

PROGRAMME

Day 1: Monday, 17 March 2014, Erwin Schrödinger-Zentrum, Berlin-Adlershof

8:30-09:30 Registration

9:30-10:00 Welcome speeches

Sebastian van der Linden & Tobias Kuemmerle
Workshop Chairmen, Humboldt-Universität zu Berlin

Patrick Hostert
Humboldt-Universität zu Berlin, Geography Department

Ioannis Manakos
Chair EARSeL SIG Land Use and Land Cover

Garik Gutman
NASA LCLUC Program Manager

SESSION 1 Moderator: Benjamin Koetz

New sensors and emerging opportunities for land use and land cover monitoring

10:00-10:30 Keynote 1 - Curtis Woodcock, Bosten University, USA

10:30-11:00 Keynote 2 - Bianca Hoersch, ESA ESRIN, Italy

11:00-11:20 Discussion of keynotes

11:20-11:40 1-slide-presentations of posters

11:40-12:30 Coffee & posters

12:30-13:00 Session wrap-up

13:00-14:00 Lunch

SESSION 2 Moderator: Kasia Ostapowicz

Advances in land cover and land use science using Earth observations

14:00-14:30 Keynote 3 - Chris Justice and John Townshend, University of Maryland, USA

14:30-15:00 Keynote 4 - Ben Somers, KU Leuven, Belgium

15:00-15:20 Discussion of keynotes

15:20-15:50 1-slide-presentations of posters

15:50-17:00 Coffee & posters

17:00-17:30 Session wrap-up

19:30-21:30 Dinner (optional)

Day 2: Tuesday, 18 March 2014, Erwin Schrödinger-Zentrum, Berlin-Adlershof

SESSION 3 Moderator: Christopher Small

Mining the archives: better use of existing data for long-term LUCC studies

- 09:00-09:30 Keynote 5 - Thomas Udelhoven, Universität Trier, Germany
- 09:30-10:00 Keynote 6 - David Roy, South Dakota State University, USA
- 10:00-10:20 Discussion of keynotes
- 10:20-10:50 1-slide-presentations of posters
- 10:50-12:00 Coffee & posters
- 12:00-12:30 Session wrap-up
- 12:30-14:00 Lunch

SESSION 4 Moderator: Achim Röder

Frontiers in RS of land cover and land use

- 14:00-14:30 Keynote 7 - Volker Radeloff, University of Wisconsin, USA
- 14:30-15:00 Keynote 8 - Martin Herold, Wageningen University, Netherlands
- 15:00-15:20 Discussion of keynotes
- 15:20-15:50 1-slide-presentations of posters
- 15:50-17:00 Coffee & posters
- 17:00-17:30 Session wrap-up
- 17:30-17:45 Workshop wrap-up

LIST OF POSTERS (and presenters)

SESSION 1

Multiple data sources for analyzing, integrating and validating biomass maps

V. Avitabile, Wageningen University

Assessment of multi-temporal, multi-frequency radar and ancillary spatial data for routine grassland monitoring

B. Barrett, University College Cork

From multi-temporal mapping to time series analysis with high spatial resolution data: evaluation of SPOT4 Take5 data to simulate Sentinel-2 contribution

G. Candiani, CNR

Automated extraction of dunes from Google Earth image New approach to study dynamic of dunes
Application to Laayoune city South of Morocco

D. Dakir, University Hassan II, Casablanca

PROBA-Vegetation, ensuring global vegetation monitoring for the future

B. Deronde, VITO

Unmixing Forest Areas in Hyperspectral Images Using the ISMA Approach

S. Dotzler, University of Trier

PhenoS – A joint research project to improve land cover classification using Sentinel-2 satellite data

H. Gerstmann, University of Halle

TWOPAC: Twinned Object-and Pixel-based Automated Classification – a tool for supervised image classification

J. Huth, DLR

The Environmental Mapping and Analysis Program (EnMAP) – Current status and science activities

H. Kaufmann, GFZ Potsdam

Insight in the EAGLE data model – paradigm shift in European land monitoring: How to move from CORINE Land Cover towards a new harmonized approach of object-oriented landscape mapping in Europe

B. Kosztra, FÖMI; S. Arnold, Destatis

Improving observation of land transformations: Copernicus land services in Europe

T. Langanke, EEA

Feature fusion of hyperspectral and LiDAR data for Classification of remote sensing data from urban area

W. Liao, University of Gent

Comparing reflectance signals of shrub species in the Kazbegi National Park to enhance monitoring of reforestation

A. Magiera, University of Gießen

Phenological structuring of multi-temporal satellite-based imagery for mapping of agricultural land use and fractional vegetation coverage

M. Möller, University of Halle-Wittenberg

GOFC-GOLD efforts in support of land cover mapping activities

B. Mora, Wageningen University

Managing multi-temporal land cover data using the EAGLE data model

C. Perger, IIASA

Interactive Forest Monitoring System: A case study of Kafa, Southwestern Ethiopia

A.K. Pratihast, Wageningen University

Exploring the potential of DMC time-series data for biotope monitoring in Switzerland

A. Psomas, WSL

M4Land – model based, multi-temporal, multi-scale and multi-sensoral extraction of continuous land management information

F. Schlenz, University of Munich

The identification and evaluation of sources of error in forest change time series analysis

M. Schultz, Wageningen University

Towards an earth observation system for a tropical mountain ecosystem

B. Silva, University of Marburg

Evaluation of Sentinel-2 multispectral images to extract Mediterranean forest species

L.M. Silva-Goncalves, Institute for Systems Engineering and Computers Coimbra

New opportunities offered by the PRISMA hyperspectral mission: land degradation activities within the SAP4PRISMA project

S. Pascucci, CNR

Monitoring vegetation dynamics at improved spatial and temporal resolution using an image fusion model for complex heterogeneous regions

A. Tewes, University of Bonn

Land cover classification based on scatter mechanism obtained from SAR data

E. Wozniak, Space Research Center, Polish Academy of Sciences

SESSION 2

Soil sealing change detection: the use of an integrated classification approach on LANDSAT archive

S. Bajocco, CMA-CRA

Contribution of Texture from Terrasar-X Radar Images for Forest Classification

H. Benelcadi, ESYCOM

Contributions of maximum likelihood, support vector machine and random forest to forest cover mapping

E. Cano, University of Toulouse

Annual land cover monitoring in Mexico using MODIS 250m data

R.R. Colditz, CONABIO

Natural vegetation land cover method in mountain context and wide area with multitemporal satellite images

D. Ducrot, CESBIO

Mapping peat bogs in Kyrgyzstan: Multi-temporal analysis of Landsat TM/ETM+ data

F. Fell, Informus GmbH

Object-based forest monitoring using an intra-annual high resolution satellite time-series

K. Fenske, Free University Berlin

How can spectral, textural and form parameters determine the degradation status of Populus Euphratica trees

P. Gärtner, Technical University Berlin

Evaluation of land cover and land use on the basin of Taquari-Miracatu stream, southwest region of Rio Grande do Sul state, Brazil, using remote sensing data

S.L. Bohn-Gass, UNIPAMPA

Integration of phenological aspects in multitemporal RapidEye-data analyses of semi-arid natural vegetation in the Negev, Israel

C. Gläßer, University of Halle

A novel algorithm for estimating photosynthetic vegetation, non-photosynthetic vegetation and bare soil fractions using Landsat and MODIS data

J.P. Guerschman, CSIRO

Evaluation of GLCM based Texture Parameters for tropical forest mapping with C-band SAR

R. Hagensieker, Free University Berlin

Land-Use Classification combining RS&GIS Methods in the Northern Negev, Israel

O. Rozenstein, A.Karnieli, Ben Gurion University

Assessment of oil palm expansion indicators with new remote sensing approaches

K. König, Humboldt-Universität zu Berlin

Spatio-temporal vegetation cover dynamics from multi-temporal RapidEye imagery

A. Kroll, University of Potsdam

Remote sensing for meadow vegetation classification

L. Kupkova, Charles University Prague

Identifying forest loss and regrowth trends in a Tanzanian Miombo Woodland landscape from 1990-2013 with multi-temporal spectral mixture analysis and spectral indices in MODIS and Landsat data

M. Mayes, Brown University

A novel approach for the categorization of cropland and grassland based on multi-seasonal high and medium resolution satellite imagery

A. Metz, Karlsruhe Institute for Technology (KIT)

Cellular Automata Urban Growth Modelling In Kenya

K. Mubea, University of Bonn

Inventory assessment of Grasslands in Ireland using hyper-temporal optical data

I. Nitze, University College Cork

Characterizing land cover changes using multitemporal LANDSAT imagery in Northern Apulia (Italy)

A. Novelli, Polytechnic Institute of Bari

Applying Boosting Approach in Hyperdimensional Feature Space for Land Cover Classification

A. Nowakowski, Space Research Center of the Polish Academy of Sciences

From Boolean classes to fractions - detecting grassland-forest ecotones

T.P. Pitkänen, University of Turku

The impact of evergreen and deciduous regrowth on winter Landsat8 albedo

C. Schaaf, University of Massachusetts

A comparative analysis of ensemble classifiers for land cover and land use (LCLU) mapping

M. Caetano, Universidade Nova de Lisboa

Finnish Corine Land Cover 2000/2006/2012 Classifications

M. Törmä, SYKE

Impact of changing land cover, observed by Landsat TM/ETM+, on tick habitat in Southern Norway

J. van Doninck, KU Leuven

Future land use change in India: A case study on land use developments and their hydrologic implications in the Mula and Mutha Rivers catchment upstream of Pune

P. Wagner, Free University Berlin

SESSION 3

Automated landslide identification at a regional scale using long-term optical multi-sensor time-series data

R. Behling, GFZ Potsdam

Multi-Source Data for Land Monitoring: Automated Access and Analysis from Open Image Archives with web-based Technologies

J. Eberle, University of Jena

New approaches to assess the impact of historic land changes on the climate: A study case for the last century of Europe

R. Fuchs, Wageningen University

Long-term time series of land cover maps combining Landsat series and Random Forest : Analyzing land cover trends in a periurban area for c.a. 40 years (NW Argentina)

J. Gutierrez-Angonese, IER

Mining the Landsat archive with application specific compositing approaches to reconstruct forest dynamics and agricultural land changes over large areas

P. Griffiths, Humboldt-Universität zu Berlin

Mapping urban expansion dynamics and natural habitat loss in China with multi-source remotely sensed data

C. He, Beijing Normal University

Identification of carbon stock changes at a sub-national level using a time-series of Landsat data for REDD+ in Peninsula Malaysia

Y. Hirata, Forestry and Forest Products Research Institute Tsukuba

Land Change Analysis of the agricultural expansion between 1986 and 2012 in the Paraguayan Chaco

C. Israel, Humboldt-University Berlin

Shifting focus from a comprehensive LC/LU classification towards thematic time series

E. Järvenpää, SYKE

Determinants of land-use changes in the So-yang River Basin

I. Kim, University of Bayreuth

Long term LULCC study of Hungary based on archive maps

G. Király, University of West Hungary

Multi-temporal and multi-sensor classification applied to intertidal flat mapping: Potential of high-resolution optical and radar satellite images for mapping intertidal flats and coastal salt-marshes, in a multi-temporal classification scheme

V.Lafon, University of Bordeaux; A. Sellé, CNES DCT/SI/AP

Spatio-temporal patterns of tree cover dynamics in the Lower Mekong Basin between 2001-2011

P. Leinenkugel, DLR

Comparative analysis of the atmospheric correction results for inter- and cross-sensor application in LULCC studies

M. Main-Knorn, DLR

Characterizing vegetation dynamics in the Brazilian Amazon: using the full depth of the Landsat archive (1984-2012)

H. Müller, Humboldt-Universität zu Berlin

Land cover mapping at the regional scale with use of Landsat data: the Carpathians case study

K. Ostapowicz, University Krakow

Environmental Pollution and Loss in Biodiversity: The Case of Light Pollution and Sea Turtles in the Caribbean

A.Perez-Barahona, INFRA

Monitoring deforestation and forest degradation in dynamic landscapes of Southeast Asia

D. Pflugmacher, Humboldt-Universität zu Berlin

Continuity of land cover data – a case study in Northern Germany

H. Rathjens, University of Kiel

Developing dense synthetic time series by blending Landsat and MODIS for analyzing intra- and inter-annual trajectories related to insect forest disturbances

C. Senf, Humboldt-Universität zu Berlin

Changes in land cover of river deltas in the Black Sea basin

V. Starodubtsev, University of Life and Environmental Sciences Kiev

Monitoring bush encroachment in a South African savannah using multi-temporal Landsat data and a machine learning algorithm

E. Symeonakis, Manchester Metropolitan University

Don't trust a pixel? Don't trust one observation! Forest Cover Change Detection using the Landsat Archive

F. Thonfeld, University of Bonn

Fire Disturbance in Tropical Closed Broadleaved Evergreen Forests of Myanmar - Evaluation using LANDSAT and MODIS NDVI time series datasets

K.P. Vadrevu, University of Maryland

Classification with MODIS NDVI data and analysis of results in relation to areas of agreement and disagreement of existing land cover products

F. Vuolo, BOKU

Mapping annual land cover changes using MODIS time series

H. Yin, Humboldt-Universität zu Berlin

Assessing land-use change in Ireland using a high resolution spatial database: The potential of the Land-Parcel Identification System (LPIS)

J. Zimmermann, Trinity College Dublin

CLUD: A time series land use database of China over the period from late 1980s to 2010

L. Zuo, Chinese Academy of Sciences Beijing

SESSION 4

The contribution of multisensor satellite data to a systematic sampling strategy of East African wetlands

E. Amler, University of Bonn

Modeling Landsat Phenology using all available Landsat data and Dynamic Time Warping

M. Baumann, University of Wisconsin

Monitoring Land-Cover and Land-Use in cities for urban climatology

B. Bechtel, University of Hamburg

Knowledge based fusion of remote sensing time series with heterogeneous spatio temporal resolution: an application for crop classification and monitoring

G. Bordogna, IREA

Exploiting multi-sensoral earth observation time series for regional land cover mapping

U. Gessner, DLR

Modelling precipitation and anthropogenic influence on vegetation productivity trends in the African Sahel

T.P. Higginbottom, Manchester Metropolitan University

Beyond "Big-Leaf" LAI: Partitioning MODIS LAI into Tree & Grass Components for Biophysical, Ecological and Grazing Systems Applications in Sub-Saharan Africa

M.N. Kahi, South Dakota State University

Application of X-Band SAR data in estimating cultivated areas at the start of the crop season

N. Milisavljevic, Royal Military Academy

Assessing REDD+ opportunities in Southern Africa

M. Pereira, Wageningen University

Forest monitoring from European to regional scale: novel forest characteristics in unprecedented consistency and detail

M. Probeck, GAF AG

Classification of mountain vegetation by combining SPOT-5 and photogrammetric point cloud data

H. Reese, Swedish University of Agricultural Sciences

Modeling Urban Growth in Shrinking Regions: A Comparative Study of the Ruhr 2030

A. Rienow, University of Bonn

Remote Sensing of the first frontier of LUCC in the Americas: the Tropical Dry Forests

A. Sanchez-Azofeifa, C. Portillo-Quintero, University of Alberta

Accounting for spatial and temporal variability in habitat use: badgers (*Meles meles* and *Taxidea taxus*) in Mediterranean ecosystems

M.J. Santos, Bill Lane Center for the American West

Assessing the influence of land-use and land-cover change and conflicting land-use authorizations on ecosystem conversion on the forest frontier of Madre de Dios, Peru

J. Scullion, University of Washington

The Land Cover Continuum; Multi-sensor Characterization of Human-Modified Landscapes

C. Small, Columbia University

High spatial resolution data for enhancing very high spatial resolution-based mapping applications

G. Smith, Specto Natura Ltd.

Simulating deforestation in Minas Gerais, Brazil, under changing government policies and socioeconomic conditions

K. Stan, University of Alberta

Tropical Forest Cover Monitoring using LiDAR and UAV technologies in Borneo, Malaysia

C.P. Tan, ETH Zurich

From High Resolution Remote Sensing Classification to Land use Change Modeling and Ecosystem Services assessment in Northern Ghana

M. Thiel, University of Würzburg

A novel framework to map land use change at unprecedented detail in data-scarce environments

J. van den Hoek, NASA Goddard Space Flight Center

Challenging production of land cover maps for operational agri-environmental applications

S. Valero-Valbuena, CESBIO

Object-based Land Use Change Mapping from multi-temporal Earth Observation Data in the Siberian Kulunda Steppe

I. Walde, University of Jena