

EAPS WEEKLY NEWSLETTER

May 5, 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!

- Congratulations to all the award recipients
 presented at the EAPS Awards Banquet this past
 Friday! Thank you to all the generous donors,
 dedicated faculty and staff, and outstanding
 students who made the EAPS Awards Banquet a
 meaningful celebration of excellence, community,
 and support. Your contributions truly make a
 difference!
- Good luck on finals this week!!
- Congratulations to Carly Frank on passing her preliminary exam and advancing to candidacy!
- Congratulations to Ph.D. candidate José Ocegueda Sanchez!
- Congratulations to Elita Li for being selected to receive the Virgil Kauffman Gold Medal from the Society of Exploration Geophysicists!
- Congratulations to Ian Pamerleau and Alexander Kling (co-winner), who won the <u>Pellas-Ryder award!</u>

This award is given annually, jointly by the Planetary Geology Division of the Geology Society of America and the Meteoritical Society, to a student for an outstanding first-author paper. Ian won for his paper published in Nature Astronomy in 2024 titled "An ancient and impure ocean on Ceres implied by its ice-rich crust."

NEWS/OPPORTUNITIES AT PURDUE

EAPS SEMINAR

No more EAPS dept. Colloquium until fall of 2025.

THANOS KLIDARAS PRELIMINARY EXAMINATION PUBLIC TALK

Today, Monday, May 5th, in HAMP 2201 at 10:00 AM ET. His talk is titled, "Follow the Water: Geologic Records of Climate and Fluvial Processes on Early Mars."

EAPS GRAD STUDENT RESEARCH OPPORTUNITIES

If you are interested in an EAPS grad research opportunity, <u>click here</u> 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/

<u>UNIVERSITY OF SCOUTING -</u> 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

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Sagamore Council, at <u>Byron.haverstick@scouting.org</u>. 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.

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:

<u>Instagram</u> Facebook Superheroes of Science

PUBLICATIONS

- 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..

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- 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., Saunois, 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.,
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 Imbrian. *Journal of Geophysical Research: Planets*, 130(2),
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- Science Journal, 6, 29, doi:10.3847/PSJ/ad9b24. https://doi.org/10.3847/PSJ/ad9b24
- Zhang, O., & Schmitt, D. R. (2025). An optimized 2D/3DFinite-difference Seismic Wave Propagator Using Rotated Staggered Grid for Complex Elastic Anisotropic Structures. Computers & Geosciences, 105850. https://doi.org/https://doi.org/https://doi.org/10.1016/j.cageo.2024.105850
- Marder, E., Gallen, S.F., Lifton, N.A., Rittenour, T.M., 2025, The Colorado Rocky Mountains awaken: Understanding topographic rejuvenation in postorogenic mountain belts: GSA Today, v. 35, p. 4–11, https://doi.org/10.1130/GSATG598A.1.

MEETINGS/EXPOS/ OPPORTUNITIES OUTSIDE OF PURDUE

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 Raftery.

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 <u>website</u> or contact <u>Megan Brown</u>.

NIU also offers OSHA's Hazardous Waste Operations & Emergency Response (HAZWOPER) training through a 1 credit course, EAE 408, which will be offered **May 12 – 16, 2025**. The 40-hour HAZWOPER Training is required for many environmental geoscience jobs and is a great addition to any resume. Housing is also available on campus during this course. For more information, please visit to our website: go.niu.edu/HAZWOPER.

ACCEPTING APPLICATIONS FOR OFFICE OF SCIENCE GRADUATE STUDENT RESEARCH AWARDS

The U.S. Department of Energy's (DOE) Office of Science is pleased to announce that the Office of Science Graduate Student Research (SCGSR) program is now accepting applications for the 2025 solicitation 1 cycle. Applications are due on Wednesday, May 7, 2025, at 5:00 p.m. ET. SCGSR application assistance workshops will be held on March 6, 2025, 2:00 p.m.-3:30 p.m. ET and April 10, 2025, 2:00 p.m.-4:30 p.m. ET. The first workshop will provide a general overview of the program and the application requirements. It will also include a time for attendees to discuss their potential research topics and their alignment with the SCGSR priority areas with managers of each participating program office; register here. The second workshop will guide attendees through the application process, answer general questions, provide guidance on proposal writing, and feature discussions with scientists and former awardees; register here. SCGSR is open to U.S. Ph.D. students in qualified graduate programs at accredited U.S. academic institutions, who are

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conducting their graduate thesis research in targeted areas relevant to DOE's Office of Science. More information on the SCGSR program can be found by visiting the <u>SCGSR program website</u>, by <u>emailing the SCGSR team</u>.

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/resour ce/resmgr/awards/student awards/harrischrysalis scholarship.pdf

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/resour-ce/resmgr/awards/idea/2025-geoscience-idea-sc-holar.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 <u>IMAGE '25</u> 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 (<u>EEAS</u>) 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 Al-driven data analytics is preferred. Interested candidates are encouraged to contact Dr. Jerry Brotzge (<<u>Jerald.brotzge@wku.edu</u>>) for more information.

MASTER OF ARTS IN TEACHING EARTH SCIENCE RESIDENCY PROGRAM

The <u>Master of Arts in Teaching Earth Science</u>
<u>Residency Program</u> 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.

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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 (USAFA) under the <u>Air Force Science & Technology Fellowship Program (AF STFP)</u>.

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

2025 AMS Denver Summit -

36th Conference on Agricultural and Forest Meteorology, 18th Conference on Polar Meteorology and Oceanography, 15th Fire and Forest Meteorology Symposium, and Seventh Conference on Biogeosciences

May 12-16, 2025 Denver, CO / Virtual Meeting info

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8TH INTERNATIONAL PLANETARY DUNES WORKSHOP

May 19-22, 2025 Sardina, Italy / Virtual Meeting info

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

POSITIONS AVAILABLE-CAREER OPPORTUNITIES

- <u>Lecturer Dept. of Earth Science and</u>
 <u>Environmental Change</u> University of Illinois, Urbana-Champaign
 - Applications must be received by 6:00 pm (CST) on May 15, 2025
- <u>Postdoctoral Fellow Atmospheric</u>
 <u>Observations</u> University of Puerto Rico
 <u>Postdoctoral Fellow Interdisciplinary</u>
 <u>Climate Science</u> University of Puerto
 Rico
 - o Interested candidates email:
 - Dii Email Dr. Héctor Jiménez

(<u>hectorj.jimenez@upr.edu</u>) and Dr. Rosimar Rios-Berrios (rberrios@ucar.edu)

- <u>Assistant Professor of Meteorology-</u>
 <u>Aviation</u> Tenure-Track University of Oklahoma, Norman, OK
- Open Rank Professor, Atmospheric
 Sciences, Tenure Track University of North Dakota
- <u>Future Faculty in the Physical Sciences</u>
 (FFPS) Fellowship Princeton
- <u>Multiple Positions</u> with Enviroforensics
- Meteorology and Atmospheric Science
 <u>multiple positions from various</u>
 companies
- AGI Geoscience Job Center <u>multiple</u> positions
- Gradient Corp <u>multiple opportunities</u>. contact <u>Qian Zhang</u>
- National Weather Service <u>multiple</u> 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, <u>click here</u>. As an additional resource for information about departmental events, seminars, etc., see our <u>departmental calendar</u>.

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