

**The 6th International Forum on Big Data for Sustainable
Development Goals (FBAS 2026)**

Session Proposal Template

<i>Session Title</i>	Leveraging Aerial and Space-Based Data Ecosystems for Sustainable Development Goals	
<i>Session Chair(s)</i>	<i>Name</i>	Mohamed-Slim Alouini
	<i>Affiliation</i>	King Abdullah University of Science and Technology (KAUST)
	<i>Profile (200-word limit)</i>	Mohamed-Slim Alouini, was born in Tunis, Tunisia. He earned his Ph.D. from the California Institute of Technology (Caltech) in 1998 before serving as a faculty member at the University of Minnesota and later at Texas A&M University at Qatar. In 2009, he became a founding faculty member at King Abdullah University of Science and Technology (KAUST), where he currently is the Al-Khawarizmi Distinguished Professor of Electrical and Computer Engineering and the holder of the UNESCO Chair on

		Education to Connect the Unconnected. Dr. Alouini is a Fellow of the IEEE, OPTICA, and SPIE and his research interests encompass a wide array of research topics in wireless and satellite communications. He is currently particularly focusing on addressing the technical challenges associated with the deployment of information and communication technologies (ICT) in underserved and disaster-prone areas.
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<i>Preferred Topics</i>	• Drone and low-altitude economy data for SDG monitoring • High-Altitude Platform Stations (HAPS) as connectivity and sensing infrastructure • Satellite remote sensing and Earth observation for SDGs • Edge computing for real-time aerial and space data processing • Anomaly detection in large-scale geospatial and environmental datasets • Data integration across aerial tiers (drone → HAPS → satellite)	

<i>Session Description</i> <i>(200-word limit)</i>	The exponential growth of data collection from aerial and space-based platforms (including drones, High-Altitude Platform Stations (HAPS), and satellites) is reshaping how humanity monitors and advances the Sustainable Development Goals. From precision agriculture and disaster response to climate monitoring and urban planning, the sky has become a critical layer of the global data infrastructure. This session explores three distinct but complementary tiers of aerial data collection. Each featured talk examines one platform tier (low-altitude drones and the emerging low-altitude economy, HAPS as a middle-layer bridging terrestrial and satellite systems, and satellite-based Earth observation) illuminating how each generates high-frequency, large-scale datasets relevant to SDG tracking. Crosscutting themes include remote sensing methodologies, edge computing for on-board data processing, and anomaly detection techniques that surface actionable insights from massive geospatial streams. A concluding panel discussion will examine interoperability and the convergence of these
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	platforms into unified sky-to-ground data pipelines in service of sustainable development.
<i>Expected outcomes</i> <i>(50-word limit)</i>	Participants will gain a cross-tier understanding of aerial and space-based data ecosystems and their SDG applications, identify synergies across drone, HAPS, and satellite platforms, and leave with concrete insights on edge computing and anomaly detection strategies enabling scalable, real-time sustainable development monitoring.

Please submit filled session proposal to fbas@cbas.ac.cn before **April 20, 2026**