QGIS Application - Bug report #18915
pyQGIS - new_point.transform(tr) Exception: unknown

2018-05-05 11:15 PM - Russell Fulton

Status:	Closed		
Priority:	Normal		
Assignee:	Denis Rouzaud		
Category:	Python bindings / sipify		
Affected QGIS version:	3.0.2	**Regression?:**	No
Operating System:	Mac OS 10.13.2	**Easy fix?:**	No
Pull Request or Patch supplied:	No	**Resolution:**	fixed/implemented
Crashes QGIS or corrupts data:	No	**Copied to github as #:**	26747

Description

I believe that this worked in 3.0.0 and 3.0.1 (once I converted the API calls to 3.0)

Call to transform dies with "Exception: unknown":

```
    if wp.name in wp_features: # have a existing waypoint with that name
                feature = wp_features[wp.name]
                new_point = QgsPoint( wp.longitude, wp.latitude)
                new_point.transform(tr)
```

History

#1 - 2018-06-08 01:45 PM - Denis Rouzaud

can you share more of the code, especially the definition of transform, and provide a minimal code example?

#2 - 2018-06-10 12:54 AM - Russell Fulton

I have done more investigation and the situations is not quite what I thought. It turns out that that transform gets called successfully lots of times before failing. Once I figured that out i looked at the point that was being transformed since the problem did not appear to be with the transform itself (my bad for not checking this before).

wp is a waypoint from gpxpy

```
                new_point = QgsPoint( wp.longitude, wp.latitude)
                print( 'debug 1 wp:', wp, 'point:', new_point, '', tr:'', tr)
                new_point.transform(tr)
```

last line printed before crash:

```
    debug 1 wp: [wpt{T E B05}:0.0,0.0@None] point: <qgis._core.QgsPoint object at 0x113b17ee8> , tr: <qgis._core.QgsCoordinateTransform object at 0x113b9a0d8>
```

It looks like the waypoint from the GPX file is 0,0 -- the transform is from 4326 to 2193

#3 - 2018-09-20 03:27 AM - Denis Rouzaud

- Status changed from Open to Feedback

Just tried this code

```
cfrom=QgsCoordinateReferenceSystem.fromEpsgId(4326)
cto=QgsCoordinateReferenceSystem.fromEpsgId(2193)
p=QgsPoint(0,0)
t=QgsCoordinateTransform(cfrom,cto,QgsProject.instance())
p.transform(t)
```

I don't get a crash but an exception

```
_core.QgsCsException: forward transform of
(0.000000, 0.000000)
PROJ:  +proj=longlat +datum=WGS84 +no_defs +ellps=WGS84 +towgs84=0,0,0 +to  +proj=tmerc +lat_0=0 +lon_0=173 +k=0.9996 +x_0=1600000
+y_0=10000000 +ellps=GRS80 +towgs84=0,0,0,0,0,0,0 +units=m +no_defs
Error: latitude or longitude exceeded limits
```

But I think that it might be indeed a crash in 3.0, I am on master (upcoming 3.4).

You might want to do a try...except in Python to handle this.

#4 - 2018-09-20 03:40 AM - Denis Rouzaud

- Resolution set to fixed/implemented

- Status changed from Feedback to Closed

I mark it as fixed as the exception is the foreseen effect.