# Giant ocean eddy shadows Sydney

March 25 2008

The giant ocean eddy that cooled Sydney's shores a year ago has been superseded by another 300 km diameter giant.

CSIRO Wealth from Oceans National Research Flagship scientist, Dr David Griffin, says the 'birth' of the eddy has been traced to last August.

"From satellite maps of sea-level we can see that it had been loitering this side of Lord Howe Island for some time and began approaching the NSW coast near Christmas," Dr Griffin says.

"It remained stationary during January and simply grew larger but, because it remained offshore, less people would have noticed its impacts on water temperatures."

The cold water at the new eddy's centre has welled up about 500m from the ocean depths.

"In the southern hemisphere, a cold eddy has to rotate clockwise," Dr Griffin says. "This one completes a full revolution every 10 days and the sea level at its centre is reduced by nearly 1m, which is how researchers can tell where the eddy is."

Four people who definitely noticed the eddy were the crew who rowed across the Tasman Sea from New Zealand in late December. Skirting its southern boundary, they received a homeward boost of 3km/h or more.

"The eddy appears to be on the wane now and the question of interest for

oceanographers is what have been the factors that influenced its development and led to its evolution into an ocean feature approaching the size of Tasmania," Dr Griffin says.

Instruments that detect the height of the world's oceans are carried by satellites such as Jason-1 (Jet Propulsion Laboratory-NASA and the French Space Agency CNES) and the European Space Agency's Envisat. These are valuable aids to scientists developing ocean forecasting systems such as Australia's BlueLINK.

Source: CSIRO

Citation: Giant ocean eddy shadows Sydney (2008, March 25) retrieved 26 April 2024 from https://phys.org/news/2008-03-giant-ocean-eddy-shadows-sydney.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.