

Southern Ocean Sea Level Centre

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The Southern Ocean Sea Level Centre is responsible for quality control and analysis of sea level data collected at the Australian Antarctic Division bases located on Macquarie Island and at Casey, Davis and Mawson on the Antarctic continent. The data is received via the Australian Antarctic Division (AAD).

The Macquarie Island data is sampled every three minutes via Aquatrak acoustic and Druck pressure gauges. The Druck pressure gauge and water temperature sensors are presently inoperative. Casey, Davis and Mawson employ Platypus Engineering bottom mounted pressure gauges providing ten-minute samples.

Ten-minute barometric pressure data is available from the four AAD stations.

Southern Ocean data is accessible through the National Tidal Facility Australia website. Hourly data can be accessed using the data request form at:

<http://www.ntf.flinders.edu.au/TEXT/WOCE/sodata.html>

and plots of the Southern Ocean data are accessible at:

<http://www.ntf.flinders.edu.au/TEXT/PRJS/SOUTH/PRODS/desprods.html>.

Following is a list of sea level data sets available from NTF Australia and supplied to PSMSL.

GLOSS Number	Station name	Latitude	Longitude	Project	Observation Periods	Authority responsible for tide gauge
022	Mawson	67° 36' S	062° 52' E	Southern Ocean	1986-1987, Mar-May 1992, Mar 1993-	Australian Antarctic Division
277	Davis	68° 27' S	077° 58' E	Southern Ocean	1986-1987, 1993-	Australian Antarctic Division
278	Casey	66° 17' S	110° 32' E	Southern Ocean	26 January 1996-	Australian Antarctic Division
130	Macquarie Is.	54° 30' S	158° 56' E	Southern Ocean	1912-1913, 1964, 1967-1974, 1987-1989, 1993-	Australian Antarctic Division

The following table lists historical Southern Ocean and Antarctic datasets held by National Tidal Facility Australia. The Cape Roberts dataset constitutes part of a continuing tidal analysis and report. It is anticipated that this analysis and report will lead to an agreement between Victoria University, Land Information New Zealand (LINZ) and National Tidal Facility Australia to provide routine analysis of Cape Roberts tidal data. The latitude and longitude listed for the Cape Roberts site is an approximation only.

GLOSS Number	Station name	Latitude	Longitude	Project	Observation Periods	Authority responsible for tide gauge
	Heard Island	53° 01' S	073° 23' E		Aug 1948-Sep 1948, Mar 1980, Nov 1986-Jan 1987	Australian Antarctic Division
	Beaver Lake	70° 48' S	068° 11' E		1994-1995, 1997-1998	Australian Antarctic Division
	Cape Roberts	*77° 0' S	*162° 0' E		Nov 1990-Sep 1993, Nov 1994-Dec 1998	Victoria University, NZ

* indicates approximate latitude and/or longitude

Appendix I is a list of Southern Ocean datasets held by other institutions and is located at:

<http://www.nf.flinders.edu.au/TEXT/PRJS/SOUTH/data.html>

These institutions include the University of Hawaii TOGA Sea Level Center, British Oceanographic Data Centre (BODC) – WOCE, National Oceanic and Atmospheric Administration (NOAA), Japanese Antarctic Research Expedition (JARE).