2022 Committee on Weather Analysis and Forecasting Annual Report

Membership

The Weather Analysis and Forecasting Committee added one new member in 2022, Jon Poterjoy (Univ. of Maryland). We also recruited four new members, two professionals (Andrei Evbuoma and Stephanie Zick) and two students (Clayton Sasaki and Eddie Wolff), for terms to begin in January 2023. We bid farewell to one committee member, Shawn Milrad, in January 2022 and will bid farewell to three committee members, Rob Banks, Clark Evans, and Jennifer Tate, in January 2023. All members with terms ending in January 2023 who could renew for a second term chose to do so.

Our committee's 2022 membership included twenty-six members, including twenty-two professionals and four students. Of the professional members, ten represented academia (including NCAR), eight represented the federal government, and four represented the private sector. Twelve of our twenty-six members identify as women, and five of our twenty-six members identify as a member of an ethnic group traditionally underrepresented in the atmospheric sciences.

Committee Meetings

The Committee on Weather Analysis and Forecasting held six virtual meetings in 2022, one each in February, May, June, August, September, and November. Minutes from each of these meetings are available on <u>the Committee's website</u>.

Conference Organization

The joint 31st Conference on Weather Analysis and Forecasting/27th Conference on Numerical Weather Prediction, led by conference chair Aaron Hill, was held with the 102nd AMS Annual Meeting in January 2022. Approximately 280 abstracts were submitted to sessions hosted by the joint conferences. The Committee on Weather Analysis and Forecasting was also the sponsoring committee for the 1st Symposium on Earth Prediction Innovation & Community Modeling, which was also held with the 102nd AMS Annual Meeting in January 2022. The Committee was not directly involved with its organization or execution, however.

During 2022, the Committee has been planning two sets of conferences and symposia:

- The Special Symposium on Forecasting a Continuum of Environmental Threats (FACETs), led by conference co-chairs Stephen Bieda and Victor Gensini, to be held with the 103rd AMS Annual Meeting in Denver, CO in January 2023.
- The joint 32nd Conference on Weather Analysis and Forecasting/28th Conference on Numerical Weather Prediction, led by conference chair Stephanie Avey, to be held with the 20th Conference on Mesoscale Processes in Madison, WI in July 2023.

Finally, the Committee is serving as the sponsoring committee for the 2nd Symposium on Community Modeling & Innovation to be held with the 103rd AMS Annual Meeting in Denver, CO in January 2023, although it is not directly involved with its organization or execution.

Society-Level Awards

The Weather Analysis and Forecasting Committee is responsible for reviewing, in whole or in part, nominations for three AMS awards, the Award for an Exceptional Specific Prediction, the Charles L. Mitchell Award, and the Francis W. Reichelderfer Award.

- Two nominations were received for the Award for an Exceptional Specific Prediction. After reviewing these nominations, the award evaluation committee (chaired by Clark Evans) recommended awarding this award to Andrew Orrison and the NOAA Weather Prediction Center team.
- Two nominations were received for the Charles L. Mitchell Award. After reviewing these nominations, the award evaluation committee (chaired by Katie Magee) recommended awarding this award to Todd Lindley.
- Finally, one nomination was received for the Francis W. Reichelderfer Award. After reviewing this nomination, the award evaluation committee (containing two representatives from the Committee on Weather Analysis and Forecasting, Joe Koval and Kim Wood) recommended awarding this award to Thomas LeFebvre.

This year's award evaluation cycle was the first to use revised Terms of Reference for the Award for an Exceptional Specific Prediction, which were proposed by the Committee on Weather Analysis and Forecasting in 2021 and approved by the AMS Awards Oversight Committee in December 2021 and Executive Committee and Council in January 2022.

STAC-Level Award

The Weather Analysis and Forecasting Committee solicited nominations for the STAC-level Weather Analysis and Forecasting Committee Distinguished Scientific/Technological Accomplishment Award. The committee recommended, and STAC leadership approved, Dr. Xuguang Wang of the University of Oklahoma as this year's award recipient "for advances in ensemble data and observation assimilation methods that have improved numerical weather prediction systems." Dr. Wang will formally receive this award at the 103rd AMS Annual Meeting in Denver, CO in January 2023.

Strategic Planning

The Committee on Weather Analysis and Forecasting stood up an *ad hoc* committee, chaired by Committee Vice Chair Stephen Bieda, to develop a five-year strategic plan to guide the Committee's activities through 2027. Six focus areas were identified: student development; professional development; social, behavioral, and economic sciences; frontiers in forecasting; outreach; and diversity, equity, inclusion, and accessibility. The final strategic plan was approved by the Committee in September 2022 and is <u>available on our website</u>.

AMS Statement on Weather Analysis and Forecasting

In 2021, a statement revision team of twenty-six members under the purview of the Committee on Weather Analysis and Forecasting prepared a revised AMS Statement on Weather Analysis and Forecasting. This statement was adopted by the AMS Council on 20 December 2021, after the preparation of the committee's 2021 Annual Report.

Glossary Reviews

The Glossary Subcommittee, led by Jennifer Tate, prepared definitions for two new AMS Glossary terms (cool change, Winter Storm Severity Index). Jennifer was recognized with an AMS Editor's Award "[for] leadership and initiative in leading reviews of both new and existing Glossary terms in a timely, thorough manner with attention to details."

Other Committee Activities

The Committee on Weather Analysis and Forecasting has active social-media and webmaster subcommittees. The former, headed by Katie Magee, has used social media to advertise for our conferences, awards, and new-member recruitments, disseminate information about the Committee's membership and other Committee activities, and share information from other sources about noteworthy high-impact weather events. The latter, headed by Matt Beitscher, has maintained the Committee's STAC webpage.

Upcoming Committee Leadership Transitions

Committee Chair Clark Evans will be stepping down as Chair effective with the 103rd AMS Annual Meeting as he becomes the STAC Incoming Commissioner. Current Vice Chair Stephen Bieda was elected by the Committee as Chair for a three-year term to begin in January 2023. Stephanie Avey was elected by the Committee as Vice Chair for a three-year term to begin in January 2023. Finally, Jennifer Tate will be stepping down as Glossary Subcommittee Chair effective with the 103rd AMS Annual Meeting, coincident with her tenure on the Committee ending. Committee member Andrew Winters will begin serving as the Glossary Subcommittee Chair in January 2023.