

5th Sentinel-2 Validation Team Meeting

11-13 April 2022 | Hybrid Event (@ESA-ESRIN and Virtual)



Time is reported in CET

11th April 2022 – Magellan Room (ESA-ESRIN) + WebEx

Registration and Reception (10:00 – 11:30)

“ESA Introduction” Session

Chairs: V. Boccia (ESA) / F. Gascon (ESA)

11:30 – 11:50	Welcome and Introduction	P. Goryl (ESA)
11:50 – 12:20	Copernicus Sentinel-2 Mission Status	F. Gascon (ESA)
12:20 – 12:40	Copernicus Sentinel-2 Data Quality Overview	V. Boccia (ESA)
12:40 – 13:00	A glimpse into ESA-ESOC and the Copernicus Sentinel-2 spacecraft operations	A. Ferrari (ESA)
13:00 – 13:10	Q&A session	

LUNCH Break (13:10 – 14:30)

“L1 Radiometry Validation” Session

Chairs: J. Barsi (NASA) / D. Rodat (CNES)

14:30 – 14:50	Copernicus Sentinel-2 Level-1 Radiometric Validation Status from the Optical-Mission Performance Cluster	B. Alhammoud (MPC/Argans Ltd)
14:50 – 15:10	Tracking the Radiometric Stability and Calibration of Copernicus Sentinel-2 MSI and Landsat OLI instruments	J. Barsi (NASA)
15:10 – 15:30	Copernicus Sentinel-2 Radiometric and Geometric Validation Activities Performed by CNES	D. Rodat (CNES)

COFFEE Break (15:30 – 16:00)

“L1 Geometry Validation” Session

Chairs: S. Clerc (MPC/ACRI) / C. Quang (MPC/CS)

16:00 – 16:20	Geometric Performance of Copernicus Sentinel-2 Refined products after one year of operation	S. Clerc (MPC/ACRI-ST)
16:20 – 16:40	Introducing Copernicus Sentinel-2 Collection-1	S. Enache (MPC/CS Group)
16:40 – 17:00	Copernicus Sentinel-2 Global Reference Image as Database of Ground Control Points: A New Approach for Satellite Image Geometric Refinement	A. Lombard (MPC/IGN) B. Saulquin (MPC/CS Group)

17:00 – 17:20	<i>Comparisons of the geometric accuracy between Sentinel-2 and Landsat-8: test cases and impact onto the changes detection.</i>	<i>B. Saulquin (MPC/CS Group)</i>
17:20 – 17:40	<u>Evaluation of Copernicus DEM 30 and The Geometric Quality of Sentinel-2 With Different Repeat Orbits Over Norwegian Mountainous Terrain</u>	<i>T. F. Klingenberg (Norwegian Mapping Authority)</i>

END of DAY 1 (17:40)

Ice breaker (17:40 – 18:30)

12th April 2022 – Magellan Room (ESA/ESRIN) + Webex

“L2 Validation” Session

Chairs: J. Louis (MPC/TELESPAZIO) / B. Pflug (MPC/DLR)

10:00 – 10:20	Copernicus Sentinel-2 Level-2 processing: Sen2Cor version 2.10 and L2A processing baseline >=04.00	J. Louis (MPC/Telespazio Fr.)
10:20 – 10:40	Validation of Sentinel-2 Scene Classification Layer processed with Sen2Cor 2.10 Based on Randomly Selected and Visually Labeled Pixels	A. Putri Pertiwi (MPC/DLR)
10:40 – 11:00	Copernicus Sentinel-2 Level-2 processing: Regional distribution of Sen2Cor version 2.8 performance for AOT, WV and SR retrieval over Europe	B. Pflug (MPC/DLR)
11:00 – 11:20	Atmospheric Correction Inter-comparison eXercise (ACIX II – Land): the second implementation of an atmospheric correction assessment for Landsat 8 and Sentinel-2 over land	G. Doxani (SERCO for ESA)

COFFEE Break (11:20 – 11:40)

11:40 – 12:00	Validation of Sentinel-2 Atmospheric Correction Using LibRadtran Emulation and Comparison Against Sen2Cor	J. Vicent (Magellium)
12:00 – 12:20	Analysis of the performances of the LaSRC Land Surface Reflectance Landsat 8,9 And Sentinel 2A, B and Cloud Mask	E. Vermote (NASA/GSFC)
12:20 – 12:40	SIAC Sentinel 2 and Landsat 8 level 2 processing validation results	F. Yin (University College London)
12:40 – 13:00	KappaMask: AI-based Cloud Mask Processor for Sentinel-2	T. Shtym (KappaZeta Ltd.)
13:00 – 13:20	FRM-Based UAV-Mounted Hyperspectral Imaging Measurements for Satellite Surface Reflectance Validation	R. Morrone (NPL - National Physical Laboratory)

LUNCH Break (13:20 – 14:30)

“Downstream Product Validation: Part I” Session

Chairs: E. Vermote (NASA) /G. Doxani (SERCO for ESA)

14:30 – 14:50	The Sen2Like Project: status and way forward	S. Saunier (MPC/Telespazio Fr.)
14:50 – 15:10	Latest validation results for the Sentinel-2 Level 2 Prototype Processor (SL2P) using Copernicus Ground Based Observations for Validation (GBOV) data	L. Brown (University of Southampton)

15:10 – 15:30	<u>Validation of Sentinel 2 Level 2B Vegetation Products from Baseline and Modified SL2P over North American Forests using the LEAF-Toolbox</u>	R. Fernandes (Canada Centre For Remote Sensing, Government Of Canada)
15:30 – 15:50	<u>Upscaling in-situ collection of FAPAR and LAI using S2-MSI to hectometric spatial resolution: a 3D-RTM based approach</u>	C. Lanconelli (European Commission Joint Research Centre)

COFFEE Break (15:50 – 16:20)

“Downstream Product Validation: Part II” Session

Chairs: V. Brando (CNR) /G. Doxani (SERCO for ESA)

16:20 – 16:40	<u>Use European Research Infrastructure networks for validation: the ICOS example</u>	B. Gielen (University Of Antwerp)
16:40 – 17:00	Radiometric Validation of Sentinel-2AB by WATERHYPERNET/PANTHYR Deployments in the North Sea and Adriatic Sea	K. Ruddick (RBINS - Royal Belgian Institute of Natural Sciences)
17:00 – 17:20	Next Generation Hyperspectral Radiometric Validation Networks for Water and Land Surface Reflectance – the HYPERNETS Project	K. Ruddick (RBINS - Royal Belgian Institute of Natural Sciences)
17:20 – 17:40	Validation of Sentinel-2/MSI Water Reflectance Using Automatic Hyperspectral In-Situ Observations in the Turbid Waters of Río de la Plata, Argentina (HYPERNETS Site)	A.I. Dogliotti (Instituto de Astronomía y Física del Espacio)

END of DAY 2 (17:40)

13th April 2022 – Magellan Room (ESA/ESRIN) + Webex

“Downstream Product Validation: Part III” Session

Chairs: K. Ruddick (RBINS) / B. Berthelot (Magellium)

10:00 – 10:20	<u>Continuation of the “Fore-Optics Contamination Experiment (FCX)” to Assess Impact of Optical Contamination of Radiometers During Long-Term Automated Deployments</u>	F. Ortenzio (RBINS - Royal Belgian Institute of Natural Sciences)
10:20 – 10:40	Validation of the Copernicus Marine High-Resolution Coastal Products	D. Van der Zande (RBINS - Royal Belgian Institute of Natural Sciences)
10:40 – 11:00	<u>A New Copernicus Service Component based on Sentinel-2 and Sentinel-1: Pan European High-resolution Snow & Ice Monitoring of the Copernicus Land Monitoring Service (CLMS).</u>	F. Marti (Magellium)
11:00 – 11:20	<u>Improvement on Water and Ice Classification for the Copernicus High Resolution Snow and Ice Monitoring Service</u>	R. Jugier (Magellium)

COFFEE Break (11:20 – 11:50)

“Discussion and wrap-up” Session

Chairs: V. Boccia (ESA) / R.Q. Iannone (Rhea for ESA)

11:50 – 13:00 Discussion All

END of MEETING (13:00)

LUNCH Break (13:00 – 14:30)