Climate Science Research Workshop
September 8th, 2023
12:00 – 4:00pm
General Research Laboratory, #201

Ryan Venturelli, Brandon Dugan, Matt Siegfried

12:00 – 12:30 Introductions/Networking/Lunch

12:35 – 12:45 Workshop Objectives

12:45 – 2:27 Lightning Talks

12:45 **Morgan Bazilian (Payne Institute**) Climate and Policy

12:48 **Shannon Mancus (HASS)** "Alternatives to the Information Deficit Model in Climate Communication"

12:51 **Sebnem Duzgun (MN)** “Critical infrastructure resilience under climate change”

12:54 **Eileen Martin (GP)** “Scalable Geophysical Monitoring for Permafrost and Glaciers"

12:57 **Chris Elvidge (Payne Institute)** “Remote sensing work we do on global gas flaring”

1:00 **Qiuhua Huang (EE)** “Power systems adaptation and resiliency considering climate change”

1:03 **Pejman Tahmasebi (PE)** ‘Machine Learning and Water Resources: Adapting to Climate Change with Data-Driven Insights”

1:06 **John McCray (CEE)** “Impacts of climate change and land use on water resources in Southern Peru”

1:09 **Eric Anderson (CEE)** “Atmosphere-Lake Interactions and Operational Forecasting”

1:12 **Adrianne C. Kroepsch (HASS)** “Climate & Society: Anxiety and Adaptation in the Anthropocene”

1:15 – 1:20 Break

1:20 **Brandon Dugan (GP)** – “Subglacial meltwater as a source for offshore freshened groundwater”

1:23 **Jake Slawson and Piret Plink-Bjorklund (GGE)** “Long-term increase in precipitation intermittency and intensity at Paleogene mid-latitudes”

1:26 **Eric Roberts (GGE)** “A 100 Million Year Paleoclimate Record of central African in the East African Rift System”

1:29 **Sara Warix (Hydrology)** “How will climate change impact headwater stream hydrology and geochemistry?”

1:32 **Zane Jobe (GGE)** - Carbon burial by turbidity currents: the overlooked carbon sink in the deep ocean

1:35 **John Spear (CEE)** “Microbes and Climate at 81N 81W”

1:38 **Adrienne Marshall (Hydrology)** “Opportunities to better understand climate change impacts, adaptation, and mitigation in the western U.S. water system”

1:41 **Tasha Snow (GP)** "Glacier-ocean interactions in polar regions using an open cloud workflow"

1:44 **Omid Beik (EE)** “Role of Renewable Power & Energy Systems, and Electrification in Climate Change”

1:47 **Nathan Lenssen (AMS)** “Better Climate Information is Critical for Science & Policy”

1:50 **Marc Dumont (GGE)** "Applications of geophysics to climate science"

1:53 **Bia Villas Boas (GP)** “Not the surface Waves you are thinking about”

1:56 - 2:04 Break

2:04 **Troy Sorensen (AMS)** “Developing models for improved methane emissions accounting across the oil and gas supply chain”

2:07 **Cal Richards-Dinger (AMS)** "Quantifying emission reduction from capturing a natural methane outcrop on Southern Ute territory".

2:10 **Ryker Fish (AMS)** "Effective Applications of Fluid Dynamics Models for Emission Quantification."

2:13 **Ryan Peterson (AMS)** "Exploring Statistical Relationships between Climate Modes and Carbon Monoxide (CO) with focus on Australian Wildfires."

2:16 **Alex Pinard (AMS)** "Optimizing Data Compression of Climate Simulation Model Output"

2:19 **Josh Sharp (CEE)** "Water Quality Impacts and Solutions in a Changing Climate"

2:22 **Marion McKenzie (GGE)** “Pairing on-and-offshore observations of paleo-streams to elucidate dynamics of the Cordilleran Ice Sheet (PISCES)

2:25 **Ryan Venturelli (GGE)** “The West Antarctic Ice Sheet before we started watching”

2:28 **Matt Siegfried (GP)** “Eyes on Ices: Ground-, air-, and space-based geophysics of ice sheets, glaciers, and permafrost”

2:30 – 2:40 Break

2:40 – 3:30 Breakout Groups/ Brainstorming

1. Climate Cohort Structure – John Spear
2. Climate Curriculum – Nathan Lessen
3. Local Partners to Engage – Tasha Snow

3:30 – 4:00 Report Back and Nest Steps

3:30 – 3:35 – Climate Cohort Structure report back

3:35 – 3:40 – Climate Curriculum report back

3:40 – 3:45 – Local Partners to Engage report back

3:45 – 4:00 – Next Steps / Close