

Exploring Our Marine

Making Waves

- Waves are most commonly caused by wind. Surface waves are created by the friction between wind and surface water. As wind blows across the surface of the ocean, the continual disturbance creates a wave crest. The stronger the wind; the larger the waves.
- The Irish Marine Data Buoy Observation Network, managed by the Marine Institute, measures wind speed and direction, pressure, air and sea surface temperature and wave statistics. During Storm Ophelia in October 2017, the M5 Data Buoy recorded a wave off the south east coast of Ireland measuring a height of 17.81 metres – that's almost the height of a six-storey building!
- The gravitational pull of the sun and moon on the earth also causes waves, known as tides. In Ireland, there are two high tides and two low tides every day. The Irish Tide Gauge Network, operated by the Marine Institute, monitors tide levels around the Irish coast.
- Waves and other oceanographic data is included in ocean forecast models. Ocean forecasts provide vital information to users in the fishing, aquaculture, ocean energy and environmental sectors. They also help improve our ability to rescue people at sea, predict the path of oil spills and forecast the track of harmful algal blooms that can have a negative impact on several industries.



Foras na Mara
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