

**NWS Hydrology Forecast Verification Team**  
**Teleconference Notes**  
**09/25/2008**

**Agenda**

- Presentation of OHRFC verification case study by Tom Adams
- Presentation of MBRFC verification application by Julie Meyer

**Questions and Comments**

Tom's presentation

Six daily batch forecast runs were inter-compared using 2 sources of QPF (RFC QPF vs. HPC QPF) and including or not the MODs; persistence was used as a reference forecast. The sample size for these sets of batch forecast runs was different from the set of operational forecasts, which included some updates. Therefore the comparison of verification statistics was not based on the operational forecasts, but on the batch forecast runs with RFC QPF and MODs, to maintain consistency between the verification statistics using similar sample sizes.

One lesson: sample size matters a lot!

Overall the RFC QPF-based forecast runs performed slightly better than the HPC QPF-based forecasts.

One comment: it would be very interesting to analyze the differences for large events. In IVP, different stage categories could be defined based on stage values. It would be better to select cases for which the QPF values were above specific thresholds. This selection is not possible in IVP at the moment (although it's possible in EVS).

Julie Meyer's presentation

Verification results were shown for 1 daily forecast point and persistence was used as baseline. In these results, the operational forecasts seemed to perform more poorly than persistence.

One comment: operational forecasts should be more skillful than persistence when the situation is changing in the basin, and more especially with longer lead times. This is shown on slide #25 with the stage results, when the Skill Score is above 0 and increasing with lead time. To show the forecast value, different thresholds could be defined to analyze results for only large events (including more events than the flood events, otherwise the sample size is too small to get robust statistics). If necessary, forecasts should be pooled together from a large numbers of years or months, to get enough events in these large categories.

The next teleconferences will be on **Tuesday, October 28 at 12 pm EDT** for LMRFC case study and **Monday, November 10 at 12:30 pm EST** for AB- and MA-RFC case studies.