

ISRSE-37 Call for Papers

The South African National Space Agency, the International Centre for Remote Sensing of Environment (ICRSE) and the International Committee on Remote Sensing of Environment (ICORSE) take pleasure in issuing this call for papers for ISRSE-37 under the overarching theme of “Earth Observation for Development and Adaptation to a Changing World”.

Papers are sought on diverse applications of remote sensing to understand and sustainably manage the environment and natural resources in the light of global change. 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. The Symposium will be particularly, though not exclusively, organised along broad 14 thematic areas described below. The ISRSE-37 Technical Programme Committee will consider and evaluate all abstracts received for inclusion in oral or poster sessions.

Abstracts (max. 300 words) submitted should focus on one of the following themes with subtopics given as examples of topics of sessions:

- 1 Biodiversity and Ecosystems** Savannas and woodlands; wetlands; land cover monitoring; maintaining ecosystem services; land surface dynamics, sustainable management, wildfires and biodiversity conservation; wild life monitoring
- 2 Disasters Resilience:** Understanding disasters including fire, earthquakes, hurricanes and floods; preparedness in high risk regions, real-time alerting and mitigation; reducing loss of life and property from natural and human-induced disasters; humanitarian support, subsidence
- 3 Energy and Mineral Resources Management:** Exploration and exploitation of non-renewable energy resources and minerals, renewable energy; sustainable use of energy resources; mitigating impacts on the environment in exploring energy resources
- 4 Food Security and Sustainable Agriculture:** Supporting sustainable agriculture; fighting poverty and hunger; fighting plant diseases; small scale subsistence agriculture; drought; food security and early warning; combating desertification; land use change; commodity agriculture
- 5 Public Health Surveillance:** Human health; vector borne disease, water-related illness, impact of extreme weather on health; air quality and health
- 6 Sustainable Urban Development and Infrastructure and Transport Management:** Understanding and monitoring human settlements and urbanisation; socio-economic development; spatial development and planning; cultural heritage monitoring and preservation; archaeology; Smart Cities; border security monitoring; support for planning, monitoring and management of infrastructure (dams, roads, rail, ports, and pipelines) and transportation (air, land and sea)
- 7 Water Resources Management:** Improving water resource management through better understanding of the water cycle; water quality in water bodies; soil moisture; precipitation and evapotranspiration; invasive species in water bodies; land use and agriculture affecting the water cycle
- 8 Climate, Weather, Atmosphere and Polar and Cold Regions:** Greenhouse gas observing and monitoring systems; assessing, predicting, mitigating, and adapting to climate variability and change; improving weather information; impact of El Niño events; weather forecasting, warning and understanding; monitoring atmospheric trace gases and parameters; understanding, monitoring and managing polar oceans; alpine environments; ice, glaciers and snow

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- 9 Marine and Coastal Environment, Resources and Dynamics:** Understanding and monitoring marine and coastal environment and resources; ocean state and dynamics including wind, waves, currents, salinity and temperature; ship traffic, offshore operations and marine pollution monitoring
- 10 Forests and Carbon Cycle:** Measurement, reporting and verification for REDD+; carbon stocks and fluxes; forest characterisation and biomass estimation; data model integration for estimating emissions; monitoring of deforestation and forest degradation; forest restoration; climate change impacts on forests; data interoperability and time series analysis
- 11 Data and Information Systems and Spatial Data Infrastructure:** Systems to manage, process, store and distribute Earth observation data and products; standards, interfaces and systems for spatial data; computationally intensive data processing, big data analytics and visualisation, real-time operational systems; crowd sourcing; topography; digital elevation models; Digital Earth
- 12 Airborne Platforms, Sensors, In-situ Measurements and Innovative Techniques:** Airborne platforms and campaigns; novel manned or autonomous aerial vehicles; novel sensors; multi-sensors techniques and interoperability; in-situ observing systems and measurements; citizen observatories
- 13 International Regional and National EO Programmes, Education and Outreach:** Progress and impact of international programmes , e.g. CEOS, GEO, AfriGEOSS; Earth observation of sustainable development goal indicators; mainstreaming EO into governments; socio-economic impacts of EO; education and outreach
- 14 Current and Future EO Missions and Programmes:** Status and planning of the latest and future Earth observation missions and programmes; nano-satellites

Conference venue and Exhibition

ISRSE 37 will take place at the CSIR International Convention Centre (CSIR ICC), Tshwane, South Africa.

The ISRSE 37 will have a dedicated exhibition area where local and international remote sensing and GIS companies as well as space agencies can present their latest remote sensing programmes, products and services.

Website and 1st announcement

A dedicated website, www.isrse37.sansa.org.za will go live in May 2017 with more information on the above and items such as registration, accommodation, side events, social events and technical tours.

Tentative dates

1st Announcement and Call for Papers	May 2016
Abstract Submission System opens	June 2016
Deadline for Abstract and Workshop Proposal Submission	End September 2016
Abstract Acceptance Notification, Call for full Paper	End November 2016
2nd Announcement and Preliminary Programme, Registration opens	Early December 2016
End of Early Bird Registration	Early March 2017
Deadline for full Paper Submission, Author Registration Deadline	End March 2017
3rd Announcement and Draft Final Program published on website	Early April 2017
Close of On-line Registration	End April 2017
Exhibition Build-up, Workshops, On-site Registration opens	7 May 2017
Convene ISRSE 37	8 May 2017