School of Earth, Society, & Environment
2023 Research Review Program

Schedule

8:30 – 10:00 AM Poster Presenter Check-In & Setup
10:00 – 1:00 PM First Round of Judging (Judges Only)
2:00 – 3:30 PM Poster Presentations/Second Round of Judging
3:30 – 3:35 PM Welcome Message
3:35 – 4:15 PM Lightning Talks
4:15 – 5:00 PM Poster and Photo Contest Awards

Lightning Talks

Asli Topuzlu, ESES, Undergraduate Student
Riley Balikian, Geology, Graduate Student
Divya Rea, Atmospheric Sciences, Undergraduate Student
Kaylee Heimes, Atmospheric Sciences, Graduate Student
Md Sadiul Chyon, Geography & GGIS, Graduate Student
Tanya Shukla, Geography & GIS, Graduate Student

Instructions For Poster Printing & Setup

If you need a poster printed by SESE, please fill out the poster printing request at https://forms.illinois.edu/sec/1815339 by **Tuesday, Feb 21st @ 12pm** so that the SESE IT team can be sure to accommodate your printing job in a timely fashion. You need to bring your poster to the Illini Union rooms ABC between **8:30-10:00am on Friday, February 24th** for check in and set up. The entrance to the Illini Union rooms ABC is located on the west side of the first floor of the Illini Union. Research Review Committee volunteers will assist with poster check-in and set up.

Poster Awards

Outstanding student presenters will receive awards during the SESE Research Review.

Poster Presentation Index

Poster #	Name	Department	Title
18	Abigail McDonnell	Atmospheric Sciences	Evaluating Constraints on Future Climate Change Based on Model Skill Over the Historical Record
24	Alexander Adams	Atmospheric Sciences	The Evolution of The Cold Pool and Contributions from Latent Cooling in a Simulated PECAN MCS
27	Allison Reed	ESES	Crisis Pregnancy Centers and Abortion Access in St. Louis
53	Amer Islam	Geography and GIS	Quantification of Sand and Gravel use in Dhaka, Bangladesh
40	Anay Patel	Atmospheric Sciences	Evaluating the Skill of Linear Models of Salinity and δ18OSW Using Isotope-Enabled Climate Models
49	Anna McMillan	Atmospheric Sciences	The Connections Between Convective Updraft Cores and Overshooting Tops
55	Ben Gorski	Geology	Hydrological Processes of the Middle Fork Vermillion River
52	Brian D'Souza	Geology	Glacial Erosion and Valley Assymetry Between the North and South Uintas
34	Caroline Ludden	Geography and GIS	Patterns Of Vegetation Succession Following Lake Drainage In Northern Alaska
9	Charumeghana Samantula	Atmospheric Sciences	How do climate uncertainties influence western US fire risk projections?
50	Chelsy Salas	Geography and GIS	Comparison of River and Floodplain Sediment Concentrations During a Flood Event on a Lowland Meandering River
2	Chishan Zhang	Geography and GIS	A Phenology-guided Bayesian-CNN (PB-CNN) Framework for Crop Yield Estimation and Uncertainty Analysis
47	Chloe Marks	Geology	Using zircon (U-Th)/He dating to understand the Great Unconformity Surface in the Minnesota River Valley

14	David Roegner	Atmospheric Sciences	Application of Machine Learning to Wind Engineering and Storm Classification
22	Divya Rea	Atmospheric Sciences	Contribution of Atmospheric Rivers to Seasonal Precipitation in the US Intermountain West
54	Dominik Rzeszutek	Geology	Cataloging volcanic structures on the surface of Venus using machine learning
20	Duncan Anderson	Geography and GIS	Linking Atmospheric Rivers with Landslide Frequency along the Northern Pacific Coast of North America
45	Eddie Wolff	Atmospheric Sciences	Signatures of QLCS Tornadogenesis in Overshooting Tops and Upper-Tropospheric Radar Reflectivity
21	Emma Hall	Geography and GIS	UAS-LiDAR Predicts 2D and 3D Spatiotemporal Patterns of Change in Retrogressive Thaw Slumps in Northern Alaska
48	Erika Pruitt	Atmospheric Sciences	Heavily Polluted Clouds Produced Precipitation
39	Fangzheng Lyu	Geography and GIS	A vector-based method for drainage network analysis based on LiDAR data
25	Hannah Veldhuizen	Geology	Coal Ash Leaching in Groundwater
1	Jacob Vile	Atmospheric Sciences	Effects of Sea Surface Temperatures (SST) on Warm Conveyor Belt (WCB) Ascent
3	Jay Pillai	Atmospheric Sciences	Arctic Amplification, Temperature Inversions, and Sea-Ice
8	Jinwoo Park	Geography and GIS	Spatial disaggregation per unique temporal sequences in dynamic spatial accessibility to primary care in New York City
28	Jinyu Wang	Geology	High frequency event-scale concentration-discharge relationships in two agriculturally impacted rivers
15	John Lundstrom	Atmospheric Sciences	Motivation for the validation of atmospheric tomography with 3D radiative transfer
26	Joseph Nied	Atmospheric Sciences	Cloud Masking for MODIS via U-Neural Networks

44	Kaylee Heimes	Atmospheric Sciences	Preliminary Categorization of 2020 and 2022 IMPACTS Cyclones for the Analysis of Wintertime Cyclones from a Satellite Perspective
35	Kei Yamato	Geography and GIS	Declining Birthrate and Aging Population: A look into Japan's problem with population over the years
36	Kei Yamato	Geography and GIS	Earth Workshop: Mapping historical photos with Uni High Students
16	Kevin Boyd	Atmospheric Sciences	A Genesis Potential Index for Polar Lows with Applications to Subseasonal to Seasonal Prediction
56	Kyuhaeng Lee	Atmospheric Sciences	Measuring air quality in classrooms with a low-cost sensor
51	Lauren Beard	Atmospheric Sciences	Preliminary Analysis of the 1800 UTC 01 February- 0000 UTC 06 February Frontal System Sampled Twice by IMPACTS
23	Leanne Blind-Doskocil	Atmospheric Sciences	The Differentiating Characteristics of Tornadic, Wind-Damaging, and Non-Damaging QLCS Mesovortices during PERiLS 2022
37	Margaret Olson	Atmospheric Sciences	Can Entraining Ribbons Enhance Hail Sizes in Supercell Thunderstorms?
57	Matthew Graber	Atmospheric Sciences	Changes in Trends and Seasonal Variability of Tornado Outbreaks
58	Md Sadiul Alam Chyon	Geography and GIS	Quantification of sand mining intensity in North East Bangladesh
31	Michael Sessa	Atmospheric Sciences	The prediction of potential tornado intensity using machine learning
38	Mingshi Yang	Atmospheric Sciences	Latitudinal Dependence and Lifecycle Evolution of Arctic Cyclone
41	Mishel Melendez Bernardo	Geography and GIS	Lateral Response of Lillooet River, Canada, to a Sediment Pulse Generated by a Massive Landslide
17	Nol Srivichainun	Geology	Fly Ash Analysis of Postsettlement Alluvium from Middle Fork Vermilion River
12	Paul Romano	Atmospheric Sciences	Termination of the bright band in mid latitude cyclones.

42	Poushalee Banerjee	Geography and GIS	Reconstructing the dynamics of a meandering river in an intensively managed landscape through analysis of floodplain deposits
6	Pranjali Anil Borse	Atmospheric Sciences	Effects of Variability of Climatic Conditions on the Production of Mosquitoes from Urban and Rural Stormwater Infrastructure in Central Illinois
10	Rachel Tam	Atmospheric Sciences	Different Drivers of Low Cloud Radiative Feedbacks and their Uncertainty in Historical and Future Simulations
4	Songning Wang	Atmospheric Sciences	Change in the frequency of tornado activity in China due to climate change
29	Sydney Carste	ESES	Statistical Runout Modelling of Snow Avalanche Risk Using GIS on Cerro Mocho, Patagonia, Southern Chile
43	Tasneem Haq Meem	Geography and GIS	Power-based Assessment of the Impact of Urban Runoff on the Stability of Chicago-area Streams
11	Tianci Guo	Geography and GIS	Towards Scalable Field-level Crop Yield Estimation through Integration of Crop Model and Deep Learning
19	Wataru Morioka	Geography and GIS	Spatially-weighted Network Dual K Function
30	Wenhan Tang	Atmospheric Sciences	Particle-resolved simulation of immersion freezing with PartMC
7	Yilun Zhao	Geography and GIS	Monitoring Spring Leaf Phenology of Individual Trees in a Temperate Forest Fragment with Multi scale Satellite Time Series
13	Yin Liu	Geography and GIS	CropSow: an integrative remotely sensed crop modeling framework for field-level crop planting date estimation
32	Yuyu Li	Geology	Using numerical models to investigate open magma system behavior at Veniaminof Volcano, Alaska
33	Zach D'Aquino	Atmospheric Sciences	PyPartMC: a Pythonic Interface to a Particle-Resolved Monte-Carlo Aerosol Simulation Framework
5	Zach Solecki	Atmospheric Sciences	Characteristics of tornado and severe hail outbreaks in Midwest supercells
46	Zijun Yang	Geography and GIS	A Novel Phenology Guided Deep Learning Model for Within-Season Field-Level Crop Mapping