QGIS Application - Bug report #475
square raster's pixels not square on display = rasters of different res are displaced

2006-12-21 02:20 PM - Redmine Admin

Status:	Closed			
Priority:	Low			
Assignee:	nobody -			
Category:	Rasters			
Affected QGIS version:		**Regression?:**	No	
Operating System:	Debian	**Easy fix?:**	No	
Pull Request or Patch supplied:		**Resolution:**	fixed	
Crashes QGIS or corrupts data:		**Copied to github as #:**	10534	

Description

1. add a a raster with **square** pixels

2. change QGIS window's proportion to be taller-than-wide, or vice versa

3. zoom in

4. see how the pixels are not displayed square (too_wide.png, too_narrow.png)

5. now display one raster of 5m and one of 10m resolution

6. see how they are misplaced against each other; set some transparance to see this clearly (misplaced.png)

BTW, these are GRASS rasters I used for examples here, created with r.mapcalc. In QGIS the r.mapcalc output is displayed B&W, while in GRASS (see GRASS_mon.png) it is color with "rainbow" pallete. Note that after I run 'r.colors rules=rainbow' for the raster displayed B&W in QGIS and color in GRASS, it is displayed color in both from then on... weird. Ideas where is the bug (GRASS, GDAL, QGIS, gdal-grass)?

Maciek

History

#1 - 2006-12-21 07:25 PM - Tim Sutton

Does the problem correct itself after the next pan / zoom?

#2 - 2006-12-21 08:09 PM - Gary Sherman

I can't duplicate the problem described in steps 1-4, using either a TIFF or GRASS raster.

GDAL 1.3.2, GRASS 6.2.0

#3 - 2006-12-22 04:58 AM - anonymous -

Replying to [comment:1 timlinux]:

> *Does the problem correct itself after the next pan / zoom?*

No.

#4 - 2006-12-22 05:05 AM - anonymous -

Replying to [comment:2 gsherman]:

> *I can't duplicate the problem described in steps 1-4, using either a TIFF or GRASS raster.*

And I can reproduce it with any raster. Why you can't I don't know.

Pan to the edge of your raster, maybe then you'll see it better. If you still can't see it, measure the pixel dimensions; one axis will be longer (while both should be equal).

> *GDAL 1.3.2*

Same here.

> *GRASS 6.2.0*

I don't think this matters. The bug is in displaying all rasters.

Maciek

#5 - 2006-12-22 06:27 AM - Gary Sherman

I don't need to measure the pixels. I can see that they are still square and I did try it from various locations in the raster.

#6 - 2006-12-22 12:05 PM - Redmine Admin

Well then can you display 2 rasters with identical cells allignment, but of different resolution, set the transparency, and reproduce steps 5, 6?

#7 - 2006-12-28 10:14 PM - Gary Sherman

Replying to [comment:6 tutey@o2.pl]:

> *Well then can you display 2 rasters with identical cells allignment, but of different resolution, set the transparency, and reproduce steps 5, 6?*

I don't have any suitable test data....

#8 - 2006-12-29 02:30 AM - Redmine Admin

Replying to [comment:7 gsherman]:

> *I don't have any suitable test data....*

Attached are 2 such rasters. One is 5m, the other is 10m. Both have exactly the same extent. Open them in QGIS and set transparency for both. Zoom and pan around a bit. Let me know if you can see how missalligned they are against each other. I can. The missalignment is different depending on zoom level and view center point location. It dissapears after zooming to either rasters full extent.

Maciek

#9 - 2006-12-29 02:11 PM - Gavin Macaulay -

This problem can be seen in another way that doesn't require two images.
- load the 5res.tif image
- click on the zoom in tool to get a cross-hair cursor
- place the cursor over the bottom right corner of the image and note down the x/y coordinates (should be 481510, 4180530)
- pan the image so that the bottom right corner of the image is in the middle of the map
- click on the zoom in tool to get a cross-hair cursor again
- place the cursor over the same corner and note the x/y coords. They are different. This is the underlying cause of the mis-matched images.

The x/y coordinate of that corner varies with panning and zooming of the image.

#10 - 2006-12-29 07:52 PM - anonymous -

Further note: this problem only occurs when the image is panned so that some of the image is off the visible map.

#11 - 2006-12-30 06:55 PM - Gavin Macaulay -
- Status changed from Open to Closed
- Resolution set to fixed

Fixed in 0.8 branch () and head ().

#12 - 2009-08-22 12:46 AM - Anonymous

Milestone Version 0.8 deleted

Files

too_tall.png	15.9 KB	2006-12-21		Redmine Admin
too_wide.png	14.4 KB	2006-12-21		Redmine Admin
displaced.png	16.5 KB	2006-12-21		Redmine Admin
GRASS_mon.png	5.11 KB	2006-12-21		Redmine Admin
5res.tif	3.03 KB	2006-12-29		Redmine Admin
10res.tif	2.94 KB	2006-12-29		Redmine Admin