The Continental Shelf Experiment 1972

The Continental Shelf Experiment was sponsored by the U. S. Atomic Energy Commission under contract designator AT 45-1-2225-TA-25 to Dr. J. Dugan Smith, Principal Investigator, at the University of Washington.

Beginning in 1972 the work for the Energy Research & Development Administration was expanded to keep moorings out for longer time periods during the winter and summer and to maintain moorings at both an Inshore and an Offshore site. In 1972 the University of Washington maintained 2 current meter moorings, Inshore, (IN), and Offshore (OF) during January, July, and August 1972. In addition, a joint project with the Pacific Oceanographic Laboratory of the National Oceanographic and Atmospheric Administration (NOAA) was completed in September 1972 and provided a two-month record of temperature and currents over the Washington continental shelf and slope at three moorings (S6, S8, S11). During this period similar observations were made by the Coastal Upwelling Experiment (CUE) over the Oregon shelf. These two data sets, one off Washington, the other off Oregon, resulted in a better understanding of continental shelf processes.

Current meters used were Aanderaa model RCM-4 (27), Braincon type 381 (20) and 3 vector averaging current meters (VACM). The Aanderaa and Braincon instruments belonged to the University of Washington, while the VACM instruments belonged to NOAA. The Aanderaa and Braincon current meters measured speed and direction, which was then resolved into u and v components. The Aanderaa meters had temperature sensors. Aanderaa meters sampled at 10 minute intervals, Braincons sampled at 10 or 20 minute intervals, and the VACM meters sampled at 3.75 minute intervals. Data presented below has been edited for spurious values. A more complete description of the data can be found in: Smith, Hickey, Beck, 1976, Observations from moored current meters on the Washington Continental Shelf from February 1971 to February 1974, University of Washington, Department of Oceanography, Special Report 65.

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,
Date and time is listed as DATE to indicate time is in Pacific Standard Time, format mm/dd/yy hh:mm. Add 8 hours to convert to Greenwich mean time (GMT). Recovery and deployment information is in PST unless the time is followed by 'z' to indicate it is in GMT.
Date and time is listed as GDATE to indicate time is in GMT, format mm/dd/yy hh:mm. The data from the S6, S8, and S11 moorings are in GMT. Recovery and deployment data are in GMT denoted by a 'z' after the time.
Aanderaa current meter, AA
Braincon current meter, BR

Data files consist of ASCII tab delimited files, one per meter. Headers indicate the time base, mooring, the deployment, variable, and depth rounded to the nearest meter. For example, IN1u15 indicates the data is from the IN mooring, first deployment in 1972, u component at 15m, OF3v23 indicates the data is from the Offshore mooring, third deployment in 1972, v component at 23m. The last column, JJ, is zero filled to indicate the last data column for that meter.

Mooring: IN172 Position: 46° 24.8'N, 124° 20.0'W
Bottom depth: 77m
Deployed: 1451 Jan. 5, 1972 by Kathy Jo (Charter vessel)

Recovered: 1720 Jan. 29, 1972 by Kathy Jo (Charter vessel)

Actual Depth	Variables	Instrument/Comments
15	u,v	BR, 10 min samples
16	u,v,T	AA, 10 min samples
20	u,v	BR, 20 min samples
30	u,v	BR, 20 min samples
49	u,v,T	AA, 10 min samples
66	u,v,T	AA, 10 min samples
71	u,v,T	AA, 10 min samples

Mooring: OF172 Position: 46º 51.3'N, 124º 40.03'W
Bottom depth: 167m
Deployed: 0936 Jan. 5, 1972 by Kathy Jo (Charter vessel)
Recovered: 0825 Jan. 29, 1972 by Kathy Jo (Charter vessel)

Actual Depth	Variables	Instrument/Comments
13	u,v	BR, 10 min samples
18	u,v	BR, 20 min samples
47	u,v	BR, 20 min samples
76	u,v,T	AA, 10 min samples
121	u,v,T	AA, 10 min samples
126	u,v,T	AA, 10 min samples

Mooring: IN272 Position: 46º 24.8'N, 124º 20.0'W
Bottom depth: 77m
Deployed: 0928 July 18, 1972 by Oceanographer (NOAA vessel)
Recovered: 1235 Aug. 17, 1972 by Oceanographer (NOAA vessel)

Actual Depth	Variables	Instrument/Comments
20	u,v,T	AA, 10 min samples
50	u,v,T	AA, 10 min samples
66	u,v,T	AA, 10 min samples
71	u,v,T	AA, 10 min samples

Mooring: OF272 Position: 46º 50.0'N, 124º 50.0'W
Bottom depth: 166m
Deployed: 1435 July 18, 1972 by Oceanographer (NOAA vessel)
Recovered: 0953 Aug. 16, 1972 by Oceanographer (NOAA vessel)

Actual Depth	Variables	Instrument/Comments
20	u,v,T	AA, 10 min samples

30	u,v,T	AA, 10 min samples
55	u,v,T	AA, 10 min samples
110	u,v,T	AA, 10 min samples
155	u,v,T	AA, 10 min samples
160	u,v,T	AA, 10 min samples

Mooring: IN372 Position: 46º 25'N, 124º 20.0'W
Bottom depth: 76m
Deployed: 1237 Aug. 18, 1972 by Oceanographer (NOAA vessel)
Recovered: 1055 Sept. 25, 1972 by Oceanographer (NOAA vessel)

Actual Depth	Variables	Instrument/Comments
14	u,v,T	AA, 10 min samples
19	u,v,T	AA, 10 min samples
49	u,v,T	AA, 10 min samples
65	u,v,T	AA, 10 min samples
70	u,v,T	AA, 10 min samples

Mooring: OF372 Position: 46º 50.0'N, 124º 50.0'W
Bottom depth: 165m
Deployed: 0726 Aug. 18, 1972 by Oceanographer (NOAA vessel)
Recovered: 1210 Sept. 24, 1972 by Oceanographer (NOAA vessel)

Actual Depth	Variables	Instrument/Comments
18	u,v,T	AA, 10 min samples
29	u,v,T	AA, 10 min samples
54	u,v,T	AA, 10 min samples
109	u,v,T	AA, 10 min samples
159	u,v,T	AA, 10 min samples

Mooring: S6172 Position: 46º 47.5'N, 124º 56.9'W
Bottom depth: 597m
Deployed: 1659z July 19, 1972 by Oceanographer (NOAA vessel)
Recovered: 1826z Sept. 24, 1972 by Oceanographer (NOAA vessel)

Actual Depth	Variables	Instrument/Comments
192	u,v	VACM, 60 min samples
323	u,v	VACM, 60 min samples
585	u,v	VACM, 60 min samples

Mooring: S8172 Position: 46º 45.8'N, 125º 08.9'W
Bottom depth: 818m

Deployed: 1908z July 19, 1972 by Oceanographer (NOAA vessel)
Recovered: 2015z Aug. 16, 1972 by Oceanographer (NOAA vessel)

Actual Depth	Variables	Instrument/Comments
60	u,v	BR, 10 min samples
247	u,v	BR, 20 min samples
433	u,v	BR, 20 min samples
619	u,v	BR, 10 min samples
805	u,v	BR, 10 min samples

Mooring: S8272 Position: 46º 45'N, 125º 09'W
Bottom depth: 818m
Deployed: 1736z Aug. 18, 1972 by Oceanographer (NOAA vessel)
Recovered: 1521z Sept. 24, 1972 by Oceanographer (NOAA vessel)

Actual Depth	Variables	Instrument/Comments
60	u,v	BR, 20 min samples
247	u,v	BR, 20 min samples
433	u,v	BR, 20 min samples
619	u,v	BR, 10 min samples
805	u,v	BR, 20 min samples

Mooring: S11172 Position: 46º 43.2'N, 125º 17.3'W
Bottom depth: 1099m
Deployed: 1805z July 20, 1972 by Oceanographer (NOAA vessel)
Recovered: 2157z Aug. 16, 1972 by Oceanographer (NOAA vessel)

Actual Depth	Variables	Instrument/Comments
60	u,v	BR, 10 min samples
265	u,v	BR, 20 min samples
881	u,v	BR, 10 min samples
1086	u,v	BR, 10 min samples

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