



## **Extreme wave events in Ireland: 2012 - 2016**

Frederic Dias (1), Laura O'Brien (1), Emiliano Renzi (2), and John Dudley (3)

(1) University College Dublin, Belfield, Ireland (frederic.dias@ucd.ie), (2) Loughborough University, UK, (3) Institut FEMTO-ST, UMR 6174 CNRS-Universite de Franche-Comte, France

In 2013, O'Brien et al. published in *Natural Hazards and Earth System Science*, 13, 625-648, a paper entitled "Extreme wave events in Ireland: 14 680 BP - 2012". This paper provided the first catalog of extreme waves around the island of Ireland. Here we extend and update this work, with an emphasis on events that led to coastal boulder transport. New data has highlighted the huge number of storm surges that have occurred in Ireland. We therefore incorporate storm surges as an additional category of extreme waves in Ireland. Our study includes new events that have been identified prior to 2012 and extends the catalogue out to 2016. The severity of weather during the winters of 2013-14 and 2015-16 has also led to a number of extreme wave events, including on the Aran Islands.