

GHOS2readmetw.txt

The Grays Harbor Off Shore (GHOS) mooring consisted of a 300kHz workhorse Acoustic Doppler Current Profiler (ADCP) upward looking with the heads at approximately 31 meters. An Aanderaa Instruments current meter (serial number (s/n) 7103) was on the mooring at approximately 37 meters.

Deployed: 11/11/98 14:26 Local time
Recovered: 6/23/99 The mooring had to be dragged for.
Deployed location: Lat 46-52.311N, Long 124-14.960W
Bottom depth: 41 meters

The workhorse data is in one file, GHOS2tw.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, 31 meters, in degrees C. Starting with the fourth column, the column header denotes the deployment (GHOS2), the bin and velocity component in units of cm/sec. For example GHOS2B8u21 indicates this column is from the GHOS2 deployment, Bin 8, u component of velocity at 21 meters. GHOS2B24v5 indicates this is from the GHOS2 deployment, Bin 24, 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.

Note: The switch on the ADCP indicated it was facing up on May 6, 1999 at 10:00 local time, but down on May 6, 1999 at 11:00 local time. This is consistent with the surface float being recovered on shore during May. The record was trimmed to not include data after the ADCP switch indicated it was facing downward.

Bin 1 corresponds to 28 meters, bin 2 27 meters, bin 3 26 meters, bin 4 25 meters, etc. The last good bin is bin 26 at 3 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 26. 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: 175
Time between ensembles: 60 minutes

Velocity coordinates: EARTH

The Aanderaa data is in one file, GHOS2.7103Stw.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 (GHOS2), 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 GHOS2.7103v37 indicates this column is from the GHOS2 deployment, s/n 7103 v component of velocity at 37m. 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.

The record was trimmed to not include data after the switch in the doppler above indicated it was facing downward.

Data may contain some spurious points.