



## **Evaluating High-Resolution Model Data for Aviation Impacts due to Cloud and Visibility for the San Francisco International Airport**

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The Aviation Weather Testbed (AWT) 2017 Summer Experiment examined the use of a super high-resolution model run provided by the UK Met Office in a small region (83 x 65 km grid) around the San Francisco International Airport (SFO). This very high resolution model has better representation of orography and surface characteristics and allows for improved model cloud parametrization. The experiment design was based on daily forecast discussions and cloud clearing forecast times for SFO created operationally issued from a joint partnership between the Oakland Center Weather Service Unit and the Monterey Weather Forecast Office. AWT participants were tasked with examining different high resolution forecasts, including the UK Met Office 330-m resolution nest, along with high-resolution observations and satellite products to derive a forecast of cloud and visibility hazards for the SFO terminal area. The finalized text based forecasts were then presented to end users participating at the FAA's Aviation Weather Research and Evaluation laboratory in Atlantic City, NJ. This paper will discuss the unique challenges of forecasting cloud and visibility in the SFO terminal area, the UK Met Office 330-m resolution model, and the user evaluation of the experimental forecast provided.