Tutorial Workshop

PROGRAMME

Day 1: Thursday 13 Mar 2014

Topic | Lead | Contents
09:00-09:10- Welcome | Director NCMRWF: Beth Ebert, Rajagopal, Gopal Iyengar, Raghu Ashrit | Brief Inauguration
09:15-09:30- Introductions | Beth Ebert and Raghu Ashrit | Housekeeping, trainers and tutorial students introduce themselves
09:30-10:30- Introduction to R | Tara Jensen | Brief introduction to R and a series of exercises focused on data manipulation and verification tools
10:30-11:00-Break
11:00-12:30- Verification basics | Barb Brown | Basic statistics review: joint distribution of forecasts and observations; graphical methods for displaying the joint distribution and verification results
12:30-13:30-Lunch
13:30-15:00- Verification of continuous variables | Martin Gober | Scatter plots, bias, MAE, RMSE, correlation, reduction of variance; skill scores for continuous variables
15:00-15:30-Break
15:30-17:00- Verification of categorical variables | Martin Gober | Why categorize? - contingency tables and scores, with interpretation
17:00-17:30- Introduction to projects | Laurie Wilson | Projects will be assigned in advance using datasets obtained from participants. All projects will be supported by a clear list of instructions

Day 2: Friday 14 Mar 2014

9:00-11:00- Probability and ensemble verification | Laurie Wilson | Probability definition; concepts of reliability, discrimination; resolution; base rate; sharpness; scores; verification methods for EPS output; measures applicable to seasonal forecasts
11:00-11:30-Break
11:30-13:00- Statistical Inference | Barb Brown | Confidence interval estimation - traditional and bootstrap methods; block bootstrap; inference
13:00-14:00-Lunch
14:00-15:30-Project time
Day 3: Saturday 15 Mar 2014

Topic | Lead | Contents

09:00-10:30 - **Spatial forecast verification** | Beth Ebert | Why spatial verification; four types of methods; survey of methods with suggestions on their use and illustrative examples

10:30-11:00 - Break

11:00-12:30 - **Operational verification systems** | Pertti Nurmi | Illustrative examples of existing operational verification systems and how to set them up

12:30-13:30 - Lunch

13:30-14:00 - Review and wrap up | Questions and review

14:00-18:00 - Break and project time