Ödsmål, Kville sn, Bohuslän

Hällristning
Fiskare från bronsåldern

Rock carving
Bronze age fishermen

MEDDELANDE från
HAVSFISKELABORATORIET · LYSEKIL
nr 155
Hydrografiska avdelningen, Göteborg

DATA OF MEASUREMENTS IN THE HANÖ BIGHT AUGUST - SEPTEMBER 1971 AND MARCH 1973 (R/V EYSTRASALT)

by

Karl Erik Berntsson and Artur Svansson

November 1973

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CONTENTS

INTRODUCTION, METHODS

During the late summer of 1969 and 1970 hydrographical and biological measurements were carried out in the Hanö Bight in order to possibly shed some light on the problem of a decline in the eel fishing between the two arms of the Helgeå river outlet into the bight. The results were published in Meddelande från Havsfiskelaboratoriet no 97 and 103.

During the periods August 30 - September 2, 1971 and March 12 - 15 1973 new observations were made. These times mostly surface measurements were carried out and thereby more stations could be visited.

The methods used for the parameters measured in 1971 and 1973 are listed below.

Temperature was read in a bucket with an ordinary thermometer of 0.1 °C accuracy and also from reversing thermometers at standard depths.

Salinity was determined with a laboratory salinometer, type Hytech, Bisset-Berman and in situ salinometer type NIO at some depths.

Oxygen (O_2) was determined according to Winkler.

BS7 (e.g. BOD7), the biochemical oxygen demand was determined on almost all stations as the difference between oxygen determined immediately and after one week of dark storage.

$KMnO_4$ - Consumption(=e.g. COD), the chemical oxygen demand was determined in an alcaline medium by the Nymölla Pulp Industry.

Phosphate - Phosphorus (PO_4-P) was determined at all stations according to Murphy and Riley.

Total Phosphorus (Tot.P) was determined in the laboratory according to Koroleff (1970).

Colour (Färg) was determined by the Nymölla Pulp Industry. The method used is published in "Standard Methods for the Examination of Water, Sewage and Industrial Wastes". American Public Helth Assosiation, Inc.

Secchi disc. The depth for the disappearance of a white-painted disc of 30 cm diameter was noted. No water telescope was used.

Attenuation (RG) was measured by a one-meter in situ beam transmittance meter and only with red filter, RG1. The intensity u_w was determined by a Speedomax current recorder with the measuring unit in situ and u_a with the measuring unit in air in a darkroom. For the red filter RG1 (655 nm) the transmittance $T_{RG} = 0.48\ u_w/u_a$ was computed. The attenuation coefficients listed (RG m^{-1}) represent $-{}^{e}\log T$.

Yellow Substance (Absorption) in the wavelength of 380 nm of filtered (through a 0.6 µ millipore filter) sample in 5 cm cuvette. This was done a few weeks afterwards. From the absorption in 380 nm was computed

$$C_{380} = \frac{A_{380} \times 20}{{}^{10}\log e}$$

This is the method by Jerlov (1955).

Bathythermographs measurements were made at every station. Photographs of all slides are stored at the Hydrographic Department of The Fishery Board.

Phytoplankton Species were identified and counted by Ruth Hobro, Stockholm, in 100 ml samples drawn from the ordinary water sample. The samples from 1973 are not yet counted.

Zooplankton Species were identified and counted by Roger Lindblom, Göteborg (1971) and Lars Hernroth, Lysekil (1973). Sampling was made with a conical plankton net, with a diameter of 1 m (1971) and 0.5 m (1973). Most hauls were made from 5 m to surface.

Determination differed somewhat 1971 and 1973

1971:

To each sample water was added to a total volume of 1000 cc. A sub-sample of 20 cc was drawn twice, and the animals counted. The figures obtained were thus multiplied by a factor of 50 to represent the entire sample. The table shows the mean number of the two sub-samples for each species.

1973:

From each sample a sub-sample was taken and counted in a counting-chamber.

Species occurence, (1973)

0 = no specimens in the sample

1 = few specimens in the sample, about 1.5 % of the total number of specimens

2 = less abundant, about 6 - 25 % of the total number of specimens

3 = abundant, about 26 - 50 % of the total number of specimens

4 = very abundant, more than 50 % of the total number of specimens

Note: In samples where the total sum of individuals was low, the species most abundant was not given figure 4 but instead figure 3, even if comprising more than 50 % of the sample. This way a more accurate comparison between the different samples was obtained.

Discussion.

710830 - 710902: The weather conditions were similar to those in 1969 and 1970: Winds from S - SW and rather strong upwelling along the coast. At the tube exit (Stn. 0) the yellow substance values only slightly above the Baltic background values, but they were considerable in Saxaviken and the Bay of Sölvesborg (Stations no 54, 57 and 58). Total phosphorus was high in the Bay of Sölvesborg and in Åhus Harbor. Permanganate was for the first time measured by the correct alkaline method. Whereas the open sea values were around 15 mg/l, at more than half of the stations there were values of 20 - 23 mg/l.

730312 - 730315: This time the wind situation was different: NE winds prevailed during the measurements but there had apparently been an upwelling situation right before, if we judge from the high salinities along the coast. Nevertheless the yellow substance values are high, at station 0 doubled in relation to background.

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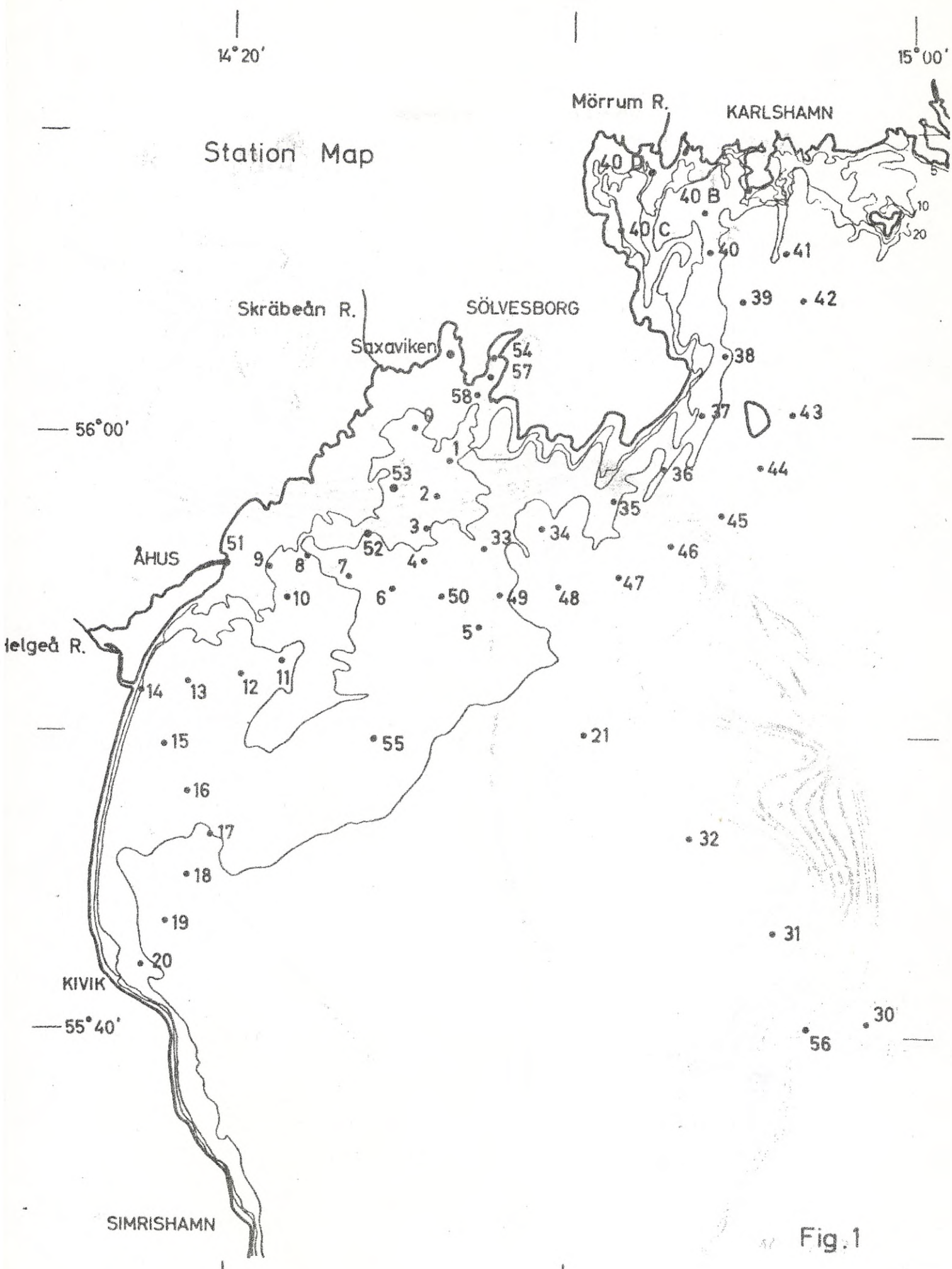
14°20'
15°00'
Mörrum R.
KARLSHAMN
Station Map
40 D
40 B
40 C
10
20
40
41
Skräbeån R.
SÖLVESBORG
Saxaviken
39
42
54
57
38
58
56°00'
37
43
53
36
44
2
35
45
3
33
34
51
52
46
ÅHUS
9
8
7
4
47
10
6
50
49
48
5
Helgeå R.
14
13
12
11
15
55
21
16
17
32
18
19
31
20
KIVIK
55°40'
30
56
SIMRISHAMN

Fig. 1

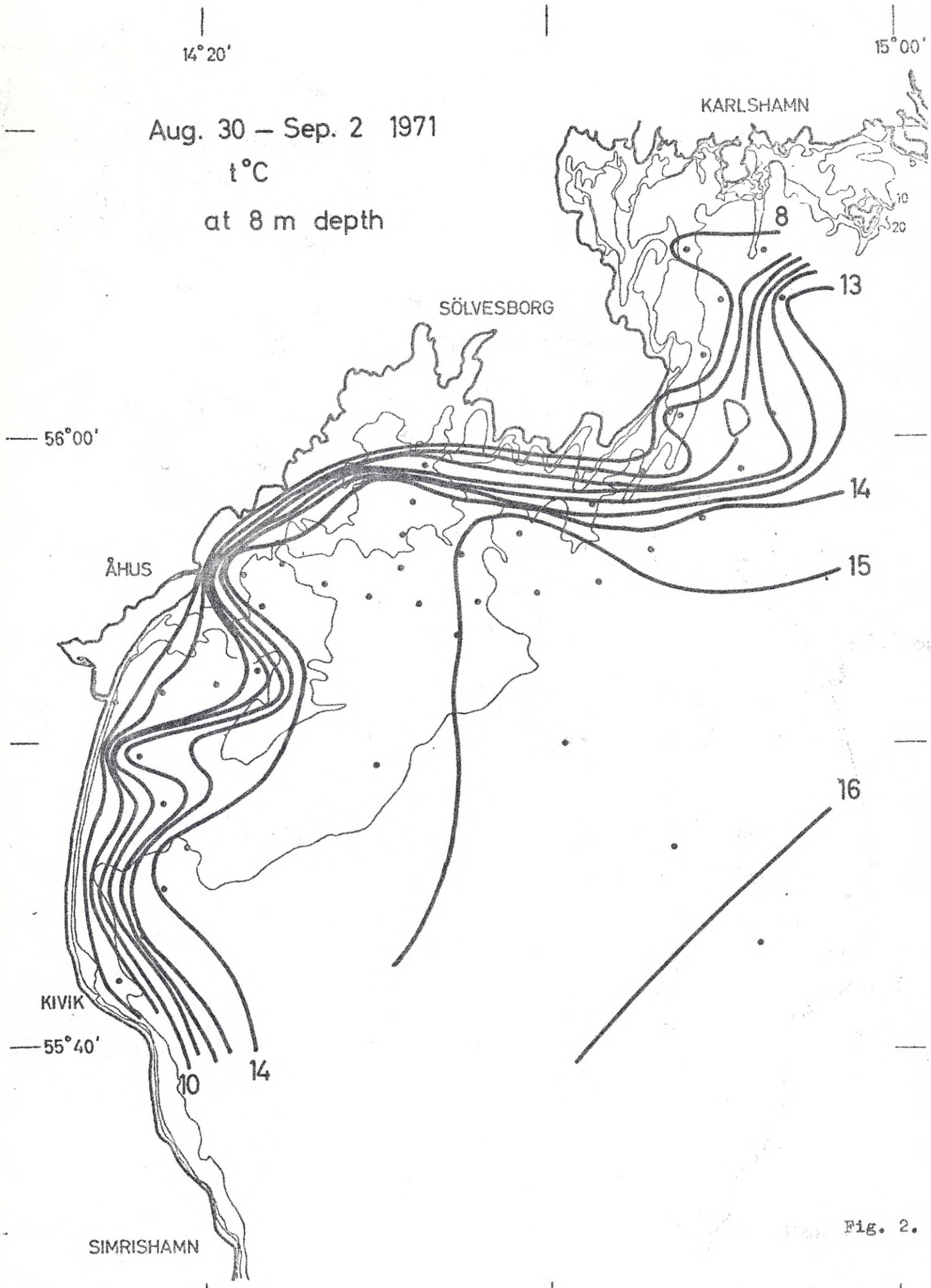
14° 20'
15° 00'
Aug. 30 – Sep. 2 1971
t °C
at 8 m depth
KARLSHAMN
8
10
20
13
SÖLVESBORG
56° 00'
14
ÅHUS
15
16
KIVIK
55° 40'
10
14
SIMRISHAMN

Fig. 2.

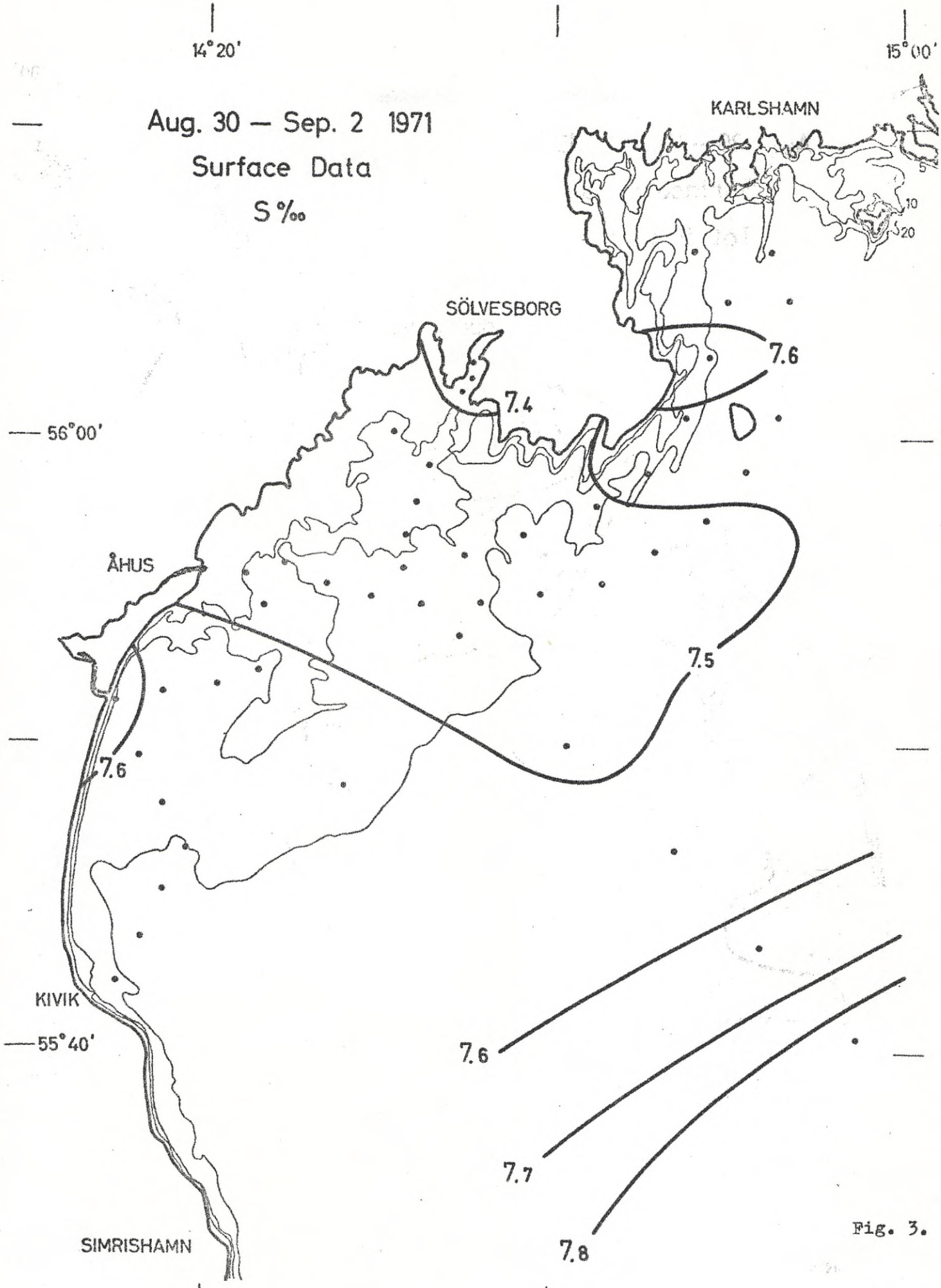
14°20'
15°00'
Aug. 30 — Sep. 2 1971
Surface Data
S ‰
KARLSHAMN
5
10
20
SÖLVESBORG
7.6
7.4
56°00'
ÅHUS
7.5
7.6
KIVIK
55°40'
7.6
7.7
7.8
SIMRISHAMN

Fig. 3.

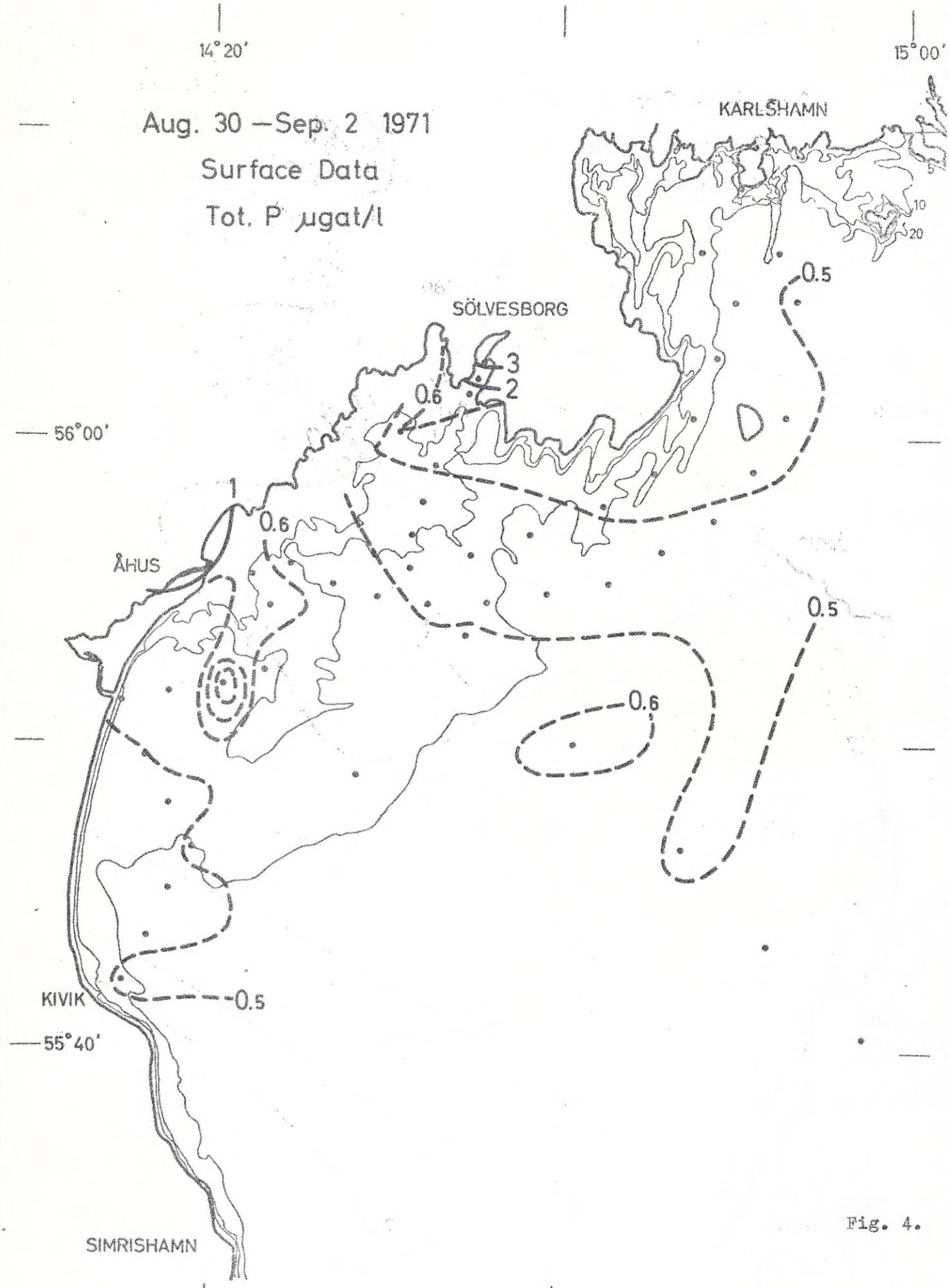
14° 20'
15° 00'
Aug. 30 – Sep. 2 1971
Surface Data
Tot. P µgat/l
KARLSHAMN
SÖLVESBORG
ÅHUS
KIVIK
SIMRISHAMN
56° 00'
55° 40'
0.5
0.6
1
2
3
5
10
20

Fig. 4.

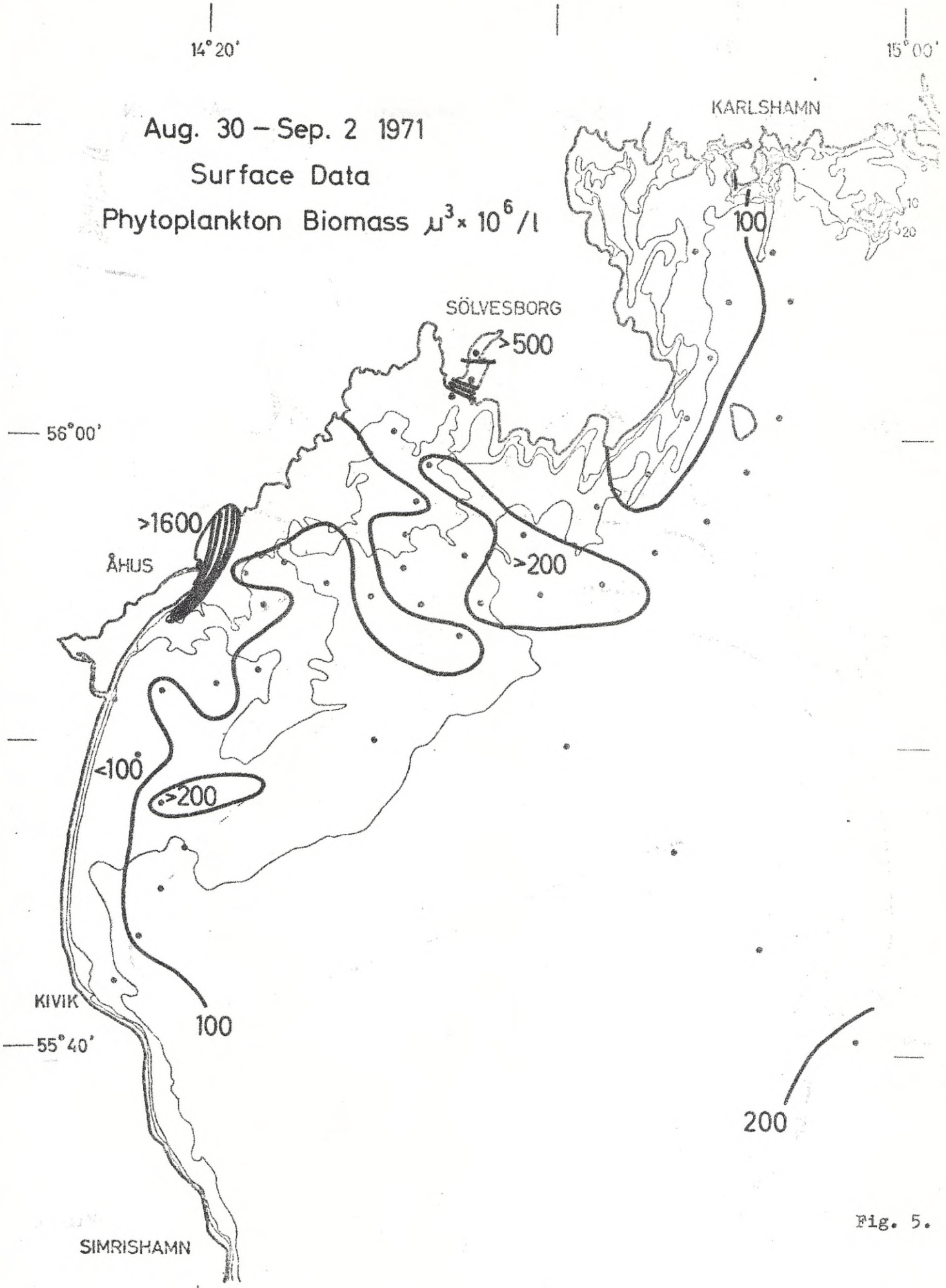
14°20'
15°00'
Aug. 30 – Sep. 2 1971
Surface Data
Phytoplankton Biomass μ³ × 10⁶/l
KARLSHAMN
100
10
20
SÖLVESBORG
>500
56°00'
>1600
ÅHUS
>200
<100
>200
KIVIK
100
55°40'
200
SIMRISHAMN

Fig. 5.

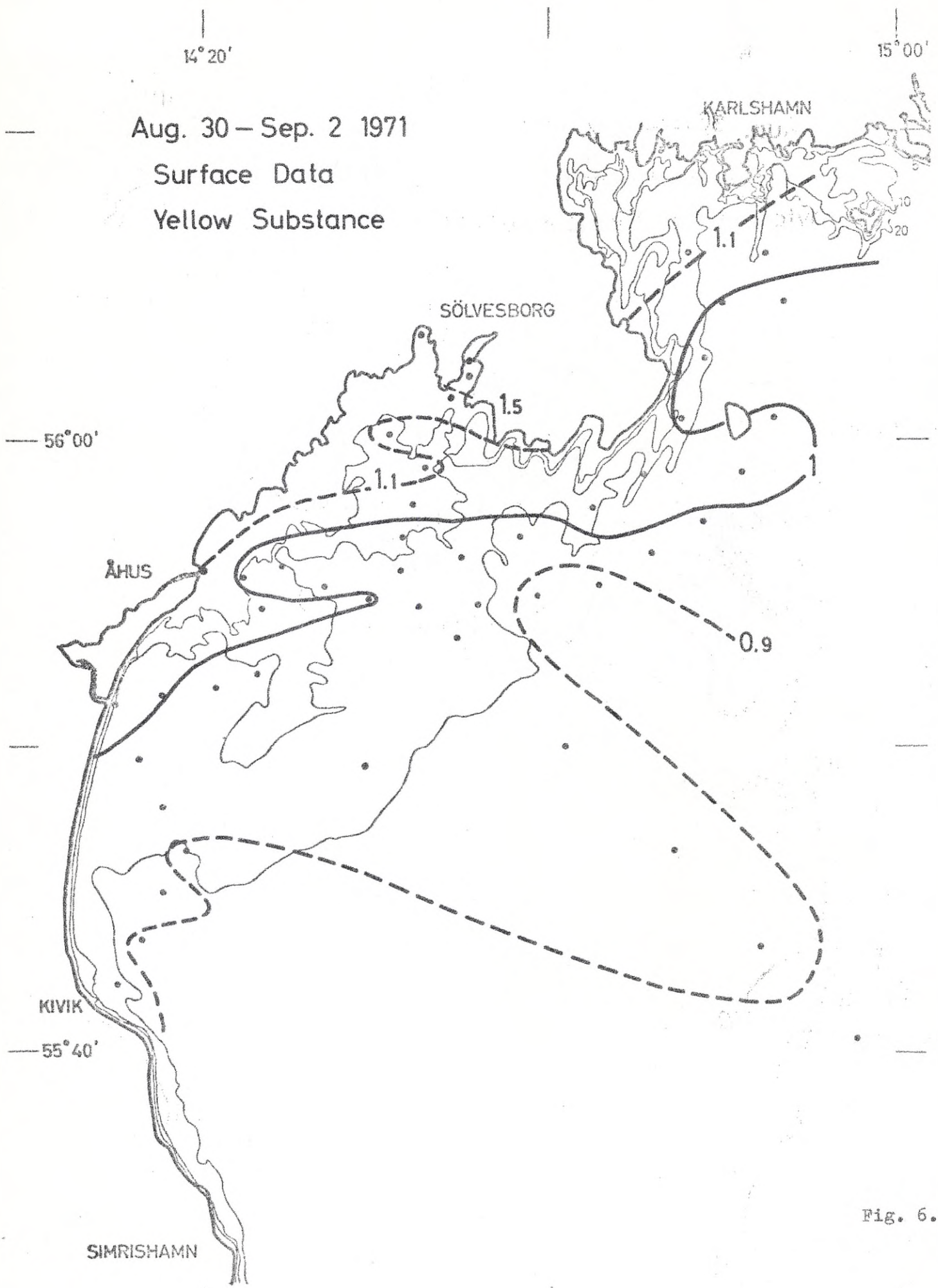
14° 20'
15° 00'
Aug. 30 – Sep. 2 1971
Surface Data
Yellow Substance
KARLSHAMN
10
20
1.1
SÖLVESBORG
1.5
56° 00'
1.1
1
ÅHUS
0.9
KIVIK
55° 40'
SIMRISHAMN

Fig. 6.

Table 1a.

Surface Data

Eystrasalt 30/8 1971

GMT	Station		Lat.	Long.	Temp. °C	Sal. ‰	O_2 ml/l	BS7	PO_4-P µgat/l	Tot.P µgat/l	$KMnO_4$ mg/l	Colour	Yellow Substance
07^{00}	Hanö	10	55° 54.5′	14° 23.4′	14.0	7.486				0.63	22	5	1.15
07^{15}		11	55° 52.3′	14° 23.0′	13.3	7.504	7.10	1.13	0.19	0.56	19	5	0.96
07^{30}		12	55° 51.9′	14° 20.7′	11.8	7.532	7.08	0.94	0.25	0.83	18	4	0.92
07^{40}		13	55° 51.7′	14° 17.7′	11.3	7.522	7.16	1.13	0.25	0.58	20	4	0.96
08^{15}		14	55° 51.4′	14° 15.0′	8.1	7.610	7.27	1.24	0.31	0.59	20	4	1.01
08^{45}		15	55° 49.7′	14° 16.2′	12.9	7.556	8.15	2.04		0.50	20	4	0.96
09^{20}		16	55° 48.1′	14° 17.7′	15.0	7.551	6.96	0.73	0.12	0.46	20	5	0.92
09^{40}		17	55° 46.6′	14° 19.1′	14.8	7.535	7.06	0.86	0.13	0.54	21	4	0.87
10^{00}		18	55° 45.2′	14° 17.7′	14.7	7.546	6.98	0.63	0.19	0.49	19	4	0.92
10^{20}		19	55° 43.7′	14° 16.4′	14.4	7.558	6.94	0.64	0.12	0.47	19	4	0.87
10^{45}		20	55° 42.2′	14° 15.0′	12.3	7.548	7.18	0.87	0.19	0.53	21	4	0.96
12^{00}		55			14.5	7.510	6.98	0.76	0.18	0.55	20	4	0.96
12^{40}		5	55° 53.5′	14° 34.7′	15.2	7.476	6.95	0.63	0.22	0.55	20	4	0.92
13^{15}		6	55° 54.8′	14° 29.5′	14.9	7.458	6.98	0.63	0.24	0.51	22	4	1.01
13^{30}		7	55° 55.3′	14° 27.0′	14.6	7.455	7.06	0.65	0.26	0.54	22	4	0.96
13^{45}		8	55° 56.0′	14° 24.6′	15.3	7.470	6.91	0.67	0.28	0.55	23	4	0.96
14^{04}		9	55° 55.5′	14° 22.3	14.8	7.481	7.04	0.70	0.29	0.63	20	4	0.96

Table 1b.

Surface Data

Eystrasalt 31/8 1971

GMT	Station		Lat.	Long.	Temp. °C	Sal. ‰	O_2 ml/l	BS7	PO_4-P µgat/l	Tot.P µgat/l	$KMnO_4$ mg/l	Colour	Yellow Substance
10^{05}	Hanö	56	55° 40′	14° 54.5′	16.3	7.801	6.85	0.66	0.08	0.59	17	5	0.87
11^{25}		31	55° 43.5′	14° 52.0′	16.1	7.605	6.79	0.55	0.18	0.56	15	5	0.92
12^{05}		32	55° 50.0′	14° 41.0′	15.7	7.562	6.90	0.93	0.13	0.48	15	5	0.96
13^{10}		21	55° 46.5′	14° 47.2′	15.2	7.488	7.02	0.91	0	0.66	15	5	0.92

Table 1c.

Surface Data

Eystrasalt 1/9 1971

GMT	Station	Lat.	Long.	Temp. °C	Sal. ‰	O_2 ml/l	BS7	PO_4-P µgat/l	Tot.P µgat/l	$KMnO_4$ mg/l	Colour Yellow Substance	
07^{10}	Hanö 4	55° 55.8′	14° 31.3′	14.8	7.474	7.04	0.82	0.11	0.47	15	5	0.92
07^{25}	3	55° 56.9′	14° 31.5′	14.7	7.471	7.04	0.78	0.14	0.46	16	5	0.96
07^{40}	2	55° 58.0′	14° 32.0′	14.8	7.465	6.98	0.79	0.13	0.47	16	5	1.01
08^{15}	0	56° 00.3′	14° 30.8′	15.3	7.477	6.85	0.80	0.20	0.60	16	5	1.05
08^{45}	1	55° 59.2′	14° 32.8′	15.0	7.476	6.96	0.81	0.08	0.51	17	5	1.10
09^{35}	54	Sölvesborg harbour		16.7	7.383	6.08		1.55	3.21	23	17	1.79
09^{45}	57	-"- harbour entrance		16.4	7.371	6.49	1.54	0.96	2.09	21	11	1.70
10^{00}	58	Sölvesborg		16.0	7.381	6.72	0.89	0.21	0.65	20	8	1.51
10^{50}	33	55° 56.3′	14° 34.8′	15.1	7.483	6.98	0.63	0.13	0.43	16	5	0.96
11^{10}	34	55° 56.8′	14° 38.3′	15.1	7.483	6.95	0.69	0.12	0.43	17	5	0.92
11^{30}	47	55° 55.2′	14° 42.8′	15.1	7.490	6.92	0.79	0.18	0.43	16	5	0.87
11^{45}	48	55° 54.9′	14° 39.3′	15.2	7.489	6.96	0.66	0.11	0.48	17	5	0.83
12^{00}	49	55° 54.7′	14° 35.8′	15.1	7.488	6.97	0.77	0.13		16	5	0.92
12^{20}	50	55° 54.6′	14° 32.3′	14.9	7.488	6.95	0.71	0.20	0.46	15	5	0.92
13^{20}	51	Åhus harbour		14.5	7.460	7.85	1.95	0.35	1.19	18	7	1.10

Table 1d.

Surface Data

Eystrasalt 2/9 1971

GMT	Station	Lat.	Long.	Temp. °C	Sal. ‰	O_2 ml/l	BS7	PO_4-P µgat/l	Tot.P µgat/l	$KMnO_4$ mg/l	Colour	Yellow Substance
08^{20}	Hanö 35	55° 57.8′	14° 42.5′	14.2	7.485	7.00	0.68	0.18	0.51	15	5	--
08^{50}	36	55° 58.8′	14° 45.4′	12.2	7.528	6.95	0.83	0.28	0.54	17	5	1.01
09^{20}	37	56° 00.6′	14° 47.7′	9.3	7.586	7.01	1.19	0.19	0.56	16	5	0.96
09^{50}	38	56° 02.5′	14° 49.1′	7.7	7.616	7.42	1.43	0.32	0.57	19	5	0.92
10^{10}	39	56° 04.4′	14° 50.0′	9.2	7.577	7.12	0.98	0.29	0.52	18	7	0.96
10^{40}	40B			11.3	7.514	7.65	1.62	0.30	0.51	15	8	1.19
11^{00}	41	56° 06.0′	14° 50.5′	10.4	7.552	7.21	1.13	0.28	0.56	20	8	1.01
11^{35}	42	56° 04.5′	14° 53.6′	13.2	7.502	7.06	0.78	0.22	0.45	20	8	0.96
12^{15}	43	56° 00.7′	14° 53.0	11.0	7.551	7.15	1.02	0.28	0.50	20	7	1.05
12^{35}	44	55° 59.0′	14° 51.1′	10.2	7.572	7.05	1.13	0.34	0.59	21	7	1.01
13^{05}	45	55° 57.3′	14° 48.9′	14.2	7.498	7.01	0.78	0.20	0.42	21	6	0.96
13^{20}	46	55° 56.3′	14° 45.9′	14.7	7.492	7.00	0.78	0.14	0.49	22	7	0.92

Table 2a.

Eystrasalt August 30, 1971

Bathythermograph Temperature °C

Station Hanö	10	11	12	13	14	15	16	17	18	19	20	55	5	6	7	8	9
Depth																	
0 m	14.0	13.3	11.8	11.3	8.1	12.9	15.0	14.8	14.7	14.4	12.3	14.5	15.2	14.9	14.6	15.3	14.8
1	14.0	13.3	11.8	11.3	8.1	12.9	15.0	14.8	14.7	14.4	12.3	14.5	15.2	14.9	14.6	15.3	14.8
2	14.0	13.3	11.8	11.3	8.1	12.9	15.0	14.8	14.7	14.4	12.2	14.5	15.2	14.9	14.6	15.3	14.8
3	14.0	13.3	11.8	11.3	8.1	12.9	15.0	14.8	14.7	14.4	11.9	14.5	15.2	14.9	14.6	15.3	14.8
4	14.0	12.5	11.8	11.2	8.1	12.8	15.0	14.8	14.7	14.4	11.6	14.5	15.2	14.9	14.6	15.3	14.8
5	14.0	11.7	11.6	11.2	8.1	12.7	14.9	14.8	14.6	14.3	10.7	14.5	15.2	14.9	14.6	15.3	14.8
6	14.0	11.3	10.6	11.1	8.1	12.7	14.7	14.8	14.6	14.3	10.2	14.4	15.1	14.9	14.6	15.3	14.8
7	14.0	10.8	9.8	10.5	8.0	12.6	13.0	14.8	14.5	14.2	9.3	14.3	15.1	14.9	14.6	15.2	14.7
8	14.0	10.4	9.6	9.3	7.9	12.5	11.0	14.8	14.3	13.0	8.2	14.2	15.0	14.8	14.5	15.2	14.7
9			9.6	9.1	7.9	10.5	9.2	14.7	12.0	7.8	7.4	14.1	15.0	14.6	14.3	15.1	
10			9.6	9.1	7.9	7.5	8.6	13.5	8.5	6.7	7.3	14.1	15.0	13.5	13.8	15.0	
11			9.6	9.1	7.9	7.4	8.3	10.0	7.3	6.6	6.9	14.0	14.7	11.3	13.2	14.7	
12				9.1	8.0	7.3	7.8	9.3	7.2	6.4	6.8	13.8	10.5	11.3	13.2	14.6	
13				9.1		7.3	7.5	7.8	6.8	6.2	6.7	12.5	8.2		13.1		
14				9.1		7.3	7.2	7.8	6.4	5.8	6.7	11.0	8.0		13.1		
15				9.1		7.3	6.8		6.2	5.7	6.7		7.8		13.1		
16						7.3	6.5		6.2	5.5	6.7		7.6		13.1		
17						7.3			6.2	5.4	6.6		7.5				
18						7.4			6.2	5.4	6.4						
19									6.2	5.4	6.4						
20									6.2	5.5	6.4						
21											6.4						

Table 2b.

Eystrasalt August 31 - September 1, 1971

Bathythermograph Temperature °C

Station Hanö	56	31	32	21	4	3	2	0	1	54	57	58	33	34	47	48	49
Depth																	
0 m	16.3	16.1	15.7	15.2	14.8	14.7	14.8	15.3	15.0	16.7	16.4	16.0	15.1	15.1	15.1	15.2	15.1
1	16.3	16.1	15.7	15.2	14.8	14.7	14.8	15.3	15.0	16.7	16.4	16.0	15.1	15.1	15.1	15.2	15.1
2	16.3	16.1	15.7	15.2	14.8	14.7	14.8	15.3	15.0	16.7	16.4	16.0	15.1	15.1	15.1	15.2	15.1
3	16.3	16.1	15.7	15.2	14.8	14.7	14.8	15.3	15.0	16.7	16.4	16.0	15.1	15.1	15.1	15.2	15.1
4	16.3	16.1	15.7	15.2	14.8	14.7	14.8	15.3	14.9	16.7	16.4	16.0	15.1	15.0	15.1	15.2	15.1
5	16.3	16.1	15.6	15.2	14.8	14.7	14.8	15.0	14.8	16.8		16.0	15.1	15.0	15.1	15.2	15.1
6	16.3	16.1	15.6	15.2	14.7	14.7	14.8	14.5	14.7				15.1	15.0	15.1	15.2	15.1
7	16.3	16.1	15.5	15.2	14.7	14.7	14.7		12.0				15.1	15.0	15.1	15.2	15.0
8	16.3	16.1	15.5	15.2	14.6	14.7	14.7		10.3				15.1	15.0	15.1	15.1	15.0
9	16.3	16.1	15.5	15.2	10.3	14.5	14.6		10.3				15.0	15.0	15.1	15.0	14.8
10	16.3	16.1	15.3	15.1	9.8	12.2	14.2						14.8	14.8	15.0	14.8	13.0
11	16.3	16.0	15.2	15.0	9.7								12.5	13.5	14.8	9.5	9.5
12	16.3	16.0	15.2	14.8									9.7	10.0	14.7	8.7	8.7
13	16.3	15.9	15.1	14.5									9.4	8.1	10.5	8.5	8.6
14	16.3	15.7	15.1	13.5									9.2	7.9	7.7	8.3	8.6
15	16.3	15.6	15.1	10.0									8.9	7.8	7.4	8.2	8.5
16	16.4	15.5	15.0	9.7										7.7	7.2	8.2	8.4
17	16.4	15.4	14.8	9.4											7.2	8.2	8.3
18	16.4	14.8	12.5	9.3											7.2	8.2	
19	16.4	13.2	9.5	8.7												8.1	
20	16.4	12.8	7.7	7.6													
25	9.0	6.2	6.8														
30	7.0	6.7	6.5														
35	6.6	7.3	6.3														
40	7.0	9.2															
45	7.9																
50	8.3																

Table 2c.

Eystrasalt September 1 - 2, 1971

Bathythermograph Temperature °C

Station Hanö	50	51	35	36	37	38	39	40B	41	42	43	44	45	46
Depth														
0 m	14.9	14.5	14.2	12.2	9.3	7.7	9.2	11.3	10.4	13.2	11.0	10.2	14.2	14.7
1	14.9	13.5	14.2	12.2	9.3	7.7	9.2	11.3	10.4	13.2	11.0	10.2	14.2	14.7
2	14.9	13.1	14.2	12.2	9.3	7.7	9.2	11.3	10.4	13.2	11.0	10.2	14.2	14.7
3	14.9	12.7	14.2	12.0	9.3	7.7	9.2	11.3	10.2	13.2	11.0	10.2	14.2	14.7
4	14.9	12.5	14.2	11.7	9.3	7.7	9.2	10.5	10.0	13.2	11.0	10.2	14.2	14.7
5	14.9		14.2	11.1	9.3	7.6	9.1	10.3	9.8	13.2	11.0	10.1	14.2	14.7
6	14.9		14.0	10.7	9.3	7.5	9.0	9.5	9.5	13.2	11.0	10.1	14.2	14.6
7	14.9		13.5	9.8	9.2	7.4	8.5	8.5	9.1	13.2	11.0	10.0	14.2	14.6
8	14.9		12.0	8.7	9.1	7.3	7.6	8.4	8.5	13.1	11.0	10.0	14.2	14.5
9	14.7		9.5	8.3	8.7	7.2	7.3	8.2	8.0	12.5	10.9	9.9	14.1	14.4
10	13.0		8.8	7.9	8.0	7.1	6.8	8.0	7.9	11.0	10.9	9.7	13.9	13.0
11	9.5		8.6	7.8	7.5	7.0	6.8	7.7	7.7	7.7	10.9	9.6		8.3
12	8.9		8.6	7.7	7.3	6.7	6.8	7.5	7.7	7.3	10.7	9.1		7.8
13	8.9		8.5	7.7	7.2	6.7	6.8	7.5	7.5	7.1	9.5	8.6		7.4
14				7.4	7.1	6.6	6.8	7.5	7.4	7.0	9.4	8.3		7.1
15				7.4		6.6	6.8	7.5	7.1	7.0	8.3	8.2		7.1
16				7.4			6.8	7.5	7.1	6.8	7.7	8.1		7.1
17							6.8		7.1	6.7	7.4	8.1		7.1
18							6.8		7.1	6.4	7.3	8.0		7.1
19							6.8		7.1	6.3	7.1	7.7		7.1
20							6.8		7.1	6.3	7.0	7.4		7.1
25							6.8		7.1	6.2	6.7	7.1		
30										6.2	6.7	7.1		

"Eystrasalt" Table 3. Station

77 Sweden 1971 Hanö 56

Hydro Depth Observations (Code 0 3)

Station No.	Lat. °	Lat. ′	Long. °	Long. ′	N S E W	Date Year	Date Mo.	Date Day	Station time	Depth to bottom	Max. obs. depth	Mixed layer depth	Wind Dir.	Wind Sp. kn.	Temperature Dry bulb	Temperature Wet bulb	Weather	Cloud amount	State of sea	Ice
5 6 7 8	9 10	11 12	13 14 15	16 17	18	19 20 21	22 23	24 25	26 27	28 29 30 31	46 47	48 49 50	51 52	53 54	55 56 57	58 59 60	61	62	63	64
0060	55	40	014	55	0	971	08	31	10	0055	01		23	14			2	8	2	0

Obs. time	Obs. depth	Temp.	Sal.	σ_t	Oxygen ml/l	Oxygen %	BS7	PO_4-P µgat/l	Tot.P µgat/l	$KMnO_4$ mg/l	Sal. method	Extra info.
26 27	28 29 30 31	32 33 34 35	36 37 38 39 40	41 42 43 44 45	58 59 60	61 62 63 64					77	78
10	0000	163	07801	0494	685		0.66	0.08	0.59	17	3	3
	0010	1592	07813	0501	672		0.54	0.09	0.39	17		
	0020	1602	07808	0500	676		0.50	0.09	0.47	16		
	0030	0915	07752	0590	673		0.81	0.18	0.42	16		
	0040	0609	07954	0629	683		1.20	0.26	0.53	14		
	0050	0693	08879	0696	637		1.29	0.37	0.81	16		
	0055	0780	09854	0767	504		0.71	0.48	0.78	13		
								Colour	Y.S. m^{-1}			
	0000							5	0.87			
	0010							5	1.01			
	0020							5	0.96			
	0030							5	1.01			
	0040							4	0.92			
	0050							5	0.96			
	0055							5	0.92			

BT Slide Ey 49/874/71 N 55°40′ E 14° 54.5′ Secchi disc: 7.3 m

Observer: Svansson

Varberg 71420

"Eystrasalt" Table 4. Station

77 Sweden 1971 Hanö 21

Hydro Depth Observations (Code 0 3)

Station No.	Lat. °	Lat. ′	Long. °	Long. ′	N S E W	Date Year	Date Mo.	Date Day	Station time	Depth to bottom	Max. obs. depth	Mixed layer depth	Wind Dir.	Wind Sp. kn.	Temperature Dry bulb	Temperature Wet bulb	Weather	Cloud amount	State of sea	Ice
5 6 7 8	9 10	11 12	13 14 15	16 17	18	19 20 21	22 23	24 25	26 27	28 29 30 31	46 47	48 49 50	51 52	53 54	55 56 57	58 59 60	61	62	63	64
0063	55	47	014	47	0	971	08	31	13	0028	00		23	16			2	7		20

Obs. time	Obs. depth	Temp.	Sal.	σ_t	Oxygen ml/l	Oxygen %	BS7	PO_4-P µgat/l	Tot.P µgat/l	$KMnO_4$ mg/l	Sal. method	Extra info.
26 27	28 29 30 31	32 33	34 35 36 37	38 39 40	41 42	43 44 45	58 59 60	61 62 63 64					77	78
13	0000	152	07488	0489	702		0.91	0	0.66	15	3	3
	0005	1491	07490	0494	702		0.68	0.11	0.43	15		
	0010	1492	07486	0494	695		0.57	0.14	0.43	16		
	0015	1444	07499	0502	695		0.63	0.14	0.53	16		
	0020	0919	07605	0580	679		0.86	0.24	0.51	16		

	Colour	Y.S. m^{-1}
0000	5	0.92
0005	5	1.01
0010	5	0.96
0015	5	0.96
0020	5	0.96

BT Slide Ey 52/874/71 N 55° 46.5′ E 14° 47.2′ Secchi disc: 7.5 m

Observer: Svansson

"Eystrasalt" Table 5.

77 Sweden 1971 Station

Hydro Depth Observations (Code 0 3) Hanö 0

Station No.	Lat. °	Lat. ′	Long. °	Long. ′	N S E W	Date Year	Date Mo.	Date Day	Station time	Depth to bottom	Max. obs. depth	Mixed layer depth	Wind Dir.	Wind Sp. kn.	Temperature Dry bulb	Temperature Wet bulb	Weather	Cloud amount	State of sea	Ice
5 6 7 8	9 10	11 12	13 14 15	16 17	18	19 20 21	22 23	24 25	26 27	28 29 30 31	46 47	48 49 50	51 52	53 54	55 56 57	58 59 60	61	62	63	64
0067	56	00	014	31	0	971	09	01	08	0007	00		23	14			2	7	2	0

Obs. time	Obs. depth	Temp.	Sal.	σ_t	Oxygen ml/l	Oxygen %	BS7	PO_4-P µgat/l	Tot.P µgat/l	$KMnO_4$ mg/l	Sal. method	Extra info.
26 27	28 29 30 31	32 33	34 35 36 37	38 39 40	41 42 43 44 45	58 59 60	61 62 63 64					77	78
08	0000	153	07474	0487	685			0.80	0.20	0.60	16	3	3
	0003	1509	07478	0490	678			0.49	0.17	0.58	16		
	0005	1510	07478	0490	675			0.57	0.17	0.48	15		
									Colour	Y.S.m^{-1}			
	0000								5	1.05			
	0003								5	1.28			
	0005								5	1.19			

BT Slide Ey 56/874/71 N 56° 00.3′ E 14° 30.8′ Secchi disc: 7.0 m

Observer: Svansson

Risson Varberg 71420

"Eystrasalt"

77 Sweden

Table 6.

1971

Station

Hanö 54

Sölvesborg

Hydro Depth Observations (Code 0 3)

Station No.	Lat. °	Lat. ′	Long. °	Long. ′	N S E W	Date Year	Date Mo.	Date Day	Station time	Depth to bottom	Max. obs. depth	Mixed layer depth	Wind Dir.	Wind Sp. kn.	Temperature Dry bulb	Temperature Wet bulb	Weather	Cloud amount	State of sea	Ice
5 6 7 8	9 10	11 12	13 14 15	16 17	18	19 20 21	22 23	24 25	26 27	28 29 30 31	46 47	48 49 50	51 52	53 54	55 56 57	58 59 60	61	62	63	64
0069					0	971	09	01	10	0008	00		23	14			2	7	1	0

Obs. time	Obs. depth	Temp.	Sal.	σ_t	Oxygen ml/l	Oxygen %	BS7	PO_4-P µgat/l	Tot.P µgat/l	$KMnO_4$ mg/l	Sal. method	Extra info.
26 27	28 29 30 31	32 33 34 35	36 37 38 39 40	41 42 43 44 45	58 59 60	61 62 63 64					77	78
10	0000	167	07383	0454	608			1.55	3.21	23	3	3
	0003	1660	07385	0457	696		2.55	1.25	2.97	21		
								Colour	$Y.S.m^{-1}$			
	0000							17	1.79			
	0003							15	1.79			

BT Slide 58/874/71 Secchi disc: 2.5 m Observer: Svansson

"Eystrasalt" Table 7. Station

77 Sweden 1971 Hanö 42

Hydro Depth Observations (Code 0 3)

Station No.	Lat.		Long.		N S E W	Date			Station time	Depth to bottom	Max. obs. depth	Mixed layer depth	Wind		Temperature		Weather	Cloud amount	State of sea	Ice
	°	′	°	′		Year	Mo.	Day					Dir.	Sp. kn.	Dry bulb	Wet bulb				
5 6 7 8	9 10	11 12	13 14 15	16 17	18	19 20 21	22 23	24 25	26 27	28 29 30 31	46 47	48 49 50	51 52	53 54	55 56 57	58 59 60	61	62	63	64
0086	56	05	014	54	0	971	09	02	12	0035	00		27	16			1	4	20	

Obs. time	Obs. depth	Temp.	Sal.	σ_t	Oxygen		BS7	PO_4-P	Tot.P	$KMnO_4$	Sal. method	Extra info.
					ml/l	%		µgat/l	µgat/l	mg/l		
26 27	28 29 30 31	32 33 34 35	36 37 38 39 40	41 42 43 44 45	58 59 60	61 62 63 64					77	78
12	0000	132	07502	0521	706		0.78	0.22	0.45	20	3	3
	0005	1278	07502	0527	702		0.82	0.21	0.42	22		
	0010	1261	07504	0529	700		0.79	0.22	0.44	21		
	0015	0661	07637	0601	699		1.36	0.25	0.44	19		
	0020	0569	07676	0610	692		0.88	---	0.48	18		
	0025	0554	07686	0611	683		1.10	0.32	---	18		
	0030	0548	07698	0612	685		1.10	0.26	0.51	17		
								Colour	$Y.S.m^{-1}$			
	0000							8	0.96			
	0005							6	1.05			
	0010							7	1.01			
	0015							7	0.92			
	0020							5	0.92			
	0025							5	0.92			
	0030							6	0.87			

BT Slide Ey 75/874/71 N 56° 04.5′ E 14° 53.6′ Secchi disc: 8.0 m

Observer: Svansson

sson Varberg 71420

Table 8a.

Dominating phytoplankton species/l

Station Hanö		10	11	12	13	14	15	16	17	18	19	20
CYANOPHYTA	Unit											
Anabaena (straight)	m											
Anabaena (trailed)	c • 10^3											
Aphanizomenon flos-aquae	m							+	+	+		
Dictyosphaerium sp.	kol. • 10^3	2	1	1	+	13	1	+	+	+		3
Gomphosphaeria sp.	" "			+				1	+	1	1	+
Nodularia spumigena	m							0.7				
Narrow bluegreen threades	m	+	+	+		+						
EUGLENOPHYTA												
Euglenid	c • 10^3					1						+
PYRROPHYTA												
Amphidinium sp.	" "	+					+					
Dinophysis spp.	" "											
Gonyaulax triacantha	" "											
Gymnodinium sp.	" "				+							
Gyrodinium sp.	" "	+					+		+	+	+	
Peridinium triquetra	" "	+	+			1			+	+		+
P. spp.	" "								+			
CHRYSOPHYTA												
Ebria tripartita	" "							+	+	+	+	
Asterionella formosa	" "									1		
Bacillaria paradoxa	" "					+						
Centric diatomée	" "	+	1	1	1		1	2	1	2	1	
Chaetoceros danicus	" "		+	+		+		1	1	2		1
Grammatophora sp.	" "											
Licmophora sp.	" "	+										
Nitschia spp.	" "											
Rhoicosphenia curvata	" "											
Sceletonema costatum	m											
Synedra spp.	c • 10^3	1										
CHLOROPHYTA												
Ankistrodesmus spp.	" "			+								
Oocystis sp.	kol. • 10^3	1			+	+	1	1	1	1	1	1
Pediastrum sp.	" "				+							
Scenedesmus sp.	" "				+							
Monader	c • 10^3	326	367	292	449	156	129	449	388	408	320	354

Table 8b.

Dominating phytoplankton species/l

Station Hanö		55	5	6	7	8	9	56:0m	56:10m	56:20m	56:30m
CYANOPHYTA	Unit										
Anabaena (straight)	m										
Anabaena (trailed)	c · 10^3		8								
Aphanizomenon flos-aquae	m	0.8	+	+				2.9	1.4	0.8	
Dictyosphaerium sp.	kol. · 10^3	+		+	+	+	1				
Gomphosphaeria sp.	" "										
Nodularia spumigena	m										
Narrow bluegreen threades	m	+	+	+	+	+	+				
EUGLENOPHYTA											
Euglenid	c · 10^3	1		+		1	+	+			
PYRROPHYTA											
Amphidinium sp.	" "										
Dinophysis spp.	" "						+				
Gonyaulax triacantha	" "										
Gymnodinium sp.	" "										
Gyrodinium sp.	" "	1				+					
Peridinium triquetra	" "		+	+	+		3				
P. spp.	" "				+						
CHRYSOPHYTA											
Ebria tripartita	" "		+					+			
Asterionella formosa	" "					+					
Bacillaria paradoxa	" "										
Centric diatomée	" "	1	+		+	+	1	1		1	1
Chaetoceros danicus	" "			+							
Grammatophora sp.	" "				1	+	1			1	
Licmophora sp.	" "										
Nitschia spp.	" "				+						
Rhoicosphenia curvata	" "					+	+				
Sceletonema costatum	m										
Synedra spp.	c · 10^3			+			+				
CHLOROPHYTA											
Ankistrodesmus spp.	" "			+			+				
Oocystis sp.	kol. · 10^3				+			+	+	+	
Pediastrum sp.	" "										
Scenedesmus sp.	" "		+								
Monader	c · 10^3	456	231	129	524	469	598	394	367	483	184

Table 8c.

Dominating phytoplankton species/l

Station Hanö	Unit	56:40m	56:50m	56:55m	31	32	21:0m	21:5m	21:10m	21:15m	21:20m
CYANOPHYTA											
Anabaena (straight)	m										
Anabaena (trailed)	c • 10^3										
Aphanizomenon flos-aquae	m										
Dictyosphaerium sp.	kol.•10^3						1.1	2.8	+	+	+
Gomphosphaeria sp.	" "							+	+		1
Nodularia spumigena	m						+	+	+		
Narrow bluegreen threades	m	+		+							+
EUGLENOPHYTA											
Euglenid	c • 10^3										
PYRROPHYTA											
Amphidinium sp.	" "								+		
Dinophysis spp.	" "										
Gonyaulax triacantha	" "										
Gymnodinium sp.	" "										
Gyrodinium sp.	" "										
Peridinium triquetra	" "										
P. spp.	" "										
CHRYSOPHYTA											
Ebria tripartita	" "							1			
Asterionella formosa	" "										
Bacillaria paradoxa	" "	+									
Centric diatomée	" "	+	1	1	2	2	+	1	+	+	1
Chaetoceros danicus	" "									1	
Grammatophora sp.	" "										
Licmophora sp.	" "										
Nitschia spp.	" "								+		
Rhoicosphenia curvata	" "										
Sceletonema costatum	m										
Synedra spp.	c • 10^3										
CHLOROPHYTA											
Ankistrodesmus spp.	" "										
Oocystis sp.	kol.•10^3	+						1	+	+	
Pediastrum sp.	" "										
Scenedesmus sp.	" "										
Monader	c • 10^3	7	14	14	326	286	292	347	721	245	394

Table 8d.

Dominating phytoplankton species/l

Station Hanö		4	3	2	0:0m	0:2.5m	0:5m	1	54:0m	54:2.5m
CYANOPHYTA	Unit									
Anabaena (straight)	m									
Anabaena (trailed)	c • 10^3									
Aphanizomenon flos-aquae	m	1.8								
Dictyosphaerium sp.	kol.•10^3		+	1	1	1	1	1		
Gomphosphaeria sp.	" "									
Nodularia spumigena	m									
Narrow bluegreen threades	m			+	+					0.7
EUGLENOPHYTA										
Euglenid	c • 10^3									
PYRROPHYTA										
Amphidinium sp.	" "						+			
Dinophysis spp.	" "								+	
Gonyaulax triacantha	" "									
Gymnodinium sp.	" "					+				
Gyrodinium sp.	" "		+		+					
Peridinium triquetra	" "					+		+	7	54
P. spp.	" "								25	14
CHRYSOPHYTA										
Ebria tripartita	" "				+				1	7
Asterionella formosa	" "									
Bacillaria paradoxa	" "								1	
Centric diatomée	" "	1	1	+		+	+			
Chaetoceros danicus	" "			+		+				
Grammatophora sp.	" "							+		
Licmophora sp.	" "									
Nitschia spp.	" "					+	+		2	34
Rhoicosphenia curvata	" "					+				
Sceletonema costatum	m									5.4
Synedra spp.	c • 10^3									
CHLOROPHYTA										
Ankistrodesmus spp.	" "									
Oocystis sp.	kol.•10^3	+						+		
Pediastrum sp.	" "									
Scenedesmus sp.	" "				+	+	+			
Monader	c • 10^3	517	503	306	490	333	102	809	1040	1618

Table 06.

Dominating phytoplankton species/l

Station Hanö	Unit	57	58	33	34	47	48	49	50	51	35
CYANOPHYTA											
Anabaena (straight)	m										
Anabaena (trailed)	c • 10^3		+								
Aphanizomenon flos-aquae	m			0.5		0.5	0.3				
Dictyosphaerium sp.	kol.•10^3		+		+		+			+	+
Gomphosphaeria sp.	" "									+	+
Nodularia spumigena	m	+				+		+			
Narrow bluegreen threades	m	+									+
EUGLENOPHYTA											
Euglenid	c • 10^3		+							2	
PYRROPHYTA											
Amphidinium sp.	" "				+			+			
Dinophysis spp.	" "	3	1							4	
Gonyaulax triacantha	" "										
Gymnodinium sp.	" "							+		15	
Gyrodinium sp.	" "				1	+	+	+			1
Peridinium triquetra	" "	9	4							870	+
P. spp.	" "	7	+								
CHRYSOPHYTA											
Ebria tripartita	" "	1			+						
Asterionella formosa	" "										
Bacillaria paradoxa	" "										
Centric diatomée	" "	+	+	+		1	1				
Chaetoceros danicus	" "						1				
Grammatophora sp.	" "									+	+
Licmophora sp.	" "										
Nitschia spp.	" "	4	1					1			
Rhoicosphenia curvata	" "										+
Sceletonema costatum	m	+									
Synedra spp.	c • 10^3										
CHLOROPHYTA											
Ankistrodesmus spp.	" "		+							1	
Oocystis sp.	kol.•10^3				+	+	+	1			1
Pediastrum sp.	" "										
Scenedesmus sp.	" "									+	
Monader	c • 10^3	1176	544	408	850	762	870	612	734	1421	605

Table 8f.

Dominating phytoplankton species/l

Station Hanö		36	37	38	39	40B	41	42:0m	42:5m	42:10m
CYANOPHYTA	Unit									
Anabaena (straight)	m									
Anabaena (trailed)	c • 10^3							4		
Aphanizomenon flos-aquae	m	+						+		+
Dictyosphaerium sp.	kol.•10^3	+		2	2	1	6	+	2	1
Gomphosphaeria sp.	" "	+		1	1	+	1		+	
Nodularia spumigena	m									
Narrow bluegreen threades	m	+		+	+	+	+			+
EUGLENOPHYTA										
Euglenid	c • 10^3									
PYRROPHYTA										
Amphidinium sp.	" "		+	+						
Dinophysis spp.	" "									
Gonyaulax triacantha	" "									+
Gymnodinium sp.										
Gyrodinium sp.	" "									
Peridinium triquetra	" "								+	
P. spp.	" "									
CHRYSOPHYTA										
Ebria tripartita	" "								+	+
Asterionella formosa	" "									
Bacillaria paradoxa	" "									
Centric diatomée	" "					+	+	+	+	
Chaetoceros danicus	" "							+		
Grammatophora sp.	" "	+	+		+		+	+		
Licmophora sp.	" "		+							
Nitschia spp.	" "				+					
Rhoicosphenia curvata	" "		+			+				
Sceletonema costatum	m									
Synedra spp.	c • 10^3									
CHLOROPHYTA										
Ankistrodesmus spp.	" "									
Oocystis sp.	kol.•10^3				+		+	+	1	+
Pediastrum sp.	" "									
Scenedesmus sp.	" "									
Monader	c • 10^3	326	204	272	313	480	626	435	510	483

Table 8g.

Dominating phytoplankton species/l

Station Hanö		42:15m	42:20m	42:25m	42:30m	43	44	45	46
CYANOPHYTA	Unit								
Anabaena (straight)	m					+			
Anabaena (trailed)	c · 10^3								
Aphanizomenon flos-aquae	m		+					1.2	+
Dictyosphaerium sp.	kol.·10^3	2	1	1	1	3	1	1	+
Gomphosphaeria sp.	" "								
Nodularia spumigena	m								
Narrow bluegreen threades	m	+	+		+	+			
EUGLENOPHYTA									
Euglenid	c · 10^3								
PYRROPHYTA									
Amphidinium sp.	" "					+			
Dinophysis spp.	" "								
Gonyaulax triacantha	" "								
Gymnodinium sp.	" "		+						
Gyrodinium sp.	" "						+	+	+
Peridinium triquetra	" "								
P. spp.	" "								
CHRYSOPHYTA									
Ebria tripartita	" "							+	+
Asterionella formosa	" "					+			
Bacillaria paradoxa	" "								
Centric diatomée	" "	+		+		+		1	1
Chaetoceros danicus	" "								
Grammatophora sp.	" "								
Licmophora sp.	" "								
Nitschia spp.	" "								
Rhoicosphenia curvata	" "								
Sceletonema costatum	m								
Synedra spp.	c · 10^3								
CHLOROPHYTA									
Ankistrodesmus spp.	" "								
Oocystis sp.	kol.·10^3	+	+					1	+
Pediastrum sp.	" "								
Scenedesmus sp.	" "								+
Monader	c · 10^3	224	184	272	95	626	496	592	517

Table 9.

Biomass per litre

Station Hanö	10	11	12	13	14	15	16	17	18	19	20	55	5
$\mu^3 \cdot 10^6/l$	93	117	99	153	48	66	286	129	186	115	93	162	79
Station Hanö	6	7	8	9	56:0m	56:10m	56:20m	56:30m	56:40m	56:50m	56:55m	31	32
$\mu^3 \cdot 10^6/l$	41	143	127	191	205	160	185	102	10	27	60	146	135
Station Hanö	21:0m	21:5m	21:10m	21:15m	21:20m	4	3	2	0:0m	0:2.5m	0:5m	1	54:0m
$\mu^3 \cdot 10^6/l$	122	226	200	72	124	190	150	94	124	94	42	203	532
Station Hanö	54:2.5m	57	58	33	34	47	48	49	50	51	35	36	37
$\mu^3 \cdot 10^6/l$	748	437	166	120	215	276	249	208	184	1614	153	87	52
Station Hanö	38	39	40B	41	42:0m	42:5m	42:10m	42:15m	42:20m	42:25m	42:30m	43	44
$\mu^3 \cdot 10^6/l$	72	81	91	170	127	146	126	65	48	84	24	167	125
Station Hanö	45	46											
$\mu^3 \cdot 10^6/l$	198	163											

Table 10a.

Dominating Zooplankton

Species - number of specimens

Station Hanö	Date	Bosmina coregoni maritima	Podon spp.	Evadna nordmanni	Acartia longiremis, Acartia bifilosa	Centropages hamatus	Tempora longicornis	Lamellibranchiata
56	31/8 -71	2075	500	3700	1575	650	825	0
31		2150	275	950	1400	775	850	0
32		1800	100	225	425	200	275	0
21		350	25	175	575	75	175	0
14	30/8 -71	500	25	100	2750	225	9475	0
15		4000	325	3350	1337	650	2475	50
16		1050	125	725	375	100	900	0
17		2700	150	750	375	175	1400	0
18		1550	100	400	225	100	1525	0
19		975	25	1100	200	100	300	25
20		750	25	1150	400	75	550	0
55		0	0	25	0	0	0	0
5		875	50	600	875	450	2150	0
6		475	0	425	475	425	825	0
7		125	25	100	250	300	900	0
8		150	0	50	325	200	575	0
9		275	25	225	1725	925	1475	0
4	1/9 -71	100	0	25	175	50	250	0
3		350	0	1075	650	225	1175	0
2		125	0	975	225	500	1275	0
0		0	0	175	375	225	725	0
1		50	0	275	325	125	625	0
54		0	0	50	150	25	100	0
57		25	0	0	125	0	0	0
58		0	0	0	375	50	25	0
33		1625	0	800	2350	925	1175	0
34		2000	25	675	1075	550	1925	0

Table 10b.

Dominating Zooplankton

Species - number of specimens

Station Hanö	Date	Bosmina coregoni maritima	Podon spp.	Evadna nordmanni	Acartia longiremis, Acartia bifilosa	Centropages hamatus	Tempora longicornis	Lamellibranchiata
47	1/9 -71	1575	50	550	1875	200	325	0
48		2325	150	1375	1125	275	175	0
49		1850	175	875	1375	400	325	0
50		750	25	800	1575	450	350	0
51		575	50	50	2775	250	600	0
35	2/9 -71	50	50	625	600	300	1275	0
36		0	50	150	825	225	475	0
37		100	50	100	5050	400	675	0
38		0	25	125	3800	375	2950	0
39		0	0	25	1250	150	325	0
40B		225	100	225	3600	400	3000	0
41		0	50	275	1975	50	675	0
42		175	75	500	2050	150	300	25
43		50	0	550	1175	25	25	0
44		100	0	275	1475	300	250	0
45		75	0	75	975	300	1600	0
46		1650	0	550	775	125	350	0

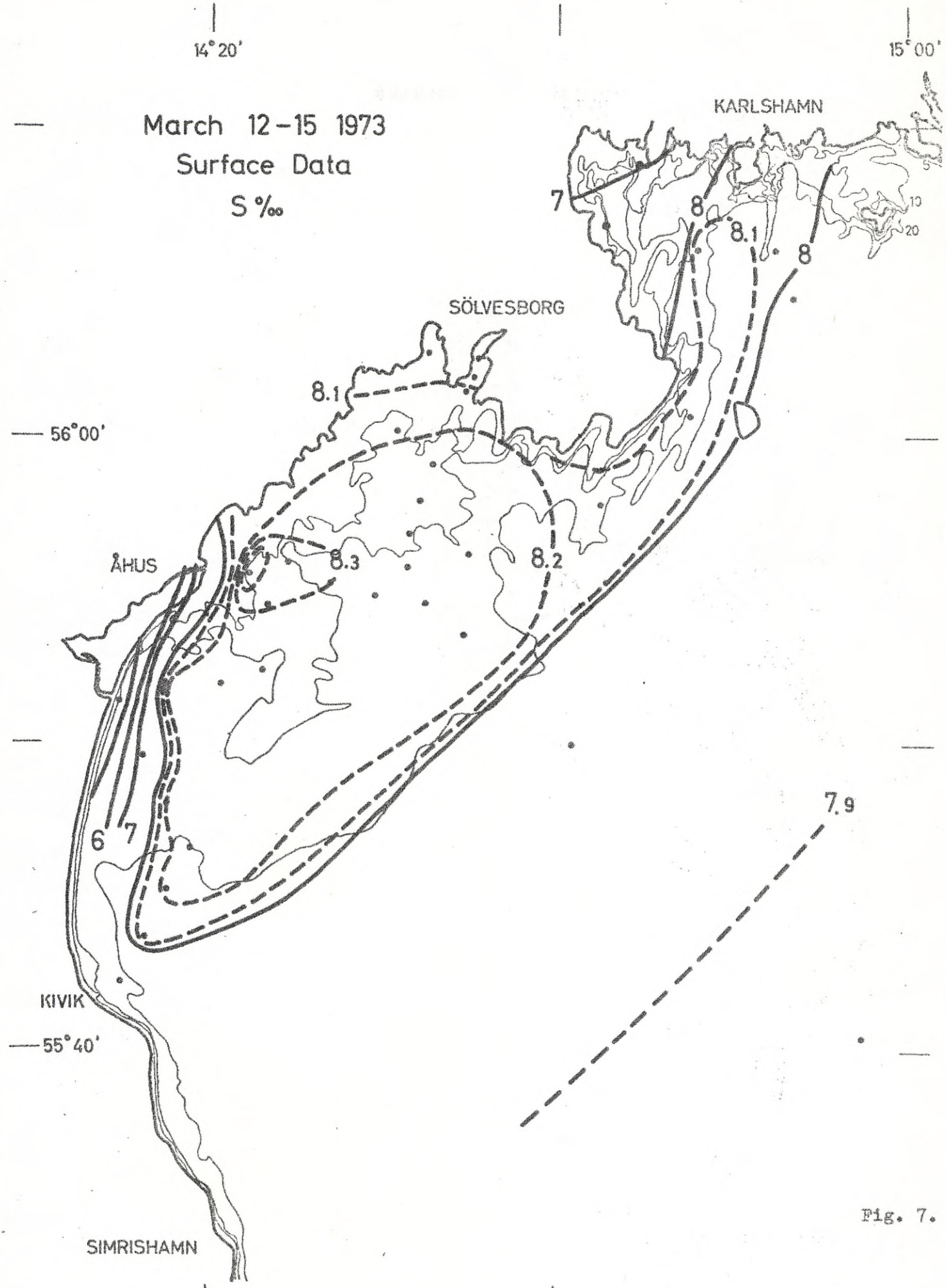
March 12-15 1973
Surface Data
S ‰
14°20'
15°00'
56°00'
55°40'
KARLSHAMN
SÖLVESBORG
ÅHUS
KIVIK
SIMRISHAMN
7
8
8.1
8
8.1
8.3
8.2
6
7
7.9
5
10
20

Fig. 7.

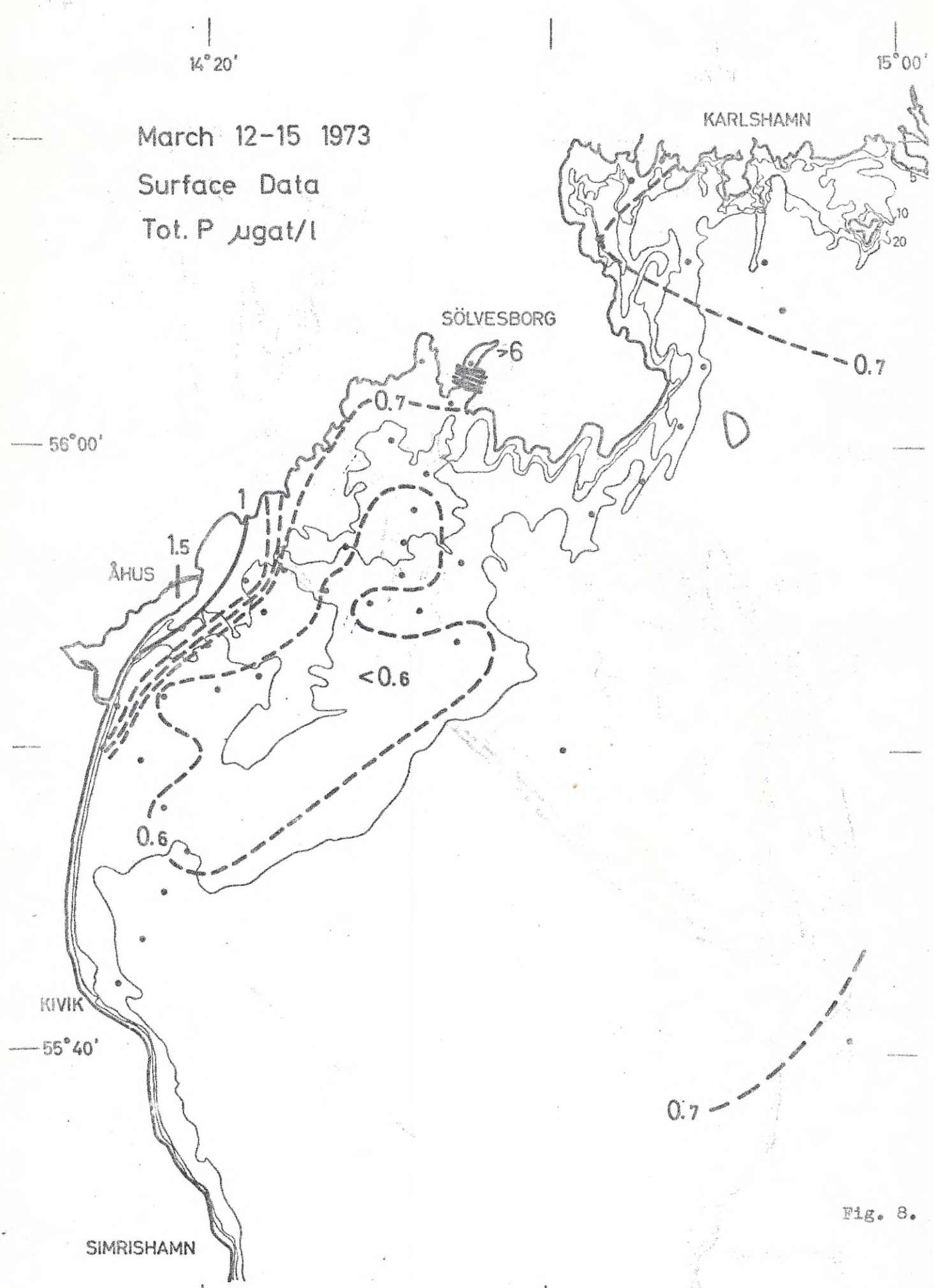
14° 20'
15° 00'
March 12-15 1973
Surface Data
Tot. P µgat/l
KARLSHAMN
5
10
20
SÖLVESBORG
>6
0.7
0.7
56° 00'
1
1.5
ÅHUS
<0.6
0.6
KIVIK
55° 40'
0.7
SIMRISHAMN

Fig. 8.

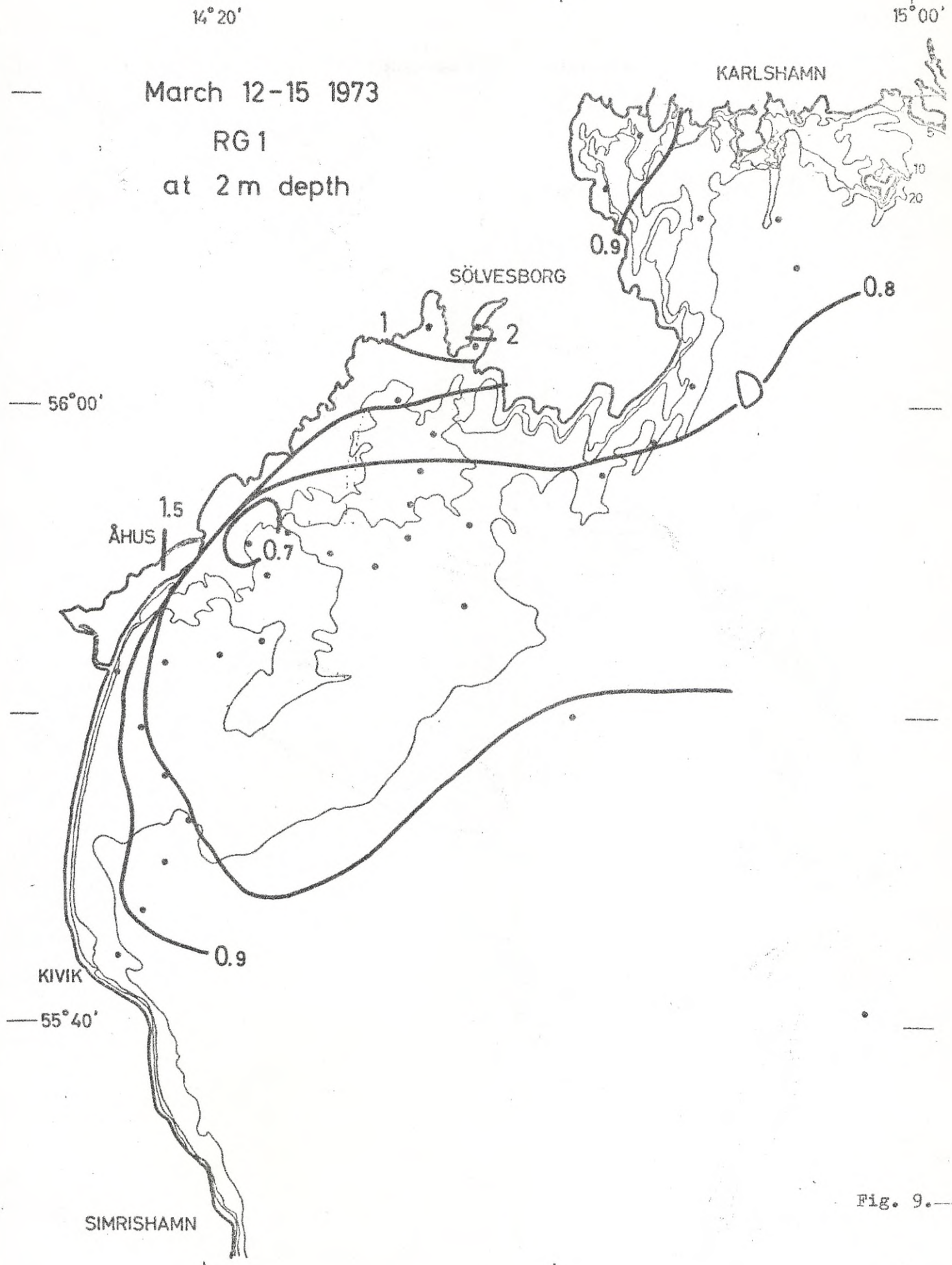
March 12-15 1973
RG 1
at 2 m depth
14°20'
15°00'
KARLSHAMN
10
20
0.9
SÖLVESBORG
1
2
0.8
56°00'
1.5
ÅHUS
0.7
0.9
KIVIK
55°40'
SIMRISHAMN

Fig. 9.

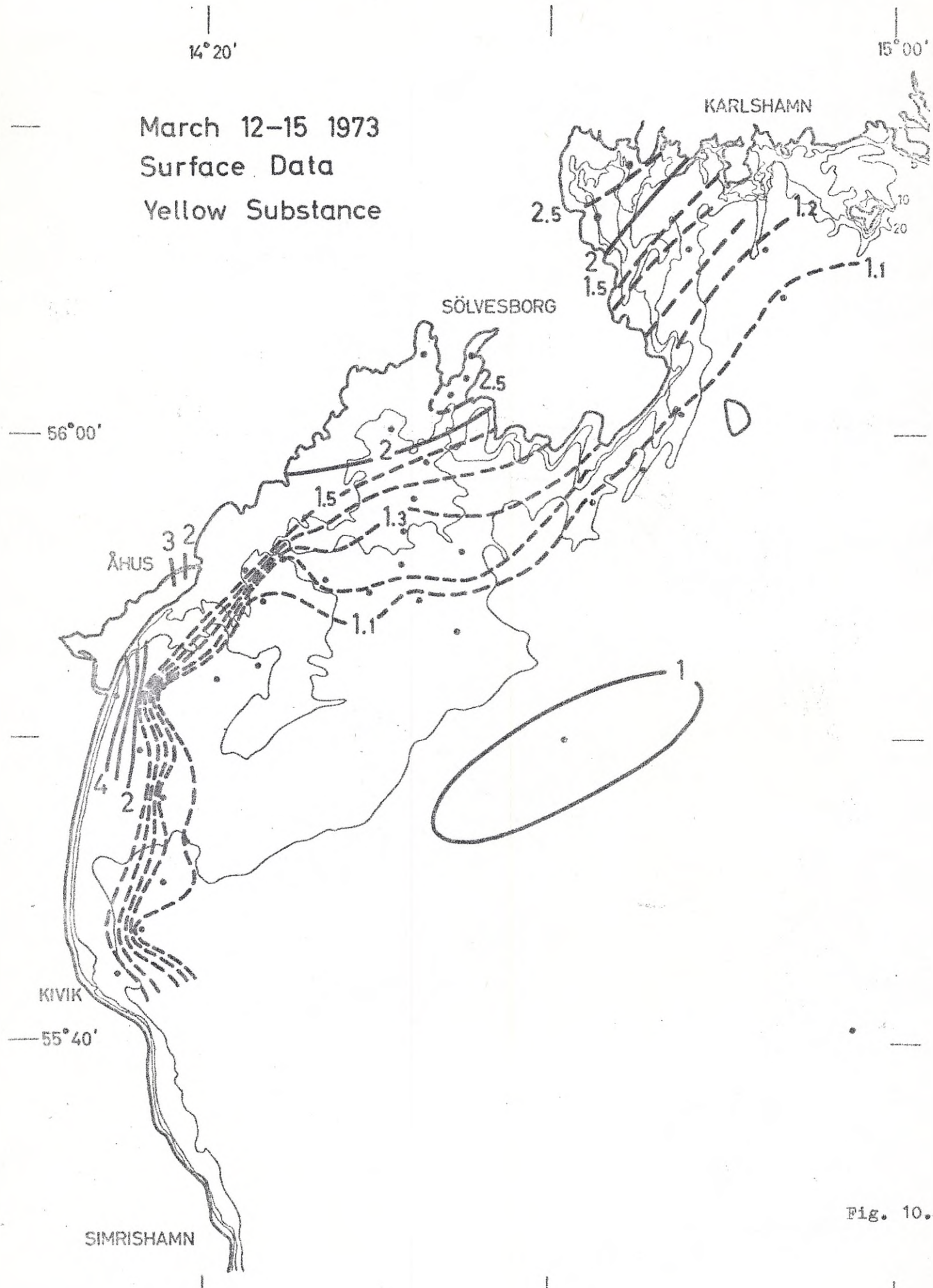
March 12–15 1973
Surface Data
Yellow Substance
14° 20'
15° 00'
KARLSHAMN
SÖLVESBORG
ÅHUS
KIVIK
SIMRISHAMN
56° 00'
55° 40'
2.5
2
1.5
1.2
1.1
1.3
1
3
4
10
20

Fig. 10.

Table 1a.

Surface Data

Eystrasalt 12/3 1973

GMT	Station		Lat.	Long.	Temp. °C	Sal. ‰	O_2 ml/l	BS7	PO_4-P µgat/l	Tot.P µgat/l	$KMnO_4$ mg/l	Colour	Yellow Substance
07^{25}	Hanö	9	55° 55.5′	14° 22.3′	2.9	8.413	9.33	2.98	0.52	0.92	11	11	1.70
07^{50}		8	55° 56.0′	14° 24.6′	2.8	8.332	9.41	1.68	0.28	0.73	18	10	1.19
08^{15}		7	55° 55.3′	14° 27.0′	2.9	8.299	9.26	1.37	0.35	0.58	14	5	1.24
08^{30}		6	55° 54.8′	14° 29.5′	3.0	8.272	9.25	1.33	0.26	0.64	17	7	1.19
09^{10}		5	55° 53.5′	14° 34.7′	3.2	8.271	9.58	1.69	0.37	0.52	15	8	1.11
10^{15}		4	55° 55.8′	14° 31.3′	3.2	8.267	9.52	1.52	0.19	0.54	17	8	1.28
10^{35}		3	55° 56.9′	14° 31.5′	3.1	8.264	9.11	1.24	0.37	0.54	18	7	1.28
10^{55}		2	55° 58.0′	14° 32.0′	3.0	8.264	9.12	1.14	0.29	0.53	16	8	1.38
11^{30}		0	56° 00.3′	14° 30.8′	2.9	8.128	9.12	1.76	0.16	0.60	23	13	2.26
12^{15}			Saxaviken		3.1	8.006	7.73	0.15	0.22	0.68	24	13	2.43
13^{10}		1	56° 00.3′	14° 30.8′	3.0	8.242	9.05	1.04	0.39	0.61	19	7	1.47
13^{35}		58	56° 01.3′	14° 34.8′	3.0	8.105	8.60	1.18	0.21	0.72	26	16	2.62

Table 1b.

Surface Data

Eystrasalt 13/3 1973

GMT	Station		Lat.	Long.	Temp. °C	Sal. ‰	O_2 ml/l	BS7	PO_4-P µgat/l	Tot.P µgat/l	$KMnO_4$ mg/l	Colour Yellow	Substance
09^{00}	Hanö	54	56° 02.7′	14° 35.2	3.3	7.820	9.25	4.70	2.37	6.20	28	31	2.56
09^{15}		57	56° 01.9′	14° 35.0′	3.0	8.010	9.12	1.54	0.24	1.21	23	22	2.52
10^{50}		10	55° 54.5′	14° 23.4′	3.0	8.304	9.27	1.00	0.38	0.60	19	7	1.11
11^{20}		11	55° 52.3′	14° 23.0′	3.2	8.268	9.36	1.61	0.39	0.57	22	8	1.11
11^{40}		12	55° 51.9′	14° 20.7′	3.2	8.264	9.21	1.57	0.37	0.56	16	8	1.11
12^{00}		13	55° 51.7′	14° 17.7′	3.1	8.273	9.25	1.86	0.41	0.51	16	5	1.11
12^{15}		14	55° 51.4′	14° 15.0′	3.1	4.910	9.26	1.89	0.42	0.91	29	25	4.47
12^{45}		15	55° 49.7′	14° 16.2′	3.2	7.878	9.26	1.41	0.41	0.67	18	7	1.70
13^{05}		16	55° 48.1	14° 17.7′	3.2	8.219	9.20	1.30	0.43	0.59	18	6	1.15
13^{30}		17	55° 46.6′	14° 19.1′	3.3	8.246	9.17	1.67	0.41	0.56	16	5	1.06
14^{00}		18	55° 45.2′	14° 17.7′	3.3	8.210	9.21	0.80	0.42	0.61	16	5	1.15
14^{15}		19	55° 43.7′	14° 16.4′	3.4	8.161	9.16	1.44	0.40	0.67	16	5	1.11
14^{45}		20	55° 42.2′	14° 15.0′	3.7	7.734	9.04	1.03	0.41	0.64	18	7	1.56

Table 1c.

Surface Data

Eystrasalt 14/3 1973

GMT	Station	Lat.	Long.	Temp. °C	Sal. ‰	O_2 ml/l	BS7	PO_4-P µgat/l	Tot.P µgat/l	$KMnO_4$ mg/l	Colour Yellow Substance	
10^{00}	Hanö 30	55° 40.5′	14° 57.5′	3.5	7.892	9.15	1.21	0.41	0.71	11	5	1.11
13^{45}	21	55° 50.0′	14° 41.0′	3.6	7.915	9.09	1.32	0.52	0.68	13	5	0.92
14^{50}	50	55° 54.6′	14° 32.3′	3.9	8.275	9.06	1.47	0.37	0.61	15	5	1.01
15^{30}	52	55° 56.6′	14° 27.9′	3.5	8.250	6.71		0.32	0.69	14	6	1.47
16^{15}	51	55° 55.7′	14° 19.9′	3.8	7.724	9.13	1.88	0.68	1.18	16	10	1.51
				Eystrasalt 15/3								
06^{35}	Åhus harbour			3.7	5.464	8.44	1.60	0.86	1.52	24	22	3.50
07^{45}	33	55° 56.3′	14° 34.8′	3.2	8.222	9.11	1.48	0.39	0.66	15	5	1.28
08^{35}	35	55° 57.8′	14° 42.5	3.3	8.167	9.20	1.60	0.37	0.66	13	5	1.11
09^{10}	37	56° 00.6′	14° 47.7′	3.2	8.139	9.29	1.78	0.43	0.69	11	5	1.11
10^{15}	40B	56° 06.9′	14° 48.4′	3.5	8.115	9.21	1.64	0.50	0.74	15	10	1.33
10^{50}	40C	56° 06.6′	14° 43.0′	3.6	7.285	9.10	1.81	0.34	0.70	17	10	2.02
11^{05}	40D	56° 08.5′	14° 44.6′	4.2	6.782	9.19	1.75	0.30	0.66	20	10	2.67
11^{50}	41	56° 06.0′	14° 50.5′	3.4	8.028	9.32	1.91	0.49	0.72	15	5	1.15
12^{30}	42	56° 04.5′	14° 53.6′	3.4	7.951	9.25	1.88	0.49	0.78	15	5	1.11

"Eystrasalt" Table 2. Station

77 Sweden 1973 Hanö 0

Hydro Depth Observations (Code 0 3)

Station No.	Lat. °	Lat. ′	Long. °	Long. ′	N S E W	Date Year	Date Mo.	Date Day	Station time	Depth to bottom	Max. obs. depth	Mixed layer depth	Wind Dir.	Wind Sp. kn.	Temperature Dry bulb	Temperature Wet bulb	Weather	Cloud amount	State of sea	Ice
5 6 7 8	9 10	11 12	13 14 15	16 17	18	19 20 21	22 23	24 25	26 27	28 29 30 31	46 47	48 49 50	51 52	53 54	55 56 57	58 59 60	61	62	63	64
0027	56	00	014	31	0	973	03	12	12		00		07	12			2	8	2	0

Obs. time	Obs. depth	Temp.	Sal.	σ_t	Oxygen ml/l	Oxygen %	BS7	PO_4-P µgat/l	Tot.P µgat/l	$KMnO_4$ mg/l	Sal. method	Extra info.
26 27	28 29 30 31	32 33 34 35	36 37 38 39 40	41 42 43 44 45	58 59 60	61 62 63 64					77	78
12	0000	0297	08108	0654	871		1.70	0.17	0.61	23	3	3
	0003	0292	08106	0654	872		1.57	0.13	0.68	22		
	0005	0294	08106	0654	871		1.71	0.15	0.66	23		
										Colour		
	0000									13		
	0003									12		
	0005									12		

BT Slide Ey 30/11732/73 N 56° 00.3′ E 14° 30.8′ Secchi disc: 4.5 m

Observer: Svansson

"Eystrasalt" Table 3. Station

77 Sweden 1973 Hanö 30

Hydro Depth Observations (Code 0 3)

Station No.	Lat. °	Lat. ′	Long. °	Long. ′	N S E W	Date Year	Date Mo.	Date Day	Station time	Depth to bottom	Max. obs. depth	Mixed layer depth	Wind Dir.	Wind Sp. kn.	Temperature Dry bulb	Temperature Wet bulb	Weather	Cloud amount	State of sea	Ice
5 6 7 8	9 10	11 12	13 14 15	16 17	18	19 20 21	22 23	24 25	26 27	28 29 30 31	46 47	48 49 50	51 52	53 54	55 56 57	58 59 60	61	62	63	64
0044	55	41	014	58	0	973	03	14	10	0066	01		27	10			2	7	20	

Obs. time	Obs. depth	Temp.	Sal.	σ_t	Oxygen ml/l	Oxygen %	BS7	PO_4-P µgat/l	Tot.P µgat/l	$KMnO_4$ mg/l	Sal. method	Extra info.
26 27	28 29 30 31	32 33 34 35	36 37 38 39 40	41 42 43 44 45	58 59 60	61 62 63 64					77	78
10	0000	035	07892	0635	915		1.21	0.41	0.71	11	3	3
	0010	0353	08059	0648	898			0.36	0.79	12		
	0020	0346	08053	0648	894		0.80	0.34	0.62	12		
	0030	0350	08063	0648	634			0.42	0.59	13		
	0040	0357	08067	0649	889		1.12	0.30	0.52	13		
	0050	0454	08822	0704	696		0.30	0.68	0.95	12		
	0055	0665	13852	1089	331			1.20	1.44	9		
	0065	069	15978	1255	132			1.43	1.85	13		
										Colour		
	0000									5		
	0010									6		
	0020									5		
	0030									5		
	0040									5		
	0050									5		
	0055									5		
	0065									5		

BT Slide Ey 46/395/73 N 55° 40.5′ E 14° 57.5′ Secchi disc: 11 m

Observer: Svansson

"Eystrasalt" — Table 4. — Station

77 Sweden — 1973 — Hanö 21

Hydro Depth Observations (Code 0 3)

Station No.	Lat. °	Lat. ′	Long. °	Long. ′	N S E W	Date Year	Date Mo.	Date Day	Station time	Depth to bottom	Max. obs. depth	Mixed layer depth	Wind Dir.	Wind Sp. kn.	Temperature Dry bulb	Temperature Wet bulb	Weather	Cloud amount	State of sea	Ice
5 6 7 8	9 10	11 12	13 14 15	16 17	18	19 20 21	22 23	24 25	26 27	28 29 30 31	46 47	48 49 50	51 52	53 54	55 56 57	58 59 60	61	62	63	64
0045	55	50	014	41	0	973	03	14	14	0033	00		27	02			1	4	1	0

Obs. time	Obs. depth	Temp.	Sal.	σ_t	Oxygen ml/l	Oxygen %	BS7	PO_4-P µgat/l	Tot.P µgat/l	$KMnO_4$ mg/l	Sal. method	Extra info.
26 27	28 29 30 31	32 33 34 35	36 37 38 39 40	41 42 43 44 45	58 59 60	61 62 63 64					77	78
14	0000	036	07915	0636	909		1.32	0.52	0.68	13		
	0005	0317	07886	0636	915		1.31	0.53	0.83	12		
	0010	0317	07899	0637	923		1.34	0.47	0.84	14		
	0015	0321	07943	0640	914		1.43	0.48	0.79	15		
	0020	0318	07975	0642	916		1.71	0.49	0.73	14		
	0033	034	08182	0658	867		1.16	0.54	0.82	13		
										Colour		
	0000									5		
	0005									5		
	0010									5		
	0015									5		
	0020									5		
	0033									5		

BT Slide Ey 47/11732/73 Secchi disc: 12 m Observer: Svansson

Table 5.

"Eystrasalt" 1973 Station

77 Sweden Hanö 40B

Hydro Depth Observations (Code 0 3)

Station No.	Lat.		Long.		N S E W	Date			Station time	Depth to bottom	Max. obs. depth	Mixed layer depth	Wind		Temperature		Weather	Cloud amount	State of sea	Ice
	°	′	°	′		Year	Mo.	Day					Dir.	Sp. kn.	Dry bulb	Wet bulb				
5 6 7 8	9 10	11 12	13 14 15	16 17	18	19 20 21	22 23	24 25	26 27	28 29 30 31	46 47	48 49 50	51 52	53 54	55 56 57	58 59 60	61	62	63	64
0053	56	07	014	48	0	973	03	15	10	0020	00		07	02			1	1	2	0

Obs. time	Obs. depth	Temp.	Sal.	σ_t	Oxygen		BS7	PO_4-P	Tot.P	$KMnO_4$	Sal. method	Extra info.
					ml/l	%		µgat/l	µgat/l	mg/l		
26 27	28 29 30 31	32 33 34 35	36 37 38 39 40	41 42 43 44 45	58 59 60	61 62 63 64					77	78
10	0000	035	08115	0652	921		164	0.50	0.74	15		
	0009		08138		888		209	0.53	0.93	19		
	0020	032	08213	0660	903			0.41	0.81	16		
								Colour				
	0000							10				
	0009							12				
	0020							7				

BT Slide Ey 55/11732/73 N 56° 06.9′ E 14° 48.4′ Secchi disc: 10 m

Observer: Svansson

Table 6.

"Eystrasalt" 1973 Station

77 Sweden Hydro Depth Observations (Code 0 3) Hanö 54

Station No.	Lat. °	Lat. ′	Long. °	Long. ′	N S E W	Date Year	Date Mo.	Date Day	Station time	Depth to bottom	Max. obs. depth	Mixed layer depth	Wind Dir.	Wind Sp. kn.	Temperature Dry bulb	Temperature Wet bulb	Weather	Cloud amount	State of sea	Ice
5 6 7 8	9 10	11 12	13 14 15	16 17	18	19 20 21	22 23	24 25	26 27	28 29 30 31	46 47	48 49 50	51 52	53 54	55 56 57	58 59 60	61	62	63	64
0031	56	03	014	35	0	972	03	13	09	0065	00		32	02						

Obs. time	Obs. depth	Temp.	Sal.	σ_t	Oxygen ml/l	Oxygen %	BS7	PO_4-P µgat/l	Tot.P µgat/l	$KMnO_4$ mg/l	Sal. method	Extra info.
26 27	28 29 30 31	32 33 34 35	36 37 38 39 40	41 42 43 44 45	58 59 60	61 62 63 64					77	78
09	0000	033	07820	0630	925		470	2.37	6.20	28	3	3
	0003	0297	07636	0616	917		211	0.67	2.38	25		
								Colour				
	0000							31				
	000							20				
	BT Slide Ey 33/11732/73 Secchi disc: 1.0 m Observer: Svansson											
	N 56° 02.7′ E 14° 35.2′											

Table 7a.

Attenuation RG1 m^{-1} March 12, 1973

Depth m	Station 1	Saxa-viken	0	2	3	4	5	6	7	8	9
0	0.81	1.06	0.98	0.77	0.79	0.77	0.75	0.73	0.71	0.71	0.66
2	0.80	1.05	0.98	0.77	0.78	0.77	0.75	0.73	0.71	0.71	0.66
4	0.80	1.03	0.98	0.77	0.77	0.76	0.75	0.73	0.71	0.70	0.66
6	0.79	1.00	0.98	0.77	0.76	0.75	0.75	0.72	0.71	0.70	0.65
8	0.79		0.98	0.76	0.76	0.75	0.75	0.72	0.71	0.70	
10	0.78			0.76	0.75	0.75	0.75	0.72	0.70	0.70	
12	0.78			0.76		0.75	0.75	0.72	0.70		
14						0.73	0.75	0.71	0.70		
15									0.70		

Table 7b.

Attenuation RG1 m^{-1} March 13, 1973

Station	54	57	10	11	12	13	14	15	16	17	18	19	20
Depth m													
0	2.41	1.73	0.70	0.75	0.78	0.78	1.06	0.86	0.80	0.80	0.84	0.86	0.98
1	2.46	1.67	0.70				1.00	0.85					
2	2.46	1.67	0.70	0.75	0.78	0.78	0.92	0.80	0.80	0.80	0.84	0.85	0.97
3	2.37	1.61	0.70				0.88	0.80					
4	2.34	1.57	0.70	0.75	0.77	0.77	0.85	0.79	0.79	0.79	0.83	0.85	0.94
5		1.63	0.70				0.83						
6		1.39	0.70	0.74	0.77	0.77	0.82	0.79	0.78	0.79	0.83	0.85	0.91
7		1.36	0.70										
8			0.70	0.73	0.76	0.77	0.81	0.78	0.78	0.78	0.82	0.84	0.89
9			0.70										
10			0.69	0.72	0.75	0.76	0.80	0.77	0.77	0.78	0.81	0.84	0.89
12				0.72	0.74	0.76	0.80	0.77	0.77	0.78	0.80	0.84	0.89
14				0.71				0.76	0.76	0.78	0.81	0.83	0.87
15									0.76				
16								0.76			0.81	0.82	0.84
18								0.76			0.80	0.82	0.83
20											0.80	0.82	
22												0.81	

Table 7c.

Attenuation RG1 m^{-1} March 14-15, 1973

Depth m	Stn. 30	21	50	52	51	Åhus harbour Inner	Åhus harbour Central	33	35	37	40B	40C	40D	41	42
0	0.80	0.80	0.88	0.88	0.99	1.61	1.30	0.79	0.76	0.81	0.83	0.91	0.93	0.81	0.80
1					0.99		1.19				0.83				
2	0.79	0.80	0.87	0.88	0.98		1.18	0.77	0.78	0.82	0.83	0.92	0.93	0.81	0.80
3					0.98		1.16				0.85				
4	0.79	0.80	0.86	0.87	0.98		1.17	0.77	0.79	0.82	0.85	0.93	0.93	0.83	0.81
5					0.96		1.18				0.86		0.95		
6	0.78	0.81	0.85	0.87	0.95			0.77	0.80	0.82	0.87	0.93	0.92	0.84	0.82
7					0.93						0.92				
8	0.78	0.80	0.85	0.86	1.14			0.77	0.79	0.82	1.00	0.91	0.90	0.83	0.83
9											0.98				
10	0.77	0.81	0.84	0.83				0.76	0.78	0.82	0.98	0.90	0.89	0.83	0.83
11											0.96				
12			0.84	0.83				0.76	0.76	0.83	0.95	0.88		0.83	0.83
13											0.93	0.86			
14			0.83					0.76	0.76	0.82	0.89	0.88		0.82	0.83
15	0.74	0.79									0.87				
16								0.76		0.80	0.88			0.82	0.83
17											0.85				
18											0.87			0.81	0.82
20	0.73	0.78												0.80	0.81
22														0.79	0.81

Dominating Zooplankton

Hanö Bight 1973

Date 1973	Station No	Aurelia aurita	Bosmina coregoni maritima	Podon spp.	Evadne nordmanni	Acartia spp.	Centropages hamatus	Temora longicornis	Pseudocalanus m. elongatus	Nauplius larvae	Gastropoda	Mytilus edulis	Fritillaria	Additional
12/2	0	0	0	0	0	0	0	0	0	0	0	0	0	No specimens because of clogging
"	1	0	0	0	0	0	0	0	0	0	0	0	0	caused by phytoplankton
"	2	0	0	0	0	1	3	1	3	2	0	0	0	
"	3	0	0	0	0	2	2	1	2	2	0	0	0	
"	4	0	0	0	0	2	3	1	2	2	0	0	0	
"	5	0	0	0	0	2	3	2	3	2	0	0	0	
"	6	0	0	0	0	3	3	1	3	2	0	0	0	
"	7	0	0	0	0	1	2	1	3	2	0	0	0	
"	8	0	0	0	0	1	1	1	4	2	0	0	0	
"	9	0	0	0	0	1	2	2	3	2	0	0	0	
13/3	10	0	0	0	0	1	2	1	4	2	0	0	0	
"	11	0	0	0	0	3	3	1	3	2	0	0	0	
"	14	0	0	0	0	0	0	0	0	0	0	0	0	← No specimens because of clogging caused by organic matter
"	17	0	0	0	0	2	3	1	3	2	0	0	0	
"	20	0	0	0	0	1	4	1	1	2	0	0	0	
14/3	21	0	0	0	0	2	2	2	2	2	0	0	0	
"	30	0	0	0	0	2	3	2	1	2	0	0	0	
"	"	0	0	0	0	2	2	2	2	3	0	0	1	50 - 0 m
15/3	37	0	0	0	0	2	3	0	2	2	0	0	0	
"	40 B	0	0	0	0	2	2	2	2	2	0	0	0	
"	42	0	0	0	0	1	3	1	1	2	0	0	0	
13/3	54	0	0	0	0	0	0	0	0	0	0	0	0	4 - 0 m Sample disturbed by unidentified organic matter
12/3	Saxaviken	0	0	0	0	0	0	0	0	0	0	0	0	

Table 8.