



Supplement to the *Bulletin of the American Meteorological Society*, Volume 87, Number 4, April 2006

Annual Report 2005

**The American
Meteorological Society**



The American Meteorological Society

Annual Report 2005

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Letter from the President

Dear AMS Colleagues,

As you read this report, we are already well into 2006 with another Annual Meeting behind us and the plans for the coming year are taking shape. And though Spring is typically a time to look forward, I believe it is always important to look back and reflect on the past. It is this reflection that helps us change, grow, and adapt the programs and services the Society provides to you.

Hurricane Katrina and the record-setting 2005 hurricane season changed our world. From policy decisions to education, from private-public sector partnerships to research and operational forecasting, we will never be the same. The events of the past year will forever change how we in the atmospheric and related sciences community do business. And that's a good thing.

Although the forecasts for every hurricane and other severe weather event last year were not perfect, there is a renewed appreciation for the work the meteorological community does, as well as the force of nature and the impact this force has on our way of life. We have an opportunity now to move from research and operations to integrating our services into every aspect of society.

During 2005 the Society embarked on several initiatives to improve our outreach to the enterprise as a whole, to the ever-broadening potential user community and the general public. Last year marked the start of the new Commission on the Weather and Climate Enterprise, which is charged with developing and implementing programs that address the needs and concerns of all sectors of the weather and climate enterprise and promoting a

sense of community among government entities, private sector organizations, and universities. Never has the need for this Commission been greater. Plans are also being formulated to increase the Society's use of the Internet and the media to increase public awareness of the resources within the Commission that can help save lives and livelihoods, and mitigate the negative economic impacts of weather.

In 2005 we also launched the Certified Broadcast Meteorologist program. As of the end of 2005, 106 broadcasters have committed themselves to improving their own skills and delivering that to the viewers. These broadcasters provide a crucial link between our work and action on behalf of communities, government, and individuals. The reinvigorated Certified Consulting Meteorologist (CCM) community has also embarked on a program of continued professional development which will further enhance the stature of CCMs.

Last year the AMS Policy Program inaugurated the Environmental Seminar Series, opening the door for regular dialogue with lawmakers. The series will help policy makers and others stay informed and up-to-date on emerging and important environmental science that has policy implications that are now more important than ever.

We accomplished many other great things in 2005 — you will find them outlined on the pages that follow. Our success in these initiatives is the result of our members and volunteer leaders working alongside a talented AMS staff to advance the state of our science and the Society. Thank you for your dedication and commitment!

Sincerely,

A handwritten signature in black ink, appearing to read "Walter Lyons". The signature is fluid and cursive.

Walter Lyons, CCM
AMS President

2005 MAJOR ACCOMPLISHMENTS

The American Meteorological Society launched a tremendous number of new initiatives in 2005 all designed to strengthen the link between the science, society and the Society. Among them:

- Forming the new Commission on the Weather and Climate Enterprise
- Building the policy influence of the AMS
- Launching the Certified Broadcast Meteorologist Program

Weather and Climate Enterprise Success

The Commission on the Weather and Climate Enterprise was officially approved by the AMS Council in January 2005 and began work immediately developing and implementing programs that address the needs and concerns of all sectors of the weather and climate enterprise and promoting a sense of community among government entities, private-sector organizations, and universities. The Commission is charged with fostering synergy among the sectors; educating users about the value of weather and climate information; and providing appropriate venues and opportunities for frank, open, and balanced discussions of points of contention and concern. The Commission participated in the Society's annual Corporate Forum in March 2005 and then hosted a meeting on the Future of Weather Prediction in the U.S. in Boulder in July 2005. The Commission also launched a Community Message Board on the AMS Web site in October 2005.

AMS Builds its Policy Influence

The AMS Policy Program (APP) has created its first-ever strategic plan — a comprehensive roadmap for the future of policy research and education. The APP strategic plan outlines specific goals and activities designed to bring policy makers and the science community closer together.

To reach lawmakers on Capitol Hill, the APP has initiated a new Environmental Science Seminar Series to inform Congressional Members, staff and others, on the science underlying a range of issues. Topics have included: Planning for Recovery from Disasters, Recent Advances on Understanding the Earth's Vertical Temperature Profile, Ocean Acidity, Hurricanes and the Resiliency of New Orleans, and Declining Western Mountain Snowpack and Its Implications. The series will help policy makers and others stay up-to-date on emerging and important environmental science that has policy implications.

To introduce policy to the classroom, the APP also developed a policy curriculum with support from the National Science Foundation. In addition, some 200 scientists have now attended the AMS Summer Policy Colloquium. These efforts will help the next generation of scientists better handle immediate and future policy issues.

Following Hurricane Katrina, the APP collaborated with the U.S. Chamber of Commerce to put on a forum on Building America's Resilience to Hazards. Participating individuals and institutions are now working with the AMS to follow up: looking at ways local chambers of commerce can work with local emergency managers to assess community vulnerability; seeking to document the Gulf coast recovery; and reassessing the performance of levees and insurance as mitigation tools.

106 CBM Certificates Awarded

The Society awarded the designation of Certified Broadcast Meteorologist to 106 individuals in 2005, the first year of the new program. In addition, one Radio Seal of Approval and 97 Television Seals of Approval were granted. Two persons were granted Certified Consulting Meteorologist certificates.

2005 HIGHLIGHTS

In addition to the major accomplishments noted on the previous page, many other AMS programs had an exciting year in 2005. The Society's journals and the Education Program reached new records; meetings and membership grew steadily and the Web site took on a new look.

Journals Rank Top-Notch

AMS journals continue to earn recognition around the world. The latest Institute for Scientific Information (ISI) Impact factor rankings of the world's 45 most prestigious meteorology and atmospheric sciences journals revealed six AMS journals in the top 14 spots, with *The Journal of Climate (JCLI)* in the #1 position. More manuscripts were submitted to *JCLI* and more pages were published in *JCLI* in 2005 than in any previous year. *The Journal of Atmospheric Sciences* is ranked at #3 (the number of printed pages is up 30% over last year). *The Bulletin of the American Meteorological Society* came in at #8, and *The Journal of Hydrometeorology*, in only its fifth year, at #12. The Society's *Monthly Weather Review* is ranked 14th. The other journals continue to do well, and the trend of increasing numbers of papers being submitted to AMS journals collectively that began in 2001 continues unabated. Another exciting development is the continuation of *The Journal of Applied Meteorology* as the *Journal of Applied Meteorology and Climatology (JAMC)* in 2006. *JAMC* provides a home in the AMS suite of journals for research in the rapidly growing field of applied climatology.

Record Number of Pages Printed

All-time records were established in 2005 for printed pages for the scientific and technical journals with 22,197 pages printed (5,390 pages for *JCLI* alone, a record for any individual journal). Records were also set for papers submitted to and accepted by AMS journals, and papers sent to press in a calendar year. This would be good news in any year, but the fact that all of these records have fallen during a year of radical

transition from paper-based production and technical editing to an all-electronic, submission-to-printing workflow is a testament to the efforts of peer-review editors and their assistants, AMS publications staff and other supporting departments, and excellent partnerships with Sheridan Press and Allen Press.

Creating a Personalized Online Library

With the encouragement of both the Publications Commission and the Council, development has begun on the personalized online library (POL) concept, first articulated by AMS members David Randall and Kerry Emmanuel. The idea of the POL—in which readers build their own automated, customized "table of contents" by drawing across journals—could become a potentially powerful tool with significant benefit for AMS members. The Society expects to make a beta version of the POL available in 2006.

AMS Weather Book in the Works

The Society took a major step toward publishing its own weather book aimed at a general audience last year by hiring Jack Williams, former editor of *USA Today's* weather page and author of both editions of the *USA TODAY Weather Book*. Williams joined the AMS staff as the public outreach coordinator where his first job will be to create a new book on weather and climate aimed at the public. Materials from the book will be used as the foundation in building a collection of public outreach modules that can be used by partner organizations and AMS members in public outreach programs and other educational efforts to promote scientific literacy.

Undergraduate Oceans Course Launched

Following a Spring 2005 pilot offered at a dozen undergraduate institutions, the innovative oceanography course *Online Ocean Studies* was introduced nationally in the Fall semester. The course is patterned after

the highly-successful *Online Weather Studies* distance-learning course. By early December 31 institutions had licensed the *Online Ocean Studies* Course.

The National Science Foundation also awarded \$750,000 to AMS to introduce *Online Ocean Studies* to 75 minority-serving undergraduate institutions over three years in a project similar to the successful AMS *Online Weather Studies* diversity initiative. The goal is to introduce oceanography to students from groups traditionally underrepresented in the sciences.

Training Teachers a Success

The unique AMS *DataStreme* teacher enhancement courses have successfully trained over 10,500 teachers since the first *DataStreme Atmosphere* offering in spring 1996. Through the Fall 2005 semester, 7,564 teachers have completed the *DataStreme Atmosphere* course over 20 semesters; 2,146 teachers completed the *DataStreme WES (Water in the Earth System)* course over 10 semesters; and 821 teachers completed the *DataStreme Ocean* course over 5 semesters.

In Fall 2005 alone, *DataStreme WES* trained 203 teachers and *DataStreme Ocean* trained 198 teachers. *DataStreme Atmosphere* trained 297 teachers in 26 states through the year. All the registered teachers earned three graduate-hour credits from the State University of New York at Brockport—a major partner with the AMS Education Program. Through these trained teachers, hundreds of thousands of other teachers and millions of students have been impacted. The AMS suite of programs to build infrastructure for precollege teaching—including *DataStreme* as well as Project Atmosphere and the Maury Project—are all under the rubric of the Cooperative Program for Earth System Education.

Online Weather Studies Reaches 300

Online Weather Studies, the introductory college-level course, has been licensed by more than 300 institutions since its introduction in 1999. For half of these institutions, *Online Weather Studies* was their first offering of an atmospheric science course. The AMS *Online Weather Studies* course has been introduced to 103 historically black colleges and universities, Hispanic-serving institutions, tribal colleges and universities, and other institutions with significant minority student populations via National Science Foundation funding. Two-thirds of these minority-serving institutions (MSIs) had never offered a meteorology course before. The AMS is using residual grant funds to extend the program one more year. The intent is to introduce *Online Weather Studies* to an additional 25 MSIs during the coming year.

Meetings Around the Country

The AMS Annual Meeting and specialty meetings are the backbone of the Society. The meetings provide the scientific community the unique opportunity to discuss challenges and opportunities, new products, services, potential research projects and much more. Some meeting highlights include:

- 13 meetings in 7 cities
- More than 3400 presentations and papers
- Over 100 exhibits at the 85th Annual Meeting
- Over 150 exhibit booths at all AMS meetings in 2005
- 3 CD-ROMs

WeatherFest, the Society's public outreach event at the Annual Meeting, set another record in 2005 with more than 2,000 people

from the San Diego community attended. In addition, nearly 60 exhibitors took part in this event, more than in any previous year.

Web site Changes Looks

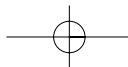
The AMS Web site underwent some dramatic face-lifts in the past 12 months. Overall the site took on a consistent look and feel, making it easier than ever for members and visitors to find the information they seek. The content was also dramatically updated and enhanced. The site now contains a Station Scientist page, a dedicated Career Center and an extensive Policy Program page. Much of the work on these concepts takes place behind the scenes with new

online applications and updates. These program changes also enhanced other AMS functions such as online submission of abstracts and membership renewal.

Students Continue to Join in Large Numbers

Growing and retaining our student member base remained an important goal in 2005. College students continued to join the Society in large numbers, with nearly 635 undergraduate and graduate students joining in 2005. This represents a large jump from the number of students that joined the Society in 2002, the year before the Early Career Dues rate was introduced.

2005 Membership By the Numbers	
The number of new member applications for 2005 was 990.	
A breakdown of the membership as of 31 December 2005:	
Honorary members	32
Fellows	551
Members	7,963
Members with Student Privileges	107
Associate Members, Voting	48
Associate Members, Nonvoting	952
Associate Members, High School Students	131
Associate Members, K – 12 Teacher	171
Student Members	1,924
Corporation Members*	166
TOTAL	12,045
*Includes 7 Sustaining; 63 Regular; 13 Small Business; 83 Publications	



Weatherwise Attracts New Members

The Society's partnership with *Weatherwise* continues to play a significant role in the recruitment of different types of Associate Members. In 2004, the Society contacted the teachers involved in the AMS Education Program to promote Society membership and to market the availability of *Weatherwise* as a membership publication. The response was tremendous with over 100 elementary school and high-school teachers joining the Society that year (compared with 15 in 2003). More than 80 percent of them renewed their 2005 membership. The availability of *Weatherwise* will also play a role in the recruitment of Associate Members-Precollege Students, who can now choose either BAMS or *Weatherwise* as their membership publication.

21st Century Campaign Raises \$185,000

The AMS 21st Century Campaign received over \$185,000 in contributions in 2005, including donations to the Policy Program, Education, Public Awareness, History, the Undesignated Fund, and to named funds, which support scholarships and student travel support. The Campaign remains a vital component of the Society's activities. Member contributions allow AMS to implement a variety of activities and programs including:

- an AMS graduate fellowship (providing financial support to over 200 first-year graduate students, affording these students the opportunity to focus solely on their studies and research);
- three minority scholarships (encouraging students from under-represented groups to pursue a degree in the atmospheric and related sciences);
- the 4th AMS Annual Student Conference; and

- student travel to meetings (with partial travel support for more than 100 students to attend the AMS Annual Meeting in San Diego).

Corporate Patrons and Donors Lead the Way

More than 40 corporations contributed over half a million dollars to meeting sponsorships, fellowships and scholarships, the Policy Colloquium, and the AMS K-12 Education Program in 2005. AMS is grateful that ITT, Lockheed Martin Corporation, and Raytheon support AMS activities at the Corporate Patron level. The Society thanks all of the members who, through their continuing commitment to the AMS 21st Century Campaign, afford AMS the opportunity to continue implementing such vitally important and worthwhile activities and further the Campaign's goal of "ensuring a strong future for the atmospheric and related sciences and services."



FINANCE AND DEVELOPMENT

The Society continues to see improvement in its financial state. For the first time in several years, the Society ended the year with a positive bottom line for the aggregate of its major ongoing programs. In fact, there should be a small net increase in the reserves coming out of the 2005 budget year, a step toward the long-term goal of restoring the reserves to a level close to one year's operating budget. The books for 2005 are not completed as of the time of this report, but the full audited financial statements will be presented in the August *Bulletin of the American Meteorological Society*.

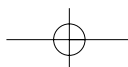
Corporate support continues to be an important part of the overall AMS development efforts and the Society is appreciative that so many corporations recognize the benefits of partnering with AMS to support the atmospheric and related sciences. The Society also wishes to express a special thank you to the Founders, those members that have made a one-time or cumulative donation of \$10,000 or more, and to the members of the Leadership Circle who have made it their intention to contribute at least \$1000 each year for at least three years.

Statements of the AMS

Two AMS Council-approved statements were released in 2005: "Bachelor's Degree in Atmospheric Science" (Adopted by AMS Council on 29 April 2005) *Bulletin of the American Meteorological Society*, 86, 7; and Endorsement of the "Joint Academies' Statement: Global Response to Climate Change" (Adopted by AMS Council on 1 July 2005).

Constitution and Bylaws

The AMS Constitution and Bylaws are available on the AMS Web site (www.ametsoc.org) and are also available upon request from AMS Headquarters by contacting Anne McDonough at (617) 227-2426 ext. 295 or amcdonough@ametsoc.org





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- Anthony F. Densham
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- Sue A. Ferguson
- George H. Fichtl
- Robert C. Gentry
- William J. Gibbs
- Peter Hanna
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- Robert G. Read
- Walter L. Records
- Robert E. Ruskin
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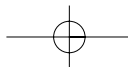
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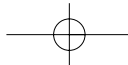
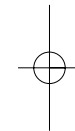
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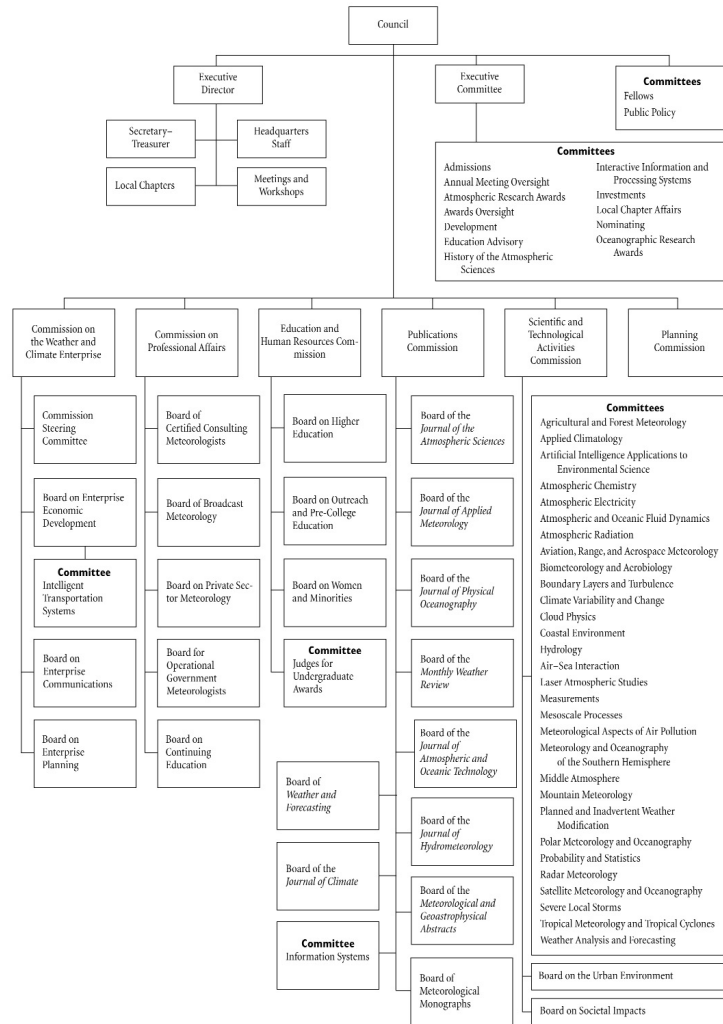
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