

TUESDAY, 13 DECEMBER

[H21C Advances in Machine Learning for Earth Science: Observation, Modeling, and Applications V Online Poster Discussion](#)

Yixin Wen, University of Florida, Department of Geography, Ft Walton Beach, FL, Guoqiang Tang, University of Saskatchewan, Centre for Hydrology, Saskatoon, SK, Canada, Mengye Chen, The University of Oklahoma, Norman, OK, and Phu Nguyen, University of California, Irvine, Department of Civil and Environmental Engineering, Irvine, CA

- *Tuesday, 13 December 2022*
- *08:00 - 09:00*
- *Online Only*

[H21C-04 - Identifying the Hydrometeorological Decision Factors Influencing Reservoir Releases over the Upper Colorado Region using a Long Short-Term Memory Network](#)

Ming Fan¹, Lujun Zhang², Siyan Liu³, Tiantian Yang² and Dan Lu¹, (1)Oak Ridge National Laboratory, Oak Ridge, TN, (2)The University of Oklahoma, Norman, OK, (3)Oak Ridge National Laboratory, Oak Ridge, TN

- *Tuesday, 13 December 2022*
- *08:15 - 08:20*
- *Online Only*

[INV22C-0505 Combustion Efficiency Observed in California with CO and NO₂ FIREX-AQ and TROPOMI Data](#)

Helene Peiro¹, Alaina Kurt¹ and Sean Crowell², (1)University of Oklahoma Norman Campus, Norman, OK, (2)University of Oklahoma, Norman, OK

- *Tuesday, 13 December 2022*
- *09:00 - 12:30*
- *McCormick Place - Poster Hall, Hall - A (South, Level 3)*

[A22F-1739A Statistical Analysis to Improve Development of a Heat Wave Definition in the Southern Great Plains](#)

Taylor M Grace, University of Oklahoma Norman Campus, Norman, OK and Jeffrey B Basara, University of Oklahoma, School of Meteorology; School of Civil Engineering and Environmental Science, Norman, OK

- *Tuesday, 13 December 2022*
- *09:00 - 12:30*
- *McCormick Place - Poster Hall, Hall A (South, Level 3)*

[GC22A - Advances in Earth Observation and Modeling for Agriculture, Forestry, and Urban Applications I Oral](#)

Xiangming Xiao¹, Yuanwei Qin², Russell Doughty³ and Jorge Andres Celis², (1)University of Oklahoma Norman Campus, Department of Microbiology and Plant Biology, Norman, OK, (2)University of Oklahoma Norman Campus, Norman, OK, (3)University of Oklahoma, GeoCarb Mission and the College of Atmospheric and Geographic Sciences, Norman, OK

- *Tuesday, 13 December 2022*
- *09:00 - 10:30*
- *McCormick Place - S503ab (South, Level 5)*

[GC22F-0662 Multidisciplinary Methodological Approach for Flash Flood Risk Assessment in Rural Communities from the Peruvian Andes.](#)

Clara Rodriguez, Lamont Doherty Earth Observatory (Columbia University), New York, NY, Andrew Kruczkiewicz, Columbia University, International Research Institute for Climate and Society, Palisades, NY, Humberto J Vergara, Cooperative Institute for Mesoscale Meteorological Studies, University of Oklahoma, Norman, OK, and Laia Andreu-Hayles, Columbia Univ, Lamont-Doherty Earth Observatory, New York, NY

- *Tuesday, 13 December 2022*
- *09:00 - 12:30*
- *McCormick Place - Poster Hall, Hall A (South, Level 3)*

[H22V-1131 Investigating deep soil CO₂ production in restored prairie ecosystems](#)

Ian Frantal¹, **Timothy R Filley**², Ashlee Laura Denton Dere³, Lisa R Welp⁴, Zachary Scott Brecheisen⁵ and Martha Jimenez-Castaneda⁵, (1)Purdue University, West Lafayette, IN, (2)University of Oklahoma Norman Campus, Geography and Environmental Sustainability, Norman, OK, (3)University of Nebraska at Omaha, Geography/Geology, Omaha, NE, (4)Purdue University, Earth, Atmospheric & Planetary Sciences, West Lafayette, IN, (5)Purdue University, West Lafayette, IN

- *Tuesday, 13 December 2022*
- *09:00 - 12:30*
- *McCormick Place - Poster Hall, Hall - A (South, Level 3)*

[H22Q-1073 - Noah-MP Parameter Optimization at Southern Great Plains Using Bayesian Optimization](#)

Qingyu Wang¹, **Sean Crowell**², **Petra Maria Klein**¹ and **Xiaoming Hu**³, (1)University of Oklahoma Norman Campus, Norman, OK, (2)University of Oklahoma, Norman, OK, (3)The University of Oklahoma, Norman, OK

- *Tuesday, 13 December 2022*
- *09:00 - 12:30*
- *McCormick Place - Poster Hall, Hall - A (South, Level 3)*
- *iPoster Only*

[H22P Advances in Machine Learning for Earth Science: Observation, Modeling, and Applications VI Poster](#)

Yixin Wen, University of Florida, Department of Geography, Ft Walton Beach, FL, Guoqiang Tang, University of Saskatchewan, Centre for Hydrology, Saskatoon, SK, Canada, **Mengye Chen**, The University of Oklahoma, Norman, OK, and Phu Nguyen, University of California, Irvine, Department of Civil and Environmental Engineering, Irvine, CA

- *Tuesday, 13 December 2022*
- *09:00 - 12:30*
- *McCormick Place - Poster Hall, Hall A (South, Level 3)*

[GC22A-01 - The GeoCarb Mission: Monitoring Vegetation Health from Space at High Spatiotemporal Resolution](#)

Sean Crowell, University of Oklahoma Norman Campus, Norman, OK, **Berrien Moore III**, University of Oklahoma, School of Meteorology, Norman, OK, **Peter Somkuti**, University of Oklahoma Norman Campus, Department of Meteorology, Norman, OK, Russell Doughty, California Institute of Technology, Pasadena, CA, **Xiangming Xiao**, Department of Microbiology and Plant Biology, Center for Spatial Analysis, University of Oklahoma, Norman, OK, and **Yuanwei Qin**, University of Oklahoma, Department of Microbiology and Plant Biology, Norman, OK

- *Tuesday, 13 December 2022*
- *09:02 - 09:13*
- *McCormick Place - S503ab (South, Level 5)*

[GC23A - Advances in Earth Observation and Modeling for Agriculture, Forestry, and Urban Applications II Oral](#)

Xiangming Xiao¹, **Yuanwei Qin**², **Russell Doughty**³ and **Jorge Andres Celis**², (1)University of Oklahoma Norman Campus, Department of Microbiology and Plant Biology, Norman, OK (2)University of Oklahoma Norman Campus, Norman, OK, (3)University of Oklahoma, GeoCarb Mission and the College of Atmospheric and Geographic Sciences, Norman, OK

- *Tuesday, 13 December 2022*
- *11:00 - 12:30*
- *McCormick Place - S503ab (South, Level 5)*

[GH23A - Global Hotspots Related to Environmental Change and Health Impacts I Oral](#)

Ramesh P Singh, Chapman University, Orange, CA, **Michael C Wimberly**, University of Oklahoma, Geography and Environmental Sustainability, Norman, OK, , Azar Mohammad Abadi, University of Nebraska Medical Center, Environmental, Agricultural, and Occupational Health, Omaha, NE, Tatiana V Loboda, Univ of Maryland, College Park, MD

- *Tuesday, 13 December 2022*
- *11:00 - 12:30*
- *McCormick Place - E258 (Lakeside, Level 2)*

[A23B-02NASA's Earth System Observatory - The Atmosphere Observation System \(AOS\) Polar Project](#)

Tyler Thorsen¹, Scott A Braun², Daniel Cecil³, Gregory R Carmichael⁴, Arlindo daSilva⁵, Richard Anthony Ferrare¹, Meloe S Kacenenelbogen⁶, Gerald G Mace⁷, Walter Arthur Petersen⁸, Jens Redemann⁹, Graeme L Stephens¹⁰, Susan C van den Heever¹¹, Duane Edward Waliser¹², David M Winker¹ and John E Yorks¹³, (1)NASA Langley Research Center, Hampton, VA, (2)NASA/GSFC, Greenbelt, MD, (3)NASA Marshall Space Flight Center, Huntsville, AL, (4)Univ Iowa, Iowa City, IA, (5)NASA Goddard Space Flight Center, Greenbelt, MD (6)NASA Ames Research Center, Moffett Field, CA, (7)Univ Utah, Salt Lake City, UT, (8)NASA MSFC, Science Research and Projects Office, Huntsville, AL, (9)University of Oklahoma, School of Meteorology, Norman, OK, (10)Jet Propulsion Laboratory, Pasadena, CA, (11)Colorado State University, Department of Atmospheric Science, Fort Collins, (12)NASA Jet Propulsion Laboratory, California Institute of Technology, Pasadena, CA, (13)NASA Goddard Space Flight Center, Greenbelt, MD

- *Tuesday, 13 December 2022*
- *11:10 - 11:20*
- *McCormick Place - E350 (Lakeside, Level 3)*

[S23A-03Characterization of Earthquake Swarms and Ruptures and Their Relation to the Orientation of the Stress Field](#)

Rachel E Abercrombie, Boston University, Boston, MA, Xiaowei Chen, University of Oklahoma, School of Geosciences, Norman, OK, Christine J Ruhl, University of Tulsa, Department of Geosciences, Tulsa, OK, and Peter M Shearer, Univ California San Diego, La Jolla, CA,

- *Tuesday, 13 December 2022*
- *11:23 - 11:33*
- *McCormick Place - S103cd (South, Level 1)*

[A23A-04Fire-Generated Tornadic Vortices](#)

Neil Lareau, University of Utah, Salt Lake City, UT and University of Nevada, Reno, Physics, Reno, NV, Matthew Roberts, Irvine, CA, Nicholas J. Nauslar, Bureau of Land Management, Boise, ID, Evan Bentley, NOAA, Norman, OK, Samuel Emmerson, University of Oklahoma, Norman, OK, Brian Brong, NOAA NWS, Reno, NV, Matthew Mehle, NOAA NWS, Monterey, CA and James Wallman, NIFC, Boise, ID

- *Tuesday, 13 December 2022*
- *11:35 - 11:50*
- *McCormick Place - E271ab (Lakeside, Level 2)*

[B23D-06Keystone Metabolites in the Rhizosphere of Switchgrass Link Plant and Microbial Response to Nitrogen Limitation](#)

Kateryna Zhalnina, Lawrence Berkeley National Laboratory, Earth and Environmental Sciences, Berkeley, CA, Nameer Rahman Baker, University of California, Berkeley, Berkeley, CA, Mengting Yuan, University of Oklahoma Norman Campus, Norman, OK, Albina Khasanova, Lawrence Berkeley National Laboratory, Berkeley, CA, Javier A. Ceja Navarro, Northern Arizona University, Center for Ecosystem Sciences and Society, Flagstaff, AZ, Jennifer Pett-Ridge, Lawrence Livermore National Laboratory, Livermore, CA, Mary K Firestone, Univ California Berkeley, Berkeley, CA, and Trent Northern, Lawrence Berkeley National Laboratory, Joint Genome Institute, Berkeley, CA

- *Tuesday, 13 December 2022*
- *11:50 - 12:00*
- *McCormick Place - S501a (South, Level 5)*

[A23B-07A Machine-Learning-Based Algorithm for Cloud Detection and Scene Classification Using Combined Active and Passive Remote Sensors](#)

Lan Gao¹, Jens Redemann², Feng Xu³, Ryan Lagerquist⁴, Ian Chang³, Emily Lenhardt⁵ and Benting Chen⁴, (1)University of Oklahoma Norman Campus, Meteorology, Norman, OK, (2)University of Oklahoma, School of Meteorology, Norman, OK (3)University of Oklahoma, School of Meteorology, Norman, OK, (4)University of Oklahoma, Norman, OK, (5)University of Oklahoma, Norman, OK

- *Tuesday, 13 December 2022*
- *12:00 - 12:10*
- *McCormick Place - E350 (Lakeside, Level 3)*

[T23A-07 Nature vs Nurture: A Multidisciplinary Perspective on Craton Survivability](#)

Catherine M Cooper, Washington State University, Pullman, WA, **Heather Bedle**, University of Oklahoma, School of Geosciences, Norman, OK, and Carol D Frost, University of Wyoming, Laramie, WY

- *Tuesday, 13 December 2022*
- *12:00 - 12:10*
- *McCormick Place - S102ab (South, Level 1)*

[GC23A-08 Satellite-based Modeling of Gross Primary Production of C3 Fields with Time Series of Landsat and Sentinel-2 Images](#)

Jorge Andres Celis, University of Oklahoma Norman Campus, Norman, OK, **Xiangming Xiao**, Department of Microbiology and Plant Biology, Center for Spatial Analysis, University of Oklahoma, Norman, OK, Pradeep Wagle, USDA-ARS, Grazinglands Research Laboratory, El Reno, OK, **Jeffrey B Basara**, University of Oklahoma, School of Meteorology; School of Civil Engineering and Environmental Science, Norman, OK, and **Lara Souza**, University of Oklahoma, Norman, OK

- *Tuesday, 13 December 2022*
- *12:19 - 12:30*
- *McCormick Place - S503ab (South, Level 5)*

[INV24A-01 - GeoCarb, the Carbon-Climate System and an International Operational Global Carbon Observing System](#)

Berrien Moore III, University of Oklahoma Norman Campus, Norman, OK and **Sean Crowell**, University of Oklahoma, Norman, OK

- *Tuesday, 13 December 2022*
- *13:45 - 13:55*
- *Online Only*

[NS24A - Near-Surface Geophysics for Characterizing and Monitoring Natural Hazards I Online Poster Discussion](#)

Sebastian Uhlemann, Lawrence Berkeley National Laboratory, Berkeley, CA, **Sina Saneiyani**, University of Oklahoma, School of Geosciences, Norman, OK, Angela Perrone, CNR Institute of Methodologies for Environmental Analysis, Potenza, Italy and Xavier Comas, Florida Atlantic University, Geosciences, Boca Raton, FL

- *Tuesday, 13 December 2022*
- *13:45 - 14:45*
- *Online Only*

[GH24A - Global Hotspots Related to Environmental Change and Health Impacts II Online Poster Discussion](#)

Ramesh P Singh, School of Life and Environmental Sciences, Schmid College of Science and Technology, Chapman University, Tatiana V Loboda, University of Maryland, College Park, MD, **Michael C Wimberly**, University of Oklahoma, Geography and Environmental Sustainability, Norman, OK, and Azar Mohammad Abadi, University of Nebraska Medical Center, Environmental, Agricultural, and Occupational Health, Omaha, NE

- *Tuesday, 13 December 2022*
- *13:45 - 14:45*
- *Online Only*

[AE25A-1864 Developing & Deploying Tools to Better Observe Lightning in the Washington D.C. Area & Beyond](#)

Daile Zhang¹, Mason Quick², Alexander Coles Friedman³, Domenic Brooks³, Terrence Pierce³, Guangyang Fang³, Joseph Patton³, Jeff Lapierre⁴, Karl Stock⁴, **Vanna Chmielewski**^{5,6} and **Michael Stock**⁵, (1)University of Maryland College Park, College Park, MD, (2)NASA Marshall Space Flight Center, Huntsville, AL, (3)University of Maryland College Park, College Park, MD, (4)Earth Networks Inc., Germantown, MD, (5)University of Oklahoma Norman Campus, Norman, OK, (6)NOAA/OAR/National Severe Storms Laboratory, Norman, OK

- *Tuesday, 13 December 2022*
- *14:45 - 18:15*
- *McCormick Place - Poster Hall, Hall - A (South, Level 3)*

[AE25A-1866Narrow Bipolar Events Observed by the ENTLN on the Global Scale](#)

Yanan Zhu, Earth Networks Inc., Germantown, MD, Jeff Lapierre, Earth Networks Inc., Germantown, MD, Elizabeth DiGangi, Earth Networks Inc., Research and Development, Germantown, MD, and **Michael Stock**, University of Oklahoma Norman Campus, Norman, OK

- *Tuesday, 13 December 2022*
- *14:45 - 18:15*
- *McCormick Place - Poster Hall, Hall - A (South, Level 3)*

[GH25D - Global Hotspots Related to Environmental Change and Health Impacts III Poster](#)

Ramesh P Singh, Chapman University, School of Earth and Environmental Sciences, Orange, CA, Azar Mohammad Abadi, University of Nebraska Medical Center, Environmental, Agricultural, and Occupational Health, Omaha, NE, Tatiana V Loboda, Univ of Maryland, College Park, MD, **Michael C Wimberly**, University of Oklahoma, Geography and Environmental Sustainability, Norman, OK

- *Tuesday, 13 December 2022*
- *14:45 - 18:15*
- *McCormick Place - Poster Hall, Hall - A (South, Level 3)*

[GH25D-0626Examining the Impact of Tropical Cyclone Events on Human West Nile Virus Cases in Louisiana](#)

Eric Bump¹, **Dawn M Nekorchuk**¹ and **Michael C Wimberly**², (1)University of Oklahoma, Geography and Environmental Sustainability, Norman, OK, (2)University of Oklahoma Norman Campus, Norman, OK,

- *Tuesday, 13 December 2022*
- *14:45 - 18:15*
- *McCormick Place - Poster Hall, Hall - A (South, Level 3)*

[GC25H-0782Using Bayesian Model Averaging to Develop an Observationally Constrained Ensemble of Downscaled Earth System Models to Support the Fifth U.S. National Climate Assessment](#)

Elias Charbel Massoud, Oak Ridge National Lab, Computational Sciences and Engineering, Oak Ridge, TN, Huikyo Lee, Jet Propulsion Laboratory, Caltech, Altadena, CA, **Adrienne Wooten**, University of Oklahoma Norman Campus, Norman, OK, and Adam J Terando, US Geological Survey, Southeast Climate Adaptation Science Center, Raleigh, NC

- *Tuesday, 13 December 2022*
- *14:45 - 18:15*
- *McCormick Place - Poster Hall, Hall A (South, Level 3)*

[NG25B-0390Finding causal gateways of heatwave propagation among U.S. cities](#)

Xueli Yang¹, Zhihua Wang¹ and **Chenghao Wang**², (1)Arizona State University, School of Sustainable Engineering and the Built Environment, Tempe, AZ, (2)University of Oklahoma, School of Meteorology; Department of Geography and Environmental Sustainability, Norman, OK

- *Tuesday, 13 December 2022*
- *14:45 - 18:15*
- *McCormick Place - Poster Hall, Hall - A (South, Level 3)*

[NS25A - Near-Surface Geophysics for Characterizing and Monitoring Natural Hazards II Poster](#)

Sebastian Uhlemann, Lawrence Berkeley National Laboratory, Berkeley, CA, **Sina Saneiyani**, University of Oklahoma, School of Geosciences, Norman, OK, Angela Perrone, CNR Institute of Methodologies for Environmental Analysis, Potenza, Italy and Xavier Comas, Florida Atlantic University, Geosciences, Boca Raton, FL

- *Tuesday, 13 December 2022*
- *14:45 - 18:15*
- *McCormick Place - Poster Hall, Hall A (South, Level 3)*

[S25D-0206Comparing Ambient-Noise-Based Seismic Velocity Variations with Dynamic and Static Strain Changes Associated with Major Earthquake Rupture at Parkfield](#)

Haoyu Li, University of Oklahoma Norman Campus, School of Geoscience, Norman, OK and **Junle Jiang**, University of Oklahoma Norman Campus, School of Geosciences, Norman, OK

- *Tuesday, 13 December 2022*
- *14:45 - 18:15*
- *McCormick Place - Poster Hall, Hall A (South, Level 3)*

[S25A-04Community Code Verification Exercises for Simulations of Earthquake Sequences and Aseismic Slip \(SEAS\): From 3D, Full Elastodynamics and Dipping Faults to Fluids and Fault Friction Evolution](#)

Valere Lambert¹, **Junle Jiang**², Brittany A Erickson³, Mohamed Abdelmeguid⁴, Martin Almquist⁵, Jean-Paul Ampuero⁶, Ryosuke Ando⁷, Sylvain Barbot⁸, Segun Bodunde², Camilla Cattania⁹, Alexandre Chen¹⁰, Luca Dal Zilio¹¹, Benchun Duan¹², Eric M Dunham¹³, Ahmed E Elbanna¹⁴, Alice-Agnes Gabriel¹⁵, Yihe Huang¹⁶, Yoshihiro Kaneko¹⁷, Taeho Kim¹⁸, Jeremy Edward Kozdon¹⁹, Nadia Lapusta²⁰, Duo Li²¹, Meng Li²², Chao Liang²³, Dunyu Liu²⁴, Yajing Liu²⁵, Jasper Marcum³, So Ozawa²⁶, Casper Pranger²⁷, Pierre Romanet⁷, Paul Segall¹³, Yudong Sun²⁸, Prithvi Thakur¹⁶, Carsten Uphoff²⁹, Ylona van Dinther³⁰ and Yuyun Yang³¹, (1)University of California Santa Cruz, Santa Cruz, CA, (2)University of Oklahoma Norman Campus, School of Geosciences, Norman, OK, 3)University of Oregon, Eugene, OR, (4)University of Illinois at Urbana Champaign, Urbana, IL, (5)Uppsala University, Department of Information Technology, Uppsala, Sweden, (6)Université Côte d'Azur, CNRS, Observatoire de la Côte d'Azur, IRD, Géoazur, Seismology, Valbonne, France, (7)University of Tokyo, Department of Earth and Planetary Science, Bunkyo-ku, Japan, (8)University of Southern California, Department of Earth Sciences, Los Angeles, CA, (9)Deutsches GeoForschungsZentrum GFZ, Potsdam, Germany, (10)University of Oregon, Department of Computer and Information Science, Eugene, OR, (11)ETH Swiss Federal Institute of Technology Zurich, Zurich, Switzerland, (12)Texas A&M University, Department of Geology & Geophysics, College Station, TX, (13)Stanford University, Department of Geophysics, Stanford, CA, (14)University of Illinois at Urbana Champaign, Department of Civil and Environmental Engineering, Urbana, IL, (15)Ludwig-Maximilians-Universität, Earth and Environmental Sciences, Munich, Germany, (16)University of Michigan Ann Arbor, Earth and Environmental Sciences, Ann Arbor, MI, (17)GNS Science, Kyoto, Japan, (18)California Institute of Technology, Pasadena, CA, (19)Naval Postgraduate School, Monterey, CA, (20)California Institute of Technology, Seismological Laboratory, Pasadena, CA (21)Ludwig Maximilians University of Munich, Munich, Germany, (22)Utrecht University, Department of Earth Sciences, Utrecht, Netherlands, (23)Géoazur - Université Nice Sophia Antipolis, Valbonne, France, (24)University of Texas, Institute for Geophysics, Austin, TX, (25)McGill University, Department of Earth and Planetary Sciences, Montreal, QC, Canada, (26)Stanford University, Stanford, CA, (27)Ludwig Maximilians University of Munich, Department of Earth and Environmental Sciences, Munich, Germany, (28)Massachusetts Institute of Technology, Cambridge, MA, (29)Technical University of Munich (TUM), Munich, Germany, (30)Utrecht University, Utrecht, Netherlands, (31)Stanford University, ICME, Stanford, CA

- *Tuesday, 13 December 2022*
- *14:45 - 18:15*
- *McCormick Place - Poster Hall, Digital Poster Monitor Zone 1*

[H25A-06Evaluating and intercomparing satellite and reanalysis precipitation products by using decision trees](#)

Xinxin Sui, University of Texas at Austin, Austin, TX, **Zhi Li**, University of Oklahoma Norman Campus, Norman, OK, Guoqiang Tang, University of Saskatchewan, Centre for Hydrology, Saskatoon, SK, Canada, Zong-Liang Yang, Univ Texas Austin, Austin, TX, and Dev Niyogi, University of Texas at Austin, Jackson School of Geosciences, Austin, TX

- *Tuesday, 13 December 2022*
- *15:35 - 15:45*
- *McCormick Place - E450b (Lakeside, Level 4)*

[A25B-07How the Large-Scale Environment and Mesoscale Convective System Modulates the Diurnal Rainfall Strength over Offshore West Africa](#)

Shun-Nan Wu, University of Oklahoma, OK, **Naoko Sakaeda**, University of Oklahoma Norman Campus, School of Meteorology, Norman, OK, **Elinor R Martin**, University of Oklahoma, School of Meteorology, Norman, OK, and Rosimar Rios-Berrios, National Center for Atmospheric Research, Boulder, CO

- *Tuesday, 13 December 2022*
- *15:45 - 15:55*
- *McCormick Place - E351 (Lakeside, Level 3)*

[H26AAdvances in Machine Learning for Earth Science: Observation, Modeling, and Applications II Oral](#)

Yixin Wen, University of Florida, Department of Geography, Ft Walton Beach, FL, Guoqiang Tang, University of Saskatchewan, Centre for Hydrology, Saskatoon, SK, Canada, **Mengye Chen**, The University of Oklahoma, Norman, OK, and Phu Nguyen, University of California, Irvine, Department of Civil and Environmental Engineering, Irvine, CA

- *Tuesday, 13 December 2022*
- *16:45 - 18:15*
- *McCormick Place - E450b (Lakeside, Level 4)*

[H26F Space-Based Precipitation Observations: Innovations for Science and Applications II Oral](#)

Sarah Ringerud, University of Maryland College Park, Earth System Science Interdisciplinary Center (ESSIC), College Park, MD; NASA Goddard Space Flight Center, Greenbelt, MD, Jackson Tan, University of Maryland Baltimore County, Baltimore, MD, **Pierre Kirstetter**, University of Oklahoma Norman Campus, CIMMS, Norman, OK, David B Wolff, NASA Goddard Space Flight Center Wallops Flight Facility, Code 610W, Wallops Island, VA, Christopher Kidd, Earth System Science Interdisciplinary Center, College PARK, MD, and Lisa Milani, CNR Institute of Atmospheric Sciences and Climate, Bologna, Italy

- *Tuesday, 13 December 2022*
- *16:45 - 18:15*
- *McCormick Place - E270 (Lakeside, Level 2)*

[H26F-02 The GPM Validation Network: Oceanic Validation of IMERG and GPROF with Ground-Based Radars](#)

Daniel Watters¹, Patrick N Gatlin², **Pierre-Emmanuel Kirstetter**^{3,4}, George John Huffman⁵, Jackson Tan^{6,7}, David T Bolvin^{7,8}, Eric Nelkin^{7,8}, David B Wolff⁹, Jianxin Wang⁵, Robert Joyce^{7,10} and Sarah Ringerud^{7,11}, (1)NASA Postdoctoral Program, NASA Marshall Space Flight Center, Huntsville, AL, (2)NASA Marshall Space Flight Center, Huntsville, AL, (3)University of Oklahoma, School of Meteorology and School of Civil Engineering and Environmental Science, Norman, OK, (4)NOAA/National Severe Storms Laboratory, Norman, OK, (5)NASA Goddard Space Flight Center, Greenbelt, MD, (6)University of Maryland Baltimore County, Baltimore, MD, (7)NASA Goddard Space Flight Center, Greenbelt, MD, (8)Science Systems and Applications, Inc., Lanham, MD, (9)NASA Goddard Space Flight Center Wallops Flight Facility, Code 610W, Wallops Island, VA, (10)Science Systems and Applications, Inc., Lanham, (11)University of Maryland College Park, Earth System Science Interdisciplinary Center (ESSIC), College Park, MD

- *Tuesday, 13 December 2022*
- *16:55 - 17:05*
- *McCormick Place - E270 (Lakeside, Level 2)*

[H26F-03 Evaluation of IMERG over mountainous regions using environmental variables](#)

Yagmur Derin, University of Oklahoma Norman Campus, Norman, OK, and **Pierre-Emmanuel Kirstetter**, University of Oklahoma, School of Meteorology and School of Civil Engineering and Environmental Science, Norman, OK

- *Tuesday, 13 December 2022*
- *17:05 - 17:15*
- *McCormick Place - E270 (Lakeside, Level 2)*

[GC26D-04 Microbes Persist: How Soil Moisture Regimes Shape the Ecophysiology and Biogeochemical Effects of Wild Soil Microbiomes](#) (Invited)

Jennifer Pett-Ridge¹, Noah Sokol¹, Alex Greenlon², Megan M Foley³, Ella Sieradzki⁴, Alexa Nicolas², Katerina Estera-Molina², **Mengting Yuan**⁵, Javier A. Ceja Navarro⁶, Jeff Kimbrel⁷, Rachel Hestrin⁷, Bruce A Hungate⁸, Jillian F Banfield⁴, Mary K Firestone⁹ and Steven Blazewicz⁷, (1)Lawrence Livermore National Laboratory, Livermore, CA, (2)University of California Berkeley, Berkeley, CA, (3)Northern Arizona University, Flagstaff, AZ, (4)University of California, Berkeley, Berkeley, CA, (5)University of Oklahoma Norman Campus, Norman, OK, (6)Northern Arizona University, Center for Ecosystem Sciences and Society, Flagstaff, AZ, (7)Lawrence Livermore National Laboratory, Livermore, CA (8)Northern Arizona University, Department of Biological Sciences and the Center for Ecosystem Science and Society, Flagstaff, AZ, (9)Univ California Berkeley, Berkeley, CA

- *Tuesday, 13 December 2022*
- *17:20 - 17:31*
- *McCormick Place - S501bcd (South, Level 5)*