

5. Source Allocation of the Atmospheric Load of Pollution

Source allocation tables for the Baltic Sea and its sub-basins. Tables (5.1 - 5.6) with two major contributors (in %) to the deposition of oxidized nitrogen, reduced nitrogen, total (oxidized + reduced) nitrogen, lead, cadmium and mercury to the entire Baltic Sea and its all sub-basins (pages 2 - 7). Comparison of 1997 and 1998 results.

Source allocation tables for the Baltic Sea catchments. Tables (5.7 - 5.12) with two major contributors (in %) to the deposition of oxidized nitrogen, reduced nitrogen, total (oxidized + reduced) nitrogen, lead, cadmium and mercury to all catchments of the Baltic Sea (pages 8 - 13). Comparison of 1997 and 1998 results.

Table 5.1. Comparison of No.1 and No.2 contributors to the deposition of oxidized nitrogen in the sub-basins of the Baltic Sea in 1997 and 1998. Units: percent of the deposition to the sub-basin.

Sub-basin	1997				1998			
	No. 1		No. 2		No. 1		No. 2	
GUB	BAS	16	SE	16	BAS	16	FI	15
BOB	FI	29	SE	17	FI	24	SE	12
BOS	SE	18	BAS	17	BAS	17	SE	16
ARC	BAS	22	DE	12	BAS	25	FI	12
GUF	FI	19	BAS	14	FI	15	BAS	13
GUR	DE	15	BAS	15	BAS	14	PL	12
BAP	DE	18	BAS	17	BAS	17	DE	16
BPN	BAS	19	DE	15	BAS	21	DE	12
BPS	DE	19	BAS	16	DE	20	BAS	15
BSK	DE	16	DK	16	DE	17	GB	14
BES	DE	19	DK	16	DE	20	GB	14
WEB	DE	20	DK	14	DE	20	GB	14
SOU	DK	25	BAS	17	DK	18	BAS	15
KAT	DK	16	BAS	14	DE	14	BAS	14
BAS	BAS	16	DE	15	BAS	16	DE	14

Table 5.2. Comparison of No.1 and No.2 contributors to the deposition of reduced nitrogen in the sub-basins of the Baltic Sea in 1997 and 1998. Units: percent of the deposition to the sub-basin.

Sub-basin	1997				1998			
	No. 1		No. 2		No. 1		No. 2	
GUB	FI	26	SE	22	FI	31	SE	20
BOB	FI	48	SE	14	FI	53	SE	12
BOS	SE	29	FI	18	SE	26	FI	22
ARC	FI	15	PL	15	FI	20	PL	14
GUF	EE	31	FI	11	EE	40	RU	11
GUR	EE	24	DE	12	EE	28	PL	12
BAP	DE	24	PL	19	PL	25	DE	24
BPN	SE	25	DE	14	SE	23	PL	18
BPS	DE	30	PL	23	DE	30	PL	29
BSK	DK	46	DE	32	DK	47	DE	35
BES	DE	44	DK	39	DE	48	DK	38
WEB	DE	46	DK	39	DE	49	DK	37
SOU	DK	38	DE	23	DK	45	DE	24
KAT	DK	56	SE	12	DK	62	DE	13
BAS	DE	24	DK	19	DE	24	DK	19

Table 5.3. Comparison of No.1 and No.2 contributors to the deposition of total (oxidized + reduced) nitrogen in the sub-basins of the Baltic Sea in 1997 and 1998. Units: percent of the deposition to the sub-basin.

Sub-basin	1997				1998			
	No. 1		No. 2		No. 1		No. 2	
GUB	FI	20	SE	18	FI	21	SE	16
BOB	FI	37	SE	16	FI	35	SE	12
BOS	SE	22	FI	14	SE	19	FI	16
ARC	BAS	14	DE	13	BAS	17	FI	14
GUF	EE	16	FI	16	EE	21	FI	13
GUR	DE	14	EE	12	EE	13	PL	12
BAP	DE	21	PL	16	DE	20	PL	18
BPN	SE	17	DE	15	SE	15	PL	14
BPS	DE	25	PL	18	DE	24	PL	21
BSK	DK	33	DE	25	DK	32	DE	27
BES	DE	35	DK	31	DE	37	DK	27
WEB	DE	37	DK	31	DE	39	DK	27
SOU	DK	31	DE	17	DK	30	DE	19
KAT	DK	37	DE	12	DK	38	DE	14
BAS	DE	19	DK	13	DE	19	PL	13

Table 5.4. Comparison of No.1 and No.2 contributors to the deposition of lead in the sub-basins of the Baltic Sea in 1997 and 1998. Units: percent of the deposition to the sub-basin.

Sub-basin	1997				1998			
	No. 1		No. 2		No. 1		No. 2	
GUB	NAT	18	GB	18	NAT	40	UA	10
BOB	NAT	23	RU	12	NAT	42	UA	10
BOS	NAT	16	GB	12	NAT	40	GB	11
ARC	NAT	14	GB	12	NAT	32	UA	10
GUF	PL	21	DE	15	RU	29	NAT	21
GUR	PL	13	NAT	11	NAT	26	UA	12
BAP	PL	26	DE	17	PL	23	NAT	21
BPN	RU	31	EE	16	NAT	27	PL	12
BPS	PL	12	NAT	12	PL	29	DE	19
BSK	DE	18	GB	17	NAT	23	DE	22
BES	DE	24	GB	16	DE	30	NAT	19
WEB	DE	25	GB	16	DE	31	NAT	20
SOU	DE	17	GB	13	DE	20	NAT	18
KAT	GB	19	FR	13	NAT	27	GB	19

Table 5.5. Comparison of No.1 and No.2 contributors to the deposition of cadmium in the sub-basins of the Baltic Sea in 1997 and 1998. Units: percent of the deposition to the sub-basin.

Sub-basin	1997				1998			
	No. 1		No. 2		No. 1		No. 2	
GUB	DE	30	NAT	23	NAT	32	SE	28
BOB	SE	56	NAT	19	SE	47	NAT	23
BOS	PL	27	NAT	26	NAT	42	FI	14
ARC	PL	27	NAT	23	NAT	32	FI	22
GUF	RU	25	PL	21	NAT	25	RU	21
GUR	PL	32	LV	20	PL	23	NAT	23
BAP	PL	58	NAT	9	PL	53	NAT	16
BPN	PL	41	NAT	15	PL	32	NAT	27
BPS	PL	65	DE	10	PL	61	NAT	12
BSK	PL	31	DK	16	NAT	23	DK	22
BES	PL	27	DK	17	DK	21	NAT	21
WEB	PL	27	DE	18	NAT	21	DE	21
SOU	PL	29	DK	28	DK	34	PL	21
KAT	PL	33	DK	15	NAT	27	DK	23

Table 5.6. Comparison of No.1 and No.2 contributors to the deposition of mercury in the sub-basins of the Baltic Sea in 1997 and 1998. Units: percent of the deposition to the sub-basin.

Sub-basin	1997				1998			
	No. 1		No. 2		No. 1		No. 2	
GUB	NAT	91	FI	2	NAT	91	FI	2
BOB	NAT	93	SE	2	NAT	91	SE	2
BOS	NAT	91	PL	2	NAT	91	DE	1
ARC	NAT	86	FI	5	NAT	86	FI	5
GUF	NAT	86	FI	4	NAT	84	FI	3
GUR	NAT	86	PL	4	NAT	82	DE	4
BAP	NAT	66	DE	12	NAT	64	PL	13
BPN	NAT	82	DE	5	NAT	80	DE	5
BPS	NAT	56	DE	17	NAT	54	PL	18
BSK	NAT	54	DK	22	NAT	56	DK	23
BES	NAT	46	DK	27	NAT	48	DK	27
WEB	NAT	47	DK	25	NAT	50	DK	24
SOU	DK	43	NAT	39	DK	45	NAT	40
KAT	NAT	64	DK	16	NAT	67	DK	18

Table 5.7. Comparison of No.1 and No.2 contributors to the deposition of oxidized nitrogen in the catchments of the Baltic Sea in 1997 and 1998. Units: percent of the deposition to the catchment.

Sub-basin	1997				1998			
	No. 1		No. 2		No. 1		No. 2	
GUB	FI	22	SE	16	FI	18	SE	12
BOB	FI	32	SE	15	FI	23	RU	9
BOS	SE	19	FI	16	SE	15	FI	14
ARC	BAS	21	FI	17	BAS	23	FI	21
GUF	RU	23	FI	17	RU	24	FI	12
GUR	PL	13	DE	12	PL	15	DE	9
BAP	PL	36	DE	15	PL	28	DE	19
BSK	DE	15	GB	14	DE	15	GB	13
BES	DE	20	DK	15	DE	21	GB	13
WEB	DE	22	GB	14	DE	22	GB	14
SOU	DK	23	BAS	17	DK	19	BAS	16
KAT	GB	15	DE	12	GB	13	DE	12
BAS	PL	24	DE	13	PL	19	DE	14

Table 5.8. Comparison of No.1 and No.2 contributors to the deposition of reduced nitrogen in the catchments of the Baltic Sea in 1997 and 1998. Units: percent of the deposition to the catchment.

Sub-basin	1997				1998			
	No. 1		No. 2		No. 1		No. 2	
GUB	FI	30	SE	19	FI	38	SE	18
BOB	FI	48	SE	12	FI	54	SE	10
BOS	SE	25	FI	20	SE	25	FI	25
ARC	FI	23	DE	13	FI	39	EE	13
GUF	RU	24	EE	14	RU	28	EE	14
GUR	BY	30	LT	11	BY	39	LT	12
BAP	PL	43	DE	13	PL	49	DE	12
BSK	DK	38	DE	29	DK	41	DE	30
BES	DE	46	DK	36	DE	49	DK	35
WEB	DE	49	DK	36	DE	52	DK	34
SOU	DK	33	SE	23	DK	40	DE	22
KAT	DK	41	SE	21	DK	47	SE	20
BAS	PL	29	DE	13	PL	34	DE	13

Table 5.9. Comparison of No.1 and No.2 contributors to the deposition of total (oxidized + reduced) nitrogen in the catchments of the Baltic Sea in 1997 and 1998. Units: percent of the deposition to the catchment.

Sub-basin	1997				1998			
	No. 1		No. 2		No. 1		No. 2	
GUB	FI	25	SE	17	FI	25	SE	14
BOB	FI	38	SE	14	FI	33	SE	10
BOS	SE	21	FI	17	SE	18	FI	18
ARC	FI	19	BAS	14	FI	27	BAS	15
GUF	RU	23	FI	14	RU	26	FI	13
GUR	BY	20	PL	11	BY	26	PL	11
BAP	PL	40	DE	14	PL	39	DE	15
BSK	DK	26	DE	22	DK	27	DE	23
BES	DE	36	DK	27	DE	38	DK	25
WEB	DE	38	DK	27	DE	41	DK	25
SOU	DK	28	DE	16	DK	29	DE	18
KAT	DK	25	SE	15	DK	28	SE	15
BAS	PL	27	DE	13	PL	26	DE	13

Table 5.10. Comparison of No.1 and No.2 contributors to the deposition of lead in the catchments of the Baltic Sea in 1997 and 1998. Units: percent of the deposition to the catchment.

18	1997				1998			
	No. 1		No. 2		No. 1		No. 2	
GUB	NAR	27	GB	11	NAT	49	UA	8
BOB	NAT	36	RU	12	NAT	52	RU	10
BOS	NAT	22	GB	13	NAT	46	GB	9
ARC	NAT	15	GB	11	NAT	52	RU	10
GUF	RU	46	NAT	13	RU	43	NAT	21
GUR	RU	17	UA	15	NAT	20	UA	19
BAP	PL	44	CZ	17	PL	47	UA	10
BSK	DE	16	GB	16	NAT	26	DE	19
BES	DE	27	GB	15	DE	33	NAT	18
WEB	DE	29	GB	15	DE	36	NAT	18
SOU	DE	16	GB	14	NAT	19	DE	19
KAT	GB	17	FR	11	NAT	31	GB	18

Table 5.11. Comparison of No.1 and No.2 contributors to the deposition of cadmium in the catchments of the Baltic Sea in 1997 and 1998. Units: percent of the deposition to the catchment.

Sub-basin	1997				1998			
	No. 1		No. 2		No. 1		No. 2	
GUB	NAT	46	PL	14	NAT	53	FI	13
BOB	NAT	51	SE	16	NAT	53	FI	14
BOS	NAT	42	PL	19	NAT	55	FI	10
ARC	NAT	25	PL	24	FI	32	NAT	31
GUF	RU	37	NAT	25	RU	34	NAT	29
GUR	PL	29	LV	19	NAT	21	PL	21
BAP	PL	79	CZ	5	PL	74	NAT	6
BSK	PL	29	NAT	15	NAT	30	PL	16
BES	PL	26	DE	20	DE	24	NAT	20
WEB	PL	25	DE	21	DE	26	NAT	21
SOU	PL	30	DK	25	DK	32	PL	23
KAT	PL	31	NAT	18	NAT	37	PL	16

Table 5.12. Comparison of No.1 and No.2 contributors to the deposition of mercury in the catchments of the Baltic Sea in 1997 and 1998. Units: percent of the deposition to the catchment.

Sub-basin	1997				1998			
	No. 1		No. 2		No. 1		No. 2	
GUB	NAT	95	PL	1	NAT	95	DE	1
BOB	NAT	97	FI	1	NAT	96	DE	1
BOS	NAT	95	PL	1	NAT	94	DE	1
ARC	NAT	88	FI	4	NAT	88	FI	4
GUF	NAT	91	RU	3	NAT	88	RU	3
GUR	NAT	85	PL	5	NAT	81	PL	5
BAP	NAT	43	PL	41	NAT	43	PL	39
BSK	NAT	67	DK	13	NAT	68	DK	14
BES	NAT	49	DK	22	NAT	50	DK	22
WEB	NAT	49	DE	21	NAT	50	DE	23
SOU	NAT	49	DK	32	NAT	48	DK	35
KAT	NAT	77	DK	9	NAT	80	DK	9