

Issue 9, October 2017



NSRS Modernization News

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

Blueprints

NOAA Technical Report NOS NGS 64, "Blueprint for 2022, Part 2: Geopotential Coordinates," will see a November 2017 release. A third and (expected) final document in the series is currently in the initial production stages and when complete will address the use of the modernized NSRS.

The Mariana Plate Survey

A field crew of three NGS employees and one NOAA Corps officer spent three weeks during August and September surveying select points in Guam and the Commonwealth of the Northern Mariana Islands (including the isolated northern islands). The team wanted to determine recent IGS coordinates and compare those coordinates with historic IGS coordinates. The effort will contribute to the creation of a new Mariana Plate rotation model, which will be used in the definition of MATRF2022.

In addition to GPS, a gravity survey was performed throughout the project to improve the geoid in the region.

Preparing USGS

NGS employees met with teams of U.S. Geological Survey (USGS) employees and contractors at the USGS Geospatial Technical Operations Center in Rolla, Missouri, in September. The two days of meetings concentrated on understanding the impact the NSRS modernization will have on both USGS's historic and ongoing data collection, as well as their digital map production. Pilot projects were established to guide NGS toward building the tools USGS needs to facilitate a smooth transition.

Progress in ongoing Projects

There are currently 17 ongoing projects at NGS that are directly related to the NSRS modernization. Highlighted below are a select few.

NADCON 5 Project Manager: Dr. Dru Smith

NGS approved the NADCON 5 tool as the official replacement for all previous versions of NADCON and GEOCON, and it will soon be moved to the live NGS web page. A vote by the Federal Geodetic Control Subcommittee to adopt the tool across the federal government is expected to occur in the next six months.

NSRS Database Project Manager: Krishna Tadepalli

The NSRS database structure continues to grow. NGS has recently begun integrating all data from CORS, GRAV-D, and GPS occupations on passive control into the new database.

OP2IDB Project Manager: Dr. Mark Schenewerk

A working version of OPUS Projects that fully supports (behind the scenes) bluebooking, including adjustments and submission to the NGS Integrated Database, is now up and running on the NGS BETA website! Sign up for training with the new version of OPUS Projects here: <https://www.ngs.noaa.gov/corbin/>

xGEOID Annual Project Manager: Dr. Yan Wang

We have begun a collaboration with NGA. NGS will annually provide NGA with GRAV-D data, and NGA in turn will produce a global geopotential model updated with those data. That model will then serve as the foundation for each xGEOID model until 2022.

GRAV-D progress last quarter: **up 2.0% to 63.9%**

Ahead of Schedule!

Recently: GA and SC

