2013-09-13 05:08 AM - matteo ghetta

Status:	Closed		
Priority:	Normal		
Assignee:	Victor Olaya		
Category:	Processing/Core		
Affected QGIS version:	master	**Regression?:**	No
Operating System:		**Easy fix?:**	No
Pull Request or Patch supplied:	No	**Resolution:**	invalid
Crashes QGIS or corrupts data:	No	**Copied to github as #:**	17348

Description

No output produced (only visible in the results dialog).

Associated revisions

Revision 195d98f4 - 2019-01-21 02:33 AM - Nyall Dawson

[needs-docs][processing] Port SAGA raster surface volume to native QGIS alg

The SAGA version of this algorithm is of limited use in QGIS, because the volume calculated is embedded only in the SAGA terminal output. This prevents it being saved to a file, or reused within a model as an input to a later model step.

It's also very user-unfriendly, because users must know to manually scan the algorithm log to find the SAGA output.

Given that the maths here is trivial, this commit ports the algorithm across to be a native QGIS c++ algorithm. The algorithm duplicates the SAGA alg 1:1, but outputs the volume (and area) to either a HTML report, or a vector table. Additionally, the outputs are exported as numeric outputs from the algorithm, allowing them to be re-used within models.

(It's also considerably faster, because it avoids the forced conversion to SAGA raster format)

Fixes #8607 (properly, even though that report is closed)

History

#1 - 2013-09-13 10:53 AM - Giovanni Manghi

- Status changed from Open to Feedback

that is, the module produces as output just a value, printing it on screen. Try it from the command line. I don't know if this can be made more clear in Sextante.

#2 - 2014-06-22 02:32 AM - Giovanni Manghi

- Resolution set to invalid

- Status changed from Feedback to Closed

closing for lack of feedback.

#3 - 2014-06-23 03:02 AM - matteo ghetta

- Status changed from Closed to Reopened

Confirmed the lack of output.

Tried with all the 4 parameters: result appears only in the LOG tab.

This is the output with a sample raster:

Grid system: 87.854333; 3252x 1721y; 515820.302167x 4847813.060164y

Grid: DEM_ER

Method: Add Volumes Below Base Level

Base Level: 0.000000

Grid Volume: Volume: 6420566440784.032227

Inconsistency detected by ld.so: dl-close.c: 762: _dl_close: Assertion `map->l_init_called' failed!

Converting outputs

Loading resulting layers

Algorithm Grid volume finished

#4 - 2014-06-23 09:36 AM - Giovanni Manghi

- Status changed from Reopened to Closed

the module has no other output and as far as I know we cannot output to html with SAGA (like it happens in GRASS, broke anyway). Compare this two, the first (grid volume) has no output parameter, while the other (example, grid sum) has it

    giovanni@sibirica ~/Desktop $ saga_cmd grid_calculus 2

    _____

     ##### ## ##### ##
     ###   ### ##   ###
     ### # ## ## #### # ##
      ### ##### ##   # #####
     ##### # ## ##### # ##

    _____

    _____

    library path: /usr/lib/saga/libgrid_calculus.so

    library name: Grid - Calculus

    module name :   Grid Volume

    author   :   (c) 2005 by O.Conrad

    _____

    Usage: saga_cmd -GRID <str> [-METHOD <str>] [-LEVEL <str>]

     -GRID:<str>   Grid

Grid (input)
 -METHOD:<str>   Method
   Choice
   Available Choices:
   [0] Count Only Above Base Level
   [1] Count Only Below Base Level
   [2] Subtract Volumes Below Base Level
   [3] Add Volumes Below Base Level
   Default: 0
 -LEVEL:<str>   Base Level
   Floating point
   Default: 0.000000

giovanni@sibirica ~/Desktop $ saga_cmd grid_calculus 8

_____

  ##### ## #####   ##
 ###   ### ##   ###
 ### # ## ## #### # ##
  ### ##### ##   # #####
 ##### # ## ##### # ##

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_____
library path: /usr/lib/saga/libgrid_calculus.so
library name: Grid - Calculus
module name :   Grids Sum
author   :   O. Conrad (c) 2010

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Usage: saga_cmd -GRIDS <str> [-RESULT <str>]
 -GRIDS:<str>   Grids
   Grid list (input)
 -RESULT:<str>   Sum
   Grid (output)

#5 - 2014-11-13 07:47 PM - changyuchuan cyc

- File 2014-11-14_114547.jpg added

go to **Rrocessing** -> **Options** -> **general** -> confirme item no.5

PS: my qis version is 2.6.0

#6 - 2015-06-07 04:32 AM - Giovanni Manghi

- Category changed from 94 to Processing/Core

Files

2014-11-14_114547.jpg	77.8 KB	2014-11-13	changyuchuan cyc