

Pacific Northwest Coastal Ecosystem Regional Study (PNCERS)

1997-2003

The Pacific Northwest Coastal Ecosystem Regional Study (PNCERS) was sponsored by the National Oceanic and Atmospheric Administration Coastal Ocean Program award NA96OP0238 and NA76RG0485 to the University of Washington.

The Hickey component of this project was to investigate the physical variability in 3 Pacific Northwest estuaries and their relation to the coastal ocean. In order to do this instruments were deployed in three estuaries, Grays Harbor and Willapa Bay, Washington and Coos Bay, Oregon. Two offshore moorings were maintained off Grays Harbor, Washington and Coos Bay, Oregon. Two sites were sampled in the Coos Bay Estuary, CBEST1, at T-Dock and CBEST2 at the Charleston River. Only one site was sampled in the Grays Harbor Estuary, GHEST1. In Willapa Bay there were 4 sites sampled, a piling at Toke Point, a piling at Nahcotta, WB3, and WB6.

Abbreviations and units are:

Depth, m, meters,

Speed, spd, cm/sec,

Direction, D, degrees, true north,

u component (eastward), u, v component (northward), v, cm/sec, true North,

Temperature, T, ° C,

Pressure, P, PSI,

Conductivity, C, mmho/cm.

Acoustic Doppler current meter, ADCP,

Aanderaa current meter, AA,

InterOcean systems, inc., S-4 current meter, S4,

Sea-Bird Electronics 37 MicroCAT C-T recorder, SBE 37

Variables are the variables measured except for AAs. AAs measure speed and direction from which u and v components of velocity are calculated. Generally if T and C were recorded salinity was computed and replaces conductivity.

Recovery and deployment information is in Local time. Add 7 (if local is Pacific Daylight time) or 8 (if local time is Pacific Standard time) hours to convert to Greenwich mean time (GMT).

The time series data are generally in the following format. Data files consist of ASCII tab delimited files, usually one per meter. File names include the mooring ID and instrument serial number followed by a processing indicator.

See readme files for details.

Mooring: CBOS1 [CBOS1 readme](#)

Position: 43° 09.48'N, 124° 33.99'W

Bottom depth: 95m

Deployed: 09:06 (+8) 01/31/1998

Recovered: no time recorded 10/2/1998

Actual Depth	Variables	Instrument/Comments

34	u,v,T,C	AA, s/n 7172.
64	u,v,T,C	AA, s/n 4922.
84	T,u,v profile	ADCP upward looking, bin 1-18.
84	T,u,v profile	ADCP upward looking, bin 19-37.

Mooring: CBOS2 [CBOS2 readme](#)

Position: 43° 09.692'N, 124° 34.101'W

Bottom depth: 98m

Deployed: 12:54 (+7) 10/03/1998

Recovered: 09:32 (+7) 05/07/1999

Actual Depth	Variables	Instrument/Comments
34	u,v,T,C	AA, s/n 7104.
64	u,v,T,C	AA, s/n 5099.
84	T,u,v profile	ADCP upward looking, bin 1-18.
84	T,u,v profile	ADCP upward looking, bin 19-36.

Mooring: CBOS3 [CBOS3 readme](#)

Position: 43° 09.357'N, 124° 34.174'W

Bottom depth: 99m

Deployed: 08:36 (+7) 05/09/1999

Recovered: 10:10 (+7) 10/06/1999

Actual Depth	Variables	Instrument/Comments
34	u,v,T,C	AA, s/n 7172.
64	u,v,T,C	AA, s/n 5213.
84	T,u,v profile	ADCP upward looking, bin 20-1.
84	T,u,v profile	ADCP upward looking, bin 36-21.

Mooring: CBOS4 [CBOS4 readme](#)

Position: 43° 09.374'N, 124° 34.223'W

Bottom depth: 100m

Deployed: 15:18 (+7) 10/07/1999

Recovered: 10:33 (+7) 04/18/2000

Actual Depth	Variables	Instrument/Comments
34	u,v,T,C	AA, s/n 7104. Rotor missing when recovered.
64	u,v,T,C	AA, s/n 5099.
85	T,u,v profile	ADCP upward looking, bin 20-1.
85	T,u,v profile	ADCP upward looking, bin 38-21.

Coos Bay Estuary 2 Charleston River Data [Readme](#)

Mooring: CBEST2.1

Position: 43° 21.448'N, 124° 19.318'W

Bottom depth: 14m

Deployed: 08:30 (+8) 03/24/1998

Recovered: 10:30 (+7) 10/3/1998

Actual Depth	Variables	Instrument/Comments
12	T,C	AA, s/n 2249.

11

T,u,v profile ADCP upward looking.

Updated Aug. 21, 2017 to remove u,v from the Variables column for the AA instrument. Only T,C were measured.

Mooring: CBEST2.2

Position: 43° 21.448'N, 124° 19.318'W

Bottom depth: 14m

Deployed: 11:21 (+7) 10/4/1998

Recovered: 07:25 (+7) 05/10/1999

Actual Depth	Variables	Instrument/Comments
<u>12</u>	T,C	AA, s/n 4922.
<u>11</u>	T,u,v profile	ADCP upward looking. ADCP was deployed later, on March 5, 1999.

Updated Aug. 21, 2017 to remove u,v from the Variables column for the AA instrument. Only T,C were measured.

Mooring: CBEST2.3

Position: 43° 21.448'N, 124° 19.318'W

Bottom depth: 14m

Deployed: 07:25 (+7) 05/10/1999

Recovered: 08:41 (+7) 10/11/1999

Actual Depth	Variables	Instrument/Comments
<u>12</u>	T,C	AA, s/n 5100.
<u>11</u>	T,u,v profile	ADCP upward looking.

Updated Aug. 21, 2017 to remove u,v from the Variables column for the AA instrument. Only T,C were measured.

Mooring: CBEST2.4

Position: 43° 21.448'N, 124° 19.318'W

Bottom depth: 14m

Deployed: 13:00 (+7) 10/10/1999

Recovered: 12:30 (+7) 8/8/2000

Actual Depth	Variables	Instrument/Comments
<u>12</u>	T,C	SBE37, s/n 394. Note- actual depth 12m, 5db erroneously used to calculate salinity and sigma-t.

Updated Aug. 20, 2017 to add note regarding CBEST2.4 salinity and sigma-t calculations.

Mooring: GHOS7 [GHOS7 readme](#)

Position: 46° 51.743'N, 124° 14.844'W

Bottom depth: 40m

Deployed: 11:10 (+7) 08/12/1997

On Surface: 02:17 (+8) 01/30/98

Recovered: no time recorded 02/08/1998

Actual Depth	Variables	Instrument/Comments
<u>25</u>	u,v,T,C	AA, s/n 5099.
<u>30</u>	u,v,T,C	AA, s/n 2249.

Mooring: GHOS1 [GHOS1 readme](#)

Position: 46° 51.868'N, 124° 14.890'W

Bottom depth: 41m

Deployed: 12:05 (+8) 03/31/1998

Recovered: 12:30 (+7) 10/7/1998

Actual Depth	Variables	Instrument/Comments
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30	T,u,v profile	ADCP s/n 457.
36	u,v,T,C	AA, s/n 6526. Note- Aanderaa instrument stopped recording data May 12.

Mooring: GHOS2 [GHOS2 readme](#)

Position: 46° 52.311'N, 124° 14.960'W

Bottom depth: 41m

Deployed: 14:26 (+8) 11/11/1998

Recovered: no time recorded 6/23/1999

Actual Depth	Variables	Instrument/Comments
31	T,u,v profile	ADCP s/n 457. Data indicated mooring damaged May 6.
37	u,v,T,C	AA, s/n 7103. Data indicated mooring damaged May 6.

Mooring: GHOS3 [GHOS3 readme](#)

Position: 46° 51.868'N, 124° 14.880'W

Bottom depth: 37m

Deployed: 12:48 (+7) 07/07/1999

Recovered: 11:34 (+7) 10/20/1999

Actual Depth	Variables	Instrument/Comments
28	T,u,v profile	ADCP s/n 457.
33	u,v,T,C	AA, s/n 7103.

Mooring: GHOS4 [GHOS4 readme](#)

Position: 46° 51.666'N, 124° 14.244'W

Bottom depth: 39m

Deployed: 10:42 (+7) 10/21/1999

Recovered: 12:14 (+7) 05/02/2000

Actual Depth	Variables	Instrument/Comments
29	T,u,v profile	ADCP s/n 457.
34	u,v,T,C	AA, s/n 7172. Note- rotor missing on retrieval, u,v zero filled after 11/19/99 15:00.

Last updated Aug. 21, 2017 u,v variables were not measured by Aanderaa meters in the estuary. Delete u,v from Variables column.

Updated Aug. 20, 2017 to correct CBEST2.3 recovery time and add note regarding CBEST2.4 salinity and sigma-t calculations.