

Weekly Report

SCSB/CISESS
Cooperative Research Program Division (CoRP)
STAR/NESDIS
National Oceanic and Atmospheric Administration (NOAA)

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Date of Submission: 7/10/2020

Products and Applications

CISESS has completed its proposal submissions for FY20. Our Maryland campus has 100 tasks funded this year along with second year funding for 3 additional tasks for a total of \$28 million. SCSB and CISESS have 11 Joint CISESS Projects this Year:

Project Name	CISESS Task Leader	NOAA Lead
Downscaling of GLM Lightning Observations Using ISS-LIS Data	Zhang, Daile	Rudlosky, Scott
Real-Time NOAA Product Analysis in Virtual Reality	Quick, Mason	Rudlosky, Scott
Facilitating GOES-R GLM and DCLMA Science	Quick, Mason	Rudlosky, Scott
Lightning Validation & User Interaction Work	Quick, Mason	Rudlosky, Scott
Sustaining Support of AMSR2 EDRs	Arulraj, Malarvizhi	Ferraro, Ralph
Blended Products and Validation Coordination	Arulraj, Malarvizhi	Ferraro, Ralph
Maximizing CISESS Contributions to the JPSS Proving Ground Initiative	Arulraj, Malarvizhi	Rudlosky, Scott
Predicting Satellite Passive Microwave Brightness Temperature from the GOES Advanced Baseline Imager	Petrović, Veljko	Ferraro, Ralph
ATMS Algorithms and Products (MIRS) SFR Development & CAL VAL: ATMS Snowfall Rate (MIRS)	Fan, Yongzhen	Meng, Huan
Expansion of Snowfall Detection Area through Machine Learning for the Enhancement of NESDIS Satellite Snowfall Rate Product	Fan, Yongzhen	Meng, Huan
Development of Snowfall Rate over Ocean, Sea Ice, and Coast Product to Support Weather Forecasting	You, Yalei	Meng, Huan

(POC: Debra Baker, drb@umd.edu, Funding: GOES-R AWG, GOES-R PGRR, JSTAR, JSTAR GCOM, JPSS PGRR, OCIO/HPCC)

Media and Outreach

NOAA Air Quality Flights in the *The New York Times*: CISESS Scientist Xinrong Ren, who works with the Air Resources Laboratory, was the subject of a feature article in *The New York Times* on June 25th:

“[G]overnment scientists at the National Oceanic and Atmospheric Administration have started a Covid air quality study to gather and analyze samples of an atmosphere in which industrial soot, tailpipe emissions and greenhouse gases have plummeted to levels not seen in decades... In the northeast corridor of the United States, Xinrong Ren of the University of Maryland and Colm Sweeney of NOAA used the shutdown to help validate scientific models that are crucial in understanding the human impact on climate change and air quality... But for the past two years, Dr. Ren and Dr. Sweeney have been monitoring carbon dioxide levels over Boston, New York, Philadelphia, Baltimore and Washington from a device mounted on the wings of two small airplanes that they fly up and down the East Coast. As soon as the shutdown started, the pair returned to their flying laboratories.”



This photo was one of five in the article that featured Xinrong Ren (left), the plane, and his graduate student Phillip Stratton taken by Rosem Morton for *The New York Times*. For the full article, see https://www.nytimes.com/2020/06/25/climate/coronavirus-clean-air.html?utm_source=Publicate&utm_medium=email&utm_content=...&utm_campaign=200702. (POC: Xinrong Ren, xinrong.ren@noaa.gov, Funding: ARL).