

**NWS Hydrology Forecast Verification Team
Teleconference Notes
05/26/2009**

Agenda

- Presentation of the recommendations from the final team report by Julie Demargne

Questions, Comments and Actions

Julie's presentation

Slide #6: it is necessary to give the information about the sample sizes when for the verification statistics. Tom Adams mentioned that he preferred to overlay the number of samples, instead of plotting the sample size with bars/dots. In the future, the sampling uncertainty will be estimated with confidence intervals and will be plotted for specific confidence level(s) on top of the verification statistics.

Slide #7: there was a lot of discussion among the team members on how to define the different forecasting scenarios to use for the QPF horizon study. A similar QPF horizon study is performed by MBRFC and NCRFC with the collaboration of CR. The suggestions given by the team members were the following:

- define basic scenarios to be used at all RFCs in order to inter-compare results at the national level; let each office define additional scenarios if necessary;
- the QPF horizons to be used are: 0, 6-hr, 12-hr, 18-hr, 24-hr, 30-hr, 36-hr, 48-hr, 72-hr, and 96-hr; each RFC will decide which source of the QPF to use for the different lead times, to choose the best available QPF;
- the model states to be used should be similar to the operational ones but should exclude any run-time mods that could impact the QPF values or interact with the QPF values; these model states should include the mods for the reservoir operations in order to produce realistic forecasts on these regulated points; all the mods included in the 10 forecasting scenarios should be systematically stored in metadata; Julie Meyer will send a list of mods to be included and mods to be excluded to the team to comment on the selection;
- the forecast to be verified is the 6-hr stage forecast for a 7-day window; the window may need to be extended for slow responding basins; the stage forecasts should be verified for each individual lead time.

Slide #8: for the run-time mods study, the recommendations were the following:

- all the RFCs should define 3 additional forecast scenarios to be compared with the operational forecasts: 1) forecasts with best available observed and forecast inputs without on-the-fly mods (i.e., run-time mods that are made on the fly; the other mods are called a priori mods since they are made before any forecast is produced); 2) forecasts with best available observed inputs (no forecast) with all mods; 3) forecasts with best available observed inputs (no forecast) without on-the-fly mods; Tom Adams will start the list of a priori mods;

- the 6-hr stage forecasts should be verified for each individual lead time and for the same window as the one used for operational stage forecasts;
- the model states to be used should come from the carryover that is 5 day old (which will include past modifications); other sets of model states could be used at each RFC for additional runs.

Action: all the RFCs will review the list of mods provided by Julie Meyer and Tom Adams. Julie D. will update the team report with the additional details for these two sensitivity analyses.

The next team meeting is scheduled for **Monday, June 29th, 2009** to discuss the final team report and the sensitivity analyses.