



United Nations
Office for Outer Space Affairs



With the support of **UNOOSA**

Under the patronage of Ministry of
Higher Education, Research and Space

SPACE4WATER CONFERENCE

Satellite Data for Sustainable Water Management

Friday

11

September 2026

8:30 — 14:30

Institut de Physique du Globe de Paris
1 rue Jussieu, 75005 Paris, France

SOMMET
INTERNATIONAL
SUR L'ESPACE

INTERNATIONAL
SPACE
SUMMIT

PARIS 9-10
GRAND PALAIS SEPT. 2026

An official side event of the International Space Summit



BL Consulting
Middle East

blue
Water Intelligence

Program

8:30

Welcome tea/coffee

9:00

Opening addresses

Prof. Jean-Philippe Avouac - *Director, Institut de Physique du Globe de Paris (IPGP)*
H.E. Mr. Philippe Baptiste - *French Minister for Higher Education, Research & Space*
Mrs. Aarti Holla-Maini - *Director, United Nations Office for Outer Space Affairs (UNOOSA)*
Dr. Tidiane Ouattara - *President Council of the African Space Agency, Director General of the Ivorian Space Agency*
Mr. Gaspard Twagirayezu - *Chief Executive Officer, Rwanda Space Agency*
Mrs. Sevara Atabaeva - *Director, Center for Digitalization & Monitoring of the Water Sector, Ministry of Water Resources of Uzbekistan*

9:50

A fireside conversation on space data for water management

Mr. Jean-Marc Astorg - *Senior Advisor, BLConsulting* - **Moderator**
Mr. Lóránt Czárán - *Chief, Space Applications Section, United Nations Office for Outer Space Affairs (UNOOSA)*
Mrs. Caroline Laurent - *Director of Orbital Systems & Applications, French Space Agency (CNES)*
Dr. Marc Paganini - *Senior Technical Officer, Climate Action, Sustainability & Science Department, European Space Agency (ESA)*

10:15

Panel Discussion #1: How space helps science better understand the water cycle

Dr. Benoît Nigon - *Hydrogeologist, Blue Water Intelligence (BWI)* - **Moderator**
Prof. Giriraj Amarnath - *Research Group Leader - Water Data for Climate Resilience, International Water Management Institute*
Prof. Christoff Andermann - *Professor of Geoscience, University of Rennes*
Dr. Kristel Chanard - *Geophysics researcher, Institut de Physique du Globe de Paris (IPGP) & French Mapping Agency (IGN)*
Dr. Joseph B. Tandoh - *Director, Ghana Space Science and Technology Institute*

10:55

Break

11:15

Keynote

Mr. Philippe Gautier - *President, Blue Water Intelligence (BWI)*

11:25

Panel Discussion #2: How countries effectively leverage satellite data for water resource management

Dr. Anil Khanal - *Hydrologist, Blue Water Intelligence (BWI)* - **Moderator**
H.E. Mrs. Tanja Miškova - *Ambassador-at-Large for Water Diplomacy, Ministry of Foreign and European Affairs of Slovenia*
Dr. Anil Mishra - *Chief of Hydrological Systems, UNESCO*
Mr. Mame Mbagnick Ndiaye - *Water Resources Manager, SAED Senegal*
Mr. Md Aminul Islam - *Additional Chief Engineer, Bangladesh Water Development Board*
Mr. Nishant Thakur - *Additional Secretary and Project Director, Government of Himachal Pradesh, India*
Mr. Umidjon Umirzakov - *Deputy IT CEO, Hydrometeorological Service Agency of Uzbekistan (Uzhydromet)*

12:05

Panel Discussion #3: Financing instruments for space-based water projects

Dr. Mohamad Hamze - *Area Manager, Blue Water Intelligence (BWI)* - **Moderator**
Mr. Armel Castets - *Deputy Assistant Secretary, French Treasury*
Mr. Charles-Antoine Hurstel - *Infrastructure Specialist, World Bank*
Mr. Badre Lanedri - *Business Development Lead - Africa, Asia & Eastern Europe, HydroSat*
Mr. Martin Leménager - *Water & Sanitation Task Team Leader, French Development Agency (AFD)*
Mr. Gautier Saby - *Vice-President - Structured Export Finance, Bpifrance*

12:45

Closing remarks

H.E. Mrs. Barbara Pompili - *French Ambassador for the Environment*

13:00

Networking lunch

Speaker profiles



Prof. Giriraj AMARNATH — *Research Group Leader — Water Data for Climate Resilience, International Water Management Institute*

Prof. Dr. Giriraj Amarnath serves as Research Group Leader – Water Data for Climate Resilience and Principal Researcher in Disaster Risk Management and Climate Resilience at the International Water Management Institute (IWMI), Sri Lanka. He previously served as Interim Deputy Director and AOW2 Lead of the CGIAR Climate Action Science Program. His research encompasses climate services, early warning and anticipatory action systems, and integrated drought and flood risk management across 25+ countries. He holds a Ph.D. in Applied Remote Sensing and has authored over 120 peer-reviewed publications, with current work focused on sub-seasonal forecast for agroclimate advisories and AI-enabled solutions for climate adaptation and disaster risk reduction.



Prof. Christoff ANDERMANN — *Professor of Geoscience — University of Rennes*

Prof. Christoff Andermann is a Professor at Université de Rennes, Géosciences Rennes, where he leads a research project on "Water in the Critical Zone" focused on the high mountain water cycle. He previously worked as a Research Scientist in the Geomorphology Group at GFZ Potsdam (2012-2022), including a Helmholtz Postdoc Fellowship building observational capacity in Nepal. He holds a bi-national PhD in Geosciences from Université Rennes 1 and TU Bergakademie Freiberg, and an MSc in Geocology. His research covers hydrology, climate, Earth observation, and erosion in high mountain environments, particularly the Himalayas, and he has authored over 30 peer-reviewed publications.



Mr. Jean-Marc ASTORG — *Senior Advisor — BLConsulting*

Mr. Jean-Marc Astorg is Senior Director at BLConsulting Middle East, based in Abu Dhabi, leading strategic advisory and business development across the UAE and wider Middle East for clients in the space, defence, and high-technology sectors. He is also Alliance Champion of the Space4Ocean Alliance, supporting international cooperation at the intersection of space and ocean priorities. After a 41-year career at CNES, the French Space Agency, he brings extensive experience in space strategy, launchers, procurement, commercial affairs, legal matters, and international cooperation, having served as Director of Launchers overseeing 300 engineers, and as Chief Strategy Officer shaping French space strategy and New Space initiatives.



Mrs. Sevara ATABAEVA — *Director — Center for Digitalization and Monitoring of Water Resources, Ministry of Water Resources of the Republic of Uzbekistan*

Mrs. Sevara Atabaeva is the Director of the Center for Digitalization and Monitoring of Water Resources under the Ministry of Water Resources of the Republic of Uzbekistan. With over 15 years of experience in public administration, international cooperation, and digital transformation, she leads national initiatives on water sector digitalization, including integrated information systems, real-time monitoring, AI-powered decision-support tools, and the unified Digital Water Management platform. She previously held senior positions at Uzbekistan's Ministry of Finance, the Chamber of Commerce and Industry, and UET Construction, focusing on international cooperation and investment promotion. She is active in advancing digital governance and AI applications in water management.



Prof. Jean-Philippe AVOUAC — *Director — Institut de Physique du Globe de Paris (IPGP)*

Prof. Jean-Philippe Avouac is the Director of the Institut de Physique du Globe de Paris and a member of the U.S. National Academy of Sciences. Using seismology, remote sensing, and geodesy, he studies earthquakes, tectonic and geomorphological processes, with recent work on subsurface fluid injection/extraction effects on crustal deformation and seismicity. A graduate of Ecole Polytechnique with a PhD from IPGP, he spent over a decade at Caltech, directing the Caltech Tectonics Observatory and later founding the Center for Geomechanics and the Mitigation of Geohazards. He has published more than 270 peer-reviewed articles, is co-Editor-in-Chief of Earth and Planetary Science Letters, and is a Fellow of the American Geophysical Union.



H.E. Mr. Philippe BAPTISTE — *French Minister for Higher Education, Research & Space — French Government*

H.E. Mr. Philippe Baptiste holds a doctorate from the Université de Technologie de Compiègne, an engineering degree from Mines de Nancy, an MSc from the University of Strathclyde, and a DEA from Sorbonne Université. He joined the CNRS as a researcher in 1999, later working at IBM's Watson Research Center and teaching at École Polytechnique (2002-2012), where he directed the computer science laboratory. He held senior roles including Directeur général délégué of CNRS, CTO of the Total group, cabinet director at the Ministry of Higher Education and Research, and advisor to Prime Minister Édouard Philippe. From 2021, he served as President of Cnes (French space agency), and was appointed Minister for Higher Education and Research in December 2024.



Mr. Armel CASTETS — *Deputy Assistant Secretary — French Treasury*

Mr. Armel Castets began his career at the Direction générale du Trésor (French Treasury) before joining the International Monetary Fund in July 2016 as Alternate Executive Director, having previously served as advisor to the French Executive Director. He then joined the World Bank as a Senior Operations Officer. He returned to the Direction générale du Trésor in September 2021, first heading the Savings and Financial Markets unit, then serving as interim Sous-directeur for corporate financing and financial markets. Since March 2024, he has been Sous-directeur for International Corporate Financing and Export Support, also serving as Censeur on the boards of Naval Group and SFIL. He is a graduate of ENA.



Dr. Kristel CHANARD — *Geophysics researcher — Institut de Physique du Globe de Paris (IPGP) & French Mapping Agency (IGN)*

Dr. Kristel Chanard is an IGN research scientist at the Institut de Physique du Globe de Paris (IPGP). She develops new applications of satellite geodesy that transform measurements of the Earth's deformation into observations of the changing water cycle, from groundwater depletion to glacier mass loss and sea level rise. She has received several major national and international early career awards, including the 2025 Irène Joliot-Curie Prize, for her contributions for advancing hydrogeodesy.



Mr. Lóránt CZÁRÁN — *Chief, Space Applications Section — United Nations Office for Outer Space Affairs (UNOOSA)*

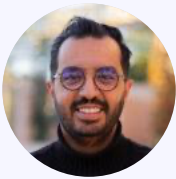
Mr. Lóránt Czárán is Chief of the Space Applications Section at the United Nations Office for Outer Space Affairs (UNOOSA), where he also coordinates the UN Platform for Space-based Information for Disaster Management and Emergency Response (UN-SPIDER). Since starting his UN career in 1996, he has worked at UNEP/GRID-Arendal, the UN Cartographic Section, and with Peacekeeping missions, including in Syria, and contributed to international boundary demarcation projects. He led the GRID3 Project Secretariat at UNFPA (2018-2021) before returning to UNOOSA. He represents the UN in bodies such as ISO/TC211 and OGC, and chairs the CEOS Working Group on Disasters. He holds a Master's-equivalent in Human Geography from Babeş-Bolyai University, Cluj.



Mr. Philippe GAUTIER — *President — Blue Water Intelligence (BWI)*

Mr. Philippe Gautier is President of BWI (Blue Water Intelligence) and President of HEMERIA, and previously served as CEO of Groupe NEXEYA (2000-2019). A graduate of CentraleSupélec and Université Paris Dauphine-PSL, he has also been a board member of Spacefounders since 2021 and is active within GIFAS, the French Aerospace Industries Association. In May 2026, he was awarded the Chevalier de la Légion d'Honneur by Minister Philippe Baptiste, recognizing 39 years of engagement in the Defence and Space industries. Under his leadership, BWI won a major CNES contract to develop AI-powered, satellite-based water level monitoring services across global river basins.

Speaker profiles



Dr. Mohamad HAMZE — *Area Manager — Blue Water Intelligence (BWI)*

Dr. Mohamad Hamze has been Area Manager – West Africa & South Asia at BWI since November 2025, following two years as Product Owner for the company's hydrological forecasting solutions. He holds a PhD in remote sensing applied to earth and water sciences (AgroParisTech, 2020–2023), conducted at INRAE on the estimation of soil hydraulic properties using satellite radar (SAR) imagery, with publications on the detection of irrigation dates and volumes via Sentinel-1 and Sentinel-2. His current role explicitly encompasses the deployment of flood forecasting, drought monitoring, and irrigation optimization systems, tailored to local hydrological and institutional contexts. His dual academic (soil-water modeling, remote sensing) and operational (field hydrological project management) expertise is directly aligned with the challenges of irrigation and flood risk management.



Mrs. Aarti HOLLA-MAINI — *Director — United Nations Office for Outer Space Affairs (UNOOSA)*

Mrs. Aarti Holla-Maini is the Director of the UN Office for Outer Space Affairs (UNOOSA), appointed by UN Secretary-General António Guterres and in post since 18 September 2023. She brings three decades of experience in the space and satellite sector, having previously served as Secretary-General of the Global Satellite Operators Association, which she grew from a regional to a global organization. She co-architected the 2015 Crisis Connectivity Charter for emergency satellite telecommunications and has secured policy support for space technologies connecting the unconnected worldwide. Her advisory roles include the World Economic Forum's Global Future Council on Space and the International Academy of Astronautics. She holds a law degree from King's College London and an MBA from HEC France.



Mr. Charles-Antoyne HURSTEL — *Infrastructure Specialist — World Bank*

Mr. Charles-Antoyne Hurstel is an Infrastructure Specialist at the World Bank Group's Global Infrastructure Facility (GIF), where he works on infrastructure projects across Africa and the Middle East. His portfolio spans several sectors, including water, transport, energy and digital infrastructure, with a focus on developing sustainable and bankable projects and mobilizing private investment. Previously, he worked with the World Bank's City Resilience Program, supporting cities in developing and financing resilient urban infrastructure. Alongside his work at the World Bank, Charles-Antoyne teaches project finance at ESCP Business School.



Mr. Md Aminul ISLAM — *Additional Chief Engineer — Bangladesh Water Development Board (BWDB)*

Mr. Md. Aminul Islam is a Water Resources Engineer with over two decades of experience in water resources development and management. He graduated from Bangladesh University of Engineering & Technology (BUET) and holds a Master's in Disaster Management from the National Graduate Institute for Policy Studies (GRIPS) in Japan. He joined the Bangladesh Water Development Board (BWDB) under the Ministry of Water Resources in 2005, where he has developed expertise in designing, planning, and monitoring water resources projects, and contributed to strengthening BWDB's project monitoring systems. He currently serves as Additional Chief Engineer, responsible for overall monitoring of BWDB development projects.



Dr. Anil KHANAL — *Hydrologist — Blue Water Intelligence (BWI)*

Dr. Anil Khanal is Hydrologist and Area Manager at BWI, specializing in watershed digitization and satellite-based hydrology (NewSpace Basin Digitization). He holds a PhD in Hydrometeorology (Université Grenoble Alpes, 2018-2022), focusing on radar remote sensing of precipitation and snow in the high mountains of the French Alps. He complemented this expertise with a Master's degree in Hydraulics and Civil Engineering (Grenoble INP - Ense3), with skills in HEC-RAS and surface water modeling, followed by four years as a research engineer at the Institute of Environmental Geosciences, working on radar remote sensing in high mountain environments. He is directly involved in the company's work on water resource management, hydropower, and climate resilience.



Mr. Badre LANEDRI — *Business Development Lead - Africa, Asia & Eastern Europe — HydroSat*

Mr. Badre Lanedri is a Senior Irrigation and Water Resources Expert and Sales & Business Development Lead for Africa, Asia and Eastern Europe at HydroSat, supporting the development and deployment of AI-enhanced, satellite-based solutions for irrigation and water resources management. Before HydroSat, he worked on major water and irrigation programmes with the French Development Agency, World Bank, EBRD and EIB. He holds an MSc in Soil & Water (Irrigation and Drainage) from Wageningen University and an Engineering Degree in Agronomy. With over 25 years of international experience across Africa, Asia, Europe and the Middle East, his work spans water infrastructure development and the use of Earth observation and digital technologies to improve irrigation performance and water management decision-making.



Mrs. Caroline LAURENT — *Director of Orbital Systems & Applications — French Space Agency (CNES)*

After serving for 30 years in the acquisition Directorate of the French Ministry of Defense, Mrs. Caroline Laurent joined CNES in 2019 and is currently at the head of orbital systems and applications, responsible for managing all projects for science, armed forces or competitiveness in the fields of earth observation, astrophysics, exploration and human flight, telecommunications and navigation, space surveillance and action in space, balloons. CNES has in the past 3 years been the operator for F2030 on space service demonstrations, including the REVALTO project managed by BWI.



Mr. Martin LEMENAGER — *Water & Sanitation Task Team Leader — French Development Agency (AFD)*

Mr. Martin Leménager has worked for 23 years in the water and development sector. He joined the Agence Française de Développement (AFD) in 2012 as Task Team Leader in the Water and Sanitation division, a role he held until 2019 and has held again since 2022; in between, he served as program manager at AFD's Jakarta office on infrastructure and climate change. A multidisciplinary engineer (Ecole Centrale Paris) with an executive master's in water management (AgroParisTech ENGREF), he began his career heading a technical department in a water utility, then worked in Laos with a development NGO. At AFD, his current portfolio covers Senegal, Mayotte, and transboundary basin organizations across Africa.



Dr. Anil MISHRA — *Chief of Hydrological Systems — United Nations Educational, Scientific and Cultural Organization (UNESCO)*

Dr. Anil Mishra is Chief of Hydrological Systems, Climate Change and Adaptation at UNESCO, where he provides science policy advice to help Member States address climate and water-related challenges. Over more than 26 years, his academic, professional, and managerial experience in hydrology, water resources, and environment has included international research studies, leading thematic groups, coordinating centers of excellence, and supporting decision- and policy-making on hydrology, cryosphere, water resources, and coupled human-environment systems worldwide. He has authored and co-authored numerous scientific publications, edited books, reports, and policy briefs, and convened conferences on climate change adaptation, hydrological extremes, cryosphere, and water resources management.



H. E. Mrs. Tanja MISOVA — *Ambassador-at-Large for Water Diplomacy — Ministry of Foreign and European Affairs of Slovenia*

H. E. Mrs. Tanja Miškova serves as Ambassador-at-Large for Water Diplomacy at Slovenia's Ministry of Foreign and European Affairs, focusing on the water-peace nexus, transboundary water cooperation, and the water-climate nexus, alongside the crosscutting priorities of human rights and gender equality; her portfolio also covers environmental peacebuilding and circular economy. She also serves as Slovenia's Deputy Commissioner to the International Sava River Basin Commission. She previously held the positions of Director General for Multilateral Affairs and Development Cooperation, Head of Department for Emerging Challenges, Ambassador to Egypt, and Diplomatic Advisor to the President of Slovenia.

Speaker profiles



Mr. Mame Mbagnick NDIAYE — *Water Resources Manager — Société Nationale d'Aménagement et d'Exploitation des Terres du Delta du Fleuve Sénégal et des Vallées du Fleuve Sénégal et de la Falémé (SAED)*

Mr. Mame Mbagnick Ndiaye is the Water Management Officer at SAED (Société Nationale d'Aménagement et d'Exploitation des Terres du Delta), Senegal, where he coordinates water resources governance across the Senegal River Delta, including hydrological, water quality and piezometric monitoring, and the development of studies and terms of reference for major water infrastructure projects. He has led the deployment of hydrometric and meteorological monitoring networks under the PGIRE2, AIDEP and DELTA programmes, and currently serves as Hydrology and Hydraulics Focal Point for the Hydrospace for Senegal project and co-designer of the SAPHIRE project.



Dr. Benoît NIGON — *Hydrogeologist — Blue Water Intelligence (BWI)*

Dr. Benoît Nigon joined BWI as a Hydrogeologist/Hydrologist, where he oversees research projects, monitors the performance of the company's hydrological model, and manages international hydrology projects. He holds a PhD in Hydrogeology applied to deep geothermal energy (Ruhr University Bochum, 2014-2018), focusing on fracture flow and heat transport modeling, complemented by a Master's degree in Hydrogeology, Hydrobiogeochemistry, and Hydropedology (University of Rennes). His background combines strong expertise in numerical modeling and deep learning applied to hydrogeology (postdoctoral research at the University of Rouen Normandy on hydrosedimentary transfers in karst aquifers, using Keras, TensorFlow, and PyTorch) with extensive field experience—pumping tests, tracer tests in karst environments, and piezometric monitoring.



Dr. Tidiane OUATTARA — *President — Council of the African Space Agency & Director General — Ivorian Space Agency*

Dr. Tidiane Ouattara is President of the Council of the African Space Agency and Director General of the Ivorian Space Agency. He is a versatile bilingual professional with more than 24 years of experience in academia, and the private and public sectors, across Canada, international organizations, and abroad. His positions have spanned strategic policy, program, research, and operational dimensions. His fields of experience include leadership roles in space, program design and delivery, science and policy integration, geospatial data analysis and management (remote sensing and GIS), environment (water erosion, wildlife conservation, landscape assessment and planning), R&D, knowledge management, and international relations.



Dr. Marc PAGANINI — *Senior Technical Officer, Climate Action, Sustainability & Science Department — European Space Agency (ESA)*

Dr. Marc Paganini is a Senior Technical Officer at the European Space Agency (ESA) in the Directorate of Earth Observation Programmes, with more than 30 years of experience in Earth Observation satellite missions. He is responsible for developing, organizing, and managing novel EO applications to provide user communities with reliable, timely, and continuous information about the Earth and its environment, with particular expertise in the exploitation of satellite data for environmental governance and sustainable development. He represents ESA in several Multilateral Environmental Agreements, including the Convention on Biological Diversity, the Convention on Wetlands, and the 2030 Agenda for Sustainable Development.



H.E. Mrs. Barbara POMPILI — *French Ambassador for the Environment — French Government*

H.E. Mrs. Barbara Pompili has been involved in environmental politics for over 20 years. As Minister for Ecological Transition from 2020 to 2022 - with a portfolio spanning energy, transportation, housing, water, biodiversity, circular economy, and international climate negotiations - she led the adoption of the Climate and Resilience Act following the Citizens' Climate Convention. She previously served as Secretary of State for Biodiversity (2016–2017), Member of Parliament for the Somme (2017–2023), Chair of the National Assembly's Committee on Sustainable Development and Spatial Planning, and rapporteur on the Committee on Foreign Affairs. As Special Advisor for International Affairs at the General Secretariat for Ecological Planning (2023–2025), she was also Special Envoy of the President of the Republic for the One Planet Summit on water. She has chaired the OECD Water Governance Initiative since 2022, and has served as French Ambassador for the Environment since March 2025.



Mr. Gautier SABY — *Vice-President - Structured Export Finance — Bpifrance*

Mr. Gautier Saby is Vice President in the Export Finance Structuring team at Bpifrance, where he has dedicated his career to supporting French exports and the international development of French companies. For 13 years, he worked at Bpifrance Assurance Export, the French Export Credit Agency, involved in the insurance and support of export financing arranged by commercial banks for French exporters. He subsequently joined Bpifrance's Export Finance department 4 years ago, where he now structures and arranges export financing solutions directly, helping French companies deliver projects worldwide. His expertise spans export credit, project financing, and the development of innovative financing solutions for strategic international projects.



Dr. Joseph B. TANDOH — *Director — Ghana Space Science and Technology Institute*

Dr. Joseph Bremang Tandoh is a physicist, Principal Research Scientist, and Director of the Ghana Space Science and Technology Institute (GSSTI), holding a PhD in Novel Physics Methods in Environmental Science. He leads Ghana's efforts to build a coordinated national space ecosystem, including its National Space Policy and Cabinet approval for a Ghana Space Agency, and facilitated the Zero Draft of Ghana's space legislation with UNOOSA. As Ghana's Principal to the Group on Earth Observations (GEO), he promotes satellite Earth observation for water-resource monitoring, flood-risk assessment, and climate resilience, focusing on institutional capacity and space-based technologies for water and environmental challenges.



Mr. Nishant THAKUR — *Additional Secretary and Project Director — Government of Himachal Pradesh, India*

Mr. Nishant Thakur is an officer of the Himachal Pradesh Administrative Service (2010 batch), currently serving as Additional Secretary (Revenue-DMC), Government of Himachal Pradesh, Shimla. He also holds additional charge as Project Director of the Programme Management Unit (SDMF), Revenue Department. He previously served as Additional Director (Health & Family Welfare) and as Executive Director of HIMUDA (Himachal Pradesh Housing and Urban Development Authority). He has represented Himachal Pradesh in its partnership with the French Development Agency (AFD) on the Himachal Pradesh Disaster Risk Reduction and Resilience Project, emphasizing the value of international expertise and funding for the state's disaster risk reduction efforts.



Mr. Gaspard TWAGIRAYEZU — *Chief Executive Officer — Rwanda Space Agency*

Mr. Gaspard Twagirayezu is the Chief Executive Officer (CEO) of Rwanda Space Agency (RSA), the national agency mandated to develop the space sector for socio-economic development. Prior to this appointment, he served as Minister of Education in Rwanda, and before that as Minister of State in charge of Primary and Secondary Education. He also served as Senior Policy and Strategy Analyst in the Office of the President, and as Science and Technology Policy Analyst at the National Council for Science and Technology (NCST). He holds a master's degree in Electrical and Computer Engineering (Engineering Management concentration) and a Bachelor's in Electrical/Electronics Engineering, both from Oklahoma Christian University, USA.



Mr. Umidjon UMIRZAKOV — *Deputy IT Chief Executive Officer — Hydrometeorological Service Agency of Uzbekistan (Uzhydromet)*

Mr. Umidjon Umirzakov serves as the Advisor to the Director on Digital Technology Development at the Hydrometeorological Service Agency of Uzbekistan (Uzhydromet). With a background spanning spatial data management, numerical modeling, and digital infrastructure, he leads strategic initiatives in IT modernizations and e-government integration within the sector. He holds a Master's degree in Public Administration from the University of International Business and Economics (China).

FOREWORD

General Philippe Adam, Secretary General of International Space Summit



On 9 and 10 September 2026, Paris will host the first **International Space Summit**, at the invitation of the **President of the Republic**.

This gathering aims to open a global dialogue on the future of the space sector — its security, its sustainability, its economy, and the ways in which it can respond to the major challenges of our time.

It is in this very spirit that I am pleased to see the **Space4Water** event take place alongside the Summit. Organised by **Blue Water Intelligence (B.W.I.)** and **BL Consulting**, supported by **UNOOSA** and placed under the patronage of the **French Ministry of Higher Education, Research and Space**, it will be hosted on the premises of the **Institut de Physique du Globe de Paris** the very day after the International Space Summit, demonstrating a welcome proximity between the two events.

Sustainable development is one of the defining challenges of our time, and among the issues it covers, **water is one of the most urgent — no path forward can leave it aside.**

This is exactly where space and water come together. Earth observation now provides an unprecedented amount of data, while water resource managers know exactly what is needed on the ground to turn that data into practical tools. It is this combination — **space expertise and water expertise, built together from the start rather than one after the other** — that produces the most promising solutions.

The **REVALTO mission**, developed by B.W.I. and selected by **CNES in 2025 as part of the France 2030 plan**, is a good example of this approach.

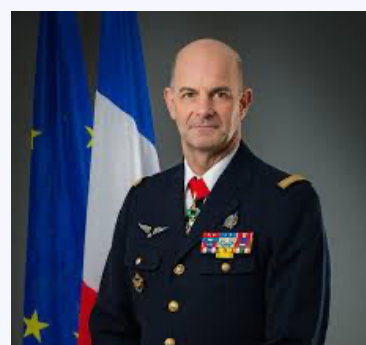
This collaboration is what Space4Water is about: bringing together, for one day, these two communities — **public decision-makers, researchers, space industry players and water managers** — to turn a still all-too-rare dialogue into lasting partnerships.

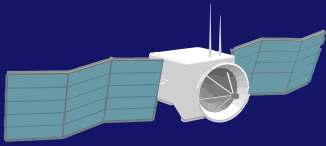
This initiative reflects exactly what the International Space Summit seeks to encourage: **concrete bridges between sectors that have everything to gain from working together, demonstrating the forward-leaning solidarity that is another unique characteristics of the future of space operations for the benefit of mankind.**

I wish all Space4Water participants rich exchanges and collaborations that, I hope, will extend well beyond this single day.

General Philippe Adam
Secretary General
International Space Summit

A handwritten signature in black ink, appearing to read 'Adam', enclosed within a rectangular box.





Concept Note

Space4Water Conference

Context

Water security has become one of the defining concerns of our time, with direct implications for sustainable development, public health, food security, climate adaptation and international stability. The 2030 Agenda for Sustainable Development, and Sustainable Development Goal 6 in particular, calls upon the international community to ensure the availability and sustainable management of water and sanitation for all. Yet progress remains uneven, and many regions continue to lack the reliable, comparable and timely information on which sound water governance depends.

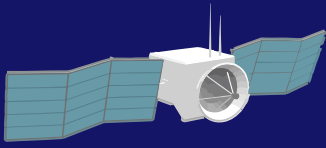
Space-based Earth observation offers a unique and increasingly indispensable contribution to this shared endeavor. Satellite missions now provide consistent, large-scale measurements of precipitation, soil moisture, surface and groundwater dynamics, evapotranspiration, snow cover and water quality, including over basins that are otherwise difficult to monitor. Realizing the full value of these capabilities, by translating observations into operational decisions and equitable access to data, calls for closer cooperation between the space and water communities, and for sustained engagement among governments, scientific institutions, operators and financial partners.

Purpose & ambition

Convened as a side event of the International Space Summit, the Space4Water Conference seeks to advance dialogue and cooperation on the use of satellite data for sustainable water management, and to contribute substantively to the preparations for the United Nations Water Summit to be held in Abu Dhabi in December 2026.

This is why the Conference brings together representatives of space agencies and Earth-observation operators, national authorities and river-basin organizations, water utilities and irrigation managers, the scientific and academic community, development banks, insurers and investors, and delegates from United Nations bodies, ministries and other institutions engaged in water and space policy.

Together, they aim to reach a shared appraisal of the maturity of space-based water services, to build a portfolio of replicable use cases, to clarify the financing pathways available, and to formulate a concise set of recommendations to be carried forward to the United Nations Water Summit.



Concept Note

Space4Water Conference

Objectives

- To illustrate how space-based Earth observation strengthens scientific understanding of the water cycle and underpins evidence-based water governance.
- To present concrete, operational applications of satellite data across agriculture, urban water supply, disaster risk reduction and transboundary basin management.
- To foster cooperation among space agencies, water authorities, the scientific community, development finance institutions and policymakers, with a view to accelerating uptake.
- To formulate actionable recommendations to inform the deliberations of the United Nations Water Summit in Abu Dhabi.

Program (8:30 - 14:30)

- Opening speeches — Water: a defining challenge of the 21st century
- A fireside conversation on space data for water management
- Roundtable #1 — How space helps science better understand the water cycle
- Roundtable #2 — How countries effectively leverage satellite data for water resource management
- Roundtable #3 — Financing instruments for space-based water projects
- Networking lunch



SUPPORTING ORGANIZATION

UNOOSA



United Nations
Office for Outer Space Affairs

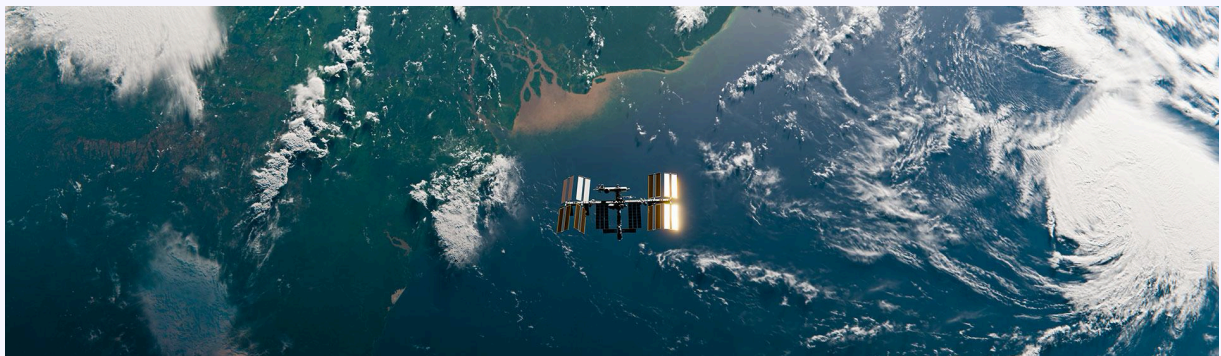
The United Nations Office for Outer Space Affairs (UNOOSA) is the United Nations office responsible for promoting international cooperation in the peaceful uses of outer space. Established in 1958 and based at the Vienna International Centre in Vienna, Austria, it is part of the United Nations Secretariat.

UNOOSA works to advance international cooperation in the exploration and use of space, and to harness space science and technology for sustainable economic and social development - assisting United Nations Member States, particularly developing countries, in building their space capabilities. It serves as the secretariat for the Committee on the Peaceful Uses of Outer Space (COPUOS), the only General Assembly committee dedicated exclusively to this field, and helps implement the major international treaties, legal principles and resolutions that together form the body of space law.

Its operational roles also include maintaining the United Nations Register of Objects Launched into Outer Space, running the United Nations Programme on Space Applications, hosting UN-SPIDER - the platform for space-based disaster management and emergency response - and supporting the International Committee on GNSS¹.

UNOOSA supports the Space4Water Conference as part of its broader mission to strengthen international cooperation in space and to put space science and technology at the service of sustainable development worldwide.

www.unoosa.org



¹ Global Navigation Satellite System



UNDER THE PATRONAGE OF

Ministry of Higher Education, Research and Space



The French Ministry of Higher Education, Research and Space (Ministère de l'Enseignement supérieur, de la Recherche et de l'Espace) is the government department responsible for France's policies on higher education, scientific research, and - since October 2025 - space.

The Ministry prepares and implements the government's policy on higher education and student life, proposes and coordinates national policy in the fields of research and technology. Under the decree of 29 October 2025 defining its remit, it also prepares and implements France's space policy, excluding activities conducted in the interest of national defense. In this capacity, it leads the public policies that support students, higher-education institutions, research organizations, and the wider French scientific and space ecosystem.

Space research sits at the crossroads of major scientific, strategic, economic and environmental challenges, and the Ministry oversees France's national space effort - including the space component of the France 2030 investment plan, which supports the transformation of the French space sector and the development of new markets.

The Space4Water Conference is held under the patronage of the Ministry, reflecting the growing importance of satellite data and space applications in addressing water and climate challenges - and the Ministry's role in advancing France's scientific and space ambitions.

www.enseignementsup-recherche.gouv.fr

HOST OF THE CONFERENCE

IPGP



Institut de Physique du Globe de Paris (IPGP) is a major French institution for higher education and research in Earth and planetary sciences, located in Paris. Created in 1921 by decree within the University of Paris, it is today a component institution of Université Paris Cité and one of the largest CNRS² research units in France.



IPGP conducts research in all fields of solid Earth studies - combining observation, experimentation, laboratory analysis and measurement, and the construction of conceptual, analog and digital models. Its research teams work across four main themes: Interiors of the Earth and Planets, Natural Hazards, Earth System, and Origins. The institute brings together around 500 researchers, engineers, technicians and students from all over the world.

Beyond fundamental research, IPGP has a permanent observation mission on behalf of the French State. It is responsible for monitoring France's active volcanoes - La Soufrière in Guadeloupe, Mount Pelée in Martinique and Piton de la Fournaise in Réunion - as well as managing the worldwide GEOSCOPE network of seismological stations and contributing to the global Intermagnet network of magnetic observatories. It is also a CNES³ space laboratory, reflecting its long-standing involvement in space missions dedicated to observing the Earth and other planets.

As host of the Space4Water Conference, IPGP provides both the venue and the scientific setting for a day of dialogue on the use of satellite data for sustainable water management - a natural fit for an institution devoted to observing the Earth system and understanding natural hazards.

www.ipgp.fr

² French National Centre for Scientific Research (Centre national de la recherche scientifique)

³ French Space Agency (Centre national d'études spatiales)



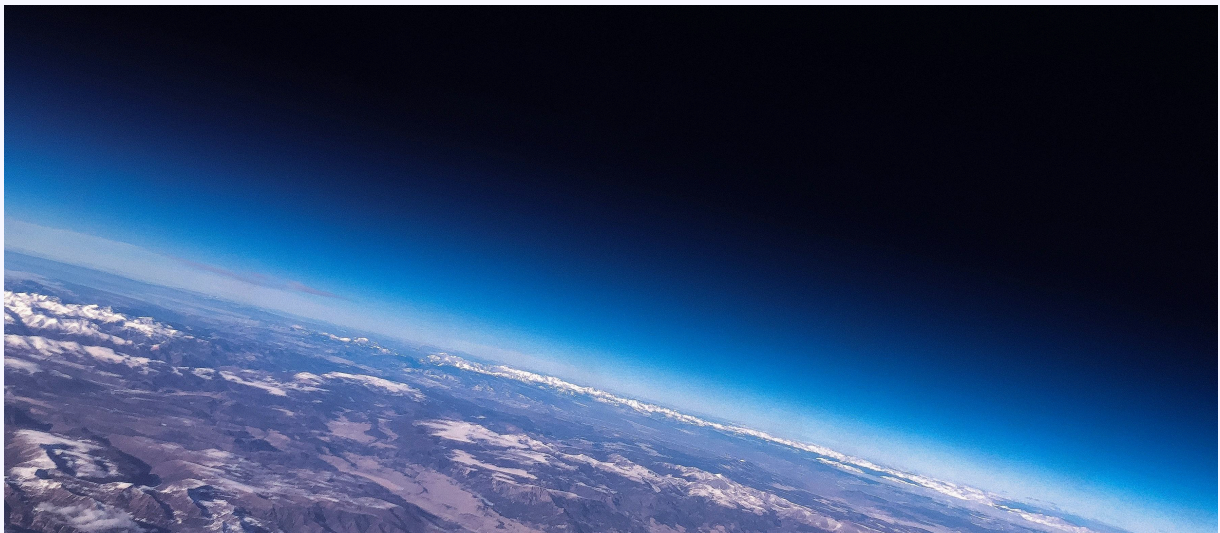
CO-ORGANIZER

BLConsulting


BL Consulting
Middle East

BLConsulting is an independent advisory firm supporting governments, institutions, and strategic industries across space, defense, and sovereign transformation.

The firm advises public and private decision-makers on some of the most strategic questions in the space sector - from digital sovereignty and resilient satellite communications architectures to space-based intelligence and geospatial data exploitation, GNSS⁴ resilience, space governance and public policy, space traffic management, and space defense. Its work is centered on helping states and operators build and protect sovereign space capabilities.



BLConsulting's distinctive strength lies in its leadership. The firm brings together former senior executives, military leaders, agency directors, entrepreneurs, and sector specialists to deliver independent, high-impact advice at the highest level.

As a co-organizer of the Space4Water Conference, BLConsulting brings its expertise in space strategy and sovereign capabilities to a dialogue on how satellite data can serve sustainable water management - connecting the space and water communities around shared strategic challenges.

www.blconsulting.space

⁴ Global Navigation Satellite System



CO-ORGANIZER

BWI



Blue Water Intelligence (BWI) is a French company founded in 2022 in Toulouse, France specializing in hydrological forecasting. The company develops solutions to forecast river flows and, if conditions are reunited, water levels, worldwide, by combining satellite and in-situ data, hydrological modeling and artificial intelligence.

At the core of BWI's approach is the concept of "virtual stations" - digital measurement points that provide forecasts across river networks, including in areas where physical monitoring is limited or unavailable.

By integrating multiple data sources, and advanced modeling powered by machine learning and neural networks, BWI delivers scalable and consistent hydrological information across space and time, supporting a better understanding of water dynamics at basin scale.

BWI's solutions support public authorities and governments, hydropower operators, agriculture stakeholders, civil engineering companies, insurance corporations, and other organizations and private stakeholders in:

- anticipating floods,
- building hydrological knowledge,
- optimizing water resource management,
- supporting informed decision-making in a context of increasing climate variability.



Designed as the perfect complement to existing monitoring systems such as ground sensors, and to feed legacy information systems such as GIS⁵ or SCADA⁶, virtual stations enable rapid deployment, flexibility and reduced operational constraints, without the need for additional physical infrastructure.

BWI is also behind the REVALTO⁷ space mission, a next-generation radar altimetry constellation aimed at improving the monitoring of inland water bodies through high-revisit surface water elevation measurements. Through its technologies, BWI contributes to strengthening water security, climate resilience, disaster preparedness and data-driven water management worldwide.

www.bwi.earth

⁵ Geographic Information System

⁶ Supervisory Control and Data Acquisition

⁷ REVisiting ALTImetry hydrOlogy



United Nations
Office for Outer Space Affairs



**MINISTÈRE
DE L'ENSEIGNEMENT
SUPÉRIEUR,
DE LA RECHERCHE
ET DE L'ESPACE**

*Liberté
Égalité
Fraternité*



BL Consulting
Middle East

blue
WaterIntelligence