

2024 AGU Fall Meeting ~ Washington, D.C.
NSF SOARS® Protégés, Alumni, and Staff Schedule
09 - 13 December 2024

Monday, 09 December

When: 08:30 – 12:30 EST

Who: NSF SOARS Alum, Holly Olivarez (Poster)

Title: [Internal Climate Variability Modulates Decadal Changes in Ocean Anthropogenic Storage](#)

Session: B11M The Global Carbon Cycle and Its Feedbacks with Anthropogenic Change I

Location: Hall B-C

When: 10:20 – 10:30 EST

Who: NSF SOARS Alum, Shay Gilpin (Oral)

Title: [Inaccuracy of the variance evolution associated with discrete covariance propagation](#)

Session: NG12A Advances in Data Assimilation, Data Fusion, Machine Learning, Predictability, and Uncertainty Quantification in the Geosciences II

Location: Marquis 12-13

When: 13:40 – 17:30 EST

Who: NSF SOARS Alum, Marcel Corchado Albelo (Poster)

Title: [Spatial Complexity of Flare Ribbon Boundaries](#)

Session: SH13C Flares and Eruptions in the IRIS Era: What Have We Learned, and What's Next?

Location: Hall B-C

When: 16:40 – 16:50 EST

Who: NSF SOARS Alum, Holly Olivarez (Oral)

Title: [Solar Radiation Modification and Ocean Biogeochemical Properties](#)

Session: GC14A Advances in Climate Engineering Science III

Location: Salon G

Tuesday, 10 December

When: 08:30 – 12:20 EST

Who: NSF SOARS Alum, Briah Davis (Poster)

Title: [The Sensitivity of Boundary Layer Characteristics to Entrainment-Enhanced Buoyant Mixing and Surface Evaporative Fraction](#)

Session: A21D Boundary Layer Processes and Turbulence IV

Location: Hall B-C

When: 10:30 – 10:40 EST

Who: NSF SOARS Protege, Lilian Zhu (Oral)

Title: [An Intercomparison of Near Surface Water Vapor Trends Over the Contiguous U.S. between CONUS404, CMIP6 Models, and Observations](#)

Session: GC22B High-Resolution Regional Earth System Modeling: Hydroclimate Variability, Extremes, and Policy Implications II

Location: Salon C

When: 13:40 – 17:30 EST

Who: NSF SOARS Protege, Emily Nigro (Poster)

Title: [Investigating Remote Vegetation Impacts on Western US Hydroclimate over the Holocene](#)

Session: PP23D Sedimentary Records of Holocene Climate and Environmental Change II

Location: Hall B-C

Wednesday, 11 December

When: 08:30 – 12:20 EST

Who: NSF SOARS PI Becca Hatheway

Title: [Exploring Climate Solutions Through Online Simulations and Games](#)

Session: ED31B Climate Empowerment: Simulations and Gamification of Climate Education I

Location: Hall B-C

When: 08:30 – 12:20 EST

Who: NSF SOARS PI Becca Hatheway

Title: [Co-creation of a Museum Exhibit about Climate Change with a Diverse Team of Students, Scientists, Educators, and Museum Professionals](#)

Session: ED31D Empowering a Diverse and Global Earth and Space Science Community Through Education and Public Engagement I

Location: Hall B-C

When: 13:40 – 17:30 EST

Who: NSF SOARS Protege, Zaria Cast (Poster)

Title: [A Comprehensive Analysis of Trends and Changes in Precipitation Partitioning over the Arctic Ocean](#)

Session: C33C Climate and Snow: Past, Present, and Future I

Location: Hall B-C

When: 13:40 – 17:30 EST

Who: NSF SOARS Alum, William Manriquez (Poster)

Title: [Super-resolution of Sea Surface Height \(SSH\) Using Machine Learning](#)

Session: OS33C Ocean Sciences

Location: Hall B-C

When: 15:12 – 15:37 EST

Who: NSF SOARS Alum, Shay Gilpin (Oral)

Title: [A new perspective on covariance propagation for data assimilation applications](#)

Session: NG33C Turcotte Awardee

Location: Ballroom C

Thursday, 12 December

When: 08:30 – 12:20 EST

Who: NSF SOARS Alum, Ariel Jacobs (Poster)

Title: [Investigating Recent Arctic Cyclone Structure and Evolution](#)

Session: A41J Extratropical and High-Latitude Storms, Circulation Dynamics, and Extreme Events in the Rapidly Changing Polar Climate

Location: Hall B-C

When: 13:40 – 17:30 EST

Who: NSF SOARS Protege, Deztynee Bryan

Title: [Structural Analysis of Tropical Cyclones by the APAR Observing Simulator: A Comparison Study](#)

Session: A43A Advances in Radar Remote Sensing of Clouds and Precipitation: Observations, Data Processing, and Weather and Water Model Applications II

Location: Hall B-C

When: 14:44 – 14:57 EST

Who: NSF SOARS Alum, Rosimar Rios-Berrios (Invited, Oral)

Title: [Multi-Scale Interactions of Tropical Weather Systems in a Hierarchy of Aquaplanet Experiments](#)

Session: A43V High-Resolution Earth System Modeling on Large Supercomputers II

Location: 145 A

Friday, 13 December

When: 08:31 – 08:51 EST

Who: NSF SOARS Alum, Rosimar Rios-Berrios (Invited, Oral)

Title: [Modulation of Tropical Cyclogenesis by Convectively Coupled Kelvin Waves](#)

Session: A51H The Madden-Julian Oscillation and Convectively Coupled Waves in the Tropics: Observations, Theory, Modeling, and Prediction I

Location: 204 A-C

When: 13:40 – 17:30 EST

Who: NSF SOARS Alum, Manny Hernandez (Poster)

Title: [Managing Catastrophic Wildfire Risk in a Changing Climate within the Insurance Industry](#)

Session: GC53C Advances in Quantifying and Attributing Climate Impacts and Damages to Inform Climate Risk Management and Litigation III

Location: Hall B-C

When: 13:40 – 17:30 EST

Who: NSF SOARS Protege, Celia Kong-Johnson (Poster)

Title: [Understanding How Winds May Have Influenced Polynesian Navigation During the Initial Voyages to Hawai'i Around 1000 CE](#)

Session: OS53B Coastlines and People: Convergence Science Between Coastal Sustainability, Human Dimensions, and Coastal Processes III

Location: Hall B-C

When: 13:40 – 17:30 EST

Who: NSF SOARS Alum, Rebecca Porter (Poster)

Title: [Investigating Different RegCM5 Planetary Boundary Layer Parameterizations to Simulate an Atmospheric River Case Study](#)

Session: A53G Atmospheric Rivers: Processes, Impacts, Observations, and Uncertainties III

Location: Hall B-C

When: 16:55 – 17:05 EST

Who: NSF SOARS Alum, Erin Dougherty (Oral)

Title: [Future Simulated Changes in Central U.S. Mesoscale Convective System Rainfall and Structure](#)

Session: A541 Understanding and Modeling of Mesoscale and Severe Local Convective Storm Processes II

Location: 201