QGIS Application - Bug report #3787
Problem Datum Transformation

2011-04-29 06:55 AM - ImPreZa -

Status:	Closed		
Priority:	Low		
Assignee:	nobody -		
Category:	Projection Support		
Affected QGIS version:		**Regression?:**	No
Operating System:	Windows	**Easy fix?:**	No
Pull Request or Patch supplied:		**Resolution:**	invalid
Crashes QGIS or corrupts data:		**Copied to github as #:**	13845

Description

Hey!!

I've tried to transform a shapefile from EPGS:4618 (SAD69) to EPGS:4674 (SIRGAS2000), but the product of this transformation doesn't shifts. It seems that QGIS export a shapefile with the new projection, but it is unable to apply (in fact) the values of the new ellipsoid.

Here are the official parameters for transformation between the both datums:

DX = -67,35

DY = +3,88

DZ = -38,22

I've attached the .gsb files (NTV2 transformation) used by the department of the brazilian government, IBGE, which is responsible for cartography etc.

SAD69 Original (SAD69_003.GSB)

SAD69 reviewed in 1996 (SAD96_003.GSB)

If I open in QGIS a shapefile originally created in [[ArcGIS]] in SAD69 and other in SIRGAS2000, also transformed from SAD69 to SIRGAS in [[ArcGIS]], without activate OTF, I can see the displacement between them. But when I transform the [[ArcGIS]]-shapefile-SAD69 to SIRGAS2000 in QGIS, the QGIS is unable to show their displacement, even with OTF activated. Why does this happens with shapes transformed in QGIS?

And the last problem: The QGIS doesn't create properly the .prj file, both for SAD69 and SIRGAS2000, as exposed here:

SIRGAS2000

GEOGCS[[GRS 1980(IUGG 1980)"DATUM*["D_unknown"*SPHEROID["GRS80"6378137298257222101]]PRIMEM["Greenwich"0]UNIT["Degree]]

And the correct one, from [[ArcGIS]] is:

GEOGCS[[GCS_SIRGAS_2000"DATUM["D_SIRGAS_2000"SPHEROID["GRS_1980"6378137029825722101]]PRIMEM["Greenwich 00]UNIT["Degree]]

SAD69:

GEOGCS[[Australian Natl & S Amer
1969"DATUM["D_unknown"SPHEROID["aust_SA"637816029825]]PRIMEM["Greenwich"0]UNIT["Degree]]

And the correct one, from [[ArcGIS]] is:

GEOGCS[[GCS_South_American_1969"DATUM["D_South_American_1969"SPHEROID["GRS_1967_Truncated"6378160029825]]P
IMEM["Greenwich"00]UNIT["Degree"00174532925199433]]VERTCS["WGS_1984_Geoid"VDATUM["WGS_1984_Geoid"]PARAMETER["Vertica
["Vertical_Shift"00]PARAMETER["Direction"10]UNIT["Meter]]

Here are the original data that I'm working with. These data are mineral rights from Rio Grande do Sul State, south Brazil:
Shapefiles in SAD69
Shapefiles in SIRGAS

I asked for help at the QGIS Forum. They've found the same problem and couldn't solve it.
Thanks!!

History

#1 - 2011-04-29 07:09 AM - ImPreZa -

- Resolution set to invalid

- Status changed from Open to Closed

#2 - 2011-04-29 07:12 AM - ImPreZa -

#3788 is the correct report. Files couldn't be uploaded.