# International Society for Photogrammetry and Remote Sensing

## ISPRS 1910 - 2010
### CENTENARY CELEBRATIONS VIENNA

**July 1-7, 2010**
**Vienna University of Technology**
**Vienna, Austria**
www.isprs100vienna.org

3 Ländertagung
DGPF - OVG - SGPF
July 1-3, 2010

ISPRS
Centenary Celebrations
July 4, 2010

Technical Commission VII
Symposium
July 5-7, 2010

# Programme

# ISPRS Technical Commission VII Symposium

## MONDAY, 5 July 2010

| 08:00 - 18:00 | EI Aula | Registration | | |
|---|---|---|---|---|
| **09:00 - 10:30** | **EI 7** | **OPENING SESSION** | | |
| | | Welcome Address by the Symposium Chairman *(Wolfgang Wagner)* | | |
| | | Welcome Address by the President of ISPRS *(Orhan Altan)* | | |
| | | Presentation of the ISPRS Student Consortium *(Cemal Özgül Kivilcim)* | | |
| 09:30 - 10:00 | | Recent Advances in Local and Global Environmental Remote Sensing *(Menzel et al. (W. Paul **Menzel**)* | | |
| 10:00 - 10:30 | | Assimilation of satellite data into land surface models **(Shaun Quegan)** | | |
| **10:30 - 11:00** | EI Aula | Coffee Break | | |
| **11:00 - 12:45** | EI 7, EI 8, EI 9 | **ORAL SESSION 1.1 - 1.3** | | |
| | | EI 7<br>Remote Sensing Applications 1<br>Chair: Klaus Steinnocher, Co-Chair: Christoph Aubrecht | EI 8<br>Data Fusion and Data Assimilation<br>Chair: Jixian Zhang, Co-Chair: John van Genderen | EI 9<br>Lidar and Laser Scanning 1<br>Chair: Juha Hyyppä, Co-Chair: Bernhard Höfle |
| 11:00 - 11:15 | | Observing stress of artificial night lighting on marine ecosystems - A remote sensing application study *(Aubrecht & al.;* **Christoph Aubrecht***)* | Fusion of optical and radar remote sensing data: Munich city example *(Palubinskas & Reinartz;* **Gintautas Palubinskas***)* | Automatic detection of buried channel deposits from dense laser altimetry data *(Possel & al.;* **Roderik C. Lindenbergh***)* |
| 11:15 - 11:30 | | Retrieval of biophysical vegetation products from rapideye imagery *(Vuolo & al.;* **Katja Richter***)* | Fusion of ALS Point Cloud Data with High Precision Surveying *(Data Wehr & al.;* **Aloysius Wehr***)* | Comparison of terrestrial laser scanner and synthetic aperture radar data in the study of forest defoliation *(Kaasalainen & al.;* **Sanna Kaasalainen***)* |
| 11:30 - 11:45 | | Built -up areas density mapping from satellite images by morphological granulometries *(Kemmouche & al.;* **Akila Kemmouche***)* | Fusion of ascending and descending polarimetric SAR data for color orthophoto generation *(Zhang & al.;* **Jixian Zhang***)* | Terrain echo probability assignment based on full-waveform airborne laser scanning observables *(Mücke & al.;* **Werner Mücke***)* |
| 11:45 - 12:00 | | Remote Sensing, Geographic Information Systems and Shannon's Entropy: Measuring Urban Sprawl in a Mountainous Environment *(Verzosa & Gonzalez;* **Loureal Camille Verzosa***)* | Pansharpening -- Relating Quantitative Quality Measures to Impact on Results of Subsequent Processing Steps *(**Uwe Weidner***)* | A Wavelet-base method in filtering of airborne Laser scanning data **(Grzegorz Jozkow)** |
| 12:00 - 12:15 | | Estimating sub-pixel to regional winter crop areas using neural nets *(Atzberger & Rembold;* **Clement Atzberger***)* | The registration of 3-D model and 2-D image using point and line features *(Teo & Chen;* **Tee-Ann Teo***)* | The Light Fantastic: Using airborne lidar, in archaeological survey **(Simon Crutchley)** |
| 12:15 - 12:30 | | Fusing Earth Observation with Local-level Health Data in a Virtual Globe Platform for Strengthening Public Health Capacity in Kisumu, Kenya *(Seaquist & al.;* **Jonathan Seaquist***)* | Spatio-Temporal Characterization of Aerosols through Active Use of Data from Multiple Sensors *(Obradovic & al.;* **Zoran Obradovic***)* | Comparison of grid-based and segment-based estimation of forest attributes using airborne laser scanning and digital aerial imagery *(Tuominen & Haapanen;* **Sakari Tuominen)** |
| 12:30 - 12:45 | | Discussion | Discussion | Discussion |
| **12:45 - 14:00** | | Lunch Break | | |

| 14:00 - 15:45 | EI 7, EI 8, EI 9 | ORAL SESSION 2.1 - 2.3 | | |
|---|---|---|---|---|
| | | **EI 7**<br>Remote Sensing Applications 2<br>Chair: Clement Atzberger, Co-Chair: Balázs Székely | **EI 8**<br>Change Detection and Process Modelling<br>Chair: Qiming Zhou, Co-Chair: Manos Baltsavias | **EI 9**<br>Lidar and Laser Scanning 2<br>Chair: Sanna Kaasalainen, Co-Chair: Uwe Stilla |
| 14:00 - 14:15 | | Remote Sensing and GIS in Inflow Estimation: The Magat Reservoir, Philippines Experience *(Sarmiento & al.;* **Rhodora M. Gonzalez** *)* | Assessment system of GIS-objects using multi-temporal imagery for near-realtime disaster management *(Frey & Butenuth;* **Daniel Frey** *)* | ALTM ORION: Bridging conventional LIDAR and full waveform digitizer technology *(Ussyshkin & Theriault;* **Valerie Ussyshkin** *)* |
| 14:15 - 14:30 | | Efficiency of texture measurement from two optical sensors for improved biomass estimation *(Nichol & Sarker;* **Janet Nicho** l*)* | Mapping the deformation of man-made linear features using dinsar technique *(Wu & al.;* **Hongan Wu** *)* | Radiometric calibration of Full-Waveform Airborne Laser Scanning Data based on natural surfaces *(Lehner & Briese;* **Hubert Lehner** *)* |
| 14:30 - 14:45 | | Land Border Monitoring with remote sensing technologies *(Malinowski & Bielinska;* **Radoslaw Malinowski** *)* | Automatic 3D Change Detection based on optical satellite stereo imagery Tian & al. *(* **Jiaojiao Tian** *)* | Urban vegetation detection using high density full-waveform airborne LiDAR data - Combination of object-based image and point cloud analysis *(Höfle & Hollaus;* **Bernhard Höfle** *)* |
| 14:45 - 15:00 | | Mapping stream bank condition from airborne LiDAR and high spatial resolution image data in a temperate rural-urban environment, Australia *(Johansen & al.;* **Kasper Johansen** *)* | Sub-pixel precision image matching for displacement measurement of mass movement using normalised cross-correlation *(Debella-Gilo & Kääb;* **Misganu Debella-Gilo** *)* | Evaluation of a laser Mobile Mapping System for monitoring sandy coasts *(Bitenc & al.;* **Maja Bitenc** *)* |
| 15:00 - 15:15 | | Quantitative Prognosis of Oil and Natural Gas Fields *(Vostokov & al.;* **Anatoliy Vostokov** *)* | Characterisation of long-term Vegetation Dynamics for a semi-arid wetland using NDVI time series from NOAA-AVHRR **(Ralf Seiler)** | Data driven alignment of 3D building models and digital aerial images *(Jung & al.;* **Costas Armenakis** *)* |
| 15:15 - 15:30 | | Mountains' Peaks Parameterisation and Determination *(* **Tomaž Podobnikar** *)* | Targeted Change Detection: A Novel Sensor-Independent Partially-Supervised Approach *(Fernàndez-Prieto & Marconcini;* **Mattia Marconcini** *)* | Tree Species Detection using full waveform LIDAR data in a complex forest *(Gupta & al.;* **Sandeep Gupta** *)* |
| 15:30 - 15:45 | | Discussion | Discussion | Discussion |
| 15:45 - 16:15 | EI Aula | Coffee Break | | |
| 16:15 - 17:45 | Prechtlsaal | **POSTER SESSION** (Main Building, Karlsplatz 13)<br>Please refer to the floor plan in Prechtlsaal to find the respective board for a poster number | | |

| | Poster # | Title | Authors |
|---|---|---|---|
| | | **Change detection and process modelling** | |
| | CHGD-004 | Research of 2D-Fisher rule function in change detection of remote sensing images | *Zhang (Baoming Zhang)* |
| | CHGD-006 | Change visualization through a texture-based analysis approach for disaster applications | *Tomowski & al. (Daniel Tomowski)* |
| | CHGD-101 | Deriving water fraction and flood map with the EOS/MODIS data using decision tree approach | *Sun & Yu (Donglian (Lillian) Sun)* |
| | CHGD-104 | Detection of forest management operations using bi-temporal aerial photographs | *Hyvönen & al. (Pekka Hyvönen)* |
| | CHGD-105 | Analysing spatio-temporal pattern of land cover change using multi-temporal satellite images | *Zhou & Sun (Qiming Zhou)* |
| | CHGD-107 | Mangrove change analysis using remote sensing and GIS technology (Case study: Can Gio district, Ho Chi Minh city, Viet Nam) | *Hoa Binh (Truong Thi Hoa Binh)* |
| | CHGD-108 | Analysis and Modeling of Urban Land Cover Change in Setúbal and Sesimbra, Portugal | *Araya (Yikalo Araya)* |
| | CHGD-146 | Automatic Registration of Airborne and Space-borne Images by Topology Map-Matching with SURF Processor Algorithm | *Brook & Ben-Dor (Anna Brook)* |
| | CHGD-158 | Landsat Image Time Series for Monitoring Change in Vegetation Phenology and Disturbance in Queensland, Australia | *Bhandari & al. (Santosh P. Bhandari)* |
| | CHGD-159 | ~~Sub-pixel precision algorithms for normalised cross-correlation based image matching of mass movements~~ | *~~Debella-Gilo & Kääb (Misganu Debella-Gilo)~~* |
| | CHGD-183 | Change detection for building models from aerial images and LIDAR data | *Chen & al. (Liang-Chien Chen)* |
| | CHGD-194 | Measuring fluctuations of the aquifer in a Brazilian savanna region using a temporal sequence of 50 Landsat images | *Pires-Luiz & Maillard (Philippe Maillard)* |