

**NOAA, National Geodetic Survey**  
**HEIGHT MODERNIZATION COORDINATION MEETING**  
**DRAFT – MEETING NOTES - Thursday, October 8, 2009**

**Attendance:**

Call-ins from: AK (Scott Sexton), CA (John Canas, Maria Turingan), IL (Bev Herzog, Amy Eller), LA (Roy Dokka), NC (Gary Thompson), NJ (John Knapp), NM (Earl Burkholder), NGS (Erika Wilson, Vicki Veilleux, Tim Hanson, Galen Scott), PA (Brad Foltz), SC (Matt Wellslager), USGS (Larry Hothem), WA (Dave Steele), WI (Dr. Dave Moyer)

Silver Spring: COOPS (Tom Landon), NGS (Neil Weston, Renee Shields, Gilbert Mitchell, Maralyn Vorhauer, Sonita Tiwari, Christine Gallagher)

Advisors/Coordinators: Marti Ikehara (CA), Pam Fromhertz (CO), Dave Newcomer (FL), Chris Pearson (IL), Monroe Rivers (KS), Ross Mackay (KY), Dennis Riordan (LA), Dave Rigney (MI), Curt Crow (NH/MA), James Richardson (NE), Mark Armstrong (OR), Dan Prouty (TX), Cliff Middleton (TX), Dan Martin (VT)

**Grants/Budget status (Sonita Tiwari)**

No new developments. All grants for current year were submitted on time. Currently, operating under a Continuing Resolution.

**Infrastructure, Models and Tools, Standards, Specs, and Guidelines**

**Software developments –TX HM level tool (Dan Prouty)**

Hope to wrap up Beta testing and have final release out next week. Renee S. added NGS could put a link onto Height Mod webpage or if PSC approved it could be a user-contributed tool on NGS website. Currently works with Leica and plan to start working with Topcon in two weeks. Tom L. asked if there were security issues with its Blue Tooth capabilities, but the tool will work fine even if the Blue Tooth is disabled – you would just use a cable.

**LOCUS (Ajit Singh not present)**

Discussed at PSC, but still in Beta

**OPUS (Neil Weston)**

US National Grid rounding mistake has been corrected and was implemented today. Geoid 09 is not currently in OPUS because state specific accuracies need to be added, but hopefully it will be updated and available within a week. OPUS will then default to Geoid 09, but user will be able to select Geoid 09 or 03/06

**GRAV-D project status – (Renee Shields, speaking for Vicki Childers)**

Everyone is “home,” and the team is finalizing the adjustments to the processing software that was creating erroneous biases in the data. Once adjusted, processing of data should

only take about a week for airborne gravity data. The final gravity data that comes out of the processing will then be turned over to the geoid team. Timeline on terrestrial gravity data is unknown. Larry H. noted that USGS has great interest in change in gravity over multiple flights and water table levels.

### **Geoid09 status (Dan Roman, not present)**

- Dan M. said that Geoid 09 is now on datasheets
- Marti said that there is not currently the option to select 03/06 on datasheet, and there will likely be further discussions for such issues with PSC in upcoming year.
- Marti said that the PC friendly Geoid 09 is now on the website as well

### **Guidelines/Publications**

#### **RTK/RTN Guidelines**

- Larry H. discussed that the Government Program Committee, American Association of Geodetic Surveying, ACSM is becoming very active in the review process. Additionally, the GPS SubTeam of the Department of the Interior (DOI) Enterprise Geographic Information Management (EGIM) Team <<http://www.nps.gov/gis/egim/>> is also making sure important users are involved within DOI. (Tim Smith, National Park Service, and Leader, EGIM GPS SubTeam).
- Dan Martin updated all on the standards presentation from Bill Henning and Richard Snay at ION GPS 2009 meeting in Savannah, GA on 9/22 to 9/25. They presented first four chapters, and then there were productive, enthusiastic break-out sessions to collect feedback/input. Ross Mackay added that there was good representation in the audience from all user groups, including state, local, and federal governments, and private industry.

### **Outreach and Education**

#### **Website (Vicki Veilleux)**

Posted past meeting notes, and pictures on state pages. The regional part of the website is still coming.

#### **Corbin (Erika Wilson)**

GNSS Derived Heights webinar on Oct. 6 and 7 were successful with about 450 participants for Part I and about 400 participants for Part II. Will be posting the powerpoint presentations by COB today, and will eventually post the recorded audio and time-synced powerpoints in near future. FY10 will have many more webinars, and if you would like to be on an email notification list for upcoming webinars email Erika at [Erika.Wilson@noaa.gov](mailto:Erika.Wilson@noaa.gov). Workshops are upcoming at Corbin in Oct. and Nov, but they are currently full.

### **Workshops, upcoming events**

- San Diego, CA – CSRC semi-annual meeting in October

- Boulder, CO – 2009 Workshop on monitoring North American Geoid change 10/21 to 10/23
- Austin, TX – 2009 TSPS Convention and Technology Expo. – Height Mod. on 10/24
- Rockford, Illinois – Great Lakes Regional Height Mod. Consortium Workshop
  - Bev described forum on 11/10 with current registration at 71 – registration will close 11/5. Three day leveling workshop will immediately follow with day 1 in classroom and days 2 and 3 in field. Field portions are filling up and directed at those in Illinois. All forum attendees welcome to attend day 1 classroom training at no additional cost.
  - Chris Pearson added that the forum will focus on RTK. There will be a panel discussion on the Height Mod program at end of the forum and they would like to have regional neighbors participate (WI).
- Rhinelander and Hayward, WI - Northern Wisconsin forums – outreach events in Dec. where Renee will discuss national program, there will be focus on active local program, and live demo of CORS
- Nashua, NH - New England Surveyors conference in Dec.
- North Carolina will have their 18<sup>th</sup> GIS workshop
- Portland, OR - Coast and Estuarine Research Federation (CERF) Conference 11/1 to 11/5 bringing Height Mod knowledge to coastal management community
- Baton Rouge Campus LSU, LA - Hurricane and coastal flooding conference (NWS/NSRC) on March 16-17 hoping to have Director of Coast Survey and Juliana present
- Pueblo, CO – ESRI Southwest User’s Group conference on 10/19 to 10/23. Pam will present on real time reference network and Bill Stone will present on 4 Corners

## **Updates from States**

### **Other Business.**

- Tom Landry - COOPS field teams are nearing completion of having GPS updates on water level stations to tie tidal gages into GPS network
- Dan Prouty – TX campaign survey NERRS Port Aransas for future RTIC
- Matt Wellslager – SC completed Height Mod project in 3 counties generating 3D control of greater than 200 stations. Next, 2 more counties are planned from Dec. – Feb. 2010

- Dave Steele – WA about to submit blue book project for primary network for NE WA state to NGS
- Bev – Illinois is completing its 1<sup>st</sup> year funding, and will submit bluebook project into NGS by Thanksgiving
- Bev - post GeoScience Congressional visit days, ACSM submitted numbers to Sen. Durbin's office stating Height Mod needs \$22M/year to be a fully funded program

**Next meeting: Thursday, November 12, 2009, 2:00-3:30 East Coast Time**