WMO OSCAR/Surface and WSI webinar for RA VI

02 September 2025, 14:00-16:00 CEST

1. Introduction

Metadata management is fundamental to the effective functioning of any observational network or data management and sharing system since nothing operates reliably without it. It ensures that data is well understood, trusted, and usable across a wide range of applications. The WMO's Observing Systems Capability Analysis and Review (OSCAR) tool provides a standardized, globally recognized platform for managing metadata.

The WMO OSCAR/Surface platform (link) is a critical component of the WMO Integrated Global Observing System (WIGOS). It serves as a comprehensive metadata database for surface-based observational data, supporting global weather, water, and climate monitoring, forecasting and research. The primary objectives of the OSCAR/Surface platform include metadata management, and standardization for surface-based observing stations worldwide, facilitation of consistency and interoperability, and accessibility of metadata for various stakeholders, including meteorologists, hydrologists, researchers, and policymakers. The OSCAR/Surface platform supports reliable hydrological data exchange and access at national, regional, and international level by enabling users within and outside the WMO community to perform gap analysis of their observing networks.

2. Rationale

WMO experts conducted a global pilot in 2023 involving the testing of WIGOS Station Identifiers (WSIs) and registration of hydrological stations in an OSCAR/ Surface test platform. The pilot was successful and demonstrated that OSCAR/Surface is ready for the registration of hydrological stations. The pilot included participation of experts from over 30 countries and 3 data centers drawn from different regions including Regional Association VI (Europe).

Raising awareness among Members in Regional Associations (RA) about the registration of hydrological stations in OSCAR/Surface and the allocation of WSIs is critical towards increasing the number of stations in OSCAR/Surface and the adoption of unique station identifiers at global level.

To further advance the integration of hydrology in WIGOS tools (key tools utilized by WIGOS to facilitate the integration and management of global observing systems) and to promote international data sharing, the RA VI Coordination Panel on Hydrology (RA VI HCP) and the RA VI Working Group on Observations, Infrastructure, and Information Systems (RA VI WG-I) together with the Expert Team on WIGOS Tools and Regional WIGOS Centres (through the subgroup on WIGOS Tools for Hydrology (WT4H)) are planning an online webinar session on 2 September 2025.

3. The objectives of the webinar

The webinar aims to raise awareness of the benefits of WIGOS tools and promote their operational use within the Hydrological Services. WIGOS offers a standardized approach to managing station metadata, gathering user requirements for observations, maintaining a centralized repository of observational stations with globally recognized WIGOS identifiers, and monitoring network performance in terms of data availability, quality, and timeliness. It also supports the management of issues and incidents related to observational data.

The webinar will also inform the participants of the steps for assigning WIGOS Station Identifiers to hydrological stations and registration of hydrological stations on the OSCAR/Surface Platform and gathering the required metadata for the observing stations, logging and registering stations. Additionally, it will also demonstrate the connection of these activities to GBON, RBON, WIPPS and contribution to WHOS, HydroSOS and applications leading to hydrological products and services.

4. Expected outcome

By the end of the webinar, the participants are expected to understand OSCAR/Surface, allocation of WSI and their connections to GBON, RBON and other WMO initiatives.

5. Target audience

The webinar will be open to all the Hydrological Advisers, hydrological experts, metadata editors and OSCAR/Surface National focal points, and any other interested participants from RA VI.

6. Format of webinar

The webinar will be conducted virtually and will include presentations, discussions, and demonstrations (nominated focal points will be later trained on OSCAR/Surface (link to training). It will be delivered in English with no interpretations, recorded and a link to the recording will be shared with participants afterward.

7. Agenda

Allocated Time	Item	Speakers
14:00-	Opening session	TBC
14:15	Welcome/opening remarks	
(15 mins)	 Webinar objectives 	
	Strategic statement on OSCAR/Surface	
14:15-	Introduction to WMO data systems	TBC
14:45	 Overview of WIGOS tools and Regional WIGOS Centers and 	
(30 mins)	their contributions to RBON/GBON, WIS2.0, WIPPS, etc.	
	o Q&A	
	 Hydrology data infrastructure description, WHOS/WIS2.0 	
	and HydroSOS	
	o Q&A	
14:45-	OSCAR/Surface and WSI	TBC
15:40	Introduction to OSCAR/Surface, registration of users and	
(55 mins)	navigating (search capabilities as metadata database tool)	
	the OSCAR Surface GUIs	
	○ Q&A	
	Allocation of WSI for hydrology	
	○ Q&A	
	 Instructions for registration of hydrological stations 	
	○ Q&A	
15:40-	Closing session and Next Steps	TBC
16:00	 Next steps 	
(20 mins)	 Closing remarks 	