

Report on research cruise with ALKOR, 30.6. – 13.7.2010:

With the research cruise we aimed at the characterization of the CO₂, oxygen and nutrient concentrations in the major basins of the Baltic Sea in order to validate a biogeochemical model that comprehensively simulates the Baltic Sea carbon cycle. Four of the 59 stations were located in Polish waters, the data from these are given below:

latitude	longitude	sample depth	T	salt	CT μmol/kg	NO _{2,3} μmol/L	PO ₄ μmol/L	O ₂ μmol/L
55.2827	17.3895	5	16.91	7.22	1518.4	0.0	0.07	337.7
55.2827	17.3895	15	9.86	7.36	1559.4	0.0	0.10	360.5
55.2827	17.3895	30	8.91	7.20	1604.2	0.0	0.19	319.0
55.2827	17.3895	50	2.13	7.56	1694.2	0.3	0.74	336.8
55.2827	17.3895	83	5.73	13.98	1996.4	8.3	1.82	101.3
55.5492	18.4008	3	16.61	7.07	1505.1	0.0	0.06	344.4
55.5492	18.4008	20	9.23	7.28	1583.8	0.0	0.06	343.1
55.5492	18.4008	50	1.90	7.55	1685.9	0.3	0.66	358.3
55.5492	18.4008	80	5.86	10.07	1961.5	5.9	2.50	32.1
55.2058	18.8429	5	16.37	7.07	1521.9	0.0	0.04	351.6
55.2058	18.8429	20	13.13	7.15	1629.3	0.0	0.04	304.7
55.2058	18.8429	40	9.28	7.21	1636.6	0.0	0.17	310.1
55.2058	18.8429	70	3.51	10.84	1860.2	0.0	0.16	198.1
55.2058	18.8429	85	5.50	12.02	1961.5	8.2	1.64	89.2
54.8333	19.2999	5	17.24	7.17	1518.1	0.0	0.04	340.4
54.8333	19.2999	20	9.74	7.22	1584.9	0.0	0.11	336.4
54.8333	19.2999	60	2.22	7.54	1682.3	0.5	0.58	354.7
54.8333	19.2999	80	5.00	10.99	1898.3	5.8	1.62	147.2
54.8333	19.2999	106	6.85	12.16	2005.2	10.2	2.10	35.2

Bernd Schneider

Warnemuende, 16.7.2010

Dr. Bernd Schneider
Baltic Sea Research Institute
Seestrasse 15
D-18119 Warnemuende
Germany

bernd.schneider@io-warnemuende.de