



PANGEA 2026 Program Overview

Time	Activity	Location
8:00 am - 9:00 am	Registration & Breakfast/Coffee	ELA 344
8:40 am - 8:50 am	Welcome and Introductions	ELA 344
9:00 am - 10:15 am	Paper Session I, II, III (concurrently)	ELA 311 (I), ELA 312 (II), ELA 315 (III)
10:20 am - 10:45 am	Coffee Break	ELA 344
10:45 am - 12:00 pm	Paper Sessions IV, V, VI, VII (concurrently)	ELA 311 (IV), ELA 312 (V), ELA 315(VI) ELA 313 (VII)
12:00 pm - 1:10 pm	Lunch Break	ELA 344 (Served in 384)
1:15 pm - 2:15 pm	Alumni Career Panel	ELA 116
2:20 pm - 3:10 pm	Poster Session	ELA Third Floor (Coffee and snacks provided in the ELA 1 st floor hallway)
3:15 pm - 4:15 pm	GEOBOWL	ELA 116
4:20 pm – 4:50 pm	Awards Ceremony	ELA 116

***Notes to PANGEA presenters and participants:**

1. Paper sessions will take place primarily in ELA 311, ELA 312, and ELA 315.
2. Each presentation will be **10 minutes**, with an additional **5 minutes** for Q&A (15 minutes total).
3. Paper presenters should have a digital copy of their presentation available **before** their scheduled time and should arrive at the beginning of their scheduled session.

DETAILED PANGEA PROGRAM

8:00am - 9:00am REGISTRATION

Room: ELA 344

Enjoy an assortment of coffee and pastries

8:40am - 8:50am WELCOME TO PANGEA 2026

Room: ELA 344

Hosts: Dr. Christi Townsend, Dr. Sam Krause, and Graduate Students Amanda Barney and Erin Farina

9:00am - 10:15am PAPER SESSIONS I & II & III (CONCURRENTLY)

Paper Session I: GIS and Remote Sensing

Room: ELA 311

Judges and hosts: Dr. Edwin Chow and Dr. Benjamin Zhan

9:00-9:15 **Joshua O. Okeke**

Assessing spatial accessibility of cooling centers across New York City

9:15-9:30 **Xihan Yao**

Investigating relationships between the Built-Environment and Big Five Personality Traits

9:30-9:45 **Anupa Bhatta**

Mapping Potential Cool Spots: Assessing the Impact of Future Urban Growth on Blue and Greenspaces and Heat Patterns in Denton, Texas

9:45-10:00 **Wesley Kimeli**

Mapping Heat Risk at the Census Block Level in San Marcos.

10:00-10:15 **Yubin Lee**

Socioeconomic Inequalities in Mobility-Based Heat Burden

Paper Session II: Physical Geography, Geology, and Climate

Room: ELA 312

Judges and hosts: Dr. Richard Dixon and Dr. Sam Krause

9:00-9:15 **Elizabeth Kubacki**

The Land-Water Nexus in South-Central Texas: An Analysis of Historical and Future Land Use and Water Use

9:15-9:30 **Erin Farina**

A Case Study of Green Infrastructure as a Flood Mitigation Tool in Houston

9:30-9:45 **Prabish Khadka Chhetri**

Seasonal surface velocity of Thulagi Glacier, Nepal, in 2023: Evidence of rapid early-monsoon acceleration driven by peak proglacial lake temperature

9:45-10:00 **Md Munir Mahmud**

Identifying Drivers of the Catastrophic LA Wildfire in 2025 Using Remotely Sensed Data, Geospatial Modeling, and Machine Learning Approaches

10:00-10:15 **Fahmina Binte Ibrahim**

The Impact of Behavioral Uncertainty on Flood Evacuation Outcomes: A Spatial Agent-Based Simulation

Paper Session III: Human and Cultural Geography

Room: ELA 315

Judges and hosts: Dr. Jennifer Devine, Dr. Eric Sarmiento

9:00-9:15 **Emily Rhodes**

From Frontier to Food Desert and Back Again: Tracing Racialized Development and Resilience in Oklahoma City's Black Spaces

9:15-9:30 **Kristan Marku Beluso (undergraduate)**

Nomadic Fandomites: Analyzing Fandom on Social Platforms

9:30-9:45 **Luisa Amato Caye**

Trends and Transformations in Irregular Migration Facilitation (Coyotaje) in Latin America

9:45-10:00 **Tay Villaseñor**

La Lucha Por La Tierra: Geographies of Refusal in Honduras

10:00-10:15 **Ellie Culverhouse**

Settler Colonial Tourism: Mermaids in the Sacred Springs

10:20am – 10:45am: Break

10:45am – 12:00pm PAPER SESSIONS IV, V & VI (CONCURRENTLY)

Paper Session IV: The Environment & Energy

Room: ELA 311

Judges and hosts: Dr. Bradley Lane and Dr. Soe Myint

10:45-11:00 **Brock Burford**

Turning Water to Wine: An Analysis of Texas Wine Industry Water Efficiency

11:00-11:15 **Jong-Ku Park**

Energy for Whom? Power, Politics, and the Expansion of Agrivoltaics in South Korea

11:15-11:30 **Prabesh Pandey**

Organized Crime and Environmental Harm: A comparative case study of Guatemala and Panama

11:30-11:45 **Ayomide Famewo**

Growing Together: The “One Block Challenge” and the Future of Sustainable Wine in Texas

11:45-12:00 **Emmanuel N. Aklie**

“From Fossil Fuels to Net-Zero: A 100-Year Systematic Review of Texas’ Renewable Energy Transition (1974–2074)”

Paper Session V: Current Geographic Topics from Education to AI

Room: ELA 312

Judges and hosts: Dr. Injeong Jo, Dr. Alberto Giordano

10:45-11:00 **Bren Vander Weil**

Factors Associated with Student Achievement in Geography and Technology and Engineering Literacy: A Comparative Review of NAEP Data

11:00-11:15 **Adriana Montoya**

Rectifying a River: A Critical Case Study of Engineering Control on the Rio Grande in El Paso, Texas

11:15-11:30 **Margo Harrison**

Rainwater Harvesting System Potential in Multi-Family Development in Austin, Texas

11:30-11:45 **Nirvana Heidarian**

AI, Borders, and the Migration Journey: Critical Feminist Perspectives on Digital Migration Governance at the U.S.–Mexico Border 12:00-12:15

11:45-12:00 **Keenon Lindsey**

“Seeing” Gentrification: A Deep Learning Approach to Visual Change Perception

Paper Session VI: Urbanization, Transportation, and Health

Room: ELA 315

Judges and hosts: Dr. Rosie Ray, Dr. Danielle Smilovsky

10:45-11:00 **Suraj Sharma**

Eco-City Dream, Urban Realities and Environmental Justice in Austin and Dallas

11:00-11:15 **Lidia Roy**

Spatial Analysis of PrEP Accessibility and Health Inequities in Atlanta, Georgia, USA, 2022

11:15-11:30 **Md Tousif Tanzir**

An Urban Greenery Assessment Using Panoramic and Human Visual Cycle-based Indices

11:30-11:45 **Jaydon Allison**

Texas Courthouse Square Analysis

11:45-12:00 **Lily Sellers**

Running Them Out of Town: How Running Clubs Serve as a Form of Community-Building and Late-Stage Cultural Displacement in East Austin

Paper Session VII: Climate Stories, Reimagined with AI

Room: ELA 313

Hosted by Dr. Yanan (Nancy) Li

Description: This session explores the environment through creative storytelling and visual expression. Student presenters use climate fiction to imagine possible futures, human responses, and socio-ecological dilemmas shaped by dynamic Earth conditions. Each presentation combines an original short story with AI-assisted visual elements, such as images or animations, to enhance narrative impact and audience engagement. While speculative in form, the stories are grounded in plausible climate science and social realities. Together, the presentations demonstrate how storytelling and AI-enhanced visualization can communicate complex environmental issues in accessible, imaginative, and compelling ways.

10:45-11:00 **Amanda Barney**

Year One: A Climate Fiction

11:00-11:15 **Farhaan Cooverji**

The Dome of Discomfort

11:15-11:30 **Annelise Holguin**

Houston Underwater

11:30-11:45 **David Smiecinski**

Return to Sender

12:00pm – 1:10 pm LUNCH BREAK

Room: ELA 384 and 344 – Lunch will be available for pick-up in ELA 384 for registered presenters and attendees. Seating will be available in ELA 344.

1:15pm – 2:15 pm CAREER PANEL DISCUSSION

Room: ELA 116

Curious about where a **geography degree** can take you? Join us for an engaging Career Panel Discussion, where **alumni from the Texas State Department of Geography and Environmental Studies** will share how they turned their passion for geography into rewarding careers. This panel will provide valuable insights into your future possibilities. Come network with professionals who were once in your shoes!

2:20 pm – 3:10 pm POSTER SESSION: ELA Third Floor

Judges: Dr. Shadi Maleki, Dr. Shelly Wernette, Dr. Jason Julian, Dr. Su Han, Dr. Yihong Yuan, Dr. Brandon Radoman-Shaw, Dr. Ron Hagelman

Undergraduate Student Poster Presenters

1. Jyotsana Kandel

The Nutritional Divergence: A Spatial Analysis of Food Swamps in San Marcos

2. Livy Rocha, Jasmine Rodriguez, Noah Hanson, Samantha McClennon, Adrian Urrutia

A Comprehensive Report on the Collection and Processing of Geospatial Data for - Texas State University: Disc Golf Course

Graduate Student Poster Presenters

1. Fahim Ahmed

Challenges and Future of U.S. Data Center Sustainability

2. Mason Miller

A GIS-based Investigation of Adaptive Water Management Practices in Arid New Mexico

3. Farhaan Cooverji

Quantifying Snowmelt-Driven Streamflow and Estimating the Regional Water Balance of the Smith River Watershed, Montana, USA

4. Annelise Holguin

The Agave and Mezcal Boom: A Mixed Method Approach to Understand Land-Use Change and Socio-Environmental Effects

5. Tristan Goedert

A Geoarchaeological Investigation of Agriculture in the Mesilla-phase Creekside Village Site in Southern New Mexico

6. Derrick Ahadzi

Plastic Waste Management and Green Innovations in Developing Cities: A Case Study in the Greater Accra Region of Ghana

7. Pingping Wang

Developing mobility zones based on heat exposure and vegetation condition: a tale of two transportation modes

8. Marie White

The Ancient Environments of New Mexico: Using geoarchaeological methods to understand Holocene human-environment interactions

9. Ernestina Osei

Identifying Socioeconomic Areas of Concern Towards Inclusion in GIS Hazard Management in Detroit, Michigan

10. Babak Heidari

Integrating GEDI, SRTM, and Global Surface Water to Quantify Water Storage Changes in the Colorado River Basin: Hydroclimatic Linkages Over the Past 20 Years

11. Sadia Islam Ritu

Assessing Invasive Giant Reed Expansion in a Flood-Disturbed River System Using Remote Sensing and Machine Learning

12. Avery Bouskila

Public and Private River Access as Drivers of Recreational Angler Pressure: A GIS Analysis of the Guadalupe River in Gruene, Texas

13. Michael D. White

Two Wheels to Town: Promoting Bicycle Infrastructure in Small-to-Midsized Texas Cities, A Spatial and Community Based Analysis

14. Sirwan Salimi

Street-Level Noise Assessment Across Different Urban Block Typologies: A Voxel-Based Forward Ray Tracing Model.

15. Annie Vo

Mapping Data Center Water Demand Against Edwards Aquifer Recharge Zones in Hays County, Texas: A Scenario-Based Spatial Analysis

16. Lakeshia Wright

Geography as a Clinical Skill: Spatial Literacy, Empathy, and Policy Practice

17. Mehnaz Badhan

Evaluation of Ambient Air Quality and Air Pollution Index in Major Cities of Bangladesh

18. Chika Ohakawa

Soil Gypsum Content Analysis of the Proposed FM 2185 Route Extension in Culberson County, Texas

19. Priyanjali Bose

Spatiotemporal Modeling of Drought Behavior in the Texas Colorado River Basin, USA

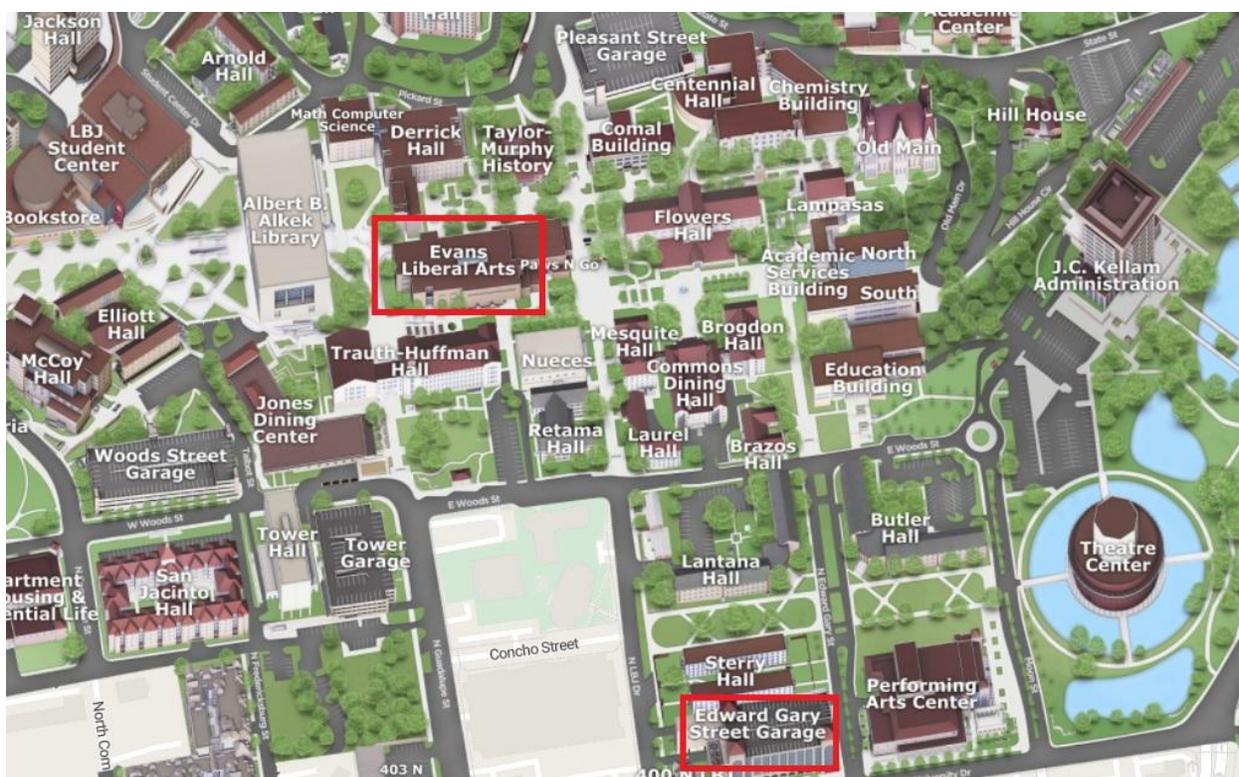
2:20pm – 3:10pm COFFEE BREAK

(Concurrently with the Poster Session)

Room: ELA First Floor Atrium

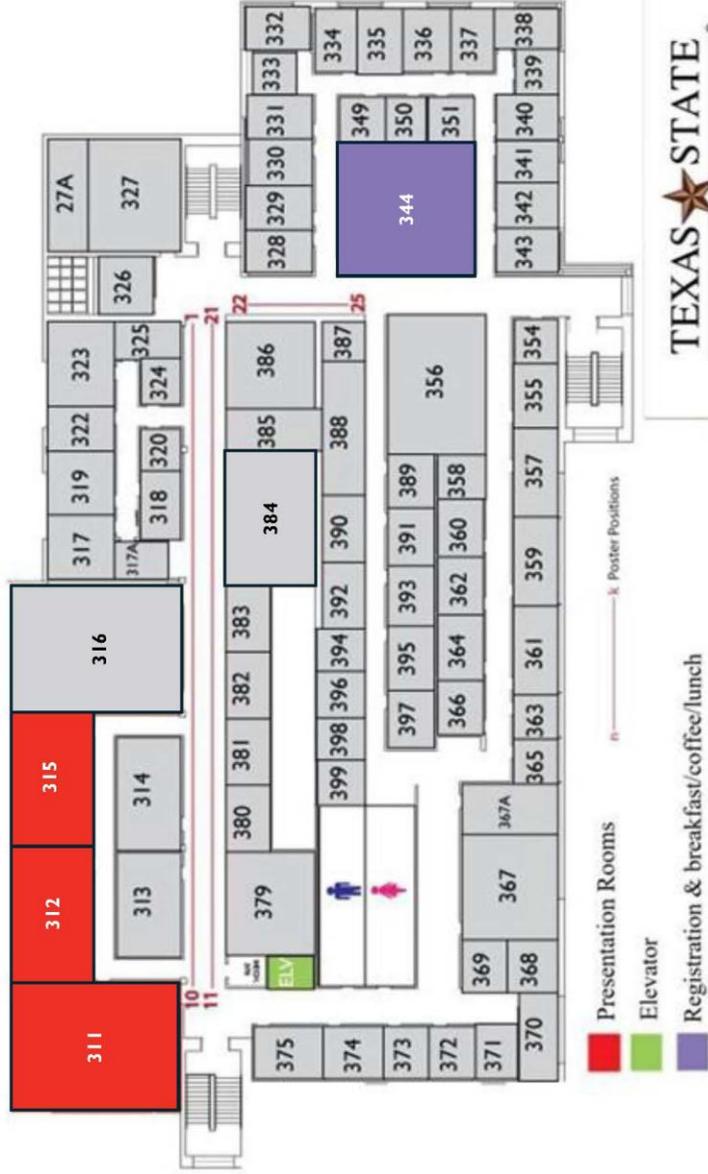
3:15 pm – 4:15 pm GEOBOWL – Hosted by Bren Vander Weil
Room: Meet in Room ELA 116

4:20 pm – 4:50 pm AWARDS CEREMONY
Room: ELA 116



Parking vouchers are available for out-of-town/non-TXST attendees who come to the conference. We recommend parking in the Edward Gary St Garage. The parking ticket obtained at the garage gate can be exchanged for a voucher at registration.

Evans Liberal Arts 3rd Floor



PANGEA Planning Committee, 2025-2026

Faculty Advisors:
Dr. Christi Townsend
Dr. Sam Krause

Staff Advisors:
Allison Glass-Smith
Holly Bazaldua
Charles Robinson

PhD Co-Chair:
Amanda Barney

Masters Co-Chair:
Erin Farina

Student Committee:
Avery Bouskila
Brock Burford
Brenna Eliaz
Megan Flannery
David Smiecinski

Special Thanks To:

Texas State University Department of Geography and Environmental Studies faculty, staff, and students for their support, attendance, and participation!

Dr. Jennifer Jensen, Department Chair
Dr. Injeong Jo, Graduate Coordinator

All faculty who served as judges, advisors, and session moderators

Geography Department Staff:
Holly Bazaldua
Charles Robinson
Allison Glass-Smith
Dan Hemenway
Katie Webb
Stephanie Avila
Kennedy Kindred

Department of Geography and Environmental Studies student workers and student volunteers.