

EAPS WEEKLY NEWSLETTER

March 11, 2024

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EAPS MEETINGS & EVENTS

[PURDUE CALENDAR 2023-24](#)

[EAPS K-12 OUTREACH CALENDAR OF EVENTS](#)

[REPORT YOUR OUTREACH AND ENGAGEMENT
ACTIVITIES](#)

NEWS/OPPORTUNITIES AT PURDUE

EAPS COLLOQUIA

No seminar this week

[EAPS calendar](#)

EAPS GRAD STUDENT RESEARCH OPPORTUNITIES

If you are interested in an EAPS grad research opportunity, [click here](#) for more information.

MS AND PHD EAPS STUDENTS BROADEN YOUR GRAD EXPERIENCE

For those MS and PhD students in EAPS that would like to broaden their graduate experiences while at Purdue, EAPS is affiliated with the Computational Interdisciplinary Graduate Programs (CIGP) at Purdue. While working toward a graduate degree in EAPS, graduate students can also have a concentration (specialization) in the area of Computational Science and Engineering (CSE). For more information, [click here](#). A short video about the CIGP/CSE program can be found [here](#).

Spring Application Deadline: March 1

Fall Application Deadline: October 1

SAY IT IN 6 (SI16) - PEOPLE'S CHOICE VOTING

Voting for the Graduate School's Say It In 6 (SI16) competition is open! SI16 challenges graduate students to tell their research story with only one image, using just six words! The competition was tough this year and we cannot wait for you to see the 10 finalist submissions!

Please click the following link to vote for your favorite submission! The winning student will receive \$1000 while the second place and the people's choice winners receive \$500!

bit.ly/sayitin6voting

UNIVERSITY SUSTAINABILITY NETWORKING WORKSHOP

Keynote with Julie Newman (MIT)

Monday, March 18

This one-day workshop, sponsored by Purdue's Institute for a Sustainable Future, brings professionals and faculty engaged with campus sustainability from universities and colleges across Indiana to discuss challenges and opportunities to address campus sustainability issues.

Highlights include keynote speaker Julie Newman, Director of Sustainability at MIT, who will give a presentation on "Leveraging the campus as a test bed for sustainability: Catalyzing innovation, imagination, and impact", which will be followed by Innovation in Sustainability Lightning Talks. The afternoon will feature a panel discussion, "Moving towards Zero: Benchmarking, Dashboards and Sustainability," featuring sustainability professionals from Harvard University, Oberlin College, University of Utah, Indiana University and the University of Oregon.

[This event is free and open to the public.](#)

PUBLICATIONS

- Colleps, C.L., van der Beek, P.A., Amalberti, J., Denker, A., Tremblay, M.M., Hajdas, W., Bernard, M., Dittwald, A.H., and Bundesmann, J., 2024, Improving the accessibility and efficiency of proton irradiations for 4He/3He thermochronology. *Geochemistry, Geophysics, Geosystems*, v. 25(2), e2023GC011334. <https://doi.org/10.1029/2023GC011334>
- Vannier, H., Horgan, B., Stopar, J. D., & Henderson, M. (2024). Constraining formation hypotheses for irregular mare patches on the Moon with orbital reflectance spectra. *Journal of Geophysical Research: Planets*, 129, e2023JE008108. <https://doi.org/10.1029/2023JE008108>

MEETINGS/EXPOS/ OPPORTUNITIES OUTSIDE OF PURDUE

- Izquierdo, K., M.M. Sori, B. Checketts, I. Hampton, B.C. Johnson, and J.M. Soderblom (2024), Global distribution and volume of cryptomare and visible mare on the Moon from gravity and dark halo craters, *J. Geophys. Res. Planets* 129, <https://doi.org/10.1029/2023JE007867>.
- Cashion, M.D., B.C. Johnson, H. Gibson, E.P. Turtle, M.M. Sori, and H.J. Melosh (2024), Europa's double ridges produced by ice wedging, *J. Geophys. Res. Planets* 129, <https://doi.org/10.1029/2023JE008007>.
- Blanco-Rojas, M., M.L. Carroll, C.S. Spradlin, J.A. Caraballo-Vegas, and Z.W. Williams (2024), A novel approach to impact crater mapping and analysis on Enceladus, using machine learning, *J. Geophys. Res. Planets* 129, <https://doi.org/10.1029/2023JE008010>.
- Liu, Z., & Wang, L. (2024). Enhanced occurrence of atmospheric blocking in the Southern Hemisphere by Baroclinic Annular Mode. *Geophysical Research Letters*, 51, e2023GL107343. <https://doi.org/10.1029/2023GL107343>
- Castañeda, V., & Wang, L. (2024). The role of climatological state in supporting US heat waves through Rossby waves packets. *Journal of Geophysical Research: Atmospheres*, 129, e2023JD039212. <https://doi.org/10.1029/2023JD039212>
- Benjamin P. Weiss, Elias N. Mansbach, Joseph L. Carsten, Kyle W. Kaplan, Justin N. Maki, Roger C. Wiens, Tanja Bosak, Curtis L. Collins, Jennifer Fentress, Joshua M. Feinberg, Yulia Goreva, Megan Kennedy Wu, Douglas E. Klein, Rachel E. Kronyak, Robert C. Moeller, Nicholas Peper, Adriana Reyes-Newell, Mark A. Sephton, David L. Shuster, Justin I. Simon, Kenneth H. Williford, Kathryn W. Stack, and Kenneth A. Farley (2024) Orienting Cores on Mars Drilled by the Perseverance Rover. *Earth & Space Science* 11, e2023EA003322. <https://doi.org/10.1029/2023EA003322>.

OUTREACH NEWS

If you or your group has worked with or helped with an activity for K-12 students or teachers, please fill out the departmental outreach activity form.

<https://bit.ly/EAPSOut>

Social sites:

[Twitter](#)

[Instagram](#)

[Facebook Superheroes of Science](#)

[EAPS departmental outreach web page](#)

SUPERHEROES OF SCIENCE

Please help us by subscribing and sharing our podcast and our [YouTube](#) channel!

On Apple: https://bit.ly/SOS_apple

On Spotify: https://bit.ly/SOS_spotify

On Amazon: https://bit.ly/Superheroes_amazon

INDIANA OIL AND GAS SCHOLARSHIP

The Indiana Oil and Gas Association (INOGA) has a rich history of involvement in the exploration and development of hydrocarbons in the State of Indiana. INOGA is an all-volunteer organization formed more than 60 years ago. Participating members include representatives from oil and gas exploration and development companies (operators) as well as companies and individuals working in the following sectors: pipeline, refinery, land acquisition, service, supply, legal, engineering, and geologic services.

In 2023, we awarded \$18,000 in scholarships to students who were attending four-year colleges and pursuing degrees in the oil & gas career path. Each year INOGA hosts a golf outing to sponsor these scholarships to encourage students to continue their education in the field of Earth Sciences, Petroleum Engineering, Chemical Engineering or Geology majors.

[More info and application can be found here.](#)

Deadline is April 1st.

SHADES FIELD TRIP – APRIL 13, 2024

**Professional Geologists of Indiana and All
Universities Field Trip 2024
Shades State Park**

Event Open to Everyone interested in the Geologic History of this Spectacular Site

Hike through deep canyons on rugged trails to see and discuss the regional Mississippian-Pennsylvanian unconformity and some spectacular cross bedding and other depositional features and weathering features in the Mansfield sandstone. There is outstanding geomorphology related to the combination of long time erosion and more recent glacial melt water related erosion.

Saturday, April 13 meet at 9:30 AM to 3:00 PM at **Shades SP** at the **Hickory Parking Lot**. Park **entry fee** applies, **Waivers** will be signed before hike so **arrive on time**. Bring water, snacks and a sack lunch. 7751 S 890 W, Waveland, IN 47989

[More info.](#) Contact [Doug Schmitt](#) for more details.

WATERSHED SCHOLARS PROGRAM

For students interested in pursuing a Master's degree in biology, chemistry, civil engineering, environmental sciences, or geography with an emphasis in Watershed Sciences at Southern Illinois University Edwardsville (SIUE). Selected students will receive a tuition waiver and \$10,000 scholarship for each of the two years they are in the program, as well as funding to attend conferences and to purchase equipment and tools needed to complete their research. In addition, students will participate in thesis and research workshops, career panels, scientific and technical seminars, and mentoring from a variety of sources. Eligible students are required to have an income of \$25,515 or less while a student at program start date (Fall 2024). Scholars must be U.S. citizens, permanent residents, or admitted refugees. Interested individuals can read more about the program [here](#). SIUE is located near the confluence of the Mississippi and Missouri Rivers and offers opportunities to study watersheds at multiple scales and from rural to urban settings. The SIUE campus is on 2,600 acres of beautiful rolling hills and woodlands, on the bluff of the Mississippi floodplain. Students applying to SIUE master's programs in [Biological Sciences](#), [Chemistry](#), [Civil Engineering](#), [Environmental Sciences](#), or [Geography & GIS](#) are eligible to apply for the Watershed Scholars program. Students with an interest in sustainable watersheds and backgrounds in biology, chemistry, engineering, ecology, geography, geology, environmental sciences, fisheries sciences, wildlife management, natural resources, and geosciences, are encouraged to apply. After being admitted to the SIUE graduate program, potential scholars must then apply to the [Watershed Scholars Program](#) (or they should apply to both the graduate program and scholarship program at the same time). Potential scholars will be asked to provide a written statement (250-500 words) describing their interest in watershed science research and, if applicable, any prior relevant research experience. Applications are being considered on a rolling basis, but students should apply before April 1 for priority consideration. Further information, including details on how to apply, can be found on the [Watershed Scholars website](#). If students have any questions, please encourage them to contact the Watershed Scholars project lead, Dr. Adriana E. Martinez at adrmart@siue.edu. This program is funded by the National Science Foundation DUE Award #2130471.

**UNIVERSITY OF NOTRE DAME'S
SOCIETY OF SCIENCE FELLOWS**

At the University of Notre Dame, the Society of Science Fellows is a Postdoctoral Fellowship Program established by the Dean of the College of Science to support highly motivated and accomplished individuals who represent the best of the next generation of scientists. These prestigious fellowships are designed for early-stage scientists who are bound for research intensive careers in research universities, institutes or industries. The Society Fellows will be initially appointed for two years, receive a stipend corresponding to the NRSA NIH pay scale for postdoctoral fellows and individualized support from College of Science Director of Postdoctoral Studies. Each fellow will work with the director of postdoctoral studies to identify a suitable primary research mentor from the five departments in the College of Science. Additional co-mentors can also be appointed, and must have an appointment at the University of Notre Dame. The primary research mentor will provide research space, supplies, and travel support. [More info.](#)

NSF NCAR | UCAR | UCP STUDENT OPPORTUNITIES

NCAR | UCAR | UCP offer many different summer experiences for students in Earth System Science. Labs and Programs have unique opportunities with separate applications and different deadlines. We invite you to explore the compiled list below and apply to opportunities you find interesting.

UCAR Next Generation Fellowship

The UCAR Next Generation graduate Fellowship is a prestigious, multi-faceted opportunity to explore the interplay between the areas of scientific research, diversity and inclusion, and public policy within the field of Earth Systems Science. Fellows engage with, and learn from, UCAR's leaders in these three arenas while participating in dedicated professional development and leadership training opportunities.

Application will open in January 2024.

Student Opportunities Website

Check the opportunities website for other opportunities that are not currently accepting applications but may during other times of the year.

**POST-DOC OPPORTUNITY - AIR FORCE SCIENCE
& TECHNOLOGY FELLOWSHIPS**

The National Academies of Sciences, Engineering, and Medicine administers postdoctoral and senior research awards at the U.S. Air Force Research

Laboratory (AFRL), the U.S. Air Force Institute of Technology (AFIT), and the U.S. Air Force Academy (USAFA) under the [Air Force Science & Technology Fellowship Program \(AF STFP\)](#).

Seeking highly qualified candidates who are U.S. citizens and hold, or anticipate earning, a doctorate in a variety of fields of science or engineering.

Application deadline dates (four annual review cycles): February 1, May 1, August 1, November 1

Awardees have the opportunity to:

- Conduct independent research in an area compatible with the interests of the Air Force laboratories
- Devote full-time effort to research and publication
- Access the excellent and often unique Air Force research facilities
- Collaborate with leading scientists and engineers
- Awardee benefits:
 - Base stipend starting at \$76,542; may be higher based on experience
 - Health insurance (including dental/vision), relocation benefits, and a professional travel allowance

Applicants should contact prospective AFRL, AFIT and USAFA Research Adviser(s) at the lab(s) prior to the application deadline to discuss their research interests and funding opportunities.

For detailed program information, to search for AFRL, AFIT, and USAFA Research Opportunities, and to contact prospective Research Adviser(s), visit www.nas.edu/afstfp.

AWG BRUNTON AWARD AND BRUNTON FIELD PROJECT AWARD

The AWG Brunton Award and Brunton Field Project Award promote the future of field mapping and data acquisition for the upcoming generation of people whose gender identity has been historically underrepresented in the geosciences. Applicants should have a passion for and exceptional experience with field work, including internships, field camp, coursework with a field-based research component, or research. The AWG Brunton Award has been active for >20 years and provides Brunton compasses to 1–2 awardees each year. The AWG Brunton Field Project Award started in 2022 and awards a Brunton compass and up to \$1000 to support field activities to each of 1–2 awardees each year. [Learn more here](#). **Deadline for entry is Dec. 15th of each year.**

INTEGRATING OCEAN DRILLING AND NASA SCIENCE: A WORKSHOP TO EXPLORE MISSIONS TO PLANET EARTH

April 2-4, 2024
Washington, D.C.
[Meeting info](#)

URANUS FLAGSHIP WORKSHOP

May 21-23, 2024
NASA Goddard Space Flight Center, Greenbelt, MD
[Meeting info](#)

8th INTERNATIONAL CONFERENCE ON MARS POLAR SCIENCE AND EXPLORATION

July 8-12, 2024
Whitehorse, Yukon, Canada
[Meeting info](#)

METSOC 2024

July 28-Aug. 2, 2024
Brussels, Belgium
[Meeting info](#)

POSITIONS AVAILABLE- CAREER OPPORTUNITIES

GS 9-12 RESEARCH AND DEVELOPMENT METEOROLOGIST POSITION AT THE AVIATION WEATHER CENTER

<https://www.usajobs.gov/job/779199700> (open to the public)

<https://www.usajobs.gov/job/779204100> (current federal employees or status candidates)

This job would be a good fit for someone who is comfortable with programming and has an interest in operational forecasting.

UNIVERSITY OF OK – AVIATION METEOROLOGY ASSOC. PROFESSOR

The School of Meteorology and School of Aviation at the University of Oklahoma have an open tenure-track position at the Associate Professor level focused on Aviation Meteorology. If you or someone you know are interested, the [full announcement is here](#). Reach out to the search chair Dr. Jens Redemann (redemann@ou.edu) with any questions.

MEDITERRANEAN INSTITUTE OF OCEANOGRAPHY MARSEILLE, FRANCE – POST DOC

2-year postdoc position in modelling the habitability of the atmosphere (applied to Earth's atmosphere and exoplanets). The position would suit someone with an interest in habitability/astrobiology, theoretical approaches to environmental microbiology, and who has strong numerical skills (ecosystem, habitability, bioenergetics modelling). The post is based at the Mediterranean Institute of Oceanography, in Marseille, France, with the possibility for remote/flexible working arrangements. [More details.](#)

ABC 57 (SOUTH BEND) - METEOROLOGIST

[Meteorologist position in South Bend, IN.](#)

ABC 57 encourages spring graduates interested in Broadcast Meteorology to reach out and apply. Two people currently working here are Purdue grads and encourage you to reach out: Tom Coomes (c/o '06 Graduate) and Maci Tetrick (c/o '19 graduate).

Contact: News Director [@Molly_Jirasek](#)

WOOSTER – VISITING ASSISTANT PROFESSOR

Wooster is hiring a 2-year Visiting Assistant Professor in Environmental Science. We are open to any expertise in the environmental sciences as long as the candidate can teach GIS. Next year, we will be developing an Environmental Science major – this person would play a critical role in that process and the administration has been supportive of our plan to convert this position to tenure track.

This is a great opportunity for an early career scientist to launch a future in the liberal arts. Our small, supportive department fosters a vibrant environment for students, staff, and faculty to thrive. We are looking for someone who is passionate about teaching and eager to contribute to our intellectual and inclusive community. [Full details and application instructions can be found here.](#)

UCHICAGO – TWO POSITIONS AVAILABLE

- Assistant Instructional Professor (<https://apply.interfolio.com/136612>)
- Senior Instructional Professor (<https://apply.interfolio.com/137371>).

These are career-track (although not tenure-track) teaching positions.

POSTDOC POSITION(S) - THE BARNES GROUP AT CSU

The [Barnes Research Group](#) at Colorado State University's [Dept. of Atmospheric Science](#) is looking to hire two postdoc positions in the area of artificial intelligence (AI) for climate science! Specifically,

the individual(s) will design and implement novel AI approaches for the prediction of earth system phenomena under past, present, and future climates. Research topics will include predicting extreme events on subseasonal-to-decadal time horizons, training, implementing and evaluating modern AI-weather/climate emulators, developing transfer learning approaches for climate models and observations, and using high-performance computing including GPU computing.

For more questions / information please contact Prof. Barnes at eabarnes@colostate.edu

To find out more about the Barnes Research Group, visit: <https://barnes.atmos.colostate.edu>

To apply via the open postdoc pool, go here: <https://jobs.colostate.edu/postings/125988>

AES – FACULTY SEARCH

The [UAH Department of Atmospheric and Earth Science \(AES\)](#) is conducting an open-rank faculty search for a member of our community who is interested in utilizing and expanding the [UAH SWIRLL research and teaching facilities](#).

Questions? aes-chair@uah.edu.

[Apply here.](#)

FULL-TIME WEEKEND METEOROLOGIST/WEEKDAY REPORTER - WVVA TV IN BLUEFIELD, WV.

An immediate opening for a full-time weekend meteorologist/weekday reporter (for weather/science stories). [Link](#)

TENURE TRACK METEOROLOGY FACULTY POSITION - VALPARAISO UNIVERSITY

We are excited to announce an opening for a Tenure Track Assistant Professor of Meteorology at Valparaiso University starting in August 2024. We especially need someone for mesoscale meteorology at the undergraduate level.

[Apply here.](#)

DePAUW SEEKING PART TIME INSTRUCTOR

The department of Geology and Environmental Geoscience at DePauw University is looking for a part-time instructor to teach an undergraduate course in Hydrogeology in next spring semester. This is a great opportunity for a graduate student to get some teaching experience in a Liberal Arts setting (at least a Master's degree is required). Apply [here](#).

POSTDOCTORAL FELLOWSHIP IN METEOROLOGY: NUMERICAL SIMULATION STUDIES OF TORNADES

The School of Meteorology of the University of Oklahoma has an opening for a Postdoctoral Fellowship in the areas of numerical modeling and severe storms. The successful candidate will use very high-resolution simulations (Cloud Model 1) to study the interaction between tornadoes and the built environment to understand how tornado dynamics evolve over urban landscapes. Sensitivity studies examining different neighborhood layouts and building types will be conducted, and different techniques for injecting turbulence into the model will be explored. The successful candidate will be supervised by Prof. David Bodine and will work collaboratively with an interdisciplinary team of scientists and engineers, including scientists Drs. Anthony Reinhart and Jeremy Gibbs at the National Severe Storms Laboratory and Prof. Franklin Lombardo at the University of Illinois Urbana-Champaign.

The successful candidate will work in the National Weather Center where the School of Meteorology and NOAA's National Severe Storms Laboratory reside. The National Weather Center fosters a unique collaborative work environment with federal, state, and academic units, providing valuable networking opportunities for career advancement.

Salary will be competitive based on experience and qualifications. The University of Oklahoma offers competitive benefits. Positions are open now until it is filled, and full consideration will be given to applications received by January 31, 2024.

Candidates in the final stages of completing their Ph.D. are also encouraged to apply. The term of appointment will be one year, renewable for a second year subject to satisfactory performance.

Qualifications

Requirements:

- Ph.D. in Atmospheric Science, Meteorology, Engineering, Computer Science, Physics, Mathematics, or related disciplines within the last 5 years

- Strong background in numerical modeling

Desired Skills and Qualifications:

- Programming experience with programming languages used in numerical models (e.g., Fortran) and for analysis and plotting (e.g., Python, Matlab)
- Excellent written and oral communication skills, evidenced by peer-reviewed publications
- Past experience and/or strong interest in using supercomputing resources
- Background and/or strong interest in mesoscale meteorology and atmospheric dynamic

Application Instructions

To apply for this position, please [submit the electronic application via Interfolio](#) and to Prof. David Bodine (bodine@ou.edu) and include the following: a letter of research interest and experience, CV, and three names of references (including their contact information).

NYS MESONET FIELD TECHNICIANS

[NYS Mesonet](#) is hiring a field technician position to maintain and repair 126-site standard network and 85 subnetwork sites. Competitive pay + benefits, learn more and [apply here](#).

MULTIPLE POSITIONS OPEN WITH ENVIROFORENSICS

EnviroForensics is hiring! We're looking for motivated and collaborative individuals to join us as a Project Manager (Indianapolis or Louisville), Staff Professional (Indianapolis), Field Professional (Indianapolis), and Field Technician (Indianapolis). If you're interested in joining our team, visit our Careers and apply today! [Click here to apply](#)

ASSISTANT PROFESSOR OF ENVIRONMENTAL & GEOSPATIAL SCIENCES - WESTERN KENTUCKY UNIVERSITY

The Department of Earth, Environmental, & Atmospheric Sciences (EEAS) at Western Kentucky University is seeking highly qualified applicants for a 9-month tenure-track Assistant Professor of Environmental & Geospatial Sciences position. [Learn more here.](#)

INDIANA EHS ADVISOR JOB POSTING

U.S. Compliance: Searching for high performing EHS professionals who want to make a difference. Join our fast-growing EHS compliance firm to help us care for people, Protect the environment and grow our clients' business. [Link to posting.](#)

METEOROLOGIST POSITIONS AVAILABLE TEGNA

Multiple [meteorology positions](#) are open with TEGNA.

PURDUE ENVISION CENTER (UNDER ITAP) RECRUITING EAPS STUDENTS

The Envision Center is recruiting EAPS students with background and interest in weather visualization. Details on the job opening can be found [here](#).

**POSITIONS AVAILABLE IN METEOROLOGY AND
ATMOSPHERIC SCIENCE**

[View current career listings](#)

AGI GEOSCIENCE JOB CENTER

[Check listings here.](#)

GRADIENT CORP

MULTIPLE OPPORTUNITIES

Please feel free to contact [Qian Zhang](#) if you are interested in applying and/or have any questions about the company and the opportunities.

NATIONAL WEATHER SERVICE

POSITIONS AVAILABLE

[Check here for available positions](#) with the National Weather Service.

NEWSLETTER INFO

IMPORTANT NOTICE ABOUT THIS NEWSLETTER

This newsletter is used as the primary information source for current and upcoming events, announcements, awards, grant opportunities, and other happenings in our department and around campus. Active links to additional information will be provided as needed. Material for inclusion in the newsletter should be submitted to [Cheryl Pierce](#) by **5:00pm on Thursday of each week for inclusion in the Monday issue.**

For answers to common technology questions and the latest updates from the EAPS Technology Support staff, [click here](#). As an additional resource for information about departmental events, seminars, etc., see our [departmental calendar](#).