

## QGIS Application - Bug report #1889

### wrong/missing crs parameters for CH1903 / LV03 (epsg:21781) in prj-file

2009-08-23 11:34 PM - zicke -

<b>Status:</b> Closed	
<b>Priority:</b> Low	
<b>Assignee:</b> nobody -	
<b>Category:</b> Projection Support	
<b>Affected QGIS version:</b>	<b>Regression?:</b> No
<b>Operating System:</b> Linux	<b>Easy fix?:</b> No
<b>Pull Request or Patch supplied:</b>	<b>Resolution:</b> worksforme
<b>Crashes QGIS or corrupts data:</b>	<b>Copied to github as #:</b> 11949

#### Description

While the crs parameters in the project properties dialog are correct, QGIS generates a wrong prj-file when saving a vector layer to a shapefile:

```
PROJCS[["Hotine_Oblique_Mercator_Azimuth_Center"GEOGCS["Bessel
1841"DATUM["D_unknown"SPHEROID["bessel"63773971552991528128]]PRIMEM["Greenwich"0]UNIT["Degree"0017453292519943295]]PRO
95]]PROJECTION["Hotine_Oblique_Mercator_Azimuth_Center"]PARAMETER["latitude_of_center"4695240555555556]PARAMETER["longitud
longitude_of_center"7439583333333333]PARAMETER["azimuth"90]PARAMETER["scale_factor"1]PARAMETER["false_easting"600000]PARA
0]PARAMETER["false_northing"200000]UNIT["Meter]]
```

According to [www.spatialreference.org](http://www.spatialreference.org) it should be:

```
RPOJCS[["CH1903 LV03"GEOGCS["CH1903"DATUM["CH1903"SPHEROID["Bessel
1841"63773971552991528128AUTHORITY["EPSG""7004"]]TOWGS84r674374150564053460000AUTHORITY["EPSG""6149"]]PRIMEM["Gre
EM["Greenwich"0AUTHORITY["EPSG""8901"]]UNIT["degree"001745329251994328AUTHORITY["EPSG""9122"]]AUTHORITY["EPSG""4149"]
""4149"]]UNIT["metre"1AUTHORITY["EPSG""9001"]]PROJECTION["Hotine_Oblique_Mercator"]PARAMETER["latitude_of_center"4695240555
24055555556]PARAMETER["longitude_of_center"7439583333333333]PARAMETER["azimuth"90]PARAMETER["rectified_grid_angle"90]PAR
"90]PARAMETER["scale_factor"1]PARAMETER["false_easting"600000]PARAMETER["false_northing"200000]AUTHORITY["EPSG""21781"]AX
781"]AXIS["Y"EAST]AXIS["X"]
```

Especially the TOWGS84 parameter is important and can confuse qgis if 'on-the-fly' transformation is enabled.

#### History

##### #1 - 2009-08-26 01:19 AM - Magnus Homann

- Resolution set to worksforme
- Status changed from Open to Closed

What version of QGIS did you use? This was hopefully fixed two weeks ago, and now the result is:

```
PROJCS[["unnamed"GEOGCS["Bessel
1841"DATUM["unknown"SPHEROID["bessel"63773971552991528128]TOWGS84r674374150564053460000]PRIMEM["Greenwich"0]UNIT["degree"0017453292
174532925199433]]PROJECTION["Hotine_Oblique_Mercator"]PARAMETER["latitude_of_center"4695240555555556]PARAMETER["longitude_of_center"74395
er"7439583333333333]PARAMETER["azimuth"90]PARAMETER["rectified_grid_angle"90]PARAMETER["scale_factor"1]PARAMETER["false_easting"600000]PA
0000]PARAMETER["false_northing"200000]UNIT["Meter]]
```

The library we use (GDAL/OGR) does not know about many datums, so it cannot write in clear text the datum name. The TOWGS84 parameters are there, though.

**#2 - 2009-08-26 04:53 AM - zicke -**

Yes, I was told just after reporting the bug, that it could be an GDAL/OGR issue. Now we are using 1.3.0 (code revision 11505) and the TOWGS84 parameters are there.

**#3 - 2009-11-23 09:04 AM - cmoe -**

It looks really like an ogr issue, but an intentional. Ogr is stripping down the towgs84 parameter when writing a shapefile (morphToEsri method).

see also #1943 and #2123

cheers

Cédric