Scientific and Technological Activities (STAC)
January 2026 Report to the AMS Council

Clark Evans, Commissioner
Kristie Franz, Past Commissioner
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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, celebrating and fostering excellence, and cultivating the next generation of scientists and leaders. STAC consists of thirty committees and six interdisciplinary boards. These boards and committees (B/Cs) carry out their primary roles by planning conferences and symposia; maintaining an active membership and website; contributing to AMS statements, the Glossary of Meteorology, and other AMS-wide activities; recognizing outstanding members via STAC Awards, Society Award, and Fellow nominations; and informing the AMS Council of concerns and suggestions for improvement.

We would like to thank AMS Staff, AMS Council, and the other Commissioners for their support and collaboration, particularly during a challenging 2025. Special thanks to Jen Ives and Ward Seguin for their contributions to this report.

Items for Council

Despite multiple attempts at engagement and intervention, there are a couple of STAC B/Cs that perpetually have low membership, little to no activity, and little to no engagement with the STAC Commissioners or other aspects of the Society. We would appreciate the Council's feedback on how to best address these circumstances.

Conferences and Symposia

(Thank you to Jen Ives for helping to prepare this portion of the report!)

Twenty-nine STAC-led conferences/symposia were held at the 2025 Annual Meeting in New Orleans and online, and STAC committees participated in four 2025 specialty meetings. Twenty-nine STAC-led conferences/symposia are being held during the 2026 Annual Meeting in Houston and are listed below. STAC committees will participate in two additional specialty conferences, also listed below, in 2026.

Conferences and Symposia at 2026 AMS Annual Meeting (Houston, TX and online)

Conference/Symposium Name	Organizing Committee/Board
42nd Conference on Environmental Information Processing Technologies	AMS Board on Environmental Information Processing Technologies

40th Conference on Hydrology	AMS Committee on Hydrology
39th Conference on Climate Variability and Change	AMS Committee on Climate Variability and Change
30th Conference on Applied Climatology	AMS Committee on Applied Climatology
29th Conference on Probability and Statistics	AMS Committee on Probability and Statistics
28th Conference on Atmospheric Chemistry	AMS Committee on Atmospheric Chemistry
27th Conference on Satellite Meteorology, Oceanography, and Climatology	AMS Committee on Satellite Meteorology, Oceanography, and Climatology
26th Conference on Aviation, Range, and Aerospace Meteorology	AMS Committee on Aviation, Range, and Aerospace Meteorology
26th Symposium on Meteorological Observation and Instrumentation	AMS Committee on Measurements
25th Conference on Artificial Intelligence for Environmental Science	AMS Committee on Artificial Intelligence Applications to Environmental Science
25th Conference on Atmospheric and Oceanic Fluid Dynamics	AMS Committee on Atmospheric and Oceanic Fluid Dynamics
24th Joint Conference on the Applications of Air Pollution Meteorology (joint with the A&WMA)	AMS Committee on Meteorological Aspects of Air Pollution
24th Symposium on the Coastal Environment	AMS Committee on Coastal Environment
23rd Conference on Middle Atmosphere	AMS Committee on Middle Atmosphere
23rd Conference on Space Weather	AMS Committee on Space Weather
22nd Symposium on Operational Environmental Satellite Systems	AMS Committee on Satellite Meteorology, Oceanography, and Climatology
21st Symposium on Societal Applications: Policy, Research and Practice	AMS Board on Societal Impacts
18th Symposium on Aerosol–Cloud–Climate Interactions	AMS Committee on Atmospheric Chemistry
17th Conference on Environment and Health	AMS Board on Environment and Health
16th Conference on Transition of Research to Operations	AMS Committee on Environmental Information Processing Technologies
16th Symposium on the Urban Environment	AMS Board on Urban Environment
14th Symposium on Building a Weather-Ready Nation: Enhancing Our Nation's Readiness, Responsiveness, and Resilience to High Impact Weather Events	AMS Board on Societal Impacts
14th AMS Symposium on the Joint Center for Satellite Data Assimilation (JCSDA)	AMS Committee on Satellite Meteorology, Oceanography, and Climatology
12th Symposium on High Performance Computing for Weather, Water, and Climate	AMS Board on Environmental Information Processing Technologies
Fifth Symposium on Community Modeling and Innovation	AMS Committee on Weather Analysis and Forecasting
Third Symposium on the Future of Weather, Forecasting, and Practice	AMS Committee on Weather Analysis and Forecasting
Third Symposium on Cloud Physics	AMS Committee on Cloud Physics
First Symposium on Weather Radar	AMS Committee on Radar Meteorology

First Symposium on Tropical Meteorology and Climate	AMS Committee on Tropical Meteorology and Tropical Cyclones

Planned 2026 STAC-led specialty meetings

Conference Name	Location
37th Conference on Hurricanes and Tropical Meteorology	La Jolla, CA
2026 AMS Madison Summit (34th Conference on Weather Analysis and Forecasting, 30th Conference on Numerical Weather Prediction, 32nd Conference on Severe Local Storms, 25th Conference on Planned and Inadvertent Weather Modification, 22nd Conference on Mountain Meteorology, 17th Conference on Cloud Physics/17th Conference on Atmospheric Radiation, Eighth Conference on Weather Warnings and Communication)	Madison, WI

Named Sessions

STAC plays an important role with named sessions at conferences and symposia. 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."

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. There will be one named session at the 2026 AMS Annual Meeting and two named sessions at 2026 specialty meetings:

2025 named sessions

Named Session	Hosted by:
2026 Annual Meeting, Houston	
John Zack: Remembering a Lifetime of Contributions to Energy Meteorology	17th Conference on Weather, Water, Climate, and the New Energy Economy
2026 specialty meetings	
From Tropics to Extratropics: Exploring Cyclone Dynamics in Current and Future Climates in Memory of Jenni Evans	37th Conference on Hurricanes and Tropical Meteorology

Frank D. Marks, Jr. Special Session on Tropical Cyclone Research and Operations Progress	37th Conference on Hurricanes and Tropical Meteorology

Named Symposia

The Named Symposium is a higher and more distinctive level of recognition than the Named Session. It is normally a one-day event consisting 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 Jen Ives by May 1 of the year prior to the next Annual Meeting, or at least 18 months before the proposed event.

Named Symposia will be held in recognition of Roger Wakimoto, Richard Stolarski, and Rafael L. Bras at the 2026 AMS Annual Meeting. Named Symposium are being planned in recognition of George Kiladis, David Randall, and Antonio Busalacchi at the 2027 AMS Annual Meeting.

Requests for Meeting Funds (Program Chair Funds)

The Program Chair of each AMS-sponsored Conference or Symposium can request up to $2000 to support student awards, student presenter travel allowance, 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). Routine requests are approved by the AMS Meetings Coordinator while those requests requiring closer examination are reviewed by the STAC Commissioner.

STAC Board and Committee Awards

In 2025, STAC offered the eighth instance of its annual award opportunity for STAC-Level Awards in accordance with the Terms of Reference approved by the AMS Council: https://www.ametsoc.org/index.cfm/stac/chair-member-information/awards/stac-board-and-committee-awards/

These awards recognize individuals whose outstanding contributions further the goals of the disciplines represented across STAC boards and committees. The process can be found on the STAC webpage, under the “Chair & Member Information” link or at STAC Level Awards. There are three types of awards for which each B/C can submit a nomination:

- Outstanding Early Career,

- Distinguished Scientific/Technological Accomplishment, and
- Outstanding Service

In fall 2025, sixteen STAC B/Cs took advantage of the annual STAC-Level Award opportunity. Fifteen of the original submissions were approved by the STAC Commissioners. The other submission was rejected because the proposed recipient had already received a Society-level award for the same contributions; however, this B/C submitted a second nomination for consideration, which was then approved by the STAC Commissioners. The awards are listed in the table below, the majority of which will be presented at the 2026 Annual Meeting; past awards are posted at https://www.ametsoc.org/index.cfm/stac/chair-member-information/awards/.

A full list of 2026 STAC-Level awardees is provided below. ***Italicized and underlined entries indicate awards for which the Board or Committee does NOT wish to make publicly known at this time - please do not share details of these awards with the awarded individuals.***

2026 STAC-Level Awards

Award Type	Recipient	Citation	Board/Committee
STAC Outstanding Early Career Award	Seth Bushinsky	For improving understanding and measurement capabilities of air-sea gas fluxes and their impact on ocean biogeochemistry.	Committee on Air-Sea Interaction
	Dr. Jane W. Baldwin	For leading the AMS's Conference on Environment and Health and pioneering cross-disciplinary research on extreme heat's health impacts.	Board on Environment and Health
	Dr. Chenghao Wang	For high-impact urban climate modeling contributions and leadership in advancing science, applications, and community engagement.	Board on Urban Environment
	Dr. Jacob Carlin	For outstanding early-career achievements in radar meteorology that have advanced the scientific community's understanding of weather radar polarimetry, microphysics, and data assimilation.	Committee on Radar Meteorology
	Shiv Priyam Raghuraman	For advances in understanding of Earth's radiative forcings, feedbacks, and spectral signatures.	Committee on Atmospheric Radiation

	Alicia Bentley	For contributions to the National Weather Service's operational model verification system and forecast evaluations.	Committee on Probability and Statistics
	Brice Coffer	*For outstanding contributions to basic and applied research relevant to supercell thunderstorms and tornadoes.*	*Committee on Severe Local Storms*
Distinguished Scientific/Technological Accomplishment Award	Dr. Richard Eckman	For advancing the observation, understanding, and modeling of atmospheric composition and its role in the Earth System.	Committee on Atmospheric Chemistry
	Siegfried Raasch	For lifelong dedication to numerical innovation, rigorous scientific modeling, and global knowledge-sharing in boundary layers and turbulence.	Committee on Boundary Layers and Turbulence
	George H. Bryan	For enabling mesoscale meteorology advances through creating, maintaining, and updating an open-source numerical weather prediction model for idealized studies of atmospheric phenomena.	Committee on Mesoscale Processes
	Dr. Paul DeMott	*For distinguished scientific accomplishment in aerosol-cloud research through innovative laboratory measurements and sustained instrumentation development benefitting the community.*	*Committee on Planned and Inadvertent Weather Modification*
	Michael M. Bell	*For advancing understanding of the physics and dynamics of the tropical atmosphere through extensive scientific and community leadership.*	*Committee on Tropical Meteorology and Tropical Cyclones*
STAC Outstanding Service Award	Jen Henderson	For dedicated service to the societal impacts community, including promotion of the AMS Board on Societal Impacts.	Board on Societal Impacts

	Eric deWeaver	For visionary leadership in climate research, fostering fundamental science, and cultivating a collaborative, inclusive scientific community.	Committee on Climate Variability and Change
	Dr. Meg Fowler	For outstanding leadership and service to the Committee on Hydrology, the AMS, and the broader hydrology community.	Committee on Hydrology
	Sherrie S. Morris	For outstanding management, coordination, and organization of conferences, networking, and community engagement in the SATMOC Committee.	Committee on Satellite Meteorology, Oceanography, and Climatology (SATMOC)

STAC Support to AMS Annual Awards

The STAC Commissioners and B/Cs are responsible for making recommendations to the AMS's Awards Oversight Committee (and ultimately AMS Council) for twelve Society-level awards:

Award	**Responsible B/C (and Commission)**
The Charles L. Mitchell Award	WAF (STAC)
The Award for an Exceptional Specific Prediction	WAF (STAC)
The Francis W. Reichelderfer Award	WAF, BOGM, Coastal Environment, Hydrology (STAC and Professional Affairs)
The Helmut E. Landsberg Award	Board on Urban Environment (STAC)
The Award for Outstanding Achievement in Biometeorology	Board on Atmospheric Biogeosciences (STAC)
The Robert E. Horton Lecturer in Hydrology	Committee on Hydrology (STAC)
The Bernard Haurwitz Memorial Lecturer	Committee on Atmospheric and Oceanic Fluid Dynamics, Committee on Middle Atmosphere, Committee on Climate Variability and Change (all STAC), and the STAC Commissioner
The Walter Orr Roberts Lecturer in Interdisciplinary Sciences	STAC Commissioners and two at-large members

The Syukuro Manabe Climate Research Award	Committee on Climate Variability and Change (STAC) plus three at-large members selected by the STAC Commissioner
The Banner I. Miller Award	Committee on Tropical Cyclones and Tropical Meteorology (STAC)
The Joanne Simpson Tropical Meteorology Research Award	Committee on Tropical Cyclones and Tropical Meteorology (STAC)
The Award for Outstanding Contributions to Boundary-Layer Meteorology	Committee on Boundary Layers and Turbulence, Committee on Air-Sea Interaction, Committee on Polar Meteorology and Oceanography (all STAC)

The STAC Committee on Applied Climatology also contributes to the selection of the Outstanding Contribution to the Advance of Applied Meteorology Award, which formally resides under the Commission on Professional Affairs. Further, the STAC Commissioner – as a member of the Awards Oversight Committee – contributes to the selection of five additional Society-level Awards: the Special Award, the Award for Outstanding Services by a Corporation, the Charles Franklin Brooks Award for Outstanding Service to the Society, the Cleveland Abbe Award for Distinguished Service to the Atmospheric and Related Sciences, and the Robert H. and Joanne Simpson Mentorship Award.

In 2025, the STAC Commissioner also participated in the Awards Oversight Committee's Eight-Year Review, the final report for which is nearing completion and will be provided to AMS Council under separate cover. Recommendations from STAC informing that report include:

- Endorsing the 2023 *ad hoc* Society Awards Review Committee's recommendation to develop and publish standard rubrics for all Society-level Awards.
- Endorsing the 2023 *ad hoc* Society Awards Review Committee's recommendation to allow self-nominations and anonymize nominator information for the review committees.
- Engage in further efforts to increase nomination counts for all Society-level Awards.
- Revisit and potentially implement the 2019 STAC recommendation to establish a named Society-level Award in atmospheric chemistry.

STAC Best Practices

The STAC Best Practices Document is in its eleventh year of existence. The document combines the Commissioners' past experiences with those of successful STAC B/Cs and is a living document designed specifically for STAC B/C Chairs, Vice Chairs, and members. Its main purpose is to aid STAC volunteers in understanding 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 provides guidance to be fully involved. Each year, the STAC Commissioners review the STAC Best Practices document and update it to improve clarity, to match changes in process, or to add new guidance. No major revisions were made this past year.

STAC Board and Committee Chairs Meetings and Conference Calls

Each year, the annual STAC Chairs and Vice Chairs meeting is held in person and virtually during the AMS Annual Meeting. This meeting will be held on January 25, 2026 for the 106th Annual Meeting in Houston. Topics planned for discussion at this meeting include B/C engagement amidst uncertain times, the future of specialty meetings, conference/symposium/workshop sponsorship support, and B/C membership and leadership selection processes.

We also held two virtual meetings with STAC Chairs and Vice Chairs in 2025, one each in February and May, both of which focused on the changing federal landscape and how it was impacting and could impact B/C activities. Our planned fall meeting was replaced by an extra newsletter due to the prolonged federal government shutdown.

STAC Newsletters

The STAC Newsletter is issued quarterly (or nearly so) to keep the STAC members informed on STAC-related activities. The newsletters are sent to all STAC members, Council, Commissioners, and AMS Staff through the AMS STAC Members Community. Three formal newsletters were disseminated in 2025, one each in February, August, and December, with an additional informal newsletter disseminated in November. Please see: https://www.ametsoc.org/stac/index.cfm/news-reports/monthly-stac-newsletter/.

STAC Support to the *Glossary of Meteorology* (*GoM*)

The *GoM* continues to be an important reference for the Society and global community. STAC B/Cs are actively involved in supporting the *GoM* by providing expert input on requests for new or updated glossary terms. *GoM* Chief Editor Ward Seguin works closely with the STAC Commissioner (who serves as co-Chief Editor) and STAC Chairs as requests for new or revised terms need attention.

This year, a total of 11 proposed changes or additions to the Glossary were received, and one was carried over from last year. Of these 11 terms reviewed, one new term was added to the Glossary, seven existing terms were revised, one suggestion was rejected, and three are still in review. STAC B/Cs reviewed six of these suggestions and are currently reviewing three others. The remaining two were addressed or reviewed by the Chief Editor with the assistance of AMS staff.

The table below summarizes the performance statistics for 2025 and earlier years:

AMS Glossary of Meteorology Summary by Year										
Year	New Suggestions	Carried Forward from Previous Years	In Review	Not yet in review	Added to GOM during year (new and revised terms)	Rejected or Withdrawn	Days in Review		Days Submission to Decision	
							Avg	#	Avg	#
2013	29				12	11	50.5	13	64.8	23
2014	31	6			26	4	75.8	30	101.4	30
2015	18	7			13	2	66.3	13	142.1	17
2016	15	10			14	3	238.6	15	270.8	16
2017	16	8			19	3	142.7	16	177.1	16
2018	50	2			39	4	51.4	39	57.8	41
2019	23	9			24	8	53.3	21	76.9	28
2020	39	1			21	19	41.8	39	47.9	39
2021	29	1			27	2	38.4	29	40.3	29
2022	23	1			22	1	20.3	23	22.3	23
2023	24	1	0	0	22	2	25.6	22	29.2	22
2024	19	1	1	0	14	5	36.9	18	38.7	18
2025	11	1	3	0	7	1	34.4	8	36.8	8

Burn scar was the lone new term added to the Glossary in 2025. The following existing terms were reviewed by STAC Committees, and revisions were submitted to the Glossary: nanotesla, freezing rain, perturbation, standard atmosphere, and ridge/trough. Ball lightning was reviewed and rejected.

The Department of Defense Range Commanders Council is retiring its glossary of environmental terms. A member of the Council approached the AMS asking for some of the terms and their definitions be preserved in the AMS Glossary. Twenty-two terms from the Council's glossary have been added to the AMS Glossary.

Membership Breakdown of STAC Boards and Committees

A detailed analysis of STAC B/C membership is presented in the tables and map below. Based on demographics received for December 2025, STAC has 480 members with an average of 13.3 members per B/C. The STAC Commissioners strongly encourage all B/Cs to have at least one student member, and all but six B/Cs had student members in 2025 – an improvement over the nine B/Cs lacking student members in 2024.

Board/Committee	Chair or Co-chairs	Vice-Chair	Emeritus Chair	Member	Student Member	Grand Total
Agricultural and Forest Meteorology	1			1		2
Air-Sea Interaction	1	1		7	1	10
Applied Climatology	1			4	1	6

Artificial Intelligence Applications to Environmental Science	1	1		8		10
Atmospheric and Oceanic Fluid Dynamics	1	1		5	1	8
Atmospheric Chemistry	1	1	1	14		17
Atmospheric Electricity	1	1		10	2	14
Atmospheric Radiation	2			5	1	8
Aviation, Range, and Aerospace Meteorology	1	1		14	1	17
Board on Atmospheric Biogeosciences	1	1		8		10
Board on Environment and Health	1	1		8	3	13
Board on Environmental Information Processing Technologies	1			9		10
Board on Open Science, Data, and Software	1	1		12	2	16
Board on Societal Impacts	1	1	1	16	3	22
Board on the Urban Environment	1	1		11	2	15
Boundary Layers and Turbulence	1			10	2	13
Climate Variability and Change	1	1		14	3	19
Cloud Physics	1			13	1	15
Coastal Environment	1	1		8	1	11
Hydrology	1	1	1	17	1	21
Laser Atmospheric Studies	1	1		12	1	15
Measurements	1	1		9	3	14
Mesoscale Processes	1	1		10	3	15
Meteorological Aspects of Air Pollution	1	1		2	1	5
Meteorology and Oceanography of the Southern Hemisphere	1			5		6
Middle Atmosphere	1	1		7	1	10
Mountain Meteorology	1			5	2	8
Planned and Inadvertent Weather Modification	1			6	2	9
Polar Meteorology and Oceanography	2			6	1	9

Probability and Statistics	1	1		11	2	15
Radar Meteorology	1	1		12	2	16
Satellite Meteorology, Oceanography, and Climatology	2			10	4	16
Severe Local Storms	1	1		19	4	25
Space Weather	1	1		13	1	16
Tropical Meteorology and Tropical Cyclones	1	1		13	2	17
Weather Analysis and Forecasting	1	1		20	5	27
Grand Total	**39**	**25**	**3**	**354**	**59**	**480**

Member counts by affiliation are shown in the table below. The majority of STAC members continue to be affiliated with academia (40%), although this percentage has been declining in the past several years. In 2025, the percentage of STAC members affiliated with the government dropped from 29% to 22%, with the percentage of STAC members with no provided affiliation increased from 4% to 16%.

Affiliation	Academic	Government	Private Sector	Student	International	Blank	Grand Total
Member count	192	104	13	59	36	76	480
Percentage	40%	22%	3%	13%	8%	16%	--

The December 2025 demographics indicate that members came from 45 states plus Washington DC, with five more states represented than in 2024. The largest member counts are from Colorado (82), California (43), and Maryland (31); please see the map on the next page for details. Most members (442 members or 92%) were from the US, with the remaining coming from seventeen different countries: Australia (3), Benin, Brazil (2), Canada (7), Chile, China (3), Egypt, France, Germany (2), Italy, Japan (2), Netherlands (3), South Africa (3), Sweden, Switzerland (2), and the United Kingdom (4).

US Members

