

ECMWF road towards the extended range ensemble forecasting

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In the mid-eighties, the interaction of atmospheric low frequency variability between tropics and extra-tropics became a hot topic. Tim, anticipating its practical importance, promoted a series of experiments to quantify the influence of the tropical circulations on forecast of extratropical weather. Our results showed that the impact of the tropics was particularly important for the predictions beyond the medium range. We concluded that, with a substantial reduction of tropical systematic errors, the extended range predictions could be viable. Thanks to the work of many scientists, ECMWF has been successful in the development of sub-seasonal forecasts and its scientific contribution in the topic is well recognized. Since 2004, ECMWF issues, operationally, an ensemble of extended range predictions. In this talk I will review the research, promoted by Tim, that facilitated the development of the ensemble forecast at the extended and seasonal ranges.

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