

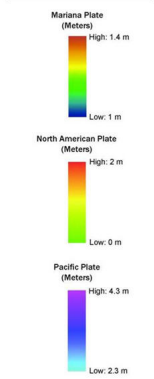
The following images, courtesy of Michael Dennis, NGS show the predicted change from NAD 83(2011/PA11/MA11) to the new geometric datum (represented here by IGS08 at epoch 2022.00). The last image is the predicted change from NAVD 88 to the new vertical datum

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

...and what about those new datums?

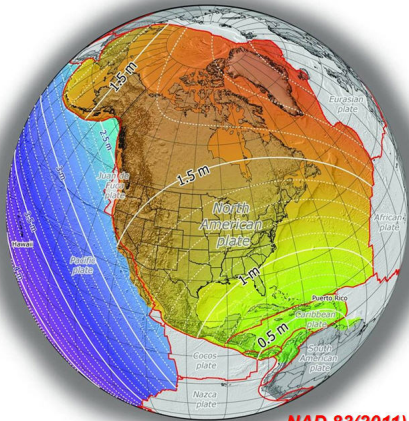
- Planned implementation of new datums in 2022
 - Geometric datum: Aligned with ITRF
 - Vertical datum: Based on gravimetric geoid
- How much will NSRS coordinates change?
 - North America plate (CONUS and AK): Approx 0.8 to 1.6 m
 - Caribbean plate: Approx 0.4 to 0.6 m
 - Pacific plate: Approx 3.4 (Midway) to 4.3 m (American Samoa)
 - Mariana plate: Approx 1.1 to 1.4 m
- How much will NSRS ellipsoid height change?
 - Approx -1.9 m (Puerto Rico) to +2.0 m (Guam)
- How much will NSRS CONUS orthometric height change?
 - Approx +0.1 m (Florida) to -1.3 m (Washington)

Approximate Horizontal Change



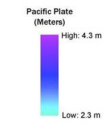
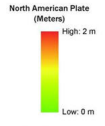
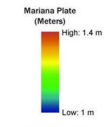
Tectonic Plate Boundaries

Approximate Horizontal Change North American Plate

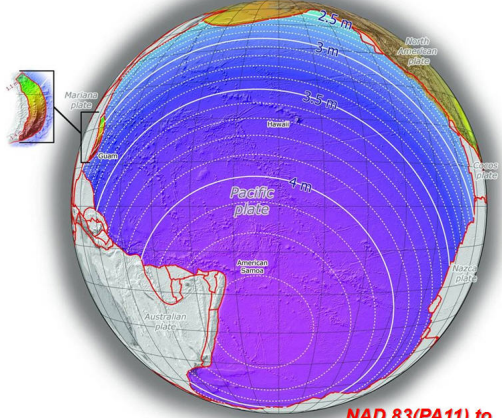


NAD 83(2011) to IGS08 at epoch 2022.0

Approximate Horizontal Change

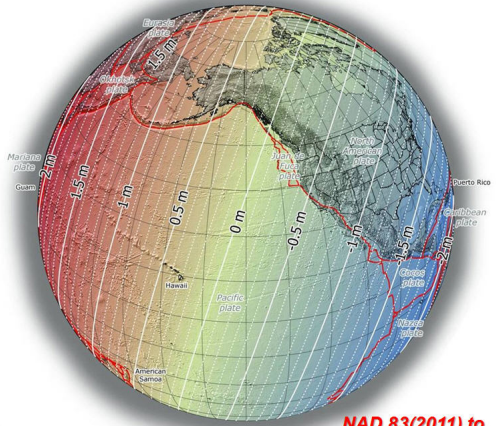
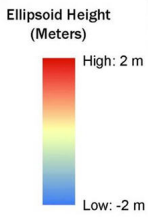


Approximate Horizontal Change Pacific Plate



NAD 83(PA11) to IGS08 at epoch 2022.0

Approximate Ellipsoid Height Change



NAD 83(2011) to IGS08 at epoch 2022.0