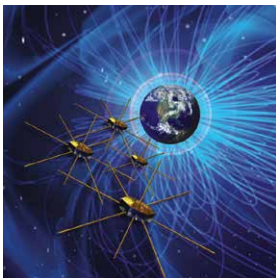
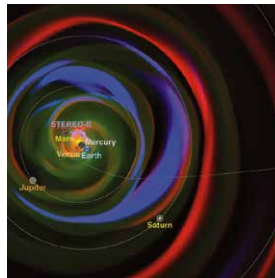


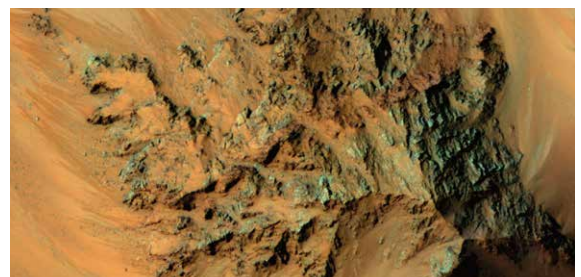
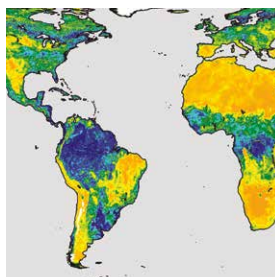
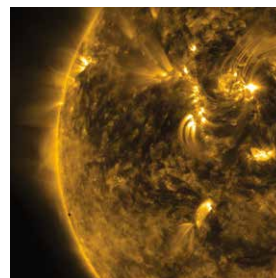
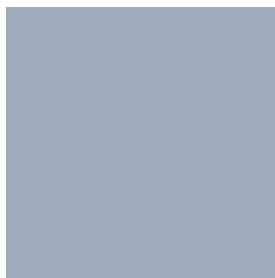
# Schedule of Events at the NASA Booth

Moscone North, Exhibit Hall, Booth #535



NASA Science has a story to tell and, at AGU, you can be part of it. This year at our exhibit we will be telling stories about our Earth science, planetary science, and heliophysics endeavors via dynamic Hyperwall presentations, flash talks, and hands-on demos. In addition, the booth will also feature a variety of individual stations where you can talk face-to-face with NASA subject-matter experts. We hope you join us!

**[nasa.gov](http://nasa.gov)**  
**[svs.gsfc.nasa.gov](http://svs.gsfc.nasa.gov)**  
**[svs.gsfc.nasa.gov/hw](http://svs.gsfc.nasa.gov/hw)**





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## MONDAY, DECEMBER 12, 2016

TIME	HYPERWALL PRESENTATIONS	PRESENTER
6:10 - 6:25 PM	CYGNSS (Cyclone Global Navigation Satellite System)	Ramesh Kakar
6:25 - 6:40 PM	The Habitability of Terrestrial Planets	Jim Green
6:40 - 6:55 PM	The Mystery of the Dwarf Planets	Michelle Thaller
6:55 - 7:10 PM	Northern Lights: From Myths to Modern Science	Pål Brekke
7:10 - 7:25 PM	The Amazing Discoveries of Cassini	Linda Spilker
7:25 - 7:40 PM	Cassini Grand Finale	Scott Edgington
7:40 - 7:55 PM	Heliophysics: Exploring the New Wilderness	Steve Clarke

### HANDS-ON DEMOS

6:00 - 8:00 PM	Experiencing Climate Data with Virtual Reality	Shayna Skolnik and Ramon Ramirez-Linan
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# TUESDAY, DECEMBER 13, 2016

TIME	HYPERWALL PRESENTATIONS	PRESENTER
9:45 - 10:00 AM	The Cornerstone Mission of NASA's Lunar Reconnaissance Orbiter	Noah Petro
10:00 - 10:15 AM	Ocean Worlds Beyond Earth	Michelle Thaller
10:15 - 10:30 AM	Curiosity's Journey Through an Ancient Martian Lakebed Searching for Habitable Environments	Paul Mahaffy
10:30 - 10:45 AM	Eclipse Across America: Science, Safety, and Celestial Geometry	Lika Guhathakurta
10:45 - 11:00 AM	NASA Global Climate Observations: Discover How Satellites See Climate Change	Jack Kaye
11:00 - 11:15 AM	El Niño 2015-16	David Halpern
11:15 - 11:30 PM	Ocean Salinity	Eric Lindstrom
11:30 - 11:45 AM	Coastal Land Ocean Interactions in the Arctic: A Sea of Change	Peter Hernes
11:45 - 12:00 PM	Improving Global-Scale Earth Observation Data and Products to Halt Illegal, Unregulated, and Unreported Fishing	Miguel Román
12:00 - 1:00 PM	<b>Special Hyperwall Presentations given by the 2016 Winners of the AGU Data Visualization and Storytelling Competition</b> Mejs Hasan – University of North Carolina, Chapel Hill • Matthew Ross – Duke University • John Granholm – Appalachian State University	
1:00 - 3:00 PM	See "Flash Talks" Schedule Below	
3:00 - 3:15 PM	NASA's Earth Observation Capabilities: Meeting The Challenges of Climate and Environmental Change	Michael Freilich
3:15 - 3:30 PM	Earth's Rapidly Changing Sea Ice Cover	Claire Parkinson
3:30 - 3:45 PM	Global Precipitation Measurements for Science and Society	Gail Skofronick-Jackson
3:45 - 4:00 PM	Earth Observations for Global Water Knowledge	John Bolton
4:00 - 4:15 PM	Measuring CO <sub>2</sub> with OCO During the 2015-16 El Niño	David Crisp
4:15 - 4:30 PM	Global Agriculture Monitoring Initiative	Bradley Doorn
4:30 - 4:45 PM	Space Weather and the Ionosphere	Alex Young

## FLASH TALKS (AT THE HYPERWALL)

1:00 - 1:07 PM	Satellite Precipitation Data: A Reservoir for Applications Users	Dalia Kirschbaum
1:10 - 1:17 PM	Great American Eclipse of 2017: Where Will You Be? What Will You See?	Kevin Hussey
1:20 - 1:27 PM	Wildland Fire: Hot and Getting Hotter	Amber Soja
1:30 - 1:37 PM	From People to Pixels: Visualizing Socioeconomic Data with the SEDAC Map Viewer	Robert S. Chen
1:40 - 1:47 PM	Flying Small Spacecraft Throughout the Solar System	Eric Christian
1:50 - 1:57 PM	From Remote Sensing Dud to Stud—The ARSET Experience	Amber Jean McCullum
2:00 - 2:07 PM	NASA Atmospheric Science Data: Easier Than You Think	Tiffany J. Mathews
2:10 - 2:17 PM	Solar Probe Plus: A Mission to Touch the Sun	Nicky Fox
2:20 - 2:27 PM	Neither Clouds, Nor Smoke, Nor Dark of Night: Earth Through the Eyes of Sentinel-1	Scott Arko
2:30 - 2:37 PM	All in the NAAMES of Ocean Ecosystems and Climate	Richard Moore
2:40 - 2:47 PM	Looking for Earth Science Data and Related Services?	Tyler Stevens
2:50 - 2:57 PM	A Deeper Look into California's Water Resources	Brittany Zajic

## HANDS-ON DEMOS

9:30 - 11:00 AM	Where Are the Small Worlds? An Interactive and Adaptive Digital Learning Experience	Joe Tamer
11:00 - 11:30 AM	The Atmospheric Science Data Center (ASDC) Geospatial Platform	Matthew Tisdale
11:30 - 12:00 PM	Visualizing Global Precipitation Data	Jacob Reed
12:00 - 12:30 PM	Tools for Extracting and Exploring Multiple Remote Sensing Data Products	Cole Krehbiel
12:30 - 1:00 PM	Methods for Geospatial Data Interaction on the Web	Flynn Platt
1:00 - 1:30 PM	Introducing HazPop: The NASA SEDAC Hazards and Population Mapper	Robert Downs
2:00 - 2:30 PM	Analyzing Potential Mars Landing Sites with JMARS	Scott Dickenshied
2:30 - 3:30 PM	What Color is the Ocean?	Stephanie Uz
3:30 - 5:00 PM	View Your World with Worldview!	Jeff Schmaltz

# WEDNESDAY, DECEMBER 14, 2016

TIME	HYPERWALL PRESENTATIONS	PRESENTER
9:45 - 10:00 AM	Space Weather and the Ionosphere	Alex Young
10:00 - 10:15 AM	The Story on Arctic Ice	Thomas Wagner
10:15 - 10:30 AM	Rapid Arctic Climate Change: What's Cloud Got to Do With It?	Patrick Taylor
10:30 - 10:45 AM	Clouds and Climate	Steve Platnick
10:45 - 11:00 AM	Earth Observations Supporting Wildfire Management	Vincent Ambrosia
11:00 - 11:15 AM	Global Climate Simulation in High Resolution	William Putman
11:15 - 11:30 AM	Surface Water & Ocean Topography (SWOT) Mission	Tamlin Pavelsky
11:30 - 11:45 AM	NASA's Mission To Europa: Exploring a Potentially Habitable World	Steve Vance
11:45 - 12:00 PM	NASA's "Eyes" Peek into the Future	Kevin Hussey
12:00 - 1:00 PM	<b>Special Hyperwall Presentations given by the 2016 Winners of the AGU Data Visualization and Storytelling Competition</b> Allison Daniel – University of Alabama, Huntsville • Kaytan Kelkar – Texas A&M University • Sara Lubkin – Northern Virginia Community College	
1:00 - 3:00 PM	See "Flash Talks" Schedule Below	
3:00 - 3:15 PM	NASA's Earth Observation Capabilities: Meeting The Challenges of Climate and Environmental Change	Michael Freilich
3:15 - 3:30 PM	Heliophysics: Exploring the New Wilderness	Steve Clarke
3:30 - 3:45 PM	The Habitability of Terrestrial Planets	Jim Green
3:45 - 4:00 PM	Snow Cover: A Global Perspective from Space	Edward Kim
4:00 - 4:15 PM	Arctic Sea Ice Loss: Old Ice, New Trends	Walt Meier
4:15 - 4:30 PM	SOFIA's Planetary Science	BG Anderson
4:30 - 4:45 PM	What's New with Earth's Ozone Layer?	Paul Newman
4:45 - 5:00 PM	Monitoring Earth's Water and Ice from Space	Ian Fenty

FLASH TALKS (AT THE HYPERWALL)		
1:00 - 1:07 PM	Barnstorming the Moon with NASA's Moon Trek	Brian Day
1:10 - 1:17 PM	The New R.O.U.S.: Radar-data Of Unusual Size	Nettie La Belle-Hamer
1:20 - 1:27 PM	An International Climate Observing System? Priceless...	Bruce Wielicki
1:30 - 1:37 PM	Discover and Access NASA AirMOSS and NASA CARVE Data	Yaxing Wei
1:40 - 1:47 PM	Why Korea? The Korea-United States Air Quality Study	James Crawford
1:50 - 1:57 PM	The TIRCIS Instrument: Hyperspectral Imaging from Small Satellites	Robert Wright
2:00 - 2:07 PM	Get NASA Snow and Ice Data Your Way Through Earthdata Search	Amy Steiker
2:10 - 2:17 PM	Wildfire Destruction: A Changing Fire Regime Threatens Idaho Fauna	Jenna Williams
2:20 - 2:27 PM	Introducing the Microwave Radiometer Technology Acceleration Mission (MiRaTA)	Kerri Cahoy
2:30 - 2:37 PM	Scientific Tools on the NASA Web Portal for Sea Level Change	Carmen Boening
2:40 - 2:47 PM	What's Wet, Green, and Covered with Animals?	Peter Griffith
2:50 - 2:57 PM	The Anatomy of an Analog	Darlene Lim

HANDS-ON DEMOS		
9:30 - 10:30 AM	What Color is the Ocean?	Stephanie Uz
10:30 - 11:30 AM	Analyzing Potential Mars Landing Sites with JMARS	Scott Dickenshied
11:30 - 12:30 PM	App-Based Citizen Observations in Support of Earth Science and GLOBE Student Research	Holli Riebeek Kohl
12:30 - 1:00 PM	What Can NASA's Goddard Earth Sciences (GES) Data and Information Services Center (DISC) Do for You?	Jennifer Wei
1:00 - 5:00 PM	Experiencing Climate Data with Virtual Reality	Shayna Skolnik and Ramon Ramirez-Linan

# THURSDAY, DECEMBER 15, 2016

TIME	HYPERWALL PRESENTATIONS	PRESENTER
9:45 - 10:00 AM	The Story on Arctic Ice	Thomas Wagner
10:00 - 10:15 AM	Landsat 8: Ice Velocity	Twila Moon/Mark Fahnestock
10:15 - 10:30 AM	NASA Earth Observation Systems and Applications for Public Health	Shobhana Gupta
10:30 - 10:45 AM	The Hole Ozone Story	Richard Eckman
10:45 - 11:00 AM	Global Atmospheric CO <sub>2</sub> from Satellite Data and Models	Steven Pawson
11:00 - 11:15 AM	CYGNSS Satellite Constellation for Tropical Ocean Winds	Derek Posselt
11:15 - 11:30 AM	Counting Trees and Bushes from Space Using Cloud Computing	Daniel Duffy
11:30 - 11:45 AM	High-Resolution Forest Biomass/Carbon Sequestration Potential	George Hurtt
11:45 - 12:00 PM	Rapid Arctic Climate Change: What's Cloud Got to Do With It?	Patrick Taylor
12:00 - 12:15 PM	Finding Your Home on Mars with Mars Trek	Brian Day
12:15 - 12:30 PM	Precipitation Data Go to Work	George Huffman
12:30 - 12:45 PM	10 Years of the A-Train Constellation: Scientific Achievements Worth Celebrating	Lazaros Oreopoulos
12:45 - 1:00 PM	Satellite View of Wildfire	Amber Soja
1:00 - 3:00 PM	See "Flash Talks" Schedule Below	
3:00 - 3:15 PM	Weather and Climate from Space	Joao Teixeira
3:15 - 3:30 PM	Earth's Biodiversity: The View from Space	Allison Leidner/Woody Turner
3:30 - 3:45 PM	The Role of Methane on Climate Change	Daniel Jacob
3:45 - 4:00 PM	3D Changes in Amazon Forests	Douglas Morton
4:00 - 4:15 PM	Cloud Observations from Space: CALIPSO (Cloud-Aerosol Lidar and Infrared Pathfinder Satellite Observation)	Chip Trepte
4:15 - 4:30 PM	Microscopic Life in a Moving Ocean	Stephanie Uz
4:30 - 4:45 PM	Observing Earth from Space: The Fires in Northern Iraq	Ralph Kahn

## FLASH TALKS (AT THE HYPERWALL)

1:00 - 1:07 PM	Monitoring Landslides from Space	Dalia Kirschbaum
1:10 - 1:17 PM	The Moon as Seen by the Lunar Reconnaissance Orbiter Camera	Brett Denevi
1:20 - 1:27 PM	News Flash! New, Open, and Reprocessed NASA Land Data at LP DAAC	Cole Krehbiel
1:30 - 1:37 PM	ICESat-2: NASA's Next-Generation Satellite Altimetry Mission	Kelly M. Brunt
1:40 - 1:47 PM	Delve Into Curtain Data with DEVELOP	Kathleen Moore
1:50 - 1:57 PM	RAVAN: CubeSat, Carbon Nanotubes, and Climate	William H. Swartz
2:00 - 2:07 PM	The Eventful Earth—Seen Through NASA Data in Giovanni	Jennifer Wei
2:10 - 2:17 PM	A New Way to Explore NASA Field Campaign Data	Amanda Weigel
2:20 - 2:27 PM	Operation IceBridge Portal 2.0: Benefits of the One-Stop Shop for IceBridge Data	Amy FitzGerrell
2:30 - 2:37 PM	NASA MODIS Land Product Subsets and Visualization in Less than 15 Minutes	Suresh Santhana Vannan
2:40 - 2:47 PM	Globe Observer: Citizen Scientist Observations in Support of Earth System Science	Holli Riebeek Kohl

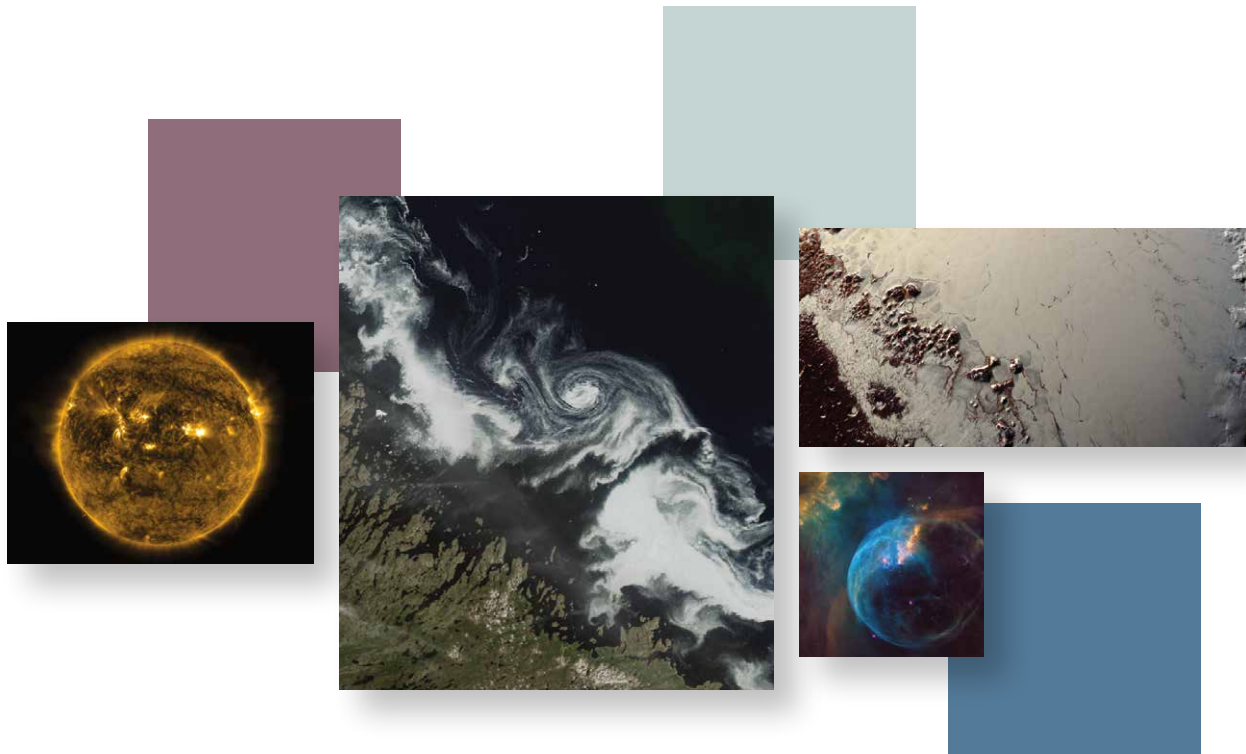
## HANDS-ON DEMOS

9:30 - 10:30 AM	App-Based Citizen Observations in Support of Earth Science and GLOBE Student Research	Holli Riebeek Kohl
10:30 - 11:30 AM	View Your World with Worldview!	Jeff Schmaltz
11:30 - 1:00 PM	Virtual Earth System Laboratory	Eric Larour
1:00 - 1:30 PM	What Can NASA's Goddard Earth Sciences (GES) Data and Information Services Center (DISC) Do for You?	Jennifer Wei
1:30 - 2:30 PM	Where Are the Small Worlds? An Interactive and Adaptive Digital Learning Experience	Joe Tamer
2:30 - 3:00 PM	The Atmospheric Science Data Center (ASDC) Geospatial Platform	Matthew Tisdale
3:00 - 3:30 PM	Tools for Extracting and Exploring Multiple Remote Sensing Data Products	Cole Krehbiel
3:30 - 4:00 PM	Methods for Geospatial Data Interaction on the Web	Flynn Platt
4:00 - 5:00 PM	Visualizing Global Precipitation Data	Jacob Reed

# FRIDAY, DECEMBER 16, 2016

TIME	HYPERWALL PRESENTATIONS	PRESENTER
9:45 - 10:00 AM	Earth at Night from Space	Steve Graham
10:00 - 10:15 AM	CYGNSS Satellite Constellation for Tropical Ocean Winds	Christopher Ruf
10:15 - 10:30 AM	Global Atmospheric Flux of CO <sub>2</sub>	Steven Pawson
10:30 - 12:00 PM	<b>Special Documentary Film:</b> <i>Before the Flood</i>	

HANDS-ON DEMOS		
9:30 - 1:30 PM	Experiencing Climate Data with Virtual Reality	Shayna Skolnik and Ramon Ramirez-Linan



## Detailed Descriptions of Flash Talks

Time/Title	Description	Presenter
<b>Tuesday, December 13</b>		
<b>1:00 - 1:07 PM</b> <b>Satellite Precipitation Data: A Reservoir for Applications Users</b>	NASA's Precipitation Measurement (PMM) Missions provide critical precipitation information for better understanding freshwater resources, to disaster response, to estimating potential health impacts from extreme events like hurricanes. These satellite-based precipitation estimates are fundamental to a broad range of applications and are among the most widely downloaded Earth science data products across NASA. Learn how to access these products and hear about some ways these data products are used in applications-translating them into actionable information to inform policy and enhance decision-making at local to global scales.	<b>Dalia Kirschbaum</b> GPM Deputy Project Scientist for Applications, NASA Goddard Space Flight Center (GSFC)
<b>1:10 - 1:17 PM</b> <b>Great American Eclipse of 2017 – Where Will You Be? What Will You See?</b>	Learn how you can easily preview what you may see during the total solar eclipse of August 21, 2017. Using a new feature in NASA's Eyes on the Solar System you will be able to visualize what this major celestial event will look like from every possible location on the planet. The last time a total solar eclipse of this magnitude visited the USA was in June 8, 1918. Don't miss the demonstration of how you can geographically prepare for the Great American Eclipse of 2017.	<b>Kevin Hussey</b> Manager, Visualization Technology Applications and Development, NASA Jet Propulsion Laboratory (JPL)
<b>1:20 - 1:27 PM</b> <b>Wildland Fire: Hot and Getting Hotter</b>	Global patterns of fire are changing under the control of human modification and the changing climate. NASA satellite, aircraft and ground-based field campaigns provide global data and information that provides an overarching view that enriches our scientific understanding and enhances our ability to inform stakeholder communities. In this talk, we will use NASA data to show several examples of the interactive nature of fire that connects our terrestrial, atmospheric and climate systems. Examples will include: connections to the Greenland Ice Sheet; and increases in extreme fire seasons.	<b>Amber Soja</b> Research Scientist, National Institute of Aerospace (NIA), NASA Langley Research Center
<b>1:30 - 1:37 PM</b> <b>From People to Pixels: Visualizing Socioeconomic Data with the SEDAC Map Viewer</b>	Visualize socioeconomic data from the NASA Socioeconomic Data and Applications Center, SEDAC with the newly released SEDAC Map Viewer. This new tool displays four synchronized panes for viewing multiple data sets simultaneously, facilitating visualization and comparison of different parameters (or variations over time) for user-selected regions. The Map Viewer is freely available at <a href="http://sedac.ciesin.columbia.edu/mapping/viewer/">http://sedac.ciesin.columbia.edu/mapping/viewer/</a> .	<b>Robert S. Chen</b> SEDAC Manager, CIESIN/Columbia University
<b>1:40 - 1:47 PM</b> <b>Flying Small Spacecraft Throughout the Solar System</b>	Small satellites — satellites that can be smaller even than a loaf of bread — have opened doors to a new way of accessing space at a relatively low cost. By keeping investigations focused, small satellites and CubeSats are capable of real scientific return. NASA's Heliophysics Program is especially interested because they provide an effective way to study Earth's magnetic system and changes in our space environment. Today small satellites are spreading beyond Earth's orbit, so many solar system and space weather topics will be targeted in the future.	<b>Eric Christian</b> Heliophysics, NASA Goddard Space Flight Center
<b>1:50 - 1:57 PM</b> <b>From Remote Sensing Dud to Stud—the ARSET Experience</b>	Are you a resource manager, policy maker, or science enthusiast interested in using NASA Earth science data for decision support? The Applied Remote Sensing Training (ARSET) Program provides high quality online and in person trainings to increase end-user engagement with Earth observations for applications such as air quality, water resources, and land management. Our expert trainers have assisted thousands of participants globally with their freely available materials and can help you with your remote sensing woes.	<b>Amber Jean McCullum</b> Research Scientist, Bay Area Environmental Research Institute, NASA Ames Research Center

## Detailed Descriptions of Flash Talks

Time/Title	Description	Presenter
<p><b>2:00-2:07 PM</b></p> <p><b>NASA Atmospheric Science Data: Easier Than You Think</b></p>	<p>Most people are unaware that NASA collects Earth Science data, much less that the data are both abundant and available for free to the public. This presentation will introduce atmospheric science data from the Atmospheric Science Data Center (ASDC), located at the NASA Langley Research Center (LaRC). During this flash talk we'll give you tips on how to discover, access and download the data and show you a few cool tools and services to help you work with the data.</p>	<p><b>Tiffany J. Mathews</b> PMP Communication, Outreach, and Project Management, Science Systems and Applications, Inc., Atmospheric Science Data Center (ASDC), NASA LaRC</p>
<p><b>2:10 - 2:17 PM</b></p> <p><b>Solar Probe Plus: A Mission to Touch the Sun</b></p>	<p>NASA's Solar Probe Plus mission will revolutionize our understanding of the sun—plunging through the sun's atmosphere, closer to the surface than any spacecraft before it, facing brutal heat and radiation conditions – and ultimately providing humanity with the first ever close-up view of a star. Scheduled for launch in 2018, Solar Probe Plus will swoop to within 4 million miles of the sun's surface, providing new data on solar activity and increasing our ability to forecast major space-weather events that impact life on Earth.</p>	<p><b>Nicky Fox</b> Solar Probe Plus Project Scientist, Johns Hopkins University Applied Physics Laboratory</p>
<p><b>2:20 - 2:27 PM</b></p> <p><b>Neither Clouds, Nor Smoke, Nor Dark of Night: Earth Through the Eyes of Sentinel-1</b></p>	<p>In the two years since the first launch, the Sentinel-1 spacecraft have observed the planet like no other SAR before them, providing a wealth of data unprecedented in microwave remote sensing. This presentation will highlight 5 natural events since the launch and discuss how Sentinel-1 is helping us better understand our dynamic world.</p>	<p><b>Scott Arko</b> Deputy Director, NASA Alaska Satellite Facility (ASF) Distributed Active Archive Center (DAAC)</p>
<p><b>2:30 - 2:37 PM</b></p> <p><b>All in the NAAMES of Ocean Ecosystems and Climate</b></p>	<p>NAAMES is an exciting investigation of one of Earth's most striking events – the annual North Atlantic phytoplankton bloom! NASA's satellite record suggests that our understanding of how this bloom comes about is wrong. Enter the ship, plane, and host of autonomous floats of NAAMES, which will get to the bottom of who, what, where, and especially when these microscopic critters appear, and how they impact not only ocean biogeochemistry but also atmospheric aerosols and clouds.</p>	<p><b>Richard Moore</b> Research Physical Scientist, NASA LaRC</p>
<p><b>2:40 - 2:47 PM</b></p> <p><b>Looking for Earth Science Data and Related Services?</b></p>	<p>NASA's Global Change Master Directory (GCMD) has got a new look and search interface! Join us to experience search, refinement, and sort functionality all on one page! The search interface offers an interdisciplinary approach for the discovery of and access to Earth science data and data services from NASA, U.S agencies, and international organizations.</p>	<p><b>Tyler Stevens</b> Science Coordinator, KBRWyle, NASA GCMD</p>
<p><b>2:50 - 2:57 PM</b></p> <p><b>A Deeper Look into California's Water Resources</b></p>	<p>The 2015-2016 El Niño weather event was forecasted to help alleviate what the US Drought Monitor classified as “exceptional” drought across the majority of California. However, the impacts of the drought, now in its fifth year, continue to strain statewide water supplies. NASA's Gravity Recovery and Climate Experiment (GRACE) Terrestrial Water Storage (TWS) hydrological data provides a uniquely integrated measurement that informs decision makers of drought severity and California's continued water deficit.</p>	<p><b>Brittany Zajic</b> NASA DEVELOP Center Lead, SSAI, NASA Ames Research Center</p>



## Detailed Descriptions of Flash Talks (cont.)

Time/Title	Description	Presenter
<b>Wednesday, December 14</b>		
<b>1:00 - 1:07 PM</b>  <b>Barnstorming the Moon with NASA's Moon Trek</b>	Get an early look at Moon Trek ( <a href="http://moontrek.jpl.nasa.gov">moontrek.jpl.nasa.gov</a> ), an exciting new product that builds upon the capabilities of its predecessor, NASA's Lunar Mapping and Modeling Portal (LMMP). Moon Trek's new 3D global view lets you make spectacular, detailed flyovers of the Moon's surface, as seen through the eyes of instruments aboard many spacecraft. Browse and download data from a range of missions, and make a variety of measurements of the Moon's surface. Use Moon Trek to make 3D prints of any lunar terrain of interest to you.	<b>Brian Day</b> Planetary Mapping and Modeling Lead, NASA Solar System Exploration Research Virtual Institute, Ames Research Center
<b>1:10 - 1:17 PM</b>  <b>The New R.O.U.S.: Radar-data Of Unusual Size</b>	Did you know you could access the entire Sentinel-1A and Sentinel-1B archive of synthetic aperture radar (SAR) data through the NASA Alaska Satellite Facility (ASF) Distributed Active Archive Center (DAAC)? Join us to hear more about the breadth of this data set in applications, and for tips on how to discover and access this important data set, through the ASF DAAC data pool.	<b>Nettie La Belle-Hamer</b> Geophysical Institute Deputy Director at ASF
<b>1:20 - 1:27 PM</b>  <b>An International Climate Observing System? Priceless...</b>	As scientists we commonly say things like: "Better understanding climate change will impact Trillion dollar decisions on climate change." Yet we currently lack an observing system designed to rigorously and comprehensively observe climate change. What would the economic value of such a system be? There have been several recent studies using modern integrated economic assessment models to examine this in a more quantitative way. The results may surprise you! Join us to hear more!	<b>Bruce Wielicki</b> Senior Research Scientist, NASA Langley Research Center (LaRC)
<b>1:30 - 1:37 PM</b>  <b>Discover and Access NASA AirMOSS and NASA CARVE Data</b>	The CARVE (Carbon in Arctic Reservoirs Vulnerability Experiment) and AirMOSS (Airborne Microwave Observatory of Subcanopy and Subsurface) Projects collected detailed airborne measurements of greenhouse gases in the Alaskan Arctic and high-resolution observations of root-zone soil moisture over major North American climatic habitats from 2011-2015. These observations provide unprecedented insights into Arctic and North American carbon cycling and ecosystems. During this talk, we'll show you some tips on how to use the NASA ORNL DAAC Web-based tools and services for easy discovery, visualization, and access to these valuable data!	<b>Yaxing Wei</b> Geospatial Scientist, NASA ORNL DAAC  <b>For information</b> <a href="https://carve.ornl.gov">https://carve.ornl.gov</a> <a href="https://airmoss.ornl.gov">https://airmoss.ornl.gov</a>
<b>1:40 - 1:47 PM</b>  <b>Why Korea? The Korea-United States Air Quality Study</b>	In late 2012, commitments were in place for a future Air Quality Constellation of satellites exploiting geostationary orbit to enable continuous monitoring of North America, Europe, and Asia by NASA, ESA, and the Korea Aerospace Research Institute (KARI). The KORUS-AQ study brought US and Korean scientists together in the interest of developing the strong relationships that will be key to enabling a truly integrated view between these satellites. KORUS-AQ combined aircraft, ground observations, and models to understand the factors controlling air quality in Korea and its observability from space.	<b>James Crawford</b> Research Scientist, NASA LaRC
<b>1:50 - 1:57 PM</b>  <b>The TIRCIS Instrument: Hyperspectral Imaging from Small Satellites</b>	Hyperspectral imaging is being used to help understand the chemical composition of geologically relevant targets, including volcanic gas and ash clouds, and the mineralogy and chemistry of rocks and minerals. NASA is developing an instrument (TIRCIS) that uses a uncooled microbolometer and a Fabry-Perot interferometer to acquire hyperspectral images in the long-wave infrared.	<b>Robert Wright</b> Associate Researcher, Hawaii Institute of Geophysics and Planetology

## Detailed Descriptions of Flash Talks

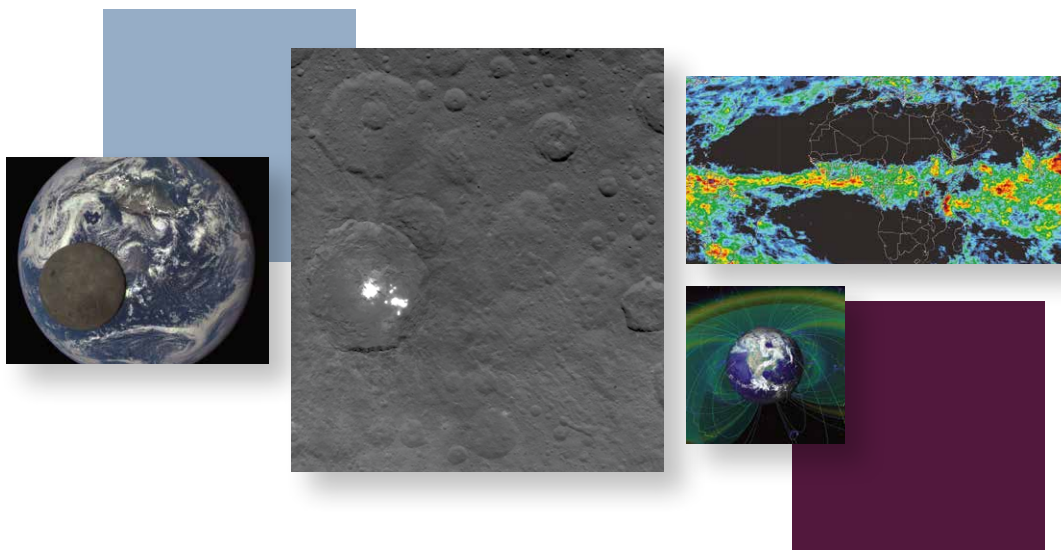
Time/Title	Description	Presenter
<p><b>2:00 - 2:07 PM</b></p> <p><b>Get NASA Snow and Ice Data Your Way Through Earthdata Search</b></p>	<p>Did you know you can reformat your MODIS snow or ice data to GeoTIFF? What about subsetting IceSat/GLAS HDF5 data? We'll show where to find these options in Earthdata Search, and how to request them across multiple data sets.</p>	<p><b>Amy Steiker</b> NASA National Snow and Ice Data Center (NSIDC) DAAC User Services</p>
<p><b>2:10 - 2:17 PM</b></p> <p><b>Wildfire Destruction: A Changing Fire Regime Threatens Idaho Fauna</b></p>	<p>Encroachment of non-native and woody-vegetation have increased fuel loads and altered fire return intervals throughout the Intermountain West. Partnering with Craters of the Moon this project identified Greater Sage-grouse and mule deer habitats with increased wildfire susceptibility. This project investigated the effect of differing spatial resolution of Landsat-8 and Sentinel- 2 on the accuracy of the output models. The methods developed provide decision makers with effective ways to monitor remote areas and threatened wildlife habitat.</p>	<p><b>Jenna Williams</b> Communications Fellow at NASA Ames Research Center, NASA DEVELOP</p>
<p><b>2:20 - 2:27 PM</b></p> <p><b>Introducing the Microwave Radiometer Technology Acceleration Mission (MiRaTA)</b></p>	<p>The Microwave Radiometer Technology Acceleration mission (MiRaTA) packs the capability of typically refrigerator-sized satellite weather sensors into a tiny satellite the size of a shoebox, scheduled to launch in March 2017. The MiRaTA CubeSat will demonstrate how these miniaturized weather sensors can make maps of all-weather temperature, water vapor, and cloud ice. The CubeSat is designed to perform "acrobatic" maneuvers to point the sensors at overlapping volumes of atmosphere, similar to "popping a wheelie" on a bike.</p>	<p><b>Kerri Cahoy</b> Associate Professor of Aeronautics and Astronautics, Massachusetts Institute of Technology (MIT)</p>
<p><b>2:30 - 2:37 PM</b></p> <p><b>Scientific Tools on the NASA Web Portal for Sea Level Change</b></p>	<p>In 2014, an interdisciplinary NASA Sea Level Change Team (N-SLCT) was formed to target today's challenges in sea level change research. A web portal has been built to provide a one-stop shop for current NASA sea level data, information on sea level research and the N-SLCT team. The website provides the latest updates on research progress in sea level science as well as background information on the causes and mechanisms. We will show you data analysis tools to quickly visualize and compare NASA data such as sea surface height, ocean temperatures, ice mass change, among others, on a global scale.</p>	<p><b>Carmen Boening</b> Sea Level Portal Principle Investigator, NASA JPL, California Institute of Technology</p>
<p><b>2:40 - 2:47 PM</b></p> <p><b>What's Wet, Green, and Covered with Animals?</b></p>	<p>Alaska and northwestern Canada are wet, green, and covered with animals in the summer. They're also some of the fastest-warming places on Earth, causing rapid environmental changes. And what's happening in the region, isn't staying in the region. The Arctic-Boreal Vulnerability Experiment (ABOVE) is a NASA Terrestrial Ecology Program field campaign investigating the underlying processes that control vulnerability and resilience of Arctic and Boreal ecosystems to environmental change, and to assess how people within and beyond this region respond to changes.</p>	<p><b>Peter Griffith</b> Chief Support Scientist, NASA Carbon Cycle &amp; Ecosystems Office, Goddard Space Flight Center</p> <p><b>For information</b> <a href="http://above.nasa.gov">http://above.nasa.gov</a></p>
<p><b>2:50 - 2:57 PM</b></p> <p><b>The Anatomy of an Analog</b></p>	<p>Analogues are locations on Earth that allow us to approximate operational or physical conditions on other planetary bodies and within deep space. The BASALT and FINESSE teams are conducting scientific and operational analogue research in Idaho, Quebec (Canada) and Hawaii to enable NASA's Journey to Mars. An overview of recent research and future plans will be presented.</p>	<p><b>Darlene Lim</b> FINESSE Deputy Principal Investigator, Bay Area Environmental Research Institute (BAERI) and NASA Ames Research Center</p>

## Detailed Descriptions of Flash Talks (cont.)

Time/Title	Description	Presenter
<b>Thursday, December 15</b>		
<b>1:00 - 1:07 PM</b>  <b>Monitoring Landslides from Space</b>	<p>Landslides cause thousands of fatalities every year, result in billions of dollars in losses and occur in nearly every country in the world. Through satellite data, models and even the media we explore how we can evaluate this pervasive in near real-time! Learn about some of the exciting ways in which NASA is exploring where, when and how landslides impact our world.</p>	<b>Dalia Kirschbaum</b> GPM Deputy Project Scientist for Applications
<b>1:10 - 1:17 PM</b>  <b>The Moon as Seen by the Lunar Reconnaissance Orbiter Camera</b>	<p>The Lunar Reconnaissance Orbiter Camera has been imaging the Moon at pixel scales as small as 50 centimeters since 2009. These images have given an unprecedented look at features that include newly discovered volcanic complexes, newly formed impact craters, and enigmatic features known as lunar swirls. We will look at how these spectacular new views are helping to reshape our understanding of many fundamental problems in lunar science, with Solar-System-wide implications.</p>	<b>Brett Denevi</b> Deputy Principal Investigator, Lunar Reconnaissance Orbiter Camera, Johns Hopkins University Applied Physics Laboratory
<b>1:20 - 1:27 PM</b>  <b>News Flash! New, Open, and Reprocessed NASA Land Data at LP DAAC</b>	<p>New NASA land data products have recently been made available by the Land Processes Distributed Active Archive Center (LP DAAC). In this talk we provide an update of three data products, including the MODIS Version 006 reprocessing campaign and eventual Version 005 retirement, the new ASTER open data policy, and the release of the NASA MEaSUREs Vegetation Index and Phenology collection.</p>	<b>Cole Krehbiel</b> Remote Sensing Scientist, Innovate!, Inc., Contractor to the USGS EROS, NASA LP DAAC
<b>1:30 - 1:37 PM</b>  <b>ICESat-2: NASA's Next-Generation Satellite Altimetry Mission</b>	<p>The NASA Ice, Cloud, and land Elevation Satellite-2 (ICESat-2) is a next-generation laser altimeter and a follow-on to the ICESat mission, which operated between 2003 and 2009. ICESat-2 is scheduled for launch in 2018 and will measure changes in ice-sheet elevation and Arctic and Southern Ocean sea ice. Combining ICESat-2 data with existing and forthcoming altimetry data will yield a 15+ year record of surface elevation change. We will discuss the motivation for space-based laser altimetry, the science requirements for ICESat-2, and the current status of the ICESat-2 mission.</p>	<b>Kelly M. Brunt</b> Assistant Research Scientist, Earth System Science Interdisciplinary Center (ESSIC), University of Maryland, College Park, NASA GSFC
<b>1:40 - 1:47 PM</b>  <b>Delve Into Curtain Data with DEVELOP</b>	<p>NASA DEVELOP's Summer 2016 project, "CALIPSO Cross-Cutting," generated a tool, enhanced over multiple terms, to create a synergy between atmospheric scientists and data. As often as scientists would like to inspect data in a tangible way, there is sometimes a conceptual chasm between the data and analysis. The Visualization of CALIPSO or "VOCAL" software allows the user to peel back the curtain, reintroducing the atmospheric scientist to CALIPSO data, enabling manual data tagging and annotation.</p>	<b>Kathleen Moore</b> Post-doctoral Fellow, NASA DEVELOP, LaRC
<b>1:50 - 1:57 PM</b>  <b>RAVAN: CubeSat, Carbon Nanotubes, and Climate</b>	<p>How much energy do greenhouse gases trap? To answer this question and accurately predict future climate, we need to measure the tiny difference in the incoming and outgoing energy at the top of Earth's atmosphere. RAVAN is a CubeSat weighing only four kilograms that aims to demonstrate how just such a measurement could be made using a global constellation of nanosatellites.</p>	<b>William H. Swartz</b> RAVAN Principal Investigator, Johns Hopkins University Applied Physics Laboratory

## Detailed Descriptions of Flash Talks

Time/Title	Description	Presenter
<b>2:00 - 2:07 PM</b> <b>The Eventful Earth — Seen Through NASA Data in Giovanni</b>	Giovanni, developed by the NASA Goddard Earth Sciences Data and Information Services Center (GES DISC), allows users to view a large variety of data from NASA satellite sensors and research projects. Giovanni enables rapid creation of many different analytical visualizations. Two examples demonstrate Giovanni's capability to view recent events influencing the Earth and human society: a plume of sulfur dioxide from a burning mine in Iraq and the landfall of Hurricane Hermine in Florida.	<b>Jennifer Wei</b> NASA Goddard Earth Science Data and Information Services Center (GES DISC), GSFC
<b>2:10 - 2:17 PM</b> <b>A New Way to Explore NASA Field Campaign Data</b>	The NASA Global Hydrology Resource Center DAAC has developed a Field Campaign Explorer (FCX) to examine data collected during field campaigns. In this talk, the FCX capabilities are demonstrated using data collected during the Hurricane and Severe Storm Sentinel (HS3) airborne field campaign that studied storm formation and hurricane intensification. By using flight reports, the FCX simplifies data acquisition for event-based research allowing users to interactively discover, visualize, and download diverse airborne datasets with different data formats. This tool allows users to simultaneously display and subset datasets within an interactive mapping system.	<b>Amanda Weigel</b> A New Way to Explore NASA Field Campaign Data
<b>2:20 - 2:27 PM</b> <b>Operation IceBridge Portal 2.0: Benefits of the One-Stop Shop for IceBridge Data</b>	The NASA National Snow and Ice Data Center (NSIDC) DAAC has released a new version of the Operation IceBridge Portal. We will show you the benefits having all of the IceBridge data in one Portal which now takes advantage of the rich metadata that is available.	<b>Amy FitzGerrell</b> NSIDC User Services, NASA NSIDC DAAC
<b>2:30 - 2:37 PM</b> <b>NASA MODIS Land Product Subsets and Visualization in Less than 15 Minutes</b>	MODIS (Moderate Resolution Imaging Spectroradiometer) land data are highly useful for field research. However, the volume of MODIS data and complexity of data format can make using the data challenging! The problem is solved using the NASA ORNL DAAC MODIS Global Tool suite. This interface subsets, visualizes and delivers the subsetted MODIS data in a matter of minutes allowing the users to conduct preliminary data analysis very quickly. For example, subsets and visualization for a 7x7 km area, for a 15-year time series can be delivered in less than 3 minutes!	<b>Suresh Santhana Vannan</b> NASA ORNL DAAC Manager, Data Theme Lead, Climate Change Science Institute (CCSI), ORNL DAAC
<b>2:40 - 2:47 PM</b> <b>Globe Observer: Citizen Scientist Observations in Support of Earth System Science</b>	How can citizen science data support Earth system science research? This demo will introduce GLOBE and GLOBE Observer, a student and citizen science program designed to collect observations of the environment. The GLOBE Observer app, released in September 2016, harnesses smart phone technology to simplify select GLOBE observations to open the program to new audiences and to increase data volume. The end goal is to facilitate new student and scientific research. The demo will provide an overview of the app and show you how to access GLOBE Observer environmental data.	<b>Holli Riebeek Kohl</b> Globe Observer Lead, NASA GSFC



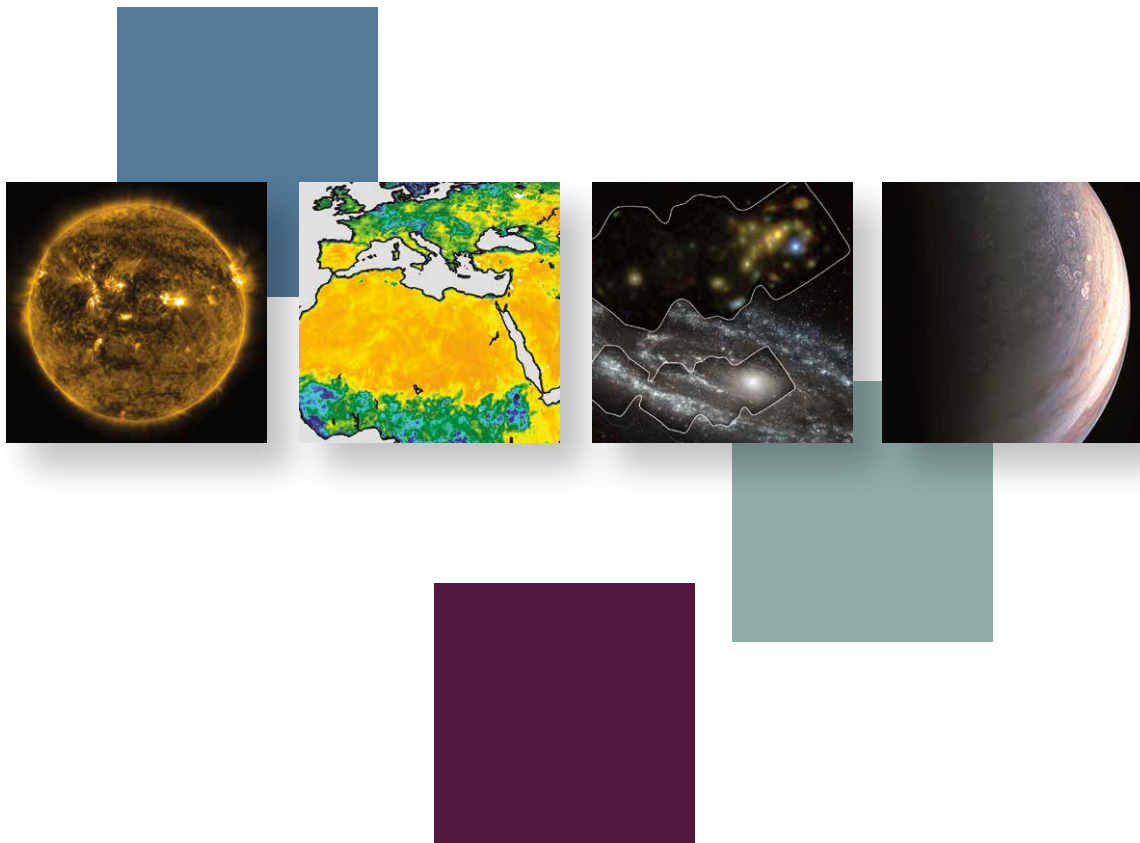






## NASA's Vision

To reach for new heights and reveal the unknown so that what we do and learn will benefit all humankind.



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