National Geodetic Survey Positioning America for the Future geodesy.noaa.gov

Issue 28 April 2022

NSRS Modernization News

For all issues of **NSRS Modernization News**, visit:
geodesy.noaa.gov/datums/newdatums/TrackOurProgress.shtml

Re-prioritization Underway

Frequent readers of this newsletter may have noticed that there are many projects associated with the NSRS Modernization. This spreads resources quite thin, causing some delays. To avoid further delays, and even reverse them somewhat, NGS is currently re-prioritizing projects, specifically those which are building support tools as promised in Blueprint Part 3. While NGS is not pulling back from any promises, it does mean that a number of fully formed and tested tools may not be available on the day when the modernized NSRS is released. This de-prioritization of *tool* building, has the positive effect of ensuring that a complete and high-quality set of *data* is released as part of the modernized NSRS. No decisions have been made yet, but watch this space for upcoming announcements.

Progress in Ongoing Projects

There are currently **33 ongoing projects** related to NSRS modernization around NGS. Here are some highlights:

M-PAGES (Project Manager: Dr. Andria Bilich)

NGS has been developing M-PAGES, our new multiple-constellation Global Navigation Satellite System (Multi-GNSS) software for position solutions. OPUS with M-PAGES will be ready for beta testing before the end of the calendar year. The new OPUS engine will allow users to process data from all GNSS systems in operation today that have two or more frequencies.

EPP2022 (Project Manager: Dr. Daniel Roman)

In August 2021, NGS contracted with the University of Nevada–Reno for scientific support and software development to produce a preliminary rotation model of the North American tectonic plate, in support of NATRF2022. Results will be delivered later this fiscal year.

GRAV-D (Project Manager: Jeffery Johnson)

During March 2022, the NGS GRAV-D team in conjunction with the NOAA Aircraft Operations Center conducted an airborne gravity survey in Guam with the NOAA WP-3D Orion aircraft (affectionately nicknamed Miss Piggy). Part of the NOAA Hurricane Hunter operations, the aircraft is also effective at collecting airborne gravity data. The team completed 82% of the airborne gravity data lines covering the islands of Guam and the highly populated parts of the Commonwealth of the Northern Mariana Islands chain. Since data was collected over and near all of the populated islands, NGS will soon decide whether we have enough data to call the Guam block complete. While on Guam, the GRAV-D team also collected ground based gravity and GPS measurements.