

NGGPS/MAPP Principal Investigators Meeting

August 2-3, 2017

Poster Session: Lobby area outside of conference center and auditorium

Topic 1: NGGPS Testbeds

[-Application of a Hybrid Dynamical-Statistical Model for Week 3 to 4 Forecast of Atlantic/Pacific Tropical Storm Activity](#) (Jae-Kyung Schemm and Hui Wang, NCEP-CPC)

-Real-time VIIRS land surface products in NOAA's numerical weather prediction applications (Ivan Csizsar, NESDIS)

-Data Mining of High Resolution Storm-Scale Data Sets (Kristin Calhoun for Travis Smith, OU/CIMMS & NOAA/NSSL)

-Cloud-scale variational lightning data assimilation within WRF-ARW using GSI and NEWS3DVAR (Kristin Calhoun for Alex Fierro, OU/CIMMS & NOAA/NSSL)

-Evaluation of Forecasts of Temperature and Precipitation for Days 8-10 (James Nelson, Weather Prediction Center)

Topic 2: Physics/Modeling and Framework

-Improving cloud microphysics and their interactions with aerosols in the NCEP cloud models (Sheng-Po Chen for Sarah Lu, State University of New York - Albany)

Topic 3: Data Assimilation

-On the Use of Valid Time Lagging (VTL) Ensembles to Increase Ensemble Size in the GFS Hybrid 4DVar System (Xuguang Wang, University of Oklahoma)

-The development of a multi-resolution hybrid 4DVar system for GFS (Xuguang Wang, University of Oklahoma)

-Development of Advanced Data Assimilation Techniques for Improved Use of Satellite-Derived Atmospheric Motion Vectors (James Jung, University of Wisconsin)

-Improvements in Air Temperature Forecasts in the Global Forecast System (GFS) via Assimilating ASCAT Soil Moisture Retrievals (Mitchell Schull, University of Maryland-ESSIC)

-Efficient Estimation of the Impact of Observing Systems using Ensemble Forecast Sensitivity to Observations (EFSO)(Tse-Chun Chen, University of Maryland)

Topic 4: Verification/Validation

-Diagnosing and quantifying uncertainties of the reanalyzed clouds, precipitation and radiation budgets over the Arctic and CONUS using combined surface-satellite observations (Baiké Xi, University of North Dakota)

-Predictability and Prediction Skills of Persistent High Pressure Systems in GEFS (Ping Liu, State University of New York -Stony Brook)

-Developing Physics-oriented Diagnostic Tools for Model Evaluation and Improvement (Wei-Wei Li for Zhuo Wang, University of Illinois)

Topic 5: Post-Processing and Applications

-Improving Global Wind-Wave Probabilistic Forecasts and Products Beyond Week 2 (Ricardo Campos for Steve Penny, University of Maryland)

-Investigation of aerosol effects on weather forecast using NCEP global forecast system (Partha Bhattacharjee, NCEP/EMC for Sarah Lu, State University of New York Albany)