

# SeCAPS 2024

## Saturday, April 6:

7:45 a.m. – Registration (Refreshments Available)

8:15 – Welcome and Opening Remarks – Dr. Sytske Kimball, University of South Alabama

### Session I: Mesoscale/Local Meteorology

8:25 – The Record-Breaking Severe Weather Marathon of June 2023 by the Numbers  
– *Cameron Young, NWS Tallahassee, FL*

8:40 – Uses and Applications of The South Alabama Mesonet – *Sytske Kimball, University of South Alabama*

8:55 – High resolution study on the microclimates of various plant zones on San Cristóbal Island, Galápagos Islands, Ecuador – *Steven Schultze, Abigail Kratsch, and Jade Martin, University of South Alabama; Francisco Laso, Western Washington University; Nazaret Narváez, Luis Tasipanta, and Ariel Pila, Universidad San Francisco de Quito*

9:10 – Challenges and Best Practices for Assessing Catastrophic Tornado Damage across a Vulnerable Community; Rolling Fork, Mississippi, – *Logan Poole, Ashlyn Jackson, Chad Entremont, Daniel Lamb, and Bill Parker, NWS Jackson, MS*

9:25 – Break/Networking

9:45 – **Keynote:** Wintertime Tornadoes, Storm Surveys, and How to get a Job – **John Gordon**, – *NWS Louisville, KY*

### Session I: Communication/Society Impacts

10:30 – Can Weather-Related Fatalities Be Reduced by Rethinking How Weather is Taught in K-12 Education – *John Lanicci, S. Katie Guffey McCorrison, and Hannah Fink, University of South Alabama*

10:45 – Break/Networking

11:00 – National Hurricane Center – Mission, Recent Progress and Future Changes  
– *Andrew Hagen, National Hurricane Center, Miami, FL (Virtual)*

11:15 – Mess Around & Find Out: Utilizing Data For Targeted Outreach to Achieve A Weather Ready Nation – *Michael Hill, NWS Jackson, MS*

11:30 – Breaking the Grip of the Rip: Communicating the Risk of Deadly Rip Currents to Tourists – *Morgan Barry, Cody Lindsey, and Jessica Chase, NWS Mobile, AL*

11:45 – Lunch (Provided)/Networking

**1:30 – Keynote:** The Alabama Tornadoes of March 25, 2021 – **James Spann**, AB3 33/40  
Chief Meteorologist, Birmingham, AL

**2:15** – 50th anniversary of the April 1974 Super Outbreak – *John Lanicci, University of South Alabama*

**2:30** – Break/Networking

**2:45** – Synoptic Briefing – *Aaron Colby and Ian Beck, University of South Alabama*

**3:30** – Poster Session (\*See bottom of page for details\*)

**5:00** – Mixer

## **Sunday, April 7:**

**8:00 a.m.** - Registration (Refreshments Available)

### **Session III: Severe Weather Operations**

**8:15** – National Weather Service Forecast Office Culture and Severe Weather Warnings  
– *Kevin Laws, NWS Birmingham, AL*

**8:30** – Considerable to Consistent: Trying to Improve Upon the Thresholds for Considerable Tag Tornado Warnings to Provide a Consistent Message to Core Partners and the Public – *Brandon Black, Jonathan Howell, and Michael Mugrage, NWS Mobile, AL*

**8:45** – **Keynote:** Storm Interactions – **Cameron Nixon**, Storm Prediction Center, Norman, OK

### **Résumé Workshop**

**9:30** – Résumé/Interview Practice Workshop – *John Gordon, NWS Louisville, KY*

**10:00** – Break/Networking

### **Session IV: Satellite Meteorology**

**10:15** – Eye in the Sky: Utilization of Remote Sensing through GIS to Assist Storm Surveys and Improve Accuracy of the Damage Assessment Toolkit and Storm Database after Tornado Events – *Michael Mugrage, NWS Mobile, AL*

**10:30** – Identifying Dust Events lofted from Post-Fire Burn Scars Utilizing Dust RGB – *Amy McAlister and Emily Berndt, University of Alabama in Huntsville, NASA MSFC SPoRT*

**10:45** – The Importance of Using GOES-16 Satellite Imagery for Mesoanalysis During the April 22nd, 2022, Central Gulf Coast Severe Weather Event – *Jonathan Howell, Michael Mugrage, Brandon Black, and Jason Beaman, NWS Mobile, AL*

### **Session V: Numerical Weather Prediction**

**11:00 – Keynote:** Saving Lives with Physics and Game Theory – *Neil Jacobs, UCAR, Boulder, CO*

**11:45** – Lunch (On your own)

### **Session VI: Student Opportunities**

**1:15** – Planning for Retirement - The Weather Career Afterlife – *Alan Sealls, University of South Alabama*

**1:30** – Panel Discussion:

- Broadcast – *Allan Sealls, Retired WKRG TV Chief Meteorologist*
- NOAA/Government – *Jeffrey Medlin, Retired NWS MIC*
- NOAA/Government – *Pat Spoden, Retired NWS Forecaster*
- Academia – *Bill Williams, Retired, USA Professor Emeritus*

**2:00** – How You As a Student Can Make an Impact in the National Weather Service (NWS) – *Carmen Hernandez and Meredith Wyatt, NWS Peachtree City, GA*

**2:15** – Opportunities in the National Weather Service/National Ocean and Atmospheric Administration – *Alana McCants, NWS West Gulf Coast River Forecast Center*

**2:30** – Teleconnections, Thermostats, and Energy Sector Meteorology – *Nick Lilja, Cheniere Energy*

**2:45** – Closing Remarks

### **Poster Session – 3:30 p.m. – 3:50 p.m.**

**P1** – Differences in Overlying Synoptic Environments between Lake-Effect and Non-Lake-Effect Snow Associated Colorado Cyclones – *Kevin Lamberson and Jacob Wiley, University of South Alabama*

**P2** – Winter UHI Effect on Snowfall in St. Louis Missouri – *Nathaniel Mirly and Jacob Wiley, University of South Alabama*

**P3** – Temperature and Radiation Sensor Performance During Lightning Events – *James Smith and Sytske Kimball, University of South Alabama*