

GHOS1readmetw.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 30 meters. An Aanderaa Instruments current meter (serial number (s/n) 6526) was on the mooring at approximately 36 meters.

Deployed: 03/31/98 12:05 Local time
Recovered: 10/07/98 12:30 Local time
Deployed location: Lat 46-51.868N, Long 124-14.890W
Bottom depth: 41 meters

The workhorse data is in one file, GHOS1tw.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, 30 meters, in degrees C. Starting with the fourth column, the column header denotes the deployment (GHOS1), the bin and velocity component in units of cm/sec. For example GHOS1B8u20 indicates this column is from the GHOS1 deployment, Bin 8, u component of velocity at 20 meters. GHOS1B21v7 indicates this is from the GHOS1 deployment, Bin 21, v component of velocity at 7 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.

**** Notice not all the bins are present, this file just has selected bins****

Bin 1 corresponds to 27 meters, bin 4 24 meters, bin 6 22 meters, bin 8 20 meters, bin 11 17 meters, bin 14 14 meters, bin 16 12 meters, bin 19 9 meters, bin 21 7 meters. The last bin is bin 24 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. 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 pings: 20.56 seconds
Time between ensembles: 60 minutes

Velocity coordinates: EARTH

The Aanderaa data is in one file, GHOS1.6526tw.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 (GHOS1), 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 GHOS1.6526T36 indicates this column is from the GHOS1 deployment, s/n 6526 Temperature at 36m. 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 Aanderaa current meter started recording 0 in all channels so the data was cut off early. The last portion included may have been slowly going bad so use with care.

Data may contain some spurious points.