Deployment 52402_1012

(NDBC 52402 - South East Saipan - 540 NM ESE of Saipan)

Location
Latitude: 11.869
Longitude: 154.039
Depth: 5875 m
Ocean region: 2.3 - Tropical Pacific Ocean

Time Span
Start Date: 2010-01-03
End Date: 2012-08-03

Notes

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

An offset of 600 bar was removed from the raw pressure data.

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 NBDC 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.

Data between 19th and 22nd August 2009 and between 9th and 11th November 2009 were considered too short to be of use and were therefore excluded from this record.

This deployment exhibits a number of sudden shifts in pressure which are unexplained e.g.
14/02/10
25/02/10
27/06/10
04/07/10
06/01/11
09/01/11
10/01/11
24/02/11
08/06/11
09/06/11

12/12/11
29/12/11
27/01/12
18/02/12
12/03/12

The effects of an earthquake off the coast of Central Chile can be seen in data for 27th to 29th Feb 2010. The effects of an earthquake off the coast of Honshu can be seen in data for 12th to 15th of March 2011.

Latitudes, longitudes and depths specific to this deployment were not available, so they are taken to be those shown for the latest deployment shown on webpage www.ndbc.noaa.gov/station_page.php?station=52402 as at 12/09/2014.

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

Channels

52402_1012 (Preferred Channel)
Parameter: pressure

Supplier

Address
NOAA National Data Buoy Center
Building 3205
Stennis Space Center, MS 39529
228-688-2805
USA