CRUISE REPORT
S206

Scientific data collected aboard
SSV Robert C. Seamans

Seattle, WA – Victoria, British Columbia – Skung Gwaii, Anthony Island – Tahsis, British Columbia – San Francisco, CA

7 July – 2 August, 2006

Ceremonial cedar columns or mortuary poles representing family lineages of Haida tribe members are just a few of the archeological remains located at Skung Gwaii village on Anthony Island. The area was declared a UNESCO World Heritage Site in 1981.
http://www.virtualmuseum.ca/Exhibitions/Haida/java/english/home/index.html

Photo by Jeff Schell

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Table 1. S206 Ship's crew and student participants

Nautical Staff		
	Elliot Rappaport	Captain
	Pamela Coughlin	Chief Mate
	Jed Deering	2nd Mate
	Kate Mini	3rd Mate
	Ted Flemming	Engineer
	Steven Wojcikiewicz	Assistant Engineer
	Shawn Strange	Steward
Scientific Staff		
	Jeffrey Schell	Chief Scientist
	Adam Baske	1st Scientist
	Skye Moret	2nd Scientist
	Austen Thomas	3rd Scientist
Visiting Scholars		
	Dr. Matthew McKenzie	Maritime Studies Professor
	Lisa Lines	Scientific Writing Professor
Students		
	Scott A. Allen	University of Dayton
	Linsey M. Arnold	Reed College
	Ellen Axelsen	LaSalle University
	Benjamin Baldwin	Bowling Green State University
	Justin R. Brodowski	St. Lawrence University
	Allison J. Bruce	Northwestern University
	Shane C. Gibbons	Northeastern University
	Justin W. Gillespie	University of Michigan
	Amanda M. Heins	Syracuse University
	Elizabeth Howe	Kenyon College
	Kathryn B. Hunter	Northeastern University
	Daniel Krofcheck	Ohio Wesleyan University
	Lindsay D. Love	Stanford University
	Katherine V. McClure	Denison University
	Natasha C. Mehta	Yale University
	Michael B. Merkley	Illinois Institute of Technology
	Carolyn W. Moss	Rochester Institute of Technology
	Julianna E. Mullen	Wellesley College
	Timothy A. Nedimyer	Alfred University
	Catherine F. Nickels	American University
	James E. Parra	Middlebury College
	Russell R. Robertson	Boston University
	Kristin Ryan	Colgate University
	Michelle C. Smet	University of Wisconsin, Milwaukee
	Maia C. Theophanis	University of Maine, Orono
	Scott Thompson	St. Michael's College
	Kyle J. Wood	U. Mass, Amherst

Data Description

This cruise report provides a record of data collected during S206 aboard the *SSV Robert C. Seamans* from Seattle, Washington to San Francisco, California (Figure 1) with stops at Victoria, British Columbia, Skung Gwaii village on Anthony Island and Tahsis, British Columbia. We collected samples or data with 110 individual deployments from 60 discrete stations (Table 2) along our cruise track. In addition we continuously sampled water depth, sub-bottom profiles and Acoustic Doppler Current Profiles (ADCP) along with flow-through sea surface temperature, salinity and *in vivo* fluorescence. This report summarizes physical, chemical and biological characteristics along our cruise track.

The S206 cruise track traversed several coastal regions that can be distinguished by their sea surface temperature, salinity, and fluorescence values (Figures 2). Inshore-offshore transects of surface stations revealed the distribution of nutrients, chlorophyll-*a* and bacteria near river outflows Table 3). Detailed views of specific transects through specific coastal regions reveal dynamic spatial (nautical miles) and temporal (days) variability (Figures 3 a-d). Sub-surface water masses and their chemical properties were also surveyed using a CTD and 12 bottle carousel (Tables 4 and 5). Regional scale hydrography is summarized by T-S plots (Figure 4). Surface currents throughout our cruise track were generally weak except for regionally isolated phenomena (Figure 5).

The distribution of neuston and meter net stations and corresponding zooplankton density and numbers of select nekton species are presented (Tables 6-7). Location and relevant station depths for sediment samples are shown in Table 8.

In addition, a complete biomass and compositional survey of lower tropic levels was completed in several regions; from enumeration of bacterial communities using epifluorescence microscopy through phytoplankton, zooplankton and meroplankton communities to myctophids (lantern fish) and other micronekton. Results, not reported here, are available upon request through SEA.

As part of SEA's educational program, undergraduates conducted independent oceanographic research during the cruise. Project explored regionally, relevant topics in the disciplines of physical, chemical, biological and geological oceanography (Table 9). Student research efforts culminated in a written report and public presentation to the ship's company. These papers are available on request from SEA.

Jeff Schell
Chief Scientist
S206

F**igure 1. Final cruise track for S206 based on hourly (local time) positions.** Oceanic regions studied during S206 include Haro Strait shelf (HS_S) and Victoria Island shelf (VI_S), Juan de Fuca eddy (JF_E), and Haida eddy (H_E), Scott Islands plume (SI_P) and Columbia River plume (CR_P).

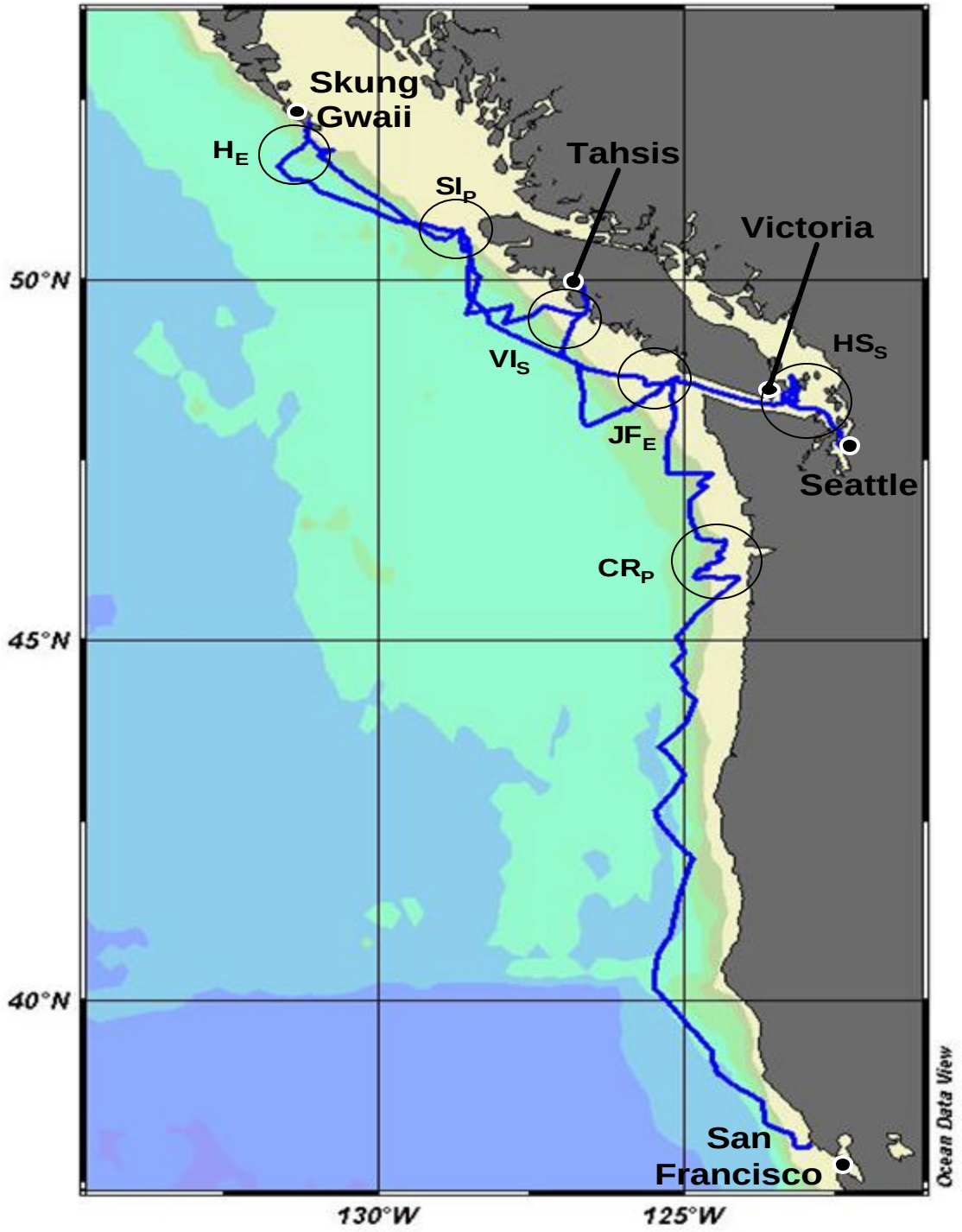

Table 2. Station summary of oceanographic sampling for S206.

Station # (S206-)	Date (2006)	Time (local +5 GMT)	Log (nm)	Lat (dec Deg N)	Lon (dec Deg W)	Location	Station Type
001							
002							
003	9-Jul	0431	_nd_	48.32	-123.31	Straight of Juan de Fuca	NT
004	10-Jul	0926	_nd_	48.50	-123.18	West San Juan Islands	CTD
004	10-Jul	0900	_nd_	48.50	-123.18	West San Juan Islands	SG
005	10-Jul	1211	_nd_	48.64	-123.24	West San Juan Islands	CTD
005	10-Jul	1211	_nd_	48.63	-123.23	Haro Strait	HC
005	10-Jul	1240	_nd_	48.63	-123.22	Haro Strait	SG
005	10-Jul	1311	_nd_	48.66	-123.23	Haro Strait	PN
005	10-Jul	1425	_nd_	48.65	-123.26	Haro Strait	MN
005	10-Jul	1430	_nd_	48.79	-123.25	Haro Strait	MN
005	10-Jul	1532	_nd_	48.65	-123.27	Haro Strait	NT
006	10-Jul	1938	_nd_	48.32	-123.18	8.5nm SW of Victoria	SG
006	10-Jul	2003	_nd_	48.31	-123.17	8.5nm SW of Victoria	CTD
007	11-Jul	0620	_nd_	48.64	-125.12	Swiftsure Bank	SG
007	11-Jul	0647	_nd_	48.64	-125.12	Swiftsure Bank	CTD
008	11-Jul	0903	_nd_	48.46	-125.43	Vancouver Shelf	PN
008	11-Jul	0908	_nd_	48.46	-125.43	Vancouver Shelf	CTD
008	11-Jul	0908	_nd_	48.46	-125.43	Vancouver Shelf	HC
008	11-Jul	0939	_nd_	48.45	-125.44	25nm SW of Swiftsure Bank	SG
008	11-Jul	1019	_nd_	48.45	-125.46	Vancouver Shelf	MN
008	11-Jul	1025	_nd_	48.44	-125.47	Vancouver Shelf	MN
008	11-Jul	1129	_nd_	48.41	-125.51	Vancouver Shelf	NT
009	11-Jul	1555	_nd_	48.26	-125.81	SW side of Juan de Fuca Eddy	SG
009	11-Jul	1625	_nd_	48.26	-125.82	SW side of Juan de Fuca Eddy	CTD
010	11-Jul	1839	_nd_	48.19	-125.95	Vancouver Shelf	CTD
010	11-Jul	1943	_nd_	48.20	-125.95	Vancouver Shelf	SG
011	12-Jul	0942	_nd_	48.43	-126.66	80 nm due west of Cape Flattery	RBR_CTD
012	12-Jul	1750	_nd_	48.86	-126.77	35 nm SW of Estevan Pt.	RBR_CTD
013	12-Jul	2216	_nd_	48.78	-126.69	45 nm W of Barkley Sound	CTD
013	12-Jul	2216	_nd_	48.78	-126.69	45 nm W of Barkley Sound	HC
013	12-Jul	2216	_nd_	48.78	-126.69	46 nm W of Barkley Sound	PN
013	12-Jul	2345	_nd_	48.78	-126.69	47 nm W of Barkley Sound	MN
013	12-Jul	2353	_nd_	48.78	-126.69	48 nm W of Barkley Sound	MN
013	13-Jul	0000	_nd_	48.78	-126.70	49 nm W of Barkley Sound	MN
013	13-Jul	0116	_nd_	48.79	-126.73	45 nm W of Barkley Sound	NT
014	13-Jul	2030	_nd_	49.37	-128.13	50 nm SW of Kyuquot Sound	RBR_CTD
015	14-Jul	0002	_nd_	49.50	-128.22	60 nm W of Nootka Sound	NT
015	14-Jul	0103	_nd_	49.54	-128.23	60 nm W of Nootka Sound	RBR_CTD
016	14-Jul	0518	_nd_	49.67	-128.41	70nm W of Checlesset Bay	RBR_CTD
017	14-Jul	0938	_nd_	49.88	-128.54	28nm SW of Solander Island	RBR_CTD
018	14-Jul	1324	_nd_	50.37	-128.52	26nm S of Scott Islands	CTD
019	14-Jul	1536	_nd_	50.42	-128.62	26nm S of Scott Islands	CTD
020	14-Jul	1815	_nd_	50.54	-128.66	13 nm S of Scott Islands	CTD
020	14-Jul	1913	_nd_	50.56	-128.66	13 nm S of Scott Islands	SG

Station # (S206-)	Date (2006)	Time (local +5 GMT)	Log (nm)	Lat (dec Deg N)	Lon (dec Deg W)	Location	Station Type
021	14-Jul	2043	_nd_	50.59	-128.57	South of Scott Islands	SG
021	14-Jul	2045	_nd_	50.59	-128.57	South of Scott Islands	PN
021	14-Jul	2105	_nd_	50.59	-128.67	South of Scott Islands	CTD
021	14-Jul	2105	_nd_	50.59	-128.67	South of Scott Islands	HC
021	14-Jul	2155	_nd_	50.64	-128.58	South of Scott Islands	MN
021	14-Jul	2200	_nd_	50.60	-128.58	South of Scott Islands	MN
021	14-Jul	2314	_nd_	50.60	-128.64	South of Scott Islands	NT
022	15-Jul	0048	_nd_	50.69	-128.64	South of Scott Islands	SG
022	15-Jul	0112	_nd_	50.69	-128.64	South of Scott Islands	CTD
023	15-Jul	0435	_nd_	50.55	-128.93	23 nm SW of Scott Channel	CTD
024	15-Jul	0622	_nd_	50.58	-129.08	18nm S of most w'ly Scott Island	CTD
025	15-Jul	1639	_nd_	51.49	-130.61	34nm SE of Cape St. James	PN
025	15-Jul	1648	_nd_	51.46	-130.61	34nm SE of Cape St. James	CTD
026	15-Jul	1927	_nd_	51.62	-130.81	22nm SE of Cape St. James	CTD
027	15-Jul	2144	_nd_	51.73	-130.99	10nm SE of Cape St. James	CTD
028	16-Jul	0008	_nd_	51.74	-130.91	SW of Cape St. James	MN
028	16-Jul	0017	_nd_	51.75	-130.91	SW of Cape St. James	NT
029	17-Jul	0922	_nd_	51.97	-131.20	9.9nm SW of Cape St. James	PN
029	17-Jul	0926	_nd_	51.97	-131.19	9.9nm SW of Cape St. James	CTD
030	17-Jul	1205	_nd_	51.83	-131.28	17nm SW of Cape St. James	CTD
031	17-Jul	1520	_nd_	51.70	-131.50	22nm SW of Cape St. James	CTD
032	17-Jul	1813	_nd_	51.56	-131.67	35nm SW of Cape St. James	CTD
032	17-Jul	1815	_nd_	51.56	-131.67	35nm SW of Cape St. James	PN
033	18-Jul	0845	_nd_	51.08	-130.51	25nm SW of Triangle Island	RBR_CTD
034	18-Jul	1033	_nd_	50.97	-130.14	43nm off Triangle Island	RBR_CTD
035	18-Jul	1205	_nd_	50.86	-129.86	25nm W of Triangle Island	RBR_CTD
036	18-Jul	1600	38	50.71	-129.04	10nm SE of Triangle Island	CTD
037	18-Jul	2015	46	50.66	-128.74	22nm W of Cape Scott	CTD
038	18-Jul	2236	51	50.56	-128.55	16nm SE of Southernmost Scott Island	CTD
039	19-Jul	0248	82	50.04	-128.34	17 nm SW of Brooks Peninsula	PN
039	19-Jul	0249	82	50.04	-128.34	17 nm SW of Brooks Peninsula	CTD
039	19-Jul	0249	82	50.04	-128.34	17 nm SW of Brooks Peninsula	HC
039	19-Jul	0341	82	50.04	-128.35	17 nm SW of Brooks Peninsula	MN
039	19-Jul	0347	82	50.04	-128.35	17 nm SW of Brooks Peninsula	MN
039	19-Jul	0353	82	50.03	-128.35	17 nm SW of Brooks Peninsula	NT
040	20-Jul	0521	_nd_	49.54	-126.63	2.3nm WNW of Escalante Pt.	NT
041	23-Jul	1307	230	49.66	-125.96	118nm SW of George Fraser Island	PN
042	23-Jul	1447	238	48.65	-125.75	36nm W of Cape Beale	PN
043	23-Jul	1527	240	48.65	-125.69	31.5 nm W of Cape Beale	CTD
043	23-Jul	1530	240	48.65	-125.69	31.5 nm W of Cape Beale	PN
044	23-Jul	1835	256	48.56	-125.46	81.5 nm SW of Cape Beale	PN
044	23-Jul	1840	256	48.56	-125.46	81.5 nm SW of Cape Beale	CTD
045	23-Jul	2117	_nd_	48.55	-125.19	19 nm SE of Barkley Sound	PN
045	23-Jul	2119	_nd_	48.55	-125.19	19 nm SE of Barkley Sound	CTD
046	24-Jul	0015	283	48.34	-125.23	22 nm W of Maka Bay	PN
046	24-Jul	0022	283	48.35	-125.23	22 nm W of Maka Bay	CTD

Station # (S206-)	Date (2006)	Time (local +5 GMT)	Log (nm)	Lat (dec Deg N)	Lon (dec Deg W)	Location	Station Type
047	24-Jul	0305	_nd_	48.19	-125.17	17 nm W of Cape Alava	PN
047	24-Jul	0311	_nd_	48.19	-125.17	17 nm W of Cape Alava	CTD
048	24-Jul	1842	368	47.31	-124.58	10nm W of Cape Elizabeth	SG
048	24-Jul	1902	368	47.31	-124.57	10nm W of Cape Elizabeth	CTD
049	24-Jul	2120	378	47.17	-124.76	18nm SW of Cape Elizabeth	PN
049	24-Jul	2123	378	47.17	-124.76	18nm SW of Cape Elizabeth	CTD
049	24-Jul	2123	378	47.17	-124.76	18nm SW of Cape Elizabeth	HC
049	24-Jul	2151	378	47.16	-124.76	18nm SW of Cape Elizabeth	SG
049	24-Jul	2240	379	47.15	-124.73	34nm W of Gray's Harbor	MN
049	24-Jul	2243	379	47.15	-124.73	34nm W of Gray's Harbor	MN
049	24-Jul	2245	379	47.15	-124.73	34nm W of Gray's Harbor	NT
050	25-Jul	0323	395	46.92	-124.92	28nm W of Browns Lighthouse	SG
050	25-Jul	0354	395	46.91	-124.92	28nm W of Brown's Lighthouse	CTD
051	25-Jul	0531	396	46.88	-124.92	35nm W of Gray's Harbor	CTD
051	25-Jul	0636	396	46.70	-124.92	35nm W of Gray's Harbor	SG
052	25-Jul	1544	421	46.41	-124.78	30nm NW of Columbia River	CTD
053	25-Jul	2106	438	46.39	-124.33	20nm SW of Willapa Bay	CTD
053	26-Jul	2043	438	46.40	-124.33	20nm SW of Willapa Bay	PN
054	25-Jul	2329	441	46.27	-124.37	13nm W of Columbia River	SG
054	25-Jul	2356	441	46.26	-124.37	13nm W of Columbia River	CTD
055	26-Jul	0141	444	46.22	-124.46	21nm W of Columbia River	PN
055	26-Jul	0328	_nd_	46.18	-124.45	21nm W of Columbia River	CTD
055	26-Jul	0335	_nd_	46.18	-124.45	21nm W of Columbia River	HC
055	26-Jul	0444	_nd_	46.15	-124.41	25.5 nm off Columbia River	MN
055	26-Jul	0449	_nd_	46.15	-124.41	25.5 nm off Columbia River	MN
055	26-Jul	0458	_nd_	46.15	-124.40	25.5 nm off Columbia River	NT
055	26-Jul	1436	444	46.20	-124.45	25.5 nm off Columbia River	SG
056	26-Jul	0851	457	46.03	-124.65	27nm W of Tillamook Head	SG
056	26-Jul	0953	457	46.01	-124.63	27nm W of Tillamook Head	CTD
057	26-Jul	1202	461	45.97	-124.79	33.8nm W of Tillamook Head	CTD
058	26-Jul	1352	466	45.88	-124.83	26.5nm W of Cannon Beach	CTD
059	26-Jul	1849	498	45.87	-124.13	6nm WSW of Tillamook Head	PN
059	26-Jul	1850	498	45.87	-124.14	6nm WSW of Tillamook Head	CTD
060	28-Jul	0023	669	43.51	-125.41	36nm SW of Haceta Bank	MN
060	28-Jul	0029	669	43.51	-125.41	36nm SW of Haceta Bank	MN
060	28-Jul	0037	669	43.51	-125.40	36nm SW of Haceta Bank	NT
060	28-Jul	0140	669	43.50	-125.37	36nm SW of Haceta Bank	PN
060	28-Jul	0142	669	43.50	-125.37	36nm SW of Haceta Bank	CTD

Duplicate station numbers refer to different oceanographic equipment that was either deployed concurrently in the same location or was deployed sequentially in the same general location once the vessel was hove to. General Location for stations was based on nearest geographic position on land or recognizable oceanic feature. Abbreviations for type of oceanographic equipment deployed: FS – Fisher scoop, NT – neuston tow, PN – phytoplankton net, MN – meter net, CTD – conductivity, temperature and depth profiler, RBR-CTD – Branker CTD deployed using our auxiliary winch and towfish device, HC – hydrocast with 12 Niskin bottles, SG – shipek grab. Frequently the taffrail log was not deployed (_nd_) and thus was not an accurate indication of our progress during the early part of the cruise.

Table 2. Surface Stations for S206.

Station # (S206-)	Date (2006)	Time (local +5 GMT)	Log (nm)	Temp (oC)	Salinity (ppt)	PO_4 (µM)	Chl-*a* (µg/l)	SF 0.45 Chl-*a* (µg/l)	SF 5.0 Chl-*a* (µg/l)	NO3 (µM)	Lat (dec Deg N)	Lon (dec Deg W)
SS-001	8-Jul	1730	_nd_	15.7	28.80	1.755	0.194			3.017	47.72	-122.45
SS-002	8-Jul	2200	_nd_	14.4	28.10	2.714	0.337			11.517	47.95	-122.53
SS-003	9-Jul	0102	_nd_	12.2	30.30	4.215	0.518			16.465	48.22	-123.02
SS-004	9-Jul	0440	_nd_	11.9	30.30	3.453	1.638			16.732	48.33	-123.31
SS-005	10-Jul	1443	_nd_	11.8	29.90	3.802	2.478			20.208	48.66	-123.26
SS-006	10-Jul	1539	_nd_	11.6	30.10	2.336	1.587			14.588	48.64	-123.27
SS-007	10-Jul	1623	_nd_	10.9	30.90	3.763	1.209			24.508	48.61	-123.25
SS-008	10-Jul	1705	_nd_	10.4	31.50	4.707	0.480			20.324	48.52	-123.22
SS-009	10-Jul	1829	_nd_	11.4	30.60	4.235	1.213			25.852	48.43	-123.19
SS-010	10-Jul	2025	_nd_	11.7	30.60	3.517	1.199			21.692	48.32	-123.16
SS-011	10-Jul	2105	_nd_	11.8	30.80	3.664	1.199			20.278	48.32	-123.27
SS-012	10-Jul	2144	_nd_	10.9	31.30	2.764	0.053			18.632	48.29	-123.40
SS-013	10-Jul	2223	_nd_	10.9	31.10	2.911	0.877			25.168	48.27	-123.53
SS-014	10-Jul	2250	_nd_	11.7	31.00	3.718	1.386			22.793	48.28	-123.62
SS-015	11-Jul	2225	3	15.5	31.30	2.759	57.384			0.178	48.37	-125.61
SS-016	13-Jul	0355	_nd_	14.0	32.00	1.164		0.131	0.509	0.113	48.85	-126.81
SS-017	14-Jul	0000	_nd_	14.4	32.20	0.303		0.044	0.160		49.50	-128.22
SS-018	15-Jul	1652	_nd_	14.9	31.40	0.254	0.751	0.198	0.289	0.108	51.46	-130.61
SS-019	15-Jul	1932	_nd_	14.6	31.50	0.805	0.826			0.135	51.60	-130.81
SS-020	15-Jul	2144	_nd_	14.6	31.90	0.544	0.635			0.384	51.73	-130.99
SS-021	16-Jul	0000	_nd_	14.6	31.90	0.835		0.770	0.574	0.127	51.74	-130.99
SS-022	17-Jul	0926	_nd_	12.3	32.10	1.214	1.344	0.218	0.946	3.978	51.97	-131.19
SS-023	17-Jul	1820	_nd_	14.4	31.90	0.746		0.574	0.425		51.56	-131.67
SS-024	20-Jul	0103	175	15.1	32.10	0.771	0.205			0.115	49.61	-127.34
SS-025	20-Jul	0200	178	15.2	32.10	0.692	0.274			0.120	49.62	-127.24
SS-026	20-Jul	0223	181	15.2	32.10	0.746	0.218			0.189	49.60	-127.16
SS-027	20-Jul	0249	184	14.8	32.00	0.564	1.083			0.099	49.55	-127.09
SS-028	20-Jul	0323	187	14.7	32.00	0.584	0.896			0.114	49.56	-126.97
SS-029	20-Jul	0347	190	14.5	31.60	0.485	3.500			0.104	49.54	-126.91
SS-030	20-Jul	0403	193	14.7	31.80	0.426	1.496			0.130	49.53	-126.85
SS-031	20-Jul	0434	196	14.8	31.60	0.495	3.281			0.131	49.53	-126.76
SS-032	20-Jul	0457	199	14.3	31.70	0.761	8.888			0.145	49.53	-126.68

Station # (S206-)	Date (2006)	Time (local +5 GMT)	Log (nm)	Temp (oC)	Salinity (ppt)	PO_4 (µM)	Chl-*a* (µg/l)	SF 0.45 Chl-*a* (µg/l)	SF 5.0 Chl-*a* (µg/l)	NO3 (µM)	Lat (dec Deg N)	Lon (dec Deg W)
SS-033	20-Jul	0545	_nd_	15.8	29.70	0.613	3.117			0.123	49.56	-126.62
SS-034	20-Jul	0630	_nd_	17.2	26.30	0.377	3.159			0.323	49.64	-126.60
SS-035	23-Jul	1307	230	15.0	31.50	0.679		0.203	4.544		49.66	-125.96
SS-036	23-Jul	1443	238	16.8	31.30	0.684		1.171	29.336		48.66	-125.76
SS-037	23-Jul	1533	240	13.0	31.70	1.854		0.288	1.456		48.61	-125.69
SS-038	23-Jul	1846	256	12.9	31.70	3.208		0.009	1.777		48.56	-125.46
SS-039	23-Jul	2118	_nd_	12.2	31.60	2.669		0.217	0.764		48.55	-125.19
SS-040	24-Jul	0015	283	13.0	32.20	3.019		0.798	2.407		48.35	-125.23
SS-041	24-Jul	0324	_nd_	14.0	31.90	1.223		0.207	0.224		48.19	-125.17
SS-042	25-Jul	1513	421	17.7	31.80	0.412	1.022				46.41	-124.78
SS-043	25-Jul	1720	425	17.8	31.70	0.373	0.994				46.40	-124.66
SS-044	25-Jul	1814	429	17.6	31.80	0.271	0.807				46.39	-124.57
SS-045	25-Jul	1911	432	17.2	32.00	0.291	1.036				46.38	-124.48
SS-046	25-Jul	2000	436	16.8	32.00	0.155	1.456				46.38	-124.38
SS-047	25-Jul	2043	438	16.2	32.00	0.402	3.486				46.40	-124.25
SS-048	26-Jul	1352	466	17.7	32.00	0.349	0.415				45.88	-124.83
SS-049	26-Jul	1514	470	17.8	31.90	0.145	0.700				45.87	-124.73
SS-050	26-Jul	1548	475	17.0	31.80	0.058	1.265				45.88	-124.62
SS-051	26-Jul	1627	480	16.6	28.60	0.504	5.040				45.87	-124.52
SS-052	26-Jul	1700	485	15.9	28.30	0.558	5.416				45.87	-124.43
SS-053	26-Jul	1734	490	16.4	27.70	0.349	6.608				45.87	-124.32
SS-054	26-Jul	1810	494	16.4	28.80	0.228	4.664				45.88	-124.21
SS-055	26-Jul	1915	498	14.3	31.60	0.325	1.920				45.86	-124.13
SS-056	27-Jul	1500	612	13.7	32.50						44.26	-124.93
SS-057	27-Jul	1600	618	12.6	32.60						44.19	-124.82
SS-058	27-Jul	1710	623	13.1	32.50						44.09	-124.86
SS-059	27-Jul	1810	629	13.8	32.50						44.00	-124.91
SS-060	27-Jul	1910	635	13.7	32.50						43.90	-124.95

Temperature and salinity and were determined using a continuous salinity/temperature flow-thru data logger. Phosphate (PO_4) and nitrate (NO_3) levels were measured by colorimetric analysis with and Ocean Optics Chem2000 digital spectrophotometer and chlorophyll-a (Chl-*a*) concentrations were determined with a Turner Designs Model 10-AU Fluorometer following methods outlined in Parsons, Maita and Lalli (1984; *A Manual of Chemical and Biological Methods for Seawater Analysis*, Pergamon Press). Often water samples for chlorophyll-*a* determination were filtered in series through 5.0 µm and then 0.45 µm GF filters for size fractionation (SF) studies. A blank space indicates that no sample was collected for that analysis; while (_bd_) indicates sample concentration was below detectable limits. Frequently the taffrail log was not deployed (_nd_) and thus was not an accurate indication of our progress during the early part of the cruise.

Figure 2a. Surface plots of temperature, salinity and fluorescence for S206. The Juan de Fuca eddy (JFE) was identified by its low salinity (31.25 psu), cool temperatures (12.5 ^{o}C) and increased fluorescence (> 100). In contrast the Haida eddy was saltier (31.75 psu), and showed variability in temperature and fluorescence on either side of the circulation. The Scott Islands plume was saltier than the Columbia River plume (31.50 psu vs < 31.00 psu) had lower fluorescence (30-40 vs 60-70) and was generally cooler (14-15 ^{o}C vs 15-17 ^{o}C). Detailed transects of these four areas can be found below. Data interpolation by VG Gridding in ODV, 20 x-scale and 20 y-scale.

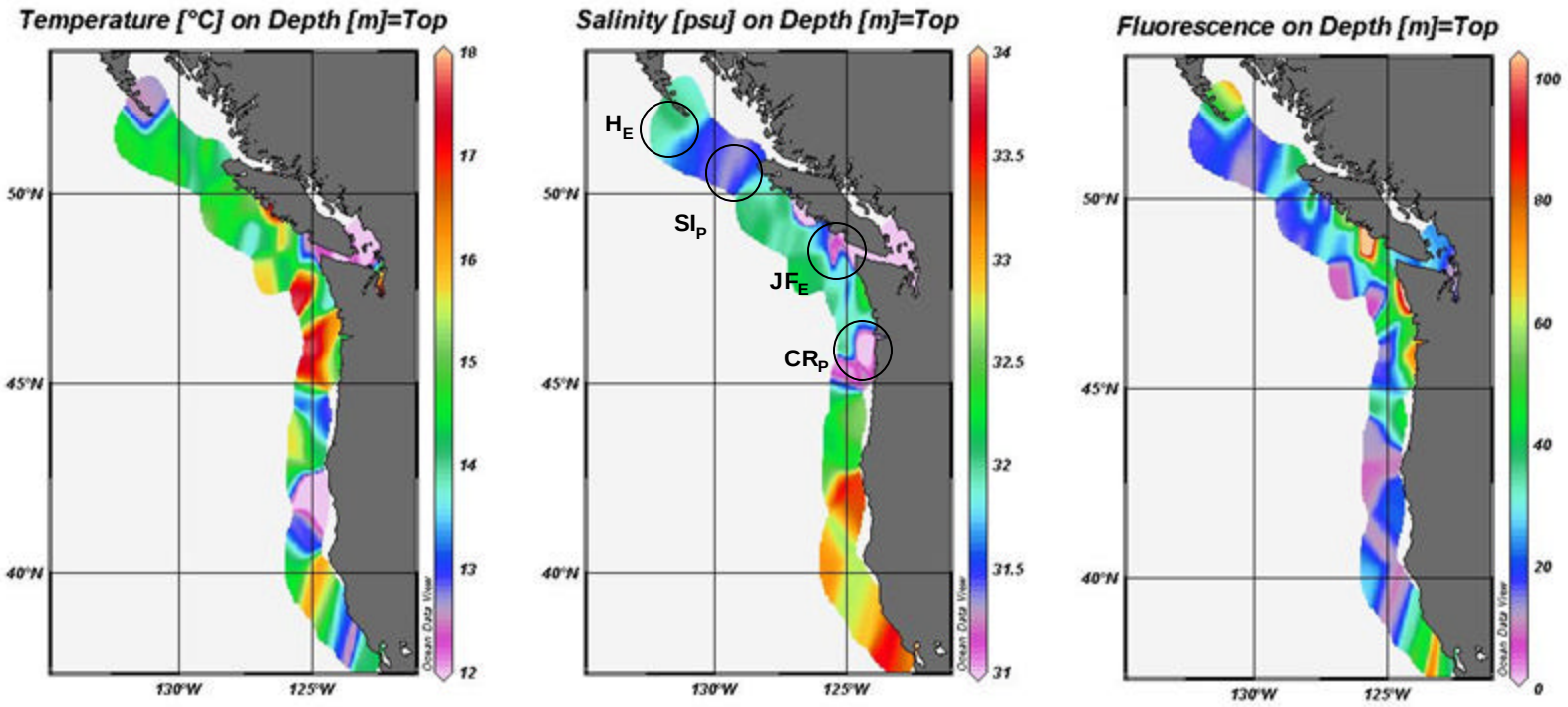

Figure 3 a and b. Surface plots of density and fluorescence for the Juan de Fuca eddy and Scott Islands plume. Transects through the Juan de Fuca eddy occurred nearly two weeks apart. Tracking the position of lower salinity and fluorescence suggest noticeable movement of eddy position related to wind patterns. Similarly, Scott Islands plume shows significant changes in location, extent (follow temperature and salinity) and resulting biologic response (follow fluorescence) among transects only 4 days apart.

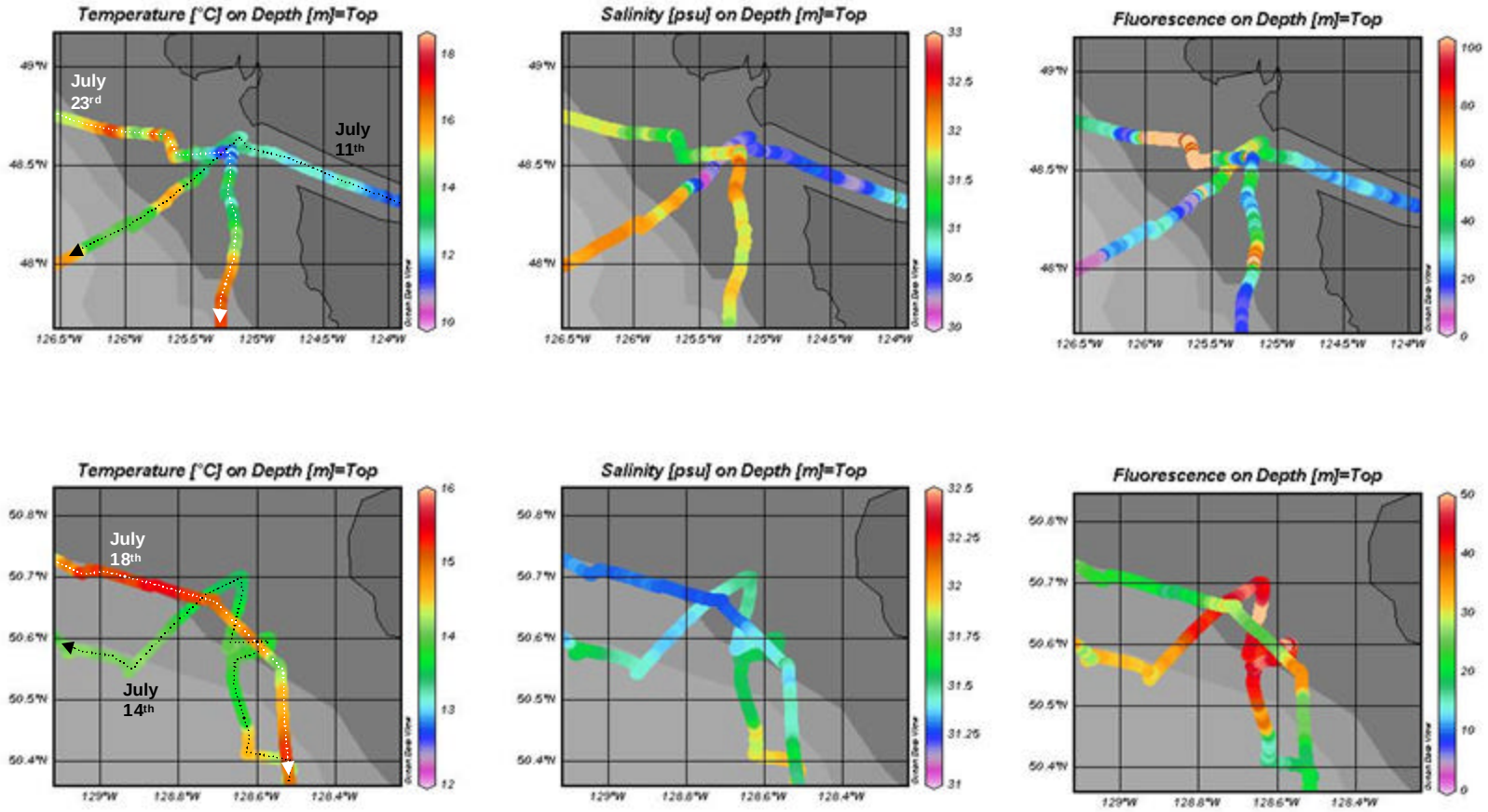

Figure 2 c and d. Surface plots of density and fluorescence for the Haida eddy and Columbia River plume. Temperature and salinity clearly demarked a Haida eddy forming off the southern tip of the Queen Charlotte Islands, while a narrow plume of low salinity and high fluorescence water moving offshore and to the south were indicative of the Columbia River plume.

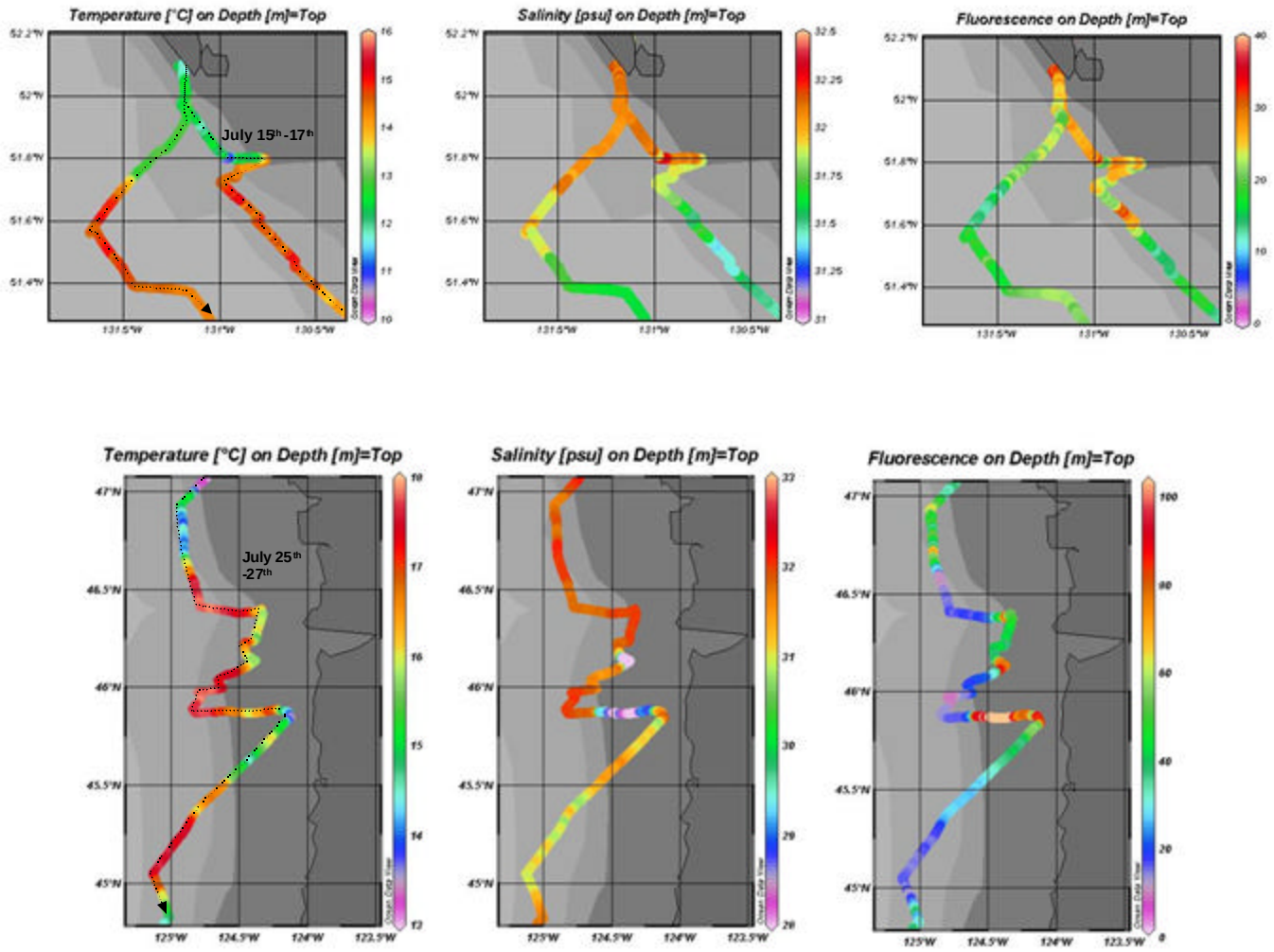

Table 4. CTD station data for S206.

Station # (S206)	Date (2006)	Local Time (+5 GMT)	Cast Depth (m)	Locale	Sensors
004	10-Jul	0926	145	West San Juan Islands	Trans
005	10-Jul	1211	214	West San Juan Islands	Trans
006	10-Jul	2003	104	8.5nm SW of Victoria	Trans
007	11-Jul	0647	73	Swiftsure Bank	Trans
008	11-Jul	0908	152	Vancouver Shelf	Trans
009	11-Jul	1625	233	SW side of Juan de Fuca Eddy	Trans
010	11-Jul	1839	692	Vancouver Shelf	Trans
011	12-Jul	0942	120	80 nm due west of Cape Flattery	RBR_CTD
012	12-Jul	1750	644	35 nm SW of Estevan Pt.	RBR_CTD
013	12-Jul	2216	300	45 nm W of Barkley Sound	Trans
014	13-Jul	2030	_nd_	50 nm SW of Kyuquot Sound	RBR_CTD
015	14-Jul	0103	_nd_	60 nm W of Nootka Sound	RBR_CTD
016	14-Jul	0518	145	70nm W of Checlesset Bay	RBR_CTD
017	14-Jul	0938	_nd_	28nm SW of Solander Island	RBR_CTD
018	14-Jul	1324	768	26nm S of Scott Islands	Fluor
019	14-Jul	1536	792	26nm S of Scott Islands	Trans
020	14-Jul	1815	470	13 nm S of Scott Islands	Trans
021	14-Jul	2105	178	South of Scott Islands	Trans
022	15-Jul	0112	131	South of Scott Islands	Trans
023	15-Jul	0435	770	23 nm SW of Scott Channel	Fluor
024	15-Jul	0622	785	18nm S of most w'ly Scott Island	
025	15-Jul	1648	1005	34nm SE of Cape St. James	Fluor
026	15-Jul	1927	682	22nm SE of Cape St. James	Fluor
027	15-Jul	2144	682	10nm SE of Cape St. James	Fluor
029	17-Jul	0926	716	9.9nm SW of Cape St. James	Fluor
030	17-Jul	1205	612	17nm SW of Cape St. James	Fluor
031	17-Jul	1520	347	22nm SW of Cape St. James	Fluor
032	17-Jul	1813	260	35nm SW of Cape St. James	Fluor
033	18-Jul	0845	_nd_	25nm SW of Triangle Island	RBR_CTD
034	18-Jul	1033	73	43nm 100T of Triangle Island	RBR_CTD
035	18-Jul	1205	71	25nm W of Triangle Island	RBR_CTD
036	18-Jul	1600	299	10nm SE of Triangle Island	Fluor
037	18-Jul	2015	191	22nm W of Cape Scott	Fluor
038	18-Jul	2236	183	16nm SE of Southernmost Scott Island	Fluor
039	19-Jul	0249	200	17 nm SW of Brooks Peninsula	Fluor
043	23-Jul	1527	56	31.5 nm W of Cape Beale	Fluor
044	23-Jul	1840	99	81.5 nm SW of Cape Beale	Fluor
045	23-Jul	2119	103	19 nm SE of Barkley Sound	Fluor
046	24-Jul	0022	171	22 nm W of Maka Bay	Fluor
047	24-Jul	0311	114	17 nm W of Cape Alava	Fluor
048	24-Jul	1902	60	10nm W of Cape Elizabeth	Trans
049	24-Jul	2123	111	18nm SW of Cape Elizabeth	Trans

Station # (S206)	Date (2006)	Local Time (+5 GMT)	Cast Depth (m)	Locale	Sensors
050	25-Jul	0354	445	28nm W of Brown's Lighthouse	Trans
051	25-Jul	0531	628	35nm W of Gray's Harbor	Trans
052	25-Jul	1544	894	30nm NW of Columbia River	Fluor
053	25-Jul	2106	68	20nm SW of Willapa Bay	Fluor
054	25-Jul	2356	135	13nm W of Columbia River	Trans
055	26-Jul	0328	106	21nm W of Columbia River	Fluor
056	26-Jul	0953	151	27nm W of Tillamook Head	Fluor
057	26-Jul	1202	349	33.8nm W of Tillamook Head	Fluor
058	26-Jul	1352	653	26.5nm W of Cannon Beach	Fluor
059	26-Jul	1850	73	6nm WSW of Tillamook Head	Fluor
060	28-Jul	0142	1407	36nm SW of Haceta Bank	Fluor

Transmissometer (Trans) and *in situ* fluorometer (Fluor) sensors alternately accompanied our CTD casts. Technical difficulties with the RBR-CTD software resulted in poor data quality and failure to determine cast depth or retrieve temperature or salinity data on numerous occasions as indicated by (_nd_).

Table 5. Hydrocast station data for S206.

Station # (S206-)	Bottle #	Depth (m)	Temp (oC)	Salinity (ppt)	Density (kg/m^3)	O_2 (ml/l)	PO_4 (µM)	Chl-*a* (µg/l)	SF 0.45 Chl-*a* (µg/l)	SF 5.0 Chl-*a* (µg/l)	Locale
005	1	150	9.7	31.30	24.10	3.46	2.774	0.551			Haro Strait
005	2	125	10.0	30.90	23.80	3.79	2.764	0.635			Haro Strait
005	3	100	10.1	30.70	23.60	3.78	2.508	0.616	0.201	0.663	Haro Strait
005	4	90	10.1	30.60	23.50	3.93	2.124	0.625			Haro Strait
005	5	80	10.2	30.40	23.30	3.93	2.252	0.891			Haro Strait
005	6	70	10.4	30.30	23.20	3.99	2.252	0.924			Haro Strait
005	7	60	10.6	30.20	23.10	4.10	3.497	1.545			Haro Strait
005	8	50	10.8	30.10	23.00	4.16	2.547	1.619	1.185	0.285	Haro Strait
005	9	40	10.9	30.00	22.90	4.29	2.360	1.563			Haro Strait
005	10	30	11.0	29.80	22.70	4.35	1.504	1.003			Haro Strait
005	11	20	11.0	29.70	22.70	4.38	1.578	1.036			Haro Strait
005	12	11	11.2	29.50	22.50	4.59	2.006	1.624			Haro Strait
005	13	0	11.8	29.90	22.50	4.52	1.583	2.301	0.226	1.437	Haro Strait
008	1	100	6.7	33.90	26.60		2.798		_bd_	0.018	Vancouver Shelf
008	4	75	7.0	33.70	26.40		3.389		0.009	0.077	Vancouver Shelf
008	7	50	7.9	33.20	25.90		2.833		_bd_	0.157	Vancouver Shelf
008	10	26	9.6	31.90	24.60	3.91	2.690		0.023	0.282	Vancouver Shelf
008	13	0	10.4	31.50	24.60		1.839		0.588	1.417	Vancouver Shelf
013	1	149	7.4	33.80	26.40	3.22	2.473	0.000	0.000	0.000	45 nm W of Barkley Sound
013	4	100	8.0	33.40	26.00	3.70	2.685	0.009	0.000	0.009	45 nm W of Barkley Sound
013	7	50	8.7	32.50	25.20	6.10	1.558	0.049	_bd_	0.049	45 nm W of Barkley Sound
013	10	25	10.6	32.20	24.60	6.24	1.219	0.798	0.028	0.770	45 nm W of Barkley Sound
013	13	0	14.5	32.10	24.60						45 nm W of Barkley Sound
021	1	150	13.3	31.60	26.60	2.65	2.336	0.023	_bd_	0.023	South of Scott Islands
021	4	100	13.2	31.60	26.00	3.89	2.291	_bd_	_bd_	0.000	South of Scott Islands
021	7	50	11.6	31.90	24.80	4.81	1.775	0.023	0.000	0.023	South of Scott Islands
021	10	25	9.2	32.10	24.00	5.92	0.791	1.054	0.317	0.737	South of Scott Islands
021	13	0	8.1	32.60	24.00		0.584	0.947	0.387	0.560	South of Scott Islands
039	1	150	7.3	33.80	26.50	2.94	3.074		_bd_	_bd_	17 nm SW of Brooks Peninsula
039	2	100	7.5	33.50	26.20	3.04	2.724		_bd_	0.077	17 nm SW of Brooks Peninsula
039	3	50	8.2	32.50	25.20	5.99	1.538		_bd_	_bd_	17 nm SW of Brooks

Station # (S206-)	Bottle #	Depth (m)	Temp (oC)	Salinity (ppt)	Density (kg/m^3)	O_2 (ml/l)	PO_4 (µM)	Chl-*a* (µg/l)	SF 0.45 Chl-*a* (µg/l)	SF 5.0 Chl-*a* (µg/l)	Locale
											Peninsula
039	13	0	14.9	31.80	25.20		0.643		0.117	0.435	17 nm SW of Brooks Peninsula
049	5	100	7.3	33.96	26.55		2.587	0.160			18nm SW of Cape Elizabeth
049	7	75	7.7	33.73	26.31		2.135	0.089			18nm SW of Cape Elizabeth
049	9	50	8.1	33.03	25.71		2.033	0.023			18nm SW of Cape Elizabeth
049	11	25	8.9	32.49	24.17		1.164	0.593			18nm SW of Cape Elizabeth
049	13	0	14.2	30.30	22.53		0.771		0.593	1.291	18nm SW of Cape Elizabeth
055	5	69	7.7	33.90	26.40		1.830	0.173			21nm W of Columbia River
055	9	23	9.2	32.50	25.10		1.325	0.658			21nm W of Columbia River
055	13	0	15.9	31.26	22.89		0.286	3.803	0.166	2.887	21nm W of Columbia River
005	1	150	9.7	31.30	24.10	3.46	2.774	0.551			Haro Strait
005	2	125	10.0	30.90	23.80	3.79	2.764	0.635			Haro Strait
005	3	100	10.1	30.70	23.60	3.78	2.508	0.616	0.201	0.663	Haro Strait
005	4	90	10.1	30.60	23.50	3.93	2.124	0.625			Haro Strait
005	5	80	10.2	30.40	23.30	3.93	2.252	0.891			Haro Strait
005	6	70	10.4	30.30	23.20	3.99	2.252	0.924			Haro Strait
005	7	60	10.6	30.20	23.10	4.10	3.497	1.545			Haro Strait
005	8	50	10.8	30.10	23.00	4.16	2.547	1.619	1.185	0.285	Haro Strait
005	9	40	10.9	30.00	22.90	4.29	2.360	1.563			Haro Strait
005	10	30	11.0	29.80	22.70	4.35	1.504	1.003			Haro Strait
005	11	20	11.0	29.70	22.70	4.38	1.578	1.036			Haro Strait
005	12	11	11.2	29.50	22.50	4.59	2.006	1.624			Haro Strait
005	13	0	11.8	29.90	22.50	4.52	1.583	2.301	0.226	1.437	Haro Strait
008	1	100	6.7	33.90	26.60		2.798		_bd_	0.018	Vancouver Shelf
008	4	75	7.0	33.70	26.40		3.389		0.009	0.077	Vancouver Shelf
008	7	50	7.9	33.20	25.90		2.833		_bd_	0.157	Vancouver Shelf
008	10	26	9.6	31.90	24.60	3.91	2.690		0.023	0.282	Vancouver Shelf
008	13	0	10.4	31.50	24.60		1.839		0.588	1.417	Vancouver Shelf
013	1	149	7.4	33.80	26.40	3.22	2.473	0.000	0.000	0.000	45 nm W of Barkley Sound
013	4	100	8.0	33.40	26.00	3.70	2.685	0.009	0.000	0.009	45 nm W of Barkley Sound

Station # (S206-)	Bottle #	Depth (m)	Temp (oC)	Salinity (ppt)	Density (kg/m^3)	O_2 (ml/l)	PO_4 (µM)	Chl-*a* (µg/l)	SF 0.45 Chl-*a* (µg/l)	SF 5.0 Chl-*a* (µg/l)	Locale
013	7	50	8.7	32.50	25.20	6.10	1.558	0.049	_bd_	0.049	45 nm W of Barkley Sound
013	10	25	10.6	32.20	24.60	6.24	1.219	0.798	0.028	0.770	45 nm W of Barkley Sound
013	13	0	14.5	32.10	24.60						45 nm W of Barkley Sound
021	1	150	13.3	31.60	26.60	2.65	2.336	0.023	_bd_	0.023	South of Scott Islands
021	4	100	13.2	31.60	26.00	3.89	2.291	_bd_	_bd_	0.000	South of Scott Islands
021	7	50	11.6	31.90	24.80	4.81	1.775	0.023	0.000	0.023	South of Scott Islands
021	10	25	9.2	32.10	24.00	5.92	0.791	1.054	0.317	0.737	South of Scott Islands
021	13	0	8.1	32.60	24.00		0.584	0.947	0.387	0.560	South of Scott Islands
039	1	150	7.3	33.80	26.50	2.94	3.074		_bd_	_bd_	17 nm SW of Brooks Peninsula
039	2	100	7.5	33.50	26.20	3.04	2.724		_bd_	0.077	17 nm SW of Brooks Peninsula
039	3	50	8.2	32.50	25.20	5.99	1.538		_bd_	_bd_	17 nm SW of Brooks Peninsula
039	13	0	14.9	31.80	25.20		0.643		0.117	0.435	17 nm SW of Brooks Peninsula
049	5	100	7.3	33.96	26.55		2.587	0.160			18nm SW of Cape Elizabeth
049	7	75	7.7	33.73	26.31		2.135	0.089			18nm SW of Cape Elizabeth
049	9	50	8.1	33.03	25.71		2.033	0.023			18nm SW of Cape Elizabeth
049	11	25	8.9	32.49	24.17		1.164	0.593			18nm SW of Cape Elizabeth
049	13	0	14.2	30.30	22.53		0.771		0.593	1.291	18nm SW of Cape Elizabeth
055	5	69	7.7	33.90	26.40		1.830	0.173			21nm W of Columbia River
055	9	23	9.2	32.50	25.10		1.325	0.658			21nm W of Columbia River
055	13	0	15.9	31.26	22.89		0.286	3.803	0.166	2.887	21nm W of Columbia River

Water samples were collected in 2.5 liter Niskin bottles deployed on a self-contained carousel system with a SBE-019Plus CTD sensor (Seabird Instruments, Inc.). Dissolved oxygen (O_2) concentrations were determined chemically by Winkler titration. Phosphate (PO_4), nitrate (NO_3) and levels were measured by colorimetric analysis with an Ocean Optics Chem2000 digital spectrophotometer and chlorophyll-a (Chl-a) concentrations were determined with a Turner Designs Model 10-AU Fluorometer following methods outlined in Parsons, Maita and Lalli (1984; *A Manual of Chemical and Biological Methods for Seawater Analysis*, Pergamon Press). Chlorophyll-*a* samples were filtered through 0.45 µm glass fiber (GF) filters. Often water samples for chlorophyll-*a* determination were filtered in series through 5.0 µm and then 0.45 µm GF filters for size fractionation (SF) studies. A blank space indicates that no sample was collected for that analysis. Sample concentrations below detectable limits are indicated as (_bd_).

Figure 4. T-S plots for S206. CTD locations indicated by blue dots. Oceanic regions surveyed include Haro Strait shelf (HS_S), Juan de Fuca eddy (JF_E), and Haida eddy (H_E), Scott Islands plume (SI_P) and Columbia River plume (CR_P).

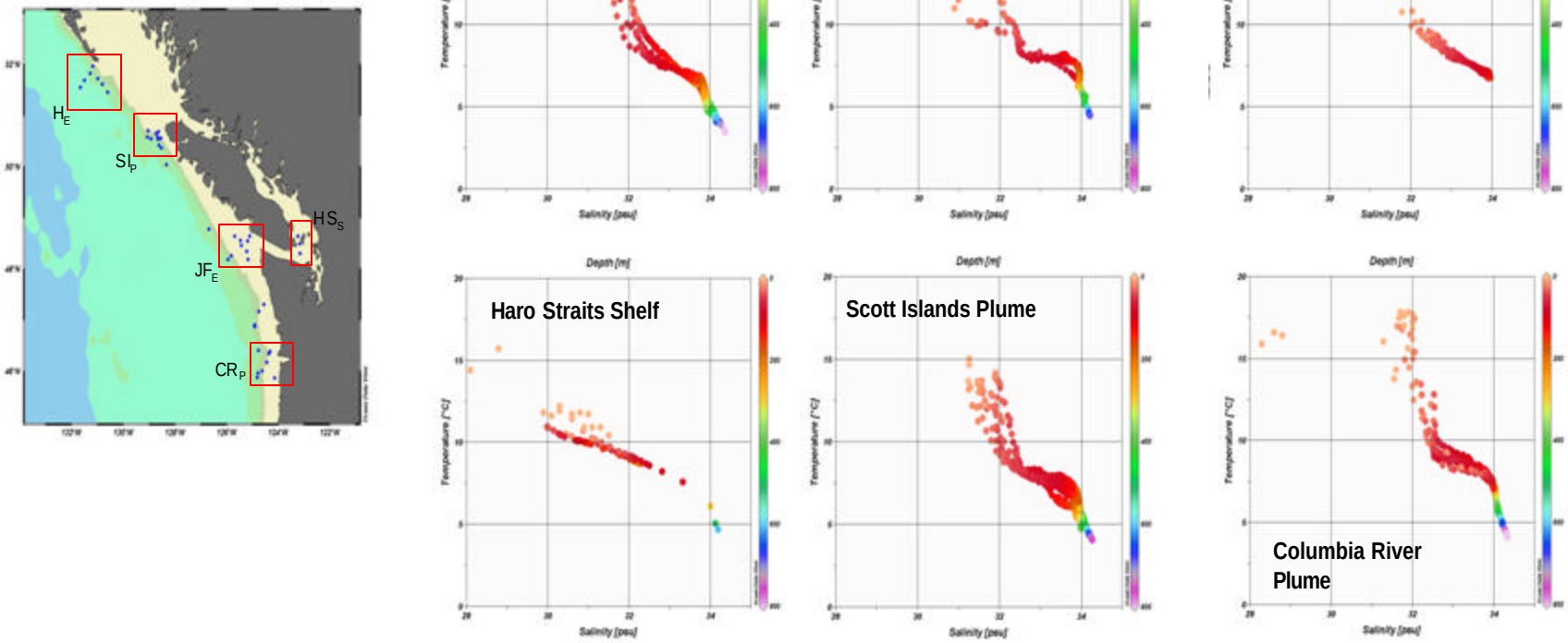

Figure 5. Current direction and magnitude for S206. Except for the three regions indicated (Haro Strait shelf - HS_S, Juan de Fuca eddy - JF_E, and Haida eddy - H_E), surface currents were generally weak (< 500 mm/s) throughout the entire cruise track. Haro Strait was dominated by tidal currents while the Juan de Fuca and Haida eddies exhibited clockwise and counter-clockwise currents respectively. Data interpolation by VG Gridding in ODV, 20 x-scale and 20 y-scale. NOTE: ~500 mm/s = 1.0 knot

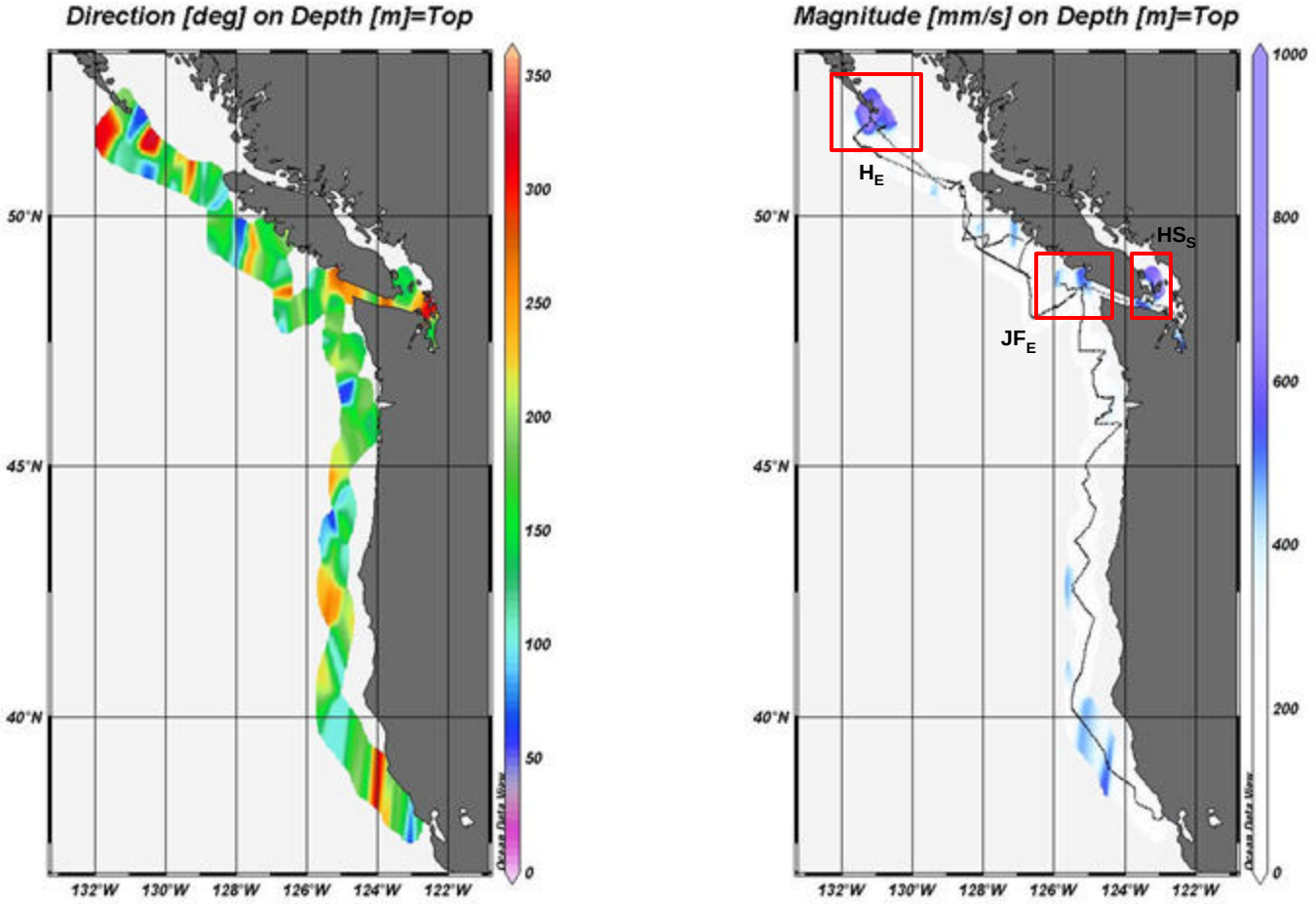

Table 6. Neuston station data for S206.

Station # (S206-)	Date (2006)	Local Time (+5 GMT)	Tow Area (m^2)	Temp (°C)	Salinity (ppt)	Zoo. Density (ml/m^2)	Halo. (#)	Mycto. (#)	Phyllo. (#)	Lepto. (#)	Plastic (#)	Tar
003	9-Jul	0431	2060	11.7	30.30	0.006	0	0	0	0	11	no
005	10-Jul	1532	1170	11.4	30.20	0.002	0	0	0	0	0	no
008	11-Jul	1129	2568	14.1	30.10	0.001	0	0	0	0	0	no
013	13-Jul	0116	2066	14.7	32.08	0.060	0	19	0	0	1	no
015	14-Jul	0002	1887	14.4	32.20	0.100	0	54	0	0	0	no
021	14-Jul	2314	2287	14.1	31.40	0.087	0	0	0	0	2	no
028	16-Jul	0017	1715	14.6	31.90	0.131	0	31	0	0	1	no
039	19-Jul	0353	1900	15.2	31.80	0.054	0	2	0	0	2	no
040	20-Jul	0521	1924	14.9	31.60	0.229	0	0	0	0	0	no
049	24-Jul	2245	1619	14.0	31.80	0.171	0	0	0	0	0	no
055	26-Jul	0458	1480	15.9	25.00	0.002	0	0	0	0	3	no
060	28-Jul	0037	1774	15.7	32.20	0.050	0	10	0	0	0	no

Tow area was derived from estimating tow distance in meters was calculated using distance between beginning and ending geographic positions. Net opening was 1.0 m wide by 0.5 m tall with a net mesh of 333 µm. Micronekton was removed using a 1 cm mesh sieve and biomass by volume displacement was determined; data available upon request. Zooplankton density is recorded as wet volume displacement per tow area (ml/m^2). Lantern fish (Family Myctophidae) spiny lobster larvae (phyllosoma), eel larvae (leptocephali) and *Halobates spp.* were sorted from net contents and recorded as numbers caught per tow. Floating plastic was also sorted from net contents, counted and recorded as numbers collected per tow. Floating tar was sorted from the nets contents and recorded present or absent.

Table 7. Meter net station data for S206.

Station # (S206-)	Date (2006)	Local Time (+5 GMT)	Target Depth (m)	Net Diameter (m)	Tow Volume (m3)	Zooplankton (ml/m²)	Mycto. (#)	Phyllo. (#)	Lepto. (#)
005	10-Jul	1425	100	1-MN	928	0.041	0	0	0
005	10-Jul	1430	50	1-MN	1144	0.017	0	0	0
008	11-Jul	1019	100	1-MN	2772	0.051	0	0	0
008	11-Jul	1025	50	1-MN	1977	0.051	0	0	0
013	12-Jul	2345	150	1-MN	2174	0.141	6	0	0
013	12-Jul	2353	100	1-MN	1272	0.241	4	0	0
013	13-Jul	0000	50	1-MN	1018	0.373	2	0	0
021	14-Jul	2200	50	1-MN	1140	0.368	0	0	0
021	14-Jul	2155	100	1-MN	1424	0.186	0	0	0
028	16-Jul	0008	50	1-MN	2139	0.076	1	0	0
039	19-Jul	0347	50	1-MN	2008	0.201	0	0	0
039	19-Jul	0341	100	1-MN	2468	0.195	2	0	0
049	24-Jul	2240	80	1-MN	1820	0.210	0	0	0
049	24-Jul	2243	50	1-MN	1705	0.900	0	0	0
055	26-Jul	0444	75	1-MN	4058	0.066	0	0	0
055	26-Jul	0449	25	1-MN	1658	0.011	0	0	0
060	28-Jul	0029	50	1-MN	1934	0.224	2	0	0
060	28-Jul	0023	100	1-MN	2690	0.160	3	0	0

Duplicate station numbers indicate multiple net deployments on the hydrowire for a given location. Tow volume was derived from estimating tow distance in meters was calculated using distance between beginning and ending geographic positions. Net size based on net diameters 1MN = 1 meter diameter, with a net mesh of 333µm. Zooplankton density is recorded as wet volume displacement per tow area (ml/m^3). Lantern fish (Family Myctophidae), spiny lobster larvae (phyllosoma) and eel larvae (leptocephali) were sorted from net contents and recorded as numbers caught per tow.

Table 8. Shipek grab station data for S206.

Station # (S206-)	Date (2006)	Time (local +5 GMT)	Sample Depth (m)	% 2000 (µm)	% 1000 (µm)	% 500 (µm)	% 250 (µm)	% 125 (µm)	% 63 (µm)	% < 63 (µm)
004	10-Jul	0900	234	27	20	33	4	1	2	13
005	10-Jul	1240	244	_nd_	_nd_	_nd_	_nd_	_nd_	_nd_	_nd_
006	10-Jul	1938	110	12	1	15	10	7	22	33
007	11-Jul	0620	76	1	4	7	34	37	4	13
008	11-Jul	0939	152	<1	<1	<1	<1	<1	<1	98
009	11-Jul	1555	213	_nd_	_nd_	_nd_	_nd_	_nd_	_nd_	_nd_
010	11-Jul	1943	800	1	2	8	5	3	4	77
020	14-Jul	1913	250	63	7	9	5	7	2	7
021	14-Jul	2043	184	57	1	3	3	9	10	17
022	15-Jul	0048	146	<1	<1	1	3	64	11	21
048	24-Jul	1842	70	1	1	8	39	39	3	9
049	24-Jul	2151	119	0	0	1	1	3	7	88
050	25-Jul	0323	436	_nd_	_nd_	_nd_	_nd_	_nd_	_nd_	_nd_
051	25-Jul	0636	292	1	1	4	4	4	3	83
054	25-Jul	2329	261	0	<1	<1	1	1	1	97
055	26-Jul	1436	134	3	4	6	9	43	6	29
056	26-Jul	0851	182	0	<1	<1	3	11	12	74

Sediment samples (100 ml) were wet sieved through a series of sieves; percent wet volume collected in each sieve is provided. _nd_ = no data collected, insufficient sediment volume to sieve.

Table 9. Student research topics for S206.

Physical Team

Scott Allen, Allison Bruce, Justin Gillespie, Carolyn Moss James Parra, Rusty Robertson, Michelle Smet	Water Transport Mechanisms of the Pacific Northwest Coast • Haida and Juan de Fuca Eddies • Columbia River and Scott Island Plumes

Chemical Team

Shane Gibbons, Katy Hunter, Dan Krofcheck, Natasha Mehta, Kyle Wood	Assessing Human Influence on Coastal Productivity In Pacific Northwest Coastal Ecosystems • Nutrients • Bacteria • Biological Oxygen Demand • Tar and Plastic

Biological Team

Justin Brodowski, Julianna Mullen, Ellen Axelsen, Michael Merkley, Scott Thompson,, Elizabeth Howe, Linsey Arnold, Tim Nedimyer, Katherine McClure, Catherine Nickels	Trophic Interactions in the Northeast Pacific Ocean • Bacteria • Phytoplankton • Zooplantkon • Meroplankton • Myctophids

Geological Team

Ben Baldwin, Mandy Heins, Lindsay Love, Kristin Ryan, Maia Theophanis	The Effects of River Discharge on Topography and Suspended Sediment Load in the N.E. Pacific Ocean • Deposited sediment grain size • Suspended sediment distribution • Bathymetry and slope