

STATISTICAL FORECASTING: PRINCIPLES AND PRACTICE

JUNE 20 – 22, 2011

Prof. Rob J Hyndman, Monash University, Australia

Waldhotel Doldenhorn, Kandersteg

Workshop leader

Rob J Hyndman is Professor of Statistics at Monash University (Australia) and Director of the Monash University Business and Economic Forecasting Unit. He completed a science degree at the University of Melbourne in 1988 and a PhD on nonlinear time series modelling at the same university in 1992. He has worked at the University of Melbourne, Colorado State University, the Australian National University and Monash University.



Rob is Editor-in-Chief of the “International Journal of Forecasting” and a Director of the International Institute of Forecasters. He has written over 100 research papers in statistical science. In 2007, he received the Moran medal from the Australian Academy of Science for his contributions to statistical research.

Rob is co-author of the well-known textbook “Forecasting: methods and applications” (Wiley, 3rd ed., 1998) and of the book “Forecasting with exponential smoothing: the state space approach” (Springer, 2008). He is also the author of the widely-used “forecast” package for R.

For over 25 years, Rob has maintained an active consulting practice, assisting hundreds of companies and organizations on forecasting problems. His recent consulting work has involved forecasting electricity demand, tourism demand and the Australian government health budget.

More information is available on his website at robjhyndman.com.

Outline

Forecasting is required in many situations: deciding whether to build another power generation plant in the next five years requires forecasts of future demand; scheduling staff in a call centre next week requires forecasts of call volume; stocking an inventory requires forecasts of stock requirements. Forecasts can be required several years in advance (for the case of capital investments), or only a few minutes beforehand (for telecommunication routing). Whatever the circumstances or time horizons involved, forecasting is an important aid in effective and efficient planning.

In this workshop, we will explore methods and models for statistical forecasting. Topics to be covered include seasonality and trends, exponential smoothing, ARIMA modelling, dynamic regression and state space models, as well as forecast accuracy methods and forecast evaluation techniques such as cross-validation. Some recent developments in each of these areas will be explored. The workshop will involve a mixture of lectures and practical sessions using R.

Examples will be drawn from Rob’s consulting experiences.

Prerequisites

Workshop participants will be assumed to be familiar with basic statistical tools such as multiple regression and maximum likelihood estimation, but no knowledge of time series or forecasting will be assumed. Some prior experience in R is desirable but not essential.

A laptop with preinstalled R software in its latest release (see CRAN.R-project.org) and the “[forecast](#)” package.

Location

The course will be held in the Waldhotel Doldenhorn in Kandersteg, see www.doldenhorn-ruedihus.ch. The hotel offers a free shuttle service to the train station.

Date and hour

Monday, June 20 till Wednesday, June 22, 2011. Course starts at 13.00 on the first day, at 08.30 on the second and third day, and ends at 17.00 on all three days.

Course fee

- CHF 1'350.-- for members of the Swiss Statistical Society, other applicants CHF 1'550.--.
- Reduced course fee CHF 950.-- for students and assistants. Please send a copy of the certification. A limited number of course places is reserved for students and assistants.

The course fee includes printed documentation for personal use only, all meals and accommodation in single rooms.

The number of participants is limited to 20 with a minimum of 15.

Registration deadline

April 1, 2011. For registrations after this date, CHF 150.-- will be added.

Registration and further information

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