

Earth Observation-Related Activities at IAC Adelaide
International Astronautical Congress
Adelaide, Australia
25-29 September 2017

Organized by the IAF Earth Observation Committee and the GEOSS Subcommittee



Status: July 20th 2017

Monday, 25 September 2017

B.1.1 Technical Session: International Cooperation in Earth Observation Missions

15:15-18:15, Hall E2

Covers broad program perspectives including current activities of the Committee on Earth Observation Satellites, as well as reviews of the Landsat and SPOT programs, FIRE monitoring for Australia, collaborative SAR solutions, small precipitation radar constellations, and overviews of Brazil-China collaboration, and Italian and Mexican Earth observation activities.

Speakers:

Mr. Jonathon Ross, Australia
Dr. Ikuko Kuriyama, Japan
Dr. Winfried Halle, Germany
Prof. Tony Milne, Australia
Dr. Ming Li, China
Dr. Maria Libera Battagliere, Italy
Mr. Yusuke Muraki, Japan
Mr. Edilberto Hernandez, Mexico
Mr. Wasanchai Vongsantivanich, Thailand

Tuesday, 26 September 2017

B.1.2 Technical Session: Future Earth Observation Systems

9:45-12:45, Hall E2

Covers future programs in China and ESA, as well as monitoring systems, individual instrument and nanosat developments, and commercial plans.

Speakers:

Dr. Ming Li, China
Mr. Danilo Muzi, ESA (Netherlands)
Mr. Frank te Hennepe, Germany
Mr. Pierre-Alexis Journel, Germany
Mr. Ahmed Kiyoshi Sugihara El Maghraby, UK
Prof.Dr. Arnold Dekker, Australia
Mr. Mattia Marengo, Germany
Mr. Eugene Kim, Australia
Dr. Denis O'Brien, Australia
Mr. Binglei SUN, China

Wednesday, 27 September 2017

B.1.3 Technical Session: Earth Observation Sensors and Technology

9:45-12:45, Hall E2

Covers individual sensor developments with an understanding of the underlying science and technology.

Speakers:

Mr. Luís Ferreira, Germany
Prof. Craig Underwood, United Kingdom
Dr. Marco Molina, Italy
Dr. Chen Xiaoli, China
Dr. Sergiy Matviyenko, Ukraine
Mr. Roland Le Goff, France
Prof. Sergio Cunha, Portugal

Thursday, 28 September 2017

Plenary Event 8: From Up There to Down Here Big Space Data Driving Sustainable Development and Economic Growth on Earth

08:30 – 09:30, Hall C

This Plenary Event will connect and explore how the dramatically expanding and increasingly diverse “big space data” sets stemming from satellite-based Earth observations can be leveraged to support global objectives for sustainable development and economic growth on Earth and, ultimately, beyond it. Space captures our imagination. Observations from space give us insights into who we are, where we have been, and where we may be headed. They help us test and stretch the limits of our technical and scientific capabilities. They help us think about where we, as humanity, might choose to go in the future.

Plenary Event Panelists:

Stuart Minchin of Geoscience Australia

Aditya Agrawal, Director, Data Ecosystems Development, Global Partnership for Sustainable Development Data (GPSDD) of the United Nations

Grega Milcinski, Chief Executive Officer and Co-Founder, Sinergise

Brendan Bouffler, Manager, Web Services Research Cloud Program, Amazon Web Services

Moderator: Harry Cikanek, Director (Acting), Center for Satellite Applications and Research, U.S. National Oceanic and Atmospheric Administration

B.1.6 Technical Session: Big Data, Data Cubes and New Platforms to Exploit Large-Scale, Multi-Temporal Earth Observation Data

9:45-12:45, Hall E2

Covers the topics of “big data initiatives and implementation of various related programs. Focus is on the new cloud and GIS-inspired software platforms and new operational models that allow users to exploit the large datasets provided by the new generation of EO sensors.

Speakers:

Dr. Trevor Dhu, Australia

Mr. Jonathon Ross, Australia

Dr. Vanessa Keuck, Germany

Dr. Matthew Purss, Australia

Mr. Wolfgang Lueck, Canada

Dr. Stefano Speretta, The Netherlands

Ms. Dimitra Stefoudi, The Netherlands

Global Networking Forum (GNF): The Status of Citizen Science in Global Earth Observation Systems

12:30-1:30 (location to be confirmed)

GNF Panelists:

James Graf, NASA/JPL

Isabelle Kingsley, University of New South Wales, Australia

3rd panelist TBD

Moderator: Jessica Culler, NASA Ames Research Center (to be confirmed)

B.1.5 Technical Session: Earth Observation Applications and Economic Benefits

14:45-17:45, Hall E2

Covers various specific Earth science applications, epidemiology, machine learning, and disaster management.

Speakers:

Dr. Danielle Wood, United States
Dr. Felix Kogan, United States
Mr. Shabarinath Nair, India
Ms. Natalia Indira Vargas-Cuentas, China
Mr. Chris Penning, Australia
Prof. Giancarlo Santilli, Brazil
Dr. Paul Stewart, The Netherlands
Dr. Rushi Ghadawala , India
Ms. Mónica Estébanez Camarena, South Africa
Mr. Samuel Malloy, United States
Ms. Ariadna Martinez Gonzalez, United States

Highlight Lecture 3: The Great Barrier Reef: Assessing its Health from Space **Lecturer: TBD, Australia**

17:45-18:45, Hall C

Stretching for over 2300 km, Australia's Great Barrier Reef (GBR) is one of the great natural wonders of the world. It is home to a vast number of marine species and provides recreational opportunities for visitors from all over the globe. The GBR hosts more than 600 different types of soft and hard coral, and fish and mollusk species number in the thousands; while sharks, whale and dolphin species number in the hundreds. Overall, the GBR is one of the most biologically diverse spots on the globe. This vast number of ecological communities make it one of the world's most complex natural ecosystems. Satellite observations are helping to monitor its health. This gem of the world is under severe attack. Coral bleaching is devastating the very fabric of the reef.

This Highlight Lecture will discuss: 1) the history of the GBR; 2) the health of the GBR; 3) the causes of the attack; 4) how we can measure and track the conditions from space; and 5) what the prognosis is for the GBR and the species that reside there.

Friday, 29 September 2017

B.1.4 Technical Session: Earth Observation Data Management Systems

9:45-12:45, Hall E2

Covers methods for managing, calibrating, and interpreting data.

Speakers:

Dr. Anthony Rea, Australia
Mr. Zhihui Zheng, China
Prof. Marco Schmidt, Germany
Dr. Timothy Newman, United States
Dr. Michal Kawulok, Poland
Ms. Alya AlMaazmi, United Arab Emirates

Global Networking Forum (GNF): 2026Agenda: Advancing Australia's Space and Spatial Capability

12:30-1:30 (location to be confirmed)

The Australian spatial sector launched its 2026 Spatial Industry Transformation and Growth Agenda (2026Agenda) Action Plan in April 2017. The 2026Agenda is a 10-year rolling Action Plan and roadmap, developed in consultation with more than 500 individuals of business, government, research, academia and spatial-user organisations in Australia.

Presenter: Dr. Peter Woodgate, CEO, Australia and New Zealand Cooperative Research Centre for Spatial Information

GNF Panelists:

Ms. Andrea Boyd, ISS Flight Operations Engineer, European Space Agency
Mr. Phil Delaney, Executive Officer, 2016 Spatial Industry Transformation and Growth Agenda
Mr. Gary Maguire, Department of the Premier and Cabinet, Government of South Australia
Dr. Naomi Mathers, Deputy Chair, Space Industry Association of Australia
Dr. Stuart Minchin, Chief, Environmental Geosciences Division, Geoscience Australia
Professor Stuart Phinn, Chair, Australian Earth Observation Coordinating Group
Speaker TBC, Airbus Defence and Space Australia