

Assimilation at the Met Office

Gemma Halloran née Bennitt

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Global

- 25km 70 Levels
- 48hr forecast twice/day
- 144hr forecast twice/day

Euro4

- 4km 70 Levels
- -60hr forecast twice/day
- 120hr forecast twice/day

UKV

– 1.5km 70 Levels
– 36hr forecast eight times/day



19th Nov 2013







Desroziers et al. (2005) method for diagnosing observation error

Innovation = (O-B) difference between Observation and Background

Residual = (O-A) difference between Observation and Analysis

Covariance of observation errors:

 $\mathsf{R}_{i,j} = (\mathsf{O}\text{-}\mathsf{A})_i(\mathsf{O}\text{-}\mathsf{B})_j$















Spatial correlations of ZTD obs, METO





- Global Desroziers
- Increase use of observations in global
- UKV 4D-VAR hourly cycling?











