

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

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





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

Invitation

You are invited to the 36th International Symposium on Remote Sensing of Environment (ISRSE), which will take place on May 11-15, 2015 in Berlin, Germany. This 36th 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 [SOCI]
- 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 36th 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.

Please find a full Preliminary Programme at the end of this document and online at www.isrse36.org/prelim-programme/.

Exhibition and Sponsoring

The 36th 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/. A number of sponsors and exhibitors have already signed up: 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.

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: Brandeburg Gate, © dpa, taken from www.berlin.de



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



Photo: DLR site Neustrelitz. © DLR

Travel and Accommodation

General Information on travel and accommodation for your trip to Berlin is provided for you at 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**.

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/.

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. Please find detailed conditions and requirements at 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/. The costs are $80 \in (incl. VAT)$.

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**/. The costs are $16 \in (incl. VAT)$ 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: Einstein Tower at Telegraphenberg Potsdam. © AIP

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.

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.

Registration Early Bird Rate	Regular	650 €		
= until 15 February 2015	Student	300 €		
	Single Day Regular	300 €		
	Single Day Student	150 €		
Registration Standard Rate	Regular	750 €		
= 15 February - 15 April 2015	Student	350 €		
	Single Day Regular	350 €		
	Single Day Student	175 €		
Registration Onsite Rate	Regular	800 €		
= from 10 May 2015	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/.

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, Author Registration Deadline	25 March 2015			
Deadline for full Paper Submission, Author Registration Deadline 3rd Announcement and Draft Final Program	25 March 2015 15 April 2015			
Deadline for full Paper Submission, Author Registration Deadline 3rd Announcement and Draft Final Program Close of On-line Registration	25 March 2015 15 April 2015 15 April 2015			
Deadline for full Paper Submission, Author Registration Deadline 3rd Announcement and Draft Final Program Close of On-line Registration Exhibition Build-up, Workshops, On-site Registration opens	25 March 2015 15 April 2015 15 April 2015 10 May 2015			
Deadline for full Paper Submission, Author Registration Deadline 3rd Announcement and Draft Final Program Close of On-line Registration Exhibition Build-up, Workshops, On-site Registration opens Convene ISRSE 36	25 March 2015 15 April 2015 15 April 2015 10 May 2015 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

Session Time Planer ISRSE 36

		Plenary & Technical Sessions						Special Sessions	Poster Sessions						
			C01	B05-06	B07-08	B09	A03	A04	A05	A06	A08	C02			
			Berlin	Beijing	Sydney	Stresa	Tromsoe	Cape Town	Honolulu	Buenos Aires	Ann Arbor				
	Time	Kind of Session	930	261	174	195	83	83	83	83	126	Poster Area			
	9:00-10:00	Opening Ceremony	OPEN												
	10:30-12:30	Plenary	PLEN-1												
	12:30-14:00	Lunch													
Monday May 11th	14:00-15:30	Technical	PROG-6	BIOD-1		DATA-1			ATMC-1						
	15:30-16:00	Coffee Break													
	16:30-18:00	Technical	PROG-6	BIOD-1	BIOD-6	DATA-1	POLA-2	AGRI-1	ATMC-3	MARI-2					
	10:30-17:30	Poster Display										DISA-P	SOCI-P	DATA-P	PROG-P
	12:30-14:00	Poster Attendance										26	8	16	7
	18:00-20:00	Ice Breaker													
	9:00-10:30	Plenary	PLEN-2												
	10:30-11:00	Coffee Break													
	11:00-12:30	Technical	PROG-1	BIOD-2	BIOD-6	DISA-2	SOCI-2	DATA-2	SENS-6	MARI-2					
⋧₤	12:30-14:00	Lunch									SPEC-1				
Tuesda May 12	14:00-15:30	Technical	SENS-5	BIOD-2	BIOD-6	DISA-1	SOCI-2	AGRI-2	SENS-7	MARI-3					
	15:30-16:00	Coffee Break													
	16:30-18:00	Technical	PROG-2	BIOD-3	SENS-8	DISA-1	POLA-3	AGRI-3	SENS-2	MARI-3					
	10:30-17:00	Poster Display										BIOD-P			
	12:30-14:00	Poster Attendance										70			
	9:00-10:30	Plenary	PLEN-3												
	10:30-11:00	Coffee Break									1				
	11:00-12:30	Technical	PROG-3	BIOD-3		DISA-4	POLA-1	DATA-4	ENGY-1	SPEC-3					
≥_	12:30-14:00	Lunch									SPEC-2				
sda 13th	14:00-15:30	Technical	PROG-5	BIOD-5	BIOD-7	DISA-3	BIOD-10	DATA-4	SENS-3	SPEC-3	SPEC-4				
dne ay `	15:30-16:00	Coffee Break													
şΞ	16:30-18:00	Technical	SENS-4	BIOD-5	BIOD-7	DISA-5	BIOD-10	AGRI-4	ATMC-4	SPEC-3	SPEC-4				
	10:30-17:00	Poster Display										MARI-P	ENGY-P	SENS-P	POLA-P
	12:30-14:00	Poster Attendance										17	4	23	5
Ŀ,	19:00-22:00	Conference Banquet													
	9:00-10:30	Plenary	PLEN-4												
	10:30-11:00	Coffee Break													
	11:00-12:30	Technical	PROG-7	BIOD-5	BIOD-9	DATA-3	SOCI-3	AGRI-5	SENS-9	MARI-1					
	12:30-14:00	Lunch													
rsdå	14:00-15:30	Technical	SENS-1	BIOD-4	BIOD-8	DATA-3	SOCI-1	AGRI-6	ATMC-2	WACY-1					
Jay Jay	15:30-16:00	Coffee Break													
F 2	16:30-18:00	Technical	SENS-1	BIOD-4	BIOD-8	DATA-5	SOCI-1	AGRI-7	ATMC-2	WACY-2					
	10:30-17:00	Poster Display										ATMC-P	AGRI-P	WACY-P	
	12:30-14:00	Poster Attendance										14	22	20	
~	9:00-10:30	Technical	PROG-4	BIOD-4	BIOD-8	DISA-6	SOCI-4	AGRI-8	SENS-10	WACY-3					
Friday May 15th	10:30-11:00	Coffee Break													
	11:00-12:30	Plenary	PLEN-5												
	12:30-13:00	Closing Ceremony	CLOSE												



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., Schmullius 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., Rücker 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., Kovalskyy 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 Schaadt

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 Schaadt

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.

Pleskachevsky A., Lenner S., Honmann P., Kleser J., Bruns T., Lindentnai A., Janssen F., Ber

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: Tromsoe (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 NOx emission trends across Europe: Synergistic use of LOTOS-EUROS and remote sensing NO2 tropospheric columns **Curier R.L.**, Segers A., Kranenburg R., Timmermans R., Eskes H.

15:15-15:30: ISRSE36-619

The linfluence 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., Klinke 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 Enery 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 Broglia 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 onEarth Observation activities on disaters 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: Tromsoe (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 Czy?ska 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 detect-ing 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., Schmullius 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., Hyyppä 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., Enenkel 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 PalSAR 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., Sentíes 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: ISRSE36-123Quality Assessment of the TanDEM-X Global Digital Elevation ModelBräutigam 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 Bargen, Jörn Hoffmann

11:00–11:18: ISRSE36-198 An International Effort of Space Agencies for Cal/Val: CEOS Working Group Cal/Val von Bargen A.

11:18–11:36: ISRSE36-243 Importance Of Fiducial Reference Measurements For Satellite Earth Observation Characterisation Bojkov B R, von Bargen 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., Schmullius 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 biodiverity, landscape dynamics, transport and resource exploration

Main Session Organizer: Deputy Session Organizer: Lecture Room: Tromsoe (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 &8220;thermokarst lake - catchment&8221; 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 retreieve vegetation photosynthetic capacity from solar-induce 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.-I.

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 dara 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., Kuschk 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.**, Jarzemski 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 & amp; 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-Polratizations 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: Tromsoe (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., Schmullius 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., Foumelis 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 & amp;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 HyspIRI / 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 Transvall 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 Estimationg Crop Growth Stages Using RADARSAT-2 and TERRASAR-X Polarmetric 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., Schmullius 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: Tromsoe (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 Satellie-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.**, Schmullius C.C.

17:45–18:00: ISRSE36-716 Application of Historical Ground Data, Satelite 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: Tromsoe (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 II y., zhan qm

11:45-12:00: ISRSE36-271

Dynamics of Land Use Land Cover Change in Riyadh Using Settelite 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.**, Zaghloul 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, Vienam 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 Emiratis - Sharjah City **AI-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., Ressl 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 ´., ´ibert J., Rogelj P., Ir¨i? ´ibert M., Muri B., **O¨tir 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? ?, 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 characterizacion 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., Tobaschus 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.**, Schmullius 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-Sprectral 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 ${\bf Busler}~{\bf J},$ 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 Utlization 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 radiothermovision 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., Weichelt 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., Holez 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 **ElNahry 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: Tromsoe (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 adress relationn 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 Intercalibration 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 Vai?i?t? 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 & amp; Annual Water Discharge & 8212; A Remote Sensing & amp; 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 optimizatiom 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.**, valadanzoej 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 Elevetion 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 & Company; 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 & amp; 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 or 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 **Seotio 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 &8216;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

GLOBIL: 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 MEGACITES 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., Müterthies 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 Rremote Sensing Services for the Democratic Republic of Congo inside the EU FP7 &8216;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., Schmidtlein 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 AI 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., Benediktssond J.A., Falko N., Árnasond K., Storvold 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 & amp; Tarangambadi in TamilNadu,India VSK.

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 atmosphereic 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 trough 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 **Piiroinen 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 environnemental 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

Zackenberg 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 Roozendael 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 Consequnces 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.

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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 **ElNahry 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.

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WACY-P WACY Posters

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P37: ISRSE36-25

Use of two &8220;state of the art&8221; 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., Sigueira 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

Assessement 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 Araújod 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., Karantzalos 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