



Voyage SS04-2008 (charter)

Deep-Ocean Tsunami Monitoring System, Deployment and Maintenance

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Contribution to Australia's national benefit:

The Australian Tsunami Warning System (ATWS) is a joint project between Geoscience Australia, the Australian Bureau of Meteorology and Emergency Management Australia.

One of the key components of the ATWS project is the deployment and the continued support of the Tsunameter Network that is under the direct management of the Australian Bureau of Meteorology.

The current, and proposed, network of six Tsunameters has been developed to support the enhancement of Australia's Tsunami early warning system. Deployment sites have been selected from areas around Australia that experience significant tectonic instability.

The placement of the Tsunameter devices has been designed to enable accurate detection and size estimation of a tsunami event while providing a 90 minute warning prior to the arrival of any life threatening impact on the Australian coastline. The total network will consist of two sensors in each of the following regions;

- Indian Ocean (North-West coverage)
- Coral Sea (North-East coverage)
- Tasman Sea (South-West coverage)

As a result of this voyage:

Voyage SS04/2008 successfully completed the Tasman Sea region, achieving the following two objectives;

1. The deployment of a new prototype ETD (Easy To Deploy) Tsunami Monitoring Sensor. This deployment was the result of a collaborative arrangement between NOAA/ PMEL (National Oceanic and Atmospheric Administration/Pacific Marine Environmental Laboratory) and the Australian Bureau of Meteorology to further develop Tsunami Warning Systems.

2. The recovery and scheduled maintenance of the DART II (Deep-Ocean Assessment and Reporting of Tsunamis system) Sensor, deployed as part of a test system during 2007.

Addressing National **Research Priorities:**

Safeguarding Australia

- Goal 1: Critical infrastructure
- Goal 5: Transformational defence technologies

Itinerary

Departed Hobart 1600 hrs Thursday 20 March 2008

Arrived Hobart 0800 hrs Tuesday 26 March 2008

