

APRFC View of National Standard “Raw” Model for Verification

The following recommendations are based on the assumption that the purpose of having a “raw” model is to be able to measure the value added to RFC forecasts by all RFC operational functions as opposed to a fully automated forecast function. This national “raw” model would be standard for all RFC’s.

1. The “raw” model would run at least daily (more often for offices that regularly produce more frequent forecasts).
2. Regular river forecasts would be automatically generated with output sent to the Archive Database.
3. The model states would be updated either once or twice per year (seasonal). The date of the update could be decided by each RFC depending on their specific climatology.
4. Only automated QC procedures would be run prior to OFS data ingest.
5. Only automated rating updates would be ingested into the “raw” model system. Exception would be ratings developed by the RFC or other agency based on measured flows.
6. New calibrations or re-calibrations would be included in the “raw” model.
7. A standard, uniform blend should be used for all “raw” model segments. APRFC recommendation is that the blend be 50 periods, which would cover over 10 days.
8. No run time mods should be included in the “raw” model run except when performing the seasonal updates.
9. Model QPF would be ingested into the “raw” model. The model chosen would be constant for the season. A choice of model for the day would be forecaster intervention and undesirable. Whether or not each RFC could choose their preferable model for the season is open for debate. However, the length of the QPF period being used should be consistent across the RFC’s. APRFC would recommend that 10 days be used for all “raw” model forecasts. If the model of choice for an RFC had a shorter forecast period, the remainder of the ten days could be populated by the GFS as a standard.

Ten days can be generated even if one only uses 3 for verification. (Actually, one can only make comparisons to the forecasts that are actually issued anyway.) That way we would have consistency in the data stored even if all the data wasn’t used by everyone or nationally for analysis.