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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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TU1-12.2: BAYESIAN APPROACH TO TREE DETECTION WITH AIRBORNE LASER 1641
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TU1-12.3: ESTIMATION OF PAIE USING AIRBORNE LIDAR DATA IN SOUTH KOREA 1645
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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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**TU3-12.2: MONITORING FOREST COVER CHANGE AT NATIONAL LEVEL IN GABON 1668
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**TU3-12.5: IMPACTS OF COMMUNAL FUELWOOD EXTRACTION ON 1676
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Terhikki Manninen, Finnish Meteorological Institute, Finland

**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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TU1-15.3: THE SENTINEL-1 MISSION AND ITS APPLICATION CAPABILITIES 1703

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TU1-15.4: OVERVIEW OF SENTINEL-2 1707

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TU3-15.4: SENTINEL-1 GROUND SEGMENT 1726

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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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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

TU4-5: SAR IMAGE PROCESSING II

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

TU4-5.2: WAVELET-BASED DESPECKLING FOR ONBOARD IMAGE PROCESSING IN 1809
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TU4-5.4: LARGE SCALE CHARACTERIZATION OF RADIO FREQUENCY 1817
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Urs Wegmüller, Tazio Strozzi, Gamma Remote Sensing, Switzerland; Reynald Delaloye, Université Fribourg, Switzerland; Hugo Raetzo, Bundesamt für Umwelt, Switzerland

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Nadine Gobron, European Commision, Joint Research Centre, Italy; Jadunandan Dash, University of Southampton, United Kingdom; Olivier Arino, European Space Agency, Italy; Lorena Hojas Gascon, European Commision, Joint Research Centre, Italy; Jan-Peter Muller, University College London, United Kingdom

TU2-13.5: EXPLOITATION OF AATSR LAND SURFACE TEMPERATURE..... 1837
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TU3-13.1: LONG TERM DEFORMATION TIME SERIES: 10 YEARS OF EARTH 1840
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TU3-13.2: ENVISAT ALTIMETRY FOR RIVER AND LAKES MONITORING..... 1844
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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

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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

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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
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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

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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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TU1-11.2: 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
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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
Haonan Chen, Venkatachalam Chandrasekar, Colorado State University, United States

TU2-11: TROPICAL CYCLONE AND EXTREME WEATHER REMOTE SENSING

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