

## **Progress in medium-range weather forecasting at ECMWF**

Erland Källén, ECMWF, Shinfield Park, Reading, Berks RG2 9AX, UK

Aksel Wiin-Nielsen was instrumental in establishing ECMWF as a very successful research and operational forecasting institute in the late 1970's. His insights and forward looking perspective provided ECMWF with the basic resources needed to become the leading global, medium-range weather forecasting institute in the world. ECMWF has maintained its leadership position over the last 30 years and is still today producing the best forecasts available. I will review the research and model developments that have taken place over last three decades and also describe the future strategy of ECMWF.

One of Aksel's favourite research topics was the use of simple, nonlinear dynamical systems to understand fundamental atmospheric behaviour. I will illustrate the progress made in medium-range NWP with such a simple model based on Lorenz predictability studies and also attempt to predict the future evolution of medium range NWP skill.