

Nr. 1  
February 2003



## First Annual Meeting of the European Meteorological Society

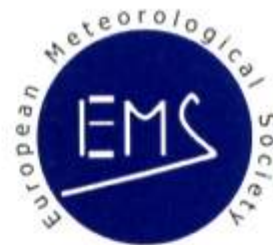
Budapest, 25-26 September 2001

Selected lectures from the symposium  
**The future of meteorology in Europe**

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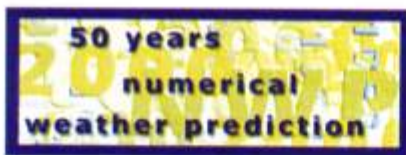
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50th Anniversary of  
Numerical Weather Prediction  
Commemorative Symposium

Wissenschaftspark Albert Einstein  
Telegrafenberg, Potsdam  
9-10 March, 2000

Book of Lectures



Edited by Arne Spekat, Secretary of the  
German Meteorological Society (DMG e.V.)  
and the European Meteorological Society (EMS e.V.)



50<sup>th</sup> Anniversary of Numerical Weather Prediction  
Book of Lectures  
Contents

- Lennart BENGTSOON: Introduction
- Norman PHILLIPS: A review of theoretical questions in the early days of NWP
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- Tim PALMER: The Prediction of Uncertainty in Numerical Weather Forecasting
- Anton ELIASSEN: Applications of Numerical Weather Prediction: Long Range Transport of Air Pollution
- Mojib LATIF: From weather prediction to short-range climate prediction

This publication of the Deutsche Meteorologische Gesellschaft and the European Meteorological Society summarises the proceedings from a symposium held 9-10 March, 2000 in Potsdam, Germany to commemorate the 50<sup>th</sup> anniversary of numerical weather prediction. A suitable reference point for this celebration is the paper by Charney, Fjortoft and von Neumann on the numerical integration of the barotropic vorticity equation published in 1950 in the Swedish journal *Tellus*.

The figure to the right is an assemblage of graphical objects, mostly from the Charney, Fjortoft and von Neumann article. The background is a rendering of their Figure 1, a finite-difference grid. Clockwise from top left: Partial differential equation for the change of height with respect to time needed to solve the vorticity equation in a form "well adapted to a variety of high-speed computing machines"; portrait of John von Neumann; their Figure 2c, forecast of January 5, 1949, 0300 GMT observed and computed 24-hour height change; equation to estimate the level of non-divergence, which led to the use of the 500 hPa level in their computations, portrait of Ragnar Fjortoft (left) and Jule Charney (right).



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