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*M. Crosetto, M. Agudo, R. Capes & S. Marsh*

Applicability of PSInSAR for Building Hazard Identification. Study of the 29 January 2006 Katowice Exhibition Hall Collapse and the 24 February 2006 Moscow Basmanny Market Collapse  
*Z. Perski, F. van Leijen & R. Hanssen*

Application of ASAR Interferometry for Motorway Deformation Monitoring  
*A. Krawczyk, Z. Perski & R. Hanssen*

ERS and Envisat SAR Interferometry to Measure Land Subsidence in the Venice Lagoon on Natural and Artificial Point Targets  
*P. Teatini, T. Strozzi, L. Tosi et al.*

### **3B3 – InSAR Applications: Subsidence, cont.**

*Chairs: D. Derauw & U. Wegmuller*

Validation of Persistent Scatterers Interferometry over a Mining Test Site: Results of the PSIC4 Project  
*M. Crosetto, M. Agudo, D. Raucoules et al.*

Structurally-Controlled Urban Subsidence along the Mexican Volcanic Belt (MVB) Monitored by InSAR  
*P. Farina, J.-A. Avila-Olivera & V.H. Garduño-Monroy*

Monitoring of Land Subsidence in Mashhad Valley, Northeast Iran, Using Interferometric Synthetic Aperture Radar (InSAR), Precise Leveling and Continuous GPS  
*M. Motagh, Y. Djamour, T.R. Walter et al.*

Detection and Characterisation of Residual Mining Subsidence Using DInSAR Interferometry: Application to Nord/Pas-de-Calais Coalbasin (Northern France)  
*Y. Gueguen, B. Deffontaines, M. Al Heib et al.*

### **3B4 – InSAR Applications: Subsidence, cont.**

*Chairs: A. Monti-Guarnieri & H. Rott*

The Coherence Analysis for Detecting the Subsidence at Permanent Frozen Area in Qinhai-Tibetan Plateau  
*Z. Li, C. Xie & X. Li*

The Experience of the Cartographic Institute of Catalonia (ICC) on Continuous DInSAR Monitoring of Large Areas  
*O. Mora, R. Arbiol & V. Palà*

### **3C1 – (A)ATSR: Performance, New Algorithms and Products**

*Chairs: I. Barton & C. Donlon*

Global Validation of the (A)ATSR Meteo Product Sea-Surface Temperature at the Met Office  
*K. Fennig, T.A. Blackmore, A.G. O'Carroll & R.W. Saunders*

Validation of AATSR SSTs with SISTeR in the Skagerrak  
*T.J. Nightingale*

The Accuracy of SST Retrievals from AATSR: Synthesis and Integration of Comparisons to Buoys and Radiometers

*C. Corlett and the AATSR SST Team*

Three-Way Error Analysis between AATSR, AMSR-E and In Situ Sea Surface Temperature Observations

*A. O'Carroll, J. Eyre & R. Saunders*

Saharan Dust Corrections for the Envisat AATSR SST Product

*X. Kong, E. Noyes, G. Corlett et al.*

### **3C2 – (A)ATSR: Performance, New Algorithms and Products, cont.**

*Chairs: J.L. Casanova & J. Moreno*

(A)ATSR Multimission Archive – Online Access to 15 Years of High Quality Data in a Common Format

*M. Pritchard & N. Houghton*

Validation of the AATSR Land Surface Temperature Product over Inland Waters and Vegetated Surfaces

*C. Coll, S.J. Hook & J.M. Galve*

AATSR Derived Land Surface Temperature over a Heterogeneous Region

*J.A. Sobrino, G. Sòria, J.C. Jiménez-Muñoz et al.*

Future Development of the Operational AATSR LST Product

*E. Noyes, G. Corlett, J. Remedios et al.*

Fire Disturbance: The Twelve Years Time Series of the ATSR World Fire Atlas

*O. Arino, S. Plummer & S. Casadio*

### **3C3 – Atmospheric Properties from Optical/Infrared**

*Chairs: C. Mutlow & R. Santer*

Retrieval of Particulate Matter Concentration (PM10) from MERIS Observation and Validation over Germany

*W. von Hoyningen-Huene, G. Rohen, T. Dinter et al.*

AATSR Derived Aerosol Properties over Land

*G. de Leeuw, R. Schoemaker, L. Curier et al.*

### **3C4 – Atmospheric Properties from Optical/Infrared, cont.**

*Chairs: J.L. Casanova & C. Mutlow*

Cloud Screening and Multitemporal Unmixing of MERIS FR Data

*L. Gómez-Chova, R. Zurita-Milla, G. Camps-Valls et al.*

The Aerosol Optical Thickness Mapping from AATSR and MODIS Data over Land

*Y. Xue, J. Guang, J. Guo & L. Bai*

DUE GlobAEROSOL: Validation of Global Aerosol Data from ATSR-2, AATSR and SEVIRI

*G. Thomas, C. Poulsen, R. Siddans et al.*



### **3D1 – Agriculture and Vegetation**

*Chairs: N. Gobron & F. Holecz*

Estimation of Rice Growth Parameter and Crop Phenology with Conjunctive Use of RADARSAT and Envisat

*I. Choudhury, M Chakraborty & J.S. Parihar*

Fusion of Optical and SAR Satellite Data to Improve Land Cover Mapping in Agricultural Areas

*T. Riedel, C. Thiel & C. Schmullius*

Mapping Annual Crops with MERIS on Large Areas in Europe in the Frame of GMES Projects, for Serving Environmental Directives and Agricultural Policy

*V. Lefèvre, P. Cayrol, H. Poilvé & P. Duthil*

Using JRC-FAPAR Products to Characterize Growing Seasons

*M.M. Verstraete, N. Gobron, O. Aussedat et al.*

### **3D2 – Agriculture and Vegetation, cont.**

*Chairs: P. Curran & S. Quegan*

Relevance of Global Remote-Sensing FAPAR Products to Carbon Flux Estimates

*N. Gobron, W. Knorr, O. Aussedat et al.*

A Method for the Detection of Solar-Induced Vegetation Fluorescence from MERIS FR Data

*L. Guanter, L. Alonso, L. Gómez-Chova et al.*

Ecosystem Production Modelling in the Iberian Peninsula Comparative Analysis Between MODIS and MERIS Datasets

*J. Seixas, N. Carvalhais, C. Nunes & A. Benali*

Using MERIS for Mountain Vegetation Mapping and Monitoring in Sweden

*H. Reese, Heather, M. Nilsson & H. Olsson*

### **3D3 – Land-Use, Land-Use Change and Forestry**

*Chairs: J.P. Rudant & B. Pinty*

Modelling Methane Emissions from Siberian High Arctic Environments - A Case Study for the Lena River Delta Region

*S. Kirschke & K. Guenther.*

Comparison of the Asar Alternative Polarisation Mode to Full Polarimetric Acquisition for Land Use Estimation over Tropical Regions

*C. Lardeux, P.-L. Frison, C. Tison et al.*

Random Forests for Classifying Multi-temporal SAR Data

*B. Waske, V. Heinzl, M. Braun & G. Menz*

### **3D4 – Land-Use, Land-Use Change and Forestry, cont.**

*Chairs: C. Schmullius & J. Hajnsek*

Leaf Area Index Estimation of Boreal and Sub-Arctic Forest Using Envisat/ASAR Data of Various Swaths

*T. Manninen, P. Stenberg, M. Rautiainen & P. Voipio*

Comparison of Forest Biomass Estimates in Siberia Using Spaceborne SAR, Inventory-Based Information and the LPJ Dynamic Global Vegetation Model

*M. Santoro, C. Beer, A. Shvidenko et al.*

Boreal Forest Stem Volume Estimation from Multitemporal C-Band InSAR Observations

*J. Askne & M. Santoro*

Analysis of ASAR APP Time Series over Siberia for Optimising Forest Cover Mapping - A GSE Forest Monitoring Study

*C. Thiel, C. Thiel, T. Riedel & C. Schmullius*

Detection of Forest Changes over French Guiana Using ERS-1 and Asar Imagery

*Y. Rauste, T. Häme, H. Ahola et al.*

### **3E2 – Geoid, Ocean Circulation and Coastal Zones**

*Chairs: D. Griffin & P. Knudsen*

An Application of the Radon Transform to Study Planetary Waves in the Indian Ocean

*S. de la Rosa, P. Cipollini & H.M. Snaith*

Meso-Scale Oceanography of the Australian Region from Altimeters, Radiometers and Drifting Buoys

*D. Griffin*

### **3E3 – Geoid, Ocean Circulation and Coastal Zones, cont.**

*Chairs: P. Cipollini & P. Challenor*

On Wet Tropospheric Correction for Altimetry in Coastal Regions

*C. Desportes, E. Obligis & L. Eymard*

Hurricane Intensity Forecasting at NOAA Using Envisat Altimetry

*J. Lillibridge, N. Shay, M. DeMaria et al.*

Retrieving Extreme Low Pressure with Altimetry

*L. Carrere, F. Mertz, J. Dorandeu et al.*

Envisat - Taking the Measure of North Atlantic Storms

*G.D. Quartly, C.A. Poulsen & T.H. Guymer*

### **3E4 – Wind and Wave/Sea State Modelling**

*Chairs: P. Queffelec & P. Janssen*

A Comparison of Two Altimeter Wave Period Algorithms Using Data from a N.E. Pacific Buoy

*D.J.T. Carter*

Ku-Band Radar Altimeter Surface Wind Speed Algorithm

*S. Abdalla*

Investigation of Large Scale and Regional Features of Wave Heights from Altimeter Measurements

*P. Queffelec & D. Croizé-Fillon*

### **3F1 – Radar Performances, New Products and Algorithms**

*Chairs: A. Monti-Guarnieri & D. Small*

Review of ASAR Instrument Performance and Product Quality Evolution after 5 Years of Operation

*B. Rosich, P.J. Meadows, A. Monti-Guarnieri et al.*

ERS-2 SAR Performance and Product Evolution

*P.J. Meadows, B. Rosich, A. Pilgrim & M. Tranfaglia*

Global Automatic Orthorectification of ASAR Products in ESRIN G-POD

*R. Cossu, F. Brito, O. Collin et al.*

Optimizing Azimuth Antenna Steering: Beyond TOPSAR

*D. D'Aria, D. Giudici, A. Monti Guarnieri & F. Rocca*

### **3F2 – Radar Performances, New Products and Algorithms, cont.**

*Chairs: D. Massonnet & F. Rocca*

ALOS PALSAR Verification Processor

*P. Pasquali, A. Monti Guarnieri, D. D'Aria et al.*

Global Re-Deployment of the Envisat ASAR Transponders for Around Orbit Calibration

*C. Goetz, H. Jackson, B. Rosich et al.*

Automatic Image-to-Image Registration of Near Real-Time SAR Images

*B. Wessel, M. Huber & A. Roth*

Geometric and Radiometric Correction of ESA SAR Products

*D. Small, A. Schubert, B. Rosich & E. Meier*

### **3F3 – ASAR Wide Swath: Algorithms & Results**

*Chairs: A. Monti-Guarnieri & M. Zink*

ASAR WSS Product Verification Using Derived Image Mosaics

*A. Schubert, D. Small, B. Rosich & E. Meier*

Using Anisotropic Diffusion for Coherence Estimation

*F. Aspert, A. Cantone, J.-P. Thiran & P. Pasquali*

Monitoring Surface Deformation in Active Margin Settings with the Scansar Technique Using Wide Swath Envisat Data.

*J. Anderssohn & H. Kaufmann*

### **3F4 – EOMD**

*Chair: S. Coulson*

Monitoring Sustainable Development in the Oil Sands Region of Alberta, Canada, Using Spot-5 and Envisat Asar and Meris Imagery

*A. Dean, A. Mangin, S. Hughes, O. Tsui, A. Syed, D. Dow, W. Gibbons, T. Boivin,*

EO-HYDRO: An Earth Observation Service for Hydropower Plant Management

*L. Tampellini, G. Ober, F.D. Vescovi et al.*

Monitoring Mining Induced Ground-Movements Using SAR Interferometric Techniques  
*U. Wegmüller, T. Strozzi, N. Benecke et al.*

Near-Surface Characterization from Remote Sensing Data  
*A. Laake & M. Insley*

### **3G1 – Research with the Ozone Monitoring Instrument**

*Chairs: P.F. Levelt & E. Hilsenrath*

Validation Results from the Joint ESA KNMI NIVR Calibration and Validation  
Announcement of Opportunity for the Ozone Monitoring Instrument  
*M. Kroon, E.J. Brinksma, D. Balis et al.*

Measurements of HCHO, CHOCHO and BrO from the Ozone Monitoring Instrument on EOS Aura  
*T.P. Kurosu, K. Chance & R. Volkamer*

Very Fast Delivery Products of OMI  
*S. Hassinen, J. Tamminen, A. Tanskanen et al.*

### **3G2 – Research with the Ozone Monitoring Instrument, cont.**

*Chairs: E. Hilsenrath & P.F. Levelt*

SO<sub>2</sub> Data from the Ozone Monitoring Instrument  
*N.A. Krotkov, K. Yang, A. Krueger et al.*

Measuring Aerosol Absorption from OMI Near UV Observations  
*O. Torres, P. Bhartia & C. Ahn*

OMI Observations of the JULY 2006 Smog Episodes in Europe  
*J.P. Veefkind, P.F. Levelt, H.J. Eskes ET AL.*

### **3G3 – Detection and Monitoring of Oil Spills and Oil Slicks**

*Chairs: B. Holt & J. Johannessen*

Operationalisation of a Multi-User Concept for Satellite Based Oil Spill and Ship Detection Services  
*L. Steinbakk, J.P. Pedersen & T. Bauna*

Complex Monitoring of Oil Pollution in the Baltic, Black and Caspian Seas  
*A.G. Kostianoy, O. Yu. Lavrova, M.I. Mityagina et al.*

Benefits of Operational Oceanography for Oil Spill Management  
*V. Toumazou, J.-Y. Le Bras, F. Jacq et al.*

The Use of Satellite Imagery to Monitor Oil Pollution in Lebanon  
*O. Muellenhoff, K. Topouzelis, D. Tarchi et al.*

A GIS Approach to Mapping of Oil Spills in the Marine Environment  
*A. Yu Ivanov & V.V. Zatyagalova*

### **3G4 – Detection and Monitoring of Oil Spills and Oil Slicks, cont.**

*Chairs: M.X He & B. Holt*

Remote Sensing of Slick as Indicators for Marine Processes in the Coastal Zone  
*M. Gade, S. Ermakov, O. Lavrova et al.*

SAR Monitoring of Oil Spills and Natural Slicks in the Black Sea  
*V.V. Malinovsky, S. Sandven & A.E. Korinenko*

Classifying Oil Spills and Look-Alikes in Envisat ASAR Images  
*C. Brekke, A. Solberg & G. Storvik*

Dual-Polarized SAR Data for Oil Spill Detection  
*F. Nunziata, A. Gambardella & M. Migliaccio*

A Generalised Algorithm for Oil Spill Detection on ERS and Envisat SAR Imagery  
*F. Nirchio, C. Marzo, P. Trivero et al.*

## **Poster Papers**

### **3P1 – A(A)TSR: Performance, New Algorithms and Products**

(A)RC Radiative Transfer and SST Retrieval  
*O. Embury & C. Merchant*

(A)ATSR Re-Analysis for Climate - Cloud Clearing Methodology  
*C. Old & C. Merchant*

A 12-Year Record of Global Aerosol Properties from ATSR-2 and AATSR  
*W. Grey, P. North, S. Los et al.*

An Accuracy Assessment of AATSR LST Data Using Empirical and Theoretical Methods  
*E. Noyes, G. Corlett, J. Remedios ET AL.*

VoMIR: Over 300 Volcanoes Monitored in Near Real-Time by AATSR  
*O. Colin, M. Rubio, P. Landart & E. Mathot*

### **3P2 – Agriculture and Vegetation**

Relationship Between the MERIS Vegetation Indices and Crop Yield for the State of South Dakota, USA  
*J. Dash & P.J. Curran*

Monitoring Agricultural Activities Using ASAR Envisat Data  
*Tavakkoli Sabour, Seyed Mohammad; Lohmann, Peter; Soergel, Uwe*

Supervised Wishart Classifier for Rice Mapping Using Multi-Temporal Envisat ASAR APS Data  
*E. Chen, Z. Y. Li, ZB. X. Tan et al.*

### **3P3 – ASAR Wide Swath: Algorithms and Results**

ASAR Wide Swath Mode Interferometry: Optimisation of the Scan Pattern Synchronisation  
*B. Rosich, A. Monti Guarnieri, D. D'Aria et al.*

### **3P4 – Atmosphere: Algorithms Developments and Methods**

Data Processing and Quality Control Activities in Support to the GOMOS Mission  
*F. Niro, D. Del Cavallo, G. Barrot & T. Fehr*

The FRESCO+ Cloud Algorithm for GOME and SCIAMACHY: Improvement and Validation  
*P. Wang, P. Stammes & R. van der A*

Assimilation of MIPAS Limb Radiances at ECMWF Using 1D and 2D Radiative Transfer Models  
*N. Bormann, S.B. Healy, M. Hamrud & J.N. Thépaut*

Improved Spectroscopic Data for Nitric Acid and First Observation of Atmospheric H<sup>15</sup>NO<sub>3</sub> in MIPAS Spectra: Retrieval Study for the H<sup>15</sup>NO<sub>3</sub> / H<sup>14</sup>NO<sub>3</sub> Isotopic Ratio.  
*G. Brizzi, M. Carlotti, B.M. Dinelli et al.*

Results of a New Straylight Correction for SCIAMACHY  
*S. Slijkhuis, R. Snel, B. Aberle et al.*

Overview of MIPAS Operational Products  
*P. Raspollini, G. Aubertin, S. Bartha et al.*

Data Processing and Quality Control Activities in Support to the SCIAMACHY Mission  
*A. Dehn, F. Niro, A. von Bargaen & T. Fehr*

Combined Ozone Retrieval Using the Michelson Interferometer for Passive Atmospheric Sounding (MIPAS) and the Tropospheric Emission Spectrometer (TES)  
*C. Waymark, A. Dudhia, J. Barnett et al.*

New Ozone Profile Climatology: Static and Dynamic Approach  
*J. Kaptur & A. Kaifel*

Future Data Analysis Techniques for Atmospheric Remote Sensing Measurements:  
First Steps towards Grid Computing  
*L. Hoffmann, M. Kaufmann, C. Lehmann et al.*

Neural Network Algorithms for the Retrieval of Ozone Concentration Profiles from Envisat-SCIAMACHY Measurements  
*P. Sellitto, A. Burini, F. Del Frate & S. Casadio*

Design of Neural Networks Algorithms for the Retrieval of Tropospheric Ozone from Satellite Data  
*F. Del Frate, P. Sellitto & D. Solimini*

Assessment of GOMOS Retrieval Algorithms and Quality of Level 2 Products  
*M. Guirlet, G. Barrot, O. Fanton d'Andon et al.*

New IG2 Seasonal Climatologies for MIPAS  
*J.J. Remedios, R.J. Leigh, H. Sembhi & A.M. Waterfall*

Current Retrieval and Inter-Comparisons Results of SCIAMACHY Nighttime NO<sub>x</sub>  
*L.K. Amekudzi, K. Bramstedt, A. Bracher et al.*

Joint Retrieval of CO Vibrational Temperature from MIPAS-Envisat  
*J. Walker & A. Dudhia*

Improved SCIAMACHY WFDOAS Total Ozone Retrieval: Steps Towards Homogenising Long-Term Total Ozone Datasets from GOME, SCIAMACHY, and GOME2  
*M. Weber, L. N. Lamsal & J.P. Burrows*

Operational SCIAMACHY Level 1B-2 Off-Line Processor: Total Vertical Columns for O<sub>3</sub> and NO<sub>2</sub> and Cloud Products  
*A. von Bargaen, T. Schröder, K. Kretschel et al.*

DRACULA – Advanced Retrieval Tool for Atmospheric Remote Sensing  
*A. Doicu, F. Schreier, S. Hilgers et al.*

Near-Real-Time Estimation of Spectral Surface Albedo – Algorithm Development for GOME-1/ERS-2 and GOME-2/METOP –  
*B. Pflug, D. Loyola, P. Valks & W. Zimmer*

### **3P5 – Atmospheric Properties from Optical/Infrared**

Remote Sensing of Cloud-Aerosol Radiative Effects from Satellite Data: A Case Study over the South of Portugal  
*D. Santos, M.J. Costa, D. Bortoli & A.M. Silva*

MODIS Aerosol Optical Properties over North Italy for Estimating Surface-Level PM<sub>2.5</sub>  
*W. Di Nicolantonio, A. Cacciari, E. Bolzacchin et al.*

Aerosol Retrievals over Land and Sea Surfaces Using Combined Satellite Measurements from MSG-SEVIRI and Envisat-AATSR  
*Y.S. Bennouna & G. de Leeuw*

GOSAT Calibration Plan  
*K. Shiomi, S. Kawakami, T. Kina et al.*

Contrail Cirrus Coverage and Radiative Forcing from Satellite Data  
*H. Mannstein, W. Krebs, S. Pinnock & F. Jelinek*

A Dual-View Optimal Estimation Scheme for Aerosol Retrieval Using AATSR Data  
*A.M. Sayer, R.G. Grainger, C.T. Mutlow & G.E. Thomas*

### **3P6 – Geoid, Ocean Circulation and Coastal Zones**

Estimation of the Ocean Tide Effect on the Altimetric Measurements  
*A. Rami, M. Khelif, S. Kahlouche & T. Dennoukri*

An Assessment of Satellite Altimetry in Proximity of the Mediterranean Coastline  
*L. Fenoglio-Marc, S. Vignudelli, A. Humbert et al.*

Residual Tide Analysis in Shallow Water – Contributions of Envisat and ERS Altimetry  
*R. Savcenko & W. Bosch*

X-Track, a New Processing Tool for Altimetry in Coastal Oceans  
*L. Roblou, F. Lyard, M. Le Henaff & C. Maraldi*

Making Radar Altimetry More Usable and Web-Interoperable in the Coastal Ocean  
*S. Vignudelli, P. Cipollini, H.M. Snaith et al.*

### **3P7 – InSAR Applications: Landslides**

Alpine Landslide Survey and Monitoring with Interferometric SAR Techniques in the Frame of the EC Framework 6 GMES Project ASSIST  
*A. Wiesmann, U. Wegmuller, T. Strozzi et al.*

Typical ERS InSAR Signature of Slope Movements in a Periglacial Mountain Environment (Swiss Alps)  
*R. Delaloye, C. Lambiel, R. Lugon et al.*

A Comparative Analysis of the DInSAR Results Achieved by the SBAS and SPINUA Techniques: The Maratea Valley Case Study, Italy  
*J. Wasowski, D. Casarano, C. Lamanna et al.*

### **3P8 – InSAR Applications: Subsidence**

Application of InSAR to the Study of Ground Deformation in the Mexicali Valley, B.C., Mexico  
*O. Sarychikhina, R. Mellors & E. Glowacka*

### **3P9 – Land-use, Land-use Change and Forestry**

Ecosystem Monitoring Development in the European Russian Tundra Based on SAR/ERS Data  
*V.V. Elsakov & V.M. Shanov*

Separability Analysis of Land Cover Classes at Regional Scale: A Comparative Study of MERIS and MODIS Data  
*H. Carrão, P. Sarmiento, A. Araújo & M. Caetano*

Joint Use of Envisat ASAR and Radarsat-1 Data in Land-Cover Classification Using Multitemporal SAR Data  
*N.-W. Park, K.H. Chi, Y.S. Kim et al.*

Monitoring of Forest Damage Caused by Gipsy Moth in Hungary Using Envisat MERIS Data (2005-2006)  
*G. Nádor, I. László, Zs. Suba & G. Csornai*

The Irkutsk Regional Information System for Environmental Protection (IRIS)  
*K. Frotscher, C. Thiel & C. Schmuilius*

SEVESEO: EO-Based Services in Support to Industrial and Technological Risk Management  
*K. Meuleman, F. Lefebvre, E. Gontier et al.*

Forest Ecosystem Dynamics Using SPOT and MODIS Satellite Images  
*S. Stagakis, N. Markos, E. Levizou & A. Kyparissis*

Spatial Unmixing of MERIS Data for Monitoring Vegetation Dynamics  
*R. Zurita-Milla, G. Kaiser, J.P.G.W. Clevers et al.*

Spatial Aggregation of Low Resolution Satellite Data for the Monitoring of Vegetation Response to Climatic Stresses: Analysis of the Spatial Heterogeneity of Aggregated Entities Spatial Aggregation Level is the Most Appropriate for Global Vegetation Monitoring?  
*S. Horion, H. Eerens, B. Tychon & Y. Cornet*

### **3P10 – Radar Performances, New Products and Algorithms**

Assessment of the ASAR Sensor Radiometric Quality in Comparison to ERS-2 and RADARSAT-1 SAR Data  
*N. Baghdadi, M. Zribi & A. Delorme*

The ERS-2 Scatterometer: Instrument and Data Performances Assessment Since the Beginning of the Mission  
*R. Crapolichio, G. De Chiara, A. Paciucci & P. Lecomte*

Analysis of Man-Made Target Detection in SAR Imagery  
*C. Wang & X. Zhong*

Synthetic Aperture Radar Image Formation Process: Application to a Region of North Algeria  
*H. Akliouat, Y. Smara & L. Bouchemakh*



Signal Error Analysis of Active Calibration via Transponder  
*W. Wang*

SIB-ESS-C – A Spatial Data Infrastructure to Facilitate Earth System Science in Siberia  
*R. Gerlach, C. Schmullius & S. Hese*

Data Processing Quality Control (DPQC) Data Flow and Quality Control System  
*M. Sunda & M. Santuari*

Optimising Envisat ASAR Interferometry Opportunities by Orbit Maintenance  
*B. Duesmann, D. Kuijper & I. Barat*

### **3P11 - Research with the Ozone Monitoring Instrument**

Aerosol Retrieval from OMI: Applications to the Amazon Basin  
*R.L. Curier, J.P. Veefkind, B. Veilhmann et al.*

Global Comparisons of Total O<sub>3</sub> Columns from SCIAMACHY Weighting Function DOAS (WFDOAS) and OL3.0 to OMI-TOMS and GOME WFD  
*A. Bracher, M. Weber, K. Bramstedt & J.P. Burrows*

Validation of OMI TOMS-V8 Total Ozone Columns Using a Data Assimilation System  
*S. Migliorini, R. Brugge, A. O'Neill et al.*

### **3P12 – Upper Atmosphere**

Retrieval of Mesospheric Sodium Densities from SCIAMACHY Daytime Limb Spectra  
*S. Casadio, C. Retscher, R. Lang et al.*

Mesospheric Retrievals from MIPAS  
*L.F. Millián-Valle & A. Dudhia*

### **3P13 – Wind and Wave/Sea State Modelling**

Validation of a Regional Wave Model with Envisat and Buoy Observations  
*J.-G. Li & M. Holt*

Retrieving the Ocean Global Wave-Skewness from Envisat RA-2 Averaged Waveforms  
*J. Gómez-Enri, P. Villares, C. Gommenginger et al.*

### **3P14 – Detection and Monitoring of Oil Spill and Oil Slicks**

Application of Envisat SAR Imagery for the Mapping and Estimation of Natural Oil Seeps in the South Caspian Sea  
*V.V. Zatyagalova, A. Yu. Ivanov & B.N. Golubov*

Exploiting Sun glint Signatures from MERIS and MODIS Imagery in Combination to SAR Data to Detect Oil Slicks  
*M. Adamo, G. De Carolis, V. De Pasquale & G. Pasquariello*

A New Object-Oriented Methodology to Detect Oil Spills Using Envisat Images  
*K. Topouzelis, V. Karathanassi, P. Pavlakis & D. Rokos*

Detection and Discrimination of Sea Surface Films in the Coastal Zone of Northeastern Black Sea Using SAR Data

*M. Mityagina, O. Lavrova & T. Bocharova*

### **3P15 – EOMD**

DInSAR Ground Movement Monitoring in the Rural Environment of an Open Pit Mining Area

*M. Schäfer, D. Walter & W. Busch*

## **Contribute Papers**

### **4A1 – Troposphere and Air Quality**

*Chairs: P. Bernath & W. Lahoz*

A Combined GOME and SCIAMACHY Global Water Vapour Data Set

*S. Noël, S. Mieruch, H. Bovensmann & J.P. Burrows*

Biogeoscience Review of SCIAMACHY Results

*C. Müller & the SCIAMACHY team*

Evidence for Long-Range Transport of Carbon Monoxide in the Southern Hemisphere from SCIAMACHY Observations

*A. Gloudemans, J. de Laat, M. Krol et al.*

Satellite Cartography of Atmospheric Methane from SCIAMACHY Onboard Envisat

*C. Frankenberg, I. Aben, P. Bergamaschi et al.*

Three Years of SCIAMACHY Carbon Dioxide and Methane Column-Averaged Dry Air Mole Fraction Measurements

*O. Schneising, M. Buchwitz, H. Bovensmann & J.P. Burrows*

### **4A2 – Troposphere and Air Quality, cont.**

*Chairs: W. Lahoz & P. Bernath*

Identification of Tropospheric Trace Gas Sources: Synergistic Use of HCHO and other Satellite Observations

*T. Marbach, S. Beirle, C. Frankenberg et al.*

Measuring Peroxyacetyl Nitrate from the MIPAS-E Instrument

*D.P. Moore & J.J. Remedios*

Southern Hemispheric Biomass Burning as seen by MIPAS: C<sub>2</sub>H<sub>6</sub> and Ozone

*T. von Clarmann, N. Glatthor, G.P. Stiller et al.*

Global HDO Measurements with MIPAS

*J. Steinwagner, T. Röckmann, M. Milz et al.*

### **4A3 – Aerosols and Clouds**

*Chairs: P. Stammes & H. Elbern*

Global SCIAMACHY Cloud Products

*A.A. Kokhanovsky, M. Vountas, W. Lotz et al.*

Tropospheric and Stratospheric Measurements of Key Atmospheric Compounds from the Ground and Space

*N. Jones, D. Griffith, G. Guergova et al.*

Aerosol Properties from OMI Using the Multi-wavelength Algorithm

*B. Veihelmann, J.P. Veefkind, R. Braak et al.*

#### **4A4 – Aerosols and Clouds, cont.**

*Chairs: H. Elbern & P. Stammes*

Impact of Clouds on Tropospheric Tracegas Retrievals

*S. Beirle, T. Deutschmann, M. Grzegorski et al.*

Investigating the Effect of Upper Tropospheric Cirrus Clouds on Tropical MIPAS Level 2 Water Vapour and Ozone Retrievals

*H. Sembhi, J. Remedios & P. Raspollini*

#### **4B1 – InSAR Applications: Tectonics**

*Chairs: D. Massonnet & T. Wright*

Generation of Three-Dimensional Deformation Map at Low Resolution Using a Combination of Spectral Diversity via Least Square Approach

*E. Erten, A. Reigber & O. Hellwich*

#### **4B3 – InSAR Applications: Tectonics, cont.**

*Chairs: T. Wright & Y. Fialko*

Improved Source Imaging of the Kleifarvatn Earthquake, Iceland, through a Combined Use of Ascending and Descending InSAR Data

*H. Sudhaus & S. Jonsson*

Postseismic Deformation in South Iceland Studied Using Multiple Acquisition Radar Interferometry

*S. Jónsson, J. Hoffmann & T. Arnadóttir*

#### **4B4 – InSAR Applications: Volcanoes**

*Chairs: G. Wadge & M. Furuya*

A Two-Scale Ground Deformation Analysis by Exploiting Envisat Radar Data via the SBAS DInSAR Technique: The Campi Flegrei Case Study

*P. Berardino, F. Casu, G. Fornaro et al.*

Deformation Due to Magma Movement and Ice Unloading at Katla Volcano, Iceland, Detected by Persistent Scatterer InSAR

*A. Hooper & R. Pedersen*

Application of Interferometric Point Target Analysis to Izu-Oshima Volcano, Japan

*M. Furuya*

InSAR Monitoring of the Nyiragongo – Nyamuragira Volcanoes (DR of Congo). Study of the Nyiragongo January 2002- and Nyamulagira November 2006 Eruptions

*N. D'oreye, F. Kervyn, C. Wauthier et al.*

## **4C1 – Inland Water Quality**

*Chairs: R. Santer & J. Pullianen*

Parameterisation of an Automated Processing Chain for Meris Data of Swiss Lakes, at the Example of Lake Constance

*D. Odermatt, T. Heege, J. Nieke et al.*

MERIS Products over Large European Lakes - Comparison with Measured Data about Aerosol and Water Quality

*A. Reinart, H. Ohvriil, K. Alikas et al.*

Adjacency Effects and Bio-Optical Model Regionalisation: MERIS Data to Assess Lake Water Quality in the Subalpine Ecoregion

*G. Candiani, C. Giardino & V.E. Brando*

## **4C2 – Coastal Zones**

*Chairs: R. Doerffer & J. Gower*

Properties of Coastal Waters Around the US: Preliminary Results Using MERIS Data

*Z.P. Lee, C. Hu, D. Gray et al.*

Sediment and Chlorophyll Concentrations from Major Chinese Rivers Using MERIS Imagery

*P.J. Mulhearn & I.S.F. Jones*

Novelty Detection in North Sea Water Reflectance Spectra

*H. Schiller, W. Schoenfeld, H. Krasemann & K. Schiller*

## **4C3 – Ocean Colour**

*Chairs: S. Lavender & C. Brockmann*

Improving the Estimation of North Sea Primary Production: MERIS CHL and  $K_D$  in VGPM

*M.A. Eleveld, H.J. van der Woerd & H. Beck*

A Novel Technique to Estimate Primary Production Directly from Earth Observation Data: An Inherent Optical Property Approach

*K. Barker, T. Smyth, S. Lavender & J. Aiken*

## **4C4 – Ocean Colour, cont.**

*Chairs: J. Fischer & R. Doerffer*

A Global Survey of Intense Surface Plankton Blooms and Floating Vegetation Using MERIS MCI

*J. Gower, S. King & P. Goncalves*

Satellite Monitoring of Harmful Cyanobacterial Blooms in the Baltic Sea during the Period 1997-2006 – The System, Results and Future Development

*M. Hansson & B. Håkansson*

Marcoast Adriatic Service Meris Products Validation

*M. Viel, G. Ceriola, Paolo Manunta et al.*

Phytoplankton Distribution and Light Absorption from Space Data Using Differential Optical Absorption Spectroscopy

*A. Bracher, M. Vountas, T. Dinter et al.*

## **4D1 – Hydrology and Soil Moisture**

*Chairs: M. Borgeaud & W. Wagner*

Provision of Snow Information from Satellite Data for Central Europe within the GMES Activity Polarview

*H. Bach, F. Appel & W. Mauser*

Soil Moisture Determination in Southern Ireland Using an ASAR Time Series

*B.W. Barrett, E. Dwyer, P. Whelan & D. Bartlett*

## **4D2 – Hydrology and Soil Moisture, cont.**

*Chairs: W. Mauser & M. Borgeaud*

New Inversion Method for Snow Density and Snow Liquid Water Content Retrieval Using C-Band Data from Envisat/ASAR Alternating Polarization in Alpine Environment

*M. Niang, J.P. Dedieu, Y. Durand et al.*

Experimental 1km Soil Moisture Products from Envisat ASAR for Southern Africa

*W. Wagner, C. Pathe, D. Sabel et al.*

## **4D3 – Wetlands and Water Dynamics**

*Chairs: A. Bartsch & W. Mauser*

Recent Results about ASAR Observation of Wetland Marshes

*F.M. Grings, H. Karszenbaum, P. Ferrazzoli et al.*

Study of Ecosystem Dynamics in Sahelian Floodplains Using Envisat ASAR C-Band Data

*T. Westra, S. Crabbe & R. De Wulf*

Wetland Mapping in the West Siberian Lowlands with Envisat ASAR Global Mode

*A. Bartsch, C. Pathe & W. Wagner*

Multi-Temporal Analysis in the Niger Inland Delta Using ERS 1/2 and ASAR Data

*J. Schmidt*

Integrated Water Resources Management for Zambia: Satellite-Derived Geo-Information to Support Policy- and Decision-Making Processes

*M. Gregor I.A. Nyambe, J. Kampata et al.*

## **4D4 – Floods**

*Chairs: H. Yesou & H. Bach*

Use of Envisat ASAR and ERS SAR Data for Flood Rapid Mapping

*T. Schneiderhan, M. Huber, H. Zwenzner et al.*

Synergy of High SAR and Optical Data for Flood Monitoring; the 2005-2006 Central European Floods Gained Experience

*H. Yesou, B. Allenbach, R. Andreoli et al.*

ASAR Products Handling and Analysis for an Enhanced Flood Monitoring Service in ESRIN G-POD

*R. Cossu, P. Bally, F. Brito et al.*

## **4E1 – Dragon**

*Chairs: Y.L. Desnos & Q. Zeng*

The Dragon Programme — Status and Achievements

*Y.-L. Desnos, Z. Li, Z. Gao & A. Zmuda*

Near Real Time Flood Monitoring in R.P. China during the 2005 and 2006 Flood and Typhoons Seasons Based on Envisat ASAR Medium and High Resolution Images

*H. Yesou, J. Li, R. Malosti et al.*

## **4E2 – Dragon, cont.**

*Chairs: Y.L. Desnos & Q. Zeng*

Creation of Large Area Forest Biomass Maps for NE China Using ERS-1/2 Tandem Coherence

*O. Cartus, M. Santoro, C. Schmullius et al.*

Assessment and Update of Forest Classification Using Multi-Parameter Satellite SAR Data for NE China

*X. Tian, Z. Li, E. Chen et al.*

Multi-Track PS Analysis in Shanghai

*D. Perissin, C. Prati, F. Rocca et al.*

Synergy of Low and Medium Resolution Envisat ASAR and Optical Data for Lake Watershed Monitoring: Case Study of Poyang Lake (Jiangxi, P.R. China)

*R. Andreoli, H. Yesou, J. Li & Y.-L. Desnos*

## **4E3 – Dragon, cont.**

*Chairs: Y.L. Desnos & Q. Zeng*

Land Cover Classification Based on SAR Data in Southeast China

*F. Ling, X. Wang & X. Shi*

MERIS Performance in the East China Seas: Evaluation of Atmospheric Correction and Optical Inversion Algorithms

*S. He, W. Li, L. Hu, Y. Wang, T. Zhang, J. Fischer, Z. Lee, C. Hu*

## **4E4 – Mapping and Cartography**

*Chairs: J. Mallorqui & D. Derauw*

L-Band SAR Data Assimilation for Improved Surface Modelling

*A. Loew, I. Hajnsek, D. Hoekman et al.*

Time-Varying Segmentation for Mapping of Land Cover Changes

*F. Aspert, M. Bach Cuadra, A. Cantone et al.*

## **4F1 – Glacier and Ice Sheet Mass Balance**

*Chairs: M. Drinkwater & F. Remy*

Modelling Mass Balance of Glaciers Using Satellite Data

*H. Rott, T. Nagler, P. Malcher & G. Bippus*

Semi-Controlled Interferometric Mosaic of the Largest European Glacier  
*A. Sharov & D.B. Nikolskiy*

The Correlation of Glacier Mass Balance and SAR Backscatter on Svartisen, Norway  
*I. Brown, M. Jackson, M. Braun & R. Engeset*

Space and Time Topographic Signatures of Ice Sheet  
*F. Rémy & B. Legrésy*

## **4F2 – Ice Sheet Mass Balance**

*Chairs: F. Remy & N. Young*

Effects of Snow Properties on the Dual Frequency Radar Altimeter Signal of Envisat over the Antarctic Ice-Sheet  
*P. Lacroix, B. Legresy, M. Dechambre et al.*

## **4F3 – Ice Sheet and Glacier Processes**

*Chairs: H. Rott & C.K. Shum*

Melt Extent and Pattern in Greenland and Antarctic Peninsular from Envisat ASAR Global Monitoring Mode  
*A. Luckman*

Ice Dam Fluctuations at the Marginal Lake Grænalón (Iceland) before and during a GLOF  
*K. Scharrer, CH. Mayer, S. Martinis et al.*

Surface Velocity of Swiss Alpine Glaciers from ERS SAR Interferometry  
*T. Strozzi, U. Wegmüller, C. Werner & A. Wiesmann*

Using Radar and Optical Data to Study the Glacier Changes on the 'Roof of the World' (ESA Project No 2401)  
*J.-P. Deroin, J. Wen, M. Dai et al.*

## **4F4 – Sea Ice Mass Balance**

*Chairs: W. Dierking & M. Drinkwater*

Svallex 2005 and Icesar 2007 — Two Flight Campaigns over Sea and Land Ice in the Svalbard Region: Sea Ice Studies  
*W. Dierking, J. Hartmann & C. Luepkes*

Ice Drift in the Fram Strait from Envisat ASAR Data  
*S. Sandven, K. Kloster & K.F. Dagestad*

## **4S2 – GMES**

*Chair: V. Liebig*

GMES Space Component – Sentinel-1, -2 and -3  
*P.G. Edwards, G. Levrini, F. Spoto et al.*

## **4S3 – GMES, cont.**

*Chair M. Doherty*

The Global Monitoring for Food Security Project: Using Envisat MERIS and ASAR for Monitoring Agriculture in Africa  
*L. Bydekerke, F. Holecz, C. Haub et al.*

Risk-Eos, Flood and Forest Fire Risk Information Service  
*Y. Desmazieres & M. Paganini*

Marine and Coastal Environmental Information Services: The MarCoast Project after 18 Months  
*J. Bruniquel*

## **4S4 – GMES, cont.**

*Chair M. Doherty*

GSE Land - Geoinformation Services for Urban Development, Spatial Planning, Water Quality and Irrigation for Europe  
*S. Kuntz*

GMES Service Element Forest Monitoring Activities  
*T. Häusler & S. Gomez*

RESPOND: Geo-Information Services for Humanitarian and Development Aid  
*N. Veck & J. Lambert*

## **Poster Papers**

### **4P1 & 4P2 – Aerosols, Clouds and UV**

Global Distribution of Atmospheric Photon Path Lengths Derived from GOME and SCIAMACHY  
*T. Wagner, S. Beirle, M. Grzegorski et al.*

Fast Forward Modelling of Observations for Cloudy Atmospheric States  
*S. Mackie, C. Merchant & P. Francis*

Cloud Parameter Retrieval from MIPAS Data  
*J. Hurley, A. Dudhia & D. Grainger*

Satellite Retrieval of Aerosol Properties over Bright Reflecting Desert Regions  
*T. Dinter, W. von Hoyningen-Huene, A. Kokhanovsky et al.*

Measuring Total Particle Extinction from the MIPAS-E Instrument  
*D.P. Moore & J.J. Remedios*

### **4P4 – Cryosphere**

ESA's CryoSat-2 Multi-Mode Level 0 to Level 1B Science Processors – Algorithm Design and Pre-Launch Verification with ASIRAS  
*R. Cullen, D.J. Wingham, P. Viau et al.*

Snow Depth and Surface Conditions of Austfonna Ice Cap (Svalbard) Using Field Observations and Satellite Altimetry  
*A. Kouraev, B. Legresy, F. Remy & A. Taurisano*

Statistical Modeling and Classification of ASAR Alternating Polarization Sea Ice Data  
*A. Doulgeris, R. Hall, T. Eltoft & S. Trondstad*



## **4P6 – Dragon**

Large Scale Land Cover Map Generation Based on Low and Medium Resolution Envisat ASAR Data, Application to Poyang Lake Area (Jiangxi, P.R. China)

*R. Andreoli, S. Huang, J. Li et al.*

Change Detection Analysis Dedicated to Flood Monitoring Using Envisat Wide Swath Mode Data

*R. Andreoli & H. Yesou*

Flood Extent Prediction from Lake Heights and Water Level Estimation from Flood Extents Using River Gauges, Elevation Models and Envisat

*R. Andreoli, J. Li, & H. Yesou*

## **4P7 – Education and Training**

ESA Support to Earth Observation Principal Investigators: Preparing for the Next Generation

*Y.-L. Desnos, P. Regner, R. Malosti et al.*

African Capacity Building in Satellite Altimetry with the UNESCO-Bilko Programme

*V. Byfield, F. Shillington, D. Kirugara et al.*

TIGER Capacity Building — Supporting Water Research in Africa.

*L. Ghaye, F. Palazzo, D. Fernandez & Z.(B.) Su*

## **4P8 – Floods**

Disaster Monitoring with the Integrated Utilization of Envisat and other Satellite Data Sets in the 2004-2006 Period in Hungary

*G. Csornai, Zs. Suba, G. Nádor et al.*

## **4P9 – Hydrology and Soil Moisture**

Surface Soil Moisture Retrieval from Envisat/ASAR AP Observations Combining two Backscattering Models

*J. Álvarez-Mozos, M. González-Audicana & J. Casali*

Using Envisat ScanSAR Data for Characterising Scaling Properties of Scatterometer Derived Soil Moisture Information over Southern Africa

*D. Sabel, C. Pathe, W. Wagner et al.*

Field and Basin Scale Analyses of ASAR Imagery for Soil Moisture Estimation in the Campidano Plain, Sardinia

*I. Gherboudj, R. Fillion, C. Paniconi et al.*

Monitoring of Spring Snowmelt with Envisat ASAR WS in the Eastern Alps by Combination of Ascending and Descending Orbits

*A. Bartsch, J. Jansa, M. Schöner & W. Wagner*

5 Years of Envisat Asar Soil Moisture Observations in Southern Germany

*A. Loew, H. Bach & W. Mauser*

## **4P10 – Inland Water Quality**

Mapping Chlorophyll-A in Lake Kivu with Remote Sensing Methods

*M. Kneubühler, T. Frank, T.W. Kellenberger et al.*

Study of the Water Quality of Alqueva Artificial Lake in the South of Portugal Using MERIS Data  
*M. Potes, M.J. Costa & J.C.B. da Silva*

## **4P11 – InSAR Applications: Tectonics**

Recent Crustal Movements Along the Carmel Fault System, Israel  
*R.N. Nof, G. Baer, Y. Eyal & F. Novali*

Deformation in the Granada Basin (Southern Betic Cordillera) Studied by PS-InSAR: Preliminary Results  
*A.M. Ruiz, J.J. Sousa, R.F. Hanssen et al.*

Extending the Temporal Coverage of Icelandic Crustal Deformation Measurements through Envisat InSAR Images  
*R. Pedersen, F. Sigmundsson, A.J. Hooper & K.L. Feigl*

## **4P12 – InSAR Applications: Volcanoes**

ASAR Not Like-ERS Swaths for Studying the Mt. Etna Ground Deformations  
*G. Puglisi, F. Guglielmino, A. Bonforte & M. Palano*

NRT Monitoring of the 2004 Subglacial Grímsvötn Eruption (Iceland) with Envisat-ASAR Data  
*U. Münzer, A. Gudmundsson & S. Martinis*

ASAR Images a Diverse Set of Deformation Patterns at Kilauea Volcano, Hawai'i  
*M.P. Poland*

Pre-Operative Test-Case of Eurorisk-Preview Project During the 2006 Mt. Etna Eruption  
*F. Guglielmino, C. Spinetti, A. Bonforte et al.*

Monitoring Active Volcanoes by Using of Envisat and ERS Data: First Results of the Eurorisk-Preview Project  
*C. Spinetti, P. Berardino, M.F. Buongiorno et al.*

## **4P13 – Mapping and Cartography**

ASAR Images Geometric Capabilities for Coastal Mapping; Framework of ESA DUE Coastchart Project - Examples of Coastal Zones of Nigeria and Gabon  
*H. Trebossen, M. Paganini, J.P. Rudant & B. Rosich*

Quantification of Geology Features: From ASAR to 3D Modelling  
*E. Pajot, J.P. Rudant, D. Dhont & J.P. Xavier*

Synergistic Usage of ASAR WS and MERIS Data for Large Scale Water and Vegetation Monitoring in Africa - A Science Product of the Aquifer Project  
*C. Thiel, J. Reiche, R. Leiterer & C. Schmuilius*

The Use of SAR Interferometric Coherence Images to Study Sandy Desertification in Southeast Niger: Preliminary Results  
*C. Bodart & A. Ozer*

Coastal Zone Mapping Using Multitemporal ERS SAR and Envisat ASAR Data  
*S. Wade, K. Ba, H. Trebossen et al.*

DEM Generation and Analysis on Rugged Terrain Using Envisat/ASAR Multi-Angle InSAR Data  
*X. Li, H. Guo & Z. Li*

## **4P14 – Ocean Circulation and Sea Features**

Spatial-Temporal Distribution and Characteristics of Internal Waves in the Okhotsk and Japan Seas Studied by ERS-1/2 SAR and Envisat ASAR  
*L. Mitnik & V.A. Dubina*

Single-Look SAR Images and Detection of Sea Dark Areas  
*A. Gambardella, F. Nunziata, A. Sorrentino et al.*

Characterization of Internal Waves in the Strait of Gibraltar, Using SAR Images and In-Situ Measurements  
*J. Gómez-Enri, A. Vazquez-, M Bruno et al.*

Mesoscale Sea Surface Currents Derived from Multi-Sensor Satellite Imagery  
*M. Gade, G. Fiedler & L. Dreschler-Fischer*

Case Study: Use of SAR Data for the Operational Control of Fishing Ships Positioning  
*O. Lavrova, S. Shcherbak, M. Mityagina & V. Pyrkov*

Assessment of SAR Ocean Features Using Optical and Marine Survey Data  
*M. Thankappan, N. Rollet, C.J.H. Smith et al.*

## **4P15 – Ocean Colour**

The Carbon Cycle from North to South along the Galathea 3 Route  
*M.B. Christiansen, L.L. Soerensen, J. Nissen & C.B. Hasager*

Validation of MERIS-Reflectance from Ferries  
*J. Høkedal & K. Sørensen*

Synergistic Use of Ferrybox and Envisat Data with the Aid of a Hydrodynamic Transport Model  
*H. Krasemann & W. Petersen*

Comparison of Ocean Color Data Products from Meris, Modis, and Seawifs: Preliminary Results for the East China Seas  
*C. Hu, Y. Wang, Q. Yang et al.*

Regional Products for the Baltic Sea in the Frame of MARCOAST GSE  
*H. Krawczyk, A. Neumann, T. Walzel & B. Gerasch*

## **4P16 – Sea Surface Temperature**

Deriving a Sea Surface Temperature Record Suitable for Climate Change Research from the Along-Track Scanning Radiometers  
*C. Merchant*

ESA's Medspiration Service  
*I. Robinson, J.-F. Piolle, P. LeBorgne et al.*

## **4P18 – Troposphere and Air Quality**

Space-Borne Tropospheric NO<sub>2</sub> above the Alpine Region: Evidences of Systematic Retrieval Errors and the Effect of Inaccurate Pixel Surface Pressure

*D. Schaub, D. Brunner, F. Boersma et al.*

Reconstructing Fine-Scale Air Pollution Structures from Coarsely Resolved Satellite Observations

*D. Brunner, D. Schaub & B. Buchmann*

Retrieval of Formaldehyde from High-Resolution MIPAS-Envisat Spectra

*T. Steck, N. Glatthor, T. von Clarmann et al.*

Global Peroxyacetyl Nitrate (PAN) Retrieval in the Upper Troposphere from Limb Emission Spectra of the Michelson Interferometer for Passive Atmospheric Sounding (MIPAS)

*N. Glatthor, T. von Clarmann, H. Fischer et al.*

An Air Quality Study for Greece with the Mm5/CAMx Modeling System

*E. Katragkou, I. Kioutsioukis, A. Poupkou et al.*

Global Observation of Formaldehyde in the Troposphere by Satellites: GOME and SCIAMACHY Results

*I. De Smedt, M. Van Roozendael, T. Stavrakou et al.*

Three Years of SCIAMACHY Carbon Monoxide Measurements

*I. Khlystova, M. Buchwitz, H. Bovensmann & J.P. Burrows*

## **4P20 – Wetlands and Water Dynamics**

Remote Sensing and Urban Malaria: Radar Contribution for the Determination of Potential Anopheles Breeding Site in Antananarivo (Madagascar)

*F. Rakotomanana, L. Jolivet, R.V. Randremanana & J.P. Rudant*

## **Contributed Papers**

### **5A1 – Atmospheric Applications**

*Chairs: B. Buchmann*

The PROMOTE Ozone Profile Service - Long-Term 3D Ozone Reanalysis of ERS-2 and Envisat Data Sets

*T. Ebertseder, F. Baier, Q. Errera et al.*

Using Satellite Aerosol Products for Monitoring National and Regional Air Quality in Austria

*R. Höller, P. Garnesson, C. Nagl, & T. Holzer-Popp*

First Years Results from Croydon Airtex

*I.J. Kilbane-Dawe, S. Potter, L. Johnson et al.*

Monitoring of Volcanic Activity from Satellite as Part of GSE PROMOTE

*J. Van Geffen, M. Van Roozendael, W. Di Nicolantonio et al.*

## **5A2 – Atmospheric Applications, cont.**

*Chairs: B. Buchmann*

GlobAEROSOL an ESA Due Product

*Ó. Pérez Navarro, C. Gómez Cid, R. Siddans et al.*

Globmodel

*W. Lahoz, A. O'Neill, J. Styles & Z. Stott*

Improving ASSET Ozone Analyses with Multi-Sensor Assimilation

*S. Massart, D.R. Jackson, A. Segers & V.-H. Peuch*

Monitoring and Assimilation of Envisat NRT Retrievals at ECMWF

*R. Dragani*

## **5B1 – ESA Toolboxes**

*Chairs: P. Regner & M. Engdahl*

PolSARpro v2.0: The Versatile Educational Toolbox for Polarimetric and Interferometric SAR Data Processing

*E. Pottier, L. Ferro-Famil, S. Allain et al.*

Basic Radar Altimetry Toolbox and Radar Altimetry Tutorial: A New Set of Tools for All Altimetry Users

*V. Rosmorduc, J. Benveniste, N. Picot et al.*

BEAT - The Basic Envisat Atmospheric Toolbox

*S.V. Niemeijer*

Beam 4 – An Efficient Development Platform for Optical EO Data

*N. Fomferra, C. Brockmann, M. Peters et al*

## **5C1 – Sea Surface Temperature**

*Chairs: I. Robinson & I. Barton*

AATSR - Completing the the First 15 Years Global SST for Climate

*D.T. Llewellyn-Jones, G.K. Corlett & C.T. Mutlow*

Use of Envisat AATSR Data within the GODAE High Resolution SST Pilot Project (GHRSSST-PP)

*C. Donlon*

Use of Envisat AATSR within a High Resolution Near Real Time Global Sea Surface Temperature Analysis System

*J. Stark & C. Donlon*

Satellite-Derived Sea Surface Temperatures – A Case Study of Error Variability

*I.J. Barton*

## **5C2 – Education and Training**

*Chairs: M. Fea & F. Sarti*

Observing the Ocean from Envisat: A UNESCO-Bilko Teaching Module on Marine Applications of Envisat Data

*V. Byfield, C. Donlon, J.C. Da Silva et al.*

Using Real-Time Satellite Data in the Classroom: The Argonautica and Calisph'Air Educational Projects

*D. de Staerke, A. Richardson & D. Robinson*

Envisat for School: The Satellite Eye for the Galathea 3 Expedition

*J. Lichtenegger, P.B. Sørensen, C.B. Hasager et al.*

Eduspace - A Multi-Lingual Earth Observation Website for Teaching and Learning

*L. Ghaye, M. Fea, J. Lichtenegger et al.*

## **5D1 – Sentinel-1, the Future European Radar Observatory**

*Chairs: E. Attema & M. Davidson*

Modeling Interferogram Stacks for Sentinel -1

*F. Rocca*

## **5D2 – Third Party Missions**

*Chair: B. Hoersch*

The Atmospheric Chemistry Experiment (ACE): Status and Results

*P.F. Bernath*

The TanDEM-X Mission

*M. Zink, G. Krieger, H. Fiedler et al.*

COSMO-SkyMed Program: Utilization and Description of an Advanced Space EO Dual-Use Asset

*A. Coletta, G. Angino, F. Battazza et al.*

## **5E1 – Mapping and Cartography, cont.**

*Chairs: D. Derauw & F. Holecz*

Earth Observation for Environmental and Health Impact Assessment - A Methodology with Synergies for European Policies

*A.N. Skouloudis, D.G. Rickerby & P. Paert*

Remote Sensing and GIS Contribution to Natural Hazard Risk Site Detection - Demonstrated by Examples from N-Venezuela, Central Italy and SW-Germany / NW-Switzerland

*B. Theilen-Willige*

Validation of the PS Height EstimateS by Means of Photogrammetry

*D. Perissin*

## **5E2 – Mapping and Cartography, cont.**

*Chairs: F. Holecz & D. Derauw*

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