

## QGIS Application - Bug report #14603

### Wrong CRS attributed to a raster exported with ArcMap

2016-04-01 06:38 AM - Jérôme Guélat

<b>Status:</b>	Closed	
<b>Priority:</b>	Normal	
<b>Assignee:</b>		
<b>Category:</b>	Projection Support	
<b>Affected QGIS version:</b>	2.14.0	<b>Regression?:</b> No
<b>Operating System:</b>	Windows	<b>Easy fix?:</b> No
<b>Pull Request or Patch supplied:</b>	No	<b>Resolution:</b>
<b>Crashes QGIS or corrupts data:</b>	No	<b>Copied to github as #:</b> 22569
<b>Description</b>		
<p>Here's a more detailed description:</p> <ol style="list-style-type: none"><li>1. Export a raster (TIFF) with ArcMap 10. The CRS is the "old" Swiss CRS (EPSG: 21781).</li><li>2. Open a QGIS project containing only data with CRS = EPSG 21781, the project CRS is also 21781.</li><li>3. Add the raster... Its CRS is now 10001, it is rotated and displayed at a wrong location.</li></ol> <p>I have the feeling that ArcMap is using a non-standard definition of this CRS... However I only had problems with QGIS. I'm also using this raster in R and everything was displayed correctly (R also uses GDAL 2). A smaller version of the raster file is attached to this issue (but the problem is not specific to this file).</p> <p>Of course everything is OK again if I manually change the CRS of the raster to 21781 in QGIS.</p>		

#### History

**#1 - 2016-04-09 08:23 AM - Giovanni Manghi**

- Status changed from Open to Feedback

I suggest to close tis as invalid. See below.

QGIS when it opens a raster do not "attribute" any CRS, it just reads the CRS from the datasource, in this case the raster created by arcmap.

This is the CRS definition of the raster you attached:

```
+proj=omerc +lat_0=46.95240555555556 +lonc=7.439583333333333 +alpha=90 +k=1 +x_0=600000 +y_0=200000 +no_uoff +gamma=0 +ellps=bessel
+towgs84=674.4,15.1,405.3,0,0,0,0 +units=m +no_defs
```

And this is the definition of EPSG 21781 - <http://spatialreference.org/ref/epsg/21781/>

```
+proj=somerc +lat_0=46.95240555555556 +lon_0=7.439583333333333 +k_0=1 +x_0=600000 +y_0=200000 +ellps=bessel
+towgs84=674.374,15.056,405.346,0,0,0,0 +units=m +no_defs
```

so no surprise that QGIS do not recognize it as 21781. So it seems you are right in the first place, is AM that do not use a standard definition.

**#2 - 2016-04-11 12:19 AM - Jérôme Guélat**

Thanks for looking into this!

I agree that this is an ArcMap problem... but it is pretty annoying for people using both softwares in Switzerland. It also seems that other softwares using GDAL (R for instance) are able to apply the correct projection (or at least to show the data at the right place).

Then maybe this could be filed as a feature request instead of a bug. What do you think?

**#3 - 2016-05-23 08:16 AM - Giovanni Manghi**  
- *Status changed from Feedback to Closed*

closed in favor of #14871

Files			
raster.zip	14.7 KB	2016-04-01	Jérôme Guélat