

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

Session Proposal Template

<i>Session Title</i>	AI for Nature: Integrating Spatiotemporal Modeling and Multi-modal AI for Automated Auditing of Nature-based Solutions	
<i>Session Chair(s)</i>	<i>Name</i>	Amber Ren ¹ , Hongshen Zhang ² , Loic Pelliser
	<i>Affiliation</i>	1. School of environmental science in Tongji University, China 2. The Department of Geography, The University of Hong Kong, Hong Kong SAR, China. 3. Loic Pelliser ETH Zurich
	<i>Profile (200-word limit)</i>	This chair team combines expertise in artificial intelligence, urban systems, climate science, and sustainability policy, offering strong interdisciplinary leadership across research, applied innovation, and stakeholder engagement.

		The session will bridge frontier AI methodologies with pressing city-scale climate challenges, including environmental monitoring, emissions management, resilience planning, and equitable adaptation. The chairs are well positioned to facilitate dialogue among scientists, planners, government agencies, and industry partners, and to translate technical advances into actionable pathways that support city-level SDG implementation.
	<i>e-mail</i>	2580057@tongji.edu.cn
<i>Contact Person</i>	<i>Name</i>	Amber Ren
	<i>e-mail</i>	
<i>Preferred Topics</i>	AI and Machine Learning for Environmental Monitoring • Spatiotemporal Modeling and Satellite Remote Sensing • Nature-based Solutions (NbS) and Urban Resilience • Climate Change and Public Health Co-benefits • Automated Auditing and ESG Data Integrity	

<i>Session Description</i> <i>(200-word limit)</i>	As the global community accelerates the deployment of Nature-based Solutions (NbS) to combat climate change, a critical "verification gap" has emerged regarding their biophysical integrity and long-term health co-benefits. Traditional auditing methods are often manual, infrequent, and prone to greenwashing. This session explores the frontier of "Planetary Intelligence" — the integration of multi-modal AI, causal machine learning, and spatiotemporal modeling to automate the monitoring and auditing of ecological interventions. We invite contributions that demonstrate how high-resolution satellite imagery, combined with policy ontologies and climate data, can quantify the specific impacts of NbS on localized thermal environments and heat-related health vulnerabilities. By bringing together experts from environmental science, AI development, and public policy, this session aims to showcase scalable digital tools that transform raw ecological data into high-integrity assets for international treaty compliance and ESG investment.
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	Discussions will prioritize real-world applications in rapidly urbanizing regions and the bridging of ecological monitoring with public health outcomes.
<i>Expected outcomes</i> <i>(50-word limit)</i>	The session aims to foster interdisciplinary collaboration between AI researchers and policy practitioners, resulting in a roadmap for standardized, AI-driven NbS auditing. Expected outcomes include the identification of key spatiotemporal metrics for health co-benefits and the establishment of a professional network dedicated to apply for AI for protecting and monitoring the nature.

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