

Co-creating Operational and Strategic Modelling Systems to Reduce Economic and Societal Impacts of Coastal Hazards



The South West Partnership for Environment & Economic Prosperity (SWEEP) is a partnership of three research institutions, University of Exeter, Plymouth University and Plymouth Marine Laboratory. SWEEP has secured a £5m award to work with businesses, policy makers and other organisations in the region to help them enhance their activities and decisions by applying the latest technological advances, scientific research and understanding of the environment.

Many businesses in the South West are reliant on natural resources such as land, air, fresh water and seas to be successful. More than half of all jobs in the South West are directly dependent on this 'natural capital', but the area is vulnerable to natural hazards such as extreme weather, flooding, and pollution.

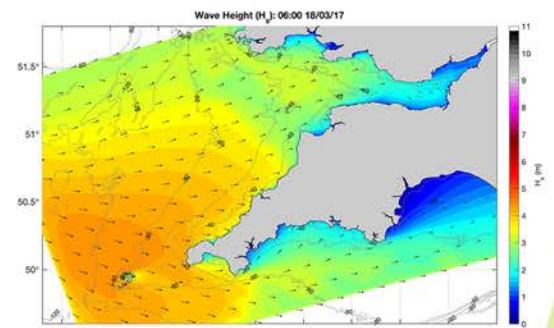
Funded by the Natural Environment Research Council (NERC), SWEEP will allow experts and stakeholders to work together to solve some of the challenges faced when working with natural resources. Plymouth University will lead collaborations focused on coastal and marine environments.

The Plymouth University contribution to SWEEP will be led by Prof. Martin Attrill (marine) and Prof. Gerd Masselink (coastal) working with the Marine Institute and the Coastal Processes Research Group.

**DISCOVER
WITH
PLYMOUTH
UNIVERSITY**

Businesses, policy makers and organisations in the region have already invested £11m of their own funding in the project. These partners include South West Water, Network Rail, the National Trust, RSPB, the Dartmoor National Park, Defra, Natural England and the Environment Agency.

Our first project will see the development of an operational real-time storm impact model designed to provide detailed forecasts of storm events and coastal hazards. Such a resource will provide the tool from which a range of valuable storm impacts can be analysed.



Example model grid and wave height prediction for the South West

We are actively looking to engage and work with businesses and organisations to ensure our output is tailored to be of the greatest benefit to all.

Please get in touch to discuss possible projects and how we can help you get the most out of the natural capital across the South West.

Dr. Tim Poate
timothy.poate@plymouth.ac.uk
44 (0)1752 586181

Dr. Chris Stokes
christopher.stokes@plymouth.ac.uk
44 (0)1752 586177