PolInSAR & Biomass 2026
26–30 January 2026 | Ljubljana, Slovenia

esa THE EUROPEAN SPACE AGENCY

Panel no.	poster ID	Presenting Author	Poster Title
46	145	Aghababaei, Hossein	Global Coverage of Sentinel-1 InSAR and Spaceborne LiDAR: A Pathway to Data-Driven Forest Height Modeling
3	127	Albinet, Clément	An Open-Source and Gpu Sar Polarimetric Processor for Ers-1/2 and Envisat
9	207	Avouris, Evripidis	Developing a UAV-SAR Measurement Concept for Diurnal Vegetation Water Monitoring
19	106	Awasthi, Shubham	Forest Vertical Profile Estimation Using SAR Tomography with L-band UAVSAR Datasets
49	154	Ayari, Emna	Potential of P-band BIOMASS data to estimate subsurface soil moisture in a semi-arid region of the southern Mediterranean
2	113	Ballester-Berman, J. David	An Extension Of The MF3C Decomposition for PolSAR Data
54	172	Bartsch, Annett	Assessing the potential of the BIOMASS mission for the Arctic Methane and Permafrost Challenge (AMPAC)
14	179	Behrmann, Anna	The Role of Polarimetry in D-InSAR Retrievals of SWE on Glaciers
29	122	Bottani, Marta	Forest disturbance analysis of BIOMASS time-series in the Brazilian Amazon: comparison with Sentinel-1 and Sentinel-2 missions
37	203	Braga, Daniel	BIOMASS height product validation using airborne laser scanning and field data over the Brazilian Amazon
36	201	Bragion, Gabriel da Rocha	A Two-Stage Machine Learning framework for characterizing and addressing systematic bias in Global Aboveground Biomass products for tropical forests
44	138	Avoiani, Elizaveta	Quantifying Forest Diversity through Spectral Metrics from PRISMA and Structural Information from BIOMASS P-band SAR
4	186	Dasari, Kiran	Full and Hybrid polarimetric analysis on Lunar Surface using chandrayaan-2 DFSAR data
22	124	Dong, Jie	An Airborne P-band TomoSAR with GPU-Accelerated TDBP and Trajectory Error Correction: The Saihanba Forest Campaign, China
35	200	Dong, Yu	A Comparison of P- and C-band SAR Sensitivity for Ecosystem Mapping in the Brazilian Amazon
24	135	El Bennioui, Youssra	Concealed Object Detection in Forested Areas Using PolTomoSAR with Various Baseline Configurations
34	141	Fluhrer, Anke	TWIST-NZ - Tree Water and Soil Moisture Integration for Satellite Calibration and Validation in New Zealand - Early BIOMASS results
30	123	Gomes Furtado, Nilton	Algorithm Calibration Analysis of a Brazilian Amazon Forest Biomass Estimation Based on Satellite Data Extracted from Esa's Biomass Project
5	204	Hadj-Rabah, Karima	Geometry-driven extraction of forest vertical layers from single-polarized TomoSAR data
41	208	Jaiman, Bhavya	Using Dual-Polarimetric information for Forest Above-Ground Biomass Estimation from Simulated NISAR data
23	128	Ježek, Vít	Using Sentinel-1 Coherence Change as an Indicator of Forest Disturbances
32	132	Khati, Unmesh	Dual-polarimetric scattering information for AGB modeling using NISAR Simulated data
6	215	Kim, Yeojin	Evaluation of permanent scatterer interferometric phase based on atmospheric correction for ground-based radar
1	108	Lee, Ken Yoong	Detecting Reflection Symmetry in Polarimetric Synthetic Aperture Radar Imagery
26	158	Li, Weiliang	Physical scattering model-based forest height retrieval Using Lutan-1 L-Band Bistatic Single-Baseline Single-Polarization InSAR Data
13	164	Liu, Jing Long	Improving cotton yield and biomass prediction by assimilating SAR data into a modified crop growth model with simple calibration
39	221	Liu, Xiao	BIOMASS Cal/Val with forest inventory and UAV lidar data in the Peruvian rainforest
17	137	Martínez de Velasco, Andrés	Analysis of Congo Basin rainforest regrowth trajectories by land use history
43	238	Milenkovic, Milutin	Citizen Science Mobile App for Collecting Ground Data for the Cal/Val of the ESA Biomass Satellite
18	174	Moravec, David	A Novel Corner-Reflector Approach for Active Microwave Monitoring of Forest VOD

40	231	Ndouni Missono, Fred Terrance	Long Term Temporal Stability of Forest Scatterers at P-band: An Assessment based on Air- and Space-borne Data Sets
8	102	Neyer, Anna Selina	Simulating Sub-daily Backscatter to Advance the Development of a SAR Mission for Vegetation Water, Carbon and Health
38	220	Nguyen, Thanh Huy	Novel insights of the water cycle and flood dynamics using BIOMASS Cal/Val data
12	136	Osio, Anne	Mapping Of Acacia Xanthophloea Spp Using Sentinel 1 Single Look Complex And Machine Learning Approaches
27	227	Ouarzeddine, Mounira	Estimation of AGB Density by Fusing PolInSAR, Sentinel-2, Dynamic World V1 and GEDI Data with Machine Learning in Pongara National Park, Gabon
53	202	Paillou, Nathan	Polarimetric Differential Entropy Analysis for Mapping Ancient Riverbeds in the BirsafSaf Region (Egypt) Using Multi-Sensor SAR Data
7	224	Passarello, Gianpaolo	A unified deep learning Model for despeckling in multi-modal polarimetricSARdata
52	126	Perski, Zbigniew	Exploring Polarimetric Signatures for Geology: Anticipated Biomass Data Applications in the Gobi Desert, Mongolia
55	133	Petříček, Jakub	Integration of interferometric and polarimetric observables for permafrost characterization at P- and L-band
31	129	Pinto, Rodrigo	Calibration and Validation of Aboveground Biomass Estimates from the ESA BIOMASS Mission Using Brazilian Atlantic Forest Plots
10	178	Polcari, Marco	Detection of burnt area using dual polarimetric SAR data: the case study of May 2022 Stromboli wildfire
50	121	Polidori, Laurent	Validation of DTM Derived from P-band SAR Under the Amazon Rainforest: from Airborne Surveys to the Biomass Perspective
33	139	Romagnoli, Sara	Exploring Context Learning for SAR-Based Global Biomass Estimation: A Proof-of-Concept Using Sentinel-1 and ESA Biomass Mission Data
15	192	S, Sreelekshmi	Multi-Stage Coherence-Polarization Fusion Modeling for Snow Depth and Snow Water Equivalent Estimation from Sentinel-1 Dual-Pol Data
25	143	Sabir, Anam	Time-Series Analysis Of S-1 Coherence For Deforestation Mapping Across The Tropics
11	107	Shi, Hongtao	High-resolution Surface Soil Moisture Mapping from Time-series SAR over Agricultural Areas with Constraints of Coarse Resolution Microwave Observations
42	211	Soja, Maciej	The prospect of synergistic above-ground biomass monitoring with BIOMASS, Sentinel-1, NISAR, and TanDEM-X SAR polarimetric and interferometric SAR data
16	222	Stroessner, Kathrin	Assessing Permafrost Coastal Erosion and Retrogressive Thaw Slumps through X-Band Interferometry and Environmental Covariate Analysis
28	230	Telli, Chiara	Analysis of L- and P-band InSAR Histograms for Mapping Forest Structure
48	195	Udy, Megan	Towards a Foundation Model for Global Terrestrial 3D Above and Below Ground Carbon Stock Mapping (3D-ABC)
47	148	Urbazaev, Mikhail	Aboveground biomass global comparative analysis framework
51	196	Wang, Liang	A DEM-Constrained and Multi-Orbit Fusion Approach for Forest Height Retrieval in Mountainous Areas Using SAOCOM L-Band PolInSAR Data
45	110	Wu, Mousong	Assimilation of Microwave Satellite-derived Vegetation Optical Depth within NUCAS For Improved Biomass Modelling
21	117	Zeng, Guobing	Forest height inversion using Hongtu-1 multi-static X-band SAR tomography
20	115	Zheng, Jinting	Underlying Terrain and Forest Height Retrieval Based on Lutan-1 L-Band Bistatic InSAR Phase Height Histograms