

C.I.P.S.

MODELE MATHEMATIQUE DE LA  
POLLUTION EN MER DU NORD.

TECHNICAL REPORT  
1975/01 CHIMIE 01.

CROISIERE AURELIA - 28 au 31.01.75

Laboratoires du Professeur R. WOLLAST

CROISIERE ESCAUT - 28 au 30.01.75

Laboratoires du Professeur R. WOLLAST.

CRUISE AURELIA (Laboratoire Walrus)

DER (Ostende)

date	heure	Position		Range	Sire (Depth)		Temperature (Depth)		Wind		Tide (m)	Bar (mm)	Wind Dir
		N.B.	O.L.		1000'	2000'	Wind %	Wind Dir					
1	10h30	52° 53' (1)	4° 33'		1.25		0.125		-	-	30.211	43.2	
2	10h45	50'	33'		1.27		0.110		-	-	-	-	
3	11h00	50'	32'		1.33		0.120		-	-	28.693	41.4	
4	11h15				1.51		0.135		-	-	-	-	
5	11h30	44' 30"	35'		1.54		0.137		-	-	30.044	41.8	
6	11h45				1.35		0.245		-	-	-	-	
7	12h00	40' 0"	33'		1.06		-		-	-	30.438	-	
8	12h15				1.25		0.165		-	-	-	-	
9	12h30	32' 0"	29'		1.33		0.145		-	-	30.273	-	
10	12h45				1.43		0.200		-	-	-	-	
11	13h00	29' 0"	27'		1.66		0.200		-	-	29.201	-	
12	13h15				1.40		0.160		-	-	-	-	
13	13h30	24' 0"	26' 5		1.50		0.190		-	-	29.175	-	
14	13h45				1.67		0.235		-	-	-	-	
15	14h00	20' 0"	25'		1.77		0.202		-	-	30.452	38.2	
16	14h15				1.78		0.205		-	-	-	-	
17	14h30	16'	21'		1.78		0.270		-	-	28.641	-	(38.2) 47
18	14h45				1.70		0.175		-	-	-	-	(37.8) 47
19	15h00	13'	18'		1.97		0.277		-	-	28.175	-	(33.4) 50
20	15h15				1.87		0.182		-	-	-	-	
21	15h30	11' 30"	15'		1.87		0.210		16.35	29.53	28.607	-	
22	15h45				1.85		0.250		16.30	29.45	-	-	
23	16h00	08'	10' 5		1.75		0.320		16.71	30.19	29.085	40.8	
24	16h15				2.14		0.235		15.02	27.15	-	-	
25	16h30	06'	07'		1.35		0.245		16.64	30.06	28.724	-	
26	16h45				1.52		0.125		17.44	31.51	-	-	
27	17h00	03'	04'		0.93		0.075		17.54	31.68	30.506	-	
28	17h15				1.02		0.105		17.24	31.16	-	-	
29	17h30				1.25		-		16.15	29.20	28.370	-	
30	17h45	00' 30"	01'		2.50		0.510		15.05	27.19	-	-	
31	17h42				3.10		0.400		14.74	25.56	24.861	-	
32	-				3.75		0.525		13.04	23.56	22.618	-	
33	17h50	51° 53'	4° 04'		4.30		0.650		13.44	24.28	19.567	-	
34	17h55				4.25		0.775		9.36	16.93	16.804	-	
35	18h02	58' (6)	07'		4.80		0.975		7.93	14.35	14.079	45.2	
36	18h10				5.30		1.025		6.52	11.80	11.708	-	
37	18h14	58' (4)	08'		5.80		1.400		5.36	9.70	9.618	-	
38	18h27				6.20		1.350		4.04	7.33	7.174	36.4	
39	18h30	56' (8)	10' 8		-		-		-	-	-	-	
40	18h41				6.60		1.475		3.57	6.49	6.395	-	
41	18h53				7.15		1.300		2.49	4.53	4.419	52.8	
42	19h10				7.60		1.350		1.41	2.58	2.482	-	
43	19h27	Entrée Cycle Haas			7.60		1.100		0.96	1.76	1.632	20.8	
44	19h47				7.55		1.050		0.71	1.31	1.193	16.4	
45	20h12				7.75		0.800		-	-	0.515	34.2/37.2	53.2
45	07h00	Pan & Bode			7.85		0.900		-	-	0.635	-	
46	07h15				8.25		-		-	-	-	-	
47	07h30	Verilme			8.10		1.225		0.98	1.79	1.712	-	
47a	07h45				8.20		-		1.32	2.41	2.263	-	
47b	08h00				8.05		1.025		1.67	3.04	-	-	
48	08h10				7.40		0.925		3.05	5.53	5.082	-	
49	-				-		1.050		5.36	9.70	9.336	-	
50	-				-		-		-	-	-	-	
51	08h45				2.50		0.330		13.72	24.79	25.855	-	
52	09h00	52° 01'	3° 58'		1.30		0.135		-	-	31.691	-	
53	09h15				0.26		0.070		-	-	-	-	
54	09h30	54° 53'	3° 50'		0.22		0.105		19.28	34.83	-	-	
55	10h00				0.21		-		20.00	36.13	33.491	-	
56	10h30	51'	38'		0.71		0.155		-	-	33.334	-	
57	11h00	46'	31'		0.24		0.220		19.53	35.37	33.022	-	
58	11h30	43'	26'		0.76		0.097		19.65	35.50	33.241	-	
59	12h00	39'	21'		0.20		0.150		19.65	35.50	33.111	-	
60	12h15				0.96		0.071		19.47	35.17	32.811	-	
61	12h25				1.21		0.130		19.15	34.60	32.174	-	
62	12h35	38'	25'		1.36		-		18.90	34.14	31.627	-	
62a	-				-		-		-	-	-	-	
63	12h50				1.42		0.042		-	-	31.435	-	
64	13h00	29'	30'		1.42		-		18.40	33.78	31.426	106.4	
65	13h15				1.61		-		18.47	33.37	31.042	-	
66	13h25	26'	38'		3.40		0.210		15.65	28.28	26.232	-	
67	13h45	25' 7	41'		4.75		0.650		14.00	25.30	23.427	-	
68	14h00	24'	41'		5.70		0.125		12.72	23.17	21.912	62.4	
69	14h15				6.20		0.120		12.20	22.05	20.261	-	
70	14h30	23'	54'		6.00		0.100		11.95	21.51	20.259	146.2	
71	14h45				1.20		0.225		10.02	13.12	11.059	-	
72	15h00	Hörswert			1.75		0.200		8.17	11.78	11.329	31.5	111
												33.5	112
												31.2	111

DER (Ostende)

Date	Station	Heure	Position		Angle	S. ou N. (m. ou fms)		S. ou N. (m. ou fms)	S. ou N. (m. ou fms)		S. ou N. (m. ou fms)	S. ou N. (m. ou fms)	
			N. P.	E. L.		1000	1000		1000	1000			
	13	08h30	51° 25'	30"	3'	37'	2.45	62.5	0.255	14.75	26.98	25.115	
	14	08h45	25'			27'	3.40	50.7	0.300	16.03	28.17	26.914	
	15	09h00	24'	30"		23'	2.45	43.2	0.420	16.66	30.10	22.147	
	16	09h15					2.76	46.0	1.530	17.40	30.89	22.046	
	17	09h30	23'			14'	2.65	44.2	0.281	17.34	31.33	24.261	
	18	09h45					2.50	41.7	0.164	17.66	31.90	24.468	
	19	10h00	22'			04'	2.60	43.3	0.135	17.56	31.73	24.254	
	80	10h45					1.15	19.2	0.270	17.82	35.81	32.831	
	81	10h30	19'	30"	20'	55'	0.75	12.5	0.263	19.12	35.99	33.246	
	82	10h45					0.54	9.0	0.053	20.17	36.44	33.482	
	83	11h00	16'		20'	52' 30"	0.64	10.7	0.113	20.05	36.22	33.228	
	84	11h15					1.34	23.2	0.244	18.62	33.64	31.341	
	85	11h30	12'			47' 30"	1.30	21.7	0.230	18.76	33.39	31.115	
	86	11h45					0.89	14.3	0.102	19.75	35.68	32.137	
	87	12h00	11'			43'	0.85	14.2	0.135	19.53	35.28	32.807	
	88	12h15					0.76	12.7	0.105	19.90	35.95	33.111	
	89	12h30	51° 10'		2°	31'	0.48	8.0	0.058	20.12	36.37	33.555	
	90	12h45	51° 13'			37' 30"	0.46	7.7	0.143	20.27	36.62	33.689	
	90a	12h47	51° 13'	30"	2°	33'	0.40	6.7	0.038	20.45	36.94	-	
	91	13h00	13'			35'	0.60	10.0	0.023	20.32	36.71	33.552	
	92	13h15					0.42	7.0	0.020	20.50	37.03	34.044	26.5
	93	13h30	12'			29'	0.32	5.3	0.044	20.50	37.03	34.159	
	94	13h45					0.30	5.0	0.016	20.72	37.43	34.300	
	95	14h00	11'			25'	0.36		0.051	20.67	37.34	34.362	
	96	14h30	09'			20'	0.34		0.018	20.67	37.34	34.226	
	97	15h00	09'			15'	0.34		0.017	20.77	37.52	34.367	
	98	15h30	08'			10'	0.36		0.030	20.72	37.47	34.246	
	99	16h00	07'			06'	0.42		0.016	20.84	37.65	34.237	
	100	16h30	05'	30"		02'	0.31		0.054	20.94	37.83	34.489	
	101	17h00	05'		1°	56'	0.33		0.035	20.90	37.45	34.427	
	102	17h30	04'			52'	0.20		0.033	21.02	37.97	34.716	Calais
	102a	17h45	05'			50'	0.17		0.023	21.17	38.23	-	42.0 40.5 42.6 43.0 40.7
	103	18h00	08'			53'	-		-	21.19	38.28	34.820	
	104	18h30	11'		2°	00'	0.11		0.032	21.19	38.28	34.838	
	105	19h00	14'			07'	0.19		0.027	21.17	38.23	34.751	
	106	19h30	17'			17'	0.21		0.025	20.84	37.65	34.357	
	107	20h00	19'			21'	0.19		0.027	20.69	37.37	34.662	
	108	20h30	22'			30'	0.18		0.032	20.54	37.40	34.633	
	109	21h00	23'	30"		34'	0.25		0.055	20.64	37.28	34.426	
	110	21h30	26'			40'	0.33		0.028	20.57	37.46	34.482	
	111	22h00	27'			47'	0.29		0.044	20.62	37.25	34.271	
	112	22h30	29'			55'	0.29		0.060	20.52	37.07	34.145	
	113	23h00	30'	30"		58'	0.39		0.067	20.27	36.62	33.657	
	114	23h30	33'		3°	06'	0.64		0.033	20.02	36.17	33.350	
	115	24h00	34'			10'	0.69		0.060	19.87	35.90	32.963	
	115b	00h15					0.59		0.095	19.90	35.95	-	
	116	00h30					1.05		0.078	17.41	34.46	31.616	
	117	00h45					0.90		0.063	19.70	35.59	32.754	
	118	01h00	51° 38'		3°	21'	0.63		0.13	19.80	35.77	32.956	
	119	01h15					0.64		0.083	19.82	35.80	33.168	
	120	01h30	51° 40'		3°	25'	0.64		0.12	19.92	35.98	33.160	
	121	01h45					0.71		0.037	19.90	35.95	33.148	
	122	02h00	43'			29'	0.58		0.022	19.92	35.98	33.248	
	123	02h15					0.67		0.032	20.05	36.22	33.406	
	124	02h30	47'			33'	0.57		0.051	20.10	36.31	33.531	
	125	02h45					0.35		0.062	20.20	36.49	33.621	
	126	03h00	50'			39'	0.54		0.047	20.20	36.49	33.539	
	127	03h15					1.22		0.100	17.34	31.33	28.824	
	128	03h24					2.34		0.202	13.29	24.02	22.407	
	128	03h30	52'			45'	-		-	-	-	-	
	129	03h35					-		-	-	-	-	
	129b	03h35					1.15		0.070	17.81	32.17	-	
	130	03h45					0.92		0.034	18.84	34.04	31.276	
	131	04h00	51° 52'		3°	45'	0.48		0.192	19.90	35.95	33.297	
	132	04h15					0.53		0.034	20.25	36.58	33.655	
	133	04h30	32° 05'		3°	45'	0.37		0.336	20.42	36.46	34.020	
	134	04h45					0.32		0.019	20.54	37.10	34.159	
	135	05h00	10'			45'	0.30		0.020	20.59	37.19	34.236	
	136	05h30	15'			45'	0.25		0.017	20.44	37.47	34.402	
	137	06h00	21'			45'	0.16		0.030	20.22	37.61	34.569	
	138	06h30	27'			45'	0.12		0.017	20.24	37.65	34.630	
	139	06h40	24'	30"	4°	01'	0.16		0.017	20.34	37.65	34.630	
	139	07h00					0.16		0.017	20.34	37.65	34.630	
	140	07h30	34'			54'	0.16		0.019	20.17	37.82	34.511	
	141	07h45	36'	30"	4°	01'	0.16		0.012	20.02	37.61	34.516	
	142	08h30	31'			08'	0.17		0.012	20.32	37.61	34.416	
	143	09h00	40'			16'	0.21		0.076	20.59	37.19	34.335	
	144	09h30	45'			22'	0.22		0.075	20.10	36.51	33.247	
	145	10h00	48'			27'	0.24		0.073	19.20	34.71	32.071	
	146	10h30	52'			35'	0.17		0.054	17.54	32.50	31.079	
	147	11h00	55'	30"	4°	40'	0.24		0.075	17.16	32.10	31.744	

Chemical Excursion (January 1945)

station	station	L. n <sup>o</sup>	date	Reure	Km distance a Rembouckere	S. lvs		a. lvs		C <sub>2</sub> O <sub>3</sub>	S <sub>2</sub> O <sub>3</sub>
						ppm	µm/l	ppm	µm/l		
E1	Breskens	B2	30/1/75		2	2.00	33.3	0.80	8.42	12.61	22.79
E2	Hoofdplaat	B614	30/1/75		9	3.00	50.0	0.75	7.23	11.98	21.66
E3	Pauline Polder	B8	30/1/75	maxie bane	14	3.00	50.0	1.45	12.1	10.94	19.77
E4	Tenneuzen	B22	30/1/75		20	4.30	71.7	2.22	23.3	8.02	14.52
E5	Endracht Polder	B30	30/1/75		25.0	3.95	65.8	1.37	14.4	8.43	15.26
E6	Ossenise	GVO 10	30/1/75		31.5	5.65	94.2	0.90	9.47	7.05	12.77
E7	Hansweert	MG-04	30/1/75		35			1.12		<del>4.88</del> 5.15	9.34
E7'	Hansweert		29/1/75			6.10		1.15		4.69	8.51
E8	Walvoorden	B48	30/1/75		39	6.60	110.0	1.20	12.6	3.72	6.75
E8'	Walvoorden		29/1/75							3.41	6.19
E9	Baalhoek	B54	29/1/75		43.0	6.35	105.2	1.40	14.7	3.18	5.79
E10	Martensonsde Plaaf	B62	29/1/75		46.5	7.45	124.2	1.05	11.0	2.14	3.90
E11	Buth	B79	29/1/75		51	8.75	145.2	0.97	10.2	1.36	2.48
E12	Beltant Plaaf (Sagging)	B72	29/1/75		54.5	8.60	143.3	1.07	11.3	1.10	2.01
E13	Zandriet	B87	29/1/75		57.5	9.05	150.8	0.98	9.3	0.8	1.36
E14	Fou Frederich	B80	29/1/75		59.5	8.60	143.3	0.72	7.6	0.7	1.30
E15	Doel	B86	29/1/75		61.5	7.45	124.2	0.80	8.4	0.4	0.90
E16	Belgische Sluis	B95	29/1/75		64.5	8.80	146.7	0.74	7.8	0.3	0.68
E17	Meertooj	B103	29/1/75		66.5	8.85	147.5	0.93	9.8	0.25	0.62
E18	Fou de Parel	B98	29/1/75		68.5	9.40	156.7	0.64	6.7	0.4	
E18'	Fou de Parel		28/1/75			10.80		0.69		0.2	0.51
E19	Boerensclans	B105	29/1/75		71.5	7.35	122.5	1.16	12.2	0.39	
E20	Boombe	B114	28/1/75		73.5	8.20	136.7	0.49	5.2	0.28	
E21	Kattendykshuis	B109	28/1/75		76.5	7.90	131.7	0.67	7.0	0.27	
E22	S <sup>te</sup> Anna		28/1/75		78.8	7.75	129.2	1.12	11.8	0.27	
E23	Tunnel E3				80.8	8.60	143.3	0.58	6.1	0.27	
E24	Burcht		28/1/75		82.8	9.00	150.0	0.74	7.9	0.27	
E25	Kruibeke				85.2	7.30	121.7	1.04	10.9	0.27	
E26	Hemibsoem				87.5	6.80	113.3	0.81	8.5	0.26	
E27	Schelle				89.5	7.75	129.2	0.40	4.2	0.26	
E28	Ruppelmonde				92.0	7.35	122.5	1.14	12.0	0.265	
E29	Sleendorp				94.0	8.80	146.7	0.74	7.8	0.265	
E30	Temse				97.5	10.65	177.5	1.02	10.7	0.265	
E31	Weert				100.5	8.55	142.5	1.51	15.9	0.265	
E32	Bred				103.5	7.00	116.7	1.26	13.3	0.26	
E33	Mariekerke				108.5	7.25	120.8	2.28	24.0	0.25	
E34	Kardel				115	7.70	128.3	1.70	17.9	0.25	
E35	Gambergen				118.5	6.10	101.7	1.42	14.9	0.265	
E36	Dendbunonde				121.6	8.20	133.3	2.14	22.5	0.27	