# Anticipating Anticipation: Improving Decision Support Today and Tomorrow by Reconsidering the Aims and Limits of Weather Prediction

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## Abstract

LSEs Centre for the Analysis of Time Series (CATS) is moving its primary focus back into applied weather forecasting for decision support. We have several funded projects starting this month and expect more. I aim to provide a wide ranging survey of the opportunities open to weather prediction in the near future, an exciting glimpse of some of recent scientific developments at CATS, and one horror story based on a fictional, but not unrealistic, challenge facing the Global Weather Enterprise (GWE). My aim is to ignite half a dozen follow-on discussions on technical issues, including harsh mathematical realities (that suggest moving our aim from probability forecasts to early warning), the provisions of user-relevant measures of skill (IGN still in the lead here)

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[3] Machete, R.L. and Smith, L.A. (2016) 'Demonstrating the value of larger ensembles in forecasting physical systems', *Tellus A*, 68, 28393. DOI: 10.3402/tellusa.v68.28393.

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