

Deployment 52403_1011

(NDBC 52403 - North Manus - 345 NM N of Manus Island, New Guinea)

Location

Latitude: 4.051

Longitude: 145.62

Depth: 4474 m

Ocean region: 2.3 - Tropical Pacific Ocean

Time Span

Start Date: 2010-01-07

End Date: 2011-05-19

Notes

Data downloaded from http://www.ndbc.noaa.gov/historical_data.shtml

For tsunameter data from the NDBC (largely from the Deep-Ocean and Reporting of Tsunamis network), information regarding deployment and recovery dates is limited. Therefore, annual files of quality controlled data are initially concatenated for each station and plotted in order to identify the start and end times of each deployment. The data are segmented into individual deployment time series, so the deployment and recovery dates are assumed dates.

Raw NDBC data have varying sampling frequencies depending upon the operating mode (i.e. whether there is a tsunami alert). Standard operating mode (1) uses 15 minute spot values, mode 2 data consists of 1 min averages of 4X15 sec spot values and mode 3 is 15 second sampling. Mode 3 data were sub-sampled to the frequency of mode 1, but mode 2 data were not compatible and were treated as missing.

Raw pressures were obtained in metres from NDBC but had been converted from psia using a conversion factor of 0.67. The true conversion should have used 0.68947573, so to convert to mb, we multiplied by $102.9 = 0.68947573 / 0.67 * 100$.

An offset of 450 bar was removed from the raw pressure data.

The phase and amplitude of the S2 constituent varies between deployments at this station. This may be due to variations in the latitude and longitude of deployments since, in some cases, these are not known and are assumed to be the same as those for later deployments.

Latitudes, longitudes and depths specific to this deployment were not available, so they are taken to be those shown for the latest deployment on webpage www.ndbc.noaa.gov/station_page.php?station=52403 as at 19/09/2014

The effects of earthquakes off the coasts of Chile and of Honshu appear in the data for 28/02/10-02/03/10 and 11/03/11-14/03/11 respectively.

These data must be treated with caution as the station is located in an area of seismic activity.

Data amended 06/02/15. Due to a large initial sensor drift, which could not be removed using a linear plus exponential fit, data to 08/01/10 were flagged as suspect.

Channels

52403_1011 (Preferred Channel)

Parameter: pressure

Supplier

Address

NOAA National Data Buoy Center
Building 3205
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228-688-2805
USA