

# Wednesday, January 26, 2022

9a – 9:30a - Climate Adaptation Science in the South Central US

Emma Kuster - South Central Climate Adaptation Science Center

<https://oklahoma.zoom.us/j/99159243939?pwd=NnBKbGNiQVAvdm42ZnBYQTBUcUpadz09>

## 12th Conference on Transition of Research to Operations

9:30a - 9A.5 - Needs and Challenges for Weather Information and Resource Integration: FEMA/Emergency Management Perspective

Somer A. Erickson (Presenter) – FEMA

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Paper/400764>

11a - 10B.2 - Operations-to-Research Impacts on the Warn-on-Forecast System from the NWS Southern Region Continental West Working Group

[Patrick Skinner \(Presenter\)](#) – CIWRO

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Paper/397660>

1:30p – 3p - Session 11B - Advances in R2O and O2R in Analysis and Short-Term Forecasting that Link Research and Operations to Forecasters' Needs. Part III: Verification and Validation

[Patrick Skinner](#) – CIWRO

[Heather M. Grams](#) – CIWRO

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Session/60321>

1:45p - 11A.2 - Coproducing Next-Generation Warning Systems: A National Survey of Broadcast Meteorologist Preferences with Probabilistic Hazard Information

[Joseph E. Trujillo-Falcón \(Presenter\)](#) – CIWRO x NOAA/NSSL

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Paper/398776>

2p - 11A.3 - User Dissemination Requirements and Policy Concerns for Threats-in-Motion

[Kimberly E. Klockow McClain \(Presenter\)](#)

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Paper/400015>

2:45p - 11B.6 - Testing of the Warn-on-Forecast Hybrid Data Assimilation and Forecasting System at 1.5-km Resolution during the HWT Spring Forecasting Experiment in 2021

[Jidong Gao \(Presenter\)](#) – NSSL

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Paper/395399>

3:45p - 12A.1 - Decision-Making and Extreme Precipitation: How Practitioners Use and Interpret Subseasonal-to-Seasonal Extreme Precipitation Forecasts

[Olivia G. VanBuskirk \(Presenter\)](#) - Univ. of Oklahoma

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Paper/392456>

4p - 12A.2 - A Comparison of Climatological Metrics Used to Define Seasonal Severe Weather Activity

[Allison L. Brannan \(Presenter\)](#) – NOAA

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Paper/393527>

4:30p - 12B.4 - Automated Storm Identification and Classification for Convection-Allowing Models and Gridded Radar Data

[Corey Potvin \(Presenter\)](#) – NSSL

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Paper/392311>

4:45p - 12B.5 - Foundational Needs of Forecasters for Probabilistic Winter Forecasting

[Daniel D. Tripp \(Presenter\)](#) – CIWRO x NOAA/OAR/NSSL

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Paper/393629>

## **10th Symposium on Building a Weather-Ready Nation: Enhancing Our Nation™s Readiness, Responsiveness, and Resilience to High Impact Weather Events**

8:30a - 9.1 - Use of Warn-on-Forecast Technology to Extend and Redefine Tornado Warning Lead Times

[Richard Smith \(Presenter\)](#) – NWS

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Paper/392413>

1:30p – 3p - Joint Panel Discussion PD10 - Emergency Management Best Practices and Lessons Learned from the February 2021 Cold Wave and Winter Storm

James G. LaDue – NWS

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Session/60199>

2p - PD10.3 - Broadcast Media Communication Leading up to the Deep Freeze in Texas and Oklahoma

[David Nowicki \(Presenter\)](#) - Center for Risk and Crisis Management

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Paper/396495>

2:30p - J11.5 - Cracking the TORFF Code: Understanding Broadcaster Coverage of Simultaneous Tornado and Flash Flood Events

[Sean Robert Ernst \(Presenter\)](#) - Center for Risk and Crisis Management

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Paper/396496>

38th Conference on Environmental Information Processing Technologies

4:15p - 12.3 - Implementing the Cloud for the NWS Radar and Applications Course during COVID: Virtual Simulation-Based Training for Warning Operations

[Sarah Borg \(Presenter\)](#) – CIWRO

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Paper/395613>

2:15p- 11.2 - Cloud Computing at the National Severe Storms Laboratory: Enabling Scientific Research during and beyond the Remote Work Era

[Anthony E. Reinhart \(Presenter\)](#) – NSSL

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Paper/399088>

## **26th Conference on Integrated Observing and Assimilation Systems for the Atmosphere, Oceans, and Land Surface (IOAS-AOLS)**

8:30a-10a - Session 9 - Data Assimilation: Research and Operational Applications on All Spatial and Temporal Scales. Part II

[Nick Gasperoni](#) - University of Oklahoma

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Session/60459>

10:45a- 12p - Joint J10 - Data Assimilation Methodology Advancement for Numerical Weather Prediction

[Xuguang Wang](#) - Univ. of Oklahoma

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Session/59080>

11:30a - J10.4 - Impacts of Flow-Dependent and Static Observation Error Estimation for the Frequent Assimilation of Thermodynamic Profilers on Convective-Scale Forecasts

[Samuel K. Degelia \(Presenter\)](#) - Univ. of Oklahoma

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Paper/397696>

1:30p – 3p - Joint J11 - Data Assimilation Methodology Advancement for Numerical Weather Prediction. Part II (joint between IOAS-AOLS, WAF/NWP, and the 21st Conference on Artificial Intelligence for Environmental Science)

[Nick Gasperoni](#) – Univ. of Oklahoma

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Session/60475>

2p - J11.3 - A Comparison of 4DEnVar and 3DEnVar for Convective-Scale Direct Radar Reflectivity Assimilation in a Variety of Nonlinearities

[Yue Yang \(Presenter\)](#) - Univ. of Oklahoma

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Paper/397932>

2:15p - J11.4 - Testing the Feature Alignment Technique (FAT) in an Ensemble-Based Data Assimilation and Forecast System with Multiple-Storm Scenarios

[Derek R. Stratman \(Presenter\)](#) – CIWRO x NSSL

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Paper/398290>

2:45p - J11.6 - Online Nonlinear Bias Correction in Ensemble Kalman Filter to Assimilate GOES-R All-Sky Radiances for the Analysis and Prediction of Rapidly Developing Supercells

[Xuguang Wang \(Presenter\)](#) - Univ. of Oklahoma

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Session/59080>

3:45p – 5p - Session 12 - Data Assimilation Methodology Advancement for Numerical Weather Prediction. Part III (joint between IOAS-AOLS, WAF/NWP, and the 21st Conference on Artificial Intelligence for Environmental Science)

[Aaron Johnson](#) - Univ. of Oklahoma

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Session/60477>

3:45p - 12.1 - Multiresolution and Multiscale Hybrid 4DEnVar for NCEP FV3GFS to Improve Global and Hurricane Numerical Prediction

[Erin A. Jones \(Presenter\)](#) - Univ. of Oklahoma

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Paper/397295>

# 31st Conference on Weather Analysis and Forecasting (WAF)/27th Conference on Numerical Weather Prediction (NWP)

9:30a - J9.5 - Nocturnally Initiating Convection Leading to Extreme Events and Their Representation in Numerical Weather Prediction Systems

[Jason Chiappa \(Presenter\)](#) - Univ. of Oklahoma

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Paper/397120>

2:15p - J11.4 - Winter Precipitation-Type Classification with a 1D Convolutional Neural Network

[David R. Harrison \(Presenter\)](#) – CIWRO x NOAA/NWS/SPC

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Paper/394420>

2:45p - J11.6 - Utilizing Machine Learning with Numerical Weather Model Prediction to Improve Aviation Icing, Turbulence, and Cloud-Top Height Forecasting

[Lance E. Steele \(Presenter\)](#) – Weathernews

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Paper/399931>

## 19th Conference on Mesoscale Processes

9:15a - 9.4 - The Contribution of Mesoscale Convective Systems from Land and Ocean to the Rainfall Maximum over West Africa

[Shun-Nan Wu \(Presenter\)](#) - Univ. of Oklahoma

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Paper/396644>

10:45p - 10.1 - Characterizing Deep-Layer Vertical Wind Shear Available to Miniature Supercells in Landfalling Tropical Cyclones

[A. Addison Alford \(Presenter\)](#) – CIWRO

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Paper/397083>

10:45p - Session 10 - Mesoscale Processes in Tropical Cyclones

A. [Addison Alford](#) – NSSL

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Session/59494>

## 31st Conference on Education

10:45p -12p - Session 10 - Getting Students Quickly Up to Speed

[Daphne S. LaDue](#) - Univ. of Oklahoma

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Session/59280>

11:15a - 10.3 - Supporting Student Skill Building While Exploring Convergent Research through a Hands-on Experience with Scientific Instrumentation

[David J. Bodine \(Presenter\)](#) - Univ. of Oklahoma

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Paper/398493>

11:30a - 10.4 - Developing and Testing a Scientific Writing Workshop for Undergraduate Interns

[Amanda K. Kis \(Presenter\)](#) - Univ. of Oklahoma

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Paper/398261>

# 17th Symposium on Societal Applications: Policy, Research and Practice

10:45a - Session 10A - Weather-Ready Nation: Measuring Progress and Value across the Enterprise

[Makenzie Krocak](#) - Center for Risk and Crisis Management

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Session/59612>

11:15a - 10A.3 - An Examination of Manufactured and Mobile Home Residents' Anchorage Decisions

[Cassandra Shivers-Williams \(Presenter\)](#) – CIWRO

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Paper/397167>

3:45p – 5p - Joint J12 - Impact of Extreme Wildland Fires on the Environment

[Sean Robert Ernst](#) - Center for Risk and Crisis Management

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Session/59247>

3:45p – 5p - Session J12B - Urban Hydrology

[Sean Robert Ernst](#) - Center for Risk and Crisis Management

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Session/58958>

## POSTERS 5p - 6:30p

437 - Real-Time Verification/Evaluation Results for the MRMS Experimental Dual-Pol QPE Product during the 2021 Warm Season

[Stephen B. Cocks \(Presenter\)](#) – CIWRO x NOAA/NSSL



<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Paper/395587>

436 - Future Applications of the WES in the Cloud

[Stephanie Edwards \(Presenter\)](#) – CIWRO

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Paper/398701>

435 - Improving Rain Estimation and Drop Size Distribution Retrieval from Polarimetric Radar Data Using the Deep Neural Network

[Junho Junho Ho \(Presenter\)](#) - Univ. of Oklahoma

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Paper/396814>

490 - The Influence of Model Configuration versus Initial and Boundary Conditions in Next-Day CAM Forecasts: A Controlled Experiment

[Brett J. Roberts \(Presenter\)](#) – SPC

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Paper/396123>

480 - A Machine Learning Approach to Generating Guidance for SPC Watch Products

[David Harrison \(Presenter\)](#) – CIWRO x NOAA/NWS/SPC

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Paper/394470>

473 - Climatology of Significant Tornadoes within China and Comparison of Tornado Environments between the United States and China

[Ming Xue](#) - Univ. of Oklahoma

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Paper/396874>

460 - Extracting Storm Mode and Tornado Potential from Statistical Moments of Updraft Helicity Distributions

[David E. Jahn \(Presenter\)](#) – CIWRO

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Paper/392702>

545 - Synoptic Evolution of the October 2020 Ice Storm across the Southern Great Plains

[Alysa Kathryn Woodward \(Presenter\)](#) - Univ. of Oklahoma

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Paper/397417>

553 - Do a Tropical Cyclone's Outer Size and Structure Change during Extratropical Transition?

[Dzuy Nguyen \(Presenter\)](#) - Univ. of Oklahoma

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Paper/396028>

554 - Using Ground-Based Radar Observations to Evaluate a Hurricane-WRF Simulation of Hurricane Harvey (2017)

[A. Addison Alford \(Presenter\)](#) - Univ. of Oklahoma

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Paper/397059>

566 - The Influence of Convection Initiation Strength on Idealized Supercell Evolution

[Matthew D. Flourney \(Presenter\)](#) – CIWRO

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Paper/394798>

573 - Environmental and Storm Characteristics Associated with Warm and Cold Above-Anvil Cirrus Plumes

[Elisa Murillo \(Presenter\)](#) - Univ. of Oklahoma

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Paper/398909>

576 - Severe Convective Storms across Europe and the United States. Part II: ERA5 Environments Associated with Lightning, Large Hail, Severe Wind, and Tornadoes

[Mateusz Taszarek \(Presenter\)](#) – NSSL

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Paper/400112>

577 - Severe Convective Storms across Europe and the United States. Part I: Climatology of Lightning, Large Hail, Severe Wind, and Tornadoes

[Mateusz Taszarek \(Presenter\)](#) - NSSL

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Paper/400144>

589 - Detecting Precipitation Magnitudes with Spaceborne Radars from TRMM to GPM

[Maresa Searls \(Presenter\)](#) – OU School of Meteorology

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Paper/396084>

