OPEN DATA & OPEN KNOWLEDGE Workshop
The Space4Water Project

16 June 2023
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www.space4water.org
www.unoosa.org
Contents

- Vision
- Background (Who, When, Why, What)
- Project Pillars
  - Portal
  - Community
  - Conferences
VISION

Enable all stakeholders in the space & water communities to access data and knowledge, to be creative & to realize their full potential in contributing to a world in which the availability and sustainable management of water and sanitation for all has become a reality.
The Partners

- 2016
  - UNITED NATIONS Office for Outer Space Affairs

- 2018
  - Space4Water Portal

- 2020
  - Agreement until 2026

www.space4water.org
Why Space4Water

Water stress, global
Source: World Resources Institute
Space4Water and the Water Action Decade

Knowledge needed to this end can be created by

- disseminating, and facilitating access to knowledge and the exchange of good practices;
- generating new information relevant to water-related SDGs;
- pursuing advocacy, networking and promoting partnerships and action; and
- strengthening communication actions at various levels for the implementation of the water-related goals.

- establishing the link between researchers and policy makers, to inform decision making with scientific results, to be able to act appropriately within the international community.
- A multi-stakeholder platform for interdisciplinary knowledge exchange
- Making information on space solutions and technologies for water-related topics accessible
- A capacity-building platform
- A portal for expert communities, including those from developing countries
Actors, Features & Resources

www.space4water.org
Shared Resources

- Capacity Building and Training Material
- Programming for Geospatial Hydrological Applications
- QGIS et Applications en Hydrologie
- Webinar: Groundwater for Water Security in Africa
- FAO CBA: Use of FAO WaPOR Portal
- Water Productivity and Water Accounting using WaPOR
- Introduction to Modflow and Model Use
- Data Sharing for Water Sector Organisations using Spatial Data Infrastructures
- Computational Hydraulics
- Online Course on Remote Sensing for Agricultural Water Management
- Water Quality Assessment
- Water Accounting + Online Training
- Afri Alliance Knowledge Hub
- Data Sharing for Water Sector Organisations using Spatial Data Infrastructures

Vision

IHE Delft Institute for Water Education envisions a world free of poverty and injustice, in which people manage their water and environmental resources sustainably and equitably.

Mission

IHE Delft works in partnership to strengthen capacity in the water sector to achieve global sustainable development.

Ambition

Through our overarching work on capacity development, IHE Delft aims to make a tangible contribution to achieving all Sustainable Development Goals in which water is key.

Education

IHE Delft offers a wide range of accredited educational programmes (MSc), tailor-made training & online training courses for engineers, scientists and managers working in the water, environment and infrastructure sectors. IHE Delft is implementing its educational activities with partner institutes.

Research and Innovation

The Institute’s research activities focus on and contribute to the knowledge base concerning the water environment, and therefore complement its educational and capacity development activities. With
Monthly articles

Monthly interviews
Indigenous voices - water challenges - space-based solutions
## Portal Content Statistics

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<th>As at 31 Dec 2019</th>
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Actors Map
Thematic Focus

Stakeholders

Professionals / Young Professionals
Ontology visualisation / Knowledge graph
Ontology visualisation / Knowledge graph

filter

show related terms

show content per term and type of resource
Communities of Practice

“Groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis.”

- Wenger et al. (2002, p. 4)
Community of Interest

- Further a common cause
- Sharing information or knowledge
- Interactively pursuing informed courses of action

Community of Practice

- Participation, interaction, negotiation of shared objectives, and developing knowledge
- Commitment from members
- Regular communication with and interaction between members
- Improved processes and practices
- Group learning in order to accomplish objectives
- More competent and capable professionals
Space4Water – 5 years of community building

Successes

✓ **Integrative**: Stakeholders and professionals sharing information and knowledge (local, regional and global level)

✓ **Inclusive**

✓ Geographic diversity and gender balance

✓ Various formats and skill levels: Science communication for non-scientist users via articles, success stories and interviews

✓ Constantly growing user and resource base

✓ Covering relevant thematic aspects on space technologies for water resource management

Challenges

❑ **Increase Interactivity** among actors

❑ Administrative efforts (lack of standardisation, consent for publication)

❑ **Encourage participation** (Missing incentives for calls to collect users needs & assess gaps)

❑ **Transfer technology / learning** and develop new solutions

❑ Capacity building perspective (funding)
Participatory workshop for Indigenous women on their roles and responsibilities related to water

- 6 women from 6 communities and countries

Objectives:
- Active exchange on the ways Indigenous communities relate to water
- Capacity building: what can be done using space-based solutions
- Identification of user needs towards the space sector
- Bringing identified user needs to the Space4Water stakeholders
- Deriving from that requirements for the space sector to develop applications by which Indigenous communities can be supported
Next Steps: Space4Water Community Building

- How to assess technological readiness of space-based solutions, applications, models, etc?
- Can we develop / do we need a competency framework for the (geo)spatial and water sectors?
- How can we assess capacity collaboratively without being on site for years?
- How can we support or facilitate in situ data collection to ground truth space-based datasets?
- How can we co-develop space-based solutions for water-related challenges
High-level participation
838 registrations
29% women
Participants from 99 countries
24h of content presented
107 speakers, with 76 males and 31 females
Participant rating: 4.48 of 5 points
Reports

- A/AC.105/C.1/2022/CRP.15
  The Space4Water Project: Community building

- A/AC.105/1268
  Report on the United Nations/Ghana/Prince Sultan bin Abdulaziz International Prize for Water Fifth International Conference on the Use of Space Technology for Water Management

- A/AC.105/1272
  Report on the first Space4Water Stakeholder Meeting

- A/AC.105/2023/CRP.22
  Report on the second Space4Water Stakeholder Meeting
Join Space4Water

Register as a stakeholder

Become a featured (young) professional

www.space4water.org
Thank you

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