

QGIS Application - Bug report #12517

Raster layer statistics SAGA module not working on Processing

2015-04-06 09:51 AM - Paolo Cavallini

Status:	Closed	
Priority:	Normal	
Assignee:	Victor Olaya	
Category:	Processing/SAGA	
Affected QGIS version:	2.8.1	Regression?: No
Operating System:	Ubuntu 12.04 LTS	Easy fix?: No
Pull Request or Patch supplied:	No	Resolution:
Crashes QGIS or corrupts data:	No	Copied to github as #: 20662

Description

See the log:

Output della console di esecuzione di SAGA

Error: no grids in selection

Error: executing tool [Statistics for Grids]

```
1. ## ##### ##

1. ### ##   ###
2. # ## ## ##### ##
3. ##### ## # #####
   1. # ## ##### # ##
```

SAGA Version: 2.1.4

library path: /usr/lib/x86_64-linux-gnu/saga/

library name: libstatistics_grid

library : Grids

tool : Statistics for Grids

author : O.Conrad (c) 2005

processors : 4 [4]

Load grid: /tmp/processing/7faba3084eca4dc89a573271c4cd05b4/dem25.sgrd...

Parameters

Grid system: 25; 601x 410y; 262859.025725x 4454037.5y

Grids: 1 object (dem25)

Arithmetic Mean: Arithmetic Mean

Minimum: Minimum

Maximum: Maximum

Range: <not set>

Sum: <not set>

Variance: Variance

Standard Deviation: Standard Deviation

Mean less Standard Deviation: Mean less Standard Deviation
Mean plus Standard Deviation: Mean plus Standard Deviation
Percentile: <not set>
Percentile: 50.000000

Error: Grid file could not be opened.
Error: executing tool [GDAL: Export Raster]

```
1. ## ##### ##  
  
1. ### ##   ###  
2. # ## ## ##### # ##  
3. ##### ## # #####  
   1. # ## ##### # ##
```

SAGA Version: 2.1.4

library path: /usr/lib/x86_64-linux-gnu/saga/
library name: libio_gdal
library : GDAL/OGR
tool : GDAL: Export Raster
author : O.Conrad (c) 2007
processors : 4 [4]

Load grid: /tmp/processing/9674cad24de5457c90abfae3a89f9007/MEAN.tif.sgrd...
failed
GDAL: Export Raster: could not initialize data objects
Error: Grid file could not be opened.
Error: executing tool [GDAL: Export Raster]

```
1. ## ##### ##  
  
1. ### ##   ###  
2. # ## ## ##### # ##  
3. ##### ## # #####  
   1. # ## ##### # ##
```

SAGA Version: 2.1.4

library path: /usr/lib/x86_64-linux-gnu/saga/
library name: libio_gdal
library : GDAL/OGR
tool : GDAL: Export Raster
author : O.Conrad (c) 2007
processors : 4 [4]

Load grid: /tmp/processing/583586ef0928494b9bb70907bcf6db24/MIN.tif.sgrd...

failed

GDAL: Export Raster: could not initialize data objects

Error: Grid file could not be opened.

Error: executing tool [GDAL: Export Raster]

1. ## ##### ##

1. ### ## ###

2. # ## ## ##### # ##

3. ##### ## # #####

1. # ## ##### # ##

SAGA Version: 2.1.4

library path: /usr/lib/x86_64-linux-gnu/saga/

library name: libio_gdal

library : GDAL/OGR

tool : GDAL: Export Raster

author : O.Conrad (c) 2007

processors : 4 [4]

Load grid: /tmp/processing/cfbb8cc2f86c4979acf1b9e5f5f23de1/MAX.tif.sgrd...

failed

GDAL: Export Raster: could not initialize data objects

Error: Grid file could not be opened.

Error: executing tool [GDAL: Export Raster]

1. ## ##### ##

1. ### ## ###

2. # ## ## ##### # ##

3. ##### ## # #####

1. # ## ##### # ##

SAGA Version: 2.1.4

library path: /usr/lib/x86_64-linux-gnu/saga/

library name: libio_gdal

library : GDAL/OGR

tool : GDAL: Export Raster

author : O.Conrad (c) 2007

processors : 4 [4]

Load grid: /tmp/processing/61f6b0e430664ddb8ad7d138334bb116/VAR.tif.sgrd...

failed

GDAL: Export Raster: could not initialize data objects

Error: Grid file could not be opened.

Error: executing tool [GDAL: Export Raster]

1. ## ##### ##

1. ### ## ###

2. # ## ## ##### # ##

3. ##### ## # #####

1. # ## ##### # ##

SAGA Version: 2.1.4

library path: /usr/lib/x86_64-linux-gnu/saga/

library name: libio_gdal

library : GDAL/OGR

tool : GDAL: Export Raster

author : O.Conrad (c) 2007

processors : 4 [4]

Load grid: /tmp/processing/e9983a4b236f491b8544b4f406692b21/STDDEV.tif.sgrd...

failed

GDAL: Export Raster: could not initialize data objects

Error: Grid file could not be opened.

Error: executing tool [GDAL: Export Raster]

1. ## ##### ##

1. ### ## ###

2. # ## ## ##### # ##

3. ##### ## # #####

1. # ## ##### # ##

SAGA Version: 2.1.4

library path: /usr/lib/x86_64-linux-gnu/saga/

library name: libio_gdal

library : GDAL/OGR

tool : GDAL: Export Raster

author : O.Conrad (c) 2007

processors : 4 [4]

Load grid: /tmp/processing/c3ab01f76ead4674ade3ce80bbc240ae/STDDEVLO.tif.sgrd...

failed

GDAL: Export Raster: could not initialize data objects
Error: Grid file could not be opened.
Error: executing tool [GDAL: Export Raster]

1. ## ##### ##

1. ### ## ###

2. # ## ## ##### # ##

3. ##### ## # #####

1. # ## ##### # ##

SAGA Version: 2.1.4

library path: /usr/lib/x86_64-linux-gnu/saga/

library name: libio_gdal

library : GDAL/OGR

tool : GDAL: Export Raster

author : O.Conrad (c) 2007

processors : 4 [4]

Load grid: /tmp/processing/77e755b712a9491d86e0e6bae205c2a0/STDDEVH1.tif.sgrd...

failed

GDAL: Export Raster: could not initialize data objects

History

#1 - 2015-04-07 09:42 AM - Paolo Cavallini

See possible explanations here: <http://sourceforge.net/p/saga-gis/wiki/Compatibility%202.1.3/>

#2 - 2015-04-09 04:21 AM - Giovanni Manghi

- Status changed from Open to Feedback

- Resolution set to up/downstream

There is nothing wrong in Processing with this module. In SAGA 2.1.4 there are only a few new parameters and this is the new description file

Statistics for Grids

statistics_grid

ParameterMultipleInput|GRIDS|Grids|3|False

ParameterNumber|PCTL_VAL|Percentile|0.0|100.0|50.0

OutputRaster|MEAN|Arithmetic Mean

OutputRaster|MIN|Minimum

OutputRaster|MAX|Maximum

OutputRaster|VAR|Variance

OutputRaster|SUM|Sum

OutputRaster|RANGE|Range

OutputRaster|PCTL|Percentile

OutputRaster|STDDEV|Standard Deviation
OutputRaster|STDDEVLO|Mean less Standard Deviation
OutputRaster|STDDEVHI|Mean plus Standard Deviation

the problem is that this module SAGA does not creates any output.

This:

```
saga_cmd io_gdal -TRANSFORM -INTERPOL 0 -GRIDS "mdt.sgrd" -FILES "mdt.tif"
```

imports correctly the raster in the SAGA data model, but then

```
saga_cmd statistics_grid "Statistics for Grids" -GRIDS "mdt.sgrd" -PCTL_VAL 50 -MEAN "MEAN.tif.sgrd"
```

do not create any output and do not give any error.

#3 - 2015-04-09 05:15 AM - Giovanni Manghi

- Status changed from Feedback to Closed

The description has been updated, now is a SAGA issue.

#4 - 2015-04-09 10:58 PM - Paolo Cavallini

- Status changed from Closed to Feedback

Could you please open a ticket upstream? Thanks.

#5 - 2015-04-10 09:46 AM - Giovanni Manghi

- Status changed from Feedback to Closed

Paolo Cavallini wrote:

| Could you please open a ticket upstream? Thanks.

for some reason I'm unable to login on sourceforge and file a ticket there.

#6 - 2015-04-10 09:51 AM - Paolo Cavallini

<https://sourceforge.net/p/saga-gis/bugs/203/>

#7 - 2015-04-13 08:00 AM - Paolo Cavallini

- Resolution deleted (up/downstream)

- Status changed from Closed to Reopened

with the command above you should see an error: "no grids in selection". The reason is that the tool requires at least two input grids in order to calculate cell statistics. For a test you can simply provide the input grid two times:

```
saga_cmd statistics_grid "Statistics for Grids" -GRIDS "mdt.sgrd;mdt.sgrd" -MEAN "MEAN.tif.sgrd"
```

see link above

#8 - 2015-04-14 04:17 AM - Giovanni Manghi

- Status changed from Reopened to Closed
- Resolution set to invalid

Paolo Cavallini wrote:

| with the command above you should see an error: "no grids in selection".

no such error message in the saga command line output

| The reason is that the tool requires at least two input grids in order to calculate cell statistics. For a test you can simply provide the input grid two times:

```
saga_cmd statistics_grid "Statistics for Grids" -GRIDS "mdt.sgrd;mdt.sgrd" -MEAN "MEAN.tif.sgrd"
```

| see link above

so there is nothing to fix: the processing module already allows choose multiple raster inputs (and is you do it works). There is no way (as far as I know) to force two, or at least two, but this is another issue.

#9 - 2015-04-14 05:17 AM - Paolo Cavallini

- Resolution deleted (invalid)
- Status changed from Closed to Reopened

The command is still not working properly, as the user should be forced to send the correct input. Please do not close it.

#10 - 2015-04-15 04:26 AM - Giovanni Manghi

- Status changed from Reopened to Closed

Paolo Cavallini wrote:

| The command is still not working properly, as the user should be forced to send the correct input.

see #12580

| Please do not close it.

the module works if you choose at least two raster inputs, as you suggests. The issue is the missing check for the minimum number of inputs, but this does not mean that this module is not working because of a wrong definition. An additional (mandatory) raster input cannot be used as workaround because this SAGA module do not allow it, the only possible input option is a single grid list

Usage: `saga_cmd statistics_grid 4 -GRIDS <str> [-MEAN <str>] [-MIN <str>] [-MAX <str>] [-RANGE <str>] [-SUM <str>] [-VAR <str>] [-STDDEV <str>] [-STDDEVLO <str>] [-STDDEVHI <str>] [-PCTL <str>] [-PCTL_VAL <str>]`

`-GRIDS:<str>` Grids
 Grid list (input)

`-MEAN:<str>` Arithmetic Mean
 Grid (optional output)

`-MIN:<str>` Minimum
 Grid (optional output)

`-MAX:<str>` Maximum
 Grid (optional output)

`-RANGE:<str>` Range
 Grid (optional output)

`-SUM:<str>` Sum
 Grid (optional output)

`-VAR:<str>` Variance
 Grid (optional output)

`-STDDEV:<str>` Standard Deviation
 Grid (optional output)

`-STDDEVLO:<str>` Mean less Standard Deviation
 Grid (optional output)

`-STDDEVHI:<str>` Mean plus Standard Deviation
 Grid (optional output)

`-PCTL:<str>` Percentile
 Grid (optional output)

`-PCTL_VAL:<str>` Percentile
 Floating point
 Minimum: 0.000000
 Maximum: 100.000000
 Default: 50.000000