

Evaluating 15 day ensemble forecasts of the Madden–Julian Oscillation

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The Madden–Julian Oscillation (MJO) is a key component of tropical variability but it has proved a challenging phenomenon for models to represent. An index of the MJO based on combined EOFs of zonal wind and outgoing longwave radiation has been applied in near real time to forecasts from medium range global forecasts from the 15 day global model version of the Met Office Global and Regional Ensemble Prediction System (MOGREPS–15). These forecasts of the MJO are described in more detail and evaluated using results from the first year of the MOGREPS–15 system. We evaluate the performance in terms of the model's ability to predict both the phase and the amplitude of the MJO and these results are compared to other models.