

NOAA/NESDIS Cooperative Research Program (CoRP) Annual Science Symposium

Turning NOAA Science into Information for Societal Benefit

6 – 7 June 2018

Hosted at the Pyle Center by

NOAA's Cooperative Institute for Meteorological Satellite Studies (CIMSS)

AGENDA

Wednesday, 6 June

8:00-9:00 Registration (outside room 235)

9:00 Welcome and Logistics (Steve Ackerman)

9:10 Sat Obs – from UFOs to FTS (Paul Menzel)

CoRP Presentations (Chair: Wayne Feltz)

9:30 Decreasing Caribbean Precipitation Trends During A Warming Sea Surface Temperature Period, 1982-2015 (Equisha Glenn, CREST)

9:50 Refining Long-Term Analysis of AVHRR Great Lakes Surface Temperatures (Charles White, CIMSS)

10:10 Subseasonal-to-seasonal (S2S) Predictability of Storm Tracks and Related Winter Weather in the NCEP Climate Forecast System (Katherine Lukens, CICS-MD)

10:30 *Break*

CoRP Presentations (Chair: Hugo Berbery)

10:50 Detecting convection using GOES-R ABI data (Yoonjin Lee, CIRA)

11:10 A Comparison of Thermodynamic Retrievals from Space-based and Ground-based Platforms Applied to a Convective Initiation Case Study (David Loveless, CIMSS)

11:30 Climatology and structure of cut-off lows in the North Atlantic basin
(Louis Rivoire, CIRA)

11:50 A Dynamic Risk Assessment for Water (Arun Ravindranath, CREST)

12:10 *Lunch on own*

CoRP Presentations (Chair: Jeff Key)

1:30 Lake Michigan Ozone Study – LMOS (Brad Pierce, ASPB-CIMSS)

1:50 Puerto Rico after Hurricane Maria (Shane Hubbard, CIMSS)

2:10 Sources and Variability of Satellite Passive Microwave Precipitation
Biases (Veljko Petkovic, CIRA)

2:30 Information content of visible and mid-infrared radiances for
retrieving tropical ice cloud properties (Kai-Wei Chang, CIMSS)

2:50 Linking SNPP and NOAA20 CrIS toward Climate Data Records (Likun
Wang, CICS-MD)

3:10 Deciphering the impacts of model moisture errors on hurricane
forecasts with satellites (Chris Slocum, CIRA)

3:30 *Break*

3:50 **CoRP Career Panel** moderated by Margaret Mooney (CIMSS) with
Kaba Bah (CIMSS), Mike Beles (American Family Insurance), Marcia
Cronce (NWS), Haddie McClean (WISC-TV3), and Alexa Ross (CIMSS)

5:00-7:00 *Poster Session and Reception (cash bar in room 209)*

RealEarth: Visualize Your Data (Sam Batzli, CIMSS)

Indirect Validation of OMPS Limb Ozone Retrievals (Margaret
Bruckner, CIMSS)

Lake Breeze Analysis from the Lake Michigan Ozone Study (Jack
Bruno, CIMSS/Ohio University)

Derivation of Drought Index for the Continental United States using Satellite Based Soil Moisture and Vegetation Indices (Cassandra Calderella, CREST)

Examining PM2.5 Data Apples-to-Apples: Comparative Analysis of CDC WONDER, Environmental Tracking Network and Dalhousie University's Maps (Seohyun Choi, CIMSS/SAGE)

The Streamwise Vorticity Current in a High Resolution Simulation of a Tornadic Supercell Thunderstorm (Austin Dixon, CIMSS)

Urban WRF - Solar Validation and Potential for Power Forecast in New York City (Harald Gamarro, CREST)

Near-real time CAPE East of the Rockies combining Hyperspectral IR Satellite Sounding and ASOS Surface Stations: Validation at the ARM SGP Site (Jessica Gartzke, CIMSS)

Using Graphical Processing Units for Massively Parallel Computations of Fluid Parcel Trajectories (Kelton Halbert, CIMSS)

Global analysis of the changes in the crop yields and how they relate to different large-scale and regional climate variables, climate change variables and technology (Ehsan Najafi, CREST)

Effects of Surface Cover Variability on the Arctic Energy Balance using the Arctic Observations and Reanalysis Integrated System (Anne Sledd, CIMSS)

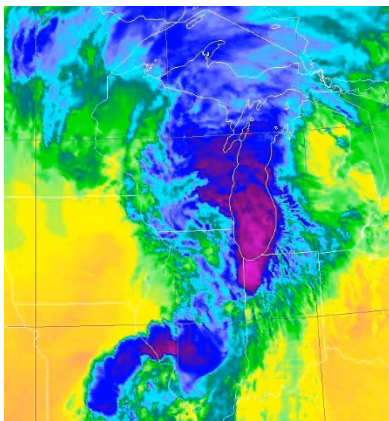
Vector-based Fast and Accurate Collocation Software for GEO and LEO instruments (Likun Wang, CICS-MD)

Impact of Bias-Correction Methods on Effectiveness of Assimilating SMAP Soil Moisture Data into NCEP Global Forecast System using the Ensemble Kalman Filter (Jifu Yin, CICS-MD)

Thursday, 7 June

CoRP Presentations (Chair: Reza Khanbilvardi)

- 9:00 Estimation of Sea Ice Albedo from SNPP/NOAA-20 VIIRS Data (Jingjing Peng, CICS-MD)
- 9:20 Comparison of OMI NO₂ Data Products (Mary Spraggs, SAGE and CIMSS)
- 9:40 GLM Detection Efficiency and Flash Characteristics (Max Marchand, CIRA)
- 10:00 Validate and Improve ATMS Geolocation Accuracy by Using Lunar Observations (Jun Zhou, CICS-MD)
- 10:20 Working Together on the Stratosphere: Comparisons of Radio Occultation and Hyperspectral Infrared Sounding (Michelle Feltz, CIMSS)
- 10:40 Break
- 11:00 **Communicating Science** (Tim Wagner and Eric Verbeten)
- 12:00 *Walk to CIMSS/SSEC for lunch on the roof (Pizza provided)*



1:30-4:30 **Understanding and Using Satellite Data** (Scott Lindstrom training at CIMSS/SSEC): Using a variety of computer software, students will learn capabilities from geostationary satellites, including GOES-16, and from the latest polar orbiting satellites such as NOAA-20 and GCOM. We will investigate visible, infrared, and microwave channels that are available.

5:00 *Brats and Jazz at the Memorial Union (on your own)*

<http://www.jazzinmadison.org/jazz-on-the-terrace-memorial-union-terrace-2pm-to-10pm/>