QGIS Application - Bug report #13181
random (In-)visibility Issue when using several large multispectral raster layers

2015-08-04 11:31 AM - Adrian Klink

Status:	Closed		
Priority:	Normal		
Assignee:			
Category:	GUI		
Affected QGIS version:	2.10.1	**Regression?:**	No
Operating System:	Windows (64bit)	**Easy fix?:**	No
Pull Request or Patch supplied:		**Resolution:**	
Crashes QGIS or corrupts data:	No	**Copied to github as #:**	21243

Description

When displaying several large multispectral raster layers (GeoTIFFs) at once some layers may become randomly invisible. This effect randomly changes when display is being updated (e.g. pressing F5-key, scrolling, zooming, changing layers, scaling window).

This effect can be reproduced with several (if not all) versions of QGIS 2.x including:
QGIS 2.8.3 Wien
QGIS 2.10.1 Pisa
(effect has been randomly seen earlier with QGIS 2.0, 2.2, 2.4 and QGIS 2.6 Brighton as well)

Versions not affected by this effect:
Quantum GIS 1.8 Lisboa (and earlier versions)

Tested using (screenshots applied):
ASTER satelite scenes (EPSG:32632, WGS84 / UTM zone 32N)
e.g. 5907 x 5359 pixels, 9 bands, 16bit Int

System Used for Testing: Windows 7 (64bit) and Windows 8.1 (64bit) with 8GB Ram, Intel Core i5-4570 @ 3.2 GHz.

History

#1 - 2015-08-05 03:19 AM - Adrian Klink

- File QGIS_2_10_Pisa_Layer_settings_contrast_stretch.png added

The (in-)visibility issue **only** applies to a layer if contrast stretch to MinMax is enabled for this layer. If contrast stretch is disabled, there is no bug.

#2 - 2015-08-05 11:38 AM - Adrian Klink

- Status changed from Open to Closed

I found a similar problem description in an other Bug report:

Bug report #13155: A Multiband image(e.g. landsat5,7,8) cannot be displayed in windows8.

> Sometimes, they can be displayed , sometimes, only white.
> If they are white, Pushing Refresh button many times, then they might be displayed.

> All win7 was fine and All win8 has that problem.

I re-checked the Win 7 system and can say it is **Win 8.1 only**. Win 7 was just slow, when I tested first time and it took longer to display, so I falsely thought it would also affect Win 7. Sorry for my mistake.

There was also a solution for it:

> *I changed to QGIS 32 bit in Windows8.*
> *It works well.*
>
> *This problem is only 64bit version.*

In fact, 64bit is only available in QGIS 2.x series, Quantum GIS 1.8 was 32bit only. This explains why all older versions dont have this problem. I didn't try 2.10 with 32bit yet, but will try tomorrow.

As mentioned, the problem with 64bit only occurs when **contrast stretch** is enabled.

Since it seems to be same problem as Bug report #13155 this one can be closed.

Files

QGIS_2_10_Pisa_ASTER_Spectral_Indices_0.jpg	381 KB	2015-08-04	Adrian Klink
QGIS_2_10_Pisa_ASTER_Spectral_Indices_1.jpg	514 KB	2015-08-04	Adrian Klink
QGIS_2_10_Pisa_ASTER_Spectral_Indices_2.jpg	562 KB	2015-08-04	Adrian Klink
QGIS_2_10_Pisa_ASTER_Spectral_Indices_3.jpg	593 KB	2015-08-04	Adrian Klink
QGIS_1_8_Lisboa_ASTER_Spectral_Indices.jpg	586 KB	2015-08-04	Adrian Klink
QGIS_2_10_Pisa_Layer_settings_contrast_stretch.png	100 KB	2015-08-05	Adrian Klink