## Report on 37<sup>th</sup> ISRSE – 8-12 May 2017, at CSIR in Tshwane, South Africa

The International Symposium on Remote Sensing of the Environment is the longest running conference on remote sensing, having commenced in 1962, although it has been rebadged over the period. The Symposium is managed by the space agencies around the world, on this occasion it was organised by the South African National Space Agency (SANSA) and held at the CSIR International Convention Centre in Tshwane (formerly Pretoria) South Africa. There were 587 attendees from 56 countries, with a good attendance from Australia. There were 463 oral presentations and 80 poster papers; 43 full papers were submitted and will be available through the ISPRS <a href="http://www.isprs.org/publications/archives.aspx">http://www.isprs.org/publications/archives.aspx</a>. The themes of the conference were as follows:

- Biodiversity and Ecosystems
- Disasters Resilience and Geohazards
- Energy and Mineral Resource Management
- Food Security and Sustainable Agriculture
- Public Health Surveillance
- Sustainable Urban Development and Infrastructure and Transport Management
- Water Resource Management
- Marine and Coastal Environment, Resources and Dynamics
- Climate, Weather, Atmosphere and Polar and Cold Regions
- Forest and Carbon Cycle
- Data and Information Systems and Spatial Data Infrastructure
- Airborne Platforms, Sensors, In-situ Measurements and Innovative Techniques
- International, Regional and National EO Programmes, Education and Outreach
- Current and Future EO Missions and Programmes

Not all themes were addressed with the same number of presentations, multiple sessions being held for some of the themes. Plenary sessions were held each day with invited speakers presenting their views on topics of the plenary session. A normal characteristic of ISRSE is the presentation of details of planned new spacecraft and this event was no exception. As well, ISRSE are considered to be the meeting where participants in GEO (Group on Earth Observation) can meet in side events. On this occasion a day and half Geo program symposium was held following ISRSE event.

Given the large number of presentations in up to 7 parallel sessions held at this Symposium, often programmed from 8.30am to 7pm, it is impossible to summarise the content of all of the sessions. Therefore people interested in following up the speakers at the sessions should review the technical program <a href="https://confmanage.eventsair.com/QuickEventWebsitePortal/isrse-37/conference-site/Agenda">https://confmanage.eventsair.com/QuickEventWebsitePortal/isrse-37/conference-site/Agenda</a> and contact the speakers directly.

Some highlights are as follows:

- The significant number of new satellite missions aimed at measurements of various aspects of the environment, especially those planned to acquire improved understanding of the impact of climate change.
- An emphasis was given at a number of sessions on how earth observation can contribute to the UN Sustainability Goals (SDG) and UN Agenda 2030. It is expected that future ISRSE will also feature considerations on how earth observation can contribute to the UN SDGs.
- The applications of Sentinels 1 and 2 satellite data for many varied applications.
- Several assessments were made on the societal benefits of earth observation, where the
  provision of jobs was emphasised. The European Space Agency (ESA) for example estimated
  that the Jobs resulting from Sentinel data in the upstream amounts to between €7.5 billion
  to €15.5 billion.
- An African space policy was described involving EO, PNT, communications, space science and astronomy, leading to Agenda 2063.

The 38<sup>th</sup> ISRSE is likely to be held in North America, with the high probability that it will occur in Bolder USA in 2019.

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