

# Pecora 20 Preliminary Program

Nov 13-16, 2017 | Sioux Falls, SD

## *Keynote Speaker –*

### **Barbara J. Ryan – Secretariat Director of the intergovernmental Group on Earth Observations (GEO)**



Ms. Ryan is the Secretariat Director of the intergovernmental Group on Earth Observations (GEO) in Geneva, Switzerland. GEO is comprised of 104 Member States, the European Commission, and 109 international scientific and technical partner organizations. Since becoming Director of GEO in 2012, Ryan has worked to integrate Earth observation systems from around the world into a single, comprehensive system that uses coordinated data to understand how environmental factors impact human life. Prior to her work at GEO, she was the Associate Director for Geography at the USGS, where she was responsible for the agency's remote sensing, geography and civilian mapping programmes, including the Landsat satellites. It was during this time she led the effort to change the decade-old Landsat data policy to full and open, an action resulting in more than 42 million scenes being downloaded globally to date. Ryan has served as chair of the international Committee on Earth Observation Satellites, which coordinates information from more than 100

civilian satellite missions, and in 2008, became director of the World Meteorological Organization's space programme. Ryan has been awarded an honorary doctorate of science degree from SUNY Cortland. She was recently named an Honorary Fellow of the American Geographical Society, and in January 2017, was one of 10 global leaders to be named to the Geospatial World Forum's Hall of Fame.

### **Michael H. Freilich – Director, Earth Science Division at NASA Headquarters**



Dr. Freilich is the Director of NASA's Earth Science Division. The purpose of NASA's Earth science program is to develop a scientific understanding of Earth's system and its response to natural or human-induced changes, and to improve prediction of climate, weather, and natural hazards. A major component of NASA's Earth Science Division is a coordinated series of satellite and airborne missions for long-term global observations of the land surface, biosphere, solid Earth, atmosphere, and oceans. This coordinated approach enables an improved understanding of the Earth as an integrated system. Prior to coming to NASA, he was a Professor and Associate Dean in the College of Oceanic and Atmospheric Sciences at Oregon State University. He received BS degrees in Physics (Honors) and Chemistry from Haverford College in 1975 and a Ph.D. in Oceanography from Scripps Institution of Oceanography in 1982. Dr. Freilich's honors include the JPL Director's Research Achievement Award (1988), the NASA Public Service Medal

(1999), and the American Meteorological Society's Verner E. Suomi Award (2004), as well as several NASA Group Achievement awards. He was named a Fellow of the American Meteorological Society in 2004.

## **Plenary sessions**

- Current state of Earth observations
- Pecora award presentation and panel of recent Pecora award winners discussing progress and challenges in remote sensing
- Trends in big data analytics and progress in using Earth observations
- New breakthroughs in Earth observations and applications

## Special Oral Sessions

- Evolution of Global Land Cover Mapping: History and New Developments (Chairs: Zhiliang Zhu and Brad Reed)
- Monitoring Land Cover and Land Cover Change using Satellite-derived Time-series Data (Chairs: George Xian and James Vogelmann)
- Landsat-derived Global Cropland Products at 30-m (LGCP30) (Chair: Prasad Thenkabail)
- Landsat & Sentinel 2 Calibration (Chair: Dennis Helder)
- National-scale Data Coordinated Within the Multi-Resolution Land Characteristics Consortium (MRLC) (Chair: Collin Homer)
- Great Lakes Remote Sensing (Chair: Brian Huberty)
- Training Next Generation Remote Sensing Scientists (Chair: Rebecca Dodge)
- Land Change Monitoring, Assessment, and Projection (Chair: Thomas Loveland)

## Town Hall Sessions

- Landsat 10 User Needs (POC: Zhuoting Wu)  
In this town hall, the USGS will provide an overview of the Landsat 10 user requirements collection process and summary results followed by a question-and-answer session. The USGS and NASA are working together to develop Landsat 10, scheduled to launch in the 2027 timeframe as part of the Sustainable Land Imaging program. The USGS Land Remote Sensing Program has collected user requirements from a range of applications to help formulate the Landsat 9 follow-on mission (Landsat 10) through the Requirements, Capabilities and Analysis (RCA) activity. User requirements collected through RCA will help inform future Landsat 10 sensor designs and mission characteristics. Current Federal civil community users have provided hundreds of requirements through systematic, in-depth interviews. Academic, State, local, industry, and international Landsat user community input was also incorporated in the process. Emphasis was placed on spatial resolution, temporal revisit, and spectral characteristics, as well as other aspects such as accuracy, continuity, sampling condition, data access and format. This is an opportunity for government, academia, industry users, and data and value-added products providers to learn about the RCA activity and have an open-forum exchange on future Landsat 10 user needs and capabilities.
- EROS Data User Group (POC: Rynn Lamb and Raad Saleh)  
In early 2018, USGS/EROS expects to launch a new initiative to support direct engagement with the Landsat and related remote sensing community through formation of an EROS Data User Group (EDUG). The primary purpose of this user group will be to: (1) provide operational users of Landsat and related products an opportunity and platform to discuss opinions, needs, and concerns in a structured manner; (2) obtain user feedback and input for potential incorporation into EROS operations to support the continuous improvement of USGS products and services; and (3) provide for targeted communications and direct feedback from selected members of the user community regarding internal development efforts.  
This town hall session will provide a high-level description of the proposed user group and allow for input and feedback from the Pecora science and applications community. Key elements planned for discussion include: user group description and mission, justification, roles and responsibilities, membership, communication mechanisms, and proposed operational flow.