

## Voyage SS03-2007

Australia

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Deep-ocean Tsunami Detection Buoy (DART) deployment for the Australian Tsunami Warning System (ATWS)

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The Australian Tsunami Warning System (ATWS) is a national effort between the Australian Bureau of Meteorology, Geoscience Australia and Emergency Management Australia to provide a comprehensive tsunami warning system capable of delivering timely and effective tsunami warnings to the Australian population by 2009.

In early April 2007 the ATWS partners deployed Australia's first tsunami warning buoy from RV *Southern Surveyor*. The buoy was deployed in the Tasman Sea adjacent to New Zealand's Puysegur Trench in approximately 5000m of water.

On arrival at the deployment site RV *Southern Surveyor* undertook a high resolution swath survey of the sea bed to determine the most appropriate location for the buoy. The buoy was then deployed with the support of a multi-agency team consisting of staff from NOAA's Pacific Marine Environment Laboratories, the Australian Bureau of Meteorology, Geoscience Australia and the Marine National Facility. The team then remained on site for approximately 24 hours to field test satellite and acoustic communications links with the buoy and bottom pressure recorder package. These tests were completed successfully and the vessel returned to Hobart.

The buoy provides open ocean sea level observations for the Pacific Tsunami Warning Centre (PTWS). Its observations will be used to verify whether a tsunami has been generated and its extent of propagation in order to assess the magnitude of a tsunami threat if an earthquake occurs in this region where active subduction is known to be occurring.

This voyage actively contributes to Safeguarding Australia from the threat of coastal inundation.

## ltinerary

Departed Hobart 19:30 hrs Thursday 12th April 2007

Arrived Hobart 09:00 hrs Thursday 19th April 2007

