Poster Program for the 44th Annual Climate Diagnostics and Prediction Workshop

Durham, North Carolina, October 22-24, 2019

Lightning Talks: Tuesday, October 22, 2019, 4:15 pm - 5:00 pm

Poster Session #1: Tuesday, October 22, 2019, 5:00 pm - end Poster Session #2: Wednesday, October 23, 2019, 2:40 pm - 3:40 pm

All posters will be presented at both sessions and left on display during the entire conference.

Modeling the impact of Expanding Irrigated Agriculture on Future Climate Projections in an Arid Environment Aldababseh, Amal, Marouane Temimi, Michael Weston, David Yates, Khalifa University of Science and Technology, NCAR

Analysis of South Atlantic Convergence Zone (SACZ) Events through the Energetics Components of Lorenz Cycle António, Jaime, Jaime Fernando António; José Antonio Aravéquia, CPTEC-INPE, Brazil

Evaluation of Sea Surface Temperature Generated by GOES-16 Satellite over the Tropical and Southwest Atlantic Area Azevedo, Mayna Helena; José Antônio Aravéguia; Natália Rudorff Oliveira, Center for Weather Forecast and Climatic Studies / National Institute for Space Research, CPTEC/INPE Brazil

An experimental seasonal snowfall prediction tool using NMME Temperature and Precipitation Barandiaran, D. and S. Baxter, NOAACPC, Innovim

The Benefits of Using High-Resolution Sea Surface Temperatures for Simulating Historical and Future Climate Extremes Bowden, Jared, Tanya Spero, Kristen Foley, Anna Jalowska, Megan Mallard, Adam Terando, North Carolina State University, US EPA, ORISE, USGS Southeast Climate Adaptation Science Center

A link between western North Pacific subseasonal ocean eddies and enhanced one- to three- week forecast skill over western North Pacific

Chang, Chueh-Hsin, Bo Qiu, Nathaniel C. Johnson, Changhyun Yoo, Hsiao- Ching Huang: University of Hawaii, Princeton University/GFDL, Ewha Womans University, National Taiwan University

Why is the East Asian summer monsoon extremely strong in 2018? — Collaborative effects of SST and snow cover anomalies

Chen, Lijuan, National Climate Center, China Meteorological Administration

MJO forecast verification and diagnostics for CWB S2S models Chen, Yun-Lan, Tzu-Yu Wu, Pang-Yen Liu, Jen-Her Chen and Hann-Ming Henry Juang, Central Weather Bureau, Taiwan, NOAA/EMC

Remote Sensing and covariance fluxes to evaluate productivity in buffelgrass (C. ciliaris) and subtropical scrub in arid zones of Northwest Mexico

Choza, Sofía, José Raúl Romo León, Alejandro Castellanos Villegas, Universidad de Sonora

Improving the CPC's ENSO Forecasts using Bayesian model averaging (BMA) Chu, Pao-Shin, Luke He, Hanpei Zhang, David Unger, University of Hawaii, NOAA/CPC

Extending the Prediction of Extremes to Seasonal Forecasts

Collins, Dan, Sarah Strazzo, Emerson LaJoie, Johnna Infanti, Emily Becker, NOAA/CPC, Embry-Riddle Aeronautical University, University of Miami

Overview of the CPC Sea Ice initialization System (CSIS) and its use in experimental sea ice forecasting at the NOAA Climate Prediction Center

Collow, Thomas, Yanyun Liu, Wangiu Wang, Arun Kumar, NOAA/CPC, Innovim

Cluster Analysis Resolution of Diurnal Climatological Wind Pattern Modes Utilizing K-Means - A Case-Study with Raleigh, N.C. Data (1946-2019) Fisk, Charles, Naval Base Ventura County, Point Mugu, CA

Preview, NCEI Daily Gridded data and selected derived products Gleason, Karin L, Derek S. Arndt, Carl J. Schreck III, Chris L. Fenimore

Enabling Numerical Seasonal Forecasts for High Resolution Modeling of Blue Nile River Basin Haider, Muhammad Rezaul, Malaquias Peña, Emmanouil Anagnostou and Zoi Dokou, University of Connecticut

Development of an Objective Confidence Metric for CPC'S Extended Range Forecast Harnos, Daniel S., Stephen Baxter, Matthew Rosencrans, Scott Handel, NOAA/CPC

MJO propagation and its influence on temperature and precipitation over the US Harnos, Kirstin J., Wanqiu Wang, NOAA/CPC

Early Detection of Vegetation Drought Onset from Space Hosseini, Atefeh, Arsalan Zolfaghari Shahrak, Wilfried Konrad, University of Kansas, University of Tuebingen

A comparison of CCSM4 high-resolution and low-resolution predictions for south Florida and southeast United States drought Infanti, Johnna M., Ben P. Kirtman, UCAR, University of Miami

Changes in Eastern North Carolina PIDF Curves Projected in Dynamically Downscaled CESM and CM3 Models, Under Future Scenarios (2025-2100) Using WRF Jalowska, A. M., J. H. Bowden, T. L. Spero, ORISE/USEPA

An analysis on estimating seasonal predictability of precipitation over land and impact of ENSO SSTs in North American Multi-Model Ensemble Hindcast Jha, Bhaskar, Arun Kumar, NOAA/CPC, Innovim

Attribution of extreme streamflow changes over headwater of the Yellow River basin in China: Impacts of anthropogenic climate change, land cover change and reservoir operation

Ji, Peng, Xing Yuan, Yang Jiao: Institute of Atmospheric Physics, Chinese Academy of Sciences, Nanjing University of Information Science and Technology

Remote Sensing of Shoreline and River Bank Changes from Tropical Cyclones and its Associated Rainfall over Rufiji Delta

Kai, K. H., Shaghude Y. W., Uiso C.B.,and Julius F, Tanzania Meteorological Agency; University of Dares Salaam and WIOMSA

A Comparison of Two Non-Linear Mathematical Models for Prediction of Monthly Rainfall Kulshrestha M S, Dhabale S and Patel N D, Anand Agricultural University, India

Exploring weights for the Autoblend Tool used in Week-34 Probabilistic Outlooks LaJoie, Emerson, NOAA/CPC, Innovim

Intensification of the oceanic water cycle in the subtropical North Atlantic and its implication for precipitation mode of variability in the US

Li, Laifang, Raymond W. Schmitt; Caroline C. Ummenhofer, Duke University, Woods Hole Oceanographic Institutions

A Deep Learning Approach to ENSO Prediction MacRitchie, Kyle, Stephen Baxter, Allen Mewhinney, NOAA/CPC, PennState

WRF Simulations of a Flood– Producing Heavy Rainstorm in Current and Future Environment Madden, Mike, Chunyong Jung, Walter Robinson, Gary Lackmann, North Carolina State University

Verification of the Global Tropics Hazards Outlook using the CPC Unified Precipitation Dataset Maurin, Christina, Jon Gottschalck, Lindsey Long, NOAA/CPC, Innovim

Long-range forecast of all India summer monsoon rainfall using adaptive neuro-fuzzy inference system: skill comparison with CFSv2 model simulation and real-time forecast for the year 2015 Mukherjee, Sayantika, Amity University Kolkata

Climate impacts global crop yield volatility Najafi, Ehsan, Reza Khanbilvardi: NOAA CREST, City College of City University of New York

Skillful all-season S2S Prediction of U.S. precipitation using the MJO and QBO Nardi, K., E. Barnes, E. Maloney, C. Baggett, D. Harnos, L. Ciasto, Colorado State University, NOAA/CPC, Innovim

Assessment of CPC Global Daily Surface Air Temperature (Global-T) Analysis Pan, Yutong, Wanqiu Wang, Wei Shi, NOAA/CPC, Innovim

Large-scale quantifying of sources and sinks of atmospheric carbon in Siberia Panov, Alexey, Anatoly Prokushkin, Vyacheslav Zyrianov, Anastasiya Timokhina, Nikita Sidenko, Sung– Bin Park, Claire G. Williams, V.N. Sukachev: Institute of Forest SB RAS, Russia; Max Planck Institute for Biogeochemistry, Germany; American University, Washington D.C.

Consistent sub-monthly and monthly forecast by combining GEFS and CFS data Peng, Peitao, Mike Halpert, Stephen Baxter, Mike Charles, NOAA/CPC

Local Technical Agroclimatic Committee in the Highlands of Guatemala: Delivering Inclusive Climate Services Pons, Diego, International Research Institute for Climate and Society, Columbia University

Using the CREATE Service: Exploring Tools and Methods to Evaluate Precipitation Rates from Reanalysis Potter, Gerald L., Laura Carriere, Judy Hertz, George Huffman, Thomas Maxwell, Yingsho Shen, NASA Goddard Space Flight Center

Is Standardized Potential Evapotranspiration Index (SPEI) a Better Drought Index for Africa? Robjhon, Miliaritiana, Wassila Thiaw, NOAA/CPC, Innovim

Contribution of anthropogenic and greenhouse gases influences to increased precipitation extremes over Southwestern Iran

Saadi, Tofigh, Applied Research Committee, Alboz Regional Water Authority, Karaj, Iran

The influence of summer deep soil temperature on early winter snow conditions in Eurasia in the NCEP CFSv2 simulation Shukla, Ravi, Bohua Huang, Paul A Dirmeyer and James L. Kinter, George Mason University

Climate diagnostics of the extreme floods in Peru during early 2017 Son, Rackhun, Gwangju Institute of Science and Technology

Comparing Extreme Events Generated by 36-km and 12-km WRF Simulations Spero, T. L., J. H. Bowden, A. M. Jalowska, M. S. Mallard, G. M. Gray, U.S. EPA, North Carolina State University, ORISE

Future Changes in Extreme Heat Waves in High-resolution Time-slice Simulations Turnau, Roger, Walter Robinson, Gary Lackmann, Allison Michaelis, North Carolina State University, University of California San Diego

Madden Julian Osculation effects of extreme rainfall events in Uruguay in Spring Ungerovich, Matilde, Marcelo Barreiro, INUMET, UdelaR

The Role of Sea Surface Temperatures in Pervasive Northern-Hemisphere Heatwave Conditions During Summer 2018 Wakamatsu, Shunya, Kazuto Takemura, Akihiko Shimpo, Hiroki Togawa, Yutaro Kubo, Yuhei Takaya, Chiaki Kobayashi, and Shuhei Maeda, Tokyo Climate Center, Japan Meteorological Agency(JMA), Meteorological Research Institute, JMA, Kyoto University

A Comparison of Seasonal Hurricane Forecasts: Dynamical Model versus Dynamical–Statistical Model Wang, Hui, Lindsey N. Long, Arun Kumar, NOAA/CPC, Innovim

Simulations of tropical impacts on North American seasonal climate variations Wang, Wanqiu, Weiyu Yang, NOAA/CPC

The Political Ecology of Urban Flooding: A Case of 2014 Floods in Kashmir Valley Wani, Sundus Samreen, School of Planning and Architecture, New Delhi

Integration of the Noah MP Land Surface Model into the Unified Forecast System Wei, Helin, Rongqian Yang, Jack Kain, IMSG, NOAA/EMC

Development and Result of TCWB1T

Wu, Tzu-Yu, Hann-Ming Henry Juang, Yun-Lan Chen, Pang-Yen Liu, Ching-Teng Lee, Jen-Her Chen, Meteorology Research and Development Center, Central Weather Bureau, Taiwan, NOAA/EMC, Meteorological Information Center, Central Weather Bureau, Taiwan

A Deep Learning Based Forecast Framework for Short-term and Long-Term Meteorological Drought Xu, Li, NOAA/CPC, Innovim

Evaluation and Intercomparison of Noah MP LSM -based Land Data Assimilation System with the Noah-based Land Data Assimilations and Reanalyses in the NCEP Operations Yang, Rongqian, Jesse Meng, Youlong Xia, Jack Kain and Mike Ek, IMSG, NOAA/EMC, JNT/RAL

Ensemble prediction in the Anthropocene: the role of LUCC and global warming Yuan, Xing, Enda Zhu, Nanjing University of Information Science and Technology, Chinese Academy of Sciences

The Northeast China Persistent Drought in Spring-Summer of 2017: Joint Roles of Teleconnection and Land-atmosphere Coupling

Zeng, Dingwen, Xing Yuan, Joshua K. Roundy, Nanjing University of Information Science and Technology, University of Kansas

Detecting flash drought impact on terrestrial ecosystem productivity based on FLUXNET and satellite observations Zhang, Miao, Xing Yuan, Institute of Atmospheric Physics, Chinese Academy of Sciences, Nanjing University of Information Science and Technology

The Dominant Modes of Anomalous Precipitation over Eastern China during the Rainy Season in Yangtze River Valley and the Possible Mechanisms

Zhang, Qingyun, Heng Guo, Institute of Atmospheric Physics, Academy of Sciences, China

Promoting In-depth Development of Neural Net Applications for Climate Prediction and Services Improvement Zhou, Jiayu, David DeWitt, NWS/OSTI, NOAA/CPC

Benchmark decadal forecast skill for terrestrial water storage over global major river basins Zhu, Enda, Xing Yuan; Andrew Wood, Nanjing University of Information Science and Technology; Research Applications Laboratory, NCAR

The Development of NCEP Global Ensemble Forecast System Zhu, Yuejian, Xiaqiong Zhu, Dingchen Hou, NOAA/EMC