



RV Aranda

## CRUISE PLAN

### EARTHSEA 2020, 6/2020

30.8. - 4.9.2020

#### Description of the cruise

Purpose of the EARTHSEA cruise is to obtain information of sediment geochemistry, especially accumulated phosphorus at previously uninvestigated areas. Measurements of nutrient concentrations and turbidity of in water column are taken, in relation to development of algal blooms. Data collected during this cruise will be compared to simultaneously collected remote sensing data. Additionally, zooplankton- and nektobenthos samples will be collected for analysis of microplastics in marine food webs.

#### Scientific staff:

<b>Chief scientist:</b>	Juha Flinkman	SYKE	30.08.2020 – 04.09.2020
<b>CTD chief:</b>		SYKE	30.08.2020 – 04.09.2020
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Altogether 11 persons in scientific staff.

**Departure from:** HELSINKI  
**Departure time:** Sunday 30.08.2020 at 22.00

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

**Arrival to:** HELSINKI  
**Arrival time:** Friday 04.09.2020 at 17.11

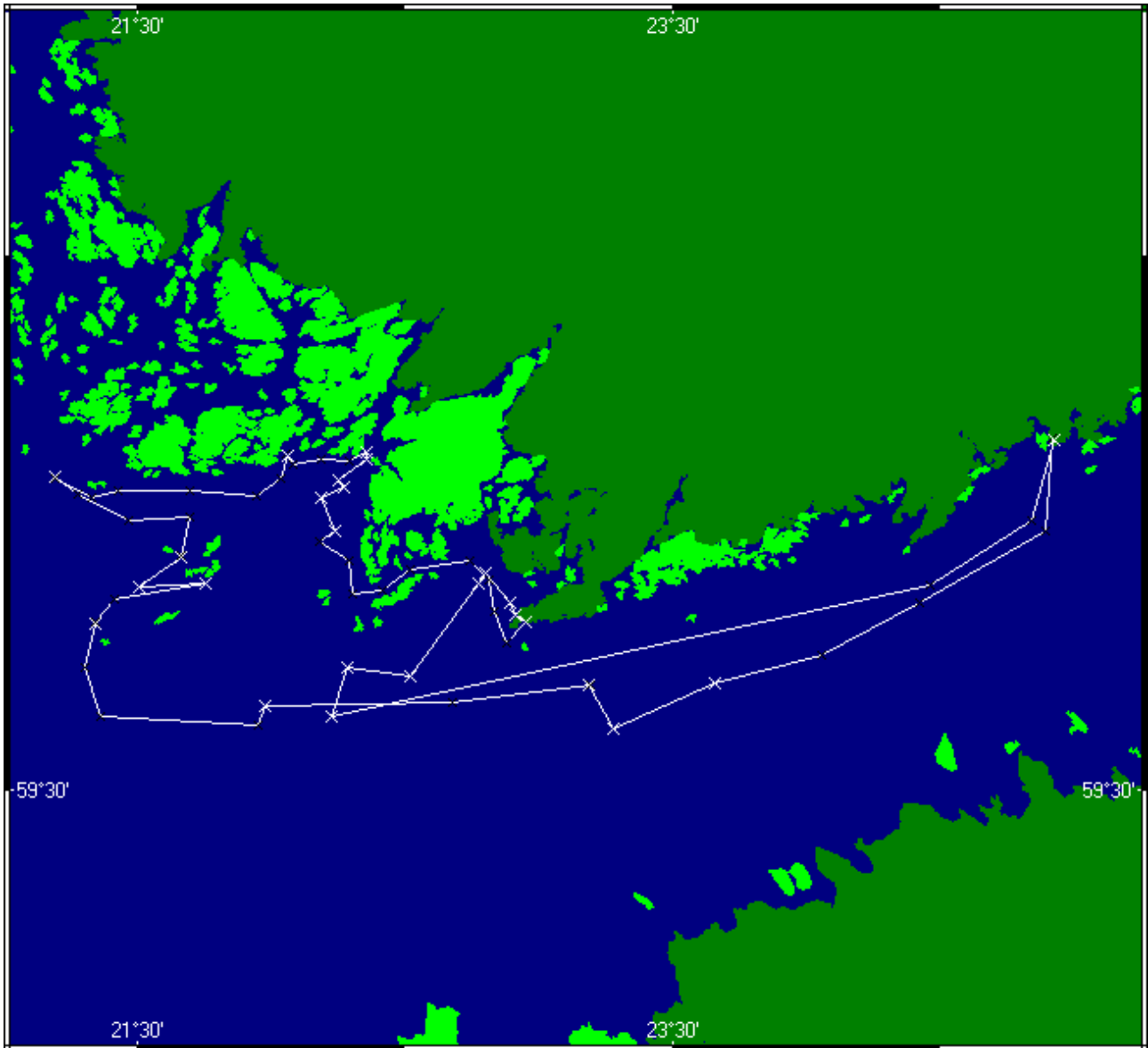
Duration of the cruise: 4 days 19 h 11 min  
 Length of the cruise: 404,37 nautical miles  
 Number of stations 23. Points with name "P" are just route points without observations.

#### Route:

Nro	Station	Lat.	Long.	Depth [m]	Arrival		Durat. hh:mm	Speed knots
					hh:mm	dy dd.mm.yyyy		
0	HELSINKI	60°09.55'	24°55.37'	0	22.00	Su 30.08.2020	0:00	S 10,0
1	P	60°00.51'	24°50.08'	-	22.56	Su 30.08.2020	0:00	S 10,0
2	P	59°53.29'	24°27.67'	-	00.16	Mo 31.08.2020	0:00	S 10,0

3	MAME24	59°38.47'	22°13.52'	40	07.11	Mo	31.08.2020	1:30	S	10,0
4	DRH_13	59°44.00'	22°17.00'	30	09.16	Mo	31.08.2020	1:30	S	10,0
5	BENGTS_SE	59°42.97'	22°30.94'	78	11.28	Mo	31.08.2020	1:30	S	10,0
6	DR_151	59°53.40'	22°46.20'	36	14.16	Mo	31.08.2020	1:30	S	10,0
7	MAME29	59°54.65'	22°48.00'	36	15.55	Mo	31.08.2020	1:30	S	10,0
8	MAME26	59°51.24'	22°53.51'	59	17.52	Mo	31.08.2020	1:30	S	10,0
9	MAME25	59°49.85'	22°54.37'	50	19.30	Mo	31.08.2020	1:30	S	10,0
10	HANKO	59°49.01'	22°56.81'	0	21.09	Mo	31.08.2020	8:00	S	10,0
11	P	59°46.78'	22°52.65'	-	05.28	Tu	01.09.2020	0:00	S	10,0
12	P	59°50.20'	22°49.86'	-	05.50	Tu	01.09.2020	0:00	S	10,0
13	P	59°53.81'	22°48.66'	-	06.12	Tu	01.09.2020	0:00	S	10,0
14	P	59°56.01'	22°44.26'	-	06.31	Tu	01.09.2020	0:00	S	10,0
15	P	59°55.01'	22°31.08'	-	07.11	Tu	01.09.2020	0:00	S	10,0
16	P	59°52.60'	22°24.69'	-	07.35	Tu	01.09.2020	0:00	S	10,0
17	P	59°52.20'	22°17.90'	-	07.55	Tu	01.09.2020	0:00	S	10,0
18	P	59°56.01'	22°17.10'	-	08.18	Tu	01.09.2020	0:00	S	10,0
19	P	59°58.21'	22°10.71'	-	08.42	Tu	01.09.2020	0:00	S	10,0
20	MAME43	59°59.40'	22°14.27'	53	08.54	Tu	01.09.2020	1:30	S	10,0
21	MAME49	60°02.99'	22°11.00'	45	10.48	Tu	01.09.2020	1:30	S	10,0
22	GULLKRO_35	60°04.17'	22°16.13'	56	12.35	Tu	01.09.2020	1:30	S	10,0
23	MAME48	60°05.09'	22°14.73'	35	14.12	Tu	01.09.2020	1:30	S	10,0
24	MAME47	60°07.35'	22°21.01'	35	16.05	Tu	01.09.2020	1:30	S	10,0
25	PALA_124	60°08.19'	22°21.21'	18	17.40	Tu	01.09.2020	1:30	S	10,0
26	P	60°07.08'	22°17.37'	-	19.23	Tu	01.09.2020	0:00	S	10,0
27	P	60°07.27'	22°10.99'	-	19.43	Tu	01.09.2020	0:00	S	10,0
28	P	60°06.68'	22°04.61'	-	20.02	Tu	01.09.2020	0:00	S	10,0
29	P	60°07.87'	22°03.01'	-	20.11	Tu	01.09.2020	0:00	S	10,0
30	MAME53	60°07.79'	22°03.51'	30	20.12	Tu	01.09.2020	1:30	S	10,0
31	P	60°05.13'	22°01.89'	-	21.59	Tu	01.09.2020	0:00	S	10,0
32	P	60°03.16'	21°56.37'	-	22.19	Tu	01.09.2020	7:00	S	10,0
33	P	60°03.75'	21°41.39'	-	06.04	We	02.09.2020	0:00	S	10,0
34	P	60°03.75'	21°25.62'	-	06.51	We	02.09.2020	0:00	S	10,0
35	P	60°02.97'	21°19.71'	-	07.10	We	02.09.2020	0:00	S	10,0
36	P	60°05.13'	21°11.43'	-	07.38	We	02.09.2020	0:00	S	10,0
37	MAME30	60°05.41'	21°11.32'	60	07.39	We	02.09.2020	1:30	S	10,0
38	P	60°03.45'	21°16.53'	-	09.29	We	02.09.2020	0:00	S	10,0
39	P	60°00.50'	21°27.94'	-	10.07	We	02.09.2020	0:00	S	10,0
40	P	60°00.90'	21°41.71'	-	10.49	We	02.09.2020	0:00	S	10,0
41	P	59°56.37'	21°39.75'	-	11.17	We	02.09.2020	0:00	S	10,0
42	P	59°56.64'	21°39.68'	-	11.18	We	02.09.2020	0:00	S	10,0
43	KORP_175	59°56.40'	21°39.60'	69	11.20	We	02.09.2020	1:30	S	10,0
44	MAME32	59°53.10'	21°30.27'	70	13.24	We	02.09.2020	1:30	S	10,0
45	MAME34	59°53.44'	21°45.10'	53	15.39	We	02.09.2020	1:30	S	10,0
46	P	59°51.58'	21°24.56'	-	18.12	We	02.09.2020	3:30	S	10,0
47	P	59°49.19'	21°20.20'	-	22.01	We	02.09.2020	9:00	S	10,0
48	IU7	59°48.91'	21°20.20'	92	07.03	Th	03.09.2020	1:30	S	10,0
49	P	59°43.93'	21°18.19'	-	09.03	Th	03.09.2020	0:00	S	2,5
50	P	59°38.34'	21°21.75'	-	11.24	Th	03.09.2020	0:00	S	10,0
51	P	59°37.34'	21°56.95'	-	13.11	Th	03.09.2020	0:00	S	10,0
52	MAME22	59°39.67'	21°58.44'	55	13.26	Th	03.09.2020	1:30	S	10,0
53	P	59°39.94'	22°40.46'	-	17.03	Th	03.09.2020	0:00	S	10,0
54	P	59°41.94'	23°11.31'	-	18.37	Th	03.09.2020	0:00	S	10,0
55	AJAX1	59°42.01'	23°10.81'	60	18.39	Th	03.09.2020	12:30	S	10,0
56	MAME 20	59°37.03'	23°16.44'	70	07.43	Fr	04.09.2020	1:30	S	10,0
57	MAME21	59°42.24'	23°39.39'	60	10.29	Fr	04.09.2020	1:30	S	10,0
58	P	59°45.25'	24°03.21'	-	13.14	Fr	04.09.2020	0:00	S	10,0
59	P	59°51.21'	24°25.32'	-	14.29	Fr	04.09.2020	0:00	S	10,0
60	P	59°59.32'	24°53.35'	-	16.07	Fr	04.09.2020	0:00	S	10,0
61	P	60°09.76'	24°54.93'	-	17.10	Fr	04.09.2020	0:00	S	10,0
62	HELSINKI	60°09.55'	24°55.37'	0	17.11	Fr	04.09.2020	1:30	S	10,0

Route map:



Cruise plan is printed at 28.08.2020 aa 11.09.