

Webinar Series



Constructing a Digital Environment

Topic: The Scout-2 HydroGNSS Microsatellite Mission

Speaker: Martin Unwin, Surrey Satellite Technology Ltd

Time: Friday 20th May 11:00GMT

Registration:

https://ukri.zoom.us/webinar/register/WN_9odfE46BQI63U0wTm24Gzg

Scout missions are a new Element in ESA's FutureEO Programme, demonstrating science from small satellites, with a three year launch schedule, under a limited budget. Data will be made available freely using a data service delivery approach. HydroGNSS has been selected as the second ESA Scout Earth Observation mission, primed by Surrey Satellite Technology Ltd, with support from a team of scientific institutions. The microsatellite uses established and new GNSS-Reflectometry techniques to take four land-based hydrological climate variables; soil moisture, freeze/thaw, inundation and biomass. The initial project is for a single satellite in a near-polar sun synchronous orbit at 550 km altitude that will approach global coverage monthly, but an option to add a second satellite has been proposed that would halve the time to cover the globe, and eventually a future constellation could be affordably deployed to achieve daily revisits.



The NERC Constructing a Digital Environment (CDE) programme is running a series of online Webinars, aiming to develop the digitally enabled environment, benefitting scientists, policymakers, businesses, communities and individuals. The webinar series seeks to showcase the latest expertise in digital technology and methodologies applied to the environment, illustrating 'the arc' from data gathering, its management and curation, analysis and presentation to decision makers, covering topics such as distributed networks of sensors, new sensor technology, novel forms of data informatics (e.g. data lakes, data cubes), data analytics, uncertainty, data labs, apps, skins and tools to support decision makers across the society.

