

Atmospheric Sciences Section of AGU Newsletter

Volume 1, Issue 1

June 6, 2007

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Section News From Warren Wiscombe, President

AS Newsletter Editor

The AS Section is fortunate that Anna Harper, a graduate student at Colorado State University with a journalism background, has volunteered as the founding Editor of our new AS Section Newsletter. The Newsletter will include news items, events of interest, reports from your AS Officers, links to AS-relevant job notices in Eos, and occasional requests for feedback. If you have an item that you would like to submit to the Newsletter, please send it to Anna at abharper@atmos.colostate.edu.

The Newsletter will be a PDF file with newspaper-style layout and graphics. When a Newsletter is ready, each AS member will receive an e-mail notice containing a URL from which to download the newsletter from the AS Section website.

More than ten people volunteered to help with the Newsletter. Not wanting to waste so much enthusiasm, we appointed some as reporters to provide material to Anna. Anna will introduce them to you as time permits.

Note that we will not be reporting on AGU-wide business. That is the function of Eos. However, we may occasionally solicit your feedback on issues of AGU-wide concern, like growth of Fall Meeting size.

Eos

The AS Section is pleased to welcome Prof. Charles Zender, UC Irvine, as our Section representative to Eos. Eos is in transition right now, as a perusal of recent issues reveals, with many improvements in the works. We are sure that Charlie will enjoy helping to shape the publication's future.

Creating Your Own Session at an AGU Meeting

Some AS members may not be aware of how easy it is to have their own AGU session, devoted to a subject they think is "hot" and/or about which they are passionate. Any member can propose a session, and no sessions are initially rejected except for obvious duplications (which may be merged); the session title and abstract is then published to the AGU membership and anyone can submit an abstract to it. If a session doesn't garner enough abstracts (roughly less than 10), it is dropped. What exactly constitutes "enough" abstracts is up to the AS Secretaries, who are the meeting planners.

Once their session "makes it", proposers become "conveners". Conveners sort their abstracts into speaking and poster slots. Conveners are told the number of invited speakers per session they may have and those invited must submit abstracts before the

deadline. Our Section Secretaries then, at an intense two-day meeting, valiantly try to arrange all the sessions into a coherent whole.

Session proposals for the Fall Meeting are due Wednesday, June 13. They are easy to enter into the AGU website (see link below in Highlights). Give it a try!

AGU Fall Meeting Size Explosion

The AGU Fall Meeting has lately been growing at an annual rate of 9%. There were nearly 14,000 attendees at the 2006 meeting, with 20,000 expected by 2010 if current growth continues. This eventually forces difficult choices. I have received unhappy feedback about parallel sessions, about having to

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HIGHLIGHTS

Proposals for special sections for the 2007 Fall Meeting are due June 13.

For more information, please go to:
<http://www.agu.org/meetings/fm07/program.html>

2007 Fall AS Section Banquet is tentatively planned for Tuesday, December 11, with a special performance from Lynda Williams.

AGU Fellows Committee nominations due July 15:

<http://www.agu.org/inside/fellguides.html>

AS Newsletter

The newsletter will serve many purposes, but in order to serve you best we will depend on AGU AS members for content. Please send any article suggestions to me at abharper@atmos.colostate.edu.

We hope to bring you the following information in this newsletter:

1. *News from the Executive Committee, namely Warren Wiscombe (President) and Alan Robock (President-Elect). See articles on pgs. 1 and 3.*
2. *News on Union-wide events specific to the AS Section, such as Alan Robock's recap of Al Gore's speech at the 2006 Fall Meeting (pg. 3-4), and Michel dos Santos Mesquita's summary of one of the 2006 Fall meeting's many well-attended sessions (pg. 4).*
3. *Announcements of new scientific programs and status of ongoing programs, for example, Juan Añel's article on COST Actions (this page).*
4. *Information on upcoming meetings, conferences, workshops, including Calls for Abstracts, within the atmospheric sciences, as well as reports on these meetings (pg. 5).*
5. *Links to job postings and post-doc opportunities advertized in EOS (pg. 5).*

Each of AGU's publications provide a unique and valuable service. EOS provides you with Union-wide news and research, while JGR-Atmospheres supplies you with news on the top research being done within our field. Now this newsletter can serve as another powerful tool in keeping you informed and current with the atmospheric science community.

Anna Harper, Editor

Newsletter Reporters:

Jen Alltop - Columbia University

Will Anderson - Texas Tech University

Juan A. Añel - University of Vigo, Spain

Michel Mesquita - Univ. of Alaska, Fairbanks

Subarna Bhattacharyya - Jawaharlal Nehru Center for Advanced Scientific Research, Bangalore, India

COST Actions: New European Cooperative Programs

Juan A. Añel

COST is an intergovernmental framework for European Cooperation in the field of Scientific and Technical Research. COST Actions cover basic and pre-competitive research, as well as activities of public utility with a geographic scope beyond the EU. Institutions from non-COST countries may join COST actions. As of 2006, 58 countries participate in COST under different forms (<http://www.cost.esf.org>).

The first COST Action was the creation of the European Centre for Medium-Range Weather Forecast (ECMWF) in 1973. After the last open call process COST has selected four new actions in the domain of meteorology to be funded: HOME, ENCWF, EUPOL and WaVaCS. These actions will run for the next 4 years, until June of 2011. The funded activities include the organization of workshops, management meetings, publication of research results in journal special issues and the organization of schools and collaborative short-term missions.

WaVaCS – Atmospheric WATER Vapour in the Climate System

The objective of this Action is to increase, integrate and disseminate the knowledge on the role of atmospheric water vapor in the terrestrial climate system and to further our understanding of the processes that control atmospheric water vapor distribution. This task will be undertaken by four working groups. Specific objectives include assessing the quality of atmospheric water vapor measurements and improving water vapor representation in mesoscale and global models. The estimated economic dimension for this Action is 12 million euros.

ENCWF – Towards a European Network on Chemical Weather Forecasting and Information Systems

This Action is focused on standardizing and networking national chemical weather forecast and information systems across Europe. The ENCWF will support and complement other European ongoing initiatives such as GMES (Global Monitoring for Environment and Security) and PROMOTE (PROtocol MO尼Toring for the GMES Service Element). The estimated economic dimension for this Action is 11 million euros.

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Noah Diffenbaugh: Promising Junior Scientist

Will Anderson

We congratulate Dr. Noah Diffenbaugh, Assistant Professor from the Department of Earth and Atmospheric Sciences at Purdue University, who was awarded the 2006 James R. Holton Junior Scientist Award at the AGU Fall Meeting in San Francisco. The Holton award has been offered annually since 2004, and is available to all AGU members not more than three years past completion of a PhD. The award recognizes an exceptional contribution to the respective scientist's field in a remarkably short time period.

In 2003, Diffenbaugh completed his PhD at the Department of Earth and Planetary Sciences at the University of California, Santa Cruz (UCSC), where his research was focused on climate modeling and biosphere-atmosphere interactions. He spent one year working as a postgraduate research scientist at UCSC before joining Purdue in 2004.

His current research interests include climate change, biosphere-atmosphere interactions, paleoclimatology and earth-system modeling. Most recently, he and colleagues have investigated climate change and extreme temperature and precipitation phenomena. They analyzed the potential link between Holocene climate variations and Holocene land change, as well as the effect of anthropogenic changes on radiative forcing. This latter contribution offers new understanding about specific climate change events.

Diffenbaugh collaborates with various research groups and centers at Purdue, notably the Climate and Earth Systems Dynamics Group, Purdue Climate Change Research Center, Atmosphere-Surface Interactions and Climate and Extreme Weather group.



Diffenbaugh accepts the his award from AS President Warren Wiscombe at the section banquet.

From Warren Wiscombe, continued from pg. 1

dash back and forth between the two Moscone buildings, and about the sheer volume of sessions even within AS, some with too similar subjects.

The AGU membership was recently polled on meeting growth, but the results were somewhat inconclusive, except that no one wanted to leave San Francisco or move the meeting to January. (AGU has secured a December week at the Moscone facility for many years into the future.) Making the meeting 6 days, having half-day poster sessions and having shorter talks are among the proposed solutions. There will be greater pressures to reduce the number of talks than the number of posters.

We would like to hear from you on this subject. If you are happy with the meeting as is, even if it doubles in size, we want to hear that. If you are not happy with the size (or projected size) of the meeting, we'd like to hear specific concerns, not generalized statements of discontent. We'd also like to hear specific solutions that you favor. If you have experience with meetings larger than AGU, positive or negative, we'd like to hear about that too. To allow us to manage your replies effectively, please use a Subject line of "AGU meeting size" and respond to wwiscomb@bnl.gov.

AS Fellows Committee

Prof. Michael Prather of UCLA has taken over from Prof. Dennis Hartmann of the University of Washington as Chair of the AS Fellows Committee. (Thanks for your dedicated service, Dennis!) I have appointed many new members representing the full breadth of AS.

The number of nominations that can be forwarded to the AGU Fellows Committee each year depends on the total number of members and their affiliations. Last year, AS was entitled to submit 14 applications, and a



AGU AS officers working hard for our section in Acapulco at the AGU Joint Assembly.

similar number might be expected for the 2008 election. Please submit any Fellow nominations directly to AGU headquarters. For suggestions on preparing a solid nomination package and submission directions, visit <http://www.agu.org/inside/fellguides.html>. Nominations are due July 15, and the decisions are made in the Fall.

Outstanding Student Paper Award

Jay Gregg of the University of Maryland has won the Outstanding Student Paper Award for the 2006 Fall AGU Meeting. Gregg is a PhD student and research assistant with The Joint Global Change Research Institute. His current research focuses on improving representations of biomass residue energy supplies.

The AS Section owes a huge debt of gratitude to Susan Buhr of the University of Colorado, who has been coordinating the student paper award selection process for several years. Susan has turned over the reins to Lin Chambers of NASA Langley. Welcome aboard, Lin!

From Alan Robock AS Section President-Elect

For this inaugural issue of the Atmospheric Sciences Newsletter, I would like to report on several items from the Fall 2006 AGU Meeting. This was my first meeting as President-Elect and as a member of the AGU Council. The AGU Council is the governing body of AGU. It is composed of the AGU President, Past President, President-Elect, International Secretary, General Secretary, Executive Director, and the Presidents and Presidents-Elect of the 11 AGU Sections. I will serve on the Council for two years as President-Elect and another two years as President of the Atmospheric Sciences Section. I also have been appointed to the AGU Meetings Committee, where I serve as a member and the AGU Council liaison.

As President-Elect, and then as President, I will represent the interests of the members of the Atmospheric Sciences Section in all matters concerning AGU, especially the main activities of publications and meetings. Please send any concerns or issues you would like me to address to my e-mail address, roboc@envsci.rutgers.edu, and I will do my best to act on your behalf. One way I will do that is to report regularly on my AGU activities.

Atmospheric Sciences Banquet

As a fulfillment of my only explicit campaign pledge, I helped transform the Atmospheric Sciences Section dinner from a poorly-attended, expensive rubber-chicken event held at local hotels into a special, eight-course Chinese banquet at the Empress of China restaurant in Chinatown. After the banquet, President Warren Wiscombe presented the James R. Holton Junior Scientist Award to Prof. Noah Diffenbaugh (Purdue University). Then Lynda Williams, the Physics Chanteuse, performed science songs specially written for the occasion on global warming, geo-engineering, aerosols, clouds, climate modeling and other atmospheric topics, as well as some old standards from her repertoire. I hope you all enjoyed it, and the AS Section plans to continue the tradition in 2007.

Al Gore Encourages Communication



Al Gore addresses a packed-house at the Fall 2006 AGU meeting.

Alan Robock

Al Gore, who told us he "used to be the next President of the United States of America", gave a one-hour talk on December 14, 2006 to 4,000 AGU members in a packed ballroom. Another 3,000 members were diverted to an overflow room, while many latecomers were turned away entirely.

Rather than lecture us about global warming as he does in his famous talk, Gore thanked us for the work we do and for helping to inform him on the subject. The main topic of his address was the communication of science to the public. He discussed past methods of dissemination of knowledge, from feudal

Continued on Next Page

Gore, continued from pg. 3

times when the only literate people were monks, to the invention of the printing press by Gutenberg, to the current TV generation when information transfer is very one-way. He said the Internet will soon allow individuals to once again dominate information transfer in a two-way manner, but we are not there yet.

In the meantime, Gore urged AGU scientists to have the courage to speak out more to inform the public of our research results. He said it is our duty to step out of our traditional role of only publishing in journals. We as scientists, according to Gore, should make more of an effort to communicate with community groups, local media, and journalists in general to spread the word about our understanding of the planet. The talk was very inspirational, and Gore received a standing ovation.

COST Actions,

continued from pg. 2

EUPOL – Assessment of production, release, distribution and health impact of allergenic pollen in Europe

The main objective of this Action is to set up a multi-disciplinary forum for critical review of information on allergenic pollen in Europe and its representation in assessment and forecasting systems. Secondary objectives include analyzing the strengths and limitations of satellite observations, exploring the possibility of their near-real-time assimilation for pollen analysis and forecasting, and assessing interactions of pollen with atmospheric pollutants. This Action will cost an estimated 10 million euros.

HOME – Advances in Homogenisation Methods of Climate Series: An Integrated Approach

The objective of this Action is to achieve a general method for homogenizing climate and environmental datasets. This will be applicable to commonly observed datasets, radiosonde data, data provided by numerical weather forecast models, reanalysis and climate proxy data. The estimated economic dimension for this Action is 6 million euros.

Currently, the Actions await signatures from the participating countries. The next step is a meeting of the respective management committees, after which the Actions will officially begin.

AGU Highlights: High-Latitude Storm Tracks

Michel dos Santos Mesquita

Atmospheric scientists were very busy at the Fall 2006 AGU Meeting. They had 36 Atmospheric Science sessions and countless more with an AS-affiliation to choose from, as well as a packed-house Bjerknes Lecture from V. Ramanathan on global dimming and global warming.

One of these well-attended sessions was “Northern Extratropical and Arctic Storm Activity: Variability, Long-Term Changes, and Impacts,” sponsored by the University of Alaska Fairbanks and the International Arctic Research Center, also in Fairbanks.

Highlights from this session include:

- Identification by Dr. Mark Serreze, Cooperative Institute for Research in Environmental Sciences (CIRES) / University of Colorado, of a summer maximum in cyclone activity near the North Pole. This pattern would contribute to a late summer peak in precipitation and may also influence the sea ice cover in this area.
- Dr. Asgeir Sorteberg, Bjerknes Centre for Climate Research / University of Bergen (Norway), noted an increasing trend in the number and intensity of cyclones entering the Arctic.
- Dr. Uwe Ulbrich, Institute for Meteorology (Freie Universitaet Berlin), identified an increase in the number of intense cyclones over the North Atlantic.

- Using AGCM experiments, Dr. Amy Solomon, NOAA/CIRES, demonstrated that “the temporal and spatial coherence between developing extratropical cyclones and latent heat release causes a greater than 2°C warming of the poles.”
- Dr. David Atkinson, International Arctic Research Center / University of Alaska Fairbanks, contrasted storm tracking methods (relative vorticity, MSLP and wind speed) for the North Pacific, and revealed sometimes large differences. He emphasized that the definition of a storm must be carefully considered, see Fig. 1.
- Dr. Edward Hanna, University of Sheffield (UK), presented a new index, termed “dp,” or the daily pressure variability index, by which an additional measure of NAO strength may be obtained.

Although not all of the papers and details are mentioned here, this shows some of the important research that is being done in high-latitude storm and climate dynamics. The importance of this session was to contribute even more to the understanding of dynamical processes of storm tracks.

For more information, the abstracts are listed on the session website:

www.agu.org/meetings/fm06/fm06-sessions/fm06_A24A.html

The full list of Atmospheric Science sessions is listed at: <http://www.agu.org/cgi-bin/sessions5?meeting=fm06&sec=A>, including links to the abstracts for each talk or poster.

On the next page: Job and Conference Opportunities

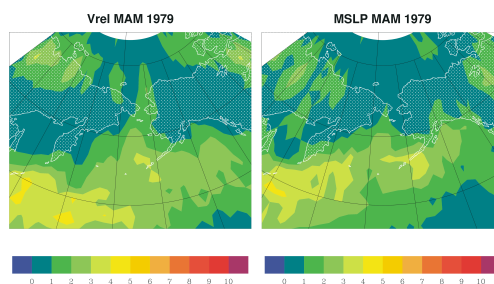


Fig. 1: Comparison of North Pacific storm count densities using identification algorithms based on relative vorticity (left) and mean SLP (right) for MAM 1979. Scale is total number of storm events for the period. Note that the main core of activity differs between the two methods for this time period. Relative vorticity plot by Atkinson using data furnished by Sorteberg, based on Hodges' (Univ. of Reading) method. MSLP plot by Gottschalck (NOAA/NCEP Earth System Research Laboratory) using Serreze's method.

Opportunities

Compiled by Subarna Bhattacharyya and Anna Harper

Note: You may be asked for your AGU member # to open the following links.

AGU job postings can be found at:

http://www.agu.org/cgi-bin/membership_services/joblistings.cgi

**Below is a list of the postings in
Atmospheric Sciences:**

- Faculty Position in Atmospheric Sciences, Yonsei University, Seoul, Korea - deadline June 23, 2007
- Postdoctoral Scholar, Department of Geosciences, Penn State
- Postdoctoral Scientist in Atmospheric Aerosol and Climate Modeling, Center for Global Change Science, Massachusetts Institute of Technology
- Program Director, NSF Antarctic Ocean and Atmospheric Sciences Program - deadline June 20, 2007
- Research Scientist Positions, Goddard Earth Sciences and Technology Center, Maryland
- Research Scientist, Cooperative Institute for Mesoscale Meteorological Studies at the University of Oklahoma
- Research Scientist, Boulder, CO Planetary Atmospheres Section

Biogeosciences

- Postdoctoral Researcher, Remote Sensing Forest Disturbance, Tulane University.

Interdisciplinary/Other

- Director, Byrd Polar Research Center, The Ohio State University
- Superintendent, Space Science Division of Naval Research Laboratory, Washington, DC

Space Physics

- Director, Hawaii Institute of Geophysics and Planetology. Review of applications begins July 1, 2007

Conferences

AGU Joint Assembly (Dec. 10-14) - San Francisco, Cal. Session proposals due June 13.

<http://www.agu.org/meetings/fm07/>

Miscellaneous

AS Newsletter Logo Contest:

We need a logo for our newsletter! We will accept submissions for the next month, after which point a winner will be selected and announced in a subsequent issue. Don't miss this chance to show off your creativity to thousands of scientists! Send submissions to abharp@atmos.colostate.edu, subject: AS Logo