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A1.01 Trace Gases in the Stratosphere and Mesosphere

Board	ID	Title	Author
504	63635	EE11 candidate CAIRT mission objectives for trace species in the stratosphere and mesosphere	Quentin Errera et al.
505	64632	An Improved Regression Method for the Retrieval of Trace Gas Profiles from Ultra-Spectral Thermal Infrared Data	Beibei Zhang et al.
506	67078	Observation of OClO by TROPOMI and comparison with meteorological parameters and PSC observations	Janis Pukite et al.
507	63591	Long-term validation of MIPAS ESA operational products using MIPAS-B measurements	Gerald Wetzel et al.
508	65010	The Version 8 data product of MIPAS from IMK/IAA processing	Gabriele Stiller et al.
509	65127	First deployment of the CAIRT airborne demonstrator GLORIA on stratospheric balloon	Gerald Wetzel et al.
510	67007	Towards Unified Error Reporting (TUNER): Recommendations	Thomas von Clarmann et al.
511	65543	The Impact of the space launches on stratospheric ozone depletion and global climate	Robert Ryan et al.
512	66579	Investigating longitudinally resolved long-term ozone changes in the stratosphere using satellite limb observations and CTM simulations	Carlo Arosio et al.
513	67232	Over Twenty Years of OSIRIS Ozone and the SAGE II/OSIRIS/SAGE III ISS Data Record	Douglas A. Degenstein et al.
514	64213	The Aerosol Limb Imager: a HAWC instrument for stratospheric aerosol and cloud profiling	Landon Rieger et al.
515	62894	Stratospheric NOx in the Asian Summer Monsoon	Kimberlee Dubé et al.

A1.03 Troposphere and Air Quality

Board	ID	Title	Author
516	63945	Satellite based reactive nitrogen emission estimates	Enrico Dammers et al.
517	63444	Nitrogen Dioxide Monitoring by synergy of remote sensing and surface concentration data in an Italian central region	Cristiana Bassani et al.
518	63142	Nitrogen dioxide reductions from satellite and surface observations during national Covid-19 lockdown in urban and rural sites (Italy)	Cristiana Bassani et al.
519	64050	Relationships between Covid-19 features and air pollution based on supervised machine learning models	Lixia Chu et al.
520	63672	Changes in ambient air quality and atmospheric composition and reactivity in the South East of the UK as a result of the COVID-19 lockdown	Kevin Wyche et al.
521	67058	Formaldehyde total column changes under COVID-19 lockdowns in European cities	Alexandre Caseiro et al.
522	64046	Reduction of Air Pollution in Poland in Spring 2020 during the Lockdown Caused by the COVID-19 Pandemic	Patryk Grzybowski et al.
523	64033	Intercomparison of the ESA Sentinel-5P NO2 tropospheric column number density product against the in-situ ground measurements	Patryk Grzybowski et al.
524	63292	Estimation of OH in urban plumes using TROPOMI inferred NO2/CO	Srijana Lama et al.
525	63722	Air quality measurements in Bucharest in the context of TROPOMI calibration / validation activities	Dragoș Ene et al.
526	63267	Urban Air Quality Monitoring with Low-Cost Sensors	Enrico Giuseppe Cadau et al.
527	64021	Use of homogeneous ground-based networks and satellite observations to investigate the COVID-19 lockdown effects on the atmospheric composition in	Monica Campanelli et al.

528	64426	IDEAS-QA4EO DOAS-BO: TOWARDS A NEW FRM4DOAS SITE IN THE PO VALLEY	Paolo Pettinari et al.
529	64029	Database of pollution plumes and emissions estimates using TROPOMI CO measurements	Manu Goudar et al.
530	64104	Estimating Surface-Level NO_2 Concentrations from TROPOMI Measurements in Finland	Henrik Virta et al.
531	64631	Tropospheric Ozone: Comparison between in-situ Measurements and Remote Sensing Products in Tropical Africa	Inês Vieira et al.
532	64883	Sentinel-5P based NOx emissions from large combustion plants for comparison with and possibly QA/QC of E-PRTR emissions	Kerstin Stebel et al.
533	65077	Improved monitoring of shipping NOx emissions from aircraft and TROPOMI satellite observations	T. Christoph V. W. Riess et al.
534	65176	Arctic lightning and anthropogenic NOx emissions estimated from TROPOMI observations	Xin Zhang et al.
535	65189	Identifying the sources of ozone precursors in a major ozone outbreak across Europe analyzed with multispectral satellite measurements and models	Sachiko Okamoto et al.
536	65365	Improving the representation of glyoxal in the global EMAC model using TROPOMI retrievals	Simon Rosanka et al.
537	65414	Challenging our understanding of upper tropospheric NOx chemistry using TROPOMI cloud-sliced observations and GEOS-Chem	Robert Ryan et al.
538	65431	Synergistic hyperspectral ground-based and sunphotometer inversion of measurements for the retrieval of gas concentration and aerosol properties using	Marcos Herreras Giralda
539	65536	InPULS: Sentinel based air pollution monitoring and forecasting service for Germany	Frank Baier et al.
540	65615	Evaluation of ammonia concentrations derived from IASI using a ground-based instrument (mini-DOAS) over two different areas (urban and rural) in France	Nadir Guendouz et al.
541	64930	The NDACC MAX-DOAS Central Processing Service in Support of Air Quality Satellite Sensors Validation	François Hendrick et al.
542	65624	A mountaintop cubesat demonstrator for AQ monitoring at city-scale level	Alexander Cede et al.
543	65664	VALIDATION STRATEGIES FOR ATMOSPHERIC SATELLITE MISSIONS LIKE SENTINEL-5P – CASE STUDY OF A NO2 AIRBORNE MAPPING CAMPAIGN OVER BELGIUM	Frederik Tack et al.
544	65711	Evolution of Sentinel-5P NO2 data product and implications for air quality applications	Steven Compernolle et al.
545	64776	Evaluation of glyoxal tropospheric columns retrieved from GEMS observations	Christophe Lerot et al.
546	64715	Tropospheric Polar BrO derived from S5-P/TROPOMI: Separation of Tropospheric BrO Columns without Model Input	Moritz Schöne et al.
547	66500	Reconstructing NO_2 concentration profiles from TROPOMI observations using Feed-Forward Neural Networks	Leon Kuhn et al.
548	66197	A global perspective on Bromine monoxide composition in volcanic plumes derived from S5-P/TROPOMI	Simon Warnach et al.
549	64477	Quantification of SO_2 emission rates from the Kilauea volcano in Hawaii by the divergence of the SO_2 flux using S5P-TROPOMI satellite measurements	Adrian Jost et al.
550	65909	Modelling Ground Level Sulphur Dioxide (SO2) Using Heterogeneous Datasets and Artificial Intelligence Methods	Katherine Elsom et al.
551	66726	Infallible Algorithms?! Cross-verification of the Sentinel-5 Level 2 processors	Dominika Czyzewska et al.
552	64459	Investigation of the tropospheric NO2 variability based on satellite measurements regarding to economic fluctuations for the study areas in the Po valley, Tokyo, and	Renée Bichler et al.
553	63622	Tropospheric ozone column data records based on total columns from GOME, SCIAMACHY, GOME-2, OMI and TROPOMI using CCD algorithm or in combination	Klaus-Peter Heue et al.
554	66831	An improved TROPOMI tropospheric NO2 research product over Europe	Sora Seo et al.
555	66930	Tracking down anthropogenic point sources of ethylene (C2H4) from space	Bruno Franco et al.

556	66963	Status on tropospheric ozone retrieval from nadir sounders by schemes developed at RAL	Brian Kerridge et al.
589	66985	Sentinel-5P TROPOMI Tropospheric Ozone: using local clouds to extend the global coverage	Kai-Uwe Eichmann et al.
590	67072	Satellite measurements of carbon monoxide as a tool for air quality assessment	Tomi Karppinen et al.
591	67074	Inference of surface NO2 concentration from space using TROPOMI observations and machine learning	Hervé Petetin et al.
592	67085	GFlaringS3 2.0 - Updated global gas flaring activity and black carbon emissions	Alexandre Caseiro et al.
593	67170	Application of Satellite Data and Steady State Approximations to Investigate the Atmospheric Hydroxyl Radical (OH)	Matilda Pimlott et al.
594	67135	Smoke detection following fires and agricultural impact analysis	Gwendoline Blanchet et al.
595	63882	Quantification of biomass burning pollution in the UTLS by infrared limb imaging compared to CAMS: the CAIRT airborne demonstrator GLORIA	Sören Johansson et al.
596	67249	Retrieval of fire plume heights from IR satellite measurements: inversions of carbon monoxide profiles	Gilles Lecomte et al.
597	66846	Re-evaluation of biomass burning CO emissions over Greece in summer 2018 using a novel data assimilation tool	Nikos Gialesakis et al.
598	64809	Using S-5p trace gas and aerosol observations of fire plumes to constrain a global composition model: a critical assessment	Vincent Huijnen et al.
599	64857	Satellite observations of flattening of aerosol and NO2 concentration trends over southeastern China in recent years.	Gerrit de Leeuw et al.
600	65890	Applications of TROPOMI's cloud shadow detection algorithm DARCLOS	Victor Trees et al.
601	66449	Improvements of the FRESCO-S cloud retrieval algorithm for TROPOMI	Ping Wang et al.
602	67301	Predicting failed ozone retrievals using machine learning for Suomi NPP CrIS and Sentinel 5P/TROPOMI	Edward Malina et al.
603	67409	Study of the lower stratosphere and troposphere exploiting the synergy of limb and nadir measurements: expected contribution of Earth Explorer 11 candidate mission	Piera Raspollini et al.
604	67442	Providing a compact airborne remote sensing sensor for multi-angular, multi-spectral aerosol polarimetric measurements	Anna Gialitaki et al.

A2.02 Ecosystem Accounting

Board	ID	Title	Author
197	64339	Ground truthing of SPAD values does not hold true for semi-natural grassland areas	Antonia Ludwig et al.
198	61373	High-resolution recording and forecasting of peatlands under forests in northeast Brandenburg, Germany, using remotely sensed data.	Hainner Aparicio et al.
199	63608	MAPPING, ANALYZING AND MONITORING ECOSYSTEMS CHANGES IN THE REGION OF DOBROGEA, ROMANIA	Cristina Elena Mihalache
200	66587	Fusing satellite optical, SAR and LiDAR data for better carbon and biodiversity tracking	Edward Mitchard
201	63112	Supporting forest conservation and restoration policies - A Mediterranean forest types map	Virginia Garcia Millan et al.
202	65190	Forest type mapping using multitemporal Sentinel data and spectral-temporal metrics: application from the region of Eastern Macedonia-Thrace to a national	Natalia Verde et al.
203	65693	A stacked generalization approach for predicting wood provisioning service in a Mediterranean forest area in Northern Greece	EIRINI CHRYSAFI et al.
204	65459	SVODI - A global long-term vegetation condition index based on microwave remote sensing	Leander Mösinger et al.
205	66205	Fusion of classification approaches for landfill detection in Ukraine	Andrii Shelestov et al.

Board	ID	Title	Author
206	64327	MACROALGAE LIVING IN CONSTANTLY CHANGING LITORAL OF SVALBARD (ARCTIC) CAPTURED BY SPACE BORNE RADARS	Jonas Gintauskas et al.
207	64812	Deep learning approach for large scale mapping of Posidonia oceanica meadows in the Mediterranean Sea based on Sentinel-2 satellite data	Masuma Chowdhury et al.
208	67293	National Ecosystem Accounting of Seagrass Extent, Blue Carbon Stocks and Sequestration Potentials in The Bahamas harnessing contemporary Earth	Alina Blume et al.
209	67270	Monitoring Irish Atlantic Sub-Tidal Kelp Forests Remotely From Orbit	Aaron Golden et al.
210	63702	Estimating Net Primary Productivity of mangrove forests using Sentinel-2: breaking new grounds for long-term monitoring	Gema Casal et al.

A2.03 Ecosystem Resilience

Board	ID	Title	Author
212	63685	Monitoring Water Hyacinth in Kuttanad, India, Using Sentinel-1 SAR Data	Morgan Simpson et al.
213	66878	PREDICTING CARBON FLUXES ALONG MANGROVE COASTLINES. A MULTISCALE MODELLING APPROACH BASED ON SATELLITE MONITORING	Christophe PROISY et al.
214	62610	Mapping nutrient concentrations in coastal waters with Sentinel-3 data	Tuuli Soomets et al.
215	65609	Land surface dynamics in Indo-Gangetic river basins - Evaluation of seasonal trends and drivers	Soner Uereyen et al.
216	64759	Mapping Areas Damaged by the 2020 Locust Outbreak in Eastern Africa Using Multi-Scale Earth Observation Data and Time Series Analyses	Jonas Schreier et al.
217	67107	Climate change effects assessment on central-Italy lakes surface temperature through satellite data time-series	Davide De Santis et al.
218	63965	Land-cover modulation of ecosystem resistance to drought stress	Chenwei Xiao et al.
219	64398	Memory effects in ecosystem processes are typically overestimated: the effects of modulated seasonal cycles	Khalil Teber et al.
220	65707	Topography and stand characteristics controlled forest response to the 2018 drought in Switzerland	Joan Sturm et al.
221	65013	Global aridity footprint and the response of ecosystem variables	Christin Abel et al.
222	64618	Response and resilience against drought in different forest types revealed by Sentinel-2	Mitro Müller
223	64235	Analysis of deforestation and degradation in Xingu National Park in the Brazilian Amazon using geotechnologies	Kate Booth

A2.04 Ecosystem Restoration

Board	ID	Title	Author
224	65201	Would forest ecosystem restoration increase cloud cover?	Grégory Duveiller et al.
226	66793	Reforestation in the Amazon: combining local indigenous knowledge with EO data, UAV and in-situ measurements	Nikolina Mileva et al.
227	63205	Monitoring aboveground biomass dynamics in forest restoration areas using GEDI Lidar and optical data fusion	Mengyu Liang et al.
228	63344	A novel drone-based approach for assessing the abundance and spatial distribution of broad-leaved orchids (Dactylorhiza majalis) in high nature value grassland	Kim-Cedric Gröschler et al.
229	63807	Quantifying ecosystem restoration effects using climate data records from satellite observations	Mendy van der Vliet et al.

A5.04 Water Vapour and its Role in Climate

Board	ID	Title	Author
456	64350	Investigating long-term changes of water vapour in the upper troposphere and lowermost stratosphere derived from in-situ observations in frame of the European	Susanne Rohs et al.

Board	ID	Title	Author
457	65642	Retrieval of Relative Humidity Directly from Simultaneous Vibrational-Rotational Raman Lidar Measurements of Temperature and Water Vapour Mixing Ratio	Vasura Jayaweera et al.
458	63262	Water vapor data from the Jülich Airborne In-situ Database (JULIA)	Christian Rolf et al.
459	63118	Analysis of global trends of total column water vapour from multiple years of OMI observations	Christian Borger et al.
460	67075	Synergistic NIR-TIR Total Colum Water Vapour Retrieval for OLCI-SLSTR - towards MTG-FCI	Jan El Kassar et al.
461	64412	A 40-year data set of upper tropospheric humidity with respect to ice for climate studies based on HIRS satellite observations	Charis Benetatos et al.
462	65102	Sentinel-1 Precipitable Water Vapor Maps Continuous Multitrack Assimilation for Numerical Weather Prediction	Pedro Mateus et al.
463	66475	The SATCROSS Measurement Campaign and its results: Application of the NDSA technique to a Ground-to-Ground Radio Link	Arjan Feta et al.

A8.05 Coastal Altimetry Algorithms, Products and Applications

Board	ID	Title	Author
297	63554	Comprehensive Remote Estimation of Total Suspended Solids, Chlorophyll-a and Color Dissolved Organic Matter using Sentinel 2 Imagery in the South Atlantic Bight	Emma Goldsmith
298	62793	Australian coastal sea level trends over 16 years of reprocessed Ja-son altimeter 20-Hz datasets	fukai peng et al.
299	64763	Waveform Shapes, Precisions, ENLs and Speckle Autocorrelation – Similarities between Focused and Unfocused SAR Waveforms for S3	Frithjof Ehlers et al.
300	63272	EOT20: Improvements made to ocean tide estimations from coastal altimetry	Michael Hart-Davis et al.
301	63665	Assessment of the Weather Research and Forecasting model using Copernicus Sentinel-3A/B altimetry-derived wind speed in coastal areas	Roberto Mulero-Martínez et al.
302	63972	Sources of sea level variability on the shelf of the U.S. Eastern seaboard from Sentinel-3A SRAL	Anrijs Abele et al.
303	64341	CTOH R&D activities for long-term monitoring of the coastal sea level at global scale	Fabien Léger et al.
304	64749	ADVANCES IN USING IMPROVED SATELLITE RADAR ALTIMETRY IN THE DELTA-LAGOONS SYSTEM OF THE NORTHERN ADRIATIC SEA	Stefano Vignudelli et al.
305	64828	Sea level variations in the Baltic Sea from altimetry – an experimental 3-day mean data set combining altimetry, tide gauges and model statistics using optimal	Ida M. Ringgaard et al.
306	65101	A Novel Carrier-Phase Differential GNSS Buoy for Coastal Sea Level Observation	Hatchouelou Kant Williams KOUASSI et al.
307	67137	Realistic coastal dynamic topography by a synergy of satellite altimetry data and marine geoid	Artu Ellmann et al.
308	66803	Evaluation of new Estuarine and coastal water level products in SAR mode	Ahmet Hakan Uyanik et al.
309	66896	Satellite Radar Altimetry for Practical and Operational Applications	Margaret Srinivasan et al.
310	64599	Assessment of global and regional tidal models in coastal regions – a contribution to improve coastal altimetry retrievals	Mathilde Cancet et al.
311	64141	ALBATROSS: Improving the bathymetry and ocean tide knowledge in the Southern Ocean with satellite observations	Mathilde Cancet et al.
312	63394	Crossover Adjustment of ICESat-2 Satellite Altimetry for Arctic Region	Bo Wang et al.
313	66944	ICESat-2 bathymetry in shallow water areas	Heidi Ranndal et al.
314	65558	Quantifying coastline changing processes in the Wadden Sea by combining satellite altimetry and optical remote sensing	Susann Aschenneller et al.
315	63625	Sea level variability and change along the Norwegian coast between 2003 and 2018 from satellite altimetry, tide gauges and hydrography	Fabio Mangini et al.

Board	ID	Title	Author
316	64697	Sentinel-3 Marine Altimetry Mission: From the open ocean to the coastal zone	Bruno Lucas et al.
317	63579	Recent improvements of the CMEMS/EO4SIBS Black Sea Sea Level products	Marie-Isabelle Pujol et al.
318	64012	A new barotropic tide model for global ocean: FES2022	Loren Carrere et al.

A8.06 Ocean Extremes

Board	ID	Title	Author
319	66559	Marine Heatwaves Forecast in the Mediterranean Sea: A machine Learning based approach	Nathalie Verbrugge et al.
320	65118	EXTREME WIND EVENTS MONITORING WITH SENTINEL-1: SERVICE DEMONSTRATION	Romain Husson et al.
321	66880	Hurricane Winds and Structures from SAR and SMAP	Guosheng Zhang et al.
322	65256	Inter-calibration of Scatterometers and Radiometers Under Extreme Winds Using NOAA Hurricane Hunter Flight Data	Albert Rabaneda et al.
323	64548	Automatic detection of polar lows in Sentinel-1 images	Jakob Grahn et al.
324	64408	Directional ocean wave spectrum properties from the SWIM instrument under tropical cyclone conditions	Eva Le Merle et al.
325	63891	Detecting Marine Heat Waves in warming oceans: the Mediterranean study case	Francesca Elisa Leonelli et al.
326	65679	Distribution and intensity of marine heatwaves over Brazilian coral reefs: relationships with bleaching events	Gabriel Lucas Xavier da Silva et al.
327	63333	The impact of climate modes on extreme events in sea level and its contributing factors	Bernd Uebbing et al.
328	65343	IMPACTS OF MARINE HEATWAVES AND COLDSPELLS ON PHYTOPLANKTON BIOMASS IN THE RED SEA	Iason Theodorou et al.
329	65657	Multi-sensors analysis of the interactions between marine heatwaves and wind-driven coastal processes along the Northwestern Mediterranean shorelines	Nathaniel Bensoussan et al.
330	63612	The Drivers of the 2019 Marine Heatwaves in the Western Mediterranean Sea, and their Effect on the Chlorophyll-a Concentration	Manal Hamdeno Elawady et al.

A8.11 Colour and Light in the Ocean from Earth Observation

Board	ID	Title	Author
334	63380	A model for decomposing water absorption coefficient into phytoplankton, colored dissolved organic, and nonalgal components based on optical water type classification	Shun Bi et al.
335	64688	Synergistic use of OLCI and TROPOMI measurements to determine phytoplankton functional types	Leonardo M. A. Alvarado et al.
336	64397	Probing the response of phytoplankton to climate change	Xuerong Sun et al.
337	66564	The challenges of fitting phytoplankton size classes models to complex waters	Andrea de Lima Oliveira et al.
338	66917	PHYTOPLANKTON DYNAMICS IN THE NORTH-WESTERN BASIN OF THE BLACK SEA	Florina Dediu et al.
339	64558	Intercomparison of in situ chlorophyll-a measurements for improved satellite validation capabilities	Susanne Kratzer
340	65251	Assessment of Sentinel-3A and Sentinel-3B OLCI chlorophyll algorithms in global coastal waters	Silvia Pardo et al.
341	64961	Regional algorithms to estimate chlorophyll-a and total suspended matter concentrations in Lake Vembanad	Varunan Theenathayalan et al.
342	67198	Responses in Chlorophyll-a Concentrations and Sun-induced Fluorescence following Volcanic Eruptions at Nishinoshima Volcano, Japan	Jan El Kassar et al.
343	67077	An Assessment and Validation of CMEMS and C2RCC Chlorophyll-a and Turbidity Products for Water Quality Monitoring in Dublin Bay, Ireland.	Sean O´Kane et al.

344	63282	Mapping shallow water benthic habitats in inland and coastal waters with Sentinel-2	Laura Argus et al.
345	63437	On the possibility of retrieving phytoplankton community composition from water reflectance in optically complex waters	Tiit Kutser et al.
346	65594	Extreme suspended particulate matter concentration events at river mouths detected by the Sentinel-3 satellite mission	Sorin Constantin
347	62726	Towards routine mapping of shallow bathymetry in environments with variable turbidity: contribution of the Sentinel-2A/B satellites mission	Isabel Caballero de Frutos et al.
348	63225	Quantification of chlorophyll-a in small eutrophic lakes using Sentinel-2 and Landsat-8 imagery and locally tuned machine learning models	Amirmasoud Chegoonian et al.
349	64142	MARS PROJECT: Implementation and validation of a MArine monitoring Remote Sensing system aimed to fulfil the requirements of European Environmental	Eva Flo et al.
350	65202	COLOR ME OPTICALLY SHALLOW: A SIMPLE AND ADAPTIVE METHOD FOR STANDARDIZED ANALYSIS READY DATA FOR COASTAL ECOSYSTEM ASSESSMENTS	Chengfa Benjamin Lee et al.
351	63446	Coastal Ocean Assessment using Earth Observation (CoastEO)	Steve Coughlan et al.
352	63861	Evaluation of the oceanic products of spaceborne and airborne lidars	Cédric Jamet et al.
353	64266	Gap-filling method to reconstruct the missing data from geostationary ocean color data	Do-Hyun Hwang et al.
354	64281	Introduction to development for practical applications of multi-satellite data including Geostationary Ocean Color Imager to maritime issues	Hee-Jeong Han et al.
355	64306	Atmospheric correction for diverse optical water types (A4O)	Martin Hieronymi et al.
356	63126	Ancillary data uncertainties within the SeaDAS uncertainty budget	Pieter De Vis et al.
357	64827	Handling moderately and highly absorbing aerosols within the GRS algorithm for atmospheric correction above the aquatic environment	Tristan Harmel et al.

A9.02 CRYO2ICE: a multi-sensor approach to Earth science

Board	ID	Title	Author
444	63059	Estimating near-shore winter snow depth on landfast sea ice in the Canadian Arctic from ICESat-2, CryoSat-2 and SAR imagery	Hoi Ming Lam et al.
445	63604	Freeboard and snow depth from near-coincident CryoSat-2 and ICESat-2 (CRYO2ICE) observations: A first examination on the impact of surface roughness	Renée Mie Fredensborg Hansen et al.
446	64583	Comparing CryoSat-2 and ICESat-2 over Arctic summer sea ice	Geoffrey Dawson et al.
447	66670	Assessment of the Sentinel-3 Fully Focused SAR processing over the Antarctic ice sheet	Jérémie Aublanc et al.
448	66671	Ice sheet topography from a new CryoSat-2 SARIn processing chain, and assessment by comparison to ICESat-2 over Antarctica	Jérémie Aublanc et al.
449	65700	Investigation of multi mission elevation change records in preparation for CRISTAL	Veit Helm et al.
450	62685	CryoSURF: Using deep learning with CryoSat radar altimetry to adjust elevations and map surface penetration	Alex Horton
451	64246	CRYO2ICE overlaps (or a lack thereof) over Antarctic sea ice: Assessing sea ice freeboard retrievals using near-coincident CryoSat-2 and ICESat-2 data	Steven Fons et al.
452	62692	Cryo2Ice Coincident Data Explorer	Jonathan Alford et al.
453	63754	Update on CryoSat-2 long-term ocean data analysis and validation	Marc Naeije et al.

A9.05 Measuring mountain glacier changes from space

Board	ID	Title	Author
402	62482	Spatially and temporally resolved ice loss in High Mountain Asia and the Gulf of Alaska observed by CryoSat-2 swath altimetry between 2010 and 2019	Livia Jakob et al.

403	65513	Monitoring glacier changes in Svalbard with time series analysis of Sentinel-1 Images	Marjan Marbouti et al.
404	62955	Processing strategies for the assessment of glacier volume changes from geodetic methods: Results from an intercomparison experiment of the IACS Working Group	Fanny Brun et al.
405	63740	Three different glacier surges at a spot: What satellites observe and what not	Frank Paul et al.
406	63549	The NASA MEaSUREs ITS_LIVE project: Accelerating glacier science through satellite data synthesis	Alex Gardner et al.
407	63705	Characteristic patterns of glacier surface velocity time series over dynamic instabilities in the Eastern Arctic from satellite observations	Tazio Strozzi et al.
408	66719	Pixel and object based high resolution mapping of glacier facies using spectral-spatial information of satellite data	Shridhar Jawak et al.
409	66765	Monitoring glacial and paraglacial changes on Deception Island (Antarctica) between 1956 and 2017 using remote sensing data and techniques	Ana Nieto et al.
410	64190	FAU Glacier portal: Near global, freely available Sentinel-1 glacier velocities database outside the polar ice sheets for analysing the evolution of glacier dynamics	Moritz Koch et al.
411	65681	Incorporating InSAR kinematic attributes into eleven rock glacier inventories worldwide: preliminary results and open key questions	Aldo Bertone et al.
412	63747	Sensor inter-comparison for quantifying surface velocity and elevation change of surging glaciers in the Karakoram	Livia Piermattei et al.
413	63903	Comparison of feature-tracking methods for glacier-velocity evaluation in Polar and Alpine regions	Giacomo Traversa et al.
414	64590	Geomorphology of the Sulzenau valley, Tyrol, Austria: Glacier retreat, lake evolution and GLOF in 2017	Valentine Piroton et al.
415	65156	Quantitative Characterization of Glacier Surging in Karakoram using Multi-source Remote Sensing Data and Numerical Simulation	Shiyi Li et al.
416	65555	Spatial and temporal dynamics of aufeis in the Trans-Himalayan Tso Moriri basin, India between 2008 and 2021	Dagmar Brombierstäudl et al.
417	65722	Analysing the dynamics of glacial lakes in Karakoram-Himalaya region from Sentinel data	Jan Kropáček et al.
418	62778	Mapping the supraglacial lakes on Baltoro Glacier from 2016 to 2020	Anna Wendleder et al.

A9.07 Advancements in Remote Sensing of Seasonal Snow

Board	ID	Title	Author
427	63661	21 years of Global SnowPack – Findings and application of the new NRT product	Andreas Jürgen Dietz et al.
428	67169	Comparison of time series of X-band and C-band SAR backscatters over glaciers and snow covered areas in the Mont-Blanc Massif	Matthieu Gallet et al.
429	64539	Retrieval of snowmelt lines in the French mountains by using Sentinel-1 SAR images	Fatima Karbou et al.
430	65007	Towards the assimilation of snow products derived from Sentinel-1/Sentinel-2 in the Crocus snow evolution model	Etienne CAP
431	65317	Recent advances in the open source Snow Microwave Radiative Model	Ghislain Picard et al.
432	66842	High Resolution Surface Melting Maps over the Greenland ice sheet using Sentinel-1 SAR Imagery and Machine Learning	bingkun luo et al.
433	66978	Retrieval of snow depth with Sentinel-1 in Norway and assessment of errors using in situ and Icesat-2 data	Eirik Malnes et al.
434	63071	The determination of snow properties using MSI/Sentinel – 2 spectral reflectance measurements	Alexander Kokhanovsky et al.
435	64663	A new method for Snow Cover identification from Webcam Images - Towards validating Sentinel-2 Snow Cover Products	Jakob Wachter et al.
436	66932	Filling temporal gaps in satellite-based snow line retrieval using public webcams	Céline Portenier et al.
437	66815	Near real-time intercomparison of satellite and webcam derived snow cover	Cemal Melih Tanis et al.

Board	ID	Title	Author
438	64541	Development of the dynamic snow densities for the GlobSnow snow water equivalent retrieval	Pinja Venäläinen et al.
439	64647	Evaluation of Snow Cover Extent products against in-situ snow depth measurements within ESA SnowPEx+	Sari Metsämäki et al.
440	63536	SnowPEx+: The International Snow Products Intercomparison and Evaluation Excercise 2015-2020	Thomas Nagler et al.
441	63926	Statistically optimal snow cover fraction estimation by linear spectral unmixing with adaptive endmembers selection for mountain areas	Lars Keuris et al.
442	66789	20 years of daily global fractional snow cover maps from MODIS	Gabriele Schwaizer et al.
443	64283	A comprehensive snow cover dynamics estimation over the past four decades based on AVHRR data: unravelling heterogeneous patterns throughout the Hindu	Kathrin Naegeli et al.

A10.02 Geodetic Satellite Missions and Their Applications

Board	ID	Title	Author
474	67355	Near real time InSAR displacement time-series analysis	Heresh Fattahi et al.
475	67057	Accuracy Assessment of InSAR Timeseries products in Respect of Unwrapping Errors	Shahabodin Badamfirooz et al.
476	63051	Small Displacement Mapping from SAR Offset Time Series: Noise Reduction and Uncertainty Quantification	Yunjun Zhang et al.
477	64960	Integrating Sentinel-1 data and Compact Active Transponders in the maintenance and development of the national geodetic infrastructure of Denmark	Joanna Balasis-Levinsen et al.
478	64557	3-Component InSAR Velocity Fields of South Island, New Zealand Reveal Along-Strike Variations in Alpine Fault Geometry	Jack McGrath et al.
479	67073	COMET LiCSAR: Tectonic and volcanic deformation measured by Sentinel-1 interferometry	Milan Lazecky et al.
480	65119	Capturing the Surface Deformation of the 112 km Deep Mw 6.8 2020 Earthquake, Chile, using InSAR time series analysis	Fei Liu et al.
481	64537	Surface Velocities and Strain Rates for Iran from Sentinel-1 InSAR and GNSS Data	Andrew Watson et al.
482	66929	Insights on the kinematics of the Pisciotta DGSD (southern Italy) through geological, geotechnical and remote sensing data.	Matteo Albano et al.
483	65160	Synergistic use of InSAR, GNSS and Levelling data to assess the ground subsidence phenomena along Northern Italy coastal areas	Marco Polcari et al.
484	64206	GNSS-R Grazing Angle Altimetry from the Spire Constellation	Matthieu Talpe et al.
485	64882	Advanced processing strategies for a future GFZ GRACE/GRACE-FO Level-2 data release	Michael Murböck et al.
486	62790	On the validation strategies of downscaling methods of GRACE data: a study case over a fractured granitic aquifer in South India	Claire Pascal et al.
487	64354	Time-variable gravity and mass redistribution from synergistic use of GRACE-FO and Chinese gravity satellites	Christina Strohmenger et al.
488	63263	Kinematic orbit determination and its contribution to the observation of Earth's mass variations	Barbara Süsser-Rechberger et al.
489	63373	Copernicus POD Service: Overview and status	Jaime Fernández et al.
490	63900	Simultaneous estimation of a continuous Mean Sea Surface and spatio-temporal Sea Level Anomaly Model from altimetric Sea Surface Heights	Moritz Borlinghaus et al.
491	63834	Transferring UT1-UTC from VLBI to Galileo orbits with an onboard VLBI transmitter	Hakan Sert et al.
492	65329	A Stochastic Model for Satellite Altimetry Using Covariance Functions	Till Schubert et al.
493	64879	Ice sheet mass changes from satellite gravimetry: scatter due to different monthly solution series	Andreas Groh et al.

Board	ID	Title	Author
494	65111	Challenges in accelerometry for NGGM/MAGIC and other geodetic satellite missions	Jakob Flury et al.
495	66775	A new combined mean dynamic topography model – DTUUH22MDT	Per Knudsen et al.
496	66781	GOCE User Toolbox and Tutorial	Per Knudsen et al.
497	64362	Mass transport processes observed by the Swarm satellites	Joao Encarnacao et al.
498	65993	The importance of Cryosat-2 for global and polar geodetic research	Ole Baltazar Andersen

B1.05 VHR Data Quality

Board	ID	Title	Author
15	64846	VHR Data Quality – Smaller EO Systems packed with State of the Art Technology	Kammy Brun et al.
16	65065	Hot pixel and hot column detection and correction on PlanetScope imagery	Sara Bahloul et al.
17	65042	Selective spatial-frequency sharpening with wavelength-dependent kernels	Colm Lynch et al.
18	62781	Evaluating the radiometric quality of Planet SuperDove image time-series	Yu-Hsuan Tu et al.
19	63777	A Trihedral Corner Reflector to Support Sentinel-6 Radar Altimeter External Calibration Using VHR FFSAR Algorithms	Adrià Gómez Olivé et al.
20	66183	Co-location of NovaSAR and Vision-1 for OptiSAR Applications	Lisa Haskell et al.
21	65105	The Data Quality Assessments of Very High Resolution Optical Data from Potential Third Party Missions under the ESA Earthnet Data Assessment Pilot (EDAP) Project	Fay Done et al.
22	63343	ESA'S EARTHNET DATA ASSESSMENT PILOT: CAL/VAL AND DATA USABILITY ASSESSMENT GUIDELINES	Leonardo De Laurentiis et al.
23	64403	Understanding the Impact of the Copernicus DEM Instances on the Orthorectification of Very High Resolution (VHR) Optical Data	Luca Cenci et al.

B2.09 SMOS L-band radiometry and follow on mission concepts

Board	ID	Title	Author
5	63885	SMOS 3rd Mission Reprocessing: data quality and stability	Raúl Díez-García et al.
6	63414	CATDS : SMOS L3/L4 products generation and dissemination	Stephane Tarot
7	63441	Large mesoscale salinity features detected by SMOS and perspectives for next generation missions	Jacqueline Boutin et al.

B4.01 Heritage Missions and Long Time Data Series

Board	ID	Title	Author
29	63822	Atmospheric corrections for SPOT World Heritage products	Sophie Coustance et al.
30	64243	Fast orthorectification of multispectral Spot World Heritage products using SWH-2A-carto portal	Béatrice Berthelot et al.
31	62028	Long-term dynamics of Land Surface Temperature over Europe and North Africa	Philipp Reiners et al.
32	65255	FDR4ATMOS (Task A): Improving SCIAMACHY Level 1 and add calibrated lunar data	Günter Lichtenberg et al.
33	63674	Copernicus Global Land LAI, FAPAR and FCover overview	Aleixandre Verger et al.
34	63710	GEOV2-AVHRR: 40+ years of global time series of leaf area index, fraction absorbed PAR and vegetation cover	Aleixandre Verger et al.

Board	ID	Title	Author
35	63035	First land surface temperature climate data records from multiple thermal infrared sensors	Karen L. Veal et al.
36	63288	Long-term multi-mission integrated cryosphere surface elevation timeseries – a case study over Svalbard for Glaciers CCI+	Lin Gilbert et al.
37	64672	Version 3 of the ESA CCI and EUMETSAT OSI SAF Sea Ice Concentration Climate Data Records	Thomas Lavergne et al.
38	65537	A Metrological Framework for the definition of Fundamental Data Records of Earth Observations for Climate Studies	Jacob Fahy et al.
39	63867	A 40-year Sea Surface Temperature Climate Data Record from the ESA Climate Change Initiative	Owen Embury et al.
40	64509	The ESA CCI sea-ice thickness CDR: Current state and evolutions	Stephan Paul et al.
41	64517	Fundamental Data Records For Altimetry: a reprocessing of ERS-1, ERS-2 and ENVISAT altimeter and radiometer dataset oriented towards dedicated Level 1 and	Fanny Piras et al.
42	64565	Extension of CCI sea ice climate time series with historical satellite data	Wiebke Margitta Kolbe et al.
43	64603	ERS-1/2 SAR and ENVISAT ASAR CARD4L NRB Product Development Project	Kajal Haria et al.
44	64693	The 4th (A)ATSR Reprocessing	Fay Done et al.
45	64743	Reprocessing and Quality Control of the Optical Japanese MOS Historical Archive held by ESA	Samantha Lavender et al.
46	64787	A new 20-year dataset of ground-based NO2 vertical column density observations over Rome, Italy, for calibration/validation of spaceborne radiometers	Henri Diémoz et al.
47	65066	Detecting dune movement rates in desert margins of Central Asia over five decades based on satellite imagery	Lukas Dörwald et al.
48	65625	Lessons from the 21-year record of MOPITT	Helen Worden et al.
49	67150	Mapping the mesophotic zone of the Mediterranean Sea: a repeatable and open-access method based on satellite data	Giorgio Castellan et al.
50	67484	The use of long PS-InSAR time series to analyse ground displacements: the Santa Iria industrial area (Portugal) case study	Mariana Ormeche et al.
51	64797	Innovation from Operations: The case of the SMOS Third Full Mission Reprocessing Campaign	Carmen Gamella et al.

B4.02 Data Archival and More in the EO Data Lifecyle

Board	ID	Title	Author
25	65278	Earth Observation Data Service Initiative achievements, results and methodology used during the service	Alessandra Paciucci et al.
26	64435	Building cross-domain environmental catalogues for big data archives with STAC	Phil Kershaw et al.
27	65457	Sentinel ARD and EO data and services at CEDA	Ed Williamson et al.
28	66994	Real-time Data Provenance and Origin Verification of Earth Observation data using Blockchain technology	Priit Anton

B6.02 Third Party Missions (VHR)

Board	ID	Title	Author
70	64687	Third Party Mission VHR – Use case – HEAD Aerospace - ESA	Kammy Brun et al.
71	66512	Planet's PELICAN VHR constellation: Near Real-Time Insights	Philippe Campenon
72	64217	Potentiality of Iceye's X-band data for mapping soil surface and vegetation characteristics over an agricultural area	Giulia Graldi et al.

B9.02 New Mission Concepts

Board	ID	Title	Author
52	66813	The SMOS HR mission: a high resolution L-band interferometric radiometer	Asma Kallel et al.
53	67370	The SAPHIR-NG instrument: a high resolution microwave sounder for the Atmosphere Observing System (AOS) mission	Christophe Malassingne et al.
54	65677	Satellite Design for a Formation Flying L-band Aperture Synthesis mission concept	Miguel Piera et al.
55	64567	Performance assessment for the Formation Flying L-band Aperture Synthesis mission concept	Francesca Scala et al.
56	61754	Towards a P- and L-band Active and Passive Soil Moisture Mission	Jeffrey Walker et al.
57	62400	CHARACTERIZATION OF MAXIMUM RADIANCE LEVELS AND SATURATION EFFECTSFOR THE CHIME MISSION USING SYNTHETIC TIME SERIES OF SNOW	Helena Burriel Navarro et al.
58	63088	SATURN - Synthetic AperTure Radar CUbesats FoRmation FlyiNg	Maria Lucia Tampellini et al.
59	63241	GALENE: Understanding coastal and inland ecosystem properties, processes and dynamics	Malik Chami et al.
60	64242	The Monitoring Nitrous Oxide Sources (MIN2OS) satellite project	Philippe Ricaud
61	65075	3-D SAR imaging of forests from space at higher frequency bands using incoherent bistatic tomography. Proof of concept and results from the TomoSense campaign	Laurent Ferro-Famil et al.
62	66531	New Mission Concepts for Sentinel-3NG Topo (Phase 0 CDF Study)	Sergio Bras et al.
63	65090	Daedalus: An in-situ mission to explore how our atmosphere interacts with space	Theodoros Sarris et al.
64	66335	On the Optimization of the ROSE-L Antenna Array Azimuth Radiation Patterns to Enable Advanced ScanSAR Capabilities	Stefano Perna et al.
65	66533	Simulations of very low baseline stereoscopic products in the frame of Sentinel HR mission	Jonathan Guinet et al.
66	64669	Sentinel-1 Next Generation Phase A possible implementation solutions to support the Mission and System requirements	Valerio Mottironi et al.
67	64792	CryoRad: a mission concept based on Low Frequency Wideband Radiometry for Remote Sensing of the Cryosphere	Giovanni Macelloni et al.
68	67295	Arctic Observing Mission: Pre-Formulation Study Progress Overview	Konstantin Baibakov et al.
69	63281	EarthScanner: Widest Swath - 136km & 150km - Earth Observation Sensors at Submeter Resolution	Kammy Brun et al.

B9.06 AI@edge and Emerging Computing Paradigms for the Future of Earth Observation

Board	ID	Title	Author
98	65403	On the use of a quantum convolutional neural network for remote sensing imagery classification	Matthijs van Waveren
99	61636	Neuromorphic Edge Sensing for Space Applications	Kynan Eng
100	67289	Design of an END2END Deep Neural Network model onboard satellites for time-critical applications	Gabriele Meoni et al.
101	64657	Towards Sentinel-2 cloud removal using quantum machine learning	Nico Piatkowski et al.

C1.02 Super Resolution for Earth Observation data enhancement

Board	ID	Title	Author
81	63735	SuperSent – EO meets AI and provides details	Karin Schenk et al.

Board	ID	Title	Author
82	66758	Free High Resolution Imagery - Open-Source Models and Package for Sentinel 2 Super-Resolution	Julien Cornebise et al.
83	64931	Sentinel-2 Super-Resolution Relying on Temporal and Spectral Fusion	Tomasz Tarasiewicz et al.
84	63816	Deep Learning Based Sentinel-2 Super Resolution Methods for Supporting Climate Change Adaptation & Mitigation Applications	MARIA DEKAVALLA et al.
85	63101	Assisting the Common Agricultural Policy compliance monitoring with a Sentinel-2 Super-resolution scheme and the Big-EO cloud platforms	AIKATERINI KARAGIANNOPOULOU et al.
86	64022	Enhancing Sentinel2 image quality with Pansharpening Super Resolution methods	Delphine NOBILEAU et al.
87	65455	Cloud-based Sentinel-2: Resolution Enhancer (s2enh) processor	Klaudia Bielińska et al.
88	67088	Refining the Resolution of Land Cover Classification using Sentinel-2 Imagery	Mirjana Voelsen et al.
89	64147	The Horizon 2020 project SURPRISE: Designing a Compressive Sensing Demonstrator of an Earth Observation Payload in the Visible and Medium Infrared, Instrumental Concept and Potential Applications	Nicolas Lamquin et al.
90	65167	In-depth analysis of deblurring methodologies for ASCAT and SCA data	Alba Granados et al.
91	67094	Enhanced VHR GEOSAT-2 imagery through Super-resolution techniques	Silvia Fraile et al.
92	66490	Spatial Loss Function for Super-Resolution of Geoscientific Data	Ashok Dahal et al.
93	66964	Improvement of Mediterranean Sea SST products' effective resolution and SST gradients' accuracy through Super Resolution techniques within the Copernicus	Claudia Fanelli et al.

C1.09 Representation learning in remote sensing: from unsupervised, to self-and meta-learning

Board	ID	Title	Author
103	67129	From Natural Images to Spaceborne Imagery: An Empirical Study of Self-supervised Learning for Earth Observation	Yi Wang et al.
104	67202	Self Supervised Learning for Hyperspectral Image Classification with Limited Labels	Nassim Ait Ali Braham et al.
105	64898	Auto-Associative Neural Networks for on-board change detection	Giorgia Guerrisi et al.
106	64409	Global comparison and integration of land cover change detection algorithms using unsupervised approaches and meta-learning	Sven-Arne Quist et al.
107	67467	Multi-temporal Consistency Regularization for Change Detection	Heng Fang et al.
108	66995	False temporal positives in self-supervised learning on satellite images	Sebastian Gerard et al.
109	66882	Self-supervised Visual Transformers with Resolution Consistency for Remote Sensing	Hao Hu et al.
110	66711	Supervised Learning with Synthetic and Noisy Labels for Urban Change Monitoring with Deep-Temporal and Multi-Type Remote Sensing Data	Georg Zitzlsberger et al.
111	62826	Cloud cast shadow detection and removal using Cellular Automata	Matthias P. Wagner et al.
112	66498	Unsupervised and semi-supervised sea ice charting with generative adversarial networks	Andrzej Kucik et al.
113	63594	Variational Autoencoders for Damage Detection at Antarctic ice shelves	Maaike Izeboud et al.
114	63986	Less Labels, More Modalities: A Self-Training Framework to Reuse Pretrained Networks	Jean-Christophe Burnel et al.
115	63273	Uncertainty-aware multimodal remote sensing classification using a semi-supervised graph-based method	Iain Rolland et al.
116	62956	Convolutional Autoencoder for the unsupervised extraction of fire footprints from Sentinel-1 time-series	Thomas Di Martino et al.

C3.02 User-Oriented Perspective in Across ESA and Third Party Missions' Earth Observation Data Access supported by Emerging Technologies

Board	ID	Title	Author
74	65576	SAR, SARin, RDSAR and FF-SAR Altimetry Processing on Demand for Cryosat-2 and Sentinel-3 at ESA's Altimetry Virtual Lab	Jérôme Benveniste et al.
75	65542	Procurement and Provision of Commercial EO Data for German Federal Users	Manuel Mayr et al.
76	63534	Cloud-based Processing and Delivery of Analysis-Ready SAR Datasets	Heidi Kristenson et al.

D1.04 Satellite EO for Coastal Hazards Linked to Land to Sea & Sea to Land Processes

Board	ID	Title	Author
275	65192	An EO-based service to monitor large-scale adaptation schemes for climate change and sea level rise	Geoff Smith et al.
276	65862	The coastline of Vietnam - annual dynamics derived from 35 years of Earth Observation data	Felix Bachofer et al.
277	62997	Mekong Delta subsidence from space	Dinh HO TONG MINH et al.
278	66691	Extreme Coastal Flood Potential Indicator	Tonatiuh Mendoza et al.
279	67154	Waterline detection using Copernicus Sentinel-1 missions	James Delaney et al.
280	63290	Coastal Change from Sentinel 1	Salvatore Savastano et al.
281	64157	A dual-polarimetric Sentinel-1 time-series analysis over the Basilicata Coast	Emanuele Ferrentino et al.
282	64925	Analysing Morphological Changes on Intertidal Flats using Waterline Detection on SAR Data	Sebastian Peters et al.
283	62881	Polarimetric scattering analysis of small ships in SAR Imagery	Adil Muhammad et al.
284	63027	The CEOS COAST Application Knowledge Hub (AKH): Towards a web application for monitoring coastal events and changes	Prasanjit Dash et al.
285	63457	A three-decade record of monthly sea level fingerprints from a multi-observation ensemble approach, utilising ESA CCI Essential Climate Variables	Stephen Chuter et al.
286	65649	The impact of mean sea level rise on the population of Ilha Comprida, Southeastern Brazilian coast	João Felipe Cardoso dos Santos et al.
287	63809	Effects of weather and river inflow on particle dynamics and properties in the Pärnu Bay, Baltic Sea	Mirjam Uusõue et al.
288	63879	Retrieving the particle size distribution data from in situ reflectance spectra in two contrasting sites	Mirjam Uusõue et al.
289	64110	Detection and mapping of Total Suspended Matter in estuaries of transboundary rivers in Greece using Copernicus earth observation satellite data	Stamatina Tounta et al.
290	64700	Application of Sentinel-1 dataset and a landslide database to assess coastal instabilities in the Peñas Cape area (North Spain)	José Cuervas-Mons et al.
291	65004	Using remote sensing to assess the role of coastal ecosystems in the protection against erosion in the Caribbean	Nathan Poillerat et al.

D2.02 Land Degradation Neutrality

Board	ID	Title	Author
141	64208	Deriving vegetation cover and land degradation in the vast eastern Mongolian Steppe from Sentinel 2 using random forest	Batnyambuu Dashpurev et al.
142	64250	Remote sensing-based assessment and field-verification of land degradation across scales	Felicia O. Akinyemi et al.
143	64650	Semi-automatic delineation of loess micro-depressions using Copernicus high resolution DEM	Andi Mihai Lazăr et al.
144	67019	Global modelling of soil functions to sustainable land management and reduce land degradation	Laura Poggio et al.

Board	ID	Title	Author
145	67027	Identifying soil sealing on-demand for reporting and decision making in Austria using a Sentinel-2 based semantic EO data cube	Thomas Strasser et al.
146	67439	Verification of degradation trends and monitoring of progress towards Land Degradation Neutrality (LDN) through the integration of free and open platforms	Hanspeter Liniger et al.
147	67363	Assessing the effects of drought on ecosystem health and functioning in East African Drylands	Booker Ogutu et al.
148	64049	Monitoring UN indicators of land degradation neutrality and proportion of degraded land using Multiscale Remote Sensing Datasets and Google Earth Engine:	Olena Dubovyk et al.

D2.03 EO for Africa: advancements of EO Science and Applications

Board	ID	Title	Author
174	64336	Land cover change analysis around the Mtendeli refugee camp in Tanzania	Ewa Gromny et al.
175	64119	Insights and impacts of the inter-annual relationship between precipitation and forest disturbance in the African rainforest	Yaqing Gou et al.
176	64134	Estimating forest change in support of national monitoring in the Democratic Republic of the Congo	Patrick Lola Amani et al.
177	64845	Improving above-ground biomass estimation in African savannas by combining lidar, radar and optical remote sensing observations	Joao Carreiras et al.
178	64878	Assessment and monitoring of soil erosion risk parameters in the trans-boundary region of Lake Kivu and the Ruzizi River basin	Stefanie Feuerstein et al.
179	66601	Enhancing Earth Observation of Migration with Insights from Social Media	Johannes Mast et al.
180	63881	Leveraging novel opportunities for operationalizing annual cropland mapping in smallholder systems of Sub-Saharan Africa: Analyzing NICFI PlanetScope mosaic	Philippe Rufin et al.
181	65641	Mapping field size in the emerging agricultural frontier of Southern Africa: New insights from the MIDLAND project	Michelle Picoli et al.
182	63802	Matching environmental data produced from remote sensing images to demographic data in Sub-Saharan Africa.	Lys Thay et al.
183	66364	Promoting sustainable intensification in sub-Saharan Africa by using satellite data	Chengxiu Li et al.
184	63402	The first sub-meter resolution digital elevation model of the Kruger National Park, South Africa	Kai Heckel et al.
185	65645	Mapping and monitoring the impact of extreme climate events in Somalia combining multi-sensor EO data and deep learning	Rahman Momeni et al.
186	64260	Digital Earth Africa - operational EO-based insights for Africa's development challenges	Adam Lewis et al.
187	64817	Capacity Building – Ground Downloading Station - Ethiopia	Kammy Brun et al.
188	66806	Supporting state-of-the-art research with the ESA EO AFRICA Research and Development Facility	Zoltán Vekerdy et al.
189	66074	A versatile Cloud Computing environment to facilitate African-European partnership in research: EO AFRICA R&D Innovation Lab	Fabien Adam et al.
190	65389	The impact of drought on agricultural area in Burkina Faso and assessment of future cropping potential using a combination of EO and climate data.	Jonas Meier et al.
191	65706	Mangrove Watch Africa	Lammert Hilarides et al.
192	67456	MULTI-TEMPORAL SENTINEL-1 SAR AND SENTINEL-2 FOR IMPROVING FLOOD MAPPING ACCURACY AND DAMAGE ASSESSMENT IN MOZAMBIQUE	Manuel Nhangumbe et al.
193	65867	GNSS and SAR observations to improve African weather forecast: results within from H2020 TWIGA project.	Marco Manzoni et al.

D2.05 Earth Observation data in Vector Borne Diseases

Board	ID	Title	Author

Board	ID	Title	Author
246	62757	Using EO parameters to model Vector Diseases and their drivers	William Wint et al.
247	62810	Satellite-based modelling of potential tsetse (Glossina pallidipes) breeding and foraging sites using teneral and non-teneral fly occurrence data	Muthoni Gachoki et al.
248	61664	West Nile virus transmission in Europe is critically driven by spring temperature	Giovanni Marini et al.
249	67374	Earth Observation and numerical modeling contribution for the monitoring of mosquito population dynamics	Federico Filipponi et al.

D2.06 EO for International Development Assistance

Board	ID	Title	Author
125	63508	Earth Observation – a key technology supporting water management decisions in international development	Christian Tottrup
126	67009	How Earth Observation (EO)-based coastal morphology monitoring can be used to restore, protect, and conserve coastal ecosystems in Africa	Tobias Landmann et al.
127	67206	Impact of European Space Agency's Earth Observation for Sustainable Development (EO4SD) program in international development context	Iñigo Alonso et al.
128	65473	Trends in Earth Observation Adoption for Development Assistance: an Analysis of International Financial Institutions' Demand	Charlotte Fafet et al.
129	63243	Leveraging Earth Observation for climate and disaster risk finance	Antoine Bavandi et al.
130	65339	Rheticus® Agriculture supports farmers and planners with accurate and reliable geospatial information in South-Est Asia	Daniela Iasillo et al.
131	67744	The application of Interferometry SAR for Land Stability Monitoring Pasca Earthquake and Tsunami (Study area: Palu, North Sulawesi, Indonesia)	Yessy Arvelyna et al.
132	67090	Geoinformational Support for Integrated River Basins Management	Przemysław Turos
133	65703	Impact Pulse: a modular tool for quick damage assessment and prioritization of recovery actions	Ana Perez Bao et al.
134	63443	Beyond Borders: how to accelerate the use of satellite applications for improved humanitarian outcomes	Nicki McGoh et al.
135	67384	Earth observation services for humanitarian action	Stefan Lang et al.

D2.08 Rapid EO Innovation from Covid-19 to the Green Future

Board	ID	Title	Author
231	63155	Tracking COVID-19 urban activity changes from NASA's Black Marble	Eleanor Stokes et al.
232	63285	Night Image & Video Constellation: New applications bringing social economic benefits from space	Kammy Brun et al.
233	66581	From Space to Public Policy: A Guide for Earth Observation Data Scientists	Mikhaela Aloísia Jéssie Santos Pletsch et al.

D2.11 Earth Observation for Health

Board	ID	Title	Author
235	62799	Emerging trends on satellite-based applications for health: a synoptic view on adoption drivers and benefits	Alessandro Paravano et al.
236	65002	Mapping water hyacinth in Lake Vembanad, India, using high resolution satellite data	Varunan Theenathayalan et al.
237	66946	Bio-optics and Remote sensing: Exploring New Opportunities for Assessing Health Status of a Waterbody	Anju R et al.
238	66934	Making inferences on water quality based on the smart phone camera images generated by citizen scientists	Ancy C Stoy et al.
239	64527	CLEANSE - a mobile application to assess the sanitation status and health of population	Nandini Menon et al.

Board	ID	Title	Author
240	62891	Exploring climate drivers of pandemic variant emergence for Vibrio, using EO time-series data	Amy Campbell
241	63351	When Crises Converge: Understanding the Impact of Floods on Covid-19 Infection Rates	Tim Landwehr et al.
242	65612	IDENTIFICATION OF AREAS WITH POTENTIAL RISK OF SCHITOSOMIASIS INFECTION USING ANALYTIC HIERARCHY PROCESS: CASE STUDY OF MIDDLE PARANAPANEMA	Vivian Alessandra Ferreira da Silva et al.
243	65636	MAPPING OF BIOMPHALARIA SNAILS POTENTIAL HABITATS USING CBERS-4A IMAGERY: OURINHOS CASE-STUDY	Vivian Alessandra Ferreira da Silva et al.
244	65972	Human leptospirosis: a spatial, environmental and social epidemiological study in two municipalities of Pará state, Brazil	Raissa Teixeira et al.

E3.01 Alps Regional Applications and Science

Board	ID	Title	Author
117	64379	Remote sensing for improved forest fire danger estimation in the Alpine region	Ruxandra-Maria Zotta et al.
118	64480	The potential of GEDI to assess the structural characteristics of mountain forests	Lisa Mandl et al.
119	67435	Multi-temporal monitoring of an Alpine glacier using satellite stereo images: the case study of Forni Glacier (Stelvio National Park, Italy)	Valeria Belloni et al.
120	64907	The Environmental Research Station Schneefernerhaus	Inga Beck et al.
121	67377	An Earth Observation based Grassland Mowing Detection Service for the Alpine Region	Ruth Sonnenschein et al.