

Issue 8, July 2017



NSRS Modernization News

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

Acronyms

We have received substantial stakeholder requests to change the official acronyms of the new terrestrial reference frames, originally announced in January 2017 as NATRF2022, PTRF2022, MTRF2022 and CTRF2022. The requests focused primarily on easier pronunciation and consistent character length. After careful consideration, and in agreement with the Canadian Geodetic Survey, we are pleased to announce the official acronyms have been changed to:

NATRF2022

North American Terrestrial Reference Frame of 2022

PATRF2022

Pacific Terrestrial Reference Frame of 2022

MATRF2022

Mariana Terrestrial Reference Frame of 2022

CATRF2022

Caribbean Terrestrial Reference Frame of 2022

Blueprints

We are finalizing **NOAA Technical Report NOS NGS 64, "Blueprint for 2022, Part 2: Geopotential Coordinates,"** for an August 2017 release. The document describes the year 2022 replacement of all vertical datums and other NSRS geopotential quantities. It will serve as a companion document to **NOAA Technical Report NOS NGS 62, "Blueprint for 2022, Part 1: Geometric Coordinates,"** released in March of this year. Work has begun on **Part 3** to address the re-invention of Bluebooking.

New Projects

We continue to initiate new projects for completion prior to 2022 as part of the rollout of the modernized NSRS. Details on the four latest projects are below.

Euler Poles

Project Manager: Dr. Daniel Roman

To determine the Euler Pole Parameters that define the angular rotation, relative to the IGS frame, of the four tectonic plates associated with each of the four 2022 NSRS terrestrial reference frames.

Scoping study for Intra-frame Velocity Models

Project Manager: Dr. Daniel Roman

This one-year effort will investigate how various methods may be used to provide Intra-frame Velocity Models for each terrestrial reference frame. The goal is to determine a recommended way forward by addressing accuracy needs, methodologies, capabilities, and budget.

VERTCON 3

Project Manager: Dr. Dru Smith

To improve and replace VERTCON 2.1 and DYN_HT, as well as to prepare for the roll-out of the **North American-Pacific Geopotential Datum of 2022 (NAPGD2022)**.

Comprehensive Toolkit Improvements

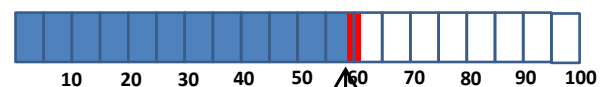
Project Manager: Dr. Dru Smith

A five-year effort to overhaul the entire Geodetic Toolkit, improving, replacing, and (where possible) integrating all code into more modern tools, and focusing on improved customer interaction and the removal of duplicate functions residing in multiple tools.

GRAV-D progress last quarter: **up 2.3% to 61.9%**

Ahead of Schedule!

Recently: Alaska (NW and SW)



Schedule: 58%