

QGIS Application - Bug report #21925

GRASS r.in.lidar fails in QGIS but works in native GRASS

2019-04-24 07:28 PM - Andreas Olsson

Status:	Open	
Priority:	Normal	
Assignee:		
Category:	Processing/GRASS	
Affected QGIS version:	3.6.2	Regression?: No
Operating System:		Easy fix?: No
Pull Request or Patch supplied:		Resolution:
Crashes QGIS or corrupts data:		Copied to github as #: 29740
Description		
<p>File info pulled from LAS-file, using GRASS because that function doesn't work in QGIS!</p> <p>The data is in "SWEREF 99 18 00", a Swedish coordinatesystem.</p> <p>Using LAS Library Version 'libLAS 1.8.0 with GeoTIFF 1.4.0 GDAL 1.11.3 LASzip 2.2.0'</p> <p>LAS File Version: 1.2</p> <p>System ID: 'Trimble'</p> <p>Generating Software: 'TRW 2.21.0 2.2 r0 (130917)'</p> <p>File Creation Day/Year: 234/2018</p> <p>Point Data Format: 2</p> <p>Number of Point Records: 126410605</p> <p>Number of Points by Return: 126410605 0 0 0 0</p> <p>Scale Factor X Y Z: 0.0001 0.0001 0.0001</p> <p>Offset X Y Z: 149520 6.56859e+006 20</p> <p>Min X Y Z: 148852 6.56773e+006 5.0197</p> <p>Max X Y Z: 149927 6.56905e+006 80.8466</p> <p>Spatial Reference: None</p> <p>Data Fields:</p> <p>'X'</p> <p>'Y'</p> <p>'Z'</p> <p>'Intensity'</p> <p>'Return Number'</p> <p>'Number of Returns'</p> <p>'Scan Direction'</p> <p>'Flighline Edge'</p> <p>'Classification'</p> <p>'Scan Angle Rank'</p> <p>'User Data'</p> <p>'Point Source ID'</p> <p>'Red'</p> <p>'Green'</p> <p>'Blue'</p>		

History

#1 - 2019-04-24 07:37 PM - Giovanni Manghi

- Status changed from Open to Feedback

Can you attach sample data?

#2 - 2019-04-24 08:11 PM - Andreas Olsson

Giovanni Manghi wrote:

| *Can you attach sample data?*

I got one file and it's too big.

I think the problem can be that there's no coordinate system info in the file and it works in GRASS because you set up a predefined file and coordinate system that GRASS can assume is the same system as the file. If it was possible to tell QGIS what coordinate system to assume is right then it might work.

#3 - 2019-04-24 08:13 PM - Andreas Olsson

So I guess the problem is the lack of spatial reference in the file.

#4 - 2019-04-24 09:14 PM - Giovanni Manghi

| *I got one file and it's too big.*

link?

#5 - 2019-04-25 09:34 AM - Andreas Olsson

Giovanni Manghi wrote:

| *I got one file and it's too big.*

| *link?*

<https://sprend.com/download?C=e892a43de33f49b79b63c421e4a03ab8>

#6 - 2019-05-01 06:42 PM - Giovanni Manghi

What CRS do you use to create your GRASS mapset/location where this data imports correctly?

#7 - 2019-05-02 07:47 AM - Andreas Olsson

Giovanni Manghi wrote:

| *What CRS do you use to create your GRASS mapset/location where this data imports correctly?*

CRS

EPSG:3011 - SWEREF99 18 00 - Projected

I sett GRASS not to assume any CRS of the data.

#8 - 2019-05-02 10:20 AM - Giovanni Manghi

I sett GRASS not to assume any CRS of the data.

that is not how Processing works when using GRASS tools: as far as I remember a temporary location/mapset is created on the fly while importing the data, and the CRS used is derived from the data itself. Is this the rule for any lidar data, they do not have an intrinsic CRS?

#9 - 2019-05-02 11:53 PM - Olivier ATHIMON

Is it the same problem than i have ? => #21905

Before we could use functions of GRASS in Processing/GRASS by using the shortcut "QGIS Desktop"? But now, functions of Processing/GRASS only work by using the shortcut "QGIS Desktop with GRASS"...

#10 - 2019-05-03 12:44 PM - Andreas Olsson

Giovanni Manghi wrote:

I sett GRASS not to assume any CRS of the data.

that is not how Processing works when using GRASS tools: as far as I remember a temporary location/mapset is created on the fly while importing the data, and the CRS used is derived from the data itself. Is this the rule for any lidar data, they do not have an intrinsic CRS?

I think the problem can be that Grass att least needs to know the project CRS to convert the LASfile. Do QGIS create a temporary database/project when processing?

#11 - 2019-05-03 07:50 PM - Giovanni Manghi

Olivier ATHIMON wrote:

Is it the same problem than i have ? => #21905

no, I think the above ticket was already given and answer.

#12 - 2019-05-03 07:55 PM - Giovanni Manghi

Do QGIS create a temporary database/project when processing?

yes, it creates on the fly a mapset/location where it (on the fly) imports the input data, then it process it and export out from the location/mapset. I think it uses the CRS of the input to define the projection for the mapset/location.

#13 - 2019-05-03 08:04 PM - Andreas Olsson

Giovanni Manghi wrote:

| *Do QGIS create a temporary database/project when processing?*
| *yes, it creates on the fly a mapset/location where it (on the fly) imports the input data, then it process it and export out from the location/mapset. I think it uses the CRS of the input to define the projection for the mapset/location.*

Maybe you could have a optional setting for overriding the files crs?

#14 - 2019-05-03 08:05 PM - Giovanni Manghi

| *Maybe you could have a optional setting for overriding the files crs?*

that would be a feature request.

#15 - 2019-05-03 08:06 PM - Andreas Olsson

Giovanni Manghi wrote:

| *Maybe you could have a optional setting for overriding the files crs?*
| *that would be a feature request.*

Or a solution to the bug.

#16 - 2019-05-03 08:09 PM - Giovanni Manghi

- Subject changed from GRASS r.in.lidar fail i QGIS but works in plain GRASS to GRASS r.in.lidar fails in QGIS but works in native GRASS
- Status changed from Feedback to Open
- Operating System deleted (Win 10)

#17 - 2019-05-03 08:15 PM - Andreas Olsson

“
-O
Override projection check (use current location's projection)
Assume that the dataset has same projection as the current location
“
This option is also in QGIS for r.in.lidar but it needs to know the project crs to actually work.

#18 - 2019-05-03 08:20 PM - Giovanni Manghi

| *This option is also in QGIS for r.in.lidar but it needs to know the project crs to actually work.*

That GRASS options assumes that the data CRS is the same as the mapset/location (that already exist). In QGIS the CRS for mapset/location (that does not exist yet) is derived from the data being used as input (again, I think bit not 100% sure).