

## STAC Board and Committee Reports for 2013

### Executive Summary

This reports summaries the many activities of the Boards and Committees that make up the Scientific and Technological Activities Commission. It highlights numerous conferences and symposiums sponsored by Boards and Committees, and mentions many joint sessions held among sponsored programs and symposiums. It references six AMS statements which were worked, two of which were completed and approved by the Council. It calls out numerous awards given to members and students; and acknowledges the services of members who are rotating off the Boards and Committees as well as recognizes new members joining STAC. New this year is STAC's support for the Glossary of Meteorology. Five Boards/Committees assisted the Glossary of Meteorology in updating word definitions. The activities of these Boards and Committees have been many and varied. Boards and Committees reporting are listed here followed by the individual reports:

- Agricultural and Forest Meteorology
- Air-Sea Interaction
- Applied Climatology
- Artificial Intelligence Applications to Environmental Science
- Atmospheric and Oceanic Fluid Dynamics
- Atmospheric Chemistry
- Atmospheric Electricity
- Atmospheric Radiation
- Aviation, Range, and Aerospace Meteorology
- Board on Atmospheric Biogeosciences
- Board on Data Stewardship - Mohan Ramamurthy
- Board on Environmental Information Processing Technologies
- Board on Societal Impacts
- Board on the Urban Environment
- Climate Variability and Change
- Coastal Environment
- Hydrology
- Laser Atmospheric Studies
- Measurements
- Mesoscale Processes
- Meteorological Aspects of Air Pollution
- Meteorology and Oceanography of the Southern Hemisphere
- Middle Atmosphere
- Mountain Meteorology
- Planned and Inadvertent Weather Modification
- Polar Meteorology and Oceanography
- Probability and Statistics
- Radar Meteorology
- Satellite Meteorology, Oceanography, and Climatology

Severe Local Storms  
Space Weather  
Tropical Meteorology and Tropical Cyclones  
Weather Analysis and Forecasting

## **1. Agricultural and Forest Meteorology - Ankur R. Desai**

This is my first year of my second term as chair of Agricultural and Forest Meteorology (AFM) STAC of the AMS. Another year has passed, and once again, agriculture and forests around the world were still influenced by meteorology, and the valiant agents of our A.F.M. S.T.A.C. continued to operate our group, keeping its eyes and ears on the pulse of all land-atmosphere interactions. Below is a report of activities over the 2013 calendar year.

The AMS 10th Fire and Forest Meteorology Symposium held in Bowling Green, KY in October.

Planning for 31st Conference of Agricultural and Forest Meteorology / 2nd Conference on Atmospheric Biogeosciences. Program chairs Joe Alfieri and April Hiscox have been working closely with the Board on Atmospheric Biogeosciences to coordinate the next specialty meeting. The meeting is now scheduled for May 12-16, 2014 in Portland, Oregon and a call for abstracts was recently posted on the AMS website. A special joint session honoring the contributions of Ray Leuning was proposed and approved by the AMS Council. Dr. Bill Massman will organize and chair this session

Adoption of common framework for student oral and travel awards. Ankur Desai and colleagues in both our STAC and Atmospheric Biogeosciences discussed and adopted a common set of guidelines for implementation of student travel, oral, and poster awards at future speciality meetings. The document presents recommendations for meeting calls and the size and number of awards, provides options for seeking extramural (corporate) funding, and encourages the co-sponsorship of student competitions at joint meeting.

AMS Glossary. A.F.M members and colleagues reviewed the terms Haines Index and pyrocumulonimbus for the AMS Glossary of Meteorology and supported its inclusion in the AMS Glossary of Meteorology.

AMS Award for Outstanding Achievement in Biometeorology. Our STAC again participated in discussion of nominees for this award and supported the Biogeosciences selection of this year's choice, Ray Leuning. There were several issues brought up with the nomination process and the role of individual STAC members in soliciting versus submitting nominations. We had a group discussion and Ankur Desai had a teleconference with Ward Seguin and Elizabeth Pattey on making sure the process is both inclusive and avoids any appearance of conflict of interest. The Board on Atmospheric Biogeosciences has agreed to try a more open selection process that includes an invitation to all AgForMet STAC members to participate fully in the discussion and vote. We will try this process next May and if things go well, try to codify it in our terms. The

process will still be consensus driven, but we will have a larger email discussion followed by a teleconference with a smaller group. AgForMet STAC members will have online access to all nominations and the ability to make online comments. We will clarify the AMS rule that members involved in any of the nominations in some way (conflict of interest, submitted a letter, etc...) must recuse themselves. We also agreed to have a larger discussion on the goals and criteria for the award and ensuring that we are fully meeting the diversity of career stage, discipline and background of our members.

Re-appointment of existing members and appointment of new members. Joe Alfieri, April Hiscox, and Chuixiang Yi all agreed to stick around for a second term. This year marked the end of the term for our student rep Henrique Duarte. The committee voted to replace Henrique with PhD student Elke Eichelmann of the University of Guelph. We also voted to add long-term active participant Brian Viner of DOE to join our STAC. Finally, at the request of the Board on Atmospheric Biogeosciences, we have decided that I will step down after six years of representation on the board, and be replaced with April Hiscox.

## **2. Air-Sea Interaction – Jeff Hare**

In January 2014, current Air-Sea Interaction (ASI) Committee Chair, Jeff Hare, will step down at the end of his second term, and the Committee will lose the service of Gary Geernaert, as he has opted to not renew his Membership.

The ASI Committee chose current Member Justin Small to become the next Chair, and by election from several highly qualified candidates, two new Members have been chosen from the community at-large: Chris Zappa of Lamont-Doherty and Henry Potter of RSMAS. There are no Membership renewals this year.

Outgoing 2012 Member Yuko Okumura attended the January 5th, 2013 STAC Meeting at the Hilton Hotel in Austin TX on behalf of the ASI Committee. As a result of feedback from Yuko's participation in the STAC meeting, the ASI Committee asked Emily Harrison to take over the management of the ASI Committee webpage on the AMS website.

The ASI Committee spent considerable time discussing potential partnerships, location, and timing of the next (19th) Air-Sea Interaction Conference. Given the size of our community and potential draw to conferences, it is necessary for us to partner with other AMS committees to coordinate conferences. Considerations included making an approach to the Tropical Meteorology and Tropical Cyclones Committee to potentially partner at an upcoming Hurricanes and Tropical Meteorology Conference, as there is significant expansion of research efforts on air-sea interaction and hurricane development. Unfortunately, discussions between the two Committees did not result in any plans to partner in the near term. The ASI Committee also considered re-partnering with the Boundary Layers and Turbulence Committee for their Leeds conference in the June of 2014, but this was deemed to present several obstacles (distance, short

notice, lack of hotel space, etc) for reasonable planning. Eventually, the ASI Committee decided that our best approach is to re-convene at the 2015 AMS Annual Meeting in Phoenix.

### 3. Applied Climatology - Tim Owen

The American Meteorological Society's Committee on Applied Climatology (CAC) worked in 2013 to support Society activities, promote partnerships, and plan for and conduct Applied Climatology Conferences.

Committee Membership:

Outgoing Members	Term Ends
Dr. Judah Cohen	2014
Dr. Steven Quiring	2014
Mr. Michael Allen, Student, Kent State	2014
Incoming Members	Term Ends
Ms. Bernadette Placky, Climate Central	2017
Mr. Gary McManus, Oklahoma Climatological Survey	2017
Mr. Trenton Ford, Student, Texas A&M	2015

Societal Activities:

Melissa Griffin, CAC Secretary, has recorded contributions to the Society that include awards, web presence, partnership promotion, and student members.

- Awards: Committee member Judah Cohen led the CAC in the review and endorsement of the STAC-related Award for Outstanding Contribution to the Advance of Applied Meteorology.
- Web Presence: Nancy Selover, Committee Webmaster, and Mike Allen have worked closely with the AMS Webmaster to ensure that content is up-to-date. The committee has updated key partner links.
- Partnership Promotion: The CAC leverages its diverse membership to promote applied climatology issues important to partners from across the climate and weather community.
- Lesley-Ann Dupigny-Giroux, Vermont State Climatologist and Committee Liaison to the American Association of State Climatologists and Regional Climate Centers, has strengthened collaborations between the organizations.

- Jim Angel, Illinois State Climatologist, has worked with the organizers of the 2014 AMS Annual Meeting to put together the Stanley Changnon Symposium. The symposium will highlight Dr. Changnon's contributions to applied climatology, with talks on the urban impact on weather and climate, impacts of climate on society, and the climatology of various insurance-sensitive phenomena across the United States.
- Student Members: The CAC is committed to inclusion and engagement of student members in its work. In 2013, two Ph.D. candidates, Michael Allen (Ph.D. candidate in Geography at Kent State University) and Olivia Kellner (Ph.D. candidate in Earth, Atmospheric, and Planetary Sciences at Purdue University) served on the committee. Ms. Kellner will continue in 2014; Mr. Trenton Ford (Ph.D. candidate in Geography at Texas A&M University) will begin a one-year renewable term in February 2014.

#### Applied Climatology Conferences:

##### 20th Conference on Applied Climatology:

- Meeting Program Organization: Committee members Barbara Mayes Boustead and Steven Quiring organized the conference, which took place in January 2013 during the 93rd AMS Annual Meeting in Austin. Consistent with the annual meeting theme "Taking Predictions to the Next Level: Expanding Beyond Today's Weather and Climate Forecasts and Projections," the program highlighted the work of research and operational communities, especially those who are involved in accelerating the transition of research results into operations. The program also emphasized the use of predictive capabilities in sectors, including public health, food security, air and water quality, alternative energy and responses to climate trends.
- Short Course: The CAC also sponsored a course on "Interpretation and Use of Climate Monitoring and Prediction Information" at the Annual Meeting in Austin on Sunday, January 6, 2013. Committee member Jon Gottschalck led the development of the course (with the support of member Doug Kluck), which described the kinds of short-term climate variability that can be used to link forecasts across the climate-weather time scale and improve user situational awareness.

##### 21st Conference on Applied Climatology:

- The CAC will continue its practice since 2004 of having its conferences rotate between the annual meeting and independent conferences on an 18-month cycle. The independent meetings have allowed excellent interaction with other AMS committees or key partners. The 21st Conference will take place from June 8-11, 2014 in Westminster, Colorado in conjunction with the 17th Symposium on Meteorological Observation and Instrumentation.
- Boulder Site Visit: In lieu of a short course, the joint program committee is organizing a tour of the impacts of the 2013 flooding event in Boulder, Colorado.

#### **4. Artificial Intelligence Applications to Environmental Science - Amy McGovern**

Members rotating off board/committee: Haig Iskenderian

New members and leadership changes: Vipin Kumar

Conferences: The AI committee held a conference at the 2013 Annual meeting. We also had joint sessions with:

- 25th Conference on Climate Variability and Change
- Fourth Conference on Weather, Climate, and the New Energy Economy
- Symposium on Prediction of the Madden-Julian Oscillation
- 29th Conference on Environmental Information Processing Technologies (formerly IIPS)
- 16th Conference on Aviation, Range, and Aerospace Meteorology
- Fourth Conference on Environment and Health

Board/committee meetings: The AI committee met during the 2013 annual meeting. Minutes are provided on our website.

Plans for 2014:

- The AI committee will have a conference at the 2014 annual meeting
- The AI committee will meet at the 2014 annual meeting
- We have discussed partnering with some peer-reviewed conference in computer science and artificial intelligence. Nothing specific planned yet for 2014 in this regard.
- We would like to run a short course/tutorial on automating spatial analysis.
- We would like to have a course on Big Data/Hadoop.

Additional items: The AI contest for 2014 has been hosted by kaggle.com and has been very successful! We will have more updates on this after the 2014 annual meeting.

#### **5. Atmospheric and Oceanic Fluid Dynamics - Steven Feldstein**

The following activities were the highlights of the past year for the AMS Atmospheric and Oceanic Fluid Dynamics (AOFD) Committee.

Three new committee members of the AOFD were nominated. These are K. Shafer Smith of Courant Institute, New York University, Catherine Jones of Scripps Institution of Oceanography, University of California, San Diego and Lei Wang of the University of Chicago. The latter two nominees are graduate students.

A very successful AOFD conference took place in Newport, Rhode Island on June 17-21, 2013. This meeting broke the record for the highest number of abstracts. This was a joint meeting with Middle Atmosphere.

During the AOFD conference, we ran a very successful special session that celebrated the accomplishments of Dr. Isaac Held.

Professor Michael McIntyre of Cambridge University delivered an outstanding Bernhard Haurwitz Memorial lecture at the AOFD conference.

We began work on choosing the site for the 2105 AOFD meeting.

Two AOFD committee members (Nili Harnik and Andrew Thompson) have volunteered to serve on the selection committee for the next Bernhard Haurwitz Memorial Lecturer.

## **6. Atmospheric Chemistry – Renyi Zhang**

Members to be replaced in 2014:

Prof. Renyi Zhang, Chair; and members: Prof. Juliane Fry, Prof. Nicholas Meskhidz, Prof. Nicole Molders, and student Mr. Yuan Wang, .

New Members/Leadership Changes:

Members: Prof. Jeff Collect, Dr. Jonathane Jiang, Prof. Joe Throton, Prof. Jun Wang; and Student member: Miss. Misti Levy,

Member to be renewed in 2014: Prof. Bertram Jobson

Committee Chair and Co-Chair starting in 2014: Dr. Jiwen Fan, Prof. Bertram Jobson.

Conferences, symposiums held during 2013:

6th Conference on Atmospheric Chemistry

Fifth Symposium on Aerosol-Cloud-Climate Interactions

Robert A. Duce Symposium

Board/committee meetings: Our committee met in January 2013 during the AMS Annual Meeting

Special activities (short courses, outreach): Funding was received from NSF in the amount of \$10,000 to support students attending the Robert A. Duce Symposium

Student member recognitions and awards: Various student awards were made for the three conferences organized by our committee in 2013

Plans for 2014: 17th Conference on Atmospheric Chemistry and Sixth Symposium on Aerosol-Cloud-Climate Interactions

Issues you would like to see the STAC and/or the Council to consider: Support for atmospheric chemistry publications within AMS journals

## **7. Atmospheric Electricity – Kristin Calhoun**

Two members will be rotating off the committee in January 2014 following the end of their 2nd terms: Edward Mansell and Greg Patrick. Two new people have been nominated as regular 3-year committee members: 1) Amaitabh Nag of Viasala and 2) Jason Jordan of the National Weather Service, WFO Lubbock, TX. Brody Fuchs was re-nominated to serve a 2nd year as the student member on the committee.

Work was resumed on a new AMS statement on lightning safety. Bill Roeder will continue to chair the effort.

The 6th conference on the Meteorological Applications for Lightning Data (6MALD) was held in January 2013 as part of the AMS Annual Meeting in Austin, TX. Timothy Lang, Ted Mansell, and Kristin Calhoun co-chaired the conference. The number of abstracts submitted to the conference necessitated growing the conference an additional day (Mon-Thurs). Attendance remained high throughout 6MALD with standing room only during many sessions, including the lightning physics and photography sessions. Student awards were given for the best oral and poster presentation: Michael Stock of New Mexico Tech was awarded best oral presentation and Fadi Zoghzy of Stanford the best poster.

A call for papers for the upcoming 7th conference on the Meteorological Applications for Lightning Data (7MALD) at the 2015 AMS Annual Meeting in Phoenix, AZ was drafted. Kristin Calhoun will chair with additional chairs and/or planning members to be determined.

## **8. Atmospheric Radiation – Paquita Zuidema**

2013 AMS Atmospheric Radiation Committee Report

We are gearing up for our 2014 specialty meeting. This will be held July 7-11 in Boston MA, joint with the AMS Cloud Physics Committee. The joint conference will include the Anthony Slingo Symposium and a Sean Twomey session. We have expanded the membership the past two years to 14 members total in preparation and we added a student member - a first for this committee. The program chairs are Paquita Zuidema for ATRAD and Jorgen Jensen for Cloud Physics.

We nominated someone for the AMS Remote Sensing prize, a first I believe for this committee, although the nomination was not successful.

## **9. Aviation, Range, and Aerospace Meteorology - David J. Pace**

Members rotating off. The following ARAM Committee members are rotating off at the conclusion of the 2013 committee year: Bjarne Hansen, Dave Pace (chair), Ed Teets, Chip West, and John Huhn.

New members and leadership changes. The following new members will join the ARAM committee at the Atlanta AMS Annual meeting: Celia Miner, Ben Schwedler, Le Jiang, and Matt Fronzak. Celia Miner will become the new ARAM chair.

Conferences, symposiums held during 2013. The ARAM Committee held one conference in 2013. The 16th Conference on Aviation, Range, and Aerospace Meteorology was held in Austin, Texas January 6-10, 2013 in association with the AMS Annual Meeting. The Program Chair was Matthias Steiner.

Session topics in the 16th Conference on ARAM were (1) From Weather Research to Operations, (2) Icing Hazard Characterization, Diagnosis and Prediction, (3) Prediction of Ceiling and Visibility Posters, (4) Impacts of Aviation on Environment, (5) Turbulence Characterization, Diagnosis and Prediction, (6) Emerging Sensors and Observing Capabilities, (7) En-route Wake Vortex and Volcanic Ash, (8) Weather Integrated Decision Support, (8) Artificial Intelligence in ARAM (Joint with the 11th Conference on Artificial and Computational Intelligence and its Applications to the Environmental Sciences), (9) Convection Guidance Posters, (10) Thunderstorm Forecasting to Benefit the Aviation Community Posters (Joint with the Sixth Conference on the Meteorological Applications of Lightning Data), (11) Lightning Impacts on Aviation and Space Launch (Joint with the Sixth Conference on the Meteorological Applications of Lightning Data), (12) Numerical Weather Prediction for Aviation and Test Ranges, (13) Benefits Assessment, (14) Programmatic, Policy and Regulatory Aspects, and (15) Weather Guidance for Airports, Test Range and Space Launch Facilities. In addition, each of the oral sessions had an associated poster session.

Committee meetings. While in Austin for the AMS Annual Meeting, the ARAM Committee conducted an in-person committee breakfast business meeting on January 8th. The agenda with meeting notes is at <http://www2.ametsoc.org/stac/index.cfm/linkservid/A69FB5AF-E878-E2BF-4716095158B6E40D/showMeta/0/>. ARAM used a computer connection and GoToMeeting to allow members to participate virtually if they could not attend physically. There were 12 members in physical attendance and 7 more in virtual attendance. The ARAM Committee held a telecom on March 15, 2013 to complete discussion on some topics for which there was not adequate discuss time at the Austin meeting. Eleven members participated. Notes from the telecom are included in the above-referenced meeting file as an addendum.

Student member recognitions and awards. ARAM conducted its third Best Student Paper Award competition at the 16th ARAM conference in Austin. This award recognizes outstanding student contributions based on an evaluation of both the submitted written paper and corresponding oral or poster presentation. Contenders for the award must have been enrolled at a University (either at the undergraduate or graduate level), be the lead-author, and personally have made the presentation of their work. The winner of the student best paper/poster for 2013 in Austin was Vivek N. Mahale of the Univ. of Oklahoma. The winner's name was announced in the Bulletin of the AMS. The paper is at

<https://ams.confex.com/ams/93Annual/webprogram/Paper216605.html>. The ARAM student recognition program was shepherded by Mike Robinson with assistance from Matthias Steiner.

Plans for 2014. ARAM is preparing for the Fourth Aviation, Range and Aerospace Meteorology Special Symposium, to be held February 5th in Atlanta, Georgia in association with the AMS Annual Meeting. The Program Chairs are John Mecikalski and Chip West. Session topics for this one-day symposium will include (1) Air Traffic Management, (2) Forecast Improvement, (3) Enhanced Observations, and (4) Unique Forecasting Algorithms. There will also be a Special International Applications Session on The Impact and Meteorological Challenges of Volcanic Eruptions to be held jointly with the 30th Conference on Environmental Information Processing Technologies. ARAM will also hold a poster session on various associated topics.

Additional items. ARAM updated and kept current its web page at <http://www2.ametsoc.org/stac/index.cfm/committees/committee-on-aviation-range-and-aerospace-meteorology/>. This page is now a combination of two previously-posted ARAM web page: one maintained by AMS and another more extensive page maintained by the ARAM Committee. The combined ARAM web page is managed by ARAM member Bjarne Hansen in cooperation with the AMS staff.

#### **10. Board on Atmospheric Biogeosciences - Elizabeth Pattey**

Listing of current board members finishing their terms: Dr Ankur R. Desai, Liaison for Agricultural & Forest Meteorology Committee; Dr Loretta J. Mickley, member

New members: Dr April Hiscox, Liaison for Agricultural & Forest Meteorology Committee and members Dr. Kyaw Tha Paw U, Dr. Timothy VanReken, and Dr. Richard H. Grant,

Listing and/or description of any meetings/conferences/symposiums that occurred during this year. N/A

Board/committee meetings: Phone calls and emails were exchanged related to membership, awards, next conference preparation, Glossary of Meteorology. No formal meeting was held. The next meeting will take during the Second Conference on Atmospheric Biogeosciences.

Glossary of Meteorology support: A new term was added the Glossary: #13002 - Biometeorology - The branch of meteorology that deals with the effects of weather on plants and animals as well as on the health and activity of human beings (human biometeorology) and on the short term feedbacks of the biosphere on the atmosphere.

Member recognitions and awards. A nomination was presented to the AMS for the outstanding contribution to Biometeorology. Dr. Ray Leuning is the recipient of the award for significantly advancing our understanding of plant functioning, from leaf stomata to terrestrial biosphere; his outstanding contributions to global flux network through advancing micrometeorological theory. The award ceremony will take place during the Second Conference on Atmospheric Biogeosciences and 31st Conference on Agricultural and Forest Meteorology. A special session will be dedicated to Dr. Ray Leuning.

Student member recognitions and awards: The student award guidelines of Board on Atmospheric Biogeosciences were revised to comply with the council decisions on capping sponsorship awards to \$200.

Plans for 2014: The Board on Atmospheric Biogeosciences is actively preparing their next specialty meeting (Second Conference on Atmospheric Biogeosciences) jointly with Agricultural and Forest Meteorology (31st Conference on Agricultural and Forest Meteorology) to be held on May 12-15, 2014 at the Crowne Plaza Portland Downtown Convention Center, Portland, Oregon.

The Atmospheric Biogeosciences meeting co-chairs are: Dr. Timothy VanReken (vanreken@wsu.edu) and Laura Edwards (laura.edwards@sdsstate.edu).

## **11. Board on Data Stewardship - Mohan Ramamurthy**

Members rotating off board/committee. Ted Tsui, Junhong Wang, Tom Whittaker, Steve Worley, and Brian Bell

New members: Jerrold Robaidek, Matthew Mayernik, and Jeremiah Brown

Conferences, symposiums held during 2013: 29th Conference on Environmental Information Processing Technologies, with sessions on Data Stewardship.

Board/committee meetings: The Board on Data Stewardship met during the 2013 AMS Annual Meeting in Austin, TX. There were twelve attendees at the meeting and few Board members could not participate due to government travel restrictions. The discussion focused on the Data Policy Statement that was being drafted by an AMS Statement Writing Team, which also chaired by the BDS chair. Another key topic of discussion concerned citation of data in AMS journals. The Board also discussed potential data stewardship session topics during the 2014 Annual Meeting.

AMS statement and position papers. A Data Policy Statement was drafted by a Statement Writing Team, chaired by the BDS Chair. The statement underwent multiple reviews by the AMS Council and has now been approved and adopted by the AMS.

Special activities: Two short courses are being organized at the 2014 AMS Annual Meeting, in collaboration with EIPT. A Short Course on Integrating WRF and Other Model Output with Remote and In-situ Observational Datasets using Unidata's Integrated Data Viewer (IDV) is being organized.

Plans for 2014: Data stewardship related sessions at the 30th Conference on Environmental Information Processing Technologies during the 2014 AMS Annual Meeting in Atlanta.

Issues you would like to see the STAC and/or the Council to consider: The topic of data citation and issuance of Digital Object Identifiers (DOIs) for data cited in AMS journal articles is an area of utmost importance. The BDS has no authority over the Publications Commission and the journals overseen by it. The AMS Council needs to consider this issue and develop more

concrete guidelines on data citation. In the opinion of the BDS chair, the Society is lagging in this area.

## **12. Board on Environment and Health – Rita Colwell**

No report.

## **13. Board on Environmental Information Processing Technologies - William F. “Woody” Roberts**

Members: Two current members are renewing their membership: Tom Whittaker, and Nazila Merita. Our student-member, Patrick Marsh, has graduated and will be nominated for full membership in 2014.

New members: None in 2013. We will be nominating new members in 2014 to represent the Python Symposium and Research to Operations (R2O) conference, and fill the now-vacant student-member position (see Plans for 2014).

Conferences held during 2013: The 29th Conference on Environmental Information Processing Technologies was successfully held in Austin, Texas during the 93rd American Meteorological Society Annual Meeting in January. Nearly 200 oral and poster presentations were made in 34 Sessions over the 4-day conference, including several joint and themed-joint sessions. Due to travel restrictions, some presenters had to give their presentations remotely. The program committee greatly appreciates the AMS staffs’ support and student aids for helping make the conference a success; especially for supporting the speakers who had to give their presentations remotely.

Board/committee meetings: Nazila Merati (EIPT Program Chair) organized and conducted monthly program committee conference calls. We had our annual board/program committee breakfast meeting Monday morning during the conference.

Plans for 2014: Preparations for the 2014/30th Anniversary EIPT Conference are nearly complete. The number of presentations will be down significantly (~25%) from previous years – most likely due to continued travel restrictions and budget reductions. A special session is planned to commemorate the 30th anniversary.

A considerable amount of work was accomplished by the STAC Commissioner (Ward Seguin) and BEIPT Chair to incorporate the Python Symposium and Conference on Transition of Research to Operations within the BEIPT. This will be completed in 2014 with nominations of new board members to represent the symposium and conference. The board appreciates the cooperation of the respective Chairs and Commissioner in this undertaking.

The BEIPT is also looking into filling the vacant student board member position using a competitive process. We are considering this as both an outreach activity and an opportunity to possibly help fund the student-member’s participation at the annual conference.

Issues: Given the current trends with participation at the conference, and new technological capabilities, the Council may want to consider innovative ways to reach a broader number of participants and ways to make these changes fiscally feasible for AMS.

#### **14. Board on Societal Impacts - Sheldon Drobot**

Mission: The AMS Board on Societal Impacts focuses on the principle of science in the service of society by considering weather and climate effects on lives, health and well-being, property, and the economy for all people, animals, plants, and the earth.

Vision: A weather and climate enterprise where social science is integrated into research and practice.

Board Member Changes: The Board thanks several departing members for their service: Andrew Freedman and Jennifer Spinney. Michael Ferrari and Kim Klockow will extend one more year to handle conference duties.

Meeting Chairs and Program Committees: Ninth Symposium on Policy and Socio-Economic Research – Randy Pepler and Kim Klockow will co-chair 9POLICY, to be held with the Annual Meeting in Atlanta. The symposium contains 31 sessions in all:

- 23 Oral Sessions: 11 are “solo”; 7 are Joint (POLICY leads 3); and 5 are Themed Joint (POLICY leads 2)
- 2 Poster Sessions: 1 is solo; 1 is Themed Joint
- 6 Panel Discussion Sessions: 3 are solo; 1 is Joint; and 2 are Themed Joint (POLICY leads 1).

For oral sessions, there are 108 speakers (50 in solo sessions; 34 in Joint Sessions; 24 in Themed Joint Sessions). For poster sessions, there are 29 posters (10 in the solo session; 19 in the Themed Joint Session). The list of panelists for the 6 panel discussion sessions is not complete.

9POLICY includes 15 declared student oral and poster presenters (there could be more). The symposium again will conduct a competition for best oral and poster presentations (up to 7 awards).

Joint and Themed Joint Session relationships:

1. Superstorm Sandy and the Built Environment – New Perspectives, Opportunities, and Tools: Themed Joint Sessions 12, 13, and 14; Themed Joint Panel Discussion 2; Themed Joint Poster Session 2
2. Stanley A. Changnon Symposium: Joint Panel Discussion 1
3. 30th Conference on Environmental Information Processing Technologies: Themed Joint Sessions 9 and 10; Joint Sessions 1 and 7 (9POLICY leads TJS9, TJS10, and JS7)
4. 26th Conference on Climate Variability and Change: Themed Joint Panel Discussion 1 (9POLICY leads)

5. 5th Conference on Environment and Health: Joint Sessions 3 and 4
6. 2nd Symposium on Building a Weather-Ready Nation – Enhancing Our Nation’s Readiness, Responsiveness, and Resilience to High Impact Weather Events: Joint Sessions 2, 5, and 6 (9POLICY leads JS5 and JS6)

Impacts – “Impacts - The Major Weather Impacts of 2013” is being held on Tuesday, Feb 4th, 2014. The first two sessions have the traditional look at global and major US weather events, including the Colorado and Calgary floods. The second half of the day is devoted to the May 2013 tornadoes. The first afternoon session takes a look at the 2013 tornado season, and specifically looking at Moore, OK and the El Reno, OK events. One of the featured speakers will be Mike Bettes from The Weather Channel discussing the El Reno event. The final afternoon session is a special two hour panel discussion being moderated by Doyle Rice from USA Today and Andrew Freedman from Climate Central. The panelists include Russell Schneider from the NOAA/NWS Storm Prediction Center, David Andra from the NOAA/NWS Norman office, David Prevatt a professor/researcher of structural engineering at the University of Florida at Gainesville, Roger Wakimoto from the National Science Foundation, Tim Marshall with Haag Engineering and Mike Bettes with The Weather Channel. Attendees will have the opportunity to ask questions during the session. The Major Weather Impacts of 2013 conference committee includes Tanja Fransen, Michael Ferrari, Klaus Wolter, Andrew Freedman and Renee Curry.

The Second Conference on Weather Warnings and Communication was held jointly with the Conference on Broadcast Meteorology in Nashville in June. Nate Johnson, John Ferree, and Harold Brooks co-chaired the conference again this year. There were 208 registered attendees, the conference featured 46 presentations, and attendees engaged in three panel discussions exploring issues raised by Hurricane Sandy and recent severe weather outbreaks in the central Plains, among other issues. Feedback about the conference was excellent, with many attendees looking forward to a future edition. Currently, the working assumption is that a third conference would be held jointly with 43Broadcast in 2015; however, opportunities to work with Severe Local Storms or an upcoming NWA Annual Meeting will also be explored.

The Board is now providing oversight to the Weather-Ready Nation Symposium; we will provide an update on it next year.

Student Awards: The organizers of the Eighth Symposium on Policy and Socio-Economic Research wish to thank the participants of this year's 8POLICY student competition in Austin, TX. All presentations showcased excellent research, of which you should all be proud! Congratulations to the seven competition winners, who each took home a \$200 cash prize:

William C. Barley, Northwestern University: Cloudy with a chance of partnership: How weather researchers shape science to support collaboration.

Joanna K. Huxster, University of Delaware: Student understanding of climate change: Undergraduate survey knowledge scores and environmental issue confusion.

Charlotte E. Lunday, University of Oklahoma: Winter storm management preferences in Oklahoma: A pilot study.

Sandra N. Maina, UCAR: Protecting South Terrebonne Parish, Louisiana through the development of Vanishing Points: an iPhone application motivating community and national involvement in coastal restoration efforts.

Daniel R. Miller, The Ohio State University: The Path to Green Energy: Fort Collins' efforts to help businesses lower energy costs and greenhouse gas emissions.

Frances Roberts-Gregory, Spelman College: Ethnobotanical conversations along the bayou: an exercise in Participatory Action Research (PAR) blending Traditional Ecological Knowledge (TEK) and geospatial information systems in order to identify vulnerable plant species valued by southern Louisiana's coastal Native American tribes.

Jordan L. Sparks, University of North Alabama: An investigative study of public response to severe weather warnings.

AMS statement and position papers.

Social Science Statement: The Board is developing an AMS Statement on Social Science. Board chair Sheldon Drobot will chair the effort. Members include Burrell Montz, Heather Lazrus, Joe Trainor, Jennifer Sprague, and Jennifer Spinney. Bill Read serves as the AMS commission member.

Additional items: To improve organization, the Board re-organized into four pods this year. Pod 1 is Conferences and provides integration and oversight of our four conferences: Impacts, Weather Communication, Weather-Ready Nation, and Society. The second Pod handles outreach, including increasing awareness of societal impacts issues for the AMS community and beyond. Pod 3 is awards, and handles the nomination of people for AMS awards. Pod 4 is internal process, and examines issues related to the running of the Societal Impacts Board, such as nominations of new members, meetings, etc.

## **15. Board on the Urban Environment - Fei Chen**

Committee Membership:

The following is a list of current members of the Board on the Urban Environment, with their membership status, and term (1st or 2nd). The slate of new members and proposed terms have all received preliminary approval by the STAC chair and will be appointed in 2013 subject to formal AMS approval.

Members rotating off the committee: Members - Janet F. Barlow, Bob Bornstein, and Fei Chen; student member - Eric S. Krayenhoff.

Members nominated for the committee: Zhihua Wang and Xuemei Wang

1st, 2014-2017

#### Brief Overview of BUE Activities in 2013:

- A BUE meeting was held on 8 January 2013 during the AMS Annual Meeting in Austin, Texas. Five BUE members and six guests attended the meeting.
- Plan and organize the 11th Symposium on the Urban Environment.
- Review and recommend the 2013 Landsberg Award.

#### 11th AMS Urban Symposium in Atlanta:

The BUE members Fei Chen, Jan Kleissl, Jorge Gonzalez, and Dev Niyogi have participated to the planning phase of the 11th Symposium on the Urban Environment to be held in Atlanta, Dublin, Georgia, 2-6 February 2014. Joint sessions are planned among this symposium, the 26th Weather Analysis and Forecasting / 22nd Numerical Weather Prediction Conference, 26th Conference on Climate Variability and Change, the 28th Conference of Hydrology, the 18th Joint Conference on the Applications of Air Pollution Meteorology, and the History Committees. We received an above-average number of abstracts (144 in total), and a large number of excellent abstracts are placed in two poster sessions due to the four-day annual meeting schedule.

#### **16. Boundary Layers and Turbulence – Julie Lundquist**

No report

#### **17. Climate Variability and Change – Aiguo Dai**

Committee website:

<http://www.ametsoc.org/stacpges/CommitteeDisplay/CommitteeDisplay.aspx?CC=CLIMVAR>

Membership: The CVC committee members nominated some potential candidates to expand the current CVC committee, and two of them were formally nominated to AMS and approved by the STAC Commissioner in Fall 2013. They are Dr. Scott Power/Australia and Prof. R. Saravanan/Texas A&M. Also, Prof. Sumant Nigam of Univ of Maryland has been nominated to replace Aiguo Dai as the next CVC chair, starting early next year. The search for a new CVC Chair started with seeking volunteers within the current CVC members, and then reaching out for some potential candidates. Some good candidates were already over committed and thus were unable to take this responsibility. Prof. Nigam served on this committee before as a regular member, so he knows how it works. We're grateful that he's willing to be the next CVC chair.

Conferences –2013,2014, 2015:

The Committee on Climate Variability and Change (CCVC) has been preparing for the AMS 26th Conference on Climate Variability and Change (CVC) to be held in Feb. 2014 during the AMS Annual Meeting in Atlanta, Georgia. This year's CVC Conference Chair is Xuebin Zhang, who has done most of the work in organizing this Conference, although Aiguo Dai and other members have helped review the submitted abstracts and will help chair the various sessions.

They also helped formulate the Call for Papers. The CVC Conference holds a student poster competition each year, and the CCVC members help rank and select the winners.

25th Conference on Climate Variability and Change (Jan. 2013, Austin, TX). Hai Lin chaired this Conference and Aiguo Dai helped him as Co-Chair. All the CVC members helped review and rank the submitted abstracts, many of them helped chair the sessions. This Conference had a total of 289 submissions, consists of 27 named oral sessions, 4 poster sessions, 3 themed Joint Sessions, and 19 CVC co-sponsored joint sessions. It also held a student poster competition with 37 student participants.

27th Conference on Climate Variability and Change (4–8 January 2015 in Phoenix, Arizona): A Conference chair will be selected soon, and the other committee members will help the chair in organizing the Conference. Call for Papers will be formulated in Spring 2014.

Board/Committee Meeting: We held a CVC committee meeting during the AMS Annual Meeting in Jan. 2013 in Austin, TX, during which we discussed the 25th CVC Conference, selected Xuebin Zhang as Chair for the next (2014) Conference, discussed possible named sessions for the Call for Papers for the 26th Conference, potential nominations to the CVC committee, and Chris Folland reported to the Committee about the selection of the AMS Haurwitz Memorial lecturer. After this meeting, Aiguo Dai and Xuebin Zhang had a number of telephone calls and email exchanges regarding the 2014 Conference. The Chair Aiguo Dai handled most email exchanges with AMS and communicated with the other CVC members through emails.

AMS Statement and Position: None in 2013. CVC committee led an effort to revised the AMS Information Statement on Climate Change, which was approved in the summer of 2012.

Special activities (short courses, outreach): None

Member recognition and awards: The CCVC was asked to help select the next Bernhard Haurwitz Memorial Lecturer, and Chris Folland volunteered to help with that. CVC members (A. Dai and Joel Norris) helped rank the nominations for the AMS Walter Orr Roberts Lecture.

Student member recognition and awards: At the 25th CVC Conference in Jan 2013 held in Austin, Texas, we held a student poster competition, which attracted 32 participants. Eight judges from the current and former CVC committee members provided scores of the posters. Using the averages of the normalized scores from each judge, we selected the following three winners: 1st place: Nathan Arnold, poster#565; 2nd place: Jason Webster, poster#139; and 3rd place: Eric Kelsey, poster#605.

Glossary of Meteorology support: The CVC Chair (A. Dai) helped AMS staff on a few meteorological/climate terms through emails.

Plans for 2014 (Conferences, short courses, outreach): The 2015 Conference issues will be discussed at the CVC committee meetings in Feb. 2014. A new CVC Committee chair (Sumant Nigam) will replace Aiguo Dai after that. The new Chair is likely to take the lead in organizing the 2015 CVC conferences and other issues. We need the AMS to formally approve the nomination of S. Nigam as the next CVC Chair asap!

## **18. Cloud Physics – Jorgen Jensen**

### **14<sup>th</sup> Conference on Cloud Physics**

#### Location

Work has progressed on this conference. As has been done over the last number of occasions, the Cloud Physics Committee and the Atmospheric Radiation Committee have decided to host the conferences in a joint location. With help from AMS, we decided to have the conferences at the Westin Copley Place in Boston. We expect to have about 500-600 participants, and we consider this ideal for both conferences, and for the overlap in form of joint sessions. We are very excited to do this in Boston, and in addition to many US participants, we also expect a significant number of international participants, especially from Europe.

#### Anthony Slingo Symposium

Jointly with the Chair of the Atmospheric Radiation Committee, we have requested to have a session to honor Anthony Slingo, who passed away a few years ago. The Slingo Symposium was approved by AMS, who allocated some travel funds to be spend on bringing his wife, Julia Slingo (currently Met Office Chief Scientist) to the symposium. Julia will be giving a lunchtime keynote speech during the joint conference.

#### Sean Twomey Remembrance

In 2012 Sean Twomey passed away in Arizona. Due to his pioneering work on cloud and radiation, we also decided to dedicate two sessions to his remembrance. In this case there is no AMS funding contribution.

#### Invited talks

As part of the Symposium and Remembrance, the radiation and cloud physics committees started working on invited speakers. This work is continuing in 2014.

### **Approaches by other STACs for co-located conferences**

We are well aware that the AMS is trying to get several conferences to co-locate due to cost saving reasons. However, both the Atmospheric Radiation and the Cloud Physics committees have expressed a very strong feeling that we prefer to have separate conferences from the annual meetings. Our experience is that there is a very fruitful collaboration between the separate committees, and that our conference arrangement works exceptionally well. We also feel that being part of larger meetings will distract from the strong disciplinary focus of our joint conferences.

Accordingly, we have resisted approaches from a couple of other STACs for joining our conferences.

## **19. Coastal Environment – Frank Aikman**

In January 2013 we held the 11th Symposium on the Coastal Environment in Austin, TX, at the 93rd AMS annual meeting (see #3 below). Other major activities in 2013 included preparation and organization of the 12th Symposium on the Coastal Environment. This will be held in February 2014 in Atlanta, GA, at the 94th AMS annual meeting. Frank Aikman will step down as the CE Chair in 2014 and Andre van der Westhuysen will become the new Chair. Frank Aikman will stay on the CE Committee and extend 3 years. The CE Committee met in Austin, TX in 2013 and will meet again in Atlanta, GA in 2014. Additional committee communications were conducted by telephone conferences and email.

Here are the specific report details as requested by the STAC Commissioner:

Three members come to the end of their terms in 2013 and have resigned. Three of our members accepted a second three-year term. This brings the total membership to fourteen (with the two new members nominated). Members rotating off the committee: Robert Beardsley, Michael Bruno and Nancy Dean rotated off in 2013. New members nominated and leadership changes include member Arthur J. Miller and a second student member, Michael DeFlorio. Frank Aikman will step down as the CE Chair in 2014 and Andre van der Westhuysen will become the new Chair. Frank Aikman will stay on the CE Committee and extend 3 years.

Conferences, symposiums held during 2013: In January 2013 we held the 11th Symposium on the Coastal Environment in Austin, TX, at the 93rd AMS annual meeting. The 11th CE Symposium topics focused on both basic and applied research issues involving understanding, analysis, and prediction of the coastal atmosphere and ocean. There was an emphasis on the coupling of atmospheric, oceanic, and hydrological processes and models and examining their effects on ecological processes and responses, coastal urban effects, and ocean and air quality. The Symposium engendered practical considerations and applications of interdisciplinary field programs, advances in remote sensing and in-situ observational networks, and advances in modeling and forecasting. A total of 60 abstracts comprised the two day Symposium, which included:

- A Themed Joint Session with Satellite Meteorology, Oceanography and Climatology (SMOC) on the “Ocean, Atmosphere, Hydrosphere, and Land Surface Interaction in the Coastal Environment”;
- Sessions on “Air-Sea Coupled Modeling Processes & Operational Prediction”;
- Sessions on “Ocean Operational, Pre-Operational and Transition Model-Based and Observationally-Constrained Forecast Systems for the U.S. Exclusive Economic Zone [EEZ]”;
- Sessions on “Pre-Operational, R&D Regional Coastal Ocean (EEZ) Circulation (& Related) Models Run in Real-Time in Academia and Industry”;
- Sessions on “Climate Trends and Projections in the Coastal Environment”; and
- Sessions on “Storm and Inundation (Surge) Flooding.”

The session chairs of the 11th Symposium on the Coastal Environment were comprised of both CE Committee members and non-members.

Other major activities in 2013 included preparation and organization of the 12th Symposium on the Coastal Environment, to be held in February 2014 in Atlanta, GA, at the 94nd AMS annual meeting. As for the 11th CE Symposium, the 12th CE Symposium topics focus on both basic and applied research issues involving understanding, analysis, and prediction of the coastal ocean and atmosphere. There is an emphasis on the coupling of atmospheric, oceanic, and hydrological processes and models and examining their effects on ecological processes and responses and ocean and air quality; as well as on climate projections in the coastal environment; air-sea coupled modeling; coastal ocean R&D, pre-operational and operational models; and storm and inundation. A total of ~40 abstracts comprise the two day 12th CE Symposium. The session chairs of the 12th Symposium on the Coastal Environment will be comprised of both CE Committee members and non-members.

The CE Committee met in Austin, TX in 2013 and will meet again in Atlanta, GA in 2014. Additional committee communications were conducted by telephone conferences and email.

Glossary of Meteorology (GoM) support: The committee provided several recommendations on proposed additions/edits to the GoM.

Member recognitions and awards:

- Allan F. Blumberg was selected to become a Fellow of the AMS
- Malcolm Scully moved from Old Dominion University to the Woods Hole Oceanographic Institution
- Mona Behl moved from the AMS (Washington, DC) to Texas A&M University and Texas Sea Grant

CE Committee Plans for 2014:

- Preparation and organization of the 12th Symposium on the Coastal Environment, to be held in February 2014 in Atlanta, GA, at the 94nd AMS annual meeting, has been done.
- CE is also planning to hold the 13th Symposium on the Coastal Environment in 2015 at the 94nd AMS annual meeting, in Phoenix, AZ.

Additional items:

- CE updated our AMS website to the new standard template. See: <http://www2.ametsoc.org/stac/index.cfm/committees/committee-on-coastal-environment/>
- The expanded CE STAC website includes: An update to our Committee description and mission statement; repositories of past annual reports, past symposium descriptions and announcements of future symposia. In order to increase the exposure of our symposia, we have also included a page showcasing a selection of recent presentations, with links to the annual meeting extended abstract repository.
- We provided two judges for the Francis W. Reichelderfer Award.

## 20. Hydrology – Michael Ek

Members rotating off board/committee. Susan Steele-Dunn

New members: David Gochis, John McHenry

Conferences, symposiums held during 2013: 27th Conference on Hydrology (at AMS annual meeting in Austin, TX, 2-6 February 2013); joint sessions with: 25th Conference on Climate Variability and Change (CVC), 17th Conference on Integrated Observing and Assimilation Systems for the Atmosphere, Oceans, and Land Surface (IOAS-AOLS), 20th Conference on Applied Climatology, 29th Conference on Environmental Information Processing Technologies, Symposium on the Role of Statistical Methods in Weather and Climate Prediction.

Board/committee meetings: The Hydrology committee luncheon at the 2013 AMS annual meeting had minimal attendance (4) most likely due to the severe government travel restrictions, so we did not cover too much other than assessing the progress of the 2013 Hydrology conference at the time (on Tuesday), and deciding that we needed to generate a committee members interests/background list (for assessing new committee member needs --John Eylander leading this); several telecons were organized in the summer/fall (along with numerous email exchanges) in planning the 28th Hydrology conference in 2014, and providing input to AMS HQ on the 2015 Horton Lecture award.

AMS statement and position papers: Flash Flood is being updated by AMS Hydrology Committee members Tom Adams, Enrique Vivoni and Andy Wood, with input from Ed Clark, the NWS Flash Flood Services Leader at NWS HQ.

Andy Wood joined Mark Svoboda (National Drought Mitigation Center; [drought.unl.edu](http://drought.unl.edu)) in leading the update of the AMS Statement on Drought, which is now official at [http://www.ametsoc.org/POLICY/2013drought\\_amsstatement.html](http://www.ametsoc.org/POLICY/2013drought_amsstatement.html)).

Member recognitions and awards: The Hydrology Committee had organized the selection process for the 2014 Horton Lecturer (Randal Koster).

Student member recognitions and awards for the 27th Conference on Hydrology (at AMS annual meeting in Austin, TX, 5-10 January 2013), winners and runners-up:

- 1st place oral: Christopher F. Labosier, Texas A&M University, "Spatial and Temporal Patterns of Drought Persistence in the Southeastern United States".
- 2nd place oral: Alys Thomas, University of California Irvine, "Using a standardized GRACE dataset to investigate regional-scale drought severity".
- 1st place poster: Jonghun Kam, Princeton University, "An integrative analysis of drought in the Southeastern United States".
- 2nd place poster: Heather Vazquez, Florida International Univ., "Variability of Heavy Precipitation by Long-Lived Mesoscale Convective Vortices Found in the Southern Plains".

Solicitations will be made for the 2014 meeting.

Plans for 2014: 28th Conference on Hydrology (at AMS annual meeting in Atlanta, GA, 2-6 February 2014); joint sessions with: 26th CVC, 18th IOAS-AOLS, 22nd Conference on Probability and Statistics in the Atmospheric Sciences, 11th Symposium on the Urban Environment, 23rd Symposium on Education.

Additional items. We will be updating AMS Hydrology Committee web page.

## **21. Laser Atmospheric Studies – Sara Tucker**

Members rotating off board/committee. The former chair, Belay Demoz, ceased his membership on the committee upon transference of the chair position. At the end of 2013, Arnaud Apitouley's membership will expire.

New members and leadership changes. New members include Monique and new Student Member John Smith of the University of Colorado.

Conferences, symposiums held during 2013. In January of 2013, the CLAS hosted the 3-day 6th Symposium on Lidar Atmospheric Applications at the AMS 2013 Annual meeting. This symposium brought together a number of young students with more experienced experts in the lidar field and reviewed recent advances in lidar-based atmospheric application activities and field programs.

Board/committee meetings. Travel restrictions prevented many members of the CLAS from attending the 2013 AMS annual meeting in Austin, however several members met informally to discuss membership transition and what to do with the short course that had been cancelled. The CLAS used email communications for the election of new members.

Special activities. The lidar short course planned for the 2013 annual meeting was cancelled by the AMS in mid-December due to low attendance and enrollment. Several of the volunteers that were going to help with that course are unwilling to try to put together another course in 2015.

Plans for 2014. In 2014 the CLAS committee will work with several other committees to organize the 2015 lidar symposium at the AMS Annual Meeting. Due to the extensive use of lidar in multiple other fields, the CLAS objective is to create the 7th Symposium on Lidar Atmospheric Applications out of ~50% independent sessions (new lidar technologies) and 50% joint sessions (e.g. renewable energy, space-based systems, data assimilation, etc.). We recognize that a greater push needs to be made to get the CLAS to be more active in the AMS community. The large effort expended in 2012 by a few members of the committee (organizing the short course (canceled) and the Lidar Symposium) resulted in a too-quiet year in 2013, however we will work to add new members (and thus new energy) to the committee in 2014.

## **22. Measurements – Wendy Ryan**

Committee Meetings Held: The committee met during the 2013 annual meeting in Austin, TX. There were 8-10 members in attendance. The following topics were discussed:

- Leviton student award criteria and schedule;
- AMS student funding options;
- Short course planned for 2014 in terms of the committee proposal and the response from the AMS Board;
- Measurements Committee web page on AMS website;
- Information from the 2013 STAC meeting held on the Saturday prior to the annual meeting;

The next meeting is being held as a joint meeting with Applied Climate in Westminster, CO June 10-12, 2014.

Conference calls: 11 March 2013, 15 August 2013, and 19 November 2013. The notes from these conference calls are available upon request.

Proposed Future Scientific / Technical Meetings: The committee is currently planning the 17th SMOI in conjunction with the 21st Applied Climate in Westminster, CO. In addition to the

meeting, a short course is being planned that will consist of 1 day of lecture and 1 day of field visits around the Boulder, CO area.

Information, Recommendations, Problems, Issues:

- Jennifer Newman, a Ph.D. candidate remains the Measurements Committee student member.
- Wendy Ryan assumed the Chair position Feb 2013.
- Both Chris Fiebrich and Mark Hall will rotate off the committee in 2014 as their terms expire, nominations have been submitted to add both Kevin Brinson (Univ. Delaware) and Scott Landolt (NCAR-Marshall test bed). We are still awaiting confirmation of these nominations from STAC leadership.
- In order to have a successful short course, the committee would really like to open the content of the lecture to remote participants using GoToMeeting/Adobe Connect or something similar. With the current state of budget cuts at state and federal levels, we feel this would allow more people to participate and gain knowledge from the short course. It would also be desirable for this to be recorded and made available (perhaps for a small fee) on the AMS website.

The Committee also supported the editor of AMS Glossary of Meteorology through term definition reviews.

### **23. Mesoscale Processes - Todd Lane**

Members rotating off Committee: Assoc. Prof. Craig Epifanio and Assoc. Prof. Matt Parker  
We thank Matt and Craig for their service to the Committee.

New members nominated to Committee: Assist. Prof. Katja Friedrich, Dr Thomas Galarneau.

Terms renewed: Dr Todd Lane (Chair) 3-years; Mr James Ruppert Jr (student member) 2-years.

Conferences held: The 15<sup>th</sup> Conference on Mesoscale Processes was held from 6-9 August in Portland Oregon, co-chaired by Craig Epifanio and Todd Lane. The conference was highly successful. With more than 160 submitted abstracts it was one of the largest stand-alone mesoscale conferences we've had for many years. The conference had exceptional student involvement with 64 student registrations out of a total of 143 registrations. In addition to almost 100 contributed oral presentations at the conference we had four outstanding invited presentations from: Dr Melvyn Shapiro, Prof. Paul Markowski, Prof. Sandra Yuter, and Dr George Bryan. We also hosted a series of highly successful evening sessions designed for students and early-career researchers, with presentations from Dr Chris Davis, Prof. Ronald Smith, Assoc. Prof. Matt Parker, and Prof. Cliff Mass. We also held a special session on the dynamics of high-impact events.

Awards presented: As part of the conference we made the following awards to students:

- Best oral presentation: Jonathan Poterjoy, Pennsylvania State University
- Runner-up oral presentation: Kristen Rasmussen, University of Washington
- Best poster presentation: Luke Madaus, University of Washington
- Runner-up poster presentation: Christopher MacIntosh, North Carolina State University
- Student travel grant: Jonathan Poterjoy, Pennsylvania State University
- Student travel grant: Keith Sherburn, North Carolina State University
- Student travel grant: Brandon Bigelbach, University of North Dakota

Committee Meetings: A meeting of the Committee was held on Wednesday 7 August. All members of the Committee attended as well as Brenda Ward from AMS. Minutes of the meeting are available on request.

Future Plans: We have already started the process of organizing the 16<sup>th</sup> Conference on Mesoscale Processes to be held in early August 2015. Sue van den Heever and Zhiyong (Ellie) Meng will Co-Chair the conference. Our top three preferred locations have been identified (Boston, Portland Maine, Burlington Vermont) and Brenda Ward is in the process of determining candidate locations.

We have ongoing plans to update our STAC webpage to be a resource for our community. Our student member, Mr James Ruppert, will lead this project.

The Committee is keen to propose a committee-level award for early-career researchers. (We see this as a significant gap in AMS council-level awards). We plan to propose such an award sponsored by the mesoscale processes committee, in consultation with the STAC Commissioner in 2014.

#### **24. Meteorological Aspects of Air Pollution - Marko Princevac**

We added a new member Akshay A. Gowardhan, PhD and the committee elected Paul Bieringer as the new chair. At the time of writing this report, Paul's nomination is pending AMS approval. A new member starting in 2013 was Akshay A. Gowardhan.

Our committee traditionally organizes bi-annual conference on Air Pollution Meteorology (the last one was in New Orleans in 2012). However, due to the importance and proper timing, as a part of 93rd Annual AMS meeting in Austin, January 2013, we organized the Special Symposium on the Transport and Diffusion of Contaminants from the Fukushima Dai-Ichi Nuclear Power Plant: Present Status and Future Directions. The symposium had 6 oral sessions with a total of 21 invited talks. This was one day event organized jointly with our colleagues from Japan Meteorological Society. We will have the follow-up of the Fukushima workshop at the forthcoming 18th Air Pollution Conference as a part of 94th Annual AMS meeting.

For the forthcoming 18th Air Pollution conference we have 96 accepted abstracts and for the first time we will have a keynote lecture. This lecture will be given by Dr. Michael Brown of LANL. The committee felt that keynote in the middle of the conference can enhance dialog about ongoing scientific and policy related issues.

From AMS we received a 1,000 USD budget for the student awards:

- best overall presentation (\$200)
- best poster award (\$200)
- best oral presentation (\$200)
- best technical content award (\$200)
- 2nd place oral award (\$100)
- 2nd place poster award (\$100), and
- 75 USD for abstract fee waivers.

At the time of writing this report, the committee is in the process of selecting the next recipient of the Committee Award. The committee for the first time awarded the AMS Meteorological Aspects of Air Pollution Committee Award in 2012 to Prof. Akula Venkatram. At the forthcoming meeting we scheduled 10 minutes time slot for the award ceremony. This will occur just after the keynote lecture on Wednesday afternoon.

At the next meeting we plan to reserve a special slot for the committee award ceremony.

As for the membership, we added a new member Akshay A. Gowardhan, PhD, Atmospheric Scientist from Lawrence Livermore National Laboratory.

Also, since this is my last year as the committee chair, the committee elected Paul Bieringer as the new chair. At the time of writing this report, Paul's nomination is pending AMS approval.

## **25. Meteorology and Oceanography of the Southern Hemisphere - Penehuo F Lefale**

Members: All Committee members confirmed renewal of their terms; committee fully staffed.

Conferences, symposiums held during 2013: Pacific Climate Forum, hosted by the University of the South Pacific (USP) Pacific Centre for Environment and Sustainable Development (USP PACE-SD) and NOAA Pacific Climate Information System (PaCIS). Participated at the second meeting of the SPREP/WMO organized Pacific Meteorological Council (PMC-2), held in Nadi, from 1-5 July 2013. PMC-2 was co-sponsored by NOAA, Australian Bureau of Meteorology (BoM), Finland and other development partners. Joint session of the Pacific Platform for Disaster Risk Management and the Pacific Climate Change Roundtable, held in Nadi, Fiji, from 8 to 11 July 2013.

Board/Committee meetings: Virtual via emails as to save costs.

AMS statement and position papers: Provided comments on the ‘AMS Data Policy Statement – Full and Open Access to Data’. Provided comments on “94th AMS Panel Session on climate change, extremes and societal Impacts in the Pacific”.

Special activities (short courses, outreach): Participated in the First Open discussion workshop on Climate Engineering: Perspective from Pacific Small Island States, Suva, Fiji, from 21-13 August 2013. IPCC AR5 WG I Outreach workshops held in Wellington, NZ on 11 October 2013 and in Suva, Fiji, from 5 to 6 October 2013.

Student member recognition and awards: University of Hawaii PhD Candidate Sara E. Henly Shepard successfully completed her PhD this year.

Plans for 2014:

- Planning for the 94th AMS, Atlanta, Georgia, USA, from 2 to 6 February 2014.
- Planning for the 11 International Conference on Southern Hemisphere Meteorology and Oceanography (ICSHMO), to be held in Santiago, Chile, southern hemisphere spring of 2015.
- Planning for more IPCC AR5 WGs I & II reports outreach workshops.

Issues you would like to see the STAC and/or the Council to consider: Support for a new partnership with the SPREP/WMO led Pacific Meteorological Council (PMC) and Southern Hemisphere DRM/CCA communities. Support for STAC MOSH representation at the third UN Conference on Sustainable Development of Small Island Developing States (SIDS), to be held in Apia, Samoa, September 2014. Financial support for the planning of the 11th ICSHMO.

## **26. Middle Atmosphere – Edwin Gerber**

Members rotating off board/committee at the end of 2013: Dr. Martin Chipperfield, Dr. Feng Li, and Dr. Micheele Santee

New members and leadership changes: New Members in 2013: Dr. Thomas Birner, Mr. Nicholas Davis, Dr. Steven Pawson

Conferences, symposiums held during 2013: The 17th Conference on Middle Atmosphere was held jointly with the 19th Conference on Atmosphere and Fluid Dynamics in Newport RI, 17-21 June 2013. The program included 100 presentations (74 oral, 26 posters), including 19 presentations by students. A highlight of the meeting was a memorable Bernard Haurwitz Memorial lecture by Professor Michael McIntyre on the subject of "A tale of two paradigm changes, with remarks on unconscious assumptions." The program for the meeting was organized by Margaret Hurwitz, Lorenzo Polvani, and Edwin Gerber. We thank Cara Campbell and Jennifer Ives for their help in making the meeting so successful.

We used \$600 of our STAC funds to award 6 prizes for the best oral and poster presentations at the conference. The committee decided not to differentiate between 1st, 2nd, and 3rd place, rather providing three equal prizes in each category, so that all awards winners received \$100.

Best Posters:

- Michael Kelleher (Cornell University)
- Joowan Kim (McGill University)
- Huang Yang (Cornell University)

Best Talks:

- Justin Bandero (Massachusetts Institute of Technology)
- Ji-Eun Kim (University of Colorado)
- Clara Orbe (Columbia University)

Board/committee meetings: Our committee meeting was held on 19 June 2013 during the meeting at Newport. Thomas Birner and Steven Pawson agreed to take the lead in organizing the 18th Conference on the Middle Atmosphere, and we decided that it should be held in conjunction with the 2015 AMS Annual Meeting in Phoenix. Given the number of members rotating off the committee at the end of 2013, we identified two new candidates, Dr. Alan Plumb and Dr. Margaret Hurwitz, whose appointments are pending AMS approval.

Special activities. We used the other portion of our STAC funds (\$900) to arrange a “Women in Science” lunch during our June meeting. We believe that there are unique pressures faced by women in careers in both industry and academia. The goal of the lunch was to connect female students, postdocs, early career and “established” professionals, and allow them to talk openly about these issues. The lunch was also open to participants in the 19th conference on Atmospheric and Oceanic Fluid Dynamics. From all accounts, the lunch was well attended and quite successful!

Plans for 2014: Our next conference will be at the 2015 Annual Meeting in Phoenix. The organization and planning for the conference will be ongoing though much of 2014.

## **27. Mountain Meteorology – Heather Reeves**

Activities of the mountain meteorology committee for 2013 are described below.

Our primary concern are the plans for our 2014 meeting. Finding a venue has been more challenging than in previous years. As of the time of this writing, contracts are not yet signed, but the venue has been approved by our meetings coordinator. Assuming it is approved, we will meet in Missoula, MT at the end of July 2014. One co-chair has been assigned, Prof. Dan Kirshbaum of McGill Univ. The other co-chair will be sought when the venue is finalized.

We are very excited about a new webinar series that we started to improve collaboration and discussion between research and operations. These are 20-30 min presentations followed by 10-30 min of questions. Speakers rotate between NWS forecasters, traditional researchers, and an other category that includes USDA, regional climate centers, etc. The webinars are given on the third Wed of odd months. Previous webinars are recorded and linked to our AMS webpage

<http://www2.ametsoc.org/stac/index.cfm/committees/committee-on-mountain-meteorology/webinar-series/>

This year the committee coordinated to nominate Dr. Vanda Grubisic as AMS fellow. We are delighted to report that her nomination was successful.

As we look forward to 2014, we are excited about our 2014 meeting and have been actively looking to expand our attendance base by including a session on more general topographically-enhanced flows (such as lake-effect snow, sea-breezes, etc). We've also asked WAF/NWP and Hydro to sponsor sessions at our meeting.

We have also been asked to participate in the 2015 International Conference on Alpine Meteorology. We have not decided upon a specific course of action, but are eager to work with our European colleagues.

## **28. Planned and Inadvertent Weather Modification – Masataka Murakami**

Members: In February 2013, Members rotating off the committee were Dan Breed, Duncan Axisa (Student member), Steve Hunter, Terry Krauss and Danny Rosenfeld (outgoing chair) and new committee members included Masataka Murakami (incoming Chair), Roy Rasmussen, David Mitchell, Don Griffith and Alexander Khain, Amanda Sheffield (Student member).

Conferences, symposiums held during 2013: We held the 19th Conference on Planned and Inadvertent Weather Modification 6–10 January 2013, as part of the 93rd AMS Annual Meeting in Austin, Texas. The conference was chaired by Dan Breed. The 19th Conference on Planned and Inadvertent Weather Modification was soliciting papers over a wide range of traditional and interdisciplinary topics, including those that address the prediction needs of water resource managers and other decision-makers. Joint sessions with the 5th Symposium on Aerosol-Cloud-Climate Interactions were also held

Board/Committee meetings: We met the 19th Conference on Planned and Inadvertent Weather Modification during the 93rd AMS Annual Meeting (from 6 pm Tuesday, 8 January 2013, Austin Texas). A discussion was held on the necessity of revision of AMS statement on geo-engineering and the next Weather Modification meeting.

AMS statement and position papers: We decided to keep the current AMS statement on geo-engineering as it is because there is no need at this time to make any changes to the statement. The time to do that will be when sufficient desired changes in the statement that warrant the

process of change will accumulate. The AMS STAC approved the extension of the Geoengineering statement.

Plans for 2014 (Conferences, short courses, outreach): We discussed several possibilities of combining the AMS Weather Modification meeting with the WMO Weather Modification meeting, having a workshop on Weather Modification co-sponsored by the ICCP, and having the Weather Modification meeting joint with the Aerosols, Clouds and Precipitation community. Finally we reached the conclusion that the next meeting will be held at the 95th AMS annual meeting. Another committee meeting will be held next month during the AGU meeting and/or the AMS annual meeting to discuss the details of the next Weather Modification meeting

## **29. Polar Meteorology and Oceanography – Jessie Cherry**

Members rotating off board/committee: John Cassano and Yi-Ching Chung

New members and leadership changes: Andrew Roberts (returning members, new Chair) and Ryan Fogt, and Jennifer Kay as a new member.

Conferences, symposiums held during 2013: The Polar group had their bi-annual conference in 2013 in Seattle and it was very successful.

Board/committee meetings. We held a committee meeting in Seattle and elected Andrew Roberts for the new chair and nominated Fogt and Kay as our new members. Agreed to hold the next meeting jointly with CMS/CMOS in Whistler, BC, 2015.

Student member recognitions and awards: Awards for best paper and best presentation were presented at the Seattle meeting and those names should be on file with the meeting staff.

## **30. Probability and Statistics – Barbara Brown**

Changes in Membership: Effective February 1, 2013, David Bright rotated off the committee and Brian Etherton joined the committee. Barbara Brown continued as committee chair. Simon Mason and Adam Monahan continued as members for a second three-year term and Scott Sellars continued as a student member for another one-year term.

In 2014, the committee membership will remain stable. Both Eric Gilleland and Scott Sellars agreed to extend their participation for another term.

2013 AMS Annual Meeting: The committee organized a one-day symposium on “The Role of Statistical Methods in Weather and Climate Prediction” in conjunction with AMS 93rd Annual Meeting in Austin, Texas. The symposium included several invited speakers, which covered a wide range of topics related to the role of statistics in prediction. The one-day symposium was very successful, and drew in a large number of participants, even though it was scheduled for the last day of the annual meeting. The conference chairs were Barbara Brown, Dan Collins, Bob Glahn, and Scott Sellars.

2014 AMS Annual Meeting: The Probability and Statistics Committee has organized a full conference during the 2014 AMS Annual Meeting, and is also sponsoring a special named symposium in honor of the work of Edward Epstein. The conference (organized by Barbara Brown, Brian Etherton, and Scott Sellars) will also include a major joint session on ensemble prediction methods in collaboration with the Weather Analysis and Prediction and Numerical Weather Prediction committee. Other joint sessions have been organized in collaboration with the Education, Hydrology, and Artificial Intelligence committees. The committee also provided support for the prediction contest sponsored by the AI committee. Finally, the Probability and Statistics committee has organized a short course on Statistical Analysis of Weather and Climate Extremes that will be held on Sunday at the beginning of the Annual Meeting. This short course is being organized by Barbara Casati, Eric Gilleland, and Richard Katz.

2015 AMS Annual Meeting: At the 2015 AMS Annual Meeting in Phoenix, the Probability and Statistics Committee will sponsor a special named symposium in honor of the work of Dr. Bob Glahn. The committee will also organize a one-day symposium on Model Post-processing and Downscaling, which will be nicely coordinated with the Glahn symposium.

Other activities: The committee met during the 2013 Annual meeting and had a teleconference later in the spring of 2013. Additional interactions and discussions took place via email. The committee web page was updated by Eric Gilleland.

### **31. Radar Meteorology – Stephen Nesbitt**

Members: At the beginning of 2013, Steve Nesbitt became the new chair, and new committee members included Larry Carey, Martin Hagen, Tom Rickenbach, Angela Rowe, Christopher Williams, and student member Paloma Borque. Bob Palmer was re-elected as a member, beginning his second term in 2014, and Scott Giangrande will join as a new member in January 2014.

Conferences, symposiums held during 2013: We held the 36th AMS Conference on Radar Meteorology 16-20 September 2013 in Breckenridge, Colorado. The conference was co-chaired by Jothiram Vivekanandan and Christopher Williams. We held a special tribute session to retiring Professor V. N. Bringi, as well as several successful short courses. The conference has 393 submitted abstracts, 136 oral presentations, and 254 posters in 22 sessions, which was a significant growth from our last conference in 2011 in Pittsburgh. Generally it was felt that the meeting was a great success, although there were some complaints about the altitude of the meeting (>11,000 ft). See recommendation below regarding this last issue.

Board/Committee meetings: We met at the 36th Conference on Radar Meteorology on 18 September. We set up a web development sub-committee and debated the future site of the Radar Meteorology conference for 2015 (Norman, OK – proposed by Bob Palmer and Alexander Ryzhkov vs Reading, UK – Proposed by Anthony Illingworth). We are still discussing the latter topic over e-mail. Other topics were discussed via email (membership, etc.).

Special activities: We held two short courses at the 36th Conference on Radar Meteorology, both were well attended. The Weather Radar Calibration Laboratory Short Course was presented on 15 September 2014 at the CSU-CHILL Radar Facility. The Phased Array Weather Radar Polarimetry Short Course was presented on 15 September 2014 at the site of the Radar Conference in Breckenridge, CO.

Student member recognition and awards: Student award committee was led by Ali Tokay, NASA GSFC. From the 2013 36th AMS Radar Conference, the Geotis Prize was awarded to Ya-Chien Feng, McGill University (Improving the accuracy of near-surface 3-D radar refractivity). The Best Oral Presentation Award was given to Robert Palumbo, University of Massachusetts (Polarimetric observations of prescribed bushfires in South Australia using an X-band phased array radar). The Best Poster Presentation Award was given to Anthony W. Wade, University of Alabama in Huntsville (Multiple Doppler radar analysis of external environmental and topographic influences on a QLCS tornado event).

Plans for 2014 (Conferences, short courses, outreach):

- Develop radar history/outreach materials for the AMS Radar STAC page
- Continue to examine the radar frequency allocation issue to ensure that weather radars are allowed to operate without electromagnetic interference (work with FCC related activities led by Bob Palmer, STAC member – he will report back to the committee on further action items)
- Steve Nesbitt will represent the AMS Radar Committee as a member of the European Radar Conference (ERAD) program committee. This conference will occur 1 - 5 September 2014 in Garmisch-Partenkirchen, Germany.

Issues you would like to see the STAC and/or the Council to consider: Several people complained about the altitude of the Radar Conference. We would like to request that the STAC and/or council work with the AMS meetings department to consider a policy on holding large meetings at high elevation. We do not want to inadvertently exclude participants,

### **32. Satellite Meteorology, Oceanography, and Climatology – Ken Carey**

Members: All members requested to renew their terms accepted; committee is fully staffed, and includes 2 student members (1 graduate and 1 undergraduate)

New Members/Leadership Changes: Added Gary McWilliams (Co-Chair of the Symposium on New Generation Operational Environmental Satellite Systems), and Dr. Lars Peter Riishojgaard (Chair of the Symposium on the Joint Center for Satellite Data Symposium (JCSDA))

Conferences, symposiums held during 2013: Joint Session with the 9th Annual Symposium on New Generation Operational Environmental Satellite Systems; Joint EUMETSAT Satellite

Conference/19th Conference on Satellite Meteorology and Oceanography held at the historic Hofburg Palace in Vienna, Austria

Board/committee meetings: Our committee held meetings in person in January and September 2013, and via conference call in April and July 2013

AMS statement and position papers: Provided comments on the Statement on User Impact for Sharing of Meteorological Satellite Spectrum with Commercial Broadband Wireless by FCC,

Special activities. Participated in the 4th Asia-Oceania Satellite Meteorology Users' Conference (AOSMUC) in Melbourne, Australia; discussed collaboration with the National Weather Association (NWA) Remote Sensing Committee

Member recognitions and awards: Recognized 35+ years of exemplary service by Dr. Johannes Schmetz, Chief Scientist, European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT).

Student member recognitions and awards: Florida State University PhD Candidate Josh Cossuth earned an AMS travel grant worth up to \$1500 to participate in the Joint 2013 EUMETSAT-20th AMS Satellite Meteorology Conference in Vienna, Austria 16-20 September 2013. Josh made an oral presentation, "Developing a climatology of tropical cyclone structures using a newly compiled passive microwave dataset".

Plans for 2014:

- Planning a Joint Session with the 10th Annual Symposium on New Generation Operational Environmental Satellite Systems and 3rd Symposium on the JCSDA
- Planning the 20th AMS Conference on Satellite Meteorology for January 2015; exploring collaboration opportunities with EUMETSAT, AOSMUC, and NWA. Will jointly plan this meeting with the chairs of the 11th Annual Symposium on New Generation Operational Environmental Satellite Systems

Issues you would like to see the STAC and/or the Council to consider: Support for a new partnership with the Asia/Oceania satellite meteorology community, and joint meeting in 2016 between the 7th AOSMUC and the 21st AMS Satellite Meteorology Conference hosted by the Korean Meteorological Administration

### **33. Severe Local Storms – Dan Miller**

Members rotating off the SLS STAC in January 2014:

Cathy Finley, WindLogics, Inc., Grand Rapids, MN

Mike Biggerstaff, University of Oklahoma, Norman, OK

New Members for 3 year terms from January 2014 through January 2017:

Pam Heinselman, National Severe Storms Laboratory, Norman, OK  
Jim Marquis, The Pennsylvania State University, State College, PA

Activities in 2013:

Planning for next SLS meetings

One-day symposium at the AMS Annual Meeting in Atlanta in January 2014: Plans have been finalized for 1-Day Severe Local Storms symposium in conjunction with the 2014 AMS Annual Meeting. The Special Symposium on Severe Local Storms: The Current State of the Science and Understanding Impacts will be held on Wednesday, February 5, 2014. A tentative agenda for the symposium can be found at this website:

<http://annual.ametsoc.org/2014/index.cfm/programs-and-events/conferences-and-symposia/special-symposium-on-severe-local-storms-the-current-state-of-the-science-and-understanding-impacts/preliminary-agenda-special-symposium-on-sls/>

Severe Local Storms STAC members Adam Houston and Dan Miller have served as symposium co-chairs and organizers, with input and guidance from the remainder of the STAC membership. The symposium will consist of 11 invited talks that will address many of the various specialty areas within severe local storms. Talks will focus on the current state of the science, and speakers will also address the greatest opportunities for advancement through approximately 2020-2025. Abstracts were also solicited for an afternoon poster session. Program chair funds have been used to cover abstract fees for invited speakers, and for first, second and third place monetary awards for best student posters.

27th AMS Conference on Severe Local Storms: The next specialty conference for severe local storms will be held in 3-6 November 2014 at the Madison Concourse Hotel in Madison, WI. Program chairs Karen Kosiba and Curtis Alexander have been working closely with Jen Ives at AMS to move forward with planning for this conference since August 2013. The city and hotel was selected in August 2013 after evaluating bids from several hotels in four potential cities. Program chair funds were requested and approved in November 2013 to help cover the costs associated with up to 2 invited speakers, to provide monetary award for the top three student oral and poster presentations, and to fund \$400 in student travel grants. The call for papers was finalized in late November 2013, and will be published in the February 2014 issue of BAMS, with an abstract deadline in early July 2014.

Tornado Statement Revision

The two severe local storm related AMS statements on tornadoes continue in the revision process:

Tornado Preparedness and Safety:

<http://www.ametsoc.org/policy/tornadopolicy2000.html>

Tornado Forecasting and Warning:

[http://www.ametsoc.org/policy/statement\\_2004\\_tornadoforecasting.html](http://www.ametsoc.org/policy/statement_2004_tornadoforecasting.html)

Note: the above two statements will be combined into one comprehensive statement on tornadoes when the revision is completed - per recommendation in the approved précis

A drafting committee for revision of the tornado statement was finalized and approved by AMS Council in March 2013. Drafting committee members are:

Dan Miller  
Harold Brooks  
Tim Marshall  
Juan Ortiz  
Julie Demuth  
Dan McCarthy  
Jessica Losego  
John Trostel  
Dave Freeman  
Steve Corfidi (AMS Councilor)

The statement revision process moved along quite well until about July, during which time many of the drafting team members experienced significant demands on their time due to professional, school, and in at least one instance, personal issues. In addition, the process of combining two statements and reducing the total wording from almost 4000 words to around 2000 per new AMS informational statement guidelines is proving to be a challenge. The tornado statement revision is behind schedule as of the time of this report, but it is hoped that a final initial rough draft can be submitted by the end of January 2014.

#### Mobile Homes and Severe Windstorms Statement Revision

A précis was also approved in late 2012 to move forward with revision of the AMS statement on Mobile Homes and Severe Windstorms:

[http://www.ametsoc.org/policy/statement\\_2004\\_mobilehomes.html](http://www.ametsoc.org/policy/statement_2004_mobilehomes.html)

However, after consulting with the current and immediate past STAC commissioners and with approval from AMS Council, a decision was made in early 2013 to proceed with revision of one statement and a time, with concentration first on revision of the tornado statements. Thus, moving forward with revision of the Mobile Homes and Severe Windstorm statement is on hold until revision of the tornado statement is complete.

#### Severe Local Storms STAC webpage

Only small, incremental progress has been made in revising the AMS STAC webpage. We have a volunteer from the STAC to be the focal point for this process now, so we hope to make more concrete progress in 2014 with a goal of documenting SLS STAC history documentation (i.e. STAC membership, past conferences locations, program chairs, number of attendees, etc.), and also build a database of reference materials for conference and symposia co-chairs.

#### **34. Space Weather - Bob McCoy**

Members: The committee is fully staffed. Three members up for renewal have been extended. Three new member nominations have been submitted to the Council, one from NCAR, one from USGS and one from NASA.

The Space Weather STAC Committee organized and executed the 10th Space Weather Conference last year in Austin. Ball Aerospace funded a coffee and continental breakfast for the meeting. The Conference was very well attended with about ~160 the first day. NOAA representatives from the Space Weather Prediction Center (SWPC) provided daily space weather forecasts during the meeting. NASA and NOAA representatives manned a booth during Weatherfest.

A Space Weather Short Course was organized and executed by Bob Rutledge with about a dozen expert speakers on various aspects of space weather, including Dean Pesnell, Delores Knipp, Bill Murtagh, Antti Pulkkinen, Joe Kunches, Geoff Crowley, Joe Mazur, Eddie Simones, Mike Holland, Alex Young, Bob Rutledge, Kent Tobiska, and Liz Page.

The Committee held a joint session with the Commission on the Weather and Climate Enterprise on Space Weather Public-Private Partnership issues.

The Space Weather STAC Committee gave its first award to Dr. Richard Behnke for exceptional contributions to space weather.

The STAC Committee worked to complete and publish an AMS Policy Statement on Space Weather. That Policy Statement can be found at:

[www.ametsoc.org/policy/2013spaceweather\\_amsstatement.html](http://www.ametsoc.org/policy/2013spaceweather_amsstatement.html)

The program for the 11th Space Weather Conference has been completed and three days of presentations, including updates from several government agencies are planned. More than 45 talks and posters will be presented. A student travel grant will be awarded for the meeting.

### **35. Tropical Meteorology and Tropical Cyclones – Patrick Harr**

**Membership:** The terms of membership for three members expired in 2013, but all three members were eligible for one renewal and all three opted to remain on the committee.

**Committee Meetings:** The committee met at the AMS Annual Meeting in Austin, Texas. The primary topic of discussion was the increasing size of the Hurricane and Tropical Meteorology Conference, Banner Miller Award, and Max Eaton Award. Throughout the course of the year, committee business was accomplished through email and telephone conferencing.

**AMS Scientific/Technical Meetings Arranged Or Sponsored:** The Committee organized a special symposium at the AMS annual meeting in January 2013. The Special Symposium on the Next Level of Predictions in Tropical Meteorology: Techniques, Usage, Support, and Impacts was conducted over two days at the 2013 Annual Meeting. In conjunction with this Symposium, three special joint sessions was conducted. A joint session with the 11th History Symposium highlighted the historical context of observations and forecasts of tropical cyclones. Two joint sessions were conducted with the 17th Conference on Integrated Observing and Assimilation Systems for the Atmosphere, Oceans, and Land Surface. These sessions contained presentations on use of observations in tropical cyclones for improving model predictions and new technologies (i.e., unmanned aircraft systems) for tropical cyclone observations.

**Proposed Future Scientific/Technical Meetings:** The 31st AMS Conference on Hurricanes and Tropical Meteorology will be held 30 March to 4 April 2014. The conference will be held in San Diego, CA. Dr. Michael Brennan of the National Hurricane Center will chair the Conference.

**Current Issues:** Because the size of the AMS Conference on Hurricanes and Tropical Meteorology continues to increase, there are concerns that the effectiveness of the Conference is being compromised. To address this, the Committee is exploring several options. One option is to divide the Conference into two components. One would be a Conference on Tropical Cyclones and the other would be a Conference on Tropical Meteorology. In the past, the distribution of papers was such that nearly two-thirds were related to tropical cyclones. However, the distribution has been changing such that only 55% of the papers at the 30th Conference were related to tropical cyclones. Therefore, it may be that there are now enough papers to support a separate Conference on Tropical Meteorology.

A second option is to conduct a Conference each year but with alternating focus. A format that is similar to the NWP/WAF Conference is being considered. Other options have also been discussed, which includes maintaining the current format.

When the Committee met at the AMS Annual Meeting, it was decided that the format would remain unchanged for the upcoming Conference on Hurricanes and Tropical Meteorology. Two issues contributed to this decision. One is that several recent field experiments may have lead to increased number of non-tropical cyclone abstracts. Increased government travel restrictions may result in a below average attendance.

The Committee intends to examine various proposals in detail when it meets at the Conference on Hurricanes and Tropical Meteorology. A survey of the attendees to the 31st Conference may be conducted. The AMS Conference representatives were in attendance at the Committee meeting held at the 2013 Annual Meeting during which this topic was discussed and the AMS will be consulted throughout the process.

A second item of concern to the Committee is the increased number of entrants into the Max Eaton award competition. Because the award is based in part on the quality of the oral presentation given at the Conference, this contributes to the number of oral presentations and the need for a minimum of four concurrent sessions. For the 2014 Conference, a new award category will be implemented to provide an award for a poster presentation. This category is announced on the AMS website when abstracts are submitted.

AMS Statements: The committee did not revise or provide any AMS Statements.

Glossary of Meteorology: The committee contributed to a new entry for African Easterly Waves in the Glossary of Meteorology.

Communication: This committee communicates with the community via emails to the attendees of previous Conferences and Symposia.

### **36. Weather Analysis and Forecasting – Bruce Telfeyan**

Due to the active involvement and enthusiasm of our members, the AMS WAF Committee had an extremely successful and productive year. The committee was comprised of fourteen members, three student members, and a chair. The committee met in person at the AMS annual meeting. Three formal teleconference meetings of the full committee were also conducted, a short conference call to finalize annual awards, as well as numerous discussions by the 2014 conference planning committee. Our largest effort was planning for the 26th Weather Analysis and Forecast Conference and the 22nd Numerical Weather Prediction Conference (26 WAF/22 NWP), both to be held in conjunction with the 94th AMS Annual Meeting in Atlanta, February 2014.

Here are the specific report details as requested by the STAC Commissioner:

Members rotating off the committee after completing six years of dedicated service: John Cannon, Kevin Sharfenberg, Edward Szoke

New members (subject to AMS Council approval): Cyrena-Marie Briede, Walter Drag, Jason Furtado, Gail Hartfield, and Alex Tardy.

Conferences, symposiums held during 2013:

- Special Symposium (Jan 9, 2013): We conducted a special symposium, largely at the request of AMS President Louis Uccellini, at the 93rd Annual Meeting in Austin. The one day symposium was entitled “Advancing Weather and Climate Forecasts: Innovative Techniques and Applications.” Kelly Mahoney and Andrew Molthan were the co-chairs and they did a superb job putting it all together, from writing the call for papers to inviting our lead speakers. Our invited speakers (Jack Kain, Marty Ralph, Rajul Pahdya, and Louis Uccellini) all gave talks that were very well received by an audience of over 100. We handed out AMS funded student awards totaling \$1500 for the very best of the student presentations.
- We assisted the 3R2O program chair, John Pereira, in developing and inviting speakers for the Symposium on Joint Center for Satellite Data Assimilation (JCSDA): Special Introductory Panel — Importance of JCSDA on Agencies.

WAF Committee meetings:

- Our initial meeting of the year was held on Jan 8 (during the AMS Annual Meeting).
- Three additional committee meetings were conducted by telephone conferences. These occurred on April 22, July 29, and Oct 23.
- Additionally, on May 23 we had a teleconference for determining our recommended winners for the Exceptional Specific Prediction Award and the Mitchell Award.

AMS statement and position papers: The AMS Council has given approval to our drafting committee and for us to proceed with the revision of the existing AMS WAF statement. The initial meeting for the drafting committee was held on Wednesday, Oct 23, 1 PM, CDT. Here is the committee membership: Name Sector:

R. Bruce Telfeyan Government  
Yvette Richardson, PhD Academia  
Jason Martinelli, PhD Government  
Richard Carpenter, Jr., PhD Private  
Martin Baxter, PhD Academia  
Nate Johnson Social Scientist  
Chad Gravelle, PhD Government  
Becky Adams-Selin, PhD Private

Clark Evans, PhD Academia  
Neil Stuart Government

We have eight months from the date of the AMS Council's approval (equating to May 24, 2014) to revise the Statement and obtain Council approval on the updated statement.

We owe special thanks to Ward Seguin, Mary Cairns, and Keith Seitter for providing guidance and assistance to help us obtain AMS Council approval for our drafting committee. (The Council had expressed multiple objections regarding our initial proposed committee makeup.) Through the advocacy and guidance of the present and past Commissioners and the Executive Director, we added two members and obtained Council buy-in. These actions highlighted the challenge of attracting sufficient numbers of qualified volunteers to serve on statement drafting committees. Perhaps this exercise will serve to fine-tune this process in the future for other AMS statements.

The Committee provided Glossary of Meteorology (GoM) support by making recommendations for three proposed additions.

Member recognitions and awards:

- Lans Rothfusz became the Acting Deputy Director of NSSL.
- Josh Hacker moved from NRL to a new position at NCAR.
- Andrew Molthan was selected to serve as a co-program chair for the 95th AMS Annual Meeting in Phoenix.
- Brent Shaw passed the AMS Certified Consulting Meteorologist oral exams and was awarded certificate #691 on January 30, 2013.
- and Brent Shaw was added to the COMET Advisory Panel for FY14 through FY16 to help represent private sector meteorology.
- Michael Brennan is serving as the program chair for the 2014 Conference on Hurricanes and Tropical Meteorology.

Student member recognition and award: Derek Mallia had his "Improving Biomass Burning emissions in Carbon Tracker" proposal accepted for funding by NOAA and will likely serve as the basis for his PhD work at the University of Utah. Here is a brief summary of his winning proposal:

“Fires can emit large quantities of carbon containing gases such as CO and CO<sub>2</sub> which can have a significant impact on Earth's carbon budget. Since there is a significant amount of temporal and spatial variation associated with wild fire emissions there is a lot of uncertainty in regards to the true emissions. The Weather Research and Forecasting - Stochastic Time-Inverted Lagrangian Transport model (WRF-STILT) will be used to determine this uncertainty which will improve upon the current wild fire emission data sets that are available.”

## WAF Committee Plans for 2014:

Our largest activity has been preparing for the 26 WAF/22 NWP. Our program chairs are Andrew Molthan and Kelly Mahoney. Here is a link to our Call for Papers: 26th Conference on Weather Analysis and Forecasting. The link to the actual conference program is at: <https://ams.confex.com/ams/94Annual/webprogram/26WAF22NWP.html> The program committee has reviewed over 300 abstracts! Some details of our 26 WAF/22 NWP conference are as follows:

- 1) Committees and/or Conferences with which we are partnering:
  - 4th Conference on Transition of Research to Operations: 4 oral sessions, 1 poster session
  - 22nd Conference on Prob. and Statistics in the Atmospheric Sciences: 4 oral sessions, 1 poster session
  - Sixth Symposium on Aerosol-Cloud-Climate Interactions: 2 themed oral session
  - 18th Conference on IOAS-AOLS: 4 oral sessions, 1 poster session
  - Tenth Annual Symposium on New Generation Operational Environmental Satellite Systems: 1 poster session
  - 11th Symposium on the Urban Environment: 1 oral session
  - 30th Conference on Environmental Information Processing Technologies: 2 oral sessions
  - AMS Board for Operational Government Meteorologists: Joint Town Hall Meeting on “NOAA’s Weather Modeling Strategy”
  
- 2) We have 34 sponsored oral sessions including joint and themed joint sessions, 30 of which are hosted by WAF/NWP. The remaining sessions are hosted by other conferences.
  
- 3) We have 165 total oral presentations among all joint sessions, of which 153 are hosted by WAF/NWP. The remaining twelve occur in other jointly sponsored sessions. NOTE: These are likely underestimates of the actual total (perhaps off by 10-12) as we are not yet officially listed as sponsoring two sessions on volcanic ash.
  
- 4) We have 135 poster presentations hosted by WAF/NWP and joint with the conferences listed above.
  
- 5). The Mountain Meteorology Conference, Missoula, MT, week of 28 July 2014 has asked us to sponsor a joint session at their conference. We have agreed to take part in this joint activity. Dr Josh Hacker and Derek Mallia will lead our WAF effort to jointly sponsor this session.

Additional items:

- We created and stood up a WAF Committee Facebook page that contains basic information about the committee and a link to the committee's AMS website. It is at this link: <https://www.facebook.com/WAFcommittee>. James Belanger came up with this idea and Charles Kuster was the key driver in creating our page with the profile photo, which serves as an identifier for the page, and cover photo, which adds uniqueness to the page. Our Facebook presence continues to grow as members add noteworthy weather images and events to the page.
- We assisted the American Society for Testing and Materials International and the ISO meteorology standards representative, Paul Fransioli, with a recommendation for the United States' position on Siting Classifications for Surface Observing Station on Land. This proposal is the product of years of developing a liaison relationship between ISO and the WMO. Keith Seitter recommended that Paul contact the WAF committee and we were able to provide assistance. Special credit is due to future WAF Committee member Cyrena-Marie Briede for her work in crafting our recommendation.
- We updated our AMS website to the new standard template (<http://www2.ametsoc.org/stac/index.cfm/committees/committee-on-weather-analysis-and-forecasting/>). Dr. Sam Ng serves as our committee webmaster and kept the website current. In addition to the standard entries, our site contains our Terms of Reference, photographs of committee members, information about upcoming WAF Committee events, the past five years of annual reports, the minutes of recent WAF Committee meetings, and thanks to the efforts of Jon Porter, a complete listing of our past conferences and future planned events.
- We began to plan ahead for the 27th WAF/23rd NWP Conference. We have narrowed our locations down to Denver, Salt Lake City, or Albuquerque. We are planning to have the conference in the June 2014 timeframe, maintaining our roughly 18 month cycle for our conferences.
- We provided two judges for the Francis W. Reichelderfer Award (Lans Rothfusz and Brent Shaw). The entire committee served as judges for the Exceptional Specific Prediction Award (ESPC) and the Charles L. Mitchell Award.
- We arranged for two orientation teleconference sessions (November 22 and December 9) for our five incoming WAF Committee members. We have found that perhaps too frequently, new members join AMS committees without a good feel for what types of activities the committee works on, the various opportunities they will have to contribute, and the vision and mission upon which the committee focuses.

Perhaps this is a more significant concern considering the funding constraints that prevent some from attending the Annual Meeting. Our orientation session is designed to address these shortfalls and make the incoming members feel like an integral part of the team.