

Special Issue on Advanced Data Assimilation and Predictability Studies on High-Impact Weather and Climate

Call for Papers

High-impact weather and climate systems refer to those events that have significant social, ecological, and economic impacts (such as tropical cyclones, winter storms, floods, droughts). Accurate forecasts of these systems much rely on our understanding of the systems and better representation of them in numerical models. Over the last decade, significant progress has been made in data assimilation, model development, and model diagnostics to enhance the predictability of these high-impact weather and climate systems.

We invite authors to present original research article as well as review articles that will stimulate the continuing efforts in advanced data assimilation techniques and numerical modeling developments to enhance the predictability of high-impact weather and climate systems. The topics to be covered include, but are not limited to:

- Advanced data assimilation techniques, including variational methods and ensemble-based Kalman filters and their applications to high-impact weather and climate studies
- Ensemble techniques and predictability
- Development and validation of model physics parameterization schemes
- Tropical cyclone formation and intensity forecasting
- Winter storm predictability
- Numerical simulations and predictability of floods
- Regional climate modeling
- Diagnoses and predictability of droughts
- Social and economic impacts of high-impact weather and climate prediction

Before submission authors should carefully read over the journal's Author Guidelines, which are located at <http://www.hindawi.com/journals/amet/guidelines.html>. Prospective authors should submit an electronic copy of their complete manuscript through the journal Manuscript Tracking System at <http://mts.hindawi.com/> according to the following timetable:

Manuscript Due	January 1, 2010
First Round of Reviews	April 1, 2010
Publication Date	July 1, 2010

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