

American Meteorological Society Weather Analysis and Forecasting (WAF) Committee 2013 Annual Report

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:

1. Members rotating off the committee after completing six years of dedicated service:
 - a. John Cannon
 - b. Kevin Sharfenberg
 - c. Edward Szoke
2. New members (subject to AMS Council approval):
 - a. Cyrena-Marie Briede (Mount Washington, NH, Observatory)
 - b. Walter Drag (NWS, Mount Holly, NJ)
 - c. Jason Furtado (AER, Lexington, MA)
 - d. Gail Hartfield (NWS, Raleigh, NC)
 - e. Alex Tardy (NWS, San Diego, CA)
3. Conferences, symposiums held during 2013:
 - a. **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.
 - b. 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.

4. WAF Committee meetings:

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

5. AMS statement and position papers:

- a. 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

- b. 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.
- c. 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.

6. Special activities (short courses, outreach ...). None.
7. Glossary of Meteorology (GoM) support: The committee provided recommendations on three proposed additions to the GoM.
 - a. Correction to the formula for pseudoequivalent potential temperature (review conducted by Brent Shaw).
 - b. Addition of a definition for thundersnow (review conducted by Jonathan Porter assisted by Brent Shaw and Bruce Telfeyan).
 - c. Addition of a definition for Norlun Trough (review conducted by John Cannon, Ed Szoke, and Jeff Waldstreicher of NWS).
8. Member recognitions and awards:
 - a. Lans Rothfusz became the Acting Deputy Director of NSSL.
 - b. Josh Hacker moved from NRL to a new position at NCAR.
 - c. Andrew Molthan was selected to serve as a co-program chair for the 95th AMS Annual Meeting in Phoenix.
 - d. Brent Shaw passed the AMS Certified Consulting Meteorologist oral exams and was awarded certificate #691 on January 30, 2013.
 - e. Additionally, Brent Shaw was added to the COMET Advisory Panel for FY14 through FY16 to help represent private sector meteorology.
 - f. Michael Brennan is serving as the program chair for the 2014 Conference on Hurricanes and Tropical Meteorology.
9. 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 CO₂ 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."

10. WAF Committee Plans for 2014:

- a. 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:
 - a) 4th Conference on Transition of Research to Operations
 - 4 oral sessions, 1 poster session
 - b) 22nd Conference on Prob. and Statistics in the Atmospheric Sciences
 - 4 oral sessions, 1 poster session
 - c) Sixth Symposium on Aerosol-Cloud-Climate Interactions
 - 2 themed oral session
 - d) 18th Conference on IOAS-AOLS
 - 4 oral sessions, 1 poster session
 - e) Tenth Annual Symposium on New Generation Operational Environmental Satellite Systems
 - 1 poster session
 - f) 11th Symposium on the Urban Environment
 - 1 oral session
 - g) 30th Conference on Environmental Information Processing Technologies
 - 2 oral sessions
 - h) 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.
- b. 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.

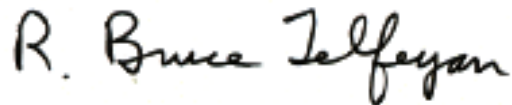
11. Issues you would like to see the STAC and/or the Council to consider: None.

12. Additional items:

- a. 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.
- b. 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.
- c. 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.
- d. 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.
- e. We provided two judges for the Francis W. Reichelderfer Award (Lans Rothfus and Brent Shaw). The entire committee served as judges for the Exceptional Specific Prediction Award (ESPC) and the Charles L. Mitchell Award.

- f. 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.

Respectfully submitted,

A handwritten signature in black ink that reads "R. Bruce Telfeyan". The signature is written in a cursive, flowing style.

R. BRUCE TELFEYAN

Chair, AMS Weather Analysis and Forecast Committee