**Jingfeng Huang Wins ESSIC Best Paper Award:**

On December 8, CICS-MD Scientist Jingfeng Huang (NESDIS/OSGS/PETD/PDGAS) was awarded the annual ESSIC (Earth System Science Interdisciplinary Center) at the University of Maryland, College Park. The article honored is on satellite measurements of aerosols, the work he does full-time for CICS-MD. This paper, in *Journal of Geophysical Research: Atmospheres*, uses CALIPSO data to determine the most probably height of dust and smoke layers. The analysis revealed interesting spatial and seasonal variability of different vertical mixture features over six regions around the world. The vertical location of aerosol layers is critical for determining predominance of aerosol radiative and microphysical effects in aerosol-cloud-precipitation interaction.


*Importance:* The vertical location of aerosol layers is critical for determining predominance of aerosol radiative and microphysical effects in aerosol-cloud-precipitation-climate interaction. POC: J. Huang
• **Urban Rainfall Manuscript Accepted for Publication:**
  The manuscript titled "Classifying Urban Rainfall Extreme Events using Weather Radar Data: An Application to Greater New York Area" has been accepted for publication by the *Journal of Hydrometeorology*. The authors are CICS-MD Summer Intern A. Hamidi and CICS Consortium Scientists N. Devineni, J. Booth, A. Hosten, R. Ferraro (SCSB) and R. Khanbilvardi - all from CCNY/CREST (except for R. Ferraro).

Mr. Hamidi spent the summer of 2015 as a CICS-MD intern developing strategies for this study. The novelty of this study is the exploitation of NOAA NEXRAD radar data sets (rather than rain gauges) to explore spatial variability of extreme rainfall, as well as using additional statistical metrics to describe extreme events. Hamidi, A., N. Devineni, J. Booth, A. Hosten, R. Ferraro and R. Khanbilvardi: 2016: Classifying urban rainfall extreme events using weather radar data: An application to greater New York area, *J. Hydrometeor*. (accepted).

_Importance:_ NOAA's Cooperative Institutes perform cutting edge research that contribute to NOAA mission goals. POC: R. Ferraro

• **Snowfall Rate Retrieval Algorithm Manuscript Submitted for Publication**
  A manuscript has been submitted to the *Journal of Geophysical Research: Atmosphere*. The manuscript is entitled “A 1DVAR-based Snowfall Rate Retrieval Algorithm for Passive Microwave Radiometers.” It is coauthored by NOAA and CICS-MD Scientists Huan Meng (SCSB), Jun Dong, Ralph Ferraro (SCSB), Banghua Yan, Limin Zhao, Cezar Kongoli, Nai-Yu Wang, and Bradley Zavodsky. It documents the operational snowfall rate (SFR) product that is being produced at NESDIS at near real-time. Figure 1 below is taken from the manuscript. It shows the validation results for both ATMS and MHS SFR against MRMS radar snowfall rate product.

The figure above shows the validation scatter plots for (a) ATMS SFR and (b) MHS SFR against MRMS radar snowfall rate product from the article. Meng, Huan, Jun Dong, Ralph Ferraro,

*Importance:* Publication is an essential part of NOAA research and documents the strong science behind NOAA operational products. POC: H. Meng

- **Coastal Restoration Work Group:**
  CICS-MD Scientist Ariana Sutton-Grier (NOS) gave a presentation on December 8 at the ACES (A Community on Ecosystem Services) Conference held this week in Jacksonville, FL.

Her talk was entitled "The Potential for Managing Coastal Systems to Provide Ecosystem Services and Enhance Resilience." It was part of the session on "Common Ground for Ecosystem Services and Marine Ecosystem-Based Management at the intersection of Science and Policy." For more information on the conference, see [http://www.conference.ifas.ufl.edu/aces/](http://www.conference.ifas.ufl.edu/aces/).

*Importance:* NOAA’s mission includes conservation and management of coastal and marine ecosystems and resources and working toward healthy ecosystems and resilient communities. POC: A. Sutton-Grier