



PROGRAMME OF THE
EUROPEAN UNION



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6th Sentinel-2 Validation Team Meeting

Agenda



12th September 2023 – Magellan Room (ESA-ESRIN) + Webex

Registration Opens at 10:00, Bus from Frascati (piazza Marconi) to ESRIN leaves at 09:15

Opening Session

Chairs: V. Boccia (ESA), P. Goryl (ESA), F. Gascon (ESA)

11:30 – 12:00	Welcome and Introduction	P. Goryl (ESA)
12:00 – 12:30	Copernicus Sentinel-2 Mission Status	F. Gascon (ESA)
12:30 – 13:00	Copernicus Sentinel-2 Data Quality Overview	V. Boccia (ESA)

Session 1: Sentinel-2 Level-1 Radiometry Validation

Chairs: B. Alhammoud (MPC/ARGANS), E. Micijevic (USGS)

13:00 – 13:20	Copernicus Sentinel-2 Level-1 Radiometric Validation status from the Optical-Mission Performance Cluster: Operational and Collection-1 Radiometry Verification	B. Alhammoud (MPC/Argans)
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13:20 – 14:30 LUNCH

14:30 – 14:50	Landsat OLI Calibration Status and Validation of Sentinel-2 MSI	E. Micijevic (USGS)
14:50 – 15:10	Radiometric calibration intercomparisons of Sentinel-2 MSI, Sentinel-3 OLCI and Landsat OLI using deep convective clouds	S. Clerc (MPC/ACRI)

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15:10 – 15:30	DIMITRI-DATABASE of Imaging Multispectral Instrument and toll for radiometric intercomparison: evolution and application	B. Alhammoud (MPC/Argans)
15:30 – 15:50	Evolutions of the Sentinel-2 Radiometric Uncertainty Tool	S. Clerc (MPC/ACRI)
15:50 – 16:10	Self-Supervised Super-Resolution of Sentinel-2 L1B Products Thanks to Inter-Band Shift, Alias and Detectors Overlap	J. Anger (ENS/KAYRROS)

16:10 – 16:40 COFFEE BREAK

Session 2: Sentinel-2 Level-1 Geometry Validation Chairs: S. Clerc (MPC/ACRI), E. Hillairet (MPC/CS Group)

16:40 – 17:00	Geometric Performance of the Copernicus Sentinel-2 products	S. Clerc (MPC/ACRI)
17:00 – 17:20	Copernicus Sentinel-2 Global Reference Image	S. Enache (MPC/CS Group)
17:20 – 17:40	Inter-Detector Management for Copernicus Sentinel-2 Level-1C Products	E. Hillairet (MPC/CS Group)
17:40 – 18:00	A DGGS (Discrete Global Grid System) Datacube Implementation for Sentinel-2	M. Savinaud on behalf of G. Salgues (MPC/CS Group)

18:00 – 19:00 Poster Session and Ice Break



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Session 3a: Sentinel-2 Level-2 Validation

Chairs: R. De Los Reyes (MPC/DLR), Y. Govaerts (RAYFERENCE)

10:00 – 10:20	Validation of the Copernicus Sentinel-2 Collection-1 and Operational Scene Classification (SCL) Products	A. P. Pertiwi (MPC/DLR)
10:20 – 10:40	Comparison of DDV-algorithm for AOT estimation in Sen2Cor and use of AOT from CAMS data	B. Pflug (MPC/DLR)
10:40 – 11:00	Validation of Sentinel-2 Collection-1 surface reflectance products with RadCalNet data	R. De Los Reyes (MPC/DLR)
11:00 – 11:20	CMIX-II: Second edition of the Cloud Mask Intercomparison eXercise	Carsten Brockmann on behalf of J.Wavers
11:20 – 11:50 COFFEE BREAK		
11:50 – 12:10	Prisma4sen2like: a spectral aggregation tool to transform PRISMA L1 hyperspectral data into Sentinel-2 PRISMA multispectral data	J. Louis (Telespazio France)
12:10 – 12:30	MAJA – State of the Software 2023	M. Savianaud on behalf of A. Pochet (CS Group)
12:30 – 12:50	Analysis of the performances of the LaSRC Land Surface Reflectance Landsat 8,9 And Sentinel 2A,B and Cloud Mask	E. Vermote (NASA)
12:50 – 13:10	Validation of Sentinel-2 MSI Atmospheric Correction Products Over Perialpine Lakes	M. Werther (Eawag)

13:10 – 14:30 LUNCH



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Session 3b: Sentinel-2 Level-2 Validation Chairs: J. Louis (MPC/TPZ-F), B. Pflug (MPC/DLR)

14:30 – 14:50	UAV-based fiducial reference measurements for the validation of Sentinel-2 surface reflectance (HCRF)	H. Morris (NPL)
14:50 – 15:10	Establishing a validation protocol for open field surface BRF data	Y. Govaerts (Rayference)
15:10 – 15:30	Validation of Sentinel-2 Surface Reflectance over water and land sites by measurements from HYPERNET	K. Ruddick (RBINS)
15:30 – 15:50	Drone-Based Cal/Val of Sentinel-2 Aquatic Reflectance: Paving the Way Towards FRM Status	I. Reusen (VITO)
15:50 – 16:10	Sentinel 2 Aquatic Reflectances - Sen2Water	C. Brockmann (Br. Consult)

16:10 – 16:40 COFFEE BREAK

Session 4a: Downstream Products Validation Chairs: K. Ruddick (RBINS), V. Brando (CNR)

16:40 – 17:00	Downstream Service Water Quality Products Validation	C. Brockmann (Br. Consult)
17:00 – 17:20	Copernicus High-Resolution Service: Correction of Detector Banding Effect	D. Van der Zande (RBINS)
17:20 – 17:40	Lake Colour Validation and Uncertainty Characterisation	M. Warren (Plymouth Marine Laboratory)

17:40 – 19:00 Poster Session



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14th September 2023 – Magellan Room (ESA-ESRIN) + Webex

Session 4b: Downstream Products Validation

Chairs: L. Brown (U.of Salford), D. Van der Zande (RBINS)

10:00 – 10:20	Hyperspectral Bio-Optical Observations Sailing on Tara (HyperBOOST) project	V. Brando (CNR)
10:20 – 10:40	Presentation of Copernicus Sentinel 2 Global Mosaic Service, Phase 2	J.-S. Carriere (ACRI)
10:40 – 11:00	Towards reducing bias in vegetation biophysical variable retrievals from Sentinel-2: the GROUNDED EO project	L. Brown (U. of Salford)

11:00 – 11:30 COFFEE BREAK

11:30 – 11:50	CEOS Level 3 Validation of SL2P and SL2P-CCRS over North American Forests: are we approaching an uncertainty bound?	R. Fernandes (Canada Centre for Remote Sensing)
11:50 – 12:10	Mapping Eucalyptus Plantation using fraction images derived from SENTINEL-2 MSI Datasets	Y. E. Shimabukuro (Instituto Nacional De Pesquisas Espaciais)

Session 5: Highlights from the Session and Recommendations from the discussion

Chairs: V. Boccia (ESA), R.Q. Iannone (RHEA for ESA)

12:10 – 13:10	<ul style="list-style-type: none">• Session 1 – Sentinel-2 Level-1 Radiometry Validation• Session 2 – Sentinel-2 Level-1 Geometry Validation• Session 3 – Sentinel-2 Level-2 Validation• Session 4 – Downstream Products Validation
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13:10 End of the Workshop + LUNCH (13:10 -14:30)



Posters

In Flight Estimation of Sentinel2 MTF using Natural Edge Targets	E. Hillairet (Cs Group)
ASGARD, a New Open-Source Tool for Sentinel-2 Geometric Computation	J. Guinet (Cs Group)
Evaluation of Copernicus DEM 30 and The Geometric Quality of Sentinel-2 Collection-1 With Different Repeat Orbits Over Norwegian Mountainous Terrain	T. F. Klingenberg (Norwegian Mapping Authority)
Validation of Sentinel-2 Auxiliary Data: Focus on Aerosol Optical Depth at 550 nm and Total Column of Water Vapour	J. Louis (Telespazio France)
KARIOS: A fast & efficient open source tool for geometric deformation analysis	S. Saunier (Telespazio France)
Sen2Like: A solution for harmonization and fusion of Sentinel-2 and Landsat 8/9 data	S. Saunier (Telespazio France)
Sen2Cor version 3.1, Atmospheric correction applied to Sentinel-2 PRISMA (S2P) Products: Implementation and Validation	F. C. Pignatale (Telespazio, Germany)
Ground Validation Site for Airborne Reflectance Measurements in Järvelja, Estonia	L. Hallik (University of Tartu)
KappaMask v2: Going Global	T. Shtym (KappaZeta Ltd.)
Validation of Sediment and Turbidity Products in the Mekong River System	P. Philipson (Br. Consult)
Sentinel-2 Application to Evaluate the Water Quality Status of Pit Lakes in the Po River Basin	N. Ghirardi (CNR – IREA)