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Probabilistic Prediction in Meteorology: A Bibliography

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PROBABILISTIC PREDICTION IN METEOROLOGY:
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PROBABILISTIC PREDICTION IN METEOROLOGY:

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ABSTRACT

This report is a bibliography on the general subject of probability forecasting including papers on the fundamental principles of probability in this context, methods of making and using probability forecasts of weather events, and methods of verifying and evaluating probability statements. The bibliography contains 683 items, but it is not claimed to be exhaustive. Few papers are included which appeared in 1969 and later.

INTRODUCTION

This bibliography is a revised version of a technical report to the Techniques Development Laboratory, Systems Development Office, Weather Bureau, ESSA, compiled by the senior author in the course of a research contract (Cwb-10847) concerned with the formulation of a framework for the evaluation of probability forecasts in meteorology. The scope of "forecast evaluation" is such that certain relevant portions of the meteorological literature in such areas as "objective" forecasting, probability forecasting, forecast verification and forecast utilization are included in the bibliography.

The preparation and verification of weather forecasts in probability terms began as early as 1906, but only in recent years has the subject been widely explored by meteorologists. It is now well recognized that the maximum value of weather forecasts in operational decision-making can be realized only when the decision-maker has access to the error characteristics of the forecasts. Probability forecasts provide such information.

The compiler (A. H. Murphy) and the editor (R. A. Allen) do not claim that the bibliography is exhaustive. However, we believe that few if any important contributions which appeared prior to 1968 have escaped our notice. Certain contributions which have appeared during 1968 and 1969 are also included, although no effort has been made to make an exhaustive compilation during this period. We plan to issue supplements from time to time to bring the bibliography up to date.

The entries have been arranged in alphabetical order according to the last name of the (first) author. We have made no attempt in this bibliography to annotate the entries or to separate the entries by topic or period, except that the entries under an author's name have been placed in chronological order.

Copies of most of the entries were obtained by the compiler and may be found in the Library of the University of Michigan.

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