Special Call for Papers
High Performance Computing and Environmental Modelling
David Swayne, Associate Editor,
Environmental Modelling and Software

Rationale:
Environmental modeling can consume considerable computational power for the analysis of complex systems. Already, the impact of SHARCNet in making high performance computing (HPC) available to the Ontario research community has been felt. This special call for papers elicits manuscripts for the Journal *Environmental Modelling and Software (EMS)* that highlight the contribution of HPC (particularly among the SHARCNet users), to the resolution of environmental issues through modeling. Papers will be judged on the following four criteria.
   1. They include contributions to environmental science or computer science by means of a practical application to the environment through modeling or software development.
   2. They feature a significant use of HPC, and *either* the HPC platform *is* SHARCNet, *or* their contribution is viewed to be specially important or innovative, likely to capture interest from the SHARCNet community.
   3. They must <u>not</u> be "accidental" users of HPC, i.e. they must demonstrate the necessity of HPC in determining the success of their computational outcome.
   4. They must be of high scientific quality.

Papers considered deficient in meeting requirements 1-3 will be returned without detailed review, with possible suggestions as to alternate places for submission. Papers meeting criteria 1-3 will be refereed for their adherence to criterion 4, for possible inclusion in a common issue of EMS. They will be published together with an article describing SHARCNet, in a single issue. A maximum of six full-length papers will be recommended for this issue, drawn from those submitted. Their selection will be based on their having met criteria 1-4 above to the highest standard. Additional submissions that otherwise have met the four criteria will be forwarded to the Short Communications section of EMS with recommendation for consideration in an abbreviated form, with the author's consent.

Logistics:
The process of submission is as follows.
Step 1: Prospective authors should contact the Associate Editor, David Swayne, at the email address below as soon as possible, indicating interest in contributing to the Journal through the Special Call. A tentative title and short description of the possible contribution would be most helpful. This contact will give an early indication of the potential for success of the project.
Next, they should send a draft manuscript likely to meet the requirements of the Special Call. This draft will be reviewed for its ability to satisfy criteria 1-3. ALL papers will be sent via email or ftp. Initial drafts wiribution would be most helpfulll be in *.pdf or MS Word *.doc format.
The manuscript should be sent by September 15, 2004 to:
David A. Swayne,

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Room 106 Blackwood Hall,
University of Guelph, N1G2W1
+1-519-824-4120 ext. 53411
Email: dswayne@uoguelph.ca
An email attachment, tarred or zipped, is the preferred method of submission, or contact DAS at the address above to arrange an ftp transfer, if the file is too large.

Step 2: Authors whose drafts meet these requirements will be asked to prepare a revised paper that adheres to Elsevier's authors' instructions for submission (http://www.elsevier.com), to be returned directly to the Associate Editor by November 15, 2004.

Step 3a: After a referee process and a suitable revision, to take place prior to January 15, 2005, the six highest-ranked accepted papers will be forwarded to EMS together with a recommendation for publication.

Step 3b: At the same time, otherwise acceptable papers in excess of the target number will have appropriate feedback to submit to the EMS Short Communications section if the author so chooses. The Associate Editor will attempt, from the first round, to limit the number of papers in this latter category.

Disclaimer:
No responsibility is assumed to make a substitution for one of the six papers, if one or more of the six best is withdrawn for any reason at the last minute.