NOTICE: NGS Releases Annual Experimental Geoid Models & Gravity Interpolation Tools

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XGEOID20 Release Details

NGS has released xGEOID20 - the foundation for determining precise heights in the modernized National Spatial Reference System (NSRS). The geoid takes the shape of the ocean surface if the other influences such as winds, tides and ocean currents were absent. This surface is extended through the continents and it is computed through the gravimetric method. The xGEOIDs provide a preliminary - but increasingly accurate - view



of the changes expected from modernizing the NSRS and replacing the North American Vertical Datum of 1988 (NAVD 88).

Experimental Geoid Model 2020 (xGEOID20) is the first joint experimental geoid model produced through international cooperation between the United States, Canada, and Mexico. It incorporates the latest satellite gravity model, all available airborne gravity data from the GRAV-D program (Gravity for the Redefinition of the American Vertical Datum), improved digital elevation model (DEM) in 3" spatial resolution. It provides the geoid accuracy and an updated dynamic geoid model of changes over time. For more information, please contact the NGS geoid team.

Also Released: New Gravity Interpolator Tool, xGRAV20



The Experimental Gravity Model 2020 (xGRAV20), a companion product of xGEOID20, provides the full-field gravity value and a Digital Elevation Model height at a user-specified location. The xGRAV20 model is being developed to replace the NGS Surface Gravity Prediction Tool.

NGS Plans New Gravity and Geoid Products

NGS has decided not to compute an experimental geoid model in 2021. Instead, NGS will increase its coordination with Canada and Mexico to help ensure a smooth transition to the modernized NSRS. We will resume computing and publishing xGEOID models in 2022. After the required gravity observations have been collected and processed, the final xGEOID model will become GEOID22 - the zero-elevation surface for the modernized NSRS.

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