NGAC

Update on new geometric and geopotential (vertical) datums

Gary Thompson
NGAC Meeting
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NGS Webinar

Presenters:
- Juliana Blackwell, Director
- Dru Smith, Chief Geodesist

Presentation can be found at this link:
- [http://www.ngs.noaa.gov/web/science_edu/presentations_library/](http://www.ngs.noaa.gov/web/science_edu/presentations_library/)
- The following four slides are from the NGS presentation
New Datums are Coming in 2022!

- Both a new geometric and a new geopotential (vertical) datum will be released in 2022.
- The realization of the new datums will be through GNSS receivers.
- NGS will provide the tools to easily transform between the new and old datums.
How will the new datums affect you?

- The new geometric datum will change latitude, longitude, and ellipsoid height by between 1 and 2 meters.

- The new vertical (geopotential) datum will change heights on average 50 cm (20''), with a 1 meter (39'') tilt towards the Pacific Northwest.
Adoption: Legal / Feds

- The datums will be official once the FGCS approves them

- OMB A-16 then requires all federal, civil agencies to transition to the new datums

- Other groups may adopt at their own speed and need
2015 Geospatial Summit

- April 13-14, 2015, in the Washington, DC Area
- As part of a broader “conference of conferences” with National Society of Professional Surveyors and Management Association for Private Photogrammetric Surveyors (MAPPS)
- Follows the successful 2010 Geospatial Summit. More info at the 2015 Geospatial Summit website.

http://www.geodesy.noaa.gov/2015GeospatialSummit/
GPS on Bench Marks

What is GPS on Bench Marks?
Improve the National Spatial Reference System (NSRS)

 Recover: Look up the description of an existing bench mark and visit the bench mark of your choice.
 Observe: Record field notes, take digital photos, and collect GPS observations or coordinates for the bench mark you visit.
 Report: Use online tools to send the information to NGS.

Where?
Currently there are over 400,000 bench marks across the Contiguous United States (CONUS), Alaska, Hawaii and all U.S. territories. Tidal marks and bench marks are used for determining heights. Use the maps to prioritize which bench marks to observe.

Who can participate?
Anyone with Global Positioning System (GPS) enabled phones, handheld devices or survey-grade GPS receivers, but recommended procedures vary depending on the type of equipment used.

When should I start?
You can collect and share information any time. Join volunteer efforts across the United States in celebration National Surveyors Week beginning March 15, 2015. Contact your local National Society of Professional Surveyors chapter or your nearest NGS geodetic advisor to learn about projects being planned in your local area.

How?
For specific information on how to help please visit

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