

## **Deployment 51425\_1314**

(NDBC 51425 - North West Apia - 370 NM NW of Apia, Samoa)

### **Location**

Latitude: -9.51

Longitude: -176.241

Depth: 4960 m

Ocean region: 2.3 - Tropical Pacific Ocean

### **Time Span**

Start Date: 2013-08-24

End Date: 2014-08-01

### **Notes**

Data downloaded from [http://www.ndbc.noaa.gov/historical\\_data.shtml](http://www.ndbc.noaa.gov/historical_data.shtml)

There are a number of shifts in pressure on:

28/10/2013 at 07:30

06/11/2013 at 05:30

09/11/2013 at 10:00

29/12/2013 at 02:15

These last 2 shifts are particularly large (~30 mb) and are associated with a switch to 'event mode' of the tsunameter, so may be due to a shift in the position of the instrumentation caused by seismic activity.

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 510 bar was removed from the raw pressure data.

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=51425](http://www.ndbc.noaa.gov/station_page.php?station=51425) as at 11/09/2014.

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

Data amended 03/09/15. This record replaces 51425\_1313 having been updated to include 2014 data.

## **Channels**

### **51425\_1314 (Preferred Channel)**

Parameter: pressure

## **Supplier**

### **Address**

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