



## **The predictability of mesoscale features in MOGREPS ensemble forecasts**

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DIAMET is major UK research project, investigating the impact of diabatically generated mesoscale structure on the evolution and predictability of extra-tropical cyclones. Here we present results from the predictability component of the project, examining the predictability of mesoscale features in the Met Office MOGREPS ensemble forecasting system. The scales at which for a given lead time forecasts have probabilistic skill in predicting the location of features such as frontal waves is examined, as well as the relationship between the predictability of these features and rainfall. The predictability of mesoscale structure within individual cyclones is also examined.