

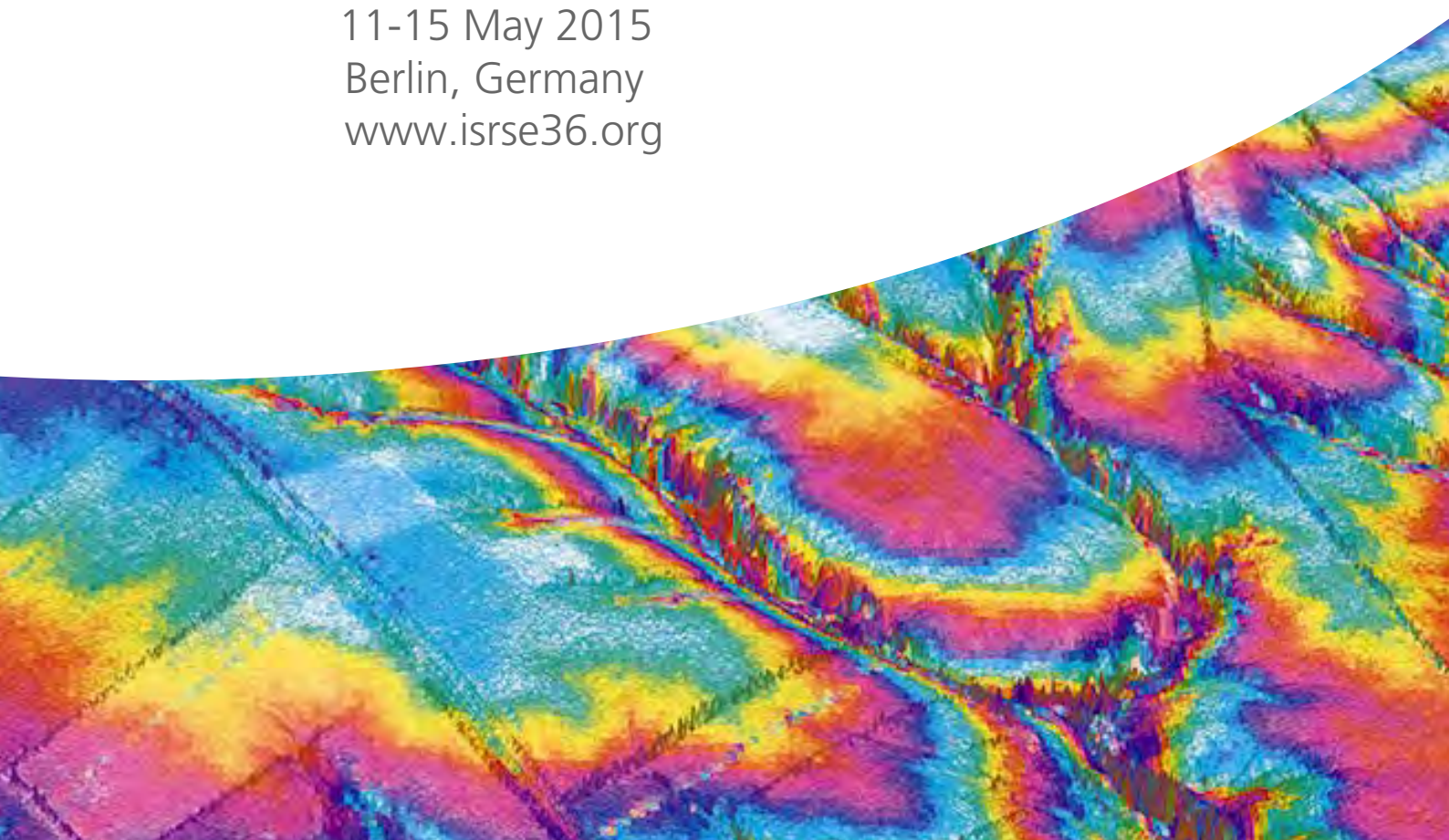


Second Announcement  
and Preliminary  
Programme

## 36th International Symposium on Remote Sensing of Environment

“Observing the Earth, Monitoring the Change,  
Sharing the Knowledge”

11-15 May 2015  
Berlin, Germany  
[www.isrse36.org](http://www.isrse36.org)



Host: German  
Aerospace Center



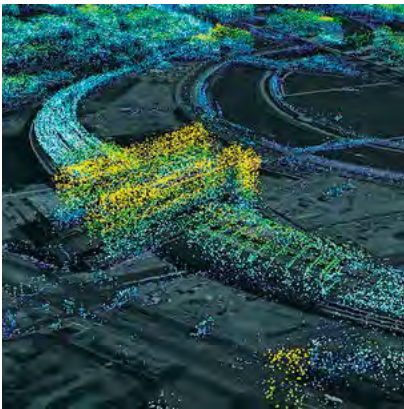
in partnership with the  
International Center  
for Remote Sensing of  
Environment.



ISRSE is an International  
Society of Photogrammetry  
and Remote Sensing  
Symposium



## Invitation



Berlin Central Station and surroundings, observed by TanDEM-X. © DLR

**You are invited to the 36<sup>th</sup> International Symposium on Remote Sensing of Environment (ISRSE), which will take place on May 11-15, 2015 in Berlin, Germany. This 36<sup>th</sup> Symposium will represent a major event in the long series of internationally recognized ISRSE meetings. The overall theme of the symposium is the use of Earth Observation systems and related Remote Sensing techniques for understanding and managing the Earth environment and resources.**

ISRSE-36 takes place at a significant moment: The process to define the UN global development agenda post 2015 with its Sustainability Development Goals will be finalized in 2015. The Future Earth initiative has been created as a global platform to deliver solution-orientated research for sustainability. Among its key challenges are innovative approaches to integrate knowledge systems (data, observation, modelling, etc.), including remote sensing of the environment. A second Hyogo Framework of Action with its goal to substantially reduce disaster losses is set to be launched in 2015, where Earth observation approaches play an increasing role in making societies resilient to disasters. The global Group on Earth Observations (GEO), together with its partners, such as the Committee on Earth Observing Satellite (CEOS), addresses all of these political and scientific agendas while it currently prepares for its second implementation phase 2016-2025. International science organisations, such as the International Society of Photogrammetry and Remote Sensing (ISPRS) are adapting their structure to master the research and development included in these challenges. ISRSE-36 will be an excellent forum to present results from past and current scientific achievements related to those international developments, as well as to discuss future plans for them. ISRSE-36 will feature recent milestones in the development of Earth observation programmes addressing sustainable development, global environmental issues and resilience to disasters:

- The European Union's Earth Observation Programme Copernicus, managed by the European Commission in partnership with the European Space Agency (ESA), has gone operational in 2014. The first mission of its dedicated Sentinel satellite fleet, Sentinel-1A, has been launched successfully. The next mission, Sentinel-2, is scheduled to be launched shortly after the conference. Other missions will follow soon.
- The Symposium will also devote attention to other significant Earth Observation programmes world-wide, public as well as private, such as the US Land Imaging Programme and its Landsat legacy, the SPOT, Radarsat, ALOS or CBERS programmes, and ESA's Living Planet programme.
- New information technologies are applied to master the amount of digital data, delivered by all these missions and turn them into new geoinformation products and global science results. The Symposium will feature key results in "big data in earth observation" projects.
- The German Aerospace Center DLR is operating very successfully the TerraSAR-X mission and, together with its twin satellite, the TanDEM-X mission. 2015 will witness the full completion of the TanDEM-X global Digital Elevation Model. This will be an unique dataset with unprecedented quality and coverage. The RapidEye mission has been launched in 2008, where DLR supports its scientific exploitation. DLR also prepares for the EnMAP Hyperspectral Imaging mission to be launched in 2017.

ISRSE-36 will provide an outstanding opportunity to learn about these major programmes and their first results. It will be an important forum to present applications based on these new missions and to exchange views on future directions of Earth Observation technology and geographic information management. The Symposium will include plenary and thematic sessions, poster sessions and side events on issues of interest to scientists, policy makers and resource managers in the public and private sectors. The programme will feature speakers from around the globe sharing their

experiences and knowledge on Earth observation applications and programmes. By attending the ISRSE-36, practitioners, scientists, policy makers, system engineers and students will be able to get a full view of the current situation in a range of fields now deemed critical in the Earth's sustainable management.

## Preliminary Programme

### Technical Sessions

ISRSE-36 has called for papers on the following themes:

- Agriculture and Food Security [AGRI]
- Forests, Biodiversity and Terrestrial Ecosystems [BIOD]
- Atmosphere, Weather and Climate [ATMC]
- Natural Disasters Monitoring, Warning and Response [DISA]
- Energy and Geology [ENGY]
- Water Cycle [WACY]
- Marine and Coastal Environment, Resources and Dynamics [MARI]
- Polar and Cold Regions [POLA]
- Socioeconomic Issues including Health, Urbanization and Human Heritage [SOCl]
- Data and Information Systems and Spatial Data Infrastructures [DATA]
- Airborne and Innovative Remote Sensing Platforms and Techniques [SENS]
- National, Regional and International Programs including Education and Outreach [PROG].

The 36<sup>th</sup> ISRSE Technical Programme Committee has accepted a total of 718 papers. Over 480 of these are scheduled as oral presentations organized in 64 oral sessions, occupying some 90 timeslots of 90 minutes with 5-6 presentations each. The other abstracts are scheduled as poster presentations and will be organized in 4 dedicated poster sessions.

Oral presentations (max 15 minutes including questions) will be thematically grouped and conducted in up to eight parallel sessions. Poster presentations will take place during dedicated poster sessions in the conference schedule.

Please note: Authors must register before 25 March 2015 to guarantee their contribution being included in the final programme. According to ISRSE policy, only papers presented at ISRSE-36 will be published in the ISRSE Proceedings.

To increase the science impact of the ISRSE-36, it is planned to publish selected papers in a Special Issue of the "ISPRS Journal of Photogrammetry and Remote Sensing". Details on this Special issue and the selection of contributions will be available shortly before the Symposium.

### Plenary Sessions

In addition to the technical sessions, the conference will see five plenary sessions (one each day). These sessions are intended to address more strategic issues in Remote Sensing of the Environment. **Numerous high-ranking experts** and leaders in Remote Sensing have already confirmed their participation and will ensure interesting insights and visionary discussions.

### Side Events

A couple of side events on special themes will complement the symposium programme. Different workshops and other meetings related to Remote Sensing of the environment are being planned. Please note there is still some room available. If you are interested please contact the symposium management at [ISRSE36@dlr.de](mailto:ISRSE36@dlr.de).

Please find a full Preliminary Programme at the end of this document and online at [www.isrse36.org/prelim-programme/](http://www.isrse36.org/prelim-programme/).

## Exhibition and Sponsoring

The 36<sup>th</sup> ISRSE Symposium will be accompanied by a dedicated exhibition. Traditionally, major Remote Sensing and GIS companies as well as Space Agencies present their latest Remote Sensing programmes, products and services. ISRSE is a unique marketing opportunity to expose products, equipment and services to quality visitors in a short space of time, and for face to face contacts with the industry's Who's Who. The Symposium is an excellent investment in cost-effective advertising and the ideal platform to launch new products, make announcements and present the latest innovations and technological developments. Different exhibition and sponsorship categories will provide flexible and tailor-made opportunities for interested companies and institutions. Note that we still have room available for additional exhibitors. For more information, please go to [www.isrse36.org/exhibit-sponsoring/](http://www.isrse36.org/exhibit-sponsoring/). A number of sponsors and exhibitors have already signed up: [www.isrse36.org/sponsors/](http://www.isrse36.org/sponsors/).

## Conference Venue



Photo: Berlin Conference Center © bcc

ISRSE-36 will take place at the Berlin Conference Center (bcc), situated in the heart of Berlin at Alexanderplatz square, within walking distance to the famed Museum Island, the Boulevard "Unter den Linden", and to Checkpoint Charlie and Brandenburg Gate Monuments, to name just a few sites. Built in the early 1960's by Hermann Henselmann, Bauhaus-influenced star architect of the German Democratic Republic (GDR), the bcc is an exceptional and visionary architectural example of that time. It has been completely refurbished some ten years ago, offers up-to-date presentation and communication infrastructure and now hosts around 50 large-scale conferences every year. See [www.bcc-berlin.de/en](http://www.bcc-berlin.de/en).

### About Berlin

Berlin is a dynamic and creative city where tradition and innovation coexist in a climate of freedom. Germany's largest city offers a myriad of opportunities in areas such as media, culture, development, science and industry. Since the fall of the Wall on 9 November 1989, the city has undergone rapid and dramatic change. And as Germany's capital, it is the seat of the German parliament and government. Berlin is renowned as one of the most exciting places in the world. It has been a city of knowledge and culture since the days of Friedrich the Great in the 18th century. The political and cultural developments of the 19th and 20th century are visible throughout Berlin's cityscape, reflecting both the history of architecture and various approaches to dealing with the consequences of war and destruction. The city reflects the rapid succession of influences and trends, and this juxtaposition and collision of styles makes the city especially appealing to young people from all over the world. They set new trends and, with their individualized lifestyles, are a part of the creative atmosphere the city generates. The city's night life tempts visitors with countless bars, discos, and clubs – which can stay open all night if they like – and with exhibitions and open-air events.





Photo: Brandenburg Gate,  
© dpa, taken from [www.berlin.de](http://www.berlin.de)

## Travel and Accommodation

General Information on travel and accommodation for your trip to Berlin is provided for you at [www.isrse36.org/accommodation-travel/](http://www.isrse36.org/accommodation-travel/).

Your individual **Visa Regulations** for Germany can be found out from the **German Federal Foreign Office Website**. All registered participants whose payment has been received can request an official Letter of Invitation confirming your registration. If you have already registered, you may request this letter by email to [isrse36@dlr.de](mailto:isrse36@dlr.de).

A range of competitively priced **Accommodation Options** has been blocked for the ISRSE-36. To get further information on options and to make your reservation, please visit the dedicated hotel booking system we provide at [www.isrse36.org/hotel-information/](http://www.isrse36.org/hotel-information/).

The 36th ISRSE Organizing Committee is pleased to offer a **Travel Support Programme** for PhD students and researchers from Europe and developing countries. Travel grants are limited to reimbursement of actual travel and accommodation expenses after the conference ends and do not cover registration rates. To qualify for travel support, the applicant must both be the first author of an accepted abstract and having a plausible need for travel support. The detailed application must be sent as soon as possible, but no later than 15 February 2015 to [isrse36@dlr.de](mailto:isrse36@dlr.de). Please find detailed conditions and requirements at [www.isrse36.org/travel-support-programm/](http://www.isrse36.org/travel-support-programm/).

## Social Programme

An **Icebreaker Reception** will be held on Monday 11 May at 18:00 hrs at the conference venue. Participation is free for registered participants.

The **Symposium Banquet** will take place on Wednesday 13 May starting at 19:00 hrs. It will be held on a three hours guided boat tour on the river Spree through the city center of Berlin. You will experience many important historic sites, while you pass the world famous museum island, the former Berlin wall and the government quarter. During your boat trip, you will enjoy a buffet dinner and drinks, while you get all information you need about Berlin from an English speaking guide. Booking is done via the general registration process at [www.isrse36.org/registration/](http://www.isrse36.org/registration/). The costs are 80 € (incl. VAT).

Additionally, 3 **Technical Tours** are offered. They will take place after the closing of the conference on Saturday 16 May. Booking is done via the general registration process at [www.isrse36.org/registration/](http://www.isrse36.org/registration/). The costs are 16 € (incl. VAT) for each of the tours.

### Tour 1: Visit of the German Aerospace Center (DLR) in Neustrelitz

The Neustrelitz site of DLR is approximately 100km north of Berlin in the state of Mecklenburg-Vorpommern, and is the workplace of about 60 scientists, engineers and clerical staff. Earth Observation and Navigation are its main focus. The site hosts a department of DLRs German Remote-sensing Data Centre and Institute for Communication and Navigation and features multiband antennas for data reception, data management systems and validation and test environments for remote-sensing satellites. You will get information about its daily work, e.g. about real-time processing for maritime security and satellite data archiving.



Photo: Spree river cruise through central Berlin. © Stern & Kreis



Photo: DLR site Neustrelitz. © DLR

### Tour 2: Visit of the German Aerospace Center (DLR) in Berlin-Adlershof

Berlin-Adlershof is one of Germany's largest science and technology parks. Alongside the DLR, numerous other aviation and aerospace businesses are located at Adlershof. Its history began in 1909 with Germany's first motorized flight. The Johannisthal airfield quickly became a meeting place for the daring pioneers of aviation and their flying machines. On this tour you will experience this unique period in history as well as today's scientific and technical achievements of Adlershof.



Photo: Einstein Tower at Telegraphenberg  
Potsdam. © AIP

### Tour 3: Visit of German Research Centre for Geosciences (GFZ) in Potsdam

You will visit the historic Science Park "Albert Einstein" on Telegraphenberg in Potsdam, some 30 min. southwest of Berlin, featuring numerous historic scientific installations and observatories including the famous Einstein Tower. Nowadays, Telegraphenberg is home for many research facilities, including the German Research Center for Geosciences (GFZ), the Potsdam Institute for Climate Impact Research (PIK), the Potsdam section of the Alfred Wegener Institute for Polar and Marine Research (AWI), and the Astrophysical Institute Potsdam (AIP). The object of research of the GFZ is the Earth System – our planet, on and from which we live. The history of the Earth and its characteristics, as well as the processes which occur on its surface and within its interior, are studied.

Additionally, a counter of the Berlin tourist office will be at your disposal at the conference venue to offer you tailor-made options for social and cultural activities.

## Registration

All symposium participants, including speakers/authors, are required to register and pay the participant registration fee. Symposium badges will be required for all activities. Full payment must accompany registrations. Each participant requires individual registration.

|  |                    |       |
|--|--------------------|-------|
| <b>Registration Early Bird Rate</b><br>= until 15 February 2015    | Regular            | 650 € |
|  | Student            | 300 € |
|  | Single Day Regular | 300 € |
|  | Single Day Student | 150 € |
| <b>Registration Standard Rate</b><br>= 15 February - 15 April 2015 | Regular            | 750 € |
|  | Student            | 350 € |
|  | Single Day Regular | 350 € |
|  | Single Day Student | 175 € |
| <b>Registration Onsite Rate</b><br>= from 10 May 2015              | Regular            | 800 € |
|  | Student            | 375 € |
|  | Single Day Regular | 375 € |
|  | Single Day Student | 190 € |

Registration fee includes VAT. Online registration is open from 1 December 2014 and closes on 15 April 2015 and available on the Symposium website at [www.isrse36.org/registration/](http://www.isrse36.org/registration/).

The registration fee for participants includes admission to all areas of the Conference Center, access to sessions, exhibition and side events, conference kit (with copy of programme and USB stick with final papers), access to conference programme app (Android and iOS), coffee breaks, Icebreaker reception on 11 May.

## Important Dates

|   |                  |
|---|------------------|
| 1st Announcement and Call for Papers                                | 2 June 2014      |
| Abstract Submission System opens                                    | 1 July 2014      |
| Deadline for Abstract and Workshop Proposal Submission              | 25 October 2014  |
| Registration opens  | 1 December 2014  |
| Abstract Acceptance Notification, Call for full Paper               | 6 December 2014  |
| 2nd Announcement and Preliminary Programme,                         | 22 January 2015  |
| End of Early Bird Registration                                      | 15 February 2015 |
| Deadline for Travel Support Applications                            | 15 February 2015 |
| Deadline for full Paper Submission,<br>Author Registration Deadline | 25 March 2015    |
| 3rd Announcement and Draft Final Program                            | 15 April 2015    |
| Close of On-line Registration                                       | 15 April 2015    |
| Exhibition Build-up, Workshops, On-site Registration opens          | 10 May 2015      |
| Convene ISRSE 36  | 11 May 2015      |

## Full Preliminary Programme

**Note:** While great care has been taken with preparing this preliminary programme, it is clearly at a preliminary stage and as such may be subject to modifications, e.g. with respect to assignment of papers to sessions, timing of sessions, etc..

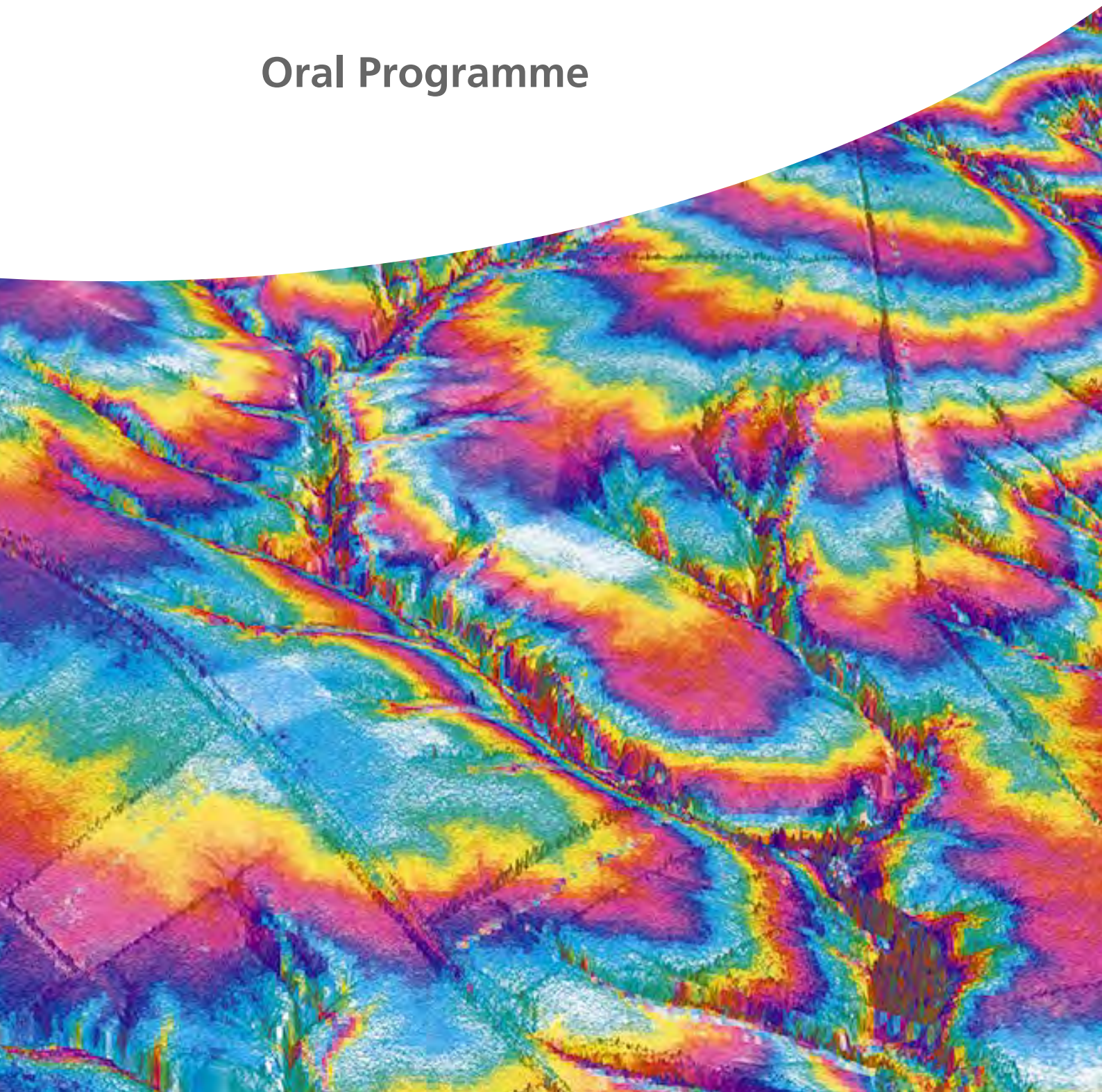
- [Session Time Planer](#)
- [Oral Programme](#)
- [Poster Programme](#)







## Oral Programme



# isrse36: Oral Programme

**Monday, 11 May 2015**

## **OPEN Opening Ceremony**

**Lecture Room:** Berlin (C01)  
**09:00–09:50**

Welcome from the Federal Government, Sigmar Gabriel, Federal Minister for Economy and Energy

Welcome from the Host DLR, Jan Wörner

Welcome from the Co-Host ICRSE, Charles Hutchinson

Welcome from the International Society for Photogrammetry and Remote Sensing, Christian Heipke

Keynote speech, NN

**END OF ORAL PROGRAMME OPEN**

## **PLEN-1 The Perspectives of Space Agencies**

**Lecture Room:** Berlin (C01)  
**10:30–12:30**

**Chairperson(s):** Per-Erik Skrovseth, Hans-Peter Lüttenberg

Volker Liebig, ESA

Michael Freilich, NASA

Gerd Gruppe, DLR

Shizuo Yamamoto, JAXA

Alain Ratier, EUMETSAT

Stephen Volz, NOAA

Guo Huadong, RADI

Panel Discussion

**END OF ORAL PROGRAMME PLEN-1**

# DATA-1 Geospatial information analysis in Digital Earth

**Lecture Room:** Stresa (B09)

**14:00–15:30**

**Chairperson(s):** Wang Changlin, Sven Schade

**14:00–14:15: ISRSE36-291**

Big Data breaking barriers - first steps on a long trail

**Schade S.**

**14:15–14:30: ISRSE36-110**

Multiresolution representation of oblique airborne photogrammetry-based 3D city models in Digital Earth

**Liang J.**, Gong J., Dai Y., Liu J.

**14:30–14:45: ISRSE36-138**

Evaluation of Future Internet Technologies for Processing and Distribution of Satellite Imagery

**Becedas J.**, Pérez R., González G., Pedrera F., Latorre M. J.

**14:45–15:00: ISRSE36-193**

Australian Geoscience Data Cube: A petabyte-scale analysis system to realise the potential of Earth observations from satellites

**Lewis A.**, Mueller N., Ip A., Roberts D., Ring S.

**15:00–15:15: ISRSE36-317**

Creating and maintaining a living digital inventory of our planet

**Marchisio G.**, Barrington L., Ricklin N., Tabb M., Johnston C., Gueguen L., Ouzounis G., Tusk C., Koperski K.

**15:15–15:30: ISRSE36-393**

Coupling the OGC Sensor Observation Service Interface to Raster Data Sources

Nüst D., Badoiu S. A., Misev D., **Jirka S.**

**15:30 Coffee Break**

**Lecture Room:** Stresa (B09)

**16:30–18:00**

**Chairperson(s):** Wang Changlin, Sven Schade

**16:30–16:45: ISRSE36-495**

Asterix and Obelix: How Standards Reunite Data and Metadata

**Baumann P.**

**16:45–17:00: ISRSE36-522**

Towards a digital earth through integration of citizen-based sensing and remote sensing in collecting geoinformation of terrestrial objects

**Jokar Arsanjani J.**

**17:00–17:15: ISRSE36-722**

iGlobe - Next Generation Framework for Handling Geospatial Data

**Chandola V.**

**17:15–17:30: ISRSE36-394**

Automated Earth Observation time-series monitoring with OGC-compliant web services

**Eberle J., Hüttich C., Schullius C.**

**17:30–17:45: ISRSE36-446**

Data Mining and Knowledge Discovery tools for exploiting big Earth-Observation data

**Espinoza Molina D., Datcu M**

**17:45–18:00: ISRSE36-440**

Heterogeneous access and processing of EO-Data on a Cloud based Infrastructure delivering operational Products

**Niggemann F., Bach H., Appel F., de la Mar J., Schirpke B., Dütting K., Heege T., Franke J., Rucker G.**

**END OF ORAL PROGRAMME DATA-1**

# BIOD-1 Trends in operational land cover mapping

**Lecture Room:** Beijing (B05-06)

**14:00–15:30**

**Chairperson(s):** Konrad Wessels

**14:00–14:18: ISRSE36-625**

History of global land cover mapping and monitoring using earth observation data

**Hansen M.**, Potapov P., Townshend J., Justice C.

**14:18–14:36: ISRSE36-657**

Improving global land cover via crowd-sourcing and product integration

**Fritz S.**, See L., SCHEPASCHENKO D., Lesiv M., Bun A., Perger C., Sturn T., McCallum I.

**14:36–14:54: ISRSE36-186**

The United States National Land Cover Database, Delivering Operational Land Cover Data for almost 20 years-  
Lessons Learned and Future Plans

**Homer C.**

**14:54–15:12: ISRSE36-218**

Implementation of an operational land cover classification system to support Mexican activity data reporting

**Wehrmann T.**, Gebhardt S., Kopeinig R., Schmidt M.

**15:12–15:30: ISRSE36-434**

Multi-year global land cover mapping at 300 m and characterization for climate modelling: achievements of the  
Land Cover component of the ESA Climate Change Initiative

**Bontemps S.**, Boettcher M., Brockmann C., Kirches G., Lamarche C., Radoux J., Santoro M., Vanbogaert E.,  
Wegmüller U., Ramoino F., Arino O., Defourny P.

**15:30 Coffee Break**

**Lecture Room:** Beijing (B05-06)

**16:30–17:57**

**Chairperson(s):** Konrad Wessels

**16:30–16:48: ISRSE36-579**

Assessment of Large Scale Land Cover Change Classifications and Drivers of Deforestation in Indonesia

**Wijaya A.**, Sugardiman R.A., Budiharto B., Purwanto J., Tosiani A., Murdiyarso D., Verchot L.V.

**16:48–17:06: ISRSE36-528**

Utilization of Pisar L-2 Data for Land Cover Classification in Forest Area Using Pixel-Based and Object-Based  
Methods

**Trisakti B.**, Sutanto A., Noviar H.

**17:06–17:24: ISRSE36-734**

Rapid Update of Land cover Using Change Detection and Supervised Machine Learning in South Africa

**Wessels K.**, van den Bergh F., Steenkamp K., Swanepoel D., McAlister B., Salmon B., Roy D., Kovalsky V.

**17:24–17:42: ISRSE36-155**

Comparative accuracy assessment of global land cover datasets using existing reference data

**Tsendbazar N.E.**, de Bruin S, Mora B, Herold M

**Discussion-1**

**END OF ORAL PROGRAMME BIOD-1**



# **BIOD-6 Time Series Analyses revealing Land Surface Dynamics**

**Main Session Organizer:**

**Deputy Session Organizer:**

**Lecture Room:** Sydney (B07-08)

**16:30–18:00**

**Chairperson(s):** Claudia Künzer, Sebastian van der Linden

**16:30–16:48: ISRSE36-740**

Time series analysis: Potentials and challenges exploiting optical satellite data for Land System Science

**Hostert P.**, Baumann M., Griffiths P., Kuemmerle T., Kuenzer C., van der Linden S., Müller H., Pflugmacher D., Rufin P., Senf C.

**16:48–17:06: ISRSE36-546**

Response of riparian vegetation across Australia's largest river basin to inter and intra-annual flooding: dynamics quantified from time series of Landsat and MODIS data

**Broich M.**, Tulbure M.G., Kingsford R., Lucas R., Keith D.

**17:06–17:24: ISRSE36-4**

Spatial and temporal patterns of tree cover dynamics in the Mekong basin between 2001 and 2011

**Leinenkugel P.**, Oppelt N., Kuenzer C.

**17:24–17:42: ISRSE36-80**

Mapping of ecosystem functioning change from global scale earth observation based trends in total and recurrent vegetation

**Fensholt R.**, Horion S., Tagesson T.

**17:42–18:00: ISRSE36-674**

DUE GlobBiomass - Estimates of Biomass on a Global Scale

**Schmullius C.** and the C. Schmullius Team

**END OF ORAL PROGRAMME BIOD-6**

# **PROG-6 Space Agency outlook**

**Lecture Room:** Berlin (C01)

**14:00–15:30**

**Chairperson(s):** Peter Schaad

**14:00–14:18: ISRSE36-349**

ESA's Earth Observation Programme

**Liebig V.**

**14:18–14:36: ISRSE36-275**

The German Earth Observation Program

**Lüttenberg H.-P.**

**14:36–14:54: ISRSE36-109**

The Cnes Earth Observation programme

**Ultre-Guerard P.**

**14:54–15:12: ISRSE36-392**

The Canadian Earth Observation Program: On the move from R&D to Operations

**Laliberté E.**

**15:12–15:30: ISRSE36-251**

Future Programmes of EUMETSAT for Weather, Climate and Environmental Monitoring

**Kaiser C.**

**15:30 Coffee Break**

**Lecture Room:** Berlin (C01)

**16:30–18:00**

**Chairperson(s):** Peter Schaad

**16:30–16:48: ISRSE36-703**

NOAA Outlook: Development of Next-Generation Geostationary and Polar Operational Environmental Satellites

**Volz S., Smith D.B.**

**16:48–17:06: ISRSE36-626**

COPERNICUS - The European Union Earth Observation Programme

**Koch A. C.**

**17:06–17:24: ISRSE36-723**

JAXA's Earth Observation Program

**Yamamoto S.**

**17:24–17:42: ISRSE36-737**

The Chinese Earth Observations Programme

**Guo H.**

**17:42–18:00: ISRSE36-738**

An update on the NASA Earth Observation Programme

**Freilich M. H.**

**END OF ORAL PROGRAMME PROG-6**

## **MARI-2 Sea state monitoring**

**Lecture Room:** Buenos Aires (A06)

**16:30–18:00**

**16:30–16:45: ISRSE36-134**

Wavemill: a new mission for high-resolution mapping of total ocean surface current vectors

**Gommenginger C.**, Martin A., Chapron B., Marquez J., Doody S., Burbidge G., Palmer K., Dobke B., Cotton D.

**16:45–17:00: ISRSE36-159**

First Analysis of Along-Track InSAR-Derived Current Fields From the Summer 2014 TanDEM-X Short Baseline Opportunity

**Romeiser R.**

**17:00–17:15: ISRSE36-181**

Satellite-Based Radar Measurements for Validation of High-Resolution Sea State Forecast Models in German Bight

**Pleskachevsky A.**, Lehner S., Hoffmann P., Kieser J., Bruns T., Lindenthal A., Janssen F., Behrens A.

**17:15–17:30: ISRSE36-293**

Quantifying variability of the surface currents in the Norwegian Sea: Estimation based on different gravity models and mean sea surface datasets

**P. Raj R.**, A. Johannessen J, Ø.Nilsen J, B. Andersen O

**17:30–17:45: ISRSE36-405**

WIMO - Laser scanning for monitoring the German Wadden Sea

**Schmidt A.**, Heipke C.

**17:45–18:00: ISRSE36-408**

Estimation of wave and wind field parameters from TerraSAR-X imagery in the Baltic Sea

**Rikka S.**, Uiboupin R., Alari V.

**END OF ORAL PROGRAMME MARI-2**

## **POLA-2 Monitoring of polar oceans, glaciers, snow and ice**

**Main Session Organizer:**

**Deputy Session Organizer:**

**Lecture Room:** Tromsø (A03)

**16:30–17:45**

**16:30–16:45: ISRSE36-65**

Spaceborne quantitative assessment of primary production variations in the Arctic Ocean over the previous decade

**Pozdnyakov D.V.**, Petrenko D.

**16:45–17:00: ISRSE36-261**

Assessment of time compositing vs near instantaneous for spectral & broadband BRF/BRDF/albedo retrieval for Arctic sea-ice

**Muller J.-P.**, Kharbouche S., Danne O., Mueller K., Gatebe C., Roman M.

**17:00–17:15: ISRSE36-366**

Characterization of ice cover extent from MODIS imagery during different winter scenarios in the Gulf of Riga, Baltic Sea

**Raag L.**

**17:15–17:30: ISRSE36-411**

Microwave remote sensing of Antarctic firn properties

**Linow S.**, Dierking W., Hörhold M., Rack W.

**17:30–17:45: ISRSE36-425**

Elevation change of the Inylchek Glacier (Central Asia) analysed by TanDEM-X data

**Neelmeijer J.**, Motagh M., Guanter L.

**END OF ORAL PROGRAMME POLA-2**

# ATMC-1 Land Atmosphere Interactions

**Main Session Organizer:**

**Deputy Session Organizer:**

**Lecture Room:** Honolulu (A05)

**14:00–15:30**

**14:00–14:15: ISRSE36-21**

Studying of atmospheric aerosols perturbations caused by recent severe forest fires in Russian boreal zone

**Tomshin O.**, Solovyev V.

**14:15–14:30: ISRSE36-107**

NDVI dynamics of the taiga zone in connection with modern climate changes

**Tsepelev V.**, Bobkov A., Panidi E., Torlopova N.

**14:30–14:45: ISRSE36-126**

Responses of vegetation growth to climate change in china

**Li Z.**, Zhou T.

**14:45–15:00: ISRSE36-196**

Link between anomalous sources of moisture associated with atmospheric rivers using the oceanic remote sensing data OAFLUX

**Nieto R.**, Ramos A. M., Gimeno L., Trigo R. M.

**15:00–15:15: ISRSE36-359**

Evaluations of discrepancies in the anthropogenic NO<sub>x</sub> emission trends across Europe: Synergistic use of LOTOS-EUROS and remote sensing NO<sub>2</sub> tropospheric columns

**Curier R.L.**, Segers A., Kranenburg R., Timmermans R., Eskes H.

**15:15–15:30: ISRSE36-619**

The influence of the Time Equation on Remote Sensing Data Interpretation

**Fichtelmann B.**, Borg E., Schwarz E.

**END OF ORAL PROGRAMME ATMC-1**



# ATMC-3 Climate and Atmosphere

**Lecture Room:** Honolulu (A05)

**16:30–18:00**

**16:30–16:45: ISRSE36-90**

Essential climate variables to support climate change mitigation

**Herold M.**, Mora B., Richter C., Holterhof J., Seifert F. M.

**16:45–17:00: ISRSE36-295**

Selected NDACC data used in CAMS validation services

Langerock B., **De Mazière M.**

**17:00–17:15: ISRSE36-417**

A Rapid Cloud Mask Algorithm for Suomi NPP VIIRS Imagery EDRs

Piper M., Bowersox M., **Bahr T.**

**17:15–17:30: ISRSE36-431**

An IDL-based weather forecast system for aviation using real-time data from remote sensing instruments, nowcasting tools and numerical models

Forster C., **Meininger M.**, Stich D., Tafferner A.

**17:30–17:45: ISRSE36-449**

The stratospheric warming 2012 / 2013: Influences on weather extremes and large scale dynamics in stratosphere and mesosphere

**Küchelbacher L.**

**17:45–18:00: ISRSE36-701**

Retrieval of Ozone Total Columns over Évora-Portugal Using Remote Sensing Instruments During 2007-2011

**Domingues A.F.**, Bortoli D., Silva A.M., Kulkarni P., Mendes R.

**END OF ORAL PROGRAMME ATMC-3**

# **AGRI-1 High resolution multi-temporal crop mapping and agricultural monitoring**

**Lecture Room:** Cape Town (A04)

**16:30–18:00**

**Chairperson(s):** Christopher Conrad

**16:30–16:48: ISRSE36-241**

Regional scale crop mapping using multi-temporal satellite imagery

**Kussul N.**, Skakun S., Shelestov A., Lavrenyuk M., Yailymov B., Kussul O.

**16:48–17:06: ISRSE36-604**

Combination of Satellite and Ancillary Data for Crop Classification in West Africa

**Forkuor G.**, Barry B, Conrad C, Thiel M

**17:06–17:24: ISRSE36-438**

Satellite image simulations for model-supervised, dynamic retrieval of crop type and land use intensity

**Bach H.**, Klug P., Migdall S., Schlenz F., Hank T., Mauser W.

**17:24–17:42: ISRSE36-603**

Quantification of cropping pattern and productivity of agro-ecosystems in Central Asia

**Biradar C.**, Low F, Zhang G, Xiao X, Dong J, Filemann E, Patil P, Singh M, Tulaymat F, Omari J, Thomas R

**17:42–18:00: ISRSE36-320**

Indicator-based soil moisture monitoring of agricultural riparian sites in North-East Germany with a multi-sensoral time-series

**Förster M.**, Frick A., Batsch K., Klinker R., Spengler D., Schmidt T., Kleinschmit B.

**END OF ORAL PROGRAMME AGRI-1**

**END OF ORAL PROGRAMME EXOP**

## **IB Ice Breaker Reception**

**Lecture Room:** Exhibition (B01)

**18:00–20:00**

**END OF ORAL PROGRAMME IB**

**Tuesday, 12 May 2015**

## **PLEN-2 Global Earth Observations for Leveraging the Essential Climate Variables**

**Lecture Room:** Berlin (C01)

**09:00–10:30**

**Chairperson(s):** Barbara Ryan, Carolin Richter

**Introduction, Barbara Ryan, GEO**

**Introduction, Carolin Richter, GCOS**

**The Global Energy and Water Cycle, Jörg Schulz, EUMETSAT**

**The Global Carbon Cycle, Han Dolman, VU Amsterdam**

**Essential Climate Variables and the IPCC, Thomas Stocker, IPCC Co-Chair WG-I**

**Global Organizations and Programmes implementing the Essential Climate Variables, Stephen Briggs, ESA**

**NN**

**END OF ORAL PROGRAMME PLEN-2**

## **DISA-1 International initiatives for Earth Observation-based Disaster and Risk Management**

**Lecture Room:** Stresa (B09)

**14:00–15:30**

**Chairperson(s):** Ivan Petitville, Jens Danzeglocke

**14:00–14:15: ISRSE36-87**

Capacity Building for Disaster Risk Reduction in Developing Countries CAS-TWAS Perspectives

**Chen F.**

**14:15–14:30: ISRSE36-152**

The Geohazard Supersites and Natural Laboratories - GSNL Initiative 2.0: Rapid Uptake of New Science in Disaster Risk Management

**Salvi S.**

**14:30–14:45: ISRSE36-175**

Bridging the science-practice gap: UN-SPIDER's approach to recommended practices for disaster risk management

Villagrán de León J.C., Post J., Hecheltjen A., **St-Pierre L.**

**14:45–15:00: ISRSE36-240**

Scope and Activities of the International Working Group on Satellite based Emergency Mapping - IWG-SEM  
**Voigt S.**, Schneiderhan T.

**15:00–15:15: ISRSE36-276**

Towards a Global Wildfire Information System (GWIS)  
**San-Miguel-Ayanz J.**, Gaetani F., Vadrevu K., Justice C.

**15:15–15:30: ISRSE36-278**

Reducing Vulnerability from Latin American Volcanoes Through Enhanced Monitoring Efforts.  
**Biggs J.**, Delgado F, Arnold D, Ebmeier S, Pritchard M

**15:30 Coffee Break**

**Lecture Room:** Stresa (B09)

**16:30–18:00**

**Chairperson(s):** Ivan Petitville; Francesco Gaetani

**16:30–16:45: ISRSE36-264**

The International Charter 'Space and major Disasters' - an international initiative for disaster response based on space-based information  
**Danzeglocke J.**, Jones B., Tinel C., Lobo E., Srinivasa Rao G.

**16:45–17:00: ISRSE36-357**

Copernicus Emergency Management Service - Mapping: Completing three years of initial operations  
**Brogli M.**

**17:00–17:15: ISRSE36-376**

Global Human Settlement Analysis for Disaster Risk Reduction  
**PESARESI M.**, Ehrlich D., Halkia M., Kemper T., Soille P.

**17:15–17:30: ISRSE36-563**

WCDRR and the Committee on Earth Observation activities on disasters  
**Petiteville I.**, Ishida C., Danzeglocke J., Eddy A., Gaetani F., Frye S., Kuligowski B., Zoffoli S., Poland M., Jones B.

**17:30–17:45: ISRSE36-721**

The CEOS Recovery Observatory Pilot  
**Hosford S.**, Giros A., Proy C., Eddy A., Petiteville I., Ishida C., Gaetani F., Frye S., Zoffoli S., Danzeglocke J.

**discussion**

**END OF ORAL PROGRAMME DISA-1**

# **DISA-2 Enhancing the resiliency of critical infrastructure to environmental change and uncertainty**

**Lecture Room:** Stresa (B09)

**11:00–12:30**

**Chairperson(s):** David Tralli

**11:00–11:18: ISRSE36-300**

Comprehensive Framework for Addressing Civil Critical Infrastructure Resilience

**TRALLI D.**

**11:18–11:36: ISRSE36-250**

From Risk to Resilience: Analytical Methodology and Applications

**Linkov I., Fox-Lent C**

**11:36–11:54: ISRSE36-188**

Utility of Thermal-Infrared Spectral Imaging for Assessment of Environmental Hazards in Post-Disaster Scenarios: Towards Civil Security and Resilience

**Tratt D.M., Buckland K.N., Johnson P.D., Scherer G.J.**

**11:54–12:12: ISRSE36-227**

Supply chain resilience and civil critical infrastructure systems

**Zobel C.**

**12:12–12:30: ISRSE36-216**

Environmental Change and Space Infrastructure Resilience

**Wickman L., Clayson M.**

**END OF ORAL PROGRAMME DISA-2**



# **SOCI-2 Methods for observing urbanisation**

**Lecture Room:** Tromsøe (A03)

**11:00–12:30**

**11:00–11:15: ISRSE36-13**

Comparing decision tree and support vector machine classification methods in performing change detection of urban areas: an exploratory study in Bucharest, Romania

**Gheorghe M.**

**11:15–11:30: ISRSE36-115**

Characterization of Informal Settlements in Mega Cities by means of Polarimetric SAR Data

**Schmitt A.**, Wurm M., Taubenböck H.

**11:30–11:45: ISRSE36-242**

Analysis of urban development by means of multi-temporal fragmentation metrics from LULC data

Sapena M., **Ruiz L. A.**

**11:45–12:00: ISRSE36-310**

Towards an automated monitoring of human settlements in South Africa using high resolution SPOT satellite imagery

**Kemper T.**, Mudau N., Mangara P., Pesaresi M.

**12:00–12:15: ISRSE36-319**

Integration of Day-Night Imaging and Non-Imaging Datasets for the Assessment of Temporal Changes in City Structure: A Case Study of Raipur City, India

**Mustak S.**

**12:15–12:30: ISRSE36-337**

Fractal Analysis Of Colors And Shapes For Natural And Urbanscapes URBANSCAPES

**Wang J.**, Ogawa S.

**12:30 Lunch Break & Poster Session**

**14:00–14:15: ISRSE36-476**

A New SAR Tomography Using Compressive Sensing in Urban Environment

Li X., Guo H., **Liang L.**

**14:15–14:30: ISRSE36-481**

With Geospatial in Path of Smart City

**Homainejad A.S.**

**14:30–14:45: ISRSE36-532**

A multi-scale SVM-based approach to derive urban landuse / landcover from multispectral images

**Bachofer F.**, Hagensieker R., Hochschild V.

**14:45–15:00: ISRSE36-677**

Exploring life between buildings by monitoring pedestrian flow patterns in public spaces using 3d lidar data and advanced image analysis

**Zwolinski A.**

**15:00–15:15: ISRSE36-680**

Application of Lidar Data and 3D-City Models in Visual Impact Simulations of Tall Buildings

**Czyżska K.**

**15:15–15:30: ISRSE36-696**

Build-up area information extraction using long time series Landsat remote sensing images

**Wang G.**, He G., Liu J.

**END OF ORAL PROGRAMME SOCI-2**

## **DATA-2 Remote sensing ontology and semantics**

**Lecture Room:** Cape Town (A04)

**11:00–12:15**

**Chairperson(s):** Karl Ahlquist, Michael Bock

**11:00–11:15: ISRSE36-718**

Land Use and Land Cover Semantics: Principles, Best Practices and Prospects

**Ahlqvist K.O.**

**11:15–11:30: ISRSE36-342**

The EAGLE concept - A data model for future land monitoring

**Arnold S.**, Soukup T., Bock M., Kosztra B., Smith G., Valcarcel-Sanz N., Hazeu G.

**11:30–11:45: ISRSE36-584**

Application of the EAGLE concept for parameterized data collection on habitats

**Kosztra B.**, Arnold S., Bock M., Banko G., Smith G., Hazeu G., Valcarcel N.

**11:45–12:00: ISRSE36-504**

Semantic-based, multi-source classification of Nature Conservation areas in Rhineland-Palatinate using conceptual modelling in combination with data mining methodologies

**Nieland S.**, Tintrup G., Moran N., Kleinschmit B.

**12:00–12:15: ISRSE36-649**

Formal ontologies for extracting information from high resolution satellite imagery

**Belgiu M.**

**END OF ORAL PROGRAMME DATA-2**

# **BIOD-2 National to global-scale forest monitoring with Landsat data**

**Lecture Room:** Beijing (B05-06)

**11:00–12:30**

**Chairperson(s):** Matt Hansen, Martin Wegmann

**11:00–11:15: ISRSE36-207**

Mapping Mexico's forest at very high resolution

**Schmidt M.**, Wehrmann T., Gebhardt S., Ornelas J.L., Victoria A., Rodriguez R., Rhodes A., Serrano E., Argumendo J

**11:15–11:30: ISRSE36-599**

INPE's Amazon Deforestation Monitoring Program

**Valeriano D.**, Maurano L., Gomes A., Almeida C.

**11:30–11:45: ISRSE36-129**

National Scale Monitoring Reporting and Verification of Deforestation and Forest Degradation in Guyana  
**BHOLANATH P.**

**11:45–12:00: ISRSE36-386**

Forest monitoring at continental and regional scale with optical sensors - some results from Australia

**Caccetta P.**, Chia J., Devereux D., Furby S., Reddy S., Wallace J., Wu X., Sun C.

**12:00–12:15: ISRSE36-665**

Monitoring the forests of the Democratic Republic of Congo using Landsat data

**Lola Amani P.**, Mane L., Potapov P., Turubanova S., Hansen M.

**12:15–12:30: ISRSE36-323**

Advancing Indonesian Forest Resource monitoring using multi-source remote sensing data

**Margono B.**

**12:30 Lunch Break & Poster Session**

**Lecture Room:** Beijing (B05-06)

**14:00–15:30**

**Chairperson(s):** Matt Hansen, Martin Wegmann

**14:00–14:15: ISRSE36-343**

Nation-to-global scale forest cover change monitoring using the Landsat data archive

**Potapov P.**, Hansen M.C., Turubanova S., Tyukavina A., Krylov A., Talero Y., Wang L.

**14:15–14:30: ISRSE36-592**

Forest and Forest Change Mapping with C- and L-band SAR in Liwale, Tanzania

**Haarpaintner J.**, Hindberg H., Davids C., Zahabu E., Malimbwi R.E.

**14:30–14:45: ISRSE36-480**

A Framework for Monitoring Net Changes in Tropical Forest Cover Using Landsat Time Series

**DeVries B.**, Decuyper M., Verbesselt J., Herold M.

**14:45–15:00: ISRSE36-720**

Ensemble-based Landscape Change Maps for the United States

**Healey S.**, Cohen W., Yang Z., Brooks E., Hansen M., Hernandez A., Huang C., Hughes J., Kennedy R., Loveland T., Megown K., Moisen G., Schroeder T., Schwind B., Stehman S., Steinwand J., Vogelmann J., Woodcock C., Yang L., Zhu Z.

**15:00–15:15: ISRSE36-391**

Annual Forest Monitoring as part of Indonesia's National Carbon Accounting System

**Kustiyo K.**, Roswintiarti O., Tjahjaningsih A., Dewanti R., Furby S., Wallace J.

**15:15–15:30: ISRSE36-739**

Fusing Landsat NDVI and PALSAR backscatter time-series data for detecting deforestation in the tropics

**Reiche J.**, Verbesselt J., Herold M., Hoekman D.

**END OF ORAL PROGRAMME BIOD-2**

## **BIOD-3 Forests Mapping and Monitoring**

**Lecture Room:** Beijing (B05-06)

**16:30–18:00**

**Chairperson(s):** Douglas Muchoney

**16:30–16:48: ISRSE36-76**

Detecting and Monitoring Deforestation and Forest Degradation

Muchoney D.M., **Hamann S.**

**16:48–17:06: ISRSE36-141**

Potential of WorldDEM to estimate forest canopy height and aboveground biomass in a tropical peat swamp forest

**Schlund M.**, von Poncet F., Kuntz S., Kahabka H.

**17:06–17:24: ISRSE36-208**

Ground, stems and foliage: Forest above-ground biomass mapping from combined Synthetic Aperture Radar and Multispectral Imagery

**Balzter H.**, Rodriguez-Veiga P., Wheeler J., Tansey K.J., Stelmaszczuk-Gorska M., Schmillius C.

**17:24–17:42: ISRSE36-347**

Comparison of interferometric and stereo-radargrammetric 3D metrics in mapping of forest resources: first results from the Advanced\_SAR EU/FP7 project

**Karila K.**, Karjalainen M., Vastaranta M., Holopainen M., Hyypä J.

**17:42–18:00: ISRSE36-496**

Forest cover mapping in Central Asia using multi-resolution remote sensing imagery

**Yin H.**, Jakob A., Martius C., Khamzina A.

**END OF ORAL PROGRAMME BIOD-3**

# BIOD-6 Time Series Analyses revealing Land Surface Dynamics

**Lecture Room:** Sydney (B07-08)

**11:00–12:30**

**Chairperson(s):** Tjomas Udelhoven, Claudia Künzer

**11:00–11:18: ISRSE36-6**

Long-term Soil Moisture Time Series Analyses based on Active Microwave Backscatter Measurements

**Wagner W.**, Reimer C., Bauer-Marschallinger B., Enekel M., Hahn S., Melzer T., Naeimi V., Paulik C., Dorigo W.

**11:18–11:36: ISRSE36-687**

Global Waterpack - Timeseries Analyses to assess spatio-temporal Variability of Inland Water Bodies

**Klein I.**, Dietz A., Gessner U., Kuenzer C., Dech S.

**11:36–11:54: ISRSE36-71**

Global SnowPack - A set of Snow Cover Parameters derived from times series of daily snow cover data made available on a global scale

**Dietz A.**, Kuenzer C., Dech S.

**11:54–12:12: ISRSE36-553**

Soil moisture dynamic in Central Asia and Xinjiang province of China over 30 years from microwave remote sensing

**LI X.**

**12:12–12:30: ISRSE36-610**

New methods for time series processing of image data in TIMESAT

**Eklundh L.**, Cai Z, jönsson P

**12:30 Lunch Break & Poster Session**

**Lecture Room:** Sydney (B07-08)

**14:00–15:30**

**Chairperson(s):** Hyun Ok Kim, Carsten Brockmann

**14:00–14:18: ISRSE36-9**

AVHRR re-processing over Europe and North Africa

**Frey C.**, Dietz A.J., Bachmann M., Bernhard E.M., Ruppert T., Kuenzer C., Mueller A., Dech S.

Towards spatial-temporally more accurate and consistent land cover mapping based on MODIS time series data

**Liu D.**

**14:36–14:54: ISRSE36-537**

Classifying land cover under heavy cloud coverage with WELD time series and PaISAR data

**Anaya J.**, Palomino S.

**14:54–15:12: ISRSE36-187**

TIME series analysis of ndvi, ndwi and lst with malaria cases; a proxy for early warning in Nkomazi, South Africa

**Adeola A.**, Botai O., Olwoch J., Tsela P., Adisa O., Kalumba A.

**15:12–15:30: ISRSE36-375**

Estimation of grassland use intensities based on high spatial resolution LAI time series  
**Asam S.**, Klein D., Dech S.

**END OF ORAL PROGRAMME BIOD-6**

## **PROG-1 ESA Earth Explorer achievements**

**Main Session Organizer:**

**Deputy Session Organizer:**

**Lecture Room:** Berlin (C01)

**11:00–12:30**

**Chairperson(s):** Michael Rast

**11:00–11:18: ISRSE36-700**

Overview of 5 years of SMOS data over the oceans  
**Reul N.**

**11:18–11:36: ISRSE36-314**

SCIENTIFIC ACHIEVEMENTS of the SMOS MISSION

**Kerr Y.**, Wigneron J.-P., Ferrazzoli P., Richaume P., Reul N., Font J., Boutin J., Waldteufel P., Hahne A., Delwart S., Drusch M., Mecklenburg S.

**11:36–11:54: ISRSE36-348**

GOCE: Earth gravity from space  
**Rummel R.**

**11:54–12:12: ISRSE36-338**

The Scientific achievements of ESA's Ice mission Cryosat

**Shepherd A.**, Armitage T, Briggs K, Hogg A, McMillan M, Muir A, Ridout A, Sundal A, Tilling R, Wingham D, Cullen R, Francis R

**12:12–12:30: ISRSE36-643**

First Scientific Results From ESA's Swarm Satellite Constellation Mission  
**Olsen N.**

**END OF ORAL PROGRAMME PROG-1**

## **PROG-2 DRAGON-3 ESA MOST China cooperation results**

**Lecture Room:** Berlin (C01)

**16:30–18:00**

**Chairperson(s):** Yves-Louis Desnos, Lin Hui

**16:30–16:45: ISRSE36-524**

Hydrologic and cryospheric processes observed from space

**Menenti M.**, Li X., Vereecken H., Li J., Mancini M., Liu Q., Li J., Kuenzer C., HUANG S., Yesou H., WEN J., Kerr Y., CHENG X., Gourmelen N, KE C., Ludwig R., LIN H., Eineder M., MA Y., SU Z. and the M.Menenti Team

**16:45–17:00: ISRSE36-671**

Forest DRAGON-3: Decadal trends of Northeastern Forests in China from Earth Observation Synergy

**Schmullius C.**, Santoro M., Li Z., Thiel C., Pang Y.

**17:00–17:15: ISRSE36-255**

Evaluation of the use of the sub-Pixel Offset Tracking method with conventional dInSAR techniques to monitor landslides in densely vegetated terrain in the Three Gorges Region, China

Sun L., **Muller J.-P.**

**17:15–17:30: ISRSE36-35**

Atmosphere and Climate

**van der A R.J.**, Bai J., Ding A., Hao N., Xue Y., Varotsos C., Ma R., Loiselle S., Huang F., Sofieva V., Liu Y., Boesch H., Ma Y., Su B.

**17:30–17:45: ISRSE36-453**

Earth Observation in Support of Science and Applications development in the field &8220;Land and Environment&8221;; Synthesis Results from the ESA-MOST DRAGON Cooperation Programme

**Cartalis C.**

**17:45–18:00: ISRSE36-726**

Study of freshwater outflow, shallow water bathymetry and water quality in the East China Sea

**Johannessen J.A.**, Zhou Y., Shen F., Collard F., Chapron B., Korosov A., Wergeland-Hansen M., Alpers W.

**END OF ORAL PROGRAMME PROG-2**



## **MARI-2 Sea state monitoring**

**Main Session Organizer:**

**Deputy Session Organizer:**

**Lecture Room:** Buenos Aires (A06)

**11:00–12:00**

**11:00–11:15: ISRSE36-420**

Observing ocean surface currents from a geostationary satellite

**Warren M.A.**, Quartly G.D., Miller P.I., Shutler J.D.

**11:15–11:30: ISRSE36-558**

Sea surface wakes observed by spaceborne SAR in the offshore wind farms

**Li X.-M.**, Lehner S., Jacobsen S.

**11:30–11:45: ISRSE36-627**

GlobCurrent - advancing the surface current estimation from satellites

**Johannessen J. A.**

**11:45–12:00: ISRSE36-712**

Maritime NRT Products Using TerraSAR-X Imagery

**Lehner S.**

**END OF ORAL PROGRAMME MARI-2**

## **MARI-3 Coastal areas and marine habitats**

**Main Session Organizer:**

**Deputy Session Organizer:**

**Lecture Room:** Buenos Aires (A06)

**14:00–15:30**

**14:00–14:15: ISRSE36-57**

Mapping of algae richness using spatial data interpolation

**Tapia\_Silva F.**, Hernández-Cervantes O-E., Vilchis-Alfaro M-I., Senties A.

**14:15–14:30: ISRSE36-140**

Mussel bed monitoring in the Wadden Sea: From pixels to products

**Müller G.**, Stelzer K., Gade M.

**14:30–14:45: ISRSE36-177**

Combining bathymetric LiDAR and WorldView-2 satellite imagery for classifying benthic habitats using OBIA

**Tamondong A.**, Cadalzo I. E., Estabillo M. S., Cruz C., Hipolito J. M., Go G. A., Blanco A.

**14:45–15:00: ISRSE36-211**

Analyses of multi-year synthetic aperture radar imagery of dry-fallen intertidal flats

**Gade M.**, Melchionna S., Kemme L.

**15:00–15:15: ISRSE36-268**

Waterline detection and monitoring in the German Wadden Sea using high resolution satellite-based radar measurements

**Wiehle S.**, Lehner S., Pleskachevsky A.

**15:15–15:30: ISRSE36-282**

Relationship between eolian dust deposition and cyanobacteria growth in the Great Barrier Reef, Australia

**Tran Van D.**, Gabric A., Cropp R.

**15:30 Coffee Break**

**16:30–16:45: ISRSE36-312**

Monitoring the Wadden Sea: A multi-sensor and multi-temporal approach for high resolution classification and monitoring of the North Sea's tidal flats

**Ehlers M.**, Jung R.

**16:45–17:00: ISRSE36-362**

Analysis of the shoreline position extracted from Landsat TM and ETM+ imagery

**Sanchez Garcia E.**,

**17:00–17:15: ISRSE36-365**

Analysis of natural background and dredging-induced changes in TSM concentration from MERIS images near commercial harbours in the Estonian coastal sea

**Raag L.**

**17:15–17:30: ISRSE36-497**

Benthic habitat mapping in the Primeiras and Segundas Archipelago Reserve

**Teixeira L.**, Nilsson M., Hedley J., Shapiro A.

**17:30–17:45: ISRSE36-542**

Estimation of mangrove fractional cover using mixture tuned matched filtering of Landsat image

**Blanco A.C.**, Escoto J.E.D.

**17:45–18:00: ISRSE36-646**

Integrative Approaches for combining Earth Observation, models and in-situ data for monitoring of the North Sea and its Coastal Zone

**Stelzer K.**, Adolph W., Eskildsen K., Gade M., Janssen F., Kohlus J., Lebreton C., Lorkowski I., Losa S., Melchionna S., Millat G., Müller G., Nerger L., Brockmann C.

**END OF ORAL PROGRAMME MARI-3**

## **SENS-2 New concepts and advanced applications in thermal remote sensing**

**Main Session Organizer:**

**Deputy Session Organizer:**

**Lecture Room:** Honolulu (A05)

**16:30–18:00**

**Chairperson(s):** Doris Klein

**16:30–16:45: ISRSE36-520**

HiTeSEM: A SATELLITE SENSOR CONCEPT FOR HYPERSPECTRAL THERMAL REMOTE SENSING

**Udelhoven T.**, Knigge T., Schlerf M., Bossung C., Segl K., Eisele A., Müller A., Storch T., Reulke R., Fischer P., Rock G.

**16:45–17:00: ISRSE36-590**

VISIR-SAT - a prospective micro-satellite based multi-spectral thermal mission for land applications

**Ruecker G.**, Menz G., Hartmann M., Oertel D.

**17:00–17:15: ISRSE36-617**

Data Validation and Case Studies using the TET-1 Thermal Infrared Satellite System

**Fischer C.**, Klein D., Kerr G., Stein E., Lorenz E., Frauenberger O.

**17:15–17:30: ISRSE36-448**

Urban and Smart City Energy and Thermal Monitoring Techniques

**Lee S.**

**17:30–17:45: ISRSE36-511**

Calculating the radiant power of fires and volcanoes

**Murphy S.**

**17:45–18:00: ISRSE36-429**

Remote sensing of inland water surface temperatures: possibilities and applications

**Fricke K.**, Baschek B.

**END OF ORAL PROGRAMME SENS-2**

## **SENS-5 First results of the TanDEM-X science mission**

**Main Session Organizer:**

**Deputy Session Organizer:**

**Lecture Room:** Berlin (C01)

**14:00–15:30**

**Chairperson(s):** Manfred Zink, Irena Hajnsek

**14:00–14:18: ISRSE36-151**

TanDEM-X Mission Status

**Zink M.**

**14:18–14:36: ISRSE36-306**

TanDEM-X: Science Activities

**Hajnsek I.**

**14:36–14:54: ISRSE36-123**

Quality Assessment of the TanDEM-X Global Digital Elevation Model

**Bräutigam B.**, Martone M., Rizzoli P., Gonzalez C., Wecklich C., Bachmann M., Schulze D., Zink M.

**14:54–15:12: ISRSE36-307**

TanDEM-X: Application of the Digital Elevation Model

**Hajnsek I.**

**15:12–15:30: ISRSE36-19**

Applying terrain and hydrological editing to create a consumer-ready WorldDEM product

**Collins J.**, Riegler G., Tinz M., Schrader H.

**END OF ORAL PROGRAMME SENS-5**

## **SENS-6 Data product validation and quality**

**Main Session Organizer:**

**Deputy Session Organizer:**

**Lecture Room:** Honolulu (A05)

**11:00–12:30**

**Chairperson(s):** Albrecht van Bargaen, Jörn Hoffmann

**11:00–11:18: ISRSE36-198**

An International Effort of Space Agencies for Cal/Val: CEOS Working Group Cal/Val  
**von Bargaen A.**

**11:18–11:36: ISRSE36-243**

Importance Of Fiducial Reference Measurements For Satellite Earth Observation Characterisation  
**Bojkov B R,** von Bargaen A

**11:36–11:54: ISRSE36-170**

Internationally Coordinated Validation of Satellite-Derived Land Surface Products  
**Schaepman-Strub G.** and the CEOS Land Product Validation Team

**11:54–12:12: ISRSE36-237**

A Comprehensive Calibration and Validation Site for Information Remote Sensing  
**Li C.R.,** Tang L.L., Ma L.L., Zhou Y.S, Gao C.X.

**12:12–12:30: ISRSE36-214**

Towards seamless inter-operability between global EO-derived DEM products: opportunities and threats  
**Muller J.-P.,** Feng L., Xiong S., Sun L.

**END OF ORAL PROGRAMME SENS-6**

## **SENS-7 Advances in Lidar remote sensing**

**Main Session Organizer:**

**Deputy Session Organizer:**

**Lecture Room:** Honolulu (A05)

**14:00–15:30**

**14:00–14:15: ISRSE36-203**

Use Of Box-Counting Method To Characterize The Degree Of Foliage Clumping From LIDAR Data  
**van Leeuwen M.**, van Aardt J.A.N., Kampe T., Krause K.

**14:15–14:30: ISRSE36-221**

Experiences with LiDAR Ground Penetration in Dense Tropical Rainforests  
**Isenburg M.**, Trunzer H., Malmer F.

**14:30–14:45: ISRSE36-222**

long Full Waveform LiDAR through 60 meter of Forest Canopy  
**Isenburg M.**, Trunzer H., Malmer F.

**14:45–15:00: ISRSE36-422**

Potential of full waveform airborne laser scanning data for urban areas classification  
**Tran G.**, Nguyen D., Milenkovic M., Pfeifer N.

**15:00–15:15: ISRSE36-575**

Crown density of over- and understory in mixed forest stands as explained by airborne LiDAR metrics  
**Latifi H.**, Heurich M., Hartig F., Müller J., Krzystek P., Jehl H., Dech S.

**15:15–15:30: ISRSE36-684**

The Phil-LiDAR 2 Program: National resource inventory of the Philippines using LiDAR and other remotely sensed data  
**Blanco A.C.**, Paringit E.C., Tamondong A.M., Perez A.M.C, Ang M.R.C.O.

**END OF ORAL PROGRAMME SENS-7**

## **SENS-8 Advances in Radar remote sensing**

**Main Session Organizer:**

**Deputy Session Organizer:**

**Lecture Room:** Sydney (B07-08)

**16:30–18:00**

**16:30–16:45: ISRSE36-122**

Significant wave height measurements from X-band radar image sequence by utilizing Teager-Huang Transform

**Mortazavi M. R.**, Huang C. J., Wu L. C.

**16:45–17:00: ISRSE36-142**

Evaluation of NASA Operation Icebridge snow radar Measurements over sea ice in the Canadian Arctic

**Howell S.**, King J., Derksen C., Toose P., Silis A., Rutter N.

**17:00–17:15: ISRSE36-358**

Monitoring subsidence in Jakarta using TerraSAR-X data

**Wang R.**

**17:15–17:30: ISRSE36-450**

Monitoring of ground deformation in an open pit iron mine based on the combination of

DinSAR time-series and PSI techniques using TerraSAR-X data

**Mura J. C.**, Paradella W. R., Gama F. F., Santos A. R., Silva G. G.

**17:30–17:45: ISRSE36-705**

SAR-EDU - An education initiative for applied Radar Remote Sensing

**Eckardt R.**, Riedel T., Eineder M., Auer S., Walter D., Jagdhuber T., Braun M., Motagh M., Pathe C.,

Pleskachevsky A., Thiel C., Hajnsek I., Lehner S., Bock M., Schmillius C.

**17:45–18:00: ISRSE36-707**

A neural network inversion of a three layers Multiscale SPM Model for the retrieval of physical soil parameters

**JAAFRI GHAMKI M.**, HOSNI I., BENNACEUR FARAH L., NACEUR M.S, FARAH I.R

**END OF ORAL PROGRAMME SENS-8**

# **POLA-3 Cold regions biodiversity, landscape dynamics, transport and resource exploration**

**Main Session Organizer:**

**Deputy Session Organizer:**

**Lecture Room:** Tromsøe (A03)

**16:30–18:00**

**16:30–16:45: ISRSE36-79**

Multi-Temporal Monitoring of Thermokarst in the High Arctic

**Nitze I.**, Grosse G., Günther F.

**16:45–17:00: ISRSE36-116**

Navigation Assistance for Ice-infested Waters through automatic Iceberg Detection and Ice Classification based on TerraSAR-X Imagery

Ressel R., **Lehner S.**, Frost A.

**17:00–17:15: ISRSE36-178**

Vertical movements of frost mounds in sub-Arctic permafrost regions detected using

**Beck I.**, Ludwig R., Bernier M., Strozzi T., Boike J.

**17:15–17:30: ISRSE36-259**

Combining optical and radar remote sensing data for the study of organic transport in thermokarst lake - catchment systems of Russian Arctic

**Dvornikov Y.**, Leibman M., Heim B., Bartsch A., Hubberten H.-W.

**17:30–17:45: ISRSE36-281**

Dynamics Process of Sea Ice in Antarctica East Coast - a Case Study Using Spaceborne SAR TerraSAR-X

**Li X.-M.**, Liu H.Y., Guo H.D.

**17:45–18:00: ISRSE36-661**

Application of a novel polarimetric filter to RADARSAT-2 data of Deception Island (Antarctic Peninsula region) for surface cover characterization

**Guillaso S.**, Schmid T, Lopez-Martinez J

**END OF ORAL PROGRAMME POLA-3**



## **AGRI-2 Mapping cropland productivity at the global scale**

**Main Session Organizer:**

**Deputy Session Organizer:**

**Lecture Room:** Cape Town (A04)

**14:00–15:15**

**14:00–14:15: ISRSE36-58**

New method to retrieve vegetation photosynthetic capacity from solar-induced fluorescence for cropland GPP modeling

**Zhang Y**, Guanter L., Berry J., Joiner J., van der Tol C., Huete A.

**14:15–14:30: ISRSE36-331**

OPERATIONAL 333m BIOPHYSICAL PRODUCTS OF THE COPERNICUS GLOBAL LAND SERVICE FOR AGRICULTURE MONITORING

**Lacaze R.**, Smets B., Baret F., Weiss M., Ramon D., Montersleet B., Wandrebeck L., Calvet J.-C., Roujean J.-L., Camacho F.

**14:30–14:45: ISRSE36-333**

Global monitoring of agricultural productivity with spaceborne measurements of sun-induced chlorophyll fluorescence

**Guanter L.**, Zhang Y., Jung M., Joiner J., Voigt M., Berry J. A., Frankenberg C., Huete A., Zarco-Tejada P., Lee J. E., Moran M. S., Ponce-Campos G., Beer C., Camps-Valls G., Buchmann N., Gianelle D., Klumpp K., Cescatti A., Baker J. M., Griffis T. J.

**14:45–15:00: ISRSE36-346**

Evaluations on the potential productivity of winter wheat based on agro-ecological zone in the world  
**wang h.**

**15:00–15:15: ISRSE36-397**

Design and feasibility study of a global operational crop yield forecasting system: an exercise based on the EC GLOBCAST project

**Baruth B.**, Lopez R., Cerrani I., Duveiller G., El Aydam M., Gallego J., Genovese G., Seguini L., Willems E.

**END OF ORAL PROGRAMME AGRI-2**

## **AGRI-3 Managing land degradation and water resources in agricultural areas**

**Main Session Organizer:**

**Deputy Session Organizer:**

**Lecture Room:** Cape Town (A04)

**16:30–18:00**

**16:30–16:45: ISRSE36-325**

The Application of Modified Normalized Difference Water Index (MNDWI) by Leaf Area Index in the Retrieval of Regional Drought Monitoring

**Zhang H.-w.**, Chen H.-l.

**16:45–17:00: ISRSE36-339**

Inventory of potential Ecological Focus Areas (EFA) in agricultural landscapes in the context of the Common Agricultural Policy (CAP) Reform

**Englhart S.**, Franke J., Kroll A., Golla B.

**17:00–17:15: ISRSE36-371**

Drought and food security monitoring using space-derived phenology

**Meroni M.**, Rembold F., Kaytakire F., Urbano F., Schucknecht A., Leo O.

**17:15–17:30: ISRSE36-407**

First results from the LaVaCCA project: Assessing land value changes and developing a discussion support tool for improved land use planning in the irrigated lowlands of Central Asia

**Löw F.**, Fliemann E., Conrad C., Dukhovny V., Muratova N., Ibrakhimov M., Lamers J.P.A.

**17:30–17:45: ISRSE36-483**

A Spatio-temporal analysis of water consumption in Lower Chenab Canal (LCC) Irrigation System

**USMAN M.**

**17:45–18:00: ISRSE36-743**

Crop pattern and crop water requirements of winter crops as affected by irrigation improvement using remote sensing and GIS techniques

**Belal A.A.**, Aboelsoud H.M., El-Nagar A., El-Hadeidy S.M., Abo El Atta A.M.

**END OF ORAL PROGRAMME AGRI-3**

## **SPEC-1 Group on Earth Observations (GEO) and GEOSS: The next Decade**

**Lecture Room:** Ann Arbor (A08)

**12:30–14:00**

**Wednesday, 13 May 2015**

## **PLEN-3 The Copernicus Era**

**Lecture Room:** Berlin (C01)

**09:00–10:30**

**Chairperson(s):** Jörn Hoffmann, Mauro Facchini

**Introducing Copernicus - Vision, Status, Outlook, Philippe Brunet, EC**

**User report 1: "Copernicus in our operations", Chris Steenmans, EEA**

**User report 2: "Copernicus in our operations", Pierluigi Soddu, Italian National Protection Agency**

**Copernicus - Opportunities for Science, Ramon Hansen, TU Delft**

**"Growth" by Copernicus - an SME perspective, Geoff Sawyer, EARSC**

**NN**

**END OF ORAL PROGRAMME PLEN-3**

## **DISA-3 Satellite based Vulcano observation**

**Lecture Room:** Stresa (B09)

**14:00–15:30**

**14:00–14:15: ISRSE36-85**

Advanced PRocedures for volcanic and Seismic Monitoring

**DI IORIO A.**, Stramondo S.

**14:15–14:30: ISRSE36-135**

Monitoring the Bardarbunga eruption using GOME-2/Metop-A & -B

**Hedelt P.**, Valks P., Loyola D.

**14:30–14:45: ISRSE36-368**

DInSAR time series of ENVISAT ASAR data as inverse solutions of nonlinear static and dy-namic neural models of land subsidence

**Ashrafianfar N.**, Busch W.

**14:45–15:00: ISRSE36-406**

Deep looks into explosive volcano craters by high resolution SAR observations

**Walter T. R.**

**15:00–15:15: ISRSE36-485**

D-InSAR Monitoring of Volcanic Activity over Tatun Mountain in Taiwan

**Tsai Y.**, Lin S., Kim J.

**15:15–15:30: ISRSE36-535**

Lava Flow Monitoring Using TET-1 Satellite  
**Zak'ek K.**, Lorenz E., Hort M.

**END OF ORAL PROGRAMME DISA-3**

## **DISA-4 Fire and burned area monitoring**

**Lecture Room:** Stresa (B09)

**11:00–12:30**

**11:00–11:15: ISRSE36-24**

Fire Monitoring - The use of Medium Resolution satellites (like AVHRR, MODIS, TET) for long time series processing of applied research questions (TIMELINE) and the implementation in user driven applications (PHAROS)

**Fuchs E.-M.**, Stein E., Strobl C., Frey C.

**11:15–11:30: ISRSE36-189**

Automated mapping of burned areas in semi-arid ecosystems using modis time-series imagery  
Hardtke L.A., Blanco P.D., del Valle H.F., **Metternicht G.I.**, Sione W.F.

**11:30–11:45: ISRSE36-288**

Disaster landscape attribution: thermal anomaly surveillance and hazard mapping, data scaling and validation  
**Jones S.D.**, Reinke K., Gupta V., Soto-Berelov M., Holden L., Held A., Mitchel S., Eckhardt A., Lehmann F., Skimore A., Grant I.

**11:45–12:00: ISRSE36-491**

Estimation of The Smoke Emission Rates from Biomass Burning in Sumatera and Kalimantan using Moderate Imaging Spectroradiometer

**Sofan P.**, Suwarsono S., Khomarudin M.R., Roswintiarti O.

**12:00–12:15: ISRSE36-613**

Real-time stream processing for active fire monitoring on Landsat 8 direct broadcast data

**Bohme C.**, Bouwer P., Prinsloo T.

**12:15–12:30: ISRSE36-631**

Mapping wildland fuels for fire risk assessment in a complex mediterranean environment

**Mallinis G.**, Mitsopoulos I

**END OF ORAL PROGRAMME DISA-4**

# **DISA-5 SAR applications in Disaster Monitoring**

**Lecture Room:** Stresa (B09)

**16:30–18:00**

**16:30–16:45: ISRSE36-136**

Tsunami Affected Farmland Extraction Using Morphological Profiles (MPs) Method by Satellite Images Including SAR and Visible Near-Infrared Band Data

**Yamada Y.**

**16:45–17:00: ISRSE36-266**

The use of SAR interferometry for landslide mapping in the Indian Himalayas  
Vöge M., **Frauenfelder R.**, Ekseth K., Arora M.K., Bhattacharaya A., Basin R.K.

**17:00–17:15: ISRSE36-313**

Preparation of a national Copernicus-service to support hazard mitigation by surface motion detection  
**Kalia A. C.**, Frei M., Lege T.

**17:15–17:30: ISRSE36-374**

Monitoring subsidence in Jakarta using TerraSAR-X data  
**Fan J.**, Wang R.Y., Liang Y.C., Liu G., Ady R., Zhao H.L.

**17:30–17:45: ISRSE36-557**

InSAR constraints on fault slip models during the 2014 earthquake sequence in the Zagros mountain, SW Iran  
**Motagh M.**, Bahroudi A., Haghshenas Haghighi M., Samsonov S., Fielding E., Wetzel H.U

**17:45–18:00: ISRSE36-628**

Long-term monitoring of a deep-seated, slow-moving landslide by mean of C-band and X-band advanced interferometric products: the Corvara in Badia case study (Dolomites, Italy).  
**Mulas M.**, Petitta M., Corsini A., Schneiderbauer S., Mair V., Iasio C.

**END OF ORAL PROGRAMME DISA-5**

# DATA-4 Image analysis, correction and information retrieval

**Lecture Room:** Cape Town (A04)

**11:00–12:30**

**11:00–11:15: ISRSE36-18**

Multiple Auto-Adapting Color Balancing for Large Number of Images

**Zhou X.**

**11:15–11:30: ISRSE36-28**

3D-information fusion from very high resolution satellite sensors

**Krauss T.**, d'Angelo P., Kusch G., Tian J., Partovi T.

**11:30–11:45: ISRSE36-183**

A Robust False Matching Points Detection Method for Remote Sensing Image Registration

Shan X. J., **Tang P.**

**11:45–12:00: ISRSE36-232**

A New Variational Model with Group Gradient Sparsity Constraints for Image Fusion

**Tang P.**, Chen Z.

**12:00–12:15: ISRSE36-398**

A modified approach for change detection using change vector analysis in posterior probability space

**AZZOUZI S. A.**, PANTALEONI A. V., BENTOUNES H. A.

**12:15–12:30: ISRSE36-104**

Which classification method is best? An infrastructure for rigorous comparisons of classification algorithms

**Lawrence R.**

**12:30 Lunch Break & Poster Session**

**14:00–14:15: ISRSE36-399**

Enhancement of the double flexible pace search threshold determination for change vector analysis

**AZZOUZI S. A.**, PANTALEONI A. V., BENTOUNES H. A.

**14:15–14:30: ISRSE36-534**

Topographic Correction Module at Storm (TC@Storm)

**Zakšek K.**, Pehani P., Veljanovski T., ?otar K., O`tir K.

**14:30–14:45: ISRSE36-559**

Automatic Generation Of Training Data For Hyperspectral Image Classification Using Support Vector Machine

**Abbasi B.**, Arefi H., Alipour T.

**14:45–15:00: ISRSE36-564**

A Support Vector Machine-Based Algorithm For Classification Of Fused Hyperspectral And 3K DSM Data

**Abbasi B.**, Arefi H., Bigdeli B.

**15:00–15:15: ISRSE36-678**

Computing and monitoring potential of public spaces by shading analysis using 3d lidar data and advanced image analysis

**Zwolinski A.**, Jarzowski M.

**15:15–15:30: ISRSE36-706**

The use of Geographically Weighted PCA to classify land cover from multispectral image data

Comber A., **Harris P.**, Tsutsumida N.

**END OF ORAL PROGRAMME DATA-4**

## **BIOD-3 Forests Mapping and Monitoring**

**Lecture Room:** Beijing (B05-06)

**11:00–12:30**

**Chairperson(s):** Douglas Muchoney

**11:00–11:18: ISRSE36-573**

Estimation of Forest Biomass Productivity based on Remote Sensing and Climate Data

**Lehmann P.**, Lessing R., Schröder J., Körner M.

**11:18–11:36: ISRSE36-589**

Quantification of the terrestrial phytomass and carbon in the mountainous forest ecosystem using remote sensing and in-situ observations

**Patil P**

**11:36–11:54: ISRSE36-659**

Tree biomass in the Swiss landscape: Nation-wide modelling for forest and non-forest trees using remotely sensed data

**Price B.**, Gomez A., Mathys L., Thürig E., Ginzler C.

**11:54–12:12: ISRSE36-664**

Importance of sample size, data type and prediction method for remote sensing based aboveground forest biomass estimation

**Fassnacht F.E.**, Hartig F., Latifi H., Berger C., Hernandez J., Corvolan P., Koch B.

**12:12–12:30: ISRSE36-729**

Design and operation of Australia's TERN AusCover Remote Sensing Data Facility & Associated Forest Monitoring Activities

**Held A.**, Phinn S.

**END OF ORAL PROGRAMME BIOD-3**

## **BIOD-5 Wildfires**

**Lecture Room:** Beijing (B05-06)

**14:00–15:30**

**Chairperson(s):** Vincent Ambrosia

**14:00–14:18: ISRSE36-56**

Improving national shrub and grass fuel maps using remotely sensed data to support fire risk assessments

**Vogelmann J.**, Hawbaker T., Shi H., Li Z., Reeves M.

**14:18–14:36: ISRSE36-46**

Rapid response tools and datasets for post-fire modeling: linking Earth Observations and process-based hydrological models to support post-fire remediation

**Miller M.E.**, Billmire M., Elliot W.J., Endsley K.A., Robichaud P.R.

**14:36–14:54: ISRSE36-52**

Use of Observational and Climate Reanalysis Time-Series Data for Fire-Risk Assessment and Post-Fire Rehabilitation Monitoring in the RECOVER Wildfire Decision Support System

**Schnase J. L.**, Carroll M. L., Weber K. T.

**14:54–15:12: ISRSE36-32**

Utilization of Multi-Sensor Active Fire Detections to Map Fires in the US. The Future of Monitoring Trends in Burn Severity

**Coan M.**, Picotte J., Howard S.M.

**15:12–15:30: ISRSE36-215**

Long-term monitoring of the Suomi NPP active fire product and transitioning to the JPSS-1 satellite

**Csiszar I.**, Schroeder W., Giglio L.

**15:30 Coffee Break**

**16:30–16:48: ISRSE36-233**

Estimating sub-pixel patchiness of wildfires in Australia using MODIS data and a linear un-mixing approach

**Maier S. W.**

**16:48–17:06: ISRSE36-165**

Spatial and temporal variability of burned areas in Northern Eurasia from 2002 to 2012

**Hao W. M.**, Petkov A., Nordgren B., Corley R. E., Urbanski S. P.

**17:06–17:24: ISRSE36-105**

Enhanced Wildland Fire Management Decision Support Using Lidar-Infused LANDFIRE Data

**Peterson B.**, Jolly W.M.

**17:24–17:42: ISRSE36-108**

Development of the Advanced Fire Information System

**Frost P.**

**17:42–18:00: ISRSE36-714**

The importance of biomass burning feedbacks: Focus on CALIOP-based estimates of smoke plume injection height

**Soja A.J.**, Choi H.-D., Vaughan M., Fairlie T.D., Westberg D.J., Roller C., Winker D., Trepte C., Kukavskaya E., Pouliot G., Szykman J.J.

**END OF ORAL PROGRAMME BIOD-5**



# BIOD-7 Various approaches to landcover mapping

**Lecture Room:** Sydney (B07-08)

**14:00–15:30**

**14:00–14:15: ISRSE36-45**

Combining Earth Observations with Animal tracking data- outlining the AniMove.org outreach and education approach

**Wegmann M.**, Safi K., Pettorelli N.

**14:15–14:30: ISRSE36-144**

A proper Land Cover and Forest Type Classification Scheme for Mexico

**Gebhardt S.**, Maeda P., Wehrmann T., Schmidt M.

**14:30–14:45: ISRSE36-145**

Mapping threatened dry deciduous dipterocarp forest ecosystems in South-east Asia for conservation management

**Wohlfart C.**, Wegmann M., Leimgruber P.

**14:45–15:00: ISRSE36-154**

Utilizing the Global Land Cover 2000 reference dataset for a comparative accuracy assessment of 1 km global land cover maps Schultz M, **Tsendbazazr N.E**, Herold M, Jung M, Mayaux P, Goehman H

**15:00–15:15: ISRSE36-253**

Improving land cover maps with multi-temporal, medium resolution hyperspectral imagery, **Clark M.**

**15:15–15:30: ISRSE36-531**

Brazilian dry forest: understanding climate changes and biodiversity dynamics using SEBAL algorithm and cloud computing

**RUFINO I. A.A.**, CUNHA J. E. B. L., GALVÃO C.O., FIORE S., ALOIZIO G., BRASILEIRO F.V.

**15:30 Coffee Break**

**16:30–16:45: ISRSE36-541**

Monitoring of rapid land cover changes in eastern Japan using Terra/MODIS data

**Harada I.**, Hara K., Park J., Asanuma I., Tomita M., Hasegawa D., Fujihara M.

**16:45–17:00: ISRSE36-551**

Spectral Mixture Analysis (SMA) of Landsat Imagery for Land Cover Change Study of Highly Degraded Peatland in Indonesia

**Sakti A. D.**, Tsuyuki S.

**17:00–17:15: ISRSE36-581**

Estimation of Biomass Carbon Stocks over Peat Swamp Forests using Multi-Temporal and Multi-Polarizations SAR Data

**Wijaya A.**, Liesenberg V., Susanti A., Karyanto O., Verchot L.V.

**17:15–17:30: ISRSE36-611**

Spatial analysis of the reliability of pan-European remote sensing based forest maps with national forest inventory data at regional scale

**Seebach L.**, Adler P., Ginzler C., Steinmeier C.

**17:30–17:45: ISRSE36-612**

Spatiotemporal monitoring of Ukraine steppe ecosystems in climate change mitigation  
**Ostapenko V.**, Tkachenko V., Boychenko S., Tomchenko O.

**17:45–18:00: ISRSE36-648**

A MODIS based methodology for large-scale land use dynamic analysis - a case study in an Amazonian basin

**Kuck T.**, Nogueira E., Parise M.

**END OF ORAL PROGRAMME BIOD-7**

## **BIOD-10 Phenology and Biophysical Parameters**

**Lecture Room:** Tromsø (A03)

**14:00–15:30**

**14:00–14:15: ISRSE36-43**

Inter-comparison and evaluation of the global LAI product (LAI3g) and the regional LAI product (GGRS-LAI) over the area of Kazakhstan

**Kappas M.**, Propastin P., Degener J., Renchin T.

**14:15–14:30: ISRSE36-72**

Prospect inversion for indirect estimation of leaf dry matter content and specific leaf area

**Ali A.**, Darvishzadeh R., Skidmore A.-K., Duren I.-V., Heiden U., Heurich M.

**14:30–14:45: ISRSE36-173**

Copernicus operational mapping of land characteristics on a continental scale. Status, lessons-learned and future development

**Langanke T.**, Dufourmont H., Büttner G., Sousa A.

**14:45–15:00: ISRSE36-182**

Supporting near-realtime forest monitoring in Siberia using a data middleware infrastructure and multi-source earth observation data

**Hüttich C.**, Eberle J., Korets M., Schmillius C.

**15:00–15:15: ISRSE36-257**

Ensemble Classification of Individual Tree Species from Multispectral Satellite Imagery and Airborne LiDAR data

**Kukunda C. B.**, Duque-Lazo J., González-Ferreiro E., RENNIES H., Khosravipour A., Hussin Y., Kleinn C.

**15:15–15:30: ISRSE36-262**

Object-based random forest classification of endangered lowland native grassland communities in the Tasmanian Midlands, **Melville B.**

**15:30 Coffee Break**

**16:30–16:45: ISRSE36-439**

Opportunities of Dense Image Matching for vegetation height classification - case study Hohenfels Training Area to support environmental management of military training areas

**Gurske E.**, Sandkaulen M., Böhm A., Schultz A.

**16:45–17:00: ISRSE36-556**

Improving estimates of woody shrub expansion using Landsat time-series trajectories

**Higginbottom T.**, Symeonakis E

**17:00–17:15: ISRSE36-587**

Solar angle effect on land surface phenology in tropical savannas  
**Ma X.**, Huete A., Davies K.

**17:15–17:30: ISRSE36-606**

A new physically based vegetation index for improved phenology estimation by remote sensing  
**Eklundh L.**, Jin H.

**17:30–17:45: ISRSE36-660**

A spatially lagged linear mixture model for the improved estimation of subpixel saltcedar cover along the Forgotten River, **Shi C.**, Wang L.

**17:45–18:00: ISRSE36-708**

Research and Development Needs on the Use of Satellite Observations of Forests in order to reduce Greenhouse Gas Emissions and protect Forest Carbon Stocks  
**Seifert F. M.**, Michel A., Rosenqvist A., Egglestone S.

**END OF ORAL PROGRAMME BIOD-10**

## **PROG-3 Sentinels for Science: SEOM program results**

**Lecture Room:** Berlin (C01)

**11:00–12:30**

**Chairperson(s):** Yves-Louis Desnos, Peter Regner

**11:00–11:15: ISRSE36-26**

The ESA Scientific Exploitation of Operational Missions element  
**DESNOS Y-L.**

**11:15–11:30: ISRSE36-49**

Assessment of the Sentinel-1 interferometric capabilities in the interferometric wide-swath mode  
**Prats P.**, Nannini M., Scheiber R., De Zan F., Wollstadt S., Minati F., Costantini M., Bucarelli A., Borgstrom S., Walter T., Fomelis M., Desnos Y.-L.

**11:30–11:45: ISRSE36-430**

INSARAP-2: Sentinel-1 InSAR Performance Study with TOPS Data  
Dehls J., Hooper A., **Larsen Y.**, Marinkovic P., Perski Z., Wright T.

**11:45–12:00: ISRSE36-236**

Sentinel Toolbox Development  
**Fomferra N.**, Brockmann C., Veci L., Ducoin N., Regner P., Engdahl M., Gascon F.

**12:00–12:15: ISRSE36-150**

SEOM's &#8216;advanced Clouds, Aerosols and WAter vapour products for Sentinel-3/OLCI' project CAWA  
**Fischer J.**, Dubovik O., Preusker R., Aspetsberger M., Brockmann C., Bojkov B.

**12:15–12:30: ISRSE36-258**

SEOM SY-4SCI Ocean Virtual Laboratory using the synergy amongst Sentinels for Ocean Science  
**Collard F.**

**END OF ORAL PROGRAMME PROG-3**

# **PROG-5 The EnMAP imaging spectroscopy mission and its science perspectives**

**Lecture Room:** Berlin (C01)

**14:00–15:30**

**Chairperson(s):** Michael Rast, Godela Rosner

**14:00–14:15: ISRSE36-635**

The EnMAP Mission

**Chlebek C.**, Fischer S., Grosser J., Gentz B., Guanter L., Honold H.P., Heider B., Sang B., Storch T.

**14:15–14:30: ISRSE36-30**

Overview about the EnMAP Science Perspectives

**Guanter L.**, Segl K., Rogass C., Förster S., Kuester T., König B., Sang B., Storch T., Müller A., Rossner G., Chlebek C., Hill J., Hostert P., Krasemann H., Mauser W.

**14:30–14:45: ISRSE36-77**

EnMAP - a scientific seed instrument for information-driven sustainable agriculture

**Mauser W.**, Bach H., Hank T.

**14:45–15:00: ISRSE36-367**

Mapping ecosystem transitions with EnMAP data and machine learning algorithms

**van der Linden S.**, Leitão P.J., Okujeni A., Schwieder M., Suess S., Hostert P.

**15:00–15:15: ISRSE36-201**

Potential of EnMAP and Sentinel-2 for Early Detection of Drought Stress in a Central European Forest

**Hill J.**, Dotzler S., Buddenbaum H., Stoffels J.

**15:15–15:30: ISRSE36-692**

Potential synergies between HypSIPI / ECOSTRESS and EnMAP for Earth system applications

**Hook S.**

**END OF ORAL PROGRAMME PROG-5**

# **ENGY-1 Remote sensing of energy and mineral resources**

**Lecture Room:** Honolulu (A05)

**11:00–12:30**

**11:00–11:15: ISRSE36-61**

A comparison of Landsat 8 (OLI) and Landsat 7 (ETM+) in mapping geology and visualising lineaments: A case study of central region Kenya

**Mwaniki M.**, Möller M., Schellmann G.

**11:15–11:30: ISRSE36-372**

Hyperspectral mineral mapping of the Transvaal Banded Iron Formations, South Africa, within the scope of the EnMAP Mission

**Schodlok M.**, Frei M., Altermann W., Hahne K.

**11:30–11:45: ISRSE36-396**

Thermal and radar remote sensing in support of geothermal exploration in Kenya

**Friese A.**, Hahne K.

**11:45–12:00: ISRSE36-578**

Modelling and mapping of potential zones for solar energy in Aswan Region, Egypt

**Effat H.**

**12:00–12:15: ISRSE36-583**

Fractal dimensions for radioisotope pollution patterns by nuclear power plant accidents

**SAITO K.**, OGAWA S

**12:15–12:30: ISRSE36-651**

Monitoring of terrain surface deformation due to shale gas hydraulic fracturing by InsSAR, corner reflectors and geodetic observations. Pilot study in Poland

**Perski Z.**, Chowaniec-Tobiasz K., Marinkowic P., Wojciechowski T., Nescieruk P.

**END OF ORAL PROGRAMME ENGY-1**

## **SENS-3 Sourcing the crowd - Earth Observation in partnership with citizens**

**Lecture Room:** Honolulu (A05)

**14:00–15:30**

**Chairperson(s):** Steffen Fritz, Jörn Hoffmann

**14:00–14:18: ISRSE36-330**

Citizen Science for Earth Observation: Applications to environmental monitoring and disaster response

**Toivanen T.**, Molinier M., Häme T., Kotovirta V.

**14:18–14:36: ISRSE36-615**

Enabling the transition towards Earth Observation Science 2.0

**MATHIEU P.-P.**

**14:36–14:54: ISRSE36-248**

A comparison of crowdsourced data from the Cropland Capture game with Degrees of Confluence and remote sensing imagery

**See L.**, Fritz S., Sturn T., Salk C., Perger C., Duerauer M., McCallum I., Kraxner F., Obersteiner M.

**14:54–15:12: ISRSE36-735**

Assessment of the added value of openstreetmap for land cover / land use mapping

**Jokar Arsanjani J.**, See L., Milcinski G., Fonte C., Bastin L., Estima J., Lupia F., Fritz S.

**Discussion**

**END OF ORAL PROGRAMME SENS-3**

## **SENS-4 Complementary and synergetic use of X and C-Band data**

**Lecture Room:** Berlin (C01)

**16:30–18:00**

**Chairperson(s):** Yann Denis, Michael Bock

**16:30–16:48: ISRSE36-543**

Multi-application InSAR Integration with TerraSAR-X and RADARSAT-2

**Rabus B.**, Ghuman P.

**16:48–17:06: ISRSE36-66**

High Temporal Resolution Permafrost Monitoring using a Multiple Stack InSAR Technique

Eppler J., Kubanski M., Sharma J., **Busler J.**

**17:06–17:24: ISRSE36-238**

Advancements in Estimating Crop Growth Stages Using RADARSAT-2 and TERRASAR-X Polarimetric Data

**Lampropoulos G.**, Li Y.

**17:24–17:42: ISRSE36-180**

Infrastructure Monitoring in Regions Affected by Permafrost Using High Resolution  
Multi-Frequency SAR Data  
**Kiefl N.**, Prietzsch C., Anderssohn J., Bindrich M.

**17:42–18:00: ISRSE36-683**

Fusion of Radarsat-2 and TanDEM-X satellite data to support the assessment of aboveground biomass (AGB) in temperate forests

**Berger C.**, Truckenbrodt J., Engelhardt S., Thiel C., Enßle F., Fassnacht F., Schnullius C., Koch B.

**END OF ORAL PROGRAMME SENS-4**

## **POLA-1 Complementary and synergetic use of X and C-Band data/ radar observation of cold regions**

**Lecture Room:** Tromsø (A03)

**11:00–12:30**

**11:00–11:18: ISRSE36-246**

Integrated SAR technologies for monitoring the stability of mine sites: application using TerraSAR-X and RADARSAT-2 images

Rheault M., **Bouroubi Y.**, Sarago V., Bugnet P., Gosselin C., Benoit M.

**11:18–11:36: ISRSE36-410**

Extreme Ice Feature Monitoring using C- and X-band SAR Data

Bobby P., Zakharov I., Saunders K., Warren S., **Power D.**, Adlakha P., Jefferies B.

**11:36–11:54: ISRSE36-402**

Monitoring Freezing and Break-up of Rivers and Shallow Lakes with High Resolution Polarimetric SAR Data

**Roth A.**, Schmitt A., Gauthier Y., Hardy S.

**11:54–12:12: ISRSE36-48**

Potential for the combination of multifrequency SAR acquisitions and optical data for polynia research

**Hollands T.**, Dierking W.

**12:12–12:30: ISRSE36-623**

Monitoring of wet snow occurrences and accumulations at high Alpine glaciers using RADAR technologies

**Wendleder A.**, Heilig A., Schmitt A., Mayer C.

**END OF ORAL PROGRAMME POLA-1**

# **ATMC-4 Human Interaction with Climate and Atmosphere**

**Lecture Room:** Honolulu (A05)

**16:30–18:00**

**16:30–16:45: ISRSE36-41**

Time Series Analysis of Satellite-Measured Vegetation Phenology and Aerosol Optical Thickness over the Korean Peninsula

**PARK S.**

**16:45–17:00: ISRSE36-100**

Spatio - Temporal Variation of Aerosol and its Relation to Vegetation Cover over Mega-City New Delhi

**Pandey A. K.**, Kumar R. P., Kumar K.

**17:00–17:15: ISRSE36-378**

Exploring the relationships of between land surface temperature, ground coverage ratio and building volume density in an urbanized environment

**Zhan Q.**, Meng F., Xiao Y.

**17:15–17:30: ISRSE36-395**

Monitoring and Assessment of Regional air quality in China using space Observations (MarcoPolo)

**van der A R.J.** and the MarcoPolo Team

**17:30–17:45: ISRSE36-536**

Spatial scales of pollution in Israel

**Chudnovsky A.**, Kostinski A, Lyapustin A, Wang Y

**17:45–18:00: ISRSE36-688**

Assessing the impact of urbanization on urban climate by remote satellite perspective: a case study in Danang city, Vietnam

**Nguyen L.**

**END OF ORAL PROGRAMME ATMC-4**



## **AGRI-4 Monitoring of managed grasslands**

**Lecture Room:** Cape Town (A04)

**16:30–18:00**

**16:30–16:45: ISRSE36-70**

Satellite-based assessment of grassland yields

**Grant K.**, Wagner M., Siegmund R., Baron M., Herrmann A., Taube F., Hartmann S.

**16:45–17:00: ISRSE36-353**

Estimation of Grass Yield in large region on Geographically Weighted Regression Model

**Chengfeng L.**, Xiujuan Y., Caijuan L., Yinkun D.

**17:00–17:15: ISRSE36-432**

Biomass estimation to support pasture management in Niger

**Schucknecht A.**, Meroni M., Kayitakire F., Rembold F., Boureima A.

**17:15–17:30: ISRSE36-436**

Determining use intensities of semi-natural grassland from high resolution intra-annual satellite time series

**Jopke C.**, Tintrup gen. Suntrup G., Kleinschmit B., Förster M.

**17:30–17:45: ISRSE36-713**

Validation of the EO-LDAS Prototype - A Data Assimilation Tool for Crop Monitoring

**Truckenbrodt S.C.**, Schullius C.C.

**17:45–18:00: ISRSE36-716**

Application of Historical Ground Data, Satellite Data and Integration of GPS and GIS for Range Monitoring in Arid Rangelands

**Arzani H.**, Frahpour M., Azimi M.

**END OF ORAL PROGRAMME AGRI-4**

## **SPEC-2 EO and Africa : A joint Europe - Africa Perspective**

**Lecture Room:** Ann Arbor (A08)

**12:30–14:00**

**The joint EU - Africa Strategy and its EU - Africa Space dialogue (EU speaker, tbc)**

**The African perspective : Africa Space Policy (Dr Martial De-Paul Ikounga, African Union Commissioner for Human Resources, Science and Technology - HRST)**

**The GMES and Africa initiative (Mahama Ouedraogo, Director for HRST, African Union Commission)**

**A concrete example : MESA project (Dr Abebe, Director Rural Economy and Agriculture Department, African Union Commission)**

**A concrete example : GFCS and Africa (Dr Guleid Artan, Director of the IGAD Climate Prediction and Application Centre)**

**END OF ORAL PROGRAMME SPEC-2**

## **SPEC-3 ABCC Program: Earth Observation for Global Change**

**Lecture Room:** Buenos Aires (A06)

**11:00–18:00**

**Chairperson(s):** Wang Changlin

tbd

**END OF ORAL PROGRAMME SPEC-3**

## **SPEC-4 EO Infrastructure for Data Access and Dissemination in Africa**

**Lecture Room:** Ann Arbor (A08)

**14:00–18:00**

**Chairperson(s):** Andiswa Mlisa, AfriGEOSS

tbd

**Thursday, 14 May 2015**

**PLEN-4 Global Trends and Challenges in Remote Sensing Technology**

**Main Session Organizer:**

**Deputy Session Organizer:**

**Lecture Room:** Berlin (C01)

**09:00–10:30**

**Chairperson(s):** Gunther Kohlhammer, ESA; Gunter Schreier, DLR

**New Approaches in SAR Imaging, Alberto Moreira, DLR**

**Optical Imaging from the ISS, Keith Beckett, Urthecast**

**The Power of Crowd Sourcing, NN**

**Earth Observation with CubeSats, NN**

**PerspeCloudComputing, Manfred Krischke, CloudEO**

**New approaches in Earth Observation by Google, Rebecca Moore, Google**

**END OF ORAL PROGRAMME PLEN-4**

# **SOCI-3 Mapping urbanisation from air & space - practical cases**

**Lecture Room:** Tromsøe (A03)

**11:00–12:30**

**11:00–11:15: ISRSE36-50**

Fit-of-use comparative analysis of the Global Human Settlement Layer and the Sealing Surface Layer towards a European Settlement Map

**Halkia M.**, Ferri S., Pesaresi M., Florczyk A., Syrris V., Scavazzon M.

**11:15–11:30: ISRSE36-69**

An Integrated System for Urban Landfill Detection and Monitoring

**Cadau E.**, Vingione G., Aurigemma R., Laneve G.

**11:30–11:45: ISRSE36-197**

Identification of urban boundaries based on remote sensing and geographic information system:  
a case in Wuhan

**li y.**, zhan qm

**11:45–12:00: ISRSE36-271**

Dynamics of Land Use Land Cover Change in Riyadh Using Satellite Derived Optical Data

**Suhail M.**

**12:00–12:15: ISRSE36-328**

Monitoring Commercial and Industrial Brownfields as Urban Resource and Land Use Option -  
The Case of Leipzig, Germany

**Banzhaf E.**

**12:15–12:30: ISRSE36-566**

Urban Growth Assessment Of ALAIN City (UAE) Using Satellite-Derived Imperviousness Index

**ISSA S. M. G.**

**END OF ORAL PROGRAMME SOCI-3**

# **SOCI-1 Cultural heritage and Earth Observation**

**Lecture Room:** Tromsoe (A03)

**14:00–15:30**

**Chairperson(s):** Mario Hernandez

**14:00–14:18: ISRSE36-84**

Innovation Technologies and Applications for Coastal Archaeological sites

**DI IORIO A.**, BILIOURIS D., HANSEN L.B., BAGNI M.

**14:18–14:36: ISRSE36-363**

Accessibility maps to selected archaeological and touristic sites in south Sinai, Egypt using satellite images

**Elbeih S.**, Zaghoul E.

**14:36–14:54: ISRSE36-478**

Automated 3D architecture reconstruction from photogrammetric structure-and-motion: A case study of the One Pilla pagoda, Hanoi, Vietnam

Nguyen D., Tran G., **To T.**

**14:54–15:12: ISRSE36-508**

Remote Sensing Archaeological Study of the Han Great Wall Defence System in Ancient Dunhuang, NW China

**Luo L.**, Liu J., Wang X.Y., Guo H.D.

**15:12–15:30: ISRSE36-529**

Tracking sand dune movements using multi-temporal remote sensing imagery: A case study of the Central Sahara (Libyan Fazzan/ Ubari Sand Sea)

**Els A.**, Merlo S, Knight J

**15:30 Coffee Break**

**Lecture Room:** Tromsoe (A03)

**16:30–18:00**

**Chairperson(s):** Mario Hernandez

**16:30–16:48: ISRSE36-644**

Unmanned Aerial Systems and Spectroscopy for Remote Sensing Applications in Archaeology

Agapiou A., **Themsistocelous K.**, Cuca B, Hadjimitsis D.G.

**16:48–17:06: ISRSE36-669**

Contributions of Remote Sensing for Governance of Natural Resources and Environmental Issues in Darfur, Sudan

**Küpper A.**

**17:06–17:24: ISRSE36-42**

Integrated RS, GIS and GPS approaches to archaeological prospecting in the Hexi Corridor, NW China: a case study of the royal road to ancient Dunhuang

**Wang X.**

**17:24–17:42: ISRSE36-225**

Novel platforms and applications for ground-penetrating radar  
**Collins M.**

**17:42–18:00: ISRSE36-681**

Study of City Landscape Heritage Using Lidar Data and 3d-City Models  
**Rubinowicz P.**

**END OF ORAL PROGRAMME SOCI-1**

## **DATA-3 Earth Observation data processing and information systems**

**Lecture Room: Stresa (B09)**

**11:00–12:30**

**11:00–11:15: ISRSE36-17**

Information extraction and Dependency on Open Government Data (OGD) for Environmental Monitoring  
**Abdulmuttalib H.**, Stobl S.

**11:15–11:30: ISRSE36-131**

Copernicus Data and Exploitation Infrastructure - a German national collaborative ground segment  
**Keuck V.**, Hoffmann J., Staudenrausch H.

**11:30–11:45: ISRSE36-143**

Automatic Processing of Chinese GF-1 Wide Field of View Images  
**Zhang Y. J.**

**11:45–12:00: ISRSE36-161**

The Swarm Archiving Payload Data Facility, an Instance Configuration of the ESA Multi-Mission Facility  
**Pruin B.**, Martini A., Shanmugam P., Lopes C.

**12:00–12:15: ISRSE36-204**

A POK-based Operational Global Land Cover Mapping and the Data Product GlobeLand30  
**Chen J.**, Liao A.P., Chen L.J.

**12:15–12:30: ISRSE36-415**

Automatic Near-Real-Time Image Processing Chain for Very High Resolution Optical Satellite Data  
**Ostir K.**, Cotar K, Marsetic A, Pehani P, Perse M, Zaksek K, Zaletelj J, Rodic T

**12:30 Lunch Break & Poster Session**

**14:00–14:15: ISRSE36-421**

Synchronization of Geospatial Data Across Servers and Clients Using Standardized Services and Data Containers  
**Simonis I.**, McKee L.

**14:15–14:30: ISRSE36-484**

Basic software tools to remotely manage massive hyperspectral data arrays in distributed information infrastructure

**Savorskiy V.**, Lupyan E., Balashov I., Ermakov D., Kuznetsov O., Panova O., Tolpin V., Chernushich A., Uvarov I.

**14:30–14:45: ISRSE36-530**

InterIMAGE Cloud Platform: towards the architecture of an open-source, distributed platform for automatic, knowledge-based image interpretation

**Ferreira R. S.**, Oliveira D. A. B., Happ P. N., Costa G. A. O. P., Feitosa R. Q., Bentes C.

**14:45–15:00: ISRSE36-593**

Cloud Optimized Image Format and Compression

**Becker P.**

**15:00–15:15: ISRSE36-601**

Software framework for building modern Earth-observation data processing and archiving environments

**Recher St.**, Scheidgen P.

**15:15–15:30: ISRSE36-605**

New Methods in Acquisition, Update and Dissemination of Nature Conservation Geodata - Implementation of an Integrated Framework

**Tintrup gen. Suntrup G.**, Jalke T., Streib L., Keck N., Nieland S., Kleinschmit B., Trapp M.

**END OF ORAL PROGRAMME DATA-3**

## **DATA-5 Data applications and quality assessment**

**Lecture Room:** Stresa (B09)

**16:30–18:00**

**16:30–16:45: ISRSE36-38**

Harmonisation Initiatives of COPERNICUS Quality Control

**Vescovi F.D.**, Lankester T., Coleman E., Ottavianelli G.

**16:45–17:00: ISRSE36-75**

Geomatics for Mapping of Groundwater Potential Zones in Northern Part of the United Arab Emirates - Sharjah City

**Al-Ruzouq R.**, Shanableh A., Merabtene T.

**17:00–17:15: ISRSE36-98**

Validation of aerosol estimation in atmospheric correction algorithm ATCOR

**Pflug B.**, Main-Knorn M., Makarau A., Richter R.

**17:15–17:30: ISRSE36-256**

A 15 year climatology of spectral BRDF derived from MODIS for a priori optimal estimation of global surface albedo within the EU-FP7 QA4ECV project.

**Kharbouche S.**, Muller J.-P., Lewis P.

**17:30–17:45: ISRSE36-305**

A Dynamic Threshold Cloud Detecting Approach based on the Brightness Temperature from FY-2 VISSR Data

**Xiang D.**, Tan D., Wen D., Wang D.

**17:45–18:00: ISRSE36-458**

Atmospheric correction methodology for Aster, Rapideye, Spot 2 and Landsat 8 images with software envi flaash module

**Aguilar H.**, Mora R., Vargas C.

**END OF ORAL PROGRAMME DATA-5**

## **BIOD-4 Biodiversity and conservation**

**Lecture Room:** Beijing (B05-06)

**14:00–15:30**

**Chairperson(s):** Martin Wegmann, Matt Hansen

**14:00–14:18: ISRSE36-527**

The Dynamic Habitat Index derived from three decades of MODIS and AVHRR data and its relationship to global patterns on mammal species richness

**Radeloff V.C.**, Brooks T.M., Coops N.C., Hobi M., Kuemmerle T., Pidgeon A.M., Rondinini C., Suttidate N.

**14:18–14:36: ISRSE36-88**

Development and use of a new suite of global, remote sensing based environmental layers for biodiversity monitoring and prediction

**Jetz W.**

**14:36–14:54: ISRSE36-409**

Land cover change impacts on biodiversity in Mt. Kilimanjaro savanna zone

**Hurskainen P.**, Hemp A., Pellikka P.K.E., Pfeifer M.

**14:54–15:12: ISRSE36-435**

Biodiversity knowledge and loss of natural vegetation in protected areas in Sub-Saharan Africa

**Szantoi Z.**, Stropp J., Brink A.

**15:12–15:30: ISRSE36-645**

Tracing anthropogenic pressures on biodiversity in the African Sahelo-Saharan region - a case study for Niger based on radar imagery

**Esch T.**, Duncan C., Heldens W., Marconcini M., Pettorelli N., Rabeil T., Wegmann M.

**15:30 Coffee Break**



**Lecture Room:** Beijing (B05-06)

**16:30–18:00**

**Chairperson(s):** Woody Turner,

**16:30–16:48: ISRSE36-595**

Application of remote sensing-derived data to species distribution models

**Garzon-Lopez C.**, Rocchini D, Metz M, Neteler M

**16:48–17:06: ISRSE36-210**

Discrete versus continuous spatial representation of habitats for modeling distribution patterns of avifauna

**Sheeren D.**, Lefevre S., Bonthoux S.

**17:06–17:24: ISRSE36-523**

Sensor requirements for biodiversity research. The role of spatial and spectral resolution in mapping habitat of zoological communities

**Leutner B. F.**, Wegmann M., Müller J., Bachmann M., Dech S.

**17:24–17:42: ISRSE36-731**

Scale dependency for assessment of biodiversity indicators from different remote sensing data sets

Ghosh A., Faßnacht F., Dawar S., Dees M., Maack J., **Koch B.**

**17:42–18:00: ISRSE36-160**

Spatial ecological complexity as a proxy of biodiversity

**Rocchini D.**, Wegmann M., Metz M., Delucchi L., Neteler M.

**END OF ORAL PROGRAMME BIOD-4**

## **BIOD-5 Wildfires**

**Main Session Organizer:**

**Deputy Session Organizer:**

**Lecture Room:** Beijing (B05-06)

**11:00–12:30**

**Chairperson(s):** Vincent Ambrosia

**11:00–11:18: ISRSE36-101**

Remote Sensing of High Temperature Events by the FireBird Mission

**Lorenz E.**

**11:18–11:36: ISRSE36-73**

Fire Pathways Towards Deforestation: How Do Current Satellite Monitoring Systems Solve the Problem?

**ROMAN-CUESTA RM.**, Herold M., Murdiyaso D., Gabo D., Setzer A.

**11:36–11:54: ISRSE36-466**

Mapping fuel loads in the Brazilian protected areas of the Cerrado in support of integrated fire management

**Franke J.**, Dias P. A., Beatty R., Hoffmann A.A., Cândido P. De A., Melchiori A.E., Siegert F., Buss P.

**11:54–12:12: ISRSE36-492**

High Temperature Fire Experiment for Validation of OOV-TET1 and Landsat 8 on the DLR Testsite Demmin (North-Eastern Germany)

**Borg E.**, Frauenberger O.

**12:12–12:30: ISRSE36-667**

Estimating Fire Radiative Energy (FRE) and fuel consumption for single fire events using MODIS Fire Radiative Power (FRP) and statistical modelling

**Ruecker G.**, Leimbach D., Kuechenhoff H., Alkaya L., Linne S., Guenther F., Windmann M.

**END OF ORAL PROGRAMME BIOD-5**

## **BIOD-8 Land cover change mapping**

**Lecture Room:** Sydney (B07-08)

**14:00–15:30**

**14:00–14:15: ISRSE36-16**

Land cover change analysis in Mexico using 30m Landsat and 250m MODIS data

**Colditz R.**, Llamas R., Ressler R.

**14:15–14:30: ISRSE36-274**

Drivers of deforestation in South America: first results from a pan-tropical remote sensing analysis

**De Sy V.**, Herold M., Beuchle R., Besnard S., Clevers J., Lindquist E., Verchot L., Wijaya A.

**14:30–14:45: ISRSE36-94**

Assessment of Land use/land cover changes in the Savanna sugar project area of Adamawa state, Nigeria

**ADEBAYO A., YAHYA A.S.**

**14:45–15:00: ISRSE36-128**

ASTER and Worldview-2 satellite data comparison for identification of groundwater salinization effects on the Classe pine forest vegetation (Ravenna, Italy)

**De Giglio M.**, Barbarella M., Greggio N., Panciroli L.

**15:00–15:15: ISRSE36-202**

A high resolution LS-factor dataset at 25m for soil erosion modelling

**Panagos P.**, Borrelli P., Meusburger K., Alewell C.

**15:15–15:30: ISRSE36-212**

Satellite-based drought monitoring in Kenya in an operational setting

**Klisch A.**, Atzberger C., Luminari L.

**15:30 Coffee Break**

**16:30–16:45: ISRSE36-229**

High Resolution, Wide Area Detection of Anthropogenic Forest Change Using RADARSAT-2  
**Staples G.**, van der Kooij M

**16:45–17:00: ISRSE36-296**

Development of Drought Monitoring System Based on Satellite Data and Ground Measurements  
Kokalj J., Ribert J., Rogelj P., Iršič Ribert M., Muri B., **Ožtir K.**

**17:00–17:15: ISRSE36-311**

Mapping the distribution of a rapidly spreading alien invasive plant (Melia azedarach) using remote sensing  
**Gebreslasie M.**, Gairola S., Proche P., Rocchini D

**17:15–17:30: ISRSE36-315**

Studying the effect of UV-B radiation on the distribution of invasive species using remote sensing data  
Vaclavik T., Foltanek M., Beckmann M., **Cord A.F.**

**17:30–17:45: ISRSE36-336**

Remote sensing of dryland vegetation dynamics and degradation at medium spatial scale: lessons from Africa and Asia  
**Dubovyk O.**, Landmann T., Erasmus B., Jakob A., Menz G., Khamzina A., Schellberg J.

**17:45–18:00: ISRSE36-447**

Potential improvement for forest cover and forest degradation mapping with the forthcoming Sentinel-2 program  
**HojasGascon L.**, Eva H., Belward A., Garcia Haro J., Hagolle O.

**END OF ORAL PROGRAMME BIOD-8**

## **BIOD-9 Wetlands and coastal observations**

**Lecture Room:** Sydney (B07-08)

**11:00–12:30**

**11:00–11:15: ISRSE36-191**

Detection and characterization of Colombian wetlands using Alos Palsar and MODIS imagery  
**Estupinan-Suarez L.M.**, Florez-Ayala C., Quinones M.J., Pacheco A.M., Santos A.C.

**11:15–11:30: ISRSE36-382**

Sentinel-2 time series to map threats in wetlands - results of ESA's DUE project GlobWetland II  
**Weise K.**, Paganini M., Schwarz M., Tobiaschus M., Faber M.

**11:30–11:45: ISRSE36-385**

Everglades Wetland Classification using object-based approach with Terra-SAR and RapidEye satellite data  
**Kim H.-O.**, Hong S.-H., Wdowinski S., Feliciano E.

**11:45–12:00: ISRSE36-472**

Study of territorial distribution of the mangrove, Térraba-Sierpe National Wetlands 2012  
**Acuña Piedra J.F.**, Vargas C

**12:00–12:15: ISRSE36-679**

Catchment properties in the Kruger National Park derived from the new TanDEM-X Intermediate Digital Elevation Model (IDEM)

**Baade J.**, Schullius C.

**12:15–12:30: ISRSE36-736**

Earth Observation in Support of Sustainable Water Resource Management in Africa The TIGER initiative - Looking After Water in Africa

**Koetz B.**, Bila M., Chibuye H., Hailu E.G., Mufeti P., Palazzo F., Phiri Z., rajah C., Tottrup C., Tumbulto J.W., Vekerdy Z., Walli A.

**END OF ORAL PROGRAMME BIOD-9**

## **PROG-7 Outlook on commercial Earth Observation Systems**

**Lecture Room:** Berlin (C01)

**11:00–12:30**

**Chairperson(s):** Peter Schaadt

**11:00–11:15: ISRSE36-725**

Breaking the Super-Spectral Imaging Barrier with Worldview-3

**Marchisio G.**, Johnston C., Tusk C., Baugh W., Gueguen L., Ouzounis G., Marchetti A.

**11:15–11:30: ISRSE36-361**

Earth Observation Activities from Airbus Defence and Space

**Menking M.**

**11:30–11:45: ISRSE36-516**

BlackBridge's RapidEye+ Strategy

**Johnson R.**

**11:45–12:00: ISRSE36-724**

Pull vs. Push: How OmniEarth Delivers Better Earth Observation Information to Subscribers

Fish C., Slagowski S., Dyrud L., Fentzke J., Hargis B., **Steerman M.**

**12:00–12:15: ISRSE36-727**

UrtheCast Second-Generation Earth Observation Sensors

**Beckett K.**

**12:15–12:30: ISRSE36-113**

Earth Observation, State of Play and Future Prospects

Topham R., **Keith A.**, Revillon P.

**END OF ORAL PROGRAMME PROG-7**

## **MARI-1 Maritime awareness and traffic observation**

**Lecture Room:** Buenos Aires (A06)

**11:00–12:15**

**11:00–11:15: ISRSE36-130**

Long-term Marine Traffic Monitoring for Environmental Safety in the Aegean Sea

Giannakopoulos T., Gyftakis S., **Charou E.**, Perantonis S., Nivolianitou Z., Koromila I., Makrygiorgos A.

**11:15–11:30: ISRSE36-217**

Tracking Vessels to Illegal Pollutant Discharges Using Multi-source Vessel Information

**Busler J.**, Wehn H, Woodhouse L

**11:30–11:45: ISRSE36-230**

Assessment of C,L,X-band Spaceborne SAR for Maritime Domain Awareness

**Staples G.**, Hurley J, Logan T

**11:45–12:00: ISRSE36-404**

Importance of wave removal in vessel detection on VHR optical imagery

**Kanjir U.**, ?otar K., Marseti? A., Pehani P., O'tir K.

**12:00–12:15: ISRSE36-433**

Near Real Time Applications for Maritime Situation Awareness

**Schwarz E.**, Krause D., Berg M., Daedelow H., Maass H.

**END OF ORAL PROGRAMME MARI-1**

## **SENS-1 UAS for resource assessment**

**Main Session Organizer:**

**Deputy Session Organizer:**

**Lecture Room:** Berlin (C01)

**14:00–15:30**

**Chairperson(s):** Vincent Ambrosia

**14:00–14:18: ISRSE36-301**

Enabling Earth Science Measurements with NASA UAS Capabilities

**Albertson R.**, Schoenung S, Fladeland M, Cutler F, Tagg B

**14:18–14:36: ISRSE36-260**

Unmanned Aircraft for Wildland Fire Science and Operations: Classification and Considerations for Use

**Watts A.**, Ambrosia V., Hunkley E.

**14:36–14:54: ISRSE36-437**

Mission adaptive UAS platform for Earth science resource assessment

**Dunagan S.**, Fladeland M., Ippolito C., Knudson M.

**14:54–15:12: ISRSE36-525**

Utilization of remotely-piloted aircraft systems for operations and research&8212;RxCADRE 2012

**Zajkowski T.**

**15:12–15:30: ISRSE36-354**

Virtualizing super-computation on-board UAS

**Salamí E.**, Soler J.A., Cuadrado R., Barrado C., Pastor E.

**15:30 Coffee Break**

**Lecture Room:** Berlin (C01)

**16:30–18:00**

**Chairperson(s):** Vincent Ambrosia

**16:30–16:48: ISRSE36-565**

Gyrocopter-based remote sensing platform

**Weber I.**, Jenal A., Kneer C., Bongartz J.

**16:48–17:06: ISRSE36-517**

Unmanned Aerial Vehicles (UAVs) for Ground Truth Data Collection for Land Cover Change

Estimation of Primate Habitats

**Szantoi Z.**, Wich S., Koh L.P.

**17:06–17:24: ISRSE36-383**

Geological Disaster Monitoring by Using Unmanned Aerial Vehicle Remote Sensing  
Data on Android Platform

**Wei Z.**, Hongtao Z., Jing S., Qihua Z.

**17:24–17:42: ISRSE36-190**

Unmanned airborne systems blur the line between field survey and remote sensing

**Joyce K.E.**, Maier S.W

**17:42–18:00: ISRSE36-663**

Detailed and highly accurate 3D-models of high mountain areas by the MACS-Himalaya  
aerial camera platform

**Brauchle J.**

**END OF ORAL PROGRAMME SENS-1**

## **SENS-9 Approaches to optical data quality**

**Lecture Room:** Honolulu (A05)

**11:00–12:15**

**11:00–11:15: ISRSE36-74**

calibration of landsat-8 tirs bands for environment change detetion

**Caselles V.**

**11:15–11:30: ISRSE36-169**

Multisensor image fusion guidelines in remote sensing

**Pohl C.**

**11:30–11:45: ISRSE36-400**

Validation of spectral continuity between PROBA-V and SPOT-VEGETATION global daily datasets

**Dierckx W.**, Swinnen E., Kempeneers P.

**11:45–12:00: ISRSE36-419**

Comparison of unsupervised vegetation classification methods from VHR images after shadows removal by innovative algorithms

**Movia A.**, Beinat A., Crosilla F.

**12:00–12:15: ISRSE36-560**

Proximal soil sensing with imaging spectroscopy: effects of removing micro-shadows from image data for soil analysis

**Vohland M.**, Jung A., Thiele-Bruhn S.

**END OF ORAL PROGRAMME SENS-9**

## **ATMC-2 Atmosphere remote sensing techniques and Missions**

**Lecture Room:** Honolulu (A05)

**14:00–15:30**

**14:00–14:15: ISRSE36-103**

Absolute Imager Intercalibration On Orbit: Quantifying the Polarization Effects on the CLARREO's Reflected Solar Spectrometer-Imager Intercalibration

**Goldin D.**, Lukashin C., Sun W.

**14:15–14:30: ISRSE36-120**

Remote sensing of the atmospheric composition in the infrared spectral region within the Network for the Detection of Atmospheric Composition Change (NDACC) and the Total Carbon Column Observing Network (TCCON)

**Notholt J.** and the TCCON and NDACC Team

**14:30–14:45: ISRSE36-125**

Observing Systems Simulation Experiment (OSSEs) for air quality applications

Timmermans R.M.A., Lahoz W.A., Attié J.-L., Peuch V.-H., **Curier R.L.**, Edwards D.P., Eskes H.J., Builtjes P.J.H.

**14:45–15:00: ISRSE36-174**

Global Climate Observations - a Roadmap to the Future

**Richter C.**, Dolman A.J., Briggs S. A., Simmons A.J.

**15:00–15:15: ISRSE36-184**

The greenhouse gas project of ESA's Climate Change Initiative (GHG-CCI): Overview, achievements and future plans

**Buchwitz M.**, Reuter M., Schneising O. and the GHG-CCI Team

**15:15–15:30: ISRSE36-290**

Observing Methane from Space - The French German LIDAR Mission MERLIN

**Alpers M.**, Ehret G., Flamant P., Millet B.

**15:30 Coffee Break**

**16:30–16:45: ISRSE36-322**

The CEOS Atmospheric Composition Constellation: Enhancing the value of space-based observations

**Eckman R.S.**, Zehner C., Al-Saadi J.

**16:45–17:00: ISRSE36-335**

Climate Absolute Radiance and Refractivity Observatory (CLARREO)

**Leckey J.**

**17:00–17:15: ISRSE36-494**

Satellite radiothermivision of atmospheric mesoscale processes: case study of tropical cyclones  
**Ermakov D.M.**, Sharkov E.A., Chernushich A.P.

**17:15–17:30: ISRSE36-518**

Towards Disentangling Natural and Anthropogenic GHG Fluxes from Space - The CarbonSat Earth Explorer 8 Candidate Mission  
**Bovensmann H.**

**17:30–17:45: ISRSE36-533**

Cloud Photogrammetry from Space  
**Zak'ek K.**, Gerst A., Hort M.

**17:45–18:00: ISRSE36-588**

COMPARISONS OF AEROSOL OPTICAL DEPTH PROVIDED BY SEVIRI SATELLITE OBSERVATIONS AND CAMx AIR QUALITY MODELLING.  
**Fernandes A.**, Riffler M., Ferreira J., Wunderle S., Borrego C., Tchepel O.

**END OF ORAL PROGRAMME ATMC-2**

## **AGRI-5 Different approaches to crop and cropland mapping**

**Lecture Room: Cape Town (A04)**

**11:00–12:30**

**11:00–11:15: ISRSE36-119**

Rice-planted area extraction by time series analysis of ENVISAT ASAR WS data using a phenology-based classification approach: A case study for Red River Delta, Vietnam  
**Nguyen D.**, Wagner W., Naeimi V., Cao S.

**11:15–11:30: ISRSE36-148**

Dynamic time warping applied to spatiotemporal agriculture mapping in the Brazilian Amazon  
**Maus V.**, Câmara G., Cartaxo R., Ramos F.

**11:30–11:45: ISRSE36-350**

Research on influence factors of crop acreage estimation based on classification technology  
**Zhang H.**

**11:45–12:00: ISRSE36-380**

Farm land in the Brazilian Amazon - satellites see more than the Agricultural Census  
**Buurman M.**, Câmara G.

**12:00–12:15: ISRSE36-513**

Systematic Crop Mapping of SIGMA Test Sites with 100M PROBA-V Data  
**Durgun Y.O.D.**, Gilliams S.G., Gobin A.G., Duveiller G.D., Djaby B.D., Tychon B.T.

**12:15–12:30: ISRSE36-616**

Assessment of soil erosion: insight from SAR data, empirical erosion model and artificial neural networks  
**Ebrahimzadeh S.**, Motagh M., Sharifi M.A.

**END OF ORAL PROGRAMME AGRI-5**



## **AGRI-6 Targeted quantification of crop parameters**

**Main Session Organizer:**

**Deputy Session Organizer:**

**Lecture Room:** Cape Town (A04)

**14:00–15:15**

**14:00–14:15: ISRSE36-81**

Mapping maize (*Zea mays* L.) Seasonality for Capturing Changes in Stemborers Occurrence

**Abdel-Rahman E.M.**, Landmann T., Kyalo R.

**14:15–14:30: ISRSE36-168**

The role of radar remote sensing in oil palm plantation monitoring

**Pohl C.**, Loong C. K.

**14:30–14:45: ISRSE36-231**

Remotely sensed wheat yield prediction using multi-temporal NDVI derived from Landsat data

**ABOELGHAR M.**, ELSHIRBANY M., ALI A., ABOUHADID A.

**14:45–15:00: ISRSE36-445**

The Tasseled Cap Transformation for RapidEye data

**Schönert M.**, Weichert H.

**15:00–15:15: ISRSE36-717**

Determining Oil Palm Age from SPOT-6 Imagery

**Carolita I.**, Sitorius J.

**END OF ORAL PROGRAMME AGRI-6**

## **AGRI-7 Modeling crop yields**

**Lecture Room:** Cape Town (A04)

**16:30–18:00**

**16:30–16:45: ISRSE36-29**

Rice Crop Monitoring and Yield Assessment with MODIS 250m Gridded Vegetation Products, A Case Study of Sakeo Province, Thailand.

**Wijesingha J.S.J**, Deshapriya N.L], Samarakoon L]

**16:45–17:00: ISRSE36-55**

Prediction of crop yield and sub-field heterogeneity: a comparison of three models

**Machwitz M.**, Schlerf M., Buchner J.

**17:00–17:15: ISRSE36-185**

Comparison of biophysical and satellite predictors for wheat yield forecasting in Ukraine

**Kolotii A.**, Kussul N., Shelestov A., Skakun S., Ostapenko V.

**17:15–17:30: ISRSE36-324**

Relationships between primary production and crop yields in semi-arid and arid irrigated agro-ecosystems

**Jaafar H.**, Ahmad F.

**17:30–17:45: ISRSE36-441**

The Impact of Multi-Sensor Data Assimilation on Plant Parameter Retrieval and Yield Estimation for Sugar Beet

**Hodrius M.**, Migdall S., Bach H., Hank T.

**17:45–18:00: ISRSE36-711**

Rice Crop Monitoring and Yield Estimation Through Cosmo Skymed and TerraSAR-X: A SAR-Based Experience in India

**Pazhanivelana S.**, Kannan P., Christy Nirmala Marya P., Subramaniana E., Jeyaramana S., Nelson A., setiyano T., Holec F., barbeiri M., Yadav M.

**END OF ORAL PROGRAMME AGRI-7**

# **WACY-1 Earth Observation for the Monitoring of Natural Resources in Large River Delta Areas**

**Lecture Room:** Buenos Aires (A06)

**14:00–15:15**

**Chairperson(s):** Juliane Huth, Claudia Künzer

**14:00–14:15: ISRSE36-63**

Unsupervised Terrain and Land Cover Classification of the Mackenzie Delta

**Ullmann T.**, Schmitt A., Roth A., Duffe J., Dech S., Hubberten H. -W., Baumhauer R.

**14:15–14:30: ISRSE36-220**

MONITORING PEARL RIVER DELTA MEGA-REGION DYNAMIC CHANGES FROM 1970s TO 2015 BY OBJECT-BASED SVM METHOD

**Jiang T.**, Sun Z., Wang S., Lv M.

**14:30–14:45: ISRSE36-695**

Technology targeting for sustainable intensification of crop production in the Delta region of Bangladesh

**Schulthess U.**, Krupnik T. J., Ahmed Z.U., McDonald A.J.

**14:45–15:00: ISRSE36-5**

Soil Degradation Assessment in North Nile Delta Using Remote Sensing and GIS Techniques

**EINahry A.**

**15:00–15:15: ISRSE36-82**

Deriving water surfaces with WaMaPro - Observation of water surface dynamics of the Yellow River Delta

**Huth J.**, Ahrens M., Kuenzer C.

**END OF ORAL PROGRAMME WACY-1**

## **WACY-2 Remote sensing of rivers and water bodies**

**Lecture Room:** Buenos Aires (A06)

**16:30–18:00**

**16:30–16:45: ISRSE36-23**

Hydrological characterization of the Usumacinta River Basin towards the preservation of environmental services

Tapia\_Silva F-O., Contreras\_Silva A-I., **Rosales Arriaga E-R.**

**16:45–17:00: ISRSE36-252**

Land Use / Cover Classification and Accuracy Assessment Using Remote Sensing and GIS Techniques - a Case Study of Ghataprabha River Basin

**Panda R.K.**

**17:00–17:15: ISRSE36-309**

A comparison between optical and SAR imagery for estimating discharge from river width

**Elmi O.**, Tourian M J., Sneeuw N.

**17:15–17:30: ISRSE36-364**

Determining and Monitoring the Water Quality of Kizilirmak River of Turkey

Gürsoy Ö., **Birdal A. C.**, Özyanar F.

**17:30–17:45: ISRSE36-547**

Remote sensing of surface water dynamics from over two decades of seasonally continuous Landsat data

**Tulbure M.G.**, Broich M.G., Kingsford R., Lucas R., Keith D.

**17:45–18:00: ISRSE36-638**

Hyperspectral and multispectral based ET estimates from an energy balance model in a wetland area

**Szporak-Wasilewska S.**, Berezowski T., Kleniewska M., Fortuniak K., Pawlak W., Szaty?owicz J., Chorma?ski J.

**END OF ORAL PROGRAMME WACY-2**

**Friday, 15 May 2015**

**DISA-6 New systems and algorithms in Disaster Monitoring**

**Main Session Organizer:**

**Deputy Session Organizer:**

**Lecture Room:** Stresa (B09)

**09:00–10:30**

**09:00–09:15: ISRSE36-60**

SAR-based change detection using hypothesis testing and Markov random field modelling

**Cao W.**, Martinis S.

**09:15–09:30: ISRSE36-167**

An Approach towards Development of Integrated Drought Index through Remote Sensing

**Abbas S.**

**09:30–09:45: ISRSE36-247**

Recent satellite data contribution for rapid mapping activities, natural disasters management, humanitarian operations and early recovery planning

**Navarro C.**, Belabbes S., Pedersen W., Jorda C., Guglielmi V., Fiol M., Bromley L., Bjorgo E.

**09:45–10:00: ISRSE36-379**

Data Collection for Disaster Response from the International Space Station

**Stefanov W.L.**, Evans C.A.

**10:00–10:15: ISRSE36-650**

Application of hi-resolution InSAR and in-situ measurements for 3d landslide deformation pattern retrieval. Case study of "Just landslide"

**Perski Z.**, Marinkovic P., Wojciechowski T., Michalski A., Chowaniec-Tobiasz K., Nescieruk P.

**10:15–10:30: ISRSE36-666**

Extraction of urban information from multi-resolution optical satellite imagery for seismic hazard assessment

**Djenaliev M.Sc.**

**END OF ORAL PROGRAMME DISA-6**

## **SOCI-4 The human footprint and human health**

**Main Session Organizer:**

**Deputy Session Organizer:**

**Lecture Room:** Tromsøe (A03)

**09:00–10:30**

**09:00–09:15: ISRSE36-31**

Identifying high-risk leptospirosis areas in Sao Paulo using RapidEye images, Aster GDEM2 and geomorphological data

**Ferreira M.**, Marujo Ferreira M.F.

**09:15–09:30: ISRSE36-54**

Using Light-at-Night (LAN) Satellite Data for Identifying Clusters of Economic Activities in Europe

**Rybnikova N.A.**, Portnov B.A.

**09:30–09:45: ISRSE36-89**

Recent advancements in fine spatial resolution remote sensing of night lights from space

**Levin N.**

**09:45–10:00: ISRSE36-99**

Using Remote Sensing and GIS techniques to address relation between Arsenic distribution and cancer in Iran

**Rashidi M.**, Zohari M

**10:00–10:15: ISRSE36-550**

Dynamics and Trend of Nighttime Stable Light over Indian urban centres using DMSP OLS through Inter-calibration and its Relation with Demographic and Socio-economic Indices

**Mukhopadhyay S.**, Gupta P.K

**10:15–10:30: ISRSE36-668**

Earth Observation and Development Banks - view from a service provider perspective on recent developments

**Fockelmann R.**

**END OF ORAL PROGRAMME SOCI-4**

## **BIOD-4 Biodiversity and conservation**

**Main Session Organizer:**

**Deputy Session Organizer:**

**Lecture Room:** Beijing (B05-06)

**09:00–10:30**

**Chairperson(s):** Martin Wegmann

**09:00–09:18: ISRSE36-147**

Earth Observation from two perspectives - combining space borne animal tracking and environmental monitoring - a case study on storks and cities.

**Flack A.**, Wikelski M., Safi K., Esch T., Taubenboeck H., Wegmann M.

**09:18–09:36: ISRSE36-224**

Modelling forage resources with airborne imaging spectroscopy: Implications for ungulate and ecosystem conservation

**Schweiger A.K.**, Kneubühler M., Risch A.C., Schütz M., Haller R., Schaepman M.E.

**09:36–09:54: ISRSE36-730**

Satellite telemetry reveals site fidelity and rainfall event triggers of directed movement of Palearctic migrant in southern African savannas

Menselsohn S, **de Klerk H. M.**, Meyburgh B.

**09:54–10:12: ISRSE36-355**

Satellite remote sensing of baleen whales; status and prospects

**Fretwell P.T**

**10:12–10:30: ISRSE36-416**

eHabitat: Modelling of habitats types and similarities in protected areas globally by means of remote sensing

**Martínez-López J.**, Bastin L., Dubois G.

**END OF ORAL PROGRAMME BIOD-4**

# **BIOD-8 Land cover change mapping**

**Lecture Room:** Sydney (B07-08)

**09:00–10:30**

**09:00–09:15: ISRSE36-465**

Towards forest change tracking using Sentinel 1, 2 and 3 satellites

**Verbesselt J.**, DeVries B., Dutrieux L., Reiche J., Herold M.

**09:15–09:30: ISRSE36-475**

Change Detection of Land Use/Land Cover Using LANDSAT Images Over The Past 40 Years (1972-2012) in Northeastern Thailand

**MA Y.**

**09:30–09:45: ISRSE36-526**

Understanding the role of vegetation fires in land cover change dynamics in Eastern Africa

**Palumbo I.**, Temperley W., Graziano M., Brink A.

**09:45–10:00: ISRSE36-561**

Tree cover patterns and changes in the West Sudanian Savanna and observed socio-economic impacts

**Gessner U.**, Knauer K., Kuenzer C.

**10:00–10:15: ISRSE36-569**

A Global Assessment Of Degraded Ecosystems Restoration

**Fernandez M.**, Navarro L., Marques A., Wolf F., Pereira H.

**10:15–10:30: ISRSE36-487**

Quantifying biophysical effects of land use change at global scale with satellite Earth observations

**Duveiller G.**, Cescatti A.

**END OF ORAL PROGRAMME BIOD-8**



## **PROG-4 Science applications related to spaceborne imaging spectroscopy missions**

**Lecture Room:** Berlin (C01)

**09:00–10:30**

**Chairperson(s):** Uta Heiden, Saskia Förster

**09:00–09:18: ISRSE36-209**

The Potential of Imaging Spectroscopy Missions for Inland Water Quality Monitoring

**Reusen I.**, Knaeps E., Sterckx S., De Keukelaere L., Bresciani M., Villa P., Giardino C., Schenk K., Heege T., Hunter P., Van der Zande D., Ruddick K., Dall'Olmo G., Simis S., Groom S., Présing M., Razinkovas-Baziukas A., Diana Vaiškaitė D.

**09:18–09:36: ISRSE36-91**

Imaging Spectroscopy: a new era for biodiversity science and conservation

**Somers B.**, Asner G.P.

**09:36–09:54: ISRSE36-157**

Spaceborne imaging spectroscopy for atmospheric sciences

**Fischer J.**, Hollstein A.

**09:54–10:12: ISRSE36-279**

Potential of spaceborne imaging spectroscopy for geological /mining activities

**Rivard B.**, Rogge D., Laakso K.

**10:12–10:30: ISRSE36-672**

Potential of spaceborne imaging spectroscopy for soil properties mapping and expected accuracy

**Chabrillat S.**, Foerster S., Schmid T., Ben-Dor E., Segl K.

**END OF ORAL PROGRAMME PROG-4**

## **SENS-10 Optical airborne and space systems**

**Lecture Room:** Honolulu (A05)

**09:00–10:15**

**09:00–09:15: ISRSE36-37**

Limits to the detectability of flowering plants within semi-arid savannas using 0.6-meter airborne hyperspectral data

**Landmann T.**, Makori D., Piiroinen R., Abdel-Rahman E., Kyalo R., Pellikka P., Raina S.R.

**09:15–09:30: ISRSE36-158**

Alignment of hyperspectral imagery and full-waveform LiDAR data for visualisation and classification purposes

**Miltiadou M.**, Warren M. A., Grant M., Brown M.

**09:30–09:45: ISRSE36-179**

Initial Checkout Results of the Compact Infrared Camera (CIRC) for earth observation

**Kato E.**, Katayama H., Sakai M., Nakajima Y., Kimura T., Nakau K.

**09:45–10:00: ISRSE36-341**

Airborne Camera System for real-time Applications - Support of a national Civil Protection Exercise  
**Gstaiger V.**, Rosenbaum D., Römer H.

**10:00–10:15: ISRSE36-633**

Remote sensing of large scale Methane emission sources with the Methane Airborne MAPper (MAMAP) instrument over oil fields and landfills in California - Initial results from COMEX  
**Bovensmann H.**

**END OF ORAL PROGRAMME SENS-10**

## **AGRI-8 Quantifying and understanding hydro-climatic dynamics on agricultural land**

**Lecture Room: Cape Town (A04)**

**09:00–10:30**

**09:00–09:15: ISRSE36-269**

Comparison of L-Band and C-band Radar images in monitoring subsidence in agricultural area  
**Zohari M.**, Esmaili M., Motagh M., Mojaradi B

**09:15–09:30: ISRSE36-326**

A novel approach to estimate soil moisture under vegetation cover using imaging spectroscopy  
**Spengler D.**, Kuester T., Segl K., Itzerott S., Guanter L.

**09:30–09:45: ISRSE36-452**

Effects of snow on satellite-derived crop phenology in Canadian Prairies  
**Dong T.**, Huffman T., Shang J., Liu J., Qian B., Geng X.

**09:45–10:00: ISRSE36-502**

Kernel Methods in Soil Moisture Estimation from Remotely Sensed Imagery - Case Studies  
**Stamenkovic J.**, Notarnicola C., Ferrazzoli P., Guerriero L., Tuia D., Greifeneder F., Thiran J-Ph.

**10:00–10:15: ISRSE36-622**

Development of Multi-temporal Model for Frost Prediction on Agricultural Land exploiting MODIS satellite observations  
LOUKA P., **PETROPOULOS G.**, PAPANIKOLAOU I.

**10:15–10:30: ISRSE36-658**

Mapping cropland parameters - Results from the Central Asian Water (CAWa) project  
**Conrad C.**, Löw F., Unger-Shayesteh K.

**END OF ORAL PROGRAMME AGRI-8**

## **WACY-3 Approaches in water remote sensing**

**Lecture Room:** Buenos Aires (A06)

**09:00–10:30**

**09:00–09:15: ISRSE36-456**

Annual mapping of water surfaces at 25 cm in a regional monitoring context  
**d'Andrimont R.**, Marlier C., Defourny P.

**09:15–09:30: ISRSE36-514**

Adapting and improving resilience to climate change in communities (moravian community as a pilot), by creating new capabilities based on the implementation of a new water culture; protection and management of natural resources

**Campos Gallo A.**

**09:30–09:45: ISRSE36-582**

Application of Earth Observation technologies for rural water management in Lower Austria

**Vuolo F.**, Neugebauer N., Essl L.

**09:45–10:00: ISRSE36-600**

Brazilian inland water bio-optical dataset to support carbon budget studies in reservoirs as well as anthropogenic impacts in Amazon floodplain lakes: Preliminary results

**Barbosa C.C.F.**, Novo E., Ferreira R., Carvalho L., Cairo C., Stech J., Alcantara E.

**10:00–10:15: ISRSE36-652**

Retrieving and evaluating water quality parameters of inland waters with Landsat 8 and Sentinel 2

**Stelzer K.**, Brockmann C., Doerffer R., Ruescas A., Odermatt D.

**10:15–10:30: ISRSE36-702**

Energy water balance model calibration using land surface temperature from remote sensing

**Corbari C.**, Mancini M

**END OF ORAL PROGRAMME WACY-3**

## **PLEN-5 Perspectives on the Future of Global Earth Observation**

**Lecture Room:** Berlin (C01)

**11:00–12:30**

**Rolf Skatteboe, KSAT**

**Jean-Noel Thepaut, ECMWF**

**Pascale Ultré-Guerard, CNES**

**Matthew Hansen, University of Maryland**

**Michael Menking, Airbus Defence & Space**

**Ryan Johnson, Blackbridge**

**END OF ORAL PROGRAMME PLEN-5**

## **CLOSE Closing Ceremony**

**Lecture Room:** Berlin (C01)

**12:30–13:30**

**Chairperson(s):** Charles Hutchinson, Helmut Staudenrausch

**Awards of the 36th ISRSE, Per Erik Skrovseth, ICORSE**

**On the Future of ICORSE and ISPRS, Lawrence Friedl, NASA**

**Announcement of the 37th ISRSE, NN**

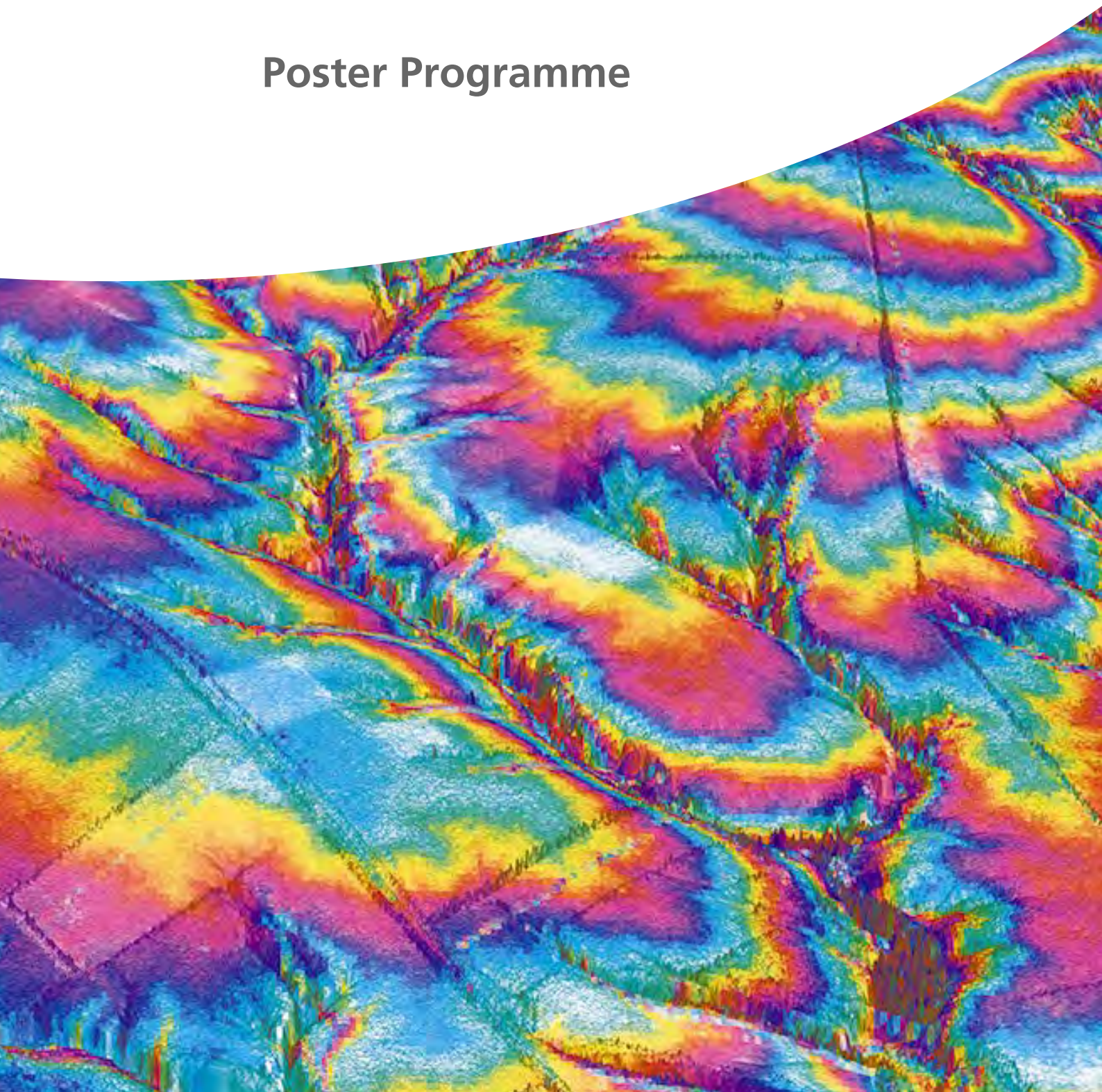
**NN**

**Closing of the 36th ISRSE, Helmut Staudenrausch, DLR**

**END OF ORAL PROGRAMME CLOSE**



## Poster Programme



# isrse36: Poster Programme

**Monday, 11 May 2015**

## **DISA-P DISA Posters**

**Poster Area: Poster Area**

**Attendance Time: 12:30–14:00**

**P1: ISRSE36-1**

Exposer Intensity, Vulnerability Index And Landscape Change Assessment In Olomouc, Czech Republic  
**Boori M.S.**, Vozenilek V., Choudhary K.

**P2: ISRSE36-93**

Inferring landslide pixels from radar images by applying GIS-based multi-criteria filtering analysis  
**Beyene F.**, Knospe S., Busch W.

**P3: ISRSE36-112**

Detection of oil pollution hotspots through the quantitative assessment of the persistence and temporal repetition of regular oil spills in the Caspian Sea using RADARSAT-2  
**Bayramov Dr.**, Rustamov Dr., Bayramov Dr.

**P4: ISRSE36-118**

An approach for detecting changes related to natural disasters using Synthetic Aperture Radar data  
**Milisavljevic N.**, Closson D., Holecz F., Collivignarelli F., Pasquali P.

**P5: ISRSE36-206**

Mapping landslides using remote sensing technologies: a case study of central region of Kenya  
**Mwaniki M.**, Möller M., Schellmann G.

**P6: ISRSE36-239**

Combined use of SAR and optical data for the assessment of ecological consequences of refugee camps in semiarid landscapes  
**Braun A.**, Hochschild V.

**P7: ISRSE36-267**

Using eCognition to automatically detect and map avalanche deposits from the spring 2009 avalanche cycle in the Tatra mts., Slovakia  
**Frauenfelder R.**, Lato M.J., Biskupi? M.

**P8: ISRSE36-285**

Assessment of active tectonics by quantifying geomorphological, geological and morphotectonics aspects. The case of Crete island, Greece  
**Argyriou A.**, Sarris A., Teeuw R.

**P9: ISRSE36-289**

Copernicus service in support of geohazard assessment and regional planning in the region Rhine-Moselle (Rhineland-Palatinate, Germany)  
**Wolf C.**

**P10: ISRSE36-302**

The Potential Of Geomatics In The Realization Of A Map Of Desertification Sensitivity  
Southern Massif Belezma (Batna).

**Hassen B.**

**P11: ISRSE36-340**

Jamuna River Erosional Hazards, Accretion & Annual Water Discharge & 8212;  
A Remote Sensing & Gis Approach

**Pahlowan E.U.**, Hossain A.T.M. S.

**P12: ISRSE36-384**

A Study of the Glacier Flow Velocity in the Tianshan Mountains Based on High Resolution SAR

**Fan J.H.**, Zhao H.L., Wang R.Y., Liu G.

**P13: ISRSE36-414**

Damage Assessment for Disaster Relief Efforts Based on Multi-Source Remote Sensing Data

Legeer B., **Bahr T.**

**P14: ISRSE36-467**

Identity of the active landslides by DInSAR along Yangzi River in Yichang, China

**Fan J.**, Zhao H.L., Liu G., Wang R.Y.

**P15: ISRSE36-469**

Crustal motion in Canterbury region, New Zealand from a decade of multi sensor satellite  
interferometry observations

**Faegh Lashgary P.**, Motagh M., Townend J., Williams C., Hamling I.

**P16: ISRSE36-489**

The effect of configuration on wildfire detection and background estimation

**Mitchell S.**, Jones SD., Reinke K.

**P17: ISRSE36-493**

Analysis of landslide hazard area in Ludian earthquake based on Random Forests

**jingchun X**

**P18: ISRSE36-506**

Multi-scale monitoring of landscape change after the 2011 tsunami

**Hara K.**, Zhao Y., Harada I., Tomita M., Park J., Jung E., Kamagata N., Hirabuki Y.

**P19: ISRSE36-538**

Real Aperture Radar Interferometry - Practical Application of a Monitoring System in Western Norway

**Ekseth K.**

**P20: ISRSE36-554**

Application of polarimetric optimization methods in surface deformation monitoring using InSAR

**Esmaeili M.**

**P21: ISRSE36-576**

Bridge stability analysis using TerraSAR-X spotlight mode data

**Hosseini F.**, Motagh M., Sharifi M.A.

**P22: ISRSE36-586**

Multi-sensor approach to address land subsidence in Mashhad, northeast Iran

**Zohari M.**, Motagh M., Esmaili M., Mojaradi B.

**P23: ISRSE36-614**

High Rate Earth Surface Subsidence Monitoring Using TerraSAR-X data with SAR Interferometry  
**mirshahi f.s.**, valadzoej M.J., dehghani M., hashemi M.

**P24: ISRSE36-673**

Assessing land degradation and desertification in Iberian Peninsula using satellite information  
**Gouveia C.M.**, Ramos P., Russo A., Bastos A., Trigo R.M.

**P25: ISRSE36-686**

Fire Risk Assessment Using Remote Sensing and GIS: Case Study of Büyük Menderes River Basin of Turkey  
**Erdogan M.A.**, Tuncay H.E., Berberoglu S.

**P26: ISRSE36-704**

Impact of climate and analysis of desertification processes in semi arid land in Algeria: using data of Alsat-1 and Landsat  
**Zegrar A.**

**END OF POSTER PROGRAMME DISA-P**



## **SOCI-P SOCI Posters**

**Poster Area: Poster Area**

**Attendance Time: 12:30–14:00**

**P27: ISRSE36-270**

Remote sensing and quantification of the Urban Heat Island in Morocco; Impact on Climate Surface  
**FATHI N.**

**P28: ISRSE36-280**

Extraction of Rural Built-up Land Features from Satellite Images  
**Keshtkar H.R.**

**P29: ISRSE36-428**

Urban Density Indices Using Mean Shift-Based Upsampled Elevation Data  
**Charou E.**, Gyftakis S., Bratsolis E., Papadopoulou Th. D., Tsenoglou T., Vassilas N.

**P30: ISRSE36-474**

Association between Urbanization and Air Temperature from a 3-D Perspective using Remote Sensing  
**Wu C.-D.**, Lung S.C.-C.

**P31: ISRSE36-479**

Evaluation of the Landscape Dynamics for the Forescene, Backscene & Impact Zone of Bosphorus - Istanbul  
**Gulnerman A.G.**, Bektas Balcik F., Goksel C., Ertekin O.

**P32: ISRSE36-540**

Identification of paleolake stages by multisensoral remote sensing  
**Bachofer F.**, Quénéhervé G., Märker M., Hochschild V.

**P33: ISRSE36-640**

Determination of Impervious Surfaces of Istanbul Using LANDSAT-8 OLI  
**BEKTAS BALCIK F.**, ERGENE E. M.

**P34: ISRSE36-719**

A novel approach for anthropogenic heat flux estimation from space  
**Chrysoulakis N.**, Esch T., Gastellu-Etchegorry J.P., Grimmond C.S.B., Parlow E., Lindberg F., Del Frate F., Klostermann J., Mitraka Z.

**END OF POSTER PROGRAMME SOCI-P**

# DATA-P Data Posters

## Poster Area: Poster Area

Attendance Time: 12:30–14:00

**P35: ISRSE36-102**

WPS-based technology for client-side remote sensing data processing  
Kazakov E., Terekhov A., Kapralov E., **Panidi E.**

**P36: ISRSE36-117**

SAR Interferogram Filtering Method Based on Empirical Mode Decomposition  
**Song R.**, Guo H.D., Liu G.

**P37: ISRSE36-213**

New algorithms for handling scientific data formats in java based geographical information systems  
**Vázquez-Rodríguez R.**, Pérez-Risquet C., Torres J. C.

**P38: ISRSE36-254**

Multidimensional Geospatial Data Integration Approach to Study the Geo-Environmental & Socio-economic Vulnerability Due to Climate Change. Case study: Cyclone Aila Affected Dacop and Koyra Upazila  
Rahman S., **Shahid S.**

**P39: ISRSE36-316**

Breaking the super-spectral imaging barrier with WorldView-3  
**Marchisio G.**, Johnston C., Tusk C., Baugh W., Gueguen L., Ouzounis G., Marchetti A.

**P40: ISRSE36-344**

Speckle filtering in POLSAR images by bilateral distance  
**Boutarfa S.**, Bouchemakh L., Smara Y.

**P41: ISRSE36-370**

Comparison among operators for detecting and/or extracting roads using the matlab software and the cartomorph software  
**Chaves C.**, Silva E., Santos A.

**P42: ISRSE36-418**

Complex data analysis in the cloud with the ENVI / IDL Services Engine  
Bahr T., **Meininger M.**

**P43: ISRSE36-459**

Use and application of photogrammetry software to develop geospatial products. Case study: Tárcoles river basin, Costa Rica  
**Vargas C.**

**P44: ISRSE36-463**

Bio-optical data integration based on a 4 D database system approach  
**Imai N.N.**, Shimabukuro M. H., Carmo A. F. C., Alcântara E. H., Rodrigues T. W. P., Watanabe F. S. Y.

**P45: ISRSE36-464**

Costa Rica experience of a geomatic, airborne and remote sensing data laboratory  
**Miller C.**

**P46: ISRSE36-498**

Spatial Multi-criteria Decision Analysis for Site Suitability Assessment for Solid Waste Management in Meghalaya

**mipun b.**, mondal m., hazarika r.

**P47: ISRSE36-500**

The Height Detection of Buildings Based on Cyclic Beamforming Tomographic SAR

**Peng X.**, Li X.W., Wang C.C, Li Z.W., Liang L., Du Y.N.

**P48: ISRSE36-634**

Vessel Trajectory Inference via Peer Data

**Seotlo M.V.**, Twala B., Kleynhans W., Salmon B.P.

**P49: ISRSE36-641**

Shadow detection improvement using spectral indices and morphological operators in high resolution images from urban areas

**Azevedo S. C.**, Silva E. A.

**P50: ISRSE36-654**

Collaboration Pathway(s) using New Tools for Optimizing Operational Climate Monitoring from Space

**Helmuth D.**

**END OF POSTER PROGRAMME DATA-P**

## **PROG-P PROG Posters**

**Poster Area: Poster Area**

**Attendance Time: 12:30–14:00**

**P51: ISRSE36-12**

Educational strategies for building a diverse geospatial technology workforce

**Vlahovic G.**, Malhotra R.

**P52: ISRSE36-78**

Pull vs. Push: How OmniEarth Delivers Better Earth Observation Information to Subscribers

**Fish C.**, Slagowski S., Dyrud L., Fentzke J., Hargis B., Steerman M.

**P53: ISRSE36-121**

Remote Sensing Tertiary Education Meets High Intensity Interval Training

**Joyce K.**

**P54: ISRSE36-512**

Potentials and challenges of student project works in remote sensing since the opening of the Landsat imagery archives

**Schaab G.**, Pfeiffer B.

**P55: ISRSE36-620**

Building capacity to use NASA Earth Observations through online and hands-on training

**Prados A.**, Gupta P., Mehta A., Schmidt C., Blevins B., Kuss A., Barbato D.

**P56: ISRSE36-632**

Global Change Research at the DLR Earth Observation Center Using Copernicus Sentinel Data

**Klein D.**, Schreier G., Dech S.

**P57: ISRSE36-685**

Creation of a high-resolution product CLC2006\_backdating by a backward look from the digital land cover model DLM-DE2009 to 2006 - a contribution to the German CORINE Land Cover 2012 project within a bottom-up approach

**Keil M.**, Esch T., Feigenspan S., Marconcini M., Metz A., Ottinger M., Zeidler J.

**END OF POSTER PROGRAMME PROG-P**

# Tuesday, 12 May 2015

## BIOD-P BIOD Posters

**Poster Area: Poster Area**

**Attendance Time: 12:30–14:00**

**P1: ISRSE36-11**

GLOBAL: WWF's Global Observation and Biodiversity Information Portal  
**Shapiro A.**, Nijsten L.

**P2: ISRSE36-20**

Multitemporal Classification to Evaluate a Transitional Forest Landscape, Brazil  
**Bicudo da Silva RF**, Batistella M, Moran EF, LU D

**P3: ISRSE36-22**

Distribution of high altitude peatlands in Broghil valley from Landsat TM data  
**Khan A.**, Hansen M., Hubacek K., Said A.

**P4: ISRSE36-27**

Assessing REDD+ opportunities in Southern Africa with global and regional data  
**Pereira M.**, Avitabile V., Herold M.

**P5: ISRSE36-40**

Evaluating the Impacts of Land-Cover and River Morphological Changes to Runoff Generation in a Philippine River Basin: Analysis Based on Landsat Images and Hydrologic Modeling  
**Santillan M.**, Santillan J.

**P6: ISRSE36-67**

Feature extraction from geoeye-1 stereo pairs data for forested area  
**Stournara P.**, Tsakiri-Strati M., Tsioukas V., Kaimaris D., Georgiadis C.

**P7: ISRSE36-68**

Tree number estimation with the use of VHR natural colour orthophotos over a heterogeneous landscape in northern Greece  
**Stournara P.**, Tsakiri-Strati M., Tsioukas V., Siachalou S., Doxani G., Mallinis G.

**P8: ISRSE36-111**

MONITORING GLOBAL MEGACITIES GROWTH WITH LANDSAT IMAGERY USING OBJECT-BASED SVM METHOD FROM 1970s TO 2015  
Sun Z., Guo H., Wang S., Jiang T., **Yu S.**, Lv M.

**P9: ISRSE36-124**

Quantifying biophysical characteristics and mangrove health: Rapid Creek, Darwin, Australia  
**Heenkenda M.**, Joyce K.E., Maier S.W.

**P10: ISRSE36-127**

Optimization of forest age-dependent light-use efficiency and its implications on climate-vegetation interactions in china  
**Li Z.**, Zhou T.

**P11: ISRSE36-133**

Sar-optical synergy in savanna ecosystem fractional vegetation cover mapping  
**Odipo V. O.**

**P12: ISRSE36-146**

Assessing land-use and land-cover dynamics for the Yellow River Basin in China  
**Wohlfart C.**, Kuenzer C.

**P13: ISRSE36-153**

The Natura 2000 habitat monitoring service of North Rhine-Westphalia (Germany):  
a new tool for monitoring authorities  
Buck O., Hinterlang D., Mütterthies A., **Rühl J.**

**P14: ISRSE36-156**

Remote Sensing of vegetation dynamics in West Africa: Improved satellite time series for  
phenological analyses  
**Knauer K.**, Gessner U., Dech S., Kuenzer C.

**P15: ISRSE36-219**

MONITORING THE LARGE URBAN AGGLOMERATIONS GROWTH BY USING OBJECT-ORIENTED  
SVM METHOD FROM 1980s TO 2015 BASED ON REMOTE SENSING DATA  
**Wang S.**, Sun Z., Jiang T.

**P16: ISRSE36-223**

Landuse mapping and forest area change detection using IRS satellite Imagery  
(Case study: Northern forests of Iran)  
**Pir Bavaghar M.**

**P17: ISRSE36-235**

Geospatial modeling to identify the effects of anthropogenic processes on landscape change  
**Rahdari V.**, Soffianian A.

**P18: ISRSE36-244**

Land use Cover of Roberts County using Landsat 8: a case study  
**Shekhar A.**, Kjaersgaard J., O'Neill M.

**P19: ISRSE36-265**

Land-use and land-cover trends monitored by NDVI multitemporal analysis in a selected southern  
amazonian area (Brazil) for the last three decades  
**Alves D. B.**, Pérez-Cabello F.

**P20: ISRSE36-272**

Performance of the Enhanced Vegetation Index to Detect Inner-annual Dry Season and Drought  
Impacts on Amazon Forest Canopies  
**Brede B.**, Verbesselt J., Dutrieux L., Herold M

**P21: ISRSE36-277**

A BiomeBGC-based Evaluation of Dryness Stress of Central European Forests  
**Buddenbaum H.**, Hientgen J., Dotzler S., Werner W., Hill J.

**P22: ISRSE36-283**

Use of ALS data to estimate stand-level structural variables in Aleppo pine forest  
**Montealegre A. L.**, Lamelas M.T., de la Riva J., García-Martín A., Escribano F.

**P23: ISRSE36-292**

An Image Segmentation Approach for Improving the Accuracy of Individual Crown Delineation  
**Amiri N.**

**P24: ISRSE36-298**

Reconstructing pre-agricultural expansion natural vegetation covers in Ethiopia: A view on human occupation

**Hailu B. T.**, Maeda E.E., Heiskanen J., Pellikka P.

**P25: ISRSE36-299**

Factors promoting avian mortality at wind turbine structures: Insights from long-term avian mortality data in the federal state of Brandenburg, Germany

**Bose A.**, Henle K., Klenke R.A., Kümmerle T.

**P26: ISRSE36-303**

Changing land use patterns and desertification in southern Nemencha (Algeria)

**Hassen B.**

**P27: ISRSE36-327**

Detection of Forest Calamities from Multi-temporal and Multi-polarized SAR Imager

**Wendleder A.**, Schmitt A., Heiden U.

**P28: ISRSE36-329**

Monitoring the Urban Tree Cover for Urban Ecosystem Services - The Case of Leipzig, Germany

**Banzhaf E.**

**P29: ISRSE36-334**

Vegetation indices and surface temperature for remote sensing in a brazilian semiarid watershed

Coelho V. H. R., Silva B. B., Montenegro S. M. G. L., **Almeida C. N.**, Oliveira L. M. M., Gusmão A. C. V. L.

**P30: ISRSE36-352**

Analysis of the 10-years' Grassland Degradation in Chinese Source Region of Three Rivers with RS Imagery

**Yan Y.**, Luo L., Yu Y., Liu L., Du D.

**P31: ISRSE36-387**

Research on Monitoring the Wetland Landcover Change Based on the Moderate Resolution Remote Sensing Image

**Zhou M.**, Yuan X.h, Sun L.m, Cui Z.x

**P32: ISRSE36-390**

Does topographic normalization of landsat images improve fractional tree cover mapping in tropical mountains?

**Adhikari H.**

**P33: ISRSE36-413**

Improved estimation of above ground biomass in Sudanian woodlands using multi-temporal Landsat-8 imagery and texture metrics

**Karlson M.**

**P34: ISRSE36-423**

Comparison of field and airborne laser scanning based crown cover estimates across land cover types in Kenya

**Heiskanen J.**, Korhonen L., Hietanen J., Heikinheimo V., Schäfer E., Pellikka P. K. E.

**P35: ISRSE36-427**

Quantification of biomass variability due to different environmental factors in Kalimantan (Indonesia) based on airborne LiDAR data

**Konecny K.**

**P36: ISRSE36-442**

A long-term perspective on deforestation rates in the Brazilian Amazon  
**Velasco Gomez M.**, Beuchle R., Eva H., Simonetti D., Rasi R.

**P37: ISRSE36-443**

Modelling of Habitat Types in Karst Landscape with High Resolution Satellite Imagery and Digital Terrain Model  
**Breg Valjavec M.**, Cigli? R., O'tir K., Ribeiro D.

**P38: ISRSE36-444**

Pluviometric influence in the indexes of NDVI and NDWI vegetation for the municipality of Guarapuava-PR, Brazil  
Schiavo B.N.V., Ruza M.S., Hentz A.M.K., **Corte A.P.D.**, Sanquetta C.R.

**P39: ISRSE36-457**

Dynamic soil erosion assessment using NDVI variations for the USLE's C factor  
**Bonifaz R.**

**P40: ISRSE36-460**

Photogrammetry applications for forest plantations analysis. Preliminary study: Analysis of individual trees  
**Mora R.**, Barahona A., Aguilar H.

**P41: ISRSE36-473**

Monitoring and Analysis of Land Use Change since the 21st Century in the north of Sanjiang Plain Based on Remote Sensing  
Gao L., Yuan X. H., **Guan L.**

**P42: ISRSE36-488**

Downscaling sun-induced chlorophyll fluorescence from 0.5 to 0.05 decimal degrees at global scale  
**Duveiller G.**, Cescatti A.

**P43: ISRSE36-490**

Potential of Data Fusion Approach on Accurate Estimation on Long-term Grassland Biomass  
Zhang B. H., **Zhang L.**, Wang X., Chai S. T.

**P44: ISRSE36-503**

Forest cover change and soil erosion in the Toledo district  
**Chicas S.**

**P45: ISRSE36-507**

Using the Hybrid model to simulate typhoon-induced litterfall in a subtropical forest  
**Wang H.-C.**, Friend A., Huang C.

**P46: ISRSE36-515**

Seasonal variation of land cover classification accuracy of Landsat 8 images in Burkina Faso  
**Liu J.**, Heiskanen J., Aynekuly E., Pellikka P.K.E.

**P47: ISRSE36-555**

Advanced satellite-based phenology monitoring: a case study of semi-arid grasslands in South Africa  
**Parplies A.**, Dubovyk O., Tewes A., Oomen R., Schellberg J., Mund J.-P.



**P48: ISRSE36-567**

Urban and peri-urban forestry in the face of climate change in Cameroon: challenges and new perspectives for sustainability

**Chekuimo G. H.**

**P49: ISRSE36-572**

Use of Landsat Data to Create a Time-series of Sand Dunes Fields Maps in Abu Dhabi, United Arab Emirates

**SALEOUS N.,** ISSA S., SAEED R.

**P50: ISRSE36-574**

Does a post-stratification of ground units improve the forest biomass estimation by remote sensing data

**Latifi H.,** Fassnacht F., Hartig F., Berger Ch., Hernández J., Corvalán P., Koch B.

**P51: ISRSE36-580**

Erosion Modelling In A Mediterranean Subcatchment Under Climate Change Scenarios Using Pan-European Soil Erosion Risk Assessment (PESERA)

**Cilek A.,** Berberoglu S., Kirkby M., Irvine B., Donmez C., Erdogan M.A.

**P52: ISRSE36-594**

Tropical Forest Remote Sensing Services for the Democratic Republic of Congo inside the EU FP7 'ReCover' Project

**Haarpaintner J.,** Pedrazzani D., Enßle F., Datta P., Mazinga A., Singa C., Mane L.

**P53: ISRSE36-597**

Mapping of active raised bogs with an iterative one-class classification approach

**Mack B.,** Stenzel S., Feilhauer H., Schmidlein S., Waske B.

**P54: ISRSE36-598**

Monitoring Pinus Radiata plantations using multitemporal RapidEye images -A case Study from New South Wales, Australia-

**Magdon P.,** Kleinn C.

**P55: ISRSE36-602**

The global financial crisis and the Congo basin's forests: adaptation and sustainability to climate change

**Chekuimo G. H.**

**P56: ISRSE36-621**

Forest and related ecosystem services assessment and management based on remote sensing information and thermodynamic approach

**Krenke A.,** Sandlerskiy R, Puzachenko Yu

**P57: ISRSE36-630**

Random forest classification for monitoring bush encroachment in a South-African savannah with Landsat and ancillary data

**Symeonakis E.,** Higginbottom T.

**P58: ISRSE36-636**

Concept for a Two-Phase Forest Inventory in Surinam

**Schardt M.,** Kleine M., Schadauer K., Wack R., Sommerauer M.

**P59: ISRSE36-642**

An automatic workflow based system to download, process and analyze remote sensing information: creating knowledge to foster environmental decision making

**Bonet F.**, Pérez-Pérez R., Pérez-Luque A., Zamora R.

**P60: ISRSE36-653**

Characterising forest succession stage and bird community with analysis of Lidar-based forest structure

**Bae S.**, Mueller J., Lee D.

**P61: ISRSE36-655**

Mass Wasting Processes on the Ethiopian Highlands - How Multisensoral Remote Sensing Methods Provide Valuable Input for Susceptibility Modelling

**Hochschild V.**, Kropacek J., Maerker M., Schillaci C.

**P62: ISRSE36-662**

Non-destructive estimation of foliar carotenoid content of tree species using merged vegetation indices

**Fassnacht F.E.**, Stenzel S., Gitelson A.

**P63: ISRSE36-676**

Environmental Assessment of Mangrove Communities In Tarut Bay, East of the Arabian Peninsula based on a Multidisciplinary Approach

**Al Ali A.**

**P64: ISRSE36-689**

Using Landsat data archive for a long-term regional forest dynamics assessment in Eastern Europe, 1985-2012

**Turubanova S.**, Potapov P., Tyukavina A., Krylov A., Hansen M.C.

**P65: ISRSE36-694**

Improvement on remote sensing determination of annual land base for national carbon inventory reporting

**Zhu Z.**, Reed B., Sleeter B., Larson T., Zhu Z.

**P66: ISRSE36-697**

Investigation of Capability of satellite data for Optimal Conservation and Sustainable Management (Case study: Miankaleh Wildlife refuge)

**Shirkhani S.**, Esmaili R., Hayali Y., Ghadimi B.

**P67: ISRSE36-698**

Vegetation Height Estimation Near Power transmission poles Via satellite Stereo Images using 3D Depth Estimation Algorithms

Qayyum A., **Malik A. S.**, Saad M. N. M., Iqbal M., Abdullah F., Rahseed W., Abdullah T. A. R. T., Ramli A. Q.

**P68: ISRSE36-710**

Enabling Intelligent Copernicus Services for Carbon and Water Balance Modeling of Boreal Forest Ecosystems - North State

**Häme T.**, Mutanen T., Rauste Y., Antropov O., Molinier M., Quegan S., Kantzas E., Mäkelä A., Minunno F., Benediktsson J.A., Falko N., Árnason K., Storbvold R., Haarpaintner J., Elsakov V., Rasinmäki J.

**P69: ISRSE36-741**

Ensemble-based Landscape Change Maps for the United States

**Healey S.**, Cohen W., Yang Z., Brooks E., Hansen M., Hernandez A., Huang C., Hughes J., Kennedy R., Loveland T., Megown K., Moisen G., Schroeder T., Schwind B., Stehman S., Steinwand D., Vogelmann J., Woodcock C., Yang L., Zhu Z.

**P70: ISRSE36-728**

Scale dependency for assessment of biodiversity indicators from different remote sensing data

**Aniruddha Ghosh AG**, Barbara Koch BK

**END OF POSTER PROGRAMME BIOD-P**

# Wednesday, 13 May 2015

## MARI-P MARI Posters

**Poster Area: Poster Area**

**Attendance Time: 12:30–14:00**

**P1: ISRSE36-34**

Dynamic Assessment of Shoreline Changes using Geomatics Engineering: A case study of Poompuhar & Tarangambadi in TamilNadu, India  
**V S K.**

**P2: ISRSE36-51**

Breakwaters monitoring using UAV aerial photogrammetry. Comparison with terrestrial LiDAR data.  
**Gonzalez-Jorge H.,** Puente I., Roca D., Riveiro B., Martínez-Sánchez J., Arias P.

**P3: ISRSE36-64**

Vessel classification in cosmo-skymed sar data using hierarchical feature selection  
Makedonas A., **Theoharatos C.,** Tsagaris V., Anastasopoulos V., Costicoglou S.

**P4: ISRSE36-194**

Detection of ship targets in polarimetric sar data using 2d-pca data fusion  
**Theoharatos C.,** Makedonas A., Fragoulis N., Tsagaris V., Costicoglou S.

**P5: ISRSE36-205**

Seasonal Variation of Suspended Sediment Concentration at the Yangtze Estuary - Remote Sensing Observation and Numerical Simulation  
**Li Y.,** Li X.

**P6: ISRSE36-287**

GIS/RS Integration Approach for Water Pollution Risk Modeling from the Agricultural Land in Al Abrash River Basin in Syrian Coastal Zone  
**Yaghi Dr,** Mulhem Dr

**P7: ISRSE36-308**

Automatic extraction of tide-coordinated shoreline using open source software and Landsat imagery  
**Gonçalves G.,** Duro N., Sousa E., Figueiredo I.

**P8: ISRSE36-332**

Improving the altimeter derived geostrophic currents using high resolution Sea Surface Temperature images: A feasibility study.  
**Rio M.-H.,** Santoleri R., Griffa A., Piterbarg L.

**P9: ISRSE36-360**

Development of a low cost photogrammetric tool for coastal monitoring and assessing the accuracy of shorelines obtained from Landsat imagery  
**Sanchez-Garcia E.,**

**P10: ISRSE36-369**

Generating a long-term series of SST and chlorophyll-a for the coast of Ireland  
**Casal G.**

**P11: ISRSE36-451**

Distribution and dynamics of intertidal geo-morphological structures and habitats - application of TerraSAR-X data for environmental monitoring of the Wadden Sea combined with extensive in-situ verification (WiMo)

**Adolph W.**, Farke H.

**P12: ISRSE36-470**

Spot detection from MODIS imagery using 2P-CFAR

**Ding X.**, Li X.

**P13: ISRSE36-501**

Oceanic and atmospheric internal gravity waves imaged by SAR

**Liu B.**, Yang H., Ding X., Li X.

**P14: ISRSE36-519**

The growth rates of hydrobionts in the Argichi and Vardenis rivers under the conditions of the impact of small hydropower plants

**Gevorgyan G. A.**, Gabrielyan B. K., Boshyan T. V.

**P15: ISRSE36-544**

Inland-lakes protection application with high resolution satellite imagery in Wuhan

**Wen X.**, Li Z., Xiang D., Shen S.

**P16: ISRSE36-562**

Joint Offshore Wind Turbine Wake Monitoring with Spaceborne SAR and In-Situ LiDAR Measurements

**Jacobsen S.**, Li X.\_M., Lehner S., Hieronimus J., Schneemann J.

**P17: ISRSE36-571**

Mangroves and salt flats changes due to aquaculture activities in the Northeastern Brazil from geographic object-based image analysis during the last three decades

**Rodrigues S.W.P.**, Souza P.W.M.

**END OF POSTER PROGRAMME MARI-P**

## **ENGY-P ENGY Posters**

**Poster Area: Poster Area**

**Attendance Time: 12:30–14:00**

**P18: ISRSE36-15**

A complementary use of information from space-based DINSAR and field measuring systems for operational monitoring purposes in open pit iron mines of Carajás mining complex (Brazilian Amazon region)

**Paradella W. R.**, Mura J. C., Gama F.F., Santos A.R., Silva G.G., Galo M., Camargo P. O., Silva A.Q.

**P19: ISRSE36-286**

Optimal size and location of bionergy powerplants in Brazil using GIS

**Ribeiro C.**, Menezes S., Chaves M., Costa F., Marcatti G., Teixeira T., Soares V., Gleriani J.

**P20: ISRSE36-618**

Multicriteria analysis for sources of renewable energy using data from remote sensing

**Matejicek L.**

**P21: ISRSE36-742**

Augmenting energy needs through geoinformatics: Hydropower potential estimation in Baspa basin, India

**Chaudhary B.S.**, Kaur R.

**END OF POSTER PROGRAMME ENGY-P**

# SENS-P SENS Posters

**Poster Area: Poster Area**

**Attendance Time: 12:30–14:00**

**P22: ISRSE36-3**

Visibility automatic observation instrument based on the visual technology

**Wang J.**, Liu X.

**P23: ISRSE36-47**

Assessing the Bandwidth Effect on the Correlation across different Bands of Landsat 8 and Landsat 7

**Alavipanah S.K.**

**P24: ISRSE36-59**

Mapping land cover in the Taita Hills, SE Kenya, using airborne laser scanning and imaging spectroscopy data fusion

**Piironen R.**, Hurskainen P., Heiskanen J., Pellikka P. K. E.

**P25: ISRSE36-62**

The mathematical model of optical remote sensing system signal considering broken cloudiness effects

Budak V.P., **Shagalov O.V.**

**P26: ISRSE36-86**

Application of Remote Sensing in Monitoring Wetland Inundation in Arid Regions: The Case of Hamoun International Wetland

**Maleki S.**, Soffianian A., Saatchi S., Rahdari V.

**P27: ISRSE36-96**

Research on geographical conditions monitoring method based on long time series Landsat data

**Zhao Y.**, Bai J.

**P28: ISRSE36-97**

Research on reefs bathymetry estimation by remote sensing

**Sheng L.**

**P29: ISRSE36-132**

Research Of Two-media Underwater Reefs Depth Measurement Based On Aviation And Aerospace Remote Sensing Images

**ZHOU G.**

**P30: ISRSE36-137**

The Method-Oriented SAR Data Processing Illustrated by Two Rapid Man-made Target Index Extraction Methods

**Wu W.**, Guo H., Li X.

**P31: ISRSE36-200**

A Hadoop-based Algorithm of Generating DEM Grid from Point Cloud Data

**Jian X.**, Xiao X., Chengfang H., Xuejun C., Zhaohui W., Dengzhong Z.

**P32: ISRSE36-226**

Research on unmanned aerial vehicles as a platform for lightweight ground-penetrating radar

**Collins M.A.**

**P33: ISRSE36-245**

Terrestrial Laser Scanning in grasslands: How good is it to estimate and monitor above-ground biomass?

**Duque Lazo J.**, Reu B., Wirth C

**P34: ISRSE36-273**

Semantic Segmentation And Difference Extraction Via Time Series Aerial Video Camera And Its Application

**Amit S.N.K.**

**P35: ISRSE36-388**

Object-oriented Change Detection Based on Spatiotemporal Relationship in Multitemporal Remote-Sensing Images

**Li L.**, Ying G.W, Wen X.H, Zhang Y

**P36: ISRSE36-401**

Calibration and Validation plan for the L2A processor and products of the Sentinel-2 mission

**Pflug B.**, Main-Knorn M., Louis J., Debaecker V.

**P37: ISRSE36-454**

Multisensor airborne experiments over vineyard: new challenges for the GNSS-R technique

**Sánchez N.**, Alonso-Arroyo A., Martínez-Fernández J., Camps A., González-Zamora A., Pablos M., Herrero-Jiménez C., Gumuzzio A.

**P38: ISRSE36-455**

Validation of SMOS L2 and L3 soil moisture products over the Duero basin at different spatial scales

**Sánchez N.**, González-Zamora A., Gumuzzio A., Piles M., Olmedo E., Martínez-Fernández J.

**P39: ISRSE36-545**

Hybrid change detection: an association between object-based and pixel-based classification methods

**Weckmüller R.**, Vicens R.S.

**P40: ISRSE36-548**

Radiometric normalization of RapidEye images for change detection

**Weckmüller R.**, Vicens R.S.

**P41: ISRSE36-596**

A class-outlier approach for environmental monitoring using uav hyperspectral images

Hemissi S., **Farah I.R.**

**P42: ISRSE36-607**

Environmental Impact Assessment follow-up of interchanges: Ground independent Geometric correction of aerial images

**Vassilaki D.I.**, Stamos A.A.

**P43: ISRSE36-608**

Measuring the light pollution area through night time imagery

**Irteza S.M.**

**P44: ISRSE36-675**

Evaluation of the aerosol type effect on the surface reflectance retrieval using CHRIS/PROBA images over land.

**tirelli c.**, manzo c., curci g., bassani c.

**END OF POSTER PROGRAMME SENS-P**



## **POLA-P POLA Posters**

**Poster Area: Poster Area**

**Attendance Time: 12:30–14:00**

**P45: ISRSE36-263**

Time-series of Landsat 8 data in mapping the onset of the growing season in Adventdalen valley, on the Arctic Archipelago Svalbard

**Karlsen S. R.**, Villa G, Bautista N, Tejeiro J-A, Grydeland T, Johansen B

**P46: ISRSE36-521**

Climate change induces changes in the distribution of four species of dragonflies Argia genus.

**Nava Bolaños A.**, Muñoz J., Sánchez-Guillén RA., Córdoba Aguilar A.

**P47: ISRSE36-591**

Zackenbergl valley from the radar perspective - which information can we get from SAR data about the Arctic tundra?

**Sobiech-Wolf J.**, Dierking W.

**P48: ISRSE36-609**

Crustal uplift due to ice mass loss in Columbia glacier assessed by TanDEM-X InSAR

**Haghshenas Haghighi M.**, Motagh M., Braun M., Vijay S., Neelmeijer J.

**P49: ISRSE36-709**

Using Earth Observation Data for the Multivariate and Multiscale Trend Analysis in the Arctic Regions between 1981 and 2012

**Urban M.**, Hüttich C., Eberle J., Schmullius C.

**END OF POSTER PROGRAMME POLA-P**

# Thursday, 14 May 2015

## ATMC-P ATMC Posters

**Poster Area: Poster Area**

**Attendance Time: 12:30–14:00**

**P1: ISRSE36-39**

Potential Climate Change Effects On Sago Palm Suitability Distribution: Analysis Based On Remotely Sensed-Derived Data And Ecocrop Modelling  
Santillan J., **Santillan M.**

**P2: ISRSE36-114**

A new health check of the ozone layer at global and regional scales  
**Coldewey-Egbers M.**, Loyola D., Braesicke P., Dameris M., van Roozendaal M., Lerot C., Balis D., Koukouli M., Zimmer W.

**P3: ISRSE36-163**

Variability of Climatic Elements in Nigeria over recent 100 Years  
**Salami T.**

**P4: ISRSE36-228**

Investigations of the influence of solar activity on the regularities of formation water in the Amu Darya River Basin  
**Ishchanov J.**, Shermatov Yo.

**P5: ISRSE36-249**

Why do we need atmospheric Limb sounding from space?  
**Orphal J.**

**P6: ISRSE36-294**

Climate change effects of various municipal solid waste management scenarios;  
Case study Tehran, Iran  
**Tayeba A.**, Dadashi M., Gharagozlu A., Hejrani Diarjan M.

**P7: ISRSE36-424**

Understanding Consequences of Climate Variability Through Integration of High Resolution Flood Event Models, Weather Forecasting Models, and Real Time Observations  
**Simonis I.**, McKee L.

**P8: ISRSE36-471**

Aerosol Retrieval Over Urban Areas Using Modified VIS/SWIR Surface Reflectance Ratios with Improved Aerosol Modelling  
**Zhang M.**, Huang B.

**P9: ISRSE36-486**

Multi-temporal Air Temperature Estimation Scheme (MATES)  
**Bechtel B.**, Zak`ek K.

**P10: ISRSE36-509**

Relationship between surface temperature and land use/cover types in case of the island of Bali Indonesia  
**Asmiwyati I G.A.A. R.**

**P11: ISRSE36-510**

Discuss on Satellite-Based Particulate Matter Monitoring Technique

**Li B.**, Hou L.

**P12: ISRSE36-549**

Preliminary Research on Radiance Fog Detection based on time series MTSAT data

**Wen X.**, Xiang D., Shen S., Li Z., Zhang S.

**P13: ISRSE36-682**

Data and techniques for studying the urban heat island effect in Johannesburg

**Hardy C.H.**, Nel A.L.

**P14: ISRSE36-699**

Sand and dust storms in the West Asia and their adverse effects (CASE STUDY IRAN)

**Shirkhani Ardehjani S.**, Ghadimi B., Hayali Y., Esmali R.

**END OF POSTER PROGRAMME ATMC-P**

# AGRI-P AGRI Posters

**Poster Area: Poster Area**

**Attendance Time: 12:30–14:00**

**P15: ISRSE36-33**

Arab Countries and Space Technology -Requirements and Applications  
**EINahry Dr.**

**P16: ISRSE36-83**

Low-altitude remote sensing for precision agriculture  
**Huang Y.**

**P17: ISRSE36-92**

Evaluation of The Calibrated Integral Equation Model over Agricultural Fields for Surface Parameter Retrieval Using Polarimetric SAR  
Huang X., **Wang J.**, Shang J.

**P18: ISRSE36-166**

Preliminary Study on the Radar Vegetation Index (RVI) Application to Actual Paddy Fields by ALOS/PALSAR Full-polarimetry SAR Data  
**Yamada Y.**

**P19: ISRSE36-171**

Soil erosion assessment using Revised Universal Soil Loss Equation (RUSLE) and Geographical information system in May Gabat sub catchment, Northern Ethiopia.  
**OSANO P.**

**P20: ISRSE36-351**

Spectral Discrimination and Reflectance Properties of Various Vine Varieties from Satellite, UAV and Proximate Sensors  
**Karakizi C.**, Oikonomou M., Karantzalos K.

**P21: ISRSE36-356**

Crop Ground Cover Fraction and Canopy Chlorophyll Content Mapping using RapidEye imagery  
**Zillmann E.**, Weichelt H.

**P22: ISRSE36-389**

A laboratory procedure for measuring and georeferencing soil colour  
**Marqués-Mateu Á.**, Balaguer-Puig M., Moreno-Ramón H., Ibáñez-Asensio S.

**P23: ISRSE36-403**

Early validation of PROBA-V GEOV1 LAI, FAPAR and FCOVER products for the continuity of the Copernicus Global Land Service  
**Sánchez J.**, Camacho F., Lacaze R., Smets B.

**P24: ISRSE36-461**

Effect of pixel purity in the training and testing stages of supervised crop classification using MODIS time series  
**Löw F.**, Fliemann E., Duveiller G.

**P25: ISRSE36-462**

Coffea arabica spectral signature determination and comparison by two measurement methods during the last rainy months and dry periods in Costa Rica  
**Aguilar H.**, Barahona A., Foster L.

**P26: ISRSE36-482**

Evaluation of Evapotranspiration Value of Rice Paddies using MODIS Data and CROPWAT  
**Lin S.**, Hunag T., Wu C., Lin J.

**P27: ISRSE36-499**

Estimation of nitrogen status in crops by spectral reflectance and local photographs  
**Martinez L. J.**, Ramos A., Escobar O.

**P28: ISRSE36-505**

Agricultural areas mapping using NDVI/MODIS time series Manica Province, Mozambique  
**Mabilana H.**, Fonseca E., Fontana D

**P29: ISRSE36-552**

Guidelines for authors submitting abstracts to the 36th international symposium of remote sensing of environment  
Mirzaee S., **Motagh M.**, Arefi H., Nooryazdan A.

**P30: ISRSE36-585**

Detecting olive oil mill waste disposal areas in Crete/Greece with the use of GIS and Remote Sensing  
**Alexakis D. D.**, Sarris A., Kalaitzidis C., Papadopoulos N., Soupios P., Argyriou N.

**P31: ISRSE36-629**

Use of factorization in not negatives matrices on the satellite images for the collection of agricultural statistics  
**Benyelles Z.**, Yousfi D

**P32: ISRSE36-637**

Land use and land cover changes in Negro river watershed, Rio Grande do Sul, Brazil between 2003 and 2013  
**Schafer A.**, Moreira D., Branco V.

**P33: ISRSE36-690**

Deforestation relationship between agriculture activities and livestock in a border area in Brazilian Amazonia.  
Cougo M., **Donato C.**, Maciel M.

**P34: ISRSE36-691**

Creating the stratification boundary of teak forest as a base forest probability for teak forest in java island to input the forest and non forest multitemporal classification  
**Kartika T.**, Parsa i M., Novitasari E. T.

**P35: ISRSE36-715**

Application of Satellite Imagery for pericise Change Detection (case study; Taleghan Basin)  
**Arzani H.**, Faraji M., Tavili A., Feghi J.

**P36: ISRSE36-733**

Evaluation of Uncertainty and Accuracy in Multi-Temporal Object-Based Land Use Classification  
**Knöfel P.**, Löw F., Möller M., Conrad C.

**END OF POSTER PROGRAMME AGRI-P**

## WACY-P WACY Posters

**Poster Area: Poster Area**

**Attendance Time: 12:30–14:00**

**P37: ISRSE36-25**

Use of two state of the art; remote sensing based data of evaporation to study anomalies in moisture sources and sinks associated to the two severe Amazonia droughts in 2005 and 2010

Gimeno L., Nieto R., **Drumond A.**

**P38: ISRSE36-106**

Apparent Optical Properties of Reservoirs in a Cascade Dam Construction over Tietê River, São Paulo, Brazil

**Rodrigues T.**, Alcântara E., Watanabe F., Imai N., Rotta L.

**P39: ISRSE36-139**

Time Series Analysis of the Lac Bam Wetland Using Dual-Polarized X-Band SAR Data

**Moser L.**, Schmitt A., Wendleder A., Roth A.

**P40: ISRSE36-162**

Changes in the land cover and land use of the Itacaiúnas River watershed, arc of deforestation, Carajás, southeastern Amazon

**Souza-Filho P.W.M.**, Nascimento Jr. W.R., Versiani de Mendonça B.R., Silva Jr. R.O., Guimarães J.T.F., Oti D., Dall'Agnol R., Siqueira J.O.

**P41: ISRSE36-164**

Estimating absorption coefficients of Colored Dissolved Organic Matter using an empirical model for Itumbiara Reservoir, Brazil

**Watanabe F.**, Alcântara E., Fernandes R., Stech J., Kampel M.

**P42: ISRSE36-192**

The Spatial Analysis and Visualization of Water Body Based on GIS in Yangtze River Basin

**Dong Y.**, Meng L K., Zhang W.

**P43: ISRSE36-195**

Assesment method of water quality for river based on multi-spectral remote sensing data

**xiao x.**

**P44: ISRSE36-234**

Integration of Remote Sensing and Geographic information system in Ground Water Quality Assessment and Management

**Shakak N.**

**P45: ISRSE36-345**

Using 710 nm and 815 nm reflectance peaks in retrieving water quality parameters of CDOM-rich lakes

**Kutser T.**, Paavel B., Kauer T.

**P46: ISRSE36-381**

Engaging the Applications Community of the future Surface Water and Ocean Topography (SWOT) Mission

**Srinivasan M.**, Andral A., Hossain F., Dejus M., Peterson C., Beighley E., Pavelsky T., Chao Y., Doorn B., Bronner E., Houpert L.

**P47: ISRSE36-468**

Developing integrated remote sensing data fusion and mining techniques for environmental monitoring of the water quality in Spanish reservoirs  
Doña C., **Caselles V.**, Chang N.B., Sánchez J.M, Camacho A.

**P48: ISRSE36-477**

Extracting Continuous Urban Rivers from High-Resolution Imagery  
Zeng C., **Wang J.**, Bird S.

**P49: ISRSE36-539**

CLOSURE ANALYSIS FOR APPARENT OPTICAL PROPERTIES AOPs IN AN AMAZON FLOODPLAIN LAKE: A STEP TO BUILD ACCURATE REMOTE SENSING INVERSE MODELS.  
**Sander de Carvalho L.A.S**, Barbosa C.C.F., Boss E., Novo E.M.L.M.

**P50: ISRSE36-570**

Water body information extraction from high resolution Sentinel-1 IWS Mode SAR images using Li's Minimum Cross Entropy threshold method  
Nguyen D., **To T.**

**P51: ISRSE36-577**

Storage capacity estimation of small reservoirs in drylands based on Interferometric Synthetic Aperture Radar (InSAR) and TanDEM-X data  
**Zhang S.**, Medeiros P., de Araújo J.C., Motagh M., Waske B., Foester S.

**P52: ISRSE36-624**

Can single empirical algorithms accurately predict inland shallow water quality status from high resolution, multi-sensorial satellite imaging datasets?  
**Theologou I.**, Patelaki M., Karantzas K.

**P53: ISRSE36-656**

Rainfall in an experimental watershed: a comparison between observed and TRMM 3B42V7 dataset  
**ALMEIDA C. N.**, BARBOSA L. R., FREITAS E. S., MELO D. C. D.

**P54: ISRSE36-744**

Towards Improving our Understanding on the Retrievals of Key Parameters Characterising our Planet's Water Cycle from Space: the work done within the PREMIER-EO Project  
**Petropoulos G.P.**, Ireland G., North M.R., Srivastava P.K., Huges C.

**P55: ISRSE36-745**

Sustainable land and water management of reservoir catchments by applying innovative remote sensing research methodologies  
**Selsam P.**, Böhm B., Böhm C., Pfennig B., Niemann C.

**P56: ISRSE36-746**

Assessment and analysis of river bank erosion and channel braiding of the Brahmaputra River by object oriented classification of optical satellite imagery  
**Selsam P.**, Böhm B., Böhm C., Flügel W.

**END OF POSTER PROGRAMME WACY-P**