

# Program for the 41<sup>st</sup> Annual Climate Diagnostics and Prediction Workshop

Orono, Maine, October 3-6, 2016

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**Tuesday, October 4, 2016**

17:00 – 20:00      **Poster Session**

## ENSO & Recent Climate Anomalies

- P.1 *A staged communication approach to advising Australian industry on the risk of El Niño or La Niña developing*, Robyn Duell, Felicity Gamble, Andrew Watkins, David Jones, Australian Bureau of Meteorology
- P.2 *A New Framework to Monitor and Understand ENSO in Real-Time Applications*, Michael J. Ventrice, The Weather Company, an IBM Business
- P.3 *Understanding the ENSO - Great Plains Low-Level Jet Relationship in the CMIP5 Models*, James F. Danco and Elinor R. Martin, University of Oklahoma
- P.4 *Impact of ENSO in different phases of PDO on Moroccan Climate in Winter and Spring*, Atika Kasmi and Samir Saadane, Direction de la Meteorologie Nationale/Morocco
- P.5 *Sea Surface Salinity and Surface Chlorophyll Variations During the 2015/ 2016 El Nino*, Li Ren; Pingping Xie; Shaorong Wu; Arun Kumar, NOAA/NCEP/Climate Prediction Center; INNOVIM, LLC
- P.6 *Structure of the 2015-16 El Nino Event in MERRA-2 Including a Comparison with Previous Strong Events*, Young-Kwon Lim, NASA Goddard Space Flight Center, Global Modeling and Assimilation Office

## Prediction, Attribution, and Analysis of High Impact Extreme Climate Events

- P.7 *Future Heat Stress Projections and their Effects on New England Livestock*, Emma McCabe, Earth Systems Research Center, Univ. of New Hampshire
- P.8 *Anomalous Rainfall in East Asia during summer and Its Association with the Aspect of East Asian Westerly Jet*, QingYun Zhang, Institute of Atmospheric Physics, Chinese Academy of Sciences, Beijing
- P.9 *Statistical Prediction of Seasonal Tornado and Hail Activity in the United States*, Hui Wang, Kirstin Harnos, and Arun Kumar, NOAA Climate Prediction Center

- P.10 *Variability and change in daily precipitation extremes stemming from north Atlantic tropical cyclones in the eastern United States*, (1)Nirajan Dhakal and (2) Shaleen Jain, (1) Environmental and Health Sciences Program, Spelman College, (2) Department of Civil and Environmental Engineering, University of Maine
- P.11 *Enhanced NCEP GLDAS for Real Time Global Drought Monitor*, Jesse Meng, EMC/MSG
- P.12 *The Roles of Radiative Forcing, Sea Surface Temperatures, and Atmospheric and Land Initial Conditions in U.S. Summer Warming Episodes*, Liwei Jia, GFDL/Princeton University and Gabriel A. Vecchi, Xiaosong Yang, Richard G. Gudgel, Thomas L. Delworth, William F. Stern, Karen Paffendorf, Seth D. Underwood and Fanrong Zeng
- P.13 *An operational drought monitoring system for the Caribbean and Central America*, Miliaritiana Robjhon and Wassila Thiaw, NOAA Climate Prediction Center
- P.14 *Enhanced NCEP GLDAS for Real Time Global Drought Monitor*, Jesse Meng, EMC/MSG
- P.15 *Forecasting The Early March Middle and Lower Mississippi Valley Flooding Event Via The Recurring Rossby Wave*, Joseph Renken, KOPN Radio 89.5FM
- P.16 *The Quantification of Rainfall Needed to Overcome Drought: Study in North Texas*, Jasmine Montgomery, Southern Climate Impacts Planning Program (SCIIPP) and Nelun Fernando, Texas Water Development Board (TWDB)

#### Arctic Climate Variability & Change

- P.17 *Gridded Climate Products for Applications to Wildland Fire Management in Alaska*, Uma S Bhatt, University of Alaska Fairbanks
- P.18 *Prediction of seasonal Arctic sea ice extent using the NMME*, Kirstin Harnos, Michelle L'Heureux, and Qin Zhang, NOAA Climate Prediction Center and Innovim LLC
- P.19 *Effect of the El-Nino Southern Oscillation on the Relationship between Arctic Oscillation and Wintertime Temperature over East Asia*, Sung-Ho Woo, Hyun-Kyung Kim, So-Young Yim, Jeongwon Park, Seongeun Lee, APEC Climate Center, KMA
- P.20 *The Rapid Arctic Warming of January 2016: Impacts, Processes, and Predictability*, Simon Wang, Henry Y-H Lin, M.-Y. Lee, and Kathy Pegion, Utah State University

#### Model & multi-model ensemble predictions & predictability

- P.21 *Exploring the impact of the SST on the extended range forecast using the NCEP Global Ensemble Forecast System*, Wei Li, Yuejian Zhu, Malaquias Peña, Xiaqiong Zhou, Dingchen Hou, Christopher Melhauser

- P.22 *An Analysis of Sesaonal Predictability of SST, Precipitation and Geopotential Height at 200 hPa in NMME Hindcasts*, Bhaskar Jha and Arun Kumar, Innovim LLC and NOAA Climate Prediction Center
- P.23 *Seasonal prediction skill of the APCC in-house model retrospective seasonal forecasts*, Suryun Ham, APEC Climate Center
- P.24 *Evaluating Fourier predictions of tropical rainfall using both observations and model data*, Carl Schreck, Cooperative Institute for Climate and Satellites - North Carolina (CICS-NC)
- P.25 *Evaluation of an NMME-based Hybrid Prediction System for Eastern Pacific Hurricane Season Activity*, Christina Finan, Hui Wang, and Jae-Kyung Schemm, Innovim LLC and NOAA CPC
- P.26 *Moisture Mode Processes and MJO Predictability in Coupled NAVGEM/HYCOM Hindcasts*, Matthew Adam Janiga, James Ridout, Maria Flatau, Neil Barton, Carolyn Reynolds, University Corporation for Atmospheric Research
- P.27 *Integration of Systems Engineering into Weather-Climate Model Optimization*, Jiayu Zhou and David DeWitt, OSTI/NWS/NOAA and NOAA CPC
- P.28 *Large-scale controls on Atlantic tropical cyclone activity on seasonal time scales*, Young-Kwon Lim, NASA Goddard Space Flight Center, Global Modeling and Assimilation Office
- P.29 *Assessing the potential of a long-term climate forecast for Cuba using the WRF model*, Lourdes Álvarez-Escudero, Institute of Meteorology, Cuba
- P.30 *Characterization of climate model errors over North America at climate and NWP timescales using the NARCCAP RCM, CMIP5-AMIP and Transpose-AMIP experiments*, Ambarish V Karmalkar, Northeast Climate Science Center, Univ of Massachusetts Amherst
- P.31 *Skill and predictability in multimodel ensemble forecasts for Northern hemisphere regions with dominant winter precipitation*, Muhammad Azhar Ehsan, Center of Excellence for Climate Change Research (CECCR), King Abdulaziz University, Jeddah Saudi Arabia
- P.32 *GEFS v11 Reforecast and its Applications*, Dingchen Hou, Hong Guan and Yuejian Zhu, EMC/NCEP/NWS/NOAA
- P.33 *Objective, temporally and spatially skill-weighted consolidation of dynamical model forecasts for Week-2 outlooks*, Scott Handel, CPC/NCEP
- P.34 *Preliminary Results of Evaluation of Week 3-4 Reforecast Data from Environment Canada*, Qin Zhang, Dan Collins and Jon Gottschalck, Climate Prediction Center NCEP/NWS/NOAA

- P.35 *Assessing Performance of Calibrated Multi-Model Ensembles in the 3-4 Week Forecast Period*, Kyle MacRitchie, Dan Collins and Jon Gottschalck, Innovim and Climate Prediction Center
- P.36 *Roles of Remote and Local Forcings in the Variation and Prediction of Regional Maritime Continent Rainfall in Wet and Dry Seasons*, Tuantuan Zhang, Song Yang, Xingwen Jiang, and Bohua Huang, Sun Yat-sen University; Institute of Plateau Meteorology, China Meteorological Administration; Center for Ocean-Land-Atmosphere Studies
- P.37 *The contribution of high resolution medium range forecast to the improvement of hydro-climate prediction*, Li Xu & Kingse Mo, CPC/NCEP
- P.38 *Observed tropical climate variability influences on North American temperature and precipitation forecasts for weeks 3 and 4*, Daniel Harnos, Nathaniel Johnson, Stephen Baxter, Michelle L'Heureux, and Adam Allgood, NOAA/NCEP/NWS/CPC (Harnos, Baxter, L'Heureux, Allgood); NOAA/GFDL/Princeton University (Johnson)
- P.39 *Evaluating CPC's Long-Lead Climate Outlooks*, Stephen Baxter, NOAA/NWS/NCEP/CPC

#### Climate Events & Risk Management / Climate Services

- P.40 *Early spring ice-out in Maine lakes: Identifying wintertime weather-climate thresholds and ENSO-related climate risk*, Mussie T. Beyene & Shaleen Jain, University of Maine

#### Climate Attribution, Analysis & Reanalysis

- P.41 *Variations of Mid-Atlantic Trough and Associated Climate Anomalies*, Mengmeng Lu, Kaiqiang Deng, Song Yang, Guojun Zhou, and Yaheng Tan, School of Atmospheric Sciences, Sun Yat-sen University, Guangzhou, China
- P.42 *A Preliminary Examination of a Conventional ENKF Atmospheric Reanalysis*, Wesley Ebisuzaki (1), Arun Kumar (1), Jeffrey Whitaker (2), Jack Woollen (3), Hyun-Chul Lee (1), Leigh Zhang (1), (1) CPC/NCEP, (2) PDS/OAR (3) EMC/NCEP
- P.43 *Initial Assessment of the Conventional Observation Reanalysis*, Li Zhang, Arun Kumar, Jeffrey Whitaker, Jack Woollen, Wesley Ebisuzaki, Hyun-Chul Lee, INNOVIM, CPC/NCEP/NWS/NOAA, PSD/OAR/NOAA
- P.44 *Precipitation Diurnal Cycle Depicted in the CMORPH Satellite Observations and Four New Global Reanalyses*, Pingping Xie and Shaorong Wu, NOAA Climate Prediction Center

- P.45 *Diversity in Global Patterns of Precipitation Variability and Change*, Anne Lausier and Shaleen Jain, Department of Civil and Environmental Engineering - University of Maine
- P.46 *Climatic variability in the Sub-Saharan region*, Skyler Jayden Dembe, Green World Uganda (GWU), Masaka, Uganda
- P.47 *A Process-level Attribution to the Difference in the Annual Variation of Surface Temperature between the Monsoon and Non-monsoon Regions*, Yana Li, Song Yang, Sun Yat-sen University
- P.48 *An analysis of the MJO influence on the rainfall in subtropical coastal areas of East Asia*, Yun-Lan Chen, Chung-Hsiung Sui, Chih-Pei Chang, Wanqiu Wang, CWB,Taiwan; NTU,Taiwan; NCEP/CPC