



Creating a scalable solution for creating quality Terminal Aerodrome Forecasts

F. Kuik

Telvent-DTN, The Netherlands

Telvent DTN has been providing Terminal Aerodrome Forecasts (TAF) to a wide variety of aviation clients since 1981. Until recently, all TAFs were written manually by individual forecasters, since automated guidance was non-existent for most TAF parameters, and because no guidance has been available at the timeliness required to produce and maintain a quality forecast for aviation end users. Consequently, TAFs require a heavy dose of manual editing which can produce significant scalability issues when a large number of sites require forecasts. Recent new model guidance additions now provide hourly updating datasets that make it feasible to produce automated TAFs, with some editing. An approach to incorporate these datasets into an automated TAF engine is discussed along with the integration of other forecast data sets, including a common precipitation forecast, an interface for aviation forecasters to edit and override unacceptable forecasts when needed, and verification statistics on the performance of the automated TAF engine.

Telvent DTN issues TAFs (which are called RAMTAF's [Real-time Atmospheric Monitoring Terminal Area Forecast] to distinguish them from regular TAF forecasts) for global locations on both a scheduled and unscheduled basis. RAMTAFs are identical in format and function to government issued TAFs, and are used by aviation clients just as TAFs are. RAMTAF forecasts are issued for clients who need a TAF forecast for a locations where no government issued TAF is available, or where government issued TAFs are unreliable or not timely enough for flight operations.