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TU3-7.3: ADVANCED OPERATION MODE TECHNIQUES FOR AN 1614
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Marwan Younis, Paco López-Dekker, Anton Patyuchenko, German Aerospace Center (DLR), Germany; Christoph Schaefer, EADS Astrium Ltd., Germany; Gerhard Krieger, German Aerospace Center (DLR), Germany

TU3-7.4: FIRST MEASUREMENT RESULTS OF A NEW HIGHLY-ACCURATE ACTIVE 1618
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TU4-7.2: HIGH PRECISION MEASUREMENT ON THE ABSOLUTE LOCALIZATION 1625
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Ulrich Balss, Xiaoying Cong, Ramon Brcic, German Aerospace Center (DLR), Germany; Moritz Rexer, Technische Universität München, Germany; Christian Minet, Helko Breit, Michael Eineder, Thomas Fritz, German Aerospace Center (DLR), Germany

TU4-7.4: SENTINEL-1 FDFAQ PERFORMANCE VALIDATION USING TERRASAR-X DATA 1629
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TU4-7.5: OPERATIONAL PRECISE BASELINE DETERMINATION FOR TANDEM-X 1633
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Gustaf Sandberg, Chalmers University of Technology, Sweden; Lars M.H. Ulander, Swedish Defence Research Agency, Sweden; Johan E.S. Fransson, Swedish University of Agricultural Sciences, Sweden; Maciej J. Soja, Chalmers University of Technology, Sweden

**TU2-12.3: DETECTING SEASONAL CHANGE OF DECISUOUS TREES USING ALOS 1656
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Akira Kato, Chiba University, Japan; Manabu Watanabe, Japan Aerospace Exploration Agency (JAXA), Japan; Yoshio Yamaguchi, Niigata University, Japan; Tatsuaki Kobayashi, Chiba University, Japan

**TU2-12.4: AIRBORNE LIDAR MEASUREMENTS TO ESTIMATE TROPICAL PEAT 1660
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Uwe Ballhorn, Juilson Jubanski, Remote Sensing Solutions GmbH, Germany; Karin Kronseder, Ludwig-Maximilians-Universität München, Germany; Florian Siegert, Remote Sensing Solutions GmbH, Germany

**TU2-12.5: QUANTIFYING SPATIAL AND TEMPORAL DYNAMICS OF TROPICAL 1664
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Maxim Neumann, Sassan Saatchi, NASA Jet Propulsion Laboratory, United States; David Clark, University of Missouri St. Louis, United States

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**TU4-12.2: COMPARISON AND ANALYSIS OF TWO FRACTAL DIMENSION 1684
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TU4-12.5: A MULTISCALE AND MULTISENSOR APPROACH OF LAI RETRIEVAL IN A MARITIME PINE ECOSYSTEM 1695

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TU1-15.4: OVERVIEW OF SENTINEL-2 1707

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TU2-15.2: SENTINEL-5 PRECURSOR MISSION AND POTENTIAL APPLICATION EXAMPLES 1715

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TU3-15.4: SENTINEL-1 GROUND SEGMENT 1726

Betlem Rosich, Nuno Miranda, Pierre Potin, European Space Agency, Italy; Cosimo Putignano, Gianluca Sabella, SERCO S.p.A., Italy; Dirk Geudtner, European Space Agency, Italy

TU3-15.5: THE SENTINEL-1 DATA PROCESSOR AND OPERATIONAL PRODUCTS 1730

Nuno Miranda, Betlem Rosich, European Space Agency, Italy; Cosimo Putignano, SERCO S.p.A., Italy

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Daniel Fisher, Jan-Peter Muller, University College London, United Kingdom

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TU2-5.3: A SEMISUPERVISED CONTEXTUAL CLASSIFICATION ALGORITHM FOR 1777
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TU2-5.5: MULTIPLE-KERNEL LEARNING-BASED UNMIXING ALGORITHM FOR 1785
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Bingjie Wu, Bo Zhang, Hong Zhang, Fan Wu, Center for Earth Observation and Digital Earth, CAS, China

**TU3-5.2: IDENTIFICATION AND CHARACTERIZATION OF RAILWAY TRAINS IN HIGH 1793
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Gottfried Schwarz, Mihai Datcu, German Aerospace Center (DLR), Germany

**TU3-5.3: SAR IMAGE SIMULATION FOR THE ASSESSMENT OF DESPECKLING 1797
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Gerardo Di Martino, Mariana Poderico, Giovanni Poggi, Daniele Riccio, Luisa Verdoliva, Università degli Studi di Napoli Federico II, Italy

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**TU4-5.1: APPLICATION OF OMNI-DIRECTIONAL TEXTURE ANALYSIS TO SAR 1805
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Matthew Lee, James Aanstoos, Lori Bruce, Mississippi State University, United States; Saurabh Prasad, University of Houston, United States

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Erica H. Peterson, University of Toronto, Canada; Georgia Fotopoulos, The University of Texas at Dallas, United States; Robert E. Zee, University of Toronto, Canada

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Muhammad Adnan Siddique, COMSATS Institute of Information Technology, Pakistan; M. Saquib Sarfraz, Karlsruhe Institute of Technology, Germany; David Bornemann, Olaf Hellwich, Berlin Institute of Technology, Germany

**TU4-5.4: LARGE SCALE CHARACTERIZATION OF RADIO FREQUENCY 1817
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Chin-Fu Chao, Kun-Shan Chen, Jong-Sen Lee, Chih-Tien Wang, National Central University, Taiwan

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Jiali Shang, Heather McNairn, Agriculture and Agri-Food Canada, Canada; François Charbonneau, Zhaohua Chen, Natural Resources Canada, Canada; Xianfeng Jiao, Nipissing University, Canada

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TU2-13.3: LANDSLIDE MAPPING IN SWITZERLAND WITH ENVISAT ASAR 1829

Urs Wegmüller, Tazio Strozzi, Gamma Remote Sensing, Switzerland; Reynald Delaloye, Université Fribourg, Switzerland; Hugo Raetzo, Bundesamt für Umwelt, Switzerland

TU2-13.4: EXPLOITING TEN YEARS OF MERIS DATA OVER LAND SURFACES..... 1833

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TU3-13.2: ENVISAT ALTIMETRY FOR RIVER AND LAKES MONITORING..... 1844
P.A.M. Berry, R.G. Smith, EAPRS Laboratory, United Kingdom; Jérôme Benveniste, European Space Agency ESRIN, Italy

TU3-13.4: ANTARCTICA VOLUME CHANGE FROM 10 YEARS OF ENVISAT ALTIMETRY 1848
Thomas Flament, Frédérique Rémy, Laboratoire d'Etudes en Géophysique et Oceanographie Spatiales, France

TU3-13.5: MONITORING SEA ICE USING ENVISAT ASAR - A NEW ERA STARTING 10 1852
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Wolfgang Dierking, Alfred Wegener Institute for Polar and Marine Research, Germany; Leif Toudal Pedersen, Danish Meteorological Institute, Denmark

TU4-13: ENVISAT - 10 YEARS ACHIEVEMENTS III

TU4-13.2: A MONITORING SYSTEM FOR GLACIERS ON SVALBARD BASED ON 1856
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Heidi Hindberg, Eirik Malnes, Kjell Arild Høgda, Norut, Norway

TU4-13.4: THE GLOBAL PICTURE OF THE ATMOSPHERIC COMPOSITION 1860
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Bruno Carli, Consiglio Nazionale delle Ricerche, Italy; Ginette Aubertin, ABB Bomem Inc., Canada; Manfred Birk, German Aerospace Center (DLR), Germany; Massimo Carlotti, University of Bologna, Italy; Elisa Castelli, Istituto di Scienza dell'Atmosfera e del Clima (ISAC) of CNR, Italy; Simone Ceccherini, Istituto di Fisica Applicata Nello Carrara IFAC-CNR, Italy; Livia D'Alba, Angelika Dehn, European Space Agency ESRIN, Italy; Marta De Laurentis, SERCO S.p.A., Italy; Bianca Maria Dinelli, Istituto di Scienza dell'Atmosfera e del Clima (ISAC) of CNR, Italy; Anu Dudhia, Atmospheric, Oceanic and Planetary Physics, Oxford University, United Kingdom; Thorsten Fehr, European Space Agency ESRIN, Italy; Herbert Fischer, Karlsruhe Institute of Technology (KIT), Institute for Meteorology and Climate Research (IMK), Germany; Jean Marie Flaud, Laboratoire Interuniversitaire des Systèmes Atmosphériques (LISA) of CNRS, France; Bernd Funke, Instituto de Astrofísica de Andalucía (CSIC), Spain; Roland Gessner, Astrium GmbH, Germany; Michael Hoepfner, Michael Kiefer, Karlsruhe Institute of Technology (KIT), Institute for Meteorology and Climate Research (IMK), Germany; Mauel Lopez Puertas, Instituto de Astrofísica de Andalucía (CSIC), Spain; Hermann Oelhaf, Karlsruhe Institute of Technology (KIT), Institute for Meteorology and Climate Research (IMK), Germany; Gaetan Perron, ABB Bomem Inc, Canada; Anne Kleinert, Karlsruhe Institute of Technology (KIT), Institute for Meteorology and Climate Research (IMK), Germany; Peter Mosner, Astrium GmbH, Germany; Fabrizio Cristoforo Niro, SERCO S.p.A., Italy; Piera Raspollini, Istituto di Fisica Applicata Nello Carrara IFAC-CNR, Italy; John Remedios, University of Leicester, United Kingdom; Marco Ridolfi, University of Bologna, Italy; Harjinder Sembhi, University of Leicester, United Kingdom; Luca Sgheri, Istituto per le Applicazioni del Calcolo (IAC) of CNR, Italy; Thomas von Clarmann, Karlsruhe Institute of Technology (KIT), Institute for Meteorology and Climate Research (IMK) of CNR, Germany; Georg Wagner, German Aerospace Center (DLR), Germany; Heidrun Weber, Astrium GmbH, Germany

TU1-1: DIFFERENTIAL SAR INTERFEROMETRY I

TU1-1.2: 1 AND 5 DAY DIFFERENTIAL INSAR UNDER CROSSING ORBITS WITH 1868
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Steffen Wollstadt, Paco López-Dekker, Pau Prats-Iraola, Francesco de Zan, Thomas Busche, Gerhard Krieger, German Aerospace Center (DLR), Germany

TU1-1.3: A NEW SBAS-DINSAR APPROACH BASED ON A REDUNDANT SET OF SMALL BASELINE INTERFEROGRAMS 1872

Yang Yang, National University of Defense Technology, China; Antonio Pepe, Mariarosaria Manzo, Riccardo Lanari, IREA-CNR, Italy

TU1-1.4: NEAR REAL-TIME, SEMI-RECURSIVE, DEFORMATION MONITORING OF INFRASTRUCTURE USING SATELLITE RADAR INTERFEROMETRY 1876

Ling Chang, Ramon Hanssen, Delft University of Technology, Netherlands

TU1-1.5: PHASE QUALITY OPTIMIZATION IN ORBITAL DIFFERENTIAL SAR INTERFEROMETRY WITH FULLY POLARIMETRIC DATA 1864

Dani Monells, Rubén Iglésias, Jordi J. Mallorquí, Xavier Fàbregas, Carlos López-Martínez, Universitat Politècnica de Catalunya, Spain

TU1-1.5: OPTIMIZED FILTER DESIGN FOR IRREGULAR ACQUIRED DATA STACK IN PERSISTENT SCATTERERS SYNTHETIC APERTURE RADAR INTERFEROMETRY 1880

Wenyu Gong, Franz Meyer, Geophysical Institute, University of Alaska Fairbanks, United States

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TU2-1.1: TIBETAN PLATEAU PERMAFROST EVOLUTION MONITORING USING C- AND L-BAND SPACEBORNE SAR INTERFEROMETRY 1884

Fulong Chen, Hui Lin, Institute of Space and Earth Information Science, The Chinese University of Hong Kong, Hong Kong SAR of China

TU2-1.3: FUSION OF PRIOR INFORMATION AND MULTI-SCALES LOCAL FREQUENCIES TO FACILITATE D-INSAR PHASE UNWRAPPING 1888

Yajing Yan, Emmanuel Trouvé, Virginie Pinel, Université de Savoie, France

TU2-1.4: ADAPTIVE SPATIAL MULTILOOKING AND TEMPORAL MULTILINKING IN SBAS INTERFEROMETRY 1892

Gianfranco Fornaro, Diego Reale, National Research Council of Italy, Italy; Simona Verde, University of Naples Parthenope, Italy

TU3-1: TANDEM-X MISSION STATUS AND FIRST SCIENTIFIC RESULTS I

TU3-1.1: TANDEM-X MISSION STATUS 1896

Manfred Zink, German Aerospace Center (DLR), Germany

TU3-1.3: TANDEM-X ACQUISITION STATUS AND CALIBRATION OF THE INTERFEROMETRIC SYSTEM 1900

Markus Bachmann, Daniel Schulze, Carlos Ortega Miguez, Donata Polimeni, Johannes Böer, Jaime Hueso Gonzalez, John Walter Antony, Gerhard Krieger, Benjamin Bräutigam, Marco Schwerdt, Manfred Zink, German Aerospace Center (DLR), Germany

TU3-1.4: INTERFEROMETRIC PROCESSING AND PRODUCTS OF THE TANDEM-X MISSION 1904

Thomas Fritz, Helko Breit, Cristian Rossi, Ulrich Balss, Marie Lachaise, Sergio Duque, German Aerospace Center (DLR), Germany

TU4-1: TANDEM-X MISSION STATUS AND FIRST SCIENTIFIC RESULTS II

TU4-1.1: FIRST RESULTS OF TANDEM-X ALONG-TRACK INTERFEROMETRY 1908

Steffen Suchandt, Hartmut Runge, German Aerospace Center (DLR), Germany

TU4-1.2: MONITORING THE PETERMANN ICE ISLAND WITH TANDEM-X 1912
Jose A. Garcia, German Aerospace Center (DLR), Germany; Kevin Eyssartier, Institute National Polytechnique de Grenoble, France; Paco López-Dekker, Pau Prats-Iraola, Francesco de Zan, Gerhard Krieger, Thomas Busche, German Aerospace Center (DLR), Germany

TU4-1.3: DECADAL EARTH TOPOGRAPHY DYNAMICS MEASURED WITH TANDEM-X AND SRTM 1916
Michael Eineder, Thomas Fritz, Wael Abdel Jaber, Cristian Rossi, Helko Breit, German Aerospace Center (DLR), Germany

TU4-1.5: BISTATIC SAR EXPERIMENTS WITH THE TANDEM-X CONSTELLATION 1920
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TU1-11: CLOUD AND PRECIPITATION RETRIEVAL

TU1-11.2: A GLOBAL PRECIPITATION RETRIEVAL ALGORITHM FOR SUOMI NPP ATMS 1924
Chinnawat Surussavadee, Prince of Songkla University, Phuket Campus, Thailand; William Blackwell, MIT Lincoln Laboratory, United States; Dara Entekhabi, Massachusetts Institute of Technology, United States; R. Vincent Leslie, MIT Lincoln Laboratory, United States

TU1-11.3: PRECIPITATION MEASUREMENT USING A DUAL KA-BAND RADAR SYSTEM FOR GPM/DPR ALGORITHM DEVELOPMENT 1928
Masanori Nishikawa, Kenji Nakamura, Haruya Minda, Nagoya University, Japan; Katsuhiko Nakagawa, Hiroshi Hanado, Seiji Kawamura, Shigeo Sugitani, National Institute of Information and Communications Technology, Japan; Shuji Shimizu, Japan Aerospace Exploration Agency (JAXA), Japan

TU1-11.4: SATELLITE BASED ANALYSIS OF AEROSOL EFFECT ON CLOUD DROPLET SIZE IN EASTERN CHINA 1932
Fu Wang, University of Electronic Science and Technology of China, China; Jianping Guo, Chinese Academy of Meteorological Sciences, China; Yerong Wu, Xiaowen Li, Beijing Normal University, China

TU1-11.5: HIGH RESOLUTION RAINFALL MAPPING IN THE DALLAS-FORT WORTH URBAN DEMONSTRATION NETWORK 1936
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TU2-11: TROPICAL CYCLONE AND EXTREME WEATHER REMOTE SENSING

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