



Recent progress in global, medium range numerical weather prediction

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Future improvements in global, medium-range weather forecasts will come from a combination of initial state and model error reductions. Data assimilation advances are crucial, we have to utilise all the available observations efficiently by optimising the assimilation algorithms. Model error reductions will come from improved resolution in space as well as more accurate parameterisations of subgridscale, physical processes. Some examples from recent work at ECMWF will be presented. Ensemble methods are used both to assess the prediction errors in the medium range as well as estimating error correlations for use in variational data assimilation. Examples of this work will also be given