

NOAA, National Geodetic Survey
HEIGHT MODERNIZATION COORDINATION MEETING
DRAFT NOTES
SSMC3, Room 8836

Date: Thursday, March 14, 2012
Time: 2:00-3:30 pm East Coast time

Attendees:

Call-ins from: AK (Patrick Kalen), CA (John Canas), IL (Amy Eller, Sheena Beaverson), KY (Wolfgang Ziegler), MI (Shawn Roy), NC (Gary Thompson, Dave Zilkoski), NGS (Vicki Veilleux, Dan Callahan), SC (Dick Woods), WA (Dave Steele)

Silver Spring: NGS (Michael Dennis, Brett Howe, Christine Gallagher, Ajit Singh, Philippe Hensel)

Advisors/Coordinators: Marti Ikehara (CA), Ed Carlson (HI), Dave Rigney (MI), Scott Lokken (NC), Mark Armstrong (OR), Bill Stone (SW Region)

Note:

It is NGS' habit to only capture names of attendees who speak up at the initial roll call or during the meeting. Many individuals using voice over internet protocol (VOIP) were muted and unable to speak up at initial roll call.

We respect those who may wish to attend anonymously. If you want your name captured in the recorded notes, and you do not see it listed here, email Christine.Gallagher@noaa.gov, or ngs.htmod@noaa.gov.

1. NGS and Height Mod related announcements:

- a. **Height Mod manager** (Brett Howe)
Christine Gallagher has been selected as the acting Height Modernization Program Manager.
- b. **Evaluating geoid models** (Ajit Singh)
Internal evaluation is ongoing comparing change between Geoid09 and Geoid12A and further testing of Geoid12A.
- c. **Height Mod Partner meeting** (Christine Gallagher)
NGS still plans to hold the Height Mod partner meeting on April 30 and May 1 in Frankfort, KY.

2. Other announcements / questions (Open to all callers):

None

1. Monthly presentation

Presentation, to start at approximately 2:10 PM:

Comparing GNSS and leveling-derived orthometric heights

Kevin Kelly, ESRI, Inc.

Jay Satalich, California Department of Transportation

The presentation will introduce a study comparing Global Navigation Satellite Systems (GNSS) and leveling-derived orthometric heights using geographic information system (GIS) software. Comparisons were made along a 31 km long leveling line of NAVD 88 bench marks in Palos Verdes Peninsula, southern California using: GEOID99, GEOID03, GEOID09 and GEOID12A models. The analysis makes use of commercial-off-the-shelf GIS software and takes into account subsidence and rebound effects.

Speaker bios:

Kevin Kelly is a Geodesist with ESRI in Redlands, California where he researches and implements geodetic algorithms and applications for the ArcGIS software. His experience spans over 34 years in hydrography, geodesy, surveying and most recently, geographic information systems. He has held the posts of Manager of Geodetic Services for the Province of Ontario, Chief Geodesist for the Kingdom of Saudi Arabia's Military Survey Department and Senior Project Surveyor for The Keith Companies (now Stantec, Inc.). Mr. Kelly received a Master of Applied Science in Geodesy at the University of Toronto, Canada and holds an Honors Diploma in Hydrographic Surveying Technology from Humber College in Toronto. He is also a licensed Geodetic Surveyor in the Province of Ontario, Canada.

Jay Satalich has held employment in both the private and public sectors. His areas of expertise are geodetic surveying and applications of the Global Positioning System (GPS). His geodetic control experience also includes both geodetic leveling and relative gravimetric surveys. He has considerable experience performing traditional photogrammetric ground control surveys, airborne GPS, and airborne laser terrain mapping using LIDAR systems.

Questions/Answers:

Q (Dave Zilkoski): Some of the differences could be attributed to gravity on its own merits. Have you considered this?

A (Kevin/Jay):

Q (Pam Fromhertz): Some similar situations seem to be arising in Colorado. Thanks for the presentation!

A (Kevin/Jay): Great!

Q (Marti Ikehara): Did you consider submitting the new observations to OPUS-DB?

A (Kevin/Jay):

Q (Philippe Hensel): Could some of the differences be attributed to assumptions made by holding the tide gage?

A (Kevin/Jay):

Q (Michael Dennis): Are GPS on BM being weighted equally compared to other control (e.g. historic leveling)? Would you consider weighting them differently?

A (Kevin/Jay):

2. Other Business

Important Links: Previous months' meeting notes and a list of future meeting presentations can be found at: <http://www.ngs.noaa.gov/heightmod/MeetingNotes.shtml>

Next meeting: April 11, 2013

Guest Presentation:

Use of GNSS to Establish a Vertical Datum

Paul Rydlund, U.S. Geological Survey

Recent Past Events

Feb 13-15, 2013, Lake Geneva, WI – Wisconsin Land information Association annual conference

Feb 19-20, 2013, Wisconsin Dells, WI – WisDOT Annual Surveyors' Workshop

Feb 19-22, 2013, Bellaire, MI – 72nd Annual Meeting of the Michigan Society of Professional Surveyors

Feb 20-21, 2013, Missoula, MT – 2013 Montana Association of Registered Land Surveyors (MARLS) Conference

Feb 21, 2013, Cabazon, CA – CA Land Surveyors Assn, annual joint Riverside/San Bernardino/Desert chapters meeting

Feb 22, 2013, Oroville, CA – CA Land Surveyors Assn, Northern Counties chapter Workshop on GPS Surveying

Feb 25-27, 2013, Washington, DC - Esri Federal GIS Conference

Feb 26-28, 2013, Sandy, UT – Utah Council of land Surveyors Annual Convention

Feb 28-Mar 3, 2013, Arvada, CO - Annual Rocky Mountain Surveyors Summit

March 1, 2013, Sacramento, CA – Federal Geographic Coordinating Committee of CA, quarterly meeting

Mar 12-13, 2013, Washington, DC - MAPPS Federal Programs Conference

Upcoming Events

Mar 15-17, 2013, Albuquerque, NM - New Mexico Professional Surveyors Conference

Mar 23-27, 2013, Reno, NV – California Land Surveyors Association / Nevada Association of Land Surveyors 2013 Conference

Mar 24-28, 2013, Baltimore, MD - ASPRS Annual Conference

Sept 16-19, 2013, Providence, Rhode Island – GIS-PRO '13 (URISA Annual Conference)