



# Making Waves

News for Alumni and Friends of Atmospheric & Oceanic Sciences • Fall 2023



## STORM: Undergraduate Research Experience

The Student Training in Oceanography, Remote Sensing, and Meteorology (STORM) REU is shaping the next generation of leaders in climate, weather, and water research

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# A Letter from the Chair

Ankur Desai, AOS Professor and Chair



*This year the department celebrated its 75th anniversary with more than 200 guests. Here, I excerpt those remarks with everyone:*

Though the history of meteorology at UW goes all the way back to UW's founding, it was 80 years ago that a university committee recommended expansion of the then fledgling meteorology program. A few years later, Reid Bryson was appointed assistant professor of meteorology in the Geography department and he went to work to establish a separate department in Science Hall, the Department of Meteorology, in 1948, 75 years ago, the event we are here to celebrate today, and most importantly to look toward the next 75.

It's worth thinking a bit about the world in 1948, a world rebuilding after the war. The Berlin airlift resolved a Soviet-led blockade, a harbinger of the Cold War to come. Gandhi was assassinated, and India was partitioned, and the post-colonial world was emerging in fits and starts. The state of Israel was formed and immediately attacked by its neighbors. In the U.S., Harry Truman defeated Thomas Dewey for president, despite the prematurely printed "fake news". Truman went on to integrate the armed forces, while the groundwork for a global civil rights movement was being laid by activists and the oppressed everywhere, and the United Nations approved the Universal Declaration of Human Rights. Bell Labs announced the invention of the transistor while the first implementation of random access memory in a computer

was tested, inventions for which our discipline are infinitely indebted to. Two years later the National Science Foundation was formed, unleashing an explosion of basic research for societal good. The city of Madison had around 90,000 people and the world 2.5 billion. With the GI bill, postwar enrollment was booming at UW, reaching 15,000 by 1956, the earliest year I could find.

For the 12 month periods ending in August 1948, global average temperature was not majorly different from the 1910-2000 average of 13.9 C or 57 F, and CO<sup>2</sup> concentration was 311 ppm.

By our 50th anniversary in 1998, Meteorology had already changed its name to Atmospheric and Oceanic Sciences six years prior and had noted in the decade prior to that the milestone of having the world's largest graduate program in meteorology. While the 19 faculty at the time were all men as were most of the students, a few milestones had been passed in changing the face of our field. In 1967, UW hired Dr. Charles Anderson, the first African-American to earn a PhD in meteorology, and who later went on to chair our department while also helping establish the African-American studies department. Our first Asian faculty member, Dr. Pao Wang, was hired in 1980 and the first woman, Dr. Patricia Pauley, in 1985.

Today, things look a little different. Our 18 faculty are 7 women and 5 minorities. Our undergrad majors and graduate students are 53% women and 25% non-white. Madison has grown along with the world of 7.8 billion and a city of 270,000 people and a campus with 50,000 students, wow. The climate has changed. Our global average temperature is 1 C above the 20th century average, at

14.9 C or 59 F, the highest human civilization has ever seen, as CO<sup>2</sup> has risen 35% to 420 ppm, the highest in a million years.

Our more than 2,200 alumni are all over the world. Weather and climate prediction and projection are major industries with both private and public sector investment of billions of dollars annually. Our alumni work in nearly every sector of the economy, from agriculture, energy, insurance, manufacturing, and environmental prediction to policy, conservation, consulting, sales, sports, finance, education, and so on. Our faculty, along with students and staff, are training the next generation, with new programs like our STORM research experience for undergraduates that is partnering with three minority-serving institutions, to our recent internship-based Professional Master's program whose graduates are in high demand. They are also pushing the boundaries of research. Our research saves lives, protects the vulnerable, helps insulate the world from the growing number of multi-billion dollar disasters from extreme weather events and refines or revolutionizes fundamental theories of our fluid atmosphere and oceans, and their relationships to the biosphere and cryosphere.

And we're going to be needed more. UW chancellor Mnookin has placed sustainability front and center in priorities for campus investment. Our current president, Joe Biden, has shepherded some of the largest investments ever for climate mitigation and research.

The private weather sector is booming and requires employees with better understanding of global markets, international politics and culture, and

multiple modes of communication. The burgeoning impacts of a rapidly changing climate by humans are being felt, directly by the most vulnerable. Understanding the shape and impacts of that change and its intersections with the fault lines of that vulnerability across race, gender, income, and nationality are only going to broaden, requiring us to seek justice first. Meanwhile the pandemic taught us that good science alone is not enough to get the world to act, as we also need to learn to counter the narrative of misinformation, to thrive in our democracy, if we can keep it.

Where will the world be over the next 75 years? I have no idea. If we don't act soon on fossil fuel emission reductions, the world could be 3 C or 5.4 F warmer, temperatures not seen in hundreds of thousands of years. For sure, the air we breathe and the oceans and land that sustain us here, and maybe on other planets by then, will still need to be stewarded, studied, and shared. I hope my children and their children find a world of their choosing that advances by science and justice on a planet that is habitable and thriving, and locally still loaded with cheese curds. I hope that AOS and its future students, staff, faculty, and alumni are still a world-leading part of that conversation.

I hope the memories you made or are making here provide you a lifetime of joy and resolve. And of course, I hope some of you consider giving back with your support, financially or with your time, so that our current students can also build those memories.



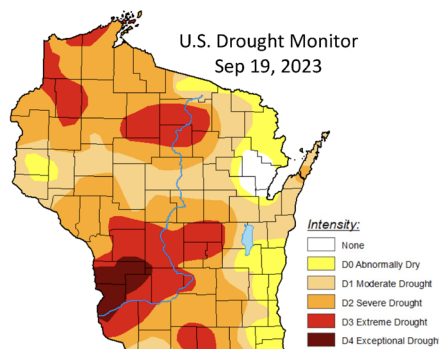
-Ankur Desai

# A Note from the State Climatology Office

Steve Vavrus, SCO Director

2023 has been a remarkable year for weather in Wisconsin and fortuitous timing for the revitalization of the State Climatology Office. The most noteworthy event was the exceptional drought, which was unusual in several ways

- First, the drought was preceded by Wisconsin's wettest meteorological winter (Dec-Feb) and wettest start to a year (Jan-Apr), based on records dating back to 1895.
- Second, this year's drought emerged incredibly rapidly, comparable to the onset of severe drought conditions in southern Wisconsin during 2012.
- Third, unlike many previous summers with major drought, extreme heat was mostly modest until late in the season.
- Fourth, the combination of a persistent circulation pattern accompanying the drought and record Canadian wildfires led to repeated episodes of extremely smoky air.
- Fifth, the magnitude of this year's drought statewide was the greatest since the U.S. Drought Monitor (USDM) began in 2000.

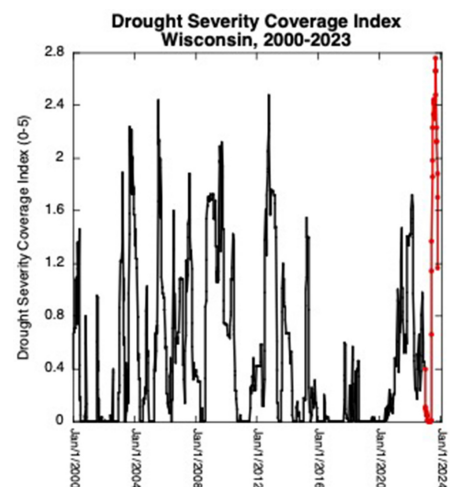


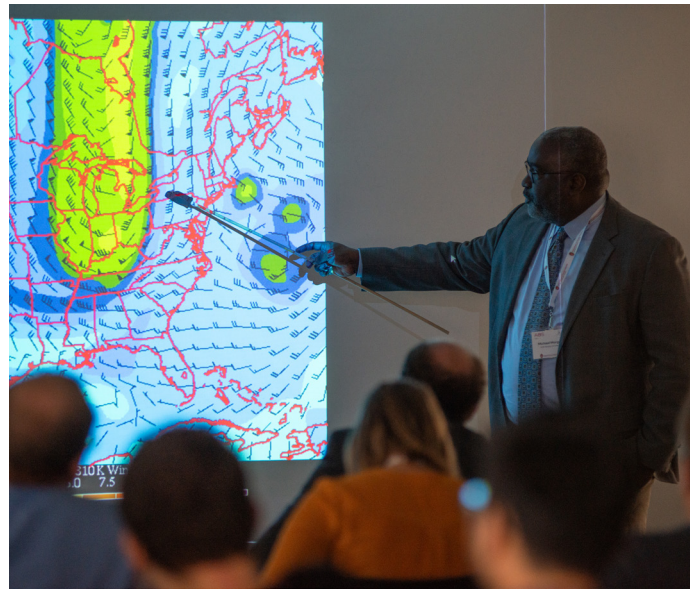
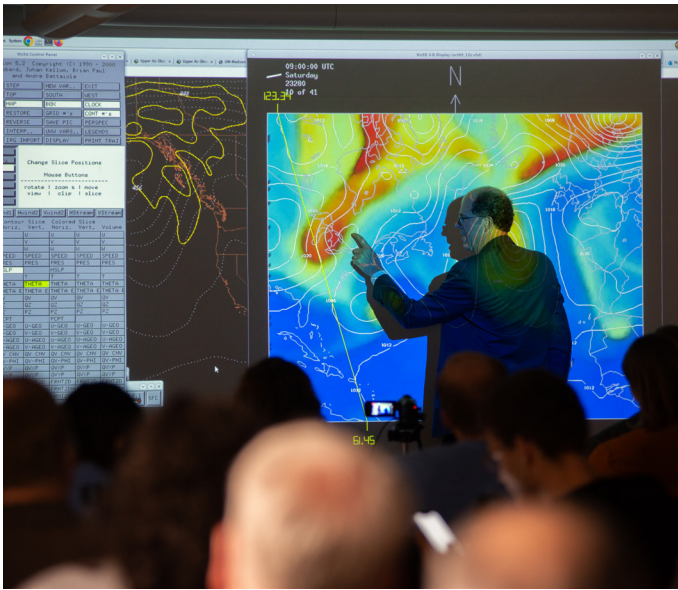
Drought was the furthest thing from our minds in April after the record-wet start to the year, but hydrological whiplash immediately ensued and led to Wisconsin's 3rd-driest May-June on record. The dryness continued and resulted in the state's 5th-driest meteorological summer (June-August). Even the severe droughts of 1988 and 2012 had more summer rainfall. In fact, the last time Wisconsin endured such a dry summer was nearly 50 years ago (1976), and before that were two summers (1933 and 1937) during the Dust Bowl. Most of Wisconsin received only 50-75% of average summer rainfall, while the southwest was even drier at 25-50%.

The term "flash drought" was invented to describe conditions like this year's. When the dryness took hold in mid-May, none of the state was classified in any drought category by the USDM.

Yet by mid-June everywhere in Wisconsin was categorized as at least "abnormally dry," and some regions were already in "severe drought."

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## AOS 75th Anniversary

AOS held its 75th-anniversary celebration on Friday, October 6, at the Deluca Forum in the Discovery Building and an open house earlier in the day at the AOSS building.

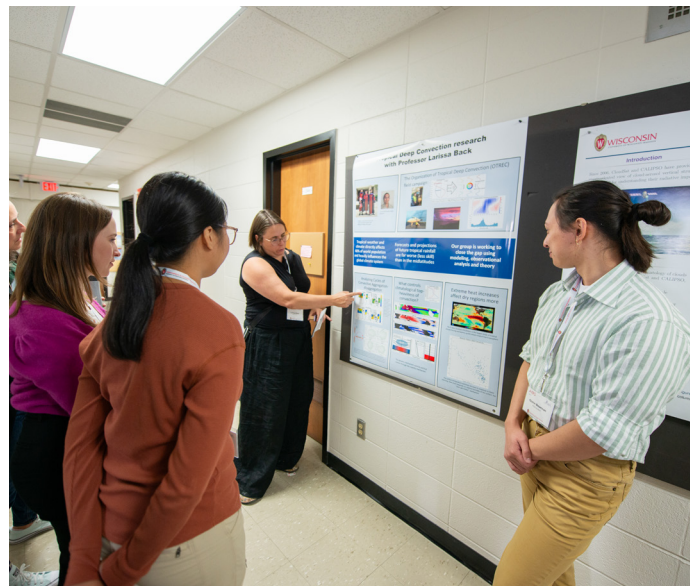
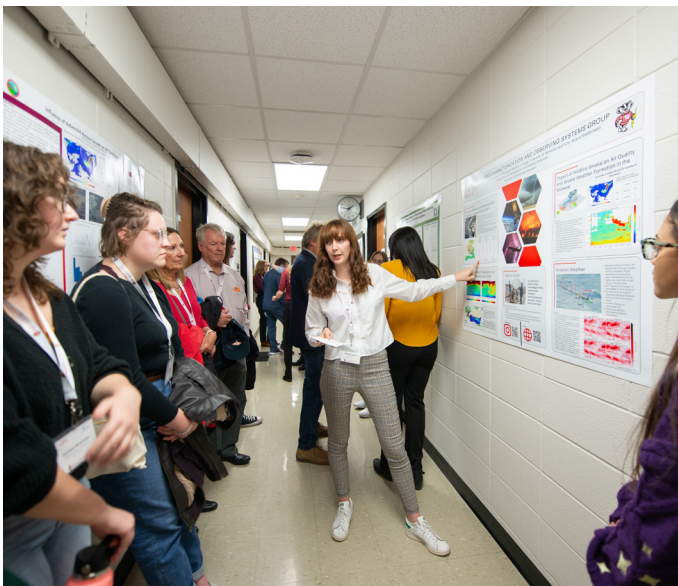
On behalf of the department, we would like to share our sincerest thanks and gratitude to everyone who joined us – and those who couldn't attend but did so in spirit – for these special events. We truly had a blast and hope you did, too. It was so great to see the AOS community of alumni, students, faculty and staff, colleagues, and supporters come together in celebration.

Many thanks to the 75th-Anniversary Committee, volunteers from the Graduate Student Association and AMS student chapter, and the voluminous efforts of AOS faculty, staff, and students.

Here's to the next seventy-five years!

On, Wisconsin!

Photos by Yingshun Sun and Christi Balas Levenson





# Summer STORM Season

Hannah Zanowski, AOS Assistant Professor



When I was an undergraduate student, the thought of reaching out to a professor and doing research with them was horrifying. I was painfully shy. I was also convinced that I needed to be able to do everything right and know everything before starting research because I didn't want to look stupid in front of people who were so smart. Luckily for me, I stumbled across a good mentor and ended up doing research that would lead me to where I am today.

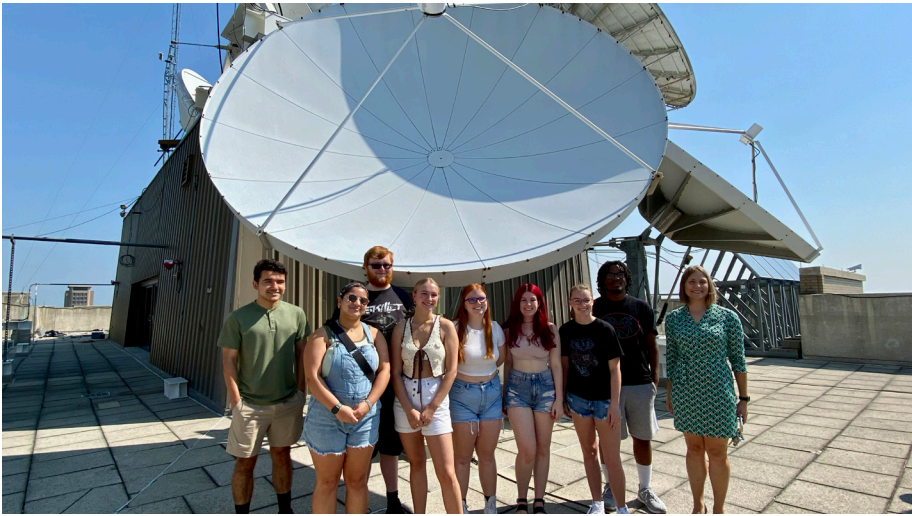
Since then, I have learned over and over again that this fear is common for many students, and they often don't find good mentors. Reaching out to faculty and finding a research experience is hard, especially when you look different or are not accustomed to academia's cultural norms. So, two years ago when several faculty members floated the idea of running a pilot summer research program for undergraduates, I jumped at the chance to lead it. Was this foolish?

Absolutely! But the nice thing about not knowing what lies ahead is that you can't be scared of the overwhelming amount of work that awaits you.

And so, with a lot of hard work during the 2021-2022 school year, the AOS Summer Research Program humbly came to life. With a team of amazing graduate students, I developed a 10-week summer program that provided a mentored research experience in atmospheric and oceanic sciences in addition to professional development activities and other social activities for five undergraduate students from across the U.S. and Puerto Rico. The program was generously funded through faculty grants with additional help from SSEC and CCR. With over 100 applicants, it was difficult to narrow the pool down to the final five students, but we were thrilled with our first cohort. We learned a lot through trial and error that first summer, and we made a lot of mistakes, but the

end-of-program feedback from the students was overwhelmingly positive.

I then set my sights higher, and in a glorious moment at the Chocolate Shoppe accompanied by Professor Ángel Adames-Corraliza, I came up with STORM, the acronym that would convince me I could turn our small summer program into something more sustainable. STORM stands for Student Training in Oceanography, Remote Sensing, and Meteorology. With the help of our fearless department chair (and now my co-Principal Investigator), Ankur Desai, I wrote a proposal to the National Science Foundation (NSF) to make STORM an official Research Experiences for Undergraduates (REU) site in the AOSS building. My goal with STORM was to bring together faculty and scientists from across AOS, SSEC, CIMSS, and CCR to mentor undergraduate students in research areas that are these programs' strengths.

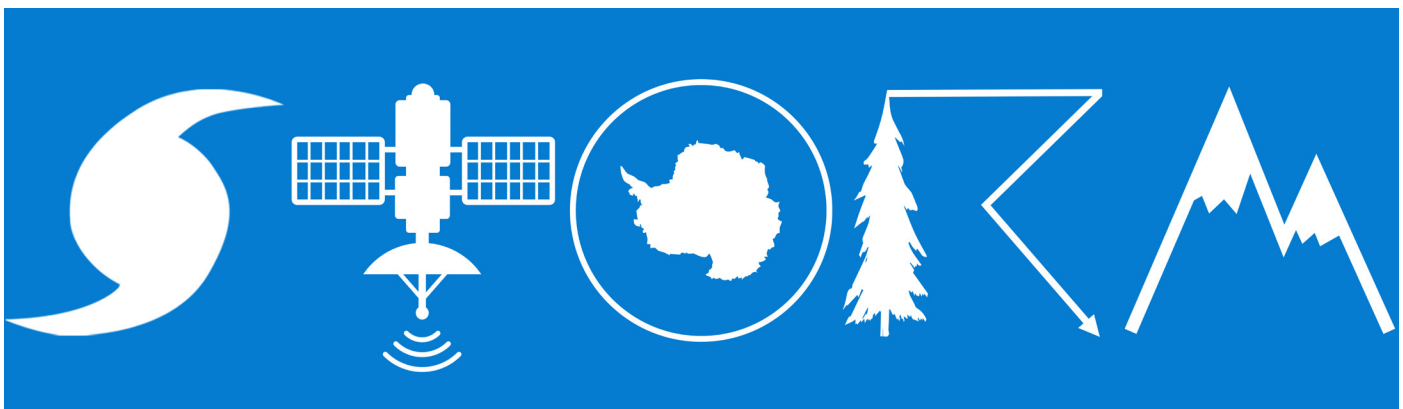


In late January 2023, we received word that NSF decided to fund STORM and were given the green light to recruit our first cohort. STORM is the first official, NSF-funded REU site in the AOS department's 75-year history. It will run for three years (2023-2026) and support ten students each summer to come to Madison to work on cutting edge research projects that span the atmospheric and oceanic sciences while developing critical skills that will serve them in a variety of STEM careers. A key goal of STORM is to create a more diverse STEM workforce through dedicated recruiting at minority-serving institutions (MSIs) and by providing a first or near-first research experience for students who might not otherwise have such opportunities.

This past summer was a whirlwind. STORM students got a chance to dig into all sorts of research, from examining extreme precipitation events using data from a recent field campaign in Taiwan with Professor Angela Rowe, to understanding extreme nighttime heat events in Madison from a social and environmental justice perspective with Professor Dan Vimont and collaborators at the Wisconsin Department of Health Services. They got to know their faculty and graduate student mentors through a number of events including building-wide research flash talks. They learned how to write code in Python and participated in career panels with speakers from TV, industry, and academia. They launched a weather balloon on the AOSS rooftop and took a field trip to the National Weather Service in Milwaukee. They participated in introspective activities

about mental health, identity, and envisioning the future. They attended the grad fair at Union South, where they learned about graduate school opportunities at UW-Madison. They presented the results of their work twice at the end of the summer, as ten-minute oral presentations to the department and in a poster session at the Wisconsin Institute for Discovery. They did a ton – and absolutely crushed it!

None of this would be possible without the time, effort, and dedication of an enormous number of people in the AOSS building beyond our science mentors, including our departmental administrators, IT staff, and the village of students who are truly the backbone of STORM and what makes it great. From hosting coding office hours and running professional development workshops, to mentoring undergraduate students and creating our awesome program logo, our graduate students in particular have helped STORM go from idea to reality, and I am deeply grateful for that. Preparations for summer 2024 are already well underway, and we are excited and committed to further improving the STORM experience for next summer's cohort, all while keeping sight of what matters most: we work with and uplift undergraduate students today so that tomorrow they can take the world by STORM.



## New Staff at AOS

### **Sabrina Manero** **Academic Advising Manager**

Sabrina Manero (she/her) is the AOS, Geoscience, and Environmental Science Academic Advising Manager. She joined the team in May 2023.

A proud New Englander, Sabrina grew up in Connecticut but has found home in many places: Vermont, Madrid (Spain), Boston, and now, Madison. She completed her BA in English at Tufts University, earned her MA in English at UW-Madison, and is now wrapping up her MS in Environment & Resources as part of the Nelson Institute for Environmental Studies here at UW-Madison. Her MS research is focused on the ethical and cultural nuances of wolf/human coexistence and conflict in the Great Lakes region, with special interest in how the history and rhetoric of wolf management in Wisconsin has evolved between the WI Department of Natural Resources and the Great Lakes Indian Fish and Wildlife Commission. While at UW-Madison, Sabrina has instructed or TA'd seven courses across the English and History of Science departments and is an active member of the Center for Culture, History, and the Environment (CHE). Prior to starting her new position, Sabrina served as an Academic Advisor for SOAR and Academic Advising Intern for L&S Academic Advising Services and the L&S Honors Program for the last three years.

In her free time, Sabrina loves gardening, snowboarding, hiking, knitting, baking, and her cat Minerva. As a serial hobbyist and lifelong learner, she always has several different crafts or interests in her rotation: currently, she's happy to talk your ear off about native pollinators, spinning fiber, watercolors, and locally made ice cream. Above all, Sabrina



strives to cultivate community and support students in pursuing their passions. She's deeply excited to be a part of the AOS community and is currently working on stocking her office with snacks, tea, hot chocolate, and stickers. In her own words: "My favorite thing to learn about people is what makes them light up with excitement and wonder. If you ever need a second opinion, have questions about classes, careers, or life in general – please don't hesitate to reach out, I can't wait to meet you!"

### **Scott Dyke** **Communications Specialist**

Scott Dyke (he/him) is the AOS Communications Specialist. He joined the team in November 2022.

Born and raised in Madison, Scott always starts conversations talking about the weather, as any true Midwesterner does. He holds a BS in Psychology from Beloit College and an MS in Environmental Conservation from the Nelson Institute for Environmental Studies at UW-Madison. His master's work culminated in an internship with Rainforest Trust, where he aided efforts to evaluate and

prioritize protected areas for amphibian conservation in Ecuador. Prior to AOS, Scott did communications and fundraising for the Driftless Area Land Conservancy and communications for the UW-Madison Arboretum.

In his role, Scott hopes to share stories that encapsulate the impact of AOS. He says, "This department has such a rich history of producing innovative weather and climate science of local and global significance. But what's most exciting to me is the research happening now, courtesy of our talented students and faculty, and I look forward to sharing this work with new audiences. If there's news or a story you want me to amplify, reach out at [communications@aos.wisc.edu](mailto:communications@aos.wisc.edu) – it would be great to connect!"



Outside of work, you can find Scott chasing his young son around the house, walking his dog, Frankie, watching soccer, and spending quality time with family and friends. His favorite season is whenever it's sixty-five degrees and sunny. Scott's office is AOSS 801 – swing by for a chat!



### **(A Note from the Wisconsin State Climatology Office cont.)**

Not even the state's historic droughts of 2012 and 1988 saw a faster flip between excessively wet to excessively dry in the Palmer Drought Severity Index. One reason is that the moisture content of the air was extremely low during May and June.

The arid air masses, frequent wildfire smoke, and tolerable heat during most of the drought can be attributed to a blocking high pressure cell over south-central Canada that emerged during May. Its outflow caused frequent northeasterly winds and blocked the usual influx of moist air masses from the Gulf of Mexico and hot air masses from the Plains. Unfortunately, this circulation pattern was also responsible for importing Canadian wildfire smoke, especially the memorable late-June event that produced the worst air quality

in memory. But a silver lining was a mostly comfortable summer with low humidity and an average temperature only 0.4° F higher than the 1991-2020 normal.

This year's drought not only emerged suddenly, but its severity statewide puts it in historic company with other memorable droughts. The accompanying time series of Wisconsin's "Drought Severity Coverage Index" – an areally weighted measure of the USDM's five drought categories – illustrates that the magnitude of our recent drought (2023 data shown in red) was the greatest since at least 2000. This year was also the first time that any part of Wisconsin reached the maximum "exceptional drought" category (D4). The most widespread coverage was in the southwest during the statewide peak of the drought in mid-September, as shown in the map.

In summary, this year's drought has made it into the record books. Although its magnitude around Madison was arguably bested by the 2012 drought, that event mostly occurred in southern Wisconsin, whereas the 2023 drought was statewide. 1988 is the other most recent historical analog, but that summer preceded the USDM, so direct comparisons are more difficult. Although this year has been a very challenging one for farmers in particular, most crops fared better than expected under the circumstances, due in part to the recent availability of drought-resistant seed varieties. Such adaptation measures may be increasingly needed as a hedge against the uncertain future of Wisconsin's summer rainfall changes in our warming climate.

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## **A New Look at Graduate Orientation and the "Hidden Curriculum"**

**Alicia Hoffman, AOS Ph.D. Student**

The transition from undergraduate education to graduate school can represent a big jump in expectations which students must navigate on their own. Many of the new expectations and policies present barriers to inclusivity and success for students. To help students feel welcome in the AOS department and to prepare them for their graduate careers, graduate students Alicia Hoffman and Zoë Brooke Zibton worked with AOS chair Ankur Desai and department staff to acquire funding from the Inclusive Graduate Education Network (IGEN).

This funding allowed the team to develop and pilot a week-long summer orientation for incoming graduate students. This course was designed

to facilitate a smooth transition into graduate school. Students discuss topics such as networking and mentorship, communication, and dealing with failure and rejection. These components are often called the "hidden curriculum" of navigating the transition to graduate school.

In the summer of 2021 and 2022, Hoffman and Brooke Zibton implemented the new orientation program. They found that students enjoyed the chance to meet each other before the start of classes and benefited from learning about department expectations compared to our traditional half-day orientation. Looking to the future, to make the orientation program sustainable, the group plans to split the

social and educational aspects. Over the summer, the department graduate students will organize get-togethers and networking events within the department so the incoming students can meet folks and feel welcome.

For the educational aspects, the department is now implementing a new graduate seminar (ATM OCN 901: Explorations of AOS) designed by Desai that all incoming students will take in their first semester. The course incorporates the orientation content in a format that aligns with the department expectations for a successful graduate school career.

# Graduate Student Association Update

**Evan Meeker, GSA Facilitator**

The Graduate Student Association (GSA) has had a busy and fruitful year! As the organization representing the interests of graduate students in AOS, we have made sure our voices have been heard throughout the department, as well as hosted a number of events meant to strengthen the AOS graduate student community. This fall we welcomed graduate students to the department through our annual outing to Devil's Lake State Park, as well as the AOS Welcome Picnic. We've also organized trips to go apple picking at Appleberry Farm and pumpkin picking/corn maze-ing at Shuster's Farm. Each year GSA creates and sells the department calendar, and last year over 100 calendars were sold! Stay tuned for this year's calendar sale, which will go out in early December.

On the science side, we've sent representatives to a number of outreach events, including the AOSS open house, UW Science Expeditions, and Madison's Science on the Square. At these events we've had the pleasure to share the basics of atmospheric science with the general public. As the host of the AOS department seminar, we've seen five Master's presentations this year, and have three more scheduled before the end of the semester (good luck to Dan, Yingshun, and Natasha!!). We've also hosted a number of department faculty and graduate students who have shared research updates with us. Finally, GSA extends our congratulations to Dr. Hannah Zanowski, who received the



Graduate Student Association Teaching Award that GSA members vote on every year.

If you are interested in reading more about GSA's goings-on, check out our website at [www.aos.wisc.edu/~gsa/](http://www.aos.wisc.edu/~gsa/), and if you are interested in getting in touch with us, please email the GSA Facilitator at [emeeker2@wisc.edu](mailto:emeeker2@wisc.edu).

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# AMS Student Chapter Update

**Anastasia Tomanek, AMS President**

2023 has been an eventful year for the American Meteorological Society (AMS) student chapter. We started the year by sending ten students to the AMS Student Conference in Denver, Colorado this past January. Participants attended various sessions such as professional wellbeing, career panels, networking, graduate student panels, research tools, programming workshops, and more! We heard a variety of talks about different careers and learned about current research in the field. We have already begun the funding process to send another ten students to the next conference in Baltimore, Maryland at the end of January 2024

February is always a month we look forward to as it marks our annual department-wide Solstice Party. Faculty, staff, graduate students, and

undergraduate students gathered for a nice dinner, skits, and entertainment from the department house band, The Sundogs, which has our very own Jon Martin and Grant Petty! This event took a lot of hard work and months of planning by our amazing officers, but it was great to see the department come together and enjoy an evening of laughs and mingling.

Once the weather started getting nicer, we debuted a new fundraising event, Pie the Meteorologist, in conjunction with our science experiments for the UW-Madison Science Expeditions! We parked a tarp and table in front of the building and enticed those passing by to pie an executive member in the face. We plan to invite some of our professors next time around!

October marked the celebration of the department's 75th anniversary, so of course we had to hop in on the action! We hosted a silent auction fundraiser with various gift baskets with items from local businesses, specially ordered quarter zips with last year's merchandise contest logo, and even a painting and beaded earrings made by two of our very own executive members.

In 2024, our chapter hopes to network with more AOS alumni. If you would like to connect with and possibly speak (in person or virtual) to our undergraduates, we would love to hear from you! Please reach out to Paige Bartels, our vice president/secretary, at [pabartels@wisc.edu](mailto:pabartels@wisc.edu) if you would like to be involved or learn more about what the AMS student chapter is up to throughout the year.

# Professional Master's Update

Kaitlyn Heinlein, Graduate Program Manager

Our Professional Master's program is off to another great start this year! For those who attended the AOS 75th-anniversary celebration, you may have seen our sleek, new office space on the 8th floor, where this year's talented cohort of nine students resides.

Several of these students are focused on careers in operational forecasting, while a few are focusing their interests on climate risk analytics, forensic meteorology, sub-seasonal forecasting

for commodity trading, and even research too. If you know of any summer 2024 internships and/or jobs related to these fields, please reach out to us (profms@aos.wisc.edu). Also, to see where last year's students ended up, check out the Professional M.S. Alumni Profiles page (<https://www.aos.wisc.edu/profms-profiles>).

The AOS graduate program will be hosting a booth at AMS 2024 in Baltimore. We look forward to this

conference and hope to connect with you at the Career Resource and Graduate School Fair and/or the Robock Alumni Reception. Until then, please continue to spread word about our wonderful graduate program!

## Support AOS

Gifts open doors for our students by funding scholarships, travel to conferences, participation in field projects and summer workshops, supplies for classes, and visits by eminent scholars.

We recently celebrated the department's 75th anniversary, and it is because of generous donors to AOS that we have achieved so much and can look forward to the next 75 years

**Scan the QR code to see how you can ensure the continued excellence of our programs and resources.**

Thank you for your generosity and support!



## 2023 Award Winners

### Departmental Student Awards

**Lucas Allen:** Lyle Horn Scholarship Award

**Doreen Anande:** First-Year Student Award

**Emily Berghuis:** Sunkel Scholarship Award

**Cameron Bertossa & Ian Cornejo:** Lettau Award

**Kelton Halbert:** Wahl Award

**Alicia Hoffman:** Student Service Award

**Rosa Vargas Martes:** Bretherton Scholarship Award

**Adrianna Modelska:** Lettau-Wahl Scholarship Award

**Nicolas Sartore:** Ettenheim Scholarship Award

### Faculty Awards

**Ángel Adames-Corraliza:** Vilas Early Career Investigator Award

**Ángel Adames-Corraliza:** NSF CAREER Award

**Grant Petty:** Special Award, AMS Awards and Honors Program (to be presented in 2024)

**Pao Wang (emeritus):** Nikolai Dotzek Award

**Hannah Zanowski:** Graduate Student Association Teaching Award

### Alumni Awards

**Eric Baylor:** NOAA Gold Medal in Leadership

**Kris Bedka:** Nikolai Dotzek Award

**Thomas Delworth:** Presidential Rank Award: Meritorious Senior Professional

**Pam Knox:** Henry T. Harrison Award for Outstanding Contributions by a Consulting Meteorologist, AMS Awards and Honors Program (to be presented in 2024)

**Jim Kossin:** NOAA Silver Medal in Scientific/Engineering Achievement

**Luke Madaus:** AMS Editor's Award

**Tom Skilling:** AOS Alumni Award for Outstanding Achievement (to be presented in 2024)

*\*We apologize for any errors or omissions. If you have been missed, please contact [communications@aos.wisc.edu](mailto:communications@aos.wisc.edu)*



Atmospheric & Oceanic Sciences  
UNIVERSITY OF WISCONSIN-MADISON

# Making Waves

Nonprofit  
Organization  
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UMS



PHOTOS BY TAYLOR WOLFRAM/UW-MADISON

Atmospheric and Oceanic Sciences  
1225 W Dayton St  
Room 849  
Madison, WI 53706

## Annual AMS Alumni Reception

Join us to catch up and connect with our  
AOS community!

**Save the Date**  
**Tuesday, January 30, 2024**  
**7-9 p.m.**

Hilton Baltimore Inner Harbor  
Key 7-8, 2nd Floor

