

AGU SCIENCE POLICY & GOVERNMENT RELATIONS

# GROWING OUR IMPACT 2023



## Amplify the voice of the Earth and space science community



AGU's Voices for Science program is creating the next generation of science policy and science communication leaders equipped to address scientific and societal challenges.

229
Members
participated

2023 is the sixth year of the AGU Voices for Science Program. **229 AGU** members have participated in the program through one of the two tracks, policy or communication. With support from AGU, participants commit to a year of personal and professional growth by setting a personal goal. In 2023, the policy track doubled the size of its UK/EU team.



48

Participants this year



619

Science outreach activities conducted



People reached

This year's 48 participants have conducted over 619 science outreach activities, reaching over 10,455 people.

### **Examples of their far-reaching science policy outreach activities include:**



Several participants are conducting their own science policy workshops to **get their peers involved in science policy advocacy across the country.** They are using their resources and training from AGU to take students to their state capitals to speak directly to legislators.



Several participants have partnered with the media to amplify science policy issues including:

- One participant researching the intersection of conservation and solar in California attended a public hearing on the Gibson Solar Project in Yolo County and submitted statements. This resulted in them being interviewed by the New York Times on their expertise on the topic.
- One of our EU UK participants in Germany was asked to do a live climate interview, has been filmed as an expert on climate issues for a children's television show, and is currently publishing a paper on heat stress on mobility patterns in cities and is working on submitting a policy paper to OECD economists.





### Many participants are engaged in open science initiatives connecting their research to community-level impact. Examples include:

- Working with the Argonne National Lab and University of Chicago to develop tools and trainings to use flood data for community members to enable them to advocate for more investment in climate resiliency strategies in their neighborhoods.
- Partnering with their university's architecture department to figure out how to retrofit mobile homes to reduce storm damage and then using these findings to inform policy changes at the county and state level in Mississippi.
- Enlisting the help of the Northeast Energy Efficiency Partnership (NEEP) communities and their local MAPC, one participant will be hosting a workshop to engage communities in Massachusetts on workforce development in electrification.



After learning that the US Antarctic Program is underfunded and facing challenges, one participant is now leading discussions with other young researchers on funding for the program to increase the visibility of the issue. This has led to deeper discussions with colleagues regarding looking into the impacts on the cumulative impact of COVID and budgetary constraints on fieldwork funding and they are trying to set up meetings with their federal representatives to discuss this issue.



### Participants' impact and growth doesn't stop at the end of the year.

- In 2023, three past participants are serving as Congressional Science Fellows; participants are also participating in other prestigious fellowship programs such as the Sea Grant Knauss Fellowship, the AAAS Science & Technology Policy Fellowship Executive Branch, Women in Science Fellowship, and the 2024 SciComm Identities Project Fellowship.
- Many past participants have deepened their engagement with AGU. Denise Hills currently serves as **Chair of the Position Statement Committee**; Ben Zaitchik is the **Past-President of the GeoHealth section and one of AGU's representatives at COP28**; Shenyue Jiai and Kristina Barowitz currently represent their respective sections on the **Fall Meeting Program Committee**.



#### AMPLIFY THE VOICE OF THE EARTH AND SPACE SCIENCE COMMUNITY



AGU's Local Science Partners enable AGU to more effectively illustrate how AGU sciences and policy priorities are relevant to each Congressional district and member of Congress.

Partners seek to build relationships with their legislators to increase the credibility, salience, and legitimacy of our sciences.





30 States



318

Legislators engaged

In its second year, AGU's Local Science Partners grew to **65 participants from 30 states** representing diverse scientific disciplines, career stages, and backgrounds.

**Partners engaged their legislators 318 times,** including conducting 65
Congressional visits at our June workshop.



Serving as an AGU Local Science Partner has led to members being asked to provide feedback on legislation, serve on a local advisory board for the member of Congress, and hosting a Representative at a university lab.





AGU is dedicated to ensuring that all our members have the ability and skills to develop sustainable partnerships with their policymakers at all levels.

1100+

Times AGU members contacted their legislators

37

Policy trainings, workshops, and webinars for 966

Members of the AGU community

AGU's online grassroots platform ensures that all U.S. based scientists can engage their legislators on critical science policy issues. **AGU members contacted their legislators over 1100 times.** 

As of October 2023, AGU has hosted over **37 policy trainings, workshops, and webinars for 966 members of the AGU community**. Our content is constantly expanding to serve a broader swath of our membership, such as holding a Science Policy 101 session at the 2023 Chapman on Climate Change and Health.







## Provide trustworthy information for policymakers



AGU partners with policymakers to ensure legislation reflects scientific consensus and the needs of the science community.

AGU responded to requests from congressional offices and committees by providing feedback on nine pieces of legislation:

- 1 Commercial Space Act of 2023
- 2 FAA Severe Turbulence Research and Development Act of 2023
- 3 Fiscal Year 2024 Appropriations
- (4) <u>National Oceanic and Atmospheric Administration Act of 2023</u> (House version)
- 5 National Oceanic and Atmospheric Administration Act of 2023 (Senate version)
- (6) <u>National Weather Service Communications Improvement Act</u>
- 7 NOAA Weather Radio Modernization Act of 2023
- (8) <u>Tsunami Warning and Education Act</u>
- 9 Weather Act Reauthorization Act of 2023

One example of the strength of AGU's reputation is the inclusion or representation of AGU's perspective in legislation and policy. Here are a few examples of AGU shaping policy in 2023:



In Fiscal Year 2024 appropriations meetings, AGU shared with House and Senate appropriators the community's concerns about:

- NSF's decision to cease operating **JOIDES Resolution** (part of the International Ocean Discovery Program (IODP)) after 2024. In response, both the House of Representatives and Senate appropriations bills contained language requiring NSF to fund the mission in 2024 and provide a strategy for the future of U.S. scientific ocean drilling.
- The need for OSTP to reconvene the Microbiome Interagency Working Group to update the Interagency Strategic Plan for Microbiome Research through OSTP. In response, the Senate expressed support for the interagency group and encouraged them to update the strategic plan.

#### PROVIDE TRUSTWORTHY INFORMATION FOR POLICYMAKERS



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- NASA's decision to indefinitely delay the launch of the Venus Emissivity, Radio Science, InSAR, Topography, and Spectroscopy [VERITAS] mission. In response, the Senate asked for an updated budget profile and schedule for the mission, while the House directed NASA to develop a plan to launch the mission by the end of the decade.
- NASA's decision to pause the development of **Dynamic Neutral Atmosphere-Ionosphere Coupling (DYNAMIC) mission and the Geospace Dynamics Constellation (GDC)** within the Heliophysics division due to cost concerns in other science mission areas. In response, the Senate provided \$54 million above the President's budget request to support the continued development of both missions.



### AGU also shared key priorities for the National Oceanic and Atmospheric Administration Act of 2023 (Senate version):

AGU comments regarding **broadening participation in STEM education** opportunities offered by the agency, the need for the National weather service to **work with social scientists and communication professionals to assess public understanding of weather warnings**, and the need for the Ocean Research Advisory Panel to advise on matters relating to the **ethics of climate intervention** were included in the bill.



### **Tsunami Warning and Education Act**

AGU community feedback concerning the inclusion of data inputs from the global navigation satellite system (GNSS) network, the addition of NASA as a key stakeholder and collaborator, and the incorporation of tsunami notifications and warnings in the USGS Earthquake Early Warning System were all included in the bill.



#### Weather Act Reauthorization Act of 2023

AGU recommendations for enhancing the timeliness of getting satellite data into weather models, as well as improving atmospheric river forecasting capabilities, were included in the bill.





### AGU supported 71 members to conduct 129 meetings with members of Congress during **AGU Congressional Visits Days.**

Members

Meetings with Members of Congress



All members received training and coaching on how to effectively communicate with their legislators and connect their science to policy. Members talked to their legislators about a wide variety of issues including funding for research and STEM education, local climate and hazard impacts, critical minerals, and geoscience workforce issues.



Multiple participants in congressional visits days with AGU have told us that the experience inspired them to participate in AGU's Voices for Science or Local Science Partners programs, join science policy groups at their university or institution, or pursue science policy fellowships or careers.

### AGU is working to ensure its policy agenda reflects the most current science and serves the global scientific community.

- AGU's policy position statements are the bedrock of AGU's policy goals. Statements provide scientific expertise on significant policy issues related to the Earth and space sciences. Statements have been used by policymakers and the press in policy discussions.
- AGU released the translation of two of its most recently updated position statements. AGU's statements on The Nuclear-Test-Ban Treaty and Resilience. Statements are now available in Chinese, French, Hindi, Portuguese, and Spanish.
- Additionally, AGU's Board and Council approved the updated position statement on Climate Intervention and the first statement on GeoHealth. Translations of these statements will be available in 2024.
- To build stronger relations with non-US governments, AGU staff have done significant outreach to embassies in DC, with the goal of introducing and inviting engagement with AGU.
  - Embassies engaged include Argentina, Italy, United Arab Emirates, New Zealand, Iceland, Germany, Senegal, Austria, Japan, Nigeria, Egypt, Tanzania, Kenya, and Tunisia, as well as other international entities such as the Subsidiary Body for Scientific and Technological Advice (SBSTA), the United Nations Foundation Association, United Nations Environment Program and the U.S. Embassies in Tokyo and Vienna.
- In June 2023, the Chapman Meeting on Climate and Health for Africa (held in DC), broadened our targeted outreach with local embassies to engage and invite the African embassies to AGU HQ for the event.
  - We presented on global science policy at the event. There was wide-spread support from all African nations engaged for the Chapman, and the Senegalese Embassy invited some of the Chapman attendees to a reception at the Embassy with their Science Attache.

## Increase the inclusion of science into decision-making



AGU was asked by Congressional offices and committees to endorse nine pieces of legislation. Requests for endorsements and support illustrate AGU's growing bipartisan influence and partnerships on Capitol Hill.

### AGU supported or endorsed the:

- (1) <u>Comprehensive National Mercury Monitoring Act</u>
- 2 FAA Severe Turbulence Research and Development Act of 2023
- 3 Mercury 13 Congressional Gold Medal Act
- 4 National Weather Service Communications Improvement Act
- 5 NOAA Weather Radio Modernization Act of 2023
- Preparedness and Risk management for Extreme weather Patterns Assuring Resilience (PREPARE) Act
- 7 Relieving Economic Strain to Enhance American Resilience and Competitiveness in Higher Education and Research (RESEARCHER) Act
- 8 Tsunami Warning and Education Act
- (9) <u>Weather Act Reauthorization Act of 2023</u>





Since 1978 AGU has sponsored a Congressional Science Fellow. Fellows are placed in a Congressional office or committee for one year and receive invaluable training and experience in science policy. AGU's current fellow Devon B. Gorbey is working in the office of Senator Heinrich (D-NM).

Many former fellows continue to advance science policy long after their tenure. A few current examples include:

- Professional Staff for the House of Representatives Energy and Commerce Committee
- Water Policy Advisor at United States Agency for International Development (USAID)
- Associate Director of U.S. Plastics Policy at the Ocean Conservancy
- Special Assistant to the President & Deputy Domestic Policy Advisor to the Vice President

Additionally, AGU's science policy internship program supports up to four student and early career AGU members interested in science policy each year. The internship serves as an important introduction to the world of science policy for AGU interested in this career path.

Many interns discover their passion for science policy and continue to ensure science is part of the policy conversation. Past AGU interns now serve in roles including:

- Government Relations Manager at the University Corporation for Atmospheric Research (UCAR)
- Deputy Director for Water Infrastructure at the White House Council on Environmental Quality
- Program Officer for Climate Crossroads at the National Academy of Sciences, Engineering, and Mathematics (NASEM)
- Head of the American Battery Materials Initiative at the Department of Energy (DOE)



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Student and early career AGU members supported through science policy internship program

## **Broader Global Outreach**



The timing of the launch of the <u>Ethical Framework for Climate Intervention Research</u> aligned well with AGU's growing recognition with international and intergovernmental entities, including the United Nations Framework Convention for Climate Change.



After UNFCCC COP27, to build stronger relations with non-US governments—AGU staff began significant outreach to embassies in DC, with the goal of introducing AGU and inviting engagement with the Ethical Framework. Embassies engaged include Argentina, Italy, United Arab Emirates, New Zealand, Iceland, Germany, Senegal, Austria, Japan, Nigeria, Egypt, Tanzania, Kenya, and Tunisia, as well as other international entities such as the Subsidiary Body for Scientific and Technological Advice (SBSTA), the United Nations Foundation Association, United Nations Environment Programme and the U.S. Embassies in Tokyo and Vienna.



In addition to the Ethical Framework, the June 2023 Chapman Meeting on Climate and Health for Africa (held in DC), broadened our targeted outreach with local embassies to engage and invite the African embassies to AGU HQ for the event. There was wide-spread support from all African nations engaged for the Chapman. The Senegalese Embassy invited some of the Chapman attendees to a reception at the Embassy with their Science Attaché.

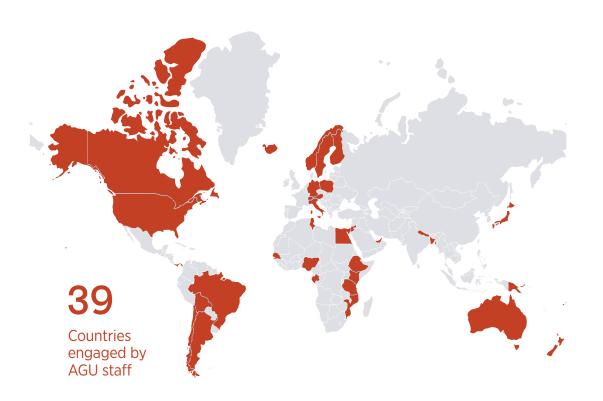


In June 2023 in Bonn, Germany, the UNFCCC convened their Subsidiary Bodies to prepare for the COP28 meeting in Dubai. AGU's President, Lisa Graumlich was invited to speak at an official side event focused on Ocean-Carbon Dioxide Removal and highlighted the importance of environmental justice in an ethical framework for CDR research, experimentation, and deployment. In addition, AGU conducted 35 bilateral meetings with multiple countries and organizations.



AGU will be engaging at the more regionally focused events, in addition to the global COP, to communicate the ethical framework initiative to new audiences, while also leveraging the opportunity to build new relationships with governments, organizations, and individuals who are mission-aligned and could lead to new opportunities and partnerships moving forward. For example, in September, AGU was an invited partner to with ECOP (Early Career Ocean Professional) Africa's official side event at Africa Climate Week and Summit, where Lisa Graumlich provided remarks.





### In 2023, AGU staff engaged with the governments of 39 countries, including:

Argentina	Germany	Nigeria
Australia	Grenada	Norway
Austria	Papua New Guinea	Panama
Bangladesh	Iceland	Poland
Bolivia	Indonesia	Senegal
Brazil	Israel	Singapore
Canada	Italy	Sweden
Chile	Japan	Switzerland
Egypt	Jordan	Tanzania
Ethiopia	Kenya	Tunisia
Fiji	Mozambique	United Arab Emirates
Finland	Nepal	USA
Gabon	New Zealand	Vatican