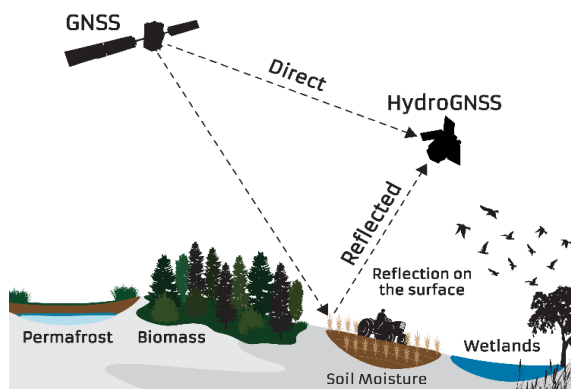


3rd ESA Scout HydroGNSS User Workshop 20th November 2026 Hybrid ECSAT / Online

Location: Magali Vaissiere Conference Centre (MVCC), ESA ECSAT, Didcot OX11 0FD, UK

<https://nikal.eventsair.com/3rd-esa-scout-hydrognss-user-workshop/>



ESA HydroGNSS Scout Mission

Complementing the well-established series of Earth Explorer research satellite missions, Scout missions are a new component of ESA's Earth Observation FutureEO programme. This family of small satellites delivers value-added science under a limited budget and rapid schedule.

HydroGNSS will improve our knowledge of Earth's hydrological cycle, and in turn, improve our understanding of natural processes and the way human activity affects land and water. The mission senses signals reflected by Earth's surface from the Galileo and GPS navigation satellites using a technique called GNSS reflectometry. As well as established measurements, HydroGNSS introduces new techniques including coherent channel, dual polarisation and dual frequency (L1/E1 and L5/E5a) to improve resolution and help separate hydrological variables.

The measurements allow for the observation of climate variables such as soil moisture, inundation and wetlands, freeze-thaw over soil and permafrost, and above-ground biomass, with secondary products of ocean wind speed and sea ice extent. HydroGNSS comprises two 75 kg small satellites, orbiting Earth at an altitude of 530 km. The satellites were launched in November 2025, with a planned 5-year lifetime.

HydroGNSS Website: <https://hydrognss.org>

Mission Animation: <https://tinyurl.com/hydrognss>



Hybrid Workshop and Registration

This workshop will introduce the HydroGNSS mission, the satellites, the instruments and the ground segment, the new measurements available, and their use for scientific retrieval of geophysical products. The products available at Data Levels 1, 2 and 3 are described, their relationship to Essential Climate Variables (ECVs), and the progress with calibration and validation of the results. The discovery data, sample scripts and test data will be presented, and a round table of how future HydroGNSS products can be accommodated alongside other data into climate and meteorological models to improve hydrological and climate knowledge.

This workshop will be an all-day event, jointly run by SSTL and ESA. It is aimed at potential users of HydroGNSS measurements for climate and meteorological models, researchers working in complementary EO missions, and those with an interest in GNSS reflectometry as a sustainable Earth Observation technique through the use of small satellite constellations.

Please follow [the link here](#) to register for your participation in the event. Participants may select to attend in person at ESA ECSAT or attend on-line.

Please note this webinar will be recorded.

The recording of this webinar may be made publicly available and hosted on the SSTL website and SSTL YouTube channel for online viewing and promotional purposes.

