

# PECORA 21 • ISRSE 38

*Continuous Monitoring of Our  
Changing Planet:  
From Sensors to Decisions*



## Call for Abstracts


**October 6-11, 2019**

Baltimore, MD • Marriott Waterfront

<https://www.asprs.org/event/pecora21-isrse38>







The joint meeting of the 21<sup>st</sup> William T. Pecora Memorial Remote Sensing Symposium (Pecora 21) and the 38<sup>th</sup> International Symposium on Remote Sensing of Environment (ISRSE 38) will convene in Baltimore, Maryland, USA from October 6 – 11, 2019.

The conference theme is *Continuous Monitoring of Our Changing Planet: From Sensors to Decisions*. Continuous monitoring of the Earth also includes the integration and analysis of both historical and contemporary remotely sensed data occurring across spatial and temporal scales, measurement objectives, and multiple methodologies. We are now in an era where our focus is on change and dynamic processes rather than one-time static measurements. These powerful advances lead to richer, more accurate, and more frequent measurements of key Earth system properties and processes and human development patterns, which ultimately provides information needed for informed natural resources management, policy-relevant decision making, and ultimately objective scientific discourse and understanding.

The ongoing maturing of Earth observation programs, driven by an expanding demand for continuous, objective Earth measurements and enabled by advances in computing and data processing algorithms, along with data policies that democratize access to remotely sensed data, has resulted in a new generation of Earth observation science and applications activities. This new era is dramatically improving our ability to use satellite data to address problems continuously over time and space. With a goal to improve our understanding of a changing Earth, monitoring programs are increasingly able to provide information to decision makers that are not only locally relevant but also globally consistent – in near real time, and at any historical point in our Earth observation records.



The Pecora 21/ISRSE 38 Conference will be organized around four session themes spanning the Earth observations and continuous monitoring continuum. Presentations are being sought on diverse science, technology, and applications of remote sensing to understand and sustainably manage the Earth's environment and natural resources. We encourage contributions along the full value chain of Earth observation, from fundamental research on Earth system processes to operational applications, innovative techniques and future missions, as well as international programmes and coordination.

Submitted abstracts (max. 300 words) will be organized, though not exclusively, along four broad thematic areas described below:

**Understanding the Earth through continuous monitoring—**

Continuous monitoring using Earth observations provides the fundamental measurements needed to objectively understand the characteristics of Earth system properties and processes and human development patterns. Presentations that address the lessons learned about local to global changes and their implications on human and natural systems are invited.

**Societal benefits and empowering decision making—**

Continuous monitoring both supports and is shaped by the broad needs of stakeholder communities that include scientists, natural resource managers, and decision makers. We seek presentations that examine the societal benefits of using Earth observations for continuous monitoring, as well as presentations addressing how monitoring data and products are being used to empower decision making and policy action at local to global scales. Presentations focused on the integration of Earth observation monitoring capabilities into operational monitoring and reporting programs are especially welcomed.

**Technical advances in monitoring using Earth observations—**

In order to continuously monitor the Earth, technical and methodological advances are required to integrate data across Earth observation systems and extract and validate the variables needed to understand our changing planet. Advances should address Earth observation missions, instruments, algorithms and methods, and other technical aspects of continuous monitoring, as well as related activities.

**Envisioning the future of global monitoring—**

The future of global monitoring relies on robust and innovative applications that effectively translate Earth observations to societal benefits and impacts. We invite community perspectives on current challenges, emerging opportunities and desired future breakthroughs in the use of Earth observations for global monitoring. We welcome visionary presentations that address science and technology innovations, policy initiatives, improved coordination of remote sensing and *in situ* networks, and the role of STEM education.

***Abstracts  
addressing the  
conference  
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special session***





Abstracts addressing the conference themes may be submitted for general consideration, or be considered for inclusion in a proposed special presentation sessions. Additional session proposals will also be accepted during the Call for Abstracts.

### Presentation Types

- **Standard presentation:** Long-format research talk (15 minutes).
- **Special presentation session:** Inclusion in one of the sessions listed to the right. For more information on the special presentations, visit <http://pecora.asprs.org/>.
- **Short presentation:** Lightning-style research talk (3 minutes)
- **Short visualization:** Lightning-style talk focused on data visualization, e.g. map products, dashboards, interactive plots, cartographic tools (3 minutes)
- **Poster:** Poster presentation. May be considered for general poster sessions or an illustrated poster sessions where posters will be grouped by topic or theme and presenters will have 1-2 minutes to introduce their poster to attendees.
- **Workshops:** 2-hour and 4-hour pre-conference workshops.

Awards will be offered in each category above, including awards for best young professional/student talk and poster. To be eligible, presenters must request to be considered for judged awards during the abstract submission process.

### Timeline

Abstracts Due—**March 11**, 2019

Preliminary Program  
Notification—March 2019

Paper deadline—May 31, 2019

Final Program—July 26, 2019

Conference—October 6-11, 2019

### Special Presentation Sessions

- SP1—Open Data Cube: A New Data Technology for Enhancing the use of Satellite Data to Address Sustainable Development Goals
- SP2—An Overview of the current Analysis Ready Data products, tools, applications and impacts
- SP3—New Technology and Techniques to Increase Scientific and Applications Access to Satellite Earth Observations
- SP4—Lidar Vegetation Canopy Metrics—Towards Developing Standards
- SP5—High-resolution Land Cover using NAIP
- SP6—SAR for Agriculture and Perspective Applications
- SP7—Water Colour: The Canadian Perspective
- SP8—Applications of NASA Earth Observations for Local Decision Making: 20 Years of the NASA DEVELOP Program
- SP9—How No-cost Landsat Data is Reshaping College-level Remote Sensing Courses
- SP10—Societal Benefits of Earth Observations in Natural Resource Management Decision Making
- SP11—So What, Who Cares: Linking Natural and Social Science to Understand Societal Impact and Improve Decision Making
- SP12—Importance of System Calibration and Data Quality on Earth Observation
- SP13—UAS, Changing the Future of Remote Sensing
- SP14—Satellite Interoperability
- SP15—Land Imaging Capabilities and User Needs
- SP16—Air Quality Monitoring with Earth Observations for Enhanced Decision Making and Regulatory Support
- SP17—Transitional by Nature: Leveraging Remote Sensing Technology for Continuous Monitoring of Dynamic Wetland Ecosystems
- SP18—Connecting People and Pixels through Citizen Science to Enhance Global Monitoring
- SP19—Open Civil Applications Committee Meetings
- SP20—The Next Generation of the Landsat Archive
- SP21—Space Agencies Outlook
- SP22—NASA Harvest and Other Recent Advances in Remote Sensing of Agricultural Applications and Food Security
- SP23—Sustainable Land Imaging and the Future of Moderate-Resolution Land Observation
- SP24—Geospatial Fusion: Observations, Features, Decisions
- SP25—The Challenges of Integration for Arctic Monitoring
- SP26—Remote Sensing Applications for Water Resources Management, Including Droughts, Floods and Associated Water Cycle Extremes
- SP27—Communicating Science Across the Earth Observation Life Cycle