

GHOS3readmetw.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 28 meters. An Aanderaa Instruments current meter (serial number (s/n) 7103) was on the mooring at approximately 33 meters.

Deployed: 07/07/99 12:48 Local time

Recovered: 10/20/99 11:34

Deployed location: Lat 46-51.868N, Long 124-14.880W

Bottom depth: 37 meters

The workhorse data is in one file, GHOS3B22B1tw.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, 28 meters, in degrees C.

Starting with the fourth column, the column header denotes the deployment (GHOS3), the bin and velocity component in units of cm/sec. For example GHOS3B8u18 indicates this column is from the GHOS3 deployment, Bin 8, u component of velocity at 18 meters. GHOS3B21v5 indicates this is from the GHOS3 deployment, Bin 21, v component of velocity at 5 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.

Bin 1 corresponds to 25 meters, bin 2 24 meters, bin 3 23 meters, bin 4 22 meters, etc. The last good bin is bin 22 at 4 meters.

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 22. 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.

The ADCP was set up with the following parameters:

Transducer: facing up

Transducer angle: 20 degrees

Depth cell size: 1m

Pings per ensemble: 140

Time between pings: 25.71 seconds

Time between ensembles: 60 minutes

Velocity coordinates: EARTH

The Aanderaa data is in one file, GHOS3.7103tw.txt, composed of tab delimited columns.

First column is the scan number, labelled NSCAN.

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

Starting with the third column, the column header denotes the deployment (GHOS3), the instrument s/n followed by the variable measured, u or v component of velocity in cm/sec (rotated to true North), 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 GHOS3.7103u33 indicates this column is from the GHOS3 deployment, s/n 7103 u component of velocity at 33m. 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.