

quite successful in reproducing satellite-observed characteristics derived from tailored TOVS soundings, microwave radiometry, scatterometers, etc. Overall, much has been learned about the processes responsible for formation and development of mesoscale cyclones.

The forecasting of mesoscale cyclones is addressed in chapter 6 by Turner, Rasmussen, and Rosting. It is here that the vast difference in effort between the Arctic and the Antarctic is particularly obvious. Illustrative case studies that are related to earlier parts of the book are presented for the North Atlantic and North Pacific, showing how to use the full range of tools available. A brief discussion of forecasting in the Antarctic gives satellite observations as the primary data source for most of the continent, and numerical model output provides key synoptic-scale guidance for likely areas of mesoscale cyclogenesis. Hopefully, this Antarctic forecasting deficiency will be rectified in coming years, as experience readily demonstrates the

importance of forecasting these phenomena that can be dangerous, even in the continental interior.

The book concludes with a chapter by Turner and Rasmussen which calls for further research to identify the possible climatic influences of mesoscale cyclones; to combine high-resolution model simulations with advanced satellite remote sensing and aircraft campaigns to further investigate the structure and dynamics in both hemispheres; and more theoretical studies to understand the governing physical mechanisms. Finally, it was noted that modern weather forecasting models with spatial resolutions of 10 km or better are capturing polar lows with fidelity even in data-sparse areas such as the Antarctic, leading to explicit predictions of these intense events.

*Polar Lows: Mesoscale Weather Systems in the Polar Regions* was a pleasure to read for the wealth of knowledge it contains on the important bipolar topic of observing, under-

standing, and forecasting mesoscale cyclones. The manuscript is well produced with nice figures and little in the way of editorial oversights. Although the \$120 cost is not cheap, it is a relative bargain considering the comprehensive synthesis of "polar low" knowledge it provides and the many communities it serves. The text is strong on both theoretical and practical aspects, and therefore has unusually wide appeal. The summaries and discussion provided throughout the material to help the reader gain understanding are especially helpful.

I strongly recommend this important contribution for purchase by all scientists interested in these sometimes intense mesoscale phenomena that extend into the mid-latitudes, and by libraries emphasizing atmospheric and polar science.

—DAVID H. BROMWICH, Byrd Polar Research Center, The Ohio State University, Columbus

# ABOUT AGU

## A Virtual Publications Forum

PAGE 118

As part of the continuing effort to inform members about the publications program and get their input, the Publications Committee scheduled an open forum at the 2003 AGU Fall Meeting. This was to allow any members or guests the opportunity to ask questions about the AGU publications program, processes, progress, or any other publications-related concerns. Here, we are using the pages of *Eos* to share several "good news" messages about AGU publications and open a dialogue with the membership about the publications program.

The first thing to remember about AGU publications is that historically, they have supported many of the non-revenue generating activities of the Union that we hold to be important. Examples include workshops for high school teachers, career information for pre-college students and school counselors, and information for the press and for decision-makers at various levels of government. Publications are very important to the mission of AGU, both intellectually and financially (Figure 1).

How are the journals doing? Overall, AGU journal submissions grew each year from 2001 through 2003 (Figure 2), although there was some contraction in some journals. Growth in submissions is an important indication of the health of the journals and the esteem they enjoy. Far more articles were published in 2003 than 2002 (Figure 3) in order to speed publication and remove the backlog that developed early in 2002. Nearly all the wrinkles in the transition from paper to electronic publishing have been worked out. We appreciate the patience and interest of the AGU membership during the transition period.

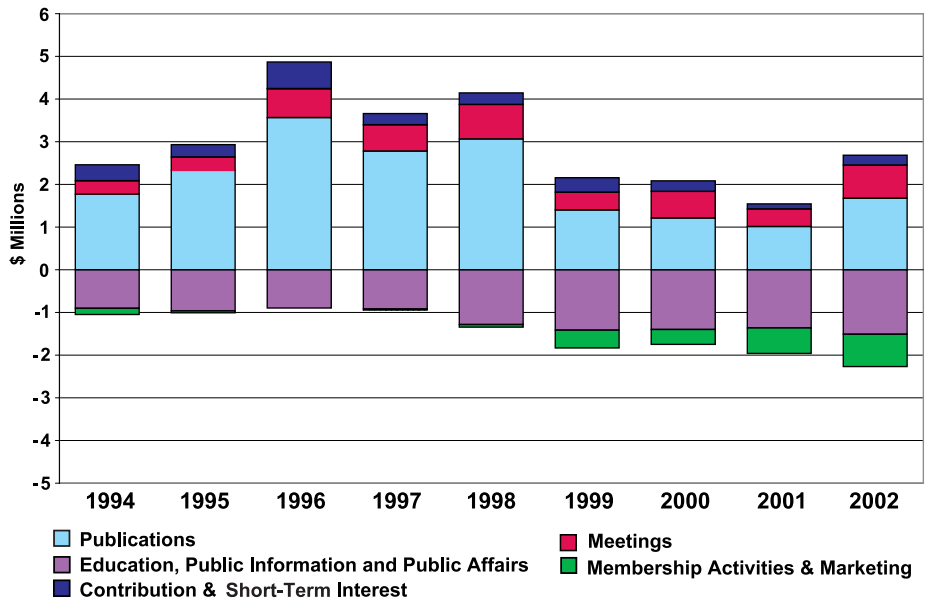


Fig. 1. The net financial return of the major AGU activities. The net is calculated by deducting the activity's income from the total of direct and applicable indirect expenses. Negative numbers mean that the activity is supported by the revenue-generating projects.

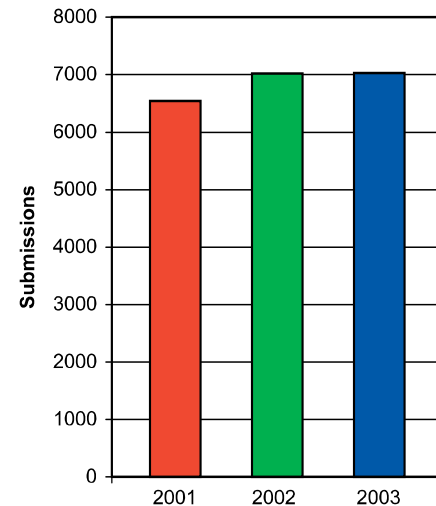


Fig. 2. Cumulative submissions to all AGU journals for 2001, 2002, and 2003.

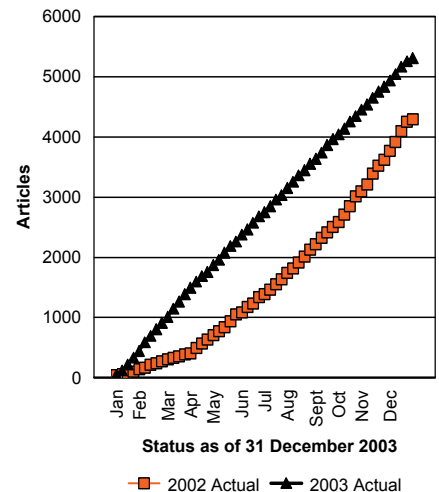


Fig. 3. Cumulative articles published for all AGU journals in 2002, when full electronic publication began, and 2003.

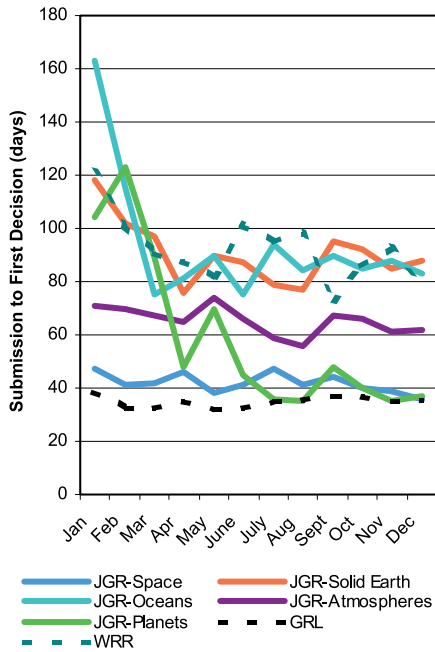


Fig. 4. Median time in days from submission of an article until its return to the author with Editor comments. The months refer to the date when the first decision was made.

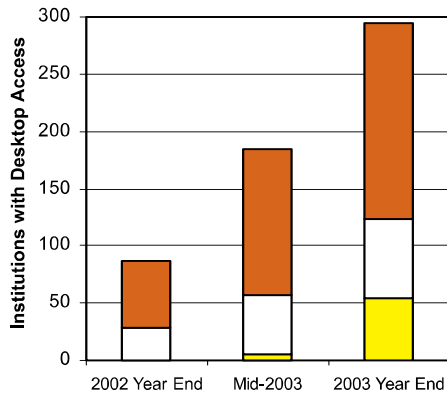


Fig. 7. Total number of institutions at which readers had campus-wide desktop access to AGU journals online. Academic institutions that offer only bachelor and master degrees and smaller research institutions are denoted by the white band; academic institutions that offer doctoral degrees and the larger research institutions are denoted by the orange band. Both of these groups have unlimited access. In June 2003, institutions were offered limited access for a lower price; those choosing this option are shown in yellow. Access is limited to a fixed number of simultaneous users per journal, depending on the price paid.

The time to complete reviews remains longer than we all would like, but in a volunteer system, this is difficult to manipulate. High-quality peer review is always the goal, but in order to achieve this goal, one trade-off is the time available for good people to do a good review. We have worked with the Editors to improve the timeliness of the review process, and as a Committee, have monitored progress carefully at least twice a year. These efforts have had some modest success. The number of days

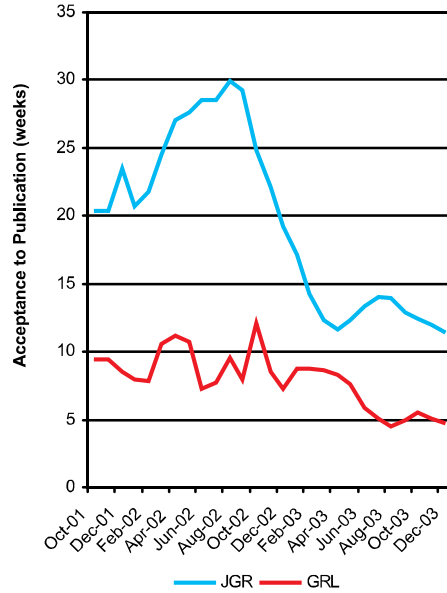


Fig. 5. Median time in weeks from the acceptance of an article until it is published (i.e., until it is posted online).

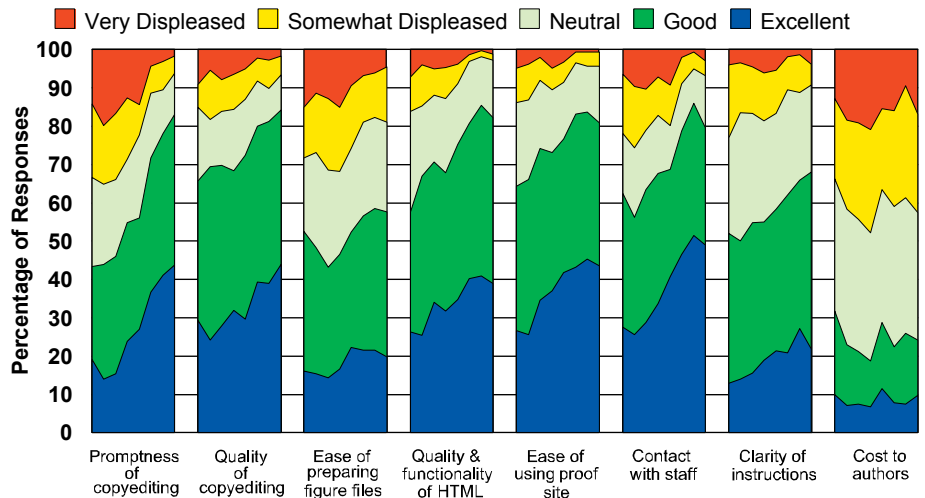


Fig. 8. Author satisfaction survey results. Authors of articles published between 1 January 2002 and 31 August 2003 were asked to evaluate several aspects of the production process: (1) promptness of copyediting; (2) quality of copyediting; (3) ease of preparing figure files; (4) quality and functionality of the HTML of the published article; (5) ease of using the proof site; (6) contact with staff; (7) clarity of instructions; and (8) cost to authors. Responses of authors published during this period are plotted chronologically from left to right on each bar; responses of authors published January-May 2002 appear on the left side of the bar followed by those from June-August 2002 and subsequent two-month periods through July-August 2003.

from receipt of a manuscript to the first editorial decision has declined in 2003 for several journals (Figure 4). We acknowledge that timeliness is crucial to many authors, and we continue to monitor progress, with the goal of keeping the review time as short as possible. You can make a positive difference whenever you are asked to serve as a reviewer.

The other part of the publication matrix is production, and here, AGU headquarters has far more control because many of these functions are carried out in-house. In 2003, the time from acceptance to publication improved dramatically, and the Publications Committee is pleased at both the improvement and absolute

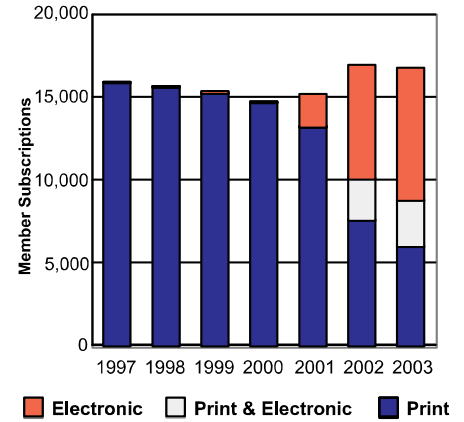


Fig. 6. Total member subscriptions by year. Eos is not included in these numbers. In 2001, members had the option to purchase the electronic version. Prior to that, online access where available was included with the subscription price of the printed version. In 2002, a third option was provided to authors—purchasing electronic access and the printed version.

value of production time in 2003 (Figure 5). We will continue to strive to minimize the review and production times, while maintaining high-quality reviews.

With this background, how have AGU journals been accepted by individuals and by the library community? Electronic delivery of AGU journals is increasing with both individual subscribers (Figure 6) and with libraries (Figure 7). We anticipate this trend will continue, as more and more scientists realize the benefits of electronic publishing.

Author satisfaction surveys for the period January 2002 through August 2003 indicate that a very high percentage of the production

aspects of AGU's journals are perceived as being good or excellent (Figure 8), and this trend has increased strongly in the sample period. People remain least happy with the "costs to authors," but the percentage of those "very" or "somewhat" displeased declined somewhat during the 2003 sample period. We have targeted this area for special attention and further work during the coming year.

This general overview of the journals program shows progress in many areas. We invite all of you to review and comment on these or any other publication matters that concern you. You can reach us at [pubmatters@agu.org](mailto:pubmatters@agu.org). We will try to respond to each comment received. Thanks, and we look forward to briefing you at a live Publications Forum at the 2004 Fall Meeting.

—AGU Publications Committee: GEORGE HORNBERGER, Chair; JEAN-LOUIS BOUGERET, SAMUEL BOWRING, CURTIS COLLINS, JOHN COSTA, ROBERT JACKSON, RALF JAUMANN, ROSS STEIN, KIYOSHI SUYEHRO, and XUBIN ZENG

---

## In Brief

PAGE 115

**"Comet-chaser" spacecraft launched** The European Space Agency successfully launched its Rosetta spacecraft on 2 March, the beginning of what is hoped will be a 10-year journey that will provide information about the origins of the solar system, by placing a lander on the nucleus of comet 67/P Churyumov-Gerasimenko.

Rosetta was launched from the ESA's facility at Kourou, French Guiana.

After three flybys of the Earth and one of Mars, Rosetta is scheduled, in mid-2011, to ignite its main engine for a major deep-space maneuver that will place it onto an intercept trajectory with the comet.

Rosetta is due to enter an orbit around the comet in 2014 about 25 km above the nucleus. At a period when the comet is still far from the Sun, Rosetta is scheduled to conduct

detailed mapping of the nucleus surface and eventually drop a 100-kg lander, Philae, which should send back images, as well as information about the nucleus' upper crust.

Churyumov-Gerasimenko is a promising target for the study of primitive solar system material, because it is a relative newcomer to the inner solar system.

—JUDY JACOBS, Assistant managing editor, *Eos*