

# New data reveals significance of Perth super storm

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Two drifting wave buoys deployed along the coast of Western Australia by researchers at The University of Western Australia have highlighted the significance of Perth's recent super storm, recording massive waves along 1000km of WA's coastline.

The research buoys, located 500km south-west of Cape Leeuwin and 350km north-west of Geraldton provided accurate and [real-time data](#)

across a vast section of WA's coastline during the storm.

Dr. Jeff Hansen from UWA's School of Earth Sciences said the buoys recorded waves more than 9m high in the south and waves above 7m lasting almost a full day in the north, with some individual waves likely reaching 20m in height.

"While waves of this size are not unheard of in the Southern and Indian Oceans, it is very uncommon for waves this high to simultaneously occur over such a large area like as WA's coast, while also lasting for a substantial period," Dr. Hansen said.

"With recent Perth storms causing many beaches to severely erode, the data from these buoys provided important information about how much energy from the ocean was impacting the coastline."

Both research buoys transmit live wave data such as height, period and direction to an interactive website, which is available for the public to view.

Despite the buoys being perfectly placed to capture the data during the storm, they were originally deployed for research projects focusing on the suitability of low-cost wave buoys for real-time wave observations and improving wave forecasts which are critical for a range of industries and the public.

"The first [buoy](#) was originally placed in the Perth Canyon offshore from Rottnest Island while the second was deployed in Bremer Canyon off WA's South Coast," Dr. Hansen said.

"The first buoy drifted south reaching its position 500km southwest of Cape Leeuwin while the second has drifted 1500km to its current location offshore of Geraldton, ultimately both were perfectly placed to

measure the open water waves associated with the [storm](#)."

Dr. Hansen worked in collaboration with Dr. Mike Cuttler, Professor Ryan Lowe and Professor Phil Watson from UWA's Oceans Graduate School to undertake the research project.

Supported by OceanWorks, an initiative to promote innovation in ocean research, and the Integrated Marine Observation System, the buoys are part of studies that combine scientific curiosity with clever, cost-effective engineering.

As the wind dies down and the clouds clear, the two solar-powered buoys will continue drifting hundreds of kilometers offshore, collecting more information about the WA coast as part of ongoing studies.

Provided by University of Western Australia

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