

A History of Atmospheric General Circulation Modeling

Forward (Lorenz)

1. Introduction (Editors)
2. From Richardson to Early Numerical
Weather Prediction
3. From Early Numerical Weather Prediction to
General Circulation Models for Climate

4. The Evolution of Research Goals for General Circulation Models (Warren Washington and Akira Kasahara)
5. The Evolution of Complexity in General Circulation Models (David Randall)
6. Numerical Weather Prediction in the Era of Climate General Circulation Models
7. The Role of Observations in Developing and Evaluating General Circulation Models (V. Ramanathan)
8. The Societal Context of General Circulation Model Research and Development
9. Coupling Atmospheric General Circulation Models to Oceans, Land Chemistry, and Biology

JAMES (aka JIM)

JAMES is an all-electronic peer-reviewed, non-profit journal, published by Colorado State University's Department of Atmospheric Science to serve the global modeling community. JAMES publishes research related to a wide range of problems in climate science, including atmospheric and oceanic flows on multiple scales, radiation, cloud physics, boundary layer and land surface processes, the biosphere and cryosphere, biogeochemical cycles, and the development of numerical methods for climate science.

Sections of JIM

The journal maintains four sections, the first for normal length research articles, the second for shorter research contributions of four or less journal pages, the third for scientific reviews of the present state of selected aspects of climate research, and the fourth for articles directed to the wider nonspecialist audience interested in climate science.

JIM Staff

Chief Editor: David A. Randall

Editors: Wayne H. Schubert

Journal Coordinators:

Cindy Carrick

Rodger B. Ames

Website Coordinator:

Mostafa ElKady

Growth Plan

- Inaugural volume: 2008
- Vol. I: 4 issues, 5-15 articles/issue, 80-240 pages/issue, 320-960 pages for Vol. I.
- Go to 6 issues/year when publications exceed 60 articles/year

Business Plan

- \$500 for 4 page article.
- \$1000 for normal length article.
- Low: $5(\$500) + 15(\$1000) = \$17,500/\text{yr}$
- Middle: $10(\$500) + 30(\$1000) = \$35,000/\text{yr}$
- High: $15(\$500) + 45(\$1000) = \$52,500/\text{yr}$

Journal Style

- Style files provided for a variety of author preferences, e.g., Latex, etc.
- Printed on 8.5 by 11 inch paper in two-column format.
- Uniform AMS reference style.

Copyright and License Policies

- Upon submission of an article, authors are asked to indicate their agreement to abide by an open-access license.
- This license permits any user to download, print, extract, archive, and distribute the article, so long as appropriate credit is given to the authors of the work.
- This policy ensures that articles are as widely available as possible and that they can be included in any scientific archive.

Algorithm/Software Sharing

- Since new algorithms and software are often important in global environmental modeling, authors are encouraged to provide sufficient information to allow interested readers to reproduce and extend the work.

Algorithm/Software Sharing

- In the case of new algorithms, authors are encouraged to include a detailed description in the paper.
- In the case of new software, authors are encouraged to make source code available as appendices, supplemental material, or through posting on a publicly available website.

Procedures

All submissions are to the Chief Editor in electronic form at the journal website. Submissions must use one of the journal style files to guarantee a uniform two-column format and a uniform reference style. Figure placement and sizing is the responsibility of the author.

Timetable

- Spring/Summer 2007: Establish journal website; write journal style files.
- Fall 2007: Receive first submissions.
- Early 2008: Publish first papers.

Possible Submissions

- Steve Krueger, Grid-size dependence of LES of trade cumulus. (Latex)
- W. Grabowski
- Wei-Kuo Tao, CRM
- M. Khairoutdinov
- John Helly, Scalable cyberinfrastructure for modeling on the sphere
- Joon-Hee Jung, Q3D MMF

Possible JIM Submissions

- Celal Konor, GCRM
- Hiroaki Miura, GCRM
- Susan Foster, UCAR/CMMAP Education and Outreach efforts
- Dave Randall
- Wayne Schubert, Rick Taft, Levi Silvers, The MJO, Double ITCZs and Twin Tropical Cyclones

Journal Name

- GEM: Global Environmental Modeling
- JAMES: Journal of Advances in Modeling the Earth System (JIM)
- AMES: Advances in Modeling the Earth System

Action Items

- Contact Academic Press, Cambridge University Press, Princeton University Press
- Line up authors for Chapters 2, 3 6, 8, 9
- Consider splitting 9 into 2 chapters.
- Consider low-cost publisher
- Consider involving professional science writer. Level: American Scientist

Action Items

- How much control? Involve EGU, PLOS, AGE. Rodger will explore.
- Invite authors: Isaac Held, Brian Hoskins, Susan Solomon, Doug Lilly, Kerry Emanuel
- Develop style files for Latex, Microsoft.
- Define layout.