

**P39 A local WRF downscaling of the Global Ensemble Forecast System members using modest computer resources**

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The Global Ensemble Forecast System (GEFS) produces 21 global forecasts during each 6-hour forecast cycle. The variability among the members can give the forecaster an estimate of some of the uncertainty in the forecast. However, examining the 6-hourly global forecast output may not give a satisfactory picture of the forecast uncertainty on the local scale. A system has been established that uses the Weather Research and Forecast (WRF) Model to effectively downscale the GEFS members over a small region. The system produces local ensemble forecasts of hourly temperatures and precipitation through the 144-hour period of the GEFS using very modest computing resources (a single i7-processor desktop system). Both the ensemble mean and the variability in the forecast is displayed on an hourly basis through the forecast period. The paper will describe the data and model processing and provide examples of the forecasts from recent weather events over the southeastern United States. In addition, surface verification statistics from the ensemble across the domain and at several station locations will be presented.