

# QGIS Application - Bug report #813

## Upsidedown (and rotated?) Rasters Not Supported

2007-11-16 12:59 PM - Frank Warmerdam -

<b>Status:</b> Closed	
<b>Priority:</b> Low	
<b>Assignee:</b> Frank Warmerdam -	
<b>Category:</b> Rasters	
<b>Affected QGIS version:</b>	<b>Regression?:</b> No
<b>Operating System:</b> Debian	<b>Easy fix?:</b> No
<b>Pull Request or Patch supplied:</b>	<b>Resolution:</b> fixed
<b>Crashes QGIS or corrupts data:</b>	<b>Copied to github as #:</b> 10872

### Description

Upside rasters (that is the top is further south than the bottom) do not appear to be supported by the qgsrasterlayer code. If one is opened (as the only object) an empty extent is established for the map. I'm guessing this is because the min/max values in the layer extent are backwards.

```
Driver: ISIS3/USGS Astrogeology ISIS cube (Version 3)
Files: r0200357_10m_Jul20_o_i3_detatched.lbl
      r0200357_10m_Jul20_o_i3_detatched.cub
Size is 317, 559
Coordinate System is:
PROJCS["Equirectangular Mars",
  GEOGCS["GCS_Mars",
    DATUM["D_Mars",
      SPHEROID[[Mars_localRadius]],
      PRIMEM[[Reference_Meridian]],
      UNIT[[degree]],
    PROJECTION[[Equirectangular]],
    PARAMETER[[latitude_of_origin]],
    PARAMETER[[central_meridian]],
    PARAMETER[[false_easting]],
    PARAMETER[[false_northing]]
  ]
Origin = (-4766.964843750000000,-872623.625000000000000)
Pixel Size = (10.102499961853027,10.102499961853027)
Corner Coordinates:
Upper Left ( -4766.965, -872623.625) (175d35'13.52"W, 0d 0'53.02"S)
Lower Left ( -4766.965, -866976.328) (175d35'13.52"W, 0d 0'52.68"S)
Upper Right ( -1564.472, -872623.625) (175d35'13.32"W, 0d 0'53.02"S)
Lower Right ( -1564.472, -866976.328) (175d35'13.32"W, 0d 0'52.68"S)
Center ( -3165.719, -869799.976) (175d35'13.42"W, 0d 0'52.85"S)
Band 1 Block=317x1 Type=Byte, [[ColorInterp]]=Undefined
[[NoData]] Value=0
```

A reduced resolution analog to the above is being attached as a tiff file.

### History

#1 - 2007-11-16 03:33 PM - Frank Warmerdam -

- Status changed from Open to In Progress

In the raster transparency branch I have made changes () that will place rotated/sheared/upsidedown images in the right portion of the map, but without the correct orientation. Because this is a fairly serious failure still, an interactive warning is issued to the user.

This lets folks **see** these images, but the failure to orient them right means they won't overlay other layers properly - still quite a serious bug. So on that basis I'm leaving this bug open in the hopes that at some point we will rework the raster layer sufficient to display non-northup images properly. This will require substantial work.

**#2 - 2007-11-16 03:40 PM - Frank Warmerdam -**

Actually, as I think about it, another alternative used by some other software packages (ie. Cadcorp SIS) is to create a GDAL "warped VRT" in memory that will take care of resampling on the fly within GDAL.

**#3 - 2007-11-16 07:58 PM - Frank Warmerdam -**

- Resolution set to fixed

- Status changed from In Progress to Closed

I have applied which rips out the changes from and replaces it with used of a "gdal warped vrt". This will render rotated, upside down and even "gcp controlled" images in the proper place. There is an outstanding issue of recognising nodata areas that may need action but that isn't the point of this particular bug report so I'm closing.

**Files**

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sample.tif	47.8 KB	2007-11-16	Frank Warmerdam -
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