Suomi NPP Marble

From its vantage 824 k miles) above Earth, th Imager Radiometer Su Suomi National Polar- (NPP) satellite gets a c planet every day. Suoi known as the NPOESS serves as a bridge bet Observing System (EO forthcoming series of System (JPSS) satellit

This "Blue Marble" co

Photos by Jason Hong

NASA Applied Sciences Program presented at the NASA Hyperwall at the 2016 American Geophysical Union Annual Meeting in San Francisco, CA. Presentations addressed HAQ topics including vector-borne diseases, harmful algal blooms, and health impacts of climate change. NASA personnel pictured are Allison Leidner (top left), Heather Hanson (top right), Lawrence Friedl (middle center), and Debra Hernandez (middle right).

upcoming:

Our Research in the News

- NOAA's GOES-16's Advanced Baseline Imager (ABI) instrument sends first high-resolution images of Earth. **CNET**, **Popular Science**, **Fox News**.
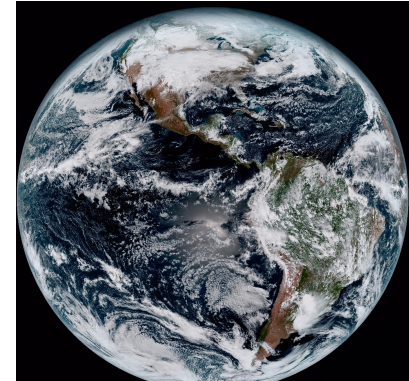

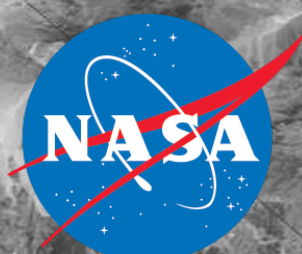*Photo courtesy of NASA Image Gallery*

NASA ARSET bridges remote sensing to public health research and applications

NASA ARSET program offers satellite remote sensing training, building skills to integrate NASA Earth science data into agencies' decision making activities. Their first training focused on health applications, *Fundamentals of Remote Sensing for Health Monitoring,* in June, 2016 engaged 368 attendees. The training covered topics including detection of harmful algal blooms and calculation of mosquito-borne disease risk, all using NASA Earth observations.

"As a novice regarding remote sensing and its application for global health issues and patterns, I found the webinar series to be highly useful. The presenters taught the material in a manner [that] was easy to understand while touching on several technical aspects of remote sensing."
- U.S. State Government Attendee

In a post-training survey, 91 percent of respondents indicated their ability to access remote sensing data products improved as a direct result of the training. One participant appreciated "knowing that there is an open database with remote sensing [data] that could be used in practical epidemiological problems and solutions."

ARSET's upcoming webinar, *Satellite Derived Annual PM2.5 Data Sets in Support of United Nations Sustainable Development Goals,* begins on March 15, 2017.

publications

Challenges for mapping cyanotoxin patterns from remote sensing of cyanobacteria
Stumpf R et al
Harmful Algae

Natural Disasters and Cholera Outbreaks: Current Understanding and Future Outlook
Jutla A et al
Current Environmental Health Reports

A TRIBUTE TO THE LIFE AND ACCOMPLISHMENTS OF MOLLY K. MACAULEY

Photo courtesy of Resources for the Future

Dr. Molly Macauley, an expert in space policy and socioeconomic benefits of Earth observations, was remembered at the 2016 AGU Annual Meeting. She was the Vice President for Research and a Senior Fellow at Resources for the Future, where she worked as an economist for over 20 years. Her contributions shaped the space science community and the way we think about the value of satellite data and products.

resources
for our community

NATIONAL CENTERS FOR ENVIRONMENTAL INFORMATION
NOAA's NCEI hosts and provides public access to archives on Earth, with comprehensive oceanic, atmospheric, and geophysical data. The site archives over 26 terabytes of data each month from over 130 observing platforms.

DE-JARGONIZER
An automated jargon identification program aimed at helping scientists and science communication trainers improve and adapt vocabulary use for various audiences. The program determines the level of vocabulary and terms in a text, and divides words into three levels: high frequency/common words; mid-frequency/normal words; and jargon – rare and technical words.

WHAT'S NEW IN THE FIELD?

THE GEOGRAPHY OF IMPORTED MALARIA TO NON-ENDEMIC COUNTRIES: A META-ANALYSIS OF NATIONALLY REPORTED STATISTICS
Lancet Infectious Diseases
October 21, 2016
In this meta-analysis, Andrew J Tatem et. al. studied publicly available nationally reported statistics on imported malaria from 40 non-endemic countries, over the past decade to understand the dynamics of malaria transfer from endemic to non-endemic countries. They find air travel, historical ties, demographics of travelers, and malaria endemicity to contribute to heterogeneous patterns of numbers, routes, and species compositions of parasites transported.

TOWARDS EPIDEMIC PREDICTION: FEDERAL EFFORTS AND OPPORTUNITIES IN OUTBREAK MODELING
Product of the Pandemic Prediction and Forecasting Science and Technology Working Group of the National Science and Technology Council
December, 2016
NASA Health and Air Quality Applications contributed to a White House report on the interdisciplinary science of infectious disease outbreak prediction. The report highlights Federal investments in predictive modeling of human, animal, and plant disease outbreaks, and identifies areas where further efforts are needed, including in the sharing of data and the integration of outbreak prediction into public health programs.