Statlig program for forurensningsovervåking
Langtidsovervåking av miljøkvaliteten i kystområdene av Norge

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• Datarapport 2000

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LANGTIDSOVERVÅKING AV MILJØKVALITETEN I KYSTOMRÅDENE AV NORGE

HYDROGRAFI\HYDROKJEMI

DATARAPPORT 2000

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Forord

Statens forurensningstilsyn (SFT) ba i 1989 Norsk institutt for vannforskning (NIVA) om å utarbeide et program for langtidsovervåking av tendensen i trofiutviklingen langs kysten av Sør-Norge (Kystovervåkingsprogrammet). Ferdige programforslag forelå våren 1990, og feltarbeidet startet samme år med hydrokjemiske og biologiske undersøkelser (hard- og bløtbunn). Den hydrokjemiske overvåkingen utføres i samarbeid med Havforsknings-instituttet i Bergen (HI) og Havforskningsinstituttets forskningstasjon Flødevigen (HFF).

NIVA har hovedansvaret for gjennomføring av prosjektet og utarbeidelse av rapporter.

For innsamling av vannprøver fra Jomfruland har Kystverkets båt Munin blitt brukt. Ved Arendal har forskningsfartøyet "G.M.Dannevig" blitt brukt, og ved Lista "Brekne". Vi vil takke mannskapet ombord på fartøyene for en fin innsats.

Feltarbeidet er blitt utført av mannskapet på Munin, samt Einar Dahl, Terje Jåvold, Anita Reisvåg og Lena Omli ved Havforskningsinstituttets forskningsstasjon Flødevigen og Hans Heimvoll har gjennomført feltarbeidet ved Lista.

Foreliggende rapport er en datarapport med presentasjon av de hydrografiske data i tabellform.

Oslo den 20.1.2002

Jan Magnusson

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1. Formål

Kystovervåkingsprogrammet skal gi en oversikt over trofitilstanden og kartlegge utviklingstendenser i området fra svenskegrensen til Vestlandet.

I 2000 er det gjennomført hydrografiske/hydrokjemiske tokt til 4 hovedstasjoner i kystvannet mellom svenskegrensen og Lista.

Formålet med denne datarapporten er å presentere de hydrografiske/hydrokjemiske observasjonene fra 2000.

2. Gjennomføring

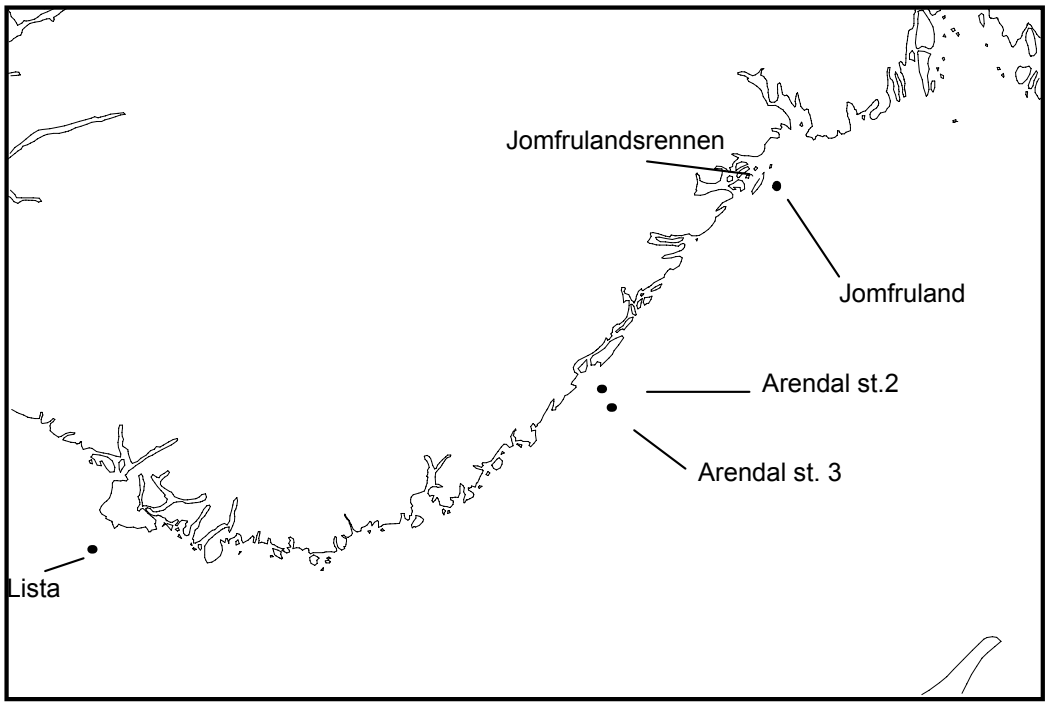
Stasjoner og observasjonsfrekvens fremgår av tabell 1 og figur 1.

I 2000 ble observasjonsfrekvensen noe lavere enn beregnet som følge av praktiske vanskeligheter med gjennomføringen av toktprogrammet (dårlig vær, motorhaverier m.m.). Tabell 2 viser en oversikt over gjennomførte tokter i 2000.

Tabell 1. Stasjoner og observasjonsfrekvens i 2000.

Stasjon	Posisjon		Dyp	Observasjonsfrekvens
Jomfruland	N: 58^{O} 51'	E: 09^{O}40.'	ca. 100 m	Ca. hver 14 dag.
Arendal st 2.	N: 58^{O} 23'	E: 08^{O}49'	ca. 75 m	Ca. hver 14 dag.
Arendal st.3.	N: 58^{O} 20.'	E: 08^{O}54.'	ca. 260 m	Ca. 1 gang pr. måned
Lista	N: 58^{O} 01'	E: 06^{O}32.'	ca. 350 m	Ca. 1 gang pr. måned

I tillegg er det tatt overflateobservasjoner i Jomfrulandsrennen (N: 58^{O} 53.5' E: 09^{O} 37.0').



Figur 1. Hydrografiske/hydrokjemiske stasjoner i kystovervåkingsprogrammet 2000.

Tabell 2. Gjennomførte tokter i 2000.

Dato	Jomfruland	Arendal St 2	Arendal St 3	Lista
13.1				1
16.1		1	1	
25.1	1			
9.2	2			
13.2		2	2	
16.2				2
22.2	3			
8.3		3	3	
9.3				3
20.3		4		
29.3	4			
11.4	5			
12.4		5	4	
26.4	6			
8.5	7			5
9.5		6		
17.5		7	5	
26.5		8		
1.6	8			
6.6				6
10.6		9	6	
20.6	9			
23.6		10		
4.7		11	7	
6.7				7
10.7	10			
26.7	11			
27.7		12		
6.8				8
9.8	12			
18.8		13	8	
22.8	13			
31.8		14		
5.9				9
6.9	14			
15.9		15	9	
27.9	15			
3.10				10
5.10		16		
21.10		17	10	
2.11		18	11	
10.11				11
13.11	16			
28.11		19		
29.11	17			
4.12		20	12	
11.12				12
18.12		21		
19.12	18			

Enkelte parametre ble kun analysert på et begrenset antall dyp. I felt ble vann til næringssalt-analyser filtrert gjennom en zooplanktonduk med maskevidde på 180 μm.

Samtlige analyser av TSM er gjennomført ved NIVA. Øvrige analyser er gjennomført ved HFF (Arendal St 2 og 3 samt Lista) og NIVA (Jomfruland), unntatt partikulært karbon og nitrogen ved Arendal St. 2, Arendal St. 3 og Lista, som ble analysert av Havforskningsinstituttet i Bergen. For en beskrivelse av analysemetoder hensvises til tidligere rapport (Aure m.fl.1991).

Tabell 3 viser observerte variable på de ulike stasjonene i 2000 og tabell 4 viser observasjonsdyp.

Tabell 3. Oversikt av observasjoner på de ulike stasjoner i 2000

Stasjon/parameter	Jomfrulands-rennen	Jomfruland	Arendal St. 2	Arendal St. 3	Lista
Temperatur	x	x	x	x	x
Saltholdighet	x	x	x	x	x
Oksygen		x	x	x	
Tot-P	x	x	x	x	x
PO_4-P		x	x	x	x
POP		x	x	x	x
Tot-N	x	x	x	x	x
NO_3-N+ NO2-N		x			
NO_3-N			x	x	x
NO_2-N			x	x	x
NH_4-N		x	x	x	
PON		x	x	x	x
Si_2O_3-Si		x	x	x	x
POC		x	x	x	x
TSM		x	x		
Kl-a		x	x	x	x
Siktedyp	x	x	x	x	x
Gulstoff(Ay380)		x			
Plantepl.*		x	x		
Zooplankton*			x		

* Rapporteres i hovedrapporter

Tabell 4. Observasjonsdyp.

Stasjon	Jomfruland	Arendal St. 2	Arendal St. 3	Lista
Dyp	0, 5, 10, 15, 20, 30, 50, 75, 100	0, 5, 10, 15, 20, 30, 50, 75.	100, 125, 150, 200, 240*	0, 5, 10, 15, 20, 30, 50, 75, 100, 150, 200, 300

* bare observasjoner i kystovervåkingsprogrammet fra 100-240 meters dyp. Øvrige observasjoner (0-75m) fra denne stasjonen er fra Havforskningsinstituttets eget program.

For observasjoner av saltholdighet og temperatur er det brukt SEACAT CTD (SEABIRD) på Jomfruland, og Gytresonde (Sensordata) på Lista. På Arendalstasjonene er det som regel brukt Neil Brown CTD (Mark III).

Kvaliteten på CTD-sonder varierer og hver sonde må kontrolleres jevnlig. SEACAT-sonden blir kontrollert dels ved normale rutiner, men også ved at det gjennomføres prøvetaking med vendetermometre og analyseres på saltholdighet på de to nederste vannhenterdypene (75 og 100 meters dyp). På Lista gjennomføres samme prosedyre på saltholdighet, for å kontrollere Gytresonden (Sensordata).

Der hvor det er foretatt saltanalyser på Jomfruland (75 og 100 m) er disse resultatene presentert i tabellen, øvrige dyp er observasjonene fra CTD.

Havforskningsinstituttet Forskningstasjonen Flødevigen (HFF) og Norsk institutt for vannforskning (NIVA) deltok i kvalitetssikringsprogrammet Quasimeme 2 ganger i 2000 (Runde 22 og 24). Det ble analysert på tot-P, tot-N, nitrat, nitrit, ammonium, fosfat og silikat, både lave og høye konsentrasjoner. Resultatet var for samtlige næringssaltsanalyser meget bra (satisfactory).

3. Hydrografiske/hydrokjemiske observasjoner 2000

3.1 Jomfruland

Station: Jomfruland Date: 25.01.2000 Time (UTC): 07:30 Position: N: 58° 51' E: 9° 40'

Ship: Munin Institute: NIVA Echodepth (m): 126 Secchidepth (m): 8 Secchicolour: Green

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)	Ay380 (m-1)
0	2.34	28.884	7.20	0.71	0.58	34.6	10.1	4.9	23.5	36.6	7.1	0.1	2.10	0.25	1.08
5	3.00	28.976	7.17	0.74	0.68	32.5	10.1	5.5	23.5	34.1	6.5	0.1	1.51	0.34	1.01
10	4.56	31.193	7.08	0.74	0.58	31.8	10.0	5.0	21.7	32.9	6.1	0.1	1.99	0.10	< 0.88
20	5.65	32.895	6.56	0.77	0.61	41.1	8.1	5.1	13.4	52.0	10.3	0.1	3.42	0.16	0.60
30	5.83	33.308	6.52	0.77	0.65	38.9	8.2	4.8	13.1	52.0	10.1	0.1	4.17	0.10	< 0.51
50	6.06	33.753	6.49	0.84	0.68	52.8	7.8	6.7	14.5					0.19	0.44
75	6.70	34.188	6.36	0.71	0.58	27.8	6.9	5.0	9.8	27.5	4.2	0.1	1.79		0.35
100	6.83	34.307	6.37	0.74	0.58	26.8	6.8	4.3	9.8						0.37

Station: Jomfruland Date: 09.02.2000 Time (UTC): 07:17 Position: N: 58° 51' E: 9° 40'

Ship: Munin Institute: NIVA Echodepth (m): 120 Secchidepth (m): 7 Secchicolour: Green

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)	Ay380 (m-1)
0	4.94	33.251	6.66	0.68	0.58	20.3	8.1	0.4	12.7	17.2	2.7	0.1	1.42	0.33	0.55
5	4.97	32.920	6.66	0.68	0.61	22.1	8.1	1.1	12.7	22.7	3.8	0.1	1.92	0.36	0.55
10	5.18	32.988	6.63	0.68	0.58	18.2	7.9	< 0.4	12.4	15.7	2.3	0.1	1.18	0.33	0.41
20	5.29	33.251	6.66	0.68	0.58	21.1	7.9	0.5	11.6	22.6	3.4	0.1	1.50	0.42	0.51
30	5.33	33.399	6.60	0.68	0.58	16.8	7.7	0.5	11.8	18.4	2.4	0.1	1.85	0.23	0.37
50	5.36	33.460	6.63	0.71	0.58	20.3	7.9	0.6	11.6					0.26	0.35
75	5.34	33.530	6.61	0.68	0.58	18.9	7.8	0.6	11.8	16.6	2.0	0.1	1.93		0.41

Station: **Jomfruland** Date: 22.02.2000 Time (UTC): 10:50 Position: N: 58° 51' E: 9° 40'

Ship: Munin Institute: NIVA Echodepth (m): 130 Secchidepth (m): 8.5 Secchicolour: Gray/green

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)	Ay380 (m-1)
0	1.07	25.285	7.68	0.65	0.48	28.9	12.1	1.0	35.6	26.4	3.7	0.1	0.71	0.39	1.43
5	2.82	28.658	7.28	0.74	0.55	31.8	9.1	1.0	22.9	40.1	6.4	0.1	1.29	0.65	1.15
10	3.65	30.310	6.95	0.74	0.58	24.3	9.9	0.8	19.7	28.6	4.1	0.1	1.14	0.54	0.97
20	5.25	32.921	6.50	0.74	0.61	25.7	8.5	0.6	14.1	38.4	6.2	0.1	1.39	0.21	0.69
30	5.63	33.542	6.46	0.71	0.58	23.6	8.1	0.5	12.7	29.7	4.5	0.1	1.53	0.24	0.62
50	5.64	33.899	6.53	0.81	0.65	43.9	9.0	1.6	12.5					0.28	0.76
75	5.80	34.236	6.49	0.84	0.68	51.0	7.8	1.8	11.6	53.4	8.1	0.1	2.43		1.11
100	6.14	34.556	6.42	0.74	0.61	24.6	6.6	0.6	10.6						0.35

Station: Jomfruland Date: 16.03.2000 Time (UTC): 11:00 Position: N: 58° 51' E: 9° 40'

Ship: Hugin Institute: NIVA Echodepth (m): 130 Secchidepth (m): 9 Secchicolour: Green

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)	Ay380 (m-1)
0	3.99	30.182	7.09	0.58	0.45	20.7	10.6	0.6	16.4	18.3	2.3	0.1	0.79	0.34	0.67
5	3.93	32.070	6.97	0.61	0.45	23.2	10.7	0.5	13.6	25.4	4.4	0.1	1.01	1.04	0.55
10	4.00	32.270	6.98	0.61	0.45	25.3	11.4	0.5	12.6	24.6	4.3	0.1	1.16	1.23	0.44
20	4.67	33.226	6.92	0.61	0.45	18.2	7.7	0.5	8.0	22.6	3.7	0.1	0.94	1.17	0.39
30	4.94	33.619	6.73	0.61	0.48	18.9	8.6	0.4	10.1	17.6	2.3	0.1	1.05	0.83	0.35
50	5.02	33.766	6.67	0.68	0.55	34.3	8.9	1.1	10.5					0.53	0.32
75	5.10	33.831	6.68	0.61	0.52	18.6	8.6	< 0.4	10.9	14.8	1.5	0.1	1.20		0.35
100	5.09	33.840	6.70	0.61	0.52	16.8	8.6	< 0.4	10.9						0.28

Station: Jomfruland Date: 29.03.2000 Time (UTC): 08:45 Position: N: 58° 51' E: 9° 40'

Ship: Hugin Institute: NIVA Echodepth (m): 125 Secchidepth (m): 8.5 Secchicolour: Grey/green

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)	Ay380 (m-1)
0	3.69	27.556	7.59	0.55	0.06	22.1	1.4	0.5	7.6	61.6	10.6	0.5	1.29	1.92	0.90
5	4.18	28.351	7.60	0.36	0.06	19.6	1.0	0.5	6.7	46.6	7.6	0.3	0.79	2.39	0.74
10	4.19	28.874	7.51	0.39	0.06	22.1	1.3	0.5	5.9	44.2	7.5	0.3	1.34	2.56	0.83
20	4.28	31.030	7.07	0.48	0.26	34.6	6.1	1.4	8.4	51.0	8.3	0.1	1.88	1.15	0.81
30	4.49	32.580	6.87	0.55	0.39	29.6	9.4	1.1	10.5	32.1	5.8	0.1	1.08	0.54	0.51
50	5.33	34.442	6.29	0.74	0.65	26.1	8.1	0.6	9.7					0.48	0.23
75	6.10	34.937	6.33	0.77	0.65	31.1	8.1	0.6	8.4	37.0	5.9	0.1	1.88		0.21
100	6.27	35.007	6.29	0.77	0.65	27.5	8.7	0.6	8.8						0.18

Station: **Jomfruland** Date: 11.04.2000 Time (UTC): 09:15 Position: N: 58° 51' E: 9° 40'

Ship: Hugin Institute: NIVA Echodepth (m): 145 Secchidepth (m): 13 Secchicolour: Green

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)	Ay380 (m-1)
0	5.05	23.449	7.65	0.39	0.06	20.0	1.1	0.9	8.4	47.7	6.6	0.3	1.16	2.25	0.69
5	3.94	25.110	7.81	0.26	0.06	15.3	1.1	1.0	6.9	23.6	3.4	0.1	0.66	0.78	0.65
10	3.87	26.979	7.44	0.29	0.13	21.1	2.5	2.1	8.0	24.1	3.7	0.1	0.91	0.39	0.71
20	4.39	31.565	6.94	0.52	0.39	25.3	8.7	1.5	10.1	31.7	4.6	0.1	1.00	0.26	0.48
30	4.74	32.847	6.69	0.58	0.48	22.5	9.4	1.0	10.1	26.6	3.8	0.1	1.04	0.16	0.35
50	5.81	34.344	6.35	0.71	0.61	22.8	9.4	0.6	9.9					0.16	0.32
75	6.15	34.800	6.23	0.71	0.65	17.8	9.5	< 0.4	9.9	16.8	2.0	0.0	0.93		0.16
100	6.13	34.805	6.29	0.74	0.65	21.4	9.5	0.6	9.7						0.25

Station: Jomfruland Date: 26.04.2000 Time (UTC): 06:34 Position: N: 58° 51' E: 9° 40'

Ship: Munin Institute: NIVA Echodepth (m): 130 Secchidepth (m): 8.5 Secchicolour: Grey/green

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)	Ay380 (m-1)
0	7.35	13.226	7.73	0.19	< 0.03	27.5	9.4	1.1	32.3	34.1	5.2	0.2	1.02	1.30	1.56
5	5.89	23.647	7.46	0.23	0.06	24.6	2.4	0.9	8.4	39.4	5.6	0.2	1.22	1.17	0.92
10	5.20	26.695	7.60	0.29	0.10	23.9	3.9	1.5	7.6	36.7	5.3	0.1	1.22	0.62	0.92
20	4.81	29.795	7.45	0.39	0.23	22.8	5.9	1.2	6.3	30.4	4.1	0.1	1.01	0.50	0.76
30	5.38	33.326	6.26	0.71	0.58	20.0	9.5	0.6	12.6	12.5	1.9	0.1	0.63	0.24	0.46
50	6.01	34.548	6.12	0.77	0.65	20.3	9.4	0.4	10.9					0.18	0.32
75	6.25	34.843	6.15	0.77	0.68	15.3	9.4	< 0.4	10.9	10.5	1.3	0.0	1.01		0.32
100	6.32	34.923	6.18	0.81	0.71	18.9	10.0	< 0.4	10.7						0.35

Station: Jomfruland Date: 08.05.2000 Time (UTC): 11:00 Position: N: 58° 51' E: 9° 40'

Ship: Hugin Institute: NIVA Echodepth (m): 140 Secchidepth (m): 8.5 Secchicolour: Grey/green

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)	Ay380 (m-1)
0	12.55	12.409	7.13	0.19	< 0.03	20.0	1.6	0.4	8.0	33.4	4.8	0.2	1.09	1.84	1.08
5	10.76	19.112	7.22	0.19	< 0.03	19.3	1.1	0.5	5.3	29.1	3.9	0.2	1.24	1.37	0.92
10	9.05	24.447	7.15	0.29	< 0.03	24.6	2.2	1.1	3.1	46.8	6.8	0.3	1.80	2.03	0.85
20	6.73	33.103	6.94	0.26	0.13	15.3	3.6	1.5	3.6	17.4	2.2	0.1	0.74	0.67	0.55
30	6.24	34.158	6.18	0.55	0.45	16.8	6.6	0.7	9.4	12.2	1.8	0.1	0.56	0.22	0.39
50	6.39	34.421		0.39	0.29	12.1	3.4	1.6	5.3					0.26	0.32
75	6.51	34.617	6.43	0.42	0.29	15.3	2.8	2.6	4.5	13.9	1.6	0.1	0.79		0.55
100	6.55	34.712	6.35	0.48	0.36	15.0	3.3	3.0	5.3						0.44

Station: **Jomfruland** Date: 01.06.2000 Time (UTC): 15:00 Position: N: 58° 51' E: 9° 40'

Ship: Munin Institute: NIVA Echodepth (m): 120 Secchidepth (m): 5 Secchicolour: Grey/green

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)		Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)		SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)		Ay380 (m-1)
0	12.48	24.565	6.33	0.26	<	0.03	18.9	1.2	0.6		2.3	56.9	8.0	0.3	1.56	2.38		0.85
5	12.40	25.053	6.20	0.23	<	0.03	16.8	1.5	0.9		2.1	42.3	5.9	0.2	1.62	2.60		0.76
10	11.97	27.017	5.94	0.19	<	0.03	15.7	1.8	1.4		2.3	36.7	5.4	0.2	1.36	1.89		0.81
20	11.05	30.692	5.55	0.23		0.03	18.2	3.3	3.3		3.4	27.2	4.1	0.1	1.04	0.64		0.78
30	10.47	32.422	5.54	0.29		0.10	18.9	3.9	3.9		3.8	18.4	2.9	0.1	0.88	0.47		0.76
50	8.86	33.928	5.94	0.39		0.19	17.8	3.1	3.1		4.2					0.31	<	0.58
75	7.29	34.452	6.14	0.55		0.36	23.6	3.9	3.1		5.5	35.7	5.5	0.1	1.47			0.37
100	7.01	34.761	6.05	0.61		0.48	20.3	4.7	2.9		5.5							0.32

Station: Jomfruland Date: 20.06.2000 Time (UTC): 06:35 Position: N: 58° 51' E: 9° 40'

Ship: Munin Institute: NIVA Echodepth (m): 150 Secchidepth (m): 8.5 Secchicolour: Green

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)		Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)		SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)		Ay380 (m-1)
0	13.78	26.761	6.01	0.19	<	0.03	22.5	1.0	1.0	<	0.2	44.7	7.6	0.2	1.31	1.18		0.97
5	13.49	26.894	5.92	0.19	<	0.03	20.7	1.4	1.6	<	0.2	38.0	6.4	0.2	1.14	1.31		1.29
10	13.01	28.475	5.85	0.23		0.03	23.9	1.6	1.9		0.4	44.0	7.6	0.2	1.18	1.09		0.90
20	11.86	31.701	5.58	0.23		0.06	25.7	5.3	3.1		2.0	34.4	6.5	0.2	0.91	0.69		0.78
30	9.77	33.300	5.26	0.39		0.16	23.9	5.7	3.4		8.3	32.2	5.4	0.1	1.14	1.27		0.67
50	8.97	33.920	5.13	0.48		0.32	29.6	4.7	3.6		9.6					0.30		0.58
75	8.89	34.240	5.31	0.52		0.36	23.9	3.1	3.0		7.9	43.9	8.0	0.2	1.74			0.48
90	8.83	34.403	5.43	0.55		0.39	23.9	3.1	3.1		7.0							0.78

Station: Jomfruland Date: 09.07.2000 Time (UTC): 23:00 Position: N: 58° 51' E: 9° 40'

Ship: Munin Institute: NIVA Echodepth (m): 130 Secchidepth (m): Secchicolour:

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)		Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)		SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)		Ay380 (m-1)
0	16.17	25.743	5.82	0.23	<	0.03	16.1	0.6	0.6		0.9	31.3	4.3	0.2	1.14	0.83		0.65
5	16.12	27.144	6.01	0.19	<	0.03	13.6	0.5	0.4		1.3	23.9	3.0	0.2	0.98	0.94		0.65
10	14.98	30.109	6.14	0.23	<	0.03	13.6	0.8	0.6		0.4	24.2	3.0	0.2	0.84	0.99		0.69
20	13.47	31.360	5.45	0.23	<	0.03	15.3	2.9	1.9		1.9	19.1	2.5	0.1	0.61	0.86		0.60
30	12.10	32.469	5.18	0.23		0.06	16.1	3.9	2.1		3.4	13.6	2.1	0.1	0.51	0.34		0.58
50	10.13	33.598	5.15	0.32		0.16	13.9	5.0	1.5		5.9					0.16	<	0.48
75	9.68	34.048	5.46	0.36		0.19	14.6	4.2	1.9		5.1	11.5	1.4	0.1	0.63			0.44
100	8.58	34.794	5.48	0.52		0.36	11.4	3.1	2.2		5.7							0.25

Station: **Jomfruland** Date: 26.07.2000 Time (UTC): 06:31 Position: N: 58° 51' E: 9° 40'

Ship: Munin Institute: NIVA Echodepth (m): 140 Secchidepth (m): 7 Secchicolour: Green

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)	Ay380 (m-1)
0	17.25	25.317	5.89	0.29	0.03	20.3	0.3	< 0.4	2.5	70.2	11.1	0.2	1.91	1.41	0.85
5	16.75	28.420	5.92	0.26	0.03	25.0	0.4	0.7	2.5	58.9	9.9	0.2	1.36	1.08	0.83
10	16.69	30.471	6.06	0.19	< 0.03	19.3	0.4	0.4	0.4	43.2	7.4	0.2	0.90	0.90	0.58
20	14.27	32.101	5.61	0.23	0.03	14.6	0.4	< 0.4	1.3	37.2	6.1	0.2	0.78	1.02	0.46
30	13.39	32.608	5.31	0.16	< 0.03	11.8	0.4	< 0.4	2.1	26.5	3.8	0.1	0.69	0.88	0.44
50	11.61	33.955	5.23	0.26	0.10	18.2	0.7	1.2	2.1					0.36	0.47
75	9.65	34.814	5.22	0.48	0.36	18.2	3.6	1.2	6.3	34.9	6.3	0.1	1.16		0.37
100	8.06	35.032	5.22	0.77	0.65	21.1	7.6	0.9	10.5						0.39

Station: Jomfruland Date: 09.08.2000 Time (UTC): 07:11 Position: N: 58° 51' E: 9° 40'

Ship: Munin Institute: NIVA Echodepth (m): 120 Secchidepth (m): 10.5 Secchicolour: Yellow/green

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)	Ay380 (m-1)
0	17.05	23.867	5.96	0.19	< 0.03	14.6	0.3	0.4	1.9	28.1	3.8	0.2	1.69	1.21	0.76
5	16.85	24.758	5.90	0.26	0.03	15.7	0.3	< 0.4	1.5	42.0	5.4	0.2	1.07	2.21	0.74
10	16.41	28.050	5.56	0.26	0.03	13.9	0.3	0.5	1.3	38.0	4.5	0.2	0.99	1.91	0.69
20	15.00	31.836	5.13	0.19	0.03	10.7	0.3	0.4	1.9	24.0	3.0	0.2	1.17	1.31	0.45
30	13.98	32.571	5.14	0.23	0.06	11.1	0.7	0.4	3.1	21.1	2.5	0.2	0.68	1.17	0.39
50	11.73	34.067	4.94	0.23	0.06	9.4	0.7	< 0.4	4.6					0.76	0.31
75	10.15	34.811	5.10	0.36	0.23	8.9	2.3	0.6	5.6	8.6	1.1	0.1	0.70		0.25
100	8.92	35.028	5.09	0.52	0.42	11.4	4.8	0.9	7.8						0.32

Station: Jomfruland Date: 22.08.2000 Time (UTC): 05:34 Position: N: 58° 51' E: 9° 40'

Ship: Munin Institute: NIVA Echodepth (m): 118 Secchidepth (m): 9 Secchicolour: yellow/green

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)	Ay380 (m-1)
0	16.79	24.041	6.20	0.36	< 0.03	16.1	0.3	< 0.4	1.0	73.6	7.4	0.4	2.25	3.06	0.65
5	16.73	25.168	6.11	0.29	0.03	15.0	0.3	< 0.4	1.1	62.3	5.7	0.3	1.50	2.60	0.70
10	16.70	26.534	6.06	0.26	0.03	16.1	0.3	< 0.4	1.9	47.5	4.6	0.2	1.39	1.98	0.62
20	16.27	29.561	5.50	0.23	0.06	13.6	0.5	0.6	1.9	40.3	4.7	0.2	1.08	1.11	0.52
30	15.56	31.065	4.96	0.19	0.06	11.4	0.6	0.4	3.1	25.9	3.4	0.2	0.94	0.69	0.44
50	12.48	34.103	4.81	0.23	0.06	10.4	0.4	< 0.4	5.0					0.59	0.32
75	10.85	34.760	4.92	0.32	0.16	9.6	1.0	0.4	7.2	17.1	2.8	0.1	0.94		0.29
100	9.87	34.885	4.98	0.39	0.26	10.4	2.8	0.4	7.4						0.23

Station: **Jomfruland** Date: 06.09.2000 Time (UTC): 08:20 Position: N: 58° 51' E: 9° 40'

Ship: Munin Institute: NIVA Echodepth (m): 99 Secchidepth (m): 7 Secchicolour: Green

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)	Ay380 (m-1)
0			5.84	0.32	0.06	23.9	0.3	0.4	< 0.2	66.0	10.9	0.3	1.78	2.05	0.82
5			5.64	0.29	0.06	15.7	0.3	0.4	1.5	41.8	6.6	0.3	1.13	1.45	0.43
10			5.59	0.26	< 0.03	15.7	0.3	< 0.4	1.9	52.0	8.1	0.2	1.69	0.93	0.47
20			5.20	0.42	0.16	33.9	0.6	1.6	2.5	107.4	18.7	0.2	2.22	0.78	0.50
30			4.53	0.29	0.13	12.5	0.7	1.1	4.7	44.2	6.1	0.2	1.23	0.43	0.32
50			4.68	0.48	0.36	30.7	2.4	1.3	6.7					0.23	0.18
75	9.44	35.073	4.84	0.45	0.32	24.6	2.4	1.2	4.7	77.3	11.2	0.1	2.48		0.23
100	7.52	35.104	5.10	1.00	0.87	36.8	10.4	1.3	9.5						0.18

Station: Jomfruland Date: 27.09.2000 Time (UTC): 05:40 Position: N: 58° 51' E: 9° 40'

Ship: Munin Institute: NIVA Echodepth (m): 110 Secchidepth (m): 6.5 Secchicolour: Green

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)	Ay380 (m-1)
0			6.09	0.55	0.13	38.6	0.3	1.1	1.5	99.9	18.8	0.4	2.64	1.61	1.30
5			6.09	0.39	0.10	27.8	0.3	< 0.4	2.1	58.7	11.4	0.2	1.58	0.95	0.73
10			6.05	0.45	0.13	35.0	0.3	0.6	1.1	88.2	17.1	0.2	2.74	1.32	0.66
20			5.71	0.32	0.10	28.9	0.3	0.6	1.9	69.6	13.7	0.2	2.12	1.06	0.48
30			5.00	0.32	0.13	32.5	0.5	1.4	3.9	81.9	15.5	0.2	2.32	0.67	0.36
50			5.28	0.36	0.13	36.1	0.5	1.7	4.5					0.51	0.52
75	14.02	34.033	5.27	0.32	0.13	22.1	0.6	1.1	5.1	46.2	8.4	0.1	2.00		0.25
100	10.04	34.755	4.54	0.84	0.65	44.3	4.7	2.1	9.1						0.36

Station: Jomfruland Date: 13.11.2000 Time (UTC): 11:00 Position: N: 58° 51' E: 9° 40'

Ship: Munin Institute: NIVA Echodepth (m): 120 Secchidepth (m): 5 Secchicolour: Yellow/green

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)	Ay380 (m-1)
0			6.61	0.55	0.36	25.3	9.7	2.6	40.5	27.9	4.4	0.2	1.65	0.71	2.75
5			6.04	0.68	0.48	19.6	4.9	2.1	15.8	21.2	3.6	0.1	1.34	0.72	1.29
10			5.98	0.71	0.48	20.7	3.9	1.9	12.0	33.6	6.4	0.1	2.38	0.58	1.06
20			5.59	0.68	0.52	16.1	2.6	1.7	8.1	19.7	3.2	0.1	0.71	0.42	0.65
30			5.47	0.68	0.52	15.0	2.6	1.5	8.1	13.8	1.8	0.1	0.79	0.35	0.56
50			5.47	0.71	0.55	14.6	2.8	2.0	9.2					0.43	0.57
75	8.44	33.705	5.29	0.58	0.45	10.7	3.4	< 0.4	8.3	6.9	1.2	0.1	1.00		0.33
100	8.44	34.450	5.23	0.58	0.45	10.7	3.3	< 0.4	8.7						0.28

Station: **Jomfruland** Date: 29.11.2000 Time (UTC): 09:37 Position: N: 58° 51' E: 9° 40'

Ship: Munin Institute: NIVA Echodepth (m): 133 Secchidepth (m): 6.5 Secchicolour: Green

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)	Ay380 (m-1)
0	8.51	26.887	6.36	0.61	0.45	16.8	4.4	1.4	12.5	14.4	1.6	0.1	0.72	1.50	0.95
5	8.86	27.606	6.37	0.65	0.45	16.8	4.4	1.6	11.8	14.9	2.1	0.1	0.84	1.40	0.81
10	8.89	27.755	6.35	0.65	0.45	17.8	4.4	1.6	11.2	20.5	2.8	0.1	0.87	1.20	0.84
20	9.23	28.618	6.18	0.68	0.52	17.8	4.4	1.6	11.6	13.8	1.9	0.1	0.84	0.95	0.74
30	9.73	30.068	5.97	0.71	0.55	18.6	4.8	1.4	11.8	11.2	1.3	0.1	1.01	0.73	0.51
50	11.18	32.903	5.65	0.71	0.58	16.8	6.3	0.4	12.2					0.41	0.51
75	11.80	33.874	5.55	0.65	0.52	16.1	5.3	0.6	10.4	14.1	1.6	0.1	0.88		0.23
100	12.03	34.283	5.46	0.65	0.52	13.6	5.1	0.9	10.0						0.28

Station: Jomfruland Date: 19.12.2000 Time (UTC): 09:00 Position: N: 58° 51' E: 9° 40'

Ship: Munin Institute: NIVA Echodepth (m): 165 Secchidepth (m): 4.5 Secchicolour: Brown

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)	Ay380 (m-1)
0	5.91	22.730	6.57	0.68	0.52	23.6	11.4	1.2	33.7	14.7	1.8	0.1	1.13	0.31	< 2.22
5	7.21	23.534	6.47	0.71	0.52	23.9	11.4	1.1	33.7	16.9	2.5	0.1	1.24	0.31	< 2.08
10	8.59	26.221	6.14	0.77	0.61	20.0	9.1	0.5	20.0	16.7	2.1	0.1	1.26	0.31	< 1.13
20	9.74	32.798	5.75	0.71	0.55	18.9	7.8	< 0.4	12.0	17.2	3.1	0.1	1.08	0.31	< 0.55
30	9.73	33.418	5.82	0.68	0.42	30.0	7.6	1.0	10.3	43.7	7.9	0.1	2.16	0.31	< 0.64
50	9.87	34.090	5.88	0.68	0.48	30.3	7.0	1.1	8.1					0.31	< 0.75
75	9.99	34.219	5.85	0.68	0.55	13.6	6.4	< 0.4	8.7	12.0	1.5	0.1	1.28		0.40
100	9.88	34.335	5.86	0.68	0.55	18.2	6.6	0.4	9.1						0.47

3.2 Arendal St. 2

Station: Arendal St. 2 Date: 16.01.2000 Time (UTC): 07:00 Position: N: 58° 23' E: 8° 49'

Ship: G.M.Dannevig Institute: HFF Echodepth (m): 105 Secchidepth (m): Secchicolour:

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)
0	4.82	30.461	7.60	0.67	0.16	25.0	8.1	2.6	12.0	15.7	2.5	0.2	2.14	0.60
5	5.16	31.110	7.24	0.75	0.54	16.9	8.3	0.4	7.9	8.5	1.4	0.1	1.00	0.40
10	5.37	31.822	7.14	0.74	0.53	17.9	7.7	0.4	6.8	10.6	1.4	0.1	1.08	0.50
20	5.91	32.736	6.98	0.71	0.55	14.8	7.0	0.1	5.7	12.3	1.5	0.1	1.06	0.40
30	6.10	33.111	6.90	0.73	0.54	15.7	7.1	0.1	5.4	13.7	1.6	0.1	0.99	0.30
50	6.31	33.538	6.89	0.72	0.54	16.1	6.7	0.2	4.9			0.1		0.30
75	6.61	33.887	6.76	0.75	0.56	16.2	6.1	0.3	4.8	9.7	1.3	0.1	1.35	

Station: Arendal St. 2 Date: 13.02.2000 Time (UTC): 19:00 Position: N: 58° 23' E: 8° 49'

Ship: G.M.Dannevig Institute: HFF Echodepth (m): 105 Secchidepth (m): Secchicolour:

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)
0	5.22	33.023	7.03	0.73	0.52	16.9	7.8	0.4	6.4	6.6	0.8	0.1	1.18	0.40
5	5.33	33.358	7.03	0.69	0.55	14.7	7.7	0.1	6.5	5.2	0.6	0.1	1.49	0.40
10	5.38	33.475	6.99	0.70	0.58	14.5	7.6	0.2	6.1	5.2	0.5	0.1	1.34	0.40
20	5.39	33.522	6.96	0.71	0.58	14.7	7.6	0.2	6.0	4.4	0.5	0.1	1.10	0.50
30	5.61	33.785	6.96	0.71	0.57	16.1	7.4	0.2	5.7	5.6	0.6	0.1	1.46	0.40
50	5.68	33.857	6.92	0.73	0.55	13.1	7.3	0.2	5.6					0.30
75	5.76	33.978	6.92	0.72	0.51	13.8	7.1	0.2	5.5	5.5	0.5	0.1	1.82	

Station: **Arendal St. 2** Date: 08.03.2000 Time (UTC): 05:00 Position: N: 58° 23' E: 8° 49'

Ship: G.M.Dannevig Institute: HFF Echodepth (m): 105 Secchidepth (m): Secchicolour:

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)
0	4.62	32.606	7.20	0.64	0.43	19.8	8.8	2.5	6.6	12.8	2.0	0.1	0.81	0.90
5	4.66	32.728	7.16	0.63	0.51	19.9	8.9	0.5	6.2	7.8	1.3	0.1	1.59	1.10
10	4.86	33.057	7.10	0.66	0.52	19.3	8.8	0.3	6.0	6.5	1.0	0.1	1.31	1.10
20	5.04	33.379	7.05	0.67	0.53	19.7	8.2	0.4	5.7	5.6	0.8	0.1	1.91	1.00
30	5.31	33.937	7.01	0.66	0.56	17.5	8.2	0.2	5.6	4.7	0.6	0.1	1.54	0.50
50	5.44	34.102	6.93	0.62	0.58	16.8	7.6	0.1	5.3					0.40
75	5.52	34.217	6.94	0.63	0.58	17.8	7.9	0.6	5.3	4.1	0.5	0.1	2.02	

Station: Arendal St. 2 Date: 20.03.2000 Time (UTC): 10:00 Position: N: 58° 23' E: 8° 49'

Ship: G.M.Dannevig Institute: HFF Echodepth (m): 105 Secchidepth (m): Secchicolour:

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)
0	3.99	30.930	7.80	0.56	0.30	22.6	7.8	0.6	6.0	15.8	2.6	0.1	0.73	2.70
5	4.00	32.180	7.58	0.70	0.39	23.4	10.3	0.4	6.0	12.4	2.1	0.2	0.89	3.10
10	4.14	32.410	7.46	0.68	0.43	22.8	11.0	0.6	6.3	10.8	1.8	0.1	1.11	2.60
20	4.26	32.800	7.44	0.67	0.47	25.0	10.1	0.6	5.3	8.8	1.4	0.1	0.96	2.10
30	4.47	33.230	7.35	0.66	0.46	22.7	9.5	1.0	4.7	10.6	1.5	0.1	0.80	2.00
50	4.71	33.640	7.22	0.77	0.56	26.4	9.1	1.7	5.3					1.20
75	5.28	34.580	6.97	0.75	0.61	19.1	7.9	1.3	5.1	7.7	0.9	0.1	1.52	

Station: Arendal St. 2 Date: 12.04.2000 Time (UTC): 13:16 Position: N: 58° 23' E: 8° 49'

Ship: G.M.Dannevig Institute: HFF Echodepth (m): 105 Secchidepth (m): 9 Secchicolour:

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)
0	5.37	23.612	7.98	0.32	0.01	16.8	0.6	1.1	3.9	17.4	2.3	0.2	0.62	2.60
5	5.38	23.612	8.01	0.32	0.01	16.3	0.5	0.9	5.3	17.9	2.5	0.2	0.55	2.00
10	4.83	25.379	8.26	0.27	0.01	16.4	1.0	1.1	3.3	10.0	1.5	0.1	0.31	1.70
20	4.31	30.508	7.63	0.43	0.18	20.1	5.8	1.1	3.7	8.9	1.2	0.1	0.25	1.10
30	4.74	33.002	7.37	0.45	0.31	16.7	5.4	1.3	2.9	5.7	0.6	0.0	0.34	0.90
50	5.49	34.214	6.84	0.68	0.55	18.6	8.8	0.6	4.5					0.50
75	6.13	34.788	6.65	0.74	0.62	17.7	8.8	0.2	4.4	6.7	0.9	0.1	1.40	

Station: **Arendal St. 2** Date: 09.05.2000 Time (UTC): 07:40 Position: N: 58° 23' E: 8° 49'

Ship: Munin Institute: HFF Echodepth (m): 105 Secchidepth (m): Secchicolour:

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)
0	12.76	17.810	7.24	0.33	0.01	17.2	0.5	1.1	2.5	20.3	2.5	0.1	0.86	1.20
5	11.81	20.350	7.49	0.29	0.01	17.8	0.4	0.8	3.0	17.3	2.5	0.1	0.89	1.30
10	10.36	21.630	7.66	0.29	0.01	18.9	0.5	1.6	2.6	14.3	2.2	0.1	0.72	1.40
20	6.82	32.120	7.28	0.42	0.19	18.9	3.8	2.4	1.9	10.9	1.5	0.1	0.23	1.10
30	6.54	33.780	7.31	0.40	0.24	15.2	2.7	1.8	1.4	7.1	1.0	0.1	0.36	0.70
50	6.45	34.110	6.96	0.47	0.30	15.9	1.2	3.3	2.1					0.20
75	6.55	34.270	6.79	0.56	0.41	27.3	2.2	3.3	2.3	25.1	4.3	0.1	1.14	

Station: Arendal St. 2 Date: 17.05.2000 Time (UTC): 06:00 Position: N: 58° 23' E: 8° 49'

Ship: G.M.Dannevig Institute: HFF Echodepth (m): 105 Secchidepth (m): 5 Secchicolour:

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)
0	14.39	16.939	7.22	0.30	0.01	26.5	0.1	3.2	2.6	26.4	3.6	0.2	1.10	1.70
5	11.77	19.390	7.82	0.36	0.01	19.2	0.1	2.6	1.2	23.9	3.2	0.2	0.97	1.90
10	8.08	28.671	7.24	0.43	0.06	21.1	4.6	1.0	2.3	17.6	2.6	0.2	0.64	2.10
20	7.38	33.459	7.96	0.34	0.03	15.4	2.0	0.8	1.3	16.6	2.5	0.2	1.63	3.20
30	6.56	34.163	7.16	0.47	0.28	17.3	3.0	2.0	2.0	10.9	1.8	0.1	0.74	0.30
50	6.39	34.512	6.83	0.54	0.38	17.4	3.6	2.1	2.6					0.10
75	6.47	34.668	6.67	0.61	0.45	16.7	4.0	2.7	3.2	5.3	0.7	0.0	0.10	

Station: Arendal St. 2 Date: 26.05.2000 Time (UTC): 07:01 Position: N: 58° 23' E: 8° 49'

Ship: G.M.Dannevig Institute: HFF Echodepth (m): 105 Secchidepth (m): Secchicolour:

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)
0	12.43	17.407	7.09	0.34	0.04	17.7	0.1	1.7	1.9	20.7	2.7	0.2	1.14	2.20
5	12.30	23.981	7.18	0.35	0.01	18.5	0.4	0.4	1.3	21.1	2.5	0.2	1.02	4.10
10	11.30	27.265	7.17	0.36	0.02	17.0	1.4	0.3	1.3	32.8	3.1	0.2	0.97	4.50
20	7.29	30.892	6.97	0.43	0.18	18.8	5.0	2.0	1.8	10.7	1.2	0.1	0.57	0.90
30	6.84	31.339	6.98	0.40	0.22	14.8	4.4	2.1	1.8	6.7	0.8	0.1	0.46	0.40
50	6.40	31.890	7.01	0.44	0.26	15.4	2.8	3.1	0.9					0.20
75	6.47	32.074	6.69	0.59	0.44	14.9	4.6	2.1	3.1	5.3	0.7	0.0	3.35	

Station: **Arendal St. 2** Date: 10.06.2000 Time (UTC): 06:00 Position: N: 58° 23' E: 8° 49'

Ship: G.M.Dannevig Institute: HFF Echodepth (m): 105 Secchidepth (m): 5 Secchicolour:

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)
0	14.14	24.028	6.93	0.32	0.01	17.9	0.3	0.3	1.5	28.5	3.7	0.2	1.23	2.80
5	12.81	26.407	6.91	0.39	0.01	18.2	0.4	0.4	0.6	26.1	3.3	0.2	1.06	3.50
10	11.42	30.307	6.10	0.38	0.03	20.0	2.8	2.5	1.6	16.7	2.3	0.2	3.38	2.20
20	10.83	31.616	5.89	0.40	0.10	24.0	4.1	3.8	2.4	13.6	2.1	0.2	0.92	0.90
30	9.93	33.278	5.86	0.41	0.21	17.9	3.7	4.2	2.6	7.8	1.1	0.1	0.95	0.20
50	9.03	34.178	6.15	0.52	0.26	18.9	2.6	2.8	2.6					0.20
75	8.56	34.542	6.24	0.48	0.31	15.3	2.5	2.4	2.7	7.8	1.1	0.1	1.48	

Station: Arendal St. 2 Date: 22.06.2000 Time (UTC): 07:18 Position: N: 58° 23' E: 8° 49'

Ship: G.M.Dannevig Institute: HFF Echodepth (m): 105 Secchidepth (m): 10 Secchicolour:

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)
0	13.84	27.657	6.36	0.26	0.01	15.1	1.5	1.2	0.5	15.7	2.0	0.1	0.81	1.60
5	12.95	28.884	6.53	0.29	0.01	13.4	0.7	0.5	0.1	15.4	2.0	0.2	0.53	1.80
10	12.41	30.214	6.02	0.29	0.03	18.0	3.6	2.5	0.8	10.6	1.4	0.1	0.30	1.10
20	11.80	31.620	5.90	0.31	0.06	19.7	5.3	2.6	1.4	9.4	1.4	0.1	0.46	1.50
30	9.88	33.290	5.66	0.44	0.21	15.2	4.1	2.6	3.5	8.0	0.9	0.1	0.73	0.50
50	8.95	34.171	5.69	0.50	0.27	14.8	3.7	2.5	3.7					0.40
75	8.93	34.318	5.78	0.48	0.31	13.3	3.0	2.2	3.0	6.3	0.7	0.1	0.92	

Station: Arendal St. 2 Date: 04.07.2000 Time (UTC): 06:00 Position: N: 58° 23' E: 8° 49'

Ship: G.M.Dannevig Institute: HFF Echodepth (m): 105 Secchidepth (m): 9 Secchicolour:

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)
0	13.53	30.114	5.99	0.36	0.01	21.0	2.6	1.6	0.7	27.9	4.1	0.1	0.52	1.00
5	13.47	30.243	5.95	0.36	0.01	19.4	2.8	1.6	0.7	20.6	2.2	0.2	1.05	1.40
10	12.42	31.688	5.67	0.35	0.02	20.7	3.8	2.6	1.1	12.5	1.6	0.1	0.10	0.80
20	10.30	33.937	5.75	0.36	0.09	13.8	2.0	2.1	1.4	8.0	1.0	0.1	1.27	0.20
30	9.65	34.198	5.89	0.41	0.17	12.3	1.8	2.1	1.3	8.6	1.3	0.1	0.41	0.20
50	9.02	34.555	5.85	0.54	0.28	13.2	2.7	2.2	2.1					0.30
75	8.76	34.718	5.97	0.55	0.32	13.1	2.4	2.2	1.9	9.1	1.1	0.1	0.76	

Station: **Arendal St. 2** Date: 27.07.2000 Time (UTC): 08:30 Position: N: 58° 23' E: 8° 49'

Ship: Munin Institute: HFF Echodepth (m): 105 Secchidepth (m): Secchicolour:

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)
0	16.86	27.600	6.18	0.60	0.15	23.8	0.2	0.5	1.3	52.8	4.1	0.3	1.96	5.30
5	16.69	27.990	6.24	0.48	0.10	22.9	0.0	0.3	1.3	46.1	4.0	0.3	1.58	5.00
10	16.72	28.240	6.16	0.45	0.08	23.6	0.0	0.3	1.1	35.5	3.4	0.3	1.46	4.20
20	14.25	31.680	6.03	0.40	0.08	20.8	0.0	0.3	0.9	30.9	2.7	0.2	1.00	3.30
30	12.55	33.140	5.63	0.31	0.09	17.2	0.5	0.7	1.8	13.6	1.6	0.1	0.47	0.90
50	10.95	34.270	5.50	0.46	0.22	19.1	1.2	1.7	1.8					1.10
75	10.07	34.800	5.53	0.51	0.33	20.0	2.4	1.5	2.7	6.7	0.8	0.1	0.60	

Station: Arendal St. 2 Date: 18.08.2000 Time (UTC): 10:45 Position: N: 58° 23' E: 8° 49'

Ship: G.M.Dannevig Institute: HFF Echodepth (m): 105 Secchidepth (m): 11 Secchicolour:

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)
0	15.62	30.765	5.70	0.38	0.09	14.2	0.3	0.6	1.8	24.9	2.8	0.2	1.84	1.70
5	15.65	30.963	5.62	0.36	0.09	12.9	0.2	0.3	1.5	22.5	2.6	0.2	0.88	1.70
10	15.66	31.179	5.45	0.35	0.11	12.7	0.0	0.6	1.4	20.8	2.5	0.2	0.93	2.10
20	14.51	32.446	5.04	0.31	0.13	10.1	0.3	0.6	2.0	12.3	1.4	0.1	0.66	0.90
30	12.72	33.412	5.02	0.34	0.22	11.5	0.9	1.1	3.1	12.2	1.3	0.1	0.71	0.80
50	11.62	34.240	5.26	0.38	0.26	11.3	0.9	1.1	2.6					0.30
75	10.47	34.745	5.30	0.46	0.24	10.0	1.9	1.7	3.3	8.6	1.0	0.1	0.95	

Station: Arendal St. 2 Date: 31.08.2000 Time (UTC): 12:30 Position: N: 58° 23' E: 8° 49'

Ship: G.M.Dannevig Institute: HFF Echodepth (m): 105 Secchidepth (m): 8 Secchicolour:

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)
0	21.08	25.000	6.01	0.45	0.10	20.8	0.3	0.3	0.6	24.4	3.0	0.3	1.09	1.50
5	15.99	30.500	5.79	0.59	0.11	15.5	0.1	0.2	0.9	21.3	2.7	0.4	0.95	2.10
10	15.86	30.790	5.65	0.45	0.10	14.0	0.1	0.3	1.0	21.4	2.7	0.3	1.08	2.20
20	15.35	31.790	5.53	0.44	0.09	13.7	0.1	0.5	1.1	20.0	2.1	0.3	0.77	2.00
30	14.61	32.730	5.20	0.36	0.08	12.9	0.1	0.6	1.6	16.1	1.6	0.2	0.74	1.30
50	13.40	33.500	4.87	0.34	0.12	11.8	0.5	0.6	1.9					0.70
70	11.15	34.580	5.04	0.46	0.22	10.4	1.9	0.3	3.7	6.7	0.9	0.1	0.69	

Station: **Arendal St. 2** Date: 15.09.2000 Time (UTC): 11:22 Position: N: 58° 23' E: 8° 49'

Ship: G.M.Dannevig Institute: HFF Echodepth (m): 105 Secchidepth (m): 5 Secchicolour:

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)
0	14.39	25.807	6.14	0.46	0.12	20.7	0.3	1.3	2.3	28.2	2.9	0.2	1.06	2.60
5	14.40	25.822	6.13	0.39	0.08	18.8	0.2	1.7	2.3	27.1	2.6	0.2	1.01	3.20
10	14.50	27.138	5.98	0.36	0.07	16.7	0.1	0.9	2.0	26.2	3.1	0.2	1.81	2.70
20	14.95	31.486	5.19	0.31	0.14	14.0	0.5	1.2	2.5	14.6	1.8	0.1	0.37	0.60
30	14.44	32.213	4.94	0.32	0.17	11.3	0.8	1.9	2.8	12.5	1.9	0.1	0.48	0.20
50	11.26	34.677	4.74	0.39	0.27	11.0	1.2	1.0	3.6					0.10
75	8.97	34.930	4.97	0.63	0.51	12.2	6.1	0.2	5.2	7.8	1.1	0.1	0.61	

Station: Arendal St. 2 Date: 05.10.2000 Time (UTC): 07:30 Position: N: 58° 23' E: 8° 49'

Ship: G.M.Dannevig Institute: HFF Echodepth (m): 105 Secchidepth (m): 9 Secchicolour:

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)
0	13.73	25.313	6.03	0.43	0.15	16.9	0.8	1.5	2.7	18.2	2.1	0.1	0.60	1.60
5	13.74	25.572	5.95	0.42	0.14	15.6	0.3	1.4	1.4	10.6	1.3	0.1	0.38	1.90
10	14.11	29.416	5.47	0.39	0.19	13.1	0.4	1.4	1.7	6.4	0.9	0.1	0.57	0.80
20	14.24	32.513	5.58	0.35	0.15	11.3	0.3	1.2	1.7	5.3	0.8	0.1	0.27	0.60
30	14.41	33.075	5.45	0.35	0.15	10.7	0.2	0.9	2.1	4.3	0.6	0.1	0.51	0.30
50	13.36	34.037	5.16	0.38	0.20	11.1	1.6	0.6	2.8					0.40
75	9.32	34.881	4.96	0.60	0.46	14.2	5.2	0.3	4.7	4.5	0.6	0.0	0.40	

Station: Arendal St. 2 Date: 21.10.2000 Time (UTC): 06:00 Position: N: 58° 23' E: 8° 49'

Ship: G.M.Dannevig Institute: HFF Echodepth (m): 105 Secchidepth (m): 8 Secchicolour:

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)
0	12.51	23.638	6.54	0.49	0.15	16.0	0.6	1.5	2.2	25.6	3.3	0.2	0.91	2.00
5	12.51	23.638	6.54	0.56	0.15	17.4	0.6	2.1	2.2	28.7	3.8	0.3	1.09	2.60
10	12.51	23.637	6.51	0.46	0.18	16.6	0.5	1.4	2.2	19.4	2.6	0.2	0.75	2.00
20	13.46	29.415	5.73	0.41	0.27	14.6	1.0	1.4	2.3	11.2	1.6	0.1	0.47	0.40
30	13.98	32.401	5.59	0.41	0.24	12.5	1.3	2.0	2.1	10.1	1.4	0.1	0.46	0.40
50	14.30	33.635	5.51	0.40	0.23	12.5	1.4	1.3	2.3					0.20
75	13.81	34.165	5.34	0.41	0.26	12.8	2.8	0.5	3.7	8.3	1.2	0.1	0.38	

Station: **Arendal St. 2** Date: 02.11.2000 Time (UTC): 14:39 Position: N: 58° 23' E: 8° 49'

Ship: G.M.Dannevig Institute: HFF Echodepth (m): 105 Secchidepth (m): 5 Secchicolour:

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)
0	12.53	30.960	5.89	0.66	0.40	12.5	2.3	1.5	3.7	12.7	1.6	0.1	1.67	0.80
5	12.82	31.675	5.72	0.62	0.40	13.3	2.2	1.5	3.1	7.1	0.9	0.1	1.35	0.50
10	13.37	32.965	5.45	0.62	0.40	12.1	2.2	1.0	3.0	6.6	0.9	0.1	1.24	0.40
20	13.43	33.098	5.49	0.64	0.40	13.0	2.2	0.9	3.1	7.3	0.9	0.1	1.11	0.40
30	13.44	33.155	5.50	0.65	0.42	14.3	2.2	1.1	3.2	9.1	1.2	0.1	1.61	0.40
50	13.49	33.303	5.45	0.61	0.42	15.5	1.9	1.5	3.2					0.40
75	13.34	33.999	5.45	0.67	0.41	13.1	2.5	1.0	3.7	14.5	1.3	0.1	3.78	

Station: Arendal St. 2 Date: 28.11.2000 Time (UTC): 10:00 Position: N: 58° 23' E: 8° 49'

Ship: Munin Institute: HFF Echodepth (m): 105 Secchidepth (m): Secchicolour:

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)
0	8.40	24.880	7.06	0.74	0.39	20.4	6.1	3.4	7.4	10.9	1.4	0.1	1.10	0.80
5	9.87	31.130	6.62	0.80	0.61	21.4	6.1	1.9	6.6	15.3	1.9	0.1	1.57	0.80
10	10.05	31.230	6.33	0.81	0.58	20.5	5.8	1.6	6.1	7.7	1.2	0.1	0.87	0.70
20	10.33	31.770	6.02	0.80	0.59	18.6	6.1	1.0	4.7	7.1	1.1	0.1	0.96	0.50
30	10.23	32.090	6.12	0.81	0.60	20.8	6.3	0.6	4.7	9.3	1.6	0.1	0.75	0.60
50	11.29	33.400	5.85	0.78	0.60	19.9	5.3	0.3	3.9					0.40
68	11.78	33.950	5.67	0.75	0.59	17.6	5.0	0.3	3.7	8.7	1.2	0.1	0.86	

Station: Arendal St. 2 Date: 04.12.2000 Time (UTC): 07:26 Position: N: 58° 23' E: 8° 49'

Ship: G.M.Dannevig Institute: HFF Echodepth (m): 105 Secchidepth (m): 5 Secchicolour:

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)
0	9.01	28.322	6.64	0.82	0.35	21.9	6.3	2.1	7.7	17.0	2.7	0.1	4.01	0.53
5	9.02	28.343	6.60	0.79	0.47	19.4	6.8	2.7	7.3	7.1	0.9	0.1	2.18	0.59
10	9.09	28.607	6.22	0.81	0.55	17.7	7.2	1.2	6.6	9.4	1.2	0.1	0.88	0.47
20	10.90	33.116	5.79	0.77	0.55	14.8	6.4	0.2	5.2	4.7	0.7	0.1	3.61	0.25
30	11.26	33.513	5.82	0.80	0.56	15.8	6.4	0.2	5.0	5.4	0.6	0.1	0.87	0.25
50	11.04	34.009	5.93	0.79	0.52	15.1	5.3	0.4	4.1					0.25
75	11.08	34.366	5.92	0.74	0.51	13.2	4.8	0.2	3.9	5.7	0.7	0.1	0.87	

Station: **Arendal St. 2** Date: 18.12.2000 Time (UTC): 14:05 Position: N: 58° 23' E: 8° 49'

Ship: Munin Institute: HFF Echodepth (m): 105 Secchidepth (m): Secchicolour:

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)
0	7.81	26.240	6.89	0.70	0.49	20.0	9.4	1.1	12.3	7.9	0.8	0.1	1.97	0.40
5	7.82	26.410		0.69	0.55	21.8	8.7	1.1	12.3	8.1	0.9	0.1	1.07	0.40
10	8.10	29.580	6.42	0.69	0.55	21.3	8.7	1.1	12.1	7.8	0.9	0.1	1.22	0.40
20	8.32	31.170		0.72	0.60	18.8	7.7	0.5	7.9	7.2	0.8	0.1	1.18	0.60
30	9.65	33.440	6.21	0.69	0.60	16.8	7.6	0.3	6.0	8.9	1.2	0.1	0.90	0.40
50	9.95	34.040		0.72	0.60	19.9	6.4	0.4	4.8					0.30
69	9.87	34.310	6.13	0.68	0.57	14.1	5.9	0.3	4.3	6.4	0.7	0.1	1.42	

3.3 Arendal St. 3

Station: Arendal St. 3 Date: 16.01.2000 Time (UTC): 08:00 Position: N: 58° 20' E: 8° 54'

Ship: G.M.Dannevig Institute: HFF Echodepth (m): 260 Secchidepth (m): 6 Secchicolour:

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)
0	4.32	29.630	7.47		0.25		8.2		9.0					0.50
5	4.34	29.786	7.42		0.54		8.3		8.6					0.40
10	5.31	32.383	7.13		0.52		7.0		5.6					0.60
20	5.84	33.200	6.99		0.52		6.6		5.0					0.40
30	6.68	33.812	6.77		0.54		6.2		4.6					0.30
50	6.69	34.037	6.73		0.56		6.2		4.6					0.30
75	6.71	34.063	6.77		0.55		6.1		4.6					
100	6.84	34.171	6.70	0.74	0.56	15.5	5.7		4.6	11.5	1.5	0.1	1.58	
125	7.21	34.539	6.74	0.68	0.56	15.9	5.9		4.5					
150	7.57	34.702	6.51	0.67	0.54	16.2	5.8		4.6					
200	7.60	34.901	6.37	0.68	0.56	15.2	6.5		4.0	10.6	1.3	0.1	1.75	
240	7.61	34.903	6.36	0.71	0.58	16.3	6.8		4.0					

Station: Arendal St. 3 Date: 13.02.2000 Time (UTC): 18:00 Position: N: 58° 20' E: 8° 54'

Ship: G.M.Dannevig Institute: HFF Echodepth (m): 260 Secchidepth (m): Secchicolour:

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)
0	5.24	33.279	7.03		0.47		7.8		6.3					0.40
5	5.25	33.278	7.01		0.57		8.0		6.3					0.40
10	5.26	33.277	6.98		0.57		7.9		6.3					0.40
20	5.27	33.278	7.00		0.58		7.8		6.4					0.40
30	5.27	33.275	7.00		0.57		8.0		6.4					0.40
50	5.29	33.295	6.99		0.59		8.0		6.4					0.40
75	5.97	34.264	6.95		0.56		6.9		5.3					
100	6.09	34.450	6.90	0.69	0.56	13.1	6.7		4.8	4.6	0.5	0.1	2.18	
125	6.09	34.487	6.89	0.72	0.56	13.7	6.7		4.8					
150	6.17	34.587	6.87	0.71	0.57	13.2	6.7		4.8					
200	6.28	34.662	6.83	0.79	0.57	14.4	6.9		4.6	12.6	1.2	0.1		
240	6.45	34.794	6.81	1.01	0.58	16.2	7.4		4.5					

Station: **Arendal St. 3** Date: 08.03.2000 Time (UTC): 06:00 Position: N: 58° 20' E: 8° 54'

Ship: G.M.Dannevig Institute: HFF Echodepth (m): 260 Secchidepth (m): 6 Secchicolour:

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)
0	3.96	31.083	7.41		0.39		9.6		7.7					1.60
5	4.12	31.409	7.37		0.47		9.6		7.2					1.40
10	4.35	31.899	7.28		0.49		9.5		6.8					0.70
20	4.45	32.106	7.23		0.50		9.3		6.6					1.30
30	5.00	33.237	7.05		0.54		8.5		5.4					0.80
50	5.70	34.396	6.92		0.57		7.6		4.6					0.50
75	5.83	34.576	6.86		0.59		7.2		4.6					
100	6.23	34.775	6.79	0.71	0.62	16.6	8.1		4.3	4.5	0.6	0.0	2.10	
125	6.48	34.916	6.72	0.75	0.63	16.3	8.4		4.3					
150	6.42	34.925	6.72	0.74	0.63	16.6	8.3		4.3					
200	6.43	34.936	6.72	0.77	0.64	16.8	7.9		4.3	6.9	0.8	0.1	3.98	
240	6.60	34.998	6.72	0.76	0.65	16.8	8.5		4.3					

Station: Arendal St. 3 Date: 12.04.2000 Time (UTC): 12:28 Position: N: 58° 20' E: 8° 54'

Ship: G.M.Dannevig Institute: HFF Echodepth (m): 260 Secchidepth (m): 9 Secchicolour:

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)
0	4.91	23.570												
5	4.91	23.596												
10	4.14	27.293												
20	4.44	31.406												
30	4.76	32.956												
50	5.81	34.455												
75	6.26	34.895												
100	6.50	35.029	6.53	0.74	0.67	17.7	9.2		5.0	7.1	0.9	0.1	0.75	
125	6.52	35.038	6.53	0.80	0.67	19.9	9.5		5.1					
150	6.55	35.054	6.54	0.80	0.65	20.0	9.3		5.2					
200	6.58	35.064	6.52	0.78	0.67	18.3	9.6		5.2	6.6	0.9	0.1	0.86	
240	6.63	35.082	6.45	0.74	0.69	17.4	9.6		4.9					

Station: **Arendal St. 3** Date: 17.05.2000 Time (UTC): 07:00 Position: N: 58° 20' E: 8° 54'

Ship: G.M.Dannevig Institute: HFF Echodepth (m): 260 Secchidepth (m): 5 Secchicolour:

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)
0	13.30	17.948	7.17		0.01		0.1		1.7					1.50
5	12.31	19.349	7.80		0.01		0.1		1.6					2.10
10	9.88	30.921	8.37		0.03		1.0		1.0					4.70
20	6.55	33.742	7.10		0.18		3.9		2.2					1.00
30	6.57	34.422	7.02		0.28		2.4		1.5					0.40
50	6.38	34.598	6.77		0.41		4.2		2.6					0.20
75	7.05	34.837	6.43		0.65		8.8		4.2					
100	6.83	35.015	6.34	0.83	0.69	18.5	9.6		4.5	12.7	1.1	0.0	0.48	
125	6.86	35.090	6.30	0.94	0.74	17.4	10.1		5.1					
150	6.88	35.133	6.23	0.87	0.77	16.7	10.6		5.7					
200	6.90	35.165	6.20	0.92	0.78	20.4	10.7		6.2	8.4	1.2	0.0	0.51	
240	6.90	35.172	6.22	0.97	0.79	20.4	10.5		7.0					

Station: Arendal St. 3 Date: 10.06.2000 Time (UTC): 07:00 Position: N: 58° 20' E: 8° 54'

Ship: G.M.Dannevig Institute: HFF Echodepth (m): 260 Secchidepth (m): 4 Secchicolour:

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)
0	14.28	22.909	6.89		0.01		0.6		2.4					2.90
5	14.28	24.333	6.97		0.02		0.1		1.0					3.60
10	12.10	28.693	6.56		0.01		1.9		0.9					5.30
20	9.93	32.785	6.16		0.06		2.2		1.7					0.60
30	9.34	34.302	6.26		0.16		0.9		0.9					0.30
50	8.28	34.595	6.31		0.31		2.4		2.4					0.20
75	8.17	34.713	6.49		0.29		1.4		0.9					
100	7.21	34.944	6.14	0.76	0.66	16.4	7.6		3.2	3.9	0.5	0.0	3.40	
125	6.91	35.017	6.24	0.81	0.65	17.3	9.6		3.8					
150	7.05	35.118	6.27	0.85	0.72	17.2	10.6		4.5					
200	6.90	35.122	6.21	0.85	0.75	18.8	11.3		4.6	5.1	0.7	0.1	0.57	
240	6.91	35.148	6.14	0.98	0.80	20.9	11.5		5.4					

Station: **Arendal St. 3** Date: 04.07.2000 Time (UTC): 07:00 Position: N: 58° 20' E: 8° 54'

Ship: G.M.Dannevig Institute: HFF Echodepth (m): 260 Secchidepth (m): 8 Secchicolour:

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)
0	14.81	28.287	6.31		0.01		1.0		0.6					1.10
5	14.74	28.492	6.21		0.01		1.2		0.5					1.30
10	14.61	29.540	6.30		0.01		1.5		0.3					1.70
20	11.66	32.952	5.68		0.20		2.4		1.1					0.30
30	9.94	34.306	5.89		0.17		1.4		1.1					0.30
50	9.45	34.754	6.04		0.23		0.7		0.9					0.30
75	8.61	34.903	6.04		0.35		1.6		1.4					
100	7.97	35.004	5.94	0.67	0.62	13.6	3.5		2.4	5.0	0.7	0.0	0.32	
125	7.24	35.040	6.07	0.82	0.67	17.1	7.5		3.8					
150	7.10	35.061	5.87	0.88	0.72	16.4	8.6		4.4					
200	7.03	35.078	5.97	0.90	0.74	17.4	9.3		4.7	8.7	1.3	0.0	0.75	
240	6.98	35.094	5.94	0.95	0.77	19.3	9.5		4.8					

Station: Arendal St. 3 Date: 14.08.2000 Time (UTC): 08:40 Position: N: 58° 20' E: 8° 54'

Ship: G.M.Dannevig Institute: HFF Echodepth (m): 260 Secchidepth (m): 8 Secchicolour:

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)
0	15.66	29.498	6.55		0.10		0.2		0.3					
5	15.81	29.936	6.00		0.04		0.1		0.6					
10	15.50	31.585	6.06		0.04		0.1		0.4					
20	13.49	33.018	5.82		0.09		0.2		1.5					
30	11.47	34.107	5.23		0.17		1.3		4.5					
50	9.70	34.990	5.45		0.22		1.1		2.5					
75	7.61	35.033	5.56		0.57		6.3		3.7					
100	7.33	35.057	5.62	0.83	0.65	16.1	7.6		4.1	5.2	0.6	0.1	0.64	
125	7.22	35.100	5.69	0.99	0.78	21.1	10.8		5.6					
150	7.20	35.103	5.67	1.00	0.80	21.4	11.3		5.8					
200	7.17	35.112	5.68	0.99	0.82	20.2	11.7		6.0	9.8	1.0	0.1	0.69	
240	7.16	35.140	5.81	0.98	0.79	19.7	11.2		5.3					

Station: **Arendal St. 3** Date: 11.09.2000 Time (UTC): 06:57 Position: N: 58° 20' E: 8° 54'

Ship: G.M.Dannevig Institute: HFF Echodepth (m): 260 Secchidepth (m): 10 Secchicolour:

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)
0	14.94	28.315	5.95		0.06		0.3		0.9					2.00
5	15.26	29.272	5.85		0.15		0.1		1.3					2.50
10	15.34	30.088	5.81		0.06		0.1		1.4					2.10
20	15.13	31.387	5.64		0.08		0.1		1.4					0.90
30	14.48	32.547	4.91		0.09		0.6		1.7					0.20
50	11.46	34.190	4.84		0.27		2.8		4.0					0.20
75	9.00	34.943	5.02		0.48		5.3		5.1					
100	7.99	35.041	5.29	0.74	0.61	15.3	7.8		4.9	8.5	1.0	0.1	0.56	
125	7.62	35.086	5.36	0.86	0.67	18.7	8.7		4.9					
150	7.46	35.099	5.36	0.90	0.70	18.3	9.2		4.8					
200	7.46	35.118	5.12	0.88	0.74	16.6	9.9		5.3	5.9	0.7	0.1	1.74	
240	7.38	35.129		0.93	0.75	16.5	10.3		5.4					

StaJan Magnusson/Niva, Date: 21.10.2000 Time (UTC): 07:25 Position: N: 58° 20' E: 8° 54'

Ship: G.M.Dannevig Institute: HFF Echodepth (m): 260 Secchidepth (m): 6 Secchicolour:

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)
0	12.45	23.658	6.51		0.17		1.2		3.2					1.90
5	12.47	23.693	6.52		0.17		1.0		2.9					2.20
10	12.78	24.403	6.42		0.08		1.1		3.0					1.50
20	13.92	32.088	5.61		0.27		1.4		2.1					0.30
30	14.25	33.238	5.57		0.26		1.0		1.8					0.20
50	14.29	33.908	5.49		0.24		1.4		2.6					0.20
75	14.22	34.259	5.51		0.25		1.9		3.7					
100	11.11	34.609	4.74	0.54	0.42	13.3	5.1		5.2	7.9	1.0	0.1	0.22	
125	8.52	34.997	5.00	0.71	0.56	17.4	7.3		5.2					
150	7.60	35.095	5.38	0.85	0.72	18.1	9.9		5.3					
200	7.21	35.160	5.66	0.97	0.84	19.2	10.3		6.2	10.3	1.5	0.1	0.35	
240	7.16	35.173	5.68	0.94	0.86	20.6	10.6		7.0					

Station: **Arendal St. 3** Date: 02.11.2000 Time (UTC): 15:27 Position: N: 58° 20' E: 8° 54'

Ship: G.M.Dannevig Institute: HFF Echodepth (m): 260 Secchidepth (m): 5 Secchicolour:

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)
0	12.03	29.825												
5	12.56	31.493												
10	13.28	32.744												
20	13.43	33.068												
30	13.45	33.323												
50	12.99	33.837												
75	12.99	34.601												
100	12.35	34.668	5.74	0.54	0.35	10.0	1.8		2.7	7.1	0.8	0.1	1.73	
125	11.88	34.713	5.61	0.57	0.38	16.9	2.8		3.3					
150	11.10	34.770	5.38	0.68	0.49	14.7	4.8		4.4					
200	8.40	35.022	5.07	0.96	0.79	16.5	9.9		6.7	5.8	0.6	0.1	1.44	
240	7.82	35.092	5.16	1.03	0.88	19.3	11.3		7.4					

Station: Arendal St. 3 Date: 04.12.2000 Time (UTC): 08:20 Position: N: 58° 20' E: 8° 54'

Ship: G.M.Dannevig Institute: HFF Echodepth (m): 260 Secchidepth (m): 6 Secchicolour:

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)
0	8.89	27.660	6.71		0.39		5.9		7.7					0.74
5	9.03	27.880	6.66		0.49		6.4		7.4					0.56
10	9.45	29.999	6.52		0.51		6.7		7.4					0.37
20	10.28	33.295	6.16		0.51		5.8		4.5					0.28
30	11.26	34.200	6.00		0.52		5.2		4.3					0.24
50	10.87	34.427	6.06		0.49		3.6		3.2					0.24
75	10.62	34.522	6.06		0.47		3.7		2.9					
100	10.35	34.698	5.77	0.74	0.53	12.6	4.8		4.1	8.0	1.2	0.1	1.30	
125	9.64	34.865	5.47	0.76	0.60	14.6	6.9		4.9					
150	8.92	34.949	5.32	0.90	0.71	16.6	8.7		6.0					
200	7.17	35.183	5.69	1.09	0.90	18.5	12.1		6.9	5.7	0.5	0.0	0.58	
240	7.14	35.188	5.67	1.15	0.92	21.8	12.3		7.5					

3.4 Lista

Station: Lista Date: 13.01.2000 Time (UTC): 14:45 Position: N: 58° 1' E: 6° 32'

Ship: Brekne Institute: HFF Echodepth (m): 310 Secchidepth (m): 10 Secchicolour:

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)
0	7.07	32.675		0.78	0.41	17.3	6.2		4.8	36.3	2.5	0.2		0.20
5	7.22	32.947		0.64	0.46	13.4	5.9		4.8	4.0	0.5	0.1		0.20
10	7.53	33.701		0.65	0.47	12.5	5.6		4.6	4.1	0.6	0.1		0.10
20	7.85	34.189		0.66	0.49	13.3	5.2		3.6	5.2	0.7	0.1		0.10
30	8.42	34.544		0.64	0.50	11.7	5.0		4.1	4.6	0.5	0.1		0.10
50	7.28	34.481		0.65	0.48	11.5	4.6		4.1					0.10
75	7.39	34.570		0.66	0.49	11.0	4.4		4.1					
100	7.76	34.688		0.65	0.50	11.1	4.4		4.1					
150	7.95	34.774		0.67	0.51	11.2	4.6		4.1					
200	7.80	34.767		0.66	0.43	11.5	4.0		4.1	5.5	0.7	0.1		
300	8.18	34.950		0.64	0.50	12.2	6.2		3.7	8.0	0.6			

Station: Lista Date: 16.02.2000 Time (UTC): 15:47 Position: N: 58° 1' E: 6° 32'

Ship: Brekne Institute: HFF Echodepth (m): 310 Secchidepth (m): 8 Secchicolour:

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)
0	5.38	33.461		0.80	0.59	18.7	7.6		5.4	18.9	1.6	0.1		0.50
5	5.38	33.484		0.69	0.57	13.7	7.3		5.5	4.9	0.5	0.1		0.50
10	5.38	33.488		0.68	0.56	14.2	7.3		5.5	3.9	0.4	0.0		0.50
20	5.43	33.537		0.69	0.58	14.0	7.4		5.5	4.8	0.5	0.0		0.50
30	5.54	33.648		0.68	0.57	14.7	7.3		5.4	5.8	0.5	0.0		0.40
50	5.98	34.087		0.66	0.58	14.9	7.3		5.4					0.30
75	6.03	34.180		0.67	0.59	14.2	7.1		5.2					
100	6.05	34.235		0.69	0.61	14.2	7.1		5.2					
150	6.07	34.353		0.67	0.62	14.2	7.1		5.3					
200	6.31	34.487		0.65	0.60	14.0	7.2		4.8	4.7	0.4	0.0		
300	7.34	34.884		0.68	0.64	14.8	8.3		4.7					

Station: **Lista** Date: 09.03.2000 Time (UTC): 07:45 Position: N: 58° 1' E: 6° 32'

Ship: Brekne Institute: HFF Echodepth (m): 310 Secchidepth (m): 8 Secchicolour:

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)
0	5.80	34.160		0.71	0.61	14.1	7.1		5.3	4.7	0.3	0.1		0.30
5	5.83	34.176		0.65	0.60	13.6	7.1		5.3	3.6	0.3	0.0		0.20
10	5.85	34.184		0.66	0.60	13.2	7.2		5.3	3.0	0.2	0.0		0.20
20	5.99	34.399		0.66	0.60	12.7	7.0		5.3	3.1	0.3	0.0		0.20
30	6.25	34.574		0.66	0.63	13.5	6.9		5.3	3.1	0.2	0.0		0.20
50	6.16	34.614		0.68	0.63	13.4	6.8		5.2					0.10
75	6.20	34.637		0.68	0.64	13.3	6.9		5.0					
100	6.43	34.734		0.65	0.62	13.3	6.9		4.8					
150	6.92	34.938		0.68	0.67	13.4	8.2		4.6					
200	7.05	35.024		0.70	0.67	14.8	8.6		4.7	4.9	0.1	0.0		
300	7.15	35.093		0.74	0.70	14.6	9.4		5.0	2.3	0.1			

Station: Lista Date: 07.04.2000 Time (UTC): 17:00 Position: N: 58° 1' E: 6° 32'

Ship: Brekne Institute: HFF Echodepth (m): 310 Secchidepth (m): 10 Secchicolour:

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)
0	4.87	32.132		0.45	0.05	14.7	2.7		2.5	18.8	3.0	0.2		5.60
5	4.72	32.237		0.46	0.08	14.7	2.5		2.5	16.1	2.6	0.2		6.00
10	4.68	32.277		0.43	0.12	14.5	2.5		2.6	14.5	2.5	0.3		5.90
20	4.64	32.384		0.41	0.20	16.0	3.7		2.9	8.4	1.3	0.2		3.20
30	4.67	32.488		0.52	0.33	15.8	5.0		3.2	4.6	0.6	0.1		1.50
50	5.88	34.567		0.71	0.62	16.2	8.1		4.5					0.50
75	6.63	34.906		0.72	0.64	16.1	8.6		4.4					
100	6.86	35.066		0.77	0.68	16.7	9.1		4.5					
150	6.82	35.112		0.71	0.69	16.7	9.3		4.7					
200	6.84	35.124		0.75	0.68	17.5	9.3		4.8	5.2	0.3	0.1		
300	6.88	35.140		0.73	0.70	17.6	9.6		5.1	3.0	0.2			

Station: **Lista** Date: 08.05.2000 Time (UTC): 17:00 Position: N: 58° 1' E: 6° 32'

Ship: Brekne Institute: HFF Echodepth (m): 310 Secchidepth (m): 11 Secchicolour:

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)
0	13.53	21.087		0.35	0.01	18.3	0.5		3.7	21.9	2.1	0.2		1.50
5	10.40	21.745		0.29	0.01	15.3	0.3		3.1	10.6	1.4	0.1		1.20
10	8.61	23.966		0.33	0.01	15.3	0.3		3.0	12.0	1.8	0.1		1.50
20	6.25	31.021		0.31	0.13	15.0	3.3		2.7	7.0	0.8	0.1		1.00
30	4.99	32.785		0.46	0.31	15.2	4.8		2.9	4.8	0.6	0.0		0.40
50	6.21	34.449		0.69	0.59	16.1	7.9		3.9					0.10
75	7.04	34.923		0.77	0.67	16.7	8.6		4.2					
100	6.87	34.978		0.76	0.68	16.9	8.7		4.5					
150	6.80	35.044		0.79	0.73	16.3	9.4		4.9					
200	6.80	35.070		0.80	0.73	18.0	9.5		4.9	1.8	0.2	0.0		
300	6.80	35.110		0.79	0.72	16.7	9.7		5.0	2.6	0.3			

Station: Lista Date: 06.06.2000 Time (UTC): 17:50 Position: N: 58° 1' E: 6° 32'

Ship: Brekne Institute: HFF Echodepth (m): 310 Secchidepth (m): 6 Secchicolour:

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)
0	12.52	25.719		0.41	0.11	18.9	0.2		0.9	29.5	3.2	0.3		3.80
5	12.38	26.149		0.35	0.13	14.6	0.2		0.9	21.7	2.6	0.2		3.50
10	12.16	26.835		0.35	0.12	15.0	0.7		1.1	20.8	2.8	0.3		3.00
20	11.15	29.121		0.32	0.12	14.8	1.8		1.3	13.3	1.6	0.2		2.00
30	10.45	30.386		0.34	0.13	14.8	2.4		2.0	10.9	1.5	0.2		1.40
50	9.02	33.442		0.33	0.16	14.4	2.5		1.6					1.10
75	7.36	34.368		0.43	0.29	14.2	3.8		2.2					
100	6.81	34.589		0.55	0.32	14.5	5.3		3.0					
150	6.65	34.880		0.58	0.36	15.6	5.7		3.0					
200	6.81	35.031		0.78	0.68	16.6	9.4		4.7	1.8	0.2	0.0		
300	6.87	35.161		0.84	0.75	17.7	10.1		5.8	3.4	0.3			

Station: **Lista** Date: 06.07.2000 Time (UTC): 08:15 Position: N: 58° 1' E: 6° 32'

Ship: Brekne Institute: HFF Echodepth (m): 310 Secchidepth (m): 7 Secchicolour:

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)
0	14.67	29.494		0.34	0.07	16.1	1.1		0.5	19.8	2.2	0.2		0.40
5	14.37	30.272		0.32	0.06	15.5	1.0		0.4	16.4	2.0	0.2		1.30
10	11.29	32.464		0.35	0.10	17.6	4.4		0.2	13.4	1.6	0.1		1.00
20	9.88	33.424		0.37	0.25	16.0	6.7		3.4	7.6	0.8	0.1		0.10
30	9.08	34.167		0.46	0.33	17.7	5.1		3.0	5.1	0.5	0.1		0.10
50	8.64	34.688		0.45	0.32	16.9	3.2		2.1					0.20
75	7.91	34.886		0.55	0.27	17.7	3.8		2.2					
100	7.22	34.946		0.77	0.55	14.9	8.0		3.1					
150	7.09	35.049		0.74	0.60	20.4	9.0		3.6					
200	6.99	35.099		0.76	0.71	15.9	10.0		4.3	7.1	1.1	0.0		
300	6.87	35.166		0.85	0.74	16.9	10.6		5.8	3.7	0.3			

Station: Lista Date: 06.08.2000 Time (UTC): 08:00 Position: N: 58° 1' E: 6° 32'

Ship: Brekne Institute: HFF Echodepth (m): 310 Secchidepth (m): 8 Secchicolour:

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)
0	16.02	30.392		0.36	0.05	13.3	0.3		0.5	28.2	2.3	0.2		2.20
5	15.95	30.541		0.35	0.05	12.9	0.2		0.3	22.2	2.0	0.2		2.30
10	15.01	31.711		0.30	0.05	10.8	0.2		0.9	13.5	1.2	0.1		1.20
20	12.82	32.948		0.28	0.06	9.8	0.5		1.7	14.2	1.1	0.1		1.60
30	11.86	33.667		0.33	0.14	10.3	2.1		2.2	5.9	0.6	0.1		0.60
50	10.73	34.352		0.36	0.14	10.6	2.0		2.7					0.60
75	9.63	34.726		0.45	0.32	11.1	4.7		2.8					
100	8.95	34.935		0.53	0.39	11.1	5.2		3.0					
150	7.22	35.074		0.80	0.39	16.2	5.1		3.0					
200	6.97	35.135		0.81	0.73	16.2	10.5		5.1	2.9	0.3	0.0		
300	6.89	35.178		0.89	0.78	20.4	11.1		6.4	4.4	0.4			

Station: **Lista** Date: 05.09.2000 Time (UTC): 17:30 Position: N: 58° 1' E: 6° 32'

Ship: Brekne Institute: HFF Echodepth (m): 310 Secchidepth (m): 7 Secchicolour:

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)
0	15.69	30.259		0.65	0.13	14.2	0.1		0.5	23.4	3.6	0.5		1.10
5	15.55	30.464		0.49	0.13	13.9	0.1		0.6	19.1	2.8	0.2		0.70
10	15.51	30.515		0.30	0.07	11.5	0.1		0.6	15.8	2.2	0.1		1.00
20	15.54	30.930		0.32	0.12	11.5	0.1		0.9	14.8	1.7	0.1		1.00
30	15.34	31.567		0.25	0.10	10.9	0.2		1.2	10.4	1.1	0.1		0.70
50	9.97	34.799		0.32	0.23	9.8	2.5		2.8					0.20
75	8.10	35.017		0.55	0.51	12.3	6.7		3.8					
100	7.54	35.089		0.72	0.65	12.4	9.4		4.4					
150	7.11	35.150		0.81	0.77	13.3	10.9		5.0					
200	7.04	35.169		0.82	0.77	16.5	11.0		5.1	2.9	0.2	0.0		
300	6.95	35.191		0.83	0.82	16.9	11.2		6.1	2.5	0.1			

Station: Lista Date: 03.10.2000 Time (UTC): 17:10 Position: N: 58° 1' E: 6° 32'

Ship: Brekne Institute: HFF Echodepth (m): 310 Secchidepth (m): 8 Secchicolour:

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)
0	13.74	25.693		0.48	0.11	20.2	0.3		0.9	31.9	2.6	0.3		2.90
5	13.75	25.698		0.40	0.12	14.2	0.2		0.9	16.5	1.7	0.2		1.90
10	13.73	25.881		0.46	0.13	14.7	0.2		0.9	14.8	1.5	0.1		1.80
20	13.77	28.066		0.34	0.14	13.2	0.2		0.8	11.8	1.5	0.1		1.40
30	13.92	31.847		0.33	0.11	10.7	0.3		1.3	6.8	0.9	0.1		0.80
50	13.82	33.626		0.33	0.12	11.9	0.4		1.8					0.70
75	13.05	34.342		0.31	0.18	9.0	1.6		2.5					
100	7.67	35.087		0.68	0.59	13.6	7.9		4.3					
150	7.22	35.156		0.87	0.76	16.3	10.8		4.9					
200	7.02	35.187		0.88	0.80	18.5	11.3		5.3	3.7	0.5	0.2		
300	7.00	35.221		0.90	0.85	18.3	11.9		7.7	4.3	0.5			

Station: **Lista** Date: 10.11.2000 Time (UTC): 12:00 Position: N: 58° 1' E: 6° 32'

Ship: Brekne Institute: HFF Echodepth (m): 310 Secchidepth (m): 8 Secchicolour:

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)
0	11.64	30.885		0.71	0.43	16.0	4.0		4.6	10.7	1.6	0.2		1.10
5	11.74	31.272		0.86	0.47	14.2	3.9		4.3	6.5	0.8	0.1		0.50
10	11.94	31.695		0.60	0.47	13.7	3.8		4.0	6.6	0.8	0.1		0.20
20	12.67	32.739		0.54	0.45	12.8	3.6		3.4	8.0	0.7	0.1		0.20
30	13.00	33.386		0.56	0.44	11.9	3.4		3.2	3.8	0.5	0.1		0.20
50	12.87	34.027		0.56	0.45	11.4	3.2		3.2					0.20
75	12.98	34.294		0.56	0.46	10.1	3.0		3.0					
100	12.70	34.584		0.52	0.44	10.8	3.0		3.0					
150	7.38	35.135		0.88	0.80	16.0	9.9		5.2					
200	7.07	35.184		0.96	0.88	17.4	11.7		6.4	3.2	0.3	0.0		
300	7.05	35.183		0.98	0.92	17.2	12.1		6.7	3.4	0.3			

Station: Lista Date: 11.12.2000 Time (UTC): 14:15 Position: N: 58° 1' E: 6° 32'

Ship: Brekne Institute: HFF Echodepth (m): 310 Secchidepth (m): 7 Secchicolour:

Depth	Temp (°C)	Salinity	Oxygen (ml/l)	TotP (µM)	Po4-P (µM)	Tot-N (µM)	NO3+NO2-N (µM)	NH4-N (µM)	SiO3 (µM)	POC (µM)	PON (µM)	POP (µM)	TSM (mg/l)	Chla (µg/l)
0	9.44	30.267		0.76	0.52	16.9	6.6		6.2	6.2	0.7	0.1		0.40
5	9.45	30.287		0.73	0.53	17.2	7.2		6.2	5.8	0.6	0.0		0.30
10	9.46	30.313		0.73	0.53	16.8	7.3		6.1	4.5	0.5	0.0		0.30
20	9.55	31.247		0.75	0.54	17.5	7.5		5.9	5.8	0.5	0.0		0.30
30	11.24	33.070		0.73	0.53	14.7	5.7		4.6	3.0	0.3	0.0		0.10
50	11.79	34.238		0.62	0.50	11.6	4.6		3.9					0.10
75	11.58	34.438		0.62	0.49	14.0	4.5		3.7					
100	10.79	34.613		0.62	0.57	11.2	4.4		4.0					
150	8.94	34.922		0.68	0.64	15.2	7.7		5.3					
200	7.52	35.084		0.88	0.76	18.6	10.0		5.9	2.9	0.2	0.0		
300	7.11	35.122		0.95	0.83	15.2	11.5		6.7	2.7	0.2			

3.5 Jomfrulandsrennen

Station: Jomfrulandsrennen Date: 25.01.2000 Time (UTC): 09:10 Position: N: 58° 53.5' E: 9° 37'
Ship: Munin Institute: NIVA Echodepth (m): 24 Secchidepth (m): 8.5 Secchicolour: Yellow/green

Depth	Temp (°C)	Salinity	TotP (µM)	Tot-N (µM)
0	1.55	21.289	0.52	31.1

Station: Jomfrulandsrennen Date: 09.02.2000 Time (UTC): 08:43 Position: N: 58° 53.5' E: 9° 37'
Ship: Munin Institute: NIVA Echodepth (m): 24.5 Secchidepth (m): 9 Secchicolour: Green

Depth	Temp (°C)	Salinity	TotP (µM)	Tot-N (µM)
0	4.31	27.824	0.55	27.8

Station: Jomfrulandsrennen Date: 22.02.2000 Time (UTC): 12:10 Position: N: 58° 53.5' E: 9° 37'
Ship: Munin Institute: NIVA Echodepth (m): 24 Secchidepth (m): 9 Secchicolour: Grey/green

Depth	Temp (°C)	Salinity	TotP (µM)	Tot-N (µM)
0	1.52	22.831	0.52	25.7

Station: Jomfrulandsrennen Date: 16.03.2000 Time (UTC): 13:15 Position: N: 58° 53.5' E: 9° 37'
Ship: Hugin Institute: NIVA Echodepth (m): 22 Secchidepth (m): 8.5 Secchicolour: Grey/green

Depth	Temp (°C)	Salinity	TotP (µM)	Tot-N (µM)
0	3.97	29.694	0.55	20.0

Station: Jomfrulandsrennen Date: 29.03.2000 Time (UTC): 10:20 Position: N: 58° 53.5' E: 9° 37'
Ship: Hugin Institute: NIVA Echodepth (m): 23 Secchidepth (m): 11 Secchicolour: Green

Depth	Temp (°C)	Salinity	TotP (µM)	Tot-N (µM)
0	3.32	22.221	0.36	26.8

Station: Jomfrulandsrennen Date: 25.01.2000 Time (UTC): 09:10 Position: N: 58° 53.5' E: 9° 37'

Ship: Munin Institute: NIVA Echodepth (m): 24 Secchidepth (m): 8.5 Secchicolour: Yellow/green

Depth	Temp (°C)	Salinity	TotP (µM)	Tot-N (µM)
0	1.55	21.289	0.52	31.1

Station: Jomfrulandsrennen Date: 09.02.2000 Time (UTC): 08:43 Position: N: 58° 53.5' E: 9° 37'

Ship: Munin Institute: NIVA Echodepth (m): 24.5 Secchidepth (m): 9 Secchicolour: Green

Depth	Temp (°C)	Salinity	TotP (µM)	Tot-N (µM)
0	4.31	27.824	0.55	27.8

Station: Jomfrulandsrennen Date: 22.02.2000 Time (UTC): 12:10 Position: N: 58° 53.5' E: 9° 37'

Ship: Munin Institute: NIVA Echodepth (m): 24 Secchidepth (m): 9 Secchicolour: Grey/green

Depth	Temp (°C)	Salinity	TotP (µM)	Tot-N (µM)
0	1.52	22.831	0.52	25.7

Station: Jomfrulandsrennen Date: 16.03.2000 Time (UTC): 13:15 Position: N: 58° 53.5' E: 9° 37'

Ship: Hugin Institute: NIVA Echodepth (m): 22 Secchidepth (m): 8.5 Secchicolour: Grey/green

Depth	Temp (°C)	Salinity	TotP (µM)	Tot-N (µM)
0	3.97	29.694	0.55	20.0

Station: Jomfrulandsrennen Date: 29.03.2000 Time (UTC): 10:20 Position: N: 58° 53.5' E: 9° 37'

Ship: Hugin Institute: NIVA Echodepth (m): 23 Secchidepth (m): 11 Secchicolour: Green

Depth	Temp (°C)	Salinity	TotP (µM)	Tot-N (µM)
0	3.32	22.221	0.36	26.8

Station: Jomfrulandsrennen Date: 11.04.2000 Time (UTC): 11:24 Position: N: 58° 53.5' E: 9° 37'

Ship: Hugin Institute: NIVA Echodepth (m): 22 Secchidepth (m): 13.5 Secchicolour: Light green

Depth	Temp (°C)	Salinity	TotP (µM)	Tot-N (µM)
0	5.29	21.648	0.19	19.3

Station: Jomfrulandsrennen Date: 26.04.2000 Time (UTC): 09:40 Position: N: 58° 53.5' E: 9° 37'

Ship: Munin Institute: NIVA Echodepth (m): 25 Secchidepth (m): 8.5 Secchicolour: Grey/green

Depth	Temp (°C)	Salinity	TotP (µM)	Tot-N (µM)
0	7.91	16.258	0.19	20.7

Station: Jomfrulandsrennen Date: 08.05.2000 Time (UTC): 12:35 Position: N: 58° 53.5' E: 9° 37'

Ship: Hugin Institute: NIVA Echodepth (m): 22 Secchidepth (m): 8.5 Secchicolour: Grey/green

Depth	Temp (°C)	Salinity	TotP (µM)	Tot-N (µM)
0	13.96	15.049	0.29	27.8

Station: Jomfrulandsrennen Date: 01.06.2000 Time (UTC): 16:36 Position: N: 58° 53.5' E: 9° 37'

Ship: Munin Institute: NIVA Echodepth (m): 25 Secchidepth (m): 4.5 Secchicolour: Green

Depth	Temp (°C)	Salinity	TotP (µM)	Tot-N (µM)
0	12.22	23.378	0.39	23.9

Station: Jomfrulandsrennen Date: 20.06.2000 Time (UTC): 08:00 Position: N: 58° 53.5' E: 9° 37'

Ship: Munin Institute: NIVA Echodepth (m): 25 Secchidepth (m): 9 Secchicolour: Green

Depth	Temp (°C)	Salinity	TotP (µM)	Tot-N (µM)
0	14.01	26.908	0.16	16.1

Station: Jomfrulandsrennen Date: 10.07.2000 Time (UTC): 00:38 Position: N: 58° 53.5' E: 9° 37'

Ship: Munin Institute: NIVA Echodepth (m): 24 Secchidepth (m): Secchicolour:

Depth	Temp (°C)	Salinity	TotP (µM)	Tot-N (µM)
0	16.39	24.662	0.19	13.6

Station: Jomfrulandsrennen Date: 26.07.2000 Time (UTC): 08:00 Position: N: 58° 53.5' E: 9° 37'

Ship: Munin Institute: NIVA Echodepth (m): 25 Secchidepth (m): 6 Secchicolour: Green

Depth	Temp (°C)	Salinity	TotP (µM)	Tot-N (µM)
0	17.61	23.154	0.32	25.7

Station: Jomfrulandsrennen Date: 09.08.2000 Time (UTC): 09:45 Position: N: 58° 53.5' E: 9° 37'

Ship: Munin Institute: NIVA Echodepth (m): 23 Secchidepth (m): 8 Secchicolour: Yellow/green

Depth	Temp (°C)	Salinity	TotP (µM)	Tot-N (µM)
0	16.70	23.446	0.39	18.6

Station: Jomfrulandsrennen Date: 22.08.2000 Time (UTC): 06:55 Position: N: 58° 53.5' E: 9° 37'

Ship: Munin Institute: NIVA Echodepth (m): 24 Secchidepth (m): 6.5 Secchicolour: Yellow/green

Depth	Temp (°C)	Salinity	TotP (µM)	Tot-N (µM)
0	16.66	21.436	0.55	20.6

Station: Jomfrulandsrennen Date: 06.09.2000 Time (UTC): Position: N: 58° 53.5' E: 9° 37'

Ship: Munin Institute: NIVA Echodepth (m): 24 Secchidepth (m): 6 Secchicolour: Green

Depth	Temp (°C)	Salinity	TotP (µM)	Tot-N (µM)
0			0.29	17.5

Station: Jomfrulandsrennen Date: 27.09.2000 Time (UTC): Position: N: 58° 53.5' E: 9° 37'

Ship: Munin Institute: NIVA Echodepth (m): 24 Secchidepth (m): 7.5 Secchicolour: Brown/green

Depth	Temp (°C)	Salinity	TotP (µM)	Tot-N (µM)
0			0.39	19.3

Station: Jomfrulandsrennen Date: 13.11.2000 Time (UTC): 13:15 Position: N: 58° 53.5' E: 9° 37'

Ship: Munin Institute: NIVA Echodepth (m): 23 Secchidepth (m): 3.5 Secchicolour: Yellow

Depth	Temp (°C)	Salinity	TotP (µM)	Tot-N (µM)
0			0.52	26.1

Station: Jomfrulandsrennen Date: 29.11.2000 Time (UTC): 10:54 Position: N: 58° 53.5' E: 9° 37'

Ship: Munin Institute: NIVA Echodepth (m): 24.5 Secchidepth (m): 2.5 Secchicolour: Brown/green

Depth	Temp (°C)	Salinity	TotP (µM)	Tot-N (µM)
0	7.59	15.784	0.52	26.8

Station: Jomfrulandsrennen Date: 19.12.2000 Time (UTC): 10:20 Position: N: 58° 53.5' E: 9° 37'

Ship: Munin Institute: NIVA Echodepth (m): 25 Secchidepth (m): 3.5 Secchicolour: Brown

Depth	Temp (°C)	Salinity	TotP (µM)	Tot-N (µM)
0	5.71	19.445	0.58	24.3

Station: Jomfrulandsrennen Date: 11.04.2000 Time (UTC): 11:24 Position: N: 58° 53.5' E: 9° 37'

Ship: Hugin Institute: NIVA Echodepth (m): 22 Secchidepth (m): 13.5 Secchicolour: Light green

Depth	Temp (°C)	Salinity	TotP (µM)	Tot-N (µM)
0	5.29	21.648	0.19	19.3

Station: Jomfrulandsrennen Date: 26.04.2000 Time (UTC): 09:40 Position: N: 58° 53.5' E: 9° 37'

Ship: Munin Institute: NIVA Echodepth (m): 25 Secchidepth (m): 8.5 Secchicolour: Grey/green

Depth	Temp (°C)	Salinity	TotP (µM)	Tot-N (µM)
0	7.91	16.258	0.19	20.7

Station: Jomfrulandsrennen Date: 08.05.2000 Time (UTC): 12:35 Position: N: 58° 53.5' E: 9° 37'

Ship: Hugin Institute: NIVA Echodepth (m): 22 Secchidepth (m): 8.5 Secchicolour: Grey/green

Depth	Temp (°C)	Salinity	TotP (µM)	Tot-N (µM)
0	13.96	15.049	0.29	27.8

Station: Jomfrulandsrennen Date: 01.06.2000 Time (UTC): 16:36 Position: N: 58° 53.5' E: 9° 37'

Ship: Munin Institute: NIVA Echodepth (m): 25 Secchidepth (m): 4.5 Secchicolour: Green

Depth	Temp (°C)	Salinity	TotP (µM)	Tot-N (µM)
0	12.22	23.378	0.39	23.9

Station: Jomfrulandsrennen Date: 20.06.2000 Time (UTC): 08:00 Position: N: 58° 53.5' E: 9° 37'

Ship: Munin Institute: NIVA Echodepth (m): 25 Secchidepth (m): 9 Secchicolour: Green

Depth	Temp (°C)	Salinity	TotP (µM)	Tot-N (µM)
0	14.01	26.908	0.16	16.1

Station: Jomfrulandsrennen Date: 10.07.2000 Time (UTC): 00:38 Position: N: 58° 53.5' E: 9° 37'

Ship: Munin Institute: NIVA Echodepth (m): 24 Secchidepth (m): Secchicolour:

Depth	Temp (°C)	Salinity	TotP (µM)	Tot-N (µM)
0	16.39	24.662	0.19	13.6

Station: Jomfrulandsrennen Date: 26.07.2000 Time (UTC): 08:00 Position: N: 58° 53.5' E: 9° 37'

Ship: Munin Institute: NIVA Echodepth (m): 25 Secchidepth (m): 6 Secchicolour: Green

Depth	Temp (°C)	Salinity	TotP (µM)	Tot-N (µM)
0	17.61	23.154	0.32	25.7

Station: Jomfrulandsrennen Date: 09.08.2000 Time (UTC): 09:45 Position: N: 58° 53.5' E: 9° 37'

Ship: Munin Institute: NIVA Echodepth (m): 23 Secchidepth (m): 8 Secchicolour: Yellow/green

Depth	Temp (°C)	Salinity	TotP (µM)	Tot-N (µM)
0	16.70	23.446	0.39	18.6

Station: Jomfrulandsrennen Date: 22.08.2000 Time (UTC): 06:55 Position: N: 58° 53.5' E: 9° 37'

Ship: Munin Institute: NIVA Echodepth (m): 24 Secchidepth (m): 6.5 Secchicolour: Yellow/green

Depth	Temp (°C)	Salinity	TotP (µM)	Tot-N (µM)
0	16.66	21.436	0.55	20.6

Station: Jomfrulandsrennen Date: 06.09.2000 Time (UTC): Position: N: 58° 53.5' E: 9° 37'

Ship: Munin Institute: NIVA Echodepth (m): 24 Secchidepth (m): 6 Secchicolour: Green

Depth	Temp (°C)	Salinity	TotP (µM)	Tot-N (µM)
0			0.29	17.5

Station: Jomfrulandsrennen Date: 27.09.2000 Time (UTC): Position: N: 58° 53.5' E: 9° 37'

Ship: Munin Institute: NIVA Echodepth (m): 24 Secchidepth (m): 7.5 Secchicolour: Brown/green

Depth	Temp (°C)	Salinity	TotP (µM)	Tot-N (µM)
0			0.39	19.3

Station: Jomfrulandsrennen Date: 13.11.2000 Time (UTC): 13:15 Position: N: 58° 53.5' E: 9° 37'

Ship: Munin Institute: NIVA Echodepth (m): 23 Secchidepth (m): 3.5 Secchicolour: Yellow

Depth	Temp (°C)	Salinity	TotP (µM)	Tot-N (µM)
0			0.52	26.1

Station: Jomfrulandsrennen Date: 29.11.2000 Time (UTC): 10:54 Position: N: 58° 53.5' E: 9° 37'

Ship: Munin Institute: NIVA Echodepth (m): 24.5 Secchidepth (m): 2.5 Secchicolour: Brown/green

Depth	Temp (°C)	Salinity	TotP (µM)	Tot-N (µM)
0	7.59	15.784	0.52	26.8

Station: Jomfrulandsrennen Date: 19.12.2000 Time (UTC): 10:20 Position: N: 58° 53.5' E: 9° 37'

Ship: Munin Institute: NIVA Echodepth (m): 25 Secchidepth (m): 3.5 Secchicolour: Brown

Depth	Temp (°C)	Salinity	TotP (µM)	Tot-N (µM)
0	5.71	19.445	0.58	24.3

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Oppdragstakers prosjektansvarlig Frithjof Moy	År 2000	Sidetall 41	SFTs kontraktnummer 2001092

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Tittel

Langtidsovervåking av miljøkvaliteten i kystområdene av Norge.
Hydrografi/hydrokjemi. Datarapport 2000.

Sammendrag

Rapporten gjengir hydrografiske/hydrokjemiske observasjoner fra 4 stasjoner i kystvannet mellom svenskegrensen og Lista i 2000.

Det er gjennomført 18 tokt til Jomfruland, 21 tokt til Arendal St. 2 og 12 tokt til Arendal St. 3 og Lista, jevnt fordelt over året.

4 emneord	4 subject words
Langtidsovervåking	Long-term monitoring
Trofiutvikling	Eutrophication
Norskekysten	Norwegian Coast
Hydrografi/hydrokjemi	Hydrography/hydrochemistry