Drones
2026
Conference

Drones 2026: Mapping the Knowledge

List of Posters

MDPI

Poster Session A

Thursday, 12 November 2026 (13:00–14:30, 16:00–16:30)

Session	Number	Author	Title
A	1	Francisco Pérez Moreno	From Ecosystem Gaps to a Future-Ready Workforce: Mapping the Spanish IAM Skills Transformation
A	2	Lázaro García	IAM in Spain: An Overview Through Spanish AIRMOB Cluster's Eyes
A	3	Julius Goldstein	Future-Resilient UAV Payload Modules: Deriving Design Requirements Based on a Structured Market Analysis
A	4	Edilson de Souza Bias	Deep Learning-Based Detection of Paint Peeling: An Evaluation of CNN Architectures for Automated Building Inspections
A	5	Edilson de Souza Bias	Archeological Mapping with Remotely Piloted Aircraft - Acquisition of Large-Scale Features
A	6	Xiaoxu Dong	Fast Scattering Prediction for Deformed Metasurfaces Using a Fourier-Encoded Neural Surrogate
A	7	Hitoshi Miyamoto	Monitoring Temporal Changes in Fluvial Land Cover Using Deep Learning and Ultra-High-Resolution Drone Imagery
A	8	Yujin Kim	Spatiotemporal Scene Graph for Scene-State Reasoning under Incomplete Observations in Repeated UAV Patrols
A	9	Gabriel Navarro	UAV Multispectral Validation of Sentinel-2 Super-Resolution Toward a Scalable Observatory of the Invasive Seaweed *Rugulopteryx okamurae*
A	10	Máté Farkas	Behavioral Responses and Adaptation of Cattle Exposed to Uncrewed Aerial Vehicles
A	11	Kelley A. Mundy	A Comparative Analysis of the Rangeland Analysis Platform and Drone Imagery for Woody Cover in Texas, USA
A	12	Shanna R. Gleason	Quantifying Phenological Changes and Invasions of *Rosa bracteata* Cover on Southeast Texas Rangelands
A	13	Ella Mulkerrins	Predictive Performance of a Machine Learning Model for Plot-Level Dry Matter Yield Estimation Using Drone-Derived Multispectral Indices
A	14	Giacomo Quattrini	High-Resolution Optical-Zoom Drone Imagery for the First Quantitative Estimate of *Euphorbia dendroides* in a Coastal Cliff Sector of Monte Conero
A	15	Nikola Grčić	Application of UAS-Based RGB Imaging for High-Throughput Maize Plant Height Phenotyping

A	16	Seonghyeok Bang	Water Spray Efficiency of UAV-Scale Aerial Firefighting Under Crosswind Conditions: An FDS-Based Dimensionless Analysis for Operational Design
A	17	Diana Carolina Polanía Montiel	Radiometric Correction of UAV Multispectral Imagery Under Variable Illumination Using a Single Calibrated Reflectance Panel
A	18	Mollie L. Kemp	Landscape-Level Forage Estimation Using Fine-Scale Drone Imagery in Rangelands
A	19	Kylie F. Perez	Drone-Derived Vegetation Responses to a Rainfall Pulse in a Semi-Arid Rangeland
A	20	Yuval Ben Abu	Precision Irrigation 2.0: Intelligent Co-Design of Drone Fleets and Soil Sensor Networks for Water-Efficient Agriculture
A	21	Dashnyam Byambatseren	UAV-Based Multispectral Imagery in Crop Breeding: Cicer Milkvetch Forage Yield Prediction as an Example
A	22	Alexander Peter Gruescu	Actor-Critic with Movement Primitives for Online Local Path Planning of Autonomous Drones
A	23	Martina Mandirola	Towards an Interoperable Multi-Agency UAS Framework for Civil Protection Emergencies: Operational Experience from the Italian Competence Centres Network
A	24	Ali Elbattay	Inference of Agronomic Information in Smallholder Systems from Low-Altitude UAV RGB Imagery
A	25	Michail Karyotakis	Development of Safety Metrics for Urban Air Mobility Operations – The Case of People Transportation
A	26	Tytus Jan Berbec	Drones vs. Satellites: A Comparative Analysis of Low- and High-Altitude Imagery in Cereal Crop Mapping

Poster Session B

Friday, 13 November 2026 (10:00–10:30, 12:15–13:45)

Session	Number	Author	Title
B	1	Edilson de Souza Bias	Application of RPA and AI in the Identification of Pests in Cotton Plantations in the Brazilian Cerrado
B	2	Diana Carolina Polanía Montiel	Bitemporal Integration of Spectral Indices Obtained from UAS–Sentinel-2 Images for the Estimation and Spatial Analysis of Maize Yield
B	3	Miguel-Ángel Fas-Millán	Definition of U-Plan 4D Volumes and Their Impact on Flight Authorisation and Airspace Capacity
B	4	Somnath Lingaraj Panigrahi	Uncertainty-Aware FLARM-Based Conflict Detection for Low-Altitude UAS Operations
B	5	Ravindu Thalagala	Spatiotemporal Multi-Modal Sensor Synchronization for High-Speed Aerial Platforms
B	6	Toma Sikora	MD-MCTS: Multimodal-Determinized Monte Carlo Tree Search for UAV Multi-Target Rendezvous
B	7	Mertcan Akin	On the Energy Trade-Offs of Continuous vs. Locked Rotor Tilt Control in Tiltrotor Quadcopters
B	8	Mustapha Amine Sadi	On Real-Time Boresight Estimation for UAV-Based Antenna Measurements: A Hybrid Model Approach
B	9	Zuoya Liu	Ultra-Wideband Localization in Forest Environments: Potential for Drone Applications
B	10	Sung-Hyub Ko	Sea-Trial Validation of ANFIS-Based Energy-Efficient Pitch Control for a Buoyancy-Driven Underwater Drone
B	11	César Asensio	A First Step Towards Noise-Aware Mission Planning Through Acoustic Geofencing
B	12	Ali Mdaihly	Real-Time Elevation and Orientation-Aware Visual Localization for GNSS-Denied Drone Navigation
B	13	Nicholas Edmond	Genetic Algorithm for Terrain-Optimized Routing for UAV and eVTOL Corridor Navigation
B	14	Ilias Panagiotopoulos	From Threat Intelligence to Safe Paths: Cooperative UAV–UGV Navigation in Contested Urban Search and Rescue
B	15	Awantha Jayasiri	Threat-Aware Trajectory Planning for Full-Scale Helicopters
B	16	Carlos S. Álvarez-Merino	Active Antenna-Aware UAV Navigation for Real-Time RF Mapping and Source Localization
B	17	Hanno Hildmann	Towards a Shared Understanding for UxV Swarming
B	18	Oleg Yakimenko	Reframing Military UAS Challenges Through Systems Engineering and Operational Reality

B	19	Victor Tolentino	Flight Altitude and Data Quality in Drone-Based Hyperspectral Imaging for Grade Control in Open-Pit Mining
B	20	Elio Lippolis	From Source to Sea: UAV-Based Monitoring of Plastic Litter in Water and Coastal Environments
B	21	Pietro Grassi	UAV-Based Synthetic Aperture Radar: State of the Art and the Road Ahead
B	22	Antonio Tovar-Sanchez	Mar_Spectra: A UAV-Based Spectroradiometric Platform for Above-Water Environmental Monitoring
B	23	Gabriel Navarro	Unmanned Aerial Vehicles in Antarctic Research: A Multi-Sensor Review
B	24	Tommaso Mainiero	Autonomous Multi-Temporal UAV Monitoring of the Belvedere Glacier Using DJI Dock 2 for Hydrogeological Hazard Assessment
B	25	Ali Elbattay	UAV-Based Forward Modeling of Bare-Soil Reflectance in Saline Drylands: Integrating DART-Lux and the Hapke Model
B	26	Ken Hellerud	Toward Decision-Conditioned Credibility for an Unvalidatable UAS Acoustic-Disturbance Digital Twin
B	27	Juan Bravo-Arrabal	Mission Templates and Event-Driven Handover for Persistent Multi-Drone Inspection and Mapping