AGU 2019 Disasters Program Activities
Updated 11/26/2019

Oral Sessions

NH12A Using Earth Observations and Imagery Analysis for Risk and Resilience Assessment, Risk Communication, and Response and Recovery Monitoring I

Monday, 9 December 2019 10:20 - 12:20 Moscone West - 2016, L2

Bandana Kar, Oak Ridge National Laboratory, Oak Ridge, TN, United States, Margaret T Glasscoe, JPL-Caltech, Pasadena, CA, United States and ZhiQiang Chen, University of Missouri Kansas City, Kansas City, MO, United States

NH12A-02 The Group on Earth Observation (GEO) Global Wildfire Information System (GEO-GWIS)

Monday, 9 December 2019 10:20 - 12:20 Moscone West - 2016, L2

Vincent G Ambrosia, NASA Ames Research Center, Moffett Field, CA, United States, Jesus San Miguel-Ayanz, European Commission, Brussels, Belgium, Luigi Boschetti, University of Idaho, Department of Forest, Rangeland and Fire Sciences, Moscow, ID, United States, Louis Giglio, University of Maryland College Park, Department of Geographical Sciences, College Park, MD, United States and Robert D Field, Columbia University, New York, NY, United States

NH12A-06 Awash in Data: Virtual Flooding with Virtual Reality Technology


Shayna Skolnik, Navteca, Greenbelt, MD, UNITED STATES and Adam Silcott, NASA, Greenbelt, MD, United States

NH12A-08 Damage Mapping Techniques using Synthetic Aperture Radar for Rapid Response: A Case Study for Hokkaido Landslide

Monday, 9 December 2019 11:44 - 11:56 Moscone West - 2016, L2

Jungkyo Jung and Sang-Ho Yun, Jet Propulsion Laboratory, Pasadena, CA, United States
TH13C NASA’s Decadal Survey Designated Observable Mission Study: Surface Deformation and Change

Monday, 9 December 2019 12:30 - 13:30 Moscone West - 3005, L3

Andrew Molthan, Paul Rosen2, Batuhan Osmanoglu3, Gerald W Bawden4, Stephen Horst5, Ala Khazendar6 and Jeanne M Sauber3, (1)NASA Marshall Space Flight Center, Huntsville, AL, United States(2)Jet Propulsion Laboratory, Pasadena, CA, United States(3)NASA Goddard Space Flight Center, Greenbelt, MD, United States(4)NASA Headquarters, Washington, DC, United States(5)Jet Propulsion Laboratory, California Institute of Technology, Pasadena, CA, United States(6)NASA Jet Propulsion Laboratory, Pasadena, CA, United States

NH24A Centennial Overview: Status and Future of Natural Hazards Mitigation---A Case Study: Earthquake Science and Increasing Societal Resilience in the San Francisco Bay Area I

Tuesday, 10 December 2019 16:00 - 18:00 Moscone West - 2016, L2

Kenneth W Hudnut, USGS Pasadena Field Office, Pasadena, CA, United States, Janine Krippner, Smithsonian Institution Global Volcanism Program, Washington D.C., DC, United States, Mary Lou C Zoback, Stanford University, Geophysics, Stanford, CA, United States and Dalia Kirschbaum, NASA Goddard Space Flight Center, Hydrological Sciences Laboratory, Greenbelt, MD, United States

PA31B Flood Risk and Resilience: Integrating Models, Methods, and Data to Inform Resilience-Building at Risk Management Scales I

Wednesday, 11 December 2019 08:00 - 10:00 Moscone South - 301-302, L3

Reinhard Mechler, IIASA International Institute for Applied Systems Analysis, Laxenburg, Austria, David S Green, NASA Headquarters, Washington, DC, United States, Michael Szonyi, Zurich Insurance Company, Zurich, Switzerland and David Borges, Booz Allen Hamilton, Norfolk, VA, United States

G31A Improving Volcano Deformation Interpretations with Integrated Multidisciplinary Data I

Wednesday, 11 December 2019 08:00 - 10:00 Moscone South - 160, Upper Mezz.

Emily K. Montgomery-Brown, USGS Volcano Science Center Menlo Park, Menlo Park, CA, United States, Ronni Grapenthin, University of Alaska Fairbanks, Geophysical Institute, Fairbanks, AK, United States, Alessandro Bonforte, Istituto Nazionale di Geofisica e Vulcanologia, Etna Observatory, Catania, Italy and Paul Lundgren, Jet Propulsion Laboratory, California Institute of Technology, Pasadena, CA, United States
IN43B-04 New satellite-derived estimates of global exposure to landslide hazards

Thursday, 12 December 2019 14:24 - 14:36 Moscone West - 2020, L2

Robert Emberson, Dalia Kirschbaum and Thomas Stanley1,2, (1) Universities Space Research Association Greenbelt, Greenbelt, MD, United States, (2) NASA Goddard Space Flight Center, Hydrological Sciences Laboratory, Greenbelt, MD, United States

IN51B Near-Real-Time/Low-Latency Data for Earth Science and Space Weather Applications I

Friday, 13 December 2019 08:00 - 10:00 Moscone West - 2020, L2


PA54B-06 Unpacking Resilience: Integrating Earth observations into Humanitarian Programming

Friday, 13 December 2019 16:00 - 18:00 Moscone South - eLightning Theater II

PA54B-03 NASA Earth Science Partnerships – Lessons Learned in Measuring, Managing, and Maturing Public-Private Partnerships in the Earth Sciences

Friday, 13 December 2019 16:00 - 18:00 Moscone South - eLightning Theater II

Jamie Favors1, Sandra Cauffman1, Jack A Kaye2, Eric Ianson1, Lawrence Friedl3, William W Turner4, Keith Gaddis5, Kevin J Murphy6, Amanda Whitehurst7, David S Green1, Shanna N. McClain, Tsengdar J Lee9 and Daniel Bader10, (1)NASA Headquarters, Washington, DC, United States, (2)NASA Headquarters SMD/ESD, Washington, DC, United States, (3)NASA Headquarters, Earth Science Division, Washington, DC, United States, (4)NASA Headquarters, Washington DC, DC, United States, (5)Texas A&M University College Station, Geography, College Station, TX, United States, (6)NASA GSFC, Greenbelt, MD, United States, (7)ASRC Federal Holding Company, Beltsville, MD, United States, (8)NASA Headquarters, Applied Sciences, Washington, DC, United States, (9)NASA, Burke, VA, United States, (10)Columbia University, CCSR, New York, NY, United States

A54C Evolution of Volcanic Plumes and Their Impacts on Aviation, Atmosphere, and Climate I

Friday, 13 December 2019 16:00 - 18:00 Moscone West - 3008, L3

Valentina Aquila, American University, Department of Environmental Science, Washington, DC, United States, Jean-Paul Vernier, National Institute of Aerospace, Hampton, VA, United States and John J Murray, NASA Langley Research Center, Hampton, VA, United States

Poster Sessions & Posters

NH13C Using Earth Observations and Imagery Analysis for Risk and Resilience Assessment, Risk Communication, and Response and Recovery Monitoring II Posters

Monday, 9 December 2019  13:40 - 18:00  Moscone South - Poster Hall

Bandana Kar, Oak Ridge National Laboratory, Oak Ridge, TN, United States, Margaret T Glasscoe, JPL-Caltech, Pasadena, CA, United States and ZhiQiang Chen, University of Missouri Kansas City, Kansas City, MO, United States

NH13C-0823 Comprehensive Severe Weather Impact Assessment and Monitoring using Synthetic Aperture Radar and Auxiliary Data

Monday, 9 December 2019, 1340-1600 Moscone South - Poster Hall

Esayas Gebremichael1, Andrew Molthan2, Jordan R Bell, Lori A. Schultz and Christopher Hain2, (1)Texas Christian University, Geological Sciences, Fort Worth, TX, United States, (2)NASA Marshall Space Flight
Center, Huntsville, AL, United States, (3)University of Alabama in Huntsville, Earth System Science Center, Huntsville, AL, United States, (4)University of Alabama in Huntsville, Huntsville, AL, United States

**NH13C-0829 Advancing Access to Global Flood Modeling and Alerting using the PDC DisasterAWARE Platform and Remote Sensing Technologies**

Monday, 9 December 2019 13:40 - 18:00  Moscone South - Poster Hall


**IN21C Near-Real-Time/Low-Latency Data for Earth Science and Space Weather Applications II Posters**

Tuesday, 10 December 2019 08:00 - 12:20 Moscone South - Poster Hall


**IN21C-0859 The NASA Disasters Program Mapping Portal: Connecting Scientists to Response and Recovery Activities in Near-Real Time**

Tuesday 10 December 2019: 0800-1220

**Lori A. Schultz**, University of Tuesday 10 December 2019: 0800-1220 Alabama in Huntsville, Huntsville, AL, United States, Jeremy Kirkendall, a.i. Solutions, Washington, D.C., United States, Garrett Layne, Al Solutions Inc./NASA Headquarters, Washington, United States, **Jordan R Bell**, University of Alabama in Huntsville, Earth System Science Center, Huntsville, AL, United States, **Andrew Molthan**, NASA Marshall Space Flight Center, Huntsville, AL, United States, **Dalia Kirschbaum**, NASA Goddard Space Flight Center, Hydrological Sciences Laboratory, Greenbelt, MD, United States, David Borges, Booz Allen Hamilton, Norfolk, VA, United States and David S Green, NASA Headquarters, Washington, DC, United States
**GC21B-06 Introducing a Satellite Agnostic Approach to Identifying and Quantifying Hail Damage Swaths over the Central United States**

Tuesday 10 December 2019: 0915-0930, Moscone West – L2

**Jordan R Bell,** Andrew Molthan2, Esayas Gebremichael3, Christopher Hain2, Christopher J Schultz4 and **Lori A. Schultz**, (1)University of Alabama in Huntsville, Earth System Science Center, Huntsville, AL, United States, (2)NASA Marshall Space Flight Center, Huntsville, AL, United States, (3)University of Alabama in Huntsville, Huntsville, AL, United States, (4)NASA Marshall Space Flight Ctr, Huntsville, AL, United States

**NH21D-0992 Preparing for the next eruptions: networks and collaborations for timely observations**

Tuesday, 10 December 2019 08:00 - 12:20 Moscone South - Poster Hall

Valentina Aquila, American University, Department of Environmental Science, Washington, DC, United States, Peter Richard Colarco, NASA GSFC, Greenbelt, MD, United States, Paul A. Newman, NASA GSFC, Code 610, Greenbelt, MD, United States and Jean-Paul Vernier, National Institute of Aerospace, Hampton, VA, United States

**PA33D Flood Risk and Resilience: Integrating Models, Methods, and Data to Inform Resilience-Building at Risk Management Scales II Posters**

Wednesday, 11 December 2019 13:40 - 18:00 Moscone South - Poster Hall

Reinhard Mechler, IIASA International Institute for Applied Systems Analysis, Laxenburg, Austria, **David S Green**, NASA Headquarters, Washington, DC, United States, Michael Szoenyi, Zurich Insurance Company, Zurich, Switzerland and David Borges, Booz Allen Hamilton, Norfolk, VA, United States

**G33C Improving Volcano Deformation Interpretations with Integrated Multidisciplinary Data II Posters**

Wednesday, 11 December 2019 13:40 - 18:00 Moscone South - Poster Hall

Emily K. Montgomery-Brown, USGS Volcano Science Center Menlo Park, Menlo Park, CA, United States, Ronni Grapenthin, University of Alaska Fairbanks, Geophysical Institute, Fairbanks, AK, United States, Alessandro Bonforte, Istituto Nazionale di Geofisica e Vulcanologia, Etna Observatory, Catania, Italy and **Paul Lundgren**, Jet Propulsion Laboratory, California Institute of Technology, Pasadena, CA, United States

**IN53C-0755 Flood Mapping of Recent Major Hurricane Events with Synthetic Aperture Radar, Commercial Imaging, and Aerial Observations**
Friday 13 December 2019: 1340-1540

**Andrew Molthan**, Alexander Melancon2, Jordan R Bell3, Lori A Schultz4 and Esayas Gebremichael4, (1)NASA Marshall Space Flight Center, Huntsville, AL, United States, (2)University of Alabama in Huntsville, Huntsville, United States, (3)University of Alabama in Huntsville/NASA Short-term Prediction Research and Transition (SPoRT) Center, Huntsville, AL, United States, (4)University of Alabama in Huntsville, Huntsville, AL, United States

**A51I Evolution of Volcanic Plumes and Their Impacts on Aviation, Atmosphere, and Climate II Posters**

Friday, 13 December 2019 08:00 - 12:20 Moscone South - Poster Hall

Valentina Aquila, American University, Department of Environmental Science, Washington, DC, United States, Jean-Paul Vernier, National Institute of Aerospace, Hampton, VA, United States and John J Murray, NASA Langley Research Center, Hampton, VA, United States

**A54C Evolution of Volcanic Plumes and Their Impacts on Aviation, Atmosphere, and Climate I**

Friday, 13 December 2019 16:00 - 18:00 Moscone West - 3008, L3

Valentina Aquila, American University, Department of Environmental Science, Washington, DC, United States, Jean-Paul Vernier, National Institute of Aerospace, Hampton, VA, United States and John J Murray, NASA Langley Research Center, Hampton, VA, United States

**A51I-2698 Re-Constructing Volcanic Ash Plume vertical and horizontal extension using CALIOP/CALIPSO and NASA Langley Trajectory Model (LaTM): The June 2019 Raikoke eruption**

Friday, 13 December 2019 08:00 - 12:20 Moscone South - Poster Hall

Hyun-Deok Choi1, Jean-Paul Vernier1, Hongyu Liu1, Fairlie T Duncan2 and Murali Natarajan2, (1)National Institute of Aerospace, Hampton, VA, United States, (2)NASA Langley Research Center, Hampton, VA, United States

**GC31N Advances in Remote Sensing, Machine Learning, and Economics to Improve Risk Management and Evaluate Impacts in Socioenvironmental Systems II Posters**

Wednesday, 11 December 2019 08:00 - 12:20 Moscone South - Poster Hall

Ian Wesley Bolliger, University of California Berkeley, Energy and Resources Group, Berkeley, CA, United States, Elinor Benami, Stanford University, Stanford, CA, United States, Eric Ross Anderson, University of Alabama in Huntsville, NASA-SERVIR, Huntsville, AL, United States, Shanna N. McClain, NASA Headquarters, Applied Sciences, Washington, DC, United States and Jonathan Proctor, University of California Berkeley, Agricultural and Resource Economics, Berkeley, CA, United States
Hyperwall Talks

**Location:** NASA booth at the AGU Exhibit Hall (Moscone North Hall - Booth 535)

Applications from GPM, Disasters and Designated Observables  
*Tuesday December 10th, 10:45am - 11:00am*

**Dalia Kirschbaum** - NASA Disasters Center Coordinator

GEO-Global Wildfire Information System (GWIS)  
*Tuesday December 10th, 3:45pm - 4:00pm*

**Vince Ambrosia** - NASA Disasters Associate Program Manager

Earth Observations for Disaster Resilience – A Decadal Imperative  
*Tuesday December 10th, 4:15pm - 4:30pm*

**David Green** - NASA Disasters Program Manager

Other Activities
- Visit the NASA booth at the AGU Exhibit Hall (Moscone North Hall - Booth 535) anytime during the week to talk with representatives from the NASA Applied Sciences team and learn about the program and how we can support your work.