

GHOS4readmetw.pdf

The Grays Harbor Off Shore (GHOS) mooring consisted of a 300kHz workhorse Acoustic Doppler Current Profiler (ADCP) upward looking with the heads at approximately 29 meters. An Aanderaa Instruments current meter (serial number (s/n) 7172) was on the mooring at approximately 34 meters.

Deployed: 10/21/99 10:42 Local time

Recovered: 05/02/00 12:14

Deployed location: Lat 46-51.666N, Long 124-14.244W

Bottom depth: 39 meters

The workhorse data is in one file, GHOS4B12B1tw.txt composed of tab delimited columns.

First column is the ensemble number.

Second column is the date and time converted to Greenwich mean time (GMT), labeled GDATE.

The third column is the temperature at the ADCP heads, 29 meters, in degrees C.

Starting with the fourth column, the column header denotes the deployment (GHOS4), the bin and velocity component in units of cm/sec. For example GHOS4B8u11 indicates this column is from the GHOS4 deployment, Bin 8, u component of velocity at 11 meters. GHOS4B2v23 indicates this is from the GHOS4 deployment, Bin 2, v component of velocity at 23 meters. Velocity units are cm/sec.

The last column is labeled JJ and filled with zeroes. It just denotes the last column and has no significance.

** Note new sampling interval. Bin lengths are 2 meters instead of the previous 1 meter***

Bin 1 corresponds to 25 meters, bin 2 23 meters, bin 3 21 meters, etc. The last bin included is bin 12 at 3 meters.

Note bin 12 is on the ragged edge of being acceptable. Bin 11 at 5 meters is better.

Data may still contain some spurious points. Side lobe reflections off the surface and subsurface instruments and or mooring components may cause spikes in the data that have not been completely eliminated, particularly in bin 12. Please use with caution.

Data has been rotated to true North, the rotation angle used was 19.3, missing data and spurious points were filled using linear interpolation, but some bad points may still exist.

The ADCP was set up with the following parameters:

Transducer: facing up

Transducer angle: 20 degrees

Depth cell size: 2m

Pings per ensemble: 110
Time between pings: 32.72 seconds
Time between ensembles: 60 minutes
Velocity coordinates: EARTH

The Aanderaa data is in one file, GHOS4.7172etw.txt, composed of tab delimited columns.

First column is the scan number, labeled NSCAN.

Second column is the date and time converted to Greenwich mean time (GMT), labeled GDATE.

Starting with the third column, the column header denotes the deployment (GHOS4), the instrument s/n followed by the variable measured, u or v component of velocity in cm/sec, temperature in degrees C, and salinity if conductivity was measured. The current meter depth was used in place of pressure if there was no pressure measured. For example GHOS4.7172u34 indicates this column is from the GHOS4 deployment, s/n 7172 u component of velocity at 34m. Velocity units are cm/sec.

The last column is labeled JJ and filled with zeroes. It just denotes the last column and has no significance.

Data may contain some spurious points.