

QGIS Application - Bug report #21516

GRASS r.series: broken as it only considers the first map of multilayer input

2019-03-07 09:53 PM - Markus Neteler

Status:	Closed	
Priority:	Normal	
Assignee:		
Category:	Processing/GRASS	
Affected QGIS version:	3.6.0	Regression?: Yes
Operating System:		Easy fix?: No
Pull Request or Patch supplied:	No	Resolution: fixed/implemented
Crashes QGIS or corrupts data:	No	Copied to github as #: 29333
Description		
<p>r.series is currently only considering the first raster map of the list of input maps.</p> <p>Example: attached test case of 3 raster layers with values 1, 3, 12 leads when computing the "r.series average" the result 1. This is wrong and the reason appears to be that only the first map in the stack is considered.</p>		

History

#1 - 2019-03-08 09:51 AM - Giovanni Manghi

- Status changed from Open to Feedback
- Subject changed from r.series: broken as it only considers the first map to GRASS r.series: broken as it only considers the first map

Is this about the tool in the processing toolbox or in the GRASS plugin (I guess is the former)?

Does the tool work if instead of a multilayer input you use different input layers?

#2 - 2019-03-08 02:36 PM - Markus Neteler

- File testcase_value_one.tif added
- File testcase_value_three.tif added
- File testcase_value_twelve.tif added

Giovanni Manghi wrote:

| Is this about the tool in the processing toolbox or in the GRASS plugin (I guess is the former)?

Yes, the tool in processing.

| Does the tool work if instead of a multilayer input you use different input layers=

It also fails with separate layers. I have attached then for testing.

#3 - 2019-03-08 04:10 PM - Giovanni Manghi

- Category changed from GRASS to Processing/GRASS

| *It also fails with separate layers. I have attached then for testing.*

this is what I see on my machine:

```
g.proj -c proj4="+proj=lcc +lat_1=36.16666666666666 +lat_2=34.33333333333334 +lat_0=33.75 +lon_0=-79 +x_0=609601.22 +y_0=0 +ellps=GRS80 +towgs84=0,0,0,0,0,0 +units=m +no_defs"
```

```
r.external input="/home/giovanni/Downloads/testcase_value_one.tif" band=1 output="rast_5c82851c9860f2" --overwrite -o
r.external input="/home/giovanni/Downloads/testcase_value_three.tif" band=1 output="rast_5c82851c986663" --overwrite -o
r.external input="/home/giovanni/Downloads/testcase_value_twelve.tif" band=1 output="rast_5c82851c986944" --overwrite -o
```

```
g.region n=229000.0 s=215000.0 e=645000.0 w=630000.0 res=1000.0
```

```
r.series input=rast_5c82851c9860f2,rast_5c82851c986663,rast_5c82851c986944 method="average" range="-1e+8,1e+8"
output=outputd59db1a653ea4832a59215aef02756c2 --overwrite
```

```
g.region raster=outputd59db1a653ea4832a59215aef02756c2
```

```
r.out.gdal -t -m input="outputd59db1a653ea4832a59215aef02756c2"
output="/tmp/processing_e91bb38b329144f0bcae672eb1f9a380/9d5939a6d1d54b3da3e7a6632c2ed1da/output.tif" format="GTiff"
createopt="TFW=YES,COMPRESS=LZW" --overwrite
```

and I get an output raster with 5.33333 as value, so is this wrong, confirm?

#4 - 2019-03-08 04:28 PM - Markus Neteler

Giovanni Manghi wrote:

| *this is what I see on my machine:*

...

| *and I get an output raster with 5.33333 as value, so is this wrong, confirm?*

That looks good as:

$(1+3+12)/3 = 5.333333$

Does it work for you with the multi-layer file as well? And, which QGIS version did you use?

#5 - 2019-03-08 04:55 PM - Giovanni Manghi

| *Does it work for you with the multi-layer file as well? And, which QGIS version did you use?*

I tried on 3.6, but I also tried 3.4.5 on Windows.

I think the real issue is that Processing is not designed (yet?) to support such cases of multilayer rasters where each layer must enter as a separate inputs

into some tool.

I think we should change the title and description to better reflect that, do you agree?

#6 - 2019-03-08 05:10 PM - Markus Neteler

- Subject changed from GRASS r.series: broken as it only considers the first map to GRASS r.series: broken as it only considers the first map of multilayer input

Agreed (title changed). I suggest that the r.series description (or more) in Processing is modified to clearly communicate that separate layers are needed (which is obviously a limitation when it comes to climatic time series).

#7 - 2019-03-08 05:11 PM - Giovanni Manghi

Markus Neteler wrote:

Agreed (title changed). I suggest that the r.series description (or more) in Processing is modified to clearly communicate that separate layers are needed (which is obviously a limitation when it comes to climatic time series).

what other modules could be affected by this limitation?

#8 - 2019-03-08 07:10 PM - Giovanni Manghi

Markus Neteler wrote:

Agreed (title changed). I suggest that the r.series description (or more) in Processing is modified to clearly communicate that separate layers are needed (which is obviously a limitation when it comes to climatic time series).

see #21531

#9 - 2019-03-08 07:19 PM - Giovanni Manghi

- Resolution set to fixed/implemented
- Status changed from Feedback to Closed

Markus Neteler wrote:

Agreed (title changed). I suggest that the r.series description (or more) in Processing is modified to clearly communicate that separate layers are needed (which is obviously a limitation when it comes to climatic time series).

closed in favor of #21531

Files

testcase_multilayer.tif	2 KB	2019-03-07	Markus Neteler
testcase_value_one.tif	499 Bytes	2019-03-08	Markus Neteler

testcase_value_three.tif	499 Bytes	2019-03-08	Markus Neteler
testcase_value_twelve.tif	499 Bytes	2019-03-08	Markus Neteler