

NEW ZEALAND NATIONAL REPORT

New Zealand is emerging from a period that has been remarkably chaotic with respect to the overall coordination and collection of sea level data. The initial government restructurings that occurred in the late 1980s resulted in a heavy commercial emphasis in such activities. If a user, willing to pay for the data could not be found, then either high quality data was not collected or, if it was collected, then it was not released in its raw form due to its supposed commercial value. The further government restructurings that occurred in the mid-1990s resulted in government agencies divesting themselves of operational capabilities in the belief that such capabilities could be purchased if and when desired from private suppliers. The net result of these restructurings, apart from a reduction in government expenditure, was a loss of coordination in the activities of data collection and analysis, a loss of institutional memory, and uncertainty as to who should coordinate and fund tidal data collection. In the last 12 months, however, there are clear signs of a resolution to these problems. The New Zealand tide gauge network is considered to fall into two broad categories.

Category 1. Those gauges (generally with a long data history), that are located in various ports and that are owned by commercial port authorities. Land Information New Zealand (LINZ), as the government agency now responsible both for the national geodetic system and national hydrographic charting, has indicated its willingness to coordinate the ongoing collection of this data to agreed and accepted standards. It has indicated its intention to enter into contracts with the various port authorities for the supply of the tidal data. It has also indicated its intention to ensure that these records are quality assured to agreed standards and then databased, together with the relevant datum information.

Two additional gauges are included in this category. The first is a pressure gauge located at Cape Roberts in McMurdo Sound that has a data record dating back to 1991. Unfortunately, this gauge has not been well calibrated over the last decade and thus the data appears to be of limited value. The second gauge is a new, high quality, open coast digital gauge located at Jackson Bay that was installed in 1996.

It is expected that the raw data from all these gauges will be made available to the international community. So also will the data from four of these gauges (Auckland, Wellington, Lyttelton and Dunedin) that have CGPS receivers collocated with them.

Category 2. This includes a total of seven gauges that have been purchased and installed since 1996 by the National Institute of Water and Atmospheric Research (NIWA). These are high quality digital gauges in open coast locations that have associated meteorological sensors and real time data links. Two were specifically located with a view towards being useful in the calibration of the Topex/Poseidon mission. At present, the raw data from these gauges is considered as proprietary in nature and, if available, are only likely to be released by NIWA in summary form (monthly or annual MSLs).