DAY-1 POSTERS

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E3.04 Baltic Sea Regional Applications and Science

A1.02 Sentinel-5P Mission - latest Calibration/Validation Results

Board	ID	Title	Author
591	67063	First validation of the TROPOMI/S5P stratospheric NO2 measurements using a new harmonized data set from the FTIR ground-based network	Corinne Vigouroux et al.
592	64609	S5P TROPOMI Aerosol Index Development	Deborah Stein Zweers et al.
593	64790	FP_ILM algorithm applied to UVN sensors for the retrieval of GE_LER climatologies for UV/VIS trace gases and clouds	Ana del Águila et al.
594	65094	Validation of TROPOMI Cloud Top/Bottom Height using BAQUNIN Lidar Systems: preliminary results	Anna Maria Iannarelli et al.
595	65188	Improving ground-based HDO reference data using a novel balloon-borne flask-sampling technique	Andreas Schneider et al.

A2.01 Biodiversity

Board	ID	Title	Author
197	63188	Leveraging Landsat time series for reconstructing habitat dynamics across space and time	Julian Oeser et al.
198	63226	Testing the efficacy of Sentinel-1, Sentinel-2 and AVIRIS-NG data with machine learning based classification and regression to detect native and invasive non-native trees in the Western Ghats, India	M Arasumani et al.
199	63931	Earth Observation in support of biodiversity monitoring processes in Finland	Saku Anttila et al.
200	63733	Seasonal and inter-annual landcover dynamics in selected drained lake basins on Yamal, Siberia	Clemens von Baeckmann et al.
201	65704	Integrated UAV-based LiDAR and multispectral investigation of fire impact on Siberian forest, Yakutia, Russia.	Robert Jackisch et al.
202	63871	Modeling species and structural diversity across temperate forest types with Remote Sensing and Deep Learning	Janik Hoffmann et al.
203	64322	Assessing determinants of breeding variability and synchrony in the European roe deer (Capreolus capreolus) across environmental gradients	Johanna Kauffert et al.
204	66855	Mapping the light regime of mountain forests using airborne LiDAR and Sentinel-1/2	Felix Glasmann et al.
205	67207	Potential of various Earth observation data for monitoring of Central European arcto-alpine tundra vegetation changes	Lucie Kupková et al.
206	64465	Monitoring the biological diversity in agricultural landscapes in Germany with Copernicus – Concept and key indicators for policy evaluation	Stefan Erasmi et al.
207	64652	Global patterns and drivers of forest phenological diversity	Marco Girardello et al.
208	64875	Eco-physiological response of phytoplankton to a storm-induced browning: a large-scale enclosure experiment	Alexis L.N. Guislain et al.
209	64902	Monitoring the marine invasive alien species Rugulopteryx okamurae using unmanned aerial vehicles and satellites: a zoomed-out approach to biodiversity monitoring	Martha Bonnet Dunbar et al.
210	65138	Enhancing the modelling of Gross Primary Productivity with Sentinel-2 Data for the monitoring of ecosystem health.	Anna Spinosa et al.
211	65246	Remotely sensed vegetation biophysical parameters as proxies for primary productivity estimation	Roshanak Darvishzadeh et al.
212	65499	Combining Machine learning and Earth Observation data for high resolution tree mapping: building a dynamic forest atlas for Europe	Carmelo Bonannella et al.
213	66706	Short and long-term persistence in European vegetation	Tristan Williams et al.
214	65675	Exploring photosynthetic dynamics in diverse crop canopies by using hyperspectral and solar-induced fluorescence (SIF) data	Julie Krämer et al.
215	66089	Relating spectral variance to taxonomic diversity: experimental evidence from imaging spectroscopy over a tropical forest.	Colette Badourdine et al.

216	66376	Evolution of the spatial diversity of butterflies and dragonflies in response to climate change and climatic sanctuaries at a regional action scale	Fanny Mallard et al.
217	66652	Evaluating maximum entropy in tropical dry forest ecosystem as a function of different successional stage	Nooshin Mashhadi et al.
218	66936	From dusty images to deadwood profiles: The use of historical aerial images for mapping the key indicator of forest biodiversity	Topi Tanhuanpää et al.
219	66731	Participatory GIS Tool for Environmental Conservation of Muringato Catchment Area	Wisdom Kipkemboi et al.
220	64534	Herbivore impact on savanna vegetation in Kenya	Isabel Pérez Postigo et al.
221	67123	Optimisation of large-scale fractional woody vegetation cover mapping in savannah ecosystems	Elias Symeonakis et al.
222	67243	Macroecological dynamics from crowd-sourced plant occurrence data via Flora Incognita	Karin Mora et al.
223	65268	Crowd-sourced plant observations from smart-phone app resemble global plant functional gradients	Sophie Wolf et al.
224	64342	Using multitemporal country-wide airborne laser scanning for estimating plant diversity change	Zsofia Koma et al.
225	65534	Using imaging spectroscopy to predict the structure and functions of grassland soil microbial communities across the US continent	Alexandra Hamer et al.
226	64081	Analyzing Grassland Diversity with Hyperspectral Remote Sensing in a Semi-Arid Mediterranean Ecosystem	Vicente Burchard-Levine et al.
227	64002	Modelling vegetation traits and diversity in grasslands across scales with deep learning, UAVs and Sentinel-1 and 2	Javier Muro et al.
228	62015	Accounting for spatio-temporal dissimilarities in spectral features to capture biodiversity in grasslands: A case study using Sentinel-2 data	Christian Rossi et al.

A3.01 Towards global rangeland monitoring using Sentinel-1/2/3

Board	*ID*	*Title*	*Author*
235	64910	Estimating grassland biomass and livestock carrying capacity using Sentinel data to strengthen grazing management on local to national scales in Armenia	Sarah Asam et al.
236	64678	Grass biomass assessment at field scale in Wallonia (Belgium) based on Sentinel data	Yannick Curnel et al.
237	63794	Grassland types mapping using Sentinel-1 and Sentinel-2, from a management and an ecological perspective.	Mathilde De Vroey et al.
238	64848	National-scale detection of grassland mowing events in Germany with Sentinel-1 and Sentinel-2 time series	Sophie Reinermann et al.
239	65492	A remote sensing approach to map productivity in mountain grasslands, Gran Paradiso National Park, NW Italy	Gianluca Filippa et al.
240	64175	Observing multiple trajectories of grassland fragmentation, degradation and recovery in dry steppe belt of Europe with multisource satellite imagery	Alexander Prishchepov et al.
241	66373	Sentinel-2 – Landsat synergy for grassland monitoring: is it essential for long-term assessment?	Katarzyna Ewa Lewińska et al.
242	63898	Long-term rangeland condition changes monitoring in Central Asia	Carlos Domenech et al.
243	64387	Approaches and challenges in monitoring high-mountain rangelands of Central Asia with remote sensing data	Harald Zandler et al.
244	66902	Vegetation cover monitoring to quantify outcomes from land management interventions targeting soil and biodiversity conservation: lessons from Australia	Juan Guerschman et al.
245	62985	Mixed pixel analysis of high spatial and temporal resolution Sentinel-1 and Sentinel-2 time series data in the Benfontein Nature Reserve and Mokala National Park, South Africa	Please use "Nangula" instead of Hilma Sevelia Nghiyalwa et al.

246	64356	Understanding and monitoring ecological and socio-ecological dynamics in African rangelands	Robert Buitenwerf et al.
247	64940	Understanding woody vegetation responses to climatic and non-climatic disturbances in the grasslands of Africa	Francesco D'Adamo et al.
248	66906	Assessing rapid vegetation growth dynamics in a semi-arid rangeland in Kenya from ground and satellite data	Francesco Pietro Fava et al.

A3.04 Agriculture - Methods and Algorithms, Science, Applications and Policy

Board	*ID*	*Title*	*Author*
99	64628	Generation of large area-wide high-resolution green leaf area data sets from Sentinel-2 on field-scale for all of Bavaria as a basis for agricultural and ecological water resources management and monitoring	Lena Brüggemann et al.
100	64685	Impact of COVID-19 on Harvest of Row Crops	Isabella Kausch et al.
101	67062	Regional monitoring Fall Armyworm (FAW) using early warning systems for small farmers	Ma. Luisa Buchaillot et al.
102	67092	VietSCO: towards an operational use of satellite data for climate change adaptation	Linda Tomasini et al.
103	64738	Simulation of rice production in the Vietnam Mekong Delta under scenarios of climate change	Hoa Phan et al.
104	65039	Investigation of the diurnal cycles of interferometric coherence and backscattering coefficient on irrigated wheat in the South Mediterranean	Nadia Ouaadi et al.
105	65554	A SURFACE ALBEDO PRODUCT AT HIGH SPATIAL RESOLUTIONFROM A COMBINATION OF SENTINEL-2 AND SENTINEL-3 DATA:TEMPORAL MONITORING OF AGRICULTURAL ALBEDO ANDCARBON FLUXES	Jeremy Auclair
106	67110	Sentinel-2 Based Empirical Indicator of Cropland Annual CO2 Fluxes	Ludovic Arnaud et al.
107	64460	Estimating Soil Moisture of Finnish Agricultural Fields using Sentinel-2 Data	Markus Törmä et al.
108	64224	Statistical analysis of remote sensing-based vegetation indices for drought monitoring of maize and winter wheat in selected Hungarian regions	Edina Birinyi et al.
109	63078	Application of Earth Observation tools for Drought and Drought Impacts Monitoring in Central Europe region	Monika Bláhová et al.
110	64144	Potential of remote sensing to study the influence of drought on cereals yields in semi-arid regions: study area Kairouan Tunisia and Catalonia Spain	Manel Khlif et al.
111	63128	Assessing the impact of disaggregated land surface temperature on evapotranspiration estimates using three thermal-based energy balance models	Bouchra AIT HSSAINE et al.
112	62898	Monitoring the water use efficiency of a densely planted olive tree plantation in Saudi Arabia	Jamal Elfarkh et al.
113	63486	Synergy between Sentinel-1 radar and Landsat thermal data to retrieve surface soil moisture at high spatio-temporal resolution	Abdelhakim Amazirh
114	67472	The Importance of Surface Canopy Water on Agricultural Monitoring using SAR	Saeed Khabbazan et al.
115	65325	Mapping of soil condition in precision agriculture by using Sentinel-1 and Sentinel-2 data	Vojtech Lukas et al.
116	65692	Assessment of winter wheat nitrogen status based on the proximal sensing and remote monitoring by UAV and Sentinel-2 imagery	Jiri Mezera et al.
117	65276	Hybrid modeling for the assessment of maize nitrogen uptake from hyperspectral PRISMA data	Marina Ranghetti et al.
118	64944	Harmonized Landsat-8 and Sentinel-2 images help to reveal the patterns and determinants of cropland abandonment in subtropical mountainous areas of China	Changqiao Hong et al.
119	64756	AI for invasive species prediction: the locust swarm case	Maximilien Houel et al.
120	64048	Integrating FLDAS and Multi-sensor Imagery for Locust Swarm Mapping in Ethiopia using CNN model	Ka Hei Pinky Chow et al.
121	64847	The impact of weather conditions on yields in the South Moravian Region	Amit Kirschenbaum et al.

122	64310	Assessment of spatial and temporal variability of crop yield at field scale with multiscale remote sensing time series and multiple models	Gohar Ghazaryan et al.
123	67042	A raster-based data assimilation approach pairing Sentinel-2 satellite observations and the Simple Algorithm for Yield Estimation to monitor winter wheat productivity.	Francesco Novelli et al.
124	65358	Wheat yield and phenological response under occurrence of extreme weather or climate events during growing season	Josef Wagner et al.
125	62530	Sugarcane Yield Estimation Through Remote Sensing Time Series and Phenology Metrics	Dimo Dimov et al.
126	63741	Deriving production-related dates in sugar beet cultivation from Sentinel-1 and Sentinel-2 data for Lower Saxony, Germany	Florian Beyer et al.
127	64969	Crop monitoring and yield forecast models for maize production in South Africa and Poland under wet and dry seasons	Solomon Newete et al.
128	65290	Potentiality of crop biophysical parameters retrieved from multitemporal Sentinel-2 and PRISMA for early detection of yield performance at field level: a case study with SARAGRI project dataset.	Francesco Nutini et al.
129	66345	Estimating crop yield using remotely sensed vegetation indices and crop simulation models	Matteo G. Ziliani et al.
130	66981	AI+EO for Coffee Crop Identification, Health Monitoring and Yield Prediction	Peter Hausknecht et al.
131	64511	Yield mapping with Sentinel-2 time series data	Gregor Perich et al.
132	63363	Mapping oil palm density at country scale: An active learning approach	Andrés C Rodríguez et al.
133	64079	Crop mapping from image time series: deep learning with multi-scale label hierarchies	Mehmet Ozgur Turkoglu et al.
134	65005	Towards traceable, transparent and sustainable cocoa farming in Côte d'Ivoire and Ghana using publicly available satellite imagery and deep learning	Nikolai Kalischek
135	66941	How can Earth observation support transparent operational monitoring systems for deforestation-free cocoa production in West Africa?	Astrid Verhegghen et al.
136	66861	Using geospatial datasets for CAP relevant accounting for crop diversity and rotation in the European Union	Marijn Van Der Velde et al.
137	63419	Improving predictions of crop yield loss in years of severe droughts by integrating Earth observation and climate data in a machine learning framework. A case study for the Pannonian basin	Emanuel Bueechi et al.
138	64705	Assessing the Potential of Sentinel-1 Terrain-Flattened Gamma Time Series for Grassland Cut Detection in Austria	Felix Reuß et al.
139	67213	Comparing uncertainties provided by machine learning methods for the retrieval of vegetation variables: applications for Sentinel-2	José Luis García Soria et al.
140	67463	Top-of-atmosphere retrieval of canopy-level crop traits in Google Earth Engine	José Alberto Estévez García et al.
141	64725	Tracking cropland growth development in multi-cropping rotation systems using Sentinel-2 and Landsat 8 green LAI time series at the Nile Delta	Eatidal Amin et al.
142	64532	Precision agriculture in rice crops: remote sensing based yield modelling and nitrogen content management	María José Sanchez-Torres et al.
143	65446	Parcel-Level Wheat Yield Estimation over Entire France : Evaluation of Machine Learning Algorithms Ingesting Sentinel-2 and Meteorological Time Series	Pierre Houdmont et al.
144	64750	Mapping field sizes in smallholder agriculture of Sub-Saharan Africa: assessing pathways to overcome the mismatch between spatial resolution and field size	Philippe Rufin et al.
145	65133	Accuracy assessment of SenET evapotranspiration retrieval based on Sentinel-2 multispectral reflectance and Sentinel-3 thermal infrared radiance measurements for agricultural water stress monitoring	Céline Champagne et al.

146	65466	Potential for improving crop models and land surface models with sun-induced chlorophyll fluorescence observations	Simon De Cannière et al.
147	66974	Monitoring of maize dry matter content using Sentinel-1 time series for harvest decision	Thibault Castin et al.
148	65213	A machine learning approach for maize green area index retrieval from multi-polarization C- and L-band synthetic aperture radar data	Jean Bouchat et al.
149	62993	Detection of New Urban Elements in Agricultural Parcels	Alban Jago et al.
152	63540	Superpixel-based identification of grassland management practices from dense NDVI time series	Anatol Garioud et al.
153	63940	Crop classification and monitoring using high cadence optical imagery	Caglar Senaras et al.
154	66590	Planet Fusion - An EO Data Product for improved management of agricultural policies	Tor Nielsen
155	66583	Planet Fusion for observing farming events and policy compliance.\	Luis Peraza et al.
156	64822	Extracting phenometrics of winter cereals in Andalusia, Spain: the potential of Sentinel-2 data for CAP management	Miguel Angel Garcia-Perez et al.
157	65015	Can we use satellite time series to estimate compliance to the EU's Common Agricultural Policy (CAP) by monitoring agricultural parcels throughout winter?	Stien Heremans et al.
158	66786	Towards mapping the nature value of agricultural land use in the Armenian Highlands	Marcel Mohr
159	66818	Supporting Agricultural App Developers with Access to EO Information Services	Conrad Bielski et al.
160	67033	EO-WIDGET – Satellite Product Platform Services for individualized Agricultural Area Monitoring Systems	David Kolitzus et al.
161	63362	ForestMind: Actionable insights for a sustainable forest-commodity future	Jerome Jones et al.
162	65018	Tools for information to farmers on grasslands yields under stressed conditions to support management practices	Radoslaw Gurdak et al.
163	63890	Predicting the impact of adverse crop conditions and agri-environmental risks using Sentinel-2 and Landsat time series data	Jan Mišurec et al.
164	64666	Pathways to using remote sensing in crop cultivation and management - the German digital test field AgriSens DEMMIN 4.0	Daniel Spengler et al.
165	64526	Generating Winter and Summer Cereal Crop Calendars in the Framework of WorldCereal	Juan Manuel Cintas Rodríguez et al.
166	66483	Leveraging the crop rotation and Sentinel-2 data with a deep learning method to forecast the crop type at parcel level	Martin Claverie et al.
167	62493	Revisiting the Use of Red and Near-Infrared Reflectances in Vegetation Studies	Garik Gutman et al.
168	64267	Daily High Resolution CubeSat-derived Leaf Area Index Delivers Insight into Crop Phenology	Kasper Johansen et al.
169	62946	Convolutional Autoencoder applied to SAR Time Series of rice fields, to extract variations in agricultural practices	Thomas Di Martino et al.
170	63077	Mapping Sahelian Cropland With NICFI Planet Basemap	Xiaoye Tong
171	63081	Burned Crop Fields Mapping	Alexandru-Petrut Becheru et al.
172	63298	Assessing the suitability of different sensor types for deriving soil related differences in plant characteristics	Maren Pöttker et al.
173	63311	Rapid-Eye time series data for assessing small scale heterogeneity of agricultural fields - A case study in Brandenburg (Germany) -	Jasper Mohr et al.
174	63678	Evaluating sowing and harvest dates of maize across the Netherlands from Sentinel-2	Xinyan Fan et al.
175	63959	Fusion of Copernicus and ground sensor data for vine monitoring applications: a case study in central Po Valley, Italy	David Marzi

176	64192	Temporal signatures of backscattering coefficient and interferometric coherence with high temporal frequency C-band radar measurements over olive orchard in semi-arid Mediterranean zone	Adnane Chakir et al.
177	64531	Crop diversity from Earth Observation across scales in the European Union	Matteo Zampieri et al.
178	64540	Crop type classification using High-Resolution Vegetation Phenology and Productivity product	Jędrzej Bojanowski et al.
179	61925	Analysis of Sentinel-2 time series densification for crop type assessment in sub-Saharan Africa	Sandra Lohberger et al.
180	64698	Detection and mapping of agricultural large-scale land acquisitions (LSLAs) using MODIS Satellite Image Time Series	Yasmine Ngadi et al.
181	64722	Meadow classification using semi-supervised learning with Sentinel-2 time series	Matej Račič et al.
182	64842	Comparison of the multiresolution segmentation algorithm with deep neural networks for delineating agricultural fields from Sentinel-2 images	Gideon Okpoti Tetteh et al.
183	64983	On a new methodology to improve crop classification by the synergic use of Sentinel-1 and super-resolved Sentinel-2	José Miguel Gorosabel et al.
184	65604	Impact of the SAR acquisition parameters and plant row orientation on Sentinel-1 backscatter time-series of agricultural areas	Linara Arslanova et al.
185	65053	Correction of wheat attenuation in Sentinel-1 VV-polarized backscatter time series	Maria Arias et al.
186	64390	Tillage monitoring in the Netherlands using Sentinel-1 and Sentinel-2 observations	Manuel Huber et al.
187	67168	Field level Crop Type Classification using Deep Learning and multi-source Sentinel 1 and Sentinel 2 satellite imagery for agricultural practices monitoring and yield estimation	Nikolaos Bouas et al.
188	64826	Filling Cloud Gaps on Optical Time-Series through Optical and SAR Data Fusion for Cropland Monitoring	Thomas Papadimos et al.
189	67157	Whiskbroom Instrument Design for Increased SNR Measurements	Diogo Mimoso et al.
190	65481	Crop-specific data-driven algorithms for GAI and fAPAR estimates from SENTINEL2 or LANDSAT-8	Blanca Mateo-Herrera et al.
191	65539	Assessment of two gap filling techniques for NDVI time series reconstruction in crops	Itsaso Aranguren et al.
192	66397	QUANTIFYING CROP TRAITS FROM PRISMA HYPERSPECTRAL SPACEBORNE IMAGES	Cinzia Panigada et al.
193	66398	Usability of the RVI4S1 radar vegetation index in agriculture	Jana Seidlova
194	67098	Monitoring the dynamics of biomass in an einkorn organic field using remote sensing methods	Milen Chanev et al.
195	67238	Delineating Agricultural Field Boundaries using a FracTAL ResUNet and Sentinel-2 Imagery	Blayne Lees et al.

A3.09 Phenology from Earth Observation - Methods, Science & Applications

Board	*ID*	*Title*	*Author*
75	62397	Phenological cross-domain ECV analysis of AVHRR time series by using a semantic EO data cube	Helga Weber et al.
76	64643	Inter-Annual variability of the 1993-2019 harmonised land use/land cover and vegetation state evaluated within the ECMWF system and perspectives for future reanalyses	Souhail Boussetta et al.
77	64712	SAR phenology across major West-African land cover types	Frank Thonfeld et al.
78	66960	Harmonization of optical and radar time series towards understanding regional-scale climatological variations on smallholder farming systems in East Africa	Adomas Liepa et al.
79	62934	Time-series analysis of SAR and thermal satellite data for potential changes in forest phenology	Christos Theocharidis et al.

80	64025	Normalizing Sentinel-1 orbits for combined time series applications in forested areas	Markus Zehner et al.
81	62506	Potential Impacts of Radiometric Uncertainty on the Estimation of Land Surface Phenology Metrics	Lukas Graf et al.
82	63146	Control of mangrove phenology: role of rainfall variability	Catherine Ottlé et al.
83	63180	Monitoring capabilities of Google Earth Engine for derivation of agricultural traits and land surface phenology	Matías Salinero Delgado et al.
84	63458	Detecting drought-induced mortality of woody vegetation from high-resolution satellite time series	Yan Cheng et al.
85	64704	A methodological review on satellite derived phenometrics as proxies of plant phenophases: the case of Mediterranean ecosystems	Jose Antonio Caparros-Santiago et al.
86	67380	Earth Observation and spatio-temporal patterns of plant phenology: a support for environmental monitoring applications	Federico Filipponi et al.
87	64871	Land surface phenology in Mediterranean ecosystems using medium spatial resolution data: a comparative analysis of vegetation indices, smoothing and phenometric extraction techniques	Jose Antonio Caparros-Santiago et al.
88	64746	Events and seasons: disentangling drivers in vegetation phenology using long-term monitoring of reflectance from RoX field spectrometers	Paul Naethe et al.
89	65069	Spatial and temporal variability in Sentinel-2 spectra of different forest tree species in Switzerland	Tiziana Koch et al.
90	64868	A forest phenology service for the Alpine region	Anja Klisch et al.
91	63010	SenRVM: A multi-modal deep learning regression methodology for continuous vegetation monitoring with dense temporal NDVI time series	Anatol Garioud et al.
92	65055	Paving the road to FLEX and Biomass: a multi-frequency study of the vegetation in three regions of Europe	Nemesio Rodriguez et al.
93	64026	Crop-specific phenology from disaggregated Medium Spatial Resolution optical data	Henry Rivas et al.
94	65277	Evaluation of Copernicus High Resolution-Vegetation Phenology Productivity service and its potential application in Finland	Kristin Böttcher et al.
95	66923	S2 Living Earth: a solution to provide high resolution time-series to feed phenology studies	Hervé Poilvé et al.
96	63512	Long-term phenological changes of agricultural crops based on the fusion of Landsat and Sentinel-2 LAI time series	Jiří Tomíček et al.
97	64009	Ypsilon's European-wide phenological information service for wheat, barley, rapeseed and maize	Heike Bach et al.

A8.04 Ocean Health

Board	*ID*	*Title*	*Author*
320	67257	Assessment of Hydrodynamic Model Sea level performance through Geoid-Referenced Tide-Gauge and Satellite Altimetry	Vahidreza Jahanmard et al.
321	63729	Detection of Cyanobacteria in the Baltic	Lena Kritten et al.
322	63751	Assessment of Coral Reef Structure Shapes and the Impact of Remote Sensing Derived Environmental Parameters	Lanqing Huang et al.
323	63829	Disentangling interactions of extreme events in the ocean using machine learning	Anshul Chauhan et al.
324	64019	Investigating the Viability of Developing an E. coli Alert Data Service (EADS)	Steve Coughlan et al.
325	64280	Towards probabilistic analyses and predictions of the Green Ocean using a stochastic NEMO-PISCES modelling system	Mikhail Popov et al.
326	64671	Using indirect detection methods to quantify marine plastic flux from river outflows using earth observation	Emma Sullivan et al.
327	64895	Marine Heat Waves and Compound events	Angela Landolfi et al.
328	63517	A novel spectral index for ocean oil spill detection	Ámbar Pérez-García et al.

329	64218	Identifying potential areas of oil pollution in the coastal waters of Kavala and Thasos, Greece, using time-series Sentinel-1 data and GIS	Sofia Papadopoulou et al.
330	65932	Automated Oil Slick Pollution Detection based on SAR Imagery and Deep Learning	Stephen Hayward et al.
331	66922	Mapping and restoration of mangroves as a preventive measure against storm surge related water contamination – applications using remote sensing	Pranav P et al.
332	63937	Using scalable cloud processing and Copernicus Sentinel-2 optical data for the development of an intertidal seagrass mapping service	Christopher Cullingworth et al.
333	63294	Sargassum observations from MODIS: a new dataset including false detection filtering	Witold Podlejski et al.
334	65648	Use of satellite and model data to identify the onset of Ostreopsis ovata harmful algal bloom onset of in the Ligurian Sea	Chiara Lapucci et al.

B1.02 Advances in calibration of optical passive imaging sensors

Board	*ID*	*Title*	*Author*
16	63133	Eradiate: Highly accurate radiative transfer modelling for calibration/validation	Vincent Leroy et al.
17	63234	Sensor inter-calibration approaches for Sentinel optical missions	Sébastien Clerc et al.
18	63999	Sentinel-2 Moon Calibration	Franco Marchese et al.
19	63502	The Ground to Space CALibration Experiment (G-SCALE): SI-traceable intercalibration of multi-scale Earth Observation platforms using mirror-based targets	Brandon Russell et al.
20	63550	Evaluation of radiance biases of AMI, GEMS and GOCI-2 by applying ray-matching in the UVIS spectral region	Yeeun Lee et al.
21	63600	PROBA-V overview of calibration and trending analysis	Iskander Benhadj et al.
22	63686	The fifth phase of Radiation Transfer Model Intercomparison: RAMI-V	Nadine Gobron et al.
23	63709	Status of the Sentinel-3 SLSTR VIS/SWIR Channel Calibration after 5 Years of Operations and Lessons Learned for the Future	Dave Smith et al.
24	63929	Sentinel-3 SLSTR SST Validation using a Fiducial Reference Measurements (FRM) Service	Werenfrid Wimmer et al.
25	64223	Meteosat Third Generation (MTG) Imagery Mission - The Flexible Combined Imager (FCI) Proto-Flight Performances	Donny M. A. Aminou et al.
26	64406	Automatic orthorectification service for very high-resolution optical satellite imagery using various free reference data	Aleš Marsetič et al.
27	67362	Cross-calibration metrics for multi-mission global coverage constellations	Laura Moreschi et al.
28	67014	Designing a calibration pipeline for a high spatial resolution multispectral small-sat mission	Joseph Fennell et al.
29	64568	COPERNICUS SENTINEL-2 RADIOMETRIC CALIBRATION STATUS FROM THE MISSION PERFORMANCE CENTRE	Bruno Lafrance et al.
30	64626	STUDY OF THE CORRECTION OF SUN-DIFFUSER BRDF ARTEFACTS ON SENTINEL-2 RADIOMETRIC CALIBRATION RESULTS	Bruno Lafrance et al.
31	65028	BRDF estimations using a Kalman-Filtering approach and related normalisations of S2 L2 and L1C reflectances: radiometric comparisons with the RadCalNet and Landsat 8 measurements.	Bertrand Saulquin et al.
32	65354	Characterising the Radiometry of SkySats using Near-Simultaneous Crossovers with Sentinel-2 over Calibration Sites	Hannah Bourne et al.
33	66505	PICSCAR initiative : Overview of future activities	Béatrice Berthelot et al.
34	66506	Focus on monitoring of OLI/L8 vs S2A/MSI intercalibration in the frame of PICSCAR activity	Béatrice Berthelot et al.
35	67200	The spectral characterisation of OLCI and its temporal evolution	Rene Preusker et al.

B1.03 Present and future of Validation for Optical Imaging Sensor Products

Board	*ID*	*Title*	*Author*

36	66573	ESA airborne measurement campaign with the Research Infrastructure of the Freie University Berlin	Thomas Ruhtz et al.
37	64182	Uncertainty of Atmospheric Scattering Functions relevant for Satellite Ocean Colour Radiometry in European Seas	Francis ZAGOLSKI et al.
38	63465	The validation and uncertainty of DESIS L2A products using AERONET and RadCalNet data	Raquel De Los Reyes et al.
39	63278	EVALUATION OF CLOUD SCREENING FOR SATELLITE AOD RETRIEVALS WITH AERONET	Larisa Sogacheva et al.
40	63283	VALIDATION OF SENTINEL-3 SY_2 AEROSOL PRODUCT	Larisa Sogacheva et al.
41	64760	The “Copernicus Space Component Validation for Land Surface Temperature, Aerosol Optical Depth and Water Vapor Sentinel-3 Products (LAW)” Project: Integrated Water Vapour Validation	Niilo Kalakoski et al.
42	64136	Uncertainty of Sentinel-2 AOT, WV and SR retrieval with Sen2Cor	Bringfried Pflug et al.
43	64166	Consistent validation of Copernicus Sentinel-2 and Sentinel-3 optical missions	Bringfried Pflug et al.
44	65117	The development of uncertainty estimates for the Sentinel 2 L2A products	Javier Gorroño et al.
45	63813	Improving the modeling of adjacency effects for MAJA high resolution atmospheric corrections	Micaël Lassalle
46	63873	Quality assessment of the MAJA atmospheric correction processor over a farmland area with a new operational in-situ ROSAS station	Jerome Colin et al.
47	64045	Performances and improvement of L2A and L3A surface reflectance products for Sentinel-2-like data produced by Theia with MAJA and WASP softwares	Olivier Hagolle et al.
48	64522	Pan-European snow cover products from Sentinel-2: algorithm and evaluation	Zacharie Barrou Dumont et al.
49	64789	A dataset of fire perimeters for the year 2019 over Sub-Saharan Africa derived from Sentinel-2 time series	Daniela Stroppiana et al.
50	65375	Exploitation of Sentinel-1&2 Data for the Assessment of Fire Damage for the Montiferru Wildfire in Sardinia, Italy	Matteo sali et al.
51	62708	A Transfer Function to Predict Soil Surface Reflectance from Laboratory Soil Spectral Libraries	Nicolas Francos et al.
52	62731	The Italian sites of the HYPERNETS water hyperspectral radiometric validation network	Vittorio Brando et al.
53	63004	Validation of Sentinel-3 Land Surface Temperature datasets against ground-based measurements	Jasdeep Singh Anand et al.
54	64691	Prototyping L2 vegetation traits models in support of the hyperspectral mission CHIME	Jochem Verrelst et al.
55	63152	CHIME-SBG Airborne Imaging Spectroscopy Campaign 2021 - Mission Control Activities	Andreas Hueni et al.
56	63423	The CHIME Observation Performance Simulator (OPSI) Software System: development and status at Preliminary Design Review	Nicolas Lamquin et al.
57	63239	Improvement of Sentinel-2 geometric uncertainty with the Global Reference Image	Sébastien Clerc et al.
58	63641	The Optical Mission Performance Cluster	Jerome Bruniquel et al.
59	64013	The “Copernicus Space Component Validation for Land Surface Temperature, Aerosol Optical Depth and Water Vapor Sentinel-3 Products (LAW)” Project: Overview and Main achievements	Claire LEJOSNE et al.
60	63529	Performance Evaluation of Land-HYPSTAR® as Compared to Multi-Mission Optical Satellites	Mohammadmehdi Saberioon et al.
61	64674	An autonomous multi-band albedometer for long-term monitoring and calibration of optical satellites	Sara Arioli et al.
62	64004	HYPERNETS water validation site in the Río de la Plata (Argentina)	Ana Dogliotti et al.
63	64770	HYPERNETS the land component	Agnieszka Bialek et al.

64	64833	DIMITRI-Toolbox: present and future evolutions	Bahjat Alhammoud et al.
65	64958	Level-1 Radiometric Validation Status of Sentinel-2/MSI and Sentinel-3/OLCI from the Copernicus OPT-Mission Performance Cluster	Bahjat Alhammoud et al.
66	65032	Early radiometric performance of Landsat 9 Operational Land Imager-2	Julia Barsi et al.
67	65155	Analysis of the On-Orbit Geometric Calibration of the SLSTR Thermal Infrared Channels	Mireya Etxaluze et al.
68	65211	Quality Control Manager for Land Monitoring Services	Lukas Brodsky et al.
69	65379	The Copernicus Ground Based Observations for Validation (GBOV) service for vegetation product validation: achievements from Phase 1 and perspectives for Phase 2	Luke Brown et al.
70	67373	Distribution of pre-operational HyperScout 2 data into Copernicus: calibration and validation	Nathan Vercruyssen et al.
71	64058	European Space Agency (ESA) Calibration/Validation Strategy for Optical Land-Imaging Satellites (Part II): Data gaps, challenges and way forward	Fabrizio Niro et al.

B1.06 Sentinel-1 mission performance and product evolution

Board	*ID*	*Title*	*Author*
4	67445	SAR meets atmosphere: Enhanced SAR signal understanding by combining SAR and NWP model information in Austria	Michael Avian et al.
5	64376	Towards NRT Sentinel-1 ARD products: model based atmospheric corrections for improved geolocation	Antonio Valentino et al.
6	65413	Is it possible to preprocess Sentinel-1 SAR data more efficiently by taking benefit of the satellites' high orbit stability?	Claudio Navacchi et al.
7	63366	Copernicus Sentinel-1 satellites - Operational precise orbit determination at the Copernicus POD Service	Marc Fernández et al.
8	63324	Radiometric Comparison of the Sentinel-1 SAR Constellation	Kersten Schmidt et al.
9	63046	Statistical Homogenization of Sentinel-1 Wide-Swath Intensity Images of Ocean Scenes	Roland Romeiser
10	64120	The Sentinel-1 Global Backscatter Model extension over the polar zones and sea ice regions.	Bernhard Bauer-Marschallinger et al.
11	67323	DEM Generation with Sentinel-1: Interferometry vs. Radargrammetry	Karlheinz Gutjahr
12	64298	Exploration for Visual and Analytical Interpretation of Digital Elevation Models Retrieved from Sentinel-1	Yen-Yi Wu et al.
13	65300	Performance evaluation of Sentinel-1 derived DEMs using Copernicus DEM and ICESat-2	Carolin Walper et al.
14	66538	Multi-platform and multi-orbit surface deformation detection by synergic utilization of TSX and S1 InSAR data	Daniel Marton Kovacs et al.

B2.03 CryoSat: 12 years in space of ESA's ice mission

Board	*ID*	*Title*	*Author*
402	70953	CryoSat Payload Data Ground Segment	Stefano Badessi et al.
403	71110	CryoSat-2 - 12 Years of Successful Operations	Jens Lerch et al.
404	70985	CryoTEMPO-EOLIS: Elevation Over Land Ice from Swath processing of CryoSat-2 SARIn mode data	Carolyn Michael et al.
405	71023	Cryo-TEMPO: A new era of CryoSat-2 Thematic Products over Ice, Ocean and Inland Water	Malcolm McMillan et al.
406	70970	12 years of CryoSat Quality Control: Evolution and Current Status of the Ocean Processors [POSTER]	Erica Turner et al.
407	70964	12 years of CryoSat Quality Control: Evolution and Current Status of the Ice Processors [POSTER]	Erica Turner et al.
408	70971	Evaluation and scientific exploitation of CryoSat ocean products for oceanographic studies	Chris Banks et al.
409	71014	12 years of Cryosat-2 range,datation and interferometer calibration with Transponder	Adrián Flores de la Cruz et al.

B3.01 ALTIUS

Board	ID	Title	Author
589	70989	On the capability of UV-VIS limb sounders to constrain modelled stratospheric ozone and its application to the ALTIUS mission	Quentin Errera

B3.03 PROBA-V and PV-CC

Board	ID	Title	Author
72	64075	Evaluation of orbital drift effect in Proba-V Surface Reflectances time series	Fabrizio Niro
73	63238	Evaluation of PROBA-V reprocessing to Collection 2: preliminary analyses over 1 year	Carolien Toté et al.
74	64466	Proba-V MEP Marketplace: A New Platform for Operationalization of Third-party Services	Hande Erdem et al.

B8.03 Synergistic exploitation of Copernicus Sentinels: examples of applications

Board	ID	Title	Author
255	66354	Synergetic multisensor land use and land cover classification for sustainable development of water resources in the Muringato sub-catchment, Kenya	Marcus Goebel et al.
256	65242	Introducing the Feature of Interest for targeted and reductive Sentinel signal extraction in the context of the CAP Checks by Monitoring	Pavel MILENOV et al.
257	63925	A processing framework for monitoring of land management with optical and radar data	Daniele Borio et al.
258	63736	Monitoring intertidal topography using Sentinel-1, Sentinel-2 imagery and SWOT	Edward Salameh et al.
259	63066	Multitemporal Sentinel-1 Images for Characterization and Discrimination of Young Forest Stands Under Regeneration and Forest Disturbance Monitoring	Vahid Akbari
260	63396	OptiSAIL: a system for the simultaneous retrieval of soil, leaf, and canopy parameters and its application to Sentinel-3 Synergy (OLCI+SLSTR) top-of-canopy reflectances	Simon Blessing et al.
261	63130	Understanding maize cropping patterns using Sentinel-2 data	Mbali Mahlayeye et al.
262	65074	An all-purpose synergistic Sentinel-3 cloud masking algorithm	Ralf Quast et al.
263	66423	InSAR-based Ground Motion Service of Sweden: evaluation and benefit analysis of a nationwide InSAR service	Mehdi Darvishi et al.
264	65476	Exploiting the Sentinel 1 Extra Wide swath archive for InSAR-based glaciological investigations in East Antarctica	Jelte van Oostveen et al.
265	64219	E-SHAPE GEOSS for Disasters in Urban Environment pilot: the 21-22 October 2019 event in north-western Italy	Martina Lagasio et al.
266	62470	Construction activities detected by Sentinel-1 and -2 from space	Lea Schollerer et al.
267	64929	Geodata enrichment for air quality	Niklas Selke et al.
268	65465	A posteriori fusion of atmospheric profiles: real data applications	Nicola Zoppetti et al.
269	64586	Synergistic exploitation of Sentinel-2 and Sentinel-3 for monitoring gas flaring and natural gas liquefaction plant operations.	Kerstin Stebel et al.
270	63341	Synergy of Sentinel 5P and ground measurements to estimate surface NO2 concentration using Machine Learning models	Shobitha Shetty et al.
271	64036	CO2M mission to support the achievement of the Paris Agreement	Marcy Frioult et al.

E1.01 When FinTech meets Nature - linking green assets with innovation in financial and digital ecosystems

Board	ID	Title	Author
273	65433	A case study of people buying carbon from farmers	Chris van Diemen et al.

E3.03 Black Sea and Danube Regional Applications and Science

Board	ID	Title	Author
303	65444	Employing Land Surface Phenology for the assessment of forest gain and loss around Lake Sevan in Armenia and Kolkheti lowlands in Georgia	Maria Banti et al.

304	65407	PONTOS Data Cube: an innovative approach for environmental monitoring applied in the Black Sea and Mediterranean regions	Maria Banti et al.
305	64051	Monitoring fluvial islands of the Danube River based on Earth Observation Data	Andreea-Florentina Marin
306	64297	Earth Observation services for Black Sea Protection - EO4BSP	Marius Budileanu et al.

E3.04 Baltic Sea Regional Applications and Science

Board	*ID*	*Title*	*Author*
308	64772	TARKKA – Web Map Application for Earth Observation Data	Hanna Alasalmi et al.
309	66753	Extreme Solar Events' Impact on GPS Positioning Results	Madara Normand et al.
310	66899	Cloud cover changes over Baltic Sea area in spring, 1982-2019	Piia Post et al.
311	62935	Geodetic SAR for Height System Unification and Sea Level Research - Observation Concept and Results in the Baltic Sea	Thomas Gruber et al.
312	63559	Baltic SEAL: new insights into the mean and variability of the sea level in the Satellite Altimetry era	Marcello Passaro et al.
313	63812	Exploring synergies between remote sensing products developed under the framework of ESA Baltic+ initiative: Sea Surface Salinity and Sea Level	Cristina González-Haro et al.
314	62960	QUANTIFYICATION OF SUBMERGED AQUATIC VEGETATION PERCENT COVER IN THE BALTIC SEA LOW TRANCPARENCY WATERS WITH SENTINEL-2 DATA	Ele Vahtmäe et al.
315	63522	Beach cast and drifting vegetation mapping with Sentinel-2 and PlanetScope	Florian Uhl et al.
316	64076	Combining satellite data and data mining to investigate Vibrio vulnificus abundance in the Schleswig-Holstein Baltic Sea region, Germany	Natascha Oppelt et al.
317	66983	Satellite Altimetry Performance Verified to Enhanced Hydrodynamic Model of the Baltic Sea	Majid Mostafavi et al.
318	64438	Evaluation of SMAP and Sentinel-2 Sea Surface Salinity measurements in the Baltic Sea	Saeed Rajabi Kiasari et al.

A9.01 Continuity in Cryosphere observation: from Cryosat to CRISTAL

Board	*ID*	*Title*	*Author*
411	62728	CRISTAL performance assessment: an end-to-end simulation approach	Albert Garcia-Mondéjar et al.
412	67368	Resonant Orbit Design for CRISTAL Mission	Laura Moreschi et al.
413	63761	Orbit accuracy at the 12th year anniversary of Cryosat-2 mission	Ernst Schrama et al.
414	63978	Sensitivity of radar altimetry waveform to snow properties	Melody Sandells et al.
415	64835	UAV Snow Radar for Validation of Satellite Products associated with Snow on Sea Ice	Robert Ricker et al.
416	64805	The ESA CryoSat-2 Validation Experiment (CryoVEx) airborne campaigns - past, present and future	Sine M. Hvidegaard et al.
417	64912	Defining Arctic sea ice Fiducial Reference Measurements (FRMs) for the Copernicus Sentinel-3 Surface Topography Mission – the ESA St3TART project	Henriette Skourup et al.
424	64802	DEFIANT: Drivers and Effects of Fluctuations in sea Ice in the ANTarctic	Andrew Shepherd et al.
425	65673	Satellite observations constrain subglacial melt rates and hydrology beneath the Antarctic Ice Sheet	Martin Wearing et al.
426	66502	Spurious variability in satellite-altimeter derived sea ice thickness	Carmen Nab et al.

A10.01 Our Solid Earth: From Core to Surface

Board	*ID*	*Title*	*Author*
474	64233	Torsional wave propagation in the Earth's core	Long Chen et al.
475	65318	Validation and interpretation of the 3-D upper-mantle electrical conductivity reconstructed from the satellite-observed tidal magnetic fields	Libor Šachl et al.
476	67003	Improving glacial isostatic adjustment estimates in Antarctica by means of geodynamically constrained structural models of the lithosphere and upper mantle	Meike Bagge et al.

477	63824	Validation of VILMA-3D GIA models with multi-analysis-centre GNSS data	Eva Boergens et al.
478	64793	Effect of lateral and stress-dependent viscosity on GIA induced uplift rates in Greenland	Wouter van der Wal et al.
479	63438	Impact of lateral variations in crust and mantle structure on periodic loading processes	Pingping Huang et al.
480	63868	WINTERC-G-v2-beta: a global thermochemical model for the crust and whole mantle obtained from joint geophysical–petrological inversion.	Mariano S. Arnaiz-Rodríguez et al.
481	64016	Dynamic topography and satellite gravity data joint inversion using Reduced Order Models	Olga Ortega-Gelabert et al.
482	64180	Swarm and GRACE-FO time series compared	Josef Sebera et al.
483	64566	Constraining transdimensional density inversions with Rayleigh wave dispersion curves	Wolfgang Szwillus
484	65322	Lithospheric domains of the West and Central African rift system based on Terracing and Cluster analysis.	Estelle Eric Fosso Teguia M et al.
485	66683	The Elevated Passive Continental Margin of Northeastern Oman using SAR interferometry and multi-proxy data	Kosmas Pavlopoulos et al.
486	64529	Updated nationwide surface deformation datasets of the Ground Motion Service Germany	Andre Cahyadi Kalia et al.
487	67379	An analysis on the contribution of InSAR interferometry for seismic hazard management. A study case: San José (Costa Rica)	Carlos Garcia Lanchares et al.
488	66947	On the effect of compressibility on horizontal motions in glacial isostatic adjustment	Jesse Reusen et al.
489	63660	Benchmark forward gravity schemes: the gravity field of a realistic lithosphere model WINTERC-G	Bart Root et al.
490	63946	Impact of the Icelandic hotspot on mantle viscosity in southeast Greenland	Valentina R. Barletta et al.
491	65434	Co-estimating the geomagnetic field and polar ionospheric currents	Clemens Kloss et al.
492	65019	SV Signals in Magnetic Field Gradient Tensor Elements derived from Swarm-based GVOs	Magnus Danel Hammer et al.
493	65198	A re-examination of the 1969 geomagnetic impulse	Rasmus Møller Blangsbøll et al.
494	65250	Sequential modelling of the Earth’s core magnetic field and associated core flow	Vincent Lesur et al.
495	63240	Satellite magnetic data reveal interannual modes in Earth’s core	Felix Gerick et al.
496	63808	Reconstruction of the Earth’s core dynamics from assimilation of satellite and ground-based magnetic observations	Mathieu Istas et al.
497	63171	Recovery of interannual core motions: a synthetic study	Tobias Schwaiger et al.
498	67060	Slow slip event characterization and consistent large-scale coupling map of the Mexican subduction zone from joint InSAR – GPS analysis.	Erwan Pathier et al.
499	62762	Joint Inversion for East Antarctic Crustal Structure with a Mutual Information Constraint	Mareen Lösing et al.
500	64525	The lithospheric structure in Greenland from integrated geophysical modelling	Agnes Wansing et al.
501	64193	Influence of crustal and lithospheric heterogeneities to the geothermal heat flow beneath the East Antarctic Ice Sheet in the Wilkes Subglacial Basin	Maximilian Lowe et al.