Extreme Value (EV) workshops

The Centre for Mathematics & Its Applications of the Australian National University (ANU) and Geoscience Australia are organising two two–day workshops on Statistical Modelling of Extreme Values (EV) for early March 2008.

Workshop Description:
Extreme value theory concerns mathematical modelling of extreme events. Statistical modelling of extreme events has been subject of much practical and theoretical work in the last few years and have found wide areas of application in risk analysis (engineering, insurance, finance), traffic prediction (IT), financial markets, etc.

The workshop will give an overview of a number of different topics in modern extreme value theory including the following topics:

- Statistical methods for extreme events,
- Some examples of application of the theory in large insurance claims due to windstorms and flood monitoring,
- Exercises on detailed “step-by-step” use of extreme value modelling within the R environment
- Discussion of some open problems in the field.

Dates:
Two-day basic EV workshop, 4 – 5 March, 2008. 9:00 AM – 4:00 PM
Two-day advanced EV workshop, 10 – 11 March, 2008. 9:00 AM – 4:00 PM

Lecturer: Prof. Nader Tajvidi, Maths/Stats, University of Lund, Sweden. (http://www.maths.lth.se/matstat/staff/nader/)

Requirements: First course in probability theory and statistics. The workshop will assume familiarity with such concepts as sampling distributions, moments, variance and dependencies. For the advanced EV: basic EV workshop.

Additionally a one-day workshop on the R programming environment, focusing on the exploratory analysis of historical climate data, will be offered before the two EV workshops start for those with little or no experience on this system.

One-day introductory workshop on the R programming environment.
Monday 3 – March, 2008. 9:00 AM – 4:00 PM.
Lecturer: John Maindonald (ANU). (http://www.maths.anu.edu.au/~johmn/)

Bibliography:

Venue:
Australian National University, Sparke Helmore Lecture Theatre 2 (basic EV) and R-workshop.
Sparke Helmore Lecture Theatre 1 (advanced EV workshop).
ANU Campus map (http://campusmap.anu.edu.au) (grid E3).
Participants in the advanced workshop should bring their own laptop. Details of the software that should be installed will be given later.

Cost:
R introductory workshop: $150 (students $100). EV workshops: $300 each (students $200).
People interested should register before 15 – February 2008 with: Augusto Sanabria (augusto.sanabria@ga.gov.au)
Workshop attendance is limited to 20 people.