

Supplement to the Bulletin of the American Meteorological Society, Volume 88, Number 4, April 2007

# Annual Report 2006

# The American Meteorological Society

# **The American Meteorological Society**

# Annual Report 2006





#### PRESIDENT'S REMARKS

Dear Colleagues,

Annual Reports are a chance to reflect on the previous year, and the AMS 2006 Annual Report is no different. On the following pages you will have a chance to read about the major accomplishments of the Society, from meetings to publications and from policy to education. I encourage you to take a few minutes to read about the hundreds of teachers who were trained through the *DataStreme* Project; the scientists who shared research and findings at specialty meetings; the scientists who worked tirelessly in producing three new AMS statements; the policy makers who were informed through the Environmental Science Seminars and other policy events; the makeup of our membership; and the number of students who received scholarships through your generous donations. You will be impressed at the diversity of our Society and the dedication of our volunteers and staff. I was and am!

Annual Reports are also an opportunity to look ahead. And we spent much of 2006 doing just that by developing a set of new AMS Strategic Goals. This document, included in this issue of the *Bulletin of the American Meteorological Society*, outlines broad goals to ensure our Society is flexible, adaptable, and innovative for the coming months, years, and decades. Again, I encourage you to read about them. You will once more be impressed by the vision of our leadership and our membership. I was and am!

Thank you for the opportunity to serve as AMS President in 2006.

Sincerely,

Araus Sinand.

Franco Einaudi AMS President

#### 2006 HIGHLIGHTS

One of the major accomplishments of 2006 was the development of new strategic goals that will guide the Society's activities and programs over the coming years. As the Society approaches its centennial, it recognizes the changing dynamics in the atmospheric and related science community. The advance of information technology and high-performance computing has made it possible to acquire and digest data, understand how the Earth system operates and changes, draw useful inferences about its condition and future, and communicate this knowledge both to specialized users and the general public. The key challenge for the AMS is to remain relevant to the community it serves and society at large in the face of accelerating change in both the Earth system and in society itself. As a result, the task before the Society is to support science and services on the one hand and capture the benefits of that science and those services on the other.

#### **Strategic Goals**

- To advance scientific and technological knowledge and foster applications through first-class publications and meetings
- 2) To accelerate the development and utility of applications, products, and services
- 3) To promote science-based decision making
- 4) To create a more scientifically literate population
- 5) To attract highly talented and committed people into the professions served by the AMS
- 6) To develop greater synergies among all sectors of the enterprise
- To support national and international programs including those of socioeconomic value

#### AMS Mission

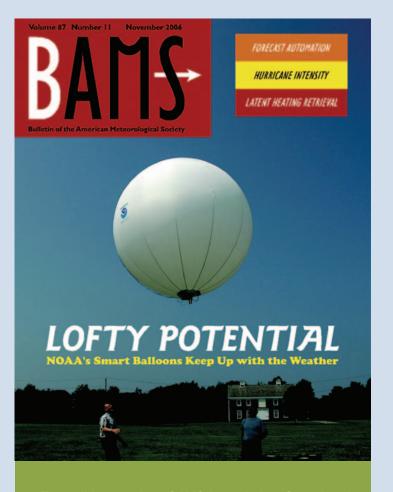
To advance the atmospheric and related sciences, technologies, applications, and services for the benefit of society.

#### **PUBLICATIONS** Publishing Journals, Books, and Monographs with Quality Reputations

Optimizing an electronic workflow was the major task of 2006 for AMS publications. Accepting, editing, reviewing, and finalizing papers using an electronic process have become more important than ever, allowing even more papers to be published in AMS journals.

## 2006 HIGHLIGHTS

- 23,890 pages were published in the scientific and technical journals including *BAMS*.
- A record number of accepted papers (1,750) entered the workflow – an increase of 28% from one year ago and 21% over the previous all-time record set in 2004.
- The Society has created a vibrant and professionally managed book and monograph program.
  Railroads and Weather, by Stanley A. Changnon, and The Callendar Effect, by James Rodger
  Fleming, were released in 2006 and both received awards from Atmospheric Science Librarians
  International.
- The Personalized Online Library (POL), a free member-only benefit described as a concept in last year's report, neared operational status in 2006. The POL will be an invaluable customization tool for organizing more than 100 years of journal articles and alerting members to new papers in their areas of interest.
- The Journals to Developing Countries program flourished last year due to funding from NOAA's Climate Program Office, the National Weather Service, NASA, and the National Science Foundation. In 2006, the Society provided AMS journals to scientists at 175 institutions in 118 countries, with nearly half of the organizations choosing to receive their subscriptions online.



The solid reputation of AMS journals is reflected and enhanced by their collective standing in the Thomson ISI Impact Factor<sup>®</sup> rankings of the most prestigious scientific journals in the world. In the most recently released (2005) rankings in the category of meteorology and atmospheric sciences, seven AMS journals were in the top 20 slots: *The Journal of Climate (JCLI)* is ranked at #3 (for the third consecutive year *JCLI* set records for number of manuscripts submitted and pages published, ending 2006 with 6,446 pages, compared with 5,390 in 2005). *BAMS* came in at #5, the *Journal of Hydrometeorology* at #12, the *Journal of Atmospheric Sciences* at #13, *Monthly Weather Review* at #15, the *Journal of Applied Meteorology* at #17, and the *Journal of Atmospheric and Oceanic Technology* at #19. The AMS Education Program continues to set the bar among professional scientific societies for training teachers and developing instructional resource materials for teachers at all levels.

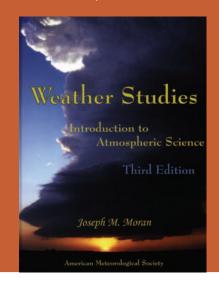
### 2006 HIGHLIGHTS

- The suite of *DataStreme* teacher-enhancement courses trained 1,211 precollege educators via more than 80 Local Implementation Teams (LITs) nationwide during 2006. To date, the unique AMS *DataStreme* teacher enhancement courses have trained 11,744 teachers and another 600 teachers are enrolled in the Spring 2007 semester.
- The NSF-funded Online Weather Studies Geosciences Diversity/National Dissemination Project has conducted five workshops over the past five years for undergraduate faculty from 120 Minority-Serving Institutions (MSIs).
- The NSF-funded Online Ocean Studies National Dissemination Project held its first workshop for undergraduate faculty members from MSIs in June 2006 at the University of Washington School of Oceanography and nearby NOAA facilities. It was the first of three such workshops designed to introduce the AMS oceanography course to 75 MSIs over a 3-year period. Recruitment and planning for the June 2007 workshop for faculty members from another 25 MSIs are underway.
- A major grant from the NOAA Education Office was used to support *DataStreme Atmosphere* and *DataStreme Ocean* courses for the 2006–07 school year. Another grant awarded by NASA last year augments its existing support of *DataStreme* Water in the Earth System.
- AMS conducted a pair of two-week AMS precollege teacher-training workshops at the National Weather Service Training Center and the U.S.

Naval Academy in July 2006. Support came from the NSF Atmospheric Science Division, the Navy, NOAA, State University of New York Brockport, and AMS.

- The annual summer training of AERAs (AMS Education Resource Agents) and college faculty who are *DataStreme* course LIT leaders was held in Boulder, CO, in early July 2006.
- A major proposal was submitted to the NSF Course, Curriculum, and Laboratory Improvement Program to develop and nationally implement a new introductory-level undergraduate course entitled Online Climate Studies: Introduction to Earth's Dynamic Climate System. The goal is to help produce a climate-literate public.
- Two new AMS Student Chapters were organized at the University of Maryland, College Park and the University of Puerto Rico—Mayaguez.

In summer 2006, the AMS published a new textbook by AMS Online Weather Studies Coordinator Joseph Moran. The *Online Weather Studies* textbook includes color photographs, graphs, charts, essays and much more. The book is being used by thousands of college/university students throughout the United States. The Society has a similar text for Online Ocean Studies published in 2005.



**Recognizing Competence and Fostering Professionalism** 

AMS Certification Programs continued to grow and thrive in 2006 with more broadcast meteorologists earning the coveted Certified Broadcast Meteorologist distinction and the Certified Consulting Meteorologist program planning a golden anniversary.

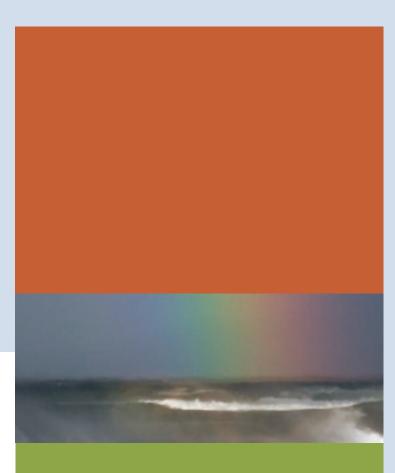
#### 2006 HIGHLIGHTS

- 87 broadcast meteorologists were granted the Certified Broadcast Meteorologist Certificate
- 53 broadcast meteorologists were granted AMS Television Seals of Approval
- 2 AMS members were granted the Certified Consulting Meteorologist Certificate









Three AMS Council–approved statements were released in 2006:

- Freedom of Scientific Expression (Adopted by the AMS Council on 17 February)
- Earth Science Education (Adopted by the AMS Council on 29 January)
- Research and Operational Use of Environmental Satellites in Weather Applications as Part of an Integrated Earth Observing System (Adopted by the AMS Council on 25 January)

All AMS Statements in force or under consideration are online at <u>http://www.ametsoc.org/policy/</u>

# ATMOSPHERIC POLICY PROGRAM

Strengthening Connections between Public Policy and Earth System Science and Services

The AMS Atmospheric Policy Program (APP) spent much of last year strengthening its policy outreach and creating new avenues of communication with key policy makers and the science community.

#### 2006 HIGHLIGHTS

- Nine seminars were held on Capitol Hill last year as part of the AMS Environmental Science Seminar Series (ESSS) that provides Congressional staff with useful scientific information communicated directly by respected researchers on different sides of pressing issues.
- Lockheed Martin joined Raytheon Company and ITT as an underwriter for the Policy Study series.
- Thirty-three graduate students and mid-level managers from science organizations around the country took part in the 2006 Summer Policy Colloquium. They built scientific program leadership skills by getting an overview of policy basics: talking with federal officials, Congressional staffers, and others; surveying current atmospheric policy issues; and building skills, experience, and interest in the challenges of matching atmospheric science to national priorities.
- The APP University Policy Education Curricula received a \$30,000 grant from the Lounsbery Foundation to develop materials for university science policy curricula.
- The Society held a workshop on "Integrating Space Weather Observations and Forecasts into Aviation Operations" in late November. The goal was to provide recommendations that will increase the safety, reliability, and efficiency of the nation's aviation system through more effective use of space weather information.
- The fifth and final workshop on science communication and the media was held in 2006 at the Woodrow Wilson Center. The workshops brought members of the media together with scientists in regional settings to improve communication of science to the public through the media.

The AMS/UCAR 2006–2007 Congressional Fellow is James Bradbury. A graduate of the University of Massachusetts at Amherst, Bradbury works on energy and environment-related issues in the office of Representative Jay Inslee (D-1st/WA). The 2005– 2006 Fellow was Paul Higgins, who is now a Senior Policy Fellow in the AMS Policy Program where he develops and advances solutions to society's climate change problems. During his fellowship year, Higgins helped develop federal climate policy in the office of Senator Mike DeWine (R-OH).



Development and fundraising remain a vital component of the Society to implement activities and programs that rely on external support, many of which are studentrelated. Last year alone, donations supported graduate fellowships, minority scholarships, the AMS Student Conference, and student travel to AMS meetings.

## 2006 HIGHLIGHTS

- The AMS 21st Century Campaign received over \$175,000 in contributions in 2006, including both donations to Campaign programs and named funds.
- The Society established three new named scholarships last year, two of which will be endowed — the David S. Johnson Scholarship and the Dr. K. Vic Ooyama Scholarship. The Society now has 13 endowed scholarships. The third scholarship, which will be awarded for three years, was established by The Weather Channel in honor of National Hurricane Center Director Max Mayfield, who retired in late 2006.
- More than 40 corporations contributed more than a half a million dollars to meeting sponsorships, fellowships, and scholarships, the Policy Colloquium, and the K–12 Education Program.



#### Fellowships and Scholarships by the Numbers

- In 2006 the Society awarded 18 Fellowships in the amount of \$396,000; 15 named Undergraduate Scholarships in the amount of \$42,000; 14 Freshman Undergraduate Scholarships totaling \$70,000, and 8 Minority Scholarships totaling \$48,000.
- The Society has awarded 434 scholarships, 233 graduate fellowships, and 7 graduate history fellowships since the inception of the fellowship and scholarship program.
- The AMS Fellowship and Scholarship Program has awarded nearly \$6 million to students pursuing degrees in the atmospheric and related sciences since 1991.
- Students from more than 50 colleges and universities apply for named scholarships and graduate fellowships.

The AMS relies on the generosity of its members and other donors. AMS is especially grateful 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 \$1,000 for at least three years. In 2006, 12 new individuals joined the Leadership Circle and 4 individuals were named to the Founders list. It is through the continuing commitment of so many members to the AMS 21st Century Campaign that the Society can continue to implement vitally important and worthwhile activities and further the Campaign's goal of "ensuring a strong future for the atmospheric and related sciences and services."

With more than 12,000 members it takes many creative minds and efforts to provide value and service to everyone. Membership delivered this value last year through improved online services such as an online membership application and cleaner Internet sites.

#### 2006 HIGHLIGHTS

- Membership is on the rise-new member applications increased by 32% and the Society's membership grew by 4% total. Overall, the total number of members has increased more than 14% over the last five years: from 10,996 in 2001 to 12,548 at the end of 2006.
- Growth in student membership continued to outpace that of other membership categories in 2006. The number of Student Members, typically at the 1,000 mark before the introduction of the Early Career Dues rate, continues to rise. This was the fifth year in a row with an increase.
- The content and layout of the Member Services Web pages were revamped in 2006 so that all visitors, particularly those with degrees in a science other than meteorology, could more easily determine the category of membership most appropriate for their educational and professional background and/or level of interest. The AMS also launched an online membership application.

# **2006 Membership By the Numbers** (Membership as of 31 December 2006)

Honorary Members	31
Fellows	562
Members	8,085
Members with Student Privileges	112
Associate Members, Voting	46
Associate Members, Nonvoting	996
Associate Members, High School Student	s 147
Associate Members, K-12 Teacher	154
Student Members	2,250
Corporation Members*	165
Total	12,548

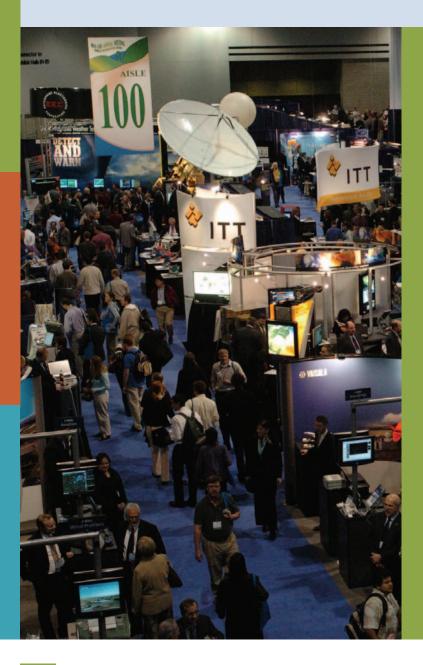
\*Includes 8 Sustaining; 62 Regular; 10 Small Business; 85 Publications

Membership has its advantages. Being a member of the nation's preeminent scientific professional organization dedicated to the atmospheric and related sciences has many benefits, including:

- Significant discounts on AMS periodicals and other publications
- Complimentary subscription to the Bulletin of the American Meteorological Society
- Access to online resources
- Discounted meeting registration fees

# **2006 MEETINGS AT A GLANCE**

- 12 meetings in 9 cities
- · 5,255 attendees at AMS conferences and symposia
- 3,900+ presentations and papers
- 106 exhibits at the 86th Annual Meeting in Atlanta
- 5 CD-ROMs
- · 10 organizations sponsoring meeting activities



The Commission on the Weather and Climate Enterprise (CWCE) is one of the Society's newest and fastest growing commissions and is a showcase of partnerships. CWCE officially started in January 2005 with one volunteer. Today, the group has more than 90 volunteers and is one of the larger commissions of the Society.

- CWCE was set up based on a recommendation from the National Research Council *Fair Weather: Effective Partnerships in Weather and Climate Services* report. The CWCE's goal is to help reduce friction between the sectors, mainly by providing opportunities for people from the various sectors to talk with one another and to work together on problems of common interest.
- CWCE has launched an annual Summer Community Meeting in Boulder and participates in the AMS Users Forum, several topic-oriented Town Hall meetings at the AMS Annual Meeting, and the Society's Corporate Forum.
- As of 2006 more than 1,770 individuals have subscribed to the Private-Sector Listserv, one of the communication vehicles for this group and larger privatesector enterprise.

Increased education and outreach to the general public is essential to the creation of a more scientifically literate population. The Society continued to make outreach a priority in the 2006.

#### 2006 HIGHLIGHTS

- The 5th Annual WeatherFest in Atlanta drew more than 2,500 attendees from the local community. Interactive exhibits, hands-on experiments, and raffle drawings all contributed to a successful outreach event first launched in 2001.
- The Society partnered with the ResearchChannel (www.researchchannel.org) for a new outreach opportunity. Over the coming year, the AMS will produce five scientific programs that will air on the ResearchChannel–a satellite, cable, and Internet distribution network that reaches more than 24 million U.S. households. The Research Channel website, with users in over 70 countries worldwide, provides programs on demand and through a live webstream.
- The initial drafts of the new book on weather and climate intended for popular audiences (working title: *The AMS Weather Book*) were completed. This book, by Jack Williams, will be published in early 2008. The book, which is intended to help the general public understand weather and climate, covers the atmosphere, the hydrosphere, the cryrosphere, and some of their key interactions with the biosphere.
- Hundreds of news stories on a broad range of atmospheric science and related topics reached readers, viewers, and listeners around the world. Many of these stories are a direct result of AMS outreach efforts related to newsworthy journal papers, presentations at the annual and specialty meetings, and ongoing dialogue with science reporters.



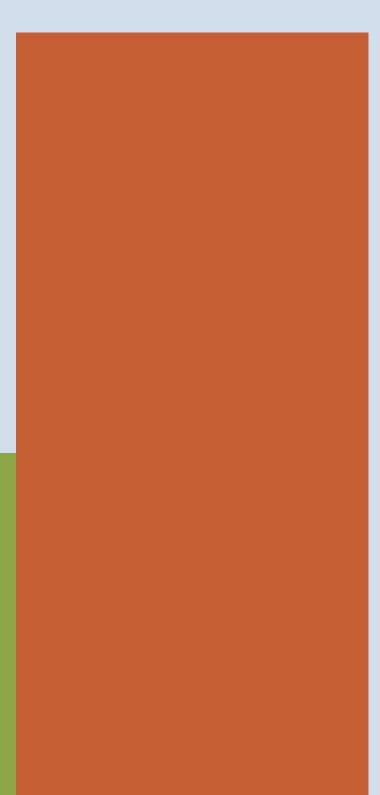
Creating a passion for science was the theme of WeatherFest 2006 where more than 2,500 children and adults were captured by the magic of the science of meteorology and oceanography. Former Atlanta Hawks player (and NBA Hall of Famer) Dominique Wilkins helped stress the importance of math and science education.

# **FINANCES** Managing Resources for Optimum Growth

The financial situation of the Society continued to improve in 2006. For the second year in a row the core programs of the AMS, including *BAMS*, the journals, books, and meetings, showed financial improvement. The result – a positive bottom line and increased reserves.

#### 2006 HIGHLIGHTS

- Extraordinary growth in the investment portfolio helped support several programs and services that could otherwise not have been sustained.
- The development efforts noted earlier are a major source of funding for students to attend the AMS Annual Meeting and other specialty meetings. The financial contributions of our members are an important asset to the Society.
- Complete financial details will be published in the August 2007 *BAMS*.



# 2006 DECEASED MEMBERS

Richard A. Addis	Maximilliam C. Kozak
Geirmunder Arnason	Matthew H. Kulawiec
Holt Ashley	Hsiao-Lan Kuo
Robert C. Behn	Marvin D. Magnuson
Eugene A. Bertoni	Donald N. McMullen
Byron A. Boville	David H. Miller
Gordan D. Cartwright	Michael T. Mills
Alfred Tieh-Chun Chang	James T. Moore
Eugene E. Chermack	Harry Moses
Brian J. Collins	John T. Riedel
Daniel J. Cotter	Brian F. Ryan
William M. Cox	Frederick Sanders
N. Andrew Crook	Roderick A. Scofield
Ralph J. Donaldson Jr.	Richard M. Schotland
Rhodes W. Fairbridge	Francis J. Socey Jr.
Ralph S. Frost	Charles K. Stidd
Louis A. Gazzaniga	Arthur C. Strong, Jr.
Joseph P. Gerrity Jr.	David W. Stuart
Leon F. Graves	David K. Todd
Norman L. Hallanger	Ernest R. Toracinta
Kirby J. Hanson	Charles H.Tracy
Edward L. Harrington	Charles M. Umpenhour
Klaus Hedegard	Joseph Vederman
Samuel C. Jones	John P. Webber
Yoram J. Kaufman	Marvin H. Wilkening
Kirill Ya. Kondratyev	William H. Wolfe Jr.

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\*President-Elect: Richard A. Anthes, University Corporation for Atmospheric Research

\*Executive Director: Keith L. Seitter, CCM, American Meteorological Society

\*Secretary-Treasurer: Kenneth C. Spengler, CCM, American Meteorological Society

Past President \*Susan K. Avery, University of Colorado at Boulder

\*Walter A. Lyons, CCM, FMA Research Inc.

**Councilors** *Terms Expire 2007* \*Jennifer A. Francis, Rutgers University

Anthony Hollingsworth, European Centre for Medium-Range Weather Forecasts

Thomas R. MacPhail, NOAA/National Weather Service

Stanley L. Marsh, CCM, Southern California Edison Co.

Chuck H. Wash, Naval Postgraduate School

*Terms Expire 2008* Joseph S. D'Aleo, CCM, JHS Associates

Kelvin Droegemeier, University of Oklahoma

Jenni Evans, The Pennsylvania State University

Marcia K. Politovich, National Center for Atmospheric Research Robert A. Weller, Woods Hole Oceanographic Institute

*Terms Expire 2009* Mary G. Altalo, Ocean.US

Raymond J. Ban, The Weather Channel

Steven A. Rutledge, Colorado State University

Joseph T. Schaefer, CCM, NOAA/Storm Prediction Center

\*J. Marshall Shepherd, University of Georgia

\*2006 Executive Committee

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*Ex Officio members*: Richard A. Anthes Franco Einaudi Chester F. Ropelewski Roger M. Wakimoto

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Chair: Bjorn B. Stevens Clara Deser Kristina B. Katsaros V. Ramanathan Richard Rotunno Robert J. Serafin Graeme L. Stephens Peter J. Webster

#### Awards Oversight\*

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*Co-chairperson*: Ronald S. Gird *Co-chairperson*: Jill F. Hasling, CCM Virginia J. Bigler-Engler Jenny Dean Joseph John Feldt Russ Heilig Carolyn F. Jones John A. Lasley Faye W. McCollum James K. Purpura Carine Richard-van Maele Lans P. Rothfusz Carl D. Thormeyer Bryan Yeaton *AMS representative*: Stephanie Kenitzer

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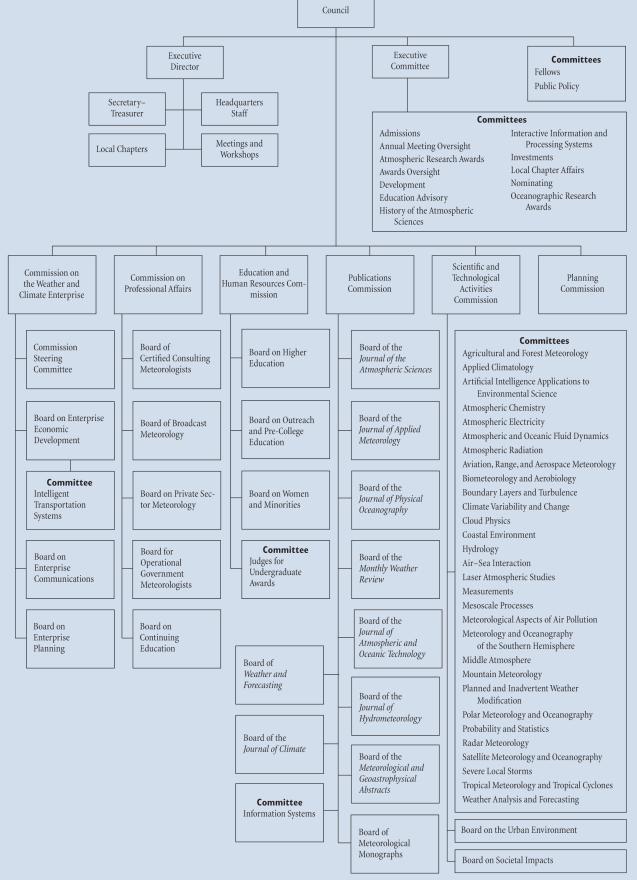
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