

Summary of the Annual Meeting of the HMT Advisory Panel

May 22-23, 2008
Sacramento, CA

Advisory Panel Meeting Attendees

1. Mike Anderson, DWR-State Climatologist
2. *Don Cline, NOHRSC
3. Mike Ekern, CNRFC
4. Gary Estes, California Extreme Precipitation Symposium
5. *Rob Hartman, CNRFC
6. *Ken Howard, NSSL
7. *Wes Junker, NCEP-HPC
8. *John Juskie, Sac-WFO
9. *David Kingsmill, ESRL-PSD
10. Elissa Lynn, DWR
11. *Elizabeth Morse, Sac-WFO
12. Brian Motta, NWS-FDTB
13. Mel Nordquist, Eureka-WFO
14. Bob Rice, UC Merced
15. *Woody Roberts, ESRL-GSD
16. *Tim Schneider, ESRL-PSD
17. *Chris Smallcomb, Reno-WFO
18. *Mike Smith, OHD
19. *Eric Strem, CNRFC
20. *Steve Vasilov, NSSL
21. Christopher Williams, ESRL-PSD

On the Phone:

*Dave Kitzmiller, OHD; Rick Koehler, NWS-FDTB; Tony Mostek NWS-FDTB

* 30 May 2008-draft Denotes current member of the HMT Advisory Panel 2008 HMT Advisory Panel Annual Meeting

Major HMT-West Recommendations: FY09 Season

- While the overall level of effort will remain high, certain activities will be curtailed:
 - No gap filling radars*
 - No supplemental soundings
 - No daily coordination calls
 - In short: no IOP driven events
- * Suggestion: in the event of a “monster storm”, the Advisory Panel feels that a “rapid deployment” gap-filling radar option would be advisable
- Communications during field season:
 - Weekly (or biweekly?) coordination calls, or as needed
 - Participate in one of the weekly Monday/Thursday RFC briefings (pick one - I suggest Monday...)
 - “iMChat” for ongoing discussions or developing events
 - Scientist visits to CNRFC and WFOs
 - Blogs and RSS feeds to monitor network status, etc.

Major HMT-West Recommendations: FY09 Season, cont.

- Emphasis on analysis and product development
 - Exploit existing data sets
 - Re-articulate key science questions via task teams
 - Ensemble modeling efforts ramping up
 - Q2 effort ramping up
- Delay FY09 snow survey (NOHRSC led) until FY10
- Enhancements to the autonomous network
 - Harden certain mesonet sites (additional batteries, etc.) to ensure season-long functionality
 - Deploy a surface met station/ETI/soil moisture site at Ward Creek (lee-side)
 - Ability to do both should be considered; if funds permit only one then harden existing sites as needed

Major HMT-West Recommendations: FY10 Season

- Gap-filling radar efforts remain focused on ARB
 - Moving to other basins (e.g. Napa or Russian) would constitute a major shift in philosophy for HMT
 - Need to finalize the objectives and develop conclusions from the HMT-West field campaigns.
 - Strong need for gap-filling radar in Sierra lee side and upper basin (for the spatial distribution of precip).
 - Need to catch the warm and smaller events in 2010
 - Consider the possibility of earlier deployment in 2010
 - A science review is needed to determine the merit of deploying gap filling radars in the Russian River Valley and Napa Valley, and perhaps alternate/additional sources of funding

Major HMT-West Recommendations: FY10 Season, cont.

- Conduct a continuous snow survey in the ARB during the whole FY10 winter by imbedding personnel in the ARB and stationed in the U.S. Forest Service Forrest Hill summer barracks
 - Replaces the FY09 “bracket study”
 - Recommend collaboration between this HMT-West activity and with UC Merced in their H2O-V2 Project.

Other HMT-West Recommendations

- Verification is a thread that runs through the existing Major Activity Areas. It is NOT a separate entity.
- Conduct a number of mini-workshops on key topics to convey new science and provide opportunity for ops people to provide input to product development
- Recommend the previously collected gap filling radar data be analyzed to estimate the spatial variability of precipitation at high elevations and on the lee-side of the mountains to evaluate PRISM-based products and model QPF
- Recommend expediting the Dual-Pol upgrade for the WSR-88D radars with the following priorities (1) KDAX (SAC), (2) KRGX (Reno), and (3) KBHX (Eureka) *[need to establish dates...]*
- Recommend continue looking for new funding opportunities and building new partnerships with local and national agencies (i.e., CalTrans and FEMA) that have an interest in new and novel observations in the inter-mountain West.
- OHD and HMT coordinate the assimilation of soil moisture so that it is more valuable to a larger community

Actions

- Tim Schneider: 88D issues
 - Get demo of below half-degree scanning. (w/RNO, MRY)
 - Coordinate dualpol roll-out with HMT (ROC)
- Don Cline: provide Tim/HMT with snow survey plan for FY10
- Dave Kingsmill: Investigate cost-trade off of new site at Ward Creek vs. harden existing sites
- Rapid radar deploy option:
 - Tim Schneider: cost/benefit of having rapid deployment capability; check-in with Marty and Gary (PPBES PMs)
 - Ken Howard, determine cost of rapid deploy with SMART-R

Actions, cont.

- Document lessons learned to be applied to HMT-east
 - Verification to determine HMT-East baseline before implementing HMT-East
 - (All 5 area teams) Know what you are trying to do before you start doing stuff.
- Write a BAMS Overview Article (principal reference) for HMT Project
- Major Activity Area Teams
 - Action (Tim)- determine teams/leaders
 - AP members- express interest
 - Define Key science questions
- Retirements (August, 08):
 - Wes Junker, Eric Strem, Betsy Morse

Initial Training Opportunities

- Atmospheric River Science
- 3 factors comprising PARTI
 - 2 predictive, 1 observational