

The University of Arizona  
Department of  
Hydrology & Atmospheric Sciences  
Presents

## El Día del Agua y la Atmósfera

March 24, 2026  
“Academia In Action”



### “Water in Waiting”

Snow blankets Navajo Mountain, a source of water for Lake Powell below.

*Photo Taken By*  
**Guy Wall**

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# El Día del Agua y la Atmósfera Agenda

- 8:00** Registration & Continental Breakfast - Courtyard
- 8:45** Welcome and Opening Remarks by Hossein Yousefi Sohi, El Día Chair
- 8:50** Remarks by Dr. Peter Troch, Department Head ~ S107 Lecture Hall
- 9:00** Keynote Speaker: Ken Graham ~ S107 Lecture Hall
- 10:00** Oral Session One ~ S107 Lecture Hall
- 11:00** Poster Session & Coffee Break ~ Courtyard
- 12:00** Lunch ~ Served in the Courtyard  
Dining Areas: S215, S225, S107 & Courtyard
- 13:00** Oral Session Two ~ S107 Lecture Hall
- 14:00** Poster Session & Coffee Break ~ Courtyard
- 15:00** Oral Session Three ~ S107 Lecture Hall
- 16:00** Keynote Speaker: Grey Nearing ~ S107 Lecture Hall
- 17:00** Closing & Presentations of Awards ~ S107 Lecture Hall
- 18:00** El Día Reception ~ No Anchovies  
870 E. University Boulevard

## General Theme

This year's theme, "**Academia in Action: Bridging Science, Industry, and Policy**," highlights the importance of connecting research in hydrology and atmospheric sciences with practical solutions for society's most pressing environmental challenges. As described by the Department of Hydrology and Atmospheric Sciences, the theme emphasizes how scientific research can extend beyond the university to inform decision-making, guide implementation, and create meaningful impact across communities, agencies, and industries.

At a time when water, weather, climate, and environmental systems are becoming increasingly complex, the need for collaboration across sectors has never been greater. This year's El Día theme recognizes that the strongest solutions often emerge when academic inquiry is brought into conversation with industry experience and policy needs. By centering this idea, the symposium underscores the role of science not only in advancing knowledge, but also in shaping tools, strategies, and partnerships that can respond to real challenges in the public and private sectors.

This vision is reflected in El Día 2026 itself. The department notes that industry partners are being invited to engage directly with student research during the symposium, creating opportunities for meaningful exchange and setting the stage for continued connection through the HAS Job Fair. The event also introduces a new student proposal competition, encouraging participants to connect their research ideas with actionable plans and broader societal relevance. Together, these elements bring the theme to life by showing how academic work can move toward implementation, innovation, and leadership.

# Message from the El Día Planning Committee

On behalf of the students of the Department of Hydrology and Atmospheric Sciences (HAS) at the University of Arizona, we are delighted to welcome you to **El Día del Agua y la Atmósfera 2026**. As the student-led planning committee, with invaluable support from our faculty and staff, we have worked hard to create an event that celebrates research, encourages collaboration, and highlights the outstanding work and dedication of our department's students.

Since its establishment in 2016, following the merger of the Hydrology and Water Resources and Atmospheric Sciences departments, El Día has become a meaningful tradition within our academic community. As one of the symposia held during Earth Week, this event provides a unique opportunity for students to showcase their research, strengthen their communication skills, and engage in meaningful dialogue on topics in hydrology and atmospheric sciences. It is a space where students can share their work, exchange ideas, and connect with peers, faculty, and professionals.

We sincerely thank our sponsors, whose generous support makes this event possible, as well as our faculty and staff for their continued guidance and encouragement. Most importantly, we thank the students — the heart of El Día — whose passion for science, curiosity, and commitment to advancing knowledge are what make this symposium so special.

We hope you enjoy the symposium and join us in celebrating the research, collaboration, and sense of community that define our department. Thank you for your participation and support. We look forward to sharing an inspiring and engaging day with all of you.

~ 2026 El Día Planning Committee

# El Día del Agua y la Atmósfera 2026 Planning Committee



Hossein Yousefi Solhi  
*Committee Chair*



Nabin Kalauni  
*Co-Chair & IT  
Coordinator*



Nathan Strom  
*Professional  
Outreach Coordinator*



Jianwen Du  
*Event Support &  
Outreach Coordinator*



Annalisa Minke  
*Planning & Logistics  
Coordinator*



Laura Duran  
*Project Coordinator*



Ty Ferré  
*EL DIA Advisor*

## Interview with El Día's Photo Contest Winner Guy Wall



Guy Wall is a student in the first cohort of Arizona's new One-Year Master's in Hydrogeology. Prior to joining our department, Guy worked for Montgomery & Associates where he gained industry experience in hydrogeologic consulting. Guy's interests include mining hydrogeology and hydro-geophysics.

***Interviewer: Can you share a bit about your interests and the story behind your winning photo in the recent contest?***

I am always on the move, and the camera never leaves my side. The photo was taken near Lake Powell on a drive from Tucson to Salt Lake City. This sorta thing happens to me a lot... I'll bring the truck to a screeching halt on a highway pull-off just to capture a moment in the distance.

***Interviewer: Could you tell us about your experience working in our department and perhaps shed some light on your hobbies outside of academia?***

Returning to academia after a few years of working has been a great experience. Through courses and research, I've gotten to challenge my field level intuition of hydrogeologic systems by developing a deeper understanding built on analytical methods. Also, I have to acknowledge how great Tucson has been! When I'm not in Harshbarger you can find me swimming at South Rec, biking the Tucson Loop, or running on a trail nearby.

***Interviewer: Winning the photo contest must have been quite an achievement. How do you feel about this accomplishment, and would you like to share a few words with the department?***

It's an honor. All of the submissions in the El Día Photo Contest were amazing and show just how passionate we are about understanding the world of water around us. It's a powerful testament to the dedication of our department as whole. I'm grateful to be a part of this group of scientists and look forward to continuing my journey with University of Arizona's department of Hydrology and Atmospheric Science!

# Special Thanks to Our Sponsors

## Legacy Award Sponsors

Errol L. Montgomery & Associates, Inc.

E. Philip Krider

Arizona Hydrological Society

HAS Advisory Board

Peter Mock Groundwater Consulting, Inc.

Salt River Project

Alumni of Ben Herman

Meixner Memorial Foundation

## Event Sponsors

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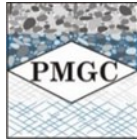
## Friends of HAS

Michael Block

Michael Carpenter

Kathleen Meixner

# 2026 El Día Sponsors



Peter Mock  
Groundwater Consulting, Inc.



# Awards and Prizes ~ Legacy Sponsors

We sincerely thank our legacy sponsors for their generous support of our major prizes and awards. Students are recognized for outstanding oral and poster presentations through juried evaluation.

## **Montgomery Prize**

*Most Outstanding Oral Presentation In Hydrology  
Certificate and Award of \$2,500*

*Second Prize for Oral Presentation in Hydrology  
Certificate and Award of \$500*

## **Philip E. Krider Award**

*Most Outstanding Oral Presentation In Atmospheric Sciences  
Certificate and Award of \$2,500*

*Second Prize for Oral Presentation in Atmospheric Sciences  
Certificate and Award of \$500*

## **Arizona Hydrological Society**

*First Place Poster Presentation in Hydrology  
Certificate and Award of \$1,000*

## **Stanley Davis Award ~ Sponsored by Peter Mock**

*Second Place Poster Presentation in Hydrology  
Certificate and Award of \$500*

## **Glenn E. Shaw ~ Sponsored by HAS Advisory Board**

*First Place Poster Presentation in Atmospheric Sciences  
Certificate and Award of \$1,000*

## **Benjamin M. Herman Award**

*Second Place Poster Presentation In Atmospheric Sciences  
Certificate and Award of \$500*

## **Donald R. Davis Undergraduate Distinction Award**

*Outstanding Undergraduate Poster Award  
Certificate and Award of \$500*

## **Proposal Pitch Award**

*Most Outstanding Proposal Pitch Presentation  
Certificate and Award of \$500*

## Tom Meixner Spirit Award



*Nominations will open on the day of El Día via the QR code located at the bottom of this page.*

The year 2022 was a profoundly difficult one for our HAS community. We lost three cherished members—Jetal Agnihotri in August, Rodrigo Delgado in September, and Thomas Meixner in October. Their absence is deeply felt, and as we come together for El Día, we honor their memory and the lasting impact they had on our community.

In this spirit, we have established the Tom Meixner Spirit Award to honor students who reflect the kindness, generosity, and supportive nature that Tom Meixner exemplified and valued. This award recognizes individuals who help create the welcoming and collaborative environment that defines El Día.

Throughout the event, if you notice someone demonstrating the spirit of El Día—whether by offering constructive feedback, asking insightful questions, bringing humor to the day, or fostering a sense of community—we encourage you to nominate them using the QR code provided. The recipient(s) will be announced during the award ceremony as we celebrate the values that make our department strong.

This year's award has been generously sponsored by the Meixner Memorial Fund.



# The Montgomery Prize

We would like to thank Errol L. Montgomery & Associates, Inc., a

## LEGACY SPONSOR

for their support. For many years, Montgomery & Associates has sponsored the premier cash award, *The Montgomery Prize*, for the Best Oral Presentation prize in hydrology and is presented to the winner by a representative from Montgomery & Associates. The award symbolizes the company's commitment to encouraging and rewarding excellence in oral presentation of hydrologic research. Montgomery & Associates offers similar awards during annual events at the University of Arizona and Northern Arizona University Geology Departments.



Errol L. Montgomery & Associates, Inc., founded by HWRS Alumnus Errol L. Montgomery, is a water resource consulting group with more than 25 years of experience addressing groundwater availability, sustainability, and quality issues for municipal, industrial, mining, and governmental clients. Professional services include:

- Groundwater exploration and development
- Contaminant assessment and remediation
- Artificial groundwater recharge
- Assured and Adequate Water Supply demonstrations
- Hydrologic monitoring
- Satellite image analysis
- Groundwater flow and solute transport modeling

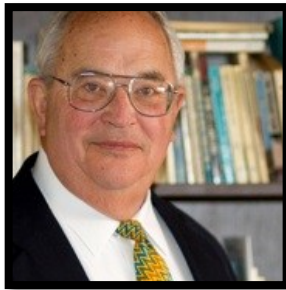
The firm's principal office is located in Tucson, Arizona, and branch offices are maintained in Scottsdale, Arizona, Lima, Perú, and in Santiago de Chile.

## E. Philip Krider Prize

We would like to thank Dr. E. Philip Krider, a

### LEGACY SPONSOR

for his support. Dr. Krider has sponsored the premier cash award, *The E. Philip Krider Prize*, for the Best Oral Presentation in Atmospheric Sciences at our annual student research symposium.



Dr. E. Philip Krider is known worldwide for his work on lightning and thunderstorm electricity and writings on Benjamin Franklin's electrical experiments. He led the group that developed the first gated, wideband magnetic direction-finders that are now the basis of the U.S. National Lightning Detection Network. Dr. Krider is a Fellow of the American Geophysical Union and the American Meteorological Society and a former Co-Chief Editor and Editor of the *Journal of the Atmospheric Sciences*; he is also past President of the International Commission on Atmospheric Electricity.

Dr. Krider received his MS in Physics (1964) and PhD in Physics (1969) from the University of Arizona. Dr. Krider joined the faculty at The University of Arizona in 1971 and retired in 2009. His research has focused primarily on the physics of lightning detection and protection, and related problems in atmospheric electricity. Dr. Krider is the author or co-author of more than 130 reviewed publications, and holds 8 patents.

# Arizona Hydrological Society (AHS) Prize Best Poster Presentation in Hydrology

We would like to thank the Arizona Hydrological Society, a

## LEGACY SPONSOR

for their support. For many years the Arizona Hydrological Society (AHS) has sponsored cash awards for best student presentations (oral and poster) and now sponsors the Arizona Hydrological Society Award for Best Poster Presentation in Hydrology.



AHS was formed in 1985 as a professional member organization with its mission to advance the science of hydrology and water resources research, planning and development; the establishment of an open forum for information exchange among professionals concerned with hydrology and water resources; and, the dissemination of ideas and information about the field of hydrology and other water resources professions to the public.

AHS has three chapters in Arizona; Flagstaff, Phoenix, and Tucson. The chapters hold monthly meetings and activities. The meetings feature presentations by local professionals and researchers. AHS membership is open to professionals and students

# Glenn E. Shaw Prize Best Poster Presentation in Atmospheric Science

We would like to thank the HAS Advisory Board for their support of this award as a

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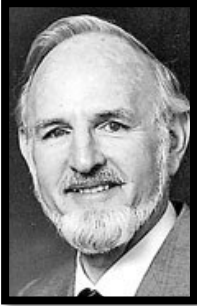


Glenn Shaw received a BS in 1963 from Montana State University, a MS in 1965 from University of Southern California, and a PhD in 1971 from University of Arizona. His PhD advisors were Benjamin S. Herman and John A. Reagan, and his dissertation was "An experimental study of atmospheric turbidity using radiometric techniques."

Dr. Shaw specialized in atmospheric physics, especially relating to global climate change and long-range transport of aerosol material. He was Emeritus Professor of Physics and Atmospheric Science at the University of Alaska Fairbanks and a member of the scientific staff of the Geophysical Institute. He conducted research on global atmospheric transport of aerosols and feedback of biogenic aerosols on global climate. He and Kenneth Rahn did research on the sources and climatic effect of [Arctic haze](#). He did pioneer work on the scientific concept of climate homeostasis through the sulfur cycle and atmospheric aerosol.

## Stanley N. Davis Award

Sponsored by Peter Mock



Dr. Davis was internationally recognized expert in the study of ground water. Dr. Davis also served on the faculty of Stanford University, the University of Chile, the University of Missouri--Columbia, and Indiana University--Bloomington. Additionally, over his career, he was a consultant for the United States Bureau of Reclamation, the Kansas and Missouri geological surveys, the Arctic Institute of North America, Princeton University, and the University Oriente and the University de los Andes, both of Venezuela. He also was the recipient of multiple honors throughout his career, in 1989 he was presented with the O.E. Meinzer Award by the Geological Society of America, and in 1996 he was made a Fellow of the American Geophysical Union. Over the course of his career, Dr. Davis was author or coauthor of more than 100 scholarly publications, and coauthor of the seminal textbook "Hydrogeology" with Dr. Roger DeWiest. From 1943-1946, Dr. Davis served in the U.S. Army during World War II in the Pacific Theater.



## Benjamin M. Herman Award

Sponsored by Alumni of Dr. Herman

Benjamin M. Herman was the first PhD student in the newly founded Department of Meteorology at the University of Arizona and went on to become Professor and Chair of the Department of Atmospheric Sciences. He excelled in classroom instruction particularly in teaching atmospheric radiation, remote sensing, and physical meteorology. As a result of his previous experience as an US Air Force meteorological officer, he loved to challenge the Departments students in Synoptic Meteorology. He was a noted researcher, developing and applying the first numerical techniques to calculate scattering, emission and absorption of radiation in Earth and planetary atmospheres. Ben retired in 2005 as a Professor Emeritus, after 45 years of service. In 2006, NASA and DOI bestowed Ben and others with the William T. Pecora Award for satellite techniques to infer O<sub>3</sub> and SO<sub>2</sub>. He also received the Distinguished Public Service Medal by NASA. Ben was a Fellow of the American Meteorological Society.

# Donald R. Davis

## Undergraduate Distinction Award

Sponsored by Salt River Project



Donald R. Davis joined the UA Department of Hydrology and Water Resources in 1972 and was one of the most senior members of the faculty at the time of his death in February 2009. His primary research focus was decision making under hydrologic and other uncertainties, and his basic approach utilized Bayesian decision theory in a general system setting. During the last decade of his life, even though the halcyon days of funded research were behind him, Don was still actively engaged in independent statistical studies with individuals both inside and outside the university. He continued to serve on MS and PHD exams and to advise masters and especially doctoral students who were majoring or minoring in Hydrology with the statistical aspects of their research projects. He was an active faculty examiner for the doctoral qualifying examinations in surface hydrology and water resources. Don served as the Undergraduate Coordinator and was the primary advisor to undergraduates with a major or minor in Environmental Hydrology and Water Resources. He taught the year-long Senior Capstone and Senior Honors Thesis courses and, when the department was part of the College of Engineering, was a rotating instructor for the COE's freshman course, Engineering 102. With Gary Woodard, he designed and oversaw the Master of Engineering degree program in Water Resources Engineering and helped that fledgling program get off the ground. Upon his death, he left an endowment to the Department of Hydrology and Water Resources specifically for undergraduates whom he especially supported and encouraged.

The evaluation for the Davis Undergraduate Distinction Award is made by a committee appointed by the department and recognizes an outstanding undergraduate who demonstrates excellence in writing, speaking, or technical communication or provides outstanding service through volunteerism or extracurricular activities that benefit the department or the profession.

**El Día Speaker**  
**ENR2 Room S107 ~ 9:00 am**



**Dr. Ken Graham**  
**Director**  
**National Weather Service**  
**National Oceanic and Atmospheric Administration (NOAA)**

Ken Graham is the Director of NOAA's National Weather Service and the Assistant Administrator for Weather Services, where he oversees civilian weather operations for the United States and its territories. Before becoming the 17th NWS Director in 2022, he served as director of the National Hurricane Center, helping guide the nation through the historic 2020 hurricane season. He is the first NWS director with such extensive operational field experience, having started his career as an intern and worked his way up through forecast offices in places such as New Orleans/Baton Rouge, where he led the local response to the Deepwater Horizon oil spill.

A Phoenix native, Graham earned a bachelor's degree in atmospheric science from the University of Arizona and a master's degree in geoscience from Mississippi State University. Before taking on his current role, he also served in leadership positions across the National Weather Service, including at headquarters and in forecast offices in Birmingham, Alabama, and Corpus Christi, Texas.

## "From Vision to Value: Demonstrating the Power of NWS Transformation"

National Weather Service transformation is underway and it's being led by a former U of A alum. Join NWS Director Ken Graham as he shares the accelerated NWS transformation timeline and demonstrates what this means for Arizona communities and for students interested in working for NWS. A key Transformation feature is the evolution of our operational staffing model. Driven by a vision to get NWS meteorologists and hydrologists eye-to-eye with emergency management decision-makers, Graham is championing a more nimble and mobile workforce that embeds NWS support where it matters most.

**El Día Speaker**  
**ENR2 Room S107 ~ 4:00 pm**



**Dr. Grey Nearing**  
**Research Scientist**  
**Flood Forecasting Team**  
**Google**

Grey Nearing is a Research Scientist at Google, a position held since November 2021. Prior to this role, Grey served as an Assistant Professor at the University of California, Davis from October 2020 to November 2021 and at The University of Alabama from August 2017 to August 2020. Between June 2013 and August 2017, Grey contributed to projects as a Project Scientist at NASA Goddard Space Flight Center. Academic qualifications include a Doctor of Philosophy in Hydrology and a Master of Science in Biosystems Engineering, both obtained from the University of Arizona, and a Bachelor of Science in Mathematics from Purdue University.

Dr. Nearing holds a B.S. in Mathematics from Purdue University, an M.S. in Agricultural and Biosystems Engineering, and a Ph.D. in Hydrology and Water Resources from the University of Arizona. Before joining Google, he worked at NASA, the National Center for Atmospheric Research, and as a professor at the University of Alabama and the University of California, Da-

# "Bridging the Gap Between Global AI Forecasts and Local Early Warning"

The United Nations' *Early Warnings for All* initiative has set a mandate to protect every person on Earth with an actionable early warning system by 2027. While significant improvements have been made over the past decade, coverage gaps remain. We are currently witnessing a technological tipping point where global-scale organizations are emerging, largely in the private sector, that have the ability to produce state-of-the-art forecasts across a range of natural hazards. Uniquely, these organizations can couple forecasts with near-instant dissemination across technology platforms used by billions of people on a daily basis. This talk will explore the evolution of Google's global flood forecasting systems, which currently provide operational flood guidance to over a billion people globally. We will discuss the transition from initial LSTM-based architectures to the new (FloodHub version 2) architectures designed to mitigate geographical bias and handle missing data in the Global South. We will detail how these hydrological models ingest atmospheric inputs, including AI-based weather predictions like GraphCast, to extend lead time accuracy. Additionally, we will touch on a suite of derivative forecast systems built on top of Google's hydrology model.

The emergence of new AI-based forecasting technologies creates an opportunity. While, the Single Voice Principle states that disaster warnings should come from mandated agencies, global technology platforms can instantly disseminate warnings to billions of people, including in countries that lack national capacity. We will discuss the "hard problem" in this space, which is likely to define the future of *Early Warnings for All* as both a technology challenge and a global governance challenge.

## Oral Session One: 10:00 ~ S107

- 10:00 **Anik Das** ~ Investigating Southern Ocean Cloud Macro- and Microphysical Properties over the Southern Ocean across multiple platforms
- 10:15 **Hossein Yousefi** ~ Quantifying the Domain Gap in Multivariate Diffusion Downscaling: Real-to-Real versus Synthetic-to-Real Training Across Two Downscaling Scales
- 10:30 **Jessica Meyer** ~ Oh hail! A climatological analysis of giant hail within the United States
- 10:45 **Ben West** ~ Using Integrated Hydrologic Modeling to Investigate the Spatiotemporal Characteristics of Droughts in Catchments with Human Water Management

## Oral Session Two: 13:00 ~ S107

- 13:00 **Tyler Maio** ~ Arizona winter extreme precipitation: synoptic types and numerical weather prediction evaluations
- 13:15 **Nabin Kalauni** ~ A Hybrid Differentiable Land Surface Model for Improved Land-Atmosphere Flux Predictions
- 13:30 **Megan Robertson** ~ Diurnal and seasonal variability of ozone precursors across Arizona's sun corridor
- 13:45 **Tong Guo** ~ Sources, occurrence and mobilization of arsenic related to iron oxide concretions in former redbed sandstones, Colorado Plateau

## Oral Session Three: 15:00 ~ S107

- 15:00 **Grace Betito** ~ Competing effects of rainfall on atmospheric pollutant levels in an urban semi-arid environment
- 15:15 **Min Ma** ~ PFAS-LEACH analytical model: a graphical tool for evaluating PFAS soil-to-groundwater leaching and site-specific soil screening levels
- 15:30 **Brianna Poirier** ~ From tropical depression to hurricane or dissipation: environmental conditions shaping early-stage evolution
- 15:45 **Mohammad Farmani** ~ AI-based Soil Moisture Solver: A Mass-Conserving Perceptron Approach

# El Día Proposal Pitch

**Kaden McCulloch** ~ How black is the box: examining the identifiability of pumping schedules based on corresponding boundary fluxes ~ P1

**Iosif Xiradakis** ~ Characterizing the Identifiability of Air-Filled vs. Water-Filled Karst Conduits Using Time-Domain Electromagnetic and Electrical Resistivity Tomography Methods ~ P2

**Trevor Askins** ~ Using Machine Learning to Minimize Sensor Array Costs in Agriculture ~ P3

**Fernanda Munari** ~ Using water stable isotopes and tritium to characterize the age and travel paths of the Santa Cruz headwaters ~ P4

**Natalie Yurek** ~ Coupled Hydrogeophysical Modeling to Characterize Unsaturated Soil Properties Within an Aquifer Recharge Site ~ P5

**Guy Wall** ~ Using aerial time-domain electromagnetic surveys to quantify storage change in copper heap leach recovery ~ P6

**Greta Freeman** ~ Evaluating Colloidal Silica Barriers and PFAS Leaching Behavior in the Vadose Zone ~ P7

**Chloe Codner** ~ Investigating the capability of time-domain electromagnetic surveys to infer aquifer properties in place of a monitoring well ~ P8

**Jordann Brendecke** ~ Testing the Gaussian Legendre Quadrature Method for Surface Flux Accuracy ~ P9

**Diamante Barrett** ~ Evaluating the Effects of Reclaimed Water on the Chemical and Physical Properties of Soil: Implications of Ion Deficiency on Soil Conductivity and Crop Development ~ P10

**Jessica Carvalho** ~ How Many Monitoring Wells Are Enough? ~ P11

**Tracy Langston** ~ Modeling Storm Runoff in an Arid Watershed Using tRIBS: Performance and Parameter Sensitivity ~ P12

## Poster Sessions ~ Courtyard ~ 11:00 & 14:00

**Muhammad Jawad** ~ A Generalized KGE Metric for Improved Training (information Extraction) and Evaluation of Dynamical Systems Models ~ P1

**Tatum Beyer** ~ Assessing a new wind phenomenon: Santa Lucia winds ~ P2

**Chloe Codner** ~ No Well? No Problem: Investigating the Capability of Time-Domain Electromagnetics to Infer Aquifer Properties in Place of a Monitoring Well ~ P3

**Brooke Beran** ~ Stratospheric ozone intrusions over the northwest Atlantic: Multiseasonal cases from the ACTIVATE airborne mission ~ P4

**Aamir Raj Lamichhane** ~ Improved snow water equivalent prediction with a hybrid LSTM-SNOW17 model ~ P5

**Annalisa Minke** ~ A statistical analysis of applying continuous and discrete Haar wavelets to predict planetary boundary layer height ~ P6

**Christabel Obi** ~ Groundwater to the human gut: arsenic exposure and the prevalence of *H. pylori* infection ~ P7

**Roswell Roberts IV** ~ Identification of Precipitation Propagation Factors in the North American Monsoon with Self-Organizing Maps and Hierarchical Clustering ~ P8

**Aldo Andres Tapia Araya** ~ Honey, I blew up the forcings: Evaluating the robustness of Deep Learning-based rainfall-runoff models ~ P9

**Brandon Nepsa** ~ Re-examining the Influence of Snow Cover Extent on Monsoon Precipitation ~ P10

**Abdul Wahed Nab** ~ Process-level assessment of aridity-regime sensitivity in Penman-Monteith and PT-JPL evapotranspiration models across climate and aridity gradients ~ P11

**Jozette Conti** ~ Meteorological Conditions at Genesis That Differentiate Intensifying and Non-Intensifying Atmospheric Rivers ~ P12

**Fernanda Munari** ~ Using water stable isotopes and tritium to characterize the age and travel paths of the Santa Cruz headwaters ~ P13

**Kendall Wilde** ~ Shells from mollusk clams off the coast of north-west North America present timeline correlation with climate drivers ~ P14

**Guy Wall** ~ Using aerial time-domain electromagnetic surveys to quantify storage change in copper heap leach recovery ~ P15

**James Lende** ~ Improving surface fluxes from space: tuning two-stream vegetation properties with MODIS ~ P16

**Maria Castro** ~ Quantifying Shallow Groundwater-River Recharge and Flow Variability to Support Habitat Assessment Near the Moab UMTRA Site ~ P17

**Lakshmi Parakkat** ~ Ozone concentrations and influential variables during heat waves over two desert cities in the Southwest U.S. ~ P18

**Omid Zandi** ~ Multisource Merging of Daily Precipitation Products over the U.S. Southwest Using Spatiotemporal Graph Representation Learning ~ P19

**Lourdes Mendoza Fierro** ~ Improving Extreme Streamflow Simulations in Arid Chile: Linking High-Resolution Ensemble Precipitation to Hydrological Response ~ P20

**Nathan Strom** ~ Evaluating Groundwater Recharge Potential Across Soil Textures and Vegetation Under Pondered Conditions ~ P21

**Steven Billington** ~ Developing genotype-specific sorghum modeling in the community land model ~ P22

**Sadaf Moghisi** ~ Evaluating the Influence of Precipitation Forcing and Vegetation Dynamics on Hydrologic Simulations in Semi-Arid Snow-Dominated Catchments Using Noah-MP and RAPID ~ P23

**Kaden McCulloch** ~ How black is the box: examining the identifiability of pumping schedules based on corresponding boundary fluxes ~ P24

**Daniel Saavedra** ~ Updating Hydrologic Properties of Property-Scale Subbasins: Post-Construction Remeasurements for Tucson Water ~ P25

**Marcy Nadel** ~ Determining site-specific soil screening levels for PFAS at an airport source area ~ P26

**Samuel Booker** ~ Floating HexProtect Devices Reduce Evaporative Water Loss on a Wildlife Tank by 48% ~ P27

**Shujie Guo** ~ Experimental Investigation of Salt Precipitation in a Free-Flow/Porous-Media Microfluidic System ~ P28

**Vivian Barbian** ~ Quantifying Flash Flood Warning Thresholds in Pima County, AZ ~ P29

# El Dia Note

# El Dia Note

# Floor Plan

1- Registration Table

4- Sponsor Tables

2- Breakfast & Lunch Table

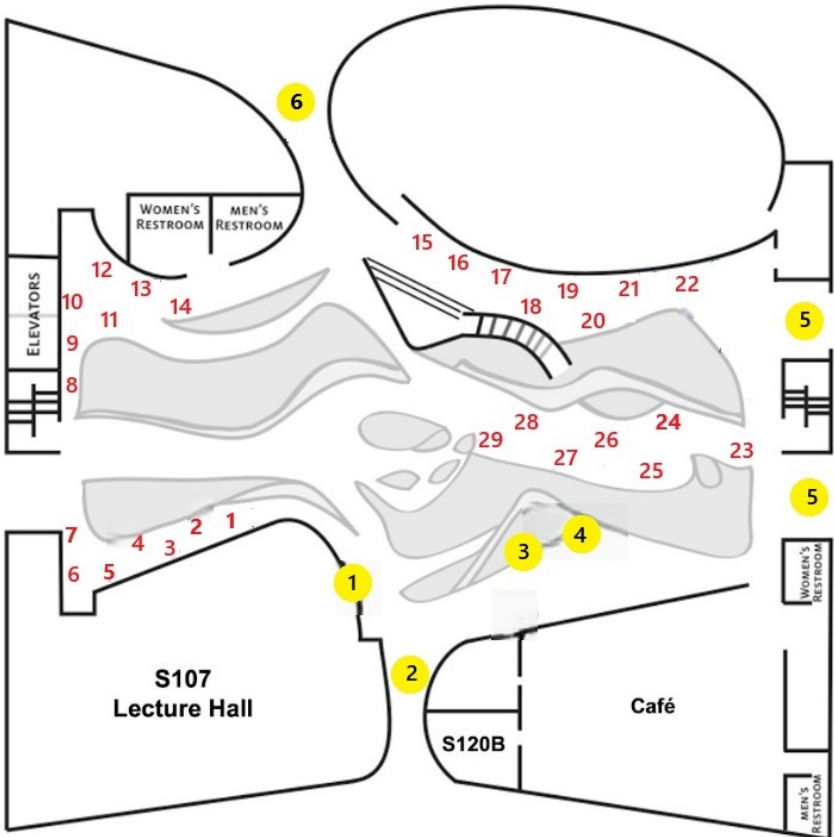
5- Sixth Street Garage Entrance

3- HASSA Table

6- Lowell Street Entrance

S107 - Oral Presentations

Nos 1-29 Poster Presentations



Meixner Spirit Award



Event Website