NWS Hydrology Forecast Verification Team
Teleconference Notes
01/17/2008

Agenda

- Presentation of the slides by Julie Demargne
- Presentation of the verification case studies by the 12 RFC verification focal points

Questions and Comments

Slides #4 and 6: the team discussed how raw model forecasts could be defined since the RFCs may not have the same needs for such a baseline forecast. Raw model forecasts could be defined as the hydrologic forecasts produced from the meteorological forecasts without any MODs, or with a few MODs that are considered crucial to produce a meaningful reference forecasts. Using meta-data to specify how the forecast was generated is especially important in this case. Since no deterministic hindcasting capability currently exists within NWSRFS, it is recommended to generate and archive the raw model forecasts on a daily basis, in parallel to the operational forecasts.
Bill Lawrence and Tom Adams said that raw model forecasts were defined at their office. They would provide the definition to the others so that each office could discuss how they want to define their raw model forecasts.
Raw model forecasts need to be differentiated from the raw model simulations, which are produced using perfect input data (defined as observations). Raw model simulations are very useful for verification analysis to analyze the impact of the meteorological forecasts on flow forecasts. By comparing the quality of flow forecasts with observed flows and with flow model simulations, one could separate the impact of the meteorological error/uncertainty and the impact of the hydrological error/uncertainty.
The FY08 AHPS verification plan includes the use of the hydrological ensemble hindcasting capability to be run in a pseudo deterministic mode (using a single member for the ensemble forecast, which values will correspond to the deterministic forecast values) and produce raw model deterministic hindcasts. Tom Adams and Rob Shed had expressed their interest in the current ensemble hindcaster to produce hindcasts in their office.

Action: Bill L. and Tom A. will send their definition of the raw model forecasts to the team. The team will revisit this issue in the next meetings.
Action: Julie D. will send to Tom A. and Rob S. the scripts of the Streamflow Ensemble Hindcaster along with the user's manual.

Slide #5: Tom Adams underlined the need to monitor what was actually being archived in the archive database to correct any issues right away. Julie Meyer mentioned the Perl script developed by Joe O. at MARFC for this kind of monitoring. The Archive Team is also aware of the need for a more robust and user-friendly tool in the future.
Action: Julie M. will send the Perl script to Tom A.

Slide #7: the slide summarizes only the availability information of data for verification purposes, based on the archiving surveys filled out by all the RFCs. Unfortunately not all the data required for verification is currently being archived by the RFCs due to all the limitations with the current system (especially the lack of disk space).
Action: Julie D. will send all the survey results to the team.

Slide #9: this slide summarizes the case studies proposed by the 13 RFCs. 12 RFCs (except MARFC) presented their case study.

For the ABRFC case study on HMOS ensembles, Julie D. will work with Bill L. to have the EPP2-ESP-based streamflow ensemble hindcasts for the test basin QUAO2. These flow ensembles will be compared with the HMOS ensembles.

NERFC and OHRFC will work on similar case studies, analyzing the impact of the QPF on their flow and/or stage forecasts using various QPF sources (HPC, RFC, and NDFD). They also would like to analyze the quality of flow ensembles produced from NCEP GFS ensembles. Rob S. and Tom A. will see with James B. and Julie D. how this study could be done with EVS given the available data.

For the NCRFC case study, Mike DeWeese would also like to verify the archived long-term ensembles for flow using EVS. He will work with James B. to see how this could be done given the limited available archived data.

Slide #15: the team agenda has been modified to account for the IVP ob8.2 installation at all the RFCs and the forecaster workload during March; there will be no meeting in February, one meeting in March, and two meetings in April. CBRFC and potentially CNRFC will present their case study to the team at the end of March. The team will work on the IVP exercises in March and will discuss the exercises in early April. The team will review the COMET verification training module in April and then work on the EVS exercises; there will be a meeting at the end of April to review the EVS exercises. From May to September, all the other RFCs will present their case study.
Action: Julie D. will send an email to schedule the next two meetings in March and early April.
Action: Hank Herr and Julie D. will give the team the IVP exercises and data early March.

The next teleconference will be scheduled for the **last week of March (03/24-28)**.