



The Use of Met Office Ensemble Model Data to Generate Probabilistic Hazard Forecasts for Aviation.

P. Buchanan and P.G. Gill

Met Office, Fitzroy Road, Exeter, Devon. United Kingdom (piers.buchanan@metoffice.gov.uk)

The Met Office Global and Regional Ensemble Prediction System (MOGREPS) was made operational in 2008 following 3 years of trials. The model output has been used in a variety of ways by both internal and external customers. This presentation focuses on the use of MOGREPS-G (global) data to generate hazard forecast products for aviation. Recent research work at the Met Office has shown that there is merit in taking a probabilistic approach to forecasting turbulence. In particular, objective verification has shown that there is superior forecast skill in producing turbulence products using 24 ensemble members against just the control member. This work will be presented alongside work to produce ensemble products for other hazards such as Cb's. A proposal to put these probabilistic hazard forecast products into an operational framework will be outlined.