

## **Extremes: Statistical Theory and Applications in Science, Engineering and Economics**

Call for Papers for Special Issue on *Statistics of Extremes in Weather and Climate*

*Guest Editors:* Dr. Richard W. Katz, National Center for Atmospheric Research, USA (email: [rwk@ucar.edu](mailto:rwk@ucar.edu))  
Dr. Philippe Naveau, Laboratoire des Sciences du Climat et de l'Environnement, France (email: [Philippe.Naveau@lsce.ipsl.fr](mailto:Philippe.Naveau@lsce.ipsl.fr))

Research on weather and climate has been a fertile area for the application of the statistical theory of extreme values for many decades. In fact, several original developments in the theory were motivated by problems in weather and climate or closely related fields. Currently, especially with the spectre of global climate change, there is renewed interest in applications of extreme value theory to weather and climate. Moreover, a number of recent developments in extremal methods have not yet been fully exploited in such applications (e.g., incorporation of covariates).

The journal *Extremes* (<http://www.springerlink.com/content/102890/>) plans to publish a special issue devoted to the topic of the “Statistics of Extremes in Weather and Climate.” Original unpublished manuscripts are solicited. Topics of interest related to weather and climate include, but are not limited to:

- Modeling of extremes via latent processes (e.g., by Bayesian inference)
- Estimating return levels under non-stationarity
- Incorporation of geophysically-based covariates in extremal modeling
- Downscaling and/or upscaling of extremes (e.g., change of support)
- Extremes and data assimilation
- Modeling complex events such as spells (e.g., heat waves or drought)
- Multivariate extremes (e.g., temperatures and winds)
- Spatial extremes (e.g., precipitation patterns)
- Spatio-temporal fields of extremes
- Combining geophysical models and extreme value theory

All manuscripts should include a substantive application to weather or climate or a closely related area.

### **Notes for Prospective Authors**

Submitted papers should not have been previously published nor be currently under consideration for publication elsewhere. All papers will be refereed through the regular peer review process for *Extremes*. For information about submission of manuscripts to the journal *Extremes*, see <http://www.editorialmanager.com/extr/>.

Please notify the Guest Editors by email of your intention to submit a manuscript, providing at least a tentative title.

**Deadlines**

Intent to submit manuscript: *1 February 2009*

Manuscript submission: *1 April 2009*

Notification of acceptance/rejection: *1 July 2009*

Submission of revised manuscript: *1 October 2009*