

Opportunity name: NERC TWINE demonstrators: digital twins for environmental science

Meeting Date: 9 November 2023

Application Reference	Project Title	Research Organisation	Outcome
11577	A digital twin of Svalbard's 21st Century Cryosphere (SvalbardCryo-DT)	University of Aberdeen	Unsuccessful
12516	Digital Twin 4 East African Flooding	UK Centre for Ecology & Hydrology	Unsuccessful
12644	Creating a digital twin of soil moisture storage from Remote Sensing (Twist-RS)	University of Edinburgh	Unsuccessful
12716	InterTwinES - Interoperable, Interdisciplinary, Interconnected, Integrated Digital Twins for Environmental Science	University College London	Unsuccessful
12772	Near Real-Time Global Carbon Budget (NRT-GCB)	University of Exeter	Unsuccessful
12787	SPLASH: digital approaches to predict wave hazards	University of Plymouth	Successful
12879	Synchronising Earth Observation and Modelling Frameworks Towards a Digital Twin Ocean (SyncED-Ocean)	Plymouth Marine Laboratory	Successful
13438	Forest Resilience Digital Twin Demonstrator (FReDo)	Bangor University	Unsuccessful
13526	FLOODTWIN	University of Hull	Successful
13833	Virtual Integration of Satellite and In-Situ Observation Networks (VISION)	University of Cambridge	Successful
14075	A digital twin of Antarctic ice shelves (DT-Ice)	Lancaster University	Unsuccessful
14156	A Novel Multisource Data Integration Framework for Digital Twinning Forests	University of Southampton	Unsuccessful
14868	MAS-DT	National Oceanography Centre	Successful
15262	DIGital twin COAST: Monitoring, Measuring and Modelling coastal processes under a changing climate (DIGICOAST-M3)	Imperial College London	Unsuccessful
15435	Modelling environmental variation and animal landscape use in recovering tropical forests	Bournemouth University	Unsuccessful
15671	TwinTurtle: demonstrating the potential for digital twins in precision conservation.	University of Aberdeen	Unsuccessful

16686	Digital twin of the lower Dnipro river following the loss of the Nova Kakhovka Dam		Unsuccessful
16749	DeltaGuard: Advancing Resilience through Integrated Digital Twins for Water Hazard Management of the Vietnamese Mekong Delta	Middlesex University	Unsuccessful
16933	A digital twin for invasive pest control in a changing climate: a case study of oak processionary moth	Newcastle University	Unsuccessful
17142	AquaTwin: Unleashing the Power of Digital Twins for Water Quality Management	UK Centre for Ecology & Hydrology	Unsuccessful
17245	VALID: aVian hAbitat digital twin Demonstrator	Durham University	Unsuccessful
17542	Digital Twins PiSL	University of Nottingham	Unsuccessful
17599	Catchment InSights	The Alan Turing Institute	Unsuccessful
17947	FARM-Bespoke Digital Twins for risk informed farm monitoring and investment: FAB-DT	Rothamsted Research	Unsuccessful
18130	SWIFT-DT: Surface Water Flood Forecasting Digital Twin Demonstrator	University of Edinburgh	Unsuccessful
18178	HESTIA: Human-Digital Twins Teaming for NetZero and Decarbonisation Debts Analysis of Thermal Insulations Inefficiencies of Urban Premises	University of Birmingham	Unsuccessful
18348	Enhancing climate-resilient drinking water: a digital twin integrating nature-based solutions and Earth Observations	University of Exeter	Unsuccessful
18766	Developing a Predictive City-Wide-Scale Digital Twins System to Mitigate the Impact of Climate Change	Queen's University Belfast	Unsuccessful
18840	Metrological Prediction Of Land Cover and temperature changes In Space and time (MetroPOLIS)	Brunel University London	Unsuccessful
19016	Leveraging AI and satellite imagery for building agricultural digital twins	The Alan Turing Institute	Unsuccessful