

Monday Morning Posters (8am to 12:20pm)

- B11B** Hyperspectral Remote Sensing of Vegetation: Knowledge Gain and Knowledge Gap Based on 40 Years of Research
- H11I** Transformative Measurements to Understand the Geosphere: Zip-Ties, Arduinos, Novel Sensors, and Twitter
- IN11A** Earth System Data Records, Essential Uncertainty Information, and Its Representation Metadata and Standards I
- IN11B** Informatics in Hydrological Modeling and Information Communication
- IN11C** Multidisciplinary, Multiscale Model Coupling
- IN11D** Open Source Tech. and Architectures Facilitating Science Data Center Collaboration and Management. I
- IN11E** Standard Service Based Approaches to Hydrological Modeling and Workflows

Monday Morning Events

- ...** Visual Data Analysis: Tools and Techniques for the Geophysical Sciences
(8:30am to 12:30am)
Salon B, Marriott Marquis

Monday Morning Talks

(8am to 10am)

H11K Characterization of Groundwater Systems I
Room 3014 (Moscone West)

IN11F **Open Source Tech. and Architectures**
Facilitating Science Data Center
Collaboration and Management II
Room 2020 (Moscone West)

(10:20am to 12:20pm)

H12A Characterization of Groundwater Systems II
Room 3014 (Moscone West)

IN12A **Free and Open Source Software (FOSS)**
for Geoinformatics and Geosciences I
Room 2020 (Moscone West)

Monday Afternoon Posters

(1:40pm to 6pm)

- C13E Polar Technology Enabling Science
- C13F The Changing Cryosphere I
- DI13C State of the Art in Computational Geoscience I
- H13B Characterization of Groundwater Systems III
- IN13A Free and Open Source Software (FOSS) for Geoinformatics and Geosciences II**
- IN13B Open Data for Open Science in Geoinformatics**
- IN13C Science Results Obtained From the UAVSAR Radar**
- NG13A Complex Networks in Geosciences I

Monday Afternoon Talks

(1:40pm to 3:40pm)

- IN13D Earth System Data Records, Essential Uncertainty Information, and Its Representation Metadata and Stds. II**
Room 2020 (Moscone West)

(4pm to 6pm)

- IN14A Earth System Data Records, Essential Uncertainty Information, and Its Representation Metadata and Stds. III**
Room 2020 (Moscone West)
- NG14A Complex Networks in Geosciences II
(4pm to 4:45pm) Room 300 (Moscone South)

Tuesday Morning Posters

(8am to 12:20pm)

- ED21C** Transformative Innovations in Earth, Oceans, and Atmospheric Science Education for Undergraduates Supported by [NSF]
- IN21A** A Governance Roadmap for Cyberinfrastructure in the Geosciences
- IN21B** Data and Service Brokering: Mediating Interactions Across Diverse Resources I
- IN21C** Large-Scale Data Analytics in Earth System Science I
- NH21A** Coastal Inundation for Present and Future Climates I

Tuesday Morning Talks

(8am to 10am)

- IN21D** Advanced Methods for Pattern Recognition and Data Prospecting for Big Data I
Room 2020 (Moscone West)

(10:20am to 12:20pm)

- DI22A** State of the Art in Computational Geoscience II
Room 305 (Moscone South)
- G22A** 4-D LiDAR Topography and Geodetic Imaging I
Room 3011 (Moscone West)
- GC22E** Mechanisms of Global Environmental Change
Room 3018 (Moscone West)

**IN22A Data Stewardship, Citation With
Confidence, and Preparing Next
Generation of Data Managers I**
Room 2020 (Moscone West)

Tuesday Lunchtime

... **Scientific Data Management 101**
(12:20pm to 1:40pm)
Salon 5, Marriott Marquis

Tuesday Afternoon Posters **(1:40pm to 6pm)**

**G23A 4-D LiDAR Topography and Geodetic
Imaging II**

**GC23B/C Global Environmental Change:
General Contributions I & II**

**IN23A A Rose by Any Other Name: Advances
in Signal and Parameter Recognition and
Classification**

**IN23B Advanced Methods for Pattern
Recognition and Data Prospecting for Big
Data II**

**IN23C Data Stewardship, Citation With
Confidence, and Preparing Next
Generation of Data Managers II**

**IN23D Earth and Space Science Informatics
General Contributions**

Tuesday Afternoon Talks

(1:40pm to 3:40pm)

- H23G Developing the Science for High-Resolution Water-Energy-Biogeochemical Cycle Modeling I
Room 3018 (Moscone West)
- IN23E Data and Service Brokering: Mediating Interactions Across Diverse Resources II**
Room 2020 (Moscone West)
- IN23F Near Real Time Data Uses for Earth Science and Space Weather Applications: Use of Social Media I (VOD)**
Room 104 (Moscone South)
- NG23D Non-Gaussian and Nonlinear Aspects of Data Assimilation/Fusion and Predictability in the Geosciences I
(1:40pm to 2:25pm) Room 300 (Moscone South)
- NH23C Coastal Inundation for Present and Future Climates II
Room 304 (Moscone South)
- PA23B Facebook, Twitter, Blogs: Science Communication Gone Social, The Social Media 101 I
Room 302 (Moscone South)

(4pm to 6pm)

IN24A Large-Scale Data Analytics in Earth System Science II

Room 2020 (Moscone West)

IN24B *Leptoukh Lecture: Bridging Information and Earth Science: a Look at Gregory Leptoukh's Contributions (VOD)*

(4pm to 5pm) Room 104 (Moscone South)

Tuesday Evening

... **Earth and Space Science Informatics Business Meeting & Reception**
(6:30pm to 8pm; ticket required)
Infusion Lounge (124 Ellis St.)

Wednesday Morning Posters (8am to 12:20pm)

- ED31A** Bright STaRS: Bright Students Training as Research Scientists
- GP31A** Integration of Paleomagnetic, Rock Magnetic, and Other Data in Online Databases
- H31A** **Developing the Science for High-Resolution Water-Energy-Biogeochemical Cycle Modeling II**
- IN31A** **Data Interoperability and Interuse Solutions I**
- IN31B** **Environmental Sensor Networks and Informatics**
- IN31C** **Technology Enabling Earth Science From Big Data to Small Satellites I**
- NG31A** Non-Gaussian and Nonlinear Aspects of Data Assimilation/Fusion and Predictability in the Geosciences II
- P31A** Internal Structure and Composition of Small Solar System Bodies I
- PA31B** Facebook, Twitter, Blogs: Science Communication Gone Social, The Social Media 101 II

Wednesday Morning Talks

(8am to 10am)

- C31C Geochemical and Microbial Processes in the Terrestrial Cryosphere III
Room 3005 (Moscone West)
- IN31D Near Real Time Data Uses for Earth Science and Space Weather Applications II**
Room 2020 (Moscone West)
- SM31D Advancing Heliophysics Data Analysis: How Data Policy Impacts Science I
(9am to 10am) Room 2018 (Moscone West)

(10:20am to 12:20pm)

- IN32A Near Real Time Data Uses for Earth Science and Space Weather Applications III**
Room 2020 (Moscone West)

Wednesday Lunchtime

- TH32C Emissions Information & Communication: Progress & Priorities
(12:30pm to 1:30pm) Room 2004 (Moscone West)
- TH32F Publishing Research Data: Peer Review, Data Center Accreditation, and Linking**
(12:30pm to 1:30pm) Room 2007 (Moscone West)
- TH32I AGU Scientific Integrity and Professional Ethics
(12:30pm to 1:30pm) Room 2011 (Moscone West)

Wednesday Afternoon Posters

(1:40pm to 6pm)

- A33M Space-Based, Operational Global Earth Observations From NPP and JPSS I
- A33N Space-Based, Operational Global Earth Observations From NPP and JPSS II
- IN33A Applications of GPU and MIC in Geosciences
- IN33B Cloud Services for Earth System Science
- IN33C Near Real Time Data Uses for Earth Science and Space Weather Applications IV
- V33B Geologic Maps as a Basis for Integrated Studies in Volcanology and Tectonics

Wednesday Afternoon Talks

(1:40pm to 3:40pm)

- C33F The Changing Cryosphere II
Room 3005 (Moscone West)
- GC33E Climate Extremes and Impacts: Can Big Data Mining and Fusion Help Reduce Uncertainties? I
Room 3003 (Moscone West)
- IN33D Technology Enabling Earth Science From Big Data to Small Satellites II
Room 2020 (Moscone West)
- PA33B Assessing Socioeconomic Benefits of Earth Observation Science I
Room 302 (Moscone South)

(4pm to 6pm)

C34B The Changing Cryosphere III
Room 3005 (Moscone West)

**IN34A Data Interoperability and Interuse
Solutions II**
Room 2020 (Moscone West)

P34A Internal Structure and Composition of
Small Solar System Bodies II
Room 2007 (Moscone West)

Wednesday Evening

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Ignite@AGU

(6pm - 9pm) Infusion Lounge (124 Ellis St.)

Thursday Morning Posters

(8am to 12:20pm)

- ED41A Distributing Science Data for Reuse**
- ED41B EarthScope in Geoscience Education and Outreach**
- ED41E Geological Collections: Important Sources of Scientific and Historic Data for Research and Teaching, Cosponsored by MSA**
- IN41A Data Discovery and Access Services I**
- IN41B Geostationary Satellite Data Generation I**
- NH41A Land-Ocean-Atmospheric-Ionospheric Interaction Processes: Implications for Natural Hazards I**
- OS41C Ocean Observing Systems: Challenges and Successes I**
- PA41A Assessing Socioeconomic Benefits of Earth Observation Science II**

Thursday Morning Talks

(8am to 10am)

- IN41C Envisioning Improvements for Earth Science Data Access I**
Room 2020 (Moscone West)
- NG41D Particle Filters for Nonlinear Data Assimilation I**
(8am to 9am) Room 300 (Moscone South)

(10:20am to 12:20pm)

**IN42A Envisioning Improvements for Earth
Science Data Access II**

Room 2020 (Moscone West)

**S42C Using Historical Information to Improve
Seismic Data Processing Methods I (VOD)**

Room 104 (Moscone South)

Thursday Lunchtime

**TH42B NASA Earth Science Division Town Hall
(12:30pm to 1:30pm) Room 2003 (Moscone West)**

Thursday Afternoon Posters

(1:40pm to 6pm)

- B43E Sustainable Agriculture: Mapping, Monitoring, and Visualization Methods in a Changing Global Environment I**
- ED43A Teacher Professional Development Programs Promoting Authentic Scientific Research in the Classroom II**
- GC43A Climate Extremes and Impacts: Can Big Data Mining and Fusion Help Reduce Uncertainties? II**
- IN43A Earth in 3D**
- IN43B Envisioning Improvements for Earth Science Data Access III**
- IN43C Impact of High-Performance Computing Trends on Earth and Space Science**
- MR43A Computational Advances and Applications in Mineral Physics I**
- NG43A Particle Filters for Nonlinear Data Assimilation II**
- S43G Using Historical Information to Improve Seismic Data Processing Methods II**
- SM43A Advancing Heliophysics Data Analysis: How Data Policy Impacts Science II**

Thursday Afternoon Talks

(1:40pm to 3:40pm)

- GC43H *Stephen Schneider Global Environmental Change Lecture: The Transformation of Climate Models to Earth System Models and Their Role in Policy Development and Decision Support (VOD)*
Room 2022-2024 (Moscone West)
- H43J *Optimizing Short-Term Reservoir Operations With Multiple Sources of Uncertainty I*
Room 3022 (Moscone West)
- IN43D Data Discovery and Access Services II**
Room 2020 (Moscone West)
- IN43E Geostationary Satellite Data Generation II**
Room 104 (Moscone South)
- NG43C *Statistical Geodynamics I*
Room 300 (Moscone South)
- NH43C *Land-Ocean-Atmospheric-Ionospheric Interaction Processes: Implications for Natural Hazards II*
Room 304 (Moscone South)

(4pm to 6pm)

- ED44A Science Networks: Facilitating Collaboration and Spurring Innovation I**
Room 302 (Moscone South)
- IN44A Data Discovery and Access Services III**
Room 2020 (Moscone West)

Friday Morning Posters

(8am to 12:20pm)

- ED51A Games, Interactive Simulations, and Virtual Labs for Science Teaching and Learning I**
- GC51B/C Spatiotemporal Change Detection and the Data Infrastructure of Environmental Observatories I & II**
- H51F Optimizing Short-Term Reservoir Operations With Multiple Sources of Uncertainty II**
- IN51A Advancing Partnerships, Collaborative Platforms, and Knowledge Networks in the Earth Sciences I**
- IN51B Collaborative DataLab**
- IN51C Linked Data for Earth and Space Science**
- IN51D Semantics and Cyberinfrastructures for Next Generation Science I**
- NG51A Statistical Geodynamics II**
- OS51E Science at Sea: Innovative Results From the Oceanographic Research Fleet I**
- PA51A Earth Science Applications: Tracing Their Sources and Heritage**
- S51D Nonseismology Seismology: Diverse Non-Earth Applications of Seismological Techniques I**

Friday Morning Talks

(8am to 10am)

- G51C Reference Frames, Global Geodetic Observing Systems, and Technique Systematic Errors I**
Room 3009 (Moscone West)
- IN51E Quality Assessment of Satellite-Derived Land Surface Variables I**
Room 2020 (Moscone West)
- IN51F Tools and Frameworks for Visualization and Big Data Analysis I**
Room 2018 (Moscone West)
- OS51F Ocean Observing Systems: Challenges and Successes II**
Room 3011 (Moscone West)
- S51F Are Seismicity Patterns and Scaling Laws Universal? I**
Room 305 (Moscone South)

(10:20am to 12:20pm)

- G52B Reference Frames, Global Geodetic Observing Systems, and Technique Systematic Errors II**
Room 3009 (Moscone West)
- IN52A Challenges in Analysis and Visualization of Large Earth Science Data Sets I**
Room 2018 (Moscone West)
- IN52B Quality Assessment of Satellite-Derived Land Surface Variables II**
Room 2020 (Moscone West)

OS52A Ocean Observing Systems: Challenges and Successes III

Room 3011 (Moscone West)

S52A Are Seismicity Patterns and Scaling Laws Universal? II

(10:20am to 11:20am) Room 305 (Moscone South)

Friday Lunchtime

TH52G EarthScope Town Hall

(12:30pm to 1:30pm) Room 2008 (Moscone West)

TH52H International Earth Science

Organizations and You

(12:30pm to 1:30pm) Room 2009 (Moscone West)

Friday Afternoon Posters (1:40pm to 6pm)

ED53C Science Networks: Facilitating Collaboration and Spurring Innovation II

G53B Reference Frames, Global Geodetic Observing Systems, and Technique Systematic Errors III

IN53A Challenges in Analysis and Visualization of Large Earth Science Data Sets II

IN53B Quality Assessment of Satellite-Derived Land Surface Variables III

IN53C Tools and Frameworks for Visualization and Big Data Analysis II

S53A Are Seismicity Patterns and Scaling Laws Universal? III

Friday Afternoon Talks

(1:40pm to 3:40pm)

- B53H Sustainable Agriculture: Mapping, Monitoring, and Visualization Methods in a Changing Global Environment II**
Room 2006 (Moscone West)
- ED53G Games, Interactive Simulations, and Virtual Labs for Science Teaching and Learning II**
Room 302 (Moscone South)
- GC53E Spatiotemporal Change Detection and the Data Infrastructure of Environmental Observatories III**
Room 3003 (Moscone West)
- IN53D Semantics and Cyberinfrastructures for Next Generation Science II**
Room 2020 (Moscone West)
- MR53A Computational Advances and Applications in Mineral Physics II**
Room 301 (Moscone South)
- OS53E Science at Sea: Innovative Results From the Oceanographic Research Fleet II**
Room 3011 (Moscone West)
- S53H Nonseismology Seismology: Diverse Non-Earth Applications of Seismological Techniques II**
Room 305 (Moscone South)

(4pm to 6pm)

- A54F** Space-Based, Operational Global Earth Observations From NPP and JPSS III (VOD)
Room 2022-2024 (Moscone West)
- GC54A** Spatiotemporal Change Detection and the Data Infrastructure of Environmental Observatories IV
Room 3003 (Moscone West)
- IN54A** Advancing Partnerships, Collaborative Platforms, and Knowledge Networks in the Earth Sciences II
Room 2020 (Moscone West)
- IN54B** Designing a Road Map for Workflow Cyberinfrastructure in the Geosciences: From Big Data to the Long Tail (VOD)
Room 104 (Moscone South)
- OS54A** Ocean Observing Systems: Challenges and Successes IV
Room 3011 (Moscone West)