

EAPS WEEKLY NEWSLETTER

May 19, 2025

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EAPS MEETINGS & EVENTS

[PURDUE REGISTRAR CALENDARS](#)

[EAPS SEMINARS AND EVENTS CALENDAR](#)

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

[REPORT YOUR OUTREACH AND
ENGAGEMENT ACTIVITIES](#)

CONGRATS, KUDOS, COOL STUFF, AND THUMBS UP!

- *The next newsletters for the summer will be on June 2nd, July 7th, August 4th, and then back to weekly on August 25th.
- Good luck and congrats to all the 2025 graduates!
- Congratulations to Alex Worthington, who won the AFROTC (Air Force Reserve Officer Training Corps) Distinguished Graduate Award! And for the second semester in a row, for an EAPS student, he was also the commencement student responder. Alex will be commissioned into the Space Force. Good luck, Alex!



- Congratulations to graduate students Lisette Melendez and Emilie Lafleche, who were awarded the Amelia Earhart fellowships from the Zonta International Foundation!

NEWS/OPPORTUNITIES AT PURDUE

EAPS SEMINAR

No more EAPS dept. Colloquium until fall of 2025. Happy summer break!

EAPS GRAD STUDENT RESEARCH OPPORTUNITIES

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

ClimART COMPETITION FOR PURDUE EAPS (and COLLABORATORS)

ClimART is a friendly climate and art competition for Purdue EAPS (and collaborators). This event celebrates both the art within your research and the science-inspired art you create for fun! We believe art is a powerful way to say "Hey, this is me" even on paper.

Event coming **September 2025** — exact date TBA.

FEDERAL FUNDING UPDATES

This site provides important information and updates from federal agencies that impact the Purdue University research enterprise.

<https://government-transition.research.purdue.edu/>

UNIVERSITY OF SCOUTING - GEOLOGY/OCEANOGRAPHY MERIT BADGE

On **Saturday, 6 December**, Scouting America (formerly Boy Scouts of America) will host a University of Scouting event on Purdue's campus. They are looking for volunteers who can teach the geology or oceanography merit badges (see attached). Courses can run 9am-12pm or 1-4pm. If you are interested, please reach out to Byron Haverstick, Chief Operating Officer of the Sagamore Council, at Byron.haverstick@scouting.org. He will work with you on supplies, pre-work from the scouts, background checks, etc.

DEFENSE CIVILIAN TRAINING CORPS - PURDUE UNIVERSITY

Purdue's Defense Civilian Training Corps (DCTC) is a new program that will build civilian careers in the Department of Defense relating to acquisition, digital technologies, critical technologies, science, engineering, and finance and more. The Defense Civilian Training Corps is a scholarship-for-civilian service award.

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](#).

Game night is the third Friday of each month.
Time: 6:00 PM to 9:00 PM.
Location: HAMP 2244

Ongoing:

- Purdue University Kids STEM Degree
- Science From the Expert

See all of our videos on the Superheroes of Science YouTube channel:
<https://www.youtube.com/c/SuperheroesofScience>

Social sites:

[Instagram](#)
[Facebook Superheroes of Science](#)

PUBLICATIONS

- Andersen, J.L., Lifton, N.A., Linge, H., Stuart, F., Olsen, J., Pedersen, V.K., in press, Ice-burial history and early Holocene thinning of the Scandinavian Ice Sheet at Gaustatoppen, southern Norway, *Quaternary Science Reviews*.
- Kelley, S., Doughty, A.M., Lifton, N., Pendleton, S., O'Brien, C., Warren, G., in press, Reconstructing the late Pleistocene glacial history of the Cairngorm Mountains, Scotland, using paired cosmogenic ¹⁰Be and ¹⁴C, *Journal of Quaternary Science*.
- Čuk, M., Anand, K. P., & Minton, D. A. (2025). Two possible orbital histories of Phobos. *The Planetary Science Journal*, 6(4), 89. <https://doi.org/10.3847/psj/adc1ba>
- **S Wakita, B C Johnson**, J M Soderblom, J K Steckloff, **A V Johnson**, C D Neish, J Shah, P Corlies (2025) Impacts Into Titan's Methane- Clathrate Crust as a Source of Atmospheric Methane. *JGR Planets*, 130, 4. <https://doi.org/10.1029/2024JE008624>

- Laferriere, K.L., A.M. Bramson, A. Gleason (2025) Quantities of Ballistically Hopping Water Molecules on the Moon: Consistent With Exospheric Hydration Observations. *JGR-Planets*, 130, 4, e2024JE008628. <https://doi.org/10.1029/2024JE008628>
- Petrini, E.Z. and M.M. Sori (2025), Layered remnant deposits in Hellas Planitia, Mars as the remains of ancient ice mounds, *Icarus*, 116604. <https://doi.org/10.1016/j.icarus.2025.116604>
- Liu, X., Griffin, A., Komurcu, M., & Huber, M. (2025). Importance of longwave radiative forcing by icy clouds in maintaining miocene high-latitude warmth. *Geophysical Research Letters*, 52, e2024GL111831. <https://doi.org/10.1029/2024GL111831>
- Vannier H, Redfield S, Wood B E, Mueller H R, Linsky J L, Frisch P (2025). Mapping the Local Interstellar Medium: Using Hubble to Look Back at the ISM Along the Sun's Historical Trajectory. *The Astrophysical Journal*, 981, 2, doi:10.3847/1538-4357/adb033
- Chen, S., Liu, L., Ma, Y., Zhuang, Q., & Shurpali, N. J. (2024). Quantifying global wetland methane emissions with in situ methane flux data and machine learning approaches. *Earth's Future*, 12, e2023EF004330. <https://doi.org/10.1029/2023EF004330>. PDF
- Liu, L., Zhuang, Q., Zhao, D., Wei, J., & Zheng, D. (2024). The fate of deep permafrost carbon in northern high latitudes in the 21st century: A process-based modeling analysis. *Earth's Future*, 12, e2024EF004996. <https://doi.org/10.1029/2024EF004996>. PDF
- X. Liu, Q. Zhuang, C. Liao and M. T. Jorgenson 2025, Changes in soil water content and lateral flow exert large effects on soil thermal dynamics across Alaskan landscapes *Environ. Res. Lett.* 20 024056, <https://doi.org/10.1088/1748-9326/adaa05>. PDF
- Zhang, Z., Poulter, B., Melton, J. R., Riley, W. J., Allen, G. H., Beerling, D. J., Bousquet, P., Canadell, J. G., Fluet-Chouinard, E., Ciais, P., Gedney, N., Hopcroft, P. O., Ito, A., Jackson, R. B., Jain, A. K., Jensen, K., Joos, F., Kleinen, T., Knox, S. H., Li, T., Li, X., Liu, X., McDonald, K., McNicol, G., Miller, P. A., Müller, J., Patra, P. K., Peng, C., Peng, S., Qin, Z., Riggs, R. M., Saunio, M., Sun, Q., Tian, H., Xu, X., Yao, Y., Xi, Y., Zhang, W., Zhu, Q., Zhu, Q., and Zhuang Q.: Ensemble estimates of global wetland methane emissions over 2000–2020, *Biogeosciences*, 22, 305–321, <https://doi.org/10.5194/bg-22-305-2025>. PDF
- Chen, S., Zhuang, Q., Taheripour, F., Yuan, Y. and Benavidez, L., 2025. Assessment of global land cover changes using satellite data: intermittent and long-term land cover changes from 2001 to 2020. *Environmental Research Letters*, 20(3): 034045. DOI 10.1088/1748-9326/adb5a3
- Blevins, A. M., Minton, D. A., Huang, Y. H., Du, J., Tremblay, M. M., & Fassett, C. I. (2025). Apollo Impact Melts Record a Rapidly Declining Impact Rate in the Late Imbrian. *Journal of Geophysical Research: Planets*, 130(2), e2024JE008722. <https://doi.org/10.1029/2024JE008722>

- Fred-Velez, K., **S.L. Pérez Cortés, A.M. Bramson**, T.R. Hudgins (2025) Mapping of Potential Mass Wasting on Enceladus. *Icarus*, 430, 116471, doi:10.1016/j.icarus.2025.116471. <https://doi.org/10.1016/j.icarus.2025.116471>
- Morgan, G.A., N.E. Putzig, D.M.H. Baker, A. Pathare, C.M. Dundas, M. Russell, M.R. Perry, M. Chojnacki, H.G. Sizemore, **A.M. Bramson**, E.I. Petersen, S. Nerozzi, R.H. Hoover, Z. Bain (2025) Refined Mapping of Subsurface Water Ice on Mars to Support Future Missions. *Planetary Science Journal*, 6, 29, doi:10.3847/PSJ/ad9b24. <https://doi.org/10.3847/PSJ/ad9b24>

MEETINGS/EXPOS/ OPPORTUNITIES OUTSIDE OF PURDUE

AIPG FIELDTRIP TO INDIANA DUNES

This field trip will travel from west to east across northwestern Indiana, examining coastal and eolian landforms between Miller and Michigan City. Discussions will include the development of beach ridges in response to quasi-periodic lake-level change, dune development during the late Holocene, vibracoring, optically stimulated luminescence dating, ground penetrating radar, and unexpected hazards in an active dune. The only strenuous part of the trip is a hike to the top of Mount Baldy using a park service trail.

Date: Thursday, June 19, 2025

Time: 9:00 AM to 3:30 PM CDT.

Where: [Paul H. Douglas Center for Environmental Education](#), 100 North Lake Street, Gary, IN 46403
[Register on EventBrite](#)

Click the [flyer](#) for more details.

NEXT GENERATION FELLOWSHIP

The Next Generation Fellowship is a 2 year program for students currently enrolled in graduate studies related to Earth System Sciences at a North American university (USA, Mexico, Canada). This program provides the opportunity for Fellows to explore the interplay between Earth System Science and its impact on society.

During their two year fellowship, Fellows pursue one of three tracks - Earth System Science Research; Transdisciplinary and Convergence Research; or Science Policy - collaborating with UCAR experts while participating in dedicated professional development and leadership training opportunities. Each Fellow receives a \$40,000 fellowship award over two years (\$10,000 twice per year); up to 20

weeks of paid research trips to Boulder, Colorado or Washington, D.C. or other agreed upon location; funding to attend conferences, professional coaching; and the support of a like minded cohort. We are holding information sessions on [March 14th](#) and [April 22](#). Click on each date to register.

Applications must be submitted in full by **May 31st, 2025** via the UCAR program website: <https://www.ucar.edu/opportunities/fellowships/ucar-next-generation-fellowships>
For more information, please reach out to our Program Coordinator, [Claire Rafferty](#).

NORTHERN ILLINOIS FIELD METHODS IN ENVIRONMENTAL GEOSCIENCES SUMMER COURSE

The Department of Earth, Atmosphere and Environment at Northern Illinois University will be offering our Field Methods in Environmental Geosciences course (EAE 477, 5 credits) this summer from **May 19 – June 18, 2025**. Our environmental field camp is designed to train students in field methods and integrative problem-solving preparing students for careers in the environmental geosciences sector.

The course covers topics such as field methods in hydrogeology, surface water and vadose-zone hydrology, water quality analysis, environmental surface geophysics, site evaluation and techniques, and regional landscape history and environmental change.

We accept undergraduate and graduate students. Students must have taken a hydrogeology course before enrolling in this field course. For more information please go to our [website](#) or contact [Megan Brown](#).

AWG JEANNE E. HARRIS CHRYSALIS SCHOLARSHIP

The **AWG Jeanne E. Harris Chrysalis Scholarship** provides degree-completion funding for women geoscience graduate students whose education has been significantly interrupted by life circumstances. Awarded funds are intended for a graduate student who is in the final stages of completing her thesis/dissertation but due to a significant interruption has not yet been able to complete her writing or defense.

Deadline: May 31, 2025

Application

Info: https://cdn.ymaws.com/www.awg.org/resource/resmgr/awards/student_awards/harris-chrysalis_scholarship.pdf

AWG Exploring Europa with Europa Clipper

Join the Lunar and Planetary Institute (LPI) for a hybrid presentation (offered in-person and virtually) by [Dr. Walter Kiefer](#), Director of the LPI. Dr. Kiefer will discuss NASA's Europa Clipper mission and its 1.8-billion-mile journey to Jupiter's moon, Europa. Launched in October 2024, Europa Clipper is the first mission designed to conduct a detailed study of Europa. This event will take place on **Thursday, June 5, at 7:30 p.m. CT** (8:30 p.m. ET/ 6:30 p.m. MT/ 5:30 p.m. PT). In-person attendees are encouraged to arrive early. Doors will open at 7:00 p.m. A short reception with the speaker will follow the presentation.

In-person at the Lunar and Planetary Institute [3600 Bay Area Blvd, Houston, TX 77058](#).

For those who are unable to attend in person, the event will be streamed live through the [LPI YouTube channel](#) beginning at 7:30 p.m. CT.

AWG GEOSCIENCE (IDEA) SCHOLARSHIP

AWG Geoscience (IDEA) Scholarship encourages women from under-served or marginalized communities to pursue an education and career in the Earth Sciences/Geosciences. Many research studies show the Earth Sciences are the least diverse community in all STEM fields. This Scholarship aims to counteract this and enhance diversity within the future Geoscience workforce.

Deadline: June 30, 2025

Application

Info: https://cdn.ymaws.com/www.awg.org/resource/resmgr/awards/idea/2025_geoscience_idea_scholar.pdf

SEG 2025–2026 Distinguished Instructor Short Course

What if seismic tools could make our cities smarter, safer, and more sustainable?

They can — and Dr. Yunyue Elita Li is here to show you how.

Launching at **IMAGE '25** the SEG 2025–2026 Distinguished Instructor Short Course will equip geoscientists, engineers, and decision-makers with seismic methods tailor-made for urban environments.

Learn to: Assess risk in dense urban areas

Improve decision-making with seismic data

Integrate geophysics into engineering practice

Use seismic techniques for minimal-impact monitoring.

The tour is kicking off in **Aug '25** and will last until **Aug '26**.

Save the date and learn more here:

<https://go.seg.org/3Ec9C8d>

WESTERN KENTUCKY UNIVERSITY SEEKING FOUR M.S. GRAD STUDENTS

The Department of Earth, Environmental, and Atmospheric Sciences ([EEAS](#)) at Western Kentucky University ([WKU](#)) is inviting applications for four M.S.-level [graduate students](#) to start **August 2025**. Students will work as a part of the state-wide CLIMBS (<https://kynsfepscor.uky.edu/climbs/>) initiative, a 5-year, \$20 million National Science Foundation EPSCoR grant to advance research in climate resilience for Kentucky. The successful applicants will be expected to contribute to one of the following projects: (a) Identification and analysis of the synoptic-scale atmospheric environments associated with high-impact weather; (b) Dynamical downscaling of future 21st century climate projections for the Mid-South region of the U.S.; (3) Comprehensive assessment of historical state-wide weather and climate-related threats and hazards; and (4) An historical, wide-ranging study of casualties associated with high-impact weather and climate events.

These positions include a 12-month stipend and tuition. Applicants should have a B.S. degree in the atmospheric, environmental, or geographic sciences, or a closely related discipline. Prior experience in computer programming (e.g., Python, FORTRAN, NCL, Linux shell scripting) is necessary, and experience in application to climatic processes, numerical weather simulation, and/or AI-driven data analytics is preferred. Interested candidates are encouraged to contact Dr. Jerry Brotzge (<Jerald.brotzge@wku.edu>) for more information.

MASTER OF ARTS IN TEACHING EARTH SCIENCE RESIDENCY PROGRAM

The [Master of Arts in Teaching Earth Science Residency Program](#) in the Richard Gilder Graduate School at the American Museum of Natural History in New York City is **looking for graduates with Earth and space science backgrounds** (geology, mineralogy, paleontology, oceanography, astronomy, environmental geology, and more) who want to make a difference in the world of STEM education. This teaching fellowship combines coursework, mentoring, and real-world experience to prepare Earth and space science graduates for **rewarding careers as culturally responsive middle and high school teachers**.

All degree candidates will receive **free tuition, books, and a \$40,000 stipend** towards the cost of

living. In return, candidates commit to teaching in a high-needs school for three years. With a sole focus on preparing new Earth science teachers, the program is a full-time, 15-month Master's degree program that takes place at the Museum and in urban partner schools. We seek a student body with a passion for social justice and diverse life and career experiences.

We are currently accepting applicants for the class that will begin in June 2025. Prospective students are encouraged to attend an Information Session or to contact us for more information. You can also visit the program website to learn more and/or join our mailing list (make sure to click MAT for Earth Science Grads). For questions, you can contact the program office directly at mat@amnh.org or (212) 313-7464.

UCAR STUDENT OPPORTUNITIES WEBSITE

Check the opportunities website for opportunities at UCAR.

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 (USAF) 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.

RECRUITMENT FOR CoCoRaHS

The Community Collaborative Rain, Hail, and Snow Network (CoCoRaHS) is looking for more weather observers throughout Indiana and beyond. By participating in CoCoRaHS, farmers contribute valuable data that supports better agricultural decisions, weather-related products, and faster recovery during severe weather events. The application for U.S. participants is at <https://www.cocorahs.org/application.aspx>

8TH INTERNATIONAL PLANETARY DUNES WORKSHOP
May 19-22, 2025
Sardina, Italy / Virtual
[Meeting info](#)

INDIANA AMERICAN METEOROLOGICAL SOCIETY
CHAPTER MEETING
June 3rd, 2025 at 6:30 PM. In person at MADE Facility Room 239, 1610 Reeves Rd, Plainfield, IN 46168. Virtually at: <https://meet.goto.com/722761973>

**52ND CONFERENCE ON BROADCAST AND DIGITAL
METEOROLOGY AND 21ST CONFERENCE ON
MESOSCALE PROCESSES**

June 23-26, 2025
Boise, ID / Virtual
[Meeting info](#)

**87TH ANNUAL MEETING OF THE METEORITICAL
SOCIETY (METSOC)**

July 14-18, 2025
Perth, Western Australia
[Meeting info](#)

**41ST INTERNATIONAL CONFERENCE ON RADAR
METEOROLOGY**

August 18-22, 2025
Ontario, Canada / Virtual
[Meeting info](#)

**WORKSHOP ON BENNU AND RYUGU:
SAMPLES FROM THE EARLY SOLAR SYSTEM**

October 7-9, 2025
Houston, TX / Virtual
[Meeting info](#)

SECOND WORKSHOP ON ICES IN THE SOLAR SYSTEM

January 5-7, 2026
Montreal, Canada

- National Weather Service – [multiple opportunities](#)

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 [David Siple](#) 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](#).

POSITIONS AVAILABLE- CAREER OPPORTUNITIES

- [Two tenure-track jobs in atmospheric and planetary science](#) – Hampton University
- [Assistant Professor of Meteorology-Aviation](#) – Tenure-Track University of Oklahoma, Norman, OK
- [Future Faculty in the Physical Sciences \(FFPS\) Fellowship](#) – Princeton
- [Multiple Positions](#) with Enviroforensics
- Meteorology and Atmospheric Science – [multiple positions from various companies](#)
- AGI Geoscience Job Center – [multiple positions](#)
- Gradient Corp – [multiple opportunities](#). contact [Qian Zhang](#)