

# Scientific and Technological Activities (STAC) Report to the AMS Council, July 2017

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## 1. Introduction:

STAC is responsible to the Society and the Council for advancing science and technology by promoting the open exchange of ideas, strengthening our disciplinary communities, enhancing collaboration and dialog among these communities, embracing diversity, celebrating and fostering excellence, and cultivating the next generation of scientists and leaders. STAC has continued to carry out these primary roles by planning conferences, symposiums, maintaining an active membership and web site (both of which are updated at least annually); recognizing outstanding members via Society Award and Fellow nominations; informing the AMS Council of concerns and suggestions for improvement; and providing a brief summary to the Council/Commissioners after each conference, symposium, or other meeting(s).

## 2. Conferences and Symposiums:

As a reminder, STAC consists of [thirty science committees](#) and [six inter-disciplinary boards](#). Of the 44 AMS sponsored conferences and symposiums held during 2016, over half were led by STAC committees and boards; 18 STAC-led conferences were held in Seattle during the Annual Meeting and eight additional conferences occurred (or will occur) later in the year at other locations. Here is a listing of all the STAC conferences and symposiums:

1. 33rd Conference on Environmental Information Processing Technologies
2. 31st Conference on Hydrology
3. 29th Conference on Climate Variability and Change
4. 28th Conference on Weather Analysis and Forecasting
5. 24th Conference on Numerical Weather Prediction
6. 19th Conference on Atmospheric Chemistry
7. 18th Conference on Aviation, Range, and Aerospace Meteorology
8. 15th Conference on Artificial and Computational Intelligence and its Applications to the Environmental Sciences
9. 15th Symposium on the Coastal Environment
10. 14th Conference on Polar Meteorology and Oceanography
11. 14th Conference on Space Weather
12. 13th Annual Symposium on New Generation Operational Environmental Satellite Systems
13. 13th Symposium of the Urban Environment
14. Eighth Symposium on Lidar Atmospheric Applications
15. Eighth Conference on the Meteorological Application of Lightning Data
16. Eighth Conference on Environment and Health

17. Special Symposium on Severe Local Storms: Observation needs to Advance Research, Prediction and Communication
18. Special Symposium on Meteorological Observations and Instrumentation
19. 23rd Conference on Applied Climatology
20. 21st Atmospheric and Oceanic Fluid Dynamics
21. 19th Middle Atmosphere
22. 17th Mesoscale Processes
23. 38th Radar Meteorology
24. 30th Climate Variability and Change
25. 24th Probability and Statistics
26. 16th Artificial Intelligence

### 3. **STAC Best Practices:**

The [STAC Best Practices Document](#) is in its third year of existence and we continue to update and expand it. We combined our past experiences with those of other successful STAC committees and created a living document that helps STAC board and committee Chairs and members. Its main purpose is to help STAC volunteers to understand their responsibilities and what they can do to help build their science community. We mention this document every chance we get and it continues to have a very positive impact. The vast majority of STAC members want to make a difference, but some simply do not know how to contribute in the most effective ways. This helps them find their direction.

4. **Named Sessions:** STAC has played an increasingly larger role with named sessions at conferences and symposiums. Named sessions are discussed in The Guidelines for Society and Commission Awards and described as follows:

"A named session honoring an individual may be held within an existing specialty conference or symposium on the recommendation of the STAC Commissioner and approval by the Executive Committee. Except for extraordinary circumstances, there should be a limit of two special sessions per specialty conference."

In the past, named sessions were uncommon and not frequently used. In recent years, STAC has been highlighting them as a way to recognize outstanding members of the various science communities, especially as STAC Commission Awards (previously) could not be used to do this. Of course, we also just received Council approval to have STAC Commission awards for Early Career, Distinguished Accomplishment, and Outstanding Service categories, so we are curious to see how this evolves. Our hunch is that named sessions will continue to be used by certain committees who are more proactive in recognizing their community members and that this will slowly spread to other committees. Thus, named sessions are getting increased attention and are now used more frequently.

The named session requires a [Proposal for Named Session](#) form submitted to the STAC Commissioner who then endorses (if appropriate) and forwards the nomination to the AMS Executive Committee for approval.

Thus far in 2017, I have processed six requests for named sessions (honoring eight individuals), and all have been approved by the Executive Committee. They are as follows:

<b>Conference</b>	<b>Honoree</b>	<b>Theme</b>	<b>Conference Location, Year</b>
Mountain Meteorology	James Steenburgh	Orographic Precipitation	Sante Fe, NM, 2018
Climate Variability and Change	Piers Sellers	Innovations in Earth Observations	Austin, TX, 2018
Climate Variability and Change	Jay Fein	The Legacy of Jay Fein	Austin, TX, 2018
33rd Conference on Hurricanes and Tropical Meteorology	Bill Gray	Tropical cyclones. Title: "Bill Gray Session: Up Moist, Down Dry"	Ponte Vedra Beach, FL, April 16-20, 2018
38th Conference on Radar Meteorology	David Atlas, Roger Lhermitte, and Edwin Kessler	A Tribute to the Science and Engineering Contributions as well as the Lives of Atlas, Lhermitte, and Kessler	Chicago, IL, Aug 2017
23rd Conference on Applied Climatology	Kelly Redmond	Kelly Redmond: Observations of an Extreme Climatologist	Asheville, NC, June 2017

#### 5. **Named Symposiums:**

Seven proposals for named symposiums were processed by STAC and forwarded to the AMS Executive Committee. Of course these proposals will be reviewed and scheduled as appropriate.

In terms of background information, the Named Symposium is a higher and more distinctive level of recognition than the Named Session. It is normally a one-day event comprised of three or four sessions (it can have a poster session in addition to oral presentations). It requires the full 18-month planning time-frame accorded to a specialty conference. Nominations ([Proposal for Named Symposium](#)) are due to the STAC Commissioner by May 1 of the year prior to the next Annual Meeting, or roughly 19 months before the proposed event.

#### 6. **STAC Board/Committee (B/C) Teleconferences:**

A STAC B/C teleconference was held on May 19 and we were honored to have Keith Seitter join in the call. The minutes to the call are at this link:

<https://www.ametsoc.org/stac/index.cfm/news-reports/monthly-stac->

[newsletter/stac-b-c-chair-telecon-19-may-2017/](#) The teleconference was the second such mid-year effort (the first one having occurred in July 2016). We have had roughly 2/3rds of our Chairs dial in (24 of 36) for these events and we will have a follow-up call in late September or early October 2017.

#### **7. STAC Support to the Editor of the *Glossary of Meteorology (GoM)*:**

The *GoM* continues to be a much-used tool for our Society and with our global community. STAC Boards and Committees are actively involved in supporting the *GoM* by providing expert input on requests for new or updated glossary terms. The number of requests is much lower this year with only seven new requests compared to twenty-one a year ago. However, as our sciences continue to evolve, there will no doubt be requests for additions and revisions to the *GoM*.

#### **8. Request for Meeting Funds:**

The Program Chair of each AMS sponsored conference or symposium can request up to \$1,500 to support student awards, student travel, abstract fees for guest speakers, invited speaker travel support, and special activities. A quick look at the requests indicates that the most common use of the program chair funds is for student awards which can be up to a maximum of \$200 per award, followed by invited speaker abstract awards. STAC handles these fund requests for all AMS conferences whether within STAC or from other Commissions (as per agreement through the AMS Meetings Coordinator). Also by arrangement with Claudia Gorski's staff, routine requests are approved by the AMS Meetings Coordinator while those requests requiring closer examination are reviewed by the STAC Commissioner.

#### **9. STAC Newsletter:**

The STAC Newsletter (now generally a bi-monthly effort) has continued to be a success as it keeps the STAC members better informed. The links to these periodic newsletters are also sent to the Council and Commissioners. Refer to:

<https://www.ametsoc.org/stac/index.cfm/news-reports/monthly-stac-newsletter/>

#### **10. Membership Breakdown of STAC Boards and Committees:**

We have updated the spreadsheet which provides a breakout of STAC B/C membership by seven different categories. Special thanks to AMS Member Services (Beth Farley) for providing the raw spreadsheet which enabled this study for a third consecutive year. This effort is helpful in viewing some demographics of our STAC volunteers (now numbering 454 individuals). Since last year we have seen a 3% growth in our numbers of female volunteers and a 7% increase in female student STAC members. Over 90% of our STAC volunteers are from the US and Colorado has the greatest representation of any state with 72 of the 454 volunteers. I am unsure of the reason, but our numbers of volunteers who are not AMS members doubled from ~10% (2016) to ~21% this year (95 of 454). Rest assured that we continue to encourage our volunteers to become AMS members. The spreadsheet is at this link:

<https://www.ametsoc.org/stac/index.cfm/news-reports/2017-breakdown-of-stac-boards-and-committees/>

## 11. Annual Awards

STAC was involved with the AMS Annual Awards again this year under the guidance of the AOC. We successfully met the new, accelerated schedule to determine the results of the judging. This table covers the awards with STAC involvement:

<b>Award</b>	<b>Responsible B/C or Commissioner</b>
The Charles L. Mitchell Award	WAF
The Award for an Exceptional Specific Prediction	WAF
The Francis W. Reichelderfer Award	WAF, BOGM, Coastal Environment, Hydrology
The Helmut E. Landsberg Award	Board on Urban Environment
The Award for Outstanding Achievement in Biometeorology	Board on Atmospheric Biogeosciences
The Robert E. Horton Lecturer in Hydrology	Committee on Hydrology
The Bernard Haurwitz Memorial Lecturer	STAC (Dave Stensrud)
The Walter Orr Roberts Lecturer in Interdisciplinary Sciences	STAC (Dave Stensrud)
The AMS Journalism Award	STAC Commissioner Review
Outstanding Contribution to the Advance of Applied Meteorology	Professional Affairs Commission with input from Applied Climatology

## 12. Items for Consideration by the Council:

There are three areas that we wish to bring forward for review and consideration by the Council.

### a. Recognition for Board and Committee Chairs:

Our feeling is that STAC Board and Committee Chairs do not receive adequate recognition for their voluntary contributions. They serve in critical roles for advancing their specific disciplines of our science and supporting the mission of the Society. They are responsible for leading and managing the efforts of their volunteer B/C members (numbering from 8 to 22 individuals). Some options for recognition for B/C Chairs include the following ideas:

- Instituting a ribbon on the name tag for Chairs at the Annual Meeting and Specialty Conferences. The ribbon could read “STAC Board Chair,” “STAC Committee Chair” or perhaps “Board Chair” or “Committee Chair,” as appropriate. The latter option could be provided across all Commissions
- Waiving the abstract submission fee at Annual Meeting or appropriate Specialty Conference
- Providing free online AMS journal access to the publication closest to the discipline of the B/C Chair

### b. Recognition for Drafting Committee members for AMS Statements:

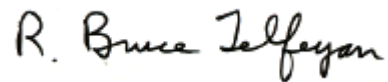
Currently, we provide no recognition to those who chair or serve on the committees which draft [AMS Statements](#). Whether initiating a new statement or updating an

existing statement, this can be an exhaustive process taking in excess of a year. These statements are equivalent to peer-reviewed manuscripts as they go through extensive review and revision with comments from the AMS Council and the Executive Committee. We recommend, therefore, that AMS develop and institute some means of providing recognition for the members of drafting committees.

**c. Improved or increased interaction between the six Commissioners**

There are areas where the Commissioners need to interact and with the exception of the annual September meeting in Boston, other occasions do not exist. Perhaps this should be established during the Annual Meeting or perhaps a semi-annual teleconference opposite the September meeting would be appropriate. The primary existing interaction is during the annual awards judging process as there are several awards that span more than a single Commission. But there needs to be a greater frequency of cross-flow of ideas and efforts. One example is the new statement on [Water Resources in the 21<sup>st</sup> Century](#), as the STAC Committee on Hydrology was not involved in the effort. Other examples might include ad hoc efforts where, perhaps, discussion between Commissioners might involve some expertise that is not otherwise considered.

13. As always, STAC appreciates the support of the AMS Staff and values our collaborative efforts with and support from the AMS Council.



R. BRUCE TELFEYAN  
Commissioner,  
AMS Scientific and Technological Activities Commission