

Australian Tsunami Warning System (ATWS)

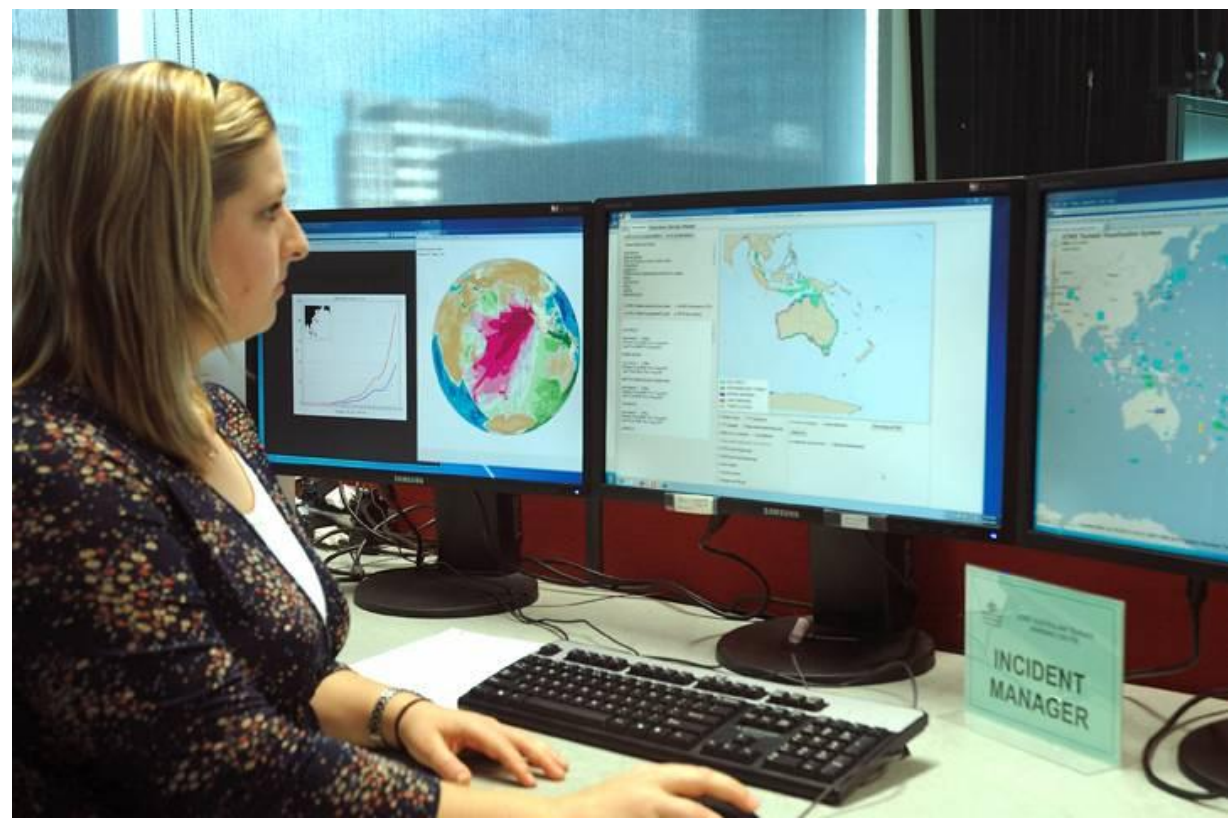
Supporting national and regional readiness

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Objective

In 2005, following the devastating Indian Ocean Tsunami of 26 December 2004, the Australia Government funded a \$69M four-year project to:

1. Develop a comprehensive tsunami warning system for Australia;
2. Support the development and implementation of a tsunami warning and mitigation system for the Indian Ocean; and
3. Support the implementation of the UNESCO/Intergovernmental Oceanographic Commission (IOC) Pacific Tsunami Warning & Mitigation System (PTWS) by enhancing seismic and sea level monitoring networks in the SW Pacific region.



Awareness and Preparedness

The Australian Tsunami Advisory Group (ATAG) of the Australia-New Zealand Emergency Management Committee (ANZEMC) provides coordination for the development of community education and emergency response and preparedness activities

Members include the national warning authorities (Australian Bureau of Meteorology and Geoscience Australia), representatives of emergency management authorities from each state and territory, Surf Life Saving Australia (SLSA), supported by the Attorney General's Department (AGD)

Activities include:

- Consultation and standardisation of community warning messaging
- Coordination of national "Ausnami" exercises and drills, national participation in international tsunami exercises
- Production of national hazard assessments
- Facilitation of localised risk assessments
- Development of Tsunami Community Education Strategy
- Production of education materials
- Development of 'Tsunami – The Ultimate Guide', see:

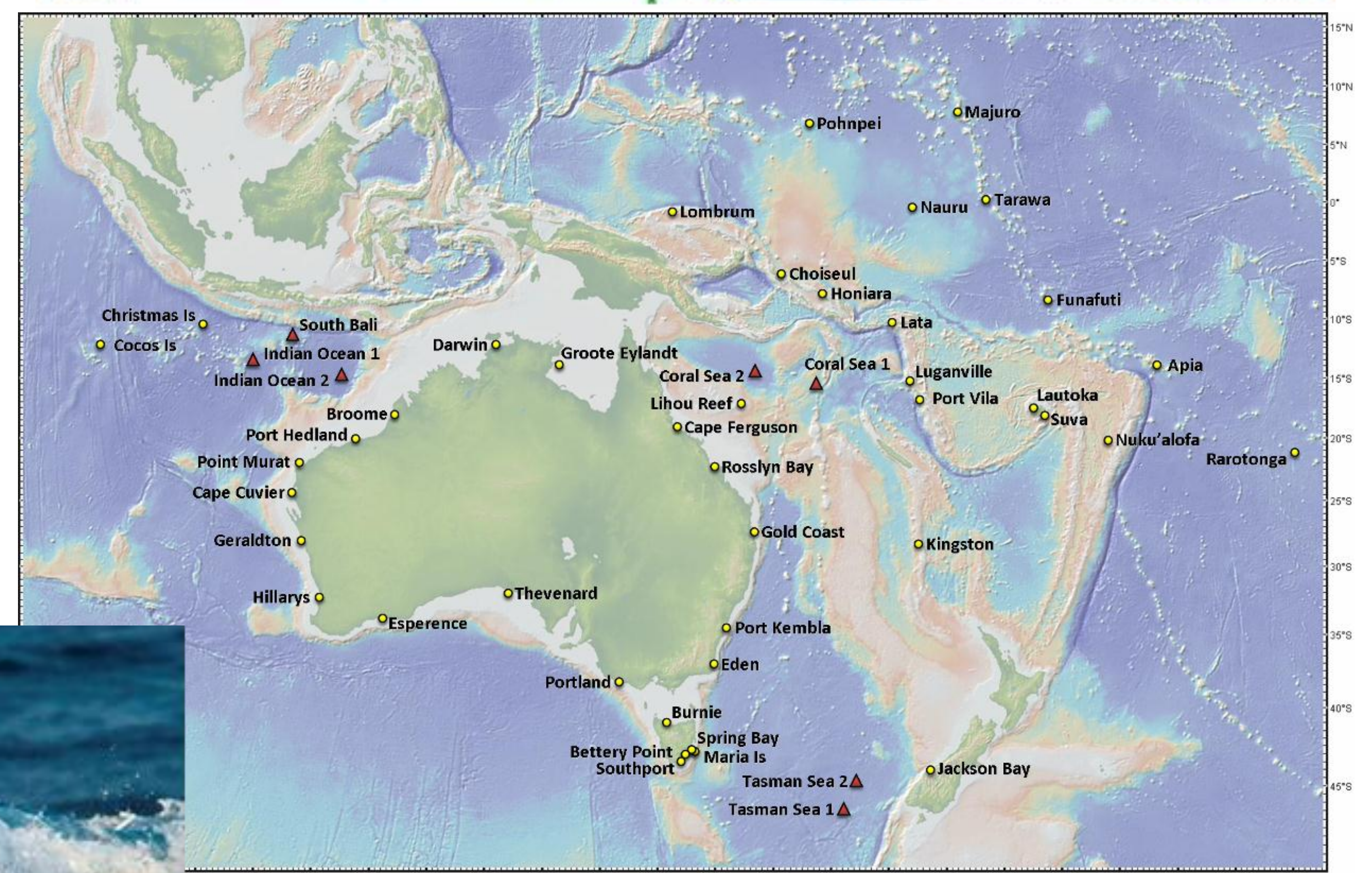
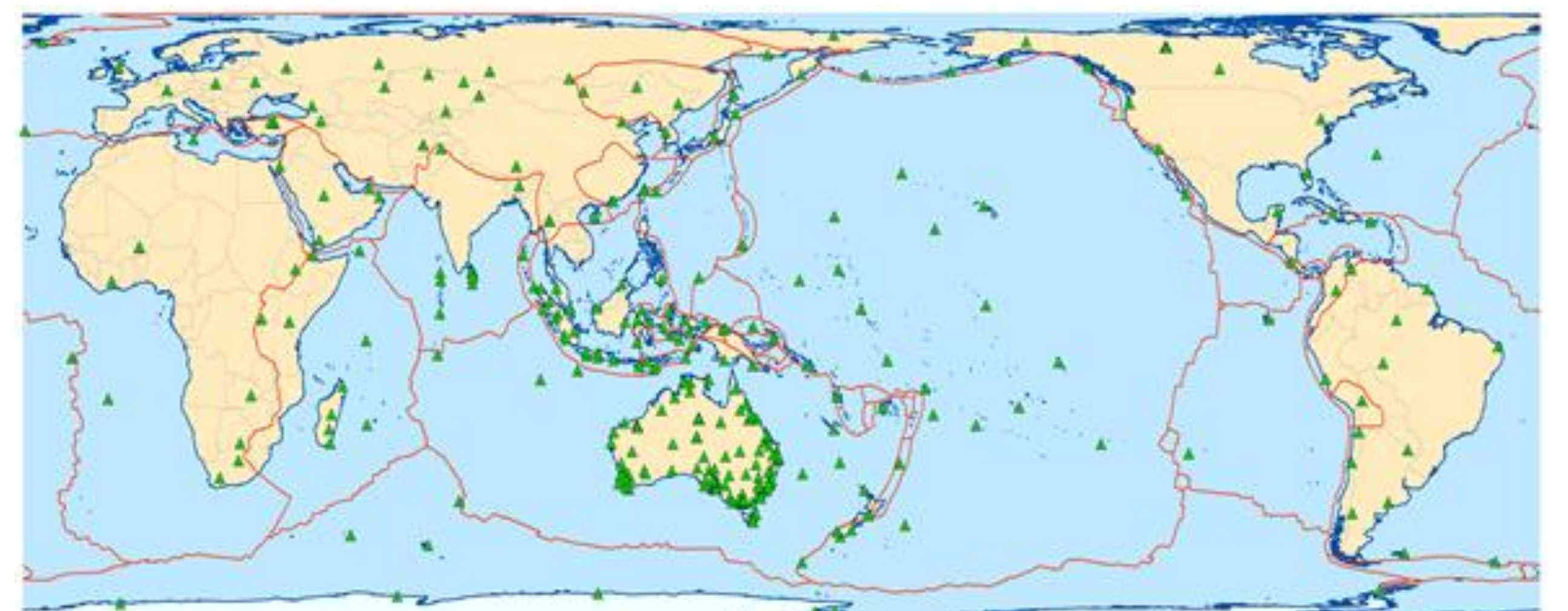
<https://www.emknowledge.gov.au/connect/tsunami-the-ultimate-guide/#/>



Joint Australian Tsunami Warning Centre (JATWC)

Jointly operated by the Australian Bureau of Meteorology and Geoscience Australia and launched in 2008, the JATWC is the Australian authority providing an independent national capability that:

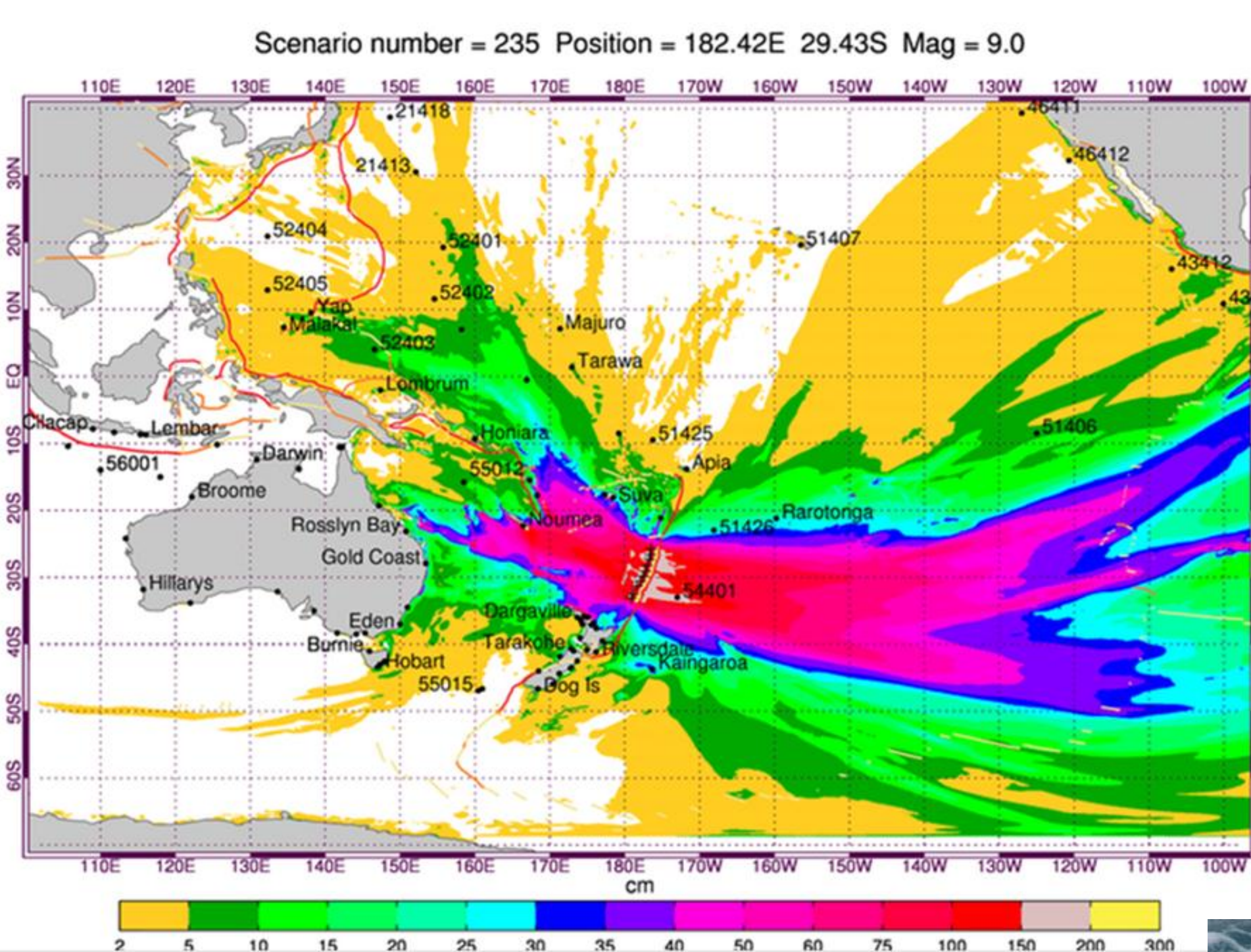
- Detects tsunamigenic earthquakes
- Forecasts, monitors and verifies tsunami propagation
- Prepares and disseminates detailed tsunami warnings to the public, media, relevant Government and emergency response authorities
- Operates 24/7 within Multi-Hazard Early Warning operations



Above top: The location of national and international seismograph stations, which are monitored in real-time by Australia.
Above bottom: Australian supported coastal (yellow circle) and deep ocean (red triangle) sea level monitoring stations.

Regional Support

- JATWC is one of three designated Tsunami Service Providers (TSP) for the UNESCO/IOC Indian Ocean Tsunami Warning & Mitigation System (IOTWS), providing tsunami threat information during tsunami events for 28 countries in the region
- Australia seismic and sea level data is freely available in real-time to the international community
- Australia supports capacity building projects in the SW Pacific and across the Indian Ocean
- Australia funds and hosts the UNESCO/IOC Secretariat of the Intergovernmental Coordination Group (ICG) for the IOTWS



Below: Deep ocean tsunami detection buoys (tsunameters) operated by Australia. These buoys provide critical information to help verify tsunami generation and size, whilst also helping to reduce false alarms.



Above: A Decision Support Tool (DST) allows forecasters to select open ocean tsunami amplitude scenarios, generated by a modified version of the US/NOAA MOST forecast model, to prepare national tsunami warnings of threat levels for designated zones along the coast line of Australia and its offshore territories..