UNITED NATIONS/ AUSTRIA SYMPOSIUM 2024

CLIMATE ACTION

Transforming space-based technology projects into sustainable services that support policy-making

Graz, Austria and online
17 – 18 July 2024

SPEAKERS' BIOGRAPHIES

SESSION 1

USER ENGAGEMENT: HOW MEANINGFUL DIALOGUES LEAD TO SUSTAINABLE INITIATIVES

FRANCIS MANFOUMBI

Gabonese Agency for Space Studies and Observations - TropiSCO Project

Francis Manfoumbi is a GIS and remote sensing engineer who has been working at the Gabonese Agency for Space Studies and Observations since 2015. Currently serving as the Head of the Forestry Department, he is responsible for conducting satellite monitoring of Gabon's forests and producing comprehensive statistics on activities that impact the forest.

PASCAL KOSUTH

Ministry of Environment (France) - Stockwater project

Pascal Kosuth is a senior advisor to the French Ministry of Environment, in charge of evaluating the implementation of public policies related to renewable resources, ecosystems, pollution and natural hazards. He has served as an environmental scientist and advisor to the European Space Agency and the French Space Agency and as Chair of the Scientific Committee of International Research Program on Rice (CGIAR). He currently co-leads the Stockwater project to establish a space-based system for real-time monitoring of water storage in dams and reservoirs.

BATTSETSEG TUVDENDORJ

Information and Research Institute of Meteorology, Hydrology, and Environment (IRIMHE) (Mongolia) - Drought Watch project

Battsetseg Tuvdendorj is a scientific researcher at the Information and Research Institute of Meteorology, Hydrology, and Environment of Mongolia. Her research focuses on drought and dzud monitoring, cropland, and land cover change. She holds a PhD in cartography and geographic information systems from the University of Chinese Academy of Sciences.

PATRICK PILS

Leto Space (Austria)

Patrick Pils is the founder and CEO of Leto Space GmbH. He is an Austrian management consultant and technology expert focused on making space technology accessible to public and private organizations. With a decade of experience, he specializes in integrating space technology into digital transformations. As a university lecturer, he inspires future professionals to drive sustainable, value-adding change.

ATILLAH ABDERRAHMANE

Royal Center for Remote Sensing (Morocco)

Atillah Abderrahmane heads the Oceanography, Climate, and Fisheries Department at the Royal Center for Remote Sensing in Rabat. He specializes in climatology and remote sensing, focusing on marine and climate data. He has led projects like RAMSES (marine pollution), GERMA (marine resource management), and SCHEMA (tsunami risk management), published extensively, and teaches remote sensing at various universities and training centers.

SESSION 2

SUPPORT AND FUNDING OPPORTUNITIES FOR SPACE FOR CLIMATE ACTION

FREDERIC BRETAR

Space for Climate Observatory (SCO), Centre National d'Etudes Spatiales (CNES) (France)

Frédéric Bretar is a French engineer and a scientist. He was a researcher in computer vision and applied mathematics at the French National Survey and headed a laboratory in Earth sciences. He then served as a diplomat in Shanghai and Hong Kong, China. He joined CNES in 2019 and now heads the international initiative Space for Climate Observatory (SCO) launched during the One Planet Summit.

SHARIF MUHAMMAD

Islamic World Educational, Scientific and Cultural Organization (ICESCO) (Morocco)

Muhammad Sharif is the Director and Advisor for the Science and Technology Sector at ICESCO in Rabat, Morocco, that gathers 54 member states and focuses on education, science, and culture. He is also an associated professor at Leibniz Institute for Catalysis Rostock, the President of the african branch of the International Engineering and Technology Institute, and an adjunct professor at the University of Lahore, Pakistan. Sharif Muhammad leads initiatives such as the ICESCO Accelerator program, International Aerospace Symposium, and A-hub, successfully promoting entrepreneurship across 19 member states.

MAXIMILIAN BAUERNFEIND

European Agency for the Space Programme (EUSPA)

Maximilian Bauernfeind is an Austrian lawyer with over 20 years in transport and innovation policy and is currently a Seconded National Expert at EUSPA in Prague. His role focuses on EU Space policy. Previously, he served in Austria's Ministry for Transport, handling space, transport research, and international trade issues. Maximilian has represented Austria and the EU in international bodies including the International Transport Forum at OECD, the EU, and UN Economic Commission for Europe.

BONAN WU

Earth Observation System and Data Center (EOSDC) (China)

Wu Bonan is a project manager at the Earth Observation System and Data Center of the China National Space Administration. Her responsibilities include data sharing aspects for initiatives such as the BRICS Remote Sensing Satellite Constellation Project, the Lancang-Mekong River Cooperation, the Asia-Pacific Space Cooperation Organization (APSCO), the Asian Oceania Earth Observation Organization (AOGEO), the Digital Silk Road (DBAR), the International Carbon Satellite Cooperation Project (CASA), and the Global Disaster Rapid Mapping Cooperation Program (VoRDM).

SESSION 3

FUNDING AND FINANCING TECHNICAL PROJECTS: SHOW ME THE MONEY

FANI KALLIANOU DE JONG
European Bank for Reconstruction and Development (EBRD)

Fani Kallianou De Jong works at the Climate Strategy and Delivery department of EBRD where she focuses on implementation and management of green economy financing facilities and policy dialogue activities. With an academic background in Economics and International Business Economics, she completed an Executive Space Course at ISU. Fani spearheads initiatives at EBRD to integrate space technology in climate action and support SDGs, including as a Chair of the Space for Green Future Accelerator Working Group launched by ESA, involving global green transition stakeholders.

KARIM AMER
Visual and AI Solutions (VAIS) (Egypt)

Karim Amer is a co-founder and chief technology officer of VAIS, a DeepTech startup democratizing AI for farmers. He applies AI to interdisciplinary challenges in agriculture, Earth observation, medical imaging, material science, bioinformatics, and geophysics. As the first Kaggle Master of data science competitions from Egypt, among a few in the region, Karim Amer specializes in artificial intelligence for climate-smart agriculture.

KIZITO ODHIAMBO
AgriBora (Kenya)

Kizito Odhiambo is the founder and CEO of AgriBORA. He holds a Bachelor's degree in electrical engineering and information technology from Technische Universität Darmstadt, Germany. Previously, he led Kedo Solutions Ltd, a social enterprise in Kenya's Homa Bay County, pioneering soybean processing for rural nutrition. At AgriBORA, his data-driven solutions for smallholder agriculture have earned global recognition and support from entities like ESA and Viva Tech. Kizito's leadership emphasizes inclusive technology adoption to enhance food security in Africa, bridging the digital divide with accessible solutions.

MAXIME BAYEN
The Catalyst Fund (Kenya)

Maxime Bayen is operating partner at The Catalyst Fund, a venture capital fund focusing on Africa and climate tech. Since early 2021, he has supported 20+ startups across 8 African markets and expanded The Catalyst Fund's global network to nearly 200 venture capital partners. Over the past decade, he has invested in, accelerated, or advised over 50 startups in Africa, and co-created the 'Africa: The Big Deal' platform providing essential insights for the African startup ecosystem.

SESSION 4
ROLE OF GOVERNMENT AND INTER-GOVERNMENTAL ORGANIZATION

ANA RAPOSO
European Space Agency (ESA)

Ana Raposo has over a decade of experience in technical and business roles within the public and private space sectors. Currently serving as business applications and partnerships officer at ESA, she promotes commercial services and applications utilizing space assets like satellite communications, Earth observation, and satellite navigation across various sectors. Ana also spearheads partnerships with non-space stakeholders, particularly in finance and sustainable development.

EVIE MERETHE HAGEN
Norwegian Space Agency (NOSA)

Evie Merethe Hagen holds a Master's degree in medical geography from the Norwegian University of Science and Technology and a Bachelor's in natural sciences, psychology, and international development from the University of Bergen, Norway. With 16 years of experience at the Norwegian Space Agency, she currently serves as Head of international development, advising Norwegian ministries on satellite data for international development. Her role includes collaborating with United Nations entities to align satellite capacities with climate and development policies.

ERWIN MOLDASCHL
Environment Agency of Austria

Erwin Moldaschl is an expert at Umweltbundesamt GmbH specializing in emission inventories, particularly greenhouse gases from land use, land-use change, and forestry. He advises national stakeholders on EU policies and contributes to capacity-building projects in countries such as Montenegro, Singapore, and Turkey. With a background in forestry science, he also serves as a certified greenhouse gas inventory reviewer for the UNFCCC.

CATHARINA HYUN-OK KIM
Korea Aerospace Research Institute (KARI)

Hyun-Ok Kim holds a PhD in engineering from TU Berlin, Germany, and specializes in geo-information and remote sensing for urban ecology and environmental planning. Since 2010 at KARI, she contributes to Korea's national space program with the constellation of small satellites New-space Earth Observation Satellite (NEONSAT). She advocates for women in science as Vice President of the Korea Association of Woman Scientists and Engineers (KWSE) and promotes science education through various publications.

HAMID MEHMOOD
Economic and Social Commission for Asia and the Pacific (ESCAP)

Hamid Mehmood is an Economic Affairs Officer at the United Nations ESCAP in Bangkok, specializing in space technologies for sustainable development in Asia-Pacific. Previously at the United Nations University in Canada, he focused on GIS and remote sensing in Thailand and Pakistan. With a Ph.D. and Master's degree in remote sensing and GIS, his research includes AI, digital technologies, and SDGs.

INDONESIA COUNTRY CASE

HOTSPOT FOR CLIMATE ACTION

ERNA SRI ADININGSIH

National Research and Innovation Agency (BRIN) (Indonesia)

Erna Sri Adiningsih is a research professor in satellite technology applications since 1989 specializing in space applications for natural resources, disasters, climate, and the environment. She served as Secretary General of the National Institute of Aeronautics and Space of Indonesia (LAPAN) (2018-2021) and is now Executive Director of the Indonesian Space Agency (INASA) of BRIN, representing Indonesia in the UN Committee on Peaceful Uses of Outer Space (COPUOS) and international space organizations.

MUHAMMAD ROKHIS KHOMARUDIN

National Research and Innovation Agency (BRIN) (Indonesia)

Muhammad Rokhis Khomarudin is a remote sensing and geomatics researcher, specializing in environmental and disaster management applications. He earned his PhD in geography of remote sensing from Ludwig-Maximilians-University of Munich in 2010. He has held key positions, including Director of remote sensing applications at National Institute of Aeronautics and Space of Indonesia (LAPAN) and is currently the acting Director of the Research Center for Geoinformatics at BRIN. He has authored over 100 articles, serves as editor-in-chief of the International Journal of Remote Sensing and Earth Sciences (IJRESES), and teaches at various Indonesian universities. He also consults on remote sensing applications for various sectors and is active in several professional organizations and international initiatives.

EVA FAMURIANTY

Ministry of Environment and Forestry (Indonesia)

Eva Famurianty holds a Bachelor's degree in Forest Resource Conservation and a Master's in Forestry Science from IPB University, Indonesia. Currently, she is a forest ecosystem specialist and coordinator of early warning and detection of forest and land fires at Indonesia's Ministry of Environment and Forestry. She manages the SiPongi Fire Monitoring System and oversees the Fire Early Warning System Post.

DIAH SARASWATI

Nusantara CompNet Integrator (Indonesia)

Diah Saraswati holds a Bachelor's degree in geography from Gadjah Mada University, Indonesia. With over 15 years of experience in GIS and remote sensing, she has served diverse public (LAPAN, Ministry of Environment and Forestry, National Land Agency, the Meteorological, Climatological and Geophysical Agency, and National Security and Defense agency) and private sector clients (TOTAL EP, Eni, Pertamina, etc). Currently, she manages Hexagon SIG products at Nusantara CompNet Integrator, a leading ICT solutions company within the Techno-Solutions Corporation (CTC) Group, Japan. She is actively engaged with the Association of Indonesia Geographer (IGI), the Indonesia Remote Sensing Society, and the Indonesia Surveyor Society.

PANEL 1

USER ENGAGEMENT: LESSONS LEARNT AND RECOMMENDATIONS

ZONGHAN MA

Chinese Academy of Sciences (China)

Zonghan Ma is an assistant professor at the Aerospace Information Research Institute (AIRCAS), Chinese Academy of Sciences. He earned his PhD in cartography and geographic information system from AIRCAS and a Bachelor's degree in geomatics engineering from Wuhan University. Since 2021, he has been involved in capacity-building projects for drought monitoring in Mongolia and Kyrgyzstan. His research focuses on remote sensing-based drought monitoring, agricultural evapotranspiration estimation at field scale, and the water-food-ecosystem nexus.

MARIA ZUBAIR

Punjab Information Technology Board (Pakistan)

With extensive experience as a GIS expert, Maria Zubair led a team specializing in space-based solutions using advanced technologies, including machine learning. Her focus has been on assisting government departments in addressing pressing challenges, particularly developing innovative approaches for environmental issues like air pollution from crop burning.

ANTONELLA TORNATO

Istituto Superiore per la Protezione e la Ricerca Ambientale (ISPRA) (Italy)

Antonella Tornato holds a Master's degree in chemistry and works as a researcher at ISPRA, focusing on the National Environmental Information System Division. As a member of Italy's delegation to UN Climate Change Conferences, she helps define user requirements for Earth observation services in the Italian Space economy, emphasizing agriculture and climate. She also represents ISPRA at Italy's Partnership Table for the National Strategic Plan for the EU's common agricultural policy 2023-2027.

MARIANA DAMOVA

Mozajka (Bulgaria)

Mariana Damova is the CEO of Mozaika which specializes in data science, natural interfaces, and building semantic information infrastructures. With a background in knowledge management and artificial intelligence, she has led interdisciplinary teams and executed projects with technological innovation at universities across Europe and North America. At Mozaika, she drives strategy, securing partnerships with entities like the European Space Agency, and has authored over 60 scientific publications.

ANGELA VEITCH

Permanent Mission of Canada to the International Organizations in Vienna

Angela Veitch is Canada's Deputy Permanent Representative to International Organizations in Vienna since 2022. She has served as a diplomat in Bamako, Mali; Beijing, China; and Brussels at Canada's mission to NATO. In Ottawa, Angela held senior legal and policy roles, including Deputy Director of non-proliferation and disarmament, and legal officer in the United Nations Law Division. She also served as a legal exchange officer in Canada's Armed Forces specializing in arms control and outer space law.

PANEL 2

CAPACITY BUILDING: IMPLEMENTING NEW TOOLS FOR WIDESPREAD AND EFFECTIVE USE

DEEPAK KUMAR MOHAPATRA

Alliance for Rural Electrification (Belgium)

Deepak Mohapatra is a senior officer for business and market development at the Alliance for Rural Electrification (ARE), a global association promoting decentralized renewable energy to unlock energy access in developing countries. He collaborates with over 200 ARE members and partners to enhance market conditions and facilitate capacity building worldwide. He holds a Master's degree in renewable energy management from Technical University of Cologne and a bachelor of technology in electrical and electronics engineering from Biju Patnaik University of Technology, India.

DARUNEE PROCHOT

Geo-Informatics and Space Technology Development Agency (GISTDA) (Thailand)

Darunee Promchot is a geoinformatics officer at GISTDA's Geo-Informatics Product Innovation Office in Bangkok, Thailand. She graduated from Beihang University, China, specializing in global navigation satellite systems in 2015. Her expertise combines climate action policy with space technology, focusing on air pollution monitoring using GNSS for water vapor analysis. She contributes to regional air pollution monitoring through projects like PAPGAPi (Building the Pan Asia Partnership for Geospatial Air Pollution Information), leveraging advanced remote sensing techniques.

MARIA MATEO IBORRA

IBISA (Spain)

Maria Mateo Iborra holds a Master's degree in telecommunication engineering and an Executive MBA. She has been involved in the space and satellite industry since 2005, and in blockchain technology from 2015. As co-founder of IBISA since 2019, she focuses on climate insurance, blending technology with impactful business solutions. Her agricultural roots and climate risk experiences drive her commitment to harness technology for positive societal change.

NOEL RABOY

CLIMBS Life and General Insurance Cooperative (Philippines)

Noel Raboy has over 20 years of experience in the cooperative sector, advocating for cooperative identity, values, and principles. Noel is the founding trustee of the Cooperative College of the Philippines and founding Chairperson of the Philippine Chamber of Cooperatives, Inc. He also chairs CLIMBS Mutual Fund and holds degrees in sociology and an Executive MBA from Xavier University and the University of San Carlos, respectively, supplemented by executive education in Singapore, the United Kingdom, and IMD Business School, Switzerland.

SAZZAD HOSSAIN

Bangladesh Water Development Board - Band-SOS project

Sazzad Hossain is superintending engineer and Director at the Bangladesh Water Development Board under the Ministry of Water Resources. He holds a PhD in environmental science from the University of Reading, UK. Since 2005, he has led operational flood forecasting efforts, spearheading flood forecasting development and satellite altimetry applications to enhance early warning systems. He currently oversees projects such as Band-SOS to bolster coastal flood prediction capabilities in Bangladesh delta.

PROJECT PITCHES

VISHAL SARAOGI

Government of Meghalaya (India)

Vishal Saraogi works as an advisor to the Government of Meghalaya. He holds a Master degree of science from the Indian Institute of Science. Vishal has worked for many State government and central government clients in India. He has over 18 years of experience in public policy and program management especially in large government/externally aided projects.

NISHCHAL BANIYA

Nepal national federation of clubs and associations for UNESCO

Nishchal Baniya holds a chemical engineering and technology degree from Zhejiang University of Technology, China. His career spans roles as a research assistant at ZJUT's Laboratory of Green Chemistry and satellite developer at Theia Group Inc. Actively engaged in youth affairs and international relations, he served as the focal point for nuclear disarmament and arms control at YOUNGO during the UNFCCC in 2021-22. Currently advising Bhanu Municipality, Nepal, he founded the Bagmati UNESCO Club and serves as an Executive Board Member of Nepal's UNESCO Federation.

SHUSHANIK ASMARYAN

Center for Ecological-Noosphere Studies of the National Academy of Sciences of Armenia (CENS)

Shushanik Asmaryan is Deputy Director for Science at CENS NAS RA and Head of the GIS and Remote Sensing Department. With a PhD in Geography, her research focuses on GIS and remote sensing technologies for land use planning, monitoring land cover, and modeling environmental changes. She leads and participates in numerous national and international projects, specializing in Earth Observation data cubes and monitoring land degradation by erosion and droughts.

NASREDDINE BELABID

Algerian Space Agency

Nasreddine Belabid is a senior engineer at the Space Applications Center of the Algerian Space Agency where he specializes in space technology applications, focusing on remote sensing and GIS. His core expertise lies in utilizing satellite data for managing major disasters such as floods, forest fires, and land degradation, with a specific focus on combating desertification.

NATALIA RODRIGUEZ

Casa de Agua (Costa Rica)

Natalia Rodriguez is an industrial engineer who developed the Risk Management Tool for Rural Water Utilities (GIRA) in Costa Rica. She specializes in space technology for water-related risks. Natalia is passionate about data management, sustainable development, climate change and creative strategies for environmental sustainability.

THOMAS FERRERO

Maps Earth Observation Satellite Services (MEOSS) (France)

Thomas Ferrero is Chairman and CEO of MEOSS. He has 12 years of working experience in spatial planning in the public sector before transitioning to a mapping software firm. In 2018, he founded MEOSS, focusing on harnessing satellite imagery to combat global warming. MEOSS is now focusing on carbon sequestration and water for agriculture.

AYSHA YUSUF ALMAHMEED

National Space Science Agency (Bahrain)

Aysha Almahmeed is a space data analyst at the National Space Science Agency (NSSA) of Bahrain. She holds a Bachelor's degree in civil engineering from the University of Bahrain. As a member of NSSA's lab, Almahmeed contributes to analyzing and evaluating earth observation data and creating analytical studies that serve to achieve the SDGs and Bahrain's Economic Vision 2030.

SHRAWANI SHAGUN

Teri School of Advanced Studies (India)

Shrawani Shagun Is the national point of contact for India at the Space Generation Advisory Council (SGAC) and is currently pursuing a PhD in space law at Teri School of Advanced Studies, New Delhi. She has achieved a Max Planck Scholarship and published numerous articles on space law, environmental justice, and human rights.