

FPRN News

August 29, 2019

Coordinate Updates

The National Geodetic Survey (NGS) has reprocessed the Continuously Operating Reference Stations (CORS) to be in alignment with the International Terrestrial Reference Frame (ITRF) 2014.

As part of our goal to stay in alignment with the NGS we will be adjusting the coordinates on the Florida Permanent Reference Network (FPRN).

The goal is to have this process completed and operational on September 3, 2019. Along with the new broadcast coordinates for each of the reference stations within the FPRN, we will be producing a Datasheet for each station that shows the current broadcast coordinates, the ITRF 2014 coordinates, and any superceded coordinates dating back to August, 2014.

ITRF 2014

The NGS's proposed changes to our Geodetic Datums in 2022 will have a great impact on precise positioning systems. In the near future, we will start broadcasting a secondary set of corrections. These corrections will be in alignment with the ITRF 2014 datum.

This secondary datum will allow academic and governmental agencies to start updating the coordinates in their local databases.

The secondary datum may also become useful for projects that will extend past the National Spatial Reference System (NSRS) 2022 implementation date.

Hybrid Geoid

The NGS has released the beta version of the new hybrid Geoid. Geoid18, when released in its final form, will be available on our homepage (<u>https://www.fdot.gov/geospatial/fprn.shtm</u>) and the customer portal (<u>https://www.myfloridagps.com/sbc</u>).

This will be the last release of a hybrid Geoid model before moving to the North American-Pacific Geopotential Datum of 2022.

The FDOT will <u>NOT</u> be creating a custom Geoid to improve the quality of vertical measurements.

Gravimetric Geoid

The NGS has also released gravimetric reference geoid model, xGeoid19B. This Geoid model will also be available on our homepage and the customer portal.