NOAA/NESDIS Cooperative Research Program (CoRP)
10th Annual Science Symposium
"Satellites and Society"

Hosted by
The NOAA-Cooperative Remote Sensing Science and Technology (CREST) Center
Grove School of Engineering, Steinman Hall Auditorium – ST 161
September 9-10, 2014

AGENDA

September 9, 2014

8:15 AM Registration **& Poster Setup** with light breakfast
9:00 AM Welcome remarks by Dr. Reza Khanbilvardi, Director, NOAA-CREST
9:15 AM History of CoRP – Ms. Ingrid Guch, Director, CoRP/STAR

PLENARY SESSION – Satellite and Society

9:30 AM to 12:00 Noon

9:30 AM	**Margaret Mooney**, Sharing Science with Society – Outreach Opportunities for Graduate Students
9:50 AM	**Chris Kummerrow**, Social and economic relevance of rainfall
10:10 AM	Break
10:30 AM	**Paul DiGiacomo**, Perspectives on coastal user needs
10:50 AM	**Ingrid Guch**, Economic impact of NOAA satellites and related sciences
11:10 AM	**Sam Ahmed**, Satellite Remote Sensing of the Coastal Waters: Needs and Responses

1**1:35 to 1:00PM Lunch (On your own NAC Cafeteria/or nearby restaurants - check your registration folders)**

1:00 to 3:00PM Oral /Technical Session I
6 papers (20 min total with 15 min talk time and 5 min Q&A and transition to next speaker)
Satellites Observations and Climate Vulnerability, Assessment, Mitigation and Adaptation
1.1) **James B. Polly**, W. Rossow: Extratropical Cyclone Clouds: Impact on Cyclone Strength and Climate
1.2) **Amanda Gumber**, M. Foster: Identifying 3D Radiative Cloud Effects via Derived Distributions of Liquid Water Path that Conserve MODIS Visible Reflectance Measurements
1.3) **Aaron Letterly**, J. Key: Wintertime Cloud Cover as a Contributor towards Inter-Annual Sea Ice Variability
1.4) **Narges Shahroudi**, W. Rossow: Retrieving Snowpack Properties from Land Surface Microwave Emissivities Based on Artificial Neural Network Techniques
1.5) **Puneeta Naik** and M. Wang: Evaluation of Trends in Chlorophyll-a Concentration in Response to Climatic Variability in the Eastern Bering Sea from MODIS
1.6) **Sirish Uprety**, C. Cao, S. Blonski, X. Shao: Establishing Consistent Radiometric Calibration between NOAA AVHRR and Suomi NPP VIIRS to Improve Satellite Data Quality for Weather and Climate

3:00 to 3:15 PM Break

3:15 to 4:45PM Panel Discussion – Degree to Career
Programs/Opportunities for Graduate Students/Early Career Scientists (45 minutes - 10minutes each followed by 15minutes Q&A)

- ***Agencies/Academia***
  - **Marlene Kaplan**, NOAA/EPP, NOAA Internships and Fellowship Opportunities
  - **Kelli Seaberry**, NOAA Workforce Management Office, Advisory Services Division, NOAA.
  - **Nakisha Evans,** CUNY Office of Workforce Partnerships

Typical Hiring Organizations for Graduate Students/Early Career Scientists (45 minutes - 5minutes each followed by 20minutes Q&A)

- ***Cooperative Institutes***
  - **Cezar Kongoli** & **Phil Arkin** Cooperative Institute for Climate and Satellites
  - **Wayne Feltz**, Cooperative Institute for Meteorological Satellite Studies
  - **Chris Kummerrow**, Cooperative Institute for Research in the Atmosphere
  - **Ken Carey**, Earth Resources Technology (ERT), Inc.
  - **Murty Divakarla**, IM Systems Group, Inc.

Wrap Up and transition to Poster Session/Networking (panelists will be available if there are further questions)

5:00 to 7:00 PM Poster Session and Networking Reception – **NAC Cafeteria – Dining Hall (North Academic Center building)**

September 10, 2014

8:30 AM to 9:00 AM Registration (day 2) with coffee

8:40 AM to 10:40AM Oral /Technical Session II
6 papers (20 min total with 15 min talk time and 5 min Q&A and transition to next speaker)
Role of Satellites in building Resilient Urban Ecosystems and Coastal Communities
2.1) **Robert Foster**, S. Hlaing, A. Gilerson and Sam Ahmed: Radiometric Calibration of Current and Future Ocean Color Satellite Sensors
2.2) **Andrea Gomez**, K. McDonald, A. Carnaval, C. Woodley, and S. Galloway: Evaluating the Effects of Temperature Stress on Coral's Fluorescence and Reflectance Signatures using Point-Specific Hyperspectral Remote Sensing
2.3) **Simon Kraatz**, Naresh Devineni, and R. Khanbilvardi: Retrieval of river ice parameters for ice jam prediction with MODIS on the lower Susquehanna
2.4) **Lesley Patrick**, Juliana Maantay and Andrew Maroko: Exposure, Socio-Economic Vulnerability, and Infrastructure at Risk to Current and Projected Coastal Flooding in New York City
2.5) **Estatio Gutierrez** and Jorge Gonzalez: Quantification of the Environmental Impacts of Anthropogenic Heat Fluxes in Highly Developed Urban Environments

10:40 AM to 11:00AM Break

11:00 to 1:00PM Oral/Technical Session III
6 papers (20 min total with 15 min talk time and 5 min Q&A and transition to next speaker)
Satellites and Environmental Assessment and Forecasting
3.1) **Jose Infante**, T. Lakhankar, and R. Khanbilvardi: Assimilating merged remote sensing and ground-based snowpack Information

3.2) **Stephanie Schollaert Uz** and P. Arkin: Using satellite data on Science On a Sphere® at museums to inform society through ClimateBits: short, engaging videos on essential Earth Science concepts
3.3) **Pedro Sequera**, D. Comarazamy, K. McDonald, S. LaDochy, and J. González: On the Validation of Airborne Data and Atmospheric Modeling on Summer Temperature Gradients in Southern California
3.4) **Tarendra Lakhankar**, J. Muñoz-Barreto, P. Romanov, C. Perez, R. Khanbilvardi, and William B. Rossow: CREST-Snow Analysis and Field Experiment (CREST-SAFE): Continuous In Situ Observations of Snow Physical Properties and Microwave Emission
3.5) **Luis Ortiz**, W. Wu, J. González, B. Bornstein, M. Schoonen, J. Tongue: Modeling New York City Impacts on Long Island Weather
3.6) **Ricardito Vargas,** James Booth: Synoptic Patterns Associated with Northeast and Southeast Ice Storms

1:00 to 2:00 PM Luncheon Speaker Kelli Seaberry, NOAA Workforce Management Office, Advisory Services Division, NOAA **- Roadmap to Federal Service - Steinman Hall Auditorium**
(Box Lunch will be provided – in the Exhibit Room ST 124 – lunch sponsored by CUNY CREST Institute, CCNY)

2:00 to 3:00PM Oral/Technical Session IV
3 Oral papers (20 min total with 15 min talk time and 5 min Q&A and transition to next speaker)
Importance of Satellites in building Weather Ready Communities
1) **Tanvir Islam**, S. Boukabara, C. Grassotti, X. Zhan, K. Garrett, C. Smith, P. Liang, S. Miller: The Microwave Integrated Retrieval System (MiRS): Algorithm Status and Science Updates
2**) Alexa Ross** and S. Ackerman: Investigating Correlations of Horizontally Oriented Ice and Precipitation in North and South Pacific Maritime
3) **Yunyue Yu**, I. Csiszar, I. Guch: Developing and Validating Satellite Land Surface Temperature Product for JPSS Missions

3:00 to 3:30 PM Award Ceremony and Evaluations

3:00 PM Judge Deliberations / Break
3:30 PM Award presentations for best oral and poster presentations
3:45 PM Closing Remarks – Ingrid Guch
4:00 PM Adjourn

Posters for Corp Symposium

1. **Michelle Feltz, Robert Knuteson, Steve Ackerman,** University of Wisconsin – Madison. *Utility of a GPS Radio Occultation and Hyperspectral Infrared Sounder Matchup*
2. **Pedro J. Gonzalez Macias, Dr. Eric Harmsen,** University of Puerto Rico, Mayaguez. *Calibration of the Runoff Component of the GOES-PRWEB algorithm in Puerto Rico*
3. **Dr. Maria Tzortziou, Dr. Ali Omar, Dr. Woody Turner,** NASA Langley Research Center. *PACE Ocean Color Mission applications and Societal Benefits*
4. **Isabel Perez Hoyos, Nir Krakeur, Reza Khanbilvardi,** NOAA-CREST, The City College of NY. *Using Remote Sensing to identify and Characterize Groundwater- Reliant Ecosystems*
5. **James Booth, Catherine Naud-** Department of Earth and Atmospheric Sciences-City University of New York, City College. *Cloud and Moisture Conditions in Cold Air Outbreaks along the Northeastern Seaboard*
6. **Joan M. Castro, Nazario D. Ramirez-Beltran,** University of Puerto Rico, Mayaguez. *A regression model with radar and satellite data for rainfall nowcasting*
7. **Carlos L. Pérez Diaz, Tarendra Lakhankar, Reza Khanbilvardi,** NOAA-CREST, The City College of NY. *Near−surface air temperatures and snow skin temperature comparison from CREST-SAFE station data with MODIS land surface temperature data*
8. **Dr. Steve LaDochy ,Freddy Hsu, Tania Torres, Pantiwa Jarujareet, Pedro Ramirez, Pedro Sequera, William Patzert,** California State University, Los Angeles. *Urban Heat Island Studies: Los Angeles' Changing Climate*
9. **Equisha Glenn, Daniel Comarazamy, Jorge E. González, Tom Smith,** NOAA-CREST, The City College of NY. *Climate Change Detection in the Intra-Americas Region and Local Implications to Sensitive Eco-systems*
10. **Ariana Atwell**, **Dr. M Patrick McCormick, Dr. Michael Hill, Dr. Neda Boyouk**, Hampton University. *Analysis of the Evolution of the Nabro Eruption aerosol using CALIPSO and a HYSPLIT Trajectory Model*
11. **Steven Buckner,** Hampton University. *Using Lidar to Examine Extinction Coefficients and Raman Scattering*
12. **Pedro J. Gonzalez Macias, Dr. Eric Harmsen,** University of Puerto Rico at Mayaguez**.***Calibration of the Runoff Component of the GOES-PRWEB algorithm in Puerto Rico*
13. **Christopher J. Spells, Dr. William L. Smith, Sr., Dr. Nichollas R. Nalli, Dr. Vernon R. Morris Everette Joseph,** Hampton University. *Hyper-spectral Retrievals From the NOAA Aerosol and Ocean Science Expeditions (AEROSE)*
14. **Chowdhury Nazmi, Yonghua Wu, Barry Gross, Fred Moshary**, NOAA-CREST, The City College of NY. *Assessment of Upper atmospheric plume models using Calipso*
15. **John Sullivan,** University of Maryland at Baltimore County**.** *A New Differential Absorption Lidar to Measure Sub-0hoursly Fluctuation of Tropospheric Ozone Profiles in the Baltimore- Washington D.C. Region*
16. **Denisse Hernandez, Erika Podest, Kyle McDonald**, NOAA-CREST, The City College of NY. *Mapping Palm Swamp Wetland in Peru using UAVSAR data*
17. **Elius Etienne, Naresh Devineni,** NOAA-CREST, The City College of NY. *Development of a Demand Sensitive Drought Index and its Forecasting for Climate Adaptation and Water Management over the continental United States*

18. **Lina Cordero, Daniel Vidal, Barry Gross, and Fred Moshary,** NOAA-CREST, the City College of NY. *Data fusion of Satellite AOD and WRF meteorology for improved PM25 estimation for northeast USA*
19. **Carlos Carrizo, Amir Ibrahim, Ahmed El-Habashi, Robert Foster, Dr. Alex Gilerson,** NOAA-CREST, The City College of NY. *Imaging of underwater targets with polarimetric camera*
20. **Ricardito Vargas, James Booth**, NOAA-CREST, The City College of NY. Synoptic Patterns Associated with Northeast and Southeast Ice Storms
21. **Morann Dagan,** Fred Moshary, Benjamin Thomas, NOAA-CREST, the City College of NY. IR LIDAR for Aerosol Detection
22. **Gokce Ceylan, Naresh Devineni,** The City College of NY, Drought Risk Assessment for Greater New York Area: A Paleo View
23. **Jose Pillich**, Yehuda Klein: Urban Livability Index (ULI): Identifying At-Risk Populations and the Interconnected Factors of the Urban Heat Island Effect