Model-Derived Precipitation Potential Placement

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In 1996, the NOAA/National Weather Service (NWS) Ohio River Forecast Center (OHRFC) implemented model-derived Precipitation Efficiency (PE) to assist in evaluating the expected spatial and temporal distribution of precipitation. Precipitation Efficiency, also known as the Precipitation Potential Placement (PPP) tool can be derived from any numerical weather prediction model where precipitable water (PW) for the entire atmospheric column and mean relative humidity for the 1000-700 hPa layer are computed. The goal of this presentation is to describe a technique by which precipitation forecasting skills can be improved using PPP. The PPP model-derived parameter has proven to be a useful tool in refining the probability, timing, duration, coverage, and intensity of precipitation. PPP has shown to provide value-added information to assist the hydro-meteorologist in preparing precipitation forecasts.