

AASC

AMERICAN ASSOCIATION OF
STATE CLIMATOLOGISTS

2019 Annual Meeting



Santa Rosa, California, June 24 – 27, 2019
Flamingo Conference Resort and Spa

www.stateclimate.org | [@stateclimate](https://twitter.com/stateclimate) | [f/stateclimate](https://facebook.com/stateclimate)

Meeting Agenda

Monday, 24 June

5:00pm – 8:00pm Registration and AASC Icebreaker

Tuesday, 25 June – Climate Services and Communication

8:00am – 8:30am: Welcome and Introductions
Nina Oakley, WRCC, Regional Climatologist
Michael Anderson, CA State Climatologist
Adnan Akyuz, ND State Climatologist, AASC President

Climate Communication Session

8:30am – 8:45am: Death by PowerPoint – Looking for New Ways to Engage an Audience
Melissa Griffin, SC Assistant State Climatologist

8:45am – 9:45am: Breakout Session – Communication in Climate Services

- *Web Services and Decision Support Products*
- *Communicating via Social Media*
- *Engaging with Mass Media*
- *Presentations and Outreach*
- *Using Kahoot! to Interact with Audiences*
- *AASC Communications*
- *Communicating Climate Challenges*
- *Blogging and Writing Articles*

9:45am – 10:00am: Lessons Learned from a Climate Products, Services, and User Engagement Workshop
Adnan Akyuz, ND State Climatologist

10:00am – 10:20am: A.M. BREAK

AASC Business Session

10:20am – 11:45am: AASC Business Meeting I

- *Quorum Check*
- *Executive Director Update*
- *Treasurer's Report*

- *Membership Committee Update*
- *ARSCO Committee Update*
- *Nominating Committee Update*
- *AASC 2021 Annual Meeting Proposals*
- *Remaining items to discuss*
- *Close Business Meeting*

11:45am – 1:15pm: LUNCHEON FEATURING GUEST SPEAKER

Fire Season 2017 – Napa and Sonoma County Fires, Tubb-Atlas-Nuns Fires

Chris Waters, Division Chief, CAL FIRE Sonoma-Lake-Napa Unit

Luncheon Guest Speaker: Chris Waters

Chris has been in the Wildland Fire Service for 20 years and currently the Division Chief assigned to Delta Conservation Camp in Suisun City, CA where he is responsible for 6 - Type 1 CAL FIRE hand crews and CAL FIRE Suppression Operations in Solano, Yolo, and Colusa Counties.

He has worked in fire weather, fire danger, fire behavior and is a qualified Fire Behavior Analyst. He is also assigned to CAL FIRE Incident Management Team 3 as an Operations Section Chief.



*Sonoma Water is a dynamic organization; providing **clean** drinking water to more than 9 communities, managing **reliable** sewer and flood protection facilities, protecting **essential** natural resources of the Russian River and partnering in our community's sustainable education efforts **every day**.*

Session I Presentations: Wildfire and California Climate

Moderated By: John Nielsen-Gammon

- 1:15pm – 1:30pm: Campbell Scientific Helping Power Companies Solve CA Wildfire Problem
Garrett Wheeler, Campbell Scientific
- 1:30pm – 1:45pm: The Role of Applied Climatologists and Wildfire Communication
Tim Brown, WRCC Director
- 1:45pm – 2:00pm: Sonoma's Weather Observations, 1850 – 1911
Glen Conner, KY State Climatologist Emeritus
- 2:00pm – 2:15pm: Advanced Observing Systems Development in California
Michael Anderson, CA State Climatologist
- 2:15pm – 3:15pm: Women in Climate Services Panel Q&A
Moderated by Becky Bolinger
Panelists: Darrian Bertrand, Lesley-Ann Dupigny-Giroux, Laura Edwards, Melissa Griffin, Lauren Holt
- 3:15pm – 3:45pm: Poster Lightning Talks I
- 3:45pm – 5:00pm: Poster Session I (with snacks)

Dinner and Activities on your own (Optional: The AASC Annual Bowling Event)

SONOMA COUNTY
• CALIFORNIA •

LIFE OPENS UP

Sonoma County Tourism is the official destination marketing organization for California's Sonoma County. SCT is a private, non-profit marketing and sales organization dedicated to promoting overnight stays and creating a sustainable hospitality economy in Sonoma County, California.

Located 45 minutes from San Francisco, Sonoma County provides a genuine and adventurous wine country experience.

Wednesday, 26 June – Research, Mesonets, and Funding

8:00am – 8:15am: Welcome and announcements
Glenn Kerr, AASC Executive Director

AASC Business Session

8:15am – 9:15am: Mesonet Meeting Recap
Stu Foster, KY State Climatologist

9:15am – 9:30am: Revitalizing AASC's Journal of Applied and Service Climatology
Beth Hall, IN State Climatologist

9:30am – 10:15am: AASC Business Meeting II

- *Quorum Check*
- *New Officer Voting*
- *New Member Nominations and Voting*
- *Mesonet Proposal and Voting*
- *AASC 2021 Annual Meeting Selection*
- *Final Discussion Points*
- *Close Business Meeting*

10:15am – 10:45am: A.M. BREAK



NATIONAL INTEGRATED DROUGHT INFORMATION SYSTEM



25 Years of Sharing Technical and Scientific
Knowledge about California Extreme
Precipitation – Floods to Droughts

Speaker presentations for each year are
available at: CEPSYM.ORG

Gary Estes, Founder

Session II Presentations: Data and Observations

Moderated By: Kevin Brinson

10:45am – 11:00am: PRISM Update: Towards Improved Temperature Mapping

Chris Daly, PRISM Climate Group Director

11:00am – 11:15am: CoCoRaHS in the Bahamas: What We Learned from a Years' Worth of Rain on San Salvador Island

Chris Fuhrmann, MS Assistant State Climatologist

11:15am – 11:30am: Observing the Atmosphere with Drones – How Good are the Sensors and Where Should You Put Them?

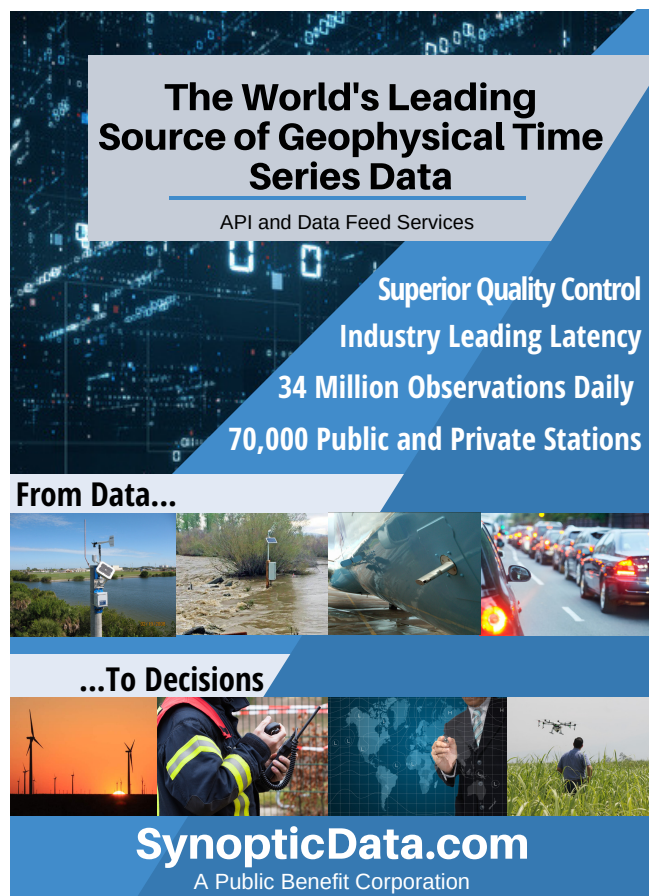
Systke Kimball, University of South Alabama Professor

11:30am – 11:45am: The Maturation of Synoptic Data PBC as a Data Hub for Public and Private Geophysical Data

Steve Woll, Synoptic Data Director of Business Development

11:45am – 12:50pm: LUNCH ON YOUR OWN

(Optional Mesonet – Soil Moisture Meeting w/ Box Lunch)



The World's Leading Source of Geophysical Time Series Data

API and Data Feed Services

Superior Quality Control
Industry Leading Latency
34 Million Observations Daily
70,000 Public and Private Stations

From Data...

...To Decisions

SynopticData.com
A Public Benefit Corporation



THANK YOU, AASC!

Your participation in the National Mesonet Program over the past decade means the world to us.

Earth Networks is proud to work together to meet the weather information needs of national, state and local constituents.

EARTH NETWORKS
www.earthnetworks.com

Session III Presentations: Research Results

Moderated By: Nick Bond

- 12:50pm – 1:30pm: AASC Dissertation Award Presentation
Nina Oakley, WRCC, Regional Climatologist
- 1:30pm – 1:45pm: Is Detection of Elevation-Dependent Warming in the Upper Colorado River Basin Possible with Existing Data?
Stephanie McAfee, NV Deputy State Climatologist
- 1:45pm – 2:00pm: Explosive Volcanic Eruptions and North Atlantic SST Variability
Sean Birkel, University of Maine Research Assistant Professor
- 2:00pm – 2:15pm: High Resolution Mapping of Damaging Winter Temperatures in Gulf Citrus
Steven Schultze, University of South Alabama Assistant Professor
- 2:15pm – 2:30pm: P.M. BREAK
- 2:30pm – 3:30pm: Open Q&A Discussion on Funding
Moderated and led by Stu Foster

2019 AASC Dissertation Award Winner: Dr. Nina Oakley

Nina received her Ph.D. in Atmospheric Science from the University of Nevada, Reno, in 2018. Her dissertation focused on meteorological drivers and climatological characteristics of extreme precipitation in California and its impacts on post-wildfire debris flows, shallow landslides, and water resource reliability.

Nina has worked with the Western Regional Climate Center at the Desert Research Institute in Reno, Nevada since 2011. Following her graduation, she became a Regional Climatologist with the WRCC. Her work includes helping people locate and use climate data for a variety of activities, developing new tools for accessing and visualizing climate data, and communicating weather and climate information to diverse audiences. Nina also does applied research on western US precipitation extremes. She is currently working on improved forecasting of short-duration, high intensity rainfall as it relates to post-wildfire debris flows. Additionally, she is working on a project to help a Southern California community plan for climate change impacts related to water resources.



Session IV Presentations: Extreme Precipitation

Moderated By: Mary Knapp

- 3:30pm – 3:45pm: Comparison of Mesonet and NOAA Atlas 14 Data for Extreme Precipitation Events in Delaware
Dan Leathers, DE State Climatologist
- 3:45pm – 4:00pm: Trends in Precipitation Variability in Maryland
Phillip Stratton, University of Maryland
- 4:00pm – 4:15pm: Understanding and Communicating Precipitation Average Return Intervals
Melissa Griffin, SC Assistant State Climatologist
- 4:15pm – 4:45pm: Poster Lightning Talks II
- 5:30pm – 6:30pm: Poster Session II (with cash bar)
- 6:30pm – 8:00pm: DINNER FEATURING GUEST SPEAKER
Adapting Viticulture in California to a Warmer and Drier Future
Elisabeth Forrestel, Assistant Professor of Viticulture, UC Davis

Banquet Guest Speaker: Dr. Elisabeth Forrestel

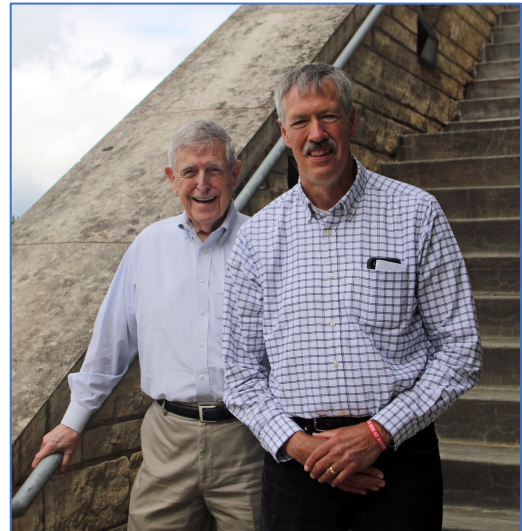
Dr. Forrestel is currently a National Science Foundation Postdoctoral Research Fellow, and will be starting as an Assistant Professor at UC Davis in the Dep't of Viticulture and Enology in July of 2019. She received her bachelors degree in biology from Cornell University and her doctorate in Ecology & Evolutionary biology from Yale University. Dr. Forrestel went on to complete postdoctoral work with Dr. Elizabeth Wolkovich at the Arnold Arboretum of Harvard University studying the phenological responses of winegrapes to a warming climate. As an NSF Postdoctoral Fellow, she came to the Department of Viticulture & Enology at UC Davis to study the phylogenetic and functional basis of drought and heat responses in wild and cultivated grapevine, under the mentorship of Dr. Andrew McElrone and Dr. Andy Walker. Her research program at Davis addresses questions about the evolutionary and ecophysiological basis of drought and heat responses in grapevine, and how irrigation practices mitigate stress responses. Dr. Forrestel will apply her research to improve understanding of how we can utilize wild species and cultivar diversity to adapt to warmer and drier climates, and inform viable management practices in vineyards in response to heat stress.



AASC Honorary Member Spotlight

We are fortunate to have two outstanding leaders among our ranks, who are also AASC's Honorary Members: Glen Conner and Nolan Doeskan. Here is a little history of these fine gentlemen.

Glen Conner joined the faculty at Western Kentucky University in mid-1976 to teach meteorology, aviation meteorology, and physical geography. The following year, the head of the Department of Geography and Geology learned that twelve of the ex-state climatologists had met and organized the Association of American State Climatologists. Glen was sent to their first meeting in Asheville in 1977.



He began the effort to restore the State Climatologist role to Kentucky. By agreement among the University, National Climatic Data Center, and National Weather Service, Glen was appointed as the State Climatologist for Kentucky in May, 1978. Kentucky Governor Julian Carroll confirmed that appointment. Glen then created the Kentucky Climate Center in early 1979, the first center of any kind at the University. He attended the next meeting of the AASC. That meeting in College Park MD was hosted by Helmut Landsburg, the creator of the first State Climatologist program. Glen has attended each of the AASC meetings since then.

At the 1980 AASC meeting, Amos Eddy the State Climatologist for Oklahoma demonstrated the Apple I computer's applicability to climatology. That caused Glen to actively push the Science College at WKU to acquire Apple computers for its departments. An Apple IIe computer was soon provided to each department, a first such acquisition for the University.

Glen was the Secretary/Treasurer of the AASC in 1981 serving under President Stan Chagnon and under President Bernie Dethier in 1982. The same year, he became a member of the Kentucky Energy Department's Alternate Energy Advisory Commission.

Glen was appointed by the Governor to the first Kentucky Drought Monitoring Task Force in 1984. It was organized write a plan for responses to water shortages. Later that year, he received the Faculty Excellence Award from the WKU Ogden College of Science and Technology .

In 1986, he participated in his first Climatologist Exchange Program at NCDC. During those three weeks, he researched and prepared Station History Forms for all observation stations that had none. He identified and got station numbers for 65 old Kentucky stations that had no station number and prepared the history forms for each of them. Over the next decade, he participated on four more exchanges at NCDC, each lasting three weeks.

The Governor of Kentucky declared a drought emergency as the drought of 1988 deepened. He implemented the Water Shortage Response Plan that Glen had helped write. In 1988 at the University Commencement, Glen received an Award For Public Service resulting from his work in the Kentucky Climate Center.

He was appointed as a member of the Wind Energy Committee of the Kentucky Department of Energy in 1989. He was a two-term member of the Applied Climatology Committee of the American Meteorological Society.

On 17 August 1995, the Kentucky Climate Center placed its home page on the World Wide Web. It was the first such home page at the University. He presented the keynote address “Folklore Climatology” to the AMS Broadcast Meteorology Conference in 1996.

During his tenure, an estimated 150 or so students were undergraduate assistants in the Kentucky Climate Center. Glen is proud of that, and proud of the seven who later earned their PhD elsewhere. Glen retired in 2000, but he retained his love for the AASC.

Nolan Doeskan: As a paperboy in small-town (Royal) Illinois, Nolan loved watching the weather, listening to farmers talk about the weather, and reading articles from the Illinois State Water Survey about the climate of Illinois. Even before high school, he wanted to be a climatologist and greatly admired the work of Stan Changnon and colleagues. After receiving a bachelor’s degree in meteorology from the University of Michigan where he was counseled NOT to go into Climatology, he headed back “home” to the U. of Illinois for a master’s degree in Atmospheric Science supported by the ISWS.

After a year of underemployment (such as being the top popcorn salesman at Univ. of Illinois football games), and a near career change, climate opportunity knocked in 1977 and Nolan answered -- moving west to Colorado to become the Assistant State Climatologist under the direction of Tom Mckee, long-time State Climatologist at Colorado State University. Nolan and Tom worked together for more than 2 decades developing improved techniques for drought monitoring (including the Standardized Precipitation Index (SPI), a surface water supply index (SWSI) and a Colorado modified Palmer Drought index.

Nolan was appointed State Climatologist in 2006 and was elected to the AASC Executive Committee in 2008 and served as AASC president 2009-2010. His efforts in AASC leadership were focused on building personal relationships and encouraging the Association to strive for a stronger national presence. While it took a few more years to become reality, he lobbied hard for an AASC Executive Director. Nolan personally visited the offices of 30 state climatologists.

What Nolan may be best known for, however, is the creation, nurture and widespread growth and acceptance of the Community Collaborative Rain, Hail and Snow (CoCoRaHS) network. Responding to a catastrophic local flash flood in Fort Collins in 1997, CoCoRaHS grew from a community grass roots undertaking to a huge international community of enthusiastic rain gauge volunteers. Nolan’s rural Midwestern roots, his wife Kathy’s dream to live and raise their family on a farm, and his mother-in-law’s personal stories growing up in a sod house on the eastern plains of Colorado surviving the dust bowl and the 1935 Republican River flood, and his 35+ years as a NWS COOP observer have all come together – a glue of stories and experiences – that together have helped CoCoRaHS grow and mature for over 20 years.

Nolan attended his first AASC annual meeting in the late 1970s and helped host the AASC in Colorado in 1981. He has been an active participant ever since. He was diagnosed with Parkinson’s Disease shortly after the meeting in NE in 2018. That’s slowing him down a bit but hasn’t dampened his love for applied climatology and the amazing careers that we all have before us.

Thursday, 27 June – Federal Partners, Regional Discussions

8:00am – 8:15am: Welcome, announcements for final day
Glenn Kerr, AASC Executive Director

Session V Presentations: Partner Updates and Product Demos

Moderated By: Becky Bolinger

8:15am – 8:30am: NWS Regional and Local Climate: Informed Decision Support Services
Fiona Horsfall, NWS Chief of Climate Services Branch

8:30am – 8:45am: NCEI Partner Update
Tamara Houston, NOAA National Centers for Environmental Information

8:45am – 9:00am: Using Hourly Observed Data Web Services: A Climatology of Wind Chill and Heat Index for the Eastern Continental United States
Bryan Peake, MRCC Service Climatologist

9:00am – 9:15am: A Web-Based Tool to Forecast Wet-Bulb Globe Temperature for Populations Who Engage in Exertional Outdoor Activities
Darrian Bertrand, NC Applied Climatologist

9:15am – 9:30am: Automation of State Climate Office Processes and Products: Developing a Weather Forecasts Hazard Index in Tennessee
Michael Shoop, Student at East Tennessee State University

9:30am – 9:45am: A.M. BREAK

9:45am – 11:00am: Regional Climate Center Breakout

- *This is a chance to join in on the conversation with other climatologists in your region and discuss region-specific agenda items. Led by the RCC directors.*

11:00am – 11:30am: Regional Climate Center Updates

- *Each RCC director will have 5 minutes to provide the entire group with key updates from the breakout discussions.*

11:30am – 11:45am: AASC Annual Meeting 2020

11:45am – Noon: Closing Remarks
Adnan Akyuz, AASC President

Noon: Adjourn

12:20pm – 6:00pm: Optional Afternoon Field Trip
Benziger and Imagery Winery Tour and Tasting





DWR plays an important role in sustaining California's economy, environment, and quality of life. DWR operates and maintains the California State Water Project, manages floodwaters, monitors dam safety, conducts habitat restoration, and provides technical assistance and funding for projects for local water needs. DWR is one of the lead state agencies for climate change mitigation and adaptation in California, using best available science to make informed management decisions. We support staff-driven scientific inquiry and publication, scientific community engagement, and promotion of cutting-edge technologies. DWR personnel collaborate with federal, state, and local partners in climate literacy, as well as the development of vulnerability analyses and adaptation strategies. These efforts have resulted in DWR receiving three National Climate Leadership awards.