

OCEANOGRAPHICAL STATION LIST

Volume 45

Coastal Hydrological Investigations
in Eastern Australia, 1959

Compiled by A. D. Crooks



Division of Fisheries and Oceanography
Commonwealth Scientific and Industrial
Research Organization, Australia
Melbourne 1960

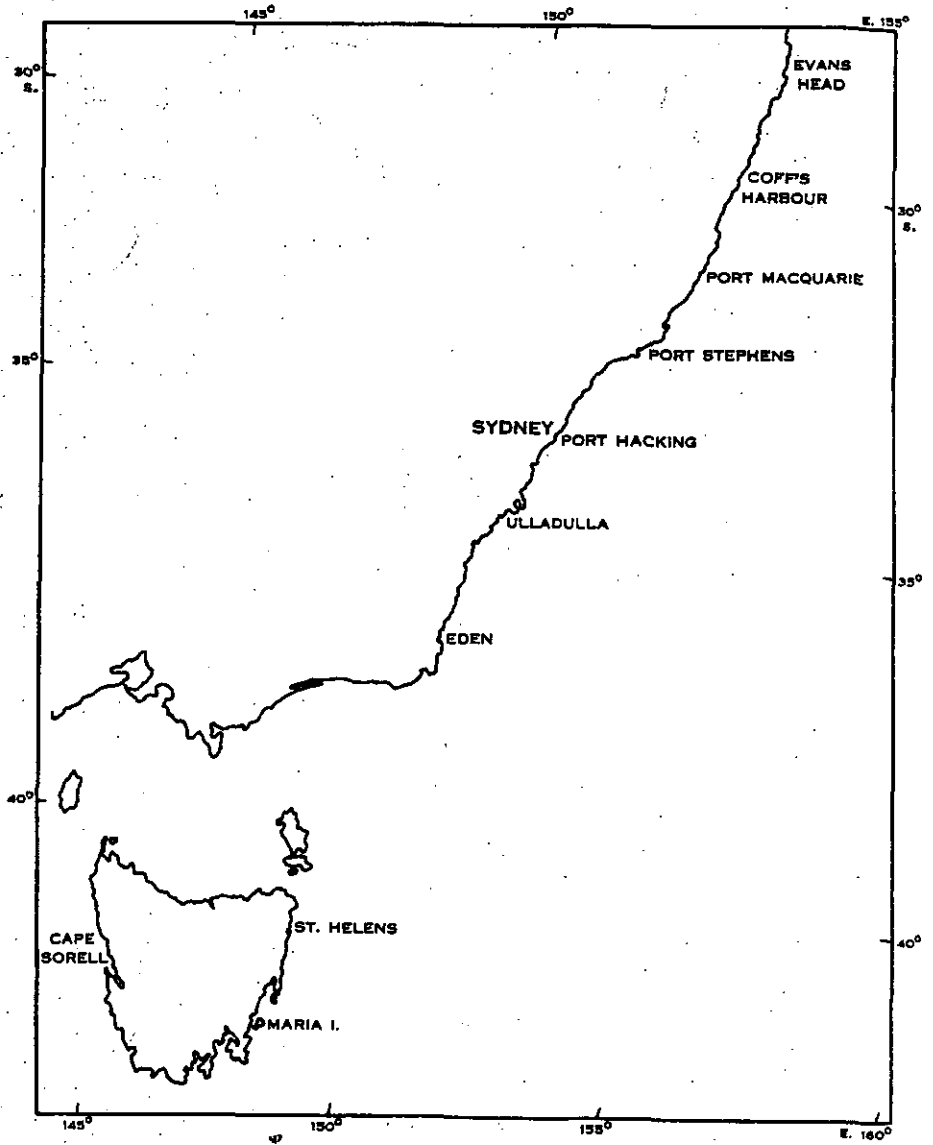


Fig. 1.—Station positions on the east Australian coast.

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COASTAL HYDROLOGICAL INVESTIGATIONS IN EASTERN AUSTRALIA, 1959

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I. INTRODUCTION

The sampling programme along the coast of eastern Australia remained as previous years. Figure 1 shows the positions of sampling stations. The data have again been published in three volumes; this volume contains data from all stations except Port Hacking, Eden, Bermagui, and Jervis Bay.

II. METHODS AND UNITS

The methods and units are given in C.S.I.R.O. Aust. (1959).

III. PERSONNEL

The sampling has been the responsibility of Mr. O. Mieztis at Hobart and of Messrs. R. Bradley and W. Prothero at Cronulla. The laboratory analyses have been carried out by Messrs. C. Walker, F. Davies, G. Dal Pont, R. Bradley, and W. Prothero at Cronulla, and by Mr. O. Mieztis at Hobart. Mrs. E. Wood and Misses Luce and R. Weidenhofer have been responsible for the processing of the data under the direction of Mr. A. D. Crooks. The typed sheets for printing were prepared by Mrs. D. Schmitzer.

IV. REFERENCE

C.S.I.R.O. Aust. (1959).—Coastal hydrological investigations in the New South Wales tuna fishing area, 1958. *C.S.I.R.O. Aust. Oceanogr. Sta. List* 38: 1-96.

Station: EVANS HEAD

Latitude: 29°07' S.

Longitude: 153°38' E.

Date	Depth (m)	Temp °C	Cl ‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1959 7.111	0	22.05	19.69	24.66	5.27	109		0.67	
	10	21.90	19.70	24.72	4.90	101		0.68	
	20	21.00	19.71	24.99	4.12	84		0.83	
	30	20.05	19.70	25.23	3.96	79		0.83	
	40	19.40	19.69	25.38	4.58	91		0.77	
	50	19.25	19.67	25.39	3.82	75		0.74	
18.1v	0	24.60	19.75	23.99	4.85	105			
	10	24.85	19.76	23.93	4.92	107		0.41	
	20	24.35	19.74	24.05	4.77	103		0.32	
	30	24.25	19.69	24.02	4.59	98		0.43	
	40	24.15	19.35	23.58	4.54	97		0.51	
	50	24.10	19.19	23.39	4.49	96		0.43	
21.v	0	21.75	19.75	24.83	4.96	102		0.34	
	10	21.75	19.75	24.83	4.99	103		0.34	
	20	21.75	19.75	24.83	4.99	103		0.39	
	30	21.75	19.75	24.83	5.02	103		0.39	
	40	21.70	19.75	24.84	5.04	104		0.35	
	50	21.70	19.75	24.84	5.02	103		0.35	
16.vi	0	21.05	19.75	^{25.24} 25.24	5.00	102		0.50	
	10	21.05	19.76	^{25.25} 25.25	5.06	103		0.38	
	20	21.05	19.79	^{25.29} 25.29	5.09	104		0.47	
	30	20.80	19.79	25.14	5.09	103		0.62	
	40	20.00	19.79	25.36	5.00	100		0.43	
	50	19.90	19.77	25.36	5.09	102		0.50	
21.vii	0	20.00	19.66	25.18	5.14	103		0.44	
	10	20.00	19.66	25.18	5.10	102		0.42	
	20	20.00	19.66	25.18	5.22	104		0.35	
	30	20.15	19.67	25.14	5.17	104		0.37	
	40	19.95	19.76	25.32	4.83	97		0.50	
	50	19.55	19.76	25.43	4.41	88		0.56	

Station: EVANS HEAD

Latitude: 29°07' S.

Longitude: 153°38' E.

Date	Depth (m)	Temp °C	Cl ‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1959 viii	0	18.85	19.74	25.59	5.39	106		0.44	
	10	18.85	19.74	25.59	5.42	106		0.54	
	20	18.85	19.74	25.59	5.42	106		0.34	
	30	18.80	19.74	25.60	5.42	106		0.37	
	40	18.40	19.73	25.69	5.42	105		0.48	
	50	17.60	19.68	25.81	5.45	104		0.76	
ix	0	19.40	19.71	25.40	5.01	99		0.49	
	10	19.35	19.70	25.41	5.18	102		0.43	
	20	19.20	19.70	25.44	5.01	99		0.38	
	30	19.15	19.70	25.46	5.01	99		0.50	
	40	19.20	19.71	25.46	5.01	99		0.42	
	50	19.35	19.74	25.46	5.05	100		0.45	
x	0	20.40	19.73	25.16	5.25	106		0.33	
	10	20.40	19.72	25.15	5.25	106		0.42	
	20	20.30	19.72	25.17	5.15	104		0.38	
	30	20.15	19.74	25.25	4.92	99		0.40	
	40	20.15	19.74	25.25	4.92	99		0.35	
	50	20.05	19.74	25.28	4.80	96		0.44	
xi	0	22.60	17.82	21.96	5.12	104		0.53	
	10	22.60	19.63	24.42	5.00	104		0.43	
	20	22.15	19.63	24.55	5.06	105		0.29	
	30	22.15	19.63	24.55	5.06	105		0.40	
	40	20.75	19.64	24.95	5.00	101		0.43	
	50	20.55	19.63	24.99	4.83	98		0.47	
xii	0	19.85	19.61	25.14	5.60	112		0.44	
	10	19.80	19.61	25.15	5.65	112		0.42	
	20	18.05	19.62	25.62	5.27	102		1.55	
	30	15.55	19.52	26.05	3.80	70		1.16	
	40	15.20	19.52	26.14	3.82	70		1.11	
	50	15.55	19.52	26.05	3.80	70		1.10	

Station: COFF 'S HARBOUR

Latitude: 30°17' S.

Longitude: 153°16' E.

Date	Depth (m)	Temp °C	Cl ‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1959 17.i	0	26.65	19.70	23.31	4.41	98		0.40	
	10	26.65	19.70	23.31	4.37	97		0.61	
	20	24.70	19.69	23.89	4.31	93		0.45	
	30	22.30	19.73	24.65	3.44	72		0.73	
	40	21.00	19.72	25.00	3.88	79		0.45	
	50	20.60	19.72	25.11	3.82	77		0.72	
10.111	0	22.57	19.61	24.40	4.99	104		0.54	
	10	22.38	19.63	24.48	4.88	101		0.56	
	20	22.46	19.68	24.53	5.08	106		0.59	
	30	21.12	19.69	24.92	4.31	88		0.74	
	40	19.85	19.66	25.22	3.58	71		0.94	
	50	18.77	19.63	25.45	3.53	69		0.95	
21.iv	0	23.60	19.70	24.23	4.77	101		0.32	
	10	23.60	19.71	24.24	4.82	102		0.31	
	20	23.65	19.72	24.24	4.82	103		0.37	
	30	23.50	19.73	24.30	4.70	100		0.35	
	40	22.50	19.73	24.59	4.54	95		0.35	
	50	20.20	19.73	25.23	4.31	87		0.52	
22.vii	0	19.85	19.76	25.35	4.83	96		0.45	
	10	19.90	19.76	25.34	4.83	97		0.50	
	20	19.90	19.76	25.34	4.92	98		0.50	
	30	19.65	19.74	25.38	4.62	92		0.50	
	40	18.20	19.70	25.69	4.07	79		0.62	
	50	17.15	19.64	25.86	4.00	76		0.72	
16.viii	0	18.70	19.77	25.65	5.20	102		0.48	
	10	18.75	19.77	25.64	5.20	102		0.68	
	20	18.75	19.77	25.64	5.20	102		0.46	
	30	18.70	19.76	25.64	5.32	104		0.47	
	40	18.70	19.77	25.65	5.25	103		0.46	
	50	18.70	19.78	25.67	5.22	102		0.43	

Station: CCF 'S HARBOUR

Latitude: 30°17' S.

Longitude: 153°16' E.

Date	Depth (m)	Temp °C	Cl ‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1959 8.ix	0	19.45	19.75	25.44	5.07	101		0.39	
	10	19.45	19.75	25.44	5.18	103		0.49	
	20	19.00	19.74	25.55	5.05	99		0.47	
	30	18.85	19.73	25.57	5.05	99		0.47	
	40	18.80	19.72	25.57	5.05	99		0.45	
	50	18.75	19.71	25.57	4.78	94		0.61	
28.x	0	21.40	19.72	24.88	5.00	102		0.33	
	10	21.15	19.72	24.95	5.01	102		0.38	
	20	20.30	19.72	25.17	4.88	98		0.41	
	30	20.20	19.72	25.20	4.84	97		0.37	
	40	20.15	19.72	25.22				0.42	
	50	20.15	19.72	25.22	4.81	97		0.43	
15.xi	0	21.90	16.68	20.59	5.55	108		0.47	
	10	21.60	19.10	23.98	5.32	108		0.35	
	20	20.25	19.46	24.83	5.25	107		0.44	
	30	20.05	19.66	25.16	5.15	103		0.34	
	40	20.06	19.68	25.19	5.02	101		0.38	
	50	20.00	19.67	25.19	5.06	101		0.38	
10.xii	0	22.50	19.54	24.32	5.06	105		0.33	
	10	22.05	19.57	24.48	5.18	107		0.37	
	20	18.10	19.66	25.66	5.67	109		0.40	
	30	16.20	19.57	26.00	4.46	83		0.90	
	40	15.30	19.54	26.15	4.40	80		1.06	
	50	15.25	19.54	26.16	4.16	76		1.05	

Station: PORT MACQUARIE

Latitude: 31°30' S.

Longitude: 153°10' E.

Date	Depth (m)	Temp °C	Cl ‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1959 9.iii	0	23.50	19.62	24.14	4.96	105			
	10	23.57	19.62	24.12	4.99	106		0.46	
	20	23.04	19.59	24.24	4.99	105		0.54	
	30	23.50	19.59	24.10	4.28	91		0.75	
	40	16.86	19.56	25.82	4.06	76		0.85	
	50	15.10	19.51	26.14	4.06	74		0.98	
23.iv	0	24.70	19.67	23.85	4.95	107		0.35	
	10	23.30	19.72	24.34	4.82	102		0.36	
	20	21.65	19.75	24.85	4.54	93		0.42	
	30	18.60	19.70	25.59	4.28	84		0.54	
	40	17.95	19.68	25.73	4.31	83		0.55	
	50	17.40	19.64	25.80	4.25	81		0.63	
12.vi	0	19.93	19.83	25.42	4.90	98		0.40	
	10	20.12	19.83	25.38	4.90	98		0.35	
	20	20.01	19.83	25.40	4.84	97		0.47	
	30	20.07	19.82	25.39	4.90	98		0.47	
	40	20.06	19.83	25.39	4.79	96		0.44	
	50	19.91	19.83	25.43	4.96	99		0.56	
23.vii	0	18.90	19.55	25.31	5.14	101		0.45	
	10	18.90	19.56	25.32	5.14	101		0.52	
	20	19.05	19.68	25.44	5.08	100		0.44	
	30	19.05	19.71	25.49	5.01	99		0.44	
	40	19.05	19.73	25.51	4.92	97		0.46	
	50	19.05	19.73	25.51	4.95	97		0.46	
14.viii	0	18.70	19.75	25.63	5.07	99		0.53	
	10	18.60	19.74	25.64	5.18	101		0.58	
	20	18.50	19.74	25.67	5.02	98		0.57	
	30	18.45	19.73	25.67	5.02	98		0.76	
	40	18.45	19.73	25.67	4.90	95		0.56	
	50	18.50	19.74	25.67	4.93	96		0.52	

Station: PORT MACQUARIE

Latitude: 31°30' S.

Longitude: 153°10' E.

Date	Depth (m)	Temp °C	Cl ‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1959 4.ix	0	17.80	19.43	25.40	4.76	91		0.62	
	10	17.60	19.63	25.74	4.55	87		0.75	
	20	17.40	19.64	25.80	4.51	86		0.71	
	30	17.40	19.64	25.80	4.58	87		0.63	
	40	17.30	19.64	25.82	4.40	84		0.66	
	50	16.35	19.59	25.98	4.31	80		0.65	
10.x	0	18.70	19.64	25.49	4.03	79		0.70	
	10	18.70	19.65	25.50	4.08	80		0.58	
	20	16.85	19.59	25.88	4.06	77		0.67	
	30	15.75	19.56	26.08	4.15	76		0.74	
	40	14.80	19.51	26.20	4.69	85		0.78	
	50	14.35	19.49	26.28	4.73	85		0.91	
19.xi	0	22.80	19.69	24.45	4.63	97		0.31	
	10	22.80	19.69	24.45	4.97	104		0.32	
	20	22.30	19.70	24.61	5.12	106		0.32	
	30	20.60	19.71	25.09	5.06	102		0.39	
	40	18.60	19.73	25.63	5.15	101		0.46	
	50	18.30	19.74	25.72	5.38	104		0.45	
9.xii	0	19.50	19.41	24.91	6.06	120		0.34	
	10	18.65	19.42	25.18	6.43	125		0.45	
	20	17.40	19.46	25.55	6.95	132		0.43	
	30	16.10	19.57	26.02	5.59	104		0.44	
	40	15.40	19.57	26.17	4.33	79		0.69	
	50	15.40	19.58	26.19	4.34	79		0.76	

Station: PORT STEPHENS

Latitude: 32°43' S.

Longitude: 152°18' E.

Date	Depth (m)	Temp °C	Cl ‰	σ_t	O ₂	O ₂ %	pH	PO ₄ -P	NO ₃ -N
1959									
14.i	0	24.90	19.74	23.89	4.67	101		0.52	
	10	24.35	19.74	24.06	4.67	100		0.52	
	20	23.55	19.74	24.30	4.70	100		0.43	
	30	21.90	19.75	24.78	4.82	100		0.44	
	40	21.50	19.75	24.90	4.92	102		0.42	
	50	20.60	19.75	25.14	4.87	99		0.44	
21.iii	0	22.60	19.55	24.31	5.01	104		0.51	
	10	22.00	19.52	24.44	5.20	107		0.56	
	20	21.70	19.59	24.62	4.95	102		0.57	
	30	21.60	19.59	24.65	4.84	99		0.54	
	40	21.40	19.58	24.69	4.78	98		0.57	
	50	21.20	19.60	24.77	4.63	94		0.61	
28.iv	0	20.65	19.52	24.81	4.95	100		0.44	
	10	20.65	19.51	24.79	4.92	99		0.44	
	20	20.60	19.52	24.82	4.88	98		0.44	
	30	20.50	19.52	24.85	4.85	98		0.35	
	40	20.70	19.58	24.89	4.70	95		0.38	
	50	20.70	19.67	25.01	4.88	99		0.43	
19.vi	0	19.30	19.79	25.53	5.17	102		0.61	
	10	19.20	19.78	25.55	5.32	105		0.47	
	20	18.85	19.78	25.64	5.09	100		0.44	
	30	18.80	19.78	25.65	5.09	100		0.42	
	40	18.70	19.82	25.73	5.11	100		0.52	
	50	18.70	19.81	25.71	5.06	99		0.53	
15.vii	0	17.85	19.78	25.88	5.49	106		0.44	
	10	17.85	19.77	25.87	5.35	103		0.44	
	20	17.85	19.77	25.87	5.42	104		0.50	
	30	17.70	19.75	25.88	5.17	99		0.50	
	40	17.60	19.74	25.90	5.01	96		0.53	
	50	17.60	19.74	25.90	4.95	95		0.60	

ation: PORT STEPHENS

itude: 32°43' S.

Longitude: 152°18' E.

Date	Depth (m)	Temp °C	Cl ‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1959 12.viii	0	17.85	19.75	25.84	5.33	103		0.47	
	10	17.90	19.76	25.84	5.31	102		0.36	
	20	17.85	19.76	25.85	5.26	101		0.50	
	30	17.85	19.76	25.85	5.31	102		0.64	
	40	17.80	19.76	25.86	5.36	103		0.54	
	50	17.50	19.71	25.88	4.98	95		0.43	
13.ix	0	18.20	19.32	25.15	5.53	107		0.34	
	10	17.65	19.64	25.74	5.39	103		0.58	
	20	17.50	19.65	25.79	5.26	100		0.52	
	30	16.50	19.63	26.01	4.51	84		0.70	
	40	15.80	19.62	26.15	4.51	83		0.79	
	50	15.60	19.60	26.17	4.45	82		0.81	

Station: ULLADULLA

Latitude: 35°22' S.

Longitude: 150°35' E.

Date	Depth (m)	Temp °C	Cl ‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1959 6.i	0	21.70	19.75	24.85	4.99	103		0.41	
	10	21.20	19.75	24.98	5.01	102		0.42	
	20	20.70	19.73	25.10	5.06	102		0.62	
	30	20.45	19.71	25.13	5.06	102		0.42	
	40	20.30	19.70	25.16	5.01	101		0.46	
	50	20.05	19.70	25.23	4.95	99		0.51	
6.ii	0	20.50	19.66	25.05	5.40	109		0.50	
	10	20.10	19.66	25.15	5.40	108		0.43	
	20	18.00	19.64	25.66	4.69	90		0.75	
	30	16.25	19.62	26.06	4.31	80		0.91	
	40	15.80	19.60	26.14	4.34	80		1.01	
	50	14.75	19.58	26.34	4.34	78		1.29	
25.iii	0	24.50	19.64	23.87	4.84	104		0.35	
	10	24.55	19.76	24.02	4.72	102		0.37	
	20	24.10	19.77	24.17	4.78	103		0.44	
	30	23.95	19.77	24.21	4.78	102		0.31	
	40	24.00	19.79	24.22	4.75	102		0.34	
	50	23.35	19.79	24.41	4.69	99		0.34	
7.iv	0	21.60	19.63	24.71	5.12	105		0.67	
	10	21.60	19.63	24.71	5.18	106		0.67	
	20	20.05	19.66	25.16	5.30	106		0.55	
	30	19.85	19.67	25.24	5.27	105		0.54	
	40	18.60	19.70	25.60	4.64	91		0.34	
	50	18.20	19.71	25.71	4.52	88		0.42	
12.v	0	20.55	19.77	25.18	5.04	102		0.40	
	10	20.55	19.77	25.18	5.14	104		0.40	
	20	20.55	19.78	25.19	5.08	103		0.40	
	30	20.60	19.78	25.18	5.17	104		0.40	
	40	20.60	19.77	25.16	5.11	103		0.62	
	50	20.40	19.76	25.21	5.17	104		0.43	

Station: ULLADULLA

Latitude: 35°22' S.

Longitude: 150°35' E.

Date	Depth (m)	Temp °C	Cl ‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1959 4.vi	0	19.00	19.74	25.55	5.15	101		0.43	
	10	19.00	19.75	25.56	5.20	102		0.42	
	20	18.70	19.73	25.61	5.27	103		0.42	
	30	18.70	19.73	25.61	5.27	103		0.42	
	40	18.55	19.75	25.67	5.18	101		0.42	
	50	18.55	19.74	25.66	5.15	100		0.42	
6.vii	0	16.95	19.42	25.61	5.77	109		0.80	
	10	16.95	19.61	25.78	5.59	106		0.80	
	20	17.05	19.69	25.99	5.44	103		0.81	
	30	16.90	19.73	26.06	5.44	103		0.85	
	40	16.80	19.72	26.07	5.35	101			
	50	16.25	19.72	26.20	5.35	100		0.78	
4.viii	0	15.70	19.68	26.26	5.42	100		0.55	
	10	15.75	19.69	26.27	5.42	100		0.50	
	20	15.60	19.67	26.27	5.39	99		0.55	
	30	15.40	19.66	26.30	5.25	96		0.57	
	40	15.70	19.68	26.27	5.29	98		0.53	
	50	15.30	19.66	26.32	5.22	95		0.53	
2.ix	0	17.05	19.70	25.98	5.60	106		0.53	
	10	16.25	19.64	26.08	5.65	105		0.30	
	20	15.70	19.66	26.23	5.60	103		0.70	
	30	15.70	19.64	26.20	5.60	103		0.86	
	40	14.50	19.59	26.41	5.37	97			
	50	14.35	19.58	26.42	5.11	92		0.78	
12.x	0	16.30	19.65	26.09	5.55	104		0.77	
	10	16.00	19.65	26.17	5.52	102		0.60	
	20	15.20	19.61	26.28	5.39	98		0.79	
	30	14.40	19.59	26.40	5.13	92		0.53	
	40	14.20	19.57	26.41	5.10	91		0.62	
	50	14.10	19.57	26.43	5.27	94		0.62	

Station: ULLADULLA

Latitude: 35°22' S.

Longitude: 150°35' E.

Date	Depth (m)	Temp °C	Cl ‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1959 9.xi	0	17.90	19.30	25.11	5.70	109		0.43	
	10	17.90	19.32	25.24	5.70	109		0.42	
	20	17.90	19.32	25.24	5.68	109		0.41	
	30	17.80	19.38	25.36	5.77	110		0.43	
	40	17.45	19.41	25.48	5.63	107		0.52	
	50	16.25	19.35	25.69	5.77	107		0.40	
9.xii	0	19.40	19.42	25.00	5.60	110		0.43	
	10	19.20	19.44	25.08	5.53	109		0.66	
	20	19.10	19.44	25.10	5.65	111		0.63	
	30	18.60	19.43	25.22	5.21	101		0.52	
	40	17.10	19.47	25.64	5.06	96		0.64	
	50	15.70	19.53	26.06	4.77	88		1.01	

Station: ST. HELENS

Latitude: 41°13' S.

Longitude: 148°22' E.

Date	Depth (m)	Temp °C	Cl ‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1959 13.i	0	16.80	19.23	25.38	5.77	102		0.35	0
	10	16.60	19.44	25.72	5.80	102		0.32	0
	20	14.90	19.40	26.04	5.95	102		0.39	0
	30	14.20	19.40	26.19	5.57	94		0.48	2.50
	40	13.20	19.40	26.40	5.32	88		0.55	4.64
	50	12.45	19.42	26.58	5.15	85		0.65	6.07
10.ii	0	16.90	19.55	25.80	5.53	98		0.29	0
	10	16.60	19.55	25.87	5.60	99		0.33	0
	20	16.45	19.54	25.89	5.56	97		0.33	0.36
	30	16.10	19.53	25.95	5.56	97		0.36	0.71
	40	14.90	19.51	26.20	5.56	95		0.46	2.86
	50	14.90	19.51	26.20	5.56	95		0.49	2.86
10.iii	0	17.20	19.62	25.82	5.36	95		0.42	0
	10	16.90	19.60	25.87	5.43	96		0.42	0
	20	16.25	19.55	25.95	5.36	94		0.45	1.07
	30	16.15	19.55	25.97	5.30	93		0.45	0
	40	15.85	19.55	26.04	5.18	90		0.48	2.14
	50	15.00	19.53	26.20	5.10	88		0.52	3.57
15.iv	0	15.90	19.56	26.05	5.37	94		0.32	0.71
	10	16.00	19.56	26.03	5.43	95		0.39	1.07
	20	16.00	19.56	26.03	5.43	95		0.39	1.07
	30	16.00	19.56	26.03	5.43	95		0.42	0.71
	40	16.00	19.55	26.01	5.48	96		0.39	0.71
	50	16.00	19.57	26.04	5.52	96		0.39	0
12.v	0	14.80	19.56	26.30	5.61	96		0.39	0.71
	10	14.80	19.56	26.30	5.61	96		0.42	1.07
	20	14.80	19.56	26.30	5.61	96		0.42	0.36
	30	14.80	19.56	26.30	5.61	96		0.42	0
	40	14.80	19.56	26.30	5.61	96		0.42	0.71
	50	14.80	19.56	26.30	5.61	96		0.42	1.07

Station: ST. HELENS

Latitude: 41°13' S.

Longitude: 148°22' E.

Date	Depth (m)	Temp °C	Cl ‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1959 9.vi	0	14.45	19.62	26.45	5.67	96		0.39	2.14
	10	14.45	19.62	26.45	5.67	96		0.42	1.07
	20	14.45	19.62	26.45	5.67	96		0.39	0.71
	30	14.45	19.62	26.45	5.67	96		0.39	2.14
	40	14.40	19.61	26.45	5.67	96		0.42	2.14
	50	14.15	19.58	26.46	5.67	96		0.42	1.79
14.vii	0	11.70	19.44	26.77	6.04	97		0.45	3.93
	10	11.70	19.44	26.77	6.07	98		0.48	3.93
	20	11.70	19.44	26.77	6.07	98		0.52	3.93
	30	11.70	19.44	26.77	6.07	98		0.48	3.57
	40	11.70	19.44	26.77	6.04	97		0.48	3.57
	50	11.70	19.44	26.77	6.07	98		0.48	3.57
11.viii	0	11.35	19.09	26.33	5.98	95		0.48	3.57
	10	11.60	19.41	26.73	6.01	97		0.48	3.93
	20	11.60	19.41	26.73	5.98	96		0.48	3.93
	30	11.60	19.41	26.73	6.01	97		0.48	3.93
	40	11.60	19.41	26.73	6.01	97		0.48	3.57
	50	11.60	19.41	26.73	6.01	97		0.48	3.93
15.ix	0	11.80	19.20	26.40	6.16	99		0.35	1.43
	10	11.80	19.44	26.74	6.21	100		0.42	3.21
	20	11.80	19.44	26.74	6.21	100		0.42	3.93
	30	11.80	19.44	26.74	6.16	99		0.42	2.86
	40	11.75	19.44	26.75	6.00	97		0.45	3.93
	50	11.75	19.44	26.75	5.95	96		0.45	3.21
13.x	0	12.90	19.48	26.58	5.95	98		0.48	3.93
	10	12.85	19.49	26.61	5.92	97		0.48	3.93
	20	12.80	19.50	26.63	5.88	97		0.55	2.86
	30	12.80	19.50	26.63	5.82	96		0.45	4.29
	40	12.80	19.50	26.63	5.80	95		0.42	3.93
	50	12.80	19.50	26.63	5.82	96		0.48	4.29

Station: ST. HELENS

Latitude: 41°13' S.

Longitude: 148°22' E.

Date	Depth (m)	Temp °C	Cl ‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1959									
10.xi	0	13.60	19.42	26.35	5.98	100		0.52	2.86
	10	13.40	19.51	26.52	6.03	101		0.58	3.93
	20	13.40	19.51	26.52	5.98	99		0.55	3.93
	30	13.40	19.51	26.52	5.88	98		0.52	4.29
	40	13.40	19.51	26.52	5.88	98		0.52	3.93
	50	13.30	19.51	26.54	5.86	97		0.58	3.57
8.xii	0	14.00	19.43	26.28	5.58	94		0.35	2.86
	10	13.70	19.48	26.41	5.61	94		0.39	3.21
	20	13.55	19.48	26.44	5.55	93		0.42	3.57
	30	13.50	19.48	26.45	5.51	92		0.48	2.14
	40	13.35	19.48	26.49	5.35	89		0.45	4.29
	50	13.25	19.48	26.51	5.28	88		0.45	4.29

Station: CAPE SORELL

Latitude: 42°08' S.

Longitude: 145°06' E.

Date	Depth (m)	Temp °C	Cl ‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1959									
12.i	0	15.50	19.11	25.51				0.35	0
	10	15.40	19.31	25.81				0.26	0
	20	14.40	19.33	26.05				0.35	0
	30	13.25	19.35	26.32				0.48	1.07
	40	13.25	19.35	26.32				0.48	1.07
	50	13.15	19.35	26.34				0.48	1.43
24.ii	0	16.70	18.64	24.59				0.26	0.36
	10	16.90	19.19	25.30				0.26	0
	20	15.80	19.34	25.77				0.26	0
	30	14.70	19.38	26.07				0.29	1.07
	40	13.60	19.38	26.30				0.35	1.43
	50	12.90	19.38	26.45				0.45	5.00
7.v	0	13.10	13.25	17.69				0.32	1.07
	10	14.60	19.33	26.01				0.39	3.21
	20	14.60	19.42	26.14				0.42	0
	30	14.70	19.43	26.14				0.42	3.57
	40	14.80	19.45	26.14				0.45	1.43
	50	14.90	19.46	26.13				0.48	2.86
1.vi	0	11.80	14.76	20.02					1.79
	10	13.60	19.19	26.03				0.32	1.79
	20	13.80	19.43	26.33				0.35	1.79
	30	13.70	19.43	26.33				0.39	1.79
	40	13.50	19.43	26.33				0.39	1.79
	50	13.40	19.43	26.33				0.32	2.14
18.viii	0	10.60	13.49	18.46				0.32	2.14
	10	11.40	18.82	25.94				0.35	2.50
	20	11.70	19.10	26.28				0.35	2.50
	30	12.10	19.40	26.62				0.42	2.14
	40	12.40	19.45	26.64				0.42	2.50
	50	12.30	19.45	26.66				0.32	2.50

Station: CAPE SORELL

Latitude: 42°08' S.

Longitude: 145°06' E.

Date	Depth (m)	Temp °C	Cl ‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1959 10.ix	0	12.05	18.23	24.99				0.35	2.14
	10	12.20	19.21	26.34				0.35	1.79
	20	12.20	19.39	26.59				0.35	1.07
	30	12.30	19.41	26.60				0.35	1.79
	40	12.40	19.44	26.62				0.42	1.79
	50	12.40	19.44	26.62				0.42	1.79
6.x	0	11.20	19.09	26.36				0.42	2.14
	10	11.70	19.26	26.50				0.39	2.14
	20	11.80	19.39	26.67				0.42	2.86
	30	11.80	19.43	26.73				0.42	3.21
	40	11.70	19.43	26.74				0.42	2.50
	50	11.50	19.43	26.78				0.39	2.50
23.xi	0	14.40	16.91	22.70				0.29	0
	10	13.70	18.92	25.64				0.29	0.36
	20	13.00	19.44	26.50				0.29	0
	30	13.00	19.47	26.55				0.29	0
	40	12.80	19.48	26.60				0.29	0.36

Station: MARIA ISLAND

Latitude: 42°36' S.

Longitude: 148°14' E.

Date	Depth (m)	Temp °C	Cl ‰	σ_t	O ₂	O ₂ %	pH	PO ₄ -P	NO ₃ -N
1959 8.i	0	16.20	19.50	25.90	5.61	98		0.32	0
	10	16.15	19.50	25.91	5.70	100		0.32	0
	20	16.10	19.50	25.92	5.70	100		0.32	0
	30	16.00	19.48	25.91	5.70	99		0.32	0
	40	14.35	19.38	26.14	5.57	95		0.42	0.71
	50	13.35	19.35	26.30	5.43	90		0.55	3.57
4.ii	0	17.80	19.54	25.57	5.47	98		0.32	0
	10	17.80	19.54	25.57	5.51	99		0.42	0
	20	17.65	19.54	25.61	5.51	99		0.29	0
	30	17.40	19.52	25.64	5.51	98		0.35	0
	40	17.00	19.50	25.71	5.56	99		0.35	0
	50	17.00	19.50	25.71	5.56	99		0.32	0
17.ii	0	17.80	19.59	25.64	5.34	96		0.33	0
	10	17.75	19.59	25.65	5.41	97		0.42	0
	20	17.40	19.54	25.67	5.45	97		0.39	0
	30	17.20	19.54	25.72	5.45	97		0.36	0
	40	17.10	19.54	25.74	5.45	97		0.39	0
	50	16.85	19.52	25.77	5.45	96		0.39	0.36
4.iii	0	17.25	19.56	25.73	5.43	97		0.32	0
	10	17.20	19.56	25.75	5.46	97		0.32	0
	20	17.20	19.56	25.75	5.46	97		0.32	0
	30	17.20	19.56	25.75	5.48	97		0.32	0
	40	17.20	19.56	25.75	5.46	97		0.32	0
	50	17.20	19.56	25.75	5.43	97		0.32	0
19.iii	0	16.95	19.60	25.86	5.50	97		0.29	0
	10	16.70	19.59	25.90	5.55	98		0.32	0
	20	16.60	19.58	25.92	5.46	96		0.32	0
	30	16.55	19.58	25.93	5.41	95		0.32	0
	40	16.40	19.58	25.96	5.41	95		0.48	0
	50	16.00	19.55	26.01	5.43	95		0.42	0.71

MARIA ISLAND

Latitude: 42°36' S.

Longitude: 148°14' E.

	Depth (m)	Temp °C	Cl ‰	σ_t	O ₂	O ₂ %	pH	PO ₄ -P	NO ₃ -N
1959 2.iv	0	15.80	19.56	26.07	5.46	95		0.32	0.71
	10	15.80	19.56	26.07	5.46	95		0.35	0.71
	20	15.80	19.56	26.07	5.48	95		0.35	1.07
	30	15.80	19.56	26.07	5.50	96		0.42	0.71
	40	15.80	19.56	26.07	5.50	96		0.42	0.71
	50	15.80	19.56	26.07	5.52	96		0.39	0.71
21.iv	0	15.00	19.50	26.17	5.58	96		0.35	0
	10	15.00	19.50	26.17	5.58	96		0.42	0
	20	14.90	19.49	26.18	5.63	97		0.39	0
	30	14.90	19.49	26.18	5.63	97		0.39	0
	40	14.90	19.49	26.18	5.63	97		0.39	0
	50	14.90	19.49	26.18	5.63	97		0.48	0.36
5.v	0	14.50	19.52	26.30	5.64	96		0.42	0.71
	10	14.50	19.52	26.30	5.70	97		0.42	0.71
	20	14.50	19.52	26.30	5.70	97		0.39	1.43
	30	14.50	19.52	26.30	5.64	96		0.42	1.43
	40	14.50	19.52	26.30	5.64	96		0.42	1.43
	50	14.50	19.52	26.30	5.64	96		0.42	1.43
21.v	0	13.70	19.46	26.47	5.77	96		0.42	1.43
	10	13.70	19.46	26.47	5.77	96		0.42	1.43
	20	13.70	19.46	26.47	5.77	96		0.42	1.43
	30	13.70	19.46	26.47	5.77	96		0.42	1.07
	40	13.70	19.46	26.47	5.77	96		0.42	1.07
	50	13.70	19.46	26.47	5.77	96		0.42	1.07
2.vi	0	13.00	19.46	26.53	5.83	96		0.48	1.79
	10	13.00	19.46	26.53	5.83	96		0.48	1.79
	20	13.00	19.46	26.53	5.83	96		0.48	2.50
	30	13.00	19.46	26.53	5.83	96		0.48	2.14
	40	13.00	19.46	26.53	5.83	96		0.48	2.14
	50	13.00	19.46	26.53	5.83	96		0.48	2.14

Station: MARIA ISLAND

Latitude: 42°36' S.

Longitude: 148°14' E.

Date	Depth (m)	Temp °C	Cl ‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1959 17.vi	0	12.05	19.40	26.63	5.95	96		0.48	3.57
	10	12.05	19.40	26.63	5.92	96		0.52	2.86
	20	12.05	19.40	26.63	5.95	96		0.52	3.57
	30	12.05	19.40	26.63	5.95	96		0.52	2.86
	40	12.05	19.40	26.63	5.88	95		0.48	3.21
	50	12.05	19.40	26.63	5.95	96		0.52	3.21
10.vii	0	11.95	19.44	26.71	6.04	98		0.48	2.86
	10	11.95	19.44	26.71	6.04	98		0.48	2.50
	20	11.80	19.44	26.74	6.04	97		0.48	2.50
	30	11.80	19.44	26.74	6.10	98		0.48	3.21
	40	11.80	19.44	26.74	6.10	98		0.48	3.21
	50	11.60	19.44	26.77	6.04	97		0.48	2.86
30.vii	0	11.65	19.38	26.69	6.10	98		0.55	3.57
	10	11.65	19.38	26.69	6.10	98		0.52	3.57
	20	11.65	19.38	26.69	6.05	97		0.45	2.14
	30	11.65	19.38	26.69	6.13	98		0.52	2.86
	40	11.65	19.38	26.69	6.20	100		0.52	2.50
	50	11.65	19.38	26.69	6.20	100		0.52	3.21
18.viii	0	11.45	19.37	26.71	6.01	97		0.48	3.57
	10	11.45	19.37	26.71	6.01	97		0.45	3.93
	20	11.45	19.37	26.71	6.03	97		0.48	2.86
	30	11.45	19.37	26.71	6.03	97		0.48	3.21
	40	11.45	19.37	26.71	6.03	97		0.48	2.86
	50	11.45	19.37	26.71	6.03	97		0.45	2.86
1.ix	0	11.10	19.32	26.70	6.18	98		0.48	2.86
	10	11.15	19.33	26.70	6.18	98		0.52	3.57
	20	11.20	19.34	26.71	6.18	98		0.48	4.29
	30	11.20	19.34	26.71	6.15	98		0.52	4.29
	40	11.20	19.35	26.72	6.15	98		0.48	4.29
	50	11.20	19.36	26.74	6.09	97		0.52	3.93

MARIA ISLAND

Latitude: 42°36' S.

Longitude: 148°14' E.

Depth (m)	Temp °C	Cl ‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1959								
25.1x	0	11.95	19.44	26.71	6.07	98	0.48	2.50
	10	11.85	19.44	26.73	6.07	98	0.48	2.14
	20	11.90	19.44	26.72	6.05	98	0.48	2.50
	30	11.80	19.42	26.71	6.07	98	0.48	2.50
	40	11.60	19.40	26.71	6.13	98	0.48	2.14
	50	11.60	19.40	26.71	6.07	97	0.48	2.14
7.x	0	11.65	19.43	26.75	6.17	99	0.45	2.50
	10	11.60	19.43	26.76	6.19	99	0.52	2.50
	20	11.60	19.43	26.76	6.22	100	0.65	2.50
	30	11.50	19.43	26.78	6.30	101	0.58	2.50
	40	11.40	19.42	26.78	6.30	101	0.58	1.43
	50	11.40	19.42	26.78	6.30	101	0.58	1.79
22.x	0	12.25	19.42	26.62	6.51	106	0.42	0
	10	12.15	19.42	26.64	6.53	106	0.45	0
	20	12.05	19.42	26.66	6.50	106	0.42	0
	30	12.00	19.42	26.67	6.37	103	0.42	0.36
	40	12.00	19.42	26.67	6.37	103	0.42	0.36
	50	11.95	19.42	26.68	6.20	101	0.42	1.07
6.xi	0	12.35	19.42	26.60	5.88	96	0.48	3.57
	10	12.30	19.42	26.61	5.88	96	0.52	3.57
	20	12.25	19.42	26.62	5.88	96	0.52	3.93
	30	12.25	19.42	26.62	5.88	96	0.52	3.57
	40	12.20	19.42	26.63	5.88	95	0.52	3.57
	50	12.20	19.42	26.63	5.88	95	0.52	2.86
19.xi	0	13.15	19.40	26.41	6.26	104	0.35	0.36
	10	12.90	19.40	26.46	6.31	104	0.35	1.43
	20	12.80	19.40	26.48	6.31	104	0.42	0.71
	30	12.65	19.40	26.51	6.31	104	0.42	0.36
	40	12.60	19.40	26.52	6.31	103	0.39	0.36
	50	12.10	19.37	26.58	6.10	99	0.45	2.50

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Longitude: 148°14' E.

Date	Depth (m)	Temp °C	Cl ‰	σ_t	O ₂	O ₂ ‰	pH	PO ₄ -P	NO ₃ -N
1959 2.xii	0	13.80	19.41	26.30	5.95	100		0.39	0
	10	13.50	19.41	26.36	6.02	100		0.39	0
	20	13.40	19.41	26.38	5.80	96		0.42	0.71
	30	13.10	19.41	26.44	5.77	95		0.45	2.14
	40	12.90	19.41	26.48	5.71	94		0.48	2.14
	50	12.80	19.41	26.50	5.71	94		0.52	2.50
18.xii	0	14.80	19.38	26.05	5.93	101		0.39	0
	10	14.80	19.38	26.05	5.97	102		0.39	0
	20	14.70	19.38	26.07	6.00	102		0.42	0
	30	14.50	19.38	26.11	6.00	102		0.42	0.71
	40	14.10	19.38	26.20	6.03	102		0.42	0.71
	50	13.60	19.38	26.30	5.93	99		0.45	1.43

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