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A.08.02 Advances in the theory and methodology of SAR Oceanography: Zone F-G

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F19	Integration of satellite Synthetic Aperture Radar data with numerical models for investigating wind, waves and currents at the lakes surface	1358	1
F20	Temporal Analysis of Ice Tongue-Originated Iceberg in Terra Nova Bay Using Multi-polarization SAR Imagery	3165	1
G01	Enhancing Deep Learning Ship Wake Detection and Feature Identification in SAR Imagery With Meteo-Marine Data Integration	2285	1
G02	Global Detection of Offshore Oil and Gas Platforms Using Sentinel-1 and Sentinel-2 Data to Methane Tracking	3111	1
G03	Oil Spill Monitoring in the North Sea Based on Deep Learning Using SAR Imagery	2732	1

A.09.11 Snow in the cryosphere: improving observations and modelling: Zone C-D

Board	*Title*	*Id*	*Day*
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C30	Modeling microwave emissions of snow at high frequencies: opportunities and challenges for satellite retrievals including frequencies above 100 GHz	5334	1
C31	Advances in hyperspectral remote sensing of snow from space	430	1
C32	Retrieving glacier-specific snow cover and snow line altitudes from optical remote sensing and Google Earth Engine	4283	1
C33	Enhancing Flood Warning Service at Norwegian Water Resources and Energy Directorate (NVE) with Sentinel-3 Fractional Snow Cover Products	4231	1
C34	Advanced long term global snow cover climate data record from satellite data generated within CCI Snow	4235	1
C35	Evaluation of VIIRS Snow Cover Products over Mountainous Areas in Europe Using Sentinel-2	2306	1
C36	From Sentinel 1 to CROCUS: a new data assimilation approach to wet snowline detection and monitoring	3421	1
C37	Sensitivity of L and C-band radiometer measurements to the liquid water content of snow with SMRT	3802	1
C38	Passive Microwave Emissivity Modelling of Global Scale Snow-Covered Areas Using Machine Learning	1191	1
D01	Investigating the Impact of Viewing Geometry on Passive Microwave Snow Mapping	3684	1
D02	Detecting snowfall events over the Arctic using optical and microwave satellite measurements	621	1
D03	Understanding C-band Radar Interactions with Snow in Various Environmental Conditions	694	1
D04	Towards Panarctic Snow Density Retrievals From Passive Microwave Remote Sensing	5138	1
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D06	Assimilation of Snow Tomography Data for Improvement of Snow Microstructure and Macrostructure Simulations	2379	1
D07	Harmonizing Satellite-Based Snow Cover Area Time-Series with Snow Model Input Data	1085	1
D08	A Preliminary Assessment of High-Resolution Remote Sensing Time Series for Constraining Intermediate Complexity Snow Model Simulations in Complex Terrain by Perturbating Energy Inputs	2396	1
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A.10.03 Our solid Earth: from core to surface: Zone I-J

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I34	Background states for Magneto-Coriolis modes in Earth's core	929	1
I35	Magnetic Boundary Layers and Diffusion near the Top of the Core in Non-Slip Geodynamo Models	3228	1
I36	Global simulations of temporal gravity due to mantle flow and their sensitivity to the mantle rheology	2175	1
I37	The inverse problem of electromagnetic induction for the determination of magnetic field at the core-mantle boundary	1425	1
I38	Magnetohydrodynamic Eigenmodes in the Plesio-geostrophic Model	740	1
J01	Insights into River Sedimentation from Satellite Temporal Gravity Field Variations	2152	1
J02	Crust Structure and Thermal Lithosphere Thickness of the South China Sea and Adjacent Areas	3687	1
J03	Using Swarm Satellite Magnetic Field Data to Unlock the Potential of Earthquake Prediction	927	1
J04	Space It Up: an innovative project to uncover LAIC processes	1661	1
J05	Near-Surface Fluids Movement in Porous Rocks, Observed by Satellite from Gravity Change	4713	1
J06	Lower mantle 3-D density structure from joint inversion of satellite gravity data	3308	1
J07	Ground Deformation Analysis over Hydrocarbon Fields with Remote Sensing and Geomechanical Modeling – A Case Study of Karamay Oil Field in China	4473	1
J08	Inventory Deformation Mapping of Hydrocarbon Fields in Nigeria Using InSAR and GIS Techniques	4584	1
J09	Short-term Postseismic Gravity Changes Driven by Nonlinear Rheology	1954	1
J10	A Deep Learning-based Approach for Predicting Seismic Anomalies within Swarm and CSELF Electromagnetic data	2931	1
J11	Advancing Detection of Submarine Volcanism: A Novel Approach Using Remote Sensing and Machine Learning	3166	1
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B.03.08 Earth Observation in support of the energy transition: Zone P-Q

Board	*Title*	*Id*	*Day*
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P42	High-Resolution Altimetry Analysis of Wave Energy Potential Around the British Isles	750	1
P43	Validation of Wave Energy Estimates from High-resolution altimeter data Using Wave Buoy Measurements and ERA5 Data	755	1

P44	Advancing Solar Energy Monitoring With Satellite Imagery: Bridging Earth Observation and the Commercial Sector	4300	1
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Q04	Automated Detection and Analysis of Ground-Mounted Photovoltaic Systems in Germany	3316	1
Q05	Automated Detection of Wind Turbines Across Germany Using High-Resolution Satellite Imagery	3337	1
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B.04.03 Integrating multi-sensor Earth Observation data to improve natural hazard monitoring: Zone T-U

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T35	Advancing UAV-based Natural Hazard Assessment with High-Performance Photogrammetry	3401	1
T36	Super-Resolution for Volcano Monitoring: Enhancing Satellite Image Precision	4444	1
T37	Lava flow monitoring from Synthetic Aperture Radar	3688	1
T38	VOLCPLUME, an interactive web platform for the multiscale monitoring of volcanic emissions and their impacts on the atmosphere	3823	1
T39	Rapid Earthquake Damage Assessment Using SAR and Optical Remote Sensing	1058	1
T40	Remote sensing analysis of forest disturbance and recovery at volcanoes worldwide	3022	1
T41	SAR Interferometry to Detect Badlands Erosion	714	1
T42	Monitoring Landslide Dynamics Using DInSAR and Historical Geotechnical Data in the Pianello Slope, Bovino, Italy.	4692	1
T43	IMAGE CORRELATION WEBSERVICES APPLIED TO OPTICAL AND SAR SATELLITE OBSERVATIONS: USEFULNESS FOR LANDSLIDE MONITORING	3814	1
T44	The life cycle of the 2018 Kakroud landslide in northern Iran: Results from optical and radar remote sensing data	4917	1
U01	Monitoring Mediterranean Wildfires Impact: Burn Severity Assessment in Greece During July and August 2024 Using Sentinel-2 Imagery	2666	1
U02	Cross-sectoral connections in the service of sustainable development: satellite observation in insurance in the context of risk prevention	2769	1
U03	A Framework for Assessing Flood Vulnerability, Adaptation and Disaster Responses Using Remote Sensing	2696	1
U04	Flood Intensity Mapping Based on the SAR images Using Deep Learning in Rice Field	4465	1
U05	Operational Flood Mapping in the Valencia Metropolitan Area (Spain) Using Multi-Sensor Satellite Data Following the October 2024 Cut-Off Low Event.	585	1
U06	Fusion of Cross-band SAR Datasets for Enhanced PS-InSAR Based Land Subsidence Monitoring in the Chiayi Region, Taiwan	1880	1

U07	Estimating the reactivation times and velocities of slow-moving landslides and investigating their potential relations with precipitation in Central Italy	4659	1
U08	Solving Local Challenges with Global Insights: A Comprehensive Spaceborne and In-Situ Analysis of the Klodne Landslide, Poland	600	1
U09	Optimizing GNSS Processing for Integrating InSAR Persistent Scatterer Displacement into the ITRF Using Integrated Geodetic Reference Stations	5128	1
U10	ENSO+IOD and Soil Moisture: Analysing the relationship between atmospheric patterns and East African Soil Moisture from 1988-2022	1267	1
U11	Spatiotemporal Analysis of Vegetation Dynamics in a Complex Post-Mining Landscape	2791	1
U12	Environmental Monitoring of Zinc and Lead Post-Mining Area Using Remotely Sensed Open Data - Case Study of the Hutki Site in Olkusz Region, Poland	3210	1
U13	New perspectives and advancements in satellite-based analyses and characterization of Medicanes	4138	1
U14	Multi-source Monitoring of Harmful Algal Blooms (HABs) in the Northern Arabian Gulf	2677	1

C.03.01 The Sentinel User Preparation Initiative for High-Priority Applications: Zone K

Board	*Title*	*Id*	*Day*
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K14	Multisensor Water Discharge project within the ESA Sentinel User Preparation initiative	2766	1
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K16	Monitoring Landslides with Multiplatform L-Band Radar Techniques	1163	1
K17	Collaborative Development of Arctic information Products Leveraging the CIMR, ROSE-L, and CRISTAL Missions	3951	1
K18	User preparation for novel aquatic applications based on synergistic use of CHIME and LSTM data	1697	1
K19	Estimating Canopy Water Availability From Earth Observation For Supporting Forest And Agriculture Management Practices	1575	1

C.03.05 Copernicus CRISTAL: Operational Monitoring for Cryospheric Science, Hydrology, and Oceanography from Coasts to Polar Seas: Zone E-F

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E13	Monitoring the cryosphere with CRISTAL: Advancing calibration and validation through the CRISTAL IN-PROVA Project	1237	1
E14	CRISTALair waveform generator	2337	1
E15	CRISTALair: A Dual-frequency Airborne Demonstrator for the CRISTAL Altimeter	2235	1
E16	Monitoring Ice Sheet Surface Melt and Snow Grain Growth with the CRISTAL AMR-CR Radiometer	4423	1
E17	Radar altimeter backscatter modeling for reducing uncertainties in sea ice thickness estimation	4593	1
E18	Impact of assimilation sea-ice thickness on the ECMWF system – DANTEX/CRISTAL	2044	1
E19	Geophysical retrievals from CRISTAL over Cryosphere and inland waters	3406	1

E20	Validation and performance assessment of the future CRISTAL mission over inland waters using simulated measurements based on SWOT products	3058	1
F01	Inland Water Extent Measurements for the CRISTAL Mission	1730	1
F02	CRISTAL pre-launch performance assessment: an end-to-end simulation approach	1676	1
F03	In Preparation for CRISTAL Coastal Ocean Processing: Multi-Year Analysis of Interferometric CryoSat-2 Data Around Cuba	1742	1
F04	Optimised Iceberg detection for CRISTAL mission	1356	1

C.03.06 Synergy of visible and infrared measurements for earth surface applications: Zone O

Board	*Title*	*Id*	*Day*
O41	Impact of Temporal Aggregation on High Resolution Evapotranspiration Estimation in Kenya Using Sentinel-2 and Sentinel-3	1439	1
O42	Development of a Monoculture Crop Index Using Remote Sensing and Time-Series Analysis	2836	1
O43	HOW CAN SATELLITE-DERIVED “VEGETATION” PROPERTY MAPS BE COMPARED FROM LOCAL TO CONTINENTAL TO GLOBAL SCALES?	684	1
O44	Detecting and filtering cloud shadow : Impact on SYNERGY products and on data quality	1536	1

C.05.01 PROBA-V and PV-CC: Zone P

Board	*Title*	*Id*	*Day*
P10	Towards a 20+ years harmonised data record of land surface reflectances derived from VGT-1, VGT-2 and Proba-V sensors	2517	1
P11	A consistent cloud masking algorithm for reprocessing 20 years of Proba-V and SPOT-VGT data records	2394	1

C.06.09 CAL/VAL towards future VNIR/SWIR imaging spectroscopy: Zone P

Board	*Title*	*Id*	*Day*
P03	Current and future radiometric calibration and validation of hyperspectral imaging systems at CNES	1090	1
P04	Hyperspectral vicarious calibration with the Eradiate radiative transfer model	1941	1
P05	LANDHYPERNET Data Distribution and Science Results	2121	1
P06	Assessing Changes in the Processing Chains of Sentinel-3/OLCI and PACE/OCI Using Reference Measurements From Fixed Autonomous Hyperspectral Radiometers in Four Italian Sites	4798	1
P07	Verifying the Spectral Performance of the EnMAP Imaging Spectrometer using Earth Datatakes – Data Quality Control Results from 3 Years in Orbit	1836	1

D.01.02 Technological Innovations for a Digital Twin of the Earth system: Zone U-V

Board	*Title*	*Id*	*Day*
U39	DestinE Platform: A Collaborative Ecosystem for Addressing Environmental Challenges through Services and Innovation	3057	1
U40	HIGHWAY – Bridging Earth Observation and Digital Twin Technologies	3199	1
U41	HIGHWAY: Scalable and Reliable Digital Twin Earth Data Processing base on MLOps Approach	4077	1
U42	Data cubes – approaches to exploit parts of DestinE Digital Twin outputs	3866	1
U43	Towards digital twins for flood risk management anywhere on Earth	501	1

U44	Machine-learning emulators of land surface model JULES for a future Digital Twin of Drought in Africa	923	1
V01	Using High Resolution Drone-Derived LiDAR to Construct Digital Twins for Resilience Planning in Small Coastal Communities	5498	1
V02	EDEN: seamless access to the Destination Earth data portfolio	3568	1
V03	Towards Cost-Effective Remote Sensing Models: Quantifying Sub-Domain Difficulty	2512	1
V04	A digital assistant for digital twins of the Earth	2142	1
V05	Augmented Reality Meets Earth Observation (ARmEO)	780	1
V06	Machine learning-based emulation of a forest growth and productivity model	3420	1
V07	Improving the 3D Representation of Plant Architecture and Parameterization Efficiency of Functional-Structural Tree Models using Terrestrial LiDAR Data	1488	1
V08	Scaling-up Frame Field Learning algorithms for building extraction on very high resolution remote sensing images	1279	1

D.03.02 Free Open Source Software for the Geospatial Domain: current status & evolution: Zone S-T

Board	*Title*	*Id*	*Day*
S20	Processing geospatial data at scale in geoscience: taking advantage of open-source tools.	2633	1
S21	Overview of geospatial tools stack through Earth Observation API (eoAPI)	1630	1
S22	Efficient Satellite Data Management: The Role of the STAC Standard and EOmetadatatool in Open-Source Metadata Harmonization for the Geospatial Domain	4620	1
S25	S1Tiling: A Sentinel-1 Preprocessing Tools for Large Analysis Ready Data Time Series	811	1
S26	Supporting Open Science for InSAR Research: An Integrated Toolkit - SARvey, Erudite, and InSAR Explorer	3954	1
T01	xDEM: Unifying Open-Source Softwares for 3D Geospatial Analysis	4770	1
T02	The latest evolutions of the Orfeo ToolBox (OTB)	2120	1
T03	Evolution of the SNAP Open Source Tools Towards a Cloud-based Modular App	4429	1
T04	Leveraging BPMN for Earth Observation Data Provisioning Workflows	4217	1
T05	Uncertainty Quantification for Geospatial Deep Learning applications and the Lightning UQ Box	4066	1
T07	A Dynamic and Platform-Agnostic Standard for Awesome Spectral Indices	1721	1
T08	High Performance Desert Analytics: Characterizing Earth Surface Dynamics in Arid Regions Through ‘terrabyte’ and Multi-Sensor Earth Observation Archives	874	1
T09	On-demand data cubes – knowledge-based, semantic querying of multimodal Earth observation data for mesoscale analyses anywhere on Earth	1103	1
T10	Implementing and utilizing National Copernicus services for hydrology and natural hazard monitoring at NVE using Open Source tools	3442	1
T11	The Earth Observation DataHub - Using Open Source Software to Make EO and Climate Data More Accessible and Usable, Supporting the Creation of New Applications and Open Science	3052	1

D.06.01 Orbital Intelligence for Earth Observation applications: The edge of AI In Space: Zone J-K

Board	*Title*	*Id*	*Day*
J13	Onboard processing for SAR data: AI-driven focusing, detection and compression for Earth monitoring	3234	1

J14	An Intelligent Tasking and Processing Chain for Generating Climate Resilience Insights Onboard	3824	1
J15	The Intuition-1 mission: Explaining and improving on-board hyperspectral image analysis using XAI for Earth observation	2172	1
J16	Verification of Deep Learning Approaches for Remote Sensing - An Evaluation of Possibilities and Challenges	2750	1
J17	Mission Persistence – A Canadian CubeSat for Edge AI	2733	1
J18	ComeOnBoardPSG! – Advancing PRISMA Second Generation With Deep Learning and Onboard Edge Computing	3946	1
J19	End-to-End Onboard Raw Data Processing for Earth Observation Applications	4023	1
J20	Harnessing the Potential of Onboard AI-Driven Coastal Water Monitoring for Near Real-Time Risk Detection with Φsat-2 Mission	3989	1
K01	Proving the feasibility of continuous AI processing on EO spacecraft	2199	1
K02	Big Data, Tiny Downlink: CORSA AI's Fix for Remote Sensing's Double Trouble	4078	1
K03	Explainability for AI Applications in Space	2020	1

D.06.02 HPC and Quantum Computing: Zone K

Board	*Title*	*Id*	*Day*
K07	Making EO Workflows Reproducible and Portable Across Federated High-Performance Computer and Cloud Platforms With Conda	3056	1

E.01.02 Earth Observation in Practise: Linking Public and Commercial Data for Earth Action: Zone Q-R

Board	*Title*	*Id*	*Day*
Q19	Paving the Impact Pathway: Capturing the Benefits of ESA's Early R&D EO Investments	2427	1
Q20	Sat4GAIA: Greek National Satellite Space Project: Axis 3 Land Monitoring Service	1021	1
Q21	Transforming Biomass Estimation for Australia's Carbon Market: Leveraging ESA's Earth Observation data and Machine Learning	2797	1
Q22	The Canadian Space Agency smartEarth Program	5010	1
Q23	A Retrogressive Analysis of High-Resolution Satellite Imagery to Understand Irrigation History and Archaeology in Southern Iraq	4599	1
Q24	Elevating the Performance of Aerial Imagery-based Building Detection with Super-resolution Networks	2734	1
Q25	Enhancing Earth Observation Access for Informed Decision-Making: The EODH Project	4956	1
Q26	IRIDE Marketplace, a cloud-native data platform to manage the ecosystem of IRIDE Satellite Data and Services in a scalable cloud environment	4336	1
R01	Using Earth Observation Data and Deep Learning for Post-Fire Landslide Susceptibility Assessment: The Mt. Mario Case Study (Rome, July 31, 2024)	3019	1
R02	TransparenC Explore Map: An intuitive end-to-end mapping solution	1004	1
R03	Spread the use of SAR in GIS community	5462	1
R04	Availability and use of Copernicus data in the commercial ArcGIS Platform	3456	1

F.02.02 C- and L-band SAR synergies - ESA-JAXA cooperation and beyond: Zone R-S

Board	*Title*	*Id*	*Day*

R17	Advancing Tropical Forest Disturbance Monitoring: Integrating Multi-Source and Multi-Wavelength SAR Data for Improved Detection and Timeliness	464	1
R18	RadWet: A novel approach for mapping inundated vegetation dynamics in grassland and forested wetlands using C-Band and L-Band radar imagery.	2088	1
R19	SMOSAR retrieval of SSM from Sentinel-1 and ALOS-2/PALSAR-2 time series	5011	1
S08	The Impact of ESA-JAXA Cooperation on Wall-to-wall Mapping of Terrestrial Carbon	2030	1
S09	DEM error estimation with independent component analysis applied to time-series InSAR data of Sentinel-1 and ALOS-2 in Miyakejima volcano	2608	1
S10	ALOS-2 PPP DEMONSTRATION PROJECTS STATUS	1309	1
S11	Update of Cal/Val and research activities of the Advanced Land Observing Satellite-2 (ALOS-2)	2812	1
S12	Permafrost thawing in disturbed areas inferred from ALOS series and Sentinel-1 InSAR data	2947	1
S13	Characterization of L and C-band radar backscatter of Arctic sea ice during the melt season	4326	1

F.02.05 Capacity Building and Technology Transfer in Earth Observation: Zone R-S

Board	*Title*	*Id*	*Day*
R24	Large-scale land cover change mapping: a new co-developed service for the Philippines	2169	1
R25	Building Earth Observation (EO) Capacity in the Philippines: Lessons from CopPhil	5294	1
R26	CADEO Project: Empowering Vietnam's Future through Geospatial and Earth Observation Innovation	663	1
S01	Bringing Copernicus Data to Latin America & the Caribbean: Capacity building activities of the CopernicusLAC Centre in Panama	2345	1
S02	Strengthening the Academic Network on Capacity Development for Climate Change Adaptions between Europe and Africa	1762	1
S03	Capacity Building Towards Raised Excellence on Artificial Intelligence and Earth Observation for Disaster Risk Reduction in the Framework of AI-OBSERVER Project	539	1
S04	Bridging GMTSAR and LiCSBAS: A Graphical User Interface for Accessible InSAR Processing	4323	1
S05	Hyperspectral Remote Sensing: A Key Pillar of Earth Observation Cooperation for Capacity Building Among European Space Agencies	4140	1
S06	Romanian Excellence Center in Artificial Intelligence on Earth Observation Data for Agriculture	966	1
S07	IEEE Geoscience and Remote Sensing Society Image Analysis and Data Fusion School on Computer Vision for Earth Observation	775	1

F.04.05 In-land Water Quality and Resources Management: Zone G-H

Board	*Title*	*Id*	*Day*
G29	Atmospheric Correction Assessment of Sentinel-2 MSI Imagery and Chlorophyll-a Monitoring During an Algal Bloom in Lake Balaton	2573	1
G30	Improving the Co-Detection of Water Hyacinth and Traditional Fishing Traps (Acadja) With Remote Sensing in Lake Nokoué, Benin	3808	1
G31	Satellite-based Water Quality Monitoring System for East African Lakes	4633	1
G32	A novel cyanobacteria occurrence index derived from optical water types	549	1
G33	EO based estimates of water transparency to support the monitoring and reporting under EU directives	5412	1

G34	Realignment of MSI derived Chl-a and Turbidity algorithms for the Copernicus Land Monitoring Service Lake Water Quality using coincident OLCI data	1319	1
G35	Towards Improved Transparency in Large Optical Water Quality Processing Chains – Bringing Calimnos to the Community	1322	1
G36	Qualitative and quantitative management of surface water from super-resolved Sentinel-2 images	2222	1
G37	Intercomparison of bio-optical primary production models in freshwater and coastal ecosystems.	2622	1
G38	Benefits from the use of Sentinel in water-related cases: findings from the Sentinel Benefits Study	4271	1
H02	Earth Observation Satellite Imagery and Cloud Computing to Monitor Human Activities Impacts on Water Quality in the Major Hydrological Basins in Ghana	3632	1
H03	Project BIGFE - using remote sensing to evaluate water quality in German water bodies	654	1
H04	Towards highly precise altimetry for inland waters: A 4D approach for range determination in level-1B data	2293	1
H05	High spatial resolution mapping of French water bodies surface temperature through Landsat imagery : toward exploitation of the future TRISHNA and LSTM missions	1232	1
H06	Advancing Inland Water Quality Monitoring through Hyperspectral Earth Observation: Insights from Early Science Applications	5064	1
H07	Towards widespread phytoplankton monitoring in small lakes: a case study comparing satellite imagery from Planet SuperDoves and ESA Sentinel-2	1374	1
H08	Satellite-Based Combined Analysis of Water Bodies and Vegetation Dynamics Under Dry Conditions	4158	1
H09	Long Short-Term Memory (LSTM) models and ESA CCI products for assessing the impacts of wildfires on lake water quality	3035	1
H29	The EcoNet Project: Surface Water Monitoring Through AI Algorithms From Hyperspectral PRISMA and Multispectral Landsat 8 With Ground Sensors Analysis	2526	1
H30	Time series analysis of Earth Observation data for water cycle science, anthropogenic impact and climate change: test cases in Iraq and Italy	2719	1
H31	Development of a Methodological Framework for Hyperspectral Estimation of Water Quality Parameters in Diverse Inland Waters	936	1
H32	Evaluation of the Seasonal and Spatial Lake Level Change Using By multitemporal Satellite and UAV Images in the Burdur Lake (Turkey)	5417	1
H33	A deep learning approach to near real-time water quality monitoring of Dutch water bodies using Sentinel-2 imagery	1861	1

F.05.04 Earth Observation in Governance: Bridging Data and Decision-Making: Zone P-Q

Board	*Title*	*Id*	*Day*
P32	Enhancing Climate Resilience, Water Scarcity Management, and Urban Planning at the local and regional level through the Strategic Integration of Satellite Data: The Role of the Copernicus4regions Initiative	3356	1

P33	Sentinel data for Highways, Forest and Lake Water Management - Transversal Analysis within the Sentinel Benefits Study	4269	1
P34	Copernicus - based monitoring at municipal level of the capacity of urban ecosystems to provide regulating and cultural ecosystem services (the case of Sofia-capital and Ruse-trans-border Euro-region)	5359	1
P35	Beyond damage assessments: Remote sensing and archaeological heritage management	4623	1
Q09	DINAMIS, the French National Facility for Shared Access to Very High Resolution Imagery: Maximizing Benefits for Research Applications and Public Policy Making	3644	1
Q10	NexOS: Data Fusion for Enhanced Decision Making	1771	1
Q11	Precision in Peril: SAR Strategies for Disaster and Emergency Operations	2196	1

24 June (Day-2)

A.01.03 Fourier Transform Spectroscopy for Atmospheric Measurements: Zone A			
Board	*Title*	*Id*	*Day*
A12	The CAREVALAB mission to examine the UTLS by 3-D tomography	2324	2
A13	Stratospheric and upper tropospheric measurements of long-lived tracers and photochemically active species of the nitrogen, chlorine, and bromine families with GLORIA-B	1031	2
A14	Observations of dichloromethane-rich air masses transported from the Asian summer monsoon region across the Pacific, Alaska and Canada	2166	2
A15	New Experimentally Derived Temperature-Dependent Refractive Index of Ice in the Infrared	4479	2
A16	A Versatile Fourier Transform Spectrometer Model for Future Earth Observation Missions	517	2
A17	Independent Performance Validation of the Instrument Simulator Model of CAIRT's End to End Performance Simulator	4178	2
A18	The project CASIA for exploring the synergy between CAIRT and IASI-NG	4522	2
A.01.05 Ozone and its precursors through the Atmosphere: Advances in understanding and methods: Zone A			
Board	*Title*	*id*	*Day*
A20	Development of a Merged CO Climate Data Record from IASI and MOPITT Observations	4117	2
A21	Inter-comparison of tropospheric ozone column data sets from combined nadir and limb satellite observations	3125	2
A22	Observation of chlorine activation by means of TROPOMI measurements of OClO from 2017 – 2025	3518	2
A23	Tropospheric Ozone from CCD and CSA: Data extension and harmonization from TROPOMI to SCIAMACHY	3409	2
A24	Characterization of the TROPOMI UV radiometric calibration for the operational Ozone Profile retrieval algorithm	2392	2
A25	The Antarctic stratospheric nitrogen hole: Southern Hemisphere and Antarctic springtime total nitrogen dioxide and total ozone variability as observed by Sentinel-5p TROPOMI and the stratospheric denitrification process.	1558	2
A26	Tropospheric Ozone Retrieval Using the RAL UV Algorithm: Applications to Geostationary and Polar-Orbiting Satellites with Early Insights from GEMS and TEMPO	3891	2
A27	A Posteriori Fusion of IASI, MIPAS and GOME2 Ozone Profile Products	3422	2
A28	The Unique Contribution to Understanding Antarctic Ozone Hole Dynamics of Infrared Sounder Measurements	4942	2
A29	Initial investigations of altitude-resolved ozone variability for the past 2.5 decades using the novel GOME-type Ozone Profile Essential Climate Variable (GOP-ECV) data record	2793	2
A30	Harmonized Tropospheric Ozone Data Records From Satellites Produced for the Second Tropospheric Ozone Assessment Report: Methodology and Outcomes	3145	2
A.01.08 Planetary Boundary Layer from Space: Zone A			
Board	*Title*	*id*	*Day*
A06	Planetary Boundary Layer Heights From GNSS Radio Occultations	4699	2

A07	Low Tropical Marine Clouds and Their Interactions With Boundary Layer Dynamics Observed From ALADIN/Aeolus and SCAT/HY-2	1919	2
A08	Temperature and humidity profile retrievals from synergistic satellite (MTG-IRS) and ground-based (Microwave Radiometer, SYNOP) observations	2253	2
A09	PBL Height Retrieval and Thermodynamic Characterization and Its Variability from NAST-I During the WH2yMSIE Field Campaign	664	2
A10	Daytime convective development over land: The role of surface forcing	2727	2

A.02.02 Terrestrial and Freshwater Biodiversity: Zone L-M-N

Board	*Title*	*id*	*Day*
L05	Enhancing Biodiversity Assessment with Super-Resolution Techniques: A Sentinel-2-Based Approach for High-Resolution Habitat and Ecosystem Monitoring	4714	2
L06	Automated Habitat Mapping Using High-Resolution Satellite Data in the “Sv. Juraj - Sv. Kajo” and “Osoje” Mining Areas	1878	2
L07	Strategic Framework for Biodiversity Conservation: AI and Open Source Data for Protected Area Prioritization	3325	2
L08	BioBalance: A Comprehensive Indicator to Quantify Anthropogenic Impacts on Biodiversity	1509	2
L09	European Biodiversity Partnership (Biodiversa+) harmonizing trans-national long-term biodiversity monitoring	4829	2
L10	SAR-based solution for Ecosystem Functional Type identification in cloudy regions	5098	2
L11	Assessing spectral-functional diversity relationships though scales in a monoculture experiment	5303	2
L12	Temporal Dynamics in Ecosystem Functional Attributes (EFAs) and Types (EFTs): Approaches and Lessons Learned	2636	2
L13	Bridging Remote Sensing and Ecosystem Dynamics for Nitrogen Deposition: A Digital Twin Perspective	3723	2
L14	Seasonal Patterns of Local and Regional Plant Biodiversity Observed from Hyperspectral Airborne Imagery	2904	2
L15	Mapping Tree Invasions in an Afromontane Ecosystem With Multidecadal Landsat and Sentinel-2 Data	2841	2
L16	Are hyperspectral vegetation indices based on multi-sensor data fusion better than pure multispectral indices in measuring trait-based functional diversity?	3703	2
L17	Environmental plague monitoring : desert locust prediction with artificial intelligence and stochastic model.	1584	2
L18	Remote Sensing-Based Detection of Giant Hogweed: Integrating Machine Learning and Satellite Data	5310	2
L19	Detection and Biclass Differentiation of Landscape Elements using Sentinel-2	1238	2
L20	Assessment of GEDI vegetation structure metrics in African savannas: Towards multi-sensor integration with Copernicus Sentinel data	4165	2
L21	Predicting spatio-temporal patterns of Lantana camara in a savannah ecosystem	1080	2
L22	Satellite Data-Driven Mapping of Tropical Forest-Savanna Transitions on a Global Scale	2717	2

L23	Mobilizing Animal Movement Data to Make Better Maps of Functional Fragmentation in African Savannas	4192	2
L24	From Point Clouds to Habitat Use: Insights into Female Roe Deer Resource-Risk Trade-Off	2405	2
L25	From Pixels to Paths: Animal Path Mapping using UAVs and a Deep Convolutional Neural Network - Insights from the Kruger National Park	1594	2
L26	Characterizing alpine vegetation communities using a multi-scale approach employing UAV and spaceborne Earth Observation	3212	2
M01	The Green(ing) Backbone: Spatiotemporal Vegetation Productivity Trends in the Carpathian Mountains	1766	2
M02	Investigating the Impact of Atmospheric Correction on PLSR-Based Vegetation Trait Retrieval	2659	2
M03	Vegetation disturbance alert from HLS (DIST-ALERT) – applications for all land monitoring	2676	2
M04	A Deep Learning Framework for Large Scale Land Cover Mapping: A Case Study in Ontario, Canada	5093	2
M05	Land Cover Mapping in Conservation Areas: Machine Learning or Deep Learning Image Classification?	5082	2
M06	Back to Black - Harnessing the Spatial Resolution of SDGSAT-1 for Biodiversity Monitoring	2774	2
M07	Species Distribution Modeling with Graph Neural Networks	2202	2
M08	Satellite Images for High-Resolution Species Distribution Models	2545	2
M09	Habitat suitability analysis of Asian elephants in Nepal-India transboundary region using machine learning and geospatial data	2209	2
M10	Canopy Reflectance as a Proxy for Soil Microbial Communities at a Regional Scale	3311	2
M11	Upland Habitat Mapping Using High-resolution Satellite Imagery and Machine Learning	3765	2
M12	Modelling the Role of Multiple Global Change Drivers on Future Range Shifts in a Tropical Biodiversity Hotspot	1546	2
M13	Estimating the Fraction of Green Vegetation Cover of Coastal Dunes Using Very High Resolution Imagery and Sentinel-2 in Southern Spain	4496	2
M14	Semi-supervised object-based classification of coastal dune vegetation covers in the SW Spain using Sentinel-2 imagery	1846	2
M15	Space4Nature: Empowering Nature Recovery With People and Earth Observation Satellite Data	409	2
M16	Satellite Remote Sensing for Riparian Vegetation Health Assessment	1585	2
M17	BIOMONDO - Towards Earth Observation supported monitoring of freshwater biodiversity	756	2
M18	From Space to Land: exploiting satellite-derived water quality variables for climate studies	1066	2
M19	Integration of a multi-sensor analysis for the estimation of water quality in Italian lakes	451	2
M20	Mapping and monitoring of natural and artificial floating materials in aquatic environments using PRISMA data	1233	2
M21	Large scale monitoring of inland freshwater hydrologic parameters to study the functioning of aquatic environments that are being modified by climate change Example of the Garonne River basin	2511	2
M22	Impact of Sentinel-2 light extinction data on lake temperature profile simulations in the 1D hydrodynamic General Lake Model	2287	2
M23	Employing Earth Observation in Habitat Modelling of Freshwater Macrophytes	622	2

M24	A Coupled In-Situ/Remote Sensing Dataset for Macrophyte Research in Small, Temperate Lakes	623	2
M25	Treesure: new data for small woody features monitoring at landscape scale	3915	2
M26	Developing a Data Cube for Biodiversity and Carbon Dynamics Assessment in Estonia with Remote Sensing data	3011	2
N01	Phytoplankton Community Assessment Using Optical Data in the Shallow Eutrophic Lake Võrtsjärv	1927	2
N02	Project From Samples to Satellites – the deployment of hyperspectral satellites for optically complex northern inland waters	5316	2
N03	Mapping 30+ Years of Mangrove Extent in Tanzania Using Historical Paper Maps and Remote Sensing	4350	2
N04	Time series of Sentinel-1 backscatter and coherence reveal shifts in inundation duration and timing in open and vegetated wetlands	4002	2

A.02.05 Peatland: Zone N

Board	*Title*	*id*	*Day*
N23	Integrating Sentinel-1, Sentinel-2, and SMAP Level-4 Soil Moisture Data for Peatland Hydrology Monitoring	4405	2
N24	Integrating Radar and Hyperspectral Data to Assess Ecological, Hydrological and Mechanical Dynamics of a Temperate Peatland.	2514	2
N25	Assessment of Surface Dynamics of Peatlands Using Sentinel-1 and Meteorological Data	3138	2
N26	Integrated indicators for monitoring peatland condition using multitemporal trends.	2472	2
N27	Mapping Global Organic Soils Drainage and Emissions: Leveraging Earth Observation-based Geospatial Data with an Intergovernmental Panel on Climate Change Framework	4728	2
N28	EO data for peatland monitoring: challenges and opportunities from multi-temporal SAR interferometry	3146	2
N29	SAR and InSAR applied to temperate peatlands: new insights on links between remote sensing estimates and ecohydrological parameters	5502	2
N30	Integrating InSAR and machine learning to estimate subsidence in deforested and drained tropical peatlands in Central Kalimantan, Indonesia	1908	2
N31	Automated Identification of Potential Peatland Areas in Closed Forest Canopies Through the Detection of Drainage Ditches: A Case Study in Austria	3549	2
N32	Multi-Source Earth Observation Data for Assessing Hydrological Dynamics in Peatlands	2700	2
N33	Temporal Analysis and Multi-Dimensional Fusion for Advanced Monitoring of Peatland Degradation	633	2
N34	Developing Spectral Indicators for the Monitoring of Re-wetted Peatlands	3353	2
N35	Assessing mire breathing patterns across Mecklenburg-Vorpommern, Germany using a Sentinel-1 SBAS approach	3086	2
N36	Improved Cerrado wetland mapping – seasonal moisture metrics, terrain information and semantic segmentation	4910	2
N37	Four decades of peatland monitoring (1985-2022) in the Baltic Sea region based on extended annual land cover products from a Landsat and Sentinel-2 data cube	4030	2

N38	From the Arctic tundra to temperate peatlands: Improving net ecosystem CO_2 exchange modelling for Irish peatland ecosystems	2667	2
N39	Assessing the Wetness of Peatlands in Sweden Using ALOS-2 L-band Data	4546	2
N40	Close range hyperspectral estimation of northern peatland moisture content across climate zones and trophic levels	857	2
N41	Northern Wetland Classifications and Carbon Cycle Applications: Translating Concepts Into Spatial Data	2881	2
N42	Global Shocks and Disruptions to Scottish Peatlands – Modelling Carbon-Water Interactions and Feedbacks	1899	2
N43	Monitoring Peatland Water Table Depth In Scotland Using Sentinel-1 SAR Data and Machine Learning	2100	2

A.03.04 Model-data interfaces and the carbon cycle: Zone O

Board	*Title*	*id*	*Day*
O01	Capturing Short-Term Dynamics in ASCAT Vegetation Parameters	5372	2
O02	Optimizing Data for a Spatially Explicit Forest Carbon Model for the EU: A Case Study of Finland	2675	2
O03	Towards a multidecadal record of above ground biomass from active and passive microwave observations	1049	2
O04	Quantifying the spatio-temporal heterogeneity around eddy-covariance towers to improve upscaling with remote sensing	2125	2
O05	Constraining vegetation turnover rates in Terrestrial Biosphere Model using L-band backscatter	4662	2
O06	Complementing global-to-local scale terrestrial carbon-water models with Earth Observation	5271	2
O07	Advancing long-term ecosystem assessments by unifying multi-sensor Earth Observation Data with self-supervised Deep Learning	3334	2
O08	A New Operational Global Terrestrial Ecosystem Gross Primary Productivity (GPP) Product: The Quantum Yield (QY) GPP Product.	3751	2
O09	Assessing the impacts of recent European droughts on terrestrial vegetation gross primary productivity (GPP) using the Quantum Yield (QY) GPP Product.	3724	2
O10	Remote Quantification of Soil Organic Carbon: Role of Topography in the Intra-field Distribution	4503	2
O11	Improving the monitoring of vegetation and drought by land surface models through the assimilation of satellite data	2070	2
O12	Verification of Terrestrial Carbon Sinks with the Terrestrial Carbon Community Assimilation System (TCCAS)	5506	2

A.03.06 Exploring ground-based, airborne and satellite observations and concepts for the carbon cycle: Zone O

Board	*Title*	*id*	*Day*
O15	A Novel Observation Operator for Assimilating Microwave Vegetation Optical Depth into Vegetation / Carbon Cycle Models	3990	2
O16	Wetland and anthropogenic emissions methane and carbon dioxide: Results and lessons learned from the MAGIC international campaigns and plans for future deployment in Brazil	5464	2
O17	Upscaling Photosynthetic Function from Leaf to Canopy Level and Across the Seasons	2653	2

O18	An optimized Land Parameter Retrieval Model parametrization for improved vegetation optical depth estimates	1669	2
O19	Impact of cluster configuration of forest inventory plots on representing AGB density within map units	3431	2
O20	3D-Biomass: Biomass Estimation at Different Height Intervals Using Terrestrial LiDAR Scanning Data	3546	2
O21	Measuring biomass in agroforestry systems coupling ground measurements, drone measurements and very high resolution stereo satellite images	4759	2
O22	Mapping and Measuring Methane Release From Boreal Peatlands and Swamps: Testing the Capability of a Ground-Based and Airborne Long-Wave Infrared Hyperspectral Imager	2232	2
O23	CAMAP and MAMAP-2D – Methane and CO2 airborne imaging spectrometers for validation of current and future GHG satellite missions	3402	2
O24	Retrieving long-term colored dissolved organic matter absorption coefficient and dissolved organic carbon concentrations in the Mackenzie River–Beaufort Sea using CMEMS GlobColour merged product	1065	2
O25	Tree level biomass through self-supervised reconstruction of ALS point clouds: Application to monospecific French forests.	1053	2
O26	Enhancing Agroforestry Biomass Estimation Using Multitask Learning and Structural Diversity from GEDI, ALOS PALSAR and Sentinel Data	533	2
O27	Scale influences on plant primary productivity as estimated with satellite-driven light-use efficiency models	2686	2
O28	Using GNSS VOD to Advance the Development of a Sub-Daily SAR Mission for Vegetation Water, Carbon, and Health	3094	2
O29	High-Resolution Gross Primary Productivity Estimation from the Synergy of Sentinel-2 and ERA5	1746	2
O30	Using remotely sensed ecological and climate variables to assess ecosystem productivity for land carbon sequestration studies	1451	2
O31	The Sentinel-3 OLCI and SLSTR Surface Reflectance Product of the Copernicus Land Monitoring Service	1407	2

A.05.01 Using earth observation to assess climate change in cities: Zone C

Board	*Title*	*id*	*Day*
C21	UpGreen: EO-based Urban Green Assessment, Prediction and Vision	2231	2
C22	Predictability of the Summer 2022 Yangtze River Valley Heatwave in Multiple Seasonal Forecast Systems	2955	2
C23	Projection of Precipitation and Temperature in Major Cities in Pakistan Using Multi-Model Ensembles	992	2
C24	Study of Erosion in Oil Extraction Fields Based on Interferometric Techniques - The Case of the Ghawar Oil Field (Saudi Arabia)	3561	2
C25	T4 version of intelligent space-borne data-fusion for Smart Cities governance	3864	2
C26	CLIM4cities: from Citizen Science, Machine Learning and Earth Observation towards Urban Climate Services	4172	2

A.05.05 Tipping points and abrupt change in the Earth system: Zone D			
Board	Title	id	Day
D18	El Niño-driven cascading effects on global ecosystem resilience	2651	2
D19	Investigating Regime Shifts in Atlantic Sargassum	2718	2
D20	Vegetation resilience: What does it mean, how can we measure it, and how can it change? Conceptual simulations with a complex dynamic vegetation model	2544	2

A.05.07 Sea level change from global to coastal scales and causes: Zone H			
Board	Title	id	Day
H20	Sea level variations at the world coastlines over the past two decades from reprocessed satellite altimetry	463	2
H21	20-Year-Long Sea Level Changes Along The World's Coastlines From Satellite Altimetry: The New ESA CCI Dataset Of Coastal Virtual Stations	894	2
H22	Impact of Using FES2022b Tidal Model for Climate Scales	1552	2
H23	Improvements in Estimating Mean Sea Level Trends and Acceleration from Global to Regional Scales	3900	2
H24	Understanding uncertainties in the satellite altimeter measurement of coastal sea level: insights from a round robin analysis.	3693	2
H25	Uncertainty quantification of sea level altimetry data in the coastal ocean	3702	2
H26	A Multiplatform Approach to Explore Sentinel-6 LRM and SAR Measurements at Different Temporal and Spatial Scales	3369	2
H27	Explaining the Global Sea Level Budget Since 1992 From Altimetry, GRACE and Independent Dataset and Models	4436	2
H28	Assessment of deep-ocean warming based on sea-level and energy budget	683	2
H29	How is the global and regional sea level budget closed from the latest observations?	1245	2
H30	Open-Ocean Contribution to Sea-Level Variations over the Norwegian Continental Shelf	3297	2

A.06.01 Geospace dynamics: modelling, coupling and Space Weather: Zone A-B			
Board	Title	id	Day
A36	Towards a physically constrained empirical model of climatological variations of ionospheric F-region magnetic field and electric currents	5759	2
A37	Ionospheric Slab-Thickness modelling for Space Weather monitoring	2495	2
A38	New release of the forecasting service SODA	2063	2
B01	AGATA (Antarctic Geospace and ATmosphere reseArch): the new SCAR Scientific Research Programme and its mentoring activities	4419	2
B02	Cosmic ray measurements and solar modulation with HEPD-01 on board CSES-01	4106	2
B03	Unexpected Field-Aligned Structure in Equatorial Plasma Bubbles	2862	2
B04	Escape of ions from Earth under different magnetospheric conditions	1176	2
B05	Ionospheric Occurrence of Pc1/EMIC Waves relative to the Ionospheric Footprint of the Plasmapause	3259	2
B06	Conjugate Processes in the Magnetosphere and the Subauroral Ionosphere	3284	2
B07	SPACE IT UP Project (Spoke 6): Aeronomic Parameters Retrieved at Middle Latitudes With the THERION Method for Space Weather Studies	2318	2

B08	Investigating Mid-Latitude Ionospheric Disturbances at the Ionospheric Observatory of Rome During Solar Minima	2336	2
B09	Short-term (1-24) hour foF2 and MUF(3000) prediction and the state of the thermosphere over Europe during the great geomagnetic storm in May 2024	2349	2
B10	On the synergies between ground-based VLF/LF measurements and SWARM data: application to the study of seismic precursors	4554	2
B11	Swarm – SMOS synergies for Space Weather events monitoring	2103	2

A.06.02 Enhancing Space Weather Understanding: Insights from LEO Satellite-Based Operational and Pre-Operational Products: Zone B

Board	*Title*	*id*	*Day*
B13	Swarm as Space Weather mission: L1 and L2 Fast data processing	2049	2
B14	Dynamical Complexity in Swarm-derived Storm and Substorm Indices Using Information Theory: Implications for Interhemispheric Asymmetry	3223	2
B15	Comparative analysis of socioeconomic impacts of space weather: High vs. Mid-latitude vulnerabilities and mitigation strategies	5346	2
B16	The 10-11 May 2024 Geomagnetic Storm in the light of Swarm Observations	3330	2

A.07.07 Advancements in Observation of Physical Snow Parameters: Zone E

Board	*Title*	*id*	*Day*
E11	Machine learning based GNSS-IR retrieval in complex terrain: Initial results for snow heights in Switzerland	2856	2
E12	A New Method for Assimilating Satellite Snow Extent Data in NWP	1100	2
E13	Improving Snow Water Equivalent retrievals and our understanding of terrestrial snow mass in the ESA CCI+ Snow project	2006	2
E14	Radar measurements using WBSCAT for supporting multi-frequency snow water equivalent retrieval and GEO- and LEO SAR development	3092	2
E15	An Innovative Concept of High Spatial Resolution Measurements of Snow Depth and Snow Density from Optical Remote Sensing	2695	2
E16	An intercomparison exercise of Snow Cover Area maps from high-resolution Earth Observation over the Alps	1664	2
E17	30-years (1991-2021) Snow Water Equivalent Dataset in the Po River District, Italy through EO images, in-situ data and physical modeling	1794	2

A.07.08 Global and regional water cycle in the integrated human-Earth system, estimation of hydrological variables and hyper-resolution modelling: Zone J-K

Board	*Title*	*id*	*Day*
J11	Assessment of future EO mission needs for the study of the water cycle	5287	2
J12	Low-Rank Matrix Completion for Denoising, Gap-Filling, and Temporal Extension of Hydro-Variable Time Series.	4255	2
J13	Seasonal Analysis of Precipitation Partitioning Using a Storage-Adjusted Budyko Framework.	5381	2
J14	Upgrading of water resources assessment including green water quantification evaluated thanks to Earth Observation	823	2
J15	Precipitation rate estimation from SWOT: a pixel-wise data-driven approach using random forest with boosting	4304	2

J16	Digital Twin Earth Hydrology precipitation: overcoming single products limitations	3745	2
J17	Using high-resolution precipitation product for characterizing and modeling flow behavior in karst environments	940	2
J18	Observation-Based Evaluation of Anthropogenic Land- and Water-Use Scenarios in Regional Water Budgets over Europe	3944	2
J19	The new HydroSHEDS v2.0 database derived from the TanDEM-X DEM	4148	2
J20	Altimeter DREAMing in River Basins - Focus on Africa	610	2
K01	Improving River Network Accuracy Using Graph Neural Networks and Multi-Sensor Remote Sensing Data	3943	2
K02	The Interplay between Earth Observation and the GEWEX Regional Hydroclimate Projects	781	2
K03	Towards an updated ESA Earth System Model: Showcasing the Improvements in the Hydrological Model of LISFLOOD on the Example of Central Asia around Lake Issyk-Kul	1876	2
K04	Development of a high resolution European Drought Monitor	5382	2
K05	Terrestrial water and energy flux dynamics: HOLAPS framework insights during extreme heat events	3357	2
K06	Evaluating Water and Energy Fluxes Using ECOSTRESS LST Imagery: Validation Against the ICOS' Warm Winter 2020 Database	1501	2
K07	Empirical Orthogonal Function (EOF) Analysis of Water Vapor Data from GPS and MODIS	2559	2
K08	RainGNSS: an In-Situ Network for Altimetry, Water Vapor and Precipitation Validation of Satellite-Based Observations.	1569	2
K09	A New Upper Tropospheric Humidity Dataset Based on Passive Microwave Sounders	3713	2
K10	Is It Possible to Translate Sentinel-1 Images to Field-Scale ET Product Using Transformers Trained With EEFlux data?	4572	2
K11	Exploring the potential of sub-daily microwave remote sensing observations for estimating evaporation	1235	2
K12	The LSA SAF evapotranspiration and surface energy fluxes in drought monitoring across the field of view of the Meteosat Second Generation satellite	1508	2
K13	Assessing uncertainty in WaPOR global evapotranspiration data: Insights from using triple collocation and in-situ measurements	3755	2
K14	Surface Temperature and Soil Moisture Estimates Across Cropland and Agroforestry: UAV-borne Imagery and Ground Sensors Synergy	2442	2
K15	Satellite canopy water content from Sentinel-2, Landsat-8 and MODIS	3179	2
K16	The use of EO-derived irrigation maps to assess irrigation impacts on water availability of the Rhine basin	4608	2
K17	Sensitivity of Sentinel-1 σ0 backscattering to crop phenology and row orientation in irrigated fields	3477	2
K18	Ensemble irrigation modeling with AquaCrop v7.2 in NASA's Land Information System, verified using in situ and satellite observations	3340	2
K19	Satellite-based optical characterization of a RAMSAR lagoon in Argentina	3689	2

A.08.01 Advances in Swath Altimetry: Zone G-H

Board	*Title*	*id*	*Day*

G20	New Insights into Cryosphere Applications of the Surface Water and Ocean Topography (SWOT) Mission	1419	2
G21	Exploring the Capabilities of SWOT KaRIn for Monitoring Lake Ice and Snow Depth	787	2
G22	Monitoring the Arctic Ocean with SWOT - A comparison with conventional altimeter measurements in the ice-covered ocean	1141	2
G23	Examining ice breakup on Arctic rivers using SWOT's high-resolution altimetry	3078	2
G24	Kilometer and Sub-kilometer Scale Precipitation Observations by the SWOT Ka-band Radar Interferometer: Detection and Precipitation Rate Retrieval Using Artificial Intelligence Approaches.	815	2
G25	Is Ultrawide-Swath Precise 2D Altimetry Possible using Multiple GNSS-R Satellites in Flight Formation?	4812	2
G26	Sentinel-3 Next Generation Topography Mission Performance and Uncertainty Assessment (S3NGT-MPUA)	1385	2
G27	Calibration of the SWOT systematic errors: current performances and limitations.	3049	2
G28	SWOT Lake Processing and Products	3611	2
G29	On the assessment of swath altimetry spectral requirements: lessons learned from the SWOT Cal/Val phase	3071	2
G30	SWOT-KaRIn Level-3 and Level-4 Algorithms and Products Overview	2227	2
G31	SWOT KaRIN Level-3 Calibration Algorithm and Updates	2348	2
G32	An enhanced Mean Sea Surface model developed by combining SWOT KaRIn and nadir altimetry data	1467	2
G33	Global assessment of SWOT performance at the small scale via synergy with surface chlorophyll observations	3579	2
G34	Desaliasing of tides and tidal currents using wide-swath altimetry	2109	2
G35	A CNN-Based Approach for Improving SWOT-Derived Sea Level Observations Using Drifter Velocities	4371	2
G36	Assessing SWOT satellite performance against tide gauge observations in the Western Mediterranean Sea	3987	2
G37	A Variational method for reconstructing and separating Balanced Motions and Internal Tide from wide-swath Altimetric Sea Surface Height Observations	1157	2
G38	Using SWOT Data to Assess the Impact of Ocean Tides and Sea Level Change on Upstream Rivers and Estuaries	5087	2
H01	Performance of the Surface Water and Ocean Topography (SWOT) Mission for Monitoring Small Lakes in West Africa	970	2
H02	A new chapter in satellite altimetry: monitoring small lakes and coastal zones with SWOT HR PIXC data	1828	2
H03	Combining S6 FFSAR and SWOT Data to Achieve Near Ground-Accurate Water Extent and Level Measurements for Terrestrial Water Storage Targets From Spaceborne Measurements	1334	2
H04	Development of an integrated method to validate SWATH altimetry over inland water: A new approach from SWOT Cal/Val first results	2289	2

H05	SWOT hydraulic visibility on a densely instrumented reach of the Rhine canal: accurate flow lines and wave propagation signature	2500	2
H06	Imaging and altimetric multi-mission synergy, including SWOT, Sentinel 6, Sentinel2, for reservoir monitoring: applications to the Grand lacs de Seine reservoirs (France)	2504	2
H07	Flood event analysis based on SWOT PICX products: case of May 2024 Sarre (Northeast France) and October 2024 Valencia Province (Spain) floods events	2503	2
H08	First Quality Data Assessment of SWOT Products Over the Gironde Estuary	2471	2
H09	SWOT's contribution to the study of coastal ocean circulation, and more specifically the North Current (NW Mediterranean Sea)	3313	2
H10	Ocean tides at the interface of inland and coastal waters from wide-swath satellite altimetry	1204	2
H11	Long swells and extreme storms: SWOT level 3 wave spectra for the calibration of climate extremes	4594	2
H12	Toward Comprehensive Understanding of Air-Sea Interactions Under Tropical Cyclones: On the Importance of High Resolution 2D Sea Surface Height measurements	3258	2
H13	The spatial organization of Sargassum aggregations by ocean frontal dynamics : insights from SWOT data	3361	2

A.08.03 Ocean Salinity: Zone H

Board	*Title*	*id*	*Day*
H33	Advancing the Understanding of Salinity Dynamics in the Baltic Sea Through Integrated Satellite, In Situ, and Numerical Modeling Approaches	2143	2
H34	Mechanisms of tropical sea surface salinity variations at seasonal timescales	3470	2
H35	New regional SSS fields developped at CATDS CEC-OS	1312	2
H36	Towards Physically Consistent Copernicus Imaging Microwave Radiometer Level 2 Products for the Global Ocean and Atmosphere	2838	2
H37	Observing Mesoscale Ocean Surface Salinity From Space: A New Instrument Concept	596	2

A.08.07 Ocean Health including marine and coastal biodiversity: Zone I

Board	*Title*	*id*	*Day*
I01	High Sensitivity Fluorescence Sensor For The Detection Of Dissolved Organic Matter In Coastal Environments	5205	2
I02	Evaluation of PRISMA Water Reflectance for the Validation of Biogeochemical Models	4198	2
I03	Advancing Oceanic Primary Production Estimates: Integrating Satellite Data, Vertical Dynamics, and BGC-Argo Observation	2187	2
I04	Leveraging Earth Observation for Phytoplankton Biodiversity Monitoring: The Role of Sentinel-3 OLCI in Supporting MSFD PH1 Indicator and Regional Reporting	3945	2
I05	Phytoplankton biodiversity from spaceborne radiometry in coastal regions	3139	2
I06	Biogeography of Arctic phytoplankton groups revealed from 20+ years of pigment data	3661	2
I07	Insights of the variability of optically active constituents and phytoplankton dynamic in the Northwestern Iberian Peninsula using ocean colour inversion model	919	2
I08	Spatio-Temporal dynamics of phytoplankton in the Ross Sea (Antarctica)	4284	2

I09	Identifying Phytoplankton Groups From Absorption Spectra – A Regional Approach Based on Data From the Baltic Sea and Estonian Lakes	1786	2
I10	Mapping the Areal Extent of Perennial Brown Macroalgae Dominated Habitats in Low Transparency Baltic Sea Waters With Sentinel-2 Satellite	3197	2
I11	Relationships Between Shelf-sea Fronts and Biodiversity Revealed Using Earth Observation Data Improve Planning of Offshore Renewable Developments	1632	2
I12	From pigment prediction to phytoplankton functional type trends with explainable machine-learning	4882	2
I13	A first national seagrass map for Venezuela	2411	2
I14	Blending PlanetScope and Sentinel-2 satellites to assess subtidal seagrass meadows threatened by water quality	960	2
I15	REWRITE project - Rewilding and Restoration of Intertidal Sediment Ecosystems for Carbon Sequestration, Climate Adaptation and Biodiversity Support	3850	2
I16	Analyzing Satellite Scaling Bias Using Drone Data: Application to Microphytobenthos Studies	4063	2
I17	Impact of Marine and Atmospheric Heatwaves on Intertidal Seagrass: Experimental Spectroradiometry and Satellite-Based Insights	2599	2
I18	Information content analysis of hyperspectral data for identification of microalgae and cyanobacteria species: from laboratory experiments to PRISMA and EnMAP satellite applications for super blooms monitoring	4548	2
I19	Integrated Methodology for Forecasting Sargassum Strandings	1335	2
I20	Using Satellite Data to Assess Sensitive Habitats and the Pressures They Face	4276	2
I21	New ocean color algorithms for estimating the surface concentrations of particulate organic nitrogen and phosphorus from satellite observations	1275	2
I22	Advancing Harmful Algal Bloom Monitoring for Sustainable Aquaculture Using Earth Observation	1912	2
I23	The CNES Ocean program: New sensors and future missions to monitor the ocean Health	2983	2
I24	Unveiling Suspended Particulate Matter Dynamics and Environmental Drivers in European Coastal Waters Using Machine Learning and Satellite Data	3447	2
I25	Trialing Real-Time Global Marine Litter Monitoring With Edge-SpAIce Project	2360	2
I26	Advancing Cloud Masking for Marine Pollution Detection	4107	2
I27	Estimating uncertainty while detecting marine litter from Sentinel-2 imagery	3172	2
I28	iMERMAID Project: Integrating Satellite and In-Situ Data for Water Pollution Identification in the Mediterranean Basin	1341	2
I29	Offshore Environmental Light Pollution in the UK Exclusive Economic Zone	744	2
I30	Combining open-access SAR and multispectral images with contextual environmental information to improve oil-spill detection in the Persian/Arabian Gulf	2671	2
I31	Evaluating topographic characteristics and population density in an Antarctic penguin colony using UAV-driven deep learning models	5368	2
I32	Modeling and Numerical Simulation of Ocean Circulation and Its Impact on Fisheries Resources: A Case Study of Northern Morocco	398	2
I33	Remote Sensing of the German North Sea Coast: A Review	2167	2

I34	SAMSelect: An Automated Spectral Index Search for Marine Applications for Multi-Spectral Satellite Images	883	2
I35	Validation of Marine Debris Modelling Using Monitoring of Surfactants in the Black Sea Using Radar Remote Sensing	2110	2

A.08.12 Advances and applications of sea surface temperature and the Group for High Resolution Sea Surface Temperature: Zone J

Board	*Title*	*id*	*Day*
J01	SST and Combined SST/IST Products Overview: The Danish Meteorological Institute's Contribution to Copernicus Marine and Climate Change Services	1872	2
J02	TRUSTED: In situ FRM Data for SST & IST	2370	2
J03	A 45-Year Sea Surface Temperature Climate Data Record From the ESA Climate Change Initiative	2628	2
J04	Preliminary Assessment of the Copernicus Imaging Microwave Radiometer (CIMR) Impact on Mediterranean Sea Surface Temperature L4 Analyses	2802	2
J05	Exploring new cloud detection algorithms for remote sensing SST observations using a data-driven approach and the multifractal theory of turbulence.	4286	2
J06	Comparing Super-Resolution Techniques for High-Resolution SST Reconstruction in the Tropic Oceans	4846	2
J07	Evaluation of NOAA ACSPO SST Products against Independent Saildrone Data	5029	2
J08	Bias Correction Methods for L4 Satellite Sea Surface Temperature Analyses	5166	2

A.09.01 The mountain cryosphere in peril – improved monitoring of snow and ice in complex terrain to address societal challenges in the face of climate change: Zone E-F

Board	*Title*	*id*	*Day*
E18	Testing the Retrieval Capabilities of Hyperspectral and Multispectral Sensors for Snow Cover Fraction (SCF)	2074	2
E19	Assimilation of Satellite Retrieved Snow Depth (SD) and Snow Water Equivalent (SWE) Into a Snow Model	771	2
E20	Data assimilation of sparse snow depth observation with optimized spatial transfer of information	5077	2
F01	Trends in the annual snow melt-out day over the French Alps and the Pyrenees from 38 years of high resolution satellite data (1986–2023).	1986	2
F02	Towards the development of a hybrid satellite product for snowline and meltline estimation at the scale of mountain massifs	3597	2
F03	A Snow Reanalysis for the Central and Southern European Mountains Based on ESA-CCI Products	4709	2
F04	Detection of Fresh Supraglacial Deposits Through Change Detection Analyses on Sentinel-2 Multispectral Data and Sentinel-1 Polarimetric Information	1316	2
F05	InSAR-based movement rate estimation and classification of rock glaciers in the Austrian Alps	1003	2
F06	Remote sensing based early detection approaches for Glacial Lake Outburst Floods susceptibility: A case study of the 2024 Thyanbo Glacial Lake Outburst Flood near Thame (Nepal) using Persistent Scatterer Interferometry with Sentinel-1 imagery	3924	2

F07	Designing a permafrost & climate change response system in Longyearbyen, Svalbard	3174	2
F08	Quantifying Uncertainty in Supraglacial Lake Depth Modeling from Optical Remote Sensing Data: Insights from Greenland	2454	2
F09	Seven decades of change in the debris-covered Belvedere Glacier (Western Italian Alps)	3036	2

A.09.04 Glaciers - the other pole: Zone F-G

Board	*Title*	*id*	*Day*
F13	Estimating Frontal Ablation at High Temporal Resolution in Svalbard With Sentinel-1 SAR Imagery and a Deep Learning Model	3621	2
F14	Towards the Regional Snowline Estimates at Sub-Seasonal Scale in Central Asia	5213	2
F15	Unlocking the Potential of Airborne Hyperspectral Thermal Infrared Remote Sensing for Monitoring Debris-Covered Glacier Dynamics	2592	2
F16	Climatic and morphological factors controlling the development of glacial lakes in High Mountain Asia	2853	2
F17	Coupling the MODIS and LANDSAT products to investigate the land surface temperature trends in High Mountain Asia	2863	2
F18	Measure Glacier Elevation Change in Karakoram using TanDEM-X InSAR Data	4223	2
F19	Remote Sensing Data Downscaling for High Mountain Glaciers	2155	2
F20	Long-term albedo glaciers variations in Pakistan: a focus on the Hushe Basin	2095	2
G01	Recent modification of Miage Glacier: using EO to monitor the evolution of the Alpine glaciers in the context of Climate Change	3005	2
G02	Drivers of Proglacial Lake Colour in Iceland	4203	2
G03	Recent changes at Jostedalsbreen ice cap revealed by repeat UAV and satellite data	452	2
G04	Combining Fully Focused and Swath Processing for Glacier Applications	2305	2
G05	Comparing Glacier Surface Velocity Methods with Satellite and UAV Imagery - the Example of Austerdalsbreen	1459	2
G06	Glacier mapping using Deep Neural networks in the Tropical Andes	3159	2
G07	Mapping annual summer glacier fronts and a proxy metric of calving intensities with Sentinel-1 Extra Wide Swath mode.	3959	2

A.10.01 EO for Mineralogy Geology and Geomorphology: Zone P

Board	*Title*	*id*	*Day*
P24	Pattern-based Sinkhole Detection In Kazakhstan From Sentinel-1 And -2 Data	446	2
P25	Geospatial Artificial Intelligence Analysis for Tailings Storage Facilities based on Satellite Earth Observation	5392	2
P26	The Role of Copernicus Data and Copernicus Contributing Missions to Raw Materials Mining Life Cycle: Outcomes From S34I	1924	2
P27	Advancing Mineral Identification Through Image Super Resolution (SIR) Methods: A Case Study in Kosovo	3595	2
P28	Unlocking Hidden Treasures from Above by Hyperspectral Imaging across Scales– Impact of Increased Spatial Resolution on Mineral Mapping Accuracy –	2350	2
P29	Fusing EnMAP and Sentinel for resolution enhanced geological mapping	2025	2

P30	Unravelling the Evolution of Alluvial Fans in the Northern Sultanate of Oman: Applications of Remote Sensing and Deep Learning	2069	2
P31	Detailed Geological Mapping of the State of Qatar at Various Mapping Scales by Combining Multi-Spectral Sentinel-2 Imagery with Very High Spatial Resolution Pleiades Imagery	3450	2

B.01.02 Earth Observation accelerating Impact in International Development Assistance and Finance: Zone V

Board	*Title*	*id*	*Day*
V01	Leveraging EO uptake through GDA FFF	1317	2
V02	Upscaling the water use efficiency analyses - GDA Agriculture pilot case Indonesia	1795	2
V03	EO-Driven Solutions for Energy Access in International Development: Bridging Gaps with ESA's GDA Clean Energy Activity	4164	2
V04	Urban Sustainability Index: Leveraging Earth Observation to Benchmark Environmental Performance at the City-Level Worldwide	5399	2
V05	Supporting fragility analyses with generative AI: the GEN4GEO approach to geospatial data exploration in natural language	2806	2
V06	Revolutionizing Country Performance Assessment: Integrating EO/OSINT Data in a Machine Learning Model for fragility assessment	4904	2
V07	Democratizing High-Resolution Earth Observation: Multi-Image Super-Resolution for Development Applications in Urban Asia	1595	2
V08	Building a Worldwide Coastal Monitoring Capability: EO-derived shoreline data for international collaboration against coastal erosion.	3710	2
V09	Graph-Based Machine Learning Models and Earth Observation Data for Social Good	1298	2
V10	How Consistent Are Existing Earth Observation-Based Poverty Prediction Models in Sub-Saharan Africa?	3371	2
V11	Impact evaluation of irrigation schemes in Africa using Earth observation data	5214	2
V12	Analyzing Gender Dynamics for Monitoring of Artisanal Mining Activities Using Remote Sensing in Ghana's Ashanti Region	4991	2
V13	EO data facilitates the global solar energy transition through scaling up solution and collaboration	4686	2
V14	The MAPME Initiative - A Cross-Institutional Community for Reproducible Geospatial Data Analysis	2976	2
V15	Evaluating the Environmental Impact of Sand Dams in Semi-Arid Regions Using Multi-Scale Earth Observation Data	1426	2
V16	Ol' Man River - development and growth by decreasing negative impacts	4320	2
V17	Zoom In – A Cascading Solar Potential Approach	4499	2
V18	Transforming Forest Monitoring for Climate Finance and Carbon Conservation in Coffee Landscapes	5118	2
V19	Earth Observation-Driven Parametric Flood Insurance for Enhancing Climate Resilience	2291	2
V20	Geospatial AI integrated with Space-based measurements to Model Future Wind Energy Potential	617	2
V21	Wastewater Treatment Plant Impact Assessment Based on Earth Observation Data in the Panama Bay	2162	2

V22	EO supporting strategic planning of industrial-scale biogas and bio-methane production	774	2
V23	Monitoring Carbon Stocks Using Satellite Data: Global and Local Approaches	3446	2
V24	GPI – Grassland Production Index	5525	2
V26	Harvesting Earth Observation for Belize: Transforming Financial Strategies for Climate-Resilient Agriculture.	1566	2

B.03.06 Climate, Environment, and Human Health: Zone C-D

Board	*Title*	*id*	*Day*
C30	AIR4health: Leveraging Earth Observation for Compound Climate and Air Quality Extremes Early Warning	4120	2
C31	Using satellite observations to improve air quality through policy relevant research	5172	2
C32	Remote Sensing of Mental Health: the Effects of Heat Stress on Mental Health in Switzerland	1889	2
C33	Spatial and temporal detection of gold panning sites by remote sensinG	2731	2
C34	High-Resolution Spatio-Temporal Mapping of Air Temperature and Humidity in Padua (Italy) Using Satellite Data and Geographically-Temporally Weighted Regression	5065	2
C35	Rising Sea Surface Temperatures and Marine Heatwaves in the Adriatic Sea: Implications for Mussel Aquaculture along the Abruzzo Coast, Central Italy	3216	2
C36	Synergy of extreme weather and socio-economic factors in improved understanding and prediction of water associated diseases in India: A machine learning and Bayesian statistics approach	1393	2
C37	Vibrio-phytoplankton relationships in Vembanad Lake and their potential use in Earth observation	1399	2
C38	Role of invasive macrophytes in enhancing the antimicrobial resistant pathogenic load in Vembanad Lake, Kerala, India	1400	2
D01	Investigating Vectors of Water-Associated Diseases Linked to Water Hyacinth in Vembanad Lake	1401	2
D02	Earth observation measurements and spatio-temporal deep learning modelling to predict infectious disease outbreaks in South Asia case study from 2000 to 2017.	958	2
D03	Advancing Health Impact Assessment with Air Quality Data from IoT/Low-Cost Sensors	3122	2
D04	From data to action: a machine learning model to support tick-borne encephalitis surveillance and prevention in Europe	3801	2
D05	The Zanzemap Project: Artificial Intelligence Models and Satellite Data to Forecast Vector Dynamics in Northern Italy	558	2
D06	Spatial Modelling of Mosquito Breeding Sites to Improve Larval Source Management	2603	2
D07	Understanding Leptospirosis in Rio Grande do Sul, Brazil: Climatic and Sociodemographic Insights	4330	2
D08	Analyzing Cholera Outbreaks: Dynamics, Risks, and Response Measures	2749	2
D09	Does Industrial pollution Drive Antimicrobial Resistance-Results from A Metagenomic study in Asia's largest Pharmaceutical Hub	2752	2
D10	From Contamination to Clarity: An Assessment of Water Quality and Public Health Risks in Lake Vembanad, India	2825	2

D11	ENgaging Researchers and coastal population In Communicating ocean's role on human Health (ENRICH)	5328	2
D12	Shoreline Dynamics and trends along the kerala coast, India: Observations from multi-temporal satellite data	5332	2
D13	Advanced ecosystem restoration: Blending phytoremediation with satellite-based and non-imaging-based remote sensing in the Himalayas of PIN Valley National Park, India	5445	2
D14	Operational surveillance of environmental factors associated with Dengue transmission at country level in Argentina: Can a few parameters alerts about dengue outbreaks?	5492	2
B.04.01 Satellite based terrain motion mapping for better understanding geohazards.: Zone P-Q			
Board	*Title*	*id*	*Day*
P33	Landslides detection through remote sensing and ground truth investigations in Cyprus.	3302	2
P34	PSI and SBAS Based InSAR Processing of Sentinel-1 Time Series for Assessing Surface Velocity Patterns and Precursor Land Subsidence due to Collapse of Underground Cavities in the State of Qatar	3441	2
P35	RAINFALL, ANTHROPOGENIC ACTIVITY OR THE CHAMOLI FLOOD? WHAT TRIGGERED THE REACTIVATION OF THE JOSHIMATH SLOPE (UTTARAKHAND, INDIA): INSIGHTS FROM MULTI-SENSOR SATELLITE OBSERVATIONS	3838	2
P36	Satellite and terrestrial L-band radar interferometry in Alpine environment: insights from slope instabilities in Val Canaria (Switzerland)	3511	2
P37	Understanding the Complexity of Large Alpine Slope Instabilities at Mt. Mater (Valle Spluga, Italy) Using Multiplatform and Multifrequency InSAR	2601	2
P38	Identifying Triggered/Accelerated Deformation Areas from Early 2023 Extreme Weather Events in Auckland (NZ) using InSAR Advanced Analytics	1148	2
P39	Earth Observation for Subsurface Risk Mitigation: InSAR Diagnostics of Wellbore Failures in the Permian Basin.	4467	2
P40	Detecting Sinkholes and Land Surface Movements in Post-Mining Regions Utilizing Multi-Source Remote Sensing Data	1104	2
P41	Application of L-band SAOCOM-1 satellite data for sinkhole formation research	2716	2
P42	Enhancing DESFA Pipeline Infrastructure Monitoring Through Advanced EO-based Geodetic Imaging	2758	2
P43	Monitoring Linear Infrastructure in Sweden Using InSAR Techniques	1989	2
P44	Decade-Long Ground Deformation Analysis from Urban Expansion to Geological Influences Using Sentinel-1 PSI in Cluj-Napoca, Romania	3892	2
Q01	Monitoring of flood protection systems with InSAR in Austria	5476	2
Q02	Validation of ICEYE PS-InSAR Using Induced Nonlinear Deformation of Corner Reflectors	3522	2
Q03	Open-Access Global Ground Deformation Dataset for Tectonic High-Strain Zones Based on Sentinel-1 Interferometry	2689	2
Q04	Enhanced Atmospheric Correction of InSAR Data Using Variable Tropospheric Layer Heights and Multi-Source Global Ionospheric Maps	3700	2
Q05	Identifying Deformation Onset Timing at Socompa Volcano, Chile, Using Breakpoints in INSAR Time Series	4062	2

Q06	VHR SAR Particle Image Velocimetry Analysis for Lava Effusion Rate Estimates at Kadovar Volcano, Papua New Guinea	2272	2
Q07	On the importance of large-scale, continually updated InSAR datasets for geohazard monitoring and mitigation	1261	2
Q08	Hypothesis Testing on a Continental Scale: GPU Based Time Series Classification	4390	2
Q09	Ground Deformation Detection and Risk Information Service for Slovenia	4359	2
Q10	InSAR.Hungary: the Hungarian InSAR Ground Motion Service and Application	4100	2
Q11	InSAR for Geotechnical Analysis, Applications and Geohazards	4890	2
Q12	The Use of InSAR Data to Identify Areas at Risk of Continuous Deformations Throughout the Country of Poland	1526	2
Q13	Processing SAR Images by PHASE: Persistent Scatterers Highly Automated Suite for Environmental Monitoring	1928	2
Q14	Advancing Ground Motion Monitoring with the IRIDE Nimbus Constellation: Development of Ground Motion Service Segment domain.	3463	2
Q15	DInSAR Time Series Uncertainty Quantification	810	2
Q16	Austrian ground motion service - just a copy of EGMS?	4514	2

B.04.05 Remote sensing for disaster preparedness and response to geo-hazards, hydro-meteorological hazards and man-made disasters: Zone Q-R

Board	*Title*	*id*	*Day*
Q20	A comparative assessment of a meteorological drought indicator and soil moisture over Austria	3986	2
Q21	EO-enhanced Hydrology: How ESA EO R&D activities could enable an Early Warning System for smarter Drought Management – A case study of the 2022 French Droughts	2430	2
Q22	High-Resolution Insights into Extreme Drought Impacts on Vegetation using Sentinel-2	4698	2
Q23	From Satellite Data to Resilient Farming Systems: Enhancing Drought Monitoring in Mozambique	3659	2
Q24	Assessment of the contribution of EO data to support national firefighters in activities of urgent technical rescue during disaster response, fire prevention and surveillance	4127	2
Q25	A Satellite-Based Methodology for Assessing Wildfire Defensibility of Buildings in France	4282	2
Q26	Human-Caused Wildfire Ignition Risk Modelling - a Comparison of Different Regions in Europe, Using Remote Sensing and Geodata	4064	2
R01	Mapping Wildfire Exposure for a Transboundary Region of Central Europe	2843	2
R02	VALUESAFE project - Vulnerability of Assets and Losses in Multirisk Evaluations: Satellite Data for Financial Estimation. Combining Engineering Risk Analysis, Satellite Observations, and Artificial Intelligence	4386	2
R03	Detecting Changes in War-Damaged Urban Areas Using the IR-MAD Method and Sentinel-2 Satellite Data	4445	2
R04	Integrating EO and OSINT for Enhanced Conflict Analysis in Fragile Settings in Sub-Saharan Africa	4259	2
R05	An integrated system for multi-hazard response based on multi-source EO and non EO: the contribution of IRIDE Service Segment	3557	2

R06	Towards a Resilient Future: CENTAUR's Integrated Approach to Climate-Security and Early-Warning Systems	3581	2
R07	SGAM - Smart Geotechnical Asset management	3681	2
R08	Applying Copernicus Satellite Data for Geo-Hazard Monitoring and Warning Services in Norway	2410	2
R09	Rapid identification of disaster hotspots by means of a geospatial information fusion from remote sensing and social media	1464	2
R10	Temporal disaggregation of high-resolution building footprint data using Sentinel 2	666	2
R11	Population Displacement and Response During Flood Events: Towards A Global Perspective	3500	2
R12	The FLOWS Project – Improving Flood Crisis Management Through Earth Observation Solutions	3707	2
R13	Holistic approach to flood risk assessment: innovative multi-parameter methodology validated in urban river basin affected by fatal flash flood	3504	2
R14	Innovative multicriteria approach for flood risk assessment: A case study in Garyllis river basin, Cyprus.	4210	2
R15	The Use of Satellite Technologies in Mapping Flood Extent and Analysis of Its Impact on the Availability of Ambulances in Flood Areas	2506	2
R16	Supporting Flood Disaster Response Using Multi-Sensor Earth Observation Data	881	2
R17	An Operational Emergency Flood Mapping System in Scotland Using SAR Data	2115	2
R18	First Assessment of Electronic Corner Reflectors for Dam Monitoring in Germany – A Case Study	494	2
R19	Optimizing Dam Monitoring: Validation and Optimization of the CR-Index for PSInSAR and Electronic Corner Reflector (ECR) Integration	640	2
R20	The use of Multi-temporal Interferometry to monitor pre-failure ground displacement	5339	2
R21	Hybrid Deep Learning for Oil Spill Mapping: Leveraging Sentinel-2 and Foundation Models	1042	2
R22	Change detection using SAR tomography	1574	2
R23	Investigating the Risk of Damage to Traditional Timber Houses Caused By Tropical Cyclones in Madagascar, a Cyclone Enawo (2017) Case Study.	5255	2
R24	Assessment of Different Synthetic Aperture Radar (SAR) Systems for Mapping Floating Pumice Rafts After Submarine Volcanic Eruptions	4222	2
R25	New Developments in the Monitoring of Spruce Bark Beetle Infestations with Copernicus Sentinel Data	5190	2
R26	Detection Of The Green Attack Stage Of Bark Beetle Infestation Using Sentinel-1 Time Series	447	2

C.02.06 Swarm - ESA's extremely versatile magnetic field and geospace explorer: Zone B

Board	*Title*	*id*	*Day*
B26	VirES: Data and model access for the Swarm mission and beyond	1654	2
B27	Characterization of the ionospheric perturbation degree at mid-scales with Swarm's NeGIX and TEGIX	3609	2
B28	A World without Low Earth Orbit High-Precision Magnetometry	4382	2
B29	Swarm Accelerometer as a Component in Derivation of the Non-Gravitational Forces Acting on the Spacecraft	782	2
B30	Swarm Magnetic Data Evaluated Through Comprehensive Inversion of Earth's Magnetic Field	1032	2

B31	Multi-Scale Irregularities Product (m-SIP): a data product utilizing the high-resolution Swarm plasma density data for space weather applications	2897	2
B32	The Swarm Constellation - Ten Years in orbit, and beyond	474	2
B33	Implementation of the Swarm FAST Processing Pipeline	1642	2
B34	11 years of Swarm PDGS Operations: Lessons Learned	2157	2
B35	State of the art of Swarm mission: Instrument performances, Data Quality and Algorithm evolution	1707	2
B36	Enhanced Swarm-Based Climatological Models of the Non-Polar Geomagnetic Daily Variations	5132	2

C.02.07 FORUM- ESA's 9th Earth Explorer: Zone C

Board	*Title*	*id*	*Day*
C01	Towards the Assimilation of Far Infrared Data: Case Studies With Low and Mid Complexity Models	4691	2
C02	PREFIRE and IASI Radiances in All-Sky Conditions: Data Intercomparison and Analysis Using sigma-IASI/F2N	1951	2
C03	Determination of emissivity profiles using a Bayesian data-driven approach	821	2
C04	A Physics-Aware Data-Driven Surrogate Approach for Fast Atmospheric Radiative Transfer Inversion	674	2
C05	Selection of Informative Channels for Future FORUM Measurements Assimilation in Numerical Weather Prediction Models	675	2
C06	Evaluating the potential impact of future FORUM radiances through ensemble simulations	4431	2
C07	Simulation of the Earth’s disk radiance seasonal variability observed from the Moon by the Lunar Earth Temperature Observatory	3998	2
C08	Modeling and Inversion of the Far-IR Spectral Radiances Measured by FIRMOS in Ground and Stratospheric Balloon Campaigns	4708	2
C09	SPectroscopy In The Far InfraREd: Reducing Uncertainties in Carbon Dioxide Spectroscopic Line Parameters for ESA’s FORUM Mission	5265	2
C10	SPectroscopy In The Far InfraREd: Reducing Uncertainties in Water Vapour Spectroscopic Line Parameters for ESA’s FORUM Mission	5290	2
C11	Development of the MetOp-SG Module (MSGM) for the ESA FORUM End-to-End Simulator	4875	2
C12	Improvement of PTB’s vacuum FIR calibration system in support of ESA’s Mission FORUM	3706	2
C13	Exploiting airborne far-infrared measurements to optimise an ice cloud retrieval.	3186	2
C14	Investigating water vapour using far infrared observations and simulations	3974	2
C15	Foreseeing the benefit of FORUM observations to evaluate climate models	4919	2

C.05.03 ALTIUS: ESA's Ozone Mission: Zone A

Board	*Title*	*id*	*Day*
A32	ALTIUS Ozone Retrieval Algorithm in Bright Limb Mode Validated using OMPS LP Observations	4421	2
A33	Feasibility of BrO and OClO Retrievals in ALTIUS' Solar Occultation Mode: Key Challenges and Solutions	760	2

C.05.04 Landsat Program and Science Applications: Zone P

Board	*Title*	*id*	*Day*

P15	Continuous Change Detection and Classification using NASA's Harmonized Landsat and Sentinel-2 (HLS) Data in Google Earth Engine	2663	2
P16	Global Evaluation of Temporal Consistency and Uncertainty in Vegetation Indices Derived from NASA's Harmonized Landsat and Sentinel-2 (HLS) Surface Reflectance Product	2240	2
P17	Leveraging the temporal benefits of Harmonized Landsat and Sentinel-2 (HLS) data for modeling fine-scale land cover and land use change in complex landscapes	5225	2
P18	Aboveground biomass prediction in tropical forests with a multi-modal approach and temporal features from HLS data	5133	2
P19	Forest Disturbances and Vulnerability mapping, preliminary results	1982	2
P20	Using Landsat Evapotranspiration and Climate Data for Estimating High-Resolution Gridded and Field-scale Irrigation Water Use and Groundwater Withdrawals in the Western U.S.	2420	2
P21	The ESA Landsat 1-5 MSS Analyse Ready Data Products, an initiative to extend multi spectral surface reflectance time series back to the 1970's	5319	2

C.06.01 Sentinel-1 mission performance and product evolution: Zone S

Board	*Title*	*id*	*Day*
S14	3 Years of Observations of the Corner Reflector Network Graz	3889	2
S15	Integrating Remote Sensing and Geospatial Analysis to Assess Environmental and Climatic Vulnerability in Urban Mediterranean Contexts: A Case Study of Valencia	4909	2
S16	Refining Sentinel-1 Radiometric and Pointing Calibration by On-Board Temperature Compensation Emulation	3251	2
S17	On the validation and assimilation of Sentinel-1C wave data in operational wave model MFWAM	5073	2
S18	Roadmap for the next generation of Sentinel-1 Level-2 Ocean Products	4524	2
S19	Observing ocean wave spectra from space: complementarity between CFOSAT-SWIM and Sentinel-1 SAR wave mode data	4642	2
S20	SAME-AT - SAR meets Atmosphere: An Austrian Initiative in coupling INSAR information and numerical weather models	5219	2
S21	DLR's Independent Calibration of the Sentinel-1C System – First Results from S1C Commissioning Phase Activities	1010	2
S22	First Commissioning Phase Results of the Internal Calibration Concept adapted for Sentinel-1C	2144	2
S23	New Product Evolution Of ESA's Extended Timing Annotation Dataset (ETAD) For Sentinel-1 Mission	2315	2
S24	Impact Of 25-th Solar Cycle Ionospheric Activity On Sentinel-1 SAR Data – A Status Report By SAR-MPC	2595	2
S25	Copernicus POD Service: Status of Copernicus Sentinel Satellite Orbit Determination	723	2
S26	Sentinel-1C and Sentinel-2C Precise Orbit Determination Commissioning Results	726	2

C.06.03 Validation of GNSS-RO and GNSS-R observations from small sats: Zone A

Board	*Title*	*id*	*Day*
A01	EDAP+ Atmospheric domain: SPIRE GNSS-R assessment	4295	2

A02	Grazing-Angle Ionospheric Delay on GNSS-R: Findings from the ESA PRETTY Mission Observations.	4966	2
A03	Exploring different microphysics assumptions with Polarimetric Radio Occultations	1072	2
A04	The impact of assimilating GNSS Radio Occultation data on the sub-seasonal forecasts	2543	2

C.06.06 Global Digital Elevation Models and geometric reference data: Zone T

Board	*Title*	*id*	*Day*
T01	Improving global DEMs from interferometry with smart DEM data fusion: a case study in urban landscapes	3476	2
T02	AI driven detection of local errors and local 3D features in global DEMs	3926	2
T03	An introduction to Sen2VM: an Open-Source tool for geocoding the Sentinel-2 Level-1B products	4162	2
T04	Improving ECOSTRESS' absolute and relative georeferencing for optimisation of crop and irrigation products	5329	2
T05	TanDEM-X DEM 2020: Product release and quality assessments	4155	2
T06	AI-Driven Landslide Susceptibility and Hazard Mapping for the CopernicusLAC Hub	1369	2
T07	WorldDEM Neo - The new reference in global elevation	5529	2

D.01.01 Collaborative Innovation: building a Digital Twin of the Earth System through Global and Local Partnerships: Zone T

Board	*Title*	*id*	*Day*
T11	Dynamic Spin on a Digital Twin: Integrating Real-Time Weather, Land-Cover and Land-Use Changes in Landslide Hazard Assessment	2528	2
T12	Leveraging Destination Earth capability for Assessing Physical Climate Risks to the European Central Bank	4730	2
T13	SNOWCOP - Unlocking the Full Potential of Copernicus Data and Infrastructure to Improve Meltwater Monitoring in the Andes	2131	2
T14	Collaboration around standardized benchmarks: Finding the common ground between Ocean and Data scientists	3097	2
T15	Flood Simulation and Forecasting based on Earth Observation and AI for Sustainable Planning of Climate Change Adaptation	414	2
T16	DT-HEAT: A Digital Twin for Urban Heat Resilience	1417	2

D.01.03 Synergies between ESA DTE Programme and DestinE Ecosystem: Zone T

Board	*Title*	*id*	*Day*
T18	Generating a Digital Twin with CARS, a scalable open-source Multiview Stereo framework	4388	2
T19	Development of a General-Purpose Multi-Scale 3D Synthetic Scene Generator for Simulation and Analysis	485	2
T20	DestinE Platform – Collaborative Endpoint for AI Tenancies	1980	2
T21	Destination Renewable Energy: Renewable Energy Forecasting on DestinE platform using Digital Twin data	4299	2
T22	DestinE Sea Ice Decision Enhancement (DESIDE): A Destination Earth Use Case	2656	2

D.01.04 Using Earth Observation to develop Digital Twin Components for the Earth System: Zone T

Board	*Title*	*id*	*Day*

T24	Towards a Digital Twin for the Alps to simulate landslide occurrences for hazard adaptation strategies.	4364	2
T25	Validation of geohazards products as part of the Digital Twin Component solution of the ESA GET-it project	2447	2
T26	Mirroring natural and anthropogenic phenomena with CyberItaly	3236	2
T27	The IRIDE Cyber Italy project: an enabling PaaS for Digital Twin Applications	3471	2
T28	Advancing water resources management and flood control merging earth observations and modelling reservoir behaviour in digital twins	4636	2
T29	Digital Twin Component in Urban Flood Modelling - A Proof-of-Concept	2449	2
T30	From Mobile LiDAR Point Clouds to Urban Digital Twins: Advancing 3D Reconstruction With Quality Optimization	1276	2
T31	A DTC Urban - SURE Smart Urban Resilience Enhancement.	3784	2
T32	Fields of The World and fiboa: Towards interoperable worldwide agricultural field boundaries through standardization and machine-learning	3910	2
T33	Forest Digital Twin – From TLS data to 3D tree representation for Radiative Transfer Modelling	1719	2
T34	A digital twin of Svalbard's cryosphere (SvalbardDT)	1386	2
T35	Introduction to the Early Digital Twin Component EO4ER ("Earth Observation for Energy Risks")	1012	2
T36	Sentinel-3 OLCI observation-based digital twin component for aquatic carbon in the land-sea continuum	837	2
T37	Digital Twin Earth for Climate Change Adaptation: Downscaling for Human Activities	5221	2

D.02.11 Super-resolution in Earth Observation: The AI change of paradigm: Zone T-U

Board	*Title*	*id*	*Day*
T39	Super-resolution in Earth Observation: The AI change of paradigm	3074	2
T40	Benchmarking Deep Learning Super-resolution Techniques for Digital Elevation Models in Mountainous Regions	3238	2
T41	AI-Driven Super-Resolution in Earth Observation: Addressing Domain Shift and Uncertainty in Thermal Data Analysis	3033	2
T42	Deep Learning Techniques to Enhance Spatial Resolution of Thermal Imagery for Fire and Cloud Detection	3956	2
T43	Enhancing Landsat-8 Temperature Downscaling in Subarctic Regions Through Tree Shadow Integration	5206	2
T44	Hyperspectral Earth Observation for Sustainability: Enhancing EnMAP Data Spatial Resolution through Deep Neural Network Fusion with Sentinel-2 Imagery.	4819	2
U01	Laveraging low resolution labels and noise-robust learning for very high resolution building mapping	2294	2
U02	Magnifying Change: A Deep Learning Approach for Multi-Sensor, Multi-Resolution Satellite Imagery	3309	2
U03	Guided Super-Resolution for Biomass Upsampling	1873	2
U04	Evaluation of super-resolution results using a knowledge-based spectral categorisation system	1431	2

U05	Investigating Generalized Strategy for Single-Image Satellite Super Resolution Using Deep Learning	4833	2
U06	Sentinel-2 Super-Resolution With Geolocation-Aware Generative Models	643	2
U07	Resource-Efficient Super-Resolution for Sentinel-2 Imagery Using Modular Auto-Encoders and U-Net Architectures	3669	2
U08	Super-resolution of all Sentinel-2 bands to 10 meters using parameter-free attention and cross-correlation embeddings	2926	2
U09	Trustworthy resolution Enhancement: Non-generative super-resolution of Sentinel-2	554	2
U10	Sharper Insights: Enhancing Agricultural and Environmental Monitoring with Sentinel-2 Super-Resolution	1352	2

D.03.04 Innovative technologies, tools and strategies for scientific visualisation and outreach: Zone U

Board	*Title*	*id*	*Day*
U16	StacLine : new QGIS Plugin for diving into STAC Catalogs	3929	2
U17	Water Health Indicator System (WHIS): A Global Water Quality Monitoring Web App through Advanced Earth Observation Technologies	3124	2
U18	Alplakes: Monitoring and forecasting European alpine lakes	545	2
U19	Satellite data for the UN Ocean Decade: Innovative Approaches to Story-telling for Diverse Marine Stakeholders	1896	2
U20	A GAMIFIED MOBILE APPLICATION FOR IMPROVING PUBLIC ENGAGEMENT WITH RECREATIONAL WATER QUALITY THROUGH AR/VR SIMULATIONS	468	2
U21	The Timeline Viewer: a web application for intuitive interactive visualisation of time-based data	678	2
U22	Towards cloud-based EO platform in support of indicator development for society and environment	1615	2

F.01.03 Trends in Earth Observation Education and Capacity Building: Embracing Emerging Technologies and Open Innovations: Zone U

Board	*Title*	*id*	*Day*
U24	Master's in Spatial Information Applications: Insights after 100 Graduates Across South America and Italy	5501	2
U25	Teaching and Learning Remote Sensing with SNAP and Sentinel-2 Data – A case study from Anhalt University of Applied Sciences	2799	2
U26	Earth Observation in the Framework of COSPAR Capacity Building	4880	2
U27	Enabling High Resolution Air Quality Forecasts using Advanced Machine Learning Algorithms for Improved Decisions through SERVIR Capacity Building Activities in Southeast Asia	3314	2
U28	Fostering Earth Observation Literacy: Lessons from SERVIR's Curriculum Development Initiative	2742	2
U29	The INTEGRAL Project: Synergies Between European and Asian Academia for Building Geo-Technologies Capacity Towards Resilient Agricultural Adaptation to Climate Change in Lao PDR	3655	2
U30	A Federated Learning Environment for Earth Observation Students: A Success Story from Austria	1611	2
U31	Closing the Geospatial Data Literacy Gap in Digital Farming: Lessons Learned	5274	2
U32	Progress made and future steps of the HYPERedu learning initiative	1940	2

U33	Breaking down time-series analyses, UAV, and hyperspectral data for schools	1505	2
U34	Digital Geomedia in Vocational Education and Training: Blended learning concepts to promote sustainable development through modern geotechnologies	3098	2
U35	Geospatial Intelligence for Sustainable Futures: Smart Data and AI Applications in Geographic Education	4581	2
U36	Advanced Environmental Assessment: Integrating Satellite and IoT Data	2842	2
U37	GATHERS project – multi-tool educational and networking experience	4530	2
U38	The ESA Stakeholder Engagement Facility	3729	2
U39	GDA Knowledge Hub: A Platform To Support Global EO Capacity Building in International Development	5227	2
U40	GEO ART – EARTH FROM SPACE: Earth Observation Data of Kruger National Park From 30 Years Captured on Canvas	4816	2
U41	Echoes in Space – A Narrative Introduction to Radar Remote Sensing With 14 Exercise Blocks	4845	2

F.02.01 Harnessing the Power of Remote Sensing for Research and Development in Africa: Zone V

Board	*Title*	*id*	*Day*
V27	Forecasting Agricultural Drought Impact in Africa through Machine Learning and Earth Observation	1567	2
V28	Satellite observations for supporting air quality monitoring in East Africa	3364	2
V29	Investigating air pollution and climate change on the African continent	5018	2
V30	Integrated Use of Multisource Remote Sensing Data for National Scale Agricultural Drought Monitoring in Kenya	4677	2
V31	Enhancing Pastoral Resilience in Northern Kenya through Integrated Use of Earth Observation and Local Knowledge	1359	2
V32	High-Resolution AI-Driven Crop Segmentation in Nyeri County, Kenya: Enhancing Agricultural Monitoring Through Deep Learning	1258	2
V33	Perspectives on Critical Remote Sensing and Mixed Methods for Development Studies in Africa. Assessing the Land Dynamics of Middle Scale Farms in the Nacala Corridor, Mozambique.	2041	2
V34	Earth Observation-Based Characterization of Social-Ecological Systems in the Kavango-Zambezi Transfrontier Conservation Area	3434	2
V35	EOCap4Africa – Earth Observation in Africa: Capacity building in the field of remote sensing for the conservation of ecosystems and their services.	1811	2
V36	Enhancing Sugarcane Stress Detection with Hyperspectral and Thermal Data: Insights from the PRISMA4AFRICA Project	3254	2
V37	Empowering Africa with Hyperspectral Data: Satellite Integration, Capacity Building, and Collaborative Research for Sustainable Agriculture	2107	2
V38	Assessing EO Maturity in Sub-Saharan Africa	4337	2
V39	SLIM but Mighty: Transforming Zambia's Future with EO Solutions	5055	2
V40	FAO PLAN-T: Advancing Climate Adaptation for Maize Cultivation in Zambia with Innovative Tools and Methodologies for Better Decision-Making	2409	2

F.04.03 Desertification, land degradation and soil management: Zone P

Board	Title	id	Day
P02	Spatio-Temporal Monitoring of Vegetation Structure and Surface Moisture in Kruger National Park and the Overberg District in South Africa From Sentinel-1 and -2 Time-Series Since 2015	4727	2
P03	Land Degradation Mapping and Change Assessment for SDG 15.3.1 in the Nigeria Guinea Savannah	5002	2
P04	Methods and applications for soil organic carbon mapping based on Sentinel-2 bare soil composites	3296	2
P05	Evaluating different methods for the estimation of bare soil surface reflectance using multispectral satellite image time series and LUCAS 2015 Multispectral Reflectance Data	4779	2
P06	The EDAFOS Project: A GIS Tool Solution To Combat Desertification	2437	2
P07	High Resolution Spectral and Statistical Information About Soils In Europe – Products, Applicability and Free Data Access	4531	2
P08	C-Band SAR Amplitude Time Series in Dryland Landscapes Reveal Grain Size Change Distribution after Flash Floods and Debris Flows	4809	2
P09	Optimising Satellite-based Soil Spectra Extraction for Predicting Agricultural Soil Carbon Content Across Europe	4144	2
P10	Addressing land degradation and desertification: from LIFE NewLife4Drylands to HE MONALISA project	4735	2
P11	Mitigating the Global Crisis of Chromium Pollution	3291	2
P12	Estimating soil properties and nutrient concentrations using machine learning and hyperspectral data: a case study in Italy	5162	2

F.04.06 Wetlands: from Inventory to Conservation: Zone N

Board	Title	id	Day
N09	Unveiling four decades: Eco-Hydrology, land-use landcover classification & water quality estimation of Haiderpur wetlands through the lens of satellite imagery and AI	5443	2
N10	Prototyping a Policy-Driven Earth Observation Service for Monitoring Critical Wetland Habitats in Natura 2000 Sites	3453	2
N11	Preliminary Analysis on long-term human activities around wetlands using VIIRS DNB data	5037	2
N12	Evaluating Sustainable Development Goal 15 Across Various Scenarios Using an Integrated Multi-objective Programming and Patch-generating Land Use Simulation Framework in the Internationally Significant Wetland of Momoge	509	2
N13	Integrating Low-Cost Uncrewed Aerial Systems (UAS) and Satellite Data for Mangrove Monitoring and Conservation: A Case Study From Seychelles	5247	2
N14	An Efficient Hybrid CNN-Transformer Framework for Wetland Classification Using Multi-Source Satellite Data	5102	2
N15	Large-Scale Wetland Mapping Using Self-Supervised Learning and Vision Transformer	5114	2
N16	The Tropical Wetland mapping system (TropWet) reveals profound changes in wetland extent across the Sahel region of Africa	2165	2
N17	Mapping invasive Prosopis spp. and native wetland vegetation communities in Point Calimere Ramsar Site using Sentinel-2 multiseasonal spectral temporal metrics	3842	2
N18	Monitoring Peatland Dynamics over Agricultural Areas in Estonia using Sentinel-1 SAR data	3962	2

F.04.20 EO in support of the regulation on Deforestation-free products (EUDR, EU 2023/1115): Zone O-P			
Board	*Title*	*id*	*Day*
O32	An Approach for an EUDR Forest Baseline Based on a Combination of Open Data, Commodity Maps and Forest Change Detection	4221	2
O33	Global Mapping of EUDR Commodities for Better Forest Baselines and Identifying Deforestation Drivers	4227	2
O34	Approaching the EUDR by a combination of crowd sourcing and remote sensing	910	2
O35	How to support smallholders in proving EUDR compliance? A feasibility study	4005	2
O36	Enhancing Satellite-Based Forest Monitoring for Accurate and Cost-Efficient Compliance With the EU Deforestation Regulation Through Standardized Benchmarking, Ground-Truthing, and Integration of Advanced Technologies.	4651	2
O37	Advancing Commercial EO Solutions for EUDR Compliance: AI-Driven Insights for Deforestation and Degradation Monitoring	5188	2
O38	Implementing Commodity Mapping and Change Detection Services in the Control System for EU Regulation 2023/1115 (EUDR)	4191	2
O39	From GEE to CODE-DE: Transforming Deforestation Monitoring for EUDR Compliance and Global Forest Protection	2519	2
O40	Readiness of Ethiopia's Coffee and Ghana's Cocoa sector for EUDR compliance	2879	2
O41	Fine Scale Cocoa Mapping With Deep Learning Methods	5473	2
O42	Traceability in the Supply Chain: EO Data for Transparency	2462	2
O43	Employing high-resolution data to enhance the accuracy of land use and cover classification	4084	2
O44	Continental-Scale Tree Crop Mapping in South America	3566	2
P01	Harnessing AI for Field Boundary Detection in South America	5764	2

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A.02.06 Advances in land surface phenology monitoring and applications: Zone P-Q			
Board	*Title*	*Id*	*Day*
P39	Comparative Analysis of Vegetation Indices from Sentinel-2 Data and Ground-Based Phenology: Insights into Forest Ecosystem Monitoring	4570	3
P40	Taking the next step in vegetation productivity estimation: towards 10m vegetation class-specific GPP estimates	1490	3
P41	Wald5Dplus And Beyond: An Open Benchmark Dataset For Forest Characterization From Sentinel-1 And -2 Time Series	448	3
P42	Forest thinning influences phenological dates and their heterogeneity derived from Sentinel-2 Data	785	3
P43	PlotToSat: Leveraging Earth Observation Data for Scalable Forest Ecology and Environmental Modelling	4951	3
P44	Methodology for estimating composition in mixed forest stands from phenological analysis of Sentinel-1 and Sentinel-2 time series	5455	3
Q01	Urban trees phenology: A comparison of PhenoCam and satellite-derived phenology metrics.	3147	3
Q02	Understanding underlayer dynamics of a fire-prone Mediterranean Tree-Grass Ecosystems using In Situ Data, a 3D Radiative Transfer Model and multi-scale remote sensing data	1586	3
Q03	Evaluating Different Approaches for Medium-Resolution Land Surface Phenology Estimation Using In-Situ Leaf Unfolding Observations of Deciduous Broadleaf Trees in Spain	4462	3
Q04	Intercomparison of Satellite Vegetation Phenology Products Across Europe: Insights From MODIS, VIIRS, MR-VPP and HR-VPP Phenology Products	4850	3
Q05	Standardizing Spectral Mixing Approaches for Global Non-Photosynthetic Vegetation Mapping with Hyperspectral EnMAP data	4464	3
Q06	Comprehensive Validation of the High-Resolution Vegetation Phenology and Productivity (HR-VPP v2) products through Ground-Based Networks	2902	3
Q07	Time Series Analysis Using Sentinel-1 and Sentinel-2 to Monitor Vegetation Dynamics in Kruger National Park, South Africa	4712	3
Q08	Identification of double-cropping parcels using Time Series of Vegetation Indices derived from Sentinel-1 and Sentinel-2 Images	4736	3
Q09	Seasonal Variability Dynamics and Drivers of Uncertainties in LAI, Chlorophyll, Vegetation Parameter Retrievals and Indices in Forest Time-Series	2703	3
Q10	Which Vegetation Index and Threshold Should Be Used? A Novel Optimisation Framework for Accurate Detection of Key Crop Phenological Phases in Germany	2723	3
Q11	Synthesis of Sentinel-2 and PAR Sensor Data for Creating Land Surface Phenology Maps Over the Czech Republic	1074	3
Q12	TerEcoData: a service to monitor terrestrial ecology changes from Earth Observing systems	1009	3
Q13	The Impact of PlanetScope-Sentinel-2 Data Fusion on Phenometrics Retrieval	1686	3
Q14	Sentinel-2 based Land Surface Phenology in complex Southern African Landscapes	2068	3

Q15	An Innovative Workflow Using Sentinel-2 Imagery to Estimate Seasonal Development from Land Surface Greenness in the High Arctic	3418	3
Q16	Senescence in the Arctic - a Case Study on the Dynamics of Tundra Plant Communities in Svalbard Using High-Resolution UAV Imagery	2674	3
Q17	Multi-decadal temporal reconstruction of Sentinel-3 biophysical trait maps	2894	3
Q18	The Back to Basics (B2B) Sentinel-2 data filtering method	835	3
Q19	Unexplained InSAR Closure Phases in Areas with Various Land Cover and Climate Conditions	4297	3
Q20	Precision Phenology: Proper Propagation of Uncertainties For The Validation of Land Surface Phenology Products	3994	3
Q21	Ecosystem Change Analysis in the European Arctic Permafrost Regions (1984–2024): A Multidimensional Assessment Using Satellite Imagery and Automated Tools	5220	3
Q22	Isolating Phenological Patterns of Grasses and Trees Across an Environmental Gradient in Tropical Savannas Using Earth Observation Techniques	2521	3
Q23	Assessment of plant nutritional parameters in cereals by PlanetScope and Sentinel-2 multispectral data	2959	3
Q24	EnrichedEuroCrops: Integrating Satellite Data for Crop Type and Phenology Assessment	1313	3
Q25	Scalable Solutions for Monitoring Rice Phenology: A Comparative Study of Rule-Based and Machine Learning Approaches in South Asia	4290	3
Q26	Pan-European mapping of Cropping Patterns at 10 m spatial resolution: methodology and product development	1624	3

A.02.08 Impacts of fire in the Earth system: Zone L-M

Board	*Title*	*Id*	*Day*
L04	An Operational Fuel Characterization Model: A Cornerstone for Burned Area Prediction and Enhanced Fire Emissions Estimations	1389	3
L05	Terrestrial LiDAR Data for Structural Variable Estimation and Biomass Consumption Through Radiative Transfer Models	2036	3
L06	A Digital Twin for Wildfire risk adaptation planning: DT-WILDFIRE	2258	3
L07	Extreme Peatland Wildfires Disrupt Carbon Sequestration and Exhibit Dynamic Combustion Behaviour	2714	3
L08	Global-scale large forest fire modelling and prediction: a dance of fire -driving and -inhibiting factors	3563	3
L09	Arctic and Northern Latitude Peat and Non-peat Wildfire Aerosols During 2018-2024	4607	3
L10	Extreme Fire Sourced Haze in Mainland Southeast Asia: Using a New AQ Network to Evaluate the Outputs of Air Quality Models Fed with Satellite Data of Fire Emissions	4799	3
L11	Can hyperspectral EO of landscape fires map proportions of flaming and smouldering combustion to improve fire emissions estimation?	4044	3
L12	FRM4FIRE: Early recommendations for the characteristics and quality of airborne reference data used for satellite fire product evaluation	5235	3
L13	Validation of FireCCI burned area products	3979	3
L14	Fires, Land Use, and Forest Loss in the South American Chaco: Links Between Fire Regimes, Climate, and Human Activity	764	3

L15	Top-Down Carbon Emission Estimates of the Extreme 2020 and 2024 Pantanal Wildfire Seasons	2923	3
L16	Quantifying the drivers of air pollutant emissions from wildfires in South America through land surface fire modelling and satellite data applications	4174	3
L17	Near coincident GEDI Measurements Unveil Fire-induced Structural Changes in the Amazon Rainforest	2626	3
L18	High-Resolution Burned Area Dataset Reveals Fire Dynamics and Human Influence Across Southern Amazonia (1990–2019)	4983	3
L19	Biases in MODIS Burned Area Products and Their Impact on the Fire Activity Decline in African Savannas	2575	3
L20	Mapping Vegetation Changes with five years of Sentinel-1 and -2 time series in Fire-effected Fynbos Areas in the Overberg District, South Africa	4460	3
L21	Quantifying the effect of bush encroachment on fuels and fire emissions in southern Africa with a satellite-based data-model fusion approach	3377	3
L22	Assessment of forest fires and erosion prediction using Sentinel-1 and Sentinel-2: Analysis of advanced indices	5470	3
L23	Quantifying Post-fire Recovery Through Forest Structure Indicators from Remote Sensing in a Mediterranean Landscape	4959	3
L24	Quantifying wildfire combustion completeness in a Mediterranean forest using multitemporal airborne LiDAR data and Fire Radiative Energy	2701	3
L25	POST-FIRE RECOVERY ESTIMATION OF RECURRENTLY BURNED VEGETATION ACROSS MEDITERRANEAN REGIONS WORLDWIDE	2341	3
L26	Predicting European Wildfire Occurrence and Analyzing Drivers with Explainable Artificial Intelligence (XAI)	3895	3
M01	A Wildfire Hazard Map for Germany	2710	3
M02	Assessing Post-Fire Deadwood and Surface Dynamics using Multispectral and LiDAR UAVs in the Harz National Park, Germany	4406	3
M03	Wildfire Detection in the United Kingdom: a Comparative Study	4621	3
M04	The Impact of Prescribed Moorland Burning in the UK on Air Quality	2265	3
M05	Landscape Fire Scars Monitoring in Eastern Europe with Deep Learning and Remote Sensing Data	1361	3

A.03.05 Opportunities and challenges for global monitoring of photosynthesis from space: Zone P

Board	*Title*	*Id*	*Day*
P21	Assimilating S3 and S5P products into a prototype model for estimating terrestrial carbon fluxes from combined data streams.	1523	3
P22	Unraveling the Nonlinear Dynamics of Photosynthesis and Fluorescence under Stress	1684	3
P23	Studying Spatial Variability of Solar-Induced Chlorophyll Fluorescence (SIF) and Its Relationship with Gross Primary Production (GPP) in Castelporziano Forest	1729	3
P24	Chlorophyll fluorescence and the xanthophyll cycle: unlocking early stress signals for scalable crop monitoring	3750	3

P25	Fluorescence combined with Spectral Unmixing Using HyPlant Airborne Data of an alphalpa field	5052	3
P26	Development of a precise full-SIF Retrieval Method Based on Principal Component Analysis Using HyPlant Hyperspectral Data	1823	3
P27	Validating and Unmixing DESIS Sun-Induced Fluorescence (SIF) Over Agricultural Fields: A Comparative Analysis With HyPlant Observations	2798	3
P28	A Lightweight SIF-Based Crop Model for Predicting Crop Yields (Australia Wheat)	852	3
P29	Opportunities regarding a network of SIF-capable sensors alongside eddy covariance towers	5076	3
P30	Evaluating modeled carbon and nitrogen cycles via leaf chlorophyll content and remote sensing observations	5204	3
P31	Detection of Dynamic Antenna Absorption Behavior at Plant Canopy Level Using Automated VNIR Imaging Spectroscopy	3968	3
P32	RStoolbox: An R package for Remote Sensing Data Analysis	4862	3
P33	Assessment of the coupling between SIF and ecosystem carbon fluxes during periods of rapid vegetation functioning shifts triggered by rain pulses	3367	3
P34	Improving the simulation of cropland CO2 fluxes using modified vegetation photosynthesis and respiration model	3777	3
P35	Improving Global Primary Production Monitoring Through Microwave Remote Sensing in a Machine Learning Framework	2460	3
P36	Reliability-Enhanced GPP Simulations Within a Land Surface Model Through the Co-Assimilation of Space-Borne SIF Retrievals and In Situ GPP Estimates	2377	3

A.04.01 Estimating and observing local-scale GHG emissions: Zone M-N

Board	*Title*	*Id*	*Day*
M08	MEDUSA: Methane Emissions Detection Using Satellites Assessment	4204	3
M09	Hotspots Detection on Landsat and Sentinel-2 via Gaussian Mixture Modeling for Estimating Industrial CO2 emissions	4911	3
M10	Low-Temperature Hotspot Detection In VIIRS Imagery For The Monitoring of Industrial CO2 Emissions	4965	3
M11	Leveraging Satellite Data for Localized CO2 Emission Measurements to Catalyze New Business Opportunities: Carb-Chaser System	5517	3
M12	Simulating CH4 Emissions in the Po Valley with WRF-GHG: Validation Against TROPOMI Observations and Ground-based Measurements	4647	3
M13	The Space Carbon Observatory Next Step (SCARBON)	4690	3
M14	Integrating Multi-Source Remote Sensing for Scalable Methane Emission Monitoring in Irrigated Rice Cultivation	4777	3
M15	Documentary best practice for facility scale methane emissions from remote sensing	4883	3
M16	Methane source identification from hyperspectral infrared satellite observations: a physically informed neural network-based inversion approach	4889	3
M17	Parameterizing the Performance of Emissions Quantification Methods from Space Using Synthetic Data	5440	3
M18	NarSha – South Korea's First Pinpoint Methane Monitoring Microsatellite Constellation	2081	3

M19	The MicroCarb PayLoad Ground Segment: description of a ground segment for new CO2 data	704	3
M20	Strengthening evidence of mitigation actions through MARS multi-satellite approach	4237	3
M21	Advancing Point-Source GHG Emission Monitoring with Microsatellites: A Coverage and Imaging Mode Analysis	1446	3
M22	Synthetic datasets for benchmarking point-source methane emissions detection approaches	4243	3
M23	Retrievals of CO2 and CH4 Maps from the EnMAP Satellite Using RemoTeC and a Matched Filter	2585	3
M24	Assessing the Detection Potential of Hyperspectral Satellites for Global Greenhouse Gas Monitoring: Insights From TANGO Simulations	2685	3
M25	Capabilities of the Airborne Visible InfraRed Imaging Spectrometer 4 (AVIRIS-4) for the quantification of anthropogenic CH4 emissions	1926	3
M26	Monitoring Methane Variations and Anomalies in Coal Mining Areas of Shanxi Province, China Using Sentinel-5P Data	2755	3
N01	Monitoring Methane Emissions From Landfills in Greece Using Sentinel-5P TROPOMI Data	3263	3
N02	Multi-instrument assessment of methane emissions from landfills: How can satellites, aircraft and ground measurements be used to inform and target mitigation strategies?	3556	3
N03	Monitoring Gas Flaring Volumes With Deep Learning on Sentinel-2 Data	2339	3
N04	TNO Global Point Sources Emission Inventory for Greenhouse Gases	2224	3
N05	Development of an End-to-End Simulator (E2ES) for the performance assessment of the Copernicus anthropogenic CO2 Monitoring mission (CO2M).	3731	3
N06	Development of a Level 1 to Level 4 Processing System for Estimating Greenhouse Gas Emissions of Localized Sources: Methane Emissions as Derived from Sentinel-5 Precursor, PRISMA and EnMAP	1013	3
N07	Testing CO2M Satellite Applications: Sensitivity Testing with Meso Scale Atmospheric Model DEHM	4481	3
N08	CO2 mixing ratio profiling in the lower troposphere using the Raman lidar technique	4495	3

A.04.03 Monitoring Greenhouse Gases from Space - Methods and Validation: Zone N

Board	*Title*	*Id*	*Day*
N10	Comparison Between Full Physics and Machine Learning XCO2 Retrievals Over Large Plumes	2373	3
N11	A multi-objective genetic algorithm approach to optimise GOSAT methane observations for high-latitude regions	1119	3
N12	Measuring natural methane fluxes with the French-German Methane Remote Sensing LIDAR Mission MERLIN	1456	3
N13	Data assimilation and emission inversion developments for current and future Copernicus greenhouse gas services at ECMWF	1646	3
N14	The Fusional-P UOL-FP CO2 full physics retrieval algorithm for the CO2M Mission	1692	3
N15	Comparison of GHG Vertical Concentrations Estimated by COCCON EM27/SUN and Satellite Missions in Rome (Italy)	1834	3
N16	Assessment of methane retrieval algorithms from for EnMAP shortwave infrared observations	2781	3
N17	Aerosol Induced Uncertainties in Satellite CO2 Retrievals	3016	3

N18	DEVELOPING A NETWORK OF SITES FOR GHGs MEASUREMENTS AND SATELLITE VALIDATIONS IN THE PO VALLEY	3211	3
N19	Fiducial Reference Measurements for Greenhouse and their use for validation of remote sensing products	3978	3
N20	The Use of Machine Learning for Greenhouse Gases Concentration Retrievals from Space: First Results and Analysis	1350	3
N21	Advanced Deep Learning Model for landfill methane detection using PRISMA satellite data	5120	3
N22	Recent Improvements for the Operational TROPOMI CH4 Retrieval	4446	3
N23	Machine Learning Models for Multi-sensor Detection of Methane Leaks in Hyperspectral Data	3717	3
N24	Machine Learning for Methane Observation	4214	3
N25	An AI-Based Convolution-Attention Model for Accurate Methane Emission Detection Using Sentinel-2 Imagery	5106	3
N26	Quantifying Environmental Impacts on Bias in Arctic TROPOMI Methane Retrievals Using Machine Learning	4385	3
N27	Advances on the Emission Estimation Using the Divergence Method for Individual Satellite Overpasses With Noise Reduction	4343	3
N28	Observations of greenhouse gases at Sodankylä and comparisons with satellite borne observations	4391	3
N29	Retrieving tropospheric water vapor isotope composition via balloon-borne flask sampling: a step toward calibrating remote sensing full-column H2O/HDO pairs	4400	3
N30	Portable Fourier Transform Spectrometer measurements of greenhouse gases at the Arctic Space Centre in Sodankylä, Finland: instrument coherence and sub-pixel variability	5208	3
N31	Validation of GHG weighted columns using vertical profiles measured by balloon-borne AirCore air sampler	5456	3
N32	Greenhouse Gas Emissions Retrieval Algorithm Using Satellite Remote Sensing And Bottom-Up Model Estimates At A National-Level In Denmark	4525	3
N33	Experience from a Satellite-Airborne Experiment to Detect Methane Emissions from Municipal Solid Waste Landfills in the Czech Republic	4661	3
N34	Unveiling Methane Emitters: China's Spaceborne Imaging Spectroscopy Breakthroughs and Plans	406	3
N35	A Satellite-Based Comparison of Air Pollution in Romania (2020 vs 2024)	417	3
N36	Sub-pixel Cloud Fraction Retrieval Based on the CO2M Multi-Angular Polarimetric Satellite Measurements	4743	3
N37	Five Years of GOSAT-2 Retrievals with REMOTEC: XCO2 and XCH4 Data Products With Quality Filtering by Machine Learning	1106	3
N38	CarbonSense V2: Expanding the Dataset for Data-Driven Carbon Flux Modelling	5031	3
N39	Carbon-I, a NASA Earth System Explorer Mission concept for Greenhouse Gas Observations	5505	3
N40	Methane Constellation	5530	3

A.05.04 Advances at the observation -modelling interface: Zone E

Board	*Title*	*Id*	*Day*

E09	Global trends in marine ecological indicators – Understanding the ocean ecosystem's response to climate forcing using remote sensing	1219	3
E10	A novel moist static energy balance model (nEBM) for improving the (atmospheric) hydrological cycle representation	1737	3
E11	Can the upcoming Ice Cloud Imager (ICI) provide long-term insights into the vertical distribution of atmospheric ice mass?	4309	3
E12	StraitFlux - Tools for Precise Oceanic Transport Calculations on Various Modeling Grids	2833	3
E13	Navigating the Jungle of CMIP Data as a First-Time User: Key Challenges and Future Directions	5258	3
E14	Atmospheric modes of variability as a driver for European drought conditions	3797	3
E15	Earth's energy imbalance more than doubled in recent decades	4015	3
E16	The potential of LUCAS for quality control of Cop4ALL-DE landcover	5234	3
E17	Advances in Radiative Transfer and Assimilation of All-Weather Microwave and Radar Observations in NWP Models	5444	3
E18	A Synergistic Description of Upper Tropospheric Cloud Systems and Diabatic Heating: Towards Enhanced Process Understanding	1522	3

A.07.05 Monitoring and predicting surface water and flood dynamics: Zone I-J

Board	*Title*	*Id*	*Day*
I13	EO4FLOOD: Earth Observation data for Advancing Flood Forecasting	3482	3
I14	Optimizing a Random Forests Pipeline for SAR-based Flood Mapping	2093	3
I15	Advancing Urban Flood Mapping with SAR: Enhancing the UrbanSARFloods Dataset from SAR to InSAR	2570	3
I16	Assessing the quality of a SAR-based flood mapping algorithm under flood and no-flood situations	3331	3
I17	A Decadal Survey of Flood Inundation in Afghanistan Using Sentinel-1 SAR Amplitude and Coherence Analysis	3338	3
I18	SAR Change Detection-based Flood Mapping Using New Space Technology	2707	3
I19	Multi-Sensor SAR-based Flood Mapping for High-Temporal Assessment of the 2020 Flood Event in Huế, Vietnam	2705	3
I20	Data-driven analysis of landslide and flood risk assessment with EO data	1226	3
I21	Can I Trust my Flood Maps? A Comprehensive Analysis of Validation Strategies	3128	3
I22	Near-Real-Time Multi-Source Flood Monitoring: Enhancing and Blending SAR and VIIRS-Based Flood Inundation Products	2949	3
I23	Urban Flood Mapping Using Sentinel-1 and Sentinel-2 and a Capsule Network-Based Deep Learning Approach	2876	3
I24	Enhancing Flood Mapping With Polarimetric Radar Beyond Backscatter Intensity	5017	3
I25	Assessing River Connectivity in the Danube River Basin Using Sentinel-1 Data and Advanced Machine Learning Techniques.	3651	3
I26	Remote sensing of river water surface dynamics over multi-branch rivers in the age of SWOT: extracting channel slope and meander from complex river networks	3328	3
I27	Advancing Wetland and Flood Monitoring Through Multi-Sensor Data intercomparison of SAR and GNSS-R Observations: the Yucatan Lake Case.	4511	3

I28	Monitoring tropical wetland storage using the SWOT mission	4892	3
I29	A Decade of PALSAR-2 Data: Mapping Inundation Variability of Tropical Wetlands	2149	3
I30	Exploring Hydrological Connectivity in European Wetlandscapes with SAR and SWOT	3076	3
I31	Observing Inland Water Body Dynamics Using Capella Space Commercial X-band Synthetic Aperture Radars	442	3
I32	Synergy of SWOT and other optical/radar missions to monitor very small sized, but high impact, reservoirs in semi-arid Bresil	1113	3
I33	Automatic Detection of Water Pans in Agropastoral Areas of Taita Taveta County, Kenya	834	3
I34	SAR-based UNet trained on authoritative governmental water masks to boost small-scale surface water and flood detection in Denmark	3061	3
I35	Multi-sensor Integration of SAR and Optical Data for Robust Surface Water Mapping	5125	3
I36	CAMEO-WAGST: Cameroon Advanced Measurements for Enhanced Observations of Water levels using Affordable GNSS-IR and Sentinel-3&6 Technology	669	3
I37	Validation of Sentinel-3 and Sentinel-6 Derived Water Levels Using a Comprehensive Network of In-Situ Data Over Rivers	1007	3
I38	The Influence of Lake Size on the Accuracy of Satellite-Derived Water Level Measurements	5442	3
J01	Improving inland water altimetry through Bin-Space-Time (BiST) retracking: A Bayesian approach to incorporate spatio-temporal information	2064	3
J02	Recovering noisy measurements over inland water bodies by regenerating L1B SAR altimetry waveforms using a Fully-Focused Sub Synthetic Aperture Radar processing scheme	2314	3
J03	Operational Near Real Time Monitoring of Lakes and Rivers Water Level Exploiting the Copernicus Altimetric Constellation, Copernicus Global Land Services Current Performances and Roadmap: Towards the Inclusion of Swath Altimetry and Copernicus Extension Mission Cristal in the Services	2768	3
J04	Detecting temporal variations of river water surface slopes from ICESat-2	3085	3
J05	On the Use of SWOT Water Surface Elevations for Capturing Global Elevation Dynamics	4999	3
J06	Integrated coastal-river water surface elevation datasets derived from SWOT and ICESat-2 over the Mekong Delta	1905	3
J07	Advancing Hydrological Forecasts with Data Assimilation of Earth Observation Datasets: Mid-Term Results from SEED-FD	1079	3
J08	Instantaneous Sea Surface Height Prediction Using Satellite Altimetry and Deep learning	3958	3
J09	Regional mapping of the surface water mass changes by inversion of Line-of-Sight GRACE acceleration changes	1600	3
J10	Benefiting from the synergy of SAR, laser and wide-swath altimetry and hydrodynamic model. Arctic Lena River as a case study.	2817	3
J11	Initial development of CIMR Level-2 Surface Water Fraction algorithm	3663	3
J12	From satellite to applications: a comprehensive perspective from CNES for water monitoring from space	2990	3
J13	Enhancing River Discharge Simulations in Snow-Dominated Regions: Assimilating Sentinel-1 Snow Depth into a Hydrological Model to Improve Precipitation Estimates in Aosta Valley	3178	3
J14	Reassessing Ice Cover Detection in Internal Waters: A Novel Perspective	739	3

J15	FloodCatch: AI-driven flood detection application for agricultural policy monitoring	5765	3

A.07.06 Monitoring river discharge variability in a context of climate change: bridging satellite technology, ground data and modelling: Zone I

Board	Title	Id	Day
I02	Using autonomous In-Situ Radiometry for Monitoring Suspended Sediments During Flood Events in the Po River, Italy	1613	3
I03	Earth Observation Hydrolab: from SWOT altimetry and multi-satellite to continental water cycle modeling	840	3
I04	Impact of Freshwater Fluxes on Ocean Modelling Systems: Towards the Combination of In Situ and Satellite Measurements With Global Hydrological Models to Improve River Discharge	1177	3
I05	Combining R with Google Earth Engine to create new datasets for the CAMELS-CZ database	4737	3
I06	The Global Runoff Database – A unique archive for in-situ river discharge data	5176	3
I07	Current status of the ESA CCI River Discharge precursor project	1216	3
I08	Advancing River Discharge Estimation Through Merged Radar Altimetry Water Surface Elevation Time Series and Rating Curve Approaches	1539	3
I09	Satellite Altimetry-based Extension of global-scale in situ river discharge Measurements (SAEM)	2539	3
I10	A Satellite-Based Framework for River Discharge Estimation: A Hybrid Approach Integrating SAR, Optical, and Altimetry Data	3317	3
I11	River discharge estimations from Near-Infrared satellite data within the ESA river discharge Climate Change Initiative project	3738	3
I12	An advance integration of satellite products for a Global Product of River discharge	3396	3

A.08.04 Submesoscale air-sea interactions: understanding, observability and impact: Zone E

Board	Title	Id	Day
E19	Atmospheric Gravity Waves signature on the sea surface: Insights from SWOT and OSCAR observations	1652	3
E20	Observing waves, current, wind and coastal bathymetry from satellite optical sensors: The «Multi-Angle Sunglint for Air-Sea Interactions» (MASAI) concept	4131	3

A.08.08 Upper Ocean Dynamics: Zone C-D

Board	Title	Id	Day
C33	Towards the next combination mean dynamic topography model DTUUH25MDT	1035	3
C34	Accounting for a Wind Directional Effect in Sea State Bias for Sentinel-3 Delay/Doppler Altimeter Measurements	3616	3
C35	Direct Observations of Ocean Surface Currents from Sentinel-1 Doppler shift: Separating Contributions from Wind, Wave, and Surface Current	1660	3
C36	Ocean mesoscale hot-spot at the Nordic high latitudes: the Lofoten Basin	3536	3
C37	Estimating ocean currents from the joint reconstruction of absolute dynamic topography and sea surface temperature through deep learning algorithms	2966	3
C38	Fine Scales Structures of the Abrolhos Bank Circulation From SWOT, Insitu and Copernicus Data	2146	3
D01	A collaborative data challenge for advancing sea surface current products: Insights from the WOC Project	3790	3

D02	Deriving Surface Currents Using Multi-Source Approach Through Variational Inverse Method: DIVAnd	1732	3
D03	Improvements of a delay/Doppler altimetry retracker: from modeling to inversion	2911	3
D04	A multi-variables synergy between satellites and in situ ocean data to better estimate upper ocean dynamics	3804	3
D05	Mesoscale Dynamics in the Baltic Sea: Oxygen and Chlorophyll Transport Insights from the 4DBaltDyn Project.	2602	3
D06	An Hybrid Time/Space CNN Approach for Lagrangian Trajectories Simulation	4707	3
D07	Eddy Kinetic Energy Intensification in the Mediterranean Sea From Three Decades of Satellite Altimetry Observations	1772	3
D08	Mesoscale Eddy Trajectories Atlas – Networks (META-Networks): a new dataset and analytical tools to visualize and investigate eddy trajectories and interactions from multi-satellite altimetry products.	4089	3
D09	Global Ocean CO2 Uptake By Long Lived Mesoscale Eddies Identified With a Synergistic Lagrangian Tracking Approach Driven By Altimeter Data	2363	3

A.08.09 Marine and Coastal Carbon: Zone D-E

Board	*Title*	*Id*	*Day*
D10	Regional Modification Of Air-Sea CO2 Fluxes Due To The Inclusion Of Quantified Ocean Biological Processes Within Satellite-based Assessments	2371	3
D11	A Satellite-Based Approach To Estimate Ocean pCO2 and Air-Sea CO2 Fluxes in the Central Mediterranean	2303	3
D12	Is the efficiency of the biological carbon pump in transporting organic carbon changing due to ongoing climate change?	1651	3
D13	Towards a global assessment of coastal dissolved organic carbon	4246	3
D14	Estimation of various carbon fractions in coastal waters by Sentinel-2 MSI and Sentinel-3 OLCI to support large-scale carbon cycle studies	1650	3
D15	Anomalous Summertime CO2 sink in the subpolar Southern Ocean promoted by early 2021 sea ice retreat	2071	3
D16	Assimilation of satellite-derived surface carbon into ocean biogeochemical models to improve the ocean's carbon budget	1678	3
D17	Understanding ground data collection needs for Multi-Resolution Satellite Imagery in Coastal Blue Carbon Monitoring	2140	3
D18	Changes in Global Mangrove Height and Structure	2382	3
D19	Advancing Mangrove Restoration: Deep Learning for Seedling Detection in UAV Imagery	552	3
D20	Toward improved validation of satellite particulate backscatter estimates for climate research: INSPIRE Project	2612	3
E01	A global observing system for ocean color validation: harnessing synergies between kinematical models, remote sensing, and in situ data	3219	3
E02	Agreement between phytoplankton communities using pigments, microscopy, and flow cytometry over three Atlantic Meridional Transects	3841	3

E03	Enhancing Ocean Color Observations' Description of Colored Dissolved Organic Matter by Retrievals of the Diffuse Attenuation in the UV from Sentinel-5P TROPOMI Data	4587	3
E04	A study on the applicability of Geostationary Ocean Colour Imager (GOCI) to monitoring diurnal variations in ocean carbon budget around Korea coastal waters	5280	3
E05	Towards a New Database of Photosynthesis Parameters Estimated From Production Profiles	1671	3
E06	Characterizing Unique Phytoplankton Bio-Optics to Enhance Estimates of Pigments and Productivity in Antarctic Coastal Waters	4545	3
E07	Understanding the Seasonal Variability in Global Photosynthesis-Irradiance Parameters Across Marine Biogeochemical Provinces	2429	3
E08	Dynamic assignment of photosynthetic parameters for modelling primary production from satellite observations using machine learning	1214	3

A.08.10 Coastal Ocean and Land-sea interaction: Zone F-G

Board	*Title*	*Id*	*Day*
F03	Towards an operational and multisource Coastal Observatory at national scale: Enhancing Coastal Dynamics Monitoring through Super-Resolution, Bathymetric Models, shoreline monitoring and LULC mapping.	3831	3
F04	Satellite-derived bathymetry in the Arctic: To what extent can we monitor?	1111	3
F05	Innovative SAR-Based Shoreline Monitoring: Advancing Coastal Change Detection and Environmental Management	1128	3
F06	Temporal and Spatial Variability of the Romanian Shoreline Over Four Decades	3648	3
F07	The Global TanDEM-X High-Resolution Coastline Product	4086	3
F08	Deep Learning Large-Scale Sentinel-1 Database for Coastline Extraction	2148	3
F09	Instant Waterline Detection Using Multi Mission and Multispectral Satellite Imagery: 40-Years Reconstruction of the Southern Latium Coastal Sector.	4153	3
F10	Coastline dynamics in the Black Sea observed from optical and SAR satellite images	4331	3
F11	Resolving near-coastal remote sensing signal into contributions by bottom, water column, glint and the adjacency effect	3217	3
F12	Suitability of Copernicus Marine Products for Estonian Coastal Areas (Baltic Sea)	2815	3
F13	Monitoring of Coastal Dynamics at the Island of Langeoog, Germany by Means of Multi-Sensor Satellite Data	1643	3
F14	FOCCUS: Advancing Copernicus for Coastal Resilience	2611	3
F15	The Copernicus Marine High-Resolution Coastal Service and its evolutions	1213	3
F16	Combined use of virtual altimetry stations and tide gauges to monitor and study variations in coastal sea level: the case of the Wouri estuary (Cameroon)	3690	3
F17	Demonstrating the contribution of ODATIS data hub's medium-resolution products to coastal monitoring	3980	3
F18	Assessment of QuikSCAT-derived coastal winds bias and accuracy.	1961	3
F19	Fusion methodology for advanced high-resolution products of ocean currents in coastal Mediterranean Sea regions – FOCCUS HE project	1373	3
F20	SAR Imprints of Submesoscale and Mesoscale Eddies in the Western Mediterranean Sea: Visual Observations vs. Automated Detection	4434	3

G01	Internal Solitary Waves off the Western Iberian Peninsula: from interactions to short timescale variability and mixing	851	3
G02	Estimating dynamic carbon fluxes across the fluvial-marine system of the Mackenzie River Delta-Beaufort Sea	4899	3
G03	A Satellite Perspective on Estuarine Dynamics: An Optical Water Types Approach	4220	3
G04	From the airborne Delta-X mission in the Mississippi River Delta to Deltas Worldwide with SWOT and NISAR.	597	3
G05	Building an Inventory of the Marine Biogeochemical Responses to Wildfires Aerosol Deposition	4639	3
G06	Towards Reliable Satellite-Based Water Quality Monitoring of Shallow Coastal Lagoons	4971	3
G07	Satellite Observations of Long-term Water Quality Properties using Improved Algorithms in the Chesapeake Bay	5489	3
G08	Automated Monitoring of Anthropogenic Coastal Changes Using Sentinel-2 Imagery and Machine Learning Techniques	3414	3
G09	EO and forcing data-driven forecast of turbidity for the operational monitoring of coastal works	1099	3
G10	Estimation of Water Clarity Based on PRISMA Hyperspectral Mission in Venice Lagoon, Italy	4820	3
G11	Detection of potentially toxin-producing phytoplankton in coastal waters using machine learning and Sentinel-3 OLCI	4341	3
G12	Assessing the Effect of Water on Submerged and Floating Plastic Detection Using UAV and Sentinel-2 Remote Sensing Data and K-Means Clustering	2864	3
G13	Trends of Sea Darkening and the Drivers of Water Optical Properties in Northwest European Shelf	2858	3
G14	Suitability of existing Satellite Chlorophyll products for year-round eutrophication assessments around the UK	4869	3

A.09.02 Dynamic Antarctica: From the coastal margins to the deep interior: Zone B

Board	*Title*	*Id*	*Day*
B05	Melt detection in Greenland and Antarctica from SMOS enhanced resolution brightness temperatures	3785	3
B06	Tracking Antarctic Ice Sheet Elevation Changes with Satellite Altimetry and UAV Laser Scanners in Dronning Maud Land	3641	3
B07	Disentangling climate trends from natural variability using satellite altimetry and firn modelling	2261	3
B08	Lasering for insights into Antarctic snow surface roughness and mass balance – Finnish Antarctic research projects LAS3R and EXQALIBR	1161	3
B09	Towards detecting perennial firn aquifers within Nivlisen Ice Shelf, East Antarctica	4477	3
B10	Channelised-Basal-Melt-Induced Instability of Roi Baudouin Ice Shelf, East Antarctica: A Case Study of the D-29 Calving Event	4017	3
B11	Mapping Subglacial Water Transport Beneath the Antarctic Ice Sheet With Sentinel-1 Interferometry	1965	3
B12	Ice sheet discharge constrained by RINGS airborne surveys of bed topography in Dronning Maud Land and Enderby Land	4553	3
B13	Towards Large-Scale Mapping of the Supraglacial Hydrology of Earth's Ice Sheets	1914	3

B14	Using Sentinel-1 SAR Imagery and Machine Learning Methods to Investigate Buried Meltwater Lakes on an Antarctic Ice Shelf	4562	3
B15	Monitoring of supraglacial lakes on the Nansen ice shelf with active microwave satellite remote sensing: a preliminary assessment	2706	3
B16	Mass Balance and Ice Discharge of the Northern Antarctic Peninsula Derived From Multi-mission SAR Date	751	3
B17	Calving front dynamics in coastal Dronning Maud Land, East Antarctica	933	3
B18	Geothermal heat flow models for ISMIP-7 – Recommendations for Antarctica	2489	3
B19	Ice Shelf Area and Ice Shelf Area Change From Sentinel-1 SAR	1921	3
B20	A Novel Method for Creating Complete, Gapless Lines From Fragmented 2D Data of Antarctic Grounding Line Measurements	2354	3
B21	Quantification of tidal grounding line migration using Sentinel-1 observations	2776	3
B22	POLARIS Airborne Radar Ice Sounding Campaign in Antarctica	3430	3
B23	Determining Ice Flow Direction in Antarctica	491	3
B24	Ice Velocity and Discharge from SAR Satellite Missions: Current Status and Emerging Opportunities	2000	3
B25	5D Antarctica: An integrated assessment of ice dynamic processes	4126	3
B26	Speed-up, slowdown, and redirection of ice flow on neighbouring ice streams in the Pope, Smith and Kohler region of West Antarctica	2359	3
B27	A Decade of High-Resolution Antarctic Ice Speed Variability from the Sentinel-1 Mission	3897	3

A.09.08 Understanding the state of the cryosphere with satellite altimetry: Zone A-B

Board	*Title*	*Id*	*Day*
A01	15 Years of CryoSat Data Quality Control: Evolution and Status of the Ice Processors	425	3
A02	15 Years of CryoSat Data Quality Control: Evolution and Current Status of the Ocean Processors	433	3
A03	Multiscale assessment of surface roughness at the Queen Maud Land - Antarctica, using in-situ, ICESat-2 and CryoSat-2 measurements	556	3
A04	Using CryoSat-2, ICESat-2 and airborne data to prepare for ice-sheet monitoring with CRISTAL	769	3
A05	Combining Altimetry and Digital Elevation Models to Map Antarctic Peninsula Glacier Evolution	924	3
A06	Spaceborne Laser and Radar Sea Ice Freeboards: From Winter to Summer	941	3
A07	A Seamless Ice Sheet Digital Elevation Model Using CryoSat-2	1321	3
A08	CS2EO: Query Platform for Altimetry Data	1394	3
A09	The EOLIS dataset: monitoring land ice from CryoSat-2 swath processing	1402	3
A10	10+ years of Greenland Ice Sheet near-surface density evolution from remote sensing	1453	3
A11	Enhanced Spatial and Temporal Resolution of Greenland Surface Elevation Changes Using a State-Space Model	1592	3
A12	Greenland's Supra-Glacial Lakes: Harnessing Sparse Climate Data for AI-Driven Mapping	1709	3
A13	Sentinel-3 Land STM: Performance of the S3A and S3B Surface Topography Mission over Land Ice	1653	3
A14	CryoSat-2 - 15 Years of Successful Flight Operations	4830	3

A15	Towards optimised and operationalised land ice altimetry pipelines for sustained climate monitoring.	1753	3
A16	Long term records of radar altimetry for monitoring ice sheet processes.	2005	3
A17	Advancing ice altimetry using deep learning: Waveform retracking with AWI-ICENet1	3077	3
A19	A Drone Based Radar for Detecting Sea Ice Thickness	1353	3
A18	Performances of the CRYO2ICE tandem in the new Arctic configuration	4335	3
A20	CryoSat and GRACE help each other: Monthly Antarctic ice sheet mass changes at tens of kilometres resolution from combining satellite data	2128	3
A21	How can High-Resolution Data Help Us Improve our Understanding of Multi-Decadal Ice Sheet Mass Balance for Greenland and Antarctica	2694	3
A22	High Resolution Freeboard From ICESat-2 Photon Cloud Data	4932	3
A23	Cryo-TEMPO: Expanding the radar altimetry portfolio with CryoSat-2 Thematic Products over Land and Sea Ice, Polar and Coastal Oceans, and Inland Waters	2278	3
A24	Towards Operational Frameworks for Monitoring Ice Sheet Elevation change: A Kalman Filtering Approach	2282	3
A25	PRODEM: An Annual Series of Summer DEMs (2019–2024) for the Greenland Ice Sheet and Adjacent Ice Caps and Glaciers	4420	3
A26	Retrieval of Ice Sheet Topography from CryoSat-2 Waveforms Using Deep Learning	2340	3
A27	Recent surface elevation changes of the Antarctic and Greenland ice sheets, from radar (Sentinel-3 AMPLI) and laser (ICESat-2 ATL15) altimetry	3208	3
A29	CPOM Land Ice Data Processor and Products	3626	3
A30	Mapping Sea Ice Concentration and Volume in the Arctic with CryoSat-2	3907	3
A28	Investigating the Influence of Cyclones on Sea Ice Thickness Variability in the New Arctic	3872	3
A31	Sea Ice Thickness, Drift, and Deformation Estimates from Airborne Laser Scanning Data and Machine Learning: Unveiling New Process Understanding	2416	3
A32	Arctic and Antarctica sea ice thickness estimates with a physical model	2668	3
A33	CS2 Baseline F Level 2 Evolutions	1978	3
A34	CRISTAL SEA ICE & ICEBERG L2 PROCESSING: BASELINE APPROACH	3080	3
A35	30 Years of Sea Ice Thickness and Volume over Arctic and Antarctic from Satellite Altimetry	4452	3
A36	Sea ice topography estimation from grazing GNSS reflectometry and Satellite Radar Altimetry	3043	3
A37	Sensitivity of Sea Ice Concentration and Snow Depth to radiometer brightness temperatures at 23, 36 and 89 GHz	4631	3
A38	Retrieval of Lake Ice Thickness on Canadian Frozen Lakes From Surface-Based, Polarimetric, Dual-Frequency Radar Altimetry	5469	3
B01	SAR Altimetry Modelling for Monitoring of Lake Ice Properties	2478	3
B02	Establishing FRM measurements for Sentinel-3 altimeter on polar ice-sheets and ice-caps.	3741	3
B03	Enabling SAR altimetric simulations in the Snow Microwave Radiative Transfer (SMRT) model for the ice-sheet, sea-ice and lake-ice.	3583	3

A.10.02 Geodetic satellite missions and their applications: Zone B-C

Board	*Title*	*Id*	*Day*

B31	CAN SENTINEL-1 ALONG-TRACK MEASUREMENTS IN THE EARTH REFERENCE FRAME SUBSTITUTE MISSING GNSS DATA FOR STRAIN MAPPING?	4905	3
B32	A Combined Sentinel-1 InSAR & GNSS Surface Velocity and Strain Rate Field for the Deforming Alpine-Himalayan Belt	1123	3
B33	A Flexible Reference Frame Connection Procedure for InSAR Time Series Based on Open GNSS Data: a Case Study in Southern Italy	4847	3
B34	Detection of Simulated Corner Reflector Displacement at Mårtsbo Geodetic Observatory Using Persistent Scatterer Interferometry	2730	3
B35	Towards a deep learning approach for improved phase unwrapping for rapid deformation and isolated regions	4168	3
B36	A New Catalog of InSAR Derived Source Parameters for Global Seismicity, Generated via Automated Bayesian Inversion.	770	3
B37	Separating Volcanic Deformation From Atmosphere and Addressing Temporary Loss of Coherence Using Bayesian Estimation of Independent Components	5134	3
B38	Interseismic and Postseismic Deformation of 2023 Kahramanmaraş Earthquakes from Subswath and Burst Overlap Interferometry (SBOI)	3809	3
C01	Widespread extent of irrecoverable aquifer depletion revealed by country-wide analysis of land surface subsidence hazard in Iran, 2014-2022, using two component Sentinel-1 InSAR time series	454	3
C02	A decade of temporal gravity observed by the ESA Swarm satellites	3544	3
C03	Assessing GNSS reflectometry wind speed information over the ocean for NWP applications	2211	3
C04	GNSS Tomography as a Cost-Effective Tool for Atmospheric Water Vapor Monitoring	4139	3
C05	GNSS data processed in PPP mode for the Estimation of the Local Solid Earth Tides: Improvements in Geophysical Investigations	4764	3
C06	Detectability of Gravity Signals Related to Mantle Convection for Future Gravity Satellite Missions	514	3
C07	Efficient DEM Error Detection and Mitigation in Multi-Temporal InSAR for Accurate Deformation Retrieval over Large Areas	5362	3
C08	Joint assimilation of satellite-derived daily Terrestrial Water Storage and Surface Soil Moisture for improving land water storage estimates and flood predictions.	2481	3
C09	Integration of multi-satellite geodetic satellite data for High-Resolution Analysis of Lake Water Storage and Flood Risk	466	3

B.02.02 Managing the Urban Green Transition with Earth Observation data and advanced analytics: Zone U-V

Board	*Title*	*Id*	*Day*
U42	Using Satellites in Support of Reducing Urban Methane Emissions From Solid Waste	4171	3
U43	Estimating the Global Area of Built Structures and Human-Made Impervious Surfaces Using a Sample of BlackSky and PlanetScope Data	790	3
U44	Probabilistic Approach to Effective Road Detection in Noisy Satellite Imagery	3132	3
V01	Decision-making tool for Night-Time Light policies with SDGSAT-1 and Biodiversity Data in Haute-Savoie, France	2270	3

V02	Quantifying the Impact of Urban NBS on Heat Island Mitigation Using High-Resolution EO and In-situ Data	1273	3
V03	Emission Observatory – piloting air quality and greenhouse gas emission hotspot visualization dashboard for Africa	4067	3

B.02.05 Restoring Biosphere Resilience: Transforming Agriculture, Forestry and Other Land Use (AFOLU) from Carbon Source to Sink: Zone R

Board	*Title*	*Id*	*Day*
R02	SEN4MOZ: Mapping Shifting Cultivation Dynamics in Conservation Areas of Mozambique using Copernicus Data	3859	3
R03	Time series mapping of the world's 25 important crops	906	3
R04	Dynamic Baseline Approach Based on Barlow Twins for ARR Projects in Brazil	2821	3
R05	Investigating Planet Imagery to Monitor Crop Residue Management: First Test in North Italy.	3593	3
R06	Continuous Monitoring of Cropland Cover and Management to Support Carbon Modeling and Climate Action	5757	3
R07	Leveraging multi-decadal satellite image time series to characterize grassland history for climate reporting	986	3
R08	Integrating Earth Observation and Modelling for Carbon Budgeting in Finnish Boreal Lakes	2322	3
R09	Mapping Salt Marsh Extent in Atlantic Canada	5020	3
R10	Towards an EO-driven and very high-resolution bookkeeping model (EO4BK project)	3899	3
R11	A preliminary framework for evaluation of spatially resolved uncertainties of land cover maps	1616	3
R12	Estimation of land cover change areas using high spatiotemporal resolution land cover products: a case study of Uganda	4247	3
R13	Annually Mapping Dominant Leaf Type of Bavaria State in Germany Using Sentinel-2 Images	3680	3
R14	Increasing Carbon Loss from Forest to Cropland Conversion in the 21st Century	3630	3
R15	Recent national and sub-national forest loss trends	5066	3
R16	A comparison of stratification strategies for area estimation of forest and forest change	5157	3
R17	Ex-Ante Baseline Deforestation Risk Modelling	2296	3
R18	Aligning Geospatial Methods for Corporate Greenhouse Gas Accounting of Deforestation	2728	3
R19	Classification of Post-Deforestation Land Use with Multi-Modal Deep Learning	1174	3
R20	Aboveground Biomass Net-Change and Private Landholdings in the Brazilian Amazon: How Are They Related?	3964	3
R21	Towards an Operational EO-integrated LULUCF and Carbon Removal Monitoring, Reporting and Verification Service at Pan-European level	918	3

B.02.07 Social-ecological land systems: practical approaches for improved mapping: Zone S

Board	*Title*	*Id*	*Day*
S13	Optimizing Land Cover Classification with Limited Training Data: A Multi-Temporal Machine Learning Approach at the Valencian Anchor Station	5232	3
S14	Integrating global land cover and human mobility data to understand human-nature interactions	5474	3
S15	The contrast of East Kazakhstan – A region between untouched environment and pollution from outdated mining. A remote sensing analyses.	5508	3

B.03.02 Monitoring and measuring climate adaptation using earth observation: Zone U			
Board	Title	Id	Day
U03	The Global Oasis Knowledge Hub	3747	3
U05	Support Local Climate Adaptation Actions Using Earth Observation Data	4969	3
U06	Advancing Drought Resilience through Parameter Optimisation of Agro-Ecological Model	2248	3
U07	Use of remote sensing in support of carbon credits for regenerative agricultural practices	2008	3
U08	Biodiversity Recovery in the Salt Marshes: Assessment of Heterogeneity and Climate Vulnerability	1892	3
U09	The future of dam monitoring: Integrating EGMS InSAR monitoring with conventional techniques.	3531	3
U10	Landscapes in Flux: Modeling Urban Growth and Climate Futures in Western Germany 2050	1136	3
U11	Monitoring Urban Development Strategies to Mitigate Surface Urban Heat Islands Using Pixel-Wise LST and Air Temperature Regression	1681	3
B.04.02 Addressing multi-hazards: Compounding and Cascading Events through Earth Observation: Zone J-K			
Board	Title	Id	Day
J20	Advancing Multi-Hazard Risk Management With On-Board AI and Earth Observation: A Conceptual Framework for Addressing Cascading Hazards	1690	3
K01	Exploring the potential of remote sensing data to assess the combined effects of drought and heatwave over the Amazon Basin in the year of 2023.	2090	3
K02	During Drought Lights Go Out – EO-Based Monitoring Of Ecuador´s Drought Cascade	4558	3
K03	ARCEME event database for cascading drought and extreme precipitation events	3529	3
K04	The Future Impacts of Multihazad Events	4984	3
C.01.08 Optical instrument concepts and technologies to enable new EO science missions: Zone V			
Board	Title	Id	Day
V40	Exploring the Capability of Future SBG-TIR Mission for Volcanic Ash and SO2 Retrievals	1620	3
V41	An Overview of the Evolution and Future of Detector Technologies for Living Planet Missions and the Positive Impact of Institutional Development on the Market Dynamic for Commercial and Export Segments.	2588	3
V42	Can a Constellation of CubeSats using a Miniaturized Optical Ranging Instrument help reduce Temporal Aliasing in Gravity Field Recovery?	2625	3
C.01.10 Microwave Instrument Concepts and Technologies to enable new EO Science Missions: Zone V			
Board	Title	Id	Day
V16	Assessment of Hongtu-1 Multi-Static X-Band SAR Constellation Interferometry	436	3
V17	Alternative applications of SWOT KaRIn time series	892	3
V18	An Assessment of the Potential of WIVERN Pulse-Pair Observations for Monitoring Ocean Surface Currents Applications	1209	3
V19	Calibration and Inversion of OSCOM Airborne Campaign	1485	3
V20	An Observing System Simulator for the C2OMODO Mission Microwave Radiometers: Current Capabilities and On-going Developments of the RadioSpy Platform	2277	3
V21	Link Budget Analysis for the Upcoming PLATiNO-1 SAR Mission in Bistatic Configurations	3083	3
V22	Simulation Analysis of the Imaging Performance of the Upcoming PLATiNO-1 SAR Mission	3155	3

V23	StriX with F-STEC: Toward the First High-Resolution Wide-Swath Imaging Mode for Constellations of Small SAR Satellites	2910	3
V24	Harmony SAR phase synchronization and performance validation by using a prototype End – to – End simulator	3599	3
V25	On the Challenges of Coherent Ambiguity Removal in the Harmony Mission	3653	3
V26	Ocean Dynamics and Surface Exchange with the Atmosphere (ODYSEA): a NASA Earth System Explorers candidate mission with a strong contribution from CNES	4504	3
V27	Effects on Brightness Temperature Bias from Simulated Antenna Pattern of the Arctic Weather Satellite Radiometer.	4103	3
V28	GRaWAC: G-band Radar for Water Vapor and Arctic Clouds	4360	3
V29	Using WBSCAT wideband scatterometer data for Characterization of Hydroterra+ Data Acquisition	4595	3
V30	The potential of Wideband Communication Transmissions as Signals of Opportunity for Inland and Coastal Altimetry	4827	3
V31	DopSCA for direct ocean current measurement	4974	3
V32	A digital receive and transmit module for a generic radar electronic	2156	3
V33	Data Driven DSAR Synchronization: From Raw Data Simulation to Algorithm Implementation and Testing	2288	3
V34	Digital Beam Forming and Synthetic Aperture Interferometry: two sides of the same coin ?	3494	3
V35	Performance Analysis of a Geostationary SAR for Interferometric Applications	3856	3
V36	Radio Frequency Interferece (RFI) Survey of the Passive Microwave Bands using the Earth Observation RFI Scanner (EORFIScan)	3873	3

C.01.12 New science-driven Earth Observation Mission ideas – Are you ready to boost future satellite Earth Observation?: Zone V

Board	*Title*	*Id*	*Day*
V38	PLUTO: a knowledge platform to boost remote sensing processing research and development	1691	3
V39	ERADICATE: A Mission Concept to Improve Food and Nutritional Security Through an Evaluation of Remote Airborne Detection of Invasive Agricultural Threats	3862	3

C.02.05 MAGIC – Preparing for the ESA-NASA satellite gravity constellation: Zone C

Board	*Title*	*Id*	*Day*
C12	NGGM/MAGIC contributions to geodesy in geoid modeling and precise orbit determination	608	3
C13	NGGM/MAGIC contributions to the static and time-variable IHRF and height combination realization	475	3
C14	NGGM\MAGIC to Improve River Discharge and Runoff Estimation	803	3
C15	An efficient data assimilation (DA) approach for integrating GRACE-C, NGGM, and MAGIC data into global high resolution hydrological models	882	3
C16	Integrating Future Satellite Gravimetry Missions with Regional Land Surface Models: Capturing Water Storages and Fluxes Under Extreme Conditions	3326	3
C17	Monitoring Terrestrial Mass Changes: The CNES's Level-2 and Level-3 Gravimetry Products	2042	3
C18	The NGGM/MAGIC Mission Performance Evaluation Framework	619	3
C19	Future Satellite Gravimetry: Towards a Direct Time-Variable Parametrization	2059	3

C20	Enhancement of Gravity Field Retrieval Performance Through Incorporation of Background Model Uncertainty Information	631	3
C21	Updating the ESA Earth System Model for Future Gravity Mission Simulation Studies: ESA ESM 3.0	1470	3
C22	How can COST-G support MAGIC?	3167	3
C23	Development of an open-source Level-3 processor for time-variable satellite gravimetry data	1893	3
C24	Application of the space-wise approach for regional solutions from NGGM/MAGIC simulated data	4555	3
C25	Rifting detectability in the Gulf of Aden from MAGIC simulated data	4598	3
C26	Developments in Level-3 ice-sheet mass balance products from GRACE to MAGIC	5152	3
C27	Evaluating the Impact of Future Satellite Gravimetry Missions (NGGM/MAGIC) on the Closure of the Sea Level Budget	1244	3
C28	In-flight calibration of the NGGM accelerometers	1582	3
C29	Assessment of updated dealiasing products based on the numerical ocean dynamics model TUGO	1096	3
C30	First Level-2a gravity field results of the NGGM and MAGIC End-To-End Mission Performance Evaluation Study	1478	3
C31	Improved ocean tide models for gravity field recovery by means of the MAGIC double-pair constellation	1937	3
C32	Toolbox for MAGIC	1983	3

C.02.12 ESA's Biomass mission: Zone R-S

Board	*Title*	*Id*	*Day*
R24	Mapping Tropical Forest in Gabon: A successful cooperation between ESA - NASA – DLR	5250	3
R25	Updates from the Project Office Biomass: Building a User Community in Germany and Beyond	4740	3
R26	Quantifying the interaction between vegetation biomass dynamics and atmospheric CO_2	5210	3
S01	Enhanced Orbit and Baseline Control Strategy for the BIOMASS Mission	3315	3
S02	On the Use of Multi-Squint for the Ionospheric Calibration of SAR Images: The Biomass Case	4515	3
S03	Ionospheric Irregularity Height Estimation Based on Scintillation Signatures in SAR	4489	3
S04	BIOMASS: Strategies and Challenges of a Special LEOP	5521	3

C.02.14 The EarthCARE Mission's First Year in Orbit: Opening new Horizons for Cloud, Aerosol and Radiation Science: Zone N-O

Board	*Title*	*Id*	*Day*
N42	Radiative closure assessment using A-Train satellite data and EarthCARE synergetic retrieval algorithm	3848	3
N43	The MTG/FCI Optimal Cloud Analysis product as complementary information for the analysis of EarthCARE cloud observations	860	3
N44	The fractal dimension of cloud measured with radar, lidar, and imagery	870	3
O01	EarthCARE PDGS status and lessons learned after one year of operations	4569	3
O02	Overview of ATLID Level 1 processing and calibration	4843	3
O03	The ESA EarthCARE Instrument Calibration and Monitoring Facility	1775	3
O04	What is the EarthCARE DISC?	1388	3

O05	Radiative Effects of Dust Aerosols and Water Vapor During the ORCESTRA Campaign Over the Atlantic	5201	3
O06	DISC support to the EarthCARE Cal/Val activities	5296	3
O07	Overview of Japanese Validation Activities for JAXA EarthCARE Products	991	3
O08	The Potential of the ERATOSTHENES CARO National Facility in the EMMENA Region: Observations over Cyprus During the First Year of EarthCARE Mission	3942	3
O09	Validation of EarthCARE MSI L1 data using the MSI forward simulator tool	3252	3
O10	Use of State-of-the-Art Spectral Radiation and Aerosol Measurements for EarthCARE Validation	3323	3
O11	Continuous Validation of EarthCARE's First Year Through Monitoring within ECMWF's Data Assimilation System	3496	3
O12	Monitoring and assimilating EarthCARE ATLID aerosol products in ECMWF's IFS-COMPO	5049	3
O13	Exploring Aerosol Composition and Vertical Distribution: Validation of EarthCARE ATLID with CAMS forecast	1444	3
O14	The ATLID-FeatureMask L2a Processor; Initial Results Using EarthCARE L1 Data	3082	3
O15	Ground Measurements of the ATLID Laser Beam at Ultra-High-Energy Cosmic Ray Observatories	1134	3
O16	Cloud top heights from ATLID and from ATLID/MSI synergy	2376	3
O17	Aerosol layer properties from ATLID and from ATLID/MSI synergy	2386	3
O18	The validation of the depolarization ratio measured by ATLID	3000	3
O19	First Examples of Aerosol Optical Thickness from the Multi-Spectral Imager (MSI) on EarthCARE	3730	3
O20	POLIPHON for 355 nm wavelength: novel conversion parameters and their application to EarthCARE/ATLID and ground-based lidar data	4528	3
O21	Using EarthCARE to Disentangle Cloud Adjustments to Aerosol Perturbations	1336	3
O22	Evaluation of EarthCARE Aerosol Extinction and Backscatter Profiles from Raman Lidars.	1550	3
O23	Advancing Aerosol-Cloud-Lightning Interactions: The Storm Data Cube	1366	3
O24	Ice cloud microphysical balance in cirrus clouds captured by high-resolution climate simulations and doppler radar observations	1445	3
O25	Evaluation of the EarthCARE BBR solar and thermal radiative fluxes	1779	3
O26	Unfiltering of the EarthCARE BBR: First results	3558	3
O27	ESA Mobile Lidar for EarthCARE mission: EMORAL & ATLID	3972	3
O28	The EarthCARE CPR L2A C-PRO data product: Updates and performance evaluation	3917	3
O29	Investigating Aerosol Impacts on Cloud Properties Using Remote Sensing Techniques	4369	3
O30	Quality Assurance of the Ground-based Aerosol High Power Lidar Measurements in the framework of the ATMO-ACCESS pilot for EarthCARE Cal/Val	4358	3
O31	ECLiAP: A Physics-Based Framework for Advanced CCN Retrievals Using Lidar Observations	4455	3

C.03.03 Advancing global-scale high resolution imaging spectroscopy in preparation for CHIME: Zone O-P

Board	*Title*	*Id*	*Day*
O32	The AVIRIS-4 Airborne Imaging Spectrometer in Support of CHIME and SBG	429	3
O33	Soil Spectral Library for Soil Mapping	477	3

O34	Integration of Plant Trait and Spectroscopy Data for Calibration and Validation of CHIME Vegetation Prototype Products.	5361	3
O35	SBG VSWIR Terrestrial Vegetation Database and Algorithm Development	594	3
O36	Phytoplankton Taxa Identification in Lakes Using Hyperspectral Airborne Imagery	671	3
O37	CORATHYP : an Atmospheric Correction Tool With Enhanced Atmospheric Characterization From Retrieval Techniques, ECMWF And CAMS Data - Application To SENTINEL2 and ENMAP	4104	3
O38	Atmospheric correction of hyperspectral satellite missions with the MAGAC toolbox	1050	3
O39	Towards quantifying model error from spectral radiative transfer models: an application to PROSPECT	2906	3
O40	The CHIME Observation Performance Simulator (OPSI) Software System	1266	3
O41	Implementation of Python Software for Estimating Vegetation Properties From Hyperspectral Satellite Data in the Prospect of CHIME	2566	3
O42	Glacier ice spectroscopy: where art thou?	4520	3
O43	Analysing Spatio-Temporal Estimation of Canopy Nitrogen Content (CNC) Exploiting Different Space-Borne Hyperspectral Data: Developing Sensor Agnostic Models	4894	3
O44	Enhancing methane detection through hyperspectral imaging and machine learning algorithms for CHIME mission preparatory activities	5218	3
P01	A Physics-Informed Neural Networks hyperspectral unmixing method for ASI PRISMA data	5183	3
P02	Exploring the use of PRISMA hyperspectral data to detect areas vulnerable to land degradation in Mediterranean forests	4317	3
P03	Leveraging PRISMA and EnMAP 2020-2024 Time Series for Improving Agricultural Soil Properties Retrieval	4604	3

C.05.05 The German EnMAP Mission: 3 Years of hyperspectral data - From Science to Environmental Applications: Zone P

Board	*Title*	*Id*	*Day*
P06	EnMAP and PRISMA time series for agricultural practice	743	3
P07	Mapping Kaolinite by EnMAP Hyperspectral Imagery Using Machine Learning Algorithms Trained on Synthetic Spectra: a Case Study of Cuprite Hills, Nevada, USA	863	3
P08	Monitoring Ecosystem Dynamics via Comprehensive Plant Traits Using EO Data Cubes	885	3
P09	Environmental Rehabilitation in the Western Negev: Asbestos Mapping with ENMAP Satellite Data	1056	3
P10	Mapping Forest Canopy Nitrogen Content From EnMAP Imaging Spectroscopy by Coupled Leaf-Canopy Radiative Transfer Models and Gaussian Process Regression	1749	3
P11	First Retrievals of Aerosol Optical Thickness, Surface Reflectance and Cloud Properties using EnMAP Radiance Data with the XBAER Algorithm	2623	3
P12	Spaceborne Hyperspectral Data Application for Characterizing Debris-Covered Glaciers in High-Mountain Environments. The Khumbu Glacier Case Study.	2771	3
P13	EnMAP data from a user‘s view	2116	3
P14	The EnMAP Foreground Mission – High priority acquisitions for enhanced science and synergies	5297	3
P15	Three Years in Orbit: Statistics from the Ground Segment of the EnMAP Mission	2225	3

P16	Optimizing EnMAP Satellite Operations: Acquisition Strategies and Data Access	2347	3
P17	EnPT: An Open-Source Tool for Custom Processing of EnMAP Hyperspectral Data	2412	3
P18	Advancing Hyperspectral Data Analysis with the EnMAP-Box	526	3
D.02.04 Machine Learning for Earth System Observation and Prediction: Zone G-H			
Board	*Title*	*Id*	*Day*
G35	WeSea - Near-real Time Monitoring of Coastal Zone – A Change Detection by Machine Learning model	2003	3
G36	Using SAR Sentinel-1 Imagery and U-Net Model for Oil Spills Monitoring	2900	3
G37	Artificial Intelligence for Earth Observation: A Machine Learning Approach for Weather Prediction on the European Weather Cloud	4958	3
G38	Learnt high-resolution encoding for improving the training of low-resolution fluid flow and weather models	4794	3
H01	Subsurface Ocean Insights: Advancing Severe Weather Forecasting through AI	722	3
H02	Advancing Ocean Insights: AI-Driven 4D Joint Reconstruction of Physical and Biological Fields in the Mediterranean Sea Within the ESA 4DMED-Sea Project	2091	3
H03	Comparative Analysis of StyleGAN2-ADA and Improved Diffusion Models for SAR Ocean Pattern Generation: A Spectral-Domain Validation Approach	5320	3
H04	Reconstruction of Arctic sea ice thickness (1992-2010) based on a hybrid machine learning and data assimilation approach	3130	3
H05	Advancing Surface NO2 Estimation Across Europe Using Machine Learning: Integration of Cloud Filling and Extended Spatio-Temporal Analysis	4018	3
H06	The E-CONTRAIL dashboard	4199	3
H07	Toward Estimating Pollutant Emissions From Fired-Clay Brick Kilns Across India Using Sentinel-2 Satellite Imagery and Machine Learning	4851	3
H08	Deep Learning for Fire Risk Prediction: Application of Metric Learning and Explainability Methods	4339	3
H09	Detecting Greenhouse Gas Anomalies in Satellite Data With Topological Data Analysis	1140	3
H10	A new unsupervised method for detecting anomalous areas in geospatial data. Applications to plume detection from greenhouse gas satellite data.	3383	3
H11	The Value of Hybrid Neural-Numerical Surrogate Models for Accelerated Greenhouse Gas Retrievals	1843	3
H12	Advanced Greenhouse Gas Predictions: Leveraging Ecosystem-Specific Analyses at ICOS sites using ML Models	4509	3
H13	Reconstructing 3D Cloud Profiles from 2D Satellite Imagery using Deep Learning	650	3
H14	AI4RSSI: an AI-Based Approach for Generating Synthetic Copernicus Sentinel-2 Images	1447	3
H15	Robust U-Net- and Transformer-based Cloud Masking Approaches for Multispectral Earth Observation Satellite Missions	4823	3
H16	EO Data Synergy for WIVERN Gap-Filling Using Machine Learning	1602	3
H17	Exploration of Machine Learning Techniques for ASIM Data Analysis	1764	3
H18	STeMP: A Protocol for Spatio-Temporal Models	1797	3
H19	Multi-channel U-Net for Separating Temporal Gravity Signals	2062	3

H20	Assimilating Brightness Temperatures of Microwave Sensors Into the LDAS-monde System Using a Neural Network	2072	3
H21	A generic and scalable neural scheme for data-driven reconstruction, prediction and uncertainty quantification in Climate Sciences	3239	3
H22	COUPLED VAE AND INTERPOLATOR APPROACH FOR FAST HYPERSPECTRAL IMAGE EMULATION	3638	3
H23	Exploring Multi-level Uncertainty Quantification for Remote Sensing Image Classification: How Label Embeddings Can Effectively Target Calibration and Out-of-Distribution Detection Performance	3678	3
H24	Advancing Wetland Segmentation and Classification using Earth Observation and AI	888	3
H25	A glacier-rock glacier inventory for the semi-arid Andes generated using a deep-learning approach.	2111	3
H26	Pan-European Multi-Seasonal Land Cover Mapping Model	1002	3
H27	Recent Advances in iota2: Enhancing Large-Scale Land Use Mapping with Cutting-Edge Tools and Techniques	3180	3
H28	Advanced Analysis of Agroforestry Fractional Covers Leveraging Sentinel-2 Data and Deep Learning Techniques	1282	3
H29	Integrating Deep Learning with Aerial Laser Scanning to Estimate Tree Diameter in Short Rotation Coppice	2712	3
H30	Advanced Tree Detection and Classification for Afforestation Monitoring Using High-Resolution Satellite Imagery: A Case Study from Medina, Saudi Arabia	3021	3
H31	SENTINELSAnyTIME: Advancing Agricultural Monitoring with Real-Time Cloud-Free Sentinel Data	1326	3
H32	Correlation of Green Values and Protein Content in Oats	4533	3
H33	Multi-Task Learning for Field Boundaries Segmentation and Crop Classification Using Remote Sensing Imagery	2245	3
H34	Spaceborne SAR and Machine Learning for Crop Damage Mapping: Exploring Potential and Scalability	4313	3
H35	Deep Learning models for short-term drought prediction in the Horn of Africa	5331	3
H36	Evaluating Deep Learning for Downscaling GRACE-Derived EWT in Flood Monitoring	2875	3
H37	An AI-based Prediction Service of Extremely Heat Islands in Cities for Urban Planning and Citizen Protection	3230	3

D.02.05 EO-based solutions to address civil security-related scenarios: Zone K

Board	*Title*	*Id*	*Day*
K06	Preventive Infrastructure Monitoring: AI-Driven Integration of SAR and Meteorological Data for Bridge Failure Prediction	3207	3
K07	Improving Railway Safety: Using Satellite Data and AI for Monitoring and Risk Prediction	2652	3
K08	Terrain-Trafficability assessment for optimised route planning using soil moisture & load bearing information derived from EO data	2226	3
K09	Improving Tiny Object Detection in Enhanced Sentinel-2 Images Using Density and Detection Methods	553	3

K10	Transformer-Based Networks for Efficient Vectorization: A Case Study of Building Rooftop Extraction	5026	3
K11	ATR Toolbox: Operational end-to-end training environment for feature detection and recognition purposes based on high-resolution SAR imagery	3940	3
K12	Enhancing Copernicus Security Services - EU governmental crisis management hub for forced population displacement - THEIA project	645	3
K13	Projecting Ukraine's Agricultural Future: synergy of the Global Change Analysis Model and Satellite-Based Insights on Crop Areas and Income Trends Amid Conflict	981	3
K14	Advancing Maritime Surveillance: Integrated AI-Based Wake Detection in Earth Observation Imagery for Enhanced Civil Security Applications	2286	3
K15	SPECTRE: Marine traffic monitoring through an innovative AI-powered multi-sensor multi-mission framework	3433	3
K16	Vessel Detection Leveraging Satellite Imagery and YOLO in Maritime Surveillance	4933	3
K17	Using met-ocean repositories to support the creation of large datasets for AI applications	5008	3
K18	SaferPlaces AI-based Digital Twin Platform for Flood Risk Intelligence in Urban Area	3467	3
K19	Night-time Satellite and Aerial Image Denoising with Online Complex Noise Modeling and Deep Learning	4867	3

D.02.09 Enhancement of EO products using advanced multi-instrument and multi-platform synergies: Zone V

Board	*Title*	*Id*	*Day*
V04	Gap-filled LAI series for crop monitoring at 20 m resolution by fusing optical and SAR data based on CNN	570	3
V05	EO-base Water Quality and Ship Detection Web Application For Decision-Making in the Baltic States	1561	3
V06	A multi-sensor strategy to observe coastal marine macroplastic litter	2173	3
V07	Integrating Multi-Scale Earth Observation for Monitoring of Mining Waste: Insights from the MOSMIN Project	5228	3
V08	Sustainable Mining Valorization: EO and Geophysical Synergies for Critical Raw Material Recovery	5256	3
V09	Deep Learning Downscaling of LST: Enhancing Heat Stress Detection in Amazonian Rainforests	2587	3
V10	Lessons Learned from COAST-VC Satellite and GOOS In Situ Co-Design Communities	2822	3
V11	MERCURIO, an Innovative Monitoring System Employing Multisource Data for the Safety of Railway Infrastructure	2840	3
V12	Estimating High Resolution Building Height at a Country-Level Using Sentinel-2 and Sentinel-1 Mission Data	3191	3
V13	Cloud-Based Validation of HISTARFM for Gap Filling in Sentinel-2 Data	3400	3
V14	Enhancing PM Estimation Through Multi-Platform Synergies: a Preparatory Study for the MAIA Mission	4230	3
V15	Integrating Earth Observation and AI for Advanced Geohazard Monitoring: The EASTERN Project	4543	3

D.02.12 Big-data Driven AI Techniques in Ocean Applications: Enhancing Marine Monitoring and Analysis: Zone G

Board	*Title*	*Id*	*Day*

G16	Fusion of Multi-Source Data for Comprehensive Assessment of Phytoplankton Composition	3736	3
G17	Improved monitoring of phytoplankton functional types in the Arctic Ocean based on big-data driven machine learning methods	4092	3
G18	Forecasting Water Quality from Space	3425	3
G19	Sensor-Agnostic Seagrass Mapping across Spatial Scales: Evaluating Satellite Sensors in the Baltic Sea	493	3
G20	Coastal Pond Aquaculture Expansion in Asia: A Multi-Decadal Satellite Time Series Analysis	3060	3
G21	Using Sentinel-2 data to quantify marine traffic in the Archipelago Sea 2018-2024: Where, when and how much?	1782	3
G22	Satellite detection of small vessels to monitor their potential impact on marine protected areas	2400	3
G23	Deep Learning for Near Real-Time Oil Spill Detection Triggering Forecasting Applications in a Digital Twin of the Ocean Framework	1657	3
G24	Enhancing Offshore Infrastructure Monitoring: Synthetic Data Generation for Deep Learning-Based Object Detection on Sentinel-1 Radar Imagery	1825	3
G25	Operational High-Resolution Ocean Current Forecasts for Maritime Stakeholders	2869	3
G26	Diffusion Models for Sea Surface Height Reconstruction	3560	3
G27	A remote sensing foundation model for the ocean using Sentinel-3	4312	3

D.03.03 Impact through Reproducibility in Earth Observation Science and Applications: Zone G

Board	*Title*	*Id*	*Day*
G30	Cubes & Clouds – A Massive Open Online Course for Cloud Native Open Data Sciences in Earth Observation	4272	3
G31	EarthCODE - a FAIR and Open Environment for collaborative research in Earth System Science	800	3
G32	Enhancing knowledge reuse and impact with the GEO Knowledge Hub	2056	3
G33	Systematic Reference Data Quality Assessment For Global Crop Mapping	2679	3
G34	Overview of the services provided to Earth and environmental data producers by the DATA TERRA Research Infrastructure, with a focus on satellite EO data	4549	3

D.03.05 Harnessing Open and Community-Driven Innovation in Times of Emergencies: Zone K

Board	*Title*	*Id*	*Day*
K05	Participatory Wall-to-Wall Mapping of Burned Areas in Russia With Sentinel-2 Imagery	2553	3

E.05.01 Traceable, Transparent Supply Chain Data for Monitoring: Examples from the Forest Data Partnership and A Call to Accelerate Industry Alignment.: Zone S

Board	*Title*	*Id*	*Day*
S09	National Tree Species Mapping Using Multispectral Radar and Optical Time Series Satellite Imagery and In-situ Data	1936	3
S10	Enhancing Forest Biomass Monitoring for Sustainable Bioenergy Production using Multi-Source EO Data	828	3
S11	Integrated EO Information for Advancing the MRV of European Forests Entering Nature Markets – EU-FOCIS	1525	3
S12	Intergovernmental Panel on Climate Change (IPCC) Tier 1 forest biomass estimates from Earth Observation	598	3

F.02.03 Using satellite EO in global capabilities for disaster response: Zone J

Board	Title	Id	Day
J17	Montandon: The Global Crisis Data Bank	3141	3
J18	The CEOS Missions, Instruments, Measurements and Datasets (MIM) Database - Overview, Upcoming Missions, and Applications	905	3
J19	Secure Decentralized Analytics for Earth Observation: Leveraging Zero-Knowledge Proofs for Trustable Onboard Machine Learning	2646	3

F.02.07 Essential Agricultural Variables: Building Blocks for Global Agriculture Monitoring and Policy Support: Zone S-T

Board	Title	Id	Day
S18	Transfer Learning for National-Scale Crop Field Delineation in Sub-Saharan Africa using Pan-Sharpened SPOT 6/7 Data	3778	3
S19	Optimizing Hybrid Models for Canopy Nitrogen Mapping from Sentinel-2	1682	3
S20	The Potential of Synthetic Data Generation in Predicting Agricultural Variables Using Machine Learning and Remote Sensing Data in Data Scarce Situations	2421	3
S21	Comparison and validation of spatial Reference Evapotranspiration datasets over Africa	4256	3
S22	Integrating Sentinel-1 and Sentinel-2 Data for Wheat and Rice Yield Prediction in the Nile Delta	1706	3
S23	Empirical Rice Yield Forecasting Models for Eastern Spain Using Remote Sensing.	1368	3
S24	The Use of Remote Rensing to Study the Rrogression of the Mealybug Pest in Citrus Orchards in Valencian Province Within the Co-Fruit AGROALNEXT Project.	2448	3
S25	Challenges in Crop Type Mapping: Integrating Field Data, Spectral Analysis, and Remote Sensing	3875	3
S26	Spatiotemporal Monitoring of Cropland Soil Organic Carbon Changes From Space	3830	3
T01	Crop biophysical and yield information estimation using time series of Sentinel-2 data	5041	3
T02	Cropland and Crop-Type Specific Product Fusion for Global Monitoring and Yield Forecasting	859	3
T03	A Multi-Year Pan-European Crop Type Map at 10 m Resolution: Introducing a New HRL Copernicus Product	1619	3

F.04.01 Earth Observation for European Agricultural Policies: Zone T

Board	Title	Id	Day
T08	Enhancing Crop Monitoring through Crop-specific Copernicus Sentinel-2 data: Insights from the JRC MARS Bulletin Use Cases	3815	3
T09	Counting pixels: an analysis of statistical assumptions in times of synoptic, multi-sensor high accuracy crop mapping	3012	3
T10	Monitoring of Common Agriculture Policy (CAP) standards with Copernicus earth observation data for the efficient use in administrative practice	1851	3
T11	Crops Classification by Procrustes Analysis to Support the CAP Controls	2963	3
T12	Crops classification algorithms comparison to support the CAP controls	4294	3
T13	Dashboard Service Supporting Agricultural Decision-Making Based on Satellite and In-Situ Data	449	3
T14	BirdWatch - a Copernicus satellite-based service to measure and improve farmland biodiversity	691	3
T15	Spectral Signatures of Sustainability: Using Sentinel-2 to Monitor Soil Management Practices	855	3

T16	Assessing pan-European crop diversity and rotation using the High Resolution Layers on Crop Types from 2017 to 2021	4626	3
T17	Advancing European Agricultural Policies through Innovative Earth Observation Solutions by Planet	4019	3
T18	Integration of Satellite Technologies for Agricultural Land Classification (STALC)	1866	3
T19	Automatic Detection of Sewage Spills on the Insula EO Platform From Sentinel 2 Satellite Imagery	3150	3
T20	Towards Biodiversity Restoration in Agricultural Landscapes: Hedgerow Mapping and Analysis in Bavaria	3269	3
T21	Detection and Classificatoin of Nitrogen Fertilized Fields Using Sentinel-2 Imagery: an AI-Based Approach With Comparative Reflectance Analysis of Fertilizer Types	3295	3
T22	Identifying summer and winter crops with Sentinel-2 data for catchment-level nutrient runoff modelling	4060	3
T23	Multi-frequency SAR Time Series for the Detection of Sowing Events and Early-Season Crop Classification	4566	3
T24	Early-season Cotton Yield Estimation in Türkiye Using Satellite-Derived Inputs with XLSTM	5299	3
T25	Drought Adaptation Strategies Through a Multi Data Approach	4773	3
T26	Delineation of management zones for the application of fertilizers in the environment of an innovative precision farming approach based on remote sensing data in Brandenburg, Germany	1687	3
T27	NEOCAP	5528	3

F.04.02 Supporting Global Food Security through Earth Observation: Zone T

Board	*Title*	*Id*	*Day*
T29	Mapping the Cropping Practices with Earth Observation Satellite Image in Support of Sustainable Agricultural Management	5094	3
T30	Earth Observation to support national crop statistics in regions with little ground truth: a case study for maize and rice area estimation in the northern Korean Peninsula during 2019-2024	2741	3
T31	Leveraging Machine Learning for National-level Yield Prediction to Support Food Security	2909	3
T32	Early-Season Crop Mapping Using Sentinel-2 Time-Series Data and the Random Forest Algorithm	3126	3
T33	Space Applications at the Service of Food Security in the Mediterranean Region	4333	3

F.04.08 Earth Observation for Nature Finance and Ecosystem Accounting: Zone U

Board	*Title*	*Id*	*Day*
U01	Mapping the 60-year Evolution of Agricultural Parcel Extents: A Customised Segmentation Approach Combining Historic and Modern Remote Sensing Imagery	2597	3
U02	BioDivER – an Earth Observation based environmental reporting tool	842	3

F.04.13 Urban Resilience: Zone U

Board	*Title*	*Id*	*Day*
U14	Mapping heat capacity of city by diurnal airborne scanning	5380	3
U15	How are Urban Heat Islands impacted by LULC Heterogeneity? German Cities in Focus	3686	3

U16	The HEATWISE Advanced Products and Algorithms for Urban Resilience Exploiting Hyperspectral and Thermal Data in Preparation to ESA's Sentinel Expansion Missions	1457	3
U17	UrbanAI: Data-Driven Surface Mapping for Sustainable Urban Development	3370	3
U18	High resolution evapotranspiration for climate adaptation strategies	3351	3
U19	Characterizing spatially explicit urban heat risk from Earth Observation data to drive urban renovations	4402	3
U20	Developing a Spectral Library of Urban Materials to Support Climate-Responsive Cities	5260	3
U21	Advancing Understanding of Urban Green Spaces' Cooling Effects Using Sub-Meter Resolution Imagery	4526	3
U22	Creating Cooler Cities: Modeling Present and Future Microclimate Impacts of Laser-Scanned Vegetation in European Cities	4190	3
U23	The influence of urbanization on vegetation phenology in European capital cities	4213	3
U24	Urbanization Pressure and Temporal Dynamics of Green Spaces in Cities Using High Spatial and Temporal Resolution PlanetScope Satellite Imagery	862	3
U25	Hyperspectral characterization of local climate zones (LCZ) in small-scale urban and rural landscapes using PRISMA imagery	3194	3
U26	Large-Scale Application of Very High-Resolution Orthophotos for Mapping Impervious Surfaces: An Automated, AI-Based Approach in North Rhine-Westphalia, Germany	1784	3
U27	The Action Fund 2.0 Data2Resilience Project: Data-driven Urban Climate Adaption for Dortmund	3017	3
U28	Why Directional LST Data Might Fall Short for Urban Climate Adaptation Monitoring and Policy	3026	3
U29	An atlas of land cover, land use and ground motion information in Europe.	696	3
U30	Land use and land cover changes in the Bucharest region following Romania's accession to the European Union in 2007	767	3
U31	Towards an Annual Update of Urban Change Detection	2388	3
U32	Mapping changes within urban areas: what is possible with spaceborne SAR sequences?	2917	3
U33	Monitoring and Detection of Urban Developments through Integration of Multiple Satellite Image Sources (Radar and Optical): A Case Study in Türkiye	2600	3
U34	Urban Scaling of Well-Being in Dutch Cities	2634	3
U35	Evaluation of the effects of drought and urbanization on urban trees using Sentinel-2 time series	3276	3
U36	AI-based Forecasting and Immersive Visualization for Flood and Mobility Resilience	4293	3
U37	Advancing Renewable Energy Solutions for Cities	5039	3
U38	A new shadow compensation approach for advanced retrievals of urban environmental information	1476	3
U39	Leveraging Earth Observation for Resilient and Sustainable Urban Development: The BUILDSPACE Approach	1724	3

F.05.01 Satellite EO data benefit the economy, the environment and our societies: the evidence and the stories: Zone T

Board	*Title*	*Id*	*Day*

T36	Harnessing Earth Observation and Socio-Economic Insights for Sustainable Aquaculture Development: Lessons from Bangladesh and Kenya	2763	3
T37	Applications and Global Impacts of National Oceanic and Atmospheric Administration's Joint Polar Satellite System	426	3
T38	Recovery Observatory: contributing to more effective and resilient recovery strategies for disaster.	2995	3
T39	Cyprus Earth Observation for Public Sector (CEOPS) ESA PECS Project: Bridging EO Innovation and Public Sector Needs	3754	3
T40	Results of the Sentinel Benefits Study - Demonstrating the value of Sentinel Data through Rigorous Value Chain Analyses and Powerful User Stories	4250	3
T41	Leveraging Earth Observation Data for Robust Supply Chain Resilience	4806	3
T42	Uniting industry, policy and academia to launch climate satellite expertise – and the difference it makes - into the mainstream media orbit	5472	3
T43	Using EO for Agricultural Resilience and to Support Communities in Afghanistan: The Char Dara Canal Desilting Project	2422	3

26 June (Day-4)

A.01.04 Advancing Air Quality Monitoring from Space: Zone A-B			
Board	*Title*	*Id*	*Day*
A21	The relationship between air pollution and urban heat islands Analysis of the impact of NO_2 and O_3 on urban heat islands in European metropolises using Sentinel-5P and Sentinel-3 Data	1262	4
A22	Harmonized tropospheric NO2 column monitoring for LEO and GEO constellations	979	4
A23	Advancing Satellite-Based NO_2 Monitoring With Machine Learning	3923	4
A24	Estimations of the NOx emissions and NO2 lifetime using TROPOMI NO2 observations over UK point sources and area sources.	5437	4
A25	Assessment of Sentinel-5P Data for Nitrogen Dioxide (NO_2) Concentrations in Selected Areas of European Coastal Zones	546	4
A26	Time series of NOx point source emissions from one year of TROPOMI NO2 observations	1519	4
A27	The Path to Sentinel-5 Operations: Products, Calibration and Validation, Monitoring, and Data Processing Systems	4650	4
A28	SO2 Emissions Derived From TROPOMI Observations Using an Improved Flux-Divergence Method With Variable Lifetimes	3283	4
A29	Improvements in the Aerosol Layer Height retrievals from TROPOMI O2-A band measurements from surface albedo fitting and comparisons with EarthCARE aerosol extinction profiles.	3362	4
A30	Development of the NO_2 Product for the CO2M Mission	3203	4
A31	High-Resolution Observations of NO2 and CO2 Emission Plumes From EnMAP Satellite Measurements	1977	4
A32	NitroNet – A Deep-Learning NO_2 Tropospheric Profile Retrieval for the TROPOMI Satellite Instrument	972	4
A33	Advancing Air Quality Monitoring through Integrated Sentinel S5P and Ground Sensor Approaches	1901	4
A34	AI-Enhanced Active Fire Detection: Bridging Sentinel-3 and Landsat 8/9 for High-Resolution LST Monitoring	1909	4
A35	The impact of agricultural burning on air quality in Northern India: A 7-year assessment using TROPOMI Carbon Monoxide	3368	4
A36	Assessing the Impact of Crop Residue Burning on Air Quality Across the Indo-Gangetic Plains Using TROPOMI Satellite Observations and WRF-Chem Model Simulations	925	4
A37	Data fusion for advanced air quality monitoring in undersampled desert areas	5377	4
A38	What Satellite Earth Observations have taught us about air emissions from the Canadian oil sands	4342	4
B01	Methane satellite detection in the landfill of Cordoba, Argentina	5494	4
B02	Evaluating CAMS European Air Quality Reanalysis in Lombardy, Italy: A Comparative Analysis With Ground-based Measurements	2851	4
B03	Integration of satellite and land-based measurements for the characterization of aerosol in an urban and rural region	3925	4

B04	Evaluating High-Resolution Simulations of Atmospheric Composition in Rotterdam Using Satellite and Ground-Based Observations	3619	4
B05	Estimation of pollutant emissions from remote sensing data and deep Learning	3886	4
B06	Assessing different Machine Learning techniques for extracting AOD and PM2.5 surface concentrations from satellite data over Europe	3274	4
B07	A Bayesian inversion for atmospheric ammonia emissions	2767	4
B08	Monitoring Ground-Level Particulate Matter Concentrations From the Synergism of Space-Borne Measurements and Machine Learning Techniques	2106	4
B10	Leveraging Earth Observation for Urban Air Quality Monitoring: Case Study of Canton Sarajevo	3112	4

A.01.07 Tracking and classifying aerosols through advances in observation and modelling: Zone B

Board	*Title*	*Id*	*Day*
B14	Detailed characterization of volcanic plumes: height estimation using near simultaneous acquisitions from Pléiades and Spot-6	4085	4
B15	An Aerosol Retrieval Algorithm Regarding the Aerosol Polarization of Both Coarse and Fine Mode	5129	4
B16	Vertical distribution of type-discriminated aerosol concentrations derived from multiwavelength lidar airborne observations	3677	4
B17	Towards space-borne lidar data assimilation for atmospheric composition and NWP	3673	4
B18	Studying the Impact of WIVERN Assimilation on Dust Transport Modelling	4111	4
B19	Application of sigma-FORUM to the retrieval of aerosol properties from interferometric acquisitions	4094	4

A.04.02 GHG monitoring for policy: Zone B

Board	*Title*	*Id*	*Day*
B24	An Application of Wind-Rotation Methodology for Quantifying Methane Emission Inventories Using Sentinel-5P	4266	4
B25	Quantification of Methane Emissions from Overlapping Sources Using Sentinel 5P TROPOMI Satellite Data, CTM Inversion and Disaggregation Techniques	1633	4
B26	Let's Investigate Methane 4 Climate Action	5515	4
B27	Assessing sub-daily emission rate variability of methane super-emitters using multiple satellite platforms	3596	4

A.05.02 Earth observation for Climate Services: Zone C

Board	*Title*	*Id*	*Day*
C01	The LOng-LIved greenhouse gas PrOducts Performances (LOLIPOP) CCI+ project: satellite dataset and climate user case studies	3200	4
C02	Quantifying Livestock Diet Composition Using Earth Observation (EO) Data for Improved Estimation of Enteric Methane Emissions in Kenya	5354	4
C03	Tracking rice residue management and fire emissions using multi-source EO	586	4
C04	The Centre for Environmental Data Analysis (CEDA) and JASMIN: EO and Atmospheric data next to a fast parallel processing cluster.	2197	4
C05	Exploring the Interplay Between Marine Heatwaves and Atmospheric Circulation in the North Atlantic Using Observation Data and Climate Indicators.	4218	4

C06	Comparative Evaluation of Runoff Estimation Models Using Detailed DEMs: A Case Study in Polish Mining Areas	2256	4
C07	From retracking to Mean Sea Level: impact of parameters estimation and correlations	3885	4
C08	Monitoring long term lake water level evolutions	3615	4
C09	Monitoring the health of the Mar Menor through Sentinel-2 for a decade	718	4
C10	High-Resolution Land-Cover Maps for Climate Modeling	4502	4
C11	From ERA5 to ERA6: the Status of the Operational Reanalysis and the Next Generation of Reanalysis at ECMWF	4733	4
C12	Analysis of Climate Change Impacts on Jet Streams Using Atmospheric Motion Vector Climate Data Records	3488	4
C13	Mapping of Winter Catch Crop Types in Germany Using Sentinel-1 SAR Time Series	2052	4
C14	Copernicus Municipal Network Office: Information and exchange to promote the use of Earth Observation in German cities and municipalities	5342	4
C15	A Seasonal Decomposition-Based Approach to Harmonize Copernicus Land Monitoring Service Vegetation Products for Climate Services	1256	4
C16	Enhancing Climate Action: Testing the Capacity of Monitor-EO, a new tool box for Monitoring and Evaluating Restoration Impacts in Carbon Offset Projects	1903	4
C17	Developments Towards ESA CCI Lakes Gap-Filled Temperature and Ice Cover Products: Lake Ice Cover	3513	4
C18	Developments Towards ESA CCI Lakes Gap-Filled Temperature and Ice Cover Products: Lake Surface Water Temperature	3829	4
C19	Lake Ice Monitoring as a Climate Service: Integrating Earth Observation and Stakeholder Feedback	1871	4
C20	Validation of Copernicus High Resolution Snow Products	2996	4
C21	The High Resolution monitoring of Water, Snow and Ice over Europe by the Copernicus Land Monitoring Service (CLMS HR-WSI)	1307	4
C22	ESA CCI Soil Moisture: making a 45-year climate data record fit for novel climate applications	5484	4
C23	Using ESA CCI ECVs to Provide Support for and Guide National and International Climate Action	3851	4
C24	Producing a Station-Satellite Blended Sunshine Duration Dataset for the UK	2221	4

A.07.02 Quantification of Water Resources and Their Evolution Under Anthropogenic Pressure: Zone L-M

Board	*Title*	*Id*	*Day*
L04	Development of a water stress indicator that highlights the impacts of tourism	4004	4
L05	Exploring GRACE and GRACE-FO data to estimate the groundwater component of a digital twin of the terrestrial water cycle	2655	4
L06	How well Can We Explain GRACE/-FO-derived Total Water Storage Variability, Deficits/Droughts, and Trends in Europe?	2987	4
L07	How can GRACE/-FO data assimilation enhance our understanding of anthropogenic effects on the hydrological system in Europe?	2040	4
L08	The Role of Hydrogeodesy in Monitoring and Managing Global Water Resources	2364	4

L09	The Nexus of Groundwater-fed Irrigation, Aquifer Depletion, Land Subsidence and Desertification: Insights from a Multi-Decadal Satellite Survey in Iran	3970	4
L10	Land subsidence analysis in Taipei Basin, Taiwan, integrating Sentinel-1 InSAR, groundwater and rainfall data	3358	4
L11	A comprehensive assessment of Groundwater Resources in Botswana: Droughts, Recharge, and Abstractions using GRACE and GLDAS	1787	4
L12	Multi-sensor monitoring of agricultural reservoirs in the Casamance region, Senegal, in the context of global change.	3142	4
L13	Long-term analysis of global surface water volume anomalies using remote sensing	2425	4
L14	An automatic Google Earth Engine tool for generating lake water area time series from satellite imagery	2426	4
L15	Italian lakes water level monitoring through GEDI and SWOT	3652	4
L16	Inland Water Dynamics in Central Italy: Surface and Water Level Extraction Based on COSMO-SkyMed Imagery	4137	4
L17	Monitoring of Seasonal Lakes Using Speckle-Related SAR Information	4238	4
L20	Analysis of Recently Drained Lake Basins Succession Driving Factors	3229	4
L21	Multitemporal Seasonal Monitoring of Reservoir Area Fluctuations Using Copernicus Satellite Imagery and Google Earth Engine, Focusing on Ten Reservoirs in Greece from 2020 to 2024	1423	4
L22	Forecasting Total Water Storage Changes with Graph Neural Networks	3220	4
L23	Eddy generation in large deep seasonally-freezing Eurasian lakes: insights from satellite remote sensing and field observations	3042	4
L24	Global trends of vegetation leaf moisture content since the 1980s	3265	4
L25	Estimate of the SWE Available for the Barasona Reservoir	2212	4
L26	Improving the Reconstruction of the Hydrological Cycle through Satellite Observations: The Case Study of the Po River Basin	1623	4
M01	Presenting of an EO-based Service for Hydrological Drought Monitoring	3849	4
M02	Small Agricultural Reservoirs Detection in Italy With Satellite Data and OpenStreetMap Integration for Climate Resilience in Drought Prone Areas: a Contribution to the CASTLE Project	4828	4
M03	Characterizing and monitoring Ramsar wetlands using multi-source remote sensing data	3961	4
M04	Ensemble Evapotranspiration approach to assess the dynamics of Agricultural Land and Water Use Under National Development Policies: 23 Years of Observations in the Chichaoua Basin (Morocco)	3391	4
M05	Intercomparison of global evapotranspiration products over large irrigated areas using irrigation auxiliary information and in situ flux tower measurements	4115	4
M06	Estimating Green and Blue Components of Evapotranspiration of a River Basin using Remote Sensing Data Based Soil Water Balance Model	4596	4
M07	Earth Observation Based Region Scale Water Bodies Modelling, Monitoring and Forecast: Atos' Approach	752	4

A.07.04 Irrigation monitoring through Earth Observation (EO) data: Zone M

Board	*Title*	*Id*	*Day*

M10	Evaluating Satellite-Based Evapotranspiration Products (EEFlux, SenET, and SAR2ET) Using UAV-Derived Thermal and RGB Observations	4301	4
M11	Harnessing Earth Observation for Accurate Early Forecasting of Irrigation Needs	2918	4
M12	EO Insights for Addressing Competing Water Demands and Advancing Drought Monitoring in Mexico's Irrigation Districts	3413	4
M13	Spatiotemporal Analysis of Irrigation Intensity and Related Impacts on Water Scarcity and Land Degradation in Iran: Insights from Multi-Sensor Earth Observation Data	4711	4
M14	Near Real Time Irrigation Monitoring, a Multi-Sensor Approach, at National Scale With Framework Agnostic Algorithm.	3102	4
M15	Satellite-Based Irrigation Mapping: Challenges and Insights from Austria	3572	4
M16	An Evaluation of the Impact of Seasonal Land Cover Change on Evapotranspiration Estimates at the Catchment Scale in the Upper Gundar River Basin, Tamil Nadu, India	5083	4
M17	Towards Operational Detection of Irrigated Agricultural Plots Using Earth Observation Data	5351	4

A.09.05 Using Earth Observation to assess change and dynamics of the Greenland Ice Sheet: Zone E-F

Board	*Title*	*Id*	*Day*
E17	Geothermal heat flow models for ISMIP-7 – Recommendations for Greenland	2490	4
E18	Glacier velocity retrieval from SAR data based on AI feature tracking	3069	4
E19	Glacier and ice sheet motion retrieval by Sentinel-1 using deep learning over Greenland	2698	4
E20	TanDEM-X for monitoring the dynamics of the Greenland ice sheet	3129	4
F01	Terrestrial Radar Interferometry Reveals High Spatial and Temporal Variability of Ice Velocity at Major Greenlandic Tidewater Outlet Glacier	1604	4
F02	Monitoring Greenland outlet glaciers using stereoscopic DEM's and radar altimetry	1955	4
F03	Assessing and projecting ice sheet catchment hydrology for Greenland's rivers – a digital twin component approach	4768	4
F04	Towards catchment scale estimates of runoff from radar altimetry over Greenland	2046	4
F05	Towards systematic mapping of Greenland's active subglacial lakes	2692	4
F06	Advancing Year-Round Supraglacial Lake Monitoring on the Greenland Ice Sheet by Utilising Sentinel-1 C-Band Radar Data	1662	4
F07	Investigation of the recent dynamics of the active subglacial lake under the Flade Isblink ice cap.	3839	4
F08	Mapping subsurface water on the Greenland ice sheet from multi-frequency passive microwave remote sensing	5212	4
F09	Monitoring the Greenland Ice Sheet through the PROMICE and GC-Net programmes	5504	4
F10	Observing Ice Sheet Melt Dynamics by Means of Active Microwave Sensors	2929	4
F11	Evolution of the Petermann Ice Shelf River and Estuary, and Impacts on Ice Shelf Stability	5046	4
F12	Glacier algae spatial and temporal distribution at the Qaanaaq Ice Cap, Northwest Greenland	1553	4
F13	Annual and Interannual Cycles Observed Between Greenland's GRACE Derived Mass Variations and Climatic Indices	1047	4

A.09.06 Advances in Permafrost: Zone F-G

Board	*Title*	*Id*	*Day*
F17	3D geospatial mapping of Arctic permafrost carbon	1016	4

F18	Permafrost and glacier observations in response to atmosphere circulation in the Arctic	488	4
F19	Creating a pan-arctic Retrogressive Thaw Slump dataset with harmonized Sentinel-2 data and deep learning methods	2423	4
F20	Using a Diffusion Model for Enhancing a Panarctic Permafrost Dataset acquired by Sentinel-2 and LandSat.	5284	4
G01	Yedoma-alas landscape elevation changes using Sentinel-1 SAR Interferometry and their drivers based on detailed geomorphological analysis and landcover changes using field data and high-resolution optical imagery, Bykovsky Peninsula, Laptev Sea region	4803	4
G02	ESA CCI+ Permafrost - Validation using international and national permafrost monitoring networks	4029	4
G03	ESA CCI Permafrost time series maps as Essential Climate Variable (ECV) products primarily derived from satellite measurements	579	4
G04	Mapping Arctic Permafrost Polygons Through Integration of the Segment Anything Model with High-Resolution UAV Imagery and Volunteered Geographic Information	3490	4
G05	Investigating Features of a Permafrost Landscape With Multi-Frequency Airborne SAR Tomography	1902	4
G06	AI4Sen2Cor: an AI-Based Approach for Integrating Geospatial Detection in Copernicus Sentinel-2 Products	1448	4
G07	Estimating Soil Organic Carbon Mobilisation From Retrogressive Thaw Slumps With Multimodal Earth Observation Data	1952	4
G08	Evolution and Variability of Post-Wildfire Permafrost Deformation in Northern Canada Under Climate Change Investigated by Sentinel-1 InSAR	997	4
G09	Interannual InSAR subsidence and heave patterns in the permafrost landscape of Svalbard	4450	4
G10	Representation of canopy effects in global-scale monitoring of permafrost	2584	4
G11	Accelerated lowland thermokarst development revealed by drone photogrammetric surveys in the Stordalen mire, Abisko, Sweden	1037	4
G12	Mapping Patterned Soils in Svalbard Using Satellite Imagery and Deep Learning: Advancing Periglacial Geomorphology Analysis	5216	4
G13	Integrating Remote Sensing Observations to Quantify Volume Rates of Thaw-Induced Coastal Erosion in the Arctic	2558	4
G14	Permafrost Surface Deformation During and Following A Climate Extreme from Sentinel-1 InSAR	402	4

A.09.09 Arctic and Antarctic Sea Ice in the Earth system: Advancing Research with Remote Sensing, In-Situ Observations, and Modeling: Zone G-H

Board	*Title*	*Id*	*Day*
G21	Using RCM and Sentinel1 SAR observations to evaluate the sea ice dynamics in ECCC prediction systems	5003	4
G22	On L-band radiometric sea ice emission: from in situ observations to enhanced thin sea ice thickness satellite retrievals	1057	4
G23	More Dynamic Ice Growth in a Thinner Arctic? 18 Years of Arctic Thermodynamic and Dynamic Sea Ice Thickness Change Along Lagrangian Trajectories	716	4

G24	15 Years of Global Winter Sea ice Thickness & Volume from CryoSat-2, Sentinel-3A/B and SMOS (CS3SMOS)	1822	4
G25	Earth Explorer 12 Candidate Mission CryoRad: Innovations in Sea Ice Observations	2113	4
G26	Sea Ice Motion Estimation in the Weddell Sea from Optical Flow Analysis	2688	4
G27	“Dynamic Ice Map”: Combining High-Resolution Sea Ice Type Classification With Sea Ice Drift Forecast	1658	4
G28	Exploring Kalman Filter Efficiency in Modelling Sea Ice Deformation Using C and L-band SAR Imagery	5061	4
G29	A New Thin Sea Ice Thickness Retrieval Using Combined L and C-band Passive Microwave Observations from SMOS and AMSR2 with Applications towards CIMR	4010	4
G30	Regional Variability and Changes of Sea Ice Deformation in the Arctic During the Last Four Decades	2168	4
G31	Pan-Arctic Melt Pond Fractions and Sea Ice Albedo Retrieved from 18 Years of Optical Satellite Observations using a Constrained Physical Forward Model	573	4
G32	Observational Sea Ice Area uncertainties and their implications for investigating the 2015/2016 Antarctic sea ice decline	3319	4
G33	Spatial and Temporal Distribution of Winter Arctic Polynyas (1978-2023)	2313	4
G34	Compensating sea ice drift to match SAR acquisitions with in situ measurements	5088	4
G35	Ice Drift Correction of SAR Imagery for Efficient Ice Navigation	3776	4
G36	Sea Ice Surface Temperature Retrieval Algorithm for Copernicus Imaging Microwave Radiometer (CIMR)	1988	4
G37	Outlook and History of Satellite-Based Iceberg Monitoring in the Arctic: Insights From Sentinel-1 Observations and the Path to Pan-Arctic Coverage With Sentinel-1C and RCM	3053	4
G38	Developing of RIO: Creating a Risk Assessment Dataset for Polar Navigation, based on Automated Sea Ice Products	5325	4
H01	New AVHRR based C3S IST CDR/iCDR of Arctic and Antarctic ice surface temperatures from 1982 to present	4725	4
H02	Separating Sea Ice and Open Water in SAR Imagery Based on Model-Derived Thresholds for Backscatter Intensity Decay Rates With Incidence Angle	4536	4
H03	Deriving Continuous Sea Ice Trajectories from Synthetic Aperture Radar Data	3757	4
H04	Direct Observations of the Mesoscale Dynamics in the Marginal Ice Zone from Sentinel-1 Doppler shift observations	1483	4
H05	The Level-2 Product Algorithm Development (L2PAD) Project : Preparing Open-Source Algorithms and Software for the Copernicus Imaging Microwave Radiometer (CIMR) Mission	505	4
H06	Upscaling of ICESat-2 Sea Ice Freeboard Measurements by Sentinel-1 Synthetic Aperture Radar	1156	4
H07	Remote Sensed Interferometric Synthetic Aperture Radar (InSAR) Observations of Thermal Strain in Arctic Sea Ice	2683	4
H08	High-Resolution UAV-Based Hyperspectral Imagery Reveals the Large Spread of Albedo-Reducing Snow Algae Blooms in Maritime Antarctica.	653	4

H09	Low-Cost Drone and Satellite Remote Sensing for Quantifying Air-Ice-Sea Interactions in a Mobile and Highly Dynamic Arctic Ocea	2834	4
H10	New estimates of Arctic Ocean sea ice export from Sentinel-1, the RADARSAT Constellation Mission (RCM), and CryoSat-2	458	4
H11	Potential of high-resolution Grazing Angle GNSS-reflectometry to derive sea surface heights and sea ice freeboard in the Arctic Ocean	1008	4
H12	Changes in snow on first-year sea ice observed with coherent change detection from C-band InSAR	522	4
H13	Inventory of historical Nimbus 5 and 6 microwave radiometer satellite sea ice concentration estimates from the 1970s	4672	4
H14	High resolution sea ice floe detection and freeboard measurements using SWOT	4032	4
H15	Altimetric Sea Ice Measurements: Performances of the new Sea Ice thematic products of S3A and S3B	4183	4
H16	Sea Ice Concentration Retrievals Using Sentinel-3's MWR	5407	4
H17	Improved applications of sea ice mass balance buoys for polar climate studies, remote sensing and modelling	4099	4

A.09.10 Interactions and feedback between Ice, Land and Ocean in Polar Regions: Zone E

Board	*Title*	*Id*	*Day*
E11	Tracking Changes in Western Antarctic Peninsula Ice Shelves: High-Resolution Surface Elevation Mapping Using Multi-Sensor Data	1472	4
E12	Scaling Up Arctic Driftwood Mapping: Deep Learning and Medium-Resolution Satellite Imagery for Large-Scale Assessments	1484	4
E13	Refining Geothermal Heat Flow Models for Greenland Using Radiogenic Heat Production and Geological Mapping	2754	4

A.11.01 Earth Energy Imbalance and Radiative Forcing: Zone D

Board	*Title*	*Id*	*Day*
D01	Consistent Estimation of Surface Radiation Budget Components from MODIS Observations Using Artificial Intelligence	996	4
D02	Climate Evolution from Spectral Radiance Trends Analysis: a Comparative Study of IASI and the EC-Earth Climate Model	3416	4
D03	Novel joint retrieval of all components of the surface radiation budget	5192	4
D04	Estimating variations in ocean heat content using space geodetic data to assess the global and regional Earth energy budget	3722	4
D05	Direct satellite measurements of the radiative forcing of long-lived halogenated gases	4670	4
D06	Space accelerometry to measure the Earth Energy Imbalance	511	4
D07	The Earth Climate Observatory space mission concept for innovative continuity in the monitoring of the Earth Outgoing Longwave Radiation	3902	4
D08	The Earth Climate Observatory space mission concept for innovative continuity in the monitoring of the Earth Reflected Solar Radiation	3871	4
D09	The Earth Climate Observatory space mission concept for the monitoring of the Earth Energy Imbalance	3692	4

D10	Traceable Radiometry Underpinning Terrestrial- and Helio- Studies (TRUTHS) – A 'gold standard' imaging spectrometer in space for radiation imbalance and in support of the climate emergency	4924	4

B.01.03 Transforming Global Analysis Ready Earth Observation Data into Actionable Information to Drive Local Climate and Environmental Actions via Co-creation: Zone T

Board	*Title*	*Id*	*Day*
T01	Moroccan locust – Potential outbreaks in future. Learning from past and present environment conditions based on EO, geospatial and modelling datasets.	5507	4
T02	Accessing actionable Sargassum information through the SAMTool web interface	2346	4
T03	Scientific climate activism: an open platform based on a scientific and reproducible workflow for mapping Surface Urban Heat Islands through open data and technology hacking	1493	4
T04	Co-Creating Climate-Resilient Urban Ecosystems: The ClimRes Project	3877	4
T05	Examining Urban Expansion in Abeokuta Through the Lens of its Economic Development Cluster: A Geospatial Approach Utilising Earth Observatory Data, Random Forest and Spatial Entropy Analysis	1280	4
T06	Contrasted Cross-border Agricultural Patterns and Trends in the Irrigated Senegal River Valley since 2016	3898	4

B.02.01 Earth System Governance & Sustainability Frameworks: Zone O

Board	*Title*	*Id*	*Day*
O43	A space-borne weighing machine to measure human-made materials in support of sustainability sciences	1240	4

B.02.09 The Role of Spaceborne Imaging Spectroscopy and Drone-based Data for Integrated Freshwater and Coastal Monitoring: Zone K

Board	*Title*	*Id*	*Day*
K02	Transforming Coastal Pollution Monitoring with AI and Drones	4488	4
K03	Mapping Aquatic Vegetation in Lakes Using Drone and Satellite Imagery with Machine Learning Models	4975	4
K04	Technological Readiness Of Complementary Shipborne, Airborne and Citizen-Operated Hyperspectral Aquatic Reflectance Data Collection	1117	4
K05	VISualisation and Assessment of water quality using an Open Data Cube FOR the weStern English channel (Vis4Sea).	2014	4
K06	The potential of EnMAP for enhancing water quality assessments in coastal waters	3376	4
K07	Assessing Cyanobacteria Concentration with Machine Learning and Hyperspectral In-Situ Data: Implications for Remote Sensing	4745	4
K08	Multi-scale Monitoring of Water Quality in a Phytoplankton Carrying, European River - a case study of the Moselle	1810	4
K09	Shedding light on biological monitoring in the Baltic Sea	3682	4
K10	Validation of atmospheric correction approaches of PACE imagery using ship-based radiometry across the coastal and open ocean Atlantic	5512	4
K11	An Evaluation of the ACOLITE Atmospheric Correction Algorithm at the Integrated Marine Observing System Lucinda Jetty Coastal Observatory	995	4

K12	ACOLITE/RAdCor: A Generic Adjacency Correction Algorithm For Inland And Coastal Water Applications	2831	4
K13	Performance assessment of the Aquaverse Atmospheric Correction Algorithm on HYPSO-1 Inland and Coastal Water Images	732	4
K14	Validation of water-leaving reflectance from current hyperspectral space missions using automated HYPERNETS hyperspectral system in the turbid waters of Río de la Plata	777	4

B.03.07 Land-atmosphere interactions: finding solutions for land-based mitigation and adaptation: Zone B

Board	*Title*	*Id*	*Day*
B32	Using CRSWIR Index for Forest Health Monitoring and Climate Impact Assessment	5373	4
B33	Global monitoring of LAI, FAPAR and FCover from Sentinel-3	3604	4
B34	GEOV2-AVHRR: global leaf area index time series from 1981 to 2022. Responses of vegetation to climate change	3635	4
B35	The potential impact of Land Use Change on biophysical processes during the diurnal cycle: study case evaluating potential transitions of natural vegetation to agricultural land for different areas of the African continent	2217	4
B36	The Agricultural Land Abandonment and Climate Change Impacts on the Water, Energy and Vegetation Carbon Cycles in the Mediterranean Region - ESA X-ECV GLANCE Project	4615	4
B37	Drought monitoring in orchard meadows: An integrative approach combining geophysics and remote sensing	1170	4

B.04.06 Fire Detection and Monitoring from Earth Observation Data for Rapid Disaster Response: Zone R

Board	*Title*	*Id*	*Day*
R01	Development and Optimization of a Machine Learning Fire Risk Prediction Model Using Multimodal Geospatial and Climate Data in Cyprus	4591	4
R02	Remote Sensing and Machine Learning for Burned Area Anomaly Detection in Madagascar: Applications of Isolation Forest and SHAP Analysis	896	4
R03	Machine Learning for Wildfire Detection from Space Using Forest-2 Satellite's Medium Wave Infrared Sensor	1570	4
R04	In-Orbit Deep Learning for Nighttime Cloud Detection Tested on a Prototype FlatSat	3528	4
R05	Wildfires Meet Multitask Learning: Enhancing Burned Area Delineation With Land Cover Classification	1347	4
R06	Burned area mapping: a new approach using Sentinel-2 time series	4742	4
R07	Methodology for burned areas delimitation and fire severity assessment using Sentinel-2 data: A case study of forest fires in Spain (2018–2023).	1631	4
R08	A Low-Latency Solution for Burnt Area Delineation Through Space Computing: A Kayrros and Loft Orbital Collaboration	4349	4
R09	Active Fire Detection in Geostationary Satellite Images	4923	4
R10	Firefighting with data pipelines: an innovative algorithm for fire detection from space	1133	4
R11	Development of Thermal Infrared and 3D Based Fire Severity Products for Innovative Insurance Market Sector Applications	1403	4
R12	Operational Delivery of MODIS and VIIRS Products in support of EFFIS	3569	4

R13	The Canadian Fire Spread Dataset; Detecting Fire Spread and Overwintering Fires in Peatland Ecosystems	2183	4
R14	CopernicusLAC: Comprehensive Wildfire Management Through Earth Observation in Latin America and the Caribbean	1231	4
R15	Efficiently sampling diverse wildfire spread predictions from conditional diffusion models	2830	4
R16	Detection, evaluation and monitoring of wildfires based on the Copernicus Satellite Data in the Southwest of Romania	4226	4

C.01.01 High Altitude Pseudo Satellites in Earth Observation: Zone I

Board	*Title*	*Id*	*Day*
I38	How HAPS Will Change the Game for Earth and Space Sciences	4801	4

C.01.02 Innovative UAV Applications for Earth Observation: Zone J

Board	*Title*	*Id*	*Day*
J02	Integrating UAVs, Aircraft, and Ground Robots for Scalable Plant Disease Monitoring With Multispectral and Hyperspectral Sensing	3749	4
J03	Enhancing LiDAR Data Integration From Mobile and Unmanned Aerial Laser Scanning Systems: An Algorithmic Solution for Matching Tree Point Clouds Based on Tree Characteristics.	2393	4
J04	Individual Tree Species Identification Using UAV-LiDAR in Mixed Temperate Forest	1813	4
J05	Segmentation of Invasive Plant Species in High-resolution UAV Images	2883	4
J06	Ready for take-off?! - How to integrate UAS remote sensing into the monitoring of EU Habitats Directive sites	1251	4
J07	Enhancing Search and Rescue Missions with AI: Cross-Comparison of Object Detection Models for Real-Time Missing Persons Detection	3646	4
J08	Monitoring and modeling of rock glacier kinematics: A study case in Lazaun South Tyrol Italy	4776	4
J09	UAV-SAR Imaging and Interferometry: System Design and Signal Processing Tools	2260	4
J10	Combined P+L band reflectometry for root-to-surface soil moisture measurements	4468	4
J11	UAV thermal remote sensing in complex environments – challenges, lessons learnt and recommendations	1979	4
J12	Innovative Autonomous UAV solution for in-situ Cal/Val of satellite altimetry over inland waters and other surfaces	2284	4
J13	Synergy Use of Decametric Satellite Imageries and UAV Observations for Continuous Monitoring of Paddy Rice Growth	2491	4
J14	Drone-based Solar Induced Chlorophyll Fluorescence (SIF) Measurements: Advancing Photosynthetic Monitoring in Vegetation	5490	4
J15	Image-Based Vegetation Classification of Rewetted Peatlands; an Example on the FluxNet-Site Zarnekow	4541	4

C.01.07 Discrete Global Grid Systems (DGGS): Zone S

Board	*Title*	*Id*	*Day*
S01	Advancing Earth Observation Analytics: Leveraging HEALpix, rHEALpix, and DGGS for Spherical Data Representation, Power Spectrum Analysis, and Multiscale Insights	1023	4
S02	Convolution in Discrete Global Grid Systems (DGGS): Example in Healpix	4873	4
S03	Towards DGGS native data cubes with DGGS.jl	2159	4

S04	The Grid Blueprint: Developing DGGS Infrastructure for Data Storage, Interoperability and and AI Integration	2974	4
S05	Advancing Cross-Jurisdictional Marine-Terrestrial Data Integration Through Discrete Global Grid Systems	2467	4
S06	Advancing indexing systems and tooling on ISEA-based hexagonal DGGS: The new Z3 and Z7 indices in DGGRID	4669	4

C.01.11 Airborne and Ground-based Instrument Demonstrators: Zone I

Board	*Title*	*Id*	*Day*
I24	Innovative VLEO Satellite Concept for Very High-Resolution Urban Monitoring	963	4
I25	Airborne Demonstrator for Near-Real-Time Infrastructure Monitoring With On-Board Processing From Satellites	1844	4
I26	International cooperation and transnational open access within EUFAR	3716	4
I27	A GNSS-R in-land water level profiler from VLEO	1437	4
I28	Exploiting constellations in VLEO to enhance optical payloads	3820	4
I29	Flying Laboratory of Imaging Systems – Aircraft Infrastructure to Support Spaceborne Imaging Spectroscopy Missions	5345	4
I30	Highlights of the Nitrogen Cycle Airborne Measurements campaigns	4632	4
I31	C-Band SAR Observations for Boreal Forest Monitoring: A Tower and Satellite Perspective	3602	4
I32	Analyzing Ku/Ka-band passive microwave observations for temperature, moisture and vegetation monitoring using airborne and ground observations	2237	4
I33	ULID: an Unconnected L-band Interferometer Demonstrator	3479	4
I34	The ALADIN Airborne Demonstrator – 2-µm Doppler Wind Lidar Team: Aeolus Support from Mission Preparation and Validation to Re-processing	4574	4
I35	The combined water vapor and high spectral resolution aerosol lidar WALES: an airborne demonstration and validation platform for current and future spaceborne lidars	2498	4

C.01.13 Quantum Sensors: Next-Generation Tools for Earth Observation: Zone H

Board	*Title*	*Id*	*Day*
H38	Development of geoscience applications of optical lattice clocks in Japan	1455	4

C.02.09 Preparing for the FLuorescence EXplorer (FLEX) mission: Zone I

Board	*Title*	*Id*	*Day*
I01	SpaFLEX: Spatial Heterogeneity Analysis and Optimized Field Sampling Design Using Sentinel-2 Imagery	2406	4
I02	SpaFLEX: Evaluation of Systematic and Random Uncertainties in Sun-Induced Chlorophyll Fluorescence and Reflected Radiance Retrievals in the Framework of the Spanish FLEX Cal/Val Campaigns	2619	4
I03	Bayesian solar-induced fluorescence retrieval algorithm for remote sensing of vegetation (SIFFI)	2323	4
I04	Towards Satellite SIF Validation: SIF and Active Chlorophyll Fluorescence Measurements in Sodankylä, Finland	4311	4
I05	Leveraging Deep Learning for the Retrieval of Sun-Induced Fluorescence in the O2-A Absorption Band of Hyperspectral Imagery Acquired by the Spaceborne DESIS Sensor	4861	4

I06	Measuring sun-induced fluorescence from ground-, UAV- and airborne platforms to understand the regulatory properties of photosynthesis and fluorescence across scales	5471	4
I07	Development of a Mobile, Automated Device For Laboratory Grade Calibration of Autonomous Field Spectrometer Systems In Situ	2594	4
I08	Validation Strategy of FLEX L2A Surface Reflectance and Irradiance using Autonomous Ground Reference Data	4058	4
I09	Design of atmospheric look-up tables for operational FLEX data processing	662	4
I10	Accounting for dynamic light absorption and emission properties due to regulated energy dissipation: a bottom-up spectral fitting strategy for early stress detection	4586	4
I11	Imaging Spectroscopy of Scots Pine (Pinus sylvestris L.) Seedlings During a Long-Term Drought Stress and Recovery Experiment	2581	4
I12	UAV and CableCam platforms for FLEX products Cal/Val protocol development	4926	4
I13	Implementation of WAFER for the retrieval of sun-induced chlorophyll fluorescence from airborne spectroscopy data	500	4
I14	Atmospheric Correction of INTA's Airborne Chlorophyll Fluorescence Sensor (CFL) Supporting FLEX Cal/Val Campaigns	1564	4
I15	INTA`s New Airborne Platform Equipped With Chlorophyll Fluorescence Sensor (CFL) for SpaFLEX CalVal Campaigns.	1944	4
I16	Bridging scales: tower, UAS and airborne-based validation of FLEX products	4244	4

C.02.13 ESA's Harmony mission: Zone H

Board	*Title*	*Id*	*Day*
H34	Spaceborne Transmitter/Stationary Receiver: Bistatic SAR retrieval over the Girose glacier	3887	4
H35	Measuring topographic change after volcanic eruptions using multistatic SAR satellites: Simulations in preparation for ESA's Harmony mission.	3752	4
H36	Preliminary InSAR landslide applicability assessment for Harmony mission	2499	4

C.03.02 Advances in the theory and methodology SAR Interferometry and SAR polarimetry: Zone P-Q

Board	*Title*	*Id*	*Day*
P38	Application of Sentinel-2, EnMAP and Sentinel-1 data in accurate crop classification: an analysis for the JECAM area in Poland	1591	4
P39	Estimating Sea-ice drift using deep-learning optical flow algorithm	2424	4
P40	Advanced InSAR Long-Term Time Series with Flatsim service for Large-Scale Geosphere Applications	3067	4
P41	Coherent lifetime estimation for Sentinel-1 InSAR	3031	4
P42	Network Formation Strategies In PSInSAR	3574	4
P43	Deep-learning-based Wrap-count Segmentation Method for 2-D Phase Unwrapping of Large-scale Interseismic Interferograms	2738	4
P44	Advances in the Application of Artificial Intelligence for InSAR Data Analysis in Landslide Studies	4891	4
Q01	Assessing Slope Instabilities Related to Glacier Retreat and Associated Impacts on Alpine Infrastructure Using InSAR Technology	2194	4
Q02	Ground rebound caused by groundwater level change using MT-InSAR time-series	5127	4

Q03	Deformation Anomaly Detection Based on Dynamic InSAR Time Series	3162	4
Q04	A Quality-Driven Network for InSAR Time-Series Analysis of Coherent Scatterers	1471	4
Q05	A Novel Deep-Learning-Based Framework for InSAR Parameters Enhancement	1206	4
Q06	Polarimetric Measurements of SAR Data Products Using Reference Point Targets: Insights from Sentinel-1 and RADARSAT Constellation Mission	1614	4
Q07	First Results on the Use of Deep Learning for Persistent Scatterers Detection	3510	4
Q08	A Novel Approach to Forest Height Estimation Using Gradient Boosting Technique and Pol-TomoSAR Data	4236	4
Q09	Enhanced MUSIC Algorithm for TomoSAR Reconstruction of Forested Areas	4068	4
Q10	Deep Learning-Based Phase Calibration of Airborne SAR Tomography	614	4
Q11	An evaluation of the Pol-InSAR forest height estimation performance with dual-pol Sentinel-1 data	2967	4
Q12	DEEP LEARNING SEGMENTATION APPROACH FOR FOREST HEIGHT RETRIEVAL WITH MULTI-CHANNEL SAR DATA	1791	4
Q13	Forest Normalized Volume Profile estimation with the PolInSAR Two Layer Model	3181	4
Q14	Monitoring Soil Freeze/Thaw Dynamics in Snow-Covered Agricultural Areas with L-band Polarimetric SAR	5050	4
Q15	WAVETRAX: Water and Vegetation Tower Radar Experiments for Improved Climate Monitoring	793	4
Q16	Can We Estimate Optical Vegetation Indices Using Sentinel-1 SAR Data and Machine Learning? A Case Study on Central European Temperate Forests	4447	4
Q17	Time Series of Dual-Polarimetric SAR Measurements to Observe Liquefaction Surface Manifestations	4152	4

C.05.02 TRUTHS – Setting the gold standard reference for climate applications and satellite inter-calibration: Zone D

Board	*Title*	*Id*	*Day*
D13	The ESA TRUTHS mission: a golden standard in flight for climate action	3578	4
D14	The Traceable Radiometry Underpinning Terrestrial and Helio Studies mission (TRUTHS): enabling a new generation of SI traceable radiometric observations.	5518	4
D15	Traceable Radiometry Underpinning Terrestrial- and Helio- Studies (TRUTHS) – A 'gold standard' reference imaging spectrometer to support the climate Emergency	3324	4
D16	What is a SITSat (SI-Traceable Satellite)	3278	4
D17	Defining a TRUTHS inter-calibration strategy with a global end-to-end simulation	2529	4

C.06.05 CEOS Analysis Ready Data (CEOS-ARD): Zone S

Board	*Title*	*Id*	*Day*
S17	Evolution of the CEOS-ARD Optical Product Family Specifications	4750	4
S18	NovaSAR-1 Analysis Ready Data (ARD): New S-band SAR ARD for Europe (and beyond)	1224	4
S19	Vision-1 and NovaSAR-1 data fusion for quasi-Near-Real-Time applications	1883	4
S20	Analysis Ready Data for Copernicus SAR Missions: Products, Algorithms, and Prototype Processors	3698	4
S21	Analysis-Ready Multi Source Backscatter (MSB) Data	3514	4
S22	Sentinel 2 Ground Segment Water Processor Sen2water (AquaticARD-compliant)	4592	4

S23	Sentinel-2 Level-2A ARD Cloud masking: Operational Performance, Foreseen Improvement and Perspectives	2638	4

C.06.08 Innovations in Calibration and Validation for New and Upcoming Earth Observation Atmospheric Missions: Zone A

Board	*Title*	*Id*	*Day*
A01	Ground-Based Observations for the EarthCARE Commissioning Cal/Val Campaign in Ottawa (ECALOT) and W-band HiSRAMS, AERI, FIRR-2, FINESSE and FIRMOS Experiment on Remote Sensing (WHAFFFERS)	2428	4
A02	EarthCARE Overpass Planning for Instrument Calibration and Validation Activities	2866	4
A03	Calibration and Validation strategies for operational products of the CO2 Monitoring (CO2M) mission	4184	4
A04	Preparation for air quality and climate validation activities for Sentinel-4 and Sentinel-5 over urban areas	5159	4
A05	First results of the European activities for the EarthCARE validation in the framework of ACTRIS/ATMO-ACCESS	2021	4
A06	EarthCARE Cloud Profiling Radar Validation using ACTRIS ground-based Cloud Radar Network	2621	4
A07	Activities of the Aerosol Clouds and Trace gases European Research Infrastructure (ACTRIS) Expert Group on Satellite Cal/Val	2496	4
A08	The ESA atmospheric Validation Data Centre (EVDC): Applications for EarthCARE	2639	4
A09	The Boundary-layer Air Quality-analysis Using Network of INstruments (BAQUNIN) Supersite: achievements and perspectives	1529	4
A10	The EarthCARE mission validation activity at the Lampedusa Climate Observatory in the framework of the EC-Valmed.it project	4314	4
A11	Validation of EarthCARE Level 2 Data Products in the WegenerNet 3D Open-Air Laboratory	1855	4
A12	Evaluation of EarthCARE Level 2 Product Uncertainties – AOD Uncertainties in the Arctic	4082	4
A13	EarthCARE Quality Control within the DISC Framework	2888	4
A14	Assessing Instrument Performance through On-Site Field Calibration: Insights from the CINDI-3 Campaign	3952	4
A15	Leveraging Ground-Based, In-Situ, and Airborne Campaign Data to Validate Satellite Retrievals of Aerosol Water Uptake.	4848	4
A16	TEDS: Toolbox for End-to-enD Simulations for the TANGO mission	3810	4
A17	The Characterization and Correction of stray light in the MAMAP2D-Light Instrument: an Airborne Imaging Remote Sounder for greenhouse gases.	1930	4
A18	The NO2 camera: New Capacity for the Monitoring of the Urban NO2 Field with High Spatio-Temporal Resolution in Support of Sentinel-4	3565	4

D.02.03 Approaches, accuracies, applications: next generation large-area land change monitoring: Zone N-O

Board	*Title*	*Id*	*Day*
N28	EvoLand - Evolution of the Copernicus Land Monitoring Service Portfolio by Integrating Novel EO Data and Latest Machine Learning Algorithms for Continuously Monitoring of Land Surface Status and Dynamics.	2096	4

N29	Synthesis and Evaluation of Seamless, Large-Scale, Multispectral Satellite Images Using Conditioned Generative Models	1288	4
N30	Scalable OOD Detection for Geospatial Deep Learning Models	1408	4
N31	Context Matters - How Climate-aware Neural Networks Improve Satellite-based Land Cover Classification	530	4
N32	The impact of map accuracy on area estimation with remote sensing data within the design-based inference framework	1173	4
N33	NexOS: a Control Framework for a Next Generation National Mapping Agency	1770	4
N34	Improving the temporal consistency and accuracy of land cover fraction mapping using Vision Transformer	4734	4
N35	Advances in global land cover research: Hybrid change detection, time series postprocessing, and spatiotemporal deep learning	4433	4
N36	Enhancing the Spatial Representativeness of the European-wide LUCAS Dataset for Machine Learning-Based Land Cover Status and Change Mapping	3542	4
N37	Leveraging geospatial metadata to enhance large scale land cover mapping: A case study using European LUCAS Data	802	4
N38	Transfer Land Cover Maps Across Years: A Time Series-based Semantic Segmentation Approach	569	4
N39	CLMS Protected Areas: towards an enhanced LULC product using a semiautomatic approach, super-resolved S2 time series, and artificial intelligence.	3844	4
N40	EarthMosaics – A Fully Automated Self-Serve Harmonized Data Fusion Solution for Large-Area Land Change Monitoring	5170	4
N41	Synthetic Training Data in support of Large-Scale Automated Land Monitoring	1348	4
N42	Towards Continental-Scale Land Change Monitoring: Advancing Land Cover Segmentation with Multi-Resolution Data	2119	4
N43	Automated Land Use/Land Cover Refinement for Multispectral Satellite Imagery	1987	4
N44	Creating harmonized Landsat 7 and 8 data for tracking LULC change	592	4
O01	AutoML Land Cover classification in the Kavango–Zambezi Transfrontier Conservation Area in Google Earth Engine	5463	4
O02	Assessment of Biases in Crop Detection in Large-Scale EO Landcover Products in Sub-Saharan Africa	2560	4
O03	Copernicus Temporal Spectrum for ESA's GTIF initiative: Multitemporal vegetation change dynamics across all Sentinel-2 observations	4717	4
O04	Detecting vegetation changes via semi-supervised deep learning from space	4076	4
O05	Deep Learning-Based Multi-Task Approach for Agricultural Field Extraction	2729	4
O07	Multisatellite Time Series Change Detection for Near-Real-Time Monitoring of Deforestation in the Brazilian Amazonia	4856	4
O08	Three-Dimensional High-Resolution Urban Growth Monitoring using SAR Data	916	4
O09	HabitAlp2.0: Updating Maps of Protected Areas in the Alps With AI-Based Remote Sensing Methods	1763	4

O10	Reviving wetlands: unveiling restoration dynamics using satellite images time series (SCO EO4Wetlands project)	2399	4
O11	Leveraging Sentinel-2 EO Data and AI for Land Use and Ecosystem Monitoring in the Eastern Mediterranean Coastal Region of the Middle East	4303	4

D.02.06 Foundation Models for Earth Observation: Current solutions with less labelled data to improve environment monitoring and future perspectives to revolutionize geospatial data discovery and utilization: Zone T

Board	*Title*	*Id*	*Day*
T12	Generation of Synthetic Earth Observation Databases Using Generative Artificial Intelligence and Diffusion Models	1565	4
T13	Generating global-scale embeddings for enhanced analysis of Sentinel-1 and Sentinel-2 data	3163	4
T14	Federated AI-Cubes: The New Paradigm for Easier, Faster, and Deeper Insight	2523	4
T15	Learned representations for accelerating planetary-scale mapping and monitoring with sparse labelled data	5398	4
T16	FINE-TUNING FOUNDATION MODELS IN EARTH OBSERVATION USING A MULTI-OBJECTIVE OPTIMIZATION STRATEGY	4611	4
T17	DeepFeatures: Remote sensing beyond spectral indices	971	4
T18	DeepFeatures: A Deep Learning Approach to Dimensionality Reduction of Spectral Indices for Scalable Earth System Analysis	2505	4
T19	Towards Sensor-Parameter Awareness in Earth Observation Foundation Models	891	4
T20	The Deep Coding Strategy for Geolocation-Aware Deep Learning in Remote Sensing	1054	4
T21	From Cradle to EO: 10 Child-Inspired Generic Tasks for Foundations Models	4968	4
T22	Sequence to Sequence Is All You Need: Flexible Generative Pre-Training for Satellite Image Time Series Models	4710	4
T23	Gaussian Trees: Learning Universal Tree Detectors With Noisy Supervision	4606	4
T24	Multi-modal Generative Modelling of Copernicus Data	1802	4
T25	Mining OpenStreetMap for Planetary-scale Labels to Build an Earth Observation Foundation Model	5447	4
T26	Towards Efficient Neural Compression for Earth Observation Data	3474	4
T27	Insights for a Reliable Model-selection in Multi-modal Biomass Estimation with Foundation Models and other State-of-the-art Baselines.	3423	4
T28	Self-supervised learning for multispectral and hyperspectral remote sensing	1398	4
T29	HyperKon: A Self-Supervised Foundation Model for Hyperspectral Earth Observation	1929	4
T30	SeaPatrolAI: Using foundational models for multiscale ocean feature detection	4676	4
T31	Foundation models for ocean monitoring: large-scale training and applications	3237	4
T32	Advancing Marine Earth Observation with AI Foundation Models	3008	4
T33	Deep Learning Approaches for Automated Inland Water Body Mapping Using Sentinel-2 Imagery	742	4
T34	Forest Land Use Mapping: the Challenge of the FAO FRA RSS Dataset for Weakly Supervised Semantic Segmentation	1726	4

T35	Foundation Model for the Mapping of Red-Listed Biotope Types to Enable Generalization on Spatially and Temporally Independent Aerial Images as Basis for a Monitoring With Sentinel-2 Data	1318	4
T36	Investigating the Key Variables Influencing the Production of Winter Wheat and Oilseed Rape in Bavaria: Integrating Spatiotemporal Fusion of Remote Sensing (Landsat and MODIS) Data and Machine Learning for Enhanced Yield and Biomass Predictions from 2001 to 2019	5486	4
T37	Determining minimum and optimal polygon requirements for regional spectral reference curves in crop monitoring: balancing data quality and processing efficiency	1967	4
T38	Massive Scale, Noisy Labels: Foundational CV Models and Terabyte Workflows for Efficient Olive Mapping in Apulia, Italy.	2891	4
T39	EO4ConStat - Earth Observation Data and AI for Construction Statistics	4986	4
T40	GMSM: A Generic Framework for Mine Site Monitoring with Multimodal Earth Observation	4811	4

D.02.07 Large Language Model Agents and Applications for Earth Observation: Zone U

Board	*Title*	*Id*	*Day*
U02	Enhancing Earth Observation Accessibility with AI-Driven Natural Language Interfaces	3879	4
U03	Visual Foundation Model as Pseudo-Annotators for Remote Sensing Visual Question Answering	4645	4
U04	Leveraging Remote Sensing, Crowd-sourced Species Observations and Wikipedia with Vision Language Models for Habitat Classification	2468	4
U05	An Artificial Intelligence Assistant for Complex Earth Observation Tasks	758	4
U06	Geolingual Studies: Integrating linguistics and digital humanities with Earth observation to assess the physical in combination with the social dimensions of cities	2785	4
U07	Generative Artificial Intelligence assistant demonstrator for EO Portal.	1554	4

D.04.02 Best practices for execution of algorithms and workflows across federated cloud environments: Zone U

Board	*Title*	*Id*	*Day*
U29	Empowering Your Community with Earth Observation Insights: An All-in-One Online Workspace Platform Solution	3373	4
U30	Exploring Federated Processing of Earth Observation Data Through Cloud-Native	1995	4
U31	Harnessing the Cloud: Integrating Diverse Toolboxes for Advanced Earth Observation with TAO	3088	4
U32	Cloud Infrastructure for Processing and dissemination of Earth Observation Data	3584	4
U33	FAIRSenDD: A FAIR cloud workflow for Sentinel-1 based forest change detection	3378	4
U34	Challenges and Lessons Learned in Implementing Deep-Dearning Based EO Workflows for a Federate Agency User Base	3193	4
U35	Benchmaking data access and processing performance of OpenEO backends: a reproducible approach	5285	4

D.04.03 Enabling Machine Learning Operations on Cloud Platforms: Zone U

Board	*Title*	*Id*	*Day*
U15	Unlocking ML and Foundation Models within openEO	1284	4
U16	AI4QC Training Data Portal: AI-Ready Datasets for Quality Control in Earth Observation Data	3977	4
U17	Artificial Intelligence Techniques for Geophysical Image Processing Onboard Satellites	5477	4

U18	Leveraging Cutting-Edge Technologies in Big Data Platforms To Speed Up AI Development in EO	3108	4
U19	Earth Observation-Driven Sustainable Energy Solutions in Nigeria with Sentinel imagery, Machine Learning and Cloud-based Platforms	4665	4
U20	GEODES: a new CNES EO Data platform integrated in a federated public platform ecosystem (data, tools and services) with Data Terra Research Infrastructure	3105	4
U21	The Earth Observation Training Data Lab (EOTDL) - Addressing Training Data related needs in the Earth Observation community.	1071	4
U22	DeployAI: Leveraging AI and Earth Observation for Environmental Applications	3385	4

D.04.05 From the Research Lab to a Global Map: Scalable and Sustainable EO Algorithm Development and Workflows: Zone U

Board	*Title*	*Id*	*Day*
U39	From GeoTIFF to Zarr: Virtualizing a Petabyte-Scale SAR Datacube for Simple, Scalable, and Efficient Workflows	4119	4
U40	Cloud-native Near-Real-Time Image Land-Cover Segmentation Data Pipeline	3901	4
U41	Bringing User Software to the Cloud to Scale up Earth Observation Data Processing – Demonstrating a Cloud-Implementation of the ThoMaS Software for Satellite Validation With In Situ Data	2264	4
U42	color33 – a cloud service for automated semantic enrichment of Sentinel-2 data	3605	4
U43	Semi-supervised crop classification using auxiliary learning of biophysical variables	2615	4
U44	Synthetic Data to enable AI for the environment and beyond	2351	4
V01	Improved Cloud Screening for Global Land Cover Classification Using Sentinel-2 Imagery	1571	4
V03	Scaling Earth Observation Workflows with openEO: Managing Large-Scale Processing Efficiently	1286	4
V05	EO Africa - Continental Demonstrator LUISA: Lessons Learned from Scaling HANNP for Local to Continental Scales.	2065	4
V06	Leveraging Insula for Advanced Eutrophication Monitoring in Albania and Tanzania	3392	4
V07	From Complex EO Data to Actionable Insights: CRISP and Insula's Role in Sustainable Agriculture	3404	4

D.05.01 Showcasing EO Data and Information Services: Zone V

Board	*Title*	*Id*	*Day*
V09	CAELOSCOPE: added-value atmospheric products based on Sentinel-5P/TROPOMI measurements in Terrascope	1689	4
V08	Innovative Data Integration for Crisis Management in Fragile Settings: Insights from the Insula Platform	3272	4
V10	Tarkka: A Comprehensive EO Service for Environmental Monitoring and Policy Support	1757	4
V11	Sentinel-2 Global Mosaic (S2GM): Copernicus Service for On-Demand Global Cloud Free Mosaics	3332	4
V12	HEDAVI platforms to discover and operate heritage missions	5322	4
V13	Quantitative Management of Water Bodies: A Space-Based Decision Support Tool for Sustainable Hydrology	3592	4

V14	Are our satellite data fit for your purpose? – The C3S approach to delivering quality information to users	4989	4
V15	Evaluation and Quality Control of Satellite ECVs at C3S – An Innovative Way of Conveying Quality and Fitness for Purpose Information	1821	4
V16	VirES for Aeolus: A Service for Advanced EO Data Access	1349	4
V17	FAO Essential Remote Sensing Data Product Portal for Agricultural Application Services	5016	4
V18	ROCS: Extending Romania's National Infrastructure within the European Collaborative Ground Segment	4409	4
V19	ORBIS: Earth Observation data service for NewSpace missions	4813	4

D.05.03 Towards Modernized Copernicus Data: Enabling Interoperability through EOPF Principles and Advanced Data Access Strategies: Zone U

Title	*Id*	*Id*	*Day*
U23	CoperniCUBE: Advanced DEM Timeseries Analysis Using Airbus CopDEM	2520	4
U24	From Space to Summits: Utilizing Copernicus Sentinel-2 Data for Condition Aware Alpine Tours	2637	4
U25	Leveraging Digital Innovation for Green Solutions - the Fast Track Applications Project	3828	4
U26	Advancing Global Land Cover Monitoring: Innovations in High-Resolution Mapping with the Copernicus Data Space Ecosystem	4853	4
U27	SentinelHD	5527	4

D.05.02 Advancing Optimization, Resilience, and Innovation Capabilities to Evolve ESA's Observation Framework operations for Copernicus and ESA Missions: Zone V

Board	*Title*	*Id*	*Day*
V31	The effectiveness of a PDGS and its implementation at Sentinel-2B Production Service	4216	4
V32	Advancing Sustainable Data Management in the Copernicus Ground Segment Data Dissemination operations	5302	4
V33	ProsEO - A Cloud Native Processing Framework for EO Data Processing	844	4
V34	Reuse of Copernicus Reference System for Earth Explorer missions	3909	4
V35	Optimizing Sentinels Mission Planning: A Unified Framework for Future Copernicus Operations	3521	4
V36	Optimising Ground Network Architecture for Future Earth Observation Programs	4702	4
V37	Scalable and Automated Cloud-Based Pipelines for Earth Observation: Enhancing the Hellenic Ground Segment Infrastructure and Collaborative Support Activities	3532	4
V38	Designing the future world-scale storage for Space observation objects	4397	4
V39	Presentation of the LCA methodology used to estimate the Copernicus Ground Segment environmental footprint	841	4
V40	Manifest for AI and Automation in Sentinel-2 Data Processing Operations	3918	4
V41	Human-Centred AI for Cybersecurity in Earth Observation: Transparent and Reliable Systems for a Sustainable Future	3227	4
V42	A generic processing framework developed by technology transfer across Earth Observation programmes	1854	4
V40	Enhancing Resilience and Sustainability in Cloud-Based Sentinel Payload Data Processing: Atos' Approach	634	4

E.02.01 Advanced SAR processing techniques for security and safety applications: Zone P

Board	Title	Id	Day
P28	SAR Advanced Techniques Exploiting Angular Diversity: Height Estimation with Spotlight Data and Moving Target Indication in Pursuit Monostatic Mode	4808	4
P29	Enhancing maritime and inland waterway situational awareness in the new space era: advanced ISAR approaches with very high resolution SAR data	4787	4
P30	Multi-sensor data fusion for maritime traffic monitoring from space	4729	4
P31	Atlantic Pathfinder Project: Integrating emerging EO & AI technologies for improved Maritime Surveillance	1756	4
P32	MIcro-Doppler InfrAstructure Stability Assessment using SAR (MIDAS) - Advanced SAR processing techniques	2542	4
P33	Safe Bridge Project: an Example for the Geomatic Monitoring of Bridges	4498	4
P34	A Python-Based RadarSimpy Library for Antenna Calibration and Simulation of Corner Reflectors for SAR Applications	5488	4
P35	EVIDERI - EO as Evidence in “Crimes Against Humanity” Investigation Process	652	4

F.01.02 Raising awareness on climate change and environmental degradation using effective communication and education: Zone C

Board	Title	Id	Day
C26	SARflix Movies of our changing planet: Opening Eyes with Sentinel-1 SAR time-series animations	3140	4
C27	Beyond Gendered Stereotypes: Combining Technical Rigor and Emotional Engagement in Climate Action	826	4
C28	Groundbreaking Science Discoveries and Successes enabled by ESA Earth Observation Satellites	2438	4
C29	Communicating the Unimaginable: Uncertainty, Storytelling, and Climate Tipping Points	2610	4
C30	Amplifying Awareness and Engaging Audiences: Communicating Climate Change and Environmental Challenges Through the Down to Earth Podcast by the IEEE GRSS	5107	4
C31	Empowering Secondary Education with Earth Observation: Teaching Climate Change and Disaster Management through Satellite Data	1882	4
C32	Leveraging Lunar and Cis-Lunar Remote Sensing for Climate Change Awareness: Engaging STEM Education Through Storytelling	865	4
C33	An Innovative Master Seminar on Water in North America: Remote Sensing and Literary Studies in Dialog	4893	4
C34	Empowering Arctic Communities Towards Marine Pollution-Control Governance: Role of Machine Learning and Citizen Science	1991	4
C35	EDUKEO – A scrollytelling approach to showcase the value of EO data across diverse Earth science domains	4163	4
C36	CCI Knowledge Exchange Training and Competitions	5286	4
C37	Diversifying the talent pipeline - engaging the next generation of earth observation specialists	4435	4

F.03.01 Commercial EO missions data for marine and land applications: Zone N

Board	Title	Id	Day
N11	Novel AI based Vessel Detection Service for PAZ1 Imagery	1086	4

N12	Japetus constellation & Earth Observation Platform: commercial EO data for marine applications	911	4
N13	Spatial vs. Temporal: Trade-Offs in High-Resolution Satellite Imagery for National-Scale Hedgerow Mapping	4459	4
N14	ENABLER Mission - A new design approach of a thermal infrared instrument for environmental monitoring and disaster response	5279	4
N15	Enhancing land monitoring through Earth Observation commercial data in the European Environment Agency's Copernicus Land Monitoring Service	1710	4
N16	RADARSAT-2 – Past, Present, and Future: a Reliable Copernicus Program Provider	4577	4
N17	A Spectral Approach for Preliminary Mapping of Mosquito Habitats Using Planetscope SuperDoves Data in the One Health Framework	4837	4
N18	Improving Field Boundary Detection: Leveraging PlanetScope to Address Sentinel-2 Limitations	1959	4

F.04.07 Earth Observation for Tracking Global Sustainability and Biodiversity Targets: Zone O

Board	*Title*	*Id*	*Day*
O32	Case Studies on Using EO Data for Ecosystem Restoration Monitoring in Support of the Nature Restoration Law	831	4
O33	Leveraging Citizen Science and Deep Learning for Satellite-Based Monitoring of Seal Populations	5068	4
O34	Assessing the potential of social media data to support remote sensing data in migration analysis – An explorative modelling approach for Ghana, 2015-2020	3589	4
O35	Space for Biodiversity: EO-Backed Auditing and Tracking of GBF Implementation	3310	4
O36	Woody fraction estimation in South-Central Ethiopia using spectral-temporal metrics: an approach for restoration monitoring	5194	4
O37	Monitoring farmland habitat diversity with Copernicus data and products from national to European level	3587	4
O38	How do we double the global area of mangroves under protection? Introducing the Decision Framework for Mangrove Conservation	731	4
O39	The 'Climate and biodiversity oases' program: advancing climate-adaptive small wetland restoration in France through innovative action research	2614	4
O40	Battling Pollution Threats of Africa's Largest Freshwater Lake – a GDA Water Resource Use Case	1953	4

F.04.11 Earth Observation for Environmental Compliance: Enhancing Monitoring, Guidance, and Enforcement: Zone P

Board	*Title*	*Id*	*Day*
P04	Monitoring Inland Water Quality in Poland Using Python and Sentinel-2 Satellite Imagery	2589	4
P05	Flood Simulation with Earth Observation - a Powerful Policy Support Instrument in Climate Change Adaptation and Response Planning Context	1815	4
P06	Mapping the risk of human-wildlife conflict at the landscape scale in Mozambique	4048	4
P07	Illegal dumping detection with high resolution satellite imagery	2218	4
P08	The potential of Sentinel-1 to monitor fine-scale natural and logging-related tropical forest disturbance patterns and associated carbon loss	1626	4

P09	Remote Sensing in the Practice of Environmental Inspectorates: Retrospective and Proactive Monitoring	2414	4
P10	Spatial- and temporal data enrichment by multi-sensor approaches and data fusion technologies: policy driven earth observation approaches	1705	4
P11	Leveraging Earth Observation for Strengthened Environmental Regulation	3388	4
P12	Monitoring Remote Marine Protected Areas Using Vessel-based Data	4065	4
P13	What is the Potential of Satellite Technology in Monitoring Future Marine Protected Areas in the High Seas?	2252	4
P14	A Data-Driven Approach for Detecting Suspicious Vessel Behavior Involved in Bilge Dumping Using SAR, AIS Data and Meteorological Data	3683	4
P15	Earth Observation data for Environmental Monotoring and Maritime Situational Awareness in the Black Sea	2810	4

F.04.15 Resilient Coasts: Adaptive Strategies for Sustainable Ocean Management in a Changing Climate: Zone M

Board	*Title*	*Id*	*Day*
M21	Advancing Marine Ecosystem Monitoring: Chlorophyll-a Gradients for Sustainable Fisheries Management	2978	4
M22	Contribution of satellite imagery in support of the Water Framework Directives for eutrophication assessment	3935	4
M23	Littosat, a satellite dashboard for monitoring coastal environment parameters for managers of coastal areas and marine protected areas	2312	4
M24	Harnessing Citizen Science for Coastal Resilience	845	4
M25	Integrated Coastal Flood Mapping: Leveraging Satellite Data and Numerical Modeling in the Senegal Estuary	1150	4
M26	Advanced Dike Structure and Dike Vegetation Monitoring with UAV-based Deep Learning	1323	4

F.04.16 Sustainable Blue Economy: Zone N

Board	*Title*	*Id*	*Day*
N01	Earth Observation-Driven Solutions for Sustainable Tourism and Leisure activities in the Blue Economy	5575	4
N02	DIOMEDEO - Datasets for InnOvative Marine Energy Developments from EO	5760	4
N03	Global mapping of aquaculture infrastructure using AI and EO imagery	2243	4
N04	Earth Observations for Sustainable Aquaculture (EO4SA)	5574	4
N05	DEEPBLUEx2 - Sustainable Blue Economy in the Fisheries Sector	5573	4

27 June (Day-5)

A.01.06 Aerosol, clouds, their interactions and the radiation budget: Zone A			
Board	*Title*	*Id*	*Day*
A14	Study of Aerosol Cloud Interaction in the Eastern Mediterranean: Long-term lidar Observations over Cyprus	5261	5
A15	Scale Invariance of Cloud Size Spectra to Near Planetary Scales	2665	5
A16	Comparisons of cloud top heights derived from lidar and radar observations and levels of neutral buoyancy	523	5
A17	Feasibility study for a new climate indicator “aerosol and cloud cooling”	1534	5
A18	Machine Learning Arctic Clouds Identification and Characterization With IASI Spectra: Comparison With Ground-Based and IASI L2 Products	4964	5
A19	High-Altitude Aerosols Water Vapor and Clouds – a Canadian contribution to NASA AOS mission	5074	5
A20	Comparison of ATLID/EarthCare and IceSat-2 ATLAS Clouds Measurements.	1932	5
A21	The Connection Between the TOA LW Cloud Radiative Effect and Cloud Properties, Using ATLID and BBR Instruments on board EarthCare	1913	5
A22	Enhancing COSP for Aeolus and EarthCARE: Toward Long-Term Simulations of Cloud Lidar Observations	3793	5
A23	Advanced cloud products from NASA’s PACE mission and their relevance for other missions	3127	5
A24	Advanced Aerosol Retrievals with RemoTAP and PARASOL: Enhancing Understanding of Aerosol-Cloud Interactions	4425	5
A25	Detection of Polar Stratospheric Clouds With IASI	2818	5
A26	Quantifying the radiative effect of volcanic sulfate aerosols from the Hunga Tonga 2022 eruption with infrared satellite sounders.	2233	5
A27	Improving MAJA’s cloud mask on water surfaces by leveraging Machine Learning and Deep Learning methods for Sentinel-2	1712	5
A28	A ML-Based Perspective on Spatio-Temporal Patterns of Convective Organisation	1587	5
A29	Atmospheric ice mass retrievals with the Arctic Weather Satellite	5022	5
A30	Development and Applications of New GEO-RING Radiance Data Set.	5429	5
A31	Validation and Comparison of Preliminary Retrievals of Clouds and Aerosols from Flexible Combined Imager (FCI) Data using the Optimal Retrieval of Aerosol and Cloud (ORAC) Algorithm	4325	5
A32	WIMEX (Wave Interaction Models EXploitation)	3106	5
A33	Advanced Sentinel-3 Near Real Time (NRT) L2 aerosols capabilities Lessons learned and plans for the next years	5270	5
A34	New dust detection algorithm for EarthCARE MSI over ocean	4228	5
A35	Airborne In-situ Measurements during JATAC/CAVA-AW 2021/2022 campaigns - Climate-Relevant Results: extinction coefficients and heating rate of mineral dust	3114	5
A36	Comparison of Airborne In-situ Measurements with LIDAR measurements during JATAC/CAVA-AW 2021/2022 campaigns	1129	5

A37	Quantifying the Semi-Direct Effect of Aerosols on Clouds Using Satellite Observations and Advanced Time Series Analysis	4206	5
A38	Effect of aerosol optical scattering and absorbing properties on the Urban heat island intensity during summertime in Rome, Italy	1563	5

A.01.09 Atmospheric 3D Winds for Weather and Climate: Zone A

Board	Title	Id	Day
A08	Assimilation of WIVERN Doppler Data in Weather Research and Forecasting (WRF) Model for the Medicane Ianos: A Comparison with Advanced SCATterometer (ASCAT)	876	5
A09	New Data Records of the Ocean Surface Winds: Contributing to the Understanding of the Atmospheric and Oceanic Circulations	5202	5
A10	Climatic characteristics of various tracks of tropical cyclones and their impact on rainfall in a temperate coastal region based on 70 years of observation data	404	5
A11	3D reconstruction of turbulent wind using lidar measurements.	3667	5
A12	Monitoring Atmospheric 3D Winds with the HALO Doppler Wind Lidar at the CARO National Facility in Limassol, Cyprus	5230	5

A.02.01 Land Surface Temperature and Emissivity Data for Research and Applications: Zone C-D

Board	Title	Id	Day
C20	Large scale exploitation of satellite data for the assessment of urban surface temperatures: the EO4UTEMP project	5449	5
C21	SPACE_EPC: Multi-Source Earth Observation Data for Measuring the Thermal Efficiency of Buildings	2223	5
C22	Temporal Data-Quality-Based Thresholding (TDQBT) for Artefact Identification in Landsat Analysis-Ready Surface Temperature Data in a Tropical Urban Area	2267	5
C23	Scalable Climate Monitoring: Integrating Multi-Source Temperature Data for Urban Adaptation in Bavaria, Germany	1751	5
C24	TRISHNA : innovative concepts for a first global delivery of Earth Observation thermal infra-red data	1627	5
C25	Ensemble Learning for Land Surface Temperature Downscaling in Urban Areas to Prepare Future Missions TRISHNA, SBG, and LSTM	3115	5
C26	The Joint ASI - NASA/JPL Surface Biology and Geology Thermal Infrared (SBG-TIR) Mission	5376	5
C27	Overview of SBG-TIR data products	4476	5
C28	Estimation of Vegetation Fractional Cover and Leaf Area Index Using the VIREO VNIR Camera in SBG-TIR Configuration	4396	5
C29	Leveraging the SBG-TIR Mission for Thermal Monitoring of Volcanoes	5344	5
C30	Integrated Satellite Analysis of Thermal Variations, Volcanic Gas Emissions, and Lava Flow Mineralogy Using Multisensor and Hyperspectral Data: the case study of Stromboli Island	1186	5
C31	Hyper-Cam Airborne Mini: Remote sensing of the environment using airborne imaging thermal-infrared spectroscopy with high spatial and spectral resolution	2848	5
C32	Assessment of level 2 LST products estimated by HyTES and OwL sensors in the framework of NET-Sense 2023 campaign	1430	5

C33	Long-term Trends of LST From a New Daytime-normalized AVHRR Time Series Over Central and Southern Europe	2896	5
C34	Developments of the new version of the LSA-SAF LST suite of products based on SEVIRI and AVHRR	3120	5
C35	Modelling of the Annual-Diurnal Land Surface Temperature Dynamics	1062	5
C36	Assessing Ecosystem Responses to Drought in the MENA Region Using Long-Term, High-Frequency Thermal Infrared Data	4597	5
C37	Hyperspectral Soil Property Mapping Using Thermal Infrared (LWIR) Imagery	4668	5
C38	A GIS-based framework for illegal waste management: integration of remote sensing and ground surveys for environmental and cost optimization	4180	5
D01	Advancing Alpine lake monitoring and modelling with high-resolution thermal remote sensing	1046	5
D02	Contribution of thermal infrared images on the understanding of subsurface hydrology and subsurface-atmosphere interaction	1776	5
D03	Downscaling of Satellite Passive Microwave Land Surface Temperature for All-Weather Global Enhanced-Resolution Long Time Series	1180	5
D04	Calibration of UAV-Based Uncooled Thermal Cameras for Crop Water Stress Detection: Lessons Learned from Mission Planning to Post-Processing Procedures	5062	5
D05	Investigating surface water loss in southern Italy: validation of the IASI-based ECI-WDI synergy with ground-stations measurements	4648	5
D06	Monitoring Earth surface skin temperature and emissivity from IASI satellite observations	665	5
D07	CIMR Level 2 Land Surface Temperature Retrieval Using Machine Learning Approaches	1487	5
D08	New Generation of GEO-ring Land Surface Temperature for the Copernicus Land Monitoring Service	1785	5
D09	Assessing the Feasibility of Producing a Moderate Extremes Dataset Based on Satellite Land Surface Temperature	2216	5
D10	Exploiting the EXtended Control Vector Framework for Improved Coupled Land-Atmosphere Data Assimilation	1068	5

A.02.04 Advances in Monitoring and Management of Forest Ecosystems: Zone F-G-H-I-J

Board	*Title*	*Id*	*Day*
F12	Forest Height Prediction in a German National Park: Comparing a Sentinel-2 ML and Sentinel-1/-2 DL Model	4802	5
F13	Forest Height Mapping From Sentinel-1 and -2 Time Series, ALS, and GEDI LiDAR Measurements Using Machine-Learning Models	4277	5
F14	Exploring multi-decadal forest recovery dynamics across spatial and temporal scales	1333	5
F15	Mapping tree height from Sentinel-2 for operational forest monitoring	4037	5
F16	Disturbance and post-disturbance vegetation composition in East Siberian boreal forests estimated from Landsat and Sentinel-2 data	1849	5
F17	The effect of forest structures on forest microclimate using Unmanned Aerial Vehicles (UAVs): Implications for Heat Mitigation in Riparian Forests in Urban Areas	673	5
F18	Global long-term (1988-2021) aboveground biomass dataset	2616	5

F19	Modelling Forest Floor Temperature From Terrestrial Laser Scanning and Potential Links to Satellite Remote Sensing	3543	5
F20	Estimating Vascular Plant Diversity in the Understory of Temperate Mountain Forests Using Airborne LiDAR and Sentinel-2	4510	5
G01	Improving National Forest Disturbance Monitoring by Integrating Landsat and Sentinel-2	4096	5
G02	Microclimatic Buffering in Boreal Forests: The Roles of Forest Management and Geographical Context	4469	5
G03	Upscaling UAV LiDAR-Derived Boreal Forest Type, Structure, and Successional Stages to Sentinel-2 and Landsat in Alaska and Northwestern Canada	1736	5
G04	C-Band SAR Interferometry in Boreal and Temperate Forests: Assessing the Influence of Temporal Decorrelation	1853	5
G05	AI-vergreens - a New Multi-level Labelled Multi-temporal Sentinel-2 Image Patch-based Training Dataset Optimized for Northern Circumboreal Forest	5251	5
G06	Comparison of Contemporaneous Sentinel-2 and EnMAP Data for Vegetation Index-Based Estimation of Leaf Area Index and Canopy Closure of a Boreal Forest	4387	5
G07	Open spectral libraries to support vegetation monitoring	1247	5
G08	Exploring Wolverine Colonization in Finnish Forests	1025	5
G09	Detection of Forest Clearcuts Across Sweden Using a Multi-Scale Feature Pyramid Network Operating on Sentinel-1 Data	4415	5
G10	Large-scale mapping of tree species in Swedish forests using Sentinel-1 and Sentinel-2 observations	2574	5
G11	National tree species mapping using the Danish Forest Inventory, Sentinels, Orthophotos and LiDAR	4678	5
G12	Finding the Best Approach to Identify Deforestation Drivers Using Earth Observation: What Works and What Doesn't	2395	5
G13	Forest structure and biodiversity: Terrestrial laser scanning of micro and macro structural proxies in a recovering Caledonian Pinewood.	976	5
G14	European-wide forest structure maps and estimates integrating Sentinel-2 and National Forest Inventory data	724	5
G15	Monitoring Loss and Survival of Trees Using Very High Resolution Satellite Images	2066	5
G16	Monitoring Species-Specific Tree Dieback across Central European Temperate Forests using Sentinel-2 Time Series	3732	5
G17	Resilience and recovery time of European forests after drought and compound hot and dry extreme events	3734	5
G18	Spaceborne Lidar Detects Decline in Overstorey and Increase in Understorey Canopy Cover of Protected Forests in Central Europe Since 2019	917	5
G19	From Point Clouds to Fuel Maps: Modeling Surface Fuels from 3D Terrestrial Lidar Data	1006	5
G20	Understanding central European forest practitioners' requirements for remote sensing-based information products: A questionnaire survey	1672	5
G21	Spectral Upscaling and Its Effects On Plant Traits Of Different Mid-European Tree Species From Leaf To Satellite	3919	5

G22	Windthrow Automatic Analysis Workflow Using Satellite Imagery and Deep Learning Algorithms - Case study Romania	4793	5
G23	Tree Cover Changes in War-Affected Areas: A Case Study of Ukraine	1196	5
G24	Country-scale tree species classification with Machine Learning in Hungary and Poland	3333	5
G25	Assessing post-disturbance recovery in European forests using remote sensing data Monitoring of post-disturbance forest recovery dynamics in Europe with remote sensing data	568	5
G26	Influence of Severe Drought Events on Pine Forest Condition in Poland in the Period 2002-2023	2016	5
G27	Classification of dominant tree species and detection of forest decline using Sentinel-2 data	3257	5
G28	Seasonal and spatial variability of Primary Productivity in Bieszczady National Park, Poland: Insights from Sentinel-3 and ECMWF data	1609	5
G29	European forest development with changing climate and legal constraints: combining Earth observations, biophysical models, and realistic human decision-making	3614	5
G30	Mapping Forest Management in Europe through Integration of Remote Sensing Products and Geospatial Data Sets	4188	5
G31	20 Years of Forest Development in the Bavarian Forest National Park Assessed With Airborne Laser Scanning Data	5454	5
G32	Characterizing Forest Fragmentation in Bavaria Through Canopy Cover Loss Analysis	2154	5
G33	A Bayesian Deep Learning approach for the estimation of Forest Parameters from Interferometric SAR images	3018	5
G34	Temporal Dynamics in Forest Structure: UAV-Based Monitoring of Tree Crowns, Canopy Gaps, and Deadwood in Hainich National Park	3249	5
G35	Prediction of Canopy Cover Loss in German Spruce Forests Using Spatio-Temporal Matrix Feature	1535	5
G36	Novel Remote Sensing-Based Tree Species Product With 10 m Resolution for Germany	1577	5
G37	Object-Guided Tree Species Classification Using Deep Learning	3093	5
G38	“Delineation of Riparian Zones” for the Classification of Riparian Forests for Ecosystem Accounting in Germany	4308	5
H01	BuWaL-Hessen: Search Space for Natura 2000 Habitat Types Dominated by Beech Forests in Hesse	1189	5
H02	From Study Areas to a Nationwide Forest Damage Monitoring: Rollout in Germany in Progress	5318	5
H03	Assessing Effects of Forest Disturbance on Land Surface Temperature in Low Mountain Ranges of Central Germany Using Google Earth Engine and the Landsat Archive	2450	5
H04	Post-Disturbance Treatment Effects on Vegetation Recovery in Forests of Central Germany From 3 Years of UAV and Satellite Remote Sensing	4232	5
H05	Forest health monitoring and climate envelopes in support of a national reforestation strategy in Germany	1077	5
H06	From Satellite to App: An End-to-End Workflow for Near-Real Time Monitoring of Forest Disturbances on German State-Level	1716	5
H07	TreeCompR: Standardized tree competition analysis based on inventory data or 3D point clouds	1544	5

H08	Multi-Annual Forest Structure Characterization in Germany - Novel Products and Analysis Based on GEDI, Sentinel-1 and Sentinel-2 Data	521	5
H09	VODnet: a virtual GNSS-T VOD network for monitoring of forest water budget and structure	4627	5
H10	Forest structure complexity from forest inventory and GEDI data for Europe	1639	5
H11	Extending canopy structure measurements from GEDI and ICESat-2 to savannas	3304	5
H12	High Biomass Forests are More Susceptible to Bark Beetle Disturbance in Europe	2988	5
H13	Exploring the Relation between Tree Species Diversity and Forest Height Heterogeneity Across Spatial Scales	4322	5
H14	Combining optical EO time series data and GEDI full-waveform measurements for the production of annual high-resolution aboveground biomass products for MRV projects	2819	5
H15	Pan-European Forest Disturbance Alerts Using Sentinel-1 Radar	3438	5
H16	Sentinel-1 forest change map using Recurrence Quantification Analysis	3390	5
H17	Assessing the Comparability of Multispectral Data from Sentinel-2 and High Resolution UAS Imagery for Advanced Forestry Monitoring	1971	5
H18	Regression-based Subpixel Mapping: Towards Global Forest Monitoring by Vision Transformers	642	5
H19	A Deep Learning Approach for Large-Scale Mapping of Trees Outside Forests in Germany	518	5
H20	MMTSCNet - Multimodal Tree Species Classification Network for the Classification of Multi-Source Single Tree LiDAR Point Clouds	4200	5
H21	Mapping Tree Species Fractions in Temperate Mixed Forests Using Sentinel-2 Time Series	730	5
H22	Hyperspectral Remote Sensing and Environmental DNA for Assessing Soil Bacterial Diversity in Temperate Forests	5448	5
H23	Continuous ground reference data for improved microwave observations of forest water status	395	5
H24	Innovative Monitoring of Forest Water Content Using Active Microwave Systems and Corner Reflectors	1838	5
H25	Analysis of Canopy Responses of Temperate Forests to Frost and Drought Across Elevational Gradients Using Sentinel-2 Data	748	5
H26	Tree Species Classification Using Time Series of Sentinel-2 Images and Weak Labelled Data	3002	5
H27	EXPLORING THE POTENTIAL OF EMIT HYPERSPECTRAL DATA FOR ASSESSING FOREST BIOMASS: AN ALPINE CASE STUDY	3792	5
H28	Detection of Temperate Forest Disturbances Based on Sentinel-1 SAR Time Series Analyses	1120	5
H29	Narrow-band spectral indicators of vegetation functioning across scales: From trees to forests	4014	5
H30	Updates on the nrt Python Package: Enhancing Near Real-Time Forest Disturbance Monitoring	4267	5
H31	Quantifying the magnitude and persistence of human degradation of global tropical moist forests	805	5
H32	Multi-Temporal Sentinel-1 InSAR Coherence for Rapid Detection of Storm Damage	2279	5
H33	The GreenEO Project: Satellite-Based Services to Support Sustainable Land Use Practices Under the European Green Deal	4181	5
H34	Integrating Airborne Laser Scanning and Satellite Data for Enhanced Forest Monitoring in the Wienerwald Biosphere Reserve	2184	5
H35	GNSS-Transmissometry-Based Monitoring of Vegetation Optical Depth in Central European Beech Forest Ecosystems	1143	5

H36	Merging Copernicus data into national forestry products – a symbiosis?	1645	5
H37	Large-Scale Sentinel-2 Tree Species Mapping: Independent Probability Sample Validation and Mixed-Species Classifications	1644	5
H38	Identifying the Drivers of Biomass Change in European Forests: Insights from Remote Sensing and Geo-Wiki Analysis	4744	5
I01	Open-Source Software for Scalable Forest Monitoring Using Diverse Satellite Data and Deep Learning	4628	5
I02	Mapping French Trees for the Last Decade	3384	5
I03	Mapping Annual Forest Growth in France at High Resolution Using Satellites and Deep Learning (2018–2024)	3966	5
I04	Combining Sentinel-1, Sentinel-2, and LiDAR data for improved forest species mapping: a case study in Navarre, Spain	1158	5
I05	Influence of topography and fire severity on pine and oak forest recovery.	2650	5
I06	Mediterranean forest traits retrieval from hybrid inversion: a multi-sensor and radiative transfer modelling comparison	1605	5
I07	RIGOR-MED: Remotely-sensed and Statistically Rigorous Monitoring of Disturbances in Mediterranean Forests	3215	5
I08	Building development is the main cause of rapid wildland-urban interface growth in wildfire-prone Mediterranean-type ecosystems	672	5
I09	Combining Ascending and Descending mode for Enhancing burned area mapping with Normalized Radar Burn Ratio	4797	5
I10	Comparison of RF and GTB Algorithms for Object-Based Burned Area Mapping Using GEE and Uni-Temporal Sentinel-2 Images	2905	5
I11	Semi-automatic detection and mapping of illegal logging integrating optical and SAR satellite data with machine learning: a framework from the European SINTETIC project	3059	5
I12	Trends in ground filtering of Airborne LiDAR: A comparison of the most used algorithms at different NEON field sites	4944	5
I13	Single-tree volume estimation using RayCloudTools based on laser scanning data	1185	5
I14	Integrating a trait-based dynamic vegetation model with earth observation data to simulate large-scale spatial and temporal patterns of plant traits	5384	5
I15	Detection of Spruce Budworm with Sentinel-1 Time Series	1272	5
I16	Integrating PRISMA and Sentinel-2 with biophysical models for monitoring fungal infection and GPP	804	5
I17	Forester: Illegal logging detection and prediction tool based on Sentinel-1 and Sentinel-2 and in-situ data.	4373	5
I18	Optimized Forest Characterization and Monitoring Services	4507	5
I19	Mapping Litter and Shrub Biomass Synergising ALS, Multispectral, and SAR data	1436	5
I20	Machine learning-based prediction of vegetation recovery time in co-seismic landslide areas	3763	5
I21	From Beams to Biomass: Developing TLS-Based Allometric Models Incorporating Size-to-Mass Scaling in Australian Tropical Forests.	2123	5

I22	Approaches for Integrating Forest Inventory and Earth Observation Data for Climate Change and Biodiversity Assessments	3643	5
I23	Developing a Ground Control Point Protocol for High-Resolution Laser Scanning in tropical and temperate Forests for integration with satellite data	4877	5
I24	Operational Applicability of the Newly Developed Radar-based Tree Cover Disturbance Monitoring Tool (TCDM-radar)	1212	5
I25	Advancing Trait Mapping of Congo Basin Secondary Forests Using Multispectral and Hyperspectral Satellite Imagery	3437	5
I26	Quantifying Forest Carbon Stocks Change Using Earth Observation Data in the State of Mato Grosso, Brazil	5436	5
I27	Regionally and Globally Trained Models for Mapping Aboveground Biomass From Remote Sensing Data Fusion: A Comparison of the Capabilities of Machine Learning in 4 Different Biomes	4978	5
I28	Multitemporal fraction images derived from Sentinel-2 data to assess land use land cover changes in Mato Grosso state, Brazilian Amazon	3192	5
I29	Spatiotemporal patterns of Amazonian canopy mortality revealed by remote sensing time series	2946	5
I30	Investigating the Impact of Airstrips on Deforestation in Indigenous Territories of the Brazilian Amazon	4950	5
I31	GeoAI-Driven Insights into Vegetation Dynamics: Decoding Disturbance and Fragmentation Patterns in the Cerrado-Amazon Transition	2899	5
I32	Exploring Microclimate Variability and Its Ecological Impacts in the Amazon Rainforest	4474	5
I33	Benchmarking Trees' Architectural Traits with Ecological Factors in a Free-Air CO_2 Enrichment Experiment in Central Amazonia Using Terrestrial Laser Scanning	5211	5
I34	Mapping of the biomedicinal compound Quercitrin from species to spatial scale: A Case Study in the Himalayan Kumaon Region	4170	5
I35	Evaluating the temporal dynamics of the forest cover and forest density with medium resolution Copernicus data in Nepal	907	5
I36	Mapping of Nepal’s Forest Cover Using High Resolution Satellite Data and Forest Change Inside Community Forests	836	5
I37	Quantifying Forest Growth and Carbon Dynamics With Terrestrial Laser Scanning Data	1915	5
I38	A Biome Centered Approach to Machine-Learning Based Above-Ground Biomass Mapping	1874	5
J01	Characterising Recent Aboveground Forest Biomass Dynamics Detected in High-Resolution Satellite-Based Global Maps	4907	5
J02	Developing swath lidars for mapping global vegetation structure, biomass and change: Requirements and technological developments to address current limitations	1879	5
J03	Assessing the Consistency of Above Ground Biomass Estimates Derived from Terrestrial Laser Scanning with Varying Instrumentation and Scanning Protocols	3360	5
J04	Assessing Disturbance Regimes Based on High-Resolution Biomass Observations	4836	5

A.02.07 Monitoring grasslands and rangelands from space: Zone D-E-F

Board	*Title*	*Id*	*Day*

D12	Towards a European-wide grassland productivity estimation system	2984	5
D13	EU Grassland Watch: From Satellite Data Towards Grassland Characterization	1387	5
D14	Grass as a Sensor: Advancing Insurance Design with Remote Sensing	4996	5
D15	Learning from Image-Level Labels: Where Unsupervised and Supervised AI Algorithms Come Together	2332	5
D16	Hyperspectral Data for Mapping and Predicting Plant Traits and Gradients of Functional Species Composition in German Grasslands	3440	5
D17	Deep Learning of Natura 2000 Grassland Habitats	5520	5
D18	Quantifying the Multi-dimensional Impact of Rangeland Restoration From Space	768	5
D19	Monitoring Herbaceous Biomass and Restoration of Semi-Natural Grasslands Using Machine Learning on Sentinel-1 and Sentinel-2 Imagery	2837	5
D20	Earth Observations for Grassland and Rangeland Managers: Current Utility and Co-Development of New Methods and Tools	5148	5
E01	Global grassland and livestock data for conversion monitoring	2849	5
E02	Mapping the Intensity and Use of European Grasslands by Combining Detailed Statistics, Spatial Modeling and Earth Observation Data	469	5
E03	Grassland Management Identification Based on Object Detection From Orthoimagery	5198	5
E04	Mapping Grassland Management Regimes in the Alps and Carpathians Using Fused Time Series From Landsat and Sentinel-2	3343	5
E05	A Self-Attention based-Convolutional Regressor for Alpine Grasslands Leaf Area Index Spatial-Gap Filling with SAR-Optical Data Fusion	4395	5
E06	Evaluating the Impact of Drought Events on Grassland and Forest Ecosystems in Northern Italian Mountains	4614	5
E07	Time series analysis of grass vegetation dynamic across a gradient of management intensity in Alpine Europe	1962	5
E08	Assessing the Impact of Local Terrain in Krkonoše Mountains on Grassland Mowing Detection Using Sentinel-1 SAR coherence and Multi-Sensor Validation	2407	5
E09	Near real-time anomaly detection in permanent grasslands using Sentinel-2: A tool for monitoring CAP compliance	5514	5
E11	Assessing Vegetation Dynamics and Land Cover Changes in Agricultural Pasture Areas and Croplands of the Mantsopa Region, South Africa	4814	5
E12	Towards Operational Surface Moisture Monitoring with Sentinel-1 in Five Project Areas in South Africa - Comparison of Five Years of In-Situ Soil Moisture Measurements with a Surface Moisture Index, NASA SMAP, ESA SMOS and ESA CCI Soil Moisture Products	4778	5
E13	Spatio-temporal Unmixing of the South African Protected Savanna Ecosystems Using a multi-data approach with spectral temporal metrics.	4130	5
E14	Advancing Fractional Woody Cover Mapping and Monitoring in African Savannahs: Multi-Sensor Remote Sensing for Enhanced Ecosystem Monitoring	5336	5
E15	Data-Driven Identification of High-Nature Value Grasslands Using Harmonized Landsat Sentinel-2 Time Series Data	557	5

E16	Grassland Conversion and Land Cover Change in Lower Saxony –Four Decades of Satellite Time Series Analysis	1788	5
E17	The First Open and Free High-Resolution Mowing Event Data Set for Austria based on Sentinel-2 Time Series Data	4384	5
E18	Growth Unveiled: Decoding the Start of Grassland Seasons in Austria	431	5
E19	Enhancing Grassland Cut Detection Using Sentinel-2 Time Series Through Integration of Sentinel-1 SAR and Weather Data	432	5
E20	Monitoring grasslands in in Wallonia (Belgium) based on satellite imagery and grass growth model to help farms management in climatic change context	5180	5
F01	Predicting grassland land use intensity using HR-VPP data, a case study from Skåne, South Sweden	4610	5
F02	Two Decades of Global Grassland Productivity: High-resolution GPP and NPP via Light Use Efficiency Model	5371	5
F03	Integration of novel Analysis-Ready PlanetScope (ARPS) imagery to improve performance of wide-scale area detection of in-field mowing events	1192	5
F04	Examining the Relationship Between Copernicus HR-VPP and Yield Data for Hungarian Grasslands	4438	5
F05	Assessing the Effects of Mowing, Burning, and Grazing on Semi-Natural Grasslands Using Landsat-Derived NDVI Time Series Analysis	1530	5
F06	Central Asia's land systems: mapping, modeling, and exploring future pathways.	3407	5
F07	Monitoring breakpoints under grazing pressure in Eastern Mongolia	2327	5

A.07.01 Soil moisture: Zone J-K

Board	*Title*	*Id*	*Day*
J08	Assessing the Contribution of Soil Moisture Memory in Drought predictability Across Europe	4874	5
J09	Inter-comparison and merging of active, passive and model-based soil moisture products for drought monitoring over differently instrumented regions.	2153	5
J11	Innovative High-Resolution Soil Moisture Retrieval in Catalan Agricultural Lands Using Change Detection and Downscaling Techniques	3996	5
J13	Assessing the Impact of Updated Land Cover and Snow Assimilation on Soil Moisture and Land Surface Temperature: Simulations in Eurasia	2075	5
J14	Physics-Informed AI for Soil Moisture Retrieval: a Deep Neural Network Approach Enhanced by Radiative Transfer Model	5137	5
J15	Machine-Learning-Based Observation Operators For Land-Surface Data Assimilation	1203	5
J16	The International Soil Moisture Network (ISMN): providing a permanent service for earth system sciences	1829	5
J17	Potential of Deep Learning based quality control methods for soil moisture time series in an operational data service	1833	5
J18	High Resolution Soil Moisture Estimation via GNSS-R and SAR Data Fusion With an Open Source Algorithm	5075	5
J19	Combined use of ground-based GNSS-R and Sentinel-2 imagery for soil moisture estimation in irrigated grassland	4442	5

J20	Neural Spatiotemporal Interpolation: A Scalable Deep Learning Framework for Filling Gaps in GNSS-R Soil Moisture Data	737	5
K01	First Results From the New Copernicus 1 km Surface Soil Moisture Product	4494	5
K02	A gap-filled global long-term satellite soil moisture climate data record from ESA CCI SM	1741	5
K03	H SAF ASCAT Disaggregated Surface Soil Moisture at 0.5 km: First Validation Results with ISMN Data Over Europe	3464	5
K04	Quality Assurance for Soil Moisture (QA4SM): A Platform for Validating Satellite Soil Moisture Data Against Fiducial Reference Measurements	3300	5
K05	Assessment of InSAR-based Soil Moisture Retrieval in the ESA DEMETRAS Project	2751	5
K06	On the relationship between C-band InSAR closure phases and temporal changes in soil moisture, and vegetation water content	747	5
K07	Field scale study on the surface soil moisture estimation from SAOCOM data	3775	5
K08	Improvement of surface soil moisture modeling from Sentinel-1 SAR data using polarimetric decompositions.	1506	5
K09	Model-based Tensor Decomposition for Soil Moisture Estimation from Polarimetric SAR Time Series	2308	5
K10	Field-Scale Soil Moisture Monitoring Using Sentinel-1 SAR: Exploring the Role of Soil Texture in Backscatter Sensitivity and Hydraulic Property Retrieval	3835	5
K11	Short-term SAR change detection for soil moisture estimation: A case study over multiple test-sites in Denmark.	1963	5
K12	Spatial and Temporal Analysis of a Novel Data Assimilation Approach for High-Resolution Soil Moisture Estimates Using Sentinel-1 and Sentinel-2 Data	2568	5
K13	Development and Evaluation of a Machine Learning-Based Model Integrating Ground-Based and Sentinel-1 Satellite Soil Moisture Data	1384	5
K14	Evaluating Remote Sensing Products for Soil Moisture Retrieval From Satellite Data	574	5
K15	Generation of a Continuous Bias-free Land Surface Reanalysis Dataset over EURO-CORDEX for 2002 to 2022	2790	5
K16	High-resolution soil moisture mapping in boreal forests using SMAP data and downscaling techniques	618	5
K17	Surface Soil Moisture Dynamics Across Stable Land Cover Zones In The Kruger National Park Using Multi-Source Remote Sensing and Precipitation Data	4859	5

A.08.05 Measuring and Monitoring Winds: Zone B

Board	*Title*	*Id*	*Day*
B34	Wind speed sensor intercomparison in cyclone conditions: CYGNSS and Sentinel-1 contrasted with ERA-5	4129	5
B35	HR-WIND: SAR Measurements Are Now Available in the CMEMS Wind TAC !	4428	5
B36	WindRAD Scatterometer Quality Control Against Rain Contamination	5758	5
B37	A Novel Ocean Calibration for the Ocean Surface Current Airborne Radar (OSCAR)	1108	5
B38	Wind and wave signatures in wind scatterometry	2239	5

A.08.06 Ocean Extremes and multiple stressors events: Zone B

Board	*Title*	*Id*	*Day*

B20	Ocean Extreme events: characterization of 3D Marine Heatwaves in ARMOR3D, a multi-observations dataset	1378	5
B21	Contribution of C-band Synthetic Aperture Radar to the Monitoring of Tropical Cyclones : Status of CyclObs Database Product and Algorithms	3424	5
B22	Assessing the Relative Contributions of Anthropogenic and Natural Drivers to ocean extremes	3941	5
B23	Cyclones from Sentinel-2: three dimensional reconstruction and wind speed using near simultaneous acquisitions	3888	5
B24	Climate Extremes Shape Phytoplankton Bloom Phenology across Spanish Marine Ecoregions	1502	5
B25	Assessment of the Frequency and Impact of Composite Marine and Atmospheric Heatwaves in the Mediterranean Region	1713	5
B26	An integration of satellite, in-situ and modelling data for monitoring Sea Surface Temperature in two contrasting lagoons	5438	5
B27	Towards a High-Resolution Inventory of Marine Heatwaves Over Coastal Habitats in the Southwestern Atlantic Ocean	4700	5
B28	From MHW detection to Impact Assessment Use Cases	4033	5
B29	High-Impact Tropical Cyclones and Ocean – Role of Marine Heat Wave, Ocean Eddy and Ocean Internal Tides	5034	5
B30	Investigating changes in extreme ocean surface wind speeds	3144	5
B31	Error characterization of satellite and synergistic sea-surface wind products under tropical cyclone conditions	2080	5

A.08.11 Ocean Waves: Measurements, Interactions and Applications: Zone C

Board	*Title*	*Id*	*Day*
C01	Sentinel-1 Archive Processing for Spaceborne Synthetic Aperture Radar Derived Sea State Parameters in Scope of ESA's Climate Change Initiative - Sea State ECV and collocation with TerraSAR-X	2507	5
C02	Nearshore sea state variability from diverse long-term satellite observations produced by the ESA Sea State CCI consortium	1438	5
C03	Progress Towards Assimilating Synthetic Aperture Radar Wave Mode Products at ECMWF	2176	5
C04	Wave TAC from Copernicus Marine service: New products generation	4108	5
C05	5Hz altimetric wave data products and climate cross cutting activities	4782	5
C06	Last Improvement of the L4 WAVE-TAC Significant Wave Height NADIR Products	2031	5
C07	A new insight into the global ocean wind-sea from CFOSAT/SWIM: Stokes drift and wind-waves related parameters	4619	5
C08	CFOSat surface waves multiplatform calibration and validation	1465	5
C09	CFOSAT: 6 years of surface wind and waves product, main outcomes and upcoming evolutions	1036	5
C10	A Novel Data-Driven Modulation Transfer Function (MTF) for Wave Spectra Inversion From CFOSAT SWIM Wave Scatterometer: Preliminary Results and Validation With Buoy Data	1841	5
C11	Sea state monitoring with miniaturized drifter network	2136	5
C12	An Evaluation of Sea Level Estimation From SWOT KaRIn Altimetry in the Southern Chesapeake Bay	2419	5

A.09.03 Understanding the Arctic as a system: Zone L-M

Board	Title	Id	Day
L21	Downstream Arctic Freshwater Impacts on Phytoplankton Dynamics on the East Greenland Shelf	3846	5
L22	The ESA Arctic Freshwater budget project (ARCFRESH)	4622	5
L23	Observational Assessment of Arctic Sea Ice Albedo Feedback Between 1979 and 2023	4159	5
L24	Case studies of extreme events and their implications in the Arctic system.	4379	5
L25	Complete and improved CryoSat-2 Polar Ocean product	4483	5
L26	Different Ground Track Maintenance Strategies for Long-Term Sea-Ice Thickness Monitoring in Polar Altimetry Missions	3222	5
M01	Arctic coastal waters: The overlooked but rapidly changing interface between the terrestrial and marine compartment	3469	5
M02	Advancing Arctic Vegetation Monitoring for Climate Resilience: Integrating Novel Indices and AI Frameworks Using MODIS, Sentinel-2, and Landsat Data	5243	5
M03	Dynamic Vegetation Changes in the Arctic: Circumpolar Trends based on Earth Observation	504	5
M04	Assessing The Evolution Of Terrestrial Arctic Heatwaves: A 3D Clustering Approach	2850	5

B.03.05 Heritage at Risk: Innovative Tools for Assessing and Mitigating Climate Change and Natural Hazards: Zone O

Board	Title	Id	Day
O40	Analyzing Climate Change Impacts on European Cultural Heritage Sites Using High-Temporal-Resolution Satellite Time Series	3038	5
O41	ArchiMed Heritage Hub: A European project for managing and preserving at-risk cultural heritage in the Mediterranean basin	2609	5
O42	Using citizen engagement through crowdsourcing to monitor heritage at risk	4407	5
O43	Leveraging GIS and Satellite Remote Sensing for Earthquake Susceptibility Mapping and Disaster Management Planning at the wider area of Ancient Olympia archaeological site	2524	5
O44	Advancing Cultural Heritage Preservation with Computer Vision for Remote and in-Situ Visual Inspection and Monitoring	582	5

B.04.04 Spaceborne data for the analysis of Natural Hazards and AI: new insights from Artificial Intelligence technologies and recent missions: Zone O

Board	Title	Id	Day
O08	Earthquake Damage Level Estimation Using Very High-Resolution Imagery and Deep Learning	1468	5
O09	Reference Burned Area Delineation with Deep Learning Model for Validating High Resolution Global Burned Area Maps	4408	5
O10	AI and Multisensor Data Fusion for Accurate Lava Flow Segmentation	4995	5
O11	Multi-source remote sensing approach for large-scale high resolution mapping of seasonal wildfire probability of occurrence	4234	5
O12	EarthAnomalyNet: A Framework for Spatio-Temporal Anomaly Detection in Satellite Image Time Series	1101	5
O14	Advanced Thunderstorm Nowcasting with AI and Satellite Data for Enhanced Safety and Preparedness	1524	5

O15	Risk Assessment of Land Subsidence in the Rhineland Coalfield in Germany: A Model Cluster Approach Integrating Remote Sensing, Deep learning and multi-source Geological and Environmental Factors	5059	5
O16	Landslide Mapping from Sentinel-2 Imagery Through Change Detection	889	5
O17	Large InSAR Dataset for Landslide Analysis at National Scale: Challenges and New Insights	1115	5
O18	InSAR and Machine Learning for Landslide Susceptibility Mapping in Western Greece	3347	5
O19	Landslide Impacts on Human Infrastructure: A Comparison of Support Vector Machines, Robust Satellite Techniques, and Object-Based Image Analysis	2532	5
O20	Validation of Satskred avalanche monitoring using Sentinel-1 data – A case study using road network data	4050	5

C.01.03 Innovative space technologies enabling growth for new EO science: Zone R

Board	*Title*	*Id*	*Day*
R05	Leveraging SMOS RFI Detection, Monitoring, and Reporting for Future ESA Earth Observation Missions	3773	5
R06	Calibration and Characterisation of Platform Magnetometers on-board GRACE-FO	935	5
R07	Horizon Scanning the Satellite Sensor Market: Aligning Emerging Technical Capabilities with the Goldrush in Sustainability Data Products	4461	5
R08	Anomaly detection using Machine/Deep Learning for Time series data	1778	5

C.01.14 Exploring new observations and mission concepts for atmospheric measurements (observations, modelling and theories): Zone A

Board	*Title*	*Id*	*Day*
A01	Towards the application of σ-FORUM radiative transfer code to the Martian atmosphere	1342	5
A02	Observing the NO2 Pollution in Rome With the NO2 Camera From the BAQUNIN Supersite	3073	5
A03	Expanding Ground-Based Remote Sensing: Continuous Sun and Lunar DOAS Observations at High-Latitude Stations	4334	5
A04	Retrieval of Liquid Water Path in Stratocumulus Clouds Using Slant-Angle W-Band Airborne Radar-Radiometer Observations: Preliminary Insights for the WIVERN Mission	3779	5
A05	WIVERN: An ESA Earth Explorer 11 Candidate Advancing Climate Science Through In-Cloud Observations of Global Winds	3286	5

C.02.01 Aeolus Mission: 5 years of advancing atmospheric understanding through spaceborne lidar technology: Zone B

Board	*Title*	*Id*	*Day*
B02	Evaluation of Aeolus feature mask and particle extinction coefficient profile products using CALIPSO data and ground-based data	946	5
B03	Exploration of Utilizing EarthCARE Feature Mask and Profile Products for Further Improvement of the Aeolus Data Processing	1610	5
B04	Lessons Learned From Aeolus Rayleigh-channel Winds With Mie Contribution	439	5
B05	Characterization of an intercontinental smoke transport event from America to Europe in September 2020 using Aeolus Baseline16 data and multi-platform data	5763	5
B06	Monitoring and assimilating Aeolus atmospheric composition products in ECMWF's IFS-COMPO	4756	5

B07	Enhancing Aeolus' Data Quality: From Processor Evolution to Reprocessing Campaigns in Aeolus DISC Phase F1	1038	5
B08	Comparing performance simulations for Aeolus-1 and Aeolus-2	1641	5
B09	Atmospheric Background Radiation Measured by the ALADIN Instrument of ESA's Aeolus Mission	3613	5
B10	Seasonal characteristics and temporal evolution of ground returns from Aeolus	1540	5
B11	Mitigating the impact of hot-pixels on the signal levels and wind bias during reprocessing of Aeolus data	1549	5
B12	Scale-Dependent and Flow-Dependent Effects of Aeolus Winds in the ECMWF 4D-Var Data Assimilation System	5431	5
B13	Combined impact of Aeolus and COSMIC-2 GNSS-RO observations in NWP in the Tropics	1702	5
B14	The impact of Aeolus wind observations on extra-tropical storms and on forecast busts	1708	5
B15	The impact of Aeolus wind observations on the predictability of tropical cyclones	1418	5

C.02.02 Heritage Missions and Long Time Data Series: Zone Q

Board	*Title*	*Id*	*Day*
Q02	The Advanced Infra-Red WAter Vapour Estimator-v3 (AIRWAVE) TCWV dataset: history and applications	2975	5
Q03	Long-Term Data Enhancement with the New X-TRACK/L2P Product for Coastal Applications	3350	5
Q04	Revisiting altimetry data in rivers: SpecR and the biases and pitfalls of the OCOG retracker	3712	5
Q05	Processing of Spot World Heritage and Pleiades World Heritage products with the MAJA software	2122	5
Q06	Theoretically Clear: Maximizing the Utility of the Sentinel-2 Record With AI-powered Cloud and Shadow Detection	2343	5
Q07	Atmospheric Correction of the 30+ Year Australian AVHRR Archive Using the RTTOV Radiative Transfer Model	1109	5
Q08	Data fusion with heritage satellite, IoT and Copernicus satellite data for estimating health of trees	2868	5
Q09	DAMPS: A Comprehensive Service for Earth Observation Data Archival, Management, and (Re)Processing	988	5
Q10	Cloud-Native Strategies for Legacy EO Data: Processing Challenges and Innovations	3173	5
Q11	Scenes investigation for enhancing cross-calibration performance: GOME and SCIAMACHY case study	2660	5
Q12	Study on the possible correction of the GOME/ERS-2 reflectance degradation as part of FDR4ATMOS	2486	5
Q13	Combining Thirty-year AVHRR NDVI Time-series and Driver Analysis to Identify Forcing Climate Variables on Vegetation Over Europe	1070	5
Q14	Wet tropospheric correction for altimetry from ERS-1 to Sentinel-6 using a 1DVAR approach: status quo and outlook	5292	5
Q15	Domain adaptation from current to historical aerial images with constrained generative model for past tree cover semantic segmentation	1165	5
Q16	Barcelona Expert Center on Remote Sensing lab distributing RS datasets	1537	5

Q17	Swell Aware Retracking For Synthetic Aperture Radar Altimetry	4376	5
Q18	Ensuring quality of oceanographic data from CryoSat's 15-years in orbit	2114	5
Q19	The ESA FDR4ATSR Project	2913	5
Q20	Geometric validation results of the full (A)ATSR mission	3363	5
Q21	Algorithm Updates in the (A)ATSR 5th Reprocessing	4666	5
Q22	AVHRR Data Recovery Project	2548	5
Q23	Generation of Long Time Data Series for ESA heritage TPM missions	2549	5

C.02.03 SMOS – 15 years in space: Zone L

Board	Title	Id	Day
L05	10 YEARS OF SMOS – PASSIVE MICROWAVE VEGETATION OPACITY STUDY (PM-VO-S) : The OSMOSE database	1255	5
L06	Hydrological drought monitoring in the Ebro basin: Standardized Soil Moisture Index	1780	5
L07	Machine learning SMOS soil moisture product assimilation at ECMWF	1405	5
L08	15 years of SMOS ESAC Operations: lessons learnt	3753	5
L09	TriHex – projecting SMOS lessons learnt into a follow-on mission concept	1435	5
L10	Mission Analysis for TriHex, Formation Flying for SMOS Follow-On	2147	5
L11	A model-based approach for mapping Forest Above-ground Biomass with SMOS and SMAP L-band Radiometer Data	2342	5
L12	The synergy between SMOS L-VOD and satellite LiDAR data in the framework of global forest monitoring	4306	5
L13	CIMR multi-frequency products advancing from L-band heritage	3743	5
L14	Monitoring Data Quality for Characterising the SMOS Fundamental Climate Data Record (FCDR).	1293	5
L15	"The impact of Radio Frequency Interference (RFI) on SMOS Level 2 Data Retrievals"	2444	5
L16	Mitigating RFI in SMOS SSS Observations: Toward Enhanced Global Accuracy	1278	5
L17	CATDS : SMOS L3/L4 products generation and dissemination	1608	5
L18	Exploring ice sheets with the SMOS observations	3843	5
L19	15-Year Time Series of Liquid Water Amount in the Greenland Ice Sheet Percolation Zone Derived from SMOS and SMAP	4448	5

C.02.04 Small Earth Science Missions: Zone R

Board	Title	Id	Day
R03	NanoMagSat: a 3x16U satellite constellation optimised for improving the monitoring and investigation of Earth's magnetic field and ionospheric environment	4196	5
R04	The Twin Anthropogenic Greenhouse Gas Observers Mission	3091	5

C.02.20 Past and Future EO Scientific Mission Concepts: Zone R

Board	Title	Id	Day
R01	Improving flood and landslide prediction, and irrigation estimation with soil moisture obtained from the Hydroterra+ mission	1460	5
R02	Hydroterra+: a game changer in the monitoring of the water cycle over Mediterranean and Africa areas	1792	5

C.06.02 Advances in Calibration and Product Validation for Optical Sensors: Zone S-T

Board	Title	Id	Day
S16	Eye-safe Raymetrics Aerosol Profiler (RAP) in Horizontal Pointing Mode: a new tool for the validation of aerosol products from Very High-Resolution optical missions	4287	5
S17	Reassessment of TROPOMI's Absolute Radiometric Calibration	1248	5
S18	Straylight and degradation in long-term trends in the TROPOMI L1 radiance signal	829	5
S19	The Goddard Laser for Absolute Measurement of Radiance (GLAMR) Facility for Spectral and Radiometric Calibration	4688	5
S20	Massive radiometric cross-comparison of the Sentinel and Landsat families over PICS using the SADE/MUSCLE system	1088	5
S21	Compressive Sampling for Geometric Correction of High Frequency Attitude Perturbations	2210	5
S23	Status of PICSCAR CEOS/IVOS initiative	1289	5
S24	ARTEMIS, Space imagery Geometry Software for in-flight Calibration and Accuracy Monitoring	1367	5
S25	In-Situ Cal/Val Activities of Sentinel-2 and Sentinel-3 Products in highly turbid inland waters: investigation in the Madeira River, Brazil	4928	5
S26	Evaluation of GRS-based Sentinel-2/MSI Level-2A products over inland waters using in-situ hyperspectral radiometric measurements spanning a large gradient of climatic and trophic conditions	1532	5
T01	Accuracy assessment of Sentinel-3 OLCI 300 m LAI, FAPAR and FCover products based on direct comparison with GBOV reference measurements over spatially representative sites	931	5
T02	The North Australian Satellite Validation Facility	5155	5
T03	Cross-calibration of Sentinel-2 MSI and Landsat-8 OLI for high spatial resolution climate studies	3567	5
T04	Using Sentinel-2 and Landsat-8 matchups with RadCalNet to define protocols minimising comparison biases	4205	5
T05	Quantifying The Spatial Variability of LANDHYPERNETS Sites Using PlanetScope Data	3647	5
T06	BRDF Model Comparison Using In-Situ Automated Hyperspectral Multi-Angular Reflectance Data (HYPSTAR-XR) in Gobabeb, Namibia	3465	5
T07	Sentinel-3 SLSTR SST Validation using a Fiducial Reference Measurements (FRM) Service	3816	5
T10	Merging Multiple Analyses of SLSTR Vis-SWIR Vicarious Calibration Results	4332	5
T11	The Advanced Surface Temperature Radiometer Network: A Next Generation In Situ Radiometer	5441	5
T12	Validation Of A Protocol For UAV-Based Surface BRF Retrieval	1923	5
T13	Automatic time series measurements of direct and diffuse radiation with very high spectral resolution	1790	5
T14	A novel automated field spectrometer system to exploit the near-infrared	1870	5
T15	HyperCrop monitoring station: a prototype of automated robotic system for field spectroradiometric measurements	4426	5
T16	A web-based tool for the validation of Sentinel-2 and Sentinel-3 derived bio-geophysical products against ICOS terrestrial ecosystems measurements	1242	5
T17	The CEOS Land Product Validation Subgroup: enhancing trust in satellite-derived global land products	1718	5

T18	Developing Improved Sentinel-2 LAI and FAPAR Products Through Machine Learning-Based Calibration with Fiducial Reference Measurements: the GROUNDED EO Project	4156	5
T19	Validation of the Copernicus Sentinel-2C Level-2A Products	3588	5
T20	Validation of the CLMS NDVI 300m V2.1 Product Using In-situ Data From the PhenoCam Network	5338	5
T21	TRACTIONS Demonstration Project TSM and Primary Production Services Improved by a Continuous Local Calibration and Validation of EO Data using High-Frequency Hyperspectral Insitu Instruments	4374	5
T22	Hyperspectral radiometry on BGC-Argo floats: first steps and challengestowards an FRM status	3967	5
T23	Ground-Based Observation for Validation: Production of Vegetation Land Products and Uncertainties	3495	5
T24	Copernicus Ground-Based Observation for Validation (GBOV): Production of Albedo and Top Of Canopy Reflectance for EO Data Cal/Val	3341	5
T25	Inter-satellite and a-posteriori in-situ comparisons for the validation of Sentinel-3 fire products	1975	5
T26	Radiometric performance of the optical sensors of Copernicus Sentinel-2 and Sentinel-3 constellations using vicarious methods	2325	5
T27	Copernicus Sentinel-2 Radiometric Calibration Status From The Optical Mission Performance Cluster - Focus On Improvements Of Sun-Diffuser Radiometric Calibrations	3189	5
T28	Radiance intercomparison of Sentinel 2 and Landsat satellites at a global scale.	893	5

C.06.04 New Space Missions Data Quality & Cal/Val: Zone R-S

Board	*Title*	*Id*	*Day*
R14	STITCH – A scalable reference image based on Sentinel-2 worldwide tiles	3538	5
R15	Nighttime PRISMA measurements over an illuminated greenhouse	3912	5
R16	PRISCAV: next developments of the Scientific CAL/VAL of PRISMA mission	4175	5
R17	System For The Consolidation of L2 Products of The PRISMA-SG Mission – The COOL Project	4752	5
R18	Achieving CEOS Analysis Ready Data Compliance with the EarthDaily Constellation: Advancements in Calibration, Validation, and Data Quality	5288	5
R19	ESA/NASA Quality Assurance Framework for Earth Observation Products	1618	5
R20	CEOS Commercial Mission Radiometric Calibration Monitoring System	1807	5
R21	Consistency of hyperspectral time-series datasets, showcased through New Space and Third Party Missions	2965	5
R22	The SARCalNet database and website	1758	5
R23	EDAP+ activities in the Atmospheric Domain. Assessment and Validation of potential ESA TPMs and a potential Cal/Val Park	3213	5
R24	GRASP-AirPhoton Multi-Angle Polarimeters (GRASP-GAPMAP) atmospheric data: EDAP+ (Earthnet Data Assessment Project) evaluation	4307	5
R25	Assessment of third-party SAR missions in the framework of the Earthnet Data Assessment Project (EDAP+)	3355	5
R26	Radiometric Calibration and Validation of Hydrosat's Dual-Payload Mission for High-Resolution Land Surface Temperature Data	495	5

S01	A Methodology for Region-specific Cal/Val of Small Thermal Satellites.	689	5
S02	Validating and Utilizing the HYPSO hyperspectral constellation	2590	5
S03	Satellite Validation and Monitoring of Belgian Water: WATERHYPERNET and AERONET-OC Data From Thornton Bank.	5241	5
S04	HotSat-1 Post-Launch Radiometric Calibration and Validation of Top-of-Atmosphere Radiances Using VIIRS	2048	5

C.06.07 Recent progress on uncertainty analysis for Earth Observation measurements: Zone U

Board	*Title*	*Id*	*Day*
U01	A first prototype of Sentinel-2 Level-2A uncertainty products	2358	5
U02	In preparation for the forthcoming Sentinel-4 and Sentinel-5 missions: Validation of tropospheric and total NO2 column products over Thessaloniki, Greece	4021	5
U03	Uncertainty Budget Investigations in the Evaluation of SMOS Satellite Soil Moisture Data	2241	5
U04	Estimation of Sentinel-3 MWR Wet Tropospheric Correction uncertainty	4042	5
U05	Insight into validation methods of SAR altimeter measurements for the provision of uncertainty estimates of river water level	3048	5
U06	Benefits of a fast-repeat phase for error/signal separation in satellite radar altimetry measurements, implications on the GMSL uncertainty budget	3984	5
U07	Can the Sentinel-3 Next Generation Topography Altimeter Mission's continuity with Sentinel-3 be assessed with a 4-Hour Tandem Phase?	1166	5
U08	St3TART-FO: Establishing a framework for operational Fiducial Reference Measurements (FRM) for Sentinel-3 Hydro-Cryo Altimetry products and beyond	1243	5
U09	Provision of operational FRM measurements for Sentinel-3 over inland water: the St3TART Follow on project	2292	5
U10	Uncertainty Estimation and Fiducial Reference Measurements in Monitoring Satellite Altimetry	4208	5
U11	CryoSat Long-Term Ocean Data Analysis and Validation: GOP from Baseline-C to Baseline-D	4161	5
U12	Geodetic Datum Connection using the Integrated Geodetic Reference Station (IGRS), an Evaluation of Efficacy	5158	5
U13	Validation and Uncertainty Assessment of the Updated GIFAPAR Product Sentinel-3 OLCI During the Tandem Phase	5056	5
U14	Uncertainty Analysis of Sentinel-3 SLSTR Radiometry	3231	5
U16	Impact of geometric knowledge performance on per pixel uncertainty for non-uniform scenes: the case for CHIME and LSTM missions	2518	5
U17	Global Sensitivity Analysis on Water Vapour and Aerosol Optical Thickness for the Upcoming ESA CHIME Mission	1496	5
U18	CHIME Level 2 Processor Traceable Uncertainty Propagation – Reflectance Retrieval and Adjacency Correction	934	5
U19	ISSI Forum on Understanding disparities by uncertainty analyses in VSWIR imaging spectroscopy of Earth surface ecosystems	5283	5
U20	Establishment and maintenance of a cross-cutting validation framework for and validation of European Copernicus Land Monitoring Service products	1454	5

U21	JRC multi-decadal field measurement programs and radiative transfer activities supporting the assessment of uncertainties in satellite ocean color data products	2335	5
U22	Uncertainty estimation of Earth Observation categorical datasets: Case Study with Copernicus Land Monitoring Service Small Woody Features	2160	5
U23	Uncertainty budget for Land Cover categorical variables: the ESA CCI Land Cover Approach	4573	5
U24	Uncertainty-aware building height estimation	5028	5
U25	Integration of InSAR and GNSS for Enhanced Geodetic Accuracy: Methodology and Evaluation within the Slovak Corner Reflector Network	4749	5
U26	Svalbard as a supersite for cryosphere observing satellite reference measurement collection	2087	5
U27	Safeguarding the Earth Observation Radio-Frequency Spectrum for a Sustainable Future	2135	5

D.02.02 Advances of Machine Learning (ML) methods for Cryosphere applications: Zone M

Board	*Title*	*Id*	*Day*
M14	EO-based Greenland Surface Mass Balance Using Deep Learning	2816	5
M15	Cryo2S1: Mapping sea ice freeboard from CryoSat-2 in Sentinel-1 SAR imagery using deep learning	4392	5
M16	Towards representation learning of radar altimeter waveforms for sea ice surface classification by stages of development	1731	5
M17	Extending Glacier Calving Front Segmentation with Spatiotemporal Learning Techniques	646	5
M18	Baltic Sea ice concentration estimation from dual-polarized C-band SAR and microwave radiometer based on advanced machine learning	745	5
M19	Segmentation and classification of multi-temporal ICEYE sea ice SAR data	749	5
M20	Bayesian Deep Learning for Enhanced Arctic Summer Sea Ice Surface Classification	4380	5
M21	Towards Sensor-Agnosticism for SAR-based Sea Ice Retrieval	4683	5
M22	AI4IS - Towards AI-based forecasting of Antarctic Ice shelf calving	2076	5
M23	Advancing Glacial Lake Mapping with Remote Sensing Geo-Foundation Models: A U-ViT Approach	2753	5
M24	A Data-Driven Deep Learning Model for Lake Ice Cover Forecasting	3550	5
M25	Evaluating deep learning approaches for automated rock glacier mapping using Earth observation data	797	5
M26	Snow depth estimation over the Alps from Sentinel-1 polarimetry observations and weather variables using an eXtreme Gradient Booster	798	5

D.02.08 Explainable AI for Earth Observation and Earth Science: Zone N

Board	*Title*	*Id*	*Day*
N01	Explainable AI (XAI) for Feature Selection for Satellite-Based Sea Ice Mapping	1852	5
N02	Enhancing Island Wake Parameterization: Segmentation of Synthetic Aperture Radar Imagery with Explainable AI Insights	5099	5
N03	Integrating physical modelling and machine learning within a Bayesian framework: a novel algorithm for coastal marine remote sensing	4362	5
N04	Predicting Sea Surface Height in Coastal Regions Using Hybrid Neural Networks A Case Study in the Aegean Sea	895	5
N06	Generating Atmospheric Dynamics From Sentinel-1 SAR Data Using Score-Based Models	4903	5

N07	From Data to Insight: Explainable AI and Meteorological Inputs for Eddy-covariance Station Flux Predictions in Vineyards	5207	5
N08	Harmonizing Attributions in CNNs: A Feature-Based Approach for Land Cover Classification in Satellite Imagery	2073	5
N09	Studying Livability at the Block-scale in Amsterdam Using an Interpretable and Lightweight Multimodal Model	3787	5
N10	Interpretable Prototype-based Deep Learning for Extreme Event Analysis	1482	5
N11	AI4Drought: Seasonal Prediction of Droughts From Large and Local Scale Drivers	4949	5
N12	Comparison of hyper-spectral and multi-spectral imaging for culture classification	5409	5
N13	Speckle Filtering of Sentinel-1 Dual-Polarimetric SAR Images with Deep Learning	1845	5
N14	Interpreting Environmental Risk Hotspots in the Apulia Region with eXplainable Artificial Intelligence (XAI)	3733	5
N15	OpenSAR Insight	1970	5
N16	Earth Observation and Artificial Intelligence Ethics for Environmental Well-being	4765	5
N17	AI Ethics for SDGs: Computer Vision in Earth Observation	4783	5
N18	Governance Approaches for Ethical and Gender-Inclusive Use of Earth Observation Data in Organizations	4937	5

D.04.01 Data Access and Interoperability to enable Infrastructure-agnostic Science Reproducibility: Zone O

Board	*Title*	*Id*	*Day*
O01	ESA Multi-Mission Algorithm and Analysis Platform (ESA-MAAP): A Cloud-Based Collaborative Environment for Data Access and Innovation Boosting the Impact of EO Science Missions	4242	5
O02	An Information Factory Prototype to make Science Usable & Reproducible	765	5
O03	xcube: A Scalable Framework for Unified Access of Earth Observation Data	1492	5
O04	A new sub-chunking strategy for fast netCDF-4 access in local, remote and cloud infrastructures	1895	5
O05	Danube Information Factory: Enablement of multi-disciplinary environmental data analysis	4239	5
O06	Exploring Earth: Your Gateway to ESA Earth Observation Data	3507	5

D.04.06 Advancements in cloud-native formats and APIs for efficient management and processing of Earth Observation data: Zone N

Board	*Title*	*Id*	*Day*
N35	Metadata Requirements for EO Products	4457	5
N36	Optimizing Partial Access to Sentinel-2 Imagery With JPEG2000 TLM Markers	4561	5
N37	Data representations for non-regular EO data: A case study using scatterometer observations from Metop ASCAT	1091	5
N38	GeoHEIF - Organizing geospatial images into data cubes inside a HEIF file format.	5222	5
N39	Video compression for spatio-temporal Earth System Data	3214	5
N40	Cloud-Optimized Geospatial Formats Guide	3135	5
N41	Cloud-based framework for data cubes extraction of extreme events	3612	5

D.06.03 Digital Revolution and Emerging Technologies: Zone N

Board	*Title*	*Id*	*Day*

N43	Enabling Digital Twin Earth: Adapting High-Performance Computing for Destination Earth and Earth Observation Services	3218	5
N44	Integrating Quantum-Classical Algorithms with Tensor Networks for Noise Reduction in Synthetic Aperture Radar	4571	5

E.01.01 EO for Cultural and Natural Heritage: from innovation to user uptake: Zone P

Board	*Title*	*Id*	*Day*
P01	IRIDE SERVICE SEGMENT: GEOSPATIAL PRODUCTS TO SUPPORT THE PRESERVATION OF ITALIAN CULTURAL HERITAGE	4490	5
P02	Landscape Metrics Demonstrating Threats to Traditional and Archaeological Landscapes in Southern Iraq	4600	5
P03	Automatic Detection of Tell Sites in Central Iraq Using Machine Learning on Open Access Satellite Synthetic Aperture Radar Imagery	5238	5
P04	Risk Assessment of the Effects of Climate Change on Lakeshore Sites Using Earth Observation Data. The Case of the Prehistoric Fortified Settlement at Smuszewo (Poland).	3294	5
P05	Digital Humanities For A Holistic Cultural And Natural Heritage Remote Management Model	914	5
P06	Enhancing Digital Geomedia Capabilities for UNESCO-designated sites: A Comprehensive Needs Assessment and Evaluation of Pilot Training Courses	1992	5
P07	QARA+CSK Project: An Innovative Approach to Monitoring and Preserving Cultural Heritage at Risk from Quarrying and Extractive Activities.	1759	5
P08	Monitoring and analysis of land cover changes in Yala National Park, Sri Lanka using Landsat data and Google Earth Engine	5079	5

F.05.03 Tracking conflict impacts: Earth Observation for socio-economic resilience and global policy support: Zone P

Board	*Title*	*Id*	*Day*
P32	Accurate Field Delineation with High-Resolution Earth Observation data and Deep Learning	702	5
P33	Leveraging Remote Sensing Data To Improve Humanitarian Response From Conflict-linked Environmental Damages	4638	5
P34	Large-scale automated conflict monitoring in Ukraine with Sentinel-1 SAR coherence data	4585	5
P35	Assessment of the Forest Cover Changes in Ukraine as an Impact of Military Aggression	849	5
P36	Soil Moisture Changes in Southern Ukraine as a Result of Military Operations	1538	5
P37	Implementation of Land Parcel Identification System Pilot in Ukraine	4772	5
P38	Satellite Monitoring and Geoportal Technologies for Supporting the Restoration of Ukraine's War-Damaged Agricultural Lands	900	5
P39	Satellite-Based Assessment of Rural Areas in Ukraine for the Effective Restoration of War-Affected Regions and Strategic Planning	903	5
P40	Analyzing Economic Activity in Ukraine Using Night Lights and Air Quality Indicators: Insights Amid War	974	5
P41	Leveraging the Synergetic Products of Copernicus, Google, and NASA in Synopsizing Tree-Land Loss Dynamics from Space	2643	5
P42	Monitoring Active Cropland Dynamics Amid Civil War in Eastern DRC	1126	5

P43	Assessing the Impact of the War on Irrigation and Agricultural Systems in Southern Ukraine Using Satellite Data	1355	5
P44	Fields Ablaze: Remote Sensing Analysis of Burned Agricultural Land Along Ukraine's Frontline	1411	5