# QGIS Application - Bug report #11134
# QGIS confuse EPSG:3857 with EPSG:54004

2014-09-03 02:39 PM - Jesus Gomez

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|---|---|---|---|
| **Status:** | Closed | | |
| **Priority:** | Normal | | |
| **Assignee:** | | | |
| **Category:** | Projection Support | | |
| **Affected QGIS version:** | 2.4.0 | **Regression?:** | No |
| **Operating System:** | Ubuntu | **Easy fix?:** | No |
| **Pull Request or Patch supplied:** | No | **Resolution:** | up/downstream |
| **Crashes QGIS or corrupts data:** | No | **Copied to github as #:** | 19462 |

**Description**

After reprojecting a layer with ogr2ogr to SRS **EPSG:3857**, QGIS think it's SRS is **EPSG:54004**.

To try, you can download this Philadelphia dataset, and run:

```
ogr2ogr -t_srs EPSG:3857 -s_srs EPSG:4326 city_limits_test.shp clipFeature/city_limits.shp
```

And add the city_limits_test layer in a clean QGIS project, and you'll see the SRS is **EPSG:54004**.

## History

#### #1 - 2014-09-03 03:38 PM - Jürgen Fischer

*- Subject changed from QGIS confuse ESPG:3857 with ESPG:54004 to QGIS confuse EPSG:3857 with EPSG:54004*

#### #2 - 2014-10-27 09:32 AM - Jürgen Fischer

*- Category changed from Browser to Projection Support*

#### #3 - 2016-05-12 07:03 PM - Etienne Trimaille

This bug is still true in QGIS 2.14.2 and GDAL 1.11.3.
If you work with a layer in 3857, it will be in 54004 after some processing in QGIS. I need to check if it's only with OGR algorithms.

#### #4 - 2016-05-28 10:59 AM - Even Rouault

*- Resolution set to up/downstream*
*- Status changed from Open to Closed*

This has been fixed in GDAL 2.1.0. Extract from the GDAL release news :

- morphToESRI(): use Mercator_Auxiliary_Sphere projection for EPSG:3857. morphFromESRI(): map Mercator_Auxiliary_Sphere to EPSG:3857 (#5924)

It generates this .prj file

$ cat out.prj
PROJCS["WGS_1984_Web_Mercator_Auxiliary_Sphere",GEOGCS["GCS_WGS_1984",DATUM["D_WGS_1984",SPHEROID["WGS_1984",6378137.0
298.257223563]],PRIMEM["Greenwich",0.0],UNIT["Degree",0.0174532925199433]],PROJECTION["Mercator_Auxiliary_Sphere"],PARAMETER["False_Easting",0
Easting",0.0],PARAMETER["False_Northing",0.0],PARAMETER["Central_Meridian",0.0],PARAMETER["Standard_Parallel_1",0.0],PARAMETER["Auxiliary_Sphere

ry_Sphere_Type",0.0],UNIT["Meter",1.0]]

And it is read by OGR as :

```
PROJCS["WGS 84 / Pseudo-Mercator",
    GEOGCS["WGS 84",
        DATUM["WGS_1984",
            SPHEROID["WGS 84",6378137,298.257223563,
                AUTHORITY["EPSG","7030"]],
            AUTHORITY["EPSG","6326"]],
        PRIMEM["Greenwich",0,
            AUTHORITY["EPSG","8901"]],
        UNIT["degree",0.0174532925199433,
            AUTHORITY["EPSG","9122"]],
        AUTHORITY["EPSG","4326"]],
    PROJECTION["Mercator_1SP"],
    PARAMETER["central_meridian",0],
    PARAMETER["scale_factor",1],
    PARAMETER["false_easting",0],
    PARAMETER["false_northing",0],
    UNIT["metre",1,
        AUTHORITY["EPSG","9001"]],
    AXIS["X",EAST],
    AXIS["Y",NORTH],
    EXTENSION["PROJ4","+proj=merc +a=6378137 +b=6378137 +lat_ts=0.0 +lon_0=0.0 +x_0=0.0 +y_0=0 +k=1.0 +units=m +nadgrids=@null +wktext
+no_defs"],
    AUTHORITY["EPSG","3857"]]
```