

NWS Hydrology Forecast

Verification Team:

13th Meeting

02/02/2009 – 2 pm EST



Outline

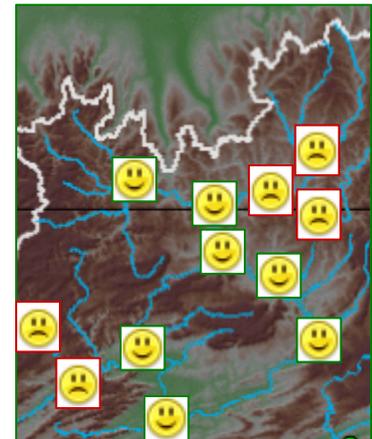
- Team recommendations
- Raw model definition
- Verification for CHPS
- Next meetings



Team Recommendations

- Users of forecasts and verification products
 - Get SCHs involved to define user groups
 - Select verification standards for each user group
- Verification standards:
 - 3 levels of details; summary scores
 - To be proposed in final team report (by April 09)
- Future RFC case studies to test verification standards

Example of summary map



Raw Model Definition

- Best way to move forward?
 - Each RFC to make a proposal (w/ different options for different uses/users)
 - Julie & Mary to summarize proposals
 - Verification Team to discuss proposals (next meeting)
 - Julie & Mary to present to HSD
 - Decision for 1 standard raw model for all RFCs
- APRFC proposal



Verification for CHPS

- 2 classes of verification
 - **Diagnostic verification** to know/improve model performance; done **off-line** with archived forecasts or hindcasts to compute verification statistics (different levels of details, different conditions, etc.)
 - **Prognostic verification** to aid forecasters make decision in real-time; done in **real-time** by querying/displaying analogs, displaying summary verification statistics, and if necessary, run bias-correction program



Verification for CHPS

- Diagnostic and prognostic verifications have **different requirements** for CHPS
 - Need to define **use cases**
 - Need to **coordinate with Deltares and HSEB** to expand existing/planned CHPS Forecast Display & Product Generator functionalities (e.g., EPG prototype)



Verification for CHPS

- Plan to define requirements:
 - OHD and Mary to define use cases w/ CAT Team
 - Verification Team to finalize use cases
- What is coming:
 - Diagnostic: EVS to be run within CHPS by Spring 09; enhanced EVS prototype to be delivered by FY09
 - Prognostic: basic functionality to be demonstrated in 2009



Verification for CHPS

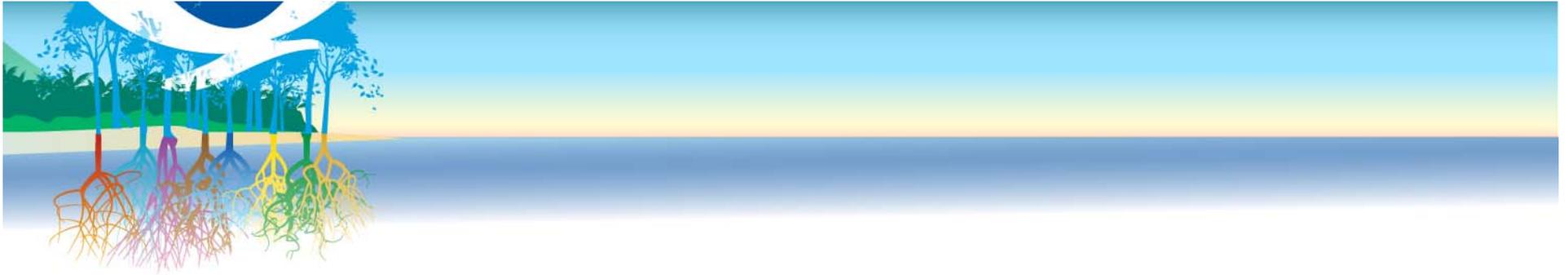
- Consistency of verification information with NCEP:
 - Same verification metrics (e.g., CRPS)
 - Same spatial and temporal scales (e.g., verification stats for daily forecasts for each RFC area)
- Need to determine the different spatial scales of interest to the RFCs
 - Give NCEP a set of masks to present NCEP grid verification statistics on these RFC-defined spatial areas (e.g., RFC area, carryover groups, forecast groups)



Next meeting

- 14th meeting on user groups and raw model definition:
 - February 19, 23
 - March 2, 3, 4, 9, or 10
- 15th meeting on standard verification metrics/graphics
 - Late March





Thank you!

Questions?

