

→ SENTINEL-3 FOR SCIENCE WORKSHOP

3–5 June 2015 | Palazzo del Casinò–Lido | Venice, Italy



Programme

Day 1, Tuesday 02 June 2015

08:30 - 09:00 Registration

1.1 Opening Session I

Chairs: /

09:00 - 09:15	Welcome	M. Borgeaud, ESA, Italy
09:15 - 09:30	Copernicus Space Component: A Quantum Leap in Earth Observation	J. Aschbacher ESA, Italy
09:30 - 09:45	Sentinel 3 in the Framework of the Copernicus Programme	R. Schulte-Braucks European Commission, Belgium
09:45 - 09:55	Sentinel-3 for Science Workshop Objectives	J. Benveniste ESA, Italy
09:55 - 10:10	The SEOM Programme Element	Y.-L. Desnos ESA, Italy
10:10 - 10:25	The Copernicus Sentinel-3 Mission: Overview and Status	C. Donlon ESA, Netherlands
10:25 - 10:40	The Copernicus Sentinel-3 Mission: Getting Ready for Operations and Data Access	S. Mecklenburg ESA, Italy
10:40 - 11:10	Coffee Break	

1.2 Opening Session II

Chairs: /

11:10 - 11:30	Sentinel-3 Surface Topography Mission Products & Processing Algorithms Definition	P. Féménias ESA, Italy
11:30 - 11:50	Sentinel-3 Optical Sensors Products & Processing Algorithms Definition	P. Goryl ESA, Italy
11:50 - 12:10	The Sentinel-3 Mission Performance Framework	P. Féménias ESA, Italy
12:10 - 12:30	EUMETSAT and the Sentinel-3 Mission	D. Provost, EUMETSAT, Germany
12:30 - 12:50	GlobCurrent: Sentinel-3 Synergy in Action	J. Johnnessen NERSC, Norway
12:50 - 14:00	Lunch	



1.3: Session: Methodology I

Chairs: /

14:00 - 14:20	The power of a tailored L1 processor	R. Escolà isardSAT, Spain
14:20 - 14:40	Analysis of new SAR-mode Processing schemes over Ocean using CryoSat-2 data	T. Moreau CLS, France
14:40 - 15:00	The German Bight: preparing for Sentinel-3 with a complete cross-validation of SAR-processed CryoSat-2 altimeter data against PLRM	L. Fenoglio-Marc TU Darmstadt, Germany
15:00 - 15:20	CryoSat to Sentinel-6: Oceanographic Advances and Coastal Incursions	P. Cipollini NOC, UK
15:20 - 15:40	Exploring multi-sensor satellite synergies to provide direction to high-resolution along-track altimetry currents	F. Nencioli PML, UK
15:40 - 16:10	Coffee Break	

1.4: Session: Methodology II

Chairs: /

16:10 - 16:30	The Cal/val Topic Collaborative Platform (CTCP), a new tool for efficient satellite data processing and validation, latest evolutions of ODESA and MERMAID	C. Lerebourg ACRI-ST, France
16:30 - 16:50	Sentinel-3 OLCI Radiometric and Spectral Performance activities	L. Bourg ACRI-ST, France
16:50 - 17:10	Generic methods for cross-calibration and validation of the Sentinel 3 surface reflectance: Descriptions and Applications to MODIS and VIIRS	E. Vermote NASA GSFC, USA
17:10 - 17:30	Bridging the Gap Between AATSR and SLSTR IR Observations Using MetOp-A Instruments AVHRR and IASI	C. Tsamali Met Office, UK
17:30 - 17:50	OPERA : an Atmospheric Correction for Land and Water.	S. Sterckx VITO, Belgium;
17:50 - 18:10	Sand Dune Ridge Alignment Effects On Surface BRF over Libya-4 Calibration Site	Y. Govaert Rayference, Belgium
18:10 - 19:45	WELCOME DRINK	

→ SENTINEL-3 FOR SCIENCE WORKSHOP

3–5 June 2015 | Palazzo del Casinò–Lido | Venice, Italy



Day 2, Wednesday 03 June 2015

2.1: Session: Methodology III

Chairs: /

09:00 - 09:20	The Sentinel-3 Mission Performance Centre for the Optical Mission	J. Bruniquel ACRI-ST, France
09:20 - 09:40	Modelling the Sea Ice Surface Emissivity at Microwave Frequencies: Impact of the Surface Assumptions and Potential use for Sea Ice Type Classification	L.Hermozo CLS, France
09:40 - 10:00	The Atlantic Meridional Transect: a unique open-ocean platform for validating satellite measurements	G. Dall'Olmo PML,UK
10:00 - 10:20	Insuring Continuity of Coastal Ocean Optical Products	R. Crout - Naval Research Laboratory, USA
10:20 - 10:40	Use of Scatterometer and Altimeter data to improve the Skill of Storm Surge Forecast	M. Bajo ISMAR-CNR, Italy
10:40 - 11:00	An Unmixing-based Model for the integration of multi-sensor imagery: a tool for the future synergy of Sentinel-2 and Sentinel-3 data	G.Doxani ESA/ESRIN, Italy
11:00 - 11:30	Coffee Break	

2.2: Session: Land I

Chairs: /

11:30 - 11:50	Sentinel-3 for the Copernicus Global Land Service: Monitoring the Continental Ecosystems at Global Scale	R. Lacaze HYGEOS, France
11:50 - 12:10	Earth Observation Data in Support of Humanitarian Operations - Envisaged Role of Sentinel-3	R. Bonifacio UN - WFP, Italy
12:10 - 12:30	A potential gross primary productivity (GPP) product from Sentinel 3 OLCI data	J. Dash Uni. Southampton, UK
12:30 - 12:50	Update on the MERIS Burned Area Detection Algorithm	I. Alonso Canas
12:50 - 14:00	Lunch	



2.3 Session: Land II

Chairs: /

14:00 - 14:20	Sentinel-3 SLSTR Active Fire Detection and Fire Radiative Power (FRP) Product	M. Wooster King's College London, UK
14:20 - 14:40	A Protocol for Validating Land Surface Temperature for SLSTR	D. Ghent NCEO, Uni. Leicester, UK
14:40 - 15:00	New products of global atmospheric aerosol and surface reflectance for Sentinel-3	P. North Swansea University, UK
15:00 - 15:20	Towards Developing a Framework of Global Evapotranspiration and Drought Product for the Sentinel-3 Mission	K. Mallick LIST, Luxembourg

2.4: Session: Land with Synergy of Proba-V and Sentinel-3

Chair: /

15:20 - 15:40	Land Missions: Synergy of Sentinel-3 with Proba-V and other Missions	B. Hoersch ESA, Italy
15:40 - 16:00	PROBA-V 100 m Products	B. Deronde VITO, Belgium
16:00 - 16:20	Extending the global time series of SPOT-VGT with PROBA-V: results and lessons learnt for the change to Sentinel-3	E. Swinnen VITO, Belgium
16:20 - 16:40	Validation and Impact Assessment of Atmospheric Correction on Products Development Using PROBA-V 100 m Data	T. Veljanovski ZRC SAZU, Slovenia
16:40 - 17:10	Coffee Break	

2.5: Session: Cryosphere

Chairs: /

17:10 - 17:30	Extending a Combined Surface Temperature Dataset for the Arctic from the Along-Track Scanning Radiometers (ATSRs) with the Sea and Land Surface Temperature Radiometers (SLSTRs)	K.L. Veal Uni. Leicester, UK
17:30 - 17:50	Seasonal sea ice predictions initialized by CryoSat-2 ice thickness	F. Kauker OASys, Alfred Wegener Institute, Germany
17:50 - 18:10	Monitoring Ice Cover of Large Lakes at Northern High Latitudes from Space: Advances and Prospects	C. Duguay Uni. Waterloo, H2O Geomatics Inc, Canada
18:10 - 18:30	Monitoring of snow properties with Sentinel-3	R. Solberg Norwegian Computing Center, Norway
18:30 - 18:50	Preparations for Global Snow Monitoring Using Sentinel-3, Based on Suomi NPP VIIRS Investigations in ESA GlobSnow Project	K. Luojus Finnish Meteorological Institute, Finland
18:50 - 19:50	POSTER SESSION – DRINK	



Day 3, Thursday 04 June 2015

3.1: Session: Inland Water

Chairs: /

09:00 - 09:20	Global Lakes Sentinel Services: Water quality parameters retrieval in lakes using the MERIS and S3-OLCI band sets	S. Peters Water Insight BV, Netherlands,
09:20 - 09:40	Sentinel 3 for inland water quality monitoring - Advances in Earth Observation based technologies to assist algal management	T. Malthus Commonwealth Scientific and Industrial Research Organisation, Australia
09:40 - 10:00	Innovative Processing Featuring Higher SAR Altimeter Performances Over Inland Water Domain	P. Thibaut CLS, France
10:00 - 10:20	Characterization of SAR Mode Altimetry Data over Inland Water	P. Fabry ALONG-TRACK, France
10:20 - 10:40	Validation of Lake Levels Based on CryoSat-2 SAR Mode Data	K. Nielsen DTU Space, Denmark
10:40 - 11:10	Coffee Break	

3.2 Session: Ocean I

Chairs: /

11:10 - 11:30	EUMETSAT and the Needs of Operational Ocean Colour Data Services for the Future	E. Kwiatkowska EUMETSAT, Germany
11:30 - 11:50	OLCI on Sentinel-3: Importance for Climate Research	S. Sathyendranath PML, UK
11:50 - 12:10	Variability of chlorophyll-a concentration in the Gulf of Guinea and its relation to physical oceanographic variables	K. Nieto EC, JRC, Italy
12:10 - 12:30	Ocean Color Products Supporting the Assessment of Good Environmental Status: Development of a Spatial Distribution Model for the Seagrass <i>Posidonia oceanica</i> (L.) Delile, 1813.	M. Zucchetta CEMAS, University Ca' Foscari Venice, Italy
12:30 - 12:50	Sea Surface Temperature from EUMETSAT including Sentinel-3 SLSTR	A. O'Carroll EUMETSAT, Germany
12:50 - 14:00	Lunch	

→ SENTINEL-3 FOR SCIENCE WORKSHOP

3–5 June 2015 | Palazzo del Casinò–Lido | Venice, Italy



3.3: Session: Ocean II

Chairs: /

14:00 - 14:20	Assessing the Accuracy of Sentinel-3 SLSTR Sea-Surface Temperature Retrievals using High Accuracy Infrared Radiometers on Ships of Opportunity	P.Minnett University of Miami, USA
14:20 - 14:40	Two-dimensional Surface Currents from the combination of SLSTR and SRAL instruments	J. Isern-Fontanet CSUC, Spain;
14:40 - 15:00	Sentinel-3 Delay Doppler Altimeter: a New Insight on High Resolution Ocean Dynamics	S. Labroue CLS, France

3.4: Session: Atmosphere I

Chairs: /

15:00 - 15:20	Retrieval of Aerosol Absorption over Ocean using AATSR/MERIS and its application to SLSTR/OLCI	F. Filipitsch Freie Universität Berlin, Germany
15:20 - 15:40	Application of GRASP Algorithm for Retrieving Aerosol and Surface Properties from Sentinel-3 Observations	O. Dubovik University of Lille 1/ CNRS, France
15:40 - 16:00	Remote Sensing of Aerosol and Marine Parameters in Coastal Environments: The Advantage of Using Polarized Radiative Transfer Simulations of the Coupled Atmosphere-water System to Analyze OLCI Measurements?	K. Stamnes Geminali AS, USA
16:00 - 16:20	ESA Climate Change Initiative: Towards an Adjusted FAMEC Algorithm Applicable to SLSTR and OLCI Measurements	H. Carbajal - Freie Universität Berlin, Germany
16:20 - 16:40	The Envisat ERS-1/ERS-2 Microwave Radiometer time series: Toward fundamental and thematic climate data records	R. Bennartz Vanderbilt University- Uni. Wisconsin, USA
16:40 - 17:10	Coffee Break	

3.5: Session: Atmosphere II

Chairs: /

17:10 - 17:30	SEOM's Advanced Clouds, Aerosols and Water Vapour Products for Sentinel-3/OLCI' Project CAWA	J.Fischer Free University Berlin, Germany
17:30 - 17:50	Total Column Water Vapour from Along Track Scanning Radiometer Series: Advanced Infra-Red Water Vapour Estimator (AIRWAVE) Algorithm Description and Applications	E. Castelli ISAC-CNR, Italy
17:50 - 18:10	Cloud, Aerosol, and Volcanic Ash Retrievals with AASTR and SLSTR.	G. McGarragh Uni. Oxford, UK
18:10 - 18:30	Key Elements for the Discussion and Wrap-up Session	Chairs
18:30 - 19:30	POSTER SESSION and DRINK	

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Day 4, Friday 05 June 2015

4.1: Session: Land III

Chairs: /

09:00 - 09:20	Moving from Envisat MERIS to Sentinel-3 to Provide Consistent Global Land Cover Time Series at 300 m up to 2016: The Land Cover Component of the ESA Climate Change Initiative	P. Defourny UCLouvain-Geomatics, Belgium
09:20 - 09:40	Uncertainties Assessment for MERIS/OLCI FAPAR	N. Gobron EC – JRC, Italy
09:40 - 10:00	A Generic Retrieval Package for Land Parameters applied to Surface Albedo Products	T. Kaminski The Inversion Lab, Germany
10:00 - 10:20	Vegetation Productivity in Drylands from MERIS fAPAR Time Series	U. Gangkofner GeoVille, Austria
10:20 - 10:40	Towards Consistent Land Surface Temperature Observations from Multiple Satellite Instruments: Validation Results from WACMOS-ET	P. Schneider NILU - Norwegian Institute for Air Research, Norway
10:40 - 11:10	Coffee Break	

4.2: Session: Ocean III

Chairs: /

11:10 - 11:30	Improved Oceanographic Measurements from SAR Altimetry: Results and Scientific Roadmap from the ESA CryoSat Plus for Oceans Project	D. Cotton Satellite Oceanographic Consultants, UK
11:30 - 11:50	On the Use of SAR-mode Altimeter Wave Data in the Wave Model MFWAM	L. Aouf Météo France
11:50 - 12:10	Pros and Cons of Physical/Empirical SAR Altimetry Retracking in Seasonally Ice-covered Waters	M. Jain DTU, Denmark
12:10 - 12:30	A Potential Use of Sentinel-3 Data for Investigating the Relations Between Biomass and Environmental Parameters for Fishery Strategy: a Remote Sensing and Lagrangian Approach for the Case of Anchovy Larvae in the Sicilian Channel (Mediterranean Sea)	B. Patti IAMC – CNR, Italy
12:30 - 12:50	Support To Aquaculture and Fishery Industry – the FP7-SAFI project - and its Valorisation of Upcoming Sentinel-3 Data	A. Mangin ACRI-ST, France
12:50 - 14:00	Lunch	

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4.3 Session: Discussion and Wrap-up

Chairs: /

14:00 - 14:15	Methodology Session Summary	
14:15 - 14:25	Ocean Session Summary	
14:25 - 14:35	Inland Water Session Summary	
14:35 - 14:45	Land with Synergy of Proba-V and Sentinel-3 Session Summary	
14:45 - 14:55	Atmosphere Session Summary	
14:55 - 15:05	Cryosphere Session Summary	
15:05 - 16:20	Discussion on all the sessions of the Workshop - Recommendations	
16:20 - 16:30	Closing Remarks	J. Benveniste

End of Workshop – Coffee served