

The Extreme Waves Map of Ireland

Ireland is battered by waves from all sides and has suffered many extreme oceanic events. From one of the largest known underwater landslides in the world at Storegga to the tragedy of the Fastnet Yacht race; from tsunamis in Kinsale to the navy vessel *Róisín* battered by rogue waves, it is clear that Ireland has experienced a wide variety of ocean extremes. This map presents the first catalogue of such events, dating as far back as the turn of the last ice age. Detailed studies of this kind are important both to understand the science of the ocean wave environment of Ireland, and also for applications such as improving the safety of shipping and coastal structures, and generating renewable energy from the sea. They can also provide new insights into myths and legends, and the origin of many unexplained features of our natural environment.



Legend

Storm Waves

- S1 1837, 1861, 1894, 1935, 1987, 1988 and 1989
The Mullet Peninsula, Co. Mayo
- S2 1869 and 1881: Calf Rock, Co. Cork
- S4 1864: Valentia, Co. Kerry
- S5 1877: Railway Lines, Co. Dublin and Co. Wicklow
- S6 1899: Greenore, Carlingford Lough, Co. Louth
- S7 1941: Inisheer Lighthouse, the Aran Islands
- S8 1945: Rosslare, Co. Wexford
- S9 1951: Kilkee, Co. Clare
- S10 1953: the Aran Islands
- S11 1962: Co. Cork
- S12 1974: Kilmore, Co. Wexford
- S13 1979: Fastnet Race
- S14 1982: Ventry, Co. Kerry
- S15 1985: Fastnet Rock Lighthouse

Tsunamis

- T1 14,680 BP: the Barra Fan, Peach Slide
- T2 8200 BP: Storegga slide
- T3 1755, 1761, 1941 and 1975:
The Lisbon, Portugal tsunamis
- T4 1767: The River Liffey, Dublin
- T5 1841: Kilmore, Co. Wexford
- T6 1854: Kilmore, Co. Wexford
- T7 1894: Galway Bay and The Atlantic
(*Festina Lente* and *Manhattan*)
- T8 1922: Ballycotton, Co. Cork
- T9 1909: Westport Quay, Co. Mayo
- T10 1910: Cork, Waterford, Southampton,
Jersey, Dublin and Ilfracombe
- T11 1912: Bray, Co. Wicklow
- T12 1932: Inishowen, Co. Donegal

Rogue Waves

- R1 1852: Inis Mór, The Aran Islands
- R2 1883: Youghal, Co. Cork
- R3 1899: Kilkee, Co. Clare
- R4 1914: Iniskeeragh, off Donegal
- R5 1936: Dundalk, Co. Louth
- R6 1972: Mullaghderg, Donegal
- R7 2004: L.E. *Róisín*, off Donegal coast
- R8 2006: off Portrush, Co. Antrim
- R9 2006: Ardglass, Co. Down
- R10 2007: Doonbeg, Co. Clare
- R11 2007: Valentia Island, Co. Kerry
- R12 2011: Swanland, off Bardsey Island, Irish Sea
- R13 2011: Largest wave recorded in Ireland



Extreme wave events in Ireland: 14680 BP–2012
L. O'Brien, J. M. Dudley and F. Dias. *Nat. Hazards Earth Syst. Sci.*, **13**, 1–24, 2013

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