



RV Aranda

## CRUISE PLAN

### Combine 1 Leg 2, 1/2015

26.1. - 6.2.2015

#### Description of the cruise

Monitoring of physical parameters (temperature, salinity, dissolved oxygen), general hydrography, nutrients and zooplankton of the Baltic Sea according to HELCOM MONAS program. This cruise is partly cooperation with SMHI Sweden, and thus also carries out Swedish Monitoring activities in Bay of Bothnia, Åland Sea and Northgern Baltic Proper.

#### Scientific staff:

**Chief scientist:** Juha Flinkman SYKE 26.01.2015 - 06.02.2015

CTD chief:

Chief chemist:

IT chief:

Altogether 13 persons in scientific staff.

**Departure from:** HELSINKI  
**Departure time:** Monday 26.01.2015 at 12:00

Cruising speed: 10,0 knots  
 Average station time: 1 h 30 min.

**Arrival to:** HELSINKI  
**Arrival time:** Friday 06.02.2015 at 14:08

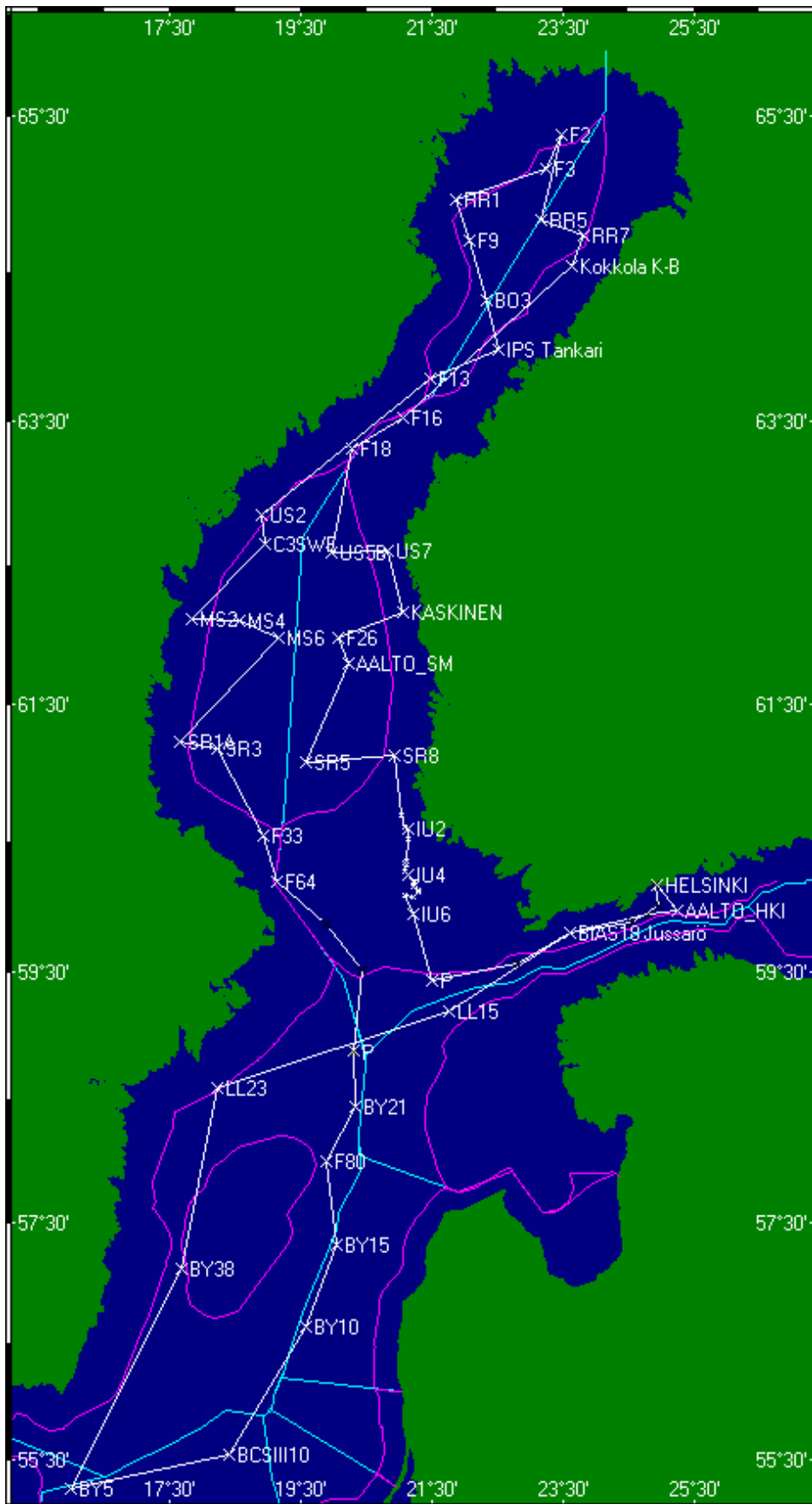
Duration of the cruise: 11 days 2 h 8 min  
 Length of the cruise: 1973,07 nautical miles  
 Number of stations 45. Points with name "P" are just route points without observations.

#### Route:

Nro	Station	Lat.	Long.	Depth		Arrival		Durat. hh:mm	Speed knots
				[m]	hh:mm	dy	dd.mm.yyyy		
0	HELSINKI	60°09.55'	24°55.37'	0	12:00	Mo	26.01.2015	0:00	S 10,0
1	AALTO_HKI	59°57.90'	25°14.10'	62	13:29	Mo	26.01.2015	1:30	S 10,0
2	P	59°56.67'	24°48.77'	-	16:16	Mo	26.01.2015	0:00	S 10,0
3	BIAS18 Jussarö	59°48.06'	23°36.90'	30	19:58	Mo	26.01.2015	1:30	S 10,0

4	P	59°33.33'	22°48.65'	-	00:19	Tu	27.01.2015	0:00	S	10,0
5	P	59°25.59'	21°29.39'	-	04:25	Tu	27.01.2015	0:00	S	10,0
6	TEILI	59°26.02'	21°30.01'	149	04:28	Tu	27.01.2015	1:30	S	10,0
7	IU6	59°56.21'	21°13.26'	120	09:06	Tu	27.01.2015	1:00	S	10,0
8	P	60°05.00'	21°05.10'	-	11:04	Tu	27.01.2015	0:00	S	10,0
9	P	60°04.55'	21°12.80'	-	11:27	Tu	27.01.2015	0:00	S	10,0
10	P	60°06.25'	21°17.20'	-	11:44	Tu	27.01.2015	0:00	S	10,0
11	P	60°07.00'	21°18.00'	-	11:49	Tu	27.01.2015	0:00	S	10,0
12	P	60°09.40'	21°13.75'	-	12:08	Tu	27.01.2015	0:00	S	10,0
13	P	60°09.20'	21°12.75'	-	12:12	Tu	27.01.2015	0:00	S	10,0
14	P	60°11.10'	21°13.80'	-	12:23	Tu	27.01.2015	0:00	S	10,0
15	P	60°11.30'	21°12.40'	-	12:28	Tu	27.01.2015	0:00	S	10,0
16	IU4	60°14.00'	21°08.80'	51	12:47	Tu	27.01.2015	1:00	S	10,0
17	P	60°15.60'	21°05.50'	-	14:01	Tu	27.01.2015	0:00	S	10,0
18	P	60°19.20'	21°06.25'	-	14:23	Tu	27.01.2015	0:00	S	10,0
19	P	60°19.40'	21°05.50'	-	14:25	Tu	27.01.2015	0:00	S	10,0
20	P	60°20.80'	21°06.50'	-	14:34	Tu	27.01.2015	0:00	S	10,0
21	P	60°30.80'	21°08.60'	-	15:34	Tu	27.01.2015	0:00	S	10,0
22	IU2	60°35.01'	21°07.80'	54	16:00	Tu	27.01.2015	1:30	S	10,0
23	P	60°35.90'	21°05.60'	-	17:38	Tu	27.01.2015	0:00	S	10,0
24	P	60°41.00'	21°02.25'	-	18:10	Tu	27.01.2015	0:00	S	10,0
25	SR8	61°07.59'	20°55.80'	46	20:51	Tu	27.01.2015	1:00	S	10,0
26	SR5	61°05.00'	19°34.78'	126	01:46	We	28.01.2015	1:30	S	10,0
27	AALTO_SM	61°48.07'	20°14.00'	100	07:58	We	28.01.2015	1:30	S	10,0
28	F26	61°59.01'	20°03.78'	140	10:40	We	28.01.2015	1:30	S	10,0
29	KASKINEN	62°10.01'	21°02.78'	43	15:08	We	28.01.2015	0:30	S	10,0
30	US7	62°36.01'	20°49.78'	23	18:18	We	28.01.2015	1:00	S	10,0
31	US5B	62°35.17'	19°58.13'	214	21:41	We	28.01.2015	1:30	S	10,0
32	F18	63°18.86'	20°16.36'	105	03:38	Th	29.01.2015	1:30	S	10,0
33	F16	63°31.01'	21°03.77'	45	07:35	Th	29.01.2015	1:30	S	10,0
34	Kokkola K-B	64°31.89'	23°38.02'	19	18:10	Th	29.01.2015	1:00	S	10,0
35	RR7	64°44.02'	23°48.77'	39	20:28	Th	29.01.2015	1:00	S	10,0
36	RR5	64°50.02'	23°09.77'	69	23:14	Th	29.01.2015	1:00	S	10,0
37	F2	65°23.02'	23°27.76'	91	03:37	Fr	30.01.2015	1:30	S	10,0
38	F3	65°10.00'	23°14.00'	100	06:33	Fr	30.01.2015	1:30	S	10,0
39	RR1	64°58.02'	21°51.76'	84	11:43	Fr	30.01.2015	1:30	S	10,0
40	F9	64°42.02'	22°03.77'	120	14:54	Fr	30.01.2015	1:30	S	10,0
41	BO3	64°18.12'	22°20.59'	109	18:53	Fr	30.01.2015	1:30	S	10,0
42	IPS Tankari	63°58.60'	22°31.47'	31	22:24	Fr	30.01.2015	2:30	S	10,0
43	F13	63°47.01'	21°28.77'	65	03:54	Sa	31.01.2015	1:30	S	10,0
44	US2	62°50.72'	18°53.32'	204	14:22	Sa	31.01.2015	1:30	S	10,0
45	C3SWE	62°39.17'	18°57.14'	100	17:02	Sa	31.01.2015	1:30	S	10,0
46	MS2	62°07.00'	17°50.78'	72	22:59	Sa	31.01.2015	1:30	S	10,0
47	MS4	62°06.06'	18°33.12'	86	02:28	Su	01.02.2015	1:30	S	10,0
48	MS6	61°59.02'	19°09.81'	72	05:49	Su	01.02.2015	1:30	S	10,0
49	SR1A	61°14.00'	17°39.79'	61	13:32	Su	01.02.2015	1:10	S	10,0
50	SR3	61°11.00'	18°13.80'	72	16:22	Su	01.02.2015	1:30	S	10,0
51	F33	60°31.99'	18°56.26'	135	22:17	Su	01.02.2015	1:30	S	10,0
52	F64	60°11.34'	19°08.55'	285	01:56	Mo	02.02.2015	2:30	S	7,0
53	P	59°51.81'	19°53.46'	-	08:41	Mo	02.02.2015	0:00	S	7,0
54	P	59°30.80'	20°26.42'	-	12:31	Mo	02.02.2015	0:00	S	7,0
55	P	58°51.71'	20°17.75'	-	18:08	Mo	02.02.2015	0:00	S	7,0
56	LL19	58°52.84'	20°18.65'	169	18:18	Mo	02.02.2015	1:30	S	10,0
57	BY21	58°26.00'	20°19.81'	124	22:29	Mo	02.02.2015	1:30	S	10,0
58	F80	58°00.00'	19°53.81'	191	02:56	Tu	03.02.2015	1:30	S	10,0
59	BY15	57°19.20'	20°03.00'	238	08:32	Tu	03.02.2015	1:30	S	10,0
60	BY10	56°38.00'	19°35.00'	145	14:26	Tu	03.02.2015	1:30	S	10,0
61	BCSIII10	55°33.00'	18°24.00'	90	23:32	Tu	03.02.2015	1:30	S	10,0
62	BY5	55°15.00'	15°59.00'	90	09:28	We	04.02.2015	1:30	S	10,0
63	BY38	57°07.00'	17°40.00'	108	23:30	We	04.02.2015	1:30	S	10,0
64	LL23	58°34.99'	18°13.83'	446	09:59	Th	05.02.2015	1:30	S	10,0
65	LL15	59°11.00'	21°44.81'	126	22:58	Th	05.02.2015	1:30	S	10,0
66	BIAS18 Jussarö	59°48.06'	23°36.90'	30	07:15	Fr	06.02.2015	1:30	S	10,0
67	P	59°52.68'	24°32.74'	-	11:36	Fr	06.02.2015	0:00	S	10,0
68	P	60°00.50'	24°57.02'	-	13:02	Fr	06.02.2015	0:00	S	10,0
69	P	60°10.02'	24°53.55'	-	14:00	Fr	06.02.2015	0:00	S	10,0
70	P	60°09.40'	24°55.01'	-	14:06	Fr	06.02.2015	0:00	S	10,0
71	HELSINKI	60°09.55'	24°55.37'	0	14:08	Fr	06.02.2015	1:30	S	10,0

Route map:



Cruise plan is printed at 18.12.2014 a 12:03.