

Pioneering research offers new insight into improved wave energy testing

March 24 2014

Pioneering research could provide a significant boost in the vital quest to harness wave power as a viable renewable energy source for the future.

Scientists from the University of Exeter have studied how wave <u>energy</u> developers can more accurately measure, and predict the wave conditions within wave <u>energy test</u> sites.

The research, which is published in leading scientific journal *Energy*, deployed wave measurement buoys and used wave modelling to show how variations in wave size and strength could be resolved.

The results should aid developers to better predict sea conditions within wave energy test sites, which is the crucial factor governing how much energy can be produced.

This latest study is part of ongoing research by the University and key partners into waves as a <u>renewable energy source</u>. With ongoing support from the Regional Growth Fund, these methods are now being applied to the Wave Hub and FabTest energy test sites in Cornwall, to support industrial partners testing at these sites.

The research has been co-authored by Dr Ian Ashton and Dr Lars Johanning, both from the Renewable Energy department based at the University of Exeter's Penryn Campus in Cornwall and was supported by the National Environmental Research Council (NERC) Flowbec project.



Dr Ashton said: "This research forms part of our work to support developers get the most out of the world class marine energy test facilities and measurement infrastructure that we have in Cornwall, and it is great to be able to support the development of this industry'.

Provided by University of Exeter

Citation: Pioneering research offers new insight into improved wave energy testing (2014, March 24) retrieved 23 April 2024 from https://phys.org/news/2014-03-insight-energy.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.