

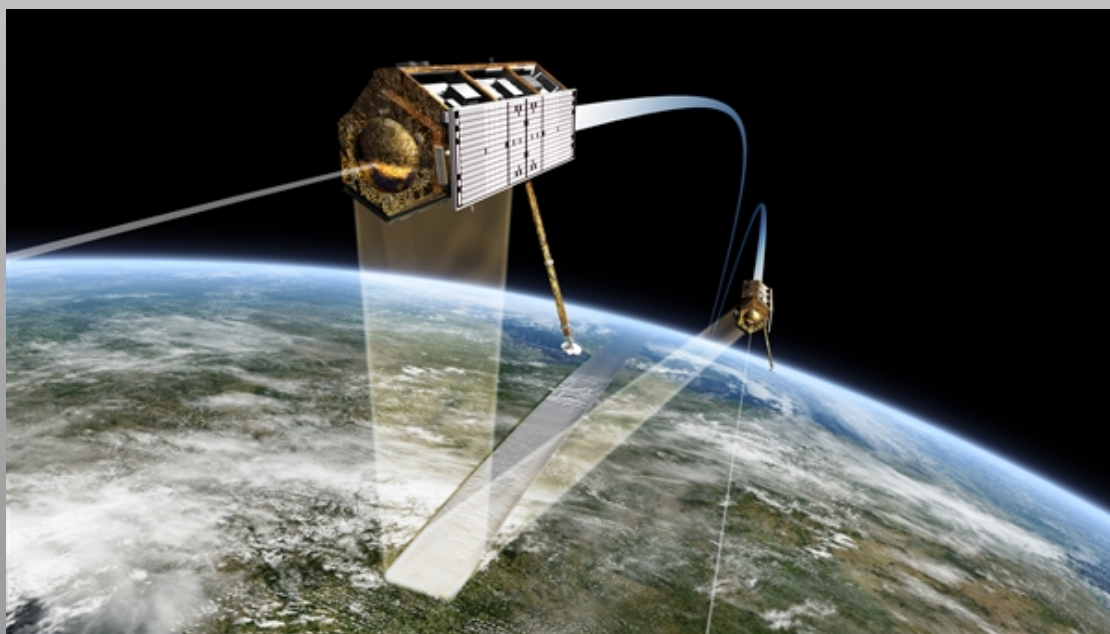
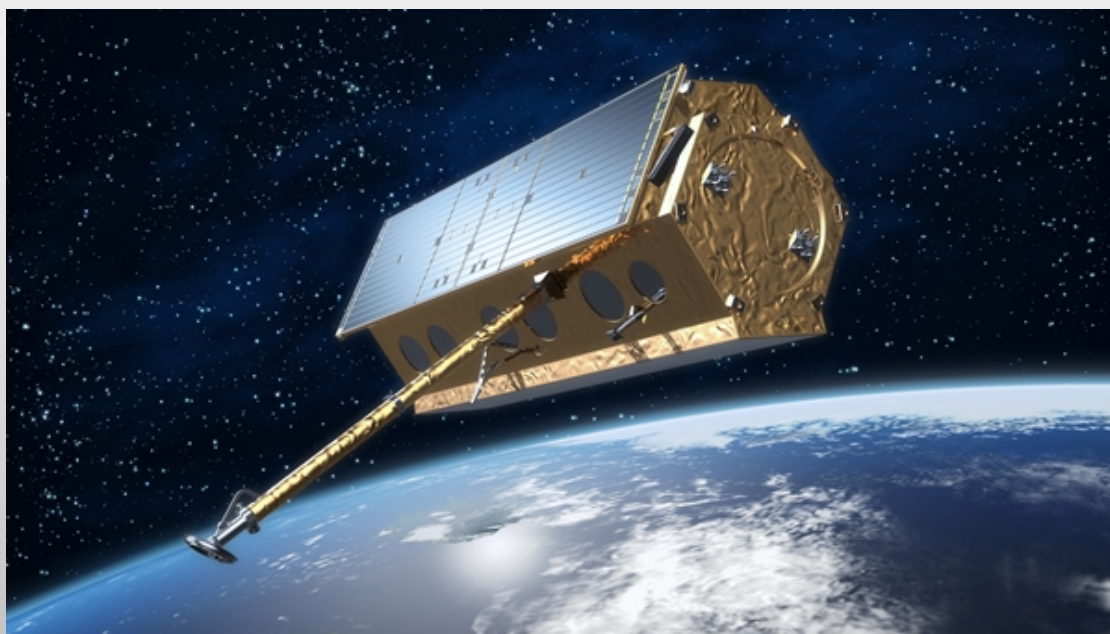


TerraSAR-X / TanDEM-X Science Team Meeting

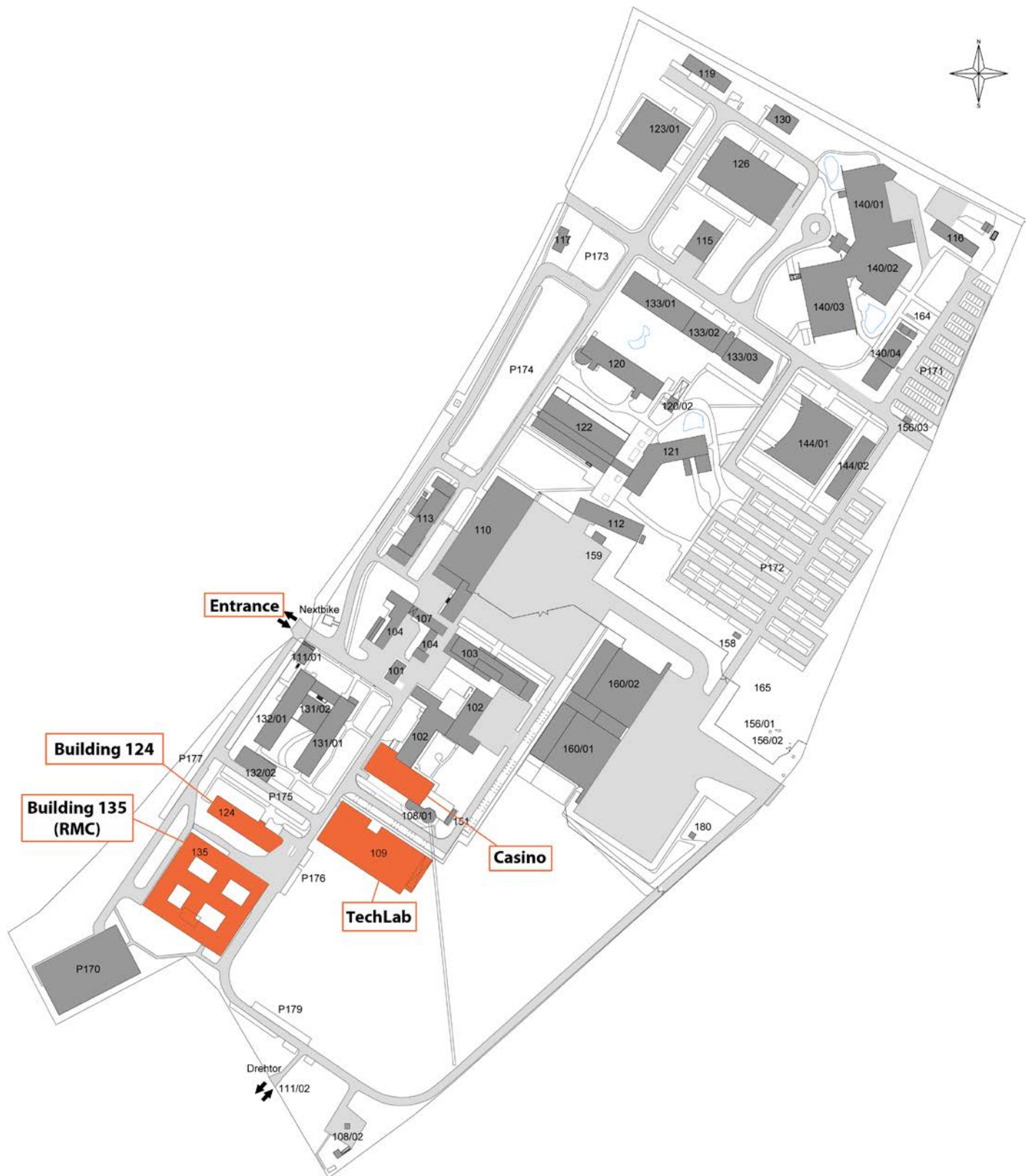
17-20 October 2016

German Aerospace Center (DLR)

Meeting Program



DLR site map



Session overview

Monday, October 17, 2016	Building 124		
13.00 – 14.30	Plenary: TerraSAR-X and TanDEM-X Mission and Coordinated Data Provision		
14.30 – 14.40	Short break		
14.40 – 16.00	Plenary: Future National SAR Missions		
16.00 – 16.30	Coffee break		
16.30 – 18.10	Session 1.1: Agricultural Applications	Session 1.2: Coastal Applications	Building 135 (RMC)
18.30 – 21.30	Icebreaker Event		

Tuesday, October 18, 2016	Building 124	Building 135 (RMC)
09.00 – 10.40	Session 2.1: Forest Applications I	Session 2.2: Ocean Applications I
10.40 – 11.10	Coffee break	
11.10 – 12.50	Session 3.1: Forest Applications II	Session 3.2: Ocean Applications II
12.50 – 14.00	Lunch break	
14.00 – 15.40	Session 4.1: Land Cover Applications	Session 4.2: Ocean Applications III
15.40 – 16.10	Coffee break	
16.10 – 17.50	Session 5.1: Georisk Applications I	Session 5.2: Sea Ice Applications
18.00 – 20.00	Poster Session (TechLab)	

Wednesday, October 19, 2016	Building 124	Building 135 (RMC)
09.00 – 10.40	Session 6.1: Urban Applications	Session 6.2: Glaciology I
10.40 – 11.10	Coffee break	
11.10 – 12.50	Session 7.1: DEMs and Methods	Session 7.2: Glaciology II
12.50 – 14.00	Lunch break	
14.00 – 15.40	Session 8.1: Deformation	Session 8.2: Snow & Hydrology
15.40 – 16.10	Coffee break	
16.10 – 17.50	Session 9.1: Landslides & Arctic Regions	Session 9.2: Methods
18.00 – 20.00	Poster Session (TechLab)	

Thursday, October 20, 2016	Building 124	Building 135 (RMC)
09.00 – 10.40	Session 10.1: Georisk Applications II	Session 10.2: Archaeology and Landcover
10.40 – 11.10	Coffee break	
11.10 – 12.50	Session 11.1: Volcanoes	Session 11.2: Permafrost & Polar

Monday, October 17, 2016

Plenary: TerraSAR-X and TanDEM-X Mission and Coordinated Data Provision

Building 124

Chairperson: Irena Hajnsek and Achim Roth

- 13.00 – 13.10 Welcome
Alberto Moreira – German Aerospace Center (DLR)
- 13.10 – 13.30 Mission overview
Stefan Buckreuz – German Aerospace Center (DLR)
- 13.30 – 13.50 The GEO Geohazard Supersites Initiative
Stefano Salvi – Istituto Nazionale di Geofisica e Vulcanologia (INGV)
- 13.50 – 14.10 Polar space task group
Yves Crevier – Canadian Space Agency (CSA)
- 14.10 – 14.30 Coordinated data access for GFOI and forest applications
Michael Bock – German Aerospace Center (DLR)
- 14.30 – 14.40 Short break

Plenary: Future National SAR Missions

Building 124

Chairperson: Irena Hajnsek and Achim Roth

- 14.40 – 14.55 Overview HRWS
Michael Bartusch – German Aerospace Center (DLR)
- 14.55 – 15.10 The Tandem-L mission overview
Alberto Moreira – German Aerospace Center (DLR)
- 15.10 – 15.20 Tandem-L: Cryosphere
Angelika Humbert – Alfred Wegener Institute (AWI)
- 15.20 – 15.30 Tandem-L: Biosphere
Andreas Huth – Centre for Environmental Research (UFZ)
- 15.30 – 15.40 Tandem-L: Geosphere
Thomas Walter – German Research Centre for Geosciences (GFZ)
- 15.40 – 15.50 Tandem-L: Hydrosphere
Carsten Montzka – Forschungszentrum Jülich (FZJ)
- 15.50 – 16.00 AGENDA Presentation
Irena Hajnsek/Achim Roth – German Aerospace Center (DLR)
- 16.00 – 16.30 Coffee break

Session1.1: Agricultural Applications

Building 124

Chairperson: Hannah Joerg and Alberto Alonso Gonzales

- 16.30 – 16.50 Evaluation of the retrieval of paddy rice height by means of polarimetric SAR interferometry with TanDEM-X data
Juan M. Lopez-Sanchez, Fernando Vicente-Guijalba, Qinghua Xie – University of Alicante
Esra Erten – Technical University of Istanbul
Manuel Campos-Taberner, Javier Garcia-Haro – University of Valencia
- 16.50 – 17.10 TanDEM-X for crop height determination: challenges and opportunities
Esra Erten – Technical University of Istanbul
Christian Rossi – DLR
- 17.10 – 17.30 Assessing the operational capabilities of TerraSAR-X for monitoring summer crop biophysical parameters
Paolo Villa, Giacomo Fontanelli, Ramin Azar, Daniela Stroppiana – CNR, IREA
Francesco Montomoli, Marco Brogioni, Giovanni Macelloni – CNR, IFAC
- 17.30 – 17.50 Monitoring agricultural crops evolution with dual-pol long-baseline TanDEM-X time series
Alberto Alonso Gonzales, Hannah Joerg, Kostas Papathanassiou – DLR
Irena Hajsek – ETH Zurich
- 17.50 – 18.10 Integration of TanDEM-X imagery and other data sources for rangeland pasture mapping
Zheng-Shu Zhou, Peter Caccetta, Neil Sims, Alex Held – CSIRO

Session 1.2: Coastal Applications

Building 135 (RMC)

Chairperson: Thomas Busche and Andrey Pleskachevsky

- 16.30 – 16.50 Geomorphic structures and habitats in the Wadden Sea – remote sensing and monitoring with TerraSAR-X
Winny Adolph, Hubert Farke – National Park Authority Lower Saxony Wadden Sea
- 16.50 – 17.10 Use of dual- and full polarimetric SAR data for the detection of bivalve beds on intertidal flats
Martin Gade – University Hamburg
- 17.10 – 17.30 Automatic waterline detection and change monitoring in the Wadden Sea
Stefan Wiehle, Björn Tings, Claus Gebhardt, Andrey Pleskachevsky, Sven Jacobsen – DLR
- 17.30 – 17.50 Small scale wind variations around offshore wind farms: A use case for SAR-based wind fields and a comparison with on-site LIDAR measurements
Sven Jacobsen, Egbert Schwarz, Holger Daeselow – DLR
Julian Hieronimus, Jörg Schneemann – University of Oldenburg
- 17.50 – 18.10 Tidal flat DEM generation and application using TanDEM-X science phase data
Ryu Joo-Hyung – KIOST, Korea Ocean Satellite Center
Lee Seung-Kuk – NASA GSFC
- 18.30 – 21.30 **Icebreaker Event**

Tuesday, October 18, 2016

Session 2.1: Forest Applications I

Building 124

Chairperson: Kostas Papathanassiou and Andreas Huth

- 09.00 – 09.20 Extracting forest structure information from TanDEM-X Pol-InSAR data: experimental results
Matteo Pardini, Victor Cazcarra Bes, Marivi Tello Alonso, Konstantinos Papathanassiou – DLR
Polyanna Da Conceicao Bispo – University of Leicester
- 09.20 – 09.40 Global-scale mangrove forest height map generation
Seung-Kuk Lee – NASA/GSFC
- 09.40 – 10.00 Interferometric water cloud model inversion of TanDEM-X data over a boreal forest: implications on forest scattering at X-band
Maciej Soja, Jan Askne, Lars Ulander – Chalmers University of Technology
- 10.00 – 10.20 Forest biomass estimation from TanDEM-X interferometry
Lars Ulander Jan Askne, Maciej Soja – Chalmers University of Technology
Johan Fransson, Henrik Persson – Swedish University of Agricultural Sciences
- 10.20 – 10.40 Forest monitoring and biomass estimation for REDD+ with InSAR
Svein Solberg, Johannes May, Belachew Gizachew, Wiley Bogren, Johannes Breidenbach – Norwegian Institute for Bioeconomy

Session 2.2: Ocean Applications I

Building 135 (RMC)

Chairperson: Sven Jacobsen and Xiao-Ming Li

- 09.00 – 09.20 Backscattering analysis of metallic platforms in Gulf of Mexico via multi-polarization TerraSAR-X data
Domenico Velotto – DLR
Armando Marino – Open University
Ferdinando Nunziata – Università di Napoli Parthenope
- 09.20 – 09.40 Derivation of sea surface current from spaceborne SAR constellation Data
Xiao-Ming Li, YongZheng Ren – Chinese Academy of Sciences
Thomas Busche – DLR
- 09.40 – 10.00 Surface velocity measurement in the Baltic Sea with TanDEM-X: results from the HGF-EDA Study
Steffen Suchandt, Andrey Pleskachevsky, Hartmut Runge – DLR
Andreas Lehmann, Josefine Herrford – GEOMAR Helmholtz Center for Ocean Research
Roland Romeiser – University of Miami
- 10.00 – 10.20 Systematic measurement of ocean backscatter coherence vs. time using TanDEM-X
Roland Romeiser – University of Miami RSMAS
Hartmut Runge, Steffen Suchandt – DLR
- 10.20 – 10.40 Understanding altimetry signal through TSX wide ScanSAR and Sentinel-1 data
Philippe Durand, Amandine Guillot, François Boy, Nadine Pourthie – CNES
Nicolas Longépé, JC Poisson, P. Thibaut – CLS
S. Fleury, K. Guerreiro, F. Remy – LEGOS
- 10.40 – 11.10 Coffee break

Session 3.1: Forest Applications II

Building 124

Chairperson: Michael Bock and Matteo Pardini

- | | |
|---------------|--|
| 11.10 – 11.30 | Forest height estimation in planted forests in the Paraná river delta (Argentina) using TerraSAR-X and TanDEM-X interferometry
<i>Diego de Abelleira, Santiago Verón – INTA</i>
<i>Matías Gaute, Roberto Benítez – Ministry of AgroIndustry of Argentina</i> |
| 11.30 – 11.50 | Tropical forest heterogeneity from TanDEM-X InSAR and LiDAR observations in Indonesia
<i>Elsa De Grandi, Edward Mitchard – University of Edinburgh</i>
<i>Dirk Hoekman – Wageningen University</i> |
| 11.50 – 12.10 | Forest parameter estimation over Indian forests using TanDEM-X observations
<i>Gulab Singh, Unmesh Khati – IIT Bombay</i>
<i>Laurent Ferro-Famil – University of Rennes 1</i> |
| 12.10 – 12.30 | Using a change detection tool for mapping storm damages in forests with TerraSAR-X data
<i>Klaus Martin – SLU</i>
<i>Andreas Schmitt – DLR</i>
<i>Robert Reissig – FBR Consulting</i> |
| 12.30 – 12.50 | Generation of a global forest/non forest map from TanDEM-X interferometric data
<i>Christopher Wecklich, Michele Martone, Paola Rizzoli, Gerhard Krieger – DLR</i> |

Session 3.2: Ocean Applications II

Building 135 (RMC)

Chairperson: Roland Romeiser and Domenico Velotto

- | | |
|---------------|--|
| 11.10 – 11.30 | TerraSAR-X SAR data to monitor typhoons
<i>Valeria Corcione, Ferdinando Nunziata, Maurizio Migliaccio – Università degli studi di Napoli Parthenope</i> |
| 11.30 – 11.50 | New possibilities in monitoring Arctic sea ice through TanDEM-X interferometry
<i>Dyre Oliver Dammann, Franz J. Meyer, Andrew R Mahoney, Hajo Eicken – University of Alaska Fairbanks</i> |
| 11.50 – 12.10 | Ocean surface wave patterns on TerraSAR-X images and follow-on applications
<i>Claus Gebhardt, Andrey Pleskachevsky – DLR</i> |
| 12.10 – 12.30 | Offshore oil spill characterization using space-borne fully polarimetric X and C band synthetic aperture radar
<i>Suman Singha, Rudolf Ressel – DLR</i> |
| 12.30 – 12.50 | Wind-wave effect on TanDEM-X ATI data for the Swedish West Coast
<i>Anis Elyouncha, Leif E.B. Eriksson, Gisela K. Carvajal, Lars M.H. Ulander – Chalmers University of Technology</i>
<i>Roland Romeiser – University of Miami</i> |
| 12.50 – 14.00 | Lunch break |

Session 4.1: Land Cover Applications

Building 124

Chairperson: Thomas Esch and Birgit Wessel

- 14.00 – 14.20 Potentials of TanDEM-X interferometric data for global land classification
Michele Martone, Paola Rizzoli, Gerhard Krieger – DLR
- 14.20 – 14.40 Potentials of multi-temporal TerraSAR-X images for tropical land cover mapping
Ron Hagensieker, Björn Waske – FU Berlin
- 14.40 – 15.00 Grassland management and biomass retrieval in an intensive dairy farm in Ireland using TerraSAR-X Staring Spotlight mode data
Brian Barrett, Konstantina Bika – University of Glasgow
Iftikhar Ali – University College Cork
Christoph Raab – University of Göttingen
- 15.00 – 15.20 Agricultural soil surface parameters retrieving from TerraSAR-X SAR data
Mehrez Zribi – CNRS, CESBIO
Azza Gorraeb – CESBIO, CESBIO
Nicolas Baghdadi – IRSTEA, UMR TETIS
Bernard Mougenot, Pascal Fanise – IRD, CESBIO
Zohra Lili-Chabaane – Carthage University
- 15.20 – 15.40 Maize growth monitoring using multitemporal TanDEM-X Spotlight acquisitions
Christoph Hütt, Nora Tilly, Georg Bareth – University of Cologne

Session 4.2: Ocean Applications III

Building 135 (RMC)

Chairperson: Martin Gade

- 14.00 – 14.20 Development of multi-band equatorially orbiting POLSAR satellite sensors - an integral task for the major space-SAR technology centers world-wide - for assessing and imaging of both natural land & ocean as well as meteorological phenomena
Wolfgang-Martin Boerner – University of Illinois at Chicago
- 14.20 – 14.40 Support of research vessels in the Antarctic with NRT radar information: an innovative service at DLR's Antarctic station GARS O'Higgins
Kathrin Höppner, Birgit Schättler, Egbert Schwarz, Detmar Krause, Erhard Diedrich – DLR
Michael Schröder, Christine Wesche – Alfred Wegener Institute (AWI)
- 14.40 – 15.00 Research and pre-operational application of near real time services for maritime situational awareness
Egbert Schwarz, Detmar Krause, Sergey Voinov, Holger Daedelow, Sven Jacobsen, Björn Tings – DLR
- 15.00 – 15.20 Fishing Vessel Surveillance using TerraSAR-X Stripmap and ScanSAR Mode Data
Zheng-Shu Zhou, Chris Wilcox, Peter Caccetta – CSIRO
- 15.20 – 15.40 A Sea State Processor for full automatic estimation of the total significant wave height in shallow coastal waters from TerraSAR-X StripMap images
Andrey Pleskachevsky, Sven Jacobsen, Björn Tings, Egbert Schwarz, Detmar Krause – DLR
Thomas Bruns, Jens Kieser – German Meteorological Service DWD
- 15.40 – 16.10 Coffee break

Session 5.1: Georisk Applications I

Building 124

Chairperson: Christian Rossi and Nadine Kiefl

- 16.10 – 16.30 High-resolution Spotlight SAR data for structural health monitoring: application and results for Masjed-Soleyman dam in Iran 2014–2015
Mahdi Motagh, Mahmud Haghshenas Haghighi – German Research Center for Geosciences (GFZ)
Lotfollah Emadali – University of Tehran
- 16.30 – 16.50 Monitoring of the Jettan Rockslide in northern Norway using high-resolution Staring Spotlight TerraSAR-X satellite data
Tom R. Lauknes, Yngvar Larsen, Line Rouyet – Norut
John F. Dehls – Geological Survey of Norway
- 16.50 – 17.10 Advanced InSAR monitoring solution for landslide geohazards
Bernhard Rabus, Jayson Eppler – Simon Fraser University
- 17.10 – 17.30 Monitoring fast motion of landslides in the Three Gorges area using point-like target offset tracking with high-resolution TerraSAR-X data
Lu Zhang, Mingsheng Liao, Xuguo Shi, Timo Balz, Menghua Li – Wuhan University
- 17.30 – 17.50 Terrestrial impact craters in 3D
Manfred Gottwald, Thomas Fritz, Helko Breit, Birgit Schättler, Alan Harris - DLR

Session 5.2: Sea Ice Applications

Building 135 (RMC)

Chairperson: Franz Meyer and Kathrin Höppner

- 16.10 – 16.30 Polynya evolution at the Terra Nova Bay Antarctica – Analysis of a multi sensor time series
Thomas Hollands, Stefanie Linow, Wolfgang Dierking – Alfred Wegener Institute (AWI)
- 16.30 – 16.50 Towards mapping sea ice and Wadden Sea topography using InSAR from the TanDEM-X science phase
Marcus Huntemann – Alfred Wegener Institute (AWI)
Gunnar Spreen, Georg Heygster – University of Bremen
- 16.50 – 17.10 Retrieval and analysis of sea ice floe size distribution from high-resolution SAR imagery
Byongjun (Phil) Hwang – Scottish Association for Marine Science
Jinchang Ren, Samuel McCormack, Craig Berry – University of Strathclyde
Ismail Ben Ayed – École de Technologie Supérieure
Erchan Aptoula – Gebze Technical University
Hans C. Graber – University of Miami
- 17.10 – 17.30 Observation of drift sea ice by quad-pol TerraSAR-X and TanDEM-X bistatic along-track interferometry
Joong-Sun Won – Yonsei University
- 17.30 – 17.50 Extraction of sea ice and iceberg parameters from TDM interferometric data
Igor Zakharov, Des Power, Michael Lynch, Mark Howell, Sherry Warren – C-CORE
Sergey Samsonov – Canada Centre for Mapping and Earth Observation

18.00 – 20.00 Poster Session
Building 109 (TechLab)

1. Assimilation of TerraSAR-X copolarized (VV, HH) data into an agro-meteorological model to estimate wheat biophysical parameters (LAI, biomass, yield)
Frédéric Baup, Rémy Fieuzal, Constance Dujarric, Julie Betbeder, Mael Ameline, Claire Marais-Sicre – CESBIO
Arnaud Selle, Philippe Durand – CNES
Thierry Rabaute – CS
2. Preliminary results of soil moisture retrieval in Ifakara Tanzania
Fridah Kirimi – University of Bonn
3. Phenological maize crop analysis using TerraSAR-X and Sentinel-1 data, case study
Kitale, Kenya
Bartholomew Kuria, Gunter Menz, Frank Thonfeld – University of Bonn
David Kuria – Dedan Kimathi University of Technology
4. Analysis of wheat characteristics using TanDEM-X Pol-InSAR data
Haiying Zhang, Zhiyong Suo, Zhenfang Li – Xidian University
5. Evaluation of the retrieval of paddy rice height by means of a dynamical approach with TerraSAR-X data
Juan M. Lopez-Sanchez, Fernando Vicente-Guijalba, Caleb G. De Bernardis, Tomás Martinez-Marin – University of Alicante
Esra Erten – Technical University of Istanbul
Manuel Campos-Taberner, Javier Garcia-Haro – University of Valencia
6. Potential of TanDEM-X for forest parameter estimation by using an adapted version of the RVoG model
Ismail Baris, Daniel Baron, Stefan Erasmi – Georg-August-University Göttingen
7. Forest/non-forest maps from interferometric TanDEM-X and multitemporal Sentinel-1 SAR data – a case study
Daniel Baron, Ismail Baris, Stefan Erasmi – Georg-August-University Göttingen
Michael Bock – scilands GmbH
8. Potential of TerraSAR-X and Sentinel 1 images to discriminate degraded forest
Maria Delgado Aguilar – University of Freiburg
9. Forest height and aboveground biomass retrieval in tropical peat swamp forests using multi-pass X- and C-band PolInSAR data
Sandra Englhart, Florian Siegert, Werner Wiedemann, Kristina Konecny – Remote Sensing Solutions GmbH
Ting Liu, George Lampropoulos, Yi Zang, Abhijit Sinha, Yifeng Li – A.U.G. Signals Ltd
10. Contribution of High Resolution TerraSAR-X images to the classification of managed forest stands through texture analysis
Pierre-Louis Frison, Yousra Hamrouni, Cécile Cazals, Clément Mallet, Jean-Paul Rudant – Université Paris-Est
Mehrez Zribi, Ludovic Villard, Thuy Le Toan, Erwan Notte – CESBIO
Isabelle Champion – INRA
11. Retrieval of forest above ground biomass (AGB) using TanDEM-X Pol-InSAR
Gulab Singh, Mohamed Musthafa, Unmesh Khati – IIT Bombay
12. Evaluation of land subsidence using high resolution TerraSAR-X time series data in Nigeshi area
Ram Avtar – United Nations University
13. Using TanDEM-X data for forest height estimation and change detection
Antje Thiele, Stefan Hinz – Karlsruhe Institute of Technology (KIT)
Clémence Dubois – Federal Institute for Geosciences and Natural Resources (BGR)

18.00 – 20.00 Poster Session

Building 109 (TechLab)

14. Detection of building changes using interferometric synthetic aperture radar and radargrammetry
Antje Thiele, Stefan Hinz – Karlsruhe Institute of Technology (KIT)
Clémence Dubois – Federal Institute for Geosciences and Natural Resources (BGR)
15. Monitoring gas extraction in Australia using TerraSAR-X interferometry
Matthew Garthwaite, Sarah Lawrie – Geoscience Australia
16. TanDEM-X reveals insights in volcanic activity at Etna volcano, Sicily, Italy
Julia Kubanek, Bettina Raible, Malte Westerhaus, Bernhard Heck – Karlsruhe Institute of Technology
17. Climate change, sediment aggradation, and riverbed-height changes in the eastern Intermontane Basins of the South-Central Andes revealed by DEM timeseries
Bodo Bookhagen, Manfred Strecker – University of Potsdam
18. TerraSAR-X satellite monitoring of landfill surface subsidence in the Noeul and Haneul parks, Seoul, Korea
Won-Kyung Baek, Hyung-Sup Jung – University of Seoul
Min-Jeong Jo – Yonsei University
19. Volcanic activity at Bárðarbunga, Iceland, monitored with TerraSAR-X and TanDEM-X data
Julia Jaenicke, Ulrich Münzer – Ludwig-Maximilians-University
Christian Minet, Michael Eineder – DLR
Ludwig Braun – Bavarian Academy of Sciences and Humanities
Florian Siegert – RSS Remote Sensing Solutions GmbH
Ágúst Guðmundsson – Fjarkönnun ehf.
20. Assessing hillslope instability and natural hazard with the World DEM and TerraSAR-X SAR data in Northeast Colombia
Stephanie Olen, Bodo Bookhagen – University of Potsdam
21. Combining pre-event optical and post-event polarimetric SAR data for rapid landslide mapping
Simon Plank, Sandro Martinis, André Twele – DLR
22. PSI analysis of TSX archive data for urban geohazard risk management: preliminary results from Brussels
Jan Walstra, Pierre-Yves Declercq – Royal Belgian Institute of Natural Sciences
23. The Earth Observation Image Librarian EOLib: automated data mining using TerraSAR-X images
Corneliu Octavian Dumitru, Mihai Datcu, Daniela Espinoza-Molina, Shiyong Cui, Gottfried Schwarz, Vlad Manilici, Christoph Reck – DLR
24. Historic centre of Sighisoara, Romania – a magnificent medieval town monitored with TerraSAR-X
Iulia Dana Negula – Romanian Space Agency
25. Archaeological study and environmental monitoring of the Nazca Civilization region, Peru, with TerraSAR-X archive images
Deodate Tapete, Francesca Cigna – British Geological Survey
26. Unsupervised optimization of change classification at Stuttgart Airport
Markus Boldt, Antje Thiele, Karsten Schulz – Fraunhofer IOSB
Stefan Hinz – KIT Karlsruhe
27. Space-based detection of sinkhole activity in central Florida
Talib Oliver Cabrera, Shimon Wdowinski, Sarah Kruse – University of Maimi
28. Differential subsidence analysis over the Collective Transport System (Metro) in Mexico City using X-band SAR scenes from TSX and CSK
Dario Solano-Rojas, Shimon Wdowinski, Yunjung Zhang, Yoangel Torres – University of Maimi
Enrique Cabral-Cano – Universidad Nacional Autonoma de Mexico

18.00 – 20.00

Poster Session

Building 109 (TechLab)

29. Monitoring urban subsidence in Bucharest City with TerraSAR-X and Sentinel-1
Delia Teleaga, Valentin Poncos, Stefan-Adrian Toma – TERRASIGNA Ltd.
30. Polarization orientation angle compensation of PolInSAR data for building model reconstruction
Changcheng Wang, Wang Ping, Xing Peng, Mengjie Zhang – Central South University
31. Deformation studies in Warsaw – comparison of the results obtained based on TerraSAR-X and Cosmo-SkyMed data
Dariusz Ziolkowski, Magdalena Lagiewska, Jan Krynski, Jan Cisak, Lukasz Zak – Institut of Geodesy and Cartography
32. Estimation of land subsidence rate using InSAR technique and analysis of the effective parameters in Mahyar plain, southeast of Isfahan city, Iran
Kourosh Shirani, Morteza Khodaghali, Sattar Chavoshi – Isfahan Research Center of Agriculture & Natural Resources
33. Characterizing landslide movement using TerraSAR-X DInSAR in Vanak region, west of Semirom city, Isfahan province, Iran
Kourosh Shirani – Isfahan Research Center of Agriculture & Natural Resources
34. The beginning of land subsidence occurrence and continuous compaction of aquifer system, as evidenced by X-band, C-band and L-band RADAR measurements in Najafabad plain, the west of Isfahan administrate, Iran
Kourosh Shirani, Mehrdad Pasandi – Isfahan Research Center of Agriculture & Natural Resources
35. Fusion of Radarsat-2 and TanDEM-X satellite data to support the assessment of aboveground biomass (AGB) in temperate forests
Christian Berger, John Truckenbrodt, Christian Thiel, Christiane Schmullius – University of Jena
Fabian Enßle, Barbara Koch – University of Freiburg
36. SAR-EDU - The SAR Remote Sensing Education Portal -
Robert Eckardt, Christian Thiel, Christiane Schmullius – University of Jena
37. Comparison of TDX DSM and Laser (TLS, LiDAR) data at Roda Supersite
Christian Thiel, Christiane Schmullius, Jussi Baade – University of Jena

Wednesday, October 19, 2016

Session 6.1: Urban Applications

Building 124

Chairperson: Nico Adam and Maria Sanjuan

- 09.00 – 09.20 Stability assessment of roads and railways in Trondheim by using TerraSAR-X
Roghayeh Shamshiri, Hossein Nahavandchi – NTNU, Norwegian University of Science and Technology
Mahdi Motagh – German Research Centre for Geosciences (GFZ)
- 09.20 – 09.40 Infrastructure stability monitoring in Romania using TerraSAR-X data
Valentin Poncos, Delia Teleaga, Stefan-Adrian Toma, Florin Serban – TERRASIGNA Ltd.
Manole Stelian Serbulea – Technical University of Civil Engineering
Rodica Nicolae – RATEN-CITON
- 09.40 – 10.00 Texture analysis for building damage detection in TerraSAR-X Staring Spotlight mode imagery
Fan Wu, Chao Wang, Hong Zhang, Bo Zhang – Institute of Remote Sensing and Digital Earth, CAS
Lixia Gong – Institute of Crustal Dynamics
- 10.00 – 10.20 Structure health monitoring for urban infrastructures with TerraSAR-X images
Xiaoqiong Qin, Mingsheng Liao, Lu Zhang, Mengshi Yang – Wuhan University
- 10.20 – 10.40 Building extraction from single TerraSAR-X ST image based on feature fusion in the pyramid framework
Bo Zhang, Fan Wu, Chao Wang, Hong Zhang – Institute of Remote Sensing and Digital Earth, CAS

Session 6.2: Glaciology I

Building 135 (RMC)

Chairperson: Helmut Rott and Angelika Humbert

- 09.00 – 09.20 Flow dynamics and mass balance of Antarctic Peninsula outlet glaciers from TanDEM-X and TerraSAR-X data time series
Helmut Rott, Jan Wuite, Thomas Nagler, Stefan Scheiblauer – ENVEO IT
Dana Floricioiu, Erling Johnson – DLR
- 09.20 – 09.40 Use of TerraSAR-X and TanDEM-X data in glaciology – examples from Antarctica, Greenland and Patagonia
Bernd Scheuchl, Jeremie Mouginot, Xin Li, Romain Milan, Eric Rignot – University of California, Irvine
Pietro Milillo – JPL
- 09.40 – 10.00 Geometric and dynamic variations of the northeast Greenland Ice Sheet observed with TerraSAR-X and TanDEM-X data
Lukas Krieger, Dana Floricioiu – DLR
- 10.00 – 10.20 Changes in ice dynamics along the northern Antarctic Peninsula
Thorsten Seehaus, Matthias Braun – Friedrich-Alexander-University Erlangen-Nuremberg
Alison Cook – Durham University
Jan Melchio van Wessem – Utrecht University
Sebastián Marinsek – Instituto Antártico Argentino
Pedro Skvarca – Glaciarium, Museo del Hielo Patagónico
- 10.20 – 10.40 Glacier mass balancing and glaciological applications in High Asia using experimental TanDEM-X data of the 2015 science phase
Gebhard Warth, Jan Kropacek, Volker Hochschild – University of Tuebingen
- 10.40 – 11.10 Coffee break

Session 7.1:

DEMs and Methods

Building 124

Chairperson: Gerhard Krieger and Manfred Zink

- 11.10 – 11.30 Accuracy assessment of TanDEM-X I-DEM over the UK
Lang Feng, Jan-Peter Muller – University College London
- 11.30 – 11.50 Evaluation of high resolution TanDEM-X DEM in southwestern China
Peng Li – Ocean University of China
Keren Dai – Southwest Jiaotong University
Yasir Al-Husseinawi, Zhenhong Li – Newcastle University
- 11.50 – 12.10 High-precision DEM generation using TanDEM-X at 1:50000 Scale
Tao Li, Xinming Tang, Xiaoming Gao, Qianfu Chen – Satellite Surveying and Mapping Application Center
Danqin Wu – Southwest Jiaotong University
- 12.10 – 12.30 Validation of TanDEM-X IDEM in the Lowveld savanna, Kruger National Park, South Africa, using TLS data sets
Jussi Baade, Victor Onyango, Christian Berger, Christiane Schmullius – Friedrich-Schiller-University Jena
- 12.30 – 12.50 Quality assessments and geomorphologic applications of digital elevation models in the central Andes with focus on TSX/TDX
Benjamin Purinton, Bodo Bookhagen – University of Potsdam
Kanayim Teshebaeva – German Research Centre for Geosciences (GFZ)

Session 7.2: Glaciology II

Building 135 (RMC)

Chairperson: Dana Floricioiu and Ian Joughin

- 11.10 – 11.30 Elevation changes of glaciers, glacier surges, and snow/firn pack variability from TanDEM-X time series DEMs in Northwest Svalbard
Christopher Nuth, Andreas Kääb – University of Oslo
Jack Kohler – Norwegian Polar Institute
Etienne Berthier – National Center for Space studies (CNES)
- 11.30 – 11.50 Characterisation and monitoring of Kyagar Glacier surge dynamics and lake outburst events using TanDEM-X
Vanessa Round, Silvan Leinss, Matthias Huss, Martin Funk – ETH Zurich
Christoph Haemmig – GEOTEST AG
- 11.50 – 12.10 A glacier surge of Bivachny glacier, Pamir Mountains, observed by TanDEM-X and Landsat data
Anja Wendt, Christoph Mayer, Astrid Lambrecht – Bavarian Academy of Sciences and Humanities
Dana Floricioiu – DLR
- 12.10 – 12.30 Extraction of glacier outlines and surface stripes using high-resolution SAR
Lei Huang – Institute of Remote Sensing and Digital Earth (CAS)
- 12.30 – 12.50 Greenland ice mapping project: Measuring rapid ice flow with TerraSAR-X and TanDEM-X
Ian Joughin – University of Washington
- 12.50 – 14.00 Lunch break

Session 8.1: Deformation

Building 124

Chairperson: Michael Eineder and Francesco De Zan

- 14.00 – 14.20 Active surface deformation in the south-central Andes revealed by multiple-sensor InSAR and field observations
Bodo Bookhagen, Manfred Strecker – University of Potsdam
Ricardo Alonso – Universidad Nacional de Salta
- 14.20 – 14.40 Change Detection Based on Persistent Scatterer Interferometry
Chia-Hsiang Yang, Uwe Sörgel – University of Stuttgart
- 14.40 – 15.00 InSAR analysis of land subsidence and sinkhole collapse in Hamadan, Western Iran
Mahdi Motagh, Sanaz Vajedian, Hans-Ulrich Wetzel, Sigrid Roessner – German Research Center for Geosciences (GFZ)
Bahman Akbari – Forest, Range and Watershed management of Iran
- 15.00 – 15.20 Continuous compaction of aquifer system in Tehran, Iran: an insight from multi-sensor InSAR
Mahmud Haghshenas Haghighi, Mahdi Motagh – German Research Center for Geosciences (GFZ)
- 15.20 – 15.40 Experiments on corner reflectors for deformation monitoring using X and C-band interferometry
Matthew Garthwaite, Sarah Lawrie, John Dawson, Medhavy Thankappan – Geoscience Australia

Session 8.2: Snow & Hydrology Applications

Building 135 (RMC)

Chairperson: Tobias Ullmann and Giuseppe Parrella

- 14.00 – 14.20 Snow depth and ice volume changes for Aletsch Glacier, Switzerland
Silvan Leinss – ETH Zurich
- 14.20 – 14.40 Assessment of the TerraSAR multi resolution data for mapping and monitoring water bodies over temperate and tropical flood plains: case of the Alsatian ried in Western Europe and the Meixihu case (Poyang Lake) in Central China
Sadri Haouet – University of Strasbourg
Henri Giraud, Mathias Studer, Hervé Yésou – Unistra
- 14.40 – 15.00 Wetland mapping and water extent monitoring using multitemporal X- and C- band SAR data
Tanja Riedel, Christiane Schmullius – Friedrich-Schiller-University
Andreas Schmitt, Achim Roth – DLR
Kathrin Weise – Jena-Optronik GmbH
- 15.00 – 15.20 Detection of surface water changes using TerraSAR-X data for flood hazard monitoring
Katherine Irwin, Georgia Fotopoulos, Alexander Braun, Danielle Beaulne – Queens University
- 15.20 – 15.40 Inland water pollution detected using TanDEM-X data
Chao Wang, Hong Zhang, Ying Deng – Institute of Remote Sensing and Digital Earth
Ruru Deng – Sun Yat-Sen University
- 15.40 – 16.10 Coffee Break

Session 9.1: Landslides & Arctic Region Applications

Building 124

Chairperson: Mahdi Motagh and Alesandro Parizzi

- 16.10 – 16.30 Monitoring displacements of Daguangbao post-seismic landslide with the assistance of Tandem-X derived high resolution DEM
Keren Dai, Guoxiang Liu, Xiaowen Wang – Southwest Jiaotong University
Zhenhong Li – Newcastle University
Roberto Tomas – Universidad de Alicante
Peng Li – Ocean University of China
- 16.30 – 16.50 A fast method for mapping and assessing large-scale landslides triggered by 2008 Wenchuan earthquake
Zhengjia Zhang, Tang Yixian, Wang Chao, Hong Zhang – Institute of Remote Sensing and Digital Earth (CAS)
- 16.50 – 17.10 Deformation and hazards monitoring along the Qinghai-Tibet railway/highway over permafrost regions with TerraSAR
Panpan Tang, Fulong Chen, Bangsen Tian – Institute of Remote Sensing and Digital Earth (CAS)
- 17.10 – 17.30 Geomorphometric exploitation of the 2014-2015 Bardarbunga unrest, Iceland, using TanDEM-X
Cristian Rossi – DLR
Stéphanie Dumont, Gro Birkefeldt – University of Iceland
Mariel Dirscherl – University College London
- 17.30 – 17.50 Ground motion monitoring using TerraSAR-X - First results
Karlheinz Gutjahr – Joanneum Research Forschungsgesellschaft mbH

Session 9.2: Methods

Building 135 (RMC)

Chairperson: Michele Martone

- 16.10 – 16.30 TanDEM-X Intermediate DEM: A first impression of the forthcoming new global DEM
Dimitra Vassilaki – Technological Educational Institute of Athens
Thanasis Stamos – National Technical University of Athens
- 16.30 – 16.50 Delay correction on Etna with DLRs Next-Generation geodetic SAR product
Markus Even – Fraunhofer IOSB
Xiaoying Cong – TU Munich
Michael Eineder – DLR
- 16.50 – 17.10 Applying geodetic SAR with TerraSAR-X and TanDEM-X
Christoph Gisinger, Xiaoying Cong, Roland Pail – TU Munich
Ulrich Balss, Stefan Hackel, Sina Montazeri, Xiaoxiang Zhu, Michael Eineder – DLR
- 17.10 – 17.30 Development of new operational applications with pursuit monostatic configuration
Parivash Lumsdon, Jürgen Janoth – Airbus Defence and Space
- 17.30 – 17.50 The use of cascaded learning for TerraSAR-X image classification
Corneliu Octavian Dumitru, Shiyong Cui, Daniela Espinoza-Molina, Gottfried Schwarz, Mihai Datcu – DLR

18.00 – 20.00 Poster Session

Building 109 (TechLab)

1. Lakes in permafrost areas: inter- and intra-annual variations
Annett Bartsch, Barbara Widhalm, Angelika Höfler – ZAMG
Marina Leibman, Artem Khomutov – Russian Academy of Science
2. Detailed mapping and monitoring of selected oxbow lakes on the Biebrza floodplain with TerraSAR-X/ Staring Mode images supported by UAV/ RGB imaging
Marek Mroz, Magdalena Mleczko – University of Warmia and Mazury
Daria Sikorska – Warsaw University of Life Sciences - SGGW
3. Biebrza wetlands mapping with TSX/TDX quad-pol data acquired during TanDEM-X science phase 2015
Marek Mroz, Magdalena Mleczko – University of Warmia and Mazury
Magdalena Fitzyk – ESA / ESRIN
4. Near real time SAR based flood extent mapping and assimilation as a means for improving flood forecast
Renaud Hostache, Marco Chini, Laura Giustarini, Giovanni Corato, Melissa Wood, Patrick Matgen – Luxembourg Institute of Science and Technology (LIST)
5. Short term elevation changes from TanDEM-X for the mass balance of the Patagonian glaciers
Wael Abdel Jaber, Dana Floricioiu, Erling Johnson – DLR
Helmut Rott – ENVEO IT
6. Snow surface characterization from polarimetric TerraSAR-X data
Avik Bhattacharya, Ashutosh Verma, Shaunak De, Gulab Singh – IIT Bombay
Surendar Manickam – Friedrich-Alexander-University Erlangen-Nuremberg
7. Automatic ground line derivation/detection over Antarctic Ice Sheet from ERS-1/2, Sentinel-1 and TerraSAR-X
Tanvir Ahmed Chowdhury, Dana Floricioiu, Michael Baessler, Alessandro Parizzi – DLR
8. Long-term monitoring of the glaciers in Wordie Bay, Antarctic Peninsula, using multi-mission SAR time series
Peter Friedl, Kathrin Höppner – DLR
Thorsten Seehaus, Matthias Braun – Friedrich-Alexander-University Erlangen-Nuremberg
9. Using TanDEM-X observations for extracting glacier and sea-ice topographies
Sang-Hoon Hong, Hyun-Cheol Kim – Korea Polar Research Institute
Shimon Wdowinski, Falk Amelung – University of Miami
Joong-Sun Won – Yonsei University
10. Evaluation of interferometric coherence over snow/ice-covered areas with space-based quadruple polarimetric X-band synthetic aperture radar
Sang-Hoon Hong – Korea Polar Research Institute
Shimon Wdowinski – University of Miami
Don Atwood – Michigan Tech Research Institute
11. TerraSAR-X glacier velocity mosaic from South Patagonia Icefield
Erling Johnson, Dana Floricioiu, Wael Abdel Jaber – DLR
Jan Wuite – ENVEO IT
12. Concepts of inverse modelling of ice dynamics of the Recovery Glacier, Antarctica
Christina Lüttig, Angelika Humbert – Alfred Wegener Institute
13. Assessment of essential climate variables – Observation of glacier changes in the tropical Andes
Thorsten Seehaus, Matthias Braun – Friedrich-Alexander-University Erlangen-Nuremberg
14. Investigation of Hybrid Decomposition (eigenvalue/model based) scattering parameters for the estimation of snowpack density
Gulab Singh, Ashutosh Verma, Unmesh Khati – IIT Bombay

18.00 – 20.00 Poster Session
Building 109 (TechLab)

15. Monitoring wet snow in Rofental, Austria, using multi-polarized TerraSAR-X data combined with RADARSAT-2 and Sentinel-1A
Anna Wendleder, Andreas Schmitt – DLR
Christoph Mayer – Bavarian Academy of Sciences and Humanities
Achim Heilig – Munich University
16. Lake ice growth and decay in Northern Scandinavia observed with Sentinel-1 and TerraSAR-X
Achim Roth, Andreas Schmitt, Anna Wendleder – DLR
17. Assessment of SAR signal penetration effect on TanDEM-X elevations in Antarctica with laser altimetry and GNSS measurement
Jie Zhao, Dana Floricioiu, Wael Abdel Jaber – DLR
18. Comparison of DEM generation by TanDEM-X interferometry and GPS field measurements, Tumor Region, Tienshan
Zongli Jiang – HNUST
Shiyin Liu, Qibing Zhang – CAREERI
19. Investigating monostatic TSX DRA acquisitions and near-coincident C and L - band fully polarimetric SAR for Arctic Sea Ice characterization
Suman Singha, Rudolf Ressel, Thomas Busche – DLR
Malin Johansson, Anthony Doulgeris – University of Tromsø
Jennifer King, Sebastian Gerland – Norwegian Polar Institute
Gunnar Spreen – University of Bremen
20. Discrimination of coastal sediments in the German Wadden Sea using TerraSAR-X data
Wensheng Wang, Martin Gade – University of Hamburg
Wensheng Wang – University of Chinese Academy of Sciences
21. TerraSAR-X detects remnants of historical landuse in the German Wadden Sea
Martin Gade – University of Hamburg
Jörn Kohlbus – Landesbetrieb für Küstenschutz
22. Study of the polarimetric characteristics of mud flats in an intertidal zone using C- and X-band spaceborne SAR data
Xiao-Ming Li – Chinese Academy of Sciences
23. NRT Vessel detectability on TerraSAR-X and Sentinel-1
Björn Tings, Carlos Bentes, Anja Frost, Domenico Velotto, Sergey Voinov, Stefan Wiehle – DLR
24. Classification of maritime objects in TerraSAR-X imagery
Domenico Velotto, Björn Tings, Carlos Bentes – DLR
25. A proposed reprocessing technique for removing ghost signatures from TerraSAR-X along-track InSAR images
Roland Romeiser – University of Miami RSMAS
26. TerraSAR-X InSAR results validation based on GNSS measurements in Bucharest
Mihaela Gheorghe, Paul Daniel Dumitru, Octavian Badescu, Alexandru Calin – Technical University of Civil Engineering
Armas, Iuliana, Ana Maria Lendvai – University of Bucharest
27. An empirical accuracy model of along-track deformation by the advanced multiple-aperture interferometry method using TerraSAR-X system
Min-Jeong Joo, Joong-Sun Won – Yonsei University
Hyung-Sup Jung – The University of Seoul
28. Evaluation of TanDEM-X Raw DEMs over Indian test sites
Yalamanchili Subrahmanyewara Rao – IIT Bombay
Rinki Deo – The Energy and Resources Institute University

18.00 – 20.00 Poster Session

Building 109 (TechLab)

29. Feature of the coherence and accuracy of DEM generated by repeat pass InSAR processing of TerraSAR-X data
Takashi Nonaka, Tomohito Asaka, Keishi Iwashita – Nihon University
30. Results from the application of TanDEM-X Intermediate DEM for terrain illumination correction of Landsat data
Medhavy Thankappan, Fuqin Li, Lan-Wei Wang – Geoscience Australia
David Jupp – Commonwealth Scientific and Industrial Research Organisation
31. Morphology and hydrology of Arctic environments - first results on the analysis of TanDEM-X Intermediate Digital Elevation Model in the Mackenzie Delta region, Canada
Tobias Ullmann, Roland Baumhauer – University of Wuerzburg
Achim Roth – DLR
32. DATE: a new free and open source radargrammetric software for DSM generation using high resolution SAR imagery
Andrea Nascetti, Martina Di Rita, Francesca Fratacangeli, Mattia Crespi – University of Rome 'La Sapienza'
33. Ground moving target indication by TanDEM-X Dual-receive antenna mode
Qiming Zeng, Jian Jiao, Jianghui Huang – Peking University
34. POA estimation results comparison of TerraSAR-X and airborne X-band ultrahigh resolution data
Suo Zhiyong – Xidian University
35. Interactive semantic annotation of TanDEM-X Interferometric SAR images
Nazli Deniz Cagatay, Corneliu Octavian Dumitru, Mihai Datcu – DLR
36. Sea ice segmentation using TanDEM-X Pursuit Monostatic data
Torbjørn Eltoft, Temesgen Yitayew, Anthony Doulgeris – UiT-the Arctic University of Norway
37. The applicability of TerraSAR-X dual-polarization data for oil spill observation
Stine Skrunes, Camilla Brekke, Torbjørn Eltoft - UiT The Arctic University of Norway
38. Satellite-based soil moisture retrieval for flood modeling in Southern Caspian Sea Watershed
Sattar Chavoshi, Kourosh Shirani – Isfahan Research Center of Agriculture & Natural Resources
39. TanDEM-X, a valuable data source for glaciology
Veit Helm, Niklas Neckel, Angelika Humbert - Alfred Wegener Institute (AWI)

Thursday, October 20, 2016

Session 10.1: Georisk Applications II

Building 124

Chairperson: Bernhard Rabus

- 09.00 – 09.20 Synergistic use of C- and X-Band SAR data for monitoring applications
Nadine Kiefl, Jan Anderssohn, Maik Bindrich, Catherine Hartley, Corinna Prietzsch – Airbus DS
- 09.20 – 09.40 The FireRisk Project - Integrating C-/X-Band SAR EO data and environmental modelling for the wildfire risk assessment in Alberta, Canada
Fabian Niggemann – Vista GmbH
- 09.40 – 10.00 Application of multiscale techniques for automatic hazard monitoring using TerraSAR-X
Franz Meyer, Olaniyi Ajadi – University of Alaska Fairbanks
- 10.00 – 10.20 On the synergistic use of SAR constellation data for earth science, natural hazards and infrastructure monitoring
Pietro Milillo, Paul Lundgren – Jet Propulsion Laboratory
Jacqueline Salzer – German Research Centre for Geosciences (GFZ)
Eric Rignot, Jeremie Mouginot, Bernd Scheuchl, Xin Li – University of California Irvine
Daniele Perissin – Purdue University
Carmine Serio – University of Basilicata
Giovanni Milillo – Italian Space Agency
- 10.20 – 10.40 Comparison of multi-mode TerraSAR-X data in monitoring landslide in the Three Gorges Area
Li Menghua, Lu Zhang, Mingsheng Liao, Xuguo Shi – Wuhan University

Session 10.2: Archaeology and Landcover

Building 135 (RMC)

Chairperson: Achim Roth and Stefan Buckreuss

- 09.00 – 09.20 Using TerraSAR-X data to support archaeological prospections in the Chinese Altai
Timo Balz, Mingsheng Liao – Wuhan University
Gino Caspari – Hamburg University
- 09.20 – 09.40 Quantitative condition and damage assessment of cultural heritage at risk with TerraSAR-X Staring Spotlight
Deodato Tapete, Francesca Cigna – British Geological Survey
- 09.40 – 10.00 An evaluation of synthetic aperture radar in the identification of subsurface archaeological features in arid environments
Frances Wiig – University of New South Wales
- 10.00 – 10.20 Rapid deformation in the foreland of the Pamir and Tian Shan, Western China, revealed by Envisat-ASAR and TerraSAR-X radar interferometry
Aron Bufe, Douglas Burbank – University of California Santa Barbara
Bodo Bookhagen – University of Potsdam
David Bekaert – Jet Propulsion Laboratory
Ekbil Hussain – University of Leeds
- 10.20 – 10.40 A new sequence based crop classification approach with series of radar images
Damian Bargiel – TU Darmstadt
- 10.40 – 11.10 Coffee break

Session 11.1: Volcanoes

Building 124

Chairperson: Thomas Walter and Julia Kubanek

- 11.10 – 11.30 Quantifying rapid morphological changes at active volcanoes using TanDEM-X data
Sylvain Charbonnier, Timothy Dixon, Chuck Connor, Laura Connor, Fanghui Deng, Rocco Malservisi – University of South Florida
Julia Kubanek – Karlsruhe Institute of Technology
Jacob Richardson – NASA Goddard Space Flight Center
- 11.30 – 11.50 Topographic changes at Shiveluch volcano (Kamchatka) from June 2011 to September 2014 observed by TanDEM-X SAR interferometry
Alexandra Heck, Julia Kubanek, Malte Westerhaus, Ellen Gottschaemmer, Bernhard Heck, Friedemann Wenzel – Karlsruhe Institute of Technology
- 11.50 – 12.10 Dome growth at Mount Cleveland volcano (Alaska) quantified by time series TerraSAR-X imagery
Zhong Lu, Teng Wang – Southern Methodist University
Mike Poland – US Geological Survey
- 12.10 – 12.30 VOLCAPSE: High resolution time lapse monitoring of dome building volcanoes by satellite radar and camera networks
Thomas Walter – German Research Centre for Geosciences (GFZ)
- 12.30 – 12.50 Volcano dome deformation monitored with TerraSAR-X Spotlight interferometry and camera observations: Results from a multi-sensor study at Volcán de Colima, Mexico
Jacqueline Salzer, Mehdi Nikkhoo, Thomas Walter – German Research Centre for Geosciences (GFZ)
Daniele Perissin – Purdue University
Pietro Milillo – Jet Propulsion Laboratory
Nick Varley – Universidad de Colima

Session 11.2: Permafrost & Polar Applications

Building 135 (RMC)

Chairperson: Annett Bartsch and Simon Zwieback

- 11.10 – 11.30 Monitoring rapid permafrost thaw with TanDEM-X time series
Simon Zwieback – ETH Zurich
Annett Bartsch – ZAMG
Julia Boike, Guido Grosse, Frank Günther, Birgit Heim, Anne Morgenstern – Alfred Wegener Institute (AWI)
Irena Hajsek – DLR
- 11.30 – 11.50 Permafrost monitoring by TerraSAR-X in the Northern Qinghai-Tibet Plateau
Chao Wang, Hong Zhang – Institute of Remote Sensing and Digital Earth (CAS)
Lin Zhao, Qingbai Wu – Cold and Arid Regions Environmental and Engineering Research Institute
- 11.50 – 12.10 Land cover characterization and classification in the Mackenzie Delta Region (Canada) by means of X-, C- and L-band polarimetric synthetic aperture radar (PolSAR)
Tobias Ullmann, Roland Baumhauer – University of Wuerzburg
Achim Roth – DLR
- 12.10 – 12.30 Active layer thickness estimation from X-Band SAR backscatter intensity
Barbara Widhalm, Annett Bartsch – ZAMG
Marina Leibman, Artem Khomutov – Russian Academy of Sciences
- 12.30 – 12.50 TanDEM-X observations of lake ice cover in support of winter road management
Joost van der Sanden, Naomi Short, Kevin Murnaghan, Hugo Drouin – Canada Centre for Remote Sensing

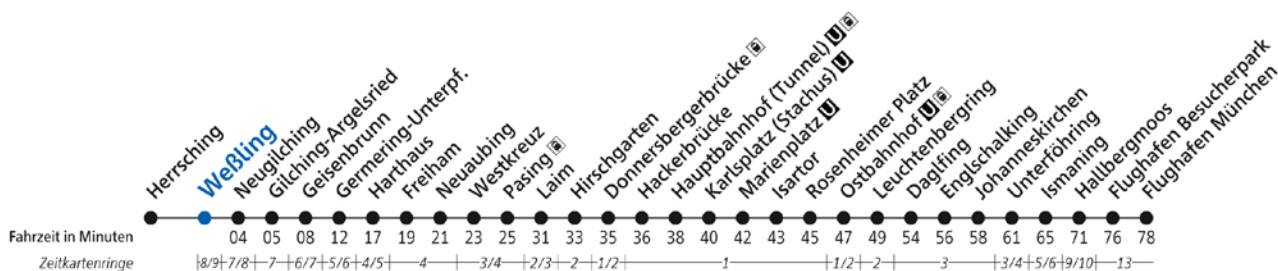
Gültig ab 13. Dezember 2015

S8

Herrsching - Weßling - Pasing - Marienplatz -
Ostbahnhof - Ismaning - Flughafen München



Weßling



Uhr	Montag - Freitag					Samstag, Sonn- und Feiertag			Uhr	
4	57					57			4	
5	37	57				37	57 ^a		5	
6	17	37	50 ¹		57	17	37 ^a	57	6	
7	10 ¹	17	37	50 ¹		57	17 ^a	37	57 ^a	7
8	17	30 ¹	37	57					8	
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1 = bis Ostbahnhof a = Samstag (Werktag) V96 = Nacht Fr/Sa, Sa/So und Nächte vor Feiertagen, auch 07./08. und 08./09.02.2016; nicht 24./25.12.2015

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Änderungen vorbehalten

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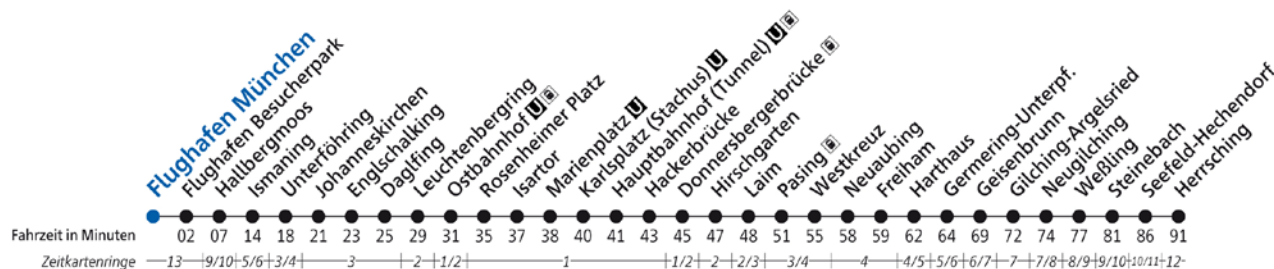
Gültig ab 13. Dezember 2015

S8

Flughafen München - Ismaning - Ostbahnhof -
Marienplatz - Pasing - Weßling - Herrsching



Flughafen München



Uhr	Montag - Freitag			Samstag, Sonn- und Feiertag			Uhr
4	04 ²	24	44 ²	04 ²	24 ^{A3}	44 ²	4
5	04	24	44	04	24 ^{A3}	44	5
6	04	24	44	04	24 ^{A3}	44	6
7	04	24	44	04 ^{A4}	24	44	7
8	04 ⁴	24	44	04 ^{B6}	24	44	8
9	04 ⁴	24	44	04 ^{B6}	24	44	9
10	04 ⁴	24	44	04 ^{B6}	24	44	10
11	04 ⁴	24	44	04 ^{B6}	24	44	11
12	04	24	44	04 ^{B6}	24	44	12
13	04	24	44	04 ^{B6}	24	44	13
14	04	24	44	04 ^{B6}	24	44	14
15	04	24	44	04 ^{B6}	24	44	15
16	04	24	44	04 ^{B6}	24	44	16
17	04	24	44	04 ^{B6}	24	44	17
18	04	24	44	04 ⁴	24	44	18
19	04	24	44	04 ⁴	24	44	19
20	04 ⁴	24	44	04 ⁴	24	44	20
21	04 ⁴	24	44 ⁴	04 ⁴	24	44 ⁴	21
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1 = bis Ostbahnhof V96 = Nacht Fr/Sa, Sa/So und Nächte vor Feiertagen, auch 07./08. und 08./09.02.2016; nicht 24./25.12.2015
 2 = bis Pasing A3 = sonntags nur bis Pasing
 3 = bis Gilching-Argelsried A4 = sonntags nur bis Weßling
 4 = bis Weßling B6 = Weßling - Herrsching nur 27.03. - 29.10.2016

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Änderungen vorbehalten

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