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Source-receptor tables for 2011

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Supplementary material to EMEP Status Report 1/2013

APPENDIX C

Source-receptor tables for 2011

This supplementary material is an extended version of Appendix C in EMEP Status Report 1/2013 (EMEP MSC-W & CCC & CEIP 2013) containing source-receptor tables calculated for the meteorological and chemical conditions of 2011.

The tables are calculated for the extended EMEP domain and are based on model runs driven by ECMWF meteorology.

The source-receptor (SR) relationships give the change in air concentrations or depositions resulting from a change in emissions from each emitter country.

For each country, reductions in five different pollutants have been calculated separately, with an emission reduction of 15% for SO_x, NO_x, NH_3, NMVOC or PPM, respectively. Here reduction in PPM means that PPM_{fine} and PPM_{coarse} are reduced together in one simulation.

For year 2011, reductions in volcanic emissions are done only for passive SO_2 degassing of Italian volcanoes (Etna and Stromboli). Although there was an eruption episode at Grímsvötn volcano in Iceland in May 2011, this eruption event has not been included in the EMEP model simulations. The eruption plume reached heights up to 16 km, which is beyond the top boundary layer of the EMEP model. Therefore, the plume and its transport can not be simulated by the current version of the model. As described in Simpson et al. (2013), extension of the model's vertical domain is currently under development.

The deposition tables show the contribution from one country to another. They have been calculated adding the differences obtained by a 15% reduction for all emissions in one country multiplied by a factor of 100/15, in order to arrive at total estimates.

For the concentrations and indicator tables, the differences obtained by the 15% emission reduction of the relevant pollutants are given directly. Thus, the tables should be interpreted as estimates of this reduction scenario from the chemical conditions in 2011.

The SR tables in the following aim to respond to two fundamental questions about transboundary air pollution:

1. Where do the pollutants emitted by a country or region end up?
2. Where do the pollutants in a given country or region come from?

Each column answers the first question. The numbers within a column give the change in the value of each pollutant (or indicator) for each receiver country caused by the emissions in the country given at the top of the column.

Each row answers the second question. The numbers given in each row show which emitter countries were responsible for the change in pollutants in the country given at the beginning of each row.

The following SR tables are presented in this supplementary material, all in the extended EMEP domain, including new EECCA countries, and using 2011 ECMWF meteorology:

Acidification and eutrophication

- Deposition of OXS (oxidised sulphur). The contribution from SO_x, NO_x, NH_3, PPM and VOC emissions have been summed up and scaled to a 100% reduction.
- Deposition of OXN (oxidised nitrogen). The contribution from SO_x, NO_x, NH_3, PPM and VOC emissions have been summed up and scaled to a 100% reduction.
- Deposition of RDN (reduced nitrogen). The contribution from SO_x, NO_x, NH_3, PPM and VOC emissions have been summed up and scaled to a 100% reduction.

Ground Level Ozone

- $AOT40_f^{uc}$. Effect of a 15% reduction in NO_x emissions.
- $AOT40_f^{uc}$. Effect of a 15% reduction in VOC emissions.
- SOMO35. Effect of a 15% reduction in NO_x emissions.
- SOMO35. Effect of a 15% reduction in VOC emissions.

Particulate Matter

- $PM_{2.5}$. Effect of a 15% reduction in PPM emissions.
- $PM_{2.5}$. Effect of a 15% reduction in SO_x emissions.
- $PM_{2.5}$. Effect of a 15% reduction in NO_x emissions.
- $PM_{2.5}$. Effect of a 15% reduction in NH_3 emissions.

- $PM_{2.5}$. Effect of a 15% reduction in VOC emissions.
- $PM_{2.5}$. Effect of a 15% reduction in all emissions. The contribution from a 15% reduction in PPM, SO_x, NO_x, NH_3 and VOC emissions have been summed up.

Additional particulate matter components not shown in Appendix C in EMEP Status Report 1/2013:

Fine Sulphate

- SO_4. Effect of a 15% reduction in SO_x emissions.
- SO_4. Effect of a 15% reduction in NO_x emissions.
- SO_4. Effect of a 15% reduction in NH_3 emissions.
- SO_4. Effect of a 15% reduction in VOC emissions.

Fine Ammonium

- NH_4. Effect of a 15% reduction in SO_x emissions.
- NH_4. Effect of a 15% reduction in NO_x emissions.
- NH_4. Effect of a 15% reduction in NH_3 emissions.
- NH_4. Effect of a 15% reduction in VOC emissions.

Fine Nitrate

- Fine NO_3. Effect of a 15% reduction in SO_x emissions.
- Fine NO_3. Effect of a 15% reduction in NO_x emissions.
- Fine NO_3. Effect of a 15% reduction in NH_3 emissions.
- Fine NO_3. Effect of a 15% reduction in VOC emissions.

Coarse Nitrate

- Coarse NO_3. Effect of a 15% reduction in SO_x emissions.
- Coarse NO_3. Effect of a 15% reduction in NO_x emissions.
- Coarse NO_3. Effect of a 15% reduction in NH_3 emissions.
- Coarse NO_3. Effect of a 15% reduction in VOC emissions.

Fine Elemental Carbon

- Fine EC. Effect of a 15% reduction in PPM emissions.

Coarse Elemental Carbon

- Coarse EC. Effect of a 15% reduction in PPM emissions.

References

EMEP MSC-W & CCC & CEIP: Transboundary acidification, eutrophication and ground level ozone in Europe in 2010., EMEP Status Report 1/2013, The Norwegian Meteorological Institute, Oslo, Norway, 2013.

Simpson, D., Tsyro, S., Wind, P., and Steensen, B. M.: EMEP model development, in: Transboundary acidification, eutrophication and ground level ozone in Europe in 2011. EMEP Status Report 1/2013, The Norwegian Meteorological Institute, Oslo, Norway, 2013.

Table C.1: 2011 country-to-country blame matrices for **oxidised sulphur** deposition.
Units: 100 Mg of S. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	ME	
AL	37	0	0	0	10	0	11	0	0	0	1	1	0	0	1	0	0	0	0	27	1	0	0	0	4	-0	0	0	0	-0	0	3	AL
AM	0	62	-0	17	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	4	0	0	0	0	0	0	0	3	0	0	0	0	0	AM
AT	0	0	29	0	18	1	4	0	3	0	18	45	0	0	6	0	7	3	0	1	4	3	0	0	11	0	0	0	0	-0	0	0	AT
AZ	0	13	0	153	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	23	0	0	0	0	0	AZ
BA	1	0	1	0	429	0	12	0	0	0	5	4	0	0	3	0	1	0	0	3	11	4	0	0	7	-0	0	0	0	0	0	11	BA
BE	0	0	0	-0	1	53	0	0	0	0	2	18	0	0	4	0	25	15	-0	0	0	0	0	0	0	0	0	0	1	-0	0	0	BE
BG	1	0	1	0	27	0	632	1	0	0	3	3	0	0	1	0	1	1	0	30	1	2	0	0	2	0	4	0	0	0	1	2	BG
BY	0	0	1	0	25	2	10	132	0	0	18	26	1	8	3	2	5	10	0	1	2	3	0	0	2	0	15	15	0	1	1	1	BY
CH	0	0	0	0	1	1	0	-0	18	0	1	7	0	0	6	0	12	2	-0	0	0	0	0	0	8	0	0	0	0	0	-0	0	CH
CY	0	0	0	0	0	0	1	0	0	3	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	-0	0	0	CY
CZ	0	0	5	0	20	2	5	0	1	0	172	55	0	0	4	0	7	4	-0	1	3	3	0	0	3	0	0	0	0	-0	0	1	CZ
DE	0	0	8	-0	13	47	3	0	9	0	83	924	2	1	32	1	107	70	-0	0	1	1	1	0	6	-0	0	1	2	-0	0	0	DE
DK	0	0	0	0	1	3	1	0	0	0	5	25	14	0	1	0	5	18	-0	0	0	0	0	0	0	-0	0	0	0	0	0	0	DK
EE	0	0	0	0	2	1	1	2	0	0	3	7	1	20	1	4	1	4	0	0	0	0	0	0	0	0	1	3	0	1	0	0	EE
ES	0	0	0	0	6	1	1	0	0	-0	4	9	0	0	848	0	18	4	0	0	1	0	0	0	7	-0	0	0	0	0	0	0	ES
FI	0	0	0	0	5	2	2	3	0	0	8	18	1	34	2	106	4	11	0	0	0	1	0	0	0	0	4	5	0	0	0	0	FI
FR	0	0	2	0	13	18	2	0	6	0	14	74	0	0	228	0	485	58	-0	1	2	1	2	0	25	-0	0	0	1	0	0	1	FR
GB	0	0	0	0	3	6	1	0	0	0	3	15	0	0	17	0	28	471	-0	0	0	0	14	1	1	0	0	0	0	0	0	0	GB
GE	0	10	0	27	1	0	2	0	0	0	0	0	-0	0	0	0	0	0	65	1	0	0	0	0	0	0	6	0	0	0	0	0	GE
GL	-0	0	0	0	0	0	0	0	0	-0	0	0	-0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	-0	-0	0	GL
GR	4	0	0	0	18	0	209	0	0	0	2	2	0	0	2	0	1	1	0	269	1	1	0	0	5	0	2	0	0	0	0	2	GR
HR	1	0	2	0	121	0	9	0	0	0	6	5	0	0	6	0	2	1	0	4	42	5	0	0	13	-0	0	0	0	-0	0	3	HR
HU	1	0	4	0	101	1	23	0	0	0	15	12	0	0	7	0	3	2	0	3	14	63	0	0	8	-0	1	0	0	-0	0	3	HU
IE	0	0	0	0	0	0	0	0	0	0	0	1	0	0	3	0	2	16	0	0	0	0	34	0	0	0	0	0	0	0	-0	0	IE
IS	0	-0	0	0	0	0	0	0	0	-0	0	1	0	0	1	0	1	3	0	0	0	0	0	113	0	0	0	0	0	0	-0	0	IS
IT	3	0	4	0	105	1	29	0	3	0	8	11	0	0	42	0	30	2	0	19	17	3	0	0	337	0	1	0	0	-0	0	5	IT
KG	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70	392	0	0	0	0	0	KG
KZT	0	14	0	40	7	0	11	5	0	0	4	5	0	4	1	2	1	2	8	3	0	1	0	0	0	36	6737	2	0	0	0	0	KZT
LT	0	0	0	0	5	1	1	7	0	0	8	14	1	2	1	1	3	5	0	0	0	1	0	0	0	0	1	51	0	1	0	0	LT
LU	0	-0	0	-0	0	1	0	-0	0	0	0	2	0	0	0	0	3	1	-0	0	0	0	0	0	0	-0	-0	0	1	0	-0	0	LU
LV	0	0	0	0	3	1	1	6	0	0	5	11	1	4	1	2	2	6	0	0	0	0	0	0	0	-0	2	16	0	7	0	0	LV
MD	0	0	0	0	3	0	10	1	0	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2	0	0	0	8	0	MD
ME	3	0	0	0	13	0	4	0	0	0	1	0	0	0	1	0	0	0	0	2	0	0	0	0	2	0	0	0	0	-0	0	19	ME
MK	3	0	0	0	7	0	49	0	0	0	1	1	0	0	0	0	0	0	0	33	0	0	0	0	1	-0	0	0	0	0	0	1	MK
MT	0	-0	0	0	0	0	0	0	0	-0	0	0	-0	0	0	0	0	0	-0	0	0	0	0	-0	0	-0	0	0	0	-0	0	0	MT
NL	0	-0	0	0	1	25	0	0	0	-0	3	32	0	0	3	0	16	27	-0	0	0	0	1	0	0	-0	0	0	0	-0	0	0	NL
NO	0	0	0	0	4	4	1	1	0	0	5	24	2	2	6	3	8	38	0	0	0	0	1	3	0	0	1	1	0	0	-0	0	NO
PL	0	0	4	0	50	6	14	10	1	0	112	148	4	4	10	1	18	22	0	2	6	8	1	0	5	-0	2	6	0	0	1	1	PL
PT	0	0	0	0	0	0	0	0	0	-0	0	1	0	0	35	0	1	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	PT
RO	2	0	2	0	88	1	152	2	0	0	14	15	0	1	5	0	4	3	0	14	4	11	0	0	6	0	8	1	0	0	4	7	RO
RS	4	0	1	0	104	0	69	0	0	0	6	4	0	0	3	0	1	1	0	13	5	8	0	0	5	0	1	0	0	-0	0	15	RS
RUE	2	18	4	72	112	8	119	90	1	1	70	106	4	196	19	83	21	44	23	25	6	9	1	2	9	5	5659	39	0	3	3	6	RUE
SE	0	0	1	0	8	6	2	2	0	0	17	52	8	9	5	17	12	37	0	0	1	1	1	1	1	-0	2	4	0	0	-0	0	SE
SI	0	0	2	0	14	0	2	0	0	0	2	2	0	0	3	0	1	0	0	1	8	1	0	0	10	-0	0	0	0	-0	0	0	SI
SK	0	0	2	0	31	1	9	0	0	0	17	9	0	0	4	0	2	1	0	1	4	13	0	0	4	0	0	0	0	-0	0	1	SK
TJ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	54	0	0	0	0	0	TJ
TM	0	3	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	135	0	0	0	0	0	TM
TR	1	12	0	5	17	0	93	1	0	12	4	4	0	0	2	0	2	1	5	44	1	1	0	0	3	0	7	0	0	0	1	1	TR
UA	1	0	2	3	81	2	91	33	1	0	37	39	1	7	7	3	8	10	2	17	4	11	0	0	6	0	56	5	0	0	8	4	UA
UZ	0	2	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	-0	0	0	9	308	0	0	0	0	0	UZ
ATL	0	0	2	0	19	21	13	4	1	0	36	122	3	26	315	35	106	373	0	2	2	2	45	297	7	0	132	5	1	0	0	1	ATL
BAS	0	0	2	0	17	10	5	4	1	0	41	119	16	35	7	39	20	49	0	1	1	3	1	0	2	0	3	15	0	2	-0	1	BAS
BLS	1	3	1	6	26	1	153	4	0	1	14	12	0	2	2	1	2	3	20	28	1	3	0	0	3	0	25	2	0	0	4	1	BLS
MED	33	0	6	0	471	2	513	1	3	40	32	35	0	1	390	0	136	10	0	500	39	8	0	0	373	0	7	1	0	-0	1	33	MED
NOS	0	0	1	0	17	44	10	2	1	-0	35	167	9	2	37	1	116	542	0	1	1	1	10	4	3	0	1	2	1	0	0	1	NOS
AST	0	14	0	132	8	0	8	1	0	10	2	3	0	1	1	0	1	1	9	8	0	0	0	0	2	14	1199	0	0	0	0	0	AST
NOA	1	0	1	0	34	0	46	0	0	1	3	4	0	0	61	0	14	2	0	40	2	1	0	0	26	0	1	0	0	0	0	3	NOA
SUM	101	152	92	474	2060	274	2334	314	52	69	842	2200	69	361	2135	304	1242	1873	153	1098	188	175	116	425	912	137	14797	177	9	16	32	128	SUM
EXC	65	135	79	335	1468	195	1587	298	45	18	679	1738	41	295	1322	227	846	894	124	518	141	157	59	124	496	123	13430	152	7	14	27	89	EXC
EU	12	0	66	1	532	178	1094	34	25	3	517	1509	33	76	1263	133	784	781	0	344	67	114	56	4	435	0	29	89	6	9	6	26	EU
emis	105	145	93	468	2153	278	2573	316	51	105	845	2223	70	363	2446	305	1273	1894	153	1351	194	174	117	406	976	143	16544	178	9	16	32	139	emis
	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	ME	

Table C.1 Cont.: 2011 country-to-country blame matrices for **oxidised sulphur** deposition.
Units: 100 Mg of S. **Emitters →, Receptors ↓.** (Based on ECMWF meteorology.)

	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	SUM	EXC	EU	
AL	23	0	0	0	2	0	3	30	0	0	0	0	-0	0	4	3	0	0	0	0	18	0	0	2	6	1	54	246	164	53	AL
AM	0	0	0	0	0	-0	0	0	1	0	0	0	0	1	36	1	1	0	0	0	1	0	29	0	9	0	45	214	129	1	AM
AT	1	0	1	0	18	0	5	9	1	0	5	4	0	0	1	7	0	1	0	0	8	2	0	1	12	1	7	238	206	161	AT
AZ	0	0	0	0	2	-0	0	0	16	0	0	0	0	5	21	12	5	0	0	0	1	0	44	0	10	0	37	361	268	3	AZ
BA	3	0	0	0	18	0	9	50	1	0	0	5	-0	0	2	7	0	0	0	0	13	0	0	2	7	0	19	633	591	74	BA
BE	0	0	4	0	3	0	0	0	0	0	0	0	-0	0	0	1	0	3	0	0	1	13	-0	0	5	1	0	153	129	127	BE
BG	25	0	0	0	20	0	86	59	14	0	0	3	0	0	99	61	0	0	0	11	12	0	0	2	12	1	79	1200	1083	787	BG
BY	1	0	1	0	223	0	20	15	51	1	1	10	0	0	3	147	0	2	6	1	3	5	0	1	19	1	18	816	759	365	BY
CH	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	5	1	0	1	9	0	2	77	59	39	CH
CY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	0	0	0	0	0	5	0	1	1	1	0	8	48	31	5	CY
CZ	1	0	1	0	67	0	8	15	2	0	1	14	0	0	0	12	0	1	1	0	3	2	0	0	9	1	4	428	407	353	CZ
DE	1	0	31	0	106	1	6	8	3	1	1	5	-0	0	0	20	0	17	18	0	11	62	0	1	49	8	6	1672	1499	1442	DE
DK	0	0	3	0	19	0	1	1	1	1	0	1	0	0	0	2	0	3	16	0	0	18	0	0	6	3	0	152	105	98	DK
EE	0	0	0	0	24	0	2	1	8	1	0	1	-0	0	0	6	0	1	8	0	0	2	0	0	4	1	1	113	95	74	EE
ES	0	0	1	0	8	21	2	3	0	0	0	1	-0	0	0	4	0	69	0	0	136	2	0	20	139	9	7	1325	942	927	ES
FI	0	0	2	2	63	0	5	3	56	13	0	3	0	0	1	20	0	3	21	0	1	8	0	0	28	4	3	445	376	280	FI
FR	1	0	5	0	23	5	3	5	1	0	1	3	-0	0	0	8	0	90	1	0	106	42	0	9	101	17	13	1367	988	951	FR
GB	0	0	4	0	7	1	1	1	1	0	0	1	0	0	0	4	0	83	1	0	3	44	0	0	49	22	2	786	583	572	GB
GE	0	0	0	0	3	0	2	1	8	0	0	0	0	2	59	14	1	0	0	4	1	0	17	0	12	0	55	291	200	8	GE
GL	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	143	1	0	149	4	1	GL
GR	62	0	0	0	11	0	26	36	6	0	0	2	0	0	155	29	0	0	0	5	75	0	0	8	18	2	171	1130	849	532	GR
HR	2	0	0	0	19	0	10	39	1	0	2	5	0	0	2	8	0	0	0	0	25	0	0	2	7	1	13	359	309	89	HR
HU	5	0	0	0	55	0	42	81	3	0	2	27	-0	0	2	28	0	1	0	1	11	1	0	1	10	1	13	546	507	268	HU
IE	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	30	0	0	1	2	0	0	18	9	0	122	62	60	IE
IS	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	20	7	1	155	120	7	IS
IT	12	1	0	0	25	1	14	35	2	0	6	5	0	0	10	15	0	3	0	1	233	1	0	21	54	6	530	1596	746	538	IT
KG	0	0	0	0	0	0	0	0	4	0	0	0	30	6	3	2	699	0	0	0	0	0	40	0	47	0	70	1365	1207	0	KG
KZT	2	0	0	0	40	0	11	5	813	1	0	2	20	125	122	346	890	1	2	3	3	1	268	1	194	1	322	10061	9264	93	KZT
LT	0	0	1	0	93	0	4	3	11	1	0	3	0	0	0	20	0	1	5	0	1	3	0	0	7	1	2	262	242	193	LT
LU	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	-0	0	0	0	0	0	-0	0	0	0	0	11	9	9	LU
LV	0	0	1	0	53	0	2	2	9	2	0	2	-0	0	0	12	0	1	7	0	0	3	0	0	6	1	1	172	151	117	LV
MD	1	0	0	0	11	0	20	3	5	0	0	1	0	0	9	42	0	0	0	2	1	0	0	0	2	0	13	140	121	47	MD
ME	2	0	0	0	2	0	1	16	0	0	0	0	0	0	1	1	0	0	0	0	7	0	0	1	3	0	14	96	72	14	ME
MK	73	0	0	0	3	0	5	27	1	0	0	1	-0	0	6	5	0	0	0	0	4	0	0	1	3	0	23	249	217	94	MK
MT	0	1	0	-0	0	0	0	0	0	0	0	0	-0	-0	0	0	-0	0	0	0	2	0	0	0	0	0	1	5	1	1	MT
NL	0	0	30	0	6	0	0	0	0	0	0	0	-0	0	0	2	0	4	1	0	1	41	0	0	6	2	0	203	148	144	NL
NO	0	0	3	29	27	0	2	3	7	5	0	1	0	0	0	5	0	20	8	0	1	31	0	0	51	14	2	314	186	133	NO
PL	3	0	5	0	1432	0	36	39	17	2	2	36	-0	0	1	107	0	5	14	1	6	12	0	1	30	4	14	2202	2116	1877	PL
PT	0	0	0	0	1	64	0	0	0	0	0	0	-0	0	0	0	0	44	0	0	8	0	0	2	37	2	1	198	104	103	PT
RO	18	0	0	0	79	0	569	96	25	0	1	15	0	0	51	178	0	1	1	10	12	2	0	2	24	1	76	1507	1377	892	RO
RS	25	0	0	-0	23	0	55	357	3	0	0	7	0	0	11	20	0	0	0	1	8	0	0	2	10	0	34	802	745	198	RS
RUE	21	0	5	4	608	1	128	70	10854	18	2	32	4	74	513	2183	263	21	46	32	27	28	175	4	1207	20	672	23771	21539	1554	RUE
SE	0	0	5	7	103	0	7	7	17	53	0	4	0	0	0	19	0	8	42	0	1	36	0	0	41	8	3	548	408	343	SE
SI	0	0	0	0	5	0	3	6	0	0	13	1	-0	0	1	2	0	0	0	0	9	0	0	1	3	0	3	94	78	46	SI
SK	2	0	0	0	62	0	17	25	2	0	1	57	0	0	0	17	0	0	0	0	5	1	0	1	6	0	5	302	284	201	SK
TJ	0	0	0	0	0	0	0	0	1	0	0	0	64	10	2	1	218	0	0	0	0	0	22	0	45	0	40	459	353	0	TJ
TM	0	0	0	0	1	0	0	0	18	0	0	0	4	146	15	12	173	0	0	0	1	0	149	0	69	0	52	792	521	3	TM
TR	10	0	0	0	22	0	32	21	32	0	0	2	0	1	4831	112	2	0	0	33	116	1	223	33	131	8	832	6661	5284	225	TR
UA	13	0	1	0	349	0	133	57	195	1	1	25	0	1	240	1712	3	3	4	25	17	5	3	3	52	4	125	3414	3174	760	UA
UZ	0	0	0	0	2	0	0	0	20	0	0	0	28	50	15	13	827	0	0	0	1	0	77	0	57	0	65	1483	1282	4	UZ
ATL	3	0	14	34	156	39	12	11	297	14	1	9	0	1	7	63	4	1930	18	0	40	88	2	8	4809	1194	47	10372	2236	1359	ATL
BAS	1	0	8	3	303	0	13	14	36	31	1	10	0	0	0	47	0	8	156	0	2	43	0	0	39	13	4	1127	861	732	BAS
BLS	10	0	0	0	104	0	125	33	156	0	1	9	0	1	990	682	3	1	2	168	32	2	22	5	42	15	164	2886	2433	467	BLS
MED	108	23	1	0	124	4	140	206	29	0	7	21	0	0	3060	187	1	18	2	35	4140	5	82	400	447	121	1855	13653	6548	2368	MED
NOS	2	0	36	13	137	2	8	11	5	3	1	6	0	0	1	22	0	102	22	0	8	441	0	1	137	92	5	2066	1258	1177	NOS
AST	2	0	0	0	15	0	4	3	157	0	0	1	22	139	375	147	334	1	1	3	52	1	2801	22	994	3	498	6990	2616	58	AST
NOA	9	3	0	0	11	2	15	17	3	0	0	2	0	0	148	18	0	8	0	2	342	1	4	306	395	14	121	1663	470	232	NOA
SUM	447	31	165	95	4491	145	1589	1425	12899	148	54	337	171	564	10825	6389	3426	2494	406	342	5521	955	3962	867	9654	1618	6154	108490			SUM
EXC	311	4	105	45	3642	97	1271	1130	12215	100	44	279	149	423	6243	5222	3084	426	205	133	905	375	1051	125	2790	167	3460		60095	14867	EXC
EU	132	3	93	11	2286	95	839	437	181	74	36	185	0	0	348	576	1	369	138	30	653	300	2	71	676	107	952		13526	11102	EU
emis	505	40	168	94	4550	233	1655	1515	14349	148	54	342	182	800	13258	6599	3876	3221	408	362	6826	961	7352	2065	0	3715	12500	121917	84507	22480	emis
	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	SUM	EXC	EU	

Table C.2: 2011 country-to-country blame matrices for **oxidised nitrogen** deposition.
Units: 100 Mg of N. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	ME	
AL	8	0	1	0	1	0	2	0	0	0	1	2	0	0	1	0	1	1	0	25	1	1	0	0	10	0	0	0	0	0	0	1	AL
AM	0	13	0	11	-0	0	0	0	0	0	0	0	0	-0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	AM
AT	0	0	74	0	2	4	1	0	10	0	15	86	1	0	6	0	21	5	0	1	5	6	0	0	42	0	0	0	2	0	0	0	AT
AZ	0	4	0	65	-0	0	0	0	0	0	0	1	0	0	0	0	0	0	13	0	0	0	0	0	0	0	3	0	0	0	0	0	AZ
BA	1	0	6	0	25	1	2	0	1	0	7	14	0	0	3	0	4	2	0	3	8	9	0	0	23	0	-0	0	0	0	0	2	BA
BE	0	0	1	0	0	16	0	0	1	0	2	20	0	0	5	0	34	20	0	0	0	0	1	0	2	0	0	0	3	0	0	0	BE
BG	2	0	4	0	2	1	78	2	1	0	5	13	1	0	2	0	4	3	0	25	2	7	0	0	7	0	0	0	0	0	3	0	BG
BY	0	0	7	0	2	7	2	56	2	0	15	68	8	3	5	5	16	25	0	1	2	9	1	0	10	0	1	12	1	4	3	0	BY
CH	0	0	3	0	0	2	0	0	30	-0	1	14	0	-0	5	0	30	4	0	0	0	0	0	0	29	-0	0	-0	1	-0	0	0	CH
CY	0	0	0	0	0	0	0	0	0	2	0	0	0	-0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	CY
CZ	0	0	24	0	2	6	1	1	4	0	55	99	2	0	5	0	24	9	0	1	4	11	0	0	12	0	0	0	3	0	0	0	CZ
DE	0	0	44	0	2	77	1	3	29	0	56	605	11	1	37	2	235	125	0	1	3	7	5	0	33	0	0	1	27	1	0	0	DE
DK	0	0	1	0	0	7	0	1	0	-0	4	36	4	0	2	0	14	31	0	0	0	1	1	0	1	0	0	0	1	0	0	0	DK
EE	0	0	1	0	0	2	0	3	0	0	2	17	3	4	1	4	4	9	0	0	0	1	0	0	1	0	0	2	0	2	0	0	EE
ES	0	0	4	-0	0	6	0	0	2	0	3	23	1	0	675	0	68	13	0	0	1	1	1	0	27	0	-0	0	2	0	0	0	ES
FI	0	0	2	0	0	8	0	9	1	0	7	50	11	10	2	79	13	32	0	0	0	2	2	0	2	0	0	6	1	4	0	0	FI
FR	0	0	17	0	1	42	0	1	22	0	14	137	3	0	246	0	644	106	0	1	3	4	6	0	106	0	0	0	13	0	0	0	FR
GB	0	0	2	0	0	11	0	0	1	0	3	33	2	0	22	0	67	269	0	0	0	1	20	0	8	0	0	0	1	0	0	0	GB
GE	0	4	0	15	-0	0	0	0	0	0	0	1	0	0	0	0	0	0	38	0	0	0	0	0	0	0	0	0	0	0	0	0	GE
GL	-0	-0	0	-0	-0	0	-0	0	0	0	0	1	0	0	0	0	0	1	-0	0	-0	0	0	0	0	0	0	0	0	0	0	-0	GL
GR	4	0	3	0	2	1	36	1	1	0	3	8	0	0	3	0	4	2	0	123	1	4	0	0	14	0	0	0	0	0	1	0	GR
HR	1	0	12	0	11	1	2	0	1	0	8	17	0	0	7	0	6	2	0	3	17	9	0	0	43	0	0	0	0	0	0	1	HR
HU	1	0	20	0	9	2	5	1	2	0	19	42	1	0	8	0	12	4	0	3	10	38	0	0	29	0	0	0	1	0	1	1	HU
IE	0	0	0	0	0	2	0	0	0	0	0	3	0	0	4	0	7	20	0	0	0	0	10	0	1	0	0	0	0	0	0	0	IE
IS	0	0	0	0	-0	1	-0	0	0	-0	0	3	0	0	1	0	2	5	0	0	0	0	0	5	0	0	-0	0	0	0	0	-0	IS
IT	3	0	33	0	11	4	4	0	16	0	10	44	1	0	49	0	76	8	0	15	19	10	0	0	745	0	-0	0	1	0	0	1	IT
KG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	69	31	0	0	0	0	0	KG
KZT	0	6	3	23	-0	4	1	11	1	0	5	29	5	1	3	8	10	21	7	2	1	2	1	1	5	56	570	2	1	2	2	0	KZT
LT	0	0	2	0	0	4	0	10	1	0	6	36	5	1	2	1	8	14	0	0	1	2	1	0	2	0	0	8	1	2	0	0	LT
LU	0	0	0	0	0	1	0	0	0	0	0	2	0	0	1	0	4	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	LU
LV	0	0	1	0	0	4	0	7	0	0	4	30	5	2	2	3	7	14	0	0	0	1	1	0	2	0	0	7	1	4	0	0	LV
MD	0	0	1	0	0	0	2	2	0	0	2	5	0	0	0	0	1	1	0	1	0	1	0	0	1	0	0	0	0	0	3	0	MD
ME	1	0	1	-0	2	0	1	0	0	0	1	2	0	0	1	0	1	0	0	2	1	1	0	0	6	-0	-0	0	0	0	0	3	ME
MK	2	0	1	0	1	0	6	0	0	0	1	2	0	0	1	0	1	0	0	21	0	2	0	0	3	0	0	0	0	0	0	0	MK
MT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	MT
NL	0	0	1	0	0	14	0	0	0	-0	2	26	1	0	4	0	25	32	0	0	0	0	1	0	2	0	0	0	1	0	0	0	NL
NO	0	0	1	0	0	11	0	2	1	0	4	52	15	1	7	5	25	63	0	0	0	1	3	1	2	0	0	1	2	1	0	0	NO
PL	0	0	25	0	4	26	3	16	5	-0	80	278	18	2	12	3	58	60	0	2	7	27	2	0	22	0	1	6	6	2	2	0	PL
PT	0	0	0	-0	0	1	0	0	0	0	0	2	0	0	55	0	5	2	0	0	0	0	0	0	1	-0	-0	0	0	0	0	0	PT
RO	2	0	13	0	7	3	29	5	3	0	17	49	3	0	7	1	13	9	0	11	5	27	0	0	24	0	1	1	1	0	9	1	RO
RS	3	0	7	-0	9	1	14	1	1	0	9	19	1	0	3	0	5	3	0	14	4	16	0	0	16	0	0	0	0	0	1	3	RS
RUE	1	7	33	39	5	43	18	168	9	0	63	340	56	53	27	143	93	177	21	18	7	29	8	3	47	8	476	46	10	29	13	1	RUE
SE	0	0	4	0	0	18	0	6	1	0	14	109	33	4	6	25	34	81	0	0	1	3	3	0	3	0	0	4	3	3	0	0	SE
SI	0	0	11	0	1	0	0	0	1	0	3	9	0	0	3	0	3	1	0	0	6	2	0	0	24	0	0	0	0	0	0	0	SI
SK	0	0	10	0	3	2	2	1	1	0	15	27	1	0	4	0	7	3	0	1	4	19	0	0	14	0	0	0	1	0	0	0	SK
TJ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	5	0	0	0	0	0	TJ
TM	0	1	0	8	-0	0	0	1	0	0	0	2	0	0	0	0	1	2	2	0	0	0	0	0	1	1	19	0	0	0	0	0	TM
TR	1	5	4	4	1	2	20	3	1	7	4	16	1	0	4	1	7	5	5	25	1	4	0	0	13	0	1	1	0	0	3	0	TR
UA	1	0	16	2	6	11	19	49	4	0	37	120	10	3	10	7	30	32	2	13	6	30	1	0	25	0	8	7	3	3	17	1	UA
UZ	0	1	0	4	-0	0	0	1	0	0	0	3	0	0	0	1	1	2	1	0	0	0	0	0	1	11	39	0	0	0	0	0	UZ
ATL	0	0	20	-0	1	76	1	13	9	0	36	325	42	14	325	65	346	646	-0	2	2	8	70	34	33	0	11	7	14	5	1	0	ATL
BAS	0	0	9	0	1	28	1	12	3	0	26	190	32	8	10	30	57	102	0	1	2	7	4	0	7	0	0	10	5	6	1	0	BAS
BLS	1	2	10	4	2	4	31	11	2	0	13	44	4	1	3	3	13	14	17	18	2	11	1	0	11	0	3	2	1	1	12	0	BLS
MED	27	0	57	-0	41	18	85	5	22	22	35	141	5	0	452	2	352	57	1	331	47	34	4	0	922	0	0	1	6	0	6	8	MED
NOS	0	0	11	0	2	66	2	5	7	0	25	241	32	1	49	3	207	559	0	2	2	6	26	1	22	0	0	2	9	1	0	0	NOS
AST	0	7	2	67	0	2	2	4	1	9	2	13	2	0	2	2	5	8	9	7	1	1	0	0	9	21	95	1	1	0	1	0	AST
NOA	3	0	9	0	3	4	10	2	4	1	5	24	1	0	107	1	67	14	0	49	4	4	1	0	115	0	0	0	1	0	1	1	NOA
SUM	63	52	513	242	160	547	381	413	204	44	639	3474	320	109	2190	399	2672	2625	121	726	181	363	178	49	2479	168	1266	132	128	74	83	25	SUM
EXC	31	43	395	172	111	348	249	361	155	11	497	2495	204	86	1242	294	1627	1224	94	317	122	290	73	13	1359	147	1157	109	92	59	61	16	EXC
EU	12	0	297	1	49	262	161	67	103	2	338	1784	106	24	1163	122	1391	876	1	186	73	174	57	3	1124	0	3	39	72	20	19	5	EU
emis	73	65	556	299	156	639	413	520	226	63	688	3935	382	109	2786	467	3060	3144	176	901	202	393	215	65	2830	204	1416	154	146	97	95	28	emis
	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	ME	

Table C.2 Cont.: 2011 country-to-country blame matrices for **oxidised nitrogen** deposition.
Units: 100 Mg of N. **Emitters →, Receptors ↓.** (Based on ECMWF meteorology.)

	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	SUM	EXC	EU	
AL	7	0	0	0	2	0	1	14	1	0	0	0	0	0	2	1	0	0	0	0	16	1	0	0	2	-0	0	107	87	51	AL
AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	14	0	0	0	0	0	1	0	3	0	2	-0	0	50	44	1	AM
AT	0	0	6	0	13	0	2	4	1	0	11	2	0	0	0	1	0	2	1	0	7	7	0	0	2	-0	0	345	325	299	AT
AZ	0	0	0	0	1	0	0	0	20	0	0	0	0	1	9	3	1	0	0	1	1	1	8	0	1	-0	0	135	124	4	AZ
BA	1	0	1	0	14	0	4	24	1	0	1	4	0	0	1	2	0	1	1	0	12	2	0	0	1	-0	0	182	165	99	BA
BE	0	0	6	0	2	1	0	0	0	0	0	0	0	0	0	0	0	5	1	0	1	14	0	0	4	0	0	142	116	114	BE
BG	6	0	1	1	16	0	39	27	17	1	1	3	0	0	32	23	0	1	2	9	12	4	0	0	-1	-0	0	357	329	211	BG
BY	0	0	11	3	120	1	9	6	62	6	2	8	0	0	1	48	0	5	21	1	4	27	0	-0	3	-0	-0	602	542	355	BY
CH	0	0	1	0	1	0	0	0	0	0	0	0	-0	0	0	0	0	1	0	0	4	3	0	0	3	-0	0	134	123	92	CH
CY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	6	0	0	0	0	-0	0	20	13	4	CY
CZ	0	0	7	1	38	0	3	8	2	1	4	7	0	0	0	3	0	2	4	0	3	12	0	0	3	0	0	363	338	313	CZ
DE	0	0	77	5	67	3	3	4	6	4	3	5	0	0	0	6	0	30	24	0	11	125	0	0	31	1	0	1710	1488	1429	DE
DK	0	0	10	2	10	0	0	1	1	2	0	1	0	0	0	1	0	4	12	0	1	32	0	0	3	0	0	186	134	128	DK
EE	0	0	3	2	14	0	1	0	12	5	0	1	0	0	0	2	0	2	15	0	0	10	0	-0	1	0	-0	125	97	78	EE
ES	0	0	5	1	5	55	1	1	1	0	1	1	0	0	0	0	0	65	1	0	160	12	0	2	52	0	-0	1190	898	891	ES
FI	0	0	12	11	41	0	2	1	62	29	0	2	0	0	0	6	0	7	51	0	1	41	0	-0	6	0	0	515	408	317	FI
FR	0	0	28	2	15	15	2	2	2	1	3	2	0	0	0	2	0	89	4	0	104	97	0	1	39	0	0	1777	1442	1407	FR
GB	0	0	14	2	7	3	1	1	1	1	0	1	0	0	0	1	0	59	3	0	5	64	0	0	24	1	0	633	478	468	GB
GE	0	0	0	0	1	0	0	0	10	0	0	0	0	0	22	3	0	0	0	3	1	1	2	0	2	-0	0	108	99	6	GE
GL	0	-0	0	1	0	0	-0	0	1	0	0	0	0	-0	0	0	0	1	0	0	0	1	-0	-0	65	0	0	73	6	4	GL
GR	15	0	1	0	9	0	12	20	7	0	0	2	0	0	63	10	0	1	1	6	71	3	0	1	3	-0	0	435	349	224	GR
HR	1	0	1	0	14	0	4	17	1	0	5	4	0	0	1	2	0	1	1	0	22	3	0	0	2	-0	0	221	192	140	HR
HU	1	0	3	0	46	1	17	35	3	1	5	17	0	0	1	9	0	1	2	1	11	6	0	0	3	-0	0	376	351	277	HU
IE	0	0	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0	16	1	0	1	6	0	0	7	0	0	82	52	51	IE
IS	0	0	1	0	1	0	-0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	2	0	0	7	0	0	35	21	15	IS
IT	3	1	4	1	16	2	5	18	2	0	18	4	0	0	4	2	0	5	2	1	224	8	0	2	18	-0	1	1396	1135	1053	IT
KG	0	0	0	0	0	0	0	0	3	0	0	0	24	1	1	0	118	0	0	0	0	0	7	0	13	-0	0	272	251	2	KG
KZT	0	0	7	9	29	0	3	2	781	7	0	3	19	22	37	79	149	11	18	5	6	26	46	0	30	-1	1	2073	1932	158	KZT
LT	0	0	7	1	47	0	2	1	12	4	0	2	0	0	0	6	0	2	14	0	1	16	0	0	2	0	0	225	190	158	LT
LU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	15	13	13	LU
LV	0	0	6	2	30	0	1	1	13	6	0	1	0	0	0	4	0	2	17	0	1	16	0	-0	1	0	-0	196	158	131	LV
MD	0	0	1	0	10	0	8	1	7	0	0	1	0	0	3	18	0	0	1	2	1	2	0	0	-1	-0	0	78	73	37	MD
ME	1	0	0	0	1	0	1	8	0	0	0	0	-0	0	0	0	0	0	0	0	5	0	0	0	1	-0	0	40	33	17	ME
MK	11	0	0	0	2	0	2	15	1	0	0	1	0	0	4	1	0	0	0	0	4	1	0	0	1	-0	0	85	79	44	MK
MT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2	1	1	MT
NL	0	0	17	1	3	1	0	0	0	0	0	0	0	0	0	0	0	7	2	0	1	27	0	0	6	0	0	176	133	130	NL
NO	0	0	16	47	16	1	0	1	7	17	0	1	0	0	0	1	0	15	27	0	1	74	0	0	14	0	0	437	306	246	NO
PL	1	0	36	5	413	1	16	15	21	8	6	26	0	0	1	38	0	12	44	1	7	70	0	0	14	0	0	1405	1257	1140	PL
PT	0	0	1	0	0	63	0	0	0	0	0	0	-0	-0	0	0	-0	38	0	0	11	1	0	0	17	0	-0	200	132	132	PT
RO	4	0	4	1	65	1	176	39	29	2	3	13	0	0	19	68	0	2	6	10	13	12	0	0	-3	-0	0	707	666	473	RO
RS	7	0	2	0	21	0	22	94	3	0	1	7	0	0	4	6	0	1	2	1	9	4	0	0	1	-0	0	317	300	163	RS
RUE	4	0	65	70	401	3	45	26	5505	83	5	27	4	12	140	518	34	67	208	31	45	226	28	-1	309	-2	5	9853	8935	1865	RUE
SE	0	0	28	27	68	1	2	2	22	62	1	3	0	0	0	5	0	14	85	0	1	107	0	0	13	0	0	799	579	512	SE
SI	0	0	1	0	4	0	1	3	0	0	12	1	0	0	0	1	0	0	0	0	8	1	0	0	1	-0	0	98	88	75	SI
SK	0	0	2	0	41	0	7	11	2	0	3	16	0	0	0	5	0	1	1	0	4	4	0	0	2	-0	0	218	205	176	SK
TJ	0	0	0	0	0	0	0	0	1	0	0	0	45	3	1	0	41	0	0	0	0	0	11	0	15	-0	0	127	101	1	TJ
TM	0	0	1	1	2	0	0	0	31	1	0	0	6	39	7	4	45	1	1	0	1	2	38	0	31	-0	0	252	177	12	TM
TR	2	0	2	1	16	0	15	9	47	1	1	2	0	0	984	42	0	3	3	37	112	6	18	4	21	-0	1	1470	1264	153	TR
UA	3	0	14	6	250	1	66	24	240	7	3	24	0	0	61	442	1	9	25	22	22	39	1	-0	-0	-0	0	1734	1617	743	UA
UZ	0	0	1	1	2	0	0	0	34	1	0	0	28	13	6	4	150	1	1	1	1	2	22	0	20	-0	0	355	307	13	UZ
ATL	1	0	101	118	121	71	1	5	263	48	2	8	0	0	2	19	0	817	92	1	50	379	0	0	2164	6	1	6378	2867	2388	ATL
BAS	0	0	41	14	130	1	5	4	37	38	1	6	0	0	0	11	0	17	113	0	3	114	0	0	14	1	0	1102	841	754	BAS
BLS	2	0	6	3	68	0	54	16	193	3	2	8	0	0	245	194	0	5	11	84	34	18	2	0	-22	-0	0	1166	1033	324	BLS
MED	29	14	18	5	75	19	50	104	39	3	22	17	0	0	705	54	0	53	12	43	2724	52	9	40	75	0	5	6848	3834	2742	MED
NOS	0	0	83	31	75	7	4	5	8	11	2	4	0	0	1	6	0	103	45	0	11	332	0	0	57	3	0	2072	1520	1450	NOS
AST	1	0	3	3	12	0	1	2	188	2	0	1	21	29	170	34	56	4	5	5	72	9	344	4	548	-0	1	1789	797	88	AST
NOA	4	3	4	1	12	6	9	11	9	1	3	2	0	0	69	8	0	13	2	5	578	10	1	38	282	-0	-0	1501	573	453	NOA
SUM	107	19	663	382	2365	264	598	585	7708	357	126	238	147	122	2620	1697	596	1504	887	272	4404	2032	541	94	3907	10	19	53286			SUM
EXC	70	2	407	206	1874	158	474	438	6972	251	94	192	126	93	1429	1369	539	491	606	135	933	1119	184	11	790	0	11		28151	14425	EXC
EU	32	1	282	65	970	150	292	196	215	127	74	110	0	0	131	195	0	369	294	29	665	697	0	7	249	3	3		11374	10203	EU
emis	122	24	790	541	2589	534	674	634	9010	443	136	259	174	198	3384	1836	691	2701	1031	304	5889	2430	1310	292	0	0	0	60498	46541	26426	emis
	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	SUM	EXC	EU	

Table C.3: 2011 country-to-country blame matrices for **reduced nitrogen** deposition.
Units: 100 Mg of N. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	ME	
AL	69	0	1	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	10	1	1	0	0	7	0	0	0	0	0	0	1	AL
AM	0	60	0	42	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	6	0	0	0	0	-0	0	0	2	0	0	0	0	0	AM
AT	0	0	179	0	1	2	0	0	24	0	19	122	1	0	6	0	22	2	0	0	6	10	0	0	59	0	0	0	0	0	0	0	AT
AZ	0	15	0	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	19	0	0	0	0	0	AZ
BA	2	0	5	0	51	0	1	1	1	0	4	9	0	0	3	0	2	0	0	2	26	12	0	0	20	0	0	0	0	0	0	1	BA
BE	0	0	2	0	-0	128	0	0	1	0	1	24	0	0	4	0	84	14	-0	0	0	0	2	0	1	-0	0	0	4	0	0	0	BE
BG	3	0	2	0	1	0	157	4	1	0	2	6	1	0	1	0	2	1	0	26	2	7	0	0	5	0	5	0	0	0	5	0	BG
BY	0	0	3	0	1	3	1	524	2	0	8	41	6	1	3	1	11	9	0	0	3	8	1	0	5	0	14	21	0	5	4	0	BY
CH	0	-0	3	0	0	1	0	0	248	0	0	22	0	0	5	0	44	2	0	0	0	0	0	0	36	0	0	0	0	0	0	0	CH
CY	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	CY
CZ	0	0	34	0	1	3	1	1	6	0	186	121	2	0	4	0	23	3	0	0	6	14	0	0	10	0	0	0	0	0	0	0	CZ
DE	0	0	49	0	0	84	0	3	76	0	41	2112	18	0	28	0	317	58	-0	0	2	6	9	0	33	0	0	1	12	0	1	0	DE
DK	0	0	1	0	0	5	0	1	0	0	2	64	138	0	1	0	15	16	-0	0	0	1	2	-0	1	-0	0	0	0	0	0	0	DK
EE	0	0	0	0	0	1	0	7	0	0	1	12	3	27	0	2	3	3	0	0	0	1	0	0	0	0	1	4	0	5	0	0	EE
ES	0	0	2	0	1	3	0	0	2	-0	2	15	0	0	1457	0	93	6	0	0	1	1	2	0	21	-0	0	0	0	0	0	0	ES
FI	0	0	1	0	0	3	0	14	1	-0	3	32	8	6	2	159	10	10	0	0	0	2	2	0	1	0	2	6	0	4	0	0	FI
FR	0	0	14	0	1	41	0	1	49	0	7	116	3	0	233	0	2821	51	0	0	2	3	14	-0	96	0	0	0	4	0	0	0	FR
GB	0	0	1	0	0	12	0	0	1	-0	1	27	2	0	15	0	126	838	-0	0	0	1	107	0	4	-0	0	0	0	0	0	0	GB
GE	0	11	0	37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	112	0	0	0	0	0	0	0	4	0	0	0	0	0	GE
GL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	GL
GR	11	0	2	0	1	0	26	2	0	0	1	4	0	0	2	0	2	0	0	210	1	3	0	0	8	0	2	0	0	0	2	0	GR
HR	1	0	11	0	10	0	1	0	1	0	5	11	0	0	6	0	4	1	0	1	82	18	0	0	40	0	1	0	0	0	0	0	HR
HU	1	0	22	0	4	1	2	2	2	0	12	24	1	0	8	0	9	1	0	2	30	166	0	0	22	0	1	0	0	0	1	0	HU
IE	0	-0	0	0	0	1	0	0	0	-0	0	3	0	0	3	0	13	28	-0	0	0	0	334	-0	1	-0	0	0	0	0	0	0	IE
IS	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	2	3	0	0	0	0	1	14	0	0	0	0	0	0	0	0	IS
IT	5	0	20	0	3	1	3	1	25	0	5	27	0	0	37	0	46	2	0	7	13	8	0	0	1736	-0	1	0	0	0	0	1	IT
KG	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	138	63	0	-0	0	0	0	KG
KZT	0	10	1	42	0	0	1	16	0	0	1	7	1	1	1	1	2	2	11	2	0	1	0	0	2	61	3351	2	0	1	2	0	KZT
LT	0	0	1	0	0	2	0	38	1	0	4	27	5	1	1	1	7	5	0	0	1	2	1	0	1	0	1	78	0	5	1	0	LT
LU	0	-0	0	-0	-0	4	0	0	0	0	0	4	0	0	0	0	10	1	0	0	0	0	0	0	0	0	0	0	4	0	0	0	LU
LV	0	0	1	0	0	2	0	21	0	0	2	21	6	3	1	1	5	5	0	0	0	1	1	0	1	0	1	21	0	33	0	0	LV
MD	0	0	0	0	0	0	1	3	0	0	1	2	0	0	0	0	1	0	0	0	0	1	0	0	1	0	2	0	0	0	27	0	MD
ME	5	0	1	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	1	1	0	0	4	0	0	0	0	0	0	7	ME
MK	7	0	1	0	0	0	3	0	0	0	0	1	0	0	0	0	0	0	0	15	1	2	0	0	2	0	0	0	0	0	0	0	MK
MT	0	0	0	0	-0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	-0	0	0	0	0	0	0	MT
NL	0	-0	1	-0	-0	44	0	0	1	-0	1	72	1	0	3	0	41	23	-0	-0	0	0	3	-0	1	-0	0	0	0	0	0	0	NL
NO	0	0	1	0	0	7	0	3	1	0	2	44	20	0	5	2	27	36	0	0	0	1	5	0	1	0	0	1	0	1	0	0	NO
PL	0	0	19	0	2	12	1	45	6	0	68	267	22	1	10	1	52	23	0	0	10	30	3	0	16	0	3	11	1	2	3	0	PL
PT	0	0	0	0	0	0	0	0	0	-0	0	2	0	0	79	0	6	1	0	0	0	0	0	0	1	-0	0	0	0	0	0	0	PT
RO	4	0	9	0	4	1	19	11	2	0	8	29	2	0	6	0	10	2	0	6	7	39	0	0	18	0	11	1	0	0	20	1	RO
RS	10	0	5	0	7	0	6	1	1	-0	5	10	1	0	3	0	3	1	0	5	15	25	0	0	13	0	1	0	0	0	1	2	RS
RUE	3	12	12	69	4	11	12	313	8	0	22	146	29	24	16	54	48	36	45	9	7	20	5	0	30	8	2359	44	1	26	16	0	RUE
SE	0	0	2	0	0	10	0	12	2	0	8	98	62	2	4	15	34	35	0	0	1	3	4	0	3	0	1	5	1	2	1	0	SE
SI	0	0	14	0	1	0	0	0	1	0	2	6	0	0	3	0	2	0	0	0	9	3	0	0	29	0	0	0	0	0	0	0	SI
SK	0	0	11	0	2	1	1	1	2	0	15	19	1	0	4	0	6	1	0	1	7	35	0	0	10	0	0	0	0	0	0	0	SK
TJ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	-0	0	4	9	0	-0	0	0	-0	TJ
TM	0	2	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	1	81	0	0	0	0	0	TM
TR	2	8	3	6	1	0	13	4	1	4	2	10	1	0	2	0	4	1	7	17	2	3	0	0	7	0	7	0	0	0	3	0	TR
UA	2	0	8	2	3	3	13	120	3	0	16	62	7	1	7	2	17	9	2	5	6	29	1	0	13	0	56	8	0	2	35	0	UA
UZ	0	2	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	16	109	0	0	0	0	0	UZ
ATL	0	0	12	0	1	35	1	16	11	0	14	201	31	3	299	20	625	486	0	1	2	5	307	30	30	0	21	5	2	2	1	0	ATL
BAS	0	0	5	0	1	16	0	24	4	0	15	247	125	12	7	34	54	37	0	0	2	7	5	-0	5	0	1	16	1	10	1	0	BAS
BLS	1	2	4	6	1	1	29	18	1	0	5	20	2	0	2	1	5	2	19	10	2	7	0	0	6	0	24	2	0	1	17	0	BLS
MED	47	0	28	0	20	4	55	8	19	15	15	55	2	0	310	0	253	9	1	120	33	27	3	0	655	0	6	1	0	0	7	5	MED
NOS	0	0	7	0	1	85	1	4	8	-0	10	325	96	0	31	1	448	531	0	0	2	4	66	0	12	-0	0	2	2	1	0	0	NOS
AST	1	9	1	81	1	0	1	4	1	4	1	4	0	0	1	0	2	0	10	4	1	1	0	0	7	22	515	0	0	0	0	0	AST
NOA	5	0	3	0	4	1	10	2	3	0	2	8	0	0	71	0	45	2	0	13	3	3	1	0	60	0	1	0	0	0	1	1	NOA
SUM	182	133	500	564	133	531	361	1229	516	31	520	4484	598	83	2690	297	5360	2298	228	469	289	513	882	46	3038	250	6678	233	37	104	153	21	SUM
EXC	127	121	440	477	104	390	264	1153	469	11	458	3624	342	68	1969	241	3928	1229	199	320	244	459	500	16	2263	227	6108	207	30	90	126	15	EXC
EU	26	0	386	1	22	362	211	164	203	6	390	3253	276	41	1913	180	3762	1129	1	252	100	336	485	0	2079	0	31	129	28	54	35	3	EU
emis	198	133	513	560	137	555	393	1270	518	42	541	4640	611	85	3135	305	5550	2389	227	507	303	534	895	44	3149	265	7016	241	38	107	163	23	emis
	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	ME	

Table C.3 Cont.: 2011 country-to-country blame matrices for **reduced nitrogen** deposition.
Units: 100 Mg of N. **Emitters →, Receptors ↓.** (Based on ECMWF meteorology.)

	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	SUM	EXC	EU	
AL	3	0	0	0	1	0	2	16	0	0	0	0	0	0	0	-0	0	0	0	-0	-0	0	0	2	5	-0	-0	125	119	28	AL
AM	0	0	0	-0	0	-0	0	0	1	0	0	0	0	0	57	0	0	-0	-0	0	0	-0	34	0	7	0	0	210	168	1	AM
AT	0	0	4	0	6	0	4	3	2	0	17	4	0	0	0	0	0	0	-0	0	0	-0	0	0	9	0	0	504	494	457	AT
AZ	0	0	0	-0	1	0	0	0	23	0	0	0	0	2	21	1	1	-0	0	0	0	0	24	0	8	0	0	390	358	2	AZ
BA	0	0	1	0	5	0	6	21	1	0	1	3	0	0	0	0	0	0	0	0	0	0	0	1	5	0	-0	188	181	76	BA
BE	0	0	25	0	1	0	0	0	0	0	0	0	-0	0	-0	0	0	-0	0	0	0	-1	0	0	4	0	-0	295	292	290	BE
BG	5	0	1	0	8	0	63	27	15	0	0	2	0	0	13	2	0	0	0	-0	0	0	0	1	9	0	0	379	369	284	BG
BY	0	0	6	1	109	0	15	4	54	4	1	4	0	0	1	5	0	0	-1	0	0	0	0	0	15	0	0	897	881	268	BY
CH	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	-0	-0	0	-0	0	0	7	0	-0	371	364	116	CH
CY	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	4	0	0	0	0	0	-0	0	1	1	1	-0	0	14	12	7	CY
CZ	0	0	5	0	28	0	6	6	2	0	4	12	0	0	0	1	0	0	0	0	0	0	0	0	7	0	0	489	481	458	CZ
DE	0	0	195	1	47	1	4	2	3	2	2	3	0	0	0	0	0	1	-1	-0	1	-7	0	0	36	0	-0	3143	3113	3025	DE
DK	0	0	13	1	7	0	0	0	0	3	0	0	0	-0	0	-0	-0	0	-1	-0	0	-2	0	0	4	-0	0	272	271	269	DK
EE	0	0	2	1	10	0	1	0	7	5	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	3	0	0	101	97	82	EE
ES	0	0	2	0	3	44	1	1	0	0	1	1	-0	0	0	0	0	-2	0	0	-5	1	0	11	102	-0	-0	1767	1660	1654	ES
FI	0	0	6	3	25	0	3	1	27	20	0	1	0	0	0	1	0	1	0	0	0	1	0	0	22	0	0	379	355	304	FI
FR	0	0	20	0	8	8	2	1	1	0	2	2	0	0	0	0	-0	-8	0	0	-1	-6	0	3	76	-1	-0	3563	3501	3445	FR
GB	0	0	14	0	3	1	1	0	0	0	0	0	-0	0	0	1	-0	-6	-0	0	0	-3	-0	0	36	-1	0	1187	1161	1156	GB
GE	0	0	0	0	1	0	1	0	25	0	0	0	0	1	78	0	0	0	0	-0	0	0	10	0	10	0	0	292	271	3	GE
GL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	111	0	0	113	2	1	GL
GR	7	0	0	0	3	0	14	16	6	0	0	1	0	0	19	1	0	0	0	-0	-1	0	0	7	14	-0	-0	366	346	278	GR
HR	0	0	1	0	5	0	6	16	1	0	10	3	-0	0	0	0	0	0	-0	0	0	0	0	1	6	0	0	245	238	124	HR
HU	1	0	2	0	14	0	34	38	4	0	7	18	0	0	0	0	0	0	0	-0	0	0	0	1	8	0	0	441	431	346	HU
IE	0	0	1	0	1	0	0	0	0	0	0	0	-0	-0	0	0	-0	-4	-0	0	0	-1	-0	0	13	-1	0	395	387	387	IE
IS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0	0	40	25	10	IS
IT	1	0	1	0	5	1	7	11	2	0	12	2	-0	0	2	0	0	0	-0	0	-7	0	0	12	41	-0	-1	2030	1985	1920	IT
KG	0	0	0	0	0	-0	0	0	2	0	0	0	36	2	2	0	105	0	0	0	0	0	25	0	37	0	0	414	351	0	KG
KZT	0	0	1	0	11	0	5	1	640	1	0	1	22	46	70	3	128	0	0	0	0	0	219	1	149	0	2	4822	4450	45	KZT
LT	0	0	4	0	53	0	3	1	12	4	0	1	0	0	0	0	0	0	-0	-0	0	1	0	0	5	0	0	267	261	206	LT
LU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	-0	0	-0	0	-0	-0	0	0	0	0	25	24	24	LU
LV	0	0	4	0	25	0	1	1	8	6	0	1	0	0	0	0	0	0	-0	-0	0	1	0	0	5	0	0	178	173	140	LV
MD	0	0	0	0	3	0	24	1	5	0	0	0	0	0	1	1	0	0	-0	-0	0	0	0	0	2	0	0	79	77	36	MD
ME	0	0	0	0	1	0	1	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	39	36	12	ME
MK	26	0	0	0	1	0	3	17	1	0	0	0	0	0	1	0	0	0	0	-0	0	0	0	1	3	0	0	87	83	30	MK
MT	0	1	0	0	0	0	0	0	0	0	0	0	-0	0	0	-0	0	-0	-0	-0	-0	0	0	0	0	-0	-0	1	1	1	MT
NL	0	-0	260	0	2	0	0	0	0	0	0	0	-0	0	-0	-0	-0	-0	-0	-0	0	-2	-0	0	4	-0	-0	455	453	452	NL
NO	0	0	13	102	12	0	1	1	2	15	0	0	0	0	0	0	0	1	0	0	0	1	0	0	38	0	0	346	305	196	NO
PL	0	0	26	1	1008	0	28	12	17	8	5	20	0	0	0	3	0	1	-0	0	1	1	0	0	24	0	0	1768	1741	1635	PL
PT	0	0	0	0	0	131	0	0	0	0	0	0	-0	-0	0	0	0	1	0	0	-0	0	0	1	28	0	0	250	220	220	PT
RO	2	0	2	0	26	0	592	43	27	1	2	7	0	0	6	2	0	0	0	-0	1	0	0	1	19	0	0	944	923	783	RO
RS	6	0	1	0	7	0	37	256	3	0	1	4	0	0	1	0	0	0	-0	-0	0	0	0	1	7	0	-0	440	431	125	RS
RUE	2	0	21	8	195	1	68	18	8802	36	3	10	4	26	177	54	32	2	2	0	2	5	140	2	1034	1	4	14043	12851	882	RUE
SE	0	0	22	18	52	0	4	2	10	184	0	2	0	0	0	2	0	1	-1	0	0	1	0	0	32	0	0	637	603	555	SE
SI	0	0	0	0	1	0	2	2	1	0	42	1	0	0	0	0	0	0	-0	0	0	-0	0	0	2	0	0	122	119	106	SI
SK	0	0	1	0	20	0	13	10	2	0	3	55	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	229	223	197	SK
TJ	0	-0	0	0	0	-0	0	0	1	0	0	0	126	4	1	0	34	-0	0	0	0	-0	37	0	32	0	-0	249	179	0	TJ
TM	0	0	0	0	0	0	0	0	19	0	0	0	6	109	12	1	39	0	0	0	0	0	50	0	49	0	0	380	281	2	TM
TR	1	0	1	0	7	0	18	7	33	0	0	1	0	1	2336	-1	0	0	0	-1	-0	0	128	30	100	0	-5	2768	2516	97	TR
UA	1	0	6	1	138	0	113	18	193	4	2	11	0	1	40	80	0	1	0	0	1	1	1	1	39	0	0	1090	1044	479	UA
UZ	0	0	0	0	0	0	0	0	20	0	0	0	41	23	10	0	228	0	0	0	0	0	34	0	39	0	0	534	460	2	UZ
ATL	0	0	54	48	53	61	6	2	98	21	2	3	0	0	1	5	0	-15	2	0	2	3	2	5	3763	-2	0	6277	2516	2278	ATL
BAS	0	0	38	6	120	0	7	3	20	83	1	3	0	0	0	0	0	1	-7	0	0	-5	0	0	28	-1	0	930	913	849	BAS
BLS	1	0	2	0	26	0	70	11	156	1	1	3	0	1	239	20	0	0	0	-2	1	0	10	3	30	-0	1	764	721	199	BLS
MED	12	8	4	0	25	7	66	70	28	1	13	7	0	0	284	9	0	1	0	0	-19	1	57	249	313	-1	1	2836	2233	1684	MED
NOS	0	0	183	22	37	3	4	3	2	13	1	2	0	0	0	0	-0	-3	-2	0	0	-12	0	0	97	-2	0	1988	1909	1865	NOS
AST	0	0	1	0	4	0	2	1	143	0	0	0	30	59	187	2	42	-0	0	0	-0	0	3392	15	856	0	-4	5404	1144	35	AST
NOA	2	1	1	0	5	3	11	9	4	0	1	1	0	0	28	2	0	1	0	0	5	0	2	447	342	0	1	1106	307	243	NOA
SUM	75	11	945	214	2123	266	1251	664	10424	416	138	191	267	274	3597	200	610	-23	-7	-2	-14	-20	4167	804	7657	-5	0	67668			SUM
EXC	59	2	663	138	1853	192	1084	563	9972	297	119	171	237	214	2857	162	567	-9	-1	-1	-3	-9	705	84	2228	0	1		45367	21213	EXC
EU	18	1	612	26	1357	189	783	178	145	235	100	132	0	0	46	15	0	-14	-3	-0	-8	-16	1	40	509	-1	-1		19696	18682	EU
emis	81	13	977	215	2227	385	1311	709	11148	426	142	199	283	363	4202	207	672	0	0	0	0	0	7258	1945	0	0	0	67852	58650	29911	emis
	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	SUM	EXC	EU	

Table C.4: 2011 country-to-country blame matrices for $\mathbf{AOT40}_f^{\mathbf{uc}}$.
Units: ppb.h per 15% emis. red. of NO_x. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	
AL	446	0	37	1	62	3	86	10	7	0	32	63	3	1	57	4	68	16	1	99	53	50	2	1	262	0	5	2	1	1	5	AL
AM	1	414	3	569	1	1	3	6	1	4	3	12	1	1	9	2	9	5	206	6	1	3	1	0	9	0	30	1	0	1	2	AM
AT	1	0	238	1	11	-8	6	7	61	0	44	255	2	2	68	7	240	13	1	4	46	43	6	3	304	0	3	4	3	3	2	AT
AZ	0	38	2	943	1	1	3	11	1	1	4	14	3	1	9	5	9	10	175	3	1	3	1	1	5	0	87	2	0	1	2	AZ
BA	10	0	89	1	542	4	30	14	9	0	77	129	4	1	70	7	91	23	2	21	220	134	4	2	250	0	3	4	2	2	4	BA
BE	0	0	8	0	1	-379	1	5	7	0	6	-70	2	1	42	6	267	-46	0	0	2	5	10	4	11	0	0	3	-27	1	1	BE
BG	6	1	27	3	19	2	589	30	5	0	31	81	6	2	21	9	40	20	4	78	16	60	3	2	43	0	10	7	1	3	32	BG
BY	0	0	5	0	1	2	2	250	1	0	13	66	13	9	7	21	31	36	0	1	2	9	6	4	5	0	7	39	2	17	10	BY
CH	0	0	35	1	3	-3	3	2	301	0	2	49	1	1	102	3	600	16	1	2	8	9	7	2	487	0	1	1	1	1	1	CH
CY	3	1	6	4	4	1	21	13	2	342	6	20	2	1	16	3	18	8	7	103	3	8	1	1	46	0	5	3	0	1	4	CY
CZ	1	0	103	0	10	-5	6	13	18	0	15	263	4	3	43	14	198	25	0	3	30	62	8	4	44	0	2	7	3	4	2	CZ
DE	0	0	20	0	1	-46	1	8	24	0	7	-14	2	3	45	12	268	10	0	0	3	9	12	5	28	0	1	5	-7	3	2	DE
DK	0	0	2	0	0	-16	0	7	0	0	-1	-37	-68	2	7	19	39	81	0	0	0	2	27	7	1	0	1	10	-0	5	1	DK
EE	0	0	1	0	0	-1	0	46	0	0	4	42	23	49	3	38	23	48	0	0	0	1	10	5	1	0	4	22	1	32	1	EE
ES	0	0	6	0	2	4	1	2	4	0	2	22	1	0	1140	1	188	24	0	3	3	3	6	2	51	0	0	1	2	0	0	ES
FI	0	0	1	0	0	0	0	15	0	0	2	23	9	11	2	74	12	21	0	0	0	1	4	3	1	0	1	8	1	7	0	FI
FR	0	0	12	0	2	-9	2	4	16	0	5	33	1	1	170	3	795	22	0	2	5	6	12	3	101	0	0	2	-2	1	1	FR
GB	0	0	1	0	0	-13	0	2	1	0	1	-5	2	1	22	6	50	-191	0	0	0	1	29	6	6	0	0	1	-0	1	0	GB
GE	0	63	3	350	1	1	5	16	1	1	6	19	3	1	10	5	10	8	787	5	1	6	1	1	6	0	32	3	0	2	5	GE
GL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	GL
GR	46	0	21	2	22	3	308	20	5	0	23	50	4	2	36	6	50	18	3	619	18	35	2	1	130	0	8	4	1	2	16	GR
HR	6	0	141	1	196	3	20	13	11	0	87	176	3	2	62	7	117	26	1	16	403	155	4	2	326	0	3	5	2	3	3	HR
HU	1	0	106	1	37	-1	32	28	10	0	87	171	5	3	47	10	99	28	0	6	86	329	5	3	88	0	4	8	2	5	7	HU
IE	0	0	1	0	0	-6	0	1	0	0	1	-6	1	1	14	6	23	-26	0	0	0	1	22	3	3	0	0	1	0	1	0	IE
IS	0	0	0	0	0	0	0	0	0	0	-0	2	1	0	3	2	4	20	0	0	0	0	2	15	1	0	0	0	0	0	0	IS
IT	5	0	85	1	32	3	15	7	35	0	20	85	1	1	111	4	308	20	1	23	63	32	5	2	1080	0	2	2	2	1	2	IT
KG	0	3	3	14	1	1	1	2	1	0	2	12	1	0	20	1	13	5	5	1	1	2	1	0	12	503	260	1	0	0	0	KG
KZT	0	1	2	8	1	2	2	9	1	0	2	15	3	2	13	10	13	15	3	1	1	2	2	1	8	16	345	3	0	2	1	KZT
LT	0	0	4	0	0	-1	1	135	1	0	12	65	24	10	6	25	32	51	0	0	1	8	9	5	3	0	4	118	1	30	5	LT
LU	0	0	10	0	1	-75	1	5	12	0	10	-54	1	1	54	6	340	-0	0	0	3	6	8	3	12	0	1	3	-676	2	1	LU
LV	0	0	3	0	0	0	1	87	1	0	7	55	26	20	5	32	28	50	0	0	1	3	10	5	2	0	5	66	1	71	2	LV
MD	0	0	13	2	3	2	23	73	3	0	24	59	7	3	13	13	34	22	2	3	4	33	3	2	14	0	12	11	1	4	169	MD
ME	69	0	49	1	178	3	64	12	9	0	48	82	4	1	60	5	74	18	1	51	84	79	3	1	239	0	4	3	2	2	5	ME
MK	85	0	33	2	36	2	237	14	7	0	37	69	4	1	47	6	60	17	2	49	24	68	2	1	124	0	5	4	1	2	9	MK
MT	9	0	23	0	20	5	22	6	6	0	10	41	1	1	110	3	237	26	0	55	22	14	5	2	438	0	2	1	1	1	2	MT
NL	0	0	4	0	0	-135	0	7	3	0	8	-89	1	2	19	10	74	-38	0	0	1	3	19	5	6	0	0	3	-6	2	1	NL
NO	0	0	1	0	0	-1	0	4	0	0	2	17	7	2	5	14	17	41	0	0	0	1	7	3	1	0	1	3	0	2	0	NO
PL	0	0	21	0	4	-6	7	42	4	0	33	124	14	5	18	16	80	42	0	2	10	41	10	4	13	0	2	18	3	8	6	PL
PT	0	0	4	0	1	3	0	1	2	0	2	18	1	0	594	1	85	22	0	1	1	1	6	1	23	0	0	0	2	0	0	PT
RO	1	0	32	1	13	2	79	42	5	0	38	88	7	3	23	11	45	20	1	8	16	86	3	2	33	0	9	8	1	3	40	RO
RS	19	0	51	2	79	2	134	19	8	0	63	109	4	2	44	7	69	22	2	35	48	140	3	2	98	0	5	4	1	2	11	RS
RUE	0	0	1	3	0	1	0	8	0	0	1	7	2	2	2	6	4	6	2	0	0	1	1	1	1	0	23	2	0	1	1	RUE
SE	0	0	2	0	1	-1	1	12	0	0	5	26	10	6	4	33	20	46	0	0	1	3	9	3	1	0	2	9	1	6	1	SE
SI	3	0	240	1	33	2	9	7	18	0	60	224	1	2	61	6	157	25	1	8	234	87	4	3	457	0	3	5	3	3	2	SI
SK	1	0	75	0	14	-2	24	31	9	0	103	151	6	3	37	11	98	30	0	5	40	247	6	3	55	0	3	11	3	6	5	SK
TJ	0	3	3	13	1	1	1	2	1	0	2	8	0	0	18	1	10	3	5	1	1	2	0	0	12	45	93	1	0	0	0	TJ
TM	0	7	3	43	1	2	2	9	2	1	3	18	3	2	18	7	15	14	11	2	1	2	2	1	11	4	224	3	1	2	1	TM
TR	2	17	7	28	3	1	25	21	2	9	9	26	3	1	15	5	16	9	36	29	3	10	1	1	20	0	11	4	0	2	11	TR
UA	0	1	9	3	3	1	10	88	2	0	19	53	8	5	11	16	28	27	3	3	4	21	4	3	10	0	21	13	1	6	26	UA
UZ	0	4	3	19	1	2	2	8	1	0	3	16	3	2	16	7	14	13	8	2	1	2	2	1	10	19	294	2	0	1	1	UZ
ATL	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	ATL
BAS	0	0	1	0	0	-5	0	16	0	0	3	13	3	10	3	26	19	33	0	0	1	2	9	3	1	0	1	13	1	12	1	BAS
BLS	0	1	2	5	0	0	8	14	0	0	4	11	2	1	2	4	4	5	18	1	1	4	1	1	2	0	6	3	0	1	7	BLS
MED	3	0	9	1	8	1	21	4	2	2	5	14	1	0	39	1	56	6	1	35	13	7	1	0	79	0	1	1	0	0	2	MED
NOS	0	0	0	0	0	-8	0	1	0	0	0	-5	-0	0	4	2	11	-10	0	0	0	0	6	2	1	0	0	1	-0	0	0	NOS
AST	0	3	2	24	1	1	2	3	1	7	1	7	1	0	10	2	7	4	5	6	1	1	0	0	9	27	93	1	0	0	1	AST
NOA	2	0	4	0	3	1	8	2	2	0	2	8	0	0	57	1	41	4	0	25	3	3	1	0	56	0	1	0	0	0	1	NOA
EXC	1	2	7	10	4	-1	9	14	3	0	5	20	3	2	41	9	46	10	6	6	5	8	3	1	29	7	66	4	0	2	3	EXC
EU	2	0	26	0	7	-10	32	17	10	1	15	50	4	4	191	16	203	13	0	23	13	27	9	3	118	0	2	8	-0	5	5	EU
	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	

Table C.4 Cont.: 2011 country-to-country blame matrices for $\mathbf{AOT40}_f^{\mathbf{uc}}$.
Units: ppb.h per 15% emis. red. of NO_x. **Emitters →, Receptors ↓.** (Based on ECMWF meteorology.)

	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	
AL	49	112	1	4	7	73	4	79	399	63	6	8	21	0	0	37	44	0	27	8	10	231	14	1	3	167	0	0	2289	986	AL
AM	0	1	0	1	3	15	1	9	3	157	2	1	2	0	15	363	37	10	9	3	24	34	5	151	4	145	0	0	1923	103	AM
AT	1	1	0	-17	11	49	4	27	22	46	8	71	20	0	0	7	25	0	68	4	2	39	-3	0	1	171	0	0	1642	1395	AT
AZ	0	0	0	2	7	21	1	8	3	467	5	0	2	0	33	111	60	22	17	8	19	13	10	122	2	136	0	0	2082	118	AZ
BA	44	7	0	2	9	113	5	76	196	55	7	17	48	0	0	13	35	0	45	7	6	88	14	1	2	176	0	0	2378	1212	BA
BE	0	0	0	-124	13	21	6	5	1	16	5	1	5	0	0	0	12	0	100	0	0	6	-127	0	0	149	0	0	-175	-240	BE
BG	5	22	0	2	13	118	2	329	161	223	11	6	26	0	0	51	212	0	37	15	83	25	17	1	1	164	0	0	2332	1517	BG
BY	0	0	0	1	18	185	1	20	4	242	21	1	10	0	0	1	157	0	59	40	3	1	30	0	0	136	0	0	1222	521	BY
CH	0	1	0	-4	6	19	5	12	8	21	3	10	4	0	0	4	13	0	67	2	1	47	6	0	1	182	0	0	1736	1364	CH
CY	1	7	0	2	4	32	1	26	19	105	3	1	5	0	0	1046	72	0	13	5	45	882	6	7	9	152	0	0	1980	677	CY
CZ	1	1	0	-11	18	65	3	25	28	52	13	19	47	0	0	3	36	0	84	11	1	10	11	0	0	167	0	0	1182	962	CZ
DE	0	0	0	-66	22	37	4	9	3	33	12	3	8	0	0	1	21	0	102	-11	1	7	-53	0	0	165	0	0	490	366	DE
DK	0	0	0	-38	56	41	1	2	1	28	26	0	2	0	0	0	8	0	153	-148	0	1	-87	0	0	157	0	0	218	109	DK
EE	0	0	0	-3	31	60	0	3	1	180	51	0	1	0	0	0	18	0	75	77	0	0	44	0	0	123	0	0	696	410	EE
ES	0	1	0	2	3	6	165	4	4	4	1	2	1	0	0	2	4	0	166	1	0	132	14	0	4	240	0	0	1670	1638	ES
FI	0	0	0	-0	24	23	0	2	1	92	36	0	1	0	0	0	8	0	37	39	0	0	25	0	0	70	0	0	382	237	FI
FR	0	0	0	-12	9	16	9	8	5	14	4	4	3	0	0	1	9	0	124	1	0	67	-11	0	1	178	0	0	1258	1187	FR
GB	0	0	0	-18	20	6	3	1	0	7	9	0	1	0	0	0	4	0	140	-1	0	4	-70	0	0	126	0	0	-44	-85	GB
GE	0	1	0	2	7	30	1	16	4	352	5	1	4	0	13	257	95	9	15	8	111	15	9	51	3	139	0	0	2148	154	GE
GL	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	9	0	0	3	2	GL
GR	6	74	1	3	8	80	2	131	133	145	7	4	17	0	0	178	121	0	27	10	56	284	15	1	3	170	0	0	2366	1559	GR
HR	8	4	0	1	9	103	4	62	118	52	7	56	50	0	0	8	34	0	53	6	4	125	13	0	1	159	0	0	2312	1438	HR
HU	2	3	0	-0	13	194	3	166	124	81	9	22	129	0	0	4	86	0	60	11	6	21	16	0	0	158	0	0	2041	1550	HU
IE	0	0	0	-12	11	6	2	1	0	5	6	0	0	0	0	0	3	0	114	-1	0	2	-16	0	0	101	0	0	65	40	IE
IS	0	0	0	0	15	1	1	0	0	4	2	0	0	0	0	0	0	0	31	1	0	1	8	0	0	27	0	0	74	38	IS
IT	4	6	1	-0	6	33	5	29	37	28	3	38	12	0	0	12	18	0	56	4	3	298	10	0	4	167	0	0	2180	1920	IT
KG	0	0	0	2	2	7	2	3	3	83	1	1	1	217	27	33	8	575	7	2	1	6	3	111	1	229	0	0	1833	93	KG
KZT	0	0	0	2	12	15	1	5	2	549	9	1	1	5	8	16	31	33	24	10	2	4	13	20	0	194	0	0	1177	132	KZT
LT	0	0	0	-5	24	172	0	9	2	137	35	1	8	0	0	1	80	0	85	63	1	1	36	0	0	145	0	0	1015	621	LT
LU	0	0	0	-50	12	30	6	7	2	22	6	3	6	0	0	1	15	0	82	1	1	8	-30	0	0	150	0	0	-261	-341	LU
LV	0	0	0	-4	31	107	0	5	1	167	42	0	4	0	0	0	38	0	81	77	1	1	41	0	0	138	0	0	873	534	LV
MD	1	1	0	2	16	173	1	167	9	286	14	2	25	0	0	16	458	1	46	21	39	5	19	1	0	158	0	0	1726	668	MD
ME	343	22	1	3	9	104	4	83	431	61	8	9	35	0	0	20	40	0	36	8	7	164	14	1	3	178	0	0	2321	1031	ME
MK	15	395	0	3	8	95	3	124	474	94	8	6	28	0	0	57	70	0	31	10	20	77	14	1	2	179	0	0	2330	1030	MK
MT	4	6	-240	4	6	21	4	25	41	26	3	8	6	0	0	25	20	0	58	4	6	100	15	0	8	155	0	0	1022	827	MT
NL	0	0	0	-396	23	21	3	3	0	13	9	1	3	0	0	0	12	0	101	-10	0	3	-268	0	0	133	0	0	-409	-476	NL
NO	0	0	0	-1	75	23	1	2	1	21	29	0	1	0	0	0	5	0	55	10	0	0	16	0	0	69	0	0	286	175	NO
PL	0	1	0	-12	22	201	2	38	18	73	21	5	37	0	0	2	82	0	86	26	2	3	13	0	0	155	0	0	1012	741	PL
PT	0	0	0	1	2	4	581	2	1	3	1	1	1	0	0	1	3	0	263	1	0	50	11	0	2	224	0	0	1372	1354	PT
RO	2	3	0	1	14	162	2	655	58	189	13	5	43	0	0	11	252	0	42	18	40	10	16	1	0	161	0	0	2032	1371	RO
RS	30	28	0	2	10	131	3	221	432	98	9	9	56	0	0	16	76	0	43	9	15	34	15	1	1	166	0	0	2106	1222	RS
RUE	0	0	0	1	6	9	0	2	1	250	5	0	1	0	0	3	20	1	11	6	2	1	6	1	0	50	0	0	377	57	RUE
SE	0	0	0	-3	42	57	1	4	2	50	68	0	2	0	0	1	12	0	60	35	0	1	22	0	0	91	0	0	436	310	SE
SI	1	2	0	-5	8	60	3	37	44	44	6	227	32	0	0	6	24	0	56	4	3	111	7	0	1	153	0	0	2149	1714	SI
SK	1	2	0	-3	14	196	2	98	68	78	9	16	289	0	0	4	95	0	65	13	4	12	16	0	0	156	0	0	1846	1477	SK
TJ	0	0	0	1	1	6	1	3	3	56	1	1	1	636	53	32	7	477	4	1	1	6	2	215	1	246	0	0	1508	78	TJ
TM	0	0	0	3	8	18	2	5	3	334	7	1	2	13	196	46	30	221	20	9	4	8	11	115	1	250	0	0	1302	146	TM
TR	1	3	0	2	7	45	1	38	17	217	6	2	6	0	2	1128	136	2	17	9	90	108	9	42	6	202	0	0	1941	294	TR
UA	0	1	0	2	17	164	1	66	11	432	15	2	20	0	1	13	451	1	48	25	26	4	23	1	0	156	0	0	1595	516	UA
UZ	0	0	0	2	8	15	2	5	3	329	7	1	2	80	44	35	25	389	18	8	3	7	11	60	1	231	0	0	1400	132	UZ
ATL	0	0	0	-0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	3	0	0	8	6	ATL
BAS	0	0	0	-11	24	49	0	2	1	51	28	0	2	0	0	0	11	0	63	-45	0	0	2	0	0	81	0	0	326	215	BAS
BLS	0	0	0	1	4	22	0	21	4	161	4	0	3	0	0	32	112	1	9	6	78	2	5	1	0	37	0	0	474	105	BLS
MED	1	3	1	1	2	14	2	16	13	29	1	3	3	0	0	63	23	0	16	2	13	163	4	1	3	46	0	0	490	321	MED
NOS	0	0	0	-14	14	4	1	0	0	4	4	0	0	0	0	0	1	0	42	-6	0	1	-69	0	0	37	0	0	20	-2	NOS
AST	0	1	0	1	2	7	1	3	2	99	2	0	1	26	26	141	14	61	6	2	4	50	3	341	2	184	0	0	609	77	AST
NOA	1	2	1	1	1	6	4	7	7	9	1	1	1	0	0	30	7	0	11	1	3	163	3	0	24	78	0	0	305	234	NOA
EXC	1	2	0	-2	10	28	7	19	9	233	8	2	5	8	7	48	42	24	31	8	7	18	6	11	1	106	0	0	779	271	EXC
EU	1	4	0	-14	17	60	35	62	22	57	18	8	16	0	0	11	42	0	94	12	7	61	-2	0	1	156	0	0	1134	921	EU
	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	

Table C.5: 2011 country-to-country blame matrices for $\mathbf{AOT40}_f^{\mathbf{uc}}$.
Units: ppb.h per 15% emis. red. of VOC. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	
AL	51	0	20	1	14	7	7	12	9	0	22	96	5	1	17	2	51	43	1	90	20	19	2	0	163	0	2	2	1	2	1	AL
AM	0	126	2	86	1	2	1	9	1	0	4	21	1	0	3	1	9	9	78	3	1	2	0	0	13	0	4	1	0	1	1	AM
AT	1	0	165	1	2	20	1	9	59	0	40	366	6	1	20	3	123	72	1	2	14	13	3	0	188	0	1	3	2	3	1	AT
AZ	0	9	2	264	0	2	1	17	1	0	5	30	3	1	3	3	11	18	94	2	1	2	1	0	9	0	10	2	0	2	1	AZ
BA	2	0	26	1	35	10	2	10	9	0	32	153	6	1	17	3	60	51	1	5	27	27	2	0	130	0	1	3	1	2	2	BA
BE	0	0	8	0	0	91	0	6	5	0	14	225	6	1	11	3	160	134	0	0	2	3	4	0	12	0	0	2	5	2	0	BE
BG	1	0	13	2	3	7	23	25	6	0	23	112	7	1	7	3	38	42	3	10	5	15	2	0	35	0	3	4	1	3	5	BG
BY	0	0	4	1	0	9	0	127	2	0	13	90	8	2	3	7	29	54	0	0	1	3	3	0	6	0	2	9	1	5	1	BY
CH	0	0	30	1	1	17	1	4	250	0	12	191	3	1	22	2	177	62	1	1	4	4	3	0	383	0	1	1	2	2	0	CH
CY	2	1	6	8	2	3	6	27	4	29	9	49	3	1	7	2	22	23	9	38	4	5	1	0	56	0	4	3	0	3	2	CY
CZ	0	0	52	1	2	24	1	15	22	0	145	349	8	1	13	4	112	88	0	1	7	14	3	0	41	0	1	4	2	3	1	CZ
DE	0	0	26	0	0	41	0	9	31	0	29	445	11	1	12	4	141	120	0	0	2	4	4	0	30	0	1	3	4	3	1	DE
DK	0	0	2	0	0	22	0	8	1	0	11	195	59	2	3	5	45	208	0	0	0	1	8	0	1	0	1	4	1	4	0	DK
EE	0	0	1	0	0	13	0	23	1	0	4	83	11	13	1	17	25	85	0	0	0	1	4	0	2	0	1	4	1	8	0	EE
ES	0	0	4	0	1	5	0	4	3	0	3	31	2	0	193	1	59	37	0	1	2	2	2	0	44	0	0	1	0	1	0	ES
FI	0	0	1	0	0	4	0	10	0	0	2	30	5	3	1	15	10	37	0	0	0	0	1	0	1	0	0	2	0	2	0	FI
FR	0	0	9	0	1	19	1	6	16	0	9	104	5	1	40	2	199	91	0	1	3	3	3	0	82	0	0	2	2	2	0	FR
GB	0	0	2	0	0	10	0	2	2	0	3	45	4	1	8	2	52	216	0	0	0	1	5	0	9	0	0	1	0	1	0	GB
GE	0	13	2	76	1	2	1	18	1	0	6	31	2	1	3	2	11	15	263	2	1	2	1	0	10	0	5	2	0	2	1	GE
GL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	GL
GR	10	0	13	2	6	6	14	23	6	0	19	81	5	1	11	3	39	44	2	123	9	13	2	0	92	0	3	3	1	2	3	GR
HR	2	0	48	1	17	14	2	11	12	0	41	210	6	2	19	3	78	64	1	6	54	30	2	0	204	0	1	3	2	2	1	HR
HU	0	0	44	1	4	16	2	20	12	0	52	224	7	1	15	4	74	70	0	2	12	56	3	0	59	0	1	4	2	3	2	HU
IE	0	0	1	0	0	6	0	2	1	0	2	31	2	0	6	2	19	71	0	0	0	0	8	0	5	0	0	1	0	1	0	IE
IS	0	0	0	0	0	1	0	0	0	0	1	11	1	0	1	1	4	10	0	0	0	0	0	0	1	0	0	0	0	0	0	IS
IT	2	0	43	1	7	14	2	7	32	0	19	148	3	1	38	2	135	62	1	7	24	11	3	0	1057	0	1	2	1	2	1	IT
KG	0	1	1	7	0	1	0	4	1	0	2	12	1	0	4	1	7	6	3	1	1	1	0	0	9	43	10	1	0	1	0	KG
KZT	0	1	2	5	0	3	0	11	1	0	3	25	3	1	4	3	11	20	2	1	1	1	1	0	8	2	9	2	0	2	0	KZT
LT	0	0	4	0	0	13	0	59	2	0	13	116	14	3	2	6	35	94	0	0	1	3	4	0	3	0	1	24	1	9	1	LT
LU	0	0	12	0	0	50	0	6	9	0	15	265	6	1	14	3	179	98	0	0	2	3	3	0	14	0	1	2	19	2	0	LU
LV	0	0	3	1	0	13	0	40	1	0	8	104	13	5	2	8	31	92	0	0	0	2	4	0	3	0	2	10	1	20	1	LV
MD	0	0	8	2	1	8	2	36	3	0	20	98	8	1	5	4	32	46	2	1	2	8	2	0	14	0	3	4	1	2	15	MD
ME	10	0	19	1	18	7	4	12	8	0	23	109	6	1	15	2	51	43	1	11	18	21	2	0	126	0	1	3	1	2	2	ME
MK	9	0	16	1	6	6	10	14	7	0	22	91	5	1	12	3	42	38	2	97	8	19	2	0	71	0	2	3	1	2	2	MK
MT	5	0	16	1	8	9	4	10	8	0	10	77	3	1	49	2	111	57	1	21	14	10	3	0	448	0	1	2	1	2	1	MT
NL	0	0	4	0	0	57	0	6	2	0	12	221	12	1	6	3	89	169	0	0	1	2	6	0	7	0	0	2	2	2	0	NL
NO	0	0	1	0	0	5	0	4	0	0	2	37	9	1	1	2	14	44	0	0	0	1	2	0	1	0	0	1	0	1	0	NO
PL	0	0	15	0	1	21	1	29	6	0	43	236	14	1	6	4	66	109	0	1	3	10	4	0	13	0	1	6	2	4	1	PL
PT	0	0	3	0	0	4	0	3	2	0	3	27	2	0	99	1	36	36	0	0	1	1	2	0	23	0	0	1	0	1	0	PT
RO	0	0	13	1	2	9	4	24	6	0	26	120	8	1	7	3	41	46	1	2	4	15	2	0	28	0	2	3	1	2	5	RO
RS	2	0	22	1	10	9	6	17	8	0	35	143	8	1	12	3	52	49	1	7	12	34	2	0	62	0	1	4	1	3	3	RS
RUE	0	0	1	1	0	1	0	6	0	0	1	11	1	0	1	1	4	8	1	0	0	0	0	0	2	0	2	1	0	1	0	RUE
SE	0	0	1	0	0	7	0	10	1	0	4	53	12	2	1	7	17	63	0	0	0	1	3	0	2	0	1	3	0	3	0	SE
SI	2	0	101	1	5	17	1	9	21	0	37	269	5	1	21	3	99	66	1	4	47	23	2	0	309	0	1	3	2	3	1	SI
SK	0	0	33	0	2	16	2	25	11	0	61	211	7	2	12	4	69	73	0	2	7	33	3	0	42	0	1	6	2	4	1	SK
TJ	0	1	1	7	0	1	0	4	1	0	1	10	1	0	3	1	6	5	3	1	1	1	0	0	8	5	6	1	0	1	0	TJ
TM	0	3	3	24	0	3	0	15	2	0	4	31	3	1	5	4	14	21	9	1	1	2	1	0	13	1	12	3	0	2	1	TM
TR	1	5	5	12	1	3	4	21	3	1	8	44	3	1	5	2	16	18	16	9	2	4	1	0	23	0	3	3	0	2	2	TR
UA	0	0	6	3	1	8	1	45	2	0	16	88	7	2	4	5	27	47	2	1	2	6	2	0	11	0	3	5	1	3	3	UA
UZ	0	2	2	11	0	3	0	12	2	0	3	27	3	1	5	3	13	19	5	1	1	1	1	0	11	8	11	2	0	2	0	UZ
ATL	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	ATL
BAS	0	0	1	0	0	10	0	12	1	0	5	84	20	5	1	13	21	88	0	0	0	1	4	0	1	0	1	4	0	6	0	BAS
BLS	0	1	1	4	0	1	1	11	1	0	4	21	2	0	1	1	6	10	8	1	1	2	0	0	3	0	1	1	0	1	1	BLS
MED	2	0	5	1	2	2	2	6	3	0	5	26	1	0	14	1	26	15	1	15	5	3	1	0	82	0	1	1	0	1	1	MED
NOS	0	0	1	0	0	5	0	1	0	0	1	27	4	0	1	1	17	56	0	0	0	0	2	0	2	0	0	0	0	0	0	NOS
AST	0	1	1	11	0	1	1	5	1	1	2	12	1	0	3	1	6	7	4	3	1	1	0	0	10	2	4	1	0	1	0	AST
NOA	1	0	3	0	1	2	1	3	2	0	2	14	1	0	16	0	19	10	0	7	2	2	1	0	39	0	0	1	0	0	0	NOA
EXC	0	1	4	4	1	4	1	10	3	0	6	43	3	1	9	2	22	26	3	2	1	2	1	0	26	1	3	2	0	1	1	EXC
EU	1	0	16	1	1	15	2	12	11	0	18	137	7	1	37	4	81	81	0	5	5	7	3	0	109	0	1	3	1	3	1	EU
	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	

Table C.5 Cont.: 2011 country-to-country blame matrices for $\mathbf{AOT40}_f^{\mathbf{uc}}$.
Units: ppb.h per 15% emis. red. of VOC. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	
AL	8	17	0	12	4	62	2	28	99	42	6	5	11	0	0	10	18	0	1	1	0	10	2	0	0	275	0	0	984	674	AL
AM	0	0	0	2	1	16	0	5	2	69	2	0	2	0	0	34	15	0	0	0	0	1	1	6	0	113	0	0	531	101	AM
AT	0	0	0	31	4	70	2	10	7	31	7	19	10	0	0	2	9	0	1	1	0	2	4	0	0	276	0	0	1322	1180	AT
AZ	0	0	0	4	3	26	1	5	2	169	5	0	2	0	1	20	27	1	0	1	0	1	1	15	0	220	0	0	761	140	AZ
BA	2	1	0	19	4	85	2	25	45	31	6	5	15	0	0	3	14	0	1	1	0	3	3	0	0	243	0	0	878	691	BA
BE	0	0	0	60	4	31	2	3	1	11	5	1	3	0	0	0	4	0	1	1	0	0	10	0	0	218	0	0	818	783	BE
BG	0	1	0	12	5	82	1	62	26	90	9	2	11	0	0	17	47	0	1	1	1	1	2	0	0	252	0	0	765	526	BG
BY	0	0	0	14	5	97	0	8	2	106	11	1	5	0	0	1	34	0	1	2	0	0	3	0	0	180	0	0	664	381	BY
CH	0	0	0	17	2	33	2	7	3	17	3	5	3	0	0	1	6	0	1	0	0	2	3	0	0	225	0	0	1275	983	CH
CY	0	2	0	5	3	43	1	24	10	98	5	1	5	0	0	374	40	0	0	1	1	16	1	1	2	354	0	0	941	351	CY
CZ	0	0	0	32	5	143	1	10	9	32	9	6	15	0	0	1	11	0	1	2	0	1	6	0	0	285	0	0	1190	1082	CZ
DE	0	0	0	57	5	69	2	5	2	21	10	1	4	0	0	1	8	0	1	2	0	1	9	0	0	270	0	0	1107	1027	DE
DK	0	0	0	50	15	46	1	2	1	21	26	0	2	0	0	0	5	0	2	8	0	0	15	0	0	228	0	0	747	696	DK
EE	0	0	0	22	6	32	0	2	1	102	19	0	1	0	0	0	6	0	1	4	0	0	5	0	0	164	0	0	491	348	EE
ES	0	0	0	6	1	11	28	4	2	6	2	1	1	0	0	1	3	0	3	0	0	9	2	0	1	223	0	0	465	440	ES
FI	0	0	0	8	4	12	0	1	0	50	10	0	0	0	0	0	3	0	0	2	0	0	2	0	0	75	0	0	215	147	FI
FR	0	0	0	23	3	27	4	6	3	12	4	2	3	0	0	0	5	0	1	1	0	3	6	0	0	207	0	0	691	641	FR
GB	0	0	0	14	3	12	1	1	0	5	5	0	1	0	0	0	2	0	1	1	0	0	6	0	0	101	0	0	410	394	GB
GE	0	0	0	4	2	27	0	7	2	122	4	0	3	0	0	27	30	0	0	0	1	1	1	4	0	147	0	0	705	141	GE
GL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-4	0	0	1	1	GL
GR	1	9	0	9	4	67	1	39	34	76	7	3	10	0	0	46	36	0	1	1	1	9	2	0	0	285	0	0	878	607	GR
HR	1	1	0	25	5	88	2	23	34	32	6	16	16	0	0	3	13	0	1	1	0	5	3	0	0	289	0	0	1103	913	HR
HU	0	0	0	24	5	156	2	35	28	41	7	6	29	0	0	2	23	0	1	1	0	1	4	0	0	274	0	0	1049	896	HU
IE	0	0	0	9	2	7	1	1	0	3	3	0	0	0	0	0	1	0	1	1	0	0	2	0	0	40	0	0	186	176	IE
IS	0	0	0	2	1	2	1	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	8	0	0	43	38	IS
IT	1	1	0	18	3	43	3	16	15	23	3	19	7	0	0	4	10	0	1	0	0	15	3	0	0	346	0	0	1794	1661	IT
KG	0	0	0	1	1	7	0	2	1	45	2	0	1	12	0	6	5	48	0	0	0	0	0	2	0	59	0	0	250	62	KG
KZT	0	0	0	4	3	17	1	3	1	131	5	0	1	1	0	4	11	3	0	1	0	0	1	1	0	141	0	0	310	121	KZT
LT	0	0	0	22	6	100	0	5	1	63	18	0	5	0	0	1	19	0	1	3	0	0	5	0	0	191	0	0	650	494	LT
LU	0	0	0	42	3	35	3	4	2	17	6	1	4	0	0	0	5	0	1	1	0	1	7	0	0	215	0	0	827	781	LU
LV	0	0	0	22	7	58	0	3	1	83	18	0	2	0	0	0	11	0	1	4	0	0	5	0	0	180	0	0	569	423	LV
MD	0	0	0	13	5	114	1	31	3	109	9	1	9	0	0	7	66	0	1	1	0	0	3	0	0	219	0	0	696	441	MD
ME	21	3	0	14	4	74	2	25	76	35	6	4	12	0	0	5	16	0	1	1	0	5	3	0	0	239	0	0	813	582	ME
MK	2	26	0	10	4	71	2	30	72	50	7	3	12	0	0	13	22	0	1	1	0	2	2	0	0	229	0	0	815	574	MK
MT	2	2	132	13	3	36	4	19	20	25	4	6	6	0	0	8	13	0	1	0	0	72	2	0	2	418	0	0	1166	1043	MT
NL	0	0	0	117	6	42	2	2	0	9	7	0	2	0	0	0	4	0	1	2	0	0	15	0	0	223	0	0	796	765	NL
NO	0	0	0	10	15	14	0	1	1	13	9	0	1	0	0	0	2	0	0	1	0	0	4	0	0	53	0	0	196	159	NO
PL	0	0	0	33	6	283	1	13	6	38	12	2	13	0	0	1	21	0	1	3	0	0	7	0	0	260	0	0	1027	913	PL
PT	0	0	0	5	1	10	176	3	1	4	2	1	1	0	0	0	2	0	8	0	0	2	1	0	0	195	0	0	453	436	PT
RO	0	0	0	14	5	106	1	90	12	72	8	2	12	0	0	6	46	0	1	1	0	1	3	0	0	227	0	0	751	563	RO
RS	2	3	0	15	5	113	2	47	125	46	7	3	20	0	0	4	24	0	1	1	0	1	3	0	0	253	0	0	924	659	RS
RUE	0	0	0	2	1	7	0	1	0	69	2	0	0	0	0	1	5	0	0	0	0	0	0	0	0	44	0	0	135	47	RUE
SE	0	0	0	13	6	30	0	3	1	30	22	0	1	0	0	0	5	0	1	3	0	0	4	0	0	96	0	0	304	248	SE
SI	0	1	0	29	4	76	2	15	15	30	6	79	12	0	0	2	10	0	1	1	0	5	4	0	0	302	0	0	1335	1185	SI
SK	0	0	0	24	5	246	1	24	16	42	7	4	42	0	0	2	22	0	1	2	0	1	4	0	0	261	0	0	1065	931	SK
TJ	0	0	0	1	1	6	0	2	1	37	1	0	1	25	1	6	4	25	0	0	0	0	0	5	0	39	0	0	181	53	TJ
TM	0	0	0	5	4	21	1	4	2	146	6	1	2	1	2	12	15	6	0	1	0	0	1	5	0	259	0	0	407	151	TM
TR	0	1	0	5	3	39	1	15	6	99	5	1	4	0	0	166	35	0	0	1	1	3	1	2	1	178	0	0	598	221	TR
UA	0	0	0	12	5	104	1	16	4	156	9	1	7	0	0	6	98	0	1	1	0	0	3	0	0	221	0	0	720	390	UA
UZ	0	0	0	4	3	18	1	4	1	124	6	0	1	8	1	9	12	30	0	1	0	0	1	3	0	212	0	0	374	132	UZ
ATL	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	7	7	ATL
BAS	0	0	0	20	6	38	0	2	1	45	24	0	1	0	0	0	4	0	1	6	0	0	5	0	0	138	0	0	420	350	BAS
BLS	0	0	0	2	2	19	0	8	2	59	3	0	2	0	0	16	27	0	0	0	1	0	1	0	0	73	0	0	225	91	BLS
MED	0	1	0	4	1	15	1	8	6	18	2	2	2	0	0	28	8	0	0	0	0	9	1	0	1	111	0	0	318	236	MED
NOS	0	0	0	10	4	6	0	0	0	3	3	0	0	0	0	0	1	0	0	1	0	0	4	0	0	44	0	0	148	138	NOS
AST	0	0	0	2	1	9	0	3	1	42	2	0	1	1	0	28	7	3	0	0	0	1	0	28	0	71	0	0	182	67	AST
NOA	0	1	0	2	1	8	2	5	4	9	1	1	1	0	0	10	4	0	0	0	0	5	0	0	1	93	0	0	176	137	NOA
EXC	0	0	0	7	3	25	2	5	3	70	4	1	2	1	0	8	11	2	0	1	0	1	1	1	0	105	0	0	326	201	EXC
EU	0	1	0	21	4	63	8	14	6	31	9	3	6	0	0	4	11	0	1	2	0	3	5	0	0	207	0	0	742	653	EU
	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	

Table C.6: 2011 country-to-country blame matrices for **SOMO35**.
Units: ppb.d per 15% emis. red. of NO_x. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	
AL	37	0	3	0	5	0	8	1	1	0	2	3	0	0	6	0	5	2	0	-3	4	3	0	0	23	0	1	0	0	0	0	AL
AM	0	32	0	63	0	0	0	1	0	1	0	1	0	0	2	0	1	2	26	1	0	0	0	0	2	0	4	0	0	0	0	AM
AT	0	0	3	0	1	-1	1	0	3	0	0	7	-0	0	7	1	20	1	0	1	3	2	0	0	23	0	0	0	0	0	0	AT
AZ	0	5	0	114	0	0	0	1	0	0	0	2	0	0	1	1	1	2	28	1	0	0	0	0	1	0	11	0	0	0	0	AZ
BA	1	0	6	0	39	0	3	1	1	0	5	6	0	0	7	1	7	2	0	2	19	11	0	0	20	0	1	0	0	0	0	BA
BE	0	0	0	0	0	-60	0	0	0	0	-0	-21	0	0	5	0	17	-11	0	0	0	0	1	1	1	0	0	0	-4	0	0	BE
BG	1	0	2	1	2	0	48	3	0	0	2	5	0	0	3	1	3	2	1	7	1	4	0	0	5	0	2	1	0	0	3	BG
BY	0	0	1	0	0	-0	0	20	0	0	1	3	1	1	1	3	3	2	0	0	0	1	1	0	1	0	2	4	0	2	1	BY
CH	0	0	-1	0	0	-1	0	0	6	0	-1	-10	-0	0	11	0	47	1	0	1	1	0	1	0	23	0	0	0	-0	0	0	CH
CY	0	0	1	1	0	0	2	1	0	31	1	2	0	0	3	0	3	2	1	11	0	1	0	0	7	0	1	0	0	0	0	CY
CZ	0	0	6	0	1	-1	1	0	1	0	-11	3	-0	0	4	1	16	2	0	0	2	3	1	0	4	0	1	0	-0	0	0	CZ
DE	0	0	-0	0	0	-6	0	0	1	0	-2	-32	-0	0	5	1	22	-1	0	0	0	0	1	0	3	0	0	0	-2	0	0	DE
DK	0	0	0	0	0	-3	0	-0	0	0	-0	-8	-14	0	1	2	5	1	0	0	0	0	3	1	0	0	0	1	-0	0	0	DK
EE	0	0	0	0	0	-1	0	4	0	0	0	1	1	3	1	4	3	2	0	0	0	0	1	1	0	0	1	2	0	3	0	EE
ES	0	0	0	0	0	-0	0	0	0	0	-0	-1	0	0	104	0	14	1	0	1	0	0	1	0	7	0	0	0	0	0	0	ES
FI	0	0	0	0	0	-0	0	1	0	0	0	2	1	1	1	7	1	1	0	0	0	0	1	1	0	0	0	1	0	1	0	FI
FR	0	0	-0	0	0	-2	0	0	-0	0	-1	-8	0	0	16	0	59	-1	0	0	0	0	1	0	3	0	0	0	-1	0	0	FR
GB	0	0	0	0	0	-2	0	0	0	0	-0	-3	-0	0	3	0	4	-48	0	0	0	0	4	1	1	0	0	0	-0	0	0	GB
GE	0	7	0	41	0	0	1	1	0	0	0	2	0	0	2	1	1	2	103	1	0	0	0	0	2	0	4	0	0	0	1	GE
GL	0	0	-0	0	0	-0	0	0	-0	0	-0	-0	-0	0	0	0	-0	0	0	0	0	-0	0	0	0	0	0	0	-0	0	0	GL
GR	4	0	1	0	2	0	26	2	0	0	1	3	0	0	4	1	4	2	0	46	1	2	0	0	12	0	1	0	0	0	1	GR
HR	1	0	10	0	16	-0	2	1	1	0	5	8	0	0	6	1	9	2	0	2	33	13	0	0	20	0	1	0	0	0	0	HR
HU	0	0	8	0	3	-0	3	2	1	0	6	7	-0	0	5	1	9	2	0	1	8	25	0	0	7	0	1	1	-0	0	1	HU
IE	0	0	0	0	0	-1	0	0	0	0	0	-1	0	0	2	0	3	-10	0	0	0	0	-1	1	0	0	0	0	0	0	0	IE
IS	0	0	-0	0	0	-0	0	-0	-0	0	-0	-1	0	0	0	0	0	3	0	0	0	-0	1	2	0	0	0	-0	-0	-0	0	IS
IT	0	0	4	0	3	-0	2	0	2	0	0	3	-0	0	10	0	23	1	0	2	4	2	0	0	45	0	0	0	0	0	0	IT
KG	0	1	0	2	0	0	0	0	0	0	0	2	0	0	2	0	2	1	1	0	0	0	0	0	2	39	22	0	0	0	0	KG
KZT	0	0	0	2	0	0	0	1	0	0	0	2	1	0	2	1	2	3	1	0	0	0	0	0	1	2	42	0	0	0	0	KZT
LT	0	0	0	0	0	-1	0	9	0	0	1	1	1	1	1	2	3	1	0	0	0	1	1	1	1	0	1	8	0	3	0	LT
LU	0	0	0	0	0	-11	0	0	1	0	-0	-22	0	0	6	0	32	-4	0	0	0	0	1	0	2	0	0	0	-90	0	0	LU
LV	0	0	0	0	0	-0	0	7	0	0	0	1	1	2	1	3	3	1	0	0	0	0	1	1	0	0	1	5	0	5	0	LV
MD	0	0	1	0	0	0	2	7	0	0	1	3	1	0	2	1	3	2	0	1	0	3	0	0	1	0	2	1	0	0	16	MD
ME	7	0	3	0	15	0	5	1	1	0	3	4	0	0	6	0	6	2	0	4	7	5	0	0	21	0	1	0	0	0	0	ME
MK	7	0	2	0	3	0	20	1	1	0	2	3	0	0	5	0	5	2	0	-8	2	4	0	0	12	0	1	0	0	0	1	MK
MT	1	0	1	0	2	0	3	1	0	0	0	2	0	0	13	0	21	2	0	7	2	1	0	0	44	0	0	0	0	0	0	MT
NL	0	0	0	0	0	-20	0	0	0	0	0	-17	0	0	2	1	7	-12	0	0	0	0	2	1	1	0	0	0	-1	0	0	NL
NO	0	0	0	0	0	-0	0	0	0	0	0	1	1	0	1	2	2	2	0	0	0	0	1	1	0	0	0	0	-0	0	0	NO
PL	0	0	2	0	0	-2	1	2	0	0	1	-3	0	0	2	1	7	1	0	0	1	3	1	0	2	0	1	2	0	1	0	PL
PT	0	0	0	0	0	-0	0	0	0	0	-0	-0	0	0	69	0	6	2	0	0	0	0	1	0	3	0	0	0	0	0	0	PT
RO	0	0	2	0	1	0	7	4	0	0	2	4	0	0	3	1	4	2	0	1	1	7	0	0	3	0	2	1	0	0	4	RO
RS	2	0	3	0	6	0	12	1	1	0	4	5	0	0	5	1	6	2	0	2	4	11	0	0	10	0	1	0	0	0	1	RS
RUE	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	1	1	0	0	0	0	0	0	0	0	4	0	0	0	0	RUE
SE	0	0	0	0	0	-1	0	1	0	0	0	1	0	0	1	4	3	2	0	0	0	0	1	1	0	0	0	1	0	0	0	SE
SI	0	0	13	0	3	-0	1	0	1	0	1	9	-0	0	6	0	12	2	0	1	17	6	0	0	22	0	1	0	0	0	0	SI
SK	0	0	6	0	1	-1	2	2	1	0	6	2	-0	0	4	1	8	1	0	1	4	17	1	0	5	0	1	1	-0	0	1	SK
TJ	0	0	0	2	0	0	0	0	0	0	0	1	0	0	2	0	1	1	1	0	0	0	0	0	1	3	8	0	0	0	0	TJ
TM	0	1	0	8	0	0	0	1	0	0	1	3	1	0	2	1	2	4	3	0	0	0	0	0	2	1	26	0	0	0	0	TM
TR	0	2	1	3	0	0	2	2	0	1	1	2	0	0	3	0	2	2	4	4	0	1	0	0	3	0	1	0	0	0	1	TR
UA	0	0	1	1	0	-0	1	9	0	0	1	1	1	1	2	2	3	3	0	0	0	2	0	0	1	0	3	1	0	1	2	UA
UZ	0	1	0	4	0	0	0	1	0	0	0	3	0	0	2	1	2	3	2	0	0	0	0	0	1	1	36	0	0	0	0	UZ
ATL	0	0	0	0	0	-0	0	0	0	0	-0	-1	0	0	1	0	1	1	0	0	0	0	1	1	0	0	0	0	-0	0	0	ATL
BAS	0	0	0	0	0	-2	0	1	0	0	0	-4	-2	1	1	5	3	1	0	0	0	0	1	1	0	0	1	2	-0	2	0	BAS
BLS	0	1	0	3	0	0	3	6	-0	0	1	2	0	0	1	1	1	2	10	1	0	1	0	0	1	0	3	1	0	1	3	BLS
MED	1	0	1	0	2	0	5	1	0	1	1	1	0	0	12	0	20	2	0	12	3	2	0	0	27	0	1	0	0	0	1	MED
NOS	0	0	0	0	0	-4	0	-0	-0	0	-0	-7	-1	0	2	1	1	-16	0	0	0	-0	3	1	1	0	0	0	-0	0	0	NOS
AST	0	1	0	6	0	0	0	1	0	1	0	1	0	0	1	0	1	1	2	1	0	0	0	0	2	3	13	0	0	0	0	AST
NOA	1	0	1	0	1	0	3	0	1	0	1	2	0	0	15	0	10	2	0	11	1	1	0	0	18	0	0	0	0	0	0	NOA
EXC	0	0	0	1	0	-0	1	1	0	0	0	0	0	0	4	1	4	1	1	1	0	1	0	0	2	1	9	0	-0	0	0	EXC
EU	0	0	1	0	1	-2	3	1	0	0	0	-3	0	0	18	2	16	-2	0	2	1	2	1	0	6	0	0	1	-0	0	0	EU
	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	

Table C.6 Cont.: 2011 country-to-country blame matrices for **SOMO35**.
Units: ppb.d per 15% emis. red. of NO_x. **Emitters →, Receptors ↓.** (Based on ECMWF meteorology.)

	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	
AL	4	6	0	0	1	4	1	7	28	6	1	1	1	0	0	3	4	0	4	0	2	26	1	0	1	23	0	0	170	67	AL
AM	0	0	0	0	1	1	0	1	0	21	0	0	0	0	2	55	5	1	3	1	4	6	1	21	1	24	0	0	226	15	AM
AT	0	0	0	-2	1	-2	1	2	1	3	1	4	1	0	0	2	1	0	7	-0	0	7	-1	0	0	21	0	0	89	71	AT
AZ	0	0	0	0	1	2	0	1	0	54	1	0	0	0	5	18	8	3	3	1	3	2	2	17	0	20	0	0	265	16	AZ
BA	4	0	0	0	1	6	1	7	11	5	1	1	3	0	0	2	2	0	5	0	1	12	1	0	1	22	0	0	177	89	BA
BE	0	0	0	-17	1	0	1	0	0	1	0	0	0	0	0	0	1	0	14	-0	0	2	-21	0	0	21	0	0	-80	-85	BE
BG	0	2	0	0	1	9	0	32	12	20	1	0	2	0	0	3	17	0	5	1	8	5	1	0	0	21	0	0	194	127	BG
BY	0	0	0	-1	3	12	0	2	0	20	2	0	1	0	0	0	14	0	7	3	0	0	1	0	0	16	0	0	99	39	BY
CH	0	0	0	-1	1	0	1	1	1	2	0	0	0	0	0	1	1	0	8	0	0	8	-0	0	0	24	0	0	86	74	CH
CY	0	1	0	0	1	3	0	2	2	12	0	0	0	0	0	114	6	0	3	1	5	107	1	3	2	25	0	0	212	70	CY
CZ	0	0	0	-1	2	-4	0	2	1	3	1	1	2	0	0	1	2	0	10	-0	0	3	-1	0	0	20	0	0	46	30	CZ
DE	0	0	0	-9	2	-2	0	1	0	2	1	0	0	0	0	0	1	0	12	-2	0	2	-9	0	0	21	0	0	-8	-17	DE
DK	0	0	0	-6	6	-1	0	0	0	1	2	0	0	0	0	0	0	0	18	-19	0	0	-19	0	0	21	0	0	-7	-17	DK
EE	0	0	0	-1	5	5	0	0	0	16	5	0	0	0	0	0	2	0	9	1	0	0	1	0	0	16	0	0	60	31	EE
ES	0	0	0	-0	0	0	15	1	1	1	0	0	0	0	0	0	0	0	18	0	0	13	0	0	1	30	0	0	147	143	ES
FI	0	0	0	-0	4	2	0	0	0	10	4	0	0	0	0	0	1	0	7	3	0	0	1	0	0	13	0	0	39	22	FI
FR	0	0	0	-2	1	-0	1	1	0	1	0	-0	0	0	0	0	1	0	17	-0	0	8	-3	0	0	24	0	0	74	69	FR
GB	0	0	0	-3	2	-0	0	0	0	1	1	0	0	0	0	0	0	0	22	-0	0	1	-14	0	0	23	0	0	-38	-43	GB
GE	0	0	0	0	1	3	0	2	0	44	1	0	0	0	2	40	11	1	4	1	14	4	2	7	0	23	0	0	276	19	GE
GL	0	0	0	-0	0	-0	0	0	-0	0	0	-0	-0	0	0	0	-0	0	2	-0	0	0	0	0	0	8	0	0	1	0	GL
GR	1	6	0	0	1	5	0	12	9	13	1	0	1	0	0	13	10	0	4	1	6	32	1	0	1	22	0	0	189	124	GR
HR	1	0	0	-0	1	1	0	6	4	4	1	4	3	0	0	2	1	0	6	0	1	14	0	0	0	19	0	0	160	93	HR
HU	0	0	0	-1	1	7	0	16	9	6	1	2	9	0	0	1	4	0	6	0	1	4	-0	0	0	18	0	0	147	108	HU
IE	0	0	0	-1	1	0	0	0	0	1	0	-0	0	0	0	0	0	0	24	-0	0	0	-4	0	0	23	0	0	-4	-7	IE
IS	0	0	0	-0	3	-0	0	0	0	1	1	-0	-0	0	0	0	0	0	10	0	0	0	1	0	0	14	0	0	11	5	IS
IT	0	0	0	-0	1	-0	1	3	2	3	0	1	1	0	0	2	1	0	6	0	1	28	0	0	1	22	0	0	121	101	IT
KG	0	0	0	0	0	1	0	0	0	9	0	0	0	22	4	5	1	47	1	0	0	2	1	23	0	30	0	0	168	13	KG
KZT	0	0	0	0	2	2	0	1	0	61	1	0	0	1	2	3	4	5	4	1	1	1	2	5	0	25	0	0	147	19	KZT
LT	0	0	0	-2	3	11	0	1	0	11	3	0	1	0	0	0	6	0	10	2	0	0	-1	0	0	17	0	0	69	37	LT
LU	0	0	0	-6	1	0	1	1	0	2	0	0	0	0	0	0	1	0	11	-0	0	2	-5	0	0	20	0	0	-82	-89	LU
LV	0	0	0	-1	4	8	0	1	0	15	4	0	0	0	0	0	4	0	9	4	0	0	-1	0	0	16	0	0	68	36	LV
MD	0	0	-0	0	2	14	0	13	1	25	1	0	2	0	0	1	36	1	6	2	3	1	2	0	0	19	0	0	149	55	MD
ME	29	1	0	0	1	6	1	7	31	5	1	1	2	0	0	3	3	0	5	0	1	20	1	0	1	24	0	0	183	78	ME
MK	1	26	0	0	1	6	0	12	36	9	1	0	2	0	0	3	6	0	4	1	2	10	1	0	1	23	0	0	165	68	MK
MT	1	1	-42	0	1	1	1	4	5	3	0	1	0	0	0	3	2	0	8	0	1	19	1	0	2	26	0	0	82	59	MT
NL	0	0	0	-59	3	0	0	0	0	1	1	0	0	0	0	0	1	0	15	-1	0	1	-44	0	0	19	0	0	-87	-93	NL
NO	0	0	0	-1	10	1	0	0	0	2	4	0	0	0	0	0	0	0	11	1	0	0	-0	0	0	16	0	0	30	15	NO
PL	0	0	0	-3	3	-2	0	3	1	3	2	0	2	0	0	0	4	0	10	-0	0	1	-2	0	0	18	0	0	39	21	PL
PT	0	0	0	-0	0	-0	55	0	0	0	0	0	0	0	0	0	0	0	30	-0	0	7	0	0	0	31	0	0	139	137	PT
RO	0	0	0	-0	2	12	0	54	4	16	1	0	3	0	0	1	21	0	5	1	4	2	1	0	0	20	0	0	169	110	RO
RS	3	2	0	-0	1	8	0	19	25	8	1	1	4	0	0	1	5	0	5	0	2	6	1	0	0	20	0	0	157	94	RS
RUE	0	0	0	0	1	1	0	0	0	30	1	0	0	0	0	1	3	0	2	1	0	0	1	0	0	9	0	0	51	9	RUE
SE	0	0	0	-1	7	4	0	0	0	4	7	0	0	0	0	0	1	0	10	2	0	0	-1	0	0	16	0	0	40	25	SE
SI	0	0	0	-1	1	-4	0	3	0	4	0	7	2	0	0	2	1	0	6	-0	1	11	-0	0	0	18	0	0	114	83	SI
SK	0	0	0	-1	2	4	0	9	5	5	1	1	15	0	0	1	4	0	7	-0	1	3	-1	0	0	19	0	0	110	82	SK
TJ	0	0	0	0	0	1	0	0	0	6	0	0	0	57	7	4	1	40	1	0	0	1	1	33	0	31	0	0	139	9	TJ
TM	0	0	0	1	1	3	0	1	0	44	1	0	0	2	35	8	5	31	4	1	1	2	3	22	0	34	0	0	191	23	TM
TR	0	0	0	0	1	3	0	3	1	22	1	0	0	0	0	104	11	0	4	1	9	17	1	6	1	28	0	0	183	29	TR
UA	0	0	0	-0	2	10	0	6	1	38	2	0	2	0	0	2	36	0	6	2	3	1	2	0	0	18	0	0	135	39	UA
UZ	0	0	0	1	1	2	0	1	0	45	1	0	0	9	8	5	4	40	4	1	1	1	2	12	0	31	0	0	179	21	UZ
ATL	0	0	0	-0	2	-0	0	0	0	2	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	17	0	0	9	4	ATL
BAS	0	0	0	-4	6	4	0	0	0	7	3	0	0	0	0	0	1	0	13	-18	0	0	-6	0	0	19	0	0	31	13	BAS
BLS	0	0	0	0	2	5	0	8	1	66	1	0	1	0	0	6	44	1	6	2	47	2	2	1	0	21	0	0	179	33	BLS
MED	1	1	1	0	1	2	1	5	4	7	0	0	1	0	0	22	5	0	8	0	3	78	1	1	2	27	0	0	145	95	MED
NOS	0	0	0	-7	8	-2	0	0	0	1	1	0	-0	0	0	0	-0	0	30	-3	0	1	-45	0	0	29	0	0	-17	-28	NOS
AST	0	0	0	0	1	1	0	1	0	21	0	0	0	3	5	19	3	7	2	1	1	7	1	49	0	28	0	0	97	13	AST
NOA	0	1	1	0	0	2	1	3	3	3	0	0	0	0	0	10	2	0	5	0	1	60	1	0	10	41	0	0	96	72	NOA
EXC	0	0	0	-0	2	2	1	2	1	27	1	0	0	1	1	5	4	3	5	1	1	2	0	2	0	16	0	0	80	22	EXC
EU	0	0	0	-2	2	2	3	6	2	5	2	0	1	0	0	1	3	0	12	0	1	7	-3	0	0	21	0	0	74	56	EU
	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	

Table C.7: 2011 country-to-country blame matrices for **SOMO35**.
Units: ppb.d per 15% emis. red. of VOC. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	
AL	9	0	3	0	2	1	3	2	1	0	3	11	1	0	2	0	6	4	0	16	2	3	0	0	24	0	0	0	0	0	0	AL
AM	0	29	0	14	0	0	0	2	0	0	1	3	0	0	1	0	2	1	21	0	0	0	0	0	2	0	1	0	0	0	0	AM
AT	0	0	21	0	1	2	0	2	8	0	5	41	1	0	2	0	15	7	0	1	3	2	0	0	31	0	0	0	0	0	0	AT
AZ	0	3	0	41	0	0	0	3	0	0	1	4	0	0	1	1	2	2	34	0	0	0	0	0	1	0	1	0	0	0	0	AZ
BA	1	0	4	0	8	1	2	3	1	0	4	17	1	0	3	0	7	5	0	3	4	5	0	0	24	0	0	0	0	0	1	BA
BE	0	0	2	0	0	12	0	1	1	0	2	29	1	0	2	0	25	19	0	0	0	0	1	0	7	0	0	0	1	0	0	BE
BG	0	0	2	0	1	1	8	4	1	0	3	13	1	0	1	1	5	5	0	3	1	3	0	0	6	0	0	1	0	0	1	BG
BY	0	0	1	0	0	1	0	17	0	0	1	11	1	0	0	1	4	7	0	0	0	1	0	0	1	0	0	2	0	1	0	BY
CH	0	0	7	0	0	2	0	1	36	0	2	27	0	0	4	0	25	6	0	1	1	1	0	0	70	0	0	0	0	0	0	CH
CY	0	0	1	1	1	1	1	4	1	4	1	7	0	0	2	0	4	3	1	4	1	1	0	0	10	0	0	0	0	0	0	CY
CZ	0	0	6	0	0	2	1	3	3	0	17	41	1	0	2	1	13	9	0	1	1	3	0	0	7	0	0	0	0	0	0	CZ
DE	0	0	4	0	0	4	0	2	4	0	4	53	1	0	2	0	18	13	0	0	0	1	1	0	6	0	0	0	0	0	0	DE
DK	0	0	0	0	0	3	0	2	0	0	2	23	7	0	1	1	7	23	0	0	0	0	1	0	1	0	0	1	0	1	0	DK
EE	0	0	0	0	0	1	0	4	0	0	1	11	2	2	0	3	4	11	0	0	0	0	0	0	1	0	0	1	0	2	0	EE
ES	0	0	1	0	0	1	0	1	1	0	1	6	0	0	29	0	9	4	0	0	1	1	0	0	10	0	0	0	0	0	0	ES
FI	0	0	0	0	0	1	0	2	0	0	0	5	1	0	0	3	2	5	0	0	0	0	0	0	0	0	0	0	0	1	0	FI
FR	0	0	3	0	0	2	0	1	3	0	2	17	0	0	8	0	32	11	0	0	1	1	0	0	25	0	0	0	0	0	0	FR
GB	0	0	0	0	0	1	0	0	0	0	1	7	0	0	2	0	9	32	0	0	0	0	1	0	3	0	0	0	0	0	0	GB
GE	0	4	1	11	0	0	0	3	0	0	1	5	0	0	1	1	2	2	93	0	0	1	0	0	2	0	1	0	0	0	0	GE
GL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	GL
GR	2	0	2	0	1	1	5	3	1	0	2	10	1	0	2	0	5	4	0	20	1	2	0	0	14	0	0	0	0	0	1	GR
HR	1	0	6	0	4	1	1	3	2	0	5	24	1	0	2	0	9	6	0	2	9	5	0	0	40	0	0	0	0	0	1	HR
HU	0	0	5	0	1	2	1	3	2	0	6	26	1	0	2	1	8	7	0	1	2	9	0	0	10	0	0	1	0	0	0	HU
IE	0	0	0	0	0	1	0	0	0	0	0	4	0	0	2	0	4	14	0	0	0	0	2	0	1	0	0	0	0	0	0	IE
IS	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	2	0	0	0	0	0	0	1	0	0	0	0	0	0	IS
IT	1	0	7	0	2	1	1	2	4	0	3	16	0	0	5	0	15	6	0	2	4	3	0	0	159	0	0	0	0	0	0	IT
KG	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	1	9	1	0	0	0	0	KG
KZT	0	0	0	1	0	0	0	2	0	0	0	3	0	0	0	1	1	2	0	0	0	0	0	0	1	1	1	0	0	0	0	KZT
LT	0	0	1	0	0	2	0	9	0	0	2	14	2	0	0	1	5	11	0	0	0	1	0	0	2	0	0	4	0	1	0	LT
LU	0	0	2	0	0	5	0	1	2	0	2	33	1	0	2	0	26	14	0	0	0	0	0	0	6	0	0	0	2	0	0	LU
LV	0	0	0	0	0	1	0	6	0	0	1	13	2	1	0	1	4	11	0	0	0	0	0	0	1	0	0	2	0	4	0	LV
MD	0	0	1	0	0	1	1	4	1	0	3	13	1	0	1	1	4	5	0	0	1	2	0	0	2	0	1	0	0	0	2	MD
ME	3	0	3	0	3	1	2	2	1	0	3	13	1	0	2	0	6	4	0	4	2	4	0	0	21	0	0	0	0	0	1	ME
MK	2	0	2	0	1	1	5	2	1	0	3	11	1	0	2	0	5	4	0	17	1	4	0	0	12	0	0	0	0	0	1	MK
MT	1	0	3	0	1	1	2	2	2	0	2	11	1	0	9	1	16	6	0	5	2	2	0	0	67	0	0	0	0	0	0	MT
NL	0	0	1	0	0	7	0	1	1	0	1	27	1	0	1	0	13	23	0	0	0	0	1	0	3	0	0	0	0	0	0	NL
NO	0	0	0	0	0	1	0	1	0	0	0	6	1	0	1	0	3	7	0	0	0	0	0	0	1	0	0	0	0	0	0	NO
PL	0	0	2	0	0	2	0	6	1	0	5	29	2	0	1	1	8	12	0	0	0	1	0	0	3	0	0	1	0	1	0	PL
PT	0	0	1	0	0	1	0	0	0	0	1	5	0	0	17	0	6	4	0	0	0	0	0	0	5	0	0	0	0	0	0	PT
RO	0	0	2	0	1	1	1	4	1	0	3	15	1	0	1	1	5	5	0	1	1	4	0	0	6	0	0	1	0	0	1	RO
RS	1	0	3	0	2	1	3	3	1	0	4	17	1	0	2	0	6	5	0	3	2	6	0	0	10	0	0	0	0	0	1	RS
RUE	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	RUE
SE	0	0	0	0	0	1	0	2	0	0	1	8	2	0	0	1	3	9	0	0	0	0	0	0	0	0	0	1	0	1	0	SE
SI	0	0	14	0	2	2	1	2	3	0	6	30	1	0	2	0	11	6	0	1	10	4	0	0	60	0	0	0	0	0	0	SI
SK	0	0	4	0	1	2	1	3	1	0	7	27	1	0	1	1	8	8	0	1	1	6	0	0	7	0	0	1	0	1	0	SK
TJ	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1	1	1	0	0	0	0	TJ
TM	0	0	0	3	0	0	0	2	0	0	1	4	0	0	1	1	2	3	2	0	0	0	0	0	2	0	1	0	0	0	0	TM
TR	0	1	1	1	0	0	1	3	0	0	1	6	0	0	1	0	3	2	2	1	0	1	0	0	4	0	0	0	0	0	0	TR
UA	0	0	1	0	0	1	0	6	0	0	2	11	1	0	1	1	3	5	0	0	0	1	0	0	2	0	1	1	0	1	0	UA
UZ	0	0	0	1	0	0	0	2	0	0	0	4	0	0	1	1	2	2	1	0	0	0	0	0	1	2	2	0	0	0	0	UZ
ATL	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	2	3	0	0	0	0	0	0	1	0	0	0	0	0	0	ATL
BAS	0	0	0	0	0	2	0	4	0	0	1	19	4	1	0	3	6	17	0	0	0	0	1	0	1	0	0	1	0	2	0	BAS
BLS	0	0	1	2	0	1	2	7	1	0	2	12	1	0	1	1	4	5	9	1	1	2	0	0	3	0	1	1	0	1	1	BLS
MED	1	0	3	0	2	1	2	3	2	0	2	13	1	0	10	0	16	7	0	8	3	2	0	0	54	0	0	1	0	0	0	MED
NOS	0	0	1	0	0	2	0	1	0	0	1	15	2	0	1	0	10	31	0	0	0	0	1	0	3	0	0	0	0	0	0	NOS
AST	0	0	0	3	0	0	0	1	0	0	0	2	0	0	0	0	1	1	1	0	0	0	0	0	2	0	1	0	0	0	0	AST
NOA	1	0	1	0	1	1	1	2	1	0	1	6	0	0	6	0	7	3	0	4	1	1	0	0	17	0	0	0	0	0	0	NOA
EXC	0	0	1	1	0	1	0	2	0	0	1	6	0	0	1	0	3	3	1	0	0	0	0	0	5	0	0	0	0	0	0	EXC
EU	0	0	2	0	0	2	1	2	2	0	2	18	1	0	6	1	11	10	0	1	1	1	0	0	19	0	0	0	0	0	0	EU
	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	

Table C.7 Cont.: 2011 country-to-country blame matrices for **SOMO35**.
Units: ppb.d per 15% emis. red. of VOC. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	
AL	1	4	0	1	1	9	0	8	15	8	1	1	2	0	0	4	4	0	0	0	0	1	0	0	0	39	0	0	155	99	AL
AM	0	0	0	0	0	3	0	2	0	14	1	0	0	0	0	11	3	0	0	0	0	0	0	1	0	17	0	0	115	19	AM
AT	0	0	0	3	0	10	0	3	2	6	1	3	1	0	0	1	3	0	0	0	0	0	0	0	0	34	0	0	178	152	AT
AZ	0	0	0	1	1	5	0	2	0	27	1	0	0	0	0	4	5	0	0	0	0	0	0	2	0	27	0	0	145	24	AZ
BA	1	1	0	2	1	13	0	9	9	9	1	1	2	0	0	1	6	0	0	0	0	1	0	0	0	35	0	0	150	105	BA
BE	0	0	0	7	0	5	0	1	0	2	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	30	0	0	121	115	BE
BG	0	1	0	1	1	10	0	15	4	14	1	0	1	0	0	5	8	0	0	0	0	0	0	0	0	32	0	0	122	81	BG
BY	0	0	0	2	1	12	0	1	0	18	2	0	1	0	0	0	4	0	0	0	0	0	0	0	0	21	0	0	92	49	BY
CH	0	0	0	2	0	5	0	2	1	3	0	1	1	0	0	0	1	0	0	0	0	1	0	0	0	31	0	0	200	156	CH
CY	0	0	0	1	0	7	0	5	2	15	1	0	1	0	0	58	6	0	0	0	0	2	0	1	0	52	0	0	148	57	CY
CZ	0	0	0	3	1	18	0	3	2	8	1	1	2	0	0	0	3	0	0	0	0	0	1	0	0	35	0	0	154	132	CZ
DE	0	0	0	6	1	9	0	1	0	4	1	0	1	0	0	0	2	0	0	0	0	0	1	0	0	33	0	0	140	127	DE
DK	0	0	0	6	2	8	0	0	0	6	3	0	0	0	0	0	2	0	0	1	0	0	2	0	0	28	0	0	99	86	DK
EE	0	0	0	2	1	5	0	0	0	16	4	0	0	0	0	0	1	0	0	1	0	0	1	0	0	22	0	0	76	52	EE
ES	0	0	0	1	0	2	4	1	1	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	31	0	0	77	71	ES
FI	0	0	0	1	1	2	0	0	0	8	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	36	24	FI
FR	0	0	0	3	0	5	1	2	1	2	0	1	1	0	0	0	1	0	0	0	0	1	1	0	0	31	0	0	124	114	FR
GB	0	0	0	2	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	16	0	0	66	63	GB
GE	0	0	0	1	1	5	0	2	1	23	1	0	0	0	0	8	6	0	0	0	0	0	0	1	0	21	0	0	178	27	GE
GL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-3	0	0	3	2	GL
GR	0	2	0	1	1	9	0	9	6	12	1	0	1	0	0	10	6	0	0	0	0	1	0	0	0	39	0	0	138	92	GR
HR	0	0	0	2	1	15	0	8	7	9	1	3	2	0	0	1	5	0	0	0	0	1	0	0	0	39	0	0	180	138	HR
HU	0	0	0	3	1	20	0	9	4	10	1	1	4	0	0	1	7	0	0	0	0	0	0	0	0	35	0	0	148	117	HU
IE	0	0	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	34	33	IE
IS	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	10	IS
IT	0	0	0	2	0	9	1	5	3	5	1	4	1	0	0	2	3	0	0	0	0	2	0	0	0	48	0	0	269	242	IT
KG	0	0	0	0	0	1	0	0	0	5	0	0	0	2	0	1	1	7	0	0	0	0	0	1	0	6	0	0	35	6	KG
KZT	0	0	0	0	0	2	0	1	0	21	1	0	0	0	0	1	2	1	0	0	0	0	0	0	0	14	0	0	45	16	KZT
LT	0	0	0	3	1	13	0	1	0	12	3	0	1	0	0	0	3	0	0	0	0	0	1	0	0	23	0	0	92	66	LT
LU	0	0	0	4	0	5	0	1	0	2	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	28	0	0	112	106	LU
LV	0	0	0	3	1	8	0	0	0	14	3	0	0	0	0	0	2	0	0	0	0	0	1	0	0	22	0	0	83	59	LV
MD	0	0	0	1	1	13	0	9	1	20	1	0	1	0	0	2	11	0	0	0	0	0	0	0	0	27	0	0	105	62	MD
ME	4	1	0	1	1	11	0	9	14	9	1	1	2	0	0	3	5	0	0	0	0	1	0	0	0	35	0	0	140	91	ME
MK	0	7	0	1	1	9	0	10	13	9	1	0	2	0	0	4	5	0	0	0	0	0	0	0	0	32	0	0	139	91	MK
MT	0	1	16	2	1	8	1	7	4	7	1	1	1	0	0	3	4	0	0	0	0	10	0	0	0	65	0	0	194	164	MT
NL	0	0	0	14	1	5	0	0	0	2	1	0	0	0	0	0	1	0	0	0	0	0	2	0	0	29	0	0	107	102	NL
NO	0	0	0	2	3	3	0	0	0	4	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	7	0	0	36	28	NO
PL	0	0	0	4	1	33	0	2	1	11	2	0	1	0	0	0	4	0	0	0	0	0	1	0	0	32	0	0	136	110	PL
PT	0	0	0	1	0	2	25	1	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	29	0	0	74	70	PT
RO	0	0	0	2	1	14	0	28	2	13	1	1	2	0	0	2	9	0	0	0	0	0	0	0	0	30	0	0	129	94	RO
RS	0	1	0	2	1	15	0	15	18	10	1	1	3	0	0	2	7	0	0	0	0	0	0	0	0	34	0	0	147	99	RS
RUE	0	0	0	0	0	1	0	0	0	14	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	5	0	0	25	8	RUE
SE	0	0	0	2	1	4	0	0	0	6	3	0	0	0	0	0	1	0	0	0	0	0	1	0	0	12	0	0	48	38	SE
SI	0	0	0	3	0	14	0	7	4	7	1	13	2	0	0	1	4	0	0	0	0	1	0	0	0	40	0	0	215	179	SI
SK	0	0	0	3	1	29	0	7	2	10	1	1	6	0	0	0	6	0	0	0	0	0	1	0	0	34	0	0	151	123	SK
TJ	0	0	0	0	0	1	0	0	0	4	0	0	0	5	0	1	0	3	0	0	0	0	0	1	0	2	0	0	21	5	TJ
TM	0	0	0	1	1	3	0	1	0	21	1	0	0	1	0	2	2	1	0	0	0	0	0	1	0	27	0	0	59	21	TM
TR	0	0	0	1	0	6	0	4	1	15	1	0	1	0	0	40	5	0	0	0	0	0	0	0	0	26	0	0	107	35	TR
UA	0	0	0	1	1	13	0	3	1	25	1	0	1	0	0	1	13	0	0	0	0	0	0	0	0	26	0	0	99	51	UA
UZ	0	0	0	1	0	3	0	1	0	19	1	0	0	2	0	1	2	5	0	0	0	0	0	1	0	24	0	0	56	18	UZ
ATL	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	16	14	ATL
BAS	0	0	0	4	2	10	0	0	0	12	6	0	0	0	0	0	2	0	0	1	0	0	1	0	0	30	0	0	102	81	BAS
BLS	0	0	0	1	1	12	0	10	2	40	2	0	1	0	0	16	16	0	0	0	0	0	0	0	0	41	0	0	162	66	BLS
MED	0	1	0	2	1	9	1	7	4	10	1	1	1	0	0	17	5	0	0	0	0	6	0	0	0	65	0	0	193	143	MED
NOS	0	0	0	5	2	5	0	1	0	3	2	0	0	0	0	0	1	0	0	0	0	0	2	0	0	24	0	0	90	81	NOS
AST	0	0	0	0	0	2	0	1	0	10	0	0	0	0	0	4	2	0	0	0	0	0	0	6	0	10	0	0	36	12	AST
NOA	0	0	0	1	0	5	1	4	2	5	1	0	1	0	0	6	3	0	0	0	0	2	0	0	0	39	0	0	83	61	NOA
EXC	0	0	0	1	0	4	0	1	0	13	1	0	0	0	0	2	2	0	0	0	0	0	0	0	0	13	0	0	52	30	EXC
EU	0	0	0	3	1	9	1	4	1	6	1	1	1	0	0	1	2	0	0	0	0	0	1	0	0	28	0	0	112	95	EU
	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	

Table C.8: 2011 country-to-country blame matrices for **PM2.5**.
Units: ng/m^3 per 15% emis. red. of PPM. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	
AL	146	0	1	0	3	0	4	0	0	0	0	1	0	0	0	0	1	0	0	41	1	2	0	0	5	0	0	0	0	0	0	AL
AM	0	4	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	AM
AT	0	0	84	0	1	0	1	0	4	0	5	17	0	0	0	0	4	0	0	0	3	13	0	0	12	0	0	0	0	0	0	AT
AZ	0	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	3	0	0	0	0	AZ
BA	2	0	2	0	76	0	3	0	0	0	2	3	0	0	0	0	2	0	0	2	11	8	0	0	6	0	0	0	0	0	0	BA
BE	0	0	2	0	0	99	0	0	2	0	1	35	0	0	1	0	74	8	0	0	0	1	0	0	1	0	0	0	5	0	0	BE
BG	1	0	1	0	1	0	139	1	0	0	0	1	0	0	0	0	1	0	0	9	0	3	0	0	1	0	0	0	0	0	1	BG
BY	0	0	0	0	0	0	0	75	0	0	1	3	1	2	0	1	1	1	0	0	0	2	0	0	0	0	1	5	0	5	0	BY
CH	0	0	5	0	0	0	0	0	86	0	0	15	0	0	0	0	22	0	0	0	0	0	0	0	22	0	0	0	0	0	0	CH
CY	0	0	0	0	0	0	0	0	0	22	0	0	0	0	0	0	0	0	0	3	0	0	0	0	1	0	0	0	0	0	0	CY
CZ	0	0	13	0	1	1	1	1	1	0	61	28	1	0	0	0	7	1	0	0	2	16	0	0	2	0	0	0	0	0	0	CZ
DE	0	0	9	0	0	5	0	0	4	0	6	131	2	0	0	0	19	3	0	0	0	2	0	0	2	0	0	0	1	0	0	DE
DK	0	0	1	0	0	2	0	1	0	0	1	18	77	0	0	0	4	6	0	0	0	1	0	0	0	0	0	0	0	1	0	DK
EE	0	0	0	0	0	0	0	4	0	0	0	2	2	68	0	8	0	1	0	0	0	0	0	0	0	0	0	2	0	20	0	EE
ES	0	0	0	0	0	0	0	0	0	0	0	1	0	0	56	0	5	0	0	0	0	0	0	0	1	0	0	0	0	0	0	ES
FI	0	0	0	0	0	0	0	1	0	0	0	1	0	3	0	48	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	FI
FR	0	0	1	0	0	2	0	0	3	0	1	10	0	0	3	0	145	3	0	0	0	1	0	0	6	0	0	0	1	0	0	FR
GB	0	0	0	0	0	1	0	0	0	-0	0	4	0	0	0	0	11	65	0	0	0	0	2	0	1	0	0	0	0	0	0	GB
GE	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	1	0	0	0	0	GE
GL	-0	0	-0	0	0	-0	-0	0	-0	0	-0	0	0	0	0	0	-0	0	-0	-0	-0	-0	0	0	-0	0	0	0	0	-0	-0	GL
GR	4	0	0	0	1	0	14	0	0	0	0	1	0	0	0	0	1	0	0	112	0	1	0	0	3	0	0	0	0	0	0	GR
HR	1	0	6	0	24	0	3	0	0	0	2	5	0	0	0	0	2	0	0	1	63	22	0	0	15	0	0	0	0	0	0	HR
HU	0	0	10	0	5	0	2	1	1	0	4	8	0	0	0	0	3	1	0	1	11	176	0	0	4	0	0	0	0	0	0	HU
IE	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	3	8	0	0	0	0	17	0	0	0	0	0	0	0	0	IE
IS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	IS
IT	1	0	3	0	2	0	0	0	2	0	1	2	0	0	1	0	6	0	0	1	2	2	0	0	225	0	0	0	0	0	0	IT
KG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28	21	0	0	0	0	KG
KZT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	81	0	0	0	0	KZT
LT	0	0	0	0	0	0	0	16	0	0	1	4	2	3	0	1	1	1	0	0	0	1	0	0	0	0	0	41	0	18	0	LT
LU	0	0	3	0	0	16	0	0	2	0	2	59	0	0	1	0	89	4	0	0	0	1	0	0	1	0	0	0	82	0	0	LU
LV	0	0	0	0	0	0	0	8	0	0	0	3	2	9	0	3	1	1	0	0	0	1	0	0	0	0	0	11	0	92	0	LV
MD	0	0	1	0	0	0	5	3	0	0	1	2	0	0	0	0	1	0	0	1	0	4	0	0	0	0	1	0	0	0	40	MD
ME	18	0	1	0	9	0	2	0	0	0	1	1	0	0	0	0	1	0	0	4	2	3	0	0	4	0	0	0	0	0	0	ME
MK	13	0	1	0	2	0	16	0	0	0	1	1	0	0	0	0	1	0	0	61	1	3	0	0	2	0	0	0	0	0	0	MK
MT	1	0	0	0	1	0	1	0	0	0	0	1	0	0	1	0	5	0	0	2	0	1	0	0	24	0	0	0	0	0	0	MT
NL	0	0	1	0	0	31	0	0	1	0	1	57	1	0	0	0	26	11	0	0	0	1	0	0	1	0	0	0	1	0	0	NL
NO	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	NO
PL	0	0	2	0	0	1	0	5	0	0	7	15	2	1	0	0	3	2	0	0	1	6	0	0	1	0	0	1	0	1	0	PL
PT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PT
RO	0	0	1	0	1	0	11	1	0	0	1	2	0	0	0	0	1	0	0	1	1	10	0	0	1	0	0	0	0	0	2	RO
RS	4	0	2	0	9	0	10	0	0	0	2	3	0	0	0	0	2	0	0	4	3	17	0	0	2	0	0	0	0	0	0	RS
RUE	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	RUE
SE	0	0	0	0	0	0	0	0	0	-0	0	2	4	1	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	SE
SI	0	0	23	0	4	0	1	0	1	0	2	6	0	0	0	0	3	0	0	1	29	13	0	0	32	0	0	0	0	0	0	SI
SK	0	0	7	0	1	0	1	1	1	0	8	8	0	0	0	0	3	1	0	0	2	55	0	0	2	0	0	0	0	0	0	SK
TJ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7	0	0	0	0	TJ
TM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	TM
TR	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	TR
UA	0	0	0	0	0	0	1	7	0	0	1	2	0	0	0	0	1	0	0	0	0	3	0	0	0	0	2	1	0	1	2	UA
UZ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	42	0	0	0	0	UZ
ATL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	ATL
BAS	0	0	0	0	0	1	0	2	0	0	1	8	11	7	0	10	2	2	0	0	0	1	0	0	0	0	0	2	0	8	0	BAS
BLS	0	0	0	0	0	0	4	1	0	0	0	1	0	0	0	0	0	0	1	1	0	1	0	0	0	0	1	0	0	0	1	BLS
MED	2	0	1	0	2	0	2	0	0	0	0	1	0	0	4	0	7	0	0	8	1	1	0	0	20	0	0	0	0	0	0	MED
NOS	0	0	0	0	0	3	0	0	0	-0	0	8	3	0	0	0	11	15	0	0	0	0	1	0	0	0	0	0	0	0	0	NOS
AST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	AST
NOA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	2	0	0	0	0	3	0	0	0	0	0	0	NOA
EXC	0	0	1	0	0	0	1	1	0	0	1	3	0	1	1	1	5	1	0	1	0	2	0	0	3	0	14	0	0	1	0	EXC
EU	0	0	4	0	1	2	5	1	1	0	3	16	2	1	8	4	24	5	0	4	1	7	0	0	18	0	0	1	0	2	0	EU
	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	

Table C.8 Cont.: 2011 country-to-country blame matrices for **PM2.5**.
Units: ng/m^3 per 15% emis. red. of PPM. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	
AL	5	17	0	0	0	2	0	7	21	1	0	0	1	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	261	66	AL
AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	12	0	0	0	0	0	0	0	7	0	0	0	0	25	0	AM
AT	0	0	0	0	0	6	0	3	1	0	0	27	13	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	197	187	AT
AZ	0	0	0	0	0	0	0	0	0	5	0	0	0	0	2	2	0	1	0	0	0	0	0	12	0	0	0	0	39	0	AZ
BA	9	1	0	0	0	4	0	11	13	0	0	2	4	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	162	49	BA
BE	0	0	0	15	0	4	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	11	0	0	0	0	0	253	250	BE
BG	0	2	0	0	0	3	0	50	7	3	0	0	2	0	0	5	2	0	0	0	2	1	0	0	0	0	0	0	236	211	BG
BY	0	0	0	0	0	24	0	4	0	9	1	0	3	0	0	0	4	0	0	1	0	0	1	0	0	0	0	0	144	55	BY
CH	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	155	69	CH
CY	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	65	0	0	0	0	0	19	0	2	1	0	0	0	95	28	CY
CZ	0	0	0	1	0	30	0	6	2	1	0	4	29	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	210	201	CZ
DE	0	0	0	4	0	13	0	2	0	0	0	1	2	0	0	0	0	0	1	1	0	0	4	0	0	0	0	0	211	204	DE
DK	0	0	0	2	4	11	0	1	0	1	3	0	1	0	0	0	0	0	1	11	0	0	11	0	0	0	0	0	138	132	DK
EE	0	0	0	0	2	6	0	1	0	7	4	0	0	0	0	0	1	0	0	5	0	0	1	0	0	0	0	0	130	116	EE
ES	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	3	0	0	7	0	0	0	0	0	0	71	71	ES
FI	0	0	0	0	2	2	0	0	0	3	4	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	67	60	FI
FR	0	0	0	1	0	1	0	0	0	0	0	1	1	0	0	0	0	0	2	0	0	3	2	0	0	0	0	0	180	176	FR
GB	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	6	0	0	0	0	0	89	88	GB
GE	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	6	0	0	0	0	0	0	0	1	0	0	0	0	26	0	GE
GL	-0	-0	0	0	0	-0	-0	-0	-0	0	0	-0	-0	0	0	-0	0	0	0	0	-0	-0	0	0	0	0	0	0	0	0	GL
GR	0	7	0	0	0	2	0	10	4	2	0	0	1	0	0	7	1	0	0	0	1	11	0	0	0	0	0	0	173	146	GR
HR	1	1	0	0	0	7	0	13	13	1	0	26	7	0	0	0	1	0	0	0	0	5	0	0	0	0	0	0	217	113	HR
HU	0	0	0	0	0	18	0	48	11	1	0	12	44	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	366	333	HU
IE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	1	0	0	0	0	0	30	30	IE
IS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	IS
IT	0	0	0	0	0	2	0	2	1	0	0	9	1	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	263	255	IT
KG	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	50	0	0	0	0	0	1	0	0	0	0	105	0	KG
KZT	0	0	0	0	0	0	0	0	0	20	0	0	0	0	1	0	0	7	0	0	0	0	0	1	0	0	0	0	111	1	KZT
LT	0	0	0	1	1	27	0	2	0	9	2	0	2	0	0	0	2	0	0	2	0	0	1	0	0	0	0	0	137	109	LT
LU	0	0	0	2	0	3	0	1	0	0	0	1	1	0	0	0	0	0	1	0	0	0	2	0	0	0	0	0	270	267	LU
LV	0	0	0	0	1	11	0	1	0	6	3	0	1	0	0	0	1	0	0	3	0	0	1	0	0	0	0	0	158	140	LV
MD	0	0	0	0	0	13	0	108	1	7	0	0	4	0	0	2	13	0	0	0	1	0	0	0	0	0	0	0	211	142	MD
ME	89	2	0	0	0	2	0	7	20	0	0	0	2	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	169	28	ME
MK	1	102	0	0	0	2	0	10	23	1	0	0	2	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0	245	101	MK
MT	0	0	55	0	0	1	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	92	0	0	2	0	0	0	99	94	MT
NL	0	0	0	78	1	6	0	1	0	0	0	0	1	0	0	0	0	0	1	1	0	0	26	0	0	0	0	0	223	220	NL
NO	0	0	0	0	30	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	37	7	NO
PL	0	0	0	1	1	173	0	6	1	2	1	1	13	0	0	0	2	0	0	1	0	0	1	0	0	0	0	0	252	240	PL
PT	0	0	0	0	0	0	136	0	0	0	0	0	0	0	0	0	0	0	13	0	0	2	0	0	0	0	0	0	160	160	PT
RO	0	1	0	0	0	8	0	308	5	3	0	1	5	0	0	1	4	0	0	0	1	0	0	0	0	0	0	0	372	352	RO
RS	6	7	0	0	0	6	0	46	95	1	0	1	7	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	231	103	RS
RUE	0	0	0	0	0	1	0	0	0	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	53	3	RUE
SE	0	0	0	0	8	3	0	1	0	1	19	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	46	36	SE
SI	0	0	0	0	0	6	0	8	3	0	0	323	4	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	461	422	SI
SK	0	0	0	0	0	41	0	20	2	1	0	4	200	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	363	352	SK
TJ	0	0	0	0	0	0	0	0	0	0	0	0	0	64	1	0	0	39	0	0	0	0	0	10	0	0	0	0	113	0	TJ
TM	0	0	0	0	0	0	0	0	0	4	0	0	0	2	40	0	0	32	0	0	0	0	0	11	0	0	0	0	96	0	TM
TR	0	0	0	0	0	1	0	2	0	2	0	0	0	0	0	135	1	0	0	0	1	2	0	2	0	0	0	0	144	6	TR
UA	0	0	0	0	0	15	0	17	0	17	0	0	3	0	0	1	25	0	0	0	1	0	0	0	0	0	0	0	104	48	UA
UZ	0	0	0	0	0	0	0	0	0	5	0	0	0	9	6	0	0	135	0	0	0	0	0	4	0	0	0	0	201	0	UZ
ATL	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	5	4	ATL
BAS	0	0	0	1	3	14	0	1	0	3	11	0	1	0	0	0	0	0	0	12	0	0	3	0	0	0	0	0	91	81	BAS
BLS	0	0	0	0	0	3	0	16	0	14	0	0	1	0	0	26	7	0	0	0	11	1	0	0	0	0	0	0	81	29	BLS
MED	0	0	0	0	0	1	0	3	1	1	0	1	1	0	0	17	0	0	0	0	0	49	0	1	2	0	0	0	74	49	MED
NOS	0	0	0	3	4	3	0	0	0	0	1	0	0	0	0	0	0	0	2	1	0	0	16	0	0	0	0	0	56	50	NOS
AST	0	0	0	0	0	0	0	0	0	2	0	0	0	1	2	8	0	3	0	0	0	1	0	24	0	0	0	0	23	1	AST
NOA	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3	0	0	0	0	0	9	0	0	7	0	0	0	14	9	NOA
EXC	0	0	0	0	1	4	1	5	1	24	1	1	1	1	1	5	1	5	0	0	0	1	0	1	0	0	0	0	90	35	EXC
EU	0	0	0	1	1	17	4	21	1	1	3	3	6	0	0	1	1	0	1	1	0	3	2	0	0	0	0	0	169	160	EU
	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	

Table C.9: 2011 country-to-country blame matrices for **PM2.5**.
Units: ng/m^3 per 15% emis. red. of SO_x. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	
AL	73	0	1	0	78	0	67	0	0	0	6	6	0	0	4	0	3	2	0	76	4	3	0	0	13	0	1	0	0	0	0	AL
AM	0	108	0	74	0	-0	0	0	-0	0	0	0	0	-0	0	-0	-0	-0	16	0	0	0	-0	-0	0	0	15	-0	-0	-0	0	AM
AT	0	0	25	0	21	1	7	0	5	0	21	62	0	0	4	0	11	4	0	1	8	6	0	0	19	0	1	0	0	0	0	AT
AZ	0	11	0	224	0	0	0	0	-0	0	0	0	0	0	0	-0	-0	0	24	0	0	0	-0	-0	0	0	57	0	-0	0	0	AZ
BA	2	0	2	0	499	1	26	1	0	0	13	17	0	0	5	0	4	3	0	6	14	6	0	0	10	0	1	0	0	0	0	BA
BE	0	0	2	0	5	100	2	0	3	-0	11	84	0	0	9	0	94	48	-0	0	1	1	2	0	3	0	1	0	2	0	0	BE
BG	1	0	1	0	21	0	361	2	0	0	6	8	0	1	1	0	2	2	0	14	1	3	0	0	1	0	5	1	0	0	1	BG
BY	0	0	0	0	4	1	1	46	0	0	5	13	1	7	1	3	2	6	0	0	0	1	0	0	0	0	10	13	0	1	0	BY
CH	0	0	5	0	3	1	1	0	54	-0	6	47	0	0	7	0	29	5	0	0	1	1	0	0	25	0	0	0	0	0	0	CH
CY	0	0	0	0	8	0	27	1	0	22	1	2	0	0	1	0	1	0	0	30	0	0	0	0	3	0	3	0	0	0	0	CY
CZ	0	0	8	0	21	3	9	1	2	0	113	96	0	1	4	0	17	10	0	1	4	8	0	0	4	0	1	1	0	0	0	CZ
DE	0	0	6	0	8	13	4	1	4	0	27	203	1	1	6	1	35	25	0	1	1	2	1	0	4	0	1	1	1	0	0	DE
DK	0	0	0	0	4	7	2	1	0	-0	11	51	19	1	1	1	11	39	0	0	0	0	1	1	0	0	1	1	0	0	0	DK
EE	0	0	0	0	0	1	0	5	0	0	2	7	1	27	0	11	1	8	0	0	0	0	0	0	0	0	4	5	0	2	0	EE
ES	0	0	0	0	4	1	1	0	0	-0	1	3	0	0	202	0	10	3	0	0	1	0	0	0	4	0	0	0	0	0	0	ES
FI	0	0	0	0	0	0	0	1	0	0	1	3	0	7	0	34	1	2	0	0	0	0	0	0	0	0	1	1	0	0	0	FI
FR	0	0	1	0	5	6	1	0	3	-0	5	28	0	0	32	0	89	18	0	0	1	1	1	0	10	0	0	0	0	0	0	FR
GB	0	0	0	0	1	2	1	0	0	-0	2	11	0	0	5	0	14	128	0	0	0	0	8	1	1	0	0	0	0	0	0	GB
GE	0	12	0	46	0	0	1	0	0	0	0	0	0	0	0	-0	0	0	90	0	0	0	-0	-0	0	0	12	0	0	0	0	GE
GL	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	GL
GR	6	0	1	0	29	0	201	1	0	0	4	5	0	0	2	0	2	1	0	138	2	2	0	0	8	0	3	0	0	0	0	GR
HR	2	0	5	0	251	1	24	1	1	0	20	29	0	1	6	0	7	4	0	5	49	11	0	0	22	0	1	0	0	0	0	HR
HU	1	0	6	0	61	2	21	2	1	0	28	39	0	1	4	0	8	6	0	2	13	48	0	0	7	0	2	1	0	0	0	HU
IE	0	0	0	0	0	1	0	0	0	-0	0	2	0	0	3	0	3	41	0	0	0	0	38	1	1	0	0	0	0	0	0	IE
IS	0	-0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	-0	0	0	0	0	95	0	0	0	0	0	0	0	IS
IT	1	0	3	0	53	1	9	0	2	0	8	11	0	0	16	0	18	2	0	5	11	2	0	0	144	0	0	0	0	0	0	IT
KG	0	0	-0	0	0	-0	0	0	-0	0	-0	-0	-0	0	-0	-0	-0	-0	0	0	0	-0	-0	-0	-0	35	141	0	-0	0	0	KG
KZT	0	0	0	1	0	-0	0	0	-0	0	0	0	0	0	0	0	-0	-0	0	0	0	0	-0	0	0	1	330	0	-0	0	0	KZT
LT	0	0	0	0	3	1	1	11	0	0	4	16	2	7	1	3	2	10	0	0	0	1	0	0	1	0	5	45	0	2	0	LT
LU	0	0	3	0	6	28	2	0	3	0	12	110	0	0	11	0	99	30	0	0	1	1	1	0	3	0	1	0	18	0	0	LU
LV	0	0	0	0	1	1	0	9	0	0	3	12	2	13	1	5	2	9	0	0	0	0	0	0	0	0	5	17	0	5	0	LV
MD	0	0	1	0	7	1	16	6	0	0	10	11	0	2	1	1	2	3	0	1	1	3	0	0	1	0	9	2	0	0	9	MD
ME	12	0	1	0	129	0	32	0	0	0	7	8	0	0	3	0	3	2	0	12	5	3	0	0	8	0	1	0	0	0	0	ME
MK	13	0	1	0	41	0	155	1	0	0	7	7	0	0	2	0	2	2	0	62	2	3	0	0	4	0	1	0	0	0	0	MK
MT	2	0	1	0	39	0	21	0	0	0	3	4	0	0	24	0	14	3	0	17	3	1	0	0	66	0	1	0	0	0	0	MT
NL	0	0	2	0	5	54	3	1	2	-0	12	120	1	0	5	0	53	64	-0	0	1	1	3	1	2	0	1	1	1	0	0	NL
NO	0	0	0	0	0	0	0	0	0	0	1	4	0	1	1	2	1	5	0	0	0	0	0	1	0	0	1	0	0	0	0	NO
PL	0	0	1	0	8	3	5	4	0	0	25	50	1	3	2	1	7	14	0	1	1	4	0	0	2	0	3	3	0	0	0	PL
PT	0	0	0	0	2	1	0	0	0	0	1	3	0	0	98	0	4	3	0	0	0	0	0	0	1	0	0	0	0	0	0	PT
RO	1	0	1	0	22	1	34	3	0	0	10	13	0	1	2	0	3	3	0	3	2	7	0	0	2	0	5	1	0	0	2	RO
RS	5	0	2	0	89	1	67	1	0	0	15	18	0	0	3	0	4	3	0	9	5	12	0	0	4	0	2	0	0	0	1	RS
RUE	0	0	0	1	0	0	0	1	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	53	0	0	0	0	RUE
SE	0	0	0	0	1	1	0	1	0	0	2	8	2	3	1	5	2	8	0	0	0	0	0	0	0	0	1	1	0	0	0	SE
SI	0	0	12	0	75	2	15	1	1	0	19	37	0	0	6	0	8	3	0	2	41	7	0	0	45	0	1	0	0	0	0	SI
SK	0	0	4	0	23	2	12	2	1	0	37	36	0	1	3	0	7	6	0	1	5	23	0	0	3	0	2	1	0	0	0	SK
TJ	0	0	-0	0	0	-0	0	0	-0	0	0	0	0	0	-0	0	-0	-0	0	0	0	0	-0	-0	-0	3	76	0	-0	0	0	TJ
TM	0	1	0	5	0	0	0	0	-0	0	0	0	0	0	0	0	-0	-0	1	0	0	0	-0	0	0	1	160	0	-0	0	0	TM
TR	0	2	0	1	3	0	14	1	0	1	1	1	0	0	0	0	0	0	1	5	0	0	0	0	0	0	3	0	0	0	0	TR
UA	0	0	0	0	5	1	6	9	0	0	7	10	0	3	1	1	2	3	0	1	0	2	0	0	0	0	17	2	0	0	1	UA
UZ	0	0	0	2	0	0	0	0	-0	0	0	0	0	0	0	0	-0	-0	0	0	0	0	-0	0	0	4	267	0	-0	0	0	UZ
ATL	0	0	0	0	0	0	0	0	0	0	0	1	0	0	3	0	1	3	0	0	0	0	0	2	0	0	2	0	0	0	0	ATL
BAS	0	0	0	0	1	2	1	2	0	0	4	20	4	7	1	11	4	16	0	0	0	0	1	0	0	0	1	3	0	1	0	BAS
BLS	0	1	0	2	4	0	21	3	0	0	4	5	0	1	0	0	1	1	5	3	0	1	0	0	0	0	13	1	0	0	1	BLS
MED	3	0	1	0	50	1	50	1	0	2	4	5	0	0	32	0	14	2	0	41	5	1	0	0	40	0	1	0	0	0	0	MED
NOS	0	0	0	0	2	4	1	0	0	-0	3	19	1	0	3	0	13	49	0	0	0	0	2	1	1	0	0	0	0	0	0	NOS
AST	0	1	0	5	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	63	0	0	0	0	AST
NOA	1	0	0	0	16	0	27	0	0	0	1	1	0	0	14	0	4	1	0	25	1	0	0	0	11	0	0	0	0	0	0	NOA
EXC	0	0	0	2	5	1	5	1	0	0	3	8	0	1	6	1	4	4	1	1	1	1	0	0	3	1	75	1	0	0	0	EXC
EU	0	0	2	0	12	4	20	1	1	0	11	35	1	2	33	4	21	17	0	5	2	3	1	0	14	0	1	2	0	0	0	EU
	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	

Table C.9 Cont.: 2011 country-to-country blame matrices for **PM2.5**.
Units: ng/m^3 per 15% emis. red. of SO_x. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	
AL	19	73	1	0	0	26	0	29	180	4	0	0	6	0	0	9	24	0	0	0	1	60	1	0	2	11	2	17	710	243	AL
AM	0	0	0	-0	-0	1	-0	1	0	6	-0	0	0	0	4	75	5	4	0	0	1	1	-0	51	0	9	0	14	311	3	AM
AT	0	1	0	1	0	34	0	8	17	2	0	8	6	0	0	1	10	0	2	1	0	8	2	0	0	12	1	4	286	219	AT
AZ	0	0	0	0	-0	2	-0	1	0	31	-0	0	0	0	13	21	22	11	0	0	1	0	0	42	0	6	0	7	418	4	AZ
BA	16	8	0	1	0	40	0	23	115	3	0	1	10	0	0	2	20	0	1	1	1	18	2	0	1	11	1	6	852	170	BA
BE	0	0	0	11	0	21	0	2	2	1	0	0	2	0	0	0	6	0	20	1	0	3	45	0	0	15	8	3	415	394	BE
BG	1	10	0	0	0	33	0	93	58	21	0	0	5	0	0	26	96	0	0	1	12	6	1	0	0	10	1	3	778	534	BG
BY	0	0	0	1	0	81	0	4	3	43	1	0	3	0	0	0	55	0	1	5	0	1	4	0	0	7	1	0	310	147	BY
CH	0	0	0	1	0	7	0	2	2	0	0	1	1	0	0	0	3	0	3	0	0	7	2	0	0	15	1	4	203	139	CH
CY	1	4	0	0	0	9	0	12	10	9	0	0	1	0	0	1433	34	0	0	0	8	160	0	12	5	13	13	29	1614	110	CY
CZ	0	1	0	2	0	84	0	12	22	4	0	2	14	0	0	1	21	0	3	2	0	3	6	0	0	11	2	2	469	389	CZ
DE	0	1	0	8	0	43	0	4	6	2	0	1	3	0	0	0	11	0	8	6	0	3	24	0	0	12	4	2	425	388	DE
DK	0	1	0	6	2	34	0	3	3	3	2	0	1	0	0	0	7	0	9	28	0	1	50	0	0	9	11	0	219	195	DK
EE	0	0	0	1	1	19	0	1	0	30	4	0	1	0	0	0	10	0	2	17	0	0	6	0	0	5	3	0	143	92	EE
ES	0	0	0	0	0	3	9	1	2	0	0	0	1	0	0	0	1	0	26	0	0	59	1	0	4	21	5	3	248	239	ES
FI	0	0	0	0	1	7	0	0	0	20	6	0	0	0	0	0	3	0	2	6	0	0	2	0	0	5	2	0	91	64	FI
FR	0	0	0	2	0	9	1	2	2	0	0	1	1	0	0	0	4	0	27	0	0	23	12	0	1	15	7	3	224	207	FR
GB	0	0	0	2	0	4	0	1	1	0	0	0	0	0	0	0	2	0	37	1	0	2	18	0	0	10	12	1	186	181	GB
GE	0	0	0	0	-0	2	0	1	0	14	0	0	0	0	3	48	15	3	0	0	5	0	0	11	0	7	0	8	250	5	GE
GL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28	0	0	0	0	GL
GR	3	40	1	0	0	23	0	45	51	12	0	0	4	0	0	79	56	0	0	0	7	87	1	0	2	10	3	15	720	438	GR
HR	5	6	0	1	0	53	0	28	97	4	0	4	12	0	0	2	26	0	1	1	1	32	2	0	1	10	1	5	681	234	HR
HU	2	3	0	1	0	99	0	67	74	8	0	3	29	0	0	2	57	0	2	1	1	7	3	0	1	11	1	3	600	374	HU
IE	0	0	0	0	0	2	0	0	0	0	0	0	0	0	-0	0	1	0	44	0	0	1	3	0	0	11	15	0	94	92	IE
IS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	7	6	0	99	3	IS
IT	2	4	1	0	0	21	0	9	18	1	0	5	4	-0	0	2	8	0	2	0	0	117	1	0	4	12	3	25	364	262	IT
KG	0	0	0	-0	-0	0	-0	0	0	2	-0	-0	-0	10	1	1	1	267	-0	-0	0	0	-0	15	0	11	0	18	459	-0	KG
KZT	0	0	0	0	0	2	-0	0	0	88	0	0	0	1	3	1	17	28	0	0	0	0	0	8	0	10	0	4	474	3	KZT
LT	0	0	0	1	1	67	0	2	2	27	2	0	2	0	0	0	31	0	2	11	0	0	7	0	0	6	3	0	252	172	LT
LU	0	0	0	5	0	20	0	2	2	1	0	0	3	0	0	0	7	0	14	1	0	4	17	0	0	15	4	3	372	350	LU
LV	0	0	0	1	1	33	0	1	1	27	3	0	1	0	0	0	17	0	2	12	0	0	7	0	0	5	3	0	171	110	LV
MD	0	1	0	0	0	74	0	54	9	42	0	0	6	0	0	8	209	1	1	1	6	1	2	0	0	9	1	1	494	190	MD
ME	84	18	0	0	0	27	0	22	160	3	0	0	6	0	0	3	15	0	1	0	1	26	1	0	1	10	1	11	566	136	ME
MK	5	104	0	0	0	27	0	39	152	6	0	0	6	0	0	10	31	0	0	0	2	14	1	0	1	11	1	8	684	319	MK
MT	3	6	32	0	0	10	0	11	22	2	0	1	2	0	0	12	9	0	3	0	1	432	1	0	18	12	13	51	308	210	MT
NL	0	1	0	29	0	33	0	2	3	1	0	0	2	0	0	0	8	0	18	2	0	2	87	0	0	13	10	2	411	389	NL
NO	0	0	0	0	7	5	0	0	0	3	2	0	0	0	0	0	1	0	5	1	0	0	5	0	0	6	4	0	38	24	NO
PL	0	1	0	3	0	228	0	13	8	11	1	1	9	0	0	0	44	0	3	7	0	2	9	0	0	8	2	1	460	377	PL
PT	0	0	0	0	0	2	45	1	1	0	0	0	0	0	0	0	1	0	78	0	0	16	1	0	3	21	7	2	164	160	PT
RO	1	3	0	0	0	59	0	191	32	21	0	0	9	0	0	6	114	0	1	1	5	2	1	0	0	10	1	2	553	340	RO
RS	11	17	0	1	0	53	0	81	277	8	0	1	14	0	0	3	46	0	1	1	2	8	2	0	1	11	1	5	754	289	RS
RUE	0	0	0	0	0	4	0	0	0	107	0	0	0	0	0	1	14	1	0	0	0	0	0	1	0	9	0	1	189	9	RUE
SE	0	0	0	1	4	14	0	1	1	5	11	0	0	0	0	0	3	0	4	9	0	0	9	0	0	5	3	0	75	60	SE
SI	1	3	0	1	0	43	0	16	40	3	0	36	8	0	0	1	15	0	1	1	0	29	2	0	1	10	1	4	444	261	SI
SK	1	2	0	1	0	130	0	36	29	7	0	2	51	0	0	1	49	0	2	1	1	4	3	0	0	9	1	2	478	356	SK
TJ	0	0	0	0	-0	0	-0	0	0	3	0	-0	0	40	7	1	1	203	-0	0	0	0	0	15	0	15	0	25	335	0	TJ
TM	0	0	0	0	0	1	0	0	0	30	0	0	0	3	45	5	14	103	0	0	0	0	0	27	0	12	0	12	369	2	TM
TR	0	1	0	0	0	8	0	9	4	12	0	0	1	0	0	584	42	1	0	0	9	16	0	15	1	12	2	21	701	43	TR
UA	0	1	0	0	0	66	0	16	5	68	0	0	4	0	0	10	255	1	1	2	5	1	2	0	0	8	1	1	499	126	UA
UZ	0	0	0	0	0	1	-0	0	0	38	0	0	0	10	13	4	14	275	-0	0	0	0	0	12	0	12	0	15	631	2	UZ
ATL	0	0	0	0	0	1	0	0	0	5	0	0	0	0	0	0	0	0	15	0	0	0	1	0	0	16	12	0	22	11	ATL
BAS	0	0	0	2	2	31	0	3	1	13	8	0	1	0	0	0	9	0	4	28	0	0	15	0	0	6	5	0	150	120	BAS
BLS	0	1	0	0	0	31	0	27	7	67	0	0	2	0	1	113	223	1	0	1	49	5	1	1	0	8	6	3	544	101	BLS
MED	4	8	3	0	0	16	1	19	27	7	0	1	3	0	0	288	31	0	3	0	5	339	1	3	15	14	13	37	661	237	MED
NOS	0	0	0	3	1	11	0	1	1	1	1	0	1	0	0	0	2	0	19	2	0	1	31	0	0	9	15	1	123	113	NOS
AST	0	0	0	0	0	1	0	1	0	14	0	0	0	1	7	56	10	22	0	0	0	7	0	102	1	19	1	15	187	7	AST
NOA	1	5	1	0	0	5	0	9	11	2	0	0	1	-0	0	79	10	0	1	0	1	105	0	1	35	24	5	35	228	102	NOA
EXC	0	1	0	0	0	13	0	5	4	67	1	0	1	1	2	23	22	15	3	1	1	5	2	3	0	11	1	3	281	60	EXC
EU	1	2	0	2	1	39	2	19	11	7	2	1	4	0	0	6	20	0	13	3	1	23	9	0	1	11	4	4	309	243	EU
	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	

Table C.10: 2011 country-to-country blame matrices for **PM2.5**.
Units: ng/m^3 per 15% emis. red. of NO_x. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	
AL	34	0	1	0	5	0	6	0	0	0	1	2	0	0	1	0	1	1	0	13	3	3	0	0	8	0	0	0	0	0	0	AL
AM	0	36	0	40	0	0	0	0	0	0	0	1	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	AM
AT	0	0	46	0	1	1	0	0	11	0	10	52	0	0	1	0	14	2	0	0	5	8	0	0	42	0	0	0	1	0	0	AT
AZ	0	7	0	104	0	0	0	0	0	0	0	1	0	0	0	0	0	1	33	0	0	0	0	0	0	0	3	0	0	0	0	AZ
BA	1	0	4	0	47	0	2	0	0	0	3	5	0	0	1	0	2	1	0	1	13	8	0	0	8	0	0	0	0	0	0	BA
BE	0	0	4	0	0	-10	0	0	6	0	4	60	1	0	5	0	93	25	0	0	0	0	2	0	7	0	0	0	3	0	0	BE
BG	0	0	1	0	1	0	40	1	0	0	1	1	0	0	0	-0	0	0	0	4	0	2	0	0	1	0	0	0	0	0	1	BG
BY	0	0	1	0	0	1	0	25	0	0	1	9	2	1	0	1	2	5	0	0	0	1	0	0	1	0	0	5	0	2	1	BY
CH	0	0	18	0	0	2	0	0	107	0	3	72	0	0	3	0	54	4	0	0	0	1	0	0	96	0	0	0	1	0	0	CH
CY	0	0	0	0	0	0	1	-0	0	14	0	1	0	0	0	0	0	0	0	7	0	0	0	0	1	0	0	0	0	0	0	CY
CZ	0	0	22	0	1	2	1	-0	2	0	19	51	0	0	1	0	14	4	0	0	3	13	0	0	6	0	0	0	1	0	0	CZ
DE	0	0	14	0	0	8	0	0	8	0	9	78	2	0	3	0	36	13	0	0	0	1	1	0	9	0	0	0	2	0	0	DE
DK	0	0	1	0	0	8	0	0	0	0	3	49	5	0	1	1	13	25	0	0	0	1	1	0	1	0	0	1	1	0	0	DK
EE	0	0	0	0	0	1	0	5	0	0	0	4	1	5	0	2	1	3	0	0	0	0	0	0	0	0	0	2	0	3	0	EE
ES	0	0	0	0	0	1	0	0	0	0	0	2	0	0	65	-0	9	1	0	0	0	0	0	0	3	0	-0	0	0	0	0	ES
FI	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	7	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	FI
FR	0	0	4	0	0	7	0	0	9	0	2	35	0	0	11	0	110	12	0	0	0	0	1	0	17	0	0	0	2	0	0	FR
GB	0	0	0	0	0	3	0	0	1	0	1	10	1	0	3	0	30	37	0	0	0	0	5	0	2	0	0	0	1	0	0	GB
GE	0	8	0	19	0	0	0	0	0	0	0	1	0	0	0	0	0	0	54	0	0	0	0	0	0	0	0	0	0	0	0	GE
GL	-0	-0	0	-0	-0	0	-0	0	0	-0	0	0	0	0	0	-0	0	0	-0	-0	-0	0	0	0	0	0	0	0	0	0	-0	GL
GR	2	0	0	0	1	0	26	0	0	0	0	0	0	0	1	0	0	0	0	38	0	1	0	0	4	0	0	0	0	0	1	GR
HR	0	0	12	0	24	1	3	0	1	0	6	13	0	0	1	0	4	2	0	1	28	17	0	0	27	0	0	0	0	0	0	HR
HU	0	0	16	0	6	1	4	1	2	0	10	21	0	0	1	0	7	3	0	1	13	45	0	0	14	0	0	0	0	0	0	HU
IE	0	0	0	0	0	3	0	0	0	0	0	4	0	0	1	0	10	57	0	0	0	0	18	0	1	0	0	0	0	0	0	IE
IS	0	0	0	0	0	0	0	-0	0	0	-0	0	0	-0	0	0	0	1	0	0	0	-0	0	3	0	0	0	-0	0	-0	0	IS
IT	0	0	11	0	2	1	0	0	3	0	3	10	0	0	3	0	9	1	0	1	6	2	0	0	200	0	0	0	0	0	0	IT
KG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	7	0	0	0	0	KG
KZT	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	1	32	0	0	0	0	KZT
LT	-0	0	1	0	0	2	0	12	0	0	1	11	3	1	0	1	3	6	0	0	0	1	0	0	2	0	0	9	0	3	1	LT
LU	0	0	7	0	0	14	0	-0	5	0	6	68	1	0	7	0	81	15	0	0	0	0	1	0	7	0	0	0	-18	0	0	LU
LV	-0	0	0	0	0	1	0	8	0	0	1	7	2	1	0	1	1	4	0	0	0	0	0	0	1	0	0	5	0	5	0	LV
MD	0	0	1	0	0	0	2	3	0	0	2	4	0	0	0	0	2	2	0	0	0	2	0	0	1	0	0	0	0	0	13	MD
ME	5	0	1	0	13	0	3	0	0	0	1	1	0	0	1	-0	1	1	0	3	4	3	0	0	5	0	0	0	0	0	0	ME
MK	6	0	1	0	2	0	18	0	0	0	1	2	0	0	1	0	1	1	0	10	1	4	0	0	3	0	0	0	0	0	0	MK
MT	0	0	1	0	1	0	1	0	0	0	0	1	0	0	3	-0	6	1	0	3	1	0	0	0	24	0	0	0	0	0	0	MT
NL	0	0	3	0	0	15	0	0	1	0	4	61	2	0	4	0	58	37	0	0	0	0	3	0	4	0	0	0	3	0	0	NL
NO	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	NO
PL	0	0	3	0	0	2	0	4	1	0	6	25	2	0	1	1	5	6	0	0	1	4	0	0	3	0	0	2	0	1	0	PL
PT	0	0	0	0	0	0	-0	0	0	0	0	1	0	-0	34	-0	2	1	0	0	0	0	0	0	1	0	-0	0	0	-0	0	PT
RO	0	0	3	0	1	0	6	1	1	0	3	6	0	0	0	0	2	1	0	1	1	8	0	0	2	0	0	0	0	0	3	RO
RS	2	0	6	0	8	1	13	1	1	0	6	12	0	0	1	0	4	2	0	6	5	19	0	0	4	0	0	0	0	0	1	RS
RUE	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	3	0	0	0	0	RUE
SE	0	0	0	0	0	1	0	0	0	0	0	5	1	0	0	1	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	SE
SI	0	0	32	0	5	1	1	0	2	0	7	21	0	0	1	0	5	2	0	1	31	12	0	0	81	0	0	0	0	0	0	SI
SK	0	0	7	0	2	0	2	0	1	0	9	13	-0	0	1	0	5	2	0	0	4	27	0	0	5	0	0	0	0	0	0	SK
TJ	0	0	0	0	-0	0	0	-0	0	0	0	0	0	-0	0	-0	0	0	0	0	-0	0	0	0	0	1	4	-0	0	-0	0	TJ
TM	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	14	0	0	0	0	TM
TR	0	1	0	1	0	0	1	0	0	0	0	1	0	0	0	0	0	1	1	1	0	0	0	0	1	0	0	0	0	0	0	TR
UA	0	0	0	0	0	0	0	4	0	0	-0	-0	0	0	0	0	1	1	0	0	0	1	0	0	0	0	1	0	0	0	2	UA
UZ	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	2	24	0	0	0	0	UZ
ATL	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	ATL
BAS	0	0	0	0	0	2	0	1	0	0	1	12	3	1	0	2	4	7	0	0	0	0	0	0	0	0	0	1	0	1	0	BAS
BLS	0	0	-0	0	-0	0	1	1	0	0	-0	-0	0	-0	0	-0	0	0	3	0	-0	0	0	0	0	0	1	0	0	0	1	BLS
MED	0	0	1	0	2	0	4	0	0	0	0	1	0	-0	3	-0	5	1	0	5	2	1	0	0	17	0	0	0	0	-0	0	MED
NOS	0	0	0	0	0	3	0	0	1	0	1	17	1	0	2	0	24	18	0	0	0	0	2	0	2	0	0	0	1	0	0	NOS
AST	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	0	0	0	0	AST
NOA	0	0	0	0	0	0	1	0	0	0	0	1	0	-0	3	-0	2	0	0	4	0	0	0	0	4	0	-0	0	0	-0	0	NOA
EXC	0	0	1	1	0	1	1	1	1	0	1	5	0	0	2	0	5	2	0	0	0	1	0	0	4	0	6	0	0	0	0	EXC
EU	0	0	5	0	1	2	2	1	3	0	3	20	1	0	11	1	24	8	0	1	1	3	1	0	20	0	0	0	1	0	0	EU
	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	

Table C.10 Cont.: 2011 country-to-country blame matrices for **PM2.5**.
Units: ng/m^3 per 15% emis. red. of NO_x. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	
AL	4	10	0	0	0	2	0	5	43	1	0	0	1	0	0	1	2	0	1	0	1	13	0	0	0	7	0	0	152	47	AL
AM	0	0	0	0	0	1	0	0	0	3	0	0	0	0	0	30	1	0	0	0	1	1	0	8	0	4	0	0	131	5	AM
AT	0	0	0	2	0	6	0	1	2	0	0	10	3	0	0	0	1	0	2	1	0	4	3	0	0	7	0	0	223	202	AT
AZ	0	0	0	0	0	1	0	0	0	14	0	0	0	0	2	7	3	1	1	0	1	0	1	7	0	4	0	0	180	6	AZ
BA	3	0	0	1	0	3	0	4	9	1	-0	1	2	0	0	0	1	0	1	0	0	3	1	0	0	6	0	0	121	46	BA
BE	0	0	0	8	1	2	1	0	-0	0	0	0	0	0	0	0	0	0	14	1	0	4	18	0	0	16	0	0	215	206	BE
BG	0	1	0	-0	0	1	0	19	8	5	0	0	1	0	0	-4	8	0	1	0	5	1	0	0	0	6	0	0	90	70	BG
BY	0	0	0	2	1	19	0	1	1	18	2	0	1	0	0	0	12	0	2	5	0	0	6	0	0	4	0	0	115	56	BY
CH	0	0	0	2	0	2	0	0	-0	0	0	1	0	0	0	0	0	0	2	0	0	5	4	0	0	8	0	0	371	263	CH
CY	0	0	0	0	0	1	0	1	1	2	0	0	0	0	0	50	2	0	1	0	2	67	0	1	0	9	0	0	84	29	CY
CZ	0	0	0	3	0	12	0	3	4	0	0	3	7	0	0	0	1	0	3	1	0	2	4	0	0	8	0	0	175	162	CZ
DE	0	0	0	12	1	9	0	1	-1	0	1	0	1	0	0	0	1	0	7	3	0	3	17	0	0	12	0	0	213	202	DE
DK	0	0	0	14	4	10	0	1	0	1	3	-0	1	0	0	0	1	0	7	9	0	1	38	0	0	9	0	0	145	138	DK
EE	0	0	0	1	1	4	0	0	0	7	3	0	0	0	0	0	2	0	1	6	0	0	4	0	0	3	0	0	46	31	EE
ES	0	0	0	1	0	0	5	0	0	-0	0	0	0	0	0	0	0	0	6	0	0	4	1	0	0	6	0	0	90	89	ES
FI	0	0	0	0	1	1	0	0	0	3	2	0	0	0	0	0	0	0	1	2	0	0	2	0	0	2	0	0	21	16	FI
FR	0	0	0	5	0	1	1	0	0	0	0	0	0	0	0	0	0	0	10	1	0	6	14	0	0	8	0	0	222	211	FR
GB	0	0	0	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0	12	1	0	1	17	0	0	7	0	0	100	98	GB
GE	0	0	0	0	0	1	0	0	0	6	0	0	0	0	0	13	1	0	0	0	2	0	0	1	0	2	0	0	107	3	GE
GL	-0	-0	-0	0	0	0	0	-0	0	0	-0	0	0	0	-0	0	0	0	0	0	-0	-0	0	-0	-0	3	0	0	0	0	GL
GR	0	6	0	-0	0	1	0	7	6	2	0	0	0	0	0	3	4	0	1	0	2	14	0	0	0	6	0	0	105	78	GR
HR	1	0	0	1	0	6	0	7	22	1	0	4	4	0	0	0	2	0	1	0	0	7	2	0	0	7	0	0	191	111	HR
HU	0	1	0	1	0	13	0	27	27	1	0	5	13	0	0	0	5	0	2	0	1	3	2	0	0	8	0	0	240	183	HU
IE	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	1	0	1	11	0	0	4	0	0	101	100	IE
IS	0	0	0	0	0	-0	0	0	-0	-0	0	0	-0	0	0	0	0	0	1	0	0	0	0	0	0	2	0	0	4	1	IS
IT	0	0	0	1	0	2	0	1	1	0	0	7	1	0	0	0	0	0	2	0	0	23	1	0	0	9	0	0	268	254	IT
KG	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	17	0	0	0	0	0	2	0	4	0	0	46	1	KG
KZT	0	0	0	0	0	1	0	0	0	32	0	0	0	0	1	0	1	2	1	0	0	0	1	2	0	6	0	0	76	5	KZT
LT	0	0	0	3	1	21	0	1	0	10	3	0	1	0	0	0	7	0	2	9	0	0	8	0	0	4	0	0	104	71	LT
LU	0	0	0	8	1	3	1	0	-0	0	0	-0	1	0	0	0	0	0	8	1	0	5	13	0	0	12	0	0	208	201	LU
LV	0	0	0	2	1	8	0	0	0	8	2	0	0	0	0	0	4	0	1	7	0	0	5	0	0	3	0	0	67	44	LV
MD	0	0	0	0	0	11	0	32	2	10	0	0	2	0	0	0	32	0	1	1	3	0	1	0	0	6	0	0	125	62	MD
ME	19	1	0	0	0	2	0	4	31	1	-0	0	1	0	0	0	1	0	1	0	0	6	0	0	0	5	0	0	103	26	ME
MK	1	22	0	0	0	3	0	8	41	2	0	0	1	0	0	3	3	0	1	0	1	5	0	0	0	6	0	0	134	54	MK
MT	0	0	-6	0	0	0	0	1	2	0	-0	0	0	0	0	1	1	0	1	0	0	-4	0	0	1	6	0	0	42	36	MT
NL	0	0	0	-4	2	7	0	0	-0	0	1	-0	0	0	0	0	1	0	16	4	0	3	27	0	0	18	0	0	205	199	NL
NO	0	0	0	1	3	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0	2	0	0	1	0	0	14	10	NO
PL	0	0	0	4	1	35	0	4	1	3	1	1	4	0	0	0	6	0	3	5	0	1	7	0	0	7	0	0	127	109	PL
PT	0	-0	0	0	0	0	19	0	0	-0	-0	0	0	0	0	0	0	0	7	0	0	2	1	0	0	6	0	0	59	59	PT
RO	0	1	0	0	0	8	0	71	8	5	0	1	3	0	0	-0	13	0	1	0	2	1	1	0	0	6	0	0	151	116	RO
RS	3	6	0	1	0	10	0	27	68	2	0	1	6	0	0	0	4	0	2	0	1	3	2	0	0	8	0	0	222	120	RS
RUE	0	0	0	0	0	1	0	0	0	28	0	0	0	0	0	0	1	0	0	1	0	0	1	0	0	3	0	0	38	4	RUE
SE	0	0	0	1	2	2	0	0	0	1	5	0	0	0	0	0	0	0	1	3	0	0	4	0	0	2	0	0	27	23	SE
SI	0	0	0	1	0	6	0	3	6	1	0	35	3	0	0	0	1	0	2	1	0	10	2	0	0	7	0	0	259	213	SI
SK	0	0	0	0	0	7	0	11	6	1	-0	2	20	0	0	0	3	0	2	-0	0	1	1	0	0	6	0	0	131	112	SK
TJ	0	0	0	0	0	0	0	0	0	-0	-0	0	0	23	1	0	0	19	0	0	0	0	0	6	0	4	0	0	49	0	TJ
TM	0	0	0	0	0	1	0	0	0	8	0	0	0	1	14	1	1	18	0	0	0	0	1	5	0	6	0	0	62	4	TM
TR	0	0	0	0	0	1	0	1	0	4	0	0	0	0	0	48	4	0	1	0	3	4	0	2	0	6	0	0	68	8	TR
UA	0	0	0	0	0	2	0	5	0	11	0	0	0	0	0	-0	14	0	1	1	1	0	1	0	0	4	0	0	44	12	UA
UZ	0	0	0	0	0	1	0	0	0	10	0	0	0	5	3	1	1	30	1	0	0	0	1	3	0	7	0	0	83	4	UZ
ATL	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	3	0	0	0	1	0	0	2	0	0	9	8	ATL
BAS	0	0	0	4	1	8	0	1	0	2	3	0	0	0	0	0	1	0	3	4	0	0	9	0	0	4	0	0	58	52	BAS
BLS	0	0	0	-0	0	0	0	4	0	13	-0	-0	-0	0	0	-7	14	0	1	0	14	-0	0	0	0	4	0	0	31	6	BLS
MED	0	0	0	0	0	0	0	2	1	1	-0	0	0	0	0	3	2	0	1	0	1	16	0	0	1	7	0	0	53	41	MED
NOS	0	0	0	4	2	2	0	0	0	0	1	0	0	0	0	0	0	0	7	2	0	1	7	0	0	6	0	0	81	78	NOS
AST	0	0	0	0	0	0	0	0	0	3	0	0	0	1	1	7	1	3	0	0	0	2	0	23	0	6	0	0	26	2	AST
NOA	0	0	0	0	0	0	0	1	1	0	-0	0	0	0	0	3	1	0	1	0	0	18	0	0	2	7	0	0	22	16	NOA
EXC	0	0	0	1	0	2	0	2	1	18	0	0	0	0	0	2	2	2	1	1	0	1	2	1	0	4	0	0	65	28	EXC
EU	0	0	0	3	1	6	1	6	2	1	1	1	1	0	0	0	2	0	5	2	0	4	7	0	0	7	0	0	135	123	EU
	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	

Table C.11: 2011 country-to-country blame matrices for **PM2.5**.
Units: ng/m^3 per 15% emis. red. of NH_3. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	
AL	161	0	2	0	1	0	4	0	0	-0	1	5	0	0	0	0	1	0	0	26	2	4	0	-0	6	-0	0	0	0	0	0	AL
AM	0	70	-0	23	-0	-0	-0	-0	0	0	-0	-0	-0	-0	-0	-0	-0	-0	4	0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	AM
AT	0	0	110	0	1	1	1	1	10	0	18	72	1	0	1	0	11	1	0	0	13	19	0	0	35	0	0	0	0	0	0	AT
AZ	-0	4	-0	89	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	8	-0	-0	-0	-0	-0	0	0	5	-0	-0	-0	-0	AZ
BA	2	0	5	0	85	1	2	1	1	0	6	14	0	0	0	0	3	1	0	1	38	14	0	0	10	0	0	0	0	0	1	BA
BE	0	0	6	0	0	155	0	0	6	0	6	108	1	0	2	0	103	36	0	0	0	1	3	0	5	0	0	0	7	0	0	BE
BG	1	0	1	0	1	0	93	2	1	0	2	5	0	0	0	0	2	0	0	12	2	5	0	-0	2	0	2	0	0	0	4	BG
BY	0	0	1	0	0	2	0	118	1	0	5	21	3	0	0	0	4	4	0	0	1	4	1	0	1	-0	3	8	0	2	1	BY
CH	-0	0	6	0	0	1	-0	0	122	-0	1	46	0	-0	1	0	26	1	0	-0	0	1	0	-0	60	0	0	0	0	0	0	CH
CY	-0	0	-0	-0	-0	-0	-2	-1	-0	-38	-0	-1	-0	-0	-0	-0	-0	-0	-0	-3	-0	-1	-0	-0	-1	0	-1	-0	-0	-0	-0	CY
CZ	0	0	34	0	2	4	1	2	3	0	186	111	1	0	1	0	19	4	0	0	10	33	1	0	8	0	1	0	1	0	0	CZ
DE	0	0	15	0	0	17	0	2	8	0	22	298	3	0	2	0	40	14	0	0	2	5	2	0	6	0	0	0	1	0	0	DE
DK	0	0	2	0	0	11	0	3	1	0	8	123	135	0	0	0	22	34	0	0	1	2	3	0	1	-0	1	1	0	0	0	DK
EE	0	0	0	0	0	1	0	12	0	-0	1	13	5	33	0	4	2	5	0	0	0	0	1	0	0	-0	1	7	0	9	0	EE
ES	-0	0	0	0	0	1	-0	0	0	-0	0	3	0	0	119	0	14	0	0	-0	0	0	0	-0	2	0	0	0	0	0	0	ES
FI	0	0	0	0	0	0	0	3	0	0	1	5	1	1	0	25	1	1	0	0	0	0	0	-0	0	-0	0	1	0	1	0	FI
FR	-0	0	3	0	0	10	-0	0	8	-0	3	40	1	0	9	0	164	11	0	-0	0	1	1	0	15	0	0	0	1	0	0	FR
GB	0	0	1	0	0	10	0	0	1	-0	1	28	2	0	2	0	43	177	0	0	0	0	8	0	2	-0	0	0	0	0	0	GB
GE	0	5	-0	23	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	55	0	-0	-0	-0	-0	0	0	-0	-0	-0	-0	-0	GE
GL	-0	0	-0	0	-0	-0	-0	0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	GL
GR	3	0	1	0	0	0	18	1	0	-0	1	2	0	-0	-0	0	1	0	0	87	1	2	0	-0	1	0	0	0	0	0	1	GR
HR	0	0	13	0	20	1	2	1	2	-0	10	22	1	0	0	0	4	1	0	0	135	29	0	0	43	0	0	0	0	0	1	HR
HU	0	0	18	0	4	1	3	2	3	0	18	39	1	0	0	0	7	2	0	0	37	204	0	-0	14	0	1	0	0	0	1	HU
IE	0	0	0	0	0	3	0	0	0	0	0	5	0	0	1	0	17	55	0	0	0	0	51	0	1	0	0	0	0	0	0	IE
IS	0	-0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	-0	0	0	0	0	4	0	-0	-0	0	0	0	0	IS
IT	1	0	7	0	1	0	0	0	4	0	2	7	0	0	1	0	4	-0	0	0	5	3	0	-0	297	0	0	0	0	0	0	IT
KG	-0	0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	-0	-0	0	30	7	-0	-0	-0	-0	KG
KZT	-0	0	-0	0	-0	-0	-0	0	-0	-0	-0	-0	-0	0	-0	0	-0	-0	0	-0	-0	-0	-0	-0	-0	1	72	0	-0	0	0	KZT
LT	0	0	1	0	0	3	0	33	0	0	5	34	8	1	1	1	6	8	0	0	1	2	1	0	2	-0	2	84	0	7	1	LT
LU	0	0	9	0	0	55	0	0	6	0	10	163	1	0	3	0	97	16	0	0	1	2	2	0	5	0	0	0	40	0	0	LU
LV	0	0	1	0	0	2	0	21	0	0	2	23	6	3	0	1	4	6	0	0	0	1	1	0	1	-0	2	30	0	36	0	LV
MD	0	0	2	0	0	1	10	6	1	0	5	13	1	0	0	0	4	1	0	1	1	7	0	-0	2	0	8	0	0	0	99	MD
ME	27	0	3	0	9	0	2	0	1	0	3	8	0	0	0	0	2	0	0	3	5	7	0	0	5	0	0	0	0	0	0	ME
MK	17	0	2	0	1	0	9	1	1	0	2	6	0	0	0	0	2	0	0	48	3	7	0	-0	3	0	0	0	0	0	1	MK
MT	0	-0	1	-0	1	0	0	0	0	0	0	1	0	0	1	0	5	0	-0	-0	1	1	0	0	26	0	-0	0	0	0	0	MT
NL	0	0	5	0	0	49	0	1	3	0	7	131	4	0	1	0	61	58	0	0	0	2	6	0	3	0	0	0	1	0	0	NL
NO	0	-0	0	-0	0	1	0	0	0	0	0	8	3	0	0	-0	3	3	0	0	0	0	0	-0	0	-0	-0	0	0	0	0	NO
PL	0	0	5	0	1	5	1	11	2	-0	34	88	7	0	1	0	12	8	0	0	3	14	1	0	5	0	2	3	0	1	1	PL
PT	-0	0	0	0	-0	0	-0	0	0	-0	0	1	0	0	38	0	5	0	0	-0	-0	-0	0	-0	0	0	0	0	0	0	-0	PT
RO	1	0	3	0	1	0	10	2	2	0	3	11	1	0	0	0	3	1	0	1	3	19	0	-0	4	0	3	0	0	0	7	RO
RS	5	0	5	0	8	1	8	1	2	0	7	18	0	0	0	0	4	1	0	4	17	31	0	-0	4	0	1	0	0	0	2	RS
RUE	0	0	0	0	0	0	0	2	0	-0	0	1	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	13	0	0	0	0	RUE
SE	0	0	0	0	0	2	0	2	0	-0	1	19	12	0	0	1	4	5	0	0	0	1	1	-0	0	-0	0	0	0	0	0	SE
SI	0	0	37	0	4	1	1	1	3	0	9	25	1	0	0	0	4	0	0	0	61	20	0	0	103	0	0	0	0	0	1	SI
SK	0	0	13	0	1	2	2	2	3	0	34	44	1	0	1	0	9	2	0	0	9	89	0	0	7	0	1	1	0	0	0	SK
TJ	-0	0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	1	0	-0	-0	-0	-0	TJ
TM	-0	0	-0	1	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	0	-0	-0	-0	0	10	0	-0	0	0	TM
TR	-0	0	0	0	-0	0	2	-0	0	-0	0	0	0	-0	-0	-0	0	-0	0	0	0	0	0	-0	0	0	-0	0	0	-0	0	TR
UA	0	0	1	0	0	1	2	15	1	0	4	13	1	0	0	0	3	1	0	0	1	6	0	0	1	0	9	1	0	0	8	UA
UZ	-0	0	-0	0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	3	16	0	-0	0	-0	UZ
ATL	0	-0	0	-0	0	0	0	0	0	-0	0	2	0	-0	2	-0	5	4	-0	0	0	0	1	-0	0	-0	-0	0	0	0	0	ATL
BAS	0	0	1	0	0	4	0	7	1	-0	4	65	31	2	0	6	9	12	0	0	0	2	1	0	1	-0	1	5	0	2	0	BAS
BLS	0	0	1	0	0	0	6	0	0	0	1	2	0	-0	0	-0	1	0	2	1	0	1	0	-0	0	0	2	-0	0	0	2	BLS
MED	-1	-0	1	-0	-1	0	-3	-1	0	-1	-0	1	-0	-0	0	-0	1	-0	-0	-4	-0	-1	-0	-0	10	-0	-1	-0	0	-0	-0	MED
NOS	0	0	2	0	0	17	0	1	1	-0	3	63	13	0	2	0	50	73	0	0	0	1	5	-0	2	0	0	0	0	0	0	NOS
AST	-0	0	0	1	-0	-0	-0	0	0	-0	-0	-0	0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	0	6	0	-0	-0	-0	AST
NOA	-1	-0	-0	-0	-0	-0	-2	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-2	-0	-0	-0	-0	-4	-0	-0	-0	-0	-0	-0	NOA
EXC	0	0	1	1	0	1	1	3	1	-0	2	11	1	0	3	1	7	3	0	1	1	2	0	0	5	0	15	1	0	0	1	EXC
EU	0	0	7	0	0	6	4	3	3	-0	10	51	4	1	16	2	33	16	0	3	3	10	2	0	26	0	1	2	0	1	1	EU
	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	

Table C.11 Cont.: 2011 country-to-country blame matrices for **PM2.5**.
Units: ng/m^3 per 15% emis. red. of NH_3. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	
AL	3	18	0	0	0	1	-0	9	59	0	0	0	1	-0	0	0	0	0	0	0	0	0	0	0	2	0	0	307	61	AL
AM	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	25	-0	-0	0	0	0	0	0	11	0	1	0	0	120	-1	AM
AT	0	0	0	2	0	11	0	5	7	0	0	20	5	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	346	313	AT
AZ	-0	-0	-0	-0	-0	-0	-0	-0	-0	4	-0	-0	-0	0	1	5	-0	0	0	0	0	0	0	5	0	1	0	0	117	-1	AZ
BA	3	1	0	1	0	5	-0	14	58	1	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	272	80	BA
BE	0	0	-0	49	0	8	0	0	0	0	0	0	1	-0	0	-0	0	0	0	0	0	0	0	0	-0	2	0	0	500	492	BE
BG	0	2	0	0	0	2	-0	54	33	2	0	0	1	0	0	9	1	0	0	0	0	0	0	0	0	2	0	0	239	181	BG
BY	0	0	0	3	0	67	0	5	1	14	2	0	2	-0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	280	137	BY
CH	-0	-0	-0	1	0	0	0	0	0	-0	0	1	0	-0	0	-0	0	0	0	0	0	0	0	0	-0	2	0	0	270	147	CH
CY	-0	-0	-0	-0	-0	-2	-0	-3	-2	-3	-0	-0	-0	-0	-0	-62	-0	-0	0	0	0	0	0	3	-0	-1	0	0	-121	-50	CY
CZ	0	0	0	6	0	48	0	8	11	1	1	5	17	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	517	487	CZ
DE	0	0	-0	27	0	26	0	2	2	1	1	2	2	-0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	504	488	DE
DK	0	0	-0	28	1	33	0	3	1	1	9	0	1	-0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	430	418	DK
EE	0	0	-0	3	1	17	0	1	0	10	7	0	0	-0	0	0	0	0	0	0	0	0	0	-0	-0	1	0	0	135	110	EE
ES	-0	-0	0	1	0	0	2	-0	-0	-0	0	0	0	-0	0	-0	-0	0	0	0	0	0	0	0	0	2	0	0	142	142	ES
FI	0	0	-0	1	0	4	0	0	0	3	4	0	0	-0	-0	0	0	-0	0	0	0	0	0	-0	-0	0	0	0	53	46	FI
FR	0	-0	-0	8	0	2	0	0	0	0	0	1	0	-0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	281	272	FR
GB	0	0	-0	16	0	3	0	0	0	0	1	0	0	-0	0	0	0	0	0	0	0	0	0	0	-0	2	0	0	298	296	GB
GE	-0	0	-0	-0	-0	-0	-0	0	-0	3	-0	-0	-0	0	0	13	-0	-0	0	0	0	0	0	2	0	1	0	0	98	-0	GE
GL	-0	-0	0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	0	12	0	0	-0	-0	GL
GR	0	5	-0	0	0	0	-0	9	11	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	-0	-0	1	0	0	143	122	GR
HR	0	0	0	1	0	11	-0	16	47	1	0	15	4	0	0	-0	0	0	0	0	0	0	0	0	0	2	0	0	381	173	HR
HU	0	0	0	2	0	28	-0	38	43	1	0	8	21	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	499	406	HU
IE	0	0	0	3	0	1	0	0	0	0	0	0	0	0	-0	-0	0	0	0	0	0	0	0	-0	0	1	0	0	139	139	IE
IS	0	0	0	0	0	0	0	0	0	-0	0	0	0	-0	-0	-0	0	-0	0	0	0	0	0	-0	0	1	0	0	7	3	IS
IT	0	0	0	0	0	2	-0	2	3	-0	0	6	1	-0	0	-0	0	0	0	0	0	0	0	0	0	2	0	0	350	335	IT
KG	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1	-0	-0	-0	-0	0	0	0	0	0	4	-0	1	0	0	38	-0	KG
KZT	-0	-0	-0	-0	0	-0	-0	0	-0	25	0	-0	-0	0	0	-0	0	1	0	0	0	0	0	5	-0	1	0	0	100	-0	KZT
LT	0	0	0	8	0	85	0	3	1	16	6	0	1	-0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	322	266	LT
LU	0	0	-0	17	0	6	0	1	1	0	0	1	1	-0	0	-0	0	0	0	0	0	0	0	0	0	2	0	0	435	427	LU
LV	0	0	0	6	0	35	0	2	0	11	7	0	1	-0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	204	168	LV
MD	0	0	0	1	0	20	0	97	5	13	0	0	3	0	0	3	6	0	0	0	0	0	0	0	0	2	0	0	310	167	MD
ME	53	2	0	1	0	3	0	9	91	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	238	48	ME
MK	0	103	0	0	0	2	-0	14	78	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	2	0	0	305	96	MK
MT	0	0	112	0	0	0	-0	1	2	-0	0	0	0	0	0	-0	0	0	0	0	0	0	0	-0	1	1	0	0	154	150	MT
NL	0	0	0	196	0	15	0	1	1	0	1	0	1	-0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	550	544	NL
NO	0	0	-0	2	9	1	0	0	0	-0	2	0	0	-0	-0	-0	0	-0	0	0	0	0	0	-0	0	0	0	0	34	25	NO
PL	0	0	0	10	0	289	0	9	4	4	2	1	10	0	0	0	1	0	0	0	0	0	0	0	0	2	0	0	534	506	PL
PT	-0	-0	-0	0	0	0	58	-0	-0	-0	0	-0	0	0	0	-0	-0	0	0	0	0	0	0	0	0	3	0	0	103	103	PT
RO	0	1	0	1	0	9	0	191	23	4	0	1	2	0	0	1	1	0	0	0	0	0	0	0	0	2	0	0	308	260	RO
RS	2	7	0	1	0	6	0	48	248	2	0	1	3	0	0	0	1	0	0	0	0	0	0	0	0	2	0	0	438	143	RS
RUE	0	0	-0	0	0	1	0	0	0	58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	1	0	0	78	4	RUE
SE	0	0	-0	4	2	8	0	1	0	0	24	0	0	-0	0	0	0	0	0	0	0	0	0	-0	0	1	0	0	88	83	SE
SI	0	0	0	1	0	11	-0	12	17	0	0	146	3	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	464	375	SI
SK	0	0	0	3	0	57	0	23	13	1	1	4	122	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	447	415	SK
TJ	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	24	0	-0	-0	7	0	0	0	0	0	4	-0	1	0	0	32	-0	TJ
TM	-0	-0	0	-0	-0	-0	-0	-0	-0	0	-0	-0	0	1	21	0	0	7	0	0	0	0	0	4	0	1	0	0	40	-0	TM
TR	-0	-0	-0	0	0	-0	-0	2	0	0	-0	0	-0	0	-0	120	0	-0	0	0	0	0	0	2	0	1	0	0	125	4	TR
UA	0	0	0	1	0	28	0	20	2	26	0	0	2	0	0	1	10	0	0	0	0	0	0	0	0	1	0	0	158	86	UA
UZ	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	4	3	-0	0	31	0	0	0	0	0	2	0	0	0	0	57	-0	UZ
ATL	0	0	0	1	0	0	0	0	-0	-1	0	0	0	-0	-0	-0	0	-0	0	0	0	0	0	-0	0	1	0	0	16	16	ATL
BAS	0	0	-0	12	1	42	0	3	1	5	22	0	1	-0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	241	225	BAS
BLS	0	0	-0	0	0	1	-0	14	2	6	0	0	0	-0	0	13	-3	0	0	0	0	0	0	0	-0	1	0	0	53	28	BLS
MED	-0	-0	-1	0	0	-1	-0	-3	-2	-3	-0	1	-0	-0	-0	-22	-0	-0	0	0	0	0	0	-0	-3	-1	0	0	-32	0	MED
NOS	0	0	0	35	2	9	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	284	279	NOS
AST	-0	-0	-0	-0	-0	-0	-0	-0	-0	1	-0	-0	-0	0	1	1	-0	-0	0	0	0	0	0	17	0	2	0	0	10	-0	AST
NOA	-0	-0	-0	-0	-0	-1	-0	-2	-2	-1	-0	-0	-0	-0	-0	-5	-0	-0	0	0	0	0	0	0	-1	-0	0	0	-23	-13	NOA
EXC	0	0	0	2	0	8	0	4	2	32	1	0	1	0	1	4	0	1	0	0	0	0	0	1	0	2	0	0	120	56	EXC
EU	0	0	0	8	0	30	1	15	5	1	3	2	3	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	276	259	EU
	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	

Table C.12: 2011 country-to-country blame matrices for **PM2.5**.
Units: ng/m^3 per 15% emis. red. of VOC. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	
AL	4	0	1	0	1	0	2	1	1	0	1	5	0	0	1	0	3	1	0	8	1	2	0	0	11	0	0	0	0	0	0	AL
AM	0	8	-0	-0	0	0	-0	0	-0	0	0	0	0	0	0	0	-0	0	5	0	-0	-0	0	0	0	0	0	0	0	0	0	AM
AT	0	0	12	0	1	0	0	1	3	0	2	12	0	0	1	0	4	1	0	0	3	4	0	0	15	0	0	0	0	0	0	AT
AZ	0	1	0	-1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	AZ
BA	0	0	2	0	5	0	2	1	1	0	2	7	0	0	1	0	3	2	0	1	1	2	0	0	11	0	0	0	0	0	0	BA
BE	0	0	5	0	0	10	0	2	6	0	3	32	0	0	2	0	19	16	0	1	1	1	1	0	14	0	0	0	0	0	0	BE
BG	0	0	1	0	1	0	10	3	1	0	2	7	0	0	1	0	3	2	0	3	1	2	0	0	3	0	0	0	0	0	1	BG
BY	0	0	1	0	0	0	0	7	0	0	1	5	0	0	0	0	2	2	0	0	0	1	0	0	1	0	0	1	0	0	0	BY
CH	0	0	6	0	0	0	0	0	15	0	1	12	0	0	2	0	8	1	0	0	1	1	0	0	18	0	0	0	0	0	0	CH
CY	0	0	0	0	0	0	0	2	0	0	1	3	0	0	1	0	1	1	1	1	0	0	0	0	4	0	0	0	0	0	0	CY
CZ	0	0	6	0	1	1	1	2	2	0	8	19	0	0	1	0	7	3	0	0	2	5	0	0	6	0	0	0	0	0	0	CZ
DE	0	0	9	0	1	3	0	2	6	0	6	36	1	0	2	0	12	7	0	1	2	2	0	0	12	0	0	0	0	0	0	DE
DK	0	0	2	0	0	2	0	2	1	0	5	27	4	0	1	0	7	7	0	0	1	1	0	0	4	0	0	0	0	0	0	DK
EE	0	0	0	0	0	0	0	2	0	0	0	3	0	1	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	1	0	EE
ES	0	0	0	0	0	0	0	0	0	0	0	1	0	0	12	0	4	1	0	0	0	0	0	0	4	0	0	0	0	0	0	ES
FI	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	FI
FR	0	0	2	0	0	1	0	1	3	0	1	10	0	0	4	0	15	3	0	0	1	1	0	0	12	0	0	0	0	0	0	FR
GB	0	0	1	0	0	1	0	0	1	0	1	7	0	0	1	0	7	15	0	0	0	0	1	0	5	0	0	0	0	0	0	GB
GE	0	1	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	GE
GL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	GL
GR	1	0	1	0	1	0	2	2	1	0	1	5	0	0	1	0	3	2	0	7	1	1	0	0	7	0	0	0	0	0	0	GR
HR	0	0	3	0	4	1	1	2	1	0	3	10	0	0	1	0	5	2	0	1	5	5	0	0	22	0	0	0	0	0	0	HR
HU	0	0	5	0	2	1	1	3	1	0	3	13	0	0	1	0	5	3	0	1	4	13	0	0	8	0	0	0	0	0	0	HU
IE	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	1	4	0	0	0	0	1	0	1	0	0	0	0	0	0	IE
IS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	IS
IT	0	0	6	0	1	0	0	1	4	0	2	7	0	0	3	0	10	2	0	1	3	2	0	0	179	0	0	0	0	0	0	IT
KG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	KG
KZT	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	KZT
LT	0	0	0	0	0	0	0	5	0	0	1	5	1	0	0	0	2	2	0	0	0	0	0	0	1	0	0	1	0	1	0	LT
LU	0	0	6	0	1	4	0	1	6	0	4	32	0	0	2	0	17	8	0	1	1	2	0	0	14	0	0	0	1	0	0	LU
LV	0	0	0	0	0	0	0	3	0	0	0	4	1	0	0	1	1	2	0	0	0	0	0	0	1	0	0	1	0	1	0	LV
MD	0	0	1	0	0	0	1	4	0	0	2	6	0	0	0	0	2	2	0	0	0	2	0	0	2	0	0	0	0	0	1	MD
ME	1	0	1	0	1	0	1	1	0	0	1	5	0	0	1	0	2	1	0	2	1	1	0	0	8	0	0	0	0	0	0	ME
MK	1	0	1	0	1	0	3	1	1	0	1	5	0	0	1	0	2	1	0	9	1	2	0	0	5	0	0	0	0	0	0	MK
MT	0	0	1	0	1	0	0	1	1	0	1	4	0	0	5	0	8	2	0	1	1	1	0	0	37	0	0	0	0	0	0	MT
NL	0	0	5	0	0	10	1	2	5	0	5	44	1	0	2	0	20	23	0	1	1	2	1	0	12	0	0	0	0	0	0	NL
NO	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	NO
PL	0	0	2	0	0	1	0	4	1	0	4	15	1	0	1	0	5	4	0	0	1	3	0	0	4	0	0	1	0	0	0	PL
PT	0	0	0	0	0	0	0	0	0	0	0	1	0	0	7	0	2	1	0	0	0	0	0	0	2	0	0	0	0	0	0	PT
RO	0	0	1	0	1	0	1	2	1	0	2	7	0	0	1	0	3	2	0	1	1	3	0	0	3	0	0	0	0	0	0	RO
RS	1	0	3	0	3	0	2	2	1	0	3	9	0	0	1	0	4	2	0	2	2	6	0	0	7	0	0	0	0	0	0	RS
RUE	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	RUE
SE	0	0	0	0	0	0	0	1	0	0	0	3	1	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	SE
SI	0	0	7	0	3	1	1	2	1	0	2	11	0	0	1	0	5	2	0	1	8	4	0	0	36	0	0	0	0	0	0	SI
SK	0	0	4	0	1	1	0	2	1	0	4	12	0	0	1	0	4	3	0	0	2	9	0	0	5	0	0	0	0	0	0	SK
TJ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	TJ
TM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	TM
TR	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0	1	1	1	0	0	0	0	0	1	0	0	0	0	0	0	TR
UA	0	0	1	0	0	0	0	4	0	0	1	5	0	0	0	1	2	2	0	0	0	1	0	0	1	0	0	0	0	0	0	UA
UZ	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	2	1	0	0	0	0	UZ
ATL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	ATL
BAS	0	0	1	0	0	1	0	2	0	0	1	9	1	0	0	1	2	4	0	0	0	0	0	0	1	0	0	0	0	1	0	BAS
BLS	0	0	1	0	0	0	1	4	0	0	1	5	0	0	0	0	1	1	3	1	0	1	0	0	1	0	0	0	0	0	0	BLS
MED	1	0	1	0	1	0	1	1	1	0	1	4	0	0	4	0	7	2	0	2	1	1	0	0	24	0	0	0	0	0	0	MED
NOS	0	0	1	0	0	2	0	1	1	0	1	12	1	0	1	0	6	8	0	0	0	0	0	0	3	0	0	0	0	0	0	NOS
AST	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	AST
NOA	0	0	0	0	0	0	0	1	0	0	0	2	0	0	2	0	2	1	0	1	0	0	0	0	8	0	0	0	0	0	0	NOA
EXC	0	0	1	0	0	0	0	1	0	0	0	3	0	0	1	0	1	1	0	0	0	0	0	0	4	0	0	0	0	0	0	EXC
EU	0	0	3	0	0	1	1	1	2	0	2	10	0	0	3	0	6	4	0	1	1	2	0	0	18	0	0	0	0	0	0	EU
	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	

Table C.12 Cont.: 2011 country-to-country blame matrices for **PM2.5**.
Units: ng/m^3 per 15% emis. red. of VOC. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	
AL	0	3	0	1	0	4	0	3	6	3	0	0	1	0	0	1	2	0	0	0	0	1	0	0	0	-3	0	0	67	45	AL
AM	0	0	0	0	0	0	-0	-0	-0	2	0	-0	0	0	0	3	0	0	0	0	0	0	0	1	0	-9	0	0	18	0	AM
AT	0	0	0	1	0	5	0	2	2	2	0	4	1	0	0	0	1	0	0	0	0	0	0	0	0	-0	0	0	81	66	AT
AZ	0	0	0	0	0	1	0	0	0	9	0	-0	0	0	0	1	1	0	0	0	0	0	0	1	0	-7	0	0	23	2	AZ
BA	0	0	0	1	0	6	0	6	8	3	0	0	1	0	0	0	3	0	0	0	0	0	0	0	0	-2	0	0	73	49	BA
BE	0	0	0	9	0	9	1	2	1	3	0	1	1	0	0	0	2	0	0	0	0	0	1	0	0	16	0	0	144	128	BE
BG	0	1	0	1	0	7	0	10	3	9	1	0	1	0	0	6	5	0	0	0	0	0	0	0	0	-2	0	0	82	53	BG
BY	0	0	0	1	0	7	0	1	0	8	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	-4	0	0	44	25	BY
CH	0	0	0	0	0	1	0	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	0	72	54	CH
CY	0	0	0	0	0	3	0	2	1	7	0	0	0	0	0	24	3	0	0	0	0	1	0	0	0	-12	0	0	58	19	CY
CZ	0	0	0	1	0	12	0	3	2	4	1	1	2	0	0	0	2	0	0	0	0	0	0	0	0	4	0	0	96	79	CZ
DE	0	0	0	4	0	10	0	2	2	3	1	1	1	0	0	0	2	0	0	0	0	0	1	0	0	11	0	0	132	113	DE
DK	0	0	0	4	1	7	0	1	1	3	2	0	0	0	0	0	1	0	0	1	0	0	1	0	0	9	0	0	85	75	DK
EE	0	0	0	0	0	3	0	0	0	6	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-2	0	0	26	16	EE
ES	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	-1	0	0	27	26	ES
FI	0	0	0	0	0	1	0	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	0	13	7	FI
FR	0	0	0	1	0	3	0	1	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	65	57	FR
GB	0	0	0	2	0	2	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	5	0	0	48	45	GB
GE	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	-5	0	0	29	2	GE
GL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	GL
GR	0	1	0	0	0	5	0	4	3	6	0	0	1	0	0	5	3	0	0	0	0	1	0	0	0	-4	0	0	66	42	GR
HR	0	0	0	1	0	8	0	7	8	4	0	2	1	0	0	0	3	0	0	0	0	0	0	0	0	-0	0	0	103	75	HR
HU	0	0	0	1	0	13	0	7	5	5	1	2	3	0	0	0	4	0	0	0	0	0	0	0	0	1	0	0	108	82	HU
IE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-2	0	0	9	8	IE
IS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	0	2	1	IS
IT	0	0	0	1	0	4	0	3	2	2	0	5	1	0	0	0	1	0	0	0	0	1	0	0	0	7	0	0	245	229	IT
KG	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	1	0	-4	0	0	8	1	KG
KZT	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	-10	0	0	14	3	KZT
LT	0	0	0	1	0	7	0	1	0	5	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	-2	0	0	39	26	LT
LU	0	0	0	3	0	6	0	2	1	2	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	9	0	0	121	106	LU
LV	0	0	0	1	0	4	0	0	0	6	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-2	0	0	31	20	LV
MD	0	0	0	1	0	8	0	11	1	13	1	0	1	0	0	1	6	0	0	0	0	0	0	0	0	-6	0	0	70	42	MD
ME	1	1	0	0	0	4	0	2	3	2	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	-4	0	0	44	32	ME
MK	0	4	0	0	0	4	0	3	4	3	0	0	1	0	0	1	2	0	0	0	0	0	0	0	0	-4	0	0	60	41	MK
MT	0	0	4	1	0	2	0	2	1	2	0	0	0	0	0	1	1	0	0	0	0	5	0	0	0	-0	0	0	79	70	MT
NL	0	0	0	16	1	11	1	2	1	3	1	1	1	0	0	0	2	0	0	0	0	0	2	0	0	22	0	0	178	161	NL
NO	0	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	5	NO
PL	0	0	0	2	0	19	0	3	1	5	1	1	2	0	0	0	3	0	0	0	0	0	0	0	0	3	0	0	87	70	PL
PT	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	0	23	22	PT
RO	0	0	0	1	0	7	0	18	2	7	1	0	1	0	0	1	4	0	0	0	0	0	0	0	0	-5	0	0	73	52	RO
RS	0	2	0	1	0	8	0	7	12	4	1	1	2	0	0	1	3	0	0	0	0	0	0	0	0	-1	0	0	87	57	RS
RUE	0	0	0	0	0	1	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-2	0	0	12	3	RUE
SE	0	0	0	0	1	2	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	13	SE
SI	0	0	0	1	0	6	0	5	6	3	0	12	1	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	123	97	SI
SK	0	0	0	1	0	13	0	5	2	4	1	1	4	0	0	0	4	0	0	0	0	0	0	0	0	1	0	0	87	70	SK
TJ	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	1	0	0	0	0	0	1	0	-4	0	0	6	1	TJ
TM	0	0	0	0	0	1	0	0	0	7	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0	-8	0	0	16	4	TM
TR	0	0	0	0	0	2	0	1	0	5	0	0	0	0	0	21	2	0	0	0	0	0	0	0	0	-7	0	0	43	11	TR
UA	0	0	0	1	0	7	0	3	0	16	1	0	1	0	0	1	6	0	0	0	0	0	0	0	0	-3	0	0	58	28	UA
UZ	0	0	0	0	0	1	0	0	0	7	0	0	0	1	0	0	1	2	0	0	0	0	0	1	0	-8	0	0	19	4	UZ
ATL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	3	2	ATL
BAS	0	0	0	1	1	5	0	1	0	4	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0	0	41	33	BAS
BLS	0	0	0	0	0	6	0	4	1	19	1	0	1	0	0	12	7	0	0	0	0	0	0	0	0	-2	0	0	76	27	BLS
MED	0	0	0	0	0	3	0	2	1	4	0	1	0	0	0	7	2	0	0	0	0	3	0	0	0	-3	0	0	75	56	MED
NOS	0	0	0	3	0	3	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	5	0	0	46	42	NOS
AST	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	2	1	0	0	0	0	0	0	1	0	-6	0	0	10	2	AST
NOA	0	0	0	0	0	1	0	1	1	1	0	0	0	0	0	2	1	0	0	0	0	1	0	0	0	-2	0	0	28	21	NOA
EXC	0	0	0	0	0	2	0	1	0	6	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	-3	0	0	26	16	EXC
EU	0	0	0	1	0	5	0	3	1	3	1	1	1	0	0	1	1	0	0	0	0	0	0	0	0	2	0	0	72	61	EU
	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	

Table C.13: 2011 country-to-country blame matrices for **PM2.5**.
Units: ng/m^3 per 15% emis. red. of PPM, SO_x, NO_x, NH_3 and VOC. **Emitters →, Receptors ↓.** (Based on ECMWF meteorology.)

	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	
AL	417	0	6	0	88	1	83	2	1	0	10	19	1	0	6	0	9	4	0	164	12	14	0	0	42	0	1	0	0	0	1	AL
AM	0	227	0	143	0	0	1	0	0	0	0	1	0	0	0	0	0	0	39	0	0	0	0	0	0	0	16	0	0	0	0	AM
AT	1	0	277	0	26	5	9	2	33	0	56	215	2	1	8	0	45	9	0	2	32	49	0	0	124	0	1	1	1	0	0	AT
AZ	0	24	0	440	0	0	0	1	0	0	0	2	0	0	0	0	0	1	75	0	0	0	0	0	0	0	67	0	0	0	0	AZ
BA	8	0	15	0	712	2	35	3	3	0	26	46	1	0	8	0	14	6	0	11	77	39	0	0	45	0	2	0	0	0	2	BA
BE	0	0	18	0	6	354	2	3	22	0	26	319	3	1	20	1	384	133	0	1	2	5	8	1	30	0	1	1	17	1	0	BE
BG	3	0	5	0	23	1	642	8	2	0	10	22	1	1	2	1	7	5	0	40	5	15	0	0	7	0	8	1	0	1	8	BG
BY	0	0	3	0	5	4	2	271	1	0	13	51	7	10	2	6	11	17	0	0	2	9	1	0	4	0	14	31	0	10	3	BY
CH	0	0	41	0	3	5	1	0	384	0	12	193	1	0	14	0	140	10	0	1	2	3	0	0	222	0	0	0	1	0	0	CH
CY	0	0	1	0	9	0	28	2	0	20	2	4	0	0	2	0	2	2	1	38	1	1	0	0	8	0	2	0	0	0	0	CY
CZ	1	0	81	0	26	11	13	5	11	0	386	304	3	1	7	1	63	22	0	3	21	74	1	0	26	0	2	1	2	1	1	CZ
DE	0	0	53	0	10	46	5	5	31	0	70	745	9	1	13	1	142	63	0	2	6	13	5	1	33	0	2	2	6	1	0	DE
DK	0	0	5	0	5	28	3	7	3	0	28	269	239	1	4	3	57	112	0	1	2	4	6	1	6	0	2	4	2	2	0	DK
EE	0	0	1	0	0	3	0	27	0	0	4	29	9	134	1	27	5	19	0	0	0	1	1	0	1	0	5	17	0	35	1	EE
ES	0	0	1	0	4	2	1	0	1	0	2	10	0	0	452	0	42	6	0	0	1	1	1	0	13	0	0	0	0	0	0	ES
FI	0	0	0	0	0	1	0	7	0	0	2	12	3	12	0	115	2	6	0	0	0	0	0	0	0	0	2	3	0	2	0	FI
FR	0	0	12	0	5	26	1	1	26	0	12	124	1	0	59	0	523	47	0	1	2	3	3	0	60	0	1	0	4	0	0	FR
GB	0	0	3	0	1	18	1	1	3	0	4	59	3	0	11	1	105	423	0	0	1	1	23	1	11	0	0	0	1	0	0	GB
GE	0	27	0	91	0	0	1	1	0	0	0	1	0	0	0	0	0	0	230	1	0	0	0	0	0	0	13	0	0	0	0	GE
GL	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	GL
GR	16	0	3	0	32	1	261	4	1	0	7	13	1	1	4	0	6	4	0	382	4	7	0	0	23	0	3	1	0	0	2	GR
HR	4	0	40	0	323	4	33	4	5	0	41	79	2	1	9	1	21	9	0	9	280	85	0	0	129	0	2	1	1	0	2	HR
HU	2	0	55	0	79	5	31	8	8	0	64	120	2	1	7	1	30	14	0	5	77	486	1	0	48	0	3	2	1	1	2	HU
IE	0	0	0	0	0	7	0	0	1	0	1	12	1	0	6	0	34	163	0	0	0	0	126	1	4	0	0	0	0	0	0	IE
IS	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	3	0	0	0	0	0	103	0	0	0	0	0	0	0	IS
IT	3	0	31	0	60	2	11	2	15	0	15	37	1	0	24	0	48	6	0	8	27	12	0	0	1046	0	0	0	0	0	0	IT
KG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	113	177	0	0	0	0	KG
KZT	0	0	0	1	0	0	0	2	0	0	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	5	515	0	0	0	0	KZT
LT	0	0	3	0	3	7	1	77	1	0	12	71	15	12	2	8	14	28	0	0	2	5	2	0	6	0	8	180	0	30	2	LT
LU	0	0	27	0	7	117	2	2	23	0	34	432	2	0	24	1	382	72	0	2	3	6	4	0	30	0	1	1	123	0	0	LU
LV	0	0	1	0	1	5	1	49	1	0	7	48	12	26	1	12	9	23	0	0	1	3	2	0	3	0	7	63	0	138	1	LV
MD	1	0	6	0	8	2	34	22	2	0	19	36	2	3	2	2	11	7	0	4	3	18	0	0	5	0	19	3	0	1	162	MD
ME	62	0	7	0	162	1	40	2	2	0	12	23	1	0	5	0	9	4	0	22	17	17	0	0	30	0	1	0	0	0	1	ME
MK	50	0	6	0	47	1	201	3	2	0	12	21	1	1	4	0	8	4	0	189	7	19	0	0	16	0	2	0	0	0	2	MK
MT	3	0	4	0	43	1	23	1	1	0	4	10	0	0	34	0	39	5	0	23	6	4	0	0	176	0	1	0	0	0	0	MT
NL	1	0	16	0	6	158	4	4	11	0	29	414	8	1	13	2	219	194	0	2	2	6	13	1	21	0	1	2	6	1	0	NL
NO	0	0	0	0	0	2	0	1	0	0	2	16	5	1	2	3	6	11	0	0	0	0	1	1	0	0	1	1	0	0	0	NO
PL	0	0	13	0	10	11	7	29	3	0	77	194	14	4	4	3	32	33	0	1	6	31	3	0	14	0	6	10	1	3	2	PL
PT	0	0	0	0	2	1	0	0	0	0	1	6	0	0	197	0	16	6	0	0	0	0	1	0	4	0	0	0	0	0	0	PT
RO	2	0	11	0	25	2	62	10	4	0	19	38	1	1	3	1	12	7	0	6	8	47	0	0	12	0	9	2	0	1	14	RO
RS	17	0	18	0	116	2	99	5	4	0	32	60	1	1	5	1	17	9	0	26	32	84	0	0	22	0	3	1	0	0	4	RS
RUE	0	0	0	1	0	0	0	5	0	0	1	3	1	2	0	2	1	1	0	0	0	0	0	0	0	0	76	1	0	1	0	RUE
SE	0	0	1	0	1	4	1	4	0	0	4	36	19	4	1	9	9	18	0	0	0	1	1	1	1	0	1	2	0	1	0	SE
SI	1	0	112	0	92	4	19	4	7	0	39	99	2	1	9	1	24	8	0	5	170	55	0	0	297	0	2	1	1	0	1	SI
SK	1	0	34	0	29	4	17	7	6	0	91	113	2	1	5	1	28	14	0	3	22	204	1	0	22	0	3	2	1	1	1	SK
TJ	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	87	0	0	0	0	TJ
TM	0	2	0	7	0	0	0	1	0	0	0	1	0	0	0	0	1	1	2	0	0	0	0	0	0	1	200	0	0	0	0	TM
TR	0	4	1	2	3	0	18	2	0	2	2	4	0	0	1	0	2	1	4	8	0	1	0	0	2	0	3	0	0	0	1	TR
UA	0	0	3	1	6	2	10	38	1	0	12	30	2	4	2	2	8	7	1	2	2	12	1	0	3	0	28	4	0	2	13	UA
UZ	0	1	0	3	0	0	0	1	0	0	0	1	0	0	0	0	1	1	1	0	0	0	0	0	0	14	350	0	0	0	0	UZ
ATL	0	0	0	0	0	1	0	0	0	0	0	4	0	0	6	1	11	10	0	0	0	0	2	2	1	0	2	0	0	0	0	ATL
BAS	0	0	2	0	2	10	1	13	1	0	11	114	51	18	2	30	21	41	0	0	1	3	3	0	3	0	3	11	1	12	1	BAS
BLS	0	1	2	3	4	1	33	9	1	0	6	12	1	1	1	1	3	3	14	6	1	4	0	0	2	0	16	2	0	1	5	BLS
MED	4	0	4	0	53	1	54	2	2	2	5	12	0	0	44	0	35	5	0	51	9	3	0	0	110	0	1	0	0	0	0	MED
NOS	0	0	4	0	2	28	1	2	3	0	9	119	18	0	8	1	105	162	0	1	1	2	10	1	7	0	0	1	2	1	0	NOS
AST	0	1	0	8	0	0	1	1	0	2	0	1	0	0	0	0	0	0	1	2	0	0	0	0	1	1	79	0	0	0	0	AST
NOA	1	0	1	0	16	0	27	1	0	0	2	4	0	0	19	0	9	2	0	30	1	1	0	0	22	0	0	0	0	0	0	NOA
EXC	1	1	4	3	6	3	8	8	3	0	7	29	2	2	13	3	21	11	1	4	3	6	1	1	19	2	111	2	0	1	1	EXC
EU	1	0	20	0	14	15	31	7	9	0	28	132	8	4	70	11	107	50	0	14	8	24	5	0	96	0	2	6	2	4	1	EU
	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	

Table C.13 Cont.: 2011 country-to-country blame matrices for **PM2.5**.
Units: ng/m^3 per 15% emis. red. of PPM, SO_x, NO_x, NH_3 and VOC. **Emitters →, Receptors ↓.** (Based on ECMWF meteorology.)

	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	
AL	32	121	1	2	0	35	0	53	309	9	1	2	9	0	0	12	28	0	2	1	2	80	2	0	3	17	2	17	1497	463	AL
AM	0	0	0	0	0	2	0	1	0	11	0	0	0	0	5	145	7	4	0	0	1	2	0	78	0	4	0	14	605	7	AM
AT	1	1	0	5	1	61	1	19	29	5	1	69	28	0	0	1	13	0	3	1	0	12	6	0	1	20	1	4	1133	987	AT
AZ	0	0	0	0	0	4	0	1	0	63	0	0	0	0	17	36	26	13	1	0	1	1	1	68	0	4	0	7	777	12	AZ
BA	31	10	0	3	1	59	0	57	204	8	1	5	19	0	0	3	24	0	2	1	1	23	3	0	2	16	1	6	1481	394	BA
BE	0	1	0	92	2	44	2	5	4	4	1	2	4	0	0	0	8	0	36	2	0	8	75	0	0	49	8	3	1526	1470	BE
BG	2	16	0	1	1	47	0	226	108	40	1	1	9	0	0	42	112	0	1	1	19	8	1	0	1	15	1	3	1426	1048	BG
BY	0	0	0	7	2	198	0	15	5	92	6	1	9	0	0	1	77	0	3	11	1	1	10	0	0	8	1	0	893	420	BY
CH	0	0	0	4	0	11	1	3	3	1	0	5	2	0	0	0	4	0	5	1	0	13	6	0	1	24	1	4	1071	672	CH
CY	1	4	0	0	0	11	0	13	9	15	0	0	1	0	0	1509	39	0	1	0	11	247	1	18	5	9	13	29	1730	136	CY
CZ	1	2	0	12	1	186	1	32	41	10	2	15	68	0	0	1	25	0	6	3	1	6	12	0	0	25	2	2	1467	1318	CZ
DE	0	1	0	55	3	101	1	10	10	7	3	5	9	0	0	1	14	0	15	11	0	7	45	0	0	37	4	2	1485	1395	DE
DK	0	1	0	53	12	96	1	9	6	9	18	1	5	0	0	0	10	0	17	48	0	2	100	0	0	29	11	0	1017	958	DK
EE	0	0	0	6	5	49	0	3	1	60	19	0	2	0	0	0	14	0	3	28	0	0	11	0	0	7	3	0	479	365	EE
ES	0	0	0	2	0	4	23	2	3	0	0	1	1	0	0	0	1	0	34	0	0	72	3	0	5	28	5	3	578	566	ES
FI	0	0	0	2	5	14	0	1	0	32	16	0	0	0	0	0	4	0	3	9	0	0	4	0	0	6	2	0	244	193	FI
FR	0	0	0	16	1	17	2	4	3	2	0	3	3	0	0	0	4	0	39	1	0	32	29	0	1	26	7	3	971	924	FR
GB	0	0	0	25	1	11	1	2	1	1	2	1	1	0	0	0	2	0	54	2	0	3	42	0	0	24	12	1	721	708	GB
GE	0	0	0	0	0	3	0	1	0	30	0	0	0	0	4	81	18	3	0	0	7	1	0	16	0	5	0	8	510	10	GE
GL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43	0	0	0	0	GL
GR	4	59	1	1	0	31	0	75	75	21	1	1	6	0	0	93	65	0	1	1	10	113	1	0	3	13	3	15	1208	826	GR
HR	7	8	0	5	1	85	1	71	186	10	1	51	28	0	0	3	32	0	3	1	1	45	4	0	2	19	1	5	1573	707	HR
HU	3	5	0	6	1	170	1	188	159	16	2	30	109	0	0	2	68	0	4	2	2	11	6	0	1	21	1	3	1813	1378	HU
IE	0	0	0	6	1	4	0	0	0	1	1	0	0	0	0	0	1	0	66	1	0	1	15	0	0	15	15	0	373	368	IE
IS	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	1	0	0	8	6	0	113	9	IS
IT	3	4	1	2	0	32	1	17	25	3	1	32	7	0	0	3	10	0	3	1	0	157	3	0	6	30	3	25	1490	1334	IT
KG	0	0	0	0	0	0	0	0	0	4	0	0	0	21	2	1	1	334	0	0	0	0	0	23	0	12	0	18	656	1	KG
KZT	0	0	0	0	0	3	0	1	0	173	0	0	0	2	4	2	19	39	1	1	0	0	1	16	0	7	0	4	774	11	KZT
LT	0	0	0	14	3	206	0	9	3	67	14	1	6	0	0	0	43	0	4	22	0	1	16	0	0	9	3	0	854	645	LT
LU	0	1	0	36	1	38	2	6	4	4	1	3	6	0	0	1	9	0	23	1	0	9	33	0	0	39	4	3	1407	1350	LU
LV	0	0	0	10	4	92	0	5	2	58	17	0	3	0	0	0	24	0	4	22	0	0	13	0	0	8	3	0	630	481	LV
MD	1	2	0	3	1	125	0	302	17	85	2	1	15	0	0	14	266	1	2	3	10	2	3	0	0	11	1	1	1209	604	MD
ME	245	24	0	2	0	38	0	44	305	6	1	2	11	0	0	5	18	0	1	1	1	36	2	0	2	14	1	11	1120	270	ME
MK	7	334	0	1	0	38	0	75	299	12	1	1	11	0	0	16	36	0	1	1	3	20	2	0	1	16	1	8	1429	611	MK
MT	4	6	196	1	0	14	1	17	28	4	0	2	3	0	0	14	11	0	4	0	1	525	2	0	22	19	13	51	682	559	MT
NL	0	1	0	317	4	72	2	7	5	5	3	1	5	0	0	1	11	0	36	7	0	6	143	0	0	56	10	2	1566	1513	NL
NO	0	0	0	3	51	8	0	1	0	4	7	0	0	0	0	0	1	0	6	3	0	0	8	0	0	8	4	0	129	71	NO
PL	0	1	0	19	2	744	0	35	15	25	6	4	38	0	0	1	56	0	6	13	1	3	17	0	0	21	2	1	1460	1302	PL
PT	0	0	0	1	0	2	265	1	1	0	0	0	0	0	0	0	1	0	98	0	0	19	2	0	3	29	7	2	509	503	PT
RO	2	5	0	2	1	90	0	779	70	40	1	3	20	0	0	9	137	1	2	1	9	3	3	0	0	13	1	2	1457	1121	RO
RS	22	38	0	3	1	83	0	209	700	17	1	4	31	0	0	5	55	0	3	1	3	11	4	0	1	20	1	5	1732	712	RS
RUE	0	0	0	0	1	7	0	1	0	242	1	0	0	0	1	1	16	2	1	1	0	0	1	1	0	12	0	1	370	23	RUE
SE	0	0	0	7	16	30	0	3	1	8	60	0	1	0	0	0	4	0	5	14	0	0	14	0	0	8	3	0	252	215	SE
SI	1	4	0	5	1	72	1	44	72	7	1	551	19	0	0	2	19	0	3	1	1	43	5	0	1	21	1	4	1751	1368	SI
SK	1	3	0	6	1	248	0	94	52	14	2	13	396	0	0	1	58	1	4	1	1	5	5	0	0	19	1	2	1506	1305	SK
TJ	0	0	0	0	0	0	0	0	0	4	0	0	0	153	10	2	1	269	0	0	0	0	0	36	0	16	0	25	534	1	TJ
TM	0	0	0	0	0	3	0	0	0	49	0	0	0	7	120	7	16	160	0	0	0	0	1	49	0	11	0	12	583	10	TM
TR	0	2	0	0	0	11	0	16	6	23	0	0	1	0	0	908	50	1	1	0	13	23	1	21	2	12	2	21	1082	72	TR
UA	0	1	0	3	1	118	0	60	8	138	2	1	10	0	0	13	309	1	2	3	7	1	3	1	0	10	1	1	863	301	UA
UZ	0	0	0	0	0	2	0	0	0	60	0	0	0	31	26	5	16	473	1	0	0	0	1	23	0	11	0	15	991	10	UZ
ATL	0	0	0	1	1	2	1	0	0	5	0	0	0	0	0	0	1	0	20	0	0	1	2	0	0	19	12	0	54	42	ATL
BAS	0	0	0	21	8	99	0	8	3	28	46	1	3	0	0	0	11	0	7	44	0	1	27	0	0	14	5	0	582	510	BAS
BLS	0	2	0	1	1	41	0	65	10	119	1	0	4	0	1	157	248	1	1	1	74	6	1	2	0	11	6	3	785	191	BLS
MED	4	9	3	1	0	20	1	23	28	10	0	3	4	0	0	292	35	0	5	0	7	406	2	4	16	16	13	37	832	383	MED
NOS	0	0	0	48	9	27	1	3	2	2	4	1	2	0	0	0	3	0	28	5	0	2	55	0	0	20	15	1	590	563	NOS
AST	0	0	0	0	0	2	0	1	0	24	0	0	0	3	11	74	11	27	0	0	1	10	0	167	1	21	1	15	254	11	AST
NOA	2	5	1	0	0	6	1	9	10	3	0	0	1	0	0	82	12	0	2	0	2	133	1	1	43	29	5	35	270	136	NOA
EXC	1	1	0	3	2	28	2	16	9	147	3	2	4	2	4	34	27	22	4	2	1	7	4	5	0	15	1	3	583	195	EXC
EU	1	3	0	16	3	98	9	64	19	14	9	9	15	0	0	8	24	0	19	6	1	30	18	0	1	21	4	4	962	846	EU
	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	

Table C.14: 2011 country-to-country blame matrices for $\mathbf{SO_4}$.
Units: ng/m^3 per 15% emis. red. of SO_x. **Emitters →, Receptors ↓.** (Based on ECMWF meteorology.)

	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	
AL	38	0	0	0	43	0	38	0	0	0	3	4	0	0	2	0	2	1	0	43	2	2	0	0	7	0	0	0	0	0	0	AL
AM	0	55	0	37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	-0	0	0	8	0	0	0	0	AM
AT	0	0	12	0	13	1	4	0	2	0	11	31	0	0	2	0	5	2	0	1	4	3	0	0	10	0	0	0	0	0	0	AT
AZ	0	5	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	29	0	0	0	0	AZ
BA	1	0	1	0	273	0	16	0	0	0	8	9	0	0	3	0	2	2	0	4	8	4	0	0	6	0	1	0	0	0	0	BA
BE	0	0	1	0	2	48	1	0	1	0	5	36	0	0	4	0	42	22	0	0	0	0	1	0	1	0	0	0	1	0	0	BE
BG	0	0	0	0	12	0	194	1	0	0	4	5	0	0	1	0	1	1	0	8	1	2	0	0	1	0	3	0	0	0	1	BG
BY	0	0	0	0	2	1	1	23	0	0	3	8	0	4	0	1	1	4	0	0	0	1	0	0	0	0	5	7	0	0	0	BY
CH	0	0	2	0	2	1	1	0	24	0	3	22	0	0	3	0	13	2	0	0	1	0	0	0	14	0	0	0	0	0	0	CH
CY	0	0	0	0	4	0	13	0	0	11	1	1	0	0	1	0	0	0	0	14	0	0	0	0	1	0	1	0	0	0	0	CY
CZ	0	0	4	0	14	2	6	1	1	0	58	46	0	0	2	0	8	5	0	1	3	5	0	0	2	0	1	0	0	0	0	CZ
DE	0	0	2	0	4	6	2	0	2	0	13	95	1	0	3	0	15	11	0	0	1	1	0	0	2	0	1	0	0	0	0	DE
DK	0	0	0	0	3	3	1	1	0	0	6	26	9	0	1	1	5	20	0	0	0	0	1	0	0	0	1	1	0	0	0	DK
EE	0	0	0	0	0	1	0	3	0	0	1	5	1	15	0	6	1	5	0	0	0	0	0	0	0	0	2	3	0	1	0	EE
ES	0	0	0	0	2	0	0	0	0	0	1	2	0	0	100	0	5	2	0	0	0	0	0	0	2	0	0	0	0	0	0	ES
FI	0	0	0	0	0	0	0	1	0	0	1	2	0	4	0	19	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	FI
FR	0	0	1	0	2	3	1	0	1	0	3	14	0	0	16	0	42	9	0	0	1	0	0	0	5	0	0	0	0	0	0	FR
GB	0	0	0	0	1	1	0	0	0	0	1	6	0	0	3	0	7	63	0	0	0	0	3	0	1	0	0	0	0	0	0	GB
GE	0	6	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	47	0	0	0	0	0	0	0	6	0	0	0	0	GE
GL	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	GL
GR	3	0	0	0	16	0	114	1	0	0	2	3	0	0	1	0	1	1	0	72	1	1	0	0	4	0	1	0	0	0	0	GR
HR	1	0	3	0	138	1	13	0	0	0	11	15	0	0	3	0	4	2	0	3	27	6	0	0	13	0	1	0	0	0	0	HR
HU	0	0	3	0	36	1	12	1	0	0	15	20	0	0	2	0	4	3	0	1	7	27	0	0	4	0	1	0	0	0	0	HU
IE	0	0	0	0	0	1	0	0	0	0	0	2	0	0	2	0	3	23	0	0	0	0	18	0	0	0	0	0	0	0	0	IE
IS	0	-0	0	-0	0	0	0	0	0	-0	0	0	0	0	0	0	0	1	-0	0	0	0	0	49	0	0	0	0	0	0	0	IS
IT	1	0	2	0	29	0	5	0	1	0	4	6	0	0	8	0	9	1	0	3	6	1	0	0	70	0	0	0	0	0	0	IT
KG	0	0	0	0	0	-0	0	0	-0	0	-0	-0	0	0	-0	0	-0	-0	0	0	0	0	-0	-0	0	18	73	0	-0	0	0	KG
KZT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	177	0	0	0	0	KZT
LT	0	0	0	0	2	1	0	6	0	0	3	10	1	4	0	2	2	6	0	0	0	0	0	0	0	0	3	25	0	1	0	LT
LU	0	0	1	0	3	14	1	0	1	0	6	50	0	0	5	0	45	14	0	0	0	0	0	0	1	0	0	0	9	0	0	LU
LV	0	0	0	0	1	1	0	5	0	0	2	7	1	7	0	3	1	5	0	0	0	0	0	0	0	0	3	10	0	3	0	LV
MD	0	0	0	0	4	0	11	3	0	0	6	7	0	1	1	1	1	2	0	1	0	2	0	0	0	0	6	1	0	0	5	MD
ME	7	0	1	0	74	0	19	0	0	0	4	5	0	0	2	0	1	1	0	7	3	2	0	0	5	0	0	0	0	0	0	ME
MK	6	0	0	0	23	0	90	0	0	0	4	4	0	0	1	0	1	1	0	36	1	2	0	0	2	0	1	0	0	0	0	MK
MT	1	0	0	0	24	0	12	0	0	0	2	2	0	0	14	0	8	1	0	9	2	1	0	0	39	0	0	0	0	0	0	MT
NL	0	0	1	0	2	25	2	0	0	0	6	53	0	0	2	0	22	29	0	0	0	0	1	0	1	0	0	0	0	0	0	NL
NO	0	0	0	0	0	0	0	0	0	0	1	3	0	1	1	1	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	NO
PL	0	0	1	0	5	2	3	2	0	0	14	27	1	1	1	1	4	7	0	0	1	2	0	0	1	0	2	2	0	0	0	PL
PT	0	0	0	0	1	0	0	0	0	0	0	1	0	0	48	0	2	2	0	0	0	0	0	0	1	0	0	0	0	0	0	PT
RO	0	0	1	0	13	0	20	1	0	0	6	7	0	1	1	0	2	2	0	1	1	4	0	0	1	0	3	0	0	0	1	RO
RS	2	0	1	0	49	0	38	1	0	0	8	10	0	0	2	0	2	2	0	5	3	7	0	0	2	0	1	0	0	0	0	RS
RUE	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	29	0	0	0	0	RUE
SE	0	0	0	0	1	1	0	0	0	0	1	5	1	2	0	2	1	5	0	0	0	0	0	0	0	0	0	1	0	0	0	SE
SI	0	0	6	0	46	1	9	0	0	0	10	18	0	0	3	0	4	2	0	1	22	4	0	0	25	0	1	0	0	0	0	SI
SK	0	0	2	0	15	1	7	1	0	0	21	19	0	1	2	0	4	3	0	1	3	15	0	0	2	0	1	0	0	0	0	SK
TJ	0	0	-0	0	0	0	0	0	-0	0	0	0	0	0	-0	0	0	0	0	0	0	0	-0	0	0	2	42	0	-0	0	0	TJ
TM	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	85	0	0	0	0	TM
TR	0	1	0	1	2	0	8	0	0	1	1	1	0	0	0	0	0	0	1	3	0	0	0	0	0	0	2	0	0	0	0	TR
UA	0	0	0	0	3	0	4	5	0	0	4	6	0	2	1	1	1	2	0	1	0	1	0	0	0	0	10	1	0	0	1	UA
UZ	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	139	0	0	0	0	UZ
ATL	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	0	1	2	0	0	0	0	0	1	0	0	1	0	0	0	0	ATL
BAS	0	0	0	0	1	1	1	1	0	0	3	12	2	4	0	6	2	9	0	0	0	0	0	0	0	0	1	2	0	0	0	BAS
BLS	0	0	0	1	2	0	12	2	0	0	2	3	0	1	0	0	0	1	3	2	0	1	0	0	0	0	7	1	0	0	1	BLS
MED	1	0	0	0	25	0	24	0	0	1	2	3	0	0	16	0	8	1	0	18	3	1	0	0	20	0	1	0	0	0	0	MED
NOS	0	0	0	0	1	2	1	0	0	0	2	11	1	0	2	0	7	27	0	0	0	0	1	0	0	0	0	0	0	0	0	NOS
AST	0	0	0	3	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	33	0	0	0	0	AST
NOA	0	0	0	0	8	0	12	0	0	0	1	1	0	0	7	0	2	0	0	12	1	0	0	0	6	0	0	0	0	0	0	NOA
EXC	0	0	0	1	3	0	3	1	0	0	1	4	0	1	3	1	2	2	0	1	0	0	0	0	1	0	40	0	0	0	0	EXC
EU	0	0	1	0	7	2	11	1	1	0	6	17	0	1	16	2	10	9	0	3	1	2	1	0	7	0	1	1	0	0	0	EU
	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	

Table C.14 Cont.: 2011 country-to-country blame matrices for $\mathbf{SO}_4$.
Units: ng/m^3 per 15% emis. red. of SO_x. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	
AL	10	43	0	0	0	14	0	16	96	2	0	0	3	0	0	5	13	0	0	0	1	33	0	0	1	6	1	9	389	136	AL
AM	0	0	0	0	0	1	0	0	0	3	0	0	0	0	2	36	3	2	0	0	0	0	0	25	0	4	0	7	155	2	AM
AT	0	1	0	0	0	19	0	4	10	1	0	4	3	0	0	0	6	0	1	0	0	4	1	0	0	6	0	2	152	114	AT
AZ	0	0	0	0	0	1	0	0	0	16	0	0	0	0	6	10	12	6	0	0	0	0	0	21	0	3	0	3	210	3	AZ
BA	9	5	0	0	0	23	0	14	68	2	0	1	6	0	0	1	12	0	1	0	0	10	1	0	1	6	0	4	479	98	BA
BE	0	0	0	5	0	11	0	1	1	1	0	0	1	0	0	0	3	0	9	0	0	2	20	0	0	6	3	1	191	181	BE
BG	1	6	0	0	0	19	0	55	34	11	0	0	3	0	0	14	51	0	0	0	6	4	1	0	0	5	1	2	431	295	BG
BY	0	0	0	1	0	48	0	3	2	23	1	0	2	0	0	0	30	0	1	3	0	0	2	0	0	3	1	0	173	86	BY
CH	0	0	0	0	0	4	0	1	1	0	0	1	0	0	0	0	1	0	1	0	0	4	1	0	0	7	0	2	98	69	CH
CY	0	2	0	0	0	5	0	6	5	4	0	0	0	0	0	660	16	0	0	0	4	76	0	7	2	6	6	14	748	53	CY
CZ	0	1	0	1	0	46	0	7	14	2	0	1	8	0	0	0	12	0	1	1	0	2	3	0	0	5	1	1	251	203	CZ
DE	0	0	0	4	0	23	0	2	3	1	0	0	1	0	0	0	6	0	3	3	0	2	11	0	0	5	2	1	203	184	DE
DK	0	0	0	3	1	20	0	2	2	2	1	0	1	0	0	0	5	0	4	14	0	0	24	0	0	4	5	0	116	101	DK
EE	0	0	0	0	0	13	0	1	0	17	2	0	0	0	0	0	6	0	1	9	0	0	3	0	0	3	1	0	86	55	EE
ES	0	0	0	0	0	2	4	1	1	0	0	0	0	0	0	0	1	0	13	0	0	31	1	0	2	10	2	1	125	120	ES
FI	0	0	0	0	1	5	0	0	0	11	3	0	0	0	0	0	2	0	1	3	0	0	1	0	0	3	1	0	53	37	FI
FR	0	0	0	1	0	5	0	1	1	0	0	0	1	0	0	0	2	0	12	0	0	12	6	0	0	7	3	2	112	103	FR
GB	0	0	0	1	0	3	0	0	0	0	0	0	0	0	0	0	1	0	18	0	0	1	9	0	0	5	6	0	94	91	GB
GE	0	0	0	0	0	1	0	1	0	7	0	0	0	0	2	24	8	1	0	0	2	0	0	6	0	3	0	4	129	3	GE
GL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	0	0	0	0	GL
GR	2	23	0	0	0	13	0	25	29	6	0	0	2	0	0	38	31	0	0	0	4	44	0	0	1	6	2	8	393	242	GR
HR	3	4	0	0	0	30	0	16	56	2	0	2	7	0	0	1	15	0	1	0	0	18	1	0	1	6	1	3	377	129	HR
HU	1	2	0	1	0	54	0	37	42	4	0	1	16	0	0	1	31	0	1	1	1	4	2	0	0	5	0	2	330	202	HU
IE	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	22	0	0	0	2	0	0	5	7	0	52	50	IE
IS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	4	3	0	51	2	IS
IT	1	2	0	0	0	11	0	5	10	1	0	2	2	0	0	1	4	0	1	0	0	62	1	0	2	6	2	13	187	131	IT
KG	0	0	0	-0	-0	0	-0	0	0	1	-0	-0	0	5	1	0	0	139	-0	0	0	0	-0	8	0	6	0	9	238	0	KG
KZT	0	0	0	0	0	1	0	0	0	50	0	0	0	0	1	1	10	15	0	0	0	0	0	4	0	5	0	2	258	2	KZT
LT	0	0	0	1	0	41	0	1	1	15	1	0	1	0	0	0	17	0	1	6	0	0	4	0	0	3	1	0	146	102	LT
LU	0	0	0	3	0	11	0	1	1	1	0	0	1	0	0	0	3	0	6	0	0	2	8	0	0	6	2	1	174	163	LU
LV	0	0	0	1	0	23	0	1	1	16	2	0	1	0	0	0	10	0	1	7	0	0	4	0	0	3	1	0	105	68	LV
MD	0	1	0	0	0	44	0	32	5	24	0	0	4	0	0	5	118	1	0	1	3	1	1	0	0	5	0	1	290	115	MD
ME	49	11	0	0	0	16	0	13	93	2	0	0	4	0	0	2	9	0	0	0	0	15	1	0	1	6	1	6	331	80	ME
MK	3	61	0	0	0	15	0	22	84	3	0	0	3	0	0	6	18	0	0	0	1	7	0	0	1	6	0	5	391	184	MK
MT	2	3	20	0	0	6	0	7	14	1	0	0	1	0	0	6	5	0	1	0	0	255	1	0	10	7	7	29	181	123	MT
NL	0	0	0	14	0	17	0	1	2	1	0	0	1	0	0	0	4	0	7	1	0	1	41	0	0	5	4	1	188	177	NL
NO	0	0	0	0	4	3	0	0	0	1	1	0	0	0	0	0	0	0	2	1	0	0	3	0	0	3	2	0	22	15	NO
PL	0	1	0	1	0	124	0	7	5	6	0	0	5	0	0	0	24	0	1	3	0	1	4	0	0	4	1	1	252	205	PL
PT	0	0	0	0	0	1	23	0	1	0	0	0	0	0	0	0	0	0	41	0	0	8	1	0	1	10	4	1	83	80	PT
RO	1	2	0	0	0	33	0	109	19	11	0	0	5	0	0	4	62	0	0	1	3	1	1	0	0	5	0	1	315	196	RO
RS	6	9	0	0	0	28	0	45	149	4	0	0	8	0	0	2	25	0	0	0	1	4	1	0	0	6	0	3	411	159	RS
RUE	0	0	0	0	0	2	0	0	0	60	0	0	0	0	0	1	8	1	0	0	0	0	0	0	0	5	0	0	106	6	RUE
SE	0	0	0	1	2	9	0	1	1	3	6	0	0	0	0	0	2	0	2	5	0	0	5	0	0	3	2	0	45	36	SE
SI	1	2	0	0	0	24	0	9	25	2	0	17	4	0	0	1	9	0	1	0	0	16	1	0	1	5	0	2	247	138	SI
SK	0	1	0	1	0	74	0	21	18	4	0	1	31	0	0	0	27	0	1	1	0	2	2	0	0	5	0	1	277	205	SK
TJ	0	0	0	0	0	0	-0	0	0	1	0	-0	0	21	4	1	1	113	-0	0	0	0	0	8	0	8	0	13	185	0	TJ
TM	0	0	0	0	0	1	0	0	0	17	0	0	0	2	26	3	8	58	0	0	0	0	0	16	0	7	0	6	204	2	TM
TR	0	1	0	0	0	4	0	5	2	6	0	0	0	0	0	299	23	0	0	0	5	8	0	8	1	6	1	11	362	24	TR
UA	0	0	0	0	0	40	0	10	3	38	0	0	2	0	0	6	129	1	0	1	2	1	1	0	0	4	1	1	275	77	UA
UZ	0	0	0	0	0	1	0	0	0	20	0	0	0	6	8	2	8	148	0	0	0	0	0	7	0	6	0	8	336	2	UZ
ATL	0	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	7	0	0	0	1	0	0	9	5	0	12	7	ATL
BAS	0	0	0	1	1	21	0	2	1	8	4	0	1	0	0	0	6	0	2	16	0	0	8	0	0	3	3	0	93	73	BAS
BLS	0	1	0	0	0	17	0	16	4	36	0	0	1	0	0	58	108	1	0	0	25	3	0	1	0	4	3	1	282	58	BLS
MED	2	4	1	0	0	9	0	10	13	3	0	0	1	0	0	127	15	0	2	0	2	157	1	2	7	7	6	17	312	117	MED
NOS	0	0	0	2	1	7	0	1	1	0	0	0	0	0	0	0	1	0	9	1	0	1	19	0	0	4	8	0	72	66	NOS
AST	0	0	0	0	0	1	0	0	0	8	0	0	0	1	4	29	5	12	0	0	0	4	0	52	0	10	0	8	100	4	AST
NOA	1	2	1	0	0	3	0	4	5	1	0	0	0	-0	0	36	5	0	1	0	1	51	0	0	18	13	2	17	109	50	NOA
EXC	0	0	0	0	0	7	0	3	3	38	0	0	1	0	1	12	12	8	1	1	0	3	1	2	0	6	1	2	153	33	EXC
EU	0	1	0	1	0	22	1	11	6	4	1	1	2	0	0	3	11	0	6	2	1	12	4	0	1	5	2	2	163	127	EU
	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	

Table C.15: 2011 country-to-country blame matrices for $\mathbf{SO_4}$.
Units: ng/m^3 per 15% emis. red. of NO_x. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	
AL	2	0	-0	0	1	-0	1	-0	-0	0	-1	-2	-0	-0	0	-0	-0	-0	0	-15	1	-1	-0	0	-0	0	0	-0	-0	-0	0	AL
AM	0	-2	0	2	0	-0	0	0	0	0	0	0	0	0	0	-0	0	0	-0	0	0	0	0	0	0	0	0	-0	0	-0	0	AM
AT	-0	0	-4	0	-0	-0	-0	-0	-0	0	-2	-6	-0	-0	-0	-0	-1	-1	0	-0	-1	-2	-0	0	-2	0	0	-0	-0	-0	-0	AT
AZ	-0	-0	-0	2	-0	-0	-0	-0	-0	0	-0	-0	-0	0	0	0	-0	-0	-0	0	-0	-0	0	0	0	-0	1	-0	-0	-0	-0	AZ
BA	-0	0	-1	0	10	-0	-0	-0	-0	0	-1	-5	-0	-0	0	-0	-1	-1	0	-1	1	-1	-0	0	-1	0	0	-0	-0	-0	-0	BA
BE	-0	0	-1	0	-0	-6	-0	-0	-0	0	-1	-11	-0	-0	-0	-0	-5	-7	0	-0	-0	-0	-0	0	-1	0	0	-0	-1	-0	-0	BE
BG	-0	0	-1	0	-0	-0	1	-0	-0	0	-1	-3	-0	-0	0	-0	-1	-1	0	-2	-0	-1	-0	0	-0	0	0	-0	-0	-0	-0	BG
BY	-0	0	-0	0	-0	-1	-0	-1	-0	0	-1	-5	-0	-0	-0	-0	-1	-2	0	-0	-0	-1	-0	0	-0	0	-0	-0	-0	-0	-0	BY
CH	-0	0	-1	0	-0	-0	0	-0	-2	0	-0	-4	-0	0	-0	-0	-1	-0	0	0	-0	-0	-0	0	-3	0	0	0	-0	0	0	CH
CY	0	0	0	0	0	-0	0	0	0	2	0	-0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	-0	0	0	CY
CZ	-0	0	-4	0	-0	-1	-0	-0	-0	0	-8	-13	-0	-0	-0	-0	-2	-2	0	-0	-1	-5	-0	0	-1	0	0	-0	-0	-0	-0	CZ
DE	-0	0	-3	0	-0	-2	-0	-0	-1	0	-4	-16	-0	-0	-0	-0	-3	-4	0	-0	-0	-1	-0	0	-1	0	0	-0	-0	-0	-0	DE
DK	-0	0	-1	0	0	-1	0	-0	-0	0	-2	-9	-1	-0	-0	-0	-2	-5	0	-0	-0	-0	-0	0	-0	0	0	-0	-0	-0	-0	DK
EE	-0	0	-0	0	-0	-0	-0	-1	-0	0	-0	-2	-0	-0	-0	-1	-0	-1	0	-0	-0	-0	-0	0	-0	0	-0	-0	-0	-0	-0	EE
ES	0	0	-0	0	0	-0	0	0	-0	0	-0	-1	-0	-0	-8	-0	-1	-0	0	0	0	0	0	0	-0	0	0	0	-0	-0	0	ES
FI	0	0	-0	0	0	-0	0	-0	-0	0	-0	-1	-0	-0	0	-1	-0	-0	0	0	-0	-0	-0	0	-0	0	-0	-0	-0	-0	-0	FI
FR	-0	0	-1	0	0	-1	0	-0	-0	0	-1	-5	-0	-0	-2	-0	-4	-2	0	0	-0	-0	-0	0	-1	0	0	-0	-0	-0	-0	FR
GB	-0	0	-0	0	0	-1	-0	-0	-0	0	-0	-3	-0	-0	-0	-0	-2	-11	0	-0	-0	-0	-0	0	-0	0	0	-0	-0	-0	0	GB
GE	0	-0	-0	-0	0	-0	0	-0	-0	0	-0	-0	-0	-0	0	-0	-0	-0	-2	0	-0	-0	0	0	0	0	0	-0	-0	-0	0	GE
GL	-0	-0	0	0	0	0	0	0	0	-0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	GL
GR	0	0	-0	0	0	-0	7	-0	-0	0	-0	-2	-0	-0	0	-0	-0	-0	0	-4	0	-0	-0	0	-0	0	0	-0	-0	-0	0	GR
HR	-0	0	-2	0	4	-0	-0	-0	-0	0	-2	-6	-0	-0	0	-0	-1	-1	0	-0	-1	-2	-0	0	-4	0	0	-0	-0	-0	-0	HR
HU	-0	0	-2	0	-0	-1	0	-0	-0	0	-2	-8	-0	-0	0	-0	-2	-1	0	-0	-2	-8	-0	0	-2	0	0	-0	-0	-0	-0	HU
IE	0	0	-0	0	0	-0	0	-0	-0	0	-0	-1	-0	0	-0	0	-1	-5	0	0	-0	-0	-1	0	-0	0	0	0	-0	0	0	IE
IS	0	0	-0	0	0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	0	-0	-0	0	0	-0	-0	-0	1	-0	0	0	-0	-0	-0	0	IS
IT	-0	0	-1	0	1	-0	0	-0	-0	0	-0	-1	-0	-0	-0	-0	-1	-0	0	-0	-0	-0	0	0	-13	0	0	-0	-0	-0	-0	IT
KG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	KG
KZT	0	0	0	0	0	-0	0	-0	0	0	-0	-0	-0	-0	0	-0	0	0	0	0	0	-0	0	0	0	0	6	-0	-0	-0	0	KZT
LT	-0	0	-0	0	0	-1	-0	-1	-0	0	-1	-5	-1	-0	-0	-0	-1	-2	0	-0	-0	-0	-0	0	-0	0	-0	-1	-0	-0	-0	LT
LU	-0	0	-1	0	-0	-3	-0	-0	-1	0	-2	-14	-0	-0	-1	-0	-5	-4	0	-0	-0	-0	-0	0	-1	0	0	-0	-3	-0	-0	LU
LV	-0	0	-0	0	-0	-0	-0	-1	-0	0	-1	-4	-0	-0	-0	-0	-1	-2	0	-0	-0	-0	-0	0	-0	0	-0	-1	-0	-0	-0	LV
MD	-0	0	-1	0	-0	-0	-2	-0	-0	0	-1	-5	-0	-0	-0	-0	-1	-1	0	-0	-0	-2	-0	0	-0	0	0	-0	-0	-0	0	MD
ME	0	0	-1	0	4	-0	0	-0	-0	-0	-1	-3	-0	-0	0	-0	-1	-0	0	-2	1	-1	-0	0	-0	0	0	-0	-0	-0	-0	ME
MK	-0	0	-1	0	0	-0	5	-0	-0	0	-1	-3	-0	-0	0	-0	-1	-1	0	-14	-0	-1	-0	0	-0	0	0	-0	-0	-0	-0	MK
MT	0	0	-0	0	0	-0	0	0	-0	0	-0	-0	-0	0	0	-0	1	-0	0	1	0	0	0	0	1	0	0	-0	-0	-0	0	MT
NL	-0	0	-1	0	-0	-4	-0	-0	-0	0	-1	-13	-0	-0	-0	-0	-4	-9	0	-0	-0	-0	-0	0	-0	0	0	-0	-0	-0	-0	NL
NO	0	0	-0	0	0	-0	0	-0	-0	0	-0	-1	-0	-0	-0	-0	-0	-1	0	0	-0	0	-0	0	-0	0	0	-0	-0	-0	0	NO
PL	-0	0	-1	0	-0	-1	-0	-1	-0	0	-3	-11	-1	-0	-0	-0	-2	-3	0	-0	-0	-2	-0	0	-1	0	0	-0	-0	-0	-0	PL
PT	0	0	-0	0	0	-0	0	0	-0	0	-0	-0	-0	-0	-3	-0	-1	-0	0	0	0	0	0	0	-0	0	0	-0	-0	-0	0	PT
RO	-0	0	-1	0	-0	-0	-1	-0	-0	0	-1	-4	-0	-0	0	-0	-1	-1	0	-0	-0	-2	-0	0	-1	0	0	-0	-0	-0	-0	RO
RS	-0	0	-2	0	-0	-0	1	-0	-0	0	-2	-5	-0	-0	0	-0	-1	-1	0	-2	-1	-3	-0	0	-1	0	0	-0	-0	-0	-0	RS
RUE	-0	0	-0	0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	0	-0	-0	-0	0	-0	-0	-0	-0	0	-0	0	0	-0	-0	-0	-0	RUE
SE	0	0	-0	0	0	-0	0	-0	-0	0	-0	-2	-0	-0	0	-0	-0	-1	0	-0	-0	-0	-0	0	-0	0	0	-0	-0	-0	-0	SE
SI	-0	0	-2	0	0	-0	-0	-0	-0	0	-1	-4	-0	-0	0	-0	-1	-0	0	-0	-4	-2	-0	0	-9	0	0	-0	-0	-0	-0	SI
SK	-0	0	-2	0	0	-1	0	-0	-0	0	-3	-9	-0	-0	-0	-0	-2	-2	0	-0	-1	-7	-0	0	-1	0	0	-0	-0	-0	-0	SK
TJ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	1	0	0	0	0	TJ
TM	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	4	0	0	0	0	TM
TR	0	0	-0	0	-0	-0	0	0	-0	0	-0	-0	-0	-0	0	0	-0	-0	0	0	-0	-0	0	0	0	0	0	0	-0	-0	0	TR
UA	-0	0	-1	0	-0	-0	-0	-1	-0	0	-1	-4	-0	-0	-0	-0	-1	-1	-0	-0	-0	-1	-0	0	-0	0	0	-0	-0	-0	-0	UA
UZ	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	6	0	0	0	0	UZ
ATL	0	0	-0	0	0	-0	0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	-0	-0	0	-0	0	0	-0	-0	-0	0	ATL
BAS	0	0	-0	0	0	-1	-0	-1	-0	0	-1	-4	-1	-0	-0	-1	-1	-2	0	-0	-0	-0	-0	0	-0	0	-0	-0	-0	-0	-0	BAS
BLS	-0	-0	-0	0	-0	-0	-1	-0	-0	-0	-0	-2	-0	-0	0	-0	-0	-0	-0	-0	-0	-1	-0	0	-0	0	0	-0	-0	-0	-0	BLS
MED	0	0	-0	0	1	-0	1	0	-0	0	-0	-1	-0	-0	-1	0	-0	-0	0	1	0	-0	0	0	-0	0	0	0	-0	0	0	MED
NOS	-0	0	-0	0	-0	-1	-0	-0	-0	0	-1	-4	-0	-0	-0	-0	-2	-6	0	-0	-0	-0	-0	0	-0	0	0	-0	-0	-0	-0	NOS
AST	0	0	0	0	0	-0	0	-0	0	0	-0	-0	-0	0	0	0	0	0	0	0	0	-0	0	0	0	0	1	-0	0	0	0	AST
NOA	0	0	-0	0	0	-0	0	0	-0	0	-0	-0	-0	0	0	0	0	-0	0	1	0	0	0	0	0	0	0	0	-0	0	0	NOA
EXC	0	-0	-0	0	0	-0	0	-0	-0	0	-0	-1	-0	-0	-0	-0	-0	-1	0	-0	-0	-0	-0	0	-0	0	1	-0	-0	-0	-0	EXC
EU	0	0	-1	0	0	-1	0	-0	-0	0	-1	-5	-0	-0	-1	-0	-2	-2	0	-0	-0	-1	-0	0	-2	0	0	-0	-0	-0	-0	EU
	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	

Table C.15 Cont.: 2011 country-to-country blame matrices for $\mathbf{SO_4}$.
Units: ng/m^3 per 15% emis. red. of NO_x. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	
AL	1	-2	0	-0	-0	-1	0	-0	-2	0	-0	-0	-0	0	0	-1	-0	0	0	-0	0	-1	-1	0	0	2	0	0	-21	-21	AL
AM	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	1	0	AM
AT	-0	-0	0	-0	-0	-3	-0	-1	-3	-0	-0	-2	-1	0	0	-0	-0	0	0	-0	-0	-0	-1	0	0	0	0	0	-31	-25	AT
AZ	0	-0	0	-0	0	-0	0	-0	-0	-0	0	-0	-0	-0	0	0	-0	0	0	-0	-0	0	-0	1	0	1	0	0	2	-0	AZ
BA	1	-0	-0	-0	-0	-3	0	-1	-14	-0	-0	-0	-1	0	0	-0	-1	0	0	-0	0	-1	-1	0	0	2	0	0	-22	-18	BA
BE	0	-0	0	-3	-0	-3	-0	-0	-0	-0	-0	-0	-0	0	0	0	-0	0	-0	-0	-0	-0	-7	0	0	1	0	0	-42	-41	BE
BG	0	-0	-0	-0	-0	-3	0	-0	-3	-0	-0	-0	-0	0	0	-5	-1	0	0	-0	0	-1	-1	0	0	2	0	0	-24	-13	BG
BY	0	-0	-0	-1	-0	-8	-0	-0	-0	-2	-0	-0	-0	0	0	-0	-0	0	-0	-1	-0	-0	-2	0	0	0	0	0	-26	-21	BY
CH	0	-0	0	-0	-0	-0	0	-0	-0	0	-0	-0	-0	0	0	0	-0	0	0	-0	0	-0	-0	0	0	0	0	0	-12	-10	CH
CY	0	0	0	-0	0	0	0	0	0	1	0	-0	0	0	0	3	1	0	0	0	1	19	0	0	0	3	0	0	12	6	CY
CZ	0	-0	-0	-1	-0	-8	-0	-1	-4	-1	-0	-1	-2	0	0	-0	-1	0	-0	-1	-0	-0	-2	0	0	1	0	0	-58	-50	CZ
DE	0	-0	0	-2	-0	-6	-0	-0	-1	-0	-0	-0	-0	0	0	-0	-0	0	-0	-1	-0	-0	-4	0	0	1	0	0	-47	-44	DE
DK	0	-0	0	-2	-0	-5	-0	-0	-1	-1	-0	-0	-0	0	0	-0	-1	0	-0	-3	-0	-0	-6	0	-0	0	0	0	-31	-29	DK
EE	0	-0	0	-0	-0	-3	-0	-0	-0	-2	-0	-0	-0	0	0	0	-0	0	-0	-2	-0	-0	-1	0	0	0	0	0	-14	-11	EE
ES	0	0	0	-0	-0	-0	-0	0	0	0	-0	-0	-0	0	0	0	-0	0	-1	-0	0	-5	-0	0	0	1	0	0	-11	-11	ES
FI	0	0	0	-0	-0	-1	0	0	-0	-1	-0	-0	-0	0	0	0	-0	0	0	-1	0	0	-0	0	0	0	0	0	-6	-4	FI
FR	0	-0	0	-1	-0	-1	-0	-0	-0	0	-0	-0	-0	0	0	0	-0	0	-0	-0	0	-1	-2	0	0	0	0	0	-19	-19	FR
GB	0	-0	-0	-1	-0	-1	-0	-0	-0	-0	-0	-0	-0	0	0	0	-0	0	-1	-0	-0	-0	-4	0	-0	0	0	0	-21	-21	GB
GE	0	0	0	-0	0	-0	0	-0	-0	-0	-0	-0	-0	0	0	0	-0	0	0	-0	0	0	-0	0	0	0	0	0	-3	-0	GE
GL	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	-0	0	-0	-0	-0	0	0	0	0	GL
GR	0	-0	0	-0	-0	-1	0	1	-1	0	-0	-0	-0	0	0	-4	0	0	0	-0	0	-1	-0	0	0	2	0	0	-7	-2	GR
HR	0	-0	-0	-1	-0	-5	0	-2	-15	-0	-0	-1	-1	0	0	-0	-1	0	0	-1	0	-1	-1	0	0	1	0	0	-43	-28	HR
HU	-0	-0	-0	-1	-0	-9	0	-1	-8	-0	-0	-1	-2	0	0	-0	-2	0	0	-1	-0	-1	-2	0	0	1	0	0	-56	-42	HU
IE	0	0	0	-0	-0	-0	-0	0	-0	0	-0	-0	-0	0	0	0	0	0	-0	-0	0	-0	-1	0	0	0	0	0	-9	-9	IE
IS	0	-0	0	-0	0	-0	-0	-0	-0	0	-0	-0	-0	0	0	-0	-0	0	0	-0	0	-0	-0	0	0	1	0	0	0	-1	IS
IT	0	-0	0	-0	-0	-1	0	-0	-1	0	-0	-1	-0	0	0	-0	-0	0	0	-0	0	-4	-0	0	0	1	0	0	-21	-20	IT
KG	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	4	0	KG
KZT	0	0	0	-0	0	-0	0	0	0	-1	-0	0	-0	0	0	0	-0	-0	0	-0	0	0	-0	0	0	1	0	0	5	-0	KZT
LT	-0	-0	-0	-1	-0	-7	-0	-0	-0	-2	-0	-0	-0	0	0	-0	-1	0	-0	-2	-0	-0	-3	0	0	0	0	0	-29	-24	LT
LU	0	-0	0	-2	-0	-3	-0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	0	-0	-0	-0	-0	-3	0	-0	0	0	0	-40	-39	LU
LV	-0	-0	0	-1	-0	-4	-0	-0	-0	-2	-0	-0	-0	0	0	0	-1	0	-0	-1	-0	-0	-2	0	0	0	0	0	-20	-16	LV
MD	-0	-0	-0	-1	-0	-7	-0	-7	-1	-3	-0	-0	-1	0	0	-2	-3	0	0	-1	-0	-0	-1	0	0	1	0	0	-40	-30	MD
ME	5	-1	-0	-0	-0	-2	0	-0	-5	-0	-0	-0	-0	0	0	-0	-0	0	0	-0	0	-0	-1	0	0	1	0	0	-7	-11	ME
MK	0	-0	-0	-0	-0	-2	0	0	-4	-0	-0	-0	-1	0	0	-1	-0	0	0	-0	0	-1	-1	0	0	1	0	0	-25	-20	MK
MT	0	0	-6	-0	0	-0	0	0	0	0	-0	-0	-0	0	0	-0	0	0	0	-0	0	-37	-0	0	0	2	0	0	-2	-4	MT
NL	0	-0	0	-6	-0	-5	-0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	0	0	-1	-0	-0	-11	0	0	1	0	0	-48	-46	NL
NO	0	0	0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	0	0	-0	-0	0	-0	-0	0	0	-1	0	0	0	0	0	-3	-2	NO
PL	0	-0	-0	-2	-0	-14	-0	-0	-1	-2	-0	-0	-1	0	0	-0	-1	0	-0	-2	-0	-0	-3	0	-0	0	0	0	-50	-43	PL
PT	0	-0	0	-0	-0	-0	-2	0	0	-0	-0	-0	-0	0	0	0	-0	0	-4	-0	0	-1	-0	0	0	1	0	0	-7	-7	PT
RO	-0	-0	-0	-0	-0	-5	-0	-3	-4	-1	-0	-0	-1	0	0	-1	-2	0	0	-1	0	-0	-1	0	0	1	0	0	-32	-23	RO
RS	0	-1	-0	-0	-0	-4	0	-2	-19	-0	-0	-0	-1	0	0	-1	-1	0	0	-0	0	-1	-1	0	0	1	0	0	-46	-23	RS
RUE	0	-0	0	-0	-0	-0	0	-0	-0	-4	-0	-0	-0	0	0	-0	-0	0	0	-0	0	-0	-0	0	0	0	0	0	-5	-1	RUE
SE	0	-0	0	-0	-0	-2	-0	0	-0	-0	-0	-0	-0	0	0	0	-0	0	-0	-1	0	0	-1	0	0	0	0	0	-8	-7	SE
SI	-0	-0	-0	-0	-0	-5	0	-1	-8	-0	-0	-4	-1	0	0	-0	-1	0	0	-0	0	-2	-1	0	0	1	0	0	-47	-33	SI
SK	0	-0	-0	-1	-0	-12	-0	-1	-2	-0	-0	-1	-3	0	0	-0	-1	0	0	-1	-0	-0	-2	0	0	1	0	0	-52	-46	SK
TJ	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	0	0	0	0	0	1	0	1	0	0	10	0	TJ
TM	0	0	0	0	0	-0	0	0	0	1	0	0	-0	0	4	0	0	4	0	0	0	0	0	1	0	2	0	0	14	0	TM
TR	0	0	0	-0	0	-0	0	-0	-0	0	-0	-0	-0	0	0	-17	0	0	0	-0	-0	0	-0	0	0	2	0	0	-17	-1	TR
UA	-0	-0	-0	-0	-0	-6	-0	-1	-1	-5	-0	-0	-1	0	0	-1	-2	0	0	-1	-0	-0	-1	0	0	1	0	0	-29	-19	UA
UZ	0	0	0	0	0	-0	0	0	0	1	0	0	0	1	1	0	0	2	0	-0	0	0	0	1	0	2	0	0	12	0	UZ
ATL	0	0	0	-0	-0	-0	-0	0	0	-0	-0	-0	-0	0	0	0	-0	0	-0	-0	0	-0	-0	0	0	0	0	0	-1	-1	ATL
BAS	0	-0	0	-1	-0	-4	-0	-0	-0	-1	-1	-0	-0	0	0	0	-1	0	-0	-3	-0	-0	-3	0	0	0	0	0	-20	-17	BAS
BLS	-0	-0	0	-0	-0	-2	0	-1	-1	-2	-0	-0	-0	0	0	-9	-0	0	0	-0	2	-1	-1	0	0	1	0	0	-22	-9	BLS
MED	0	-0	0	-0	0	-0	0	0	-0	0	-0	-0	-0	0	0	-3	0	0	0	-0	0	-10	-0	0	0	2	0	0	-2	-1	MED
NOS	0	-0	-0	-1	-0	-2	-0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	0	-0	-1	-0	-0	-6	0	-0	0	0	0	-20	-19	NOS
AST	0	0	0	-0	0	-0	0	0	0	0	0	0	-0	0	0	1	0	1	0	-0	0	1	0	5	0	1	0	0	5	0	AST
NOA	0	0	0	-0	0	-0	0	0	0	0	0	-0	0	0	0	0	0	0	0	-0	0	1	-0	0	1	1	0	0	3	2	NOA
EXC	0	-0	-0	-0	-0	-1	-0	-0	-0	-2	-0	-0	-0	0	0	-1	-0	0	-0	-0	0	-0	-0	0	0	1	0	0	-8	-5	EXC
EU	0	-0	-0	-1	-0	-3	-0	-0	-1	-0	-0	-0	-0	0	0	-0	-0	0	-0	-1	0	-1	-2	0	0	1	0	0	-24	-21	EU
	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	

Table C.16: 2011 country-to-country blame matrices for $\mathbf{SO_4}$.
Units: ng/m^3 per 15% emis. red. of NH_3. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	
AL	14	0	0	0	-0	0	1	0	0	-0	0	1	0	-0	-0	0	0	0	0	4	0	0	0	0	0	-0	0	0	0	0	0	AL
AM	0	21	-0	5	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	0	-0	-0	-0	1	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	AM
AT	-0	0	9	0	0	0	0	0	1	-0	2	8	0	0	-0	0	1	0	0	0	3	3	0	0	2	0	0	0	0	0	0	AT
AZ	-0	1	-0	15	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1	-0	-0	-0	0	-0	0	0	1	-0	-0	-0	-0	AZ
BA	0	0	1	0	18	0	1	0	0	-0	1	3	0	0	-0	0	1	0	0	0	8	2	0	0	1	0	0	0	0	0	0	BA
BE	-0	0	1	0	-0	14	0	0	0	0	1	18	0	0	0	0	11	6	0	-0	0	0	1	0	0	0	0	0	1	0	0	BE
BG	0	0	0	0	0	0	27	1	0	0	0	1	0	0	0	0	0	0	0	2	1	1	0	0	0	0	1	0	0	0	1	BG
BY	0	0	0	0	0	0	0	22	0	-0	1	4	1	0	0	0	1	1	0	0	0	1	0	0	0	-0	1	2	0	0	0	BY
CH	-0	0	0	0	-0	0	-0	-0	4	-0	0	4	0	-0	-0	-0	1	-0	0	-0	0	0	0	0	2	0	0	-0	0	-0	0	CH
CY	-0	0	0	-0	-0	-0	-0	-0	0	1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	CY
CZ	0	0	6	0	0	1	0	1	0	0	30	19	0	0	0	0	3	1	0	0	2	6	0	0	1	0	0	0	0	0	0	CZ
DE	-0	0	2	0	0	3	0	0	0	0	4	38	0	0	0	0	5	2	0	0	0	1	0	0	0	0	0	0	0	0	0	DE
DK	0	0	0	0	0	1	0	1	0	0	1	12	15	0	0	0	2	5	0	0	0	0	1	0	0	-0	0	0	0	0	0	DK
EE	0	0	0	0	0	0	0	2	0	-0	0	2	1	4	0	1	0	1	0	0	0	0	0	0	0	-0	0	1	0	1	0	EE
ES	-0	0	0	-0	-0	0	-0	-0	0	-0	0	0	0	-0	17	0	2	0	0	-0	-0	-0	0	0	0	0	0	0	0	-0	-0	ES
FI	-0	0	0	0	0	0	0	1	0	-0	0	1	0	0	0	4	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	FI
FR	-0	0	0	0	-0	2	-0	-0	0	-0	0	5	0	-0	1	0	13	2	0	-0	0	0	0	0	1	0	0	0	0	-0	0	FR
GB	0	0	0	0	0	1	0	0	0	-0	0	4	0	-0	0	0	4	31	0	0	0	0	2	0	0	-0	0	0	0	-0	0	GB
GE	-0	1	-0	5	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	7	0	-0	-0	0	-0	0	0	-0	-0	-0	-0	-0	GE
GL	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	GL
GR	0	0	0	0	-0	0	6	0	0	-0	0	1	0	-0	-0	0	0	0	0	9	0	0	0	-0	0	0	0	0	0	0	0	GR
HR	-0	0	1	0	6	0	1	0	0	-0	1	4	0	0	-0	0	1	0	0	0	23	4	0	0	3	0	0	0	0	0	0	HR
HU	0	0	2	0	1	0	1	1	0	-0	3	7	0	0	-0	0	1	0	0	0	7	28	0	0	1	0	0	0	0	0	0	HU
IE	0	0	0	0	0	0	-0	0	0	0	-0	0	0	-0	0	0	1	7	0	-0	0	-0	6	0	0	0	0	-0	0	-0	-0	IE
IS	-0	-0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	-0	0	0	0	8	0	-0	-0	0	0	0	0	IS
IT	-0	0	1	0	0	0	0	0	0	-0	0	1	0	-0	-0	0	0	-0	0	-0	1	0	0	0	19	0	-0	0	0	0	0	IT
KG	-0	0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	0	8	5	-0	-0	-0	-0	KG
KZT	-0	0	-0	0	-0	-0	-0	0	-0	-0	-0	-0	0	-0	-0	0	-0	-0	0	-0	-0	-0	0	-0	-0	0	27	0	-0	0	0	KZT
LT	0	0	0	0	0	0	0	7	0	-0	1	6	1	0	0	0	1	1	0	0	0	0	0	0	0	-0	1	15	0	1	0	LT
LU	-0	0	1	-0	0	7	0	0	0	0	1	23	0	-0	0	0	10	3	0	0	0	0	0	0	0	0	0	0	3	0	0	LU
LV	0	0	0	0	0	0	0	4	0	-0	0	3	1	1	0	0	1	1	0	0	0	0	0	0	0	-0	0	5	0	4	0	LV
MD	0	0	0	0	0	0	3	1	0	-0	1	3	0	0	0	0	1	0	0	0	0	1	0	0	0	0	2	0	0	0	9	MD
ME	3	0	1	0	2	0	1	0	0	0	1	2	0	0	-0	0	1	0	0	0	1	1	0	0	1	0	0	0	0	0	0	ME
MK	3	0	0	0	0	0	3	0	0	-0	0	1	0	0	-0	0	0	0	0	6	1	1	0	0	0	0	0	0	0	0	0	MK
MT	-0	-0	0	-0	-0	0	0	0	0	0	-0	0	0	-0	-0	-0	0	-0	-0	-0	0	-0	0	-0	1	0	-0	-0	-0	-0	-0	MT
NL	-0	0	1	0	0	5	0	0	0	0	1	17	1	0	0	0	7	9	0	0	0	0	1	0	0	0	0	0	0	0	0	NL
NO	0	-0	0	-0	0	0	0	0	0	-0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	-0	0	0	0	-0	NO
PL	0	0	1	0	0	1	0	3	0	-0	8	15	1	0	0	0	2	2	0	0	1	2	0	0	1	0	1	1	0	0	0	PL
PT	-0	0	0	-0	-0	0	-0	-0	0	-0	0	0	0	0	5	0	1	0	0	-0	-0	-0	0	-0	0	0	0	0	0	0	-0	PT
RO	0	0	0	0	0	0	3	1	0	0	1	2	0	0	0	0	1	0	0	0	0	3	0	0	0	0	1	0	0	0	1	RO
RS	1	0	1	0	1	0	2	0	0	-0	1	3	0	0	0	0	1	0	0	0	3	4	0	0	1	0	0	0	0	0	1	RS
RUE	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	RUE
SE	0	0	0	0	0	0	0	0	0	-0	0	2	2	0	0	0	0	1	0	0	0	0	0	0	0	-0	0	0	0	0	0	SE
SI	-0	0	3	0	1	0	0	0	0	-0	1	4	0	0	-0	0	1	0	0	0	10	3	0	0	8	0	0	0	0	0	0	SI
SK	0	0	2	0	0	0	0	1	0	-0	6	9	0	0	0	0	2	1	0	0	2	14	0	0	1	0	0	0	0	0	0	SK
TJ	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	-0	-0	TJ
TM	-0	0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	0	4	-0	-0	0	0	TM
TR	-0	0	0	-0	-0	0	0	-0	0	0	-0	0	0	-0	-0	-0	0	0	0	0	-0	0	0	-0	0	0	-0	-0	0	0	0	TR
UA	0	0	0	0	0	0	1	3	0	0	1	3	0	0	0	0	1	0	0	0	0	1	0	0	0	0	4	0	0	0	1	UA
UZ	-0	0	-0	0	-0	-0	-0	0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	1	9	-0	-0	0	-0	UZ
ATL	0	-0	0	-0	-0	0	0	0	0	-0	0	0	0	0	0	0	0	1	0	0	-0	0	0	0	0	-0	-0	0	0	0	-0	ATL
BAS	0	0	0	0	0	1	0	2	0	-0	1	7	3	0	0	1	1	2	0	0	0	0	0	0	0	-0	0	1	0	0	0	BAS
BLS	0	0	0	0	0	0	1	0	0	0	0	1	0	-0	0	0	0	0	0	0	0	0	0	-0	0	0	1	0	0	0	0	BLS
MED	-0	-0	0	-0	0	0	0	-0	0	-0	0	0	0	-0	1	-0	1	0	-0	-0	0	0	0	-0	1	0	-0	-0	0	-0	0	MED
NOS	0	0	0	0	0	1	0	0	0	-0	0	7	2	0	0	0	4	10	0	0	0	0	1	0	0	-0	0	0	0	0	0	NOS
AST	-0	0	-0	0	-0	-0	-0	0	0	-0	-0	-0	0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	0	2	0	-0	0	-0	AST
NOA	-0	-0	0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	NOA
EXC	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0	1	1	0	0	0	0	0	0	0	0	6	0	0	0	0	EXC
EU	0	0	1	0	0	1	1	1	0	0	2	7	1	0	2	0	3	3	0	0	0	1	0	0	2	0	0	0	0	0	0	EU
	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	

Table C.16 Cont.: 2011 country-to-country blame matrices for $\mathbf{SO_4}$.
Units: ng/m^3 per 15% emis. red. of NH_3. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	
AL	0	3	0	0	0	-0	-0	2	11	0	0	0	-0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38	10	AL
AM	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	5	-0	-0	0	0	0	0	0	3	0	0	0	0	31	-0	AM
AT	-0	-0	0	0	0	2	-0	1	1	0	0	3	1	-0	0	-0	0	0	0	0	0	0	0	0	-0	0	0	0	39	34	AT
AZ	-0	-0	0	0	-0	-0	-0	-0	-0	1	-0	-0	-0	0	0	1	-0	0	0	0	0	0	0	1	0	0	0	0	21	-0	AZ
BA	1	0	0	0	0	1	-0	4	15	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60	17	BA
BE	-0	-0	0	7	0	1	0	0	-0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	61	61	BE
BG	0	0	0	0	0	0	-0	12	7	1	0	0	0	-0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	60	45	BG
BY	0	0	0	1	0	16	0	1	0	3	0	0	0	-0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	57	30	BY
CH	-0	-0	-0	0	0	-0	-0	0	0	-0	0	0	-0	-0	0	-0	-0	0	0	0	0	0	0	0	-0	0	0	0	12	8	CH
CY	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	0	0	0	0	0	1	0	0	0	0	-1	-1	CY
CZ	0	0	0	1	0	11	-0	2	2	0	0	1	2	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	91	85	CZ
DE	0	-0	0	4	0	5	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	71	69	DE
DK	0	0	0	3	0	6	0	1	0	0	2	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52	49	DK
EE	0	0	-0	0	0	3	0	0	0	2	1	0	0	-0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	22	17	EE
ES	-0	-0	-0	0	0	-0	0	-0	-0	-0	0	-0	-0	-0	0	-0	-0	0	0	0	0	0	0	-0	0	1	0	0	21	21	ES
FI	0	0	-0	0	0	1	0	0	-0	1	1	0	0	-0	0	0	0	-0	0	0	0	0	0	-0	-0	0	0	0	9	8	FI
FR	-0	-0	-0	1	0	0	0	0	0	0	0	0	0	-0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	28	27	FR
GB	0	0	0	2	0	0	0	0	-0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46	46	GB
GE	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	0	-0	2	-0	-0	0	0	0	0	0	0	0	0	0	0	15	-0	GE
GL	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	0	0	0	-0	-0	GL
GR	-0	0	0	0	0	-0	-0	2	2	0	0	0	-0	-0	0	1	0	0	0	0	0	0	0	-0	0	0	0	0	22	18	GR
HR	0	-0	0	0	0	3	-0	5	11	0	0	2	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	67	25	HR
HU	0	0	0	1	0	7	-0	8	8	0	0	1	2	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	81	63	HU
IE	0	-0	-0	0	0	0	0	0	-0	-0	0	0	-0	-0	-0	-0	-0	0	0	0	0	0	0	-0	-0	0	0	0	17	17	IE
IS	-0	-0	0	0	0	0	0	0	-0	-0	0	0	0	-0	-0	-0	0	-0	0	0	0	0	0	-0	0	1	0	0	9	1	IS
IT	0	-0	0	0	0	0	-0	0	0	-0	0	1	-0	-0	0	-0	-0	0	0	0	0	0	0	-0	0	0	0	0	23	22	IT
KG	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1	0	0	-0	3	0	0	0	0	0	1	-0	0	0	0	17	-0	KG
KZT	-0	-0	-0	-0	0	-0	-0	-0	-0	8	0	-0	-0	0	0	-0	0	0	0	0	0	0	0	2	-0	0	0	0	36	-0	KZT
LT	0	0	0	1	0	19	0	1	0	3	1	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	62	50	LT
LU	-0	-0	0	4	0	1	0	0	0	0	0	0	0	-0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	55	54	LU
LV	0	0	0	1	0	7	0	0	0	2	1	0	0	-0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	33	26	LV
MD	0	0	0	0	0	5	0	22	1	3	0	0	0	-0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	57	38	MD
ME	8	0	0	0	0	0	-0	2	19	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42	9	ME
MK	-0	9	0	0	0	0	-0	3	12	0	0	0	-0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42	16	MK
MT	-0	-0	0	0	0	-0	-0	0	0	-0	0	0	-0	0	0	-0	-0	0	0	0	0	0	0	-0	0	0	0	0	-0	0	MT
NL	-0	-0	0	14	0	2	0	0	-0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	59	58	NL
NO	0	-0	-0	0	1	0	0	0	-0	-0	0	0	0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	0	0	0	4	2	NO
PL	0	0	0	2	0	58	0	2	1	1	1	0	1	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	106	99	PL
PT	-0	-0	-0	0	0	-0	7	-0	-0	-0	0	-0	-0	0	0	-0	-0	0	0	0	0	0	0	-0	0	1	0	0	13	13	PT
RO	0	0	0	0	0	2	-0	37	4	1	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60	50	RO
RS	0	1	0	0	0	1	-0	11	43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	78	27	RS
RUE	0	0	-0	0	0	0	-0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	22	1	RUE
SE	0	0	-0	0	0	1	0	0	0	0	3	0	0	-0	0	0	0	0	0	0	0	0	0	-0	-0	0	0	0	11	10	SE
SI	0	0	0	0	0	2	-0	3	3	0	0	15	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	55	41	SI
SK	0	0	0	1	0	13	-0	4	2	0	0	1	12	-0	0	-0	0	0	0	0	0	0	0	0	0	1	0	0	73	67	SK
TJ	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	2	0	-0	-0	2	0	0	0	0	0	0	-0	0	0	0	4	-0	TJ
TM	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	0	-0	0	0	3	0	0	1	0	0	0	0	0	1	-0	0	0	0	8	-0	TM
TR	-0	-0	0	0	0	-0	-0	0	-0	0	0	0	-0	0	-0	30	0	-0	0	0	0	0	0	1	0	0	0	0	30	1	TR
UA	0	0	0	0	0	7	0	4	0	7	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	38	20	UA
UZ	-0	-0	-0	-0	0	-0	-0	-0	-0	0	0	-0	-0	1	1	0	0	8	0	0	0	0	0	1	-0	0	0	0	20	-0	UZ
ATL	0	-0	-0	0	0	0	0	0	-0	-0	0	0	0	-0	-0	-0	0	-0	0	0	0	0	0	0	0	0	0	0	2	2	ATL
BAS	0	0	-0	1	0	6	0	0	0	1	2	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	27	BAS
BLS	0	0	0	0	0	0	-0	2	0	4	0	0	0	-0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	16	6	BLS
MED	-0	-0	0	0	0	-0	-0	0	0	-0	0	0	-0	-0	-0	0	-0	-0	0	0	0	0	0	0	0	0	0	0	4	4	MED
NOS	0	0	0	3	0	2	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	30	NOS
AST	-0	-0	0	-0	0	-0	-0	-0	-0	0	0	-0	-0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	-0	AST
NOA	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	0	0	0	0	-2	-1	NOA
EXC	0	0	0	0	0	2	0	1	0	9	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	26	8	EXC
EU	0	0	0	1	0	6	0	3	1	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	37	EU
	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	

Table C.17: 2011 country-to-country blame matrices for $\mathbf{SO_4}$.
Units: ng/m^3 per 15% emis. red. of VOC. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	
AL	0	0	0	0	-0	0	0	0	0	-0	0	1	0	0	0	0	0	0	0	2	-0	0	0	0	1	0	0	0	0	0	0	AL
AM	0	0	0	-0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	AM
AT	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	AT
AZ	0	0	0	-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	-0	0	0	0	0	AZ
BA	0	0	0	0	1	0	1	0	0	0	0	2	0	0	0	0	1	0	0	0	-0	1	0	0	2	0	0	0	0	0	0	BA
BE	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	BE
BG	0	0	0	0	0	0	3	1	0	0	0	2	0	0	0	0	1	1	0	1	0	1	0	0	1	0	0	0	0	0	0	BG
BY	0	0	0	0	0	0	0	-0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	BY
CH	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	CH
CY	0	0	0	-0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	-0	0	0	0	0	CY
CZ	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	1	0	0	0	1	0	0	1	0	0	0	0	0	0	CZ
DE	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	DE
DK	0	0	0	0	0	0	0	0	-0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	DK
EE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	EE
ES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	ES
FI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	FI
FR	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	FR
GB	-0	0	-0	0	-0	0	0	0	-0	-0	0	0	0	0	0	0	0	1	0	-0	-0	-0	0	0	0	0	0	0	0	0	-0	GB
GE	0	0	0	-0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	-0	0	0	0	0	GE
GL	-0	-0	-0	-0	-0	0	-0	-0	-0	0	-0	-0	0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	0	-0	-0	GL
GR	0	0	0	-0	0	0	1	0	0	-0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	GR
HR	0	0	0	0	1	0	0	1	0	-0	0	2	0	0	0	0	1	0	0	0	0	1	0	0	2	0	0	0	0	0	0	HR
HU	0	0	0	0	1	0	0	0	0	-0	0	2	0	0	0	0	1	0	0	0	0	2	0	0	1	0	0	0	0	0	0	HU
IE	0	0	-0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	-0	0	0	0	0	0	0	-0	IE
IS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	IS
IT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	IT
KG	0	0	0	-0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	KG
KZT	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	KZT
LT	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	LT
LU	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	LU
LV	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	LV
MD	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	MD
ME	0	0	0	0	-1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-0	0	0	0	1	0	0	0	0	0	0	ME
MK	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	3	0	1	0	0	1	0	0	0	0	0	0	MK
MT	-0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	-0	0	0	0	0	4	0	0	0	0	0	0	MT
NL	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	2	0	0	0	0	0	0	1	0	0	0	0	0	0	NL
NO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	-0	0	0	0	0	0	NO
PL	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	PL
PT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PT
RO	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	0	0	RO
RS	0	0	0	0	1	0	1	0	0	0	0	2	0	0	0	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	RS
RUE	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	RUE
SE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	SE
SI	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	SI
SK	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	SK
TJ	0	0	0	-0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	TJ
TM	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	TM
TR	0	-0	0	-0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	TR
UA	0	0	0	-0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	UA
UZ	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	UZ
ATL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	ATL
BAS	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	BAS
BLS	0	0	0	-0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	BLS
MED	0	0	0	-0	-0	0	0	0	0	-0	0	1	0	0	0	0	1	0	0	-0	-0	0	0	0	1	0	0	0	0	0	0	MED
NOS	0	0	0	0	0	0	0	0	-0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	NOS
AST	0	-0	0	-0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	-0	0	0	0	0	AST
NOA	-0	0	0	-0	-0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	NOA
EXC	0	0	0	-0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	EXC
EU	0	0	0	0	0	0	0	0	0	-0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	EU
	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	

Table C.17 Cont.: 2011 country-to-country blame matrices for $\mathbf{SO}_4$.
Units: ng/m^3 per 15% emis. red. of VOC. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	
AL	-0	1	0	0	0	1	0	1	-0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	0	10	8	AL
AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	-0	0	0	0	0	0	-0	-0	-1	0	0	1	0	AM
AT	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	5	AT
AZ	0	0	0	0	0	0	0	0	0	1	0	0	0	0	-0	0	0	0	0	0	0	0	0	-0	0	-1	0	0	1	1	AZ
BA	-0	0	0	0	0	1	0	3	3	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-0	0	0	19	12	BA
BE	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	8	7	BE
BG	0	0	0	0	0	2	0	3	1	1	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	-1	0	0	21	14	BG
BY	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	4	3	BY
CH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	CH
CY	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	-0	0	-0	-0	-7	0	0	1	1	CY
CZ	0	0	0	0	0	2	0	1	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	11	8	CZ
DE	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	9	7	DE
DK	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	1	0	0	7	5	DK
EE	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	EE
ES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	2	2	ES
FI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	FI
FR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	4	FR
GB	-0	0	-0	0	0	0	0	-0	-0	0	0	-0	0	0	0	-0	0	0	0	0	-0	-0	0	0	-0	0	0	0	2	2	GB
GE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	-0	0	0	0	0	0	-0	0	-1	0	0	3	0	GE
GL	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	0	-0	-0	-0	0	0	-0	-0	GL
GR	0	0	0	0	0	1	0	1	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-0	-2	0	0	11	8	GR
HR	0	0	0	0	0	2	0	3	3	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	21	14	HR
HU	0	0	0	0	0	3	0	2	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	18	13	HU
IE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	2	1	IE
IS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	IS
IT	-0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	9	8	IT
KG	-0	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	-2	0	0	0	0	KG
KZT	0	0	0	0	0	0	0	0	0	1	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	-3	0	0	3	1	KZT
LT	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	3	LT
LU	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	7	6	LU
LV	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	3	LV
MD	0	0	0	0	0	2	0	3	0	3	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	-1	0	0	16	10	MD
ME	-1	0	0	0	0	1	0	1	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	0	5	6	ME
MK	0	1	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	0	13	10	MK
MT	-0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	-0	-2	0	0	8	7	MT
NL	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	10	9	NL
NO	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	NO
PL	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	-0	0	0	0	9	6	PL
PT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	0	2	2	PT
RO	0	0	0	0	0	1	0	4	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-1	0	0	15	11	RO
RS	0	0	0	0	0	2	0	2	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	17	12	RS
RUE	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	2	1	RUE
SE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	SE
SI	0	0	0	0	0	2	0	2	2	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	17	11	SI
SK	0	0	0	0	0	2	0	1	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	12	9	SK
TJ	-0	-0	0	0	0	0	0	0	0	0	0	0	0	-0	-0	0	0	-0	0	0	0	0	0	-0	-0	-2	0	0	-0	0	TJ
TM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	-0	0	0	0	0	0	-0	-0	-4	0	0	1	1	TM
TR	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	6	0	0	0	0	0	0	0	-0	-0	-2	0	0	10	3	TR
UA	0	0	0	0	0	1	0	1	0	3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-0	0	0	11	6	UA
UZ	0	0	0	0	0	0	0	0	0	1	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	-4	0	0	3	1	UZ
ATL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	ATL
BAS	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	3	BAS
BLS	0	0	0	0	0	1	0	1	0	2	0	0	0	0	0	4	0	0	0	0	-0	0	0	0	0	-1	0	0	14	6	BLS
MED	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	-0	0	-3	0	0	6	4	MED
NOS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	3	NOS
AST	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	-0	-0	0	-0	0	0	0	-0	0	-1	-0	-2	0	0	0	0	AST
NOA	-0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	-0	-2	0	0	1	1	NOA
EXC	0	0	0	0	0	0	0	0	0	1	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	-1	0	0	3	2	EXC
EU	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	5	EU
	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	

Table C.18: 2011 country-to-country blame matrices for $\mathbf{NH_4}$.
Units: ng/m^3 per 15% emis. red. of SO_x. **Emitters →, Receptors ↓.** (Based on ECMWF meteorology.)

	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	
AL	12	0	0	0	11	0	10	0	0	0	1	1	0	0	1	0	0	0	0	11	1	0	0	0	2	0	0	0	0	0	0	AL
AM	0	19	0	14	0	-0	0	0	-0	0	0	0	-0	-0	0	-0	-0	-0	3	0	0	0	-0	-0	0	0	3	-0	-0	-0	0	AM
AT	0	0	4	0	3	0	1	0	1	0	4	11	0	0	1	0	2	1	0	0	1	1	0	0	3	0	0	0	0	0	0	AT
AZ	0	2	-0	39	0	0	0	0	-0	0	0	0	0	0	0	-0	-0	0	4	0	0	0	-0	-0	0	0	9	0	-0	0	0	AZ
BA	0	0	0	0	24	0	2	0	0	0	2	2	0	0	1	0	1	0	0	1	2	1	0	0	1	0	0	0	0	0	0	BA
BE	0	0	0	0	1	18	0	0	1	0	2	15	0	0	2	0	17	9	-0	0	0	0	0	0	0	0	0	0	0	0	0	BE
BG	0	0	0	0	2	0	22	0	0	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	BG
BY	0	0	0	0	1	0	0	8	0	0	1	2	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2	2	0	0	0	BY
CH	0	0	1	0	1	0	0	0	10	-0	1	9	0	0	1	0	5	1	0	0	0	0	0	0	4	0	0	0	0	0	0	CH
CY	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	CY
CZ	0	0	1	0	3	1	1	0	0	0	20	17	0	0	1	0	3	2	0	0	1	1	0	0	1	0	0	0	0	0	0	CZ
DE	0	0	1	0	1	2	1	0	1	0	5	37	0	0	1	0	6	4	0	0	0	0	0	0	1	0	0	0	0	0	0	DE
DK	0	0	0	0	1	1	0	0	0	0	2	9	3	0	0	0	2	7	0	0	0	0	0	0	0	0	0	0	0	0	0	DK
EE	0	0	0	0	0	0	0	1	0	0	0	1	0	3	0	2	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	EE
ES	0	0	0	0	1	0	0	0	0	-0	0	1	0	0	35	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	ES
FI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	FI
FR	0	0	0	0	1	1	0	0	1	-0	1	5	0	0	5	0	16	3	0	0	0	0	0	0	2	0	0	0	0	0	0	FR
GB	0	0	0	0	0	0	0	0	0	-0	0	2	0	0	1	0	3	23	0	0	0	0	1	0	0	0	0	0	0	0	0	GB
GE	0	2	0	8	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	16	0	0	0	-0	-0	0	0	2	0	0	0	0	GE
GL	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	GL
GR	1	0	0	0	2	0	15	0	0	0	0	1	0	0	0	0	0	0	0	9	0	0	0	0	1	0	0	0	0	0	0	GR
HR	0	0	1	0	18	0	3	0	0	0	3	5	0	0	1	0	1	1	0	0	7	2	0	0	3	0	0	0	0	0	0	HR
HU	0	0	1	0	10	0	4	0	0	0	5	7	0	0	1	0	1	1	0	0	2	8	0	0	1	0	0	0	0	0	0	HU
IE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	7	0	0	0	0	7	0	0	0	0	0	0	0	0	IE
IS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	IS
IT	0	0	1	0	7	0	1	0	0	0	1	2	0	0	2	0	3	0	0	1	2	0	0	0	25	0	0	0	0	0	0	IT
KG	-0	0	-0	0	0	-0	0	0	-0	0	-0	-0	-0	0	-0	-0	-0	-0	0	0	-0	-0	-0	-0	-0	5	7	0	-0	0	0	KG
KZT	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	-0	0	0	0	0	0	-0	0	0	0	25	0	0	0	0	KZT
LT	0	0	0	0	0	0	0	2	0	0	1	2	0	1	0	1	0	2	0	0	0	0	0	0	0	0	1	8	0	0	0	LT
LU	0	0	0	0	1	5	0	0	1	0	2	20	0	0	2	0	18	5	0	0	0	0	0	0	1	0	0	0	3	0	0	LU
LV	0	0	0	0	0	0	0	1	0	0	0	2	0	1	0	1	0	1	0	0	0	0	0	0	0	0	1	3	0	1	0	LV
MD	0	0	0	0	1	0	2	1	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	MD
ME	2	0	0	0	11	0	4	0	0	0	1	1	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	ME
MK	2	0	0	0	6	0	15	0	0	0	1	1	0	0	0	0	0	0	0	7	0	1	0	0	1	0	0	0	0	0	0	MK
MT	0	0	0	0	3	0	1	0	0	0	0	1	0	0	3	0	2	0	0	1	0	0	0	0	6	0	0	0	0	0	0	MT
NL	0	0	0	0	1	10	1	0	0	-0	2	22	0	0	1	0	10	11	-0	0	0	0	1	0	0	0	0	0	0	0	0	NL
NO	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	NO
PL	0	0	0	0	1	0	1	1	0	-0	4	8	0	0	0	0	1	2	0	0	0	1	0	0	0	0	0	1	0	0	0	PL
PT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	PT
RO	0	0	0	0	3	0	4	0	0	0	2	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	RO
RS	1	0	0	0	13	0	10	0	0	0	3	3	0	0	0	0	1	1	0	2	1	2	0	0	1	0	0	0	0	0	0	RS
RUE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	RUE
SE	0	0	0	0	0	0	0	0	0	-0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	SE
SI	0	0	2	0	9	0	2	0	0	0	3	6	0	0	1	0	1	1	0	0	7	1	0	0	8	0	0	0	0	0	0	SI
SK	0	0	1	0	4	0	2	0	0	0	6	6	0	0	0	0	1	1	0	0	1	3	0	0	1	0	0	0	0	0	0	SK
TJ	-0	0	-0	0	0	-0	0	0	-0	0	0	0	0	0	-0	0	-0	-0	0	0	-0	0	-0	-0	-0	0	5	0	-0	0	0	TJ
TM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	TM
TR	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	TR
UA	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	UA
UZ	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	-0	0	0	0	0	0	-0	0	0	0	12	0	0	0	0	UZ
ATL	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	ATL
BAS	0	0	0	0	0	0	0	0	0	0	1	3	1	1	0	1	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	BAS
BLS	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	BLS
MED	0	0	0	0	1	0	1	0	0	0	0	1	0	0	2	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	MED
NOS	0	0	0	0	0	1	0	0	0	-0	1	3	0	0	1	0	2	7	0	0	0	0	0	0	0	0	0	0	0	0	0	NOS
AST	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	AST
NOA	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NOA
EXC	0	0	0	0	1	0	0	0	0	0	0	1	0	0	1	0	1	1	0	0	0	0	0	0	0	0	6	0	0	0	0	EXC
EU	0	0	0	0	2	1	2	0	0	0	2	6	0	0	6	0	4	3	0	0	0	0	0	0	2	0	0	0	0	0	0	EU
	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	

Table C.18 Cont.: 2011 country-to-country blame matrices for $\mathbf{NH}_4$.
Units: ng/m^3 per 15% emis. red. of SO_x. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	
AL	3	10	0	0	0	4	0	5	30	1	0	0	1	0	0	1	4	0	0	0	0	7	0	0	0	2	0	2	110	37	AL
AM	0	0	0	-0	-0	0	-0	0	0	1	-0	0	0	0	1	14	1	1	0	-0	0	0	-0	9	0	2	0	3	56	0	AM
AT	0	0	0	0	0	6	0	1	3	0	0	1	1	0	0	0	2	0	0	0	0	1	0	0	0	2	0	1	48	38	AT
AZ	0	0	0	0	-0	0	-0	0	0	5	-0	0	0	0	2	4	3	2	0	0	0	0	0	7	0	1	0	1	72	1	AZ
BA	2	1	0	0	0	5	0	3	11	0	0	0	1	0	0	0	2	0	0	0	0	2	0	0	0	1	0	1	63	21	BA
BE	0	0	0	2	0	4	0	0	0	0	0	0	0	0	0	0	1	0	4	0	0	1	8	0	0	3	1	1	75	71	BE
BG	0	1	0	0	0	4	0	9	6	2	0	0	1	0	0	1	7	0	0	0	1	1	0	0	0	1	0	0	59	39	BG
BY	0	0	0	0	0	13	0	1	0	7	0	0	0	0	0	0	8	0	0	1	0	0	1	0	0	1	0	0	49	23	BY
CH	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	3	0	1	37	25	CH
CY	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	28	2	0	0	0	0	5	0	2	0	1	0	1	36	4	CY
CZ	0	0	0	0	0	14	0	2	3	1	0	0	2	0	0	0	4	0	1	0	0	1	1	0	0	2	0	0	79	66	CZ
DE	0	0	0	1	0	7	0	1	1	0	0	0	0	0	0	0	2	0	1	1	0	1	4	0	0	2	1	0	75	69	DE
DK	0	0	0	1	0	6	0	0	0	0	0	0	0	0	0	0	1	0	2	5	0	0	9	0	0	2	2	0	37	34	DK
EE	0	0	0	0	0	2	0	0	0	3	1	0	0	0	0	0	1	0	0	3	0	0	1	0	0	1	0	0	18	12	EE
ES	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	4	0	0	8	0	0	1	4	1	0	42	41	ES
FI	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	10	7	FI
FR	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	5	0	0	3	2	0	0	3	1	1	39	36	FR
GB	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	3	0	0	2	2	0	33	32	GB
GE	0	0	0	0	-0	0	0	0	0	2	-0	0	0	0	1	9	2	1	0	0	1	0	0	2	0	1	0	1	44	1	GE
GL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	-0	0	0	0	GL
GR	0	4	0	0	0	3	0	4	5	1	0	0	0	0	0	3	5	0	0	0	0	4	0	0	0	1	0	1	56	34	GR
HR	0	1	0	0	0	8	0	4	12	1	0	1	2	0	0	0	4	0	0	0	0	4	0	0	0	2	0	1	78	35	HR
HU	0	1	0	0	0	17	0	12	12	1	0	0	5	0	0	0	9	0	0	0	0	1	1	0	0	2	0	0	100	64	HU
IE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	8	0	0	0	0	0	0	2	3	0	17	16	IE
IS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	0	IS
IT	0	0	0	0	0	3	0	1	2	0	0	1	1	-0	0	0	1	0	0	0	0	16	0	0	1	2	0	2	58	44	IT
KG	0	0	0	-0	-0	0	-0	0	0	0	-0	-0	-0	1	0	0	0	12	-0	-0	0	0	-0	2	0	1	0	1	25	-0	KG
KZT	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	2	2	0	0	0	0	0	1	0	1	0	0	40	0	KZT
LT	0	0	0	0	0	10	0	0	0	4	0	0	0	0	0	0	5	0	0	2	0	0	1	0	0	1	0	0	40	27	LT
LU	0	0	0	1	0	3	0	0	0	0	0	0	0	0	0	0	1	0	3	0	0	1	3	0	0	3	1	1	66	62	LU
LV	0	0	0	0	0	4	0	0	0	3	1	0	0	0	0	0	2	0	0	2	0	0	1	0	0	1	0	0	24	15	LV
MD	0	0	0	0	0	11	0	9	1	6	0	0	1	0	0	1	25	0	0	0	1	0	0	0	0	1	0	0	67	29	MD
ME	9	2	0	0	0	4	0	3	21	0	0	0	1	0	0	0	2	0	0	0	0	3	0	0	0	2	0	1	68	18	ME
MK	1	9	0	0	0	4	0	6	24	1	0	0	1	0	0	1	4	0	0	0	0	2	0	0	0	2	0	1	86	38	MK
MT	0	0	3	0	0	1	0	1	2	0	0	0	0	0	0	1	1	0	0	0	0	36	0	0	2	2	1	3	28	20	MT
NL	0	0	0	5	0	6	0	0	1	0	0	0	0	0	0	0	1	0	3	0	0	0	16	0	0	2	2	0	74	70	NL
NO	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	0	0	4	3	NO
PL	0	0	0	0	0	38	0	2	1	2	0	0	1	0	0	0	7	0	0	1	0	0	1	0	0	1	0	0	75	62	PL
PT	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	12	0	0	3	0	0	0	4	1	0	28	27	PT
RO	0	0	0	0	0	9	0	26	5	3	0	0	1	0	0	1	14	0	0	0	1	0	0	0	0	2	0	0	75	48	RO
RS	2	3	0	0	0	9	0	13	45	1	0	0	2	0	0	0	7	0	0	0	0	1	0	0	0	2	0	1	121	47	RS
RUE	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	18	1	RUE
SE	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	0	0	9	7	SE
SI	0	0	0	0	0	7	0	2	6	0	0	6	1	0	0	0	2	0	0	0	0	5	0	0	0	2	0	1	69	44	SI
SK	0	0	0	0	0	19	0	6	4	1	0	0	8	0	0	0	6	0	0	0	0	1	1	0	0	2	0	0	72	55	SK
TJ	0	0	0	0	-0	0	-0	0	0	0	0	-0	0	6	1	0	0	16	-0	0	0	0	0	2	0	2	0	2	28	0	TJ
TM	0	0	0	0	0	0	0	0	0	3	0	0	0	0	4	0	1	7	0	0	0	0	0	3	0	2	0	1	27	0	TM
TR	0	0	0	0	0	1	0	1	0	2	0	0	0	0	0	54	5	0	0	0	1	1	0	3	0	2	0	3	67	4	TR
UA	0	0	0	0	0	5	0	2	0	6	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	1	0	0	29	11	UA
UZ	0	0	0	0	0	0	0	0	0	3	0	0	0	1	1	0	1	19	0	0	0	0	0	1	0	1	0	1	39	0	UZ
ATL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	1	1	ATL
BAS	0	0	0	0	0	4	0	0	0	1	1	0	0	0	0	0	1	0	1	4	0	0	2	0	0	1	1	0	19	16	BAS
BLS	0	0	0	0	0	2	0	2	0	5	0	0	0	0	0	6	4	0	0	0	2	0	0	0	0	1	0	0	25	6	BLS
MED	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	2	1	0	0	0	0	5	0	0	0	1	0	0	16	10	MED
NOS	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	4	0	0	1	1	0	18	17	NOS
AST	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	5	1	2	0	0	0	0	0	16	0	3	0	1	17	1	AST
NOA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	4	0	0	3	2	0	1	7	4	NOA
EXC	0	0	0	0	0	2	0	1	1	7	0	0	0	0	0	2	2	1	0	0	0	1	0	0	0	1	0	0	29	9	EXC
EU	0	0	0	0	0	6	0	3	1	1	0	0	1	0	0	0	3	0	2	1	0	3	2	0	0	2	1	0	46	38	EU
	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	

Table C.19: 2011 country-to-country blame matrices for $\mathbf{NH_4}$.
Units: ng/m^3 per 15% emis. red. of NO_x. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	
AL	5	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	1	0	0	0	0	0	0	AL
AM	0	7	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	AM
AT	0	0	9	0	0	0	0	0	2	0	2	11	0	0	0	0	3	0	0	0	1	2	0	0	8	0	0	0	0	0	0	AT
AZ	0	1	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	AZ
BA	0	0	1	0	2	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	BA
BE	0	0	1	0	0	-1	0	0	1	0	1	12	0	-0	1	0	18	5	0	0	0	0	0	0	1	0	0	0	1	0	0	BE
BG	0	0	0	0	0	0	3	0	0	0	0	0	-0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	BG
BY	0	0	0	0	0	0	0	4	0	0	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	BY
CH	0	0	4	0	0	0	0	0	21	0	1	14	0	0	1	0	10	1	0	0	0	0	0	0	19	0	0	0	0	0	0	CH
CY	0	0	-0	0	0	-0	0	0	0	1	-0	-0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	-0	0	0	CY
CZ	0	0	4	0	0	0	0	0	1	0	4	11	0	0	0	0	3	1	0	0	1	3	0	0	1	0	0	0	0	0	0	CZ
DE	0	0	3	0	0	2	0	0	2	0	2	17	0	0	1	0	7	3	0	0	-0	0	0	0	2	0	0	0	1	0	0	DE
DK	0	0	0	0	0	2	0	0	0	0	1	10	1	0	0	0	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	DK
EE	0	0	0	0	0	0	-0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	EE
ES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	ES
FI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	FI
FR	0	0	1	0	0	1	0	0	2	0	0	7	0	0	2	0	21	2	0	0	0	0	0	0	3	0	0	0	0	0	0	FR
GB	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	6	8	0	0	0	0	1	0	0	0	0	0	0	0	0	GB
GE	0	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	GE
GL	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	-0	0	0	0	0	GL
GR	0	0	0	0	0	-0	2	0	0	0	0	0	-0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	GR
HR	0	0	2	0	2	0	0	0	0	0	1	2	0	0	0	0	1	0	0	0	4	3	0	0	4	0	0	0	0	0	0	HR
HU	0	0	3	0	1	0	1	0	0	0	2	4	0	0	0	0	1	0	0	0	3	9	0	0	3	0	0	0	0	0	0	HU
IE	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	2	11	0	0	0	0	4	0	0	0	0	0	0	0	0	IE
IS	0	0	-0	0	0	-0	-0	0	0	0	-0	-0	-0	-0	0	0	0	0	0	0	-0	-0	0	0	0	0	0	0	-0	0	0	IS
IT	0	0	2	0	0	0	0	0	1	0	0	2	0	0	0	0	1	0	0	0	1	0	0	0	36	0	0	0	0	0	0	IT
KG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	KG
KZT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	KZT
LT	-0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	LT
LU	0	0	1	0	0	3	0	0	1	0	1	15	0	0	1	0	16	3	0	0	0	0	0	0	1	0	0	0	-3	0	0	LU
LV	-0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	LV
MD	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	MD
ME	1	0	0	0	1	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	ME
MK	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	0	0	0	0	0	0	MK
MT	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	-0	0	-0	0	0	0	0	0	0	1	0	0	0	0	0	0	MT
NL	0	0	0	0	0	3	0	0	0	0	1	12	0	0	1	0	11	7	0	0	0	0	1	0	1	0	0	0	1	0	0	NL
NO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO
PL	0	0	1	0	0	0	0	1	0	0	1	6	0	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	PL
PT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PT
RO	0	0	1	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	RO
RS	0	0	1	0	1	0	2	0	0	0	1	2	0	0	0	0	1	0	0	1	1	3	0	0	1	0	0	0	0	0	0	RS
RUE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	RUE
SE	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	SE
SI	0	0	6	0	0	0	0	0	0	0	1	4	0	0	0	0	1	0	0	0	6	2	0	0	14	0	0	0	0	0	0	SI
SK	0	0	1	0	0	0	0	0	0	0	2	3	0	0	0	0	1	0	0	0	1	5	0	0	1	0	0	0	0	0	0	SK
TJ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	TJ
TM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	TM
TR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	TR
UA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	UA
UZ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	UZ
ATL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	ATL
BAS	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	BAS
BLS	0	0	0	0	-0	-0	0	0	0	0	0	-0	-0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	BLS
MED	0	0	0	0	0	0	0	0	0	0	0	0	-0	-0	-0	-0	0	-0	0	0	0	0	0	0	1	0	0	0	0	0	0	MED
NOS	0	0	0	0	0	1	0	0	0	0	0	3	0	0	0	0	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	NOS
AST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	AST
NOA	0	0	0	0	0	0	0	0	0	0	-0	0	-0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	NOA
EXC	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	EXC
EU	0	0	1	0	0	0	0	0	1	0	1	4	0	0	2	0	4	1	0	0	0	1	0	0	4	0	0	0	0	0	0	EU
	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	

Table C.19 Cont.: 2011 country-to-country blame matrices for $\mathbf{NH}_4$.
Units: ng/m^3 per 15% emis. red. of NO_x. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	
AL	1	2	0	0	0	0	0	1	7	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	24	7	AL
AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	6	0	0	0	0	0	0	0	1	0	1	0	0	24	1	AM
AT	0	0	0	0	0	1	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	45	41	AT
AZ	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	32	1	AZ
BA	0	0	-0	0	0	1	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	7	BA
BE	0	0	0	2	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	2	0	0	1	4	0	0	3	0	0	43	42	BE
BG	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	1	0	0	0	0	0	-0	0	0	0	0	0	9	7	BG
BY	0	0	0	0	0	4	0	0	0	3	0	0	0	0	0	0	2	0	0	1	0	0	1	0	0	0	0	0	20	10	BY
CH	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	72	51	CH
CY	0	0	0	-0	0	0	0	0	-0	0	0	-0	-0	0	0	1	0	0	0	0	0	1	-0	0	0	0	0	0	2	1	CY
CZ	0	0	0	1	0	3	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	36	34	CZ
DE	0	0	0	3	0	2	0	0	-0	0	0	0	0	0	0	0	0	0	1	1	0	1	4	0	0	2	0	0	44	42	DE
DK	0	0	0	3	1	2	0	0	-0	0	0	-0	0	0	0	0	0	0	1	2	0	0	7	0	0	2	0	0	27	26	DK
EE	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	6	4	EE
ES	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	14	14	ES
FI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	FI
FR	0	0	0	1	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	2	0	0	1	3	0	0	1	0	0	42	40	FR
GB	0	0	0	1	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0	0	1	0	0	19	19	GB
GE	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	19	1	GE
GL	-0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	-0	0	0	0	-0	0	-0	0	0	0	0	0	0	GL
GR	0	1	0	-0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	-0	0	1	-0	0	0	0	0	0	11	8	GR
HR	0	0	0	0	0	1	0	1	5	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	31	19	HR
HU	0	0	0	0	0	3	0	5	5	0	0	1	2	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	44	34	HU
IE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	0	1	0	0	19	19	IE
IS	0	-0	0	-0	0	-0	0	0	-0	0	0	-0	-0	0	0	-0	0	0	0	-0	0	0	-0	0	0	0	0	0	0	0	IS
IT	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0	0	47	45	IT
KG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	KG
KZT	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	KZT
LT	0	-0	0	1	0	4	0	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	1	0	0	0	0	0	19	13	LT
LU	0	0	0	2	0	1	0	0	-0	0	0	-0	0	0	0	0	0	0	1	0	0	1	3	0	0	2	0	0	44	43	LU
LV	0	-0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	1	0	0	0	0	0	10	7	LV
MD	0	0	-0	0	0	2	0	6	0	1	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	20	11	MD
ME	2	0	0	0	0	0	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	3	ME
MK	0	3	0	0	0	0	0	1	7	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	21	9	MK
MT	0	0	-1	-0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	-1	-0	0	0	0	0	0	1	1	MT
NL	0	-0	0	-0	0	1	0	0	-0	0	0	-0	0	0	0	0	0	0	3	1	0	1	6	0	0	3	0	0	40	39	NL
NO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	NO
PL	0	0	0	1	0	8	0	1	0	1	0	0	1	0	0	0	1	0	0	1	0	0	1	0	0	1	0	0	26	22	PL
PT	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	8	8	PT
RO	0	0	0	0	0	1	0	12	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	24	19	RO
RS	0	1	0	0	0	2	0	4	13	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	39	20	RS
RUE	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	RUE
SE	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	SE
SI	0	0	0	0	0	1	0	1	1	0	0	7	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	48	40	SI
SK	0	0	0	0	0	2	0	2	1	0	0	0	3	0	0	0	0	0	0	-0	0	0	0	0	0	1	0	0	25	21	SK
TJ	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0	1	0	0	0	0	4	0	TJ
TM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	3	0	TM
TR	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	1	0	0	13	1	TR
UA	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	6	2	UA
UZ	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	4	0	UZ
ATL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	ATL
BAS	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	0	0	1	0	0	9	9	BAS
BLS	0	0	0	-0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	-0	0	0	-0	0	0	0	0	0	3	1	BLS
MED	0	0	0	0	0	-0	-0	0	0	0	-0	0	0	0	0	0	0	0	0	-0	0	0	-0	0	0	0	0	0	2	2	MED
NOS	0	0	0	1	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	0	0	15	15	NOS
AST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3	0	0	0	0	2	0	AST
NOA	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	NOA
EXC	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	5	EXC
EU	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	1	0	0	24	22	EU
	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	

Table C.20: 2011 country-to-country blame matrices for $\mathbf{NH_4}$.
Units: ng/m^3 per 15% emis. red. of NH_3. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	
AL	43	0	0	0	1	0	1	0	0	0	0	1	0	0	0	0	0	0	0	7	1	1	0	-0	2	-0	0	0	0	0	0	AL
AM	0	15	-0	5	-0	-0	-0	-0	0	0	-0	-0	-0	-0	0	-0	-0	-0	1	0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	AM
AT	0	0	23	0	0	0	0	0	2	0	4	15	0	0	0	0	2	0	0	0	3	4	0	0	8	0	0	0	0	0	0	AT
AZ	-0	1	-0	20	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	2	0	-0	-0	-0	-0	0	0	2	-0	-0	-0	0	AZ
BA	1	0	2	0	53	0	1	0	0	0	2	4	0	0	0	0	1	0	0	1	13	5	0	0	4	0	0	0	0	0	0	BA
BE	0	0	1	0	0	28	0	0	1	0	1	21	0	0	1	0	21	7	0	0	0	0	1	0	1	0	0	0	1	0	0	BE
BG	0	0	0	0	0	0	39	1	0	0	1	2	0	0	0	0	1	0	0	5	1	2	0	0	1	0	1	0	0	0	2	BG
BY	0	0	0	0	0	0	0	28	0	-0	1	5	1	0	0	0	1	1	0	0	0	1	0	0	0	0	1	2	0	0	0	BY
CH	-0	0	1	0	0	0	-0	0	21	-0	0	9	0	0	0	0	6	0	0	-0	0	0	0	-0	12	-0	0	0	0	0	0	CH
CY	0	0	0	0	0	0	1	0	0	43	0	0	0	0	0	0	0	0	0	1	0	0	0	-0	1	0	0	0	0	0	0	CY
CZ	0	0	7	0	0	1	0	0	1	0	39	23	0	0	0	0	4	1	0	0	2	7	0	0	2	0	0	0	0	0	0	CZ
DE	0	0	3	0	0	3	0	0	1	0	5	58	1	0	0	0	8	3	0	0	0	1	0	0	1	0	0	0	0	0	0	DE
DK	0	0	0	0	0	2	0	1	0	0	2	24	27	0	0	0	4	7	0	0	0	0	1	0	0	-0	0	0	0	0	0	DK
EE	0	0	0	0	0	0	0	3	0	0	0	3	1	10	0	1	0	1	0	0	0	0	0	0	0	0	0	2	0	2	0	EE
ES	0	0	0	0	0	0	0	0	0	-0	0	1	0	0	29	0	3	0	0	0	0	0	0	0	1	0	0	0	0	0	0	ES
FI	0	0	0	0	0	0	0	1	0	-0	0	1	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	FI
FR	0	0	1	0	0	2	-0	0	2	-0	1	8	0	0	2	0	34	2	0	0	0	0	0	0	4	0	0	0	0	0	0	FR
GB	0	0	0	0	0	2	0	0	0	-0	0	6	0	0	0	0	9	35	0	0	0	0	2	0	1	-0	0	0	0	0	0	GB
GE	0	1	-0	5	-0	-0	0	0	0	0	-0	-0	-0	-0	-0	-0	-0	-0	12	0	-0	-0	-0	-0	0	0	0	-0	-0	-0	0	GE
GL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	GL
GR	2	0	0	0	0	0	11	0	0	0	0	1	0	0	0	0	1	0	0	40	0	1	0	0	2	0	0	0	0	0	0	GR
HR	1	0	3	0	13	0	1	0	0	0	2	5	0	0	0	0	1	0	0	0	37	7	0	0	11	0	0	0	0	0	0	HR
HU	0	0	4	0	1	0	1	0	1	0	4	8	0	0	0	0	2	0	0	0	8	44	0	-0	3	0	0	0	0	0	0	HU
IE	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	3	11	0	0	0	0	10	0	0	0	0	0	0	0	0	IE
IS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	IS
IT	0	0	2	0	1	0	0	0	1	0	1	2	0	0	1	0	1	0	0	0	1	1	0	-0	64	0	0	0	0	0	0	IT
KG	0	0	0	0	0	-0	-0	0	0	0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	-0	0	-0	-0	0	22	9	0	-0	0	0	KG
KZT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	-0	0	1	39	0	0	0	0	KZT
LT	0	0	0	0	0	1	0	7	0	-0	1	8	2	0	0	0	1	2	0	0	0	0	0	0	0	-0	0	19	0	2	0	LT
LU	0	0	2	0	0	11	0	0	1	0	2	32	0	0	1	0	20	3	0	0	0	0	0	0	1	0	0	0	7	0	0	LU
LV	0	0	0	0	0	0	0	5	0	0	1	5	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	7	0	10	0	LV
MD	0	0	1	0	0	0	2	2	0	0	1	3	0	0	0	0	1	0	0	0	0	2	0	0	0	0	2	0	0	0	32	MD
ME	8	0	1	0	6	0	1	0	0	0	1	2	0	0	0	0	1	0	0	1	2	2	0	0	2	0	0	0	0	0	0	ME
MK	5	0	0	0	0	0	4	0	0	0	1	1	0	0	0	0	0	0	0	14	1	2	0	0	1	0	0	0	0	0	0	MK
MT	1	0	0	0	0	0	1	0	0	0	0	1	0	0	2	0	3	0	0	1	0	1	0	0	16	0	0	0	0	0	0	MT
NL	0	0	1	0	0	9	0	0	1	-0	1	23	1	0	0	0	12	12	0	0	0	0	1	0	1	-0	0	0	0	0	0	NL
NO	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	NO
PL	0	0	1	0	0	1	0	2	0	-0	7	19	2	0	0	0	3	2	0	0	1	3	0	0	1	0	0	1	0	0	0	PL
PT	0	0	0	0	-0	0	-0	0	0	0	0	0	0	0	9	0	1	0	0	-0	-0	-0	0	0	0	0	0	0	0	0	-0	PT
RO	0	0	1	0	0	0	3	1	0	0	1	3	0	0	0	0	1	0	0	0	1	4	0	-0	1	0	1	0	0	0	2	RO
RS	1	0	1	0	2	0	2	0	0	0	2	4	0	0	0	0	1	0	0	1	4	7	0	-0	1	0	0	0	0	0	0	RS
RUE	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	RUE
SE	0	0	0	0	0	0	0	0	0	-0	0	4	3	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	SE
SI	0	0	8	0	1	0	0	0	1	0	2	6	0	0	0	0	1	0	0	0	15	5	0	0	21	0	0	0	0	0	0	SI
SK	0	0	3	0	0	0	0	0	1	0	8	10	0	0	0	0	2	1	0	0	2	20	0	0	2	0	0	0	0	0	0	SK
TJ	-0	0	-0	0	-0	-0	-0	0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	0	1	2	-0	-0	0	0	TJ
TM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	-0	0	0	10	0	0	0	0	TM
TR	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	TR
UA	0	0	0	0	0	0	1	5	0	0	1	4	0	0	0	0	1	0	0	0	0	2	0	0	0	0	3	0	0	0	3	UA
UZ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	2	21	0	0	0	0	UZ
ATL	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	ATL
BAS	0	0	0	0	0	1	0	2	0	0	1	14	7	1	0	2	2	3	0	0	0	0	0	0	0	0	0	1	0	1	0	BAS
BLS	0	0	0	0	0	0	3	2	0	0	0	1	0	0	0	0	0	0	1	1	0	1	0	0	0	0	2	0	0	0	2	BLS
MED	1	0	1	0	1	0	2	0	0	1	0	1	0	0	5	0	4	0	0	3	1	1	0	0	14	0	0	0	0	0	0	MED
NOS	0	0	0	0	0	3	0	0	0	-0	1	13	3	0	0	0	11	17	0	0	0	0	1	0	0	0	0	0	0	0	0	NOS
AST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	4	0	0	0	0	AST
NOA	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0	1	0	0	1	0	0	0	0	3	0	0	0	0	0	0	NOA
EXC	0	0	0	0	0	0	0	1	0	0	0	2	0	0	1	0	1	1	0	0	0	1	0	0	1	0	7	0	0	0	0	EXC
EU	0	0	1	0	0	1	2	1	1	0	2	10	1	0	4	1	7	3	0	1	1	2	0	0	6	0	0	1	0	0	0	EU
	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	

Table C.20 Cont.: 2011 country-to-country blame matrices for $\mathbf{NH_4}$.
Units: ng/m^3 per 15% emis. red. of NH_3. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	
AL	1	4	0	0	0	0	0	2	14	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	82	17	AL
AM	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	5	-0	-0	0	0	0	0	0	2	0	0	0	0	25	-0	AM
AT	0	0	0	0	0	2	0	1	2	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	74	67	AT
AZ	-0	-0	-0	-0	-0	-0	-0	-0	-0	2	-0	-0	-0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	28	-0	AZ
BA	1	0	0	0	0	2	0	4	20	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	117	28	BA
BE	0	0	-0	9	0	2	0	0	0	0	0	0	0	-0	0	-0	0	0	0	0	0	0	0	0	-0	0	0	0	95	94	BE
BG	0	2	0	0	0	1	0	21	11	3	0	0	0	0	0	4	1	0	0	0	0	0	0	0	0	1	0	0	99	74	BG
BY	0	0	0	1	0	15	0	1	0	3	0	0	0	-0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	65	30	BY
CH	-0	-0	-0	0	0	0	0	0	0	0	0	0	0	-0	0	-0	0	0	0	0	0	0	0	0	-0	0	0	0	51	30	CH
CY	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	41	0	0	0	0	0	0	0	1	1	1	0	0	91	47	CY
CZ	0	0	0	1	0	10	0	2	2	0	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	110	103	CZ
DE	0	0	-0	5	0	5	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	97	DE
DK	0	0	-0	6	0	7	0	1	0	0	2	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	87	84	DK
EE	0	0	0	1	0	4	0	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36	29	EE
ES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	35	35	ES
FI	0	0	-0	0	0	1	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	14	FI
FR	0	0	0	2	0	1	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	59	57	FR
GB	0	0	-0	3	0	1	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	60	59	GB
GE	-0	0	-0	-0	-0	-0	-0	0	-0	1	-0	0	-0	0	0	3	0	-0	0	0	0	0	0	0	0	0	0	0	22	-0	GE
GL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	GL
GR	0	2	0	0	0	1	0	6	5	1	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	1	0	0	83	64	GR
HR	0	0	0	0	0	3	0	4	13	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	109	44	HR
HU	0	0	0	0	0	6	0	8	9	0	0	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	108	88	HU
IE	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	-0	0	0	0	0	28	28	IE
IS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	14	1	IS
IT	0	0	0	0	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	78	73	IT
KG	0	0	0	-0	-0	0	-0	0	0	0	-0	0	0	4	0	0	0	14	0	0	0	0	0	2	0	1	0	0	48	0	KG
KZT	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	1	0	0	0	0	0	2	0	1	0	0	52	0	KZT
LT	0	0	0	2	0	19	0	1	0	4	1	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	72	60	LT
LU	0	0	-0	3	0	1	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	87	85	LU
LV	0	0	0	1	0	8	0	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	41	LV
MD	0	0	0	0	0	5	0	21	1	5	0	0	1	0	0	1	2	0	0	0	0	0	0	0	0	1	0	0	83	38	MD
ME	20	1	0	0	0	1	0	3	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	79	16	ME
MK	0	36	0	0	0	1	0	4	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	93	29	MK
MT	0	0	60	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	90	86	MT
NL	0	0	-0	33	0	3	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	99	NL
NO	0	0	0	0	3	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	7	NO
PL	0	0	0	2	0	63	0	2	1	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	116	110	PL
PT	0	-0	0	0	0	0	15	-0	-0	-0	0	0	0	0	0	-0	-0	0	0	0	0	0	0	0	0	1	0	0	26	26	PT
RO	0	0	0	0	0	3	0	51	6	2	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	83	69	RO
RS	0	2	0	0	0	1	0	11	57	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	102	33	RS
RUE	0	0	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	27	1	RUE
SE	0	0	-0	1	1	2	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	21	SE
SI	0	0	0	0	0	2	0	3	4	0	0	32	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	103	82	SI
SK	0	0	0	1	0	15	0	5	3	0	0	1	30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	105	97	SK
TJ	-0	-0	0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	16	0	0	0	10	0	0	0	0	0	3	0	1	0	0	31	-0	TJ
TM	0	0	0	0	0	0	0	0	0	2	0	0	0	1	16	0	0	8	0	0	0	0	0	2	0	1	0	0	38	0	TM
TR	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	59	0	0	0	0	0	0	0	1	0	1	0	0	64	3	TR
UA	0	0	0	0	0	9	0	6	1	15	0	0	1	0	0	1	9	0	0	0	0	0	0	0	0	1	0	0	65	27	UA
UZ	0	0	0	0	0	0	-0	0	0	3	0	0	0	4	2	0	0	31	0	0	0	0	0	2	0	1	0	0	63	0	UZ
ATL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	5	4	ATL
BAS	0	0	-0	3	0	10	0	1	0	2	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	53	BAS
BLS	0	0	0	0	0	2	0	7	1	15	0	0	0	0	0	12	3	0	0	0	0	0	0	0	0	1	0	0	53	16	BLS
MED	0	0	0	0	0	1	0	2	2	1	0	0	0	0	0	11	0	0	0	0	0	0	0	1	2	1	0	0	55	36	MED
NOS	0	0	0	7	1	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	62	60	NOS
AST	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	2	0	1	0	0	0	0	0	11	0	2	0	0	10	0	AST
NOA	0	0	0	0	0	0	0	1	1	0	0	0	0	-0	0	2	0	0	0	0	0	0	0	0	11	3	0	0	12	8	NOA
EXC	0	0	0	0	0	2	0	1	1	12	0	0	0	0	0	2	0	1	0	0	0	0	0	0	0	1	0	0	40	13	EXC
EU	0	0	0	2	0	7	0	4	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	64	59	EU
	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	

Table C.21: 2011 country-to-country blame matrices for $\mathbf{NH_4}$.
Units: ng/m^3 per 15% emis. red. of VOC. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	
AL	0	0	0	0	-0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	1	-0	0	0	0	0	0	0	0	0	0	0	AL
AM	-0	1	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	AM
AT	0	0	1	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	-0	0	0	AT
AZ	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	AZ
BA	0	0	0	-0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	BA
BE	0	0	1	0	0	2	0	0	1	0	0	5	0	0	0	0	2	2	0	0	0	0	0	0	2	0	0	0	0	0	0	BE
BG	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	BG
BY	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	BY
CH	0	0	1	0	0	-0	0	0	1	0	0	1	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	-0	-0	0	CH
CY	0	-0	0	-0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	-0	-0	0	0	0	0	0	0	-0	0	0	0	0	CY
CZ	0	0	1	0	0	0	0	0	0	0	1	2	0	0	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	0	0	CZ
DE	0	0	1	0	0	0	0	0	1	0	1	4	0	0	0	0	1	1	0	0	0	0	0	0	2	0	0	0	0	0	0	DE
DK	0	0	0	0	0	0	0	0	0	0	1	4	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	DK
EE	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	-0	0	0	0	0	EE
ES	0	0	0	-0	0	-0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	-0	-0	0	0	0	0	0	0	-0	0	0	ES
FI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	FI
FR	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	FR
GB	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	2	0	0	0	0	0	0	1	0	0	0	0	0	0	GB
GE	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	GE
GL	-0	0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	GL
GR	-0	0	0	-0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	-0	GR
HR	0	0	0	-0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	HR
HU	0	-0	0	-0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	-0	0	0	0	0	HU
IE	0	0	0	0	0	-0	0	0	0	0	0	-0	-0	-0	0	-0	-0	0	0	0	0	0	0	-0	0	0	0	-0	-0	-0	0	IE
IS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	-0	0	0	0	0	0	0	IS
IT	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	21	0	0	0	0	0	0	IT
KG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	KG
KZT	-0	0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	-0	-0	KZT
LT	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	LT
LU	0	0	1	0	0	1	0	0	1	0	1	4	0	0	0	0	2	1	0	0	0	0	0	0	2	0	0	0	0	0	0	LU
LV	0	-0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	-0	0	0	0	0	0	-0	0	0	0	0	LV
MD	0	-0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	-0	0	0	0	0	MD
ME	0	0	0	-0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	ME
MK	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	-0	-0	MK
MT	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	MT
NL	0	0	1	0	0	2	0	0	1	0	1	7	0	0	0	0	3	3	0	0	0	0	0	0	2	0	0	0	0	0	0	NL
NO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO
PL	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PL
PT	0	0	0	-0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	-0	-0	0	0	0	0	0	0	-0	0	0	PT
RO	0	-0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	-0	-0	0	0	0	-0	RO
RS	0	0	0	-0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	RS
RUE	0	-0	0	-0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	-0	0	0	0	0	-0	0	0	-0	0	0	-0	-0	RUE
SE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	SE
SI	0	0	1	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	0	0	0	0	SI
SK	0	0	0	-0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	SK
TJ	-0	0	0	-0	-0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	-0	0	0	0	0	0	0	TJ
TM	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	TM
TR	0	-0	0	-0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	-0	-0	0	0	0	0	0	0	-0	0	0	0	-0	TR
UA	0	0	0	-0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	-0	0	0	-0	UA
UZ	0	0	0	-0	0	0	0	-0	0	0	0	0	0	-0	0	-0	0	0	0	0	0	0	0	0	0	0	0	-0	0	-0	0	UZ
ATL	0	0	0	0	0	-0	0	0	0	0	0	-0	-0	0	0	0	-0	0	0	0	0	0	-0	0	0	0	0	0	-0	0	0	ATL
BAS	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	BAS
BLS	0	0	0	-0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	-0	BLS
MED	0	0	0	-0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	MED
NOS	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	NOS
AST	-0	-0	-0	-0	-0	0	-0	-0	0	-0	0	0	-0	-0	0	-0	0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	AST
NOA	-0	0	0	-0	-0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	-0	-0	0	0	0	0	0	0	0	0	0	0	NOA
EXC	0	-0	0	-0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	-0	0	0	0	0	EXC
EU	0	0	0	0	0	0	0	0	0	-0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	EU
	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	

Table C.21 Cont.: 2011 country-to-country blame matrices for $\mathbf{NH}_4$.
Units: ng/m^3 per 15% emis. red. of VOC. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	
AL	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	0	3	2	AL
AM	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-2	0	0	-1	-0	AM
AT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	6	5	AT
AZ	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	0	0	-3	-0	AZ
BA	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	0	2	1	BA
BE	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	21	18	BE
BG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	3	2	BG
BY	0	0	0	0	0	1	0	0	0	0	0	0	0	0	-0	0	0	-0	0	0	0	0	0	-0	0	-1	0	0	2	1	BY
CH	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	0	4	3	CH
CY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	-0	0	-0	-0	-1	0	0	1	0	CY
CZ	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	7	CZ
DE	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	17	15	DE
DK	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	11	10	DK
EE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	-0	0	0	0	0	0	0	0	-0	0	0	1	1	EE
ES	0	0	0	0	0	0	0	0	0	0	0	-0	-0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	0	1	1	ES
FI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	FI
FR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	5	5	FR
GB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	6	6	GB
GE	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	0	0	-1	-0	GE
GL	-0	-0	0	-0	-0	-0	-0	-0	0	-0	-0	0	0	0	-0	-0	-0	0	-0	-0	-0	0	-0	0	0	-0	0	0	-0	-0	GL
GR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	-0	0	-0	-0	-1	0	0	1	1	GR
HR	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	6	4	HR
HU	0	0	0	0	0	1	0	0	0	0	0	0	0	-0	-0	0	0	-0	0	0	0	0	0	-0	0	-0	0	0	8	6	HU
IE	0	0	0	-0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	-1	0	0	0	0	IE
IS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	IS
IT	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	26	25	IT
KG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	1	0	KG
KZT	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	0	-0	0	-0	-0	-0	-0	-0	0	-0	-1	0	0	-0	-0	KZT
LT	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	2	1	LT
LU	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	17	14	LU
LV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	-0	0	0	0	0	0	-0	0	-0	0	0	1	1	LV
MD	0	0	0	0	0	0	0	1	0	0	0	0	0	-0	-0	0	-0	-0	0	0	-0	0	0	-0	0	-1	0	0	2	2	MD
ME	-0	0	0	0	0	0	0	0	-0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	0	1	1	ME
MK	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	0	2	2	MK
MT	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	-0	0	0	1	1	MT
NL	0	0	0	3	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	26	24	NL
NO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	NO
PL	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	7	PL
PT	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	-0	0	0	0	0	0	0	0	0	0	0	-0	0	0	1	1	PT
RO	0	0	0	0	0	0	0	1	0	0	0	0	0	-0	-0	0	0	-0	0	0	-0	0	0	-0	0	-1	0	0	3	2	RO
RS	0	0	0	0	0	0	0	0	1	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	6	4	RS
RUE	0	0	0	0	-0	0	0	-0	0	0	-0	0	0	0	-0	0	-0	-0	0	0	-0	0	0	-0	-0	-0	0	0	0	0	RUE
SE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	SE
SI	0	0	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	9	7	SI
SK	0	0	0	0	0	1	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	6	5	SK
TJ	-0	-0	-0	0	0	0	-0	0	-0	0	0	0	0	0	-0	-0	0	0	0	0	0	-0	0	-0	-0	-1	0	0	0	0	TJ
TM	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	0	-0	-0	-0	-0	-0	0	-0	-0	-0	-1	0	0	-0	-0	TM
TR	0	0	0	0	-0	0	-0	0	0	-0	0	0	0	0	-0	1	-0	-0	0	0	-0	0	0	-0	-0	-1	0	0	1	0	TR
UA	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	-0	0	0	-0	0	0	-0	0	0	0	0	-0	0	0	1	1	UA
UZ	0	0	0	0	-0	0	0	0	0	-0	-0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	-0	0	0	1	0	UZ
ATL	0	0	0	0	-0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	ATL
BAS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	BAS
BLS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	-0	-0	0	0	-0	0	0	0	0	-0	0	0	1	0	BLS
MED	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	-0	-0	0	0	1	1	MED
NOS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	5	5	NOS
AST	-0	-0	0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	0	-0	-0	-1	0	0	-0	-0	AST
NOA	-0	0	-0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	-0	-0	-0	0	0	0	0	NOA
EXC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	-0	0	0	1	1	EXC
EU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6	EU
	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	

Table C.22: 2011 country-to-country blame matrices for **fine NO_3**.
Units: ng/m^3 per 15% emis. red. of SO_x. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	
AL	-2	-0	-0	-0	-2	-0	-3	-0	-0	0	-1	-1	-0	-0	-0	-0	-0	-0	-0	-4	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	AL
AM	-0	0	-0	0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	AM
AT	-0	-0	-0	-0	-3	-0	-1	-0	1	-0	-1	-1	0	-0	-0	-0	-0	-0	-0	-0	-1	-1	-0	-0	-1	-0	-0	-0	-0	-0	-0	AT
AZ	-0	0	-0	4	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	AZ
BA	-0	-0	-0	-0	-18	-0	-1	-0	-0	-0	-1	-1	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	BA
BE	-0	-0	0	-0	-0	2	-0	0	1	-0	-0	6	0	-0	0	-0	6	2	-0	-0	-0	0	0	0	0	0	0	-0	0	-0	-0	BE
BG	-0	-0	-0	-0	-1	-0	-9	-0	-0	-0	-1	-1	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	BG
BY	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-1	-3	-0	-0	-0	0	-1	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	BY
CH	-0	-0	0	-0	-0	-0	0	-0	5	-0	-0	2	-0	-0	0	-0	1	-0	-0	-0	-0	-0	-0	-0	-2	0	-0	-0	-0	-0	-0	CH
CY	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	CY
CZ	-0	-0	0	-0	-5	-0	-2	-0	0	-0	-3	-0	0	0	-0	-0	-0	-0	-0	-1	-2	0	0	-0	-0	-0	-0	-0	-0	-0	-0	CZ
DE	-0	-0	0	-0	-1	0	-0	-0	1	-0	0	6	0	-0	0	-0	2	1	-0	-0	-0	-0	0	0	0	-0	-0	-0	0	-0	-0	DE
DK	-0	-0	-0	-0	-1	-0	-1	-0	0	-0	-0	-1	0	-0	-0	0	-0	-2	-0	-0	-0	-0	0	0	-0	-0	-0	0	-0	0	-0	DK
EE	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-1	-2	-0	-1	-0	-1	-0	-1	-0	-0	-0	-0	-0	0	-0	-0	-1	-1	-0	-0	-0	EE
ES	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	1	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	ES
FI	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-2	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	FI
FR	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-1	-1	-0	-0	0	-0	2	-0	-0	-0	-0	-0	0	0	-0	-0	-0	-0	-0	-0	-0	FR
GB	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-1	-2	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	-0	-0	-0	-0	-0	GB
GE	-0	-0	-0	-1	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-3	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	GE
GL	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	GL
GR	-0	-0	-0	-0	-1	-0	-5	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-3	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	GR
HR	-0	-0	-0	-0	-11	-0	-1	-0	-0	0	-1	-1	-0	-0	-0	-0	-0	-0	-0	-0	-3	-1	-0	-0	-3	-0	-0	-0	-0	-0	-0	HR
HU	-0	-0	0	-0	-7	-0	-1	0	0	0	-2	-1	-0	-0	-0	-0	-0	-0	-0	-0	-1	-6	-0	-0	-1	-0	-0	-0	-0	-0	-0	HU
IE	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-1	-5	-0	-0	-0	-0	1	0	-0	-0	-0	-0	-0	-0	-0	IE
IS	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	IS
IT	-0	-0	0	-0	-2	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	4	-0	-0	-0	0	-0	-0	IT
KG	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	KG
KZT	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-5	-0	-0	-0	-0	KZT
LT	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-1	-4	-0	-0	-0	-0	-1	-2	-0	-0	-0	-0	-0	-0	-0	-0	-1	-4	-0	-0	-0	LT
LU	-0	-0	0	-0	-0	0	-0	-0	1	0	-1	5	-0	-0	0	-0	5	1	-0	-0	0	0	0	0	0	0	-0	-0	0	-0	-0	LU
LV	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-1	-3	-0	-1	-0	-0	-1	-2	-0	-0	-0	-0	-0	-0	-0	-0	-1	-3	-0	-1	-0	LV
MD	-0	-0	-0	-0	-1	-0	-4	-0	-0	-0	-1	-2	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-2	-0	-0	-0	-1	MD
ME	-1	-0	-0	-0	-4	-0	-2	-0	-0	0	-1	-1	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	ME
MK	-0	-0	-0	-0	-2	-0	-7	-0	-0	0	-1	-1	-0	-0	-0	-0	-0	-0	-0	-5	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	MK
MT	-0	-0	-0	-0	-2	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-1	-0	-0	-0	-0	-0	-0	-0	-3	0	-0	-0	-0	-0	-0	MT
NL	-0	-0	0	-0	-0	3	-0	0	0	-0	0	9	0	-0	0	-0	5	2	-0	-0	0	0	0	0	0	-0	-0	-0	0	-0	-0	NL
NO	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	NO
PL	-0	-0	-0	-0	-2	-0	-1	-0	0	-0	-3	-5	-0	-0	-0	-0	-1	-1	-0	-0	-0	-1	0	0	-0	-0	-0	-0	-0	-0	-0	PL
PT	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1	-0	-0	-0	-0	-0	0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	PT
RO	-0	-0	-0	-0	-2	-0	-3	-0	-0	-0	-1	-2	-0	-0	-0	-0	-1	-0	-0	-0	-0	-1	-0	-0	-0	-0	-1	-0	-0	-0	-0	RO
RS	0	-0	-0	-0	-4	-0	-3	-0	-0	0	-1	-1	-0	-0	-0	-0	-0	-0	-0	-1	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	RS
RUE	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-2	-0	-0	-0	-0	RUE
SE	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-2	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	SE
SI	-0	-0	0	-0	-8	-0	-2	-0	0	-0	-1	0	-0	-0	-0	-0	-0	-0	-0	-0	-2	-1	-0	-0	-4	-0	-0	-0	0	-0	-0	SI
SK	-0	-0	-0	-0	-5	-0	-2	0	0	-0	-4	-2	-0	-0	-0	-0	-1	-0	-0	-0	-1	-6	-0	-0	-1	-0	-0	-0	-0	-0	-0	SK
TJ	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	TJ
TM	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-2	-0	-0	-0	-0	TM
TR	-0	0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	TR
UA	-0	-0	-0	-0	-1	-0	-1	-1	-0	-0	-1	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-2	-0	-0	-0	-0	UA
UZ	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-4	-0	-0	-0	-0	UZ
ATL	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	ATL
BAS	-0	-0	-0	-0	-1	-1	-0	-0	-0	-0	-1	-4	-0	-0	-0	-0	-1	-2	-0	-0	-0	-0	0	0	-0	-0	-1	-0	-0	-0	-0	BAS
BLS	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	BLS
MED	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	MED
NOS	-0	-0	-0	-0	-0	-1	-0	-0	0	-0	-1	-3	-0	-0	-0	-0	-1	-6	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	NOS
AST	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	AST
NOA	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	NOA
EXC	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	0	-0	0	-0	-0	-0	-0	-0	0	-0	-0	-0	-2	-0	-0	-0	-0	EXC
EU	-0	-0	0	-0	-1	-0	-1	-0	0	-0	-1	-1	-0	-0	0	-0	0	-0	-0	-0	-0	-0	0	0	0	-0	-0	-0	-0	-0	-0	EU
	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	

Table C.22 Cont.: 2011 country-to-country blame matrices for **fine NO_3**.
Units: ng/m^3 per 15% emis. red. of SO_x. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	
AL	-0	-5	-0	-0	-0	-1	-0	-1	-4	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-2	-0	-0	-0	-0	-0	-1	-28	-13	AL
AM	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	3	-0	-0	-0	-0	-0	-0	-0	1	0	0	-0	0	2	-1	AM
AT	-0	-0	-0	-0	-0	-3	0	-1	-3	-0	-0	-0	-0	-0	-0	-0	-1	-0	0	-0	-0	-1	-0	-0	-0	0	-0	0	-18	-10	AT
AZ	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	0	0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	2	-1	AZ
BA	-0	-1	-0	-0	-0	-2	-0	-2	-8	-0	-0	-0	-1	-0	-0	-0	-1	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-42	-11	BA
BE	-0	-0	-0	0	0	-1	0	0	-0	-0	-0	-0	0	-0	0	-0	0	0	2	-0	-0	-0	2	-0	-0	2	1	0	17	17	BE
BG	-0	-1	-0	-0	-0	-2	-0	-5	-4	-1	-0	-0	-1	-0	-0	-1	-3	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-31	-21	BG
BY	-0	-0	-0	-0	-0	-13	-0	-1	-1	-2	-0	-0	-1	-0	-0	-0	-2	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-30	-22	BY
CH	-0	-0	-0	-0	-0	-1	0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	0	0	-0	-0	-1	-0	-0	-0	1	-0	0	3	-1	CH
CY	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-2	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-2	-0	CY
CZ	-0	-0	-0	-0	-0	-6	0	-2	-5	-0	-0	-0	-1	-0	-0	-0	-2	-0	0	-0	-0	-0	0	-0	-0	0	0	-0	-32	-18	CZ
DE	-0	-0	-0	0	0	-3	0	-0	-1	-0	-0	0	-0	-0	-0	-0	-1	-0	1	-0	-0	-0	1	-0	-0	1	0	0	4	6	DE
DK	-0	-0	0	-0	0	-5	-0	-1	-1	-1	0	-0	-0	-0	-0	-0	-2	-0	0	-1	-0	-0	0	-0	-0	1	0	-0	-16	-10	DK
EE	-0	-0	-0	-0	-0	-6	-0	-0	-0	-3	-0	-0	-0	-0	-0	-0	-2	-0	-0	-1	-0	-0	-1	-0	-0	-0	-0	-0	-21	-14	EE
ES	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-1	-0	-0	-0	0	-0	-0	-1	-1	ES
FI	-0	-0	-0	-0	-0	-1	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-1	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-8	-6	FI
FR	-0	-0	-0	-0	-0	-1	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1	-0	-0	-1	-0	-0	-0	1	0	0	-3	-3	FR
GB	-0	-0	-0	-0	0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1	-0	-0	-0	-1	-0	-0	1	0	-0	-5	-5	GB
GE	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-6	-0	GE
GL	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-2	-0	-0	-0	-0	GL
GR	-0	-2	-0	-0	-0	-1	-0	-2	-2	-0	-0	-0	-0	-0	-0	-1	-1	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-20	-13	GR
HR	-0	-0	-0	-0	-0	-4	-0	-2	-7	-0	-0	-0	-1	-0	-0	-0	-2	-0	-0	-0	-0	-2	-0	-0	-0	-0	-0	-0	-40	-16	HR
HU	-0	-0	-0	-0	-0	-7	-0	-4	-7	-0	-0	-0	-3	-0	-0	-0	-3	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-45	-26	HU
IE	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-1	-0	-0	0	0	-0	-8	-8	IE
IS	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	IS
IT	-0	-0	-0	-0	-0	-1	-0	-0	-1	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-2	-0	-0	-0	0	-0	-0	-3	1	IT
KG	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-4	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-6	-0	KG
KZT	-0	-0	-0	-0	-0	-0	-0	-0	-0	-5	-0	-0	-0	-0	-0	-0	-1	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-13	-1	KZT
LT	-0	-0	-0	-0	-0	-13	-0	-0	-0	-3	-0	-0	-0	-0	-0	-0	-2	-0	-0	-1	-0	-0	-1	-0	-0	-0	-0	-0	-35	-28	LT
LU	-0	-0	-0	-0	-0	-2	0	0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	1	-0	-0	-0	0	-0	-0	2	0	1	9	9	LU
LV	-0	-0	-0	-0	-0	-9	-0	-0	-0	-4	-0	-0	-0	-0	-0	-0	-2	-0	-0	-1	-0	-0	-1	-0	-0	-0	-0	-0	-31	-23	LV
MD	-0	-0	-0	-0	-0	-9	-0	-7	-2	-3	-0	-0	-1	-0	-0	-2	-11	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-50	-28	MD
ME	-3	-2	-0	-0	-0	-2	-0	-2	-9	-0	-0	-0	-0	0	0	-0	-1	-0	-0	-0	-0	-1	-0	-0	-0	-1	-0	-0	-31	-10	ME
MK	-0	-8	-0	-0	-0	-2	-0	-3	-8	-0	-0	-0	-1	-0	-0	-1	-1	-0	-0	-0	-0	-1	-0	-0	-0	-1	-0	-0	-41	-20	MK
MT	-0	-0	-2	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-19	-0	-0	-0	-0	-1	-1	-12	-8	MT
NL	-0	-0	-0	0	0	-2	0	-0	-0	-0	0	0	-0	-0	-0	-0	-0	-0	2	-0	-0	-0	3	-0	-0	2	1	0	18	19	NL
NO	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-5	-4	NO
PL	-0	-0	-0	-0	-0	-15	-0	-1	-1	-1	-0	-0	-1	-0	-0	-0	-2	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-37	-30	PL
PT	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	0	1	0	0	0	0	PT
RO	-0	-0	-0	-0	-0	-5	-0	-13	-4	-1	-0	-0	-1	-0	-0	-0	-4	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-41	-28	RO
RS	0	-1	-0	-0	-0	-3	-0	-5	-9	-1	-0	-0	-1	-0	-0	-0	-2	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-36	-18	RS
RUE	-0	-0	-0	-0	-0	-1	-0	-0	-0	-6	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-11	-1	RUE
SE	-0	-0	-0	-0	-0	-2	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-1	-0	-0	-1	-0	-0	-0	-0	-0	-11	-9	SE
SI	-0	-0	-0	-0	-0	-4	0	-2	-6	-0	-0	1	-1	-0	-0	-0	-2	-0	-0	-0	-0	-3	-0	-0	-0	-0	-0	-0	-33	-13	SI
SK	-0	-0	-0	-0	-0	-10	-0	-5	-4	-0	-0	-0	-8	-0	-0	-0	-3	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-52	-39	SK
TJ	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-2	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-2	-0	TJ
TM	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-1	-0	-0	-2	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-6	-0	TM
TR	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-9	-1	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-12	-2	TR
UA	-0	-0	-0	-0	-0	-7	-0	-2	-1	-5	-0	-0	-1	-0	-0	-0	-6	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-31	-15	UA
UZ	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-3	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-9	-0	UZ
ATL	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-2	-2	ATL
BAS	-0	-0	-0	-0	-0	-7	-0	-1	-1	-1	-1	-0	-0	-0	-0	-0	-2	-0	-0	-4	-0	-0	-2	-0	-0	-0	-0	-0	-27	-21	BAS
BLS	-0	-0	-0	-0	-0	-1	-0	-2	-1	-2	-0	-0	-0	-0	-0	-2	-2	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-14	-6	BLS
MED	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-2	-0	-0	-0	-0	-0	-0	-4	-3	MED
NOS	-0	-0	-0	-1	-0	-3	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-5	-0	-0	0	-1	-0	-18	-16	NOS
AST	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1	-0	-0	-0	-0	-1	-0	AST
NOA	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	NOA
EXC	-0	-0	-0	-0	-0	-1	0	-0	-0	-4	-0	-0	-0	-0	-0	-0	-1	-0	0	-0	-0	-0	-0	-0	-0	0	-0	-0	-11	-3	EXC
EU	-0	-0	-0	-0	-0	-3	0	-1	-1	-0	-0	-0	-0	-0	-0	-0	-1	-0	0	-0	-0	-1	-0	-0	-0	0	0	-0	-13	-9	EU
	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	

Table C.23: 2011 country-to-country blame matrices for **fine NO_3**.
Units: ng/m^3 per 15% emis. red. of NO_x. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	
AL	17	0	1	0	1	0	2	0	0	0	1	4	0	0	0	0	1	1	0	26	1	2	0	0	3	0	0	0	0	0	0	AL
AM	0	27	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	AM
AT	0	0	37	0	1	1	0	0	9	0	9	45	0	0	1	0	11	2	0	0	5	8	0	0	31	0	0	0	1	0	0	AT
AZ	0	5	0	62	0	0	0	0	0	0	0	1	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	AZ
BA	0	0	3	0	11	0	1	0	0	0	3	8	0	0	0	0	2	1	0	1	5	5	0	0	5	0	0	0	0	0	0	BA
BE	0	0	4	0	0	3	0	0	4	0	5	57	1	0	4	0	69	26	0	0	0	0	1	0	5	0	0	0	3	0	0	BE
BG	0	0	1	0	0	0	18	0	0	0	1	3	0	0	0	0	1	1	0	4	0	2	0	0	1	0	0	0	0	0	1	BG
BY	0	0	1	0	0	1	0	15	0	0	2	11	2	0	0	1	2	5	0	0	0	2	0	0	1	0	0	3	0	1	0	BY
CH	0	0	14	0	0	2	0	0	74	0	3	54	0	0	2	0	37	3	0	0	0	0	0	0	69	0	0	0	1	0	0	CH
CY	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	CY
CZ	0	0	20	0	1	2	1	1	2	0	24	53	1	0	1	0	12	5	0	0	3	15	0	0	5	0	0	0	1	0	0	CZ
DE	0	0	14	0	0	9	0	1	6	0	11	78	2	0	2	0	28	14	0	0	0	2	1	0	6	0	0	0	2	0	0	DE
DK	0	0	1	0	0	7	0	1	0	0	4	44	6	0	1	0	10	22	0	0	0	1	1	0	0	0	0	0	1	0	0	DK
EE	0	0	0	0	0	1	0	4	0	0	1	4	1	1	0	2	1	3	0	0	0	0	0	0	0	0	0	2	0	2	0	EE
ES	0	0	0	0	0	1	0	0	0	0	0	2	0	0	45	0	6	1	0	0	0	0	0	0	2	0	0	0	0	0	0	ES
FI	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	FI
FR	0	0	4	0	0	6	0	0	6	0	3	31	0	0	8	0	76	11	0	0	0	0	0	0	13	0	0	0	2	0	0	FR
GB	0	0	0	0	0	2	0	0	0	0	1	10	1	0	2	0	22	40	0	0	0	0	4	0	2	0	0	0	1	0	0	GB
GE	0	6	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35	0	0	0	0	0	0	0	0	0	0	0	0	GE
GL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	GL
GR	1	0	1	0	0	0	4	0	0	0	0	1	0	0	0	0	0	0	0	22	0	1	0	0	1	0	0	0	0	0	0	GR
HR	0	0	9	0	8	1	2	1	1	0	6	15	0	0	0	0	3	2	0	1	17	13	0	0	20	0	0	0	0	0	0	HR
HU	0	0	13	0	4	1	2	1	2	0	9	25	0	0	0	0	6	3	0	1	11	40	0	0	11	0	0	0	1	0	0	HU
IE	0	0	0	0	0	2	0	0	0	0	0	3	0	0	1	0	8	44	0	0	0	0	14	0	1	0	0	0	0	0	0	IE
IS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	IS
IT	0	0	8	0	1	1	0	0	2	0	2	8	0	0	1	0	5	1	0	0	3	1	0	0	142	0	0	0	0	0	0	IT
KG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	2	0	0	0	0	KG
KZT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7	0	0	0	0	KZT
LT	0	0	1	0	0	2	0	9	0	0	2	14	2	0	0	1	3	6	0	0	0	1	0	0	1	0	0	6	0	2	0	LT
LU	0	0	7	0	0	14	0	0	4	0	7	70	1	0	5	0	61	15	0	0	0	1	1	0	5	0	0	0	-7	0	0	LU
LV	0	0	0	0	0	1	0	6	0	0	1	8	1	1	0	1	1	4	0	0	0	1	0	0	1	0	0	4	0	2	0	LV
MD	0	0	2	0	0	1	3	2	0	0	2	8	0	0	0	0	2	2	0	1	0	3	0	0	1	0	0	0	0	0	7	MD
ME	2	0	1	0	2	0	1	0	0	0	1	4	0	0	0	0	1	1	0	3	1	2	0	0	1	0	-0	0	0	0	0	ME
MK	3	0	2	0	1	0	3	0	0	0	2	4	0	0	0	0	1	1	0	23	1	3	0	0	2	0	0	0	0	0	0	MK
MT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	MT
NL	0	0	3	0	0	16	0	0	1	0	4	58	2	0	2	0	43	37	0	0	0	1	2	0	3	0	0	0	2	0	0	NL
NO	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	NO
PL	0	0	3	0	0	3	0	4	1	0	9	32	2	0	0	1	6	7	0	0	1	5	0	0	3	0	0	1	1	0	0	PL
PT	0	0	0	0	0	0	0	0	0	0	0	1	0	0	20	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PT
RO	0	0	3	0	1	0	4	1	1	0	2	8	0	0	0	0	3	2	0	1	1	7	0	0	2	0	0	0	0	0	2	RO
RS	2	0	6	0	5	1	5	1	1	0	5	14	0	0	0	0	4	2	0	6	4	15	0	0	3	0	0	0	0	0	0	RS
RUE	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	RUE
SE	0	0	0	0	0	1	0	0	0	0	0	5	1	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	SE
SI	0	0	25	0	2	1	1	1	2	0	6	19	1	0	0	0	4	2	0	0	25	9	0	0	60	0	0	0	0	0	0	SI
SK	0	0	7	0	1	1	1	1	1	0	10	21	0	0	0	0	5	3	0	0	3	27	0	0	4	0	0	0	1	0	0	SK
TJ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	TJ
TM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	TM
TR	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	TR
UA	0	0	1	0	0	0	0	2	0	0	1	4	0	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	1	UA
UZ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	0	0	0	0	UZ
ATL	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	1	0	0	0	0	0	0	0	-0	0	0	0	0	0	ATL
BAS	0	0	0	0	0	2	0	1	0	0	2	13	3	0	0	1	3	6	0	0	0	1	0	0	0	0	0	1	0	0	0	BAS
BLS	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	BLS
MED	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	6	0	0	0	0	0	0	MED
NOS	0	0	1	0	0	4	0	0	0	0	1	17	1	0	1	0	18	18	0	0	0	0	1	0	1	0	0	0	1	0	0	NOS
AST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	AST
NOA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	NOA
EXC	0	0	1	0	0	1	0	1	1	0	1	4	0	0	1	0	3	2	0	0	0	1	0	0	3	0	2	0	0	0	0	EXC
EU	0	0	4	0	0	2	1	1	2	0	3	20	1	0	7	0	17	8	0	1	1	3	1	0	14	0	0	0	1	0	0	EU
	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	

Table C.23 Cont.: 2011 country-to-country blame matrices for **fine NO_3**.
Units: ng/m^3 per 15% emis. red. of NO_x. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	
AL	1	8	0	0	0	3	0	3	29	1	0	0	1	0	0	1	1	0	0	0	0	6	1	0	0	1	0	0	109	49	AL
AM	0	0	0	0	0	1	0	0	0	2	0	0	0	0	0	19	1	0	0	0	0	0	0	3	0	1	0	0	83	3	AM
AT	0	0	0	2	0	9	0	2	5	1	0	9	3	0	0	0	1	0	1	1	0	2	3	0	0	3	0	0	192	170	AT
AZ	0	0	0	0	0	1	0	0	0	9	0	0	0	0	0	5	2	0	0	0	1	0	0	3	0	1	0	0	110	4	AZ
BA	1	0	0	1	0	5	0	3	20	1	0	1	2	0	0	0	1	0	0	1	0	1	2	0	0	1	0	0	80	40	BA
BE	0	0	0	10	1	5	0	0	0	0	0	0	0	0	0	0	0	0	8	1	0	3	22	0	0	8	0	0	203	196	BE
BG	0	1	0	0	0	3	0	8	7	2	0	0	1	0	0	3	3	0	0	0	1	1	1	0	0	1	0	0	61	43	BG
BY	0	0	0	2	1	22	0	1	1	13	1	0	1	0	0	0	7	0	1	4	0	0	5	0	0	1	0	0	100	61	BY
CH	0	0	0	2	0	2	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	3	3	0	0	4	0	0	264	189	CH
CY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	1	0	0	0	0	0	0	6	2	CY
CZ	0	0	0	3	0	20	0	3	7	1	0	3	7	0	0	0	1	0	2	1	0	1	6	0	0	4	0	0	196	178	CZ
DE	0	0	0	12	1	14	0	1	1	1	1	1	1	0	0	0	1	0	4	3	0	2	17	0	0	6	0	0	211	199	DE
DK	0	0	0	11	2	13	0	0	1	1	2	0	1	0	0	0	1	0	4	12	0	1	33	0	0	5	0	0	132	126	DK
EE	0	0	0	1	0	5	0	0	0	5	1	0	0	0	0	0	1	0	0	5	0	0	3	0	0	1	0	0	36	25	EE
ES	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	3	0	0	5	1	0	0	2	0	0	61	61	ES
FI	0	0	-0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	1	0	-0	0	0	0	11	9	FI
FR	0	0	0	4	0	2	0	0	0	0	0	0	0	0	0	0	0	0	6	1	0	4	12	0	0	4	0	0	169	161	FR
GB	0	0	0	4	0	1	0	0	0	0	0	0	0	0	0	0	0	0	8	1	0	1	16	0	0	4	0	0	92	91	GB
GE	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	8	1	0	0	0	1	0	0	0	0	1	0	0	68	2	GE
GL	-0	0	-0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	-0	2	0	0	0	0	GL
GR	0	4	0	0	0	1	0	2	5	1	0	0	0	0	0	4	1	0	0	0	0	4	0	0	0	1	0	0	49	35	GR
HR	0	0	0	1	0	10	0	6	32	1	0	4	3	0	0	0	2	0	1	1	0	3	2	0	0	2	0	0	159	97	HR
HU	0	1	0	2	0	19	0	19	28	1	0	4	11	0	0	0	5	0	1	1	0	2	3	0	0	3	0	0	224	169	HU
IE	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	1	0	0	9	0	0	2	0	0	77	76	IE
IS	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	-0	0	0	0	1	0	IS
IT	0	0	0	1	0	3	0	0	1	0	0	5	1	0	0	0	0	0	1	0	0	14	1	0	0	3	0	0	188	179	IT
KG	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	7	0	0	0	0	0	1	0	1	0	0	19	0	KG
KZT	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	1	0	0	27	2	KZT
LT	0	0	0	4	1	23	0	1	1	9	2	0	1	0	0	0	6	0	1	7	0	0	8	0	0	1	0	0	100	72	LT
LU	0	0	0	9	0	5	0	0	0	0	0	0	1	0	0	0	0	0	5	1	0	3	14	0	0	7	0	0	202	196	LU
LV	0	0	0	2	1	10	0	0	0	6	2	0	0	0	0	0	3	0	1	5	0	0	5	0	0	1	0	0	59	41	LV
MD	0	0	0	1	0	13	0	30	3	6	0	0	2	0	0	2	18	0	0	1	1	0	2	0	0	1	0	0	113	72	MD
ME	4	2	0	0	0	2	0	2	22	1	0	0	1	0	0	0	1	0	0	0	0	2	1	0	0	1	0	0	56	21	ME
MK	0	13	0	0	0	3	0	4	29	1	0	0	1	0	0	2	1	0	0	0	0	3	1	0	0	1	0	0	105	52	MK
MT	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	9	9	MT
NL	0	0	0	7	1	10	0	0	0	1	1	0	0	0	0	0	1	0	10	4	0	2	34	0	0	10	0	0	197	191	NL
NO	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0	8	7	NO
PL	0	0	0	5	1	43	0	3	2	4	1	1	4	0	0	0	5	0	2	5	0	1	9	0	0	3	0	0	149	131	PL
PT	0	0	0	0	0	0	13	0	0	0	0	0	0	0	-0	0	0	-0	7	0	0	2	0	0	0	1	0	0	38	38	PT
RO	0	1	0	1	0	9	0	47	10	3	0	1	2	0	0	1	8	0	0	1	1	1	2	0	0	1	0	0	123	95	RO
RS	1	5	0	1	0	11	0	18	70	2	0	1	5	0	0	1	3	0	1	1	0	2	2	0	0	2	0	0	194	99	RS
RUE	0	0	0	0	0	1	0	0	0	15	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	21	2	RUE
SE	-0	0	0	1	1	2	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0	0	3	0	0	0	0	0	18	16	SE
SI	0	0	0	1	0	10	0	4	13	1	0	30	2	0	0	0	1	0	1	1	0	7	2	0	0	3	0	0	223	178	SI
SK	0	0	0	1	0	20	0	8	7	1	0	2	16	0	0	0	3	0	1	1	0	1	3	0	0	2	0	0	145	128	SK
TJ	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	4	0	0	0	0	0	2	0	1	0	0	12	0	TJ
TM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	3	0	0	0	0	0	1	0	0	0	0	8	1	TM
TR	0	0	0	0	0	1	0	1	0	2	0	0	0	0	0	47	1	0	0	0	1	1	0	0	0	1	0	0	56	5	TR
UA	0	0	0	1	0	6	0	4	1	8	0	0	1	0	0	0	5	0	0	1	0	0	1	0	0	0	0	0	40	22	UA
UZ	0	0	0	0	0	0	0	0	0	2	0	0	0	2	1	0	0	12	0	0	0	0	0	1	0	0	0	0	22	1	UZ
ATL	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	0	-0	1	0	0	0	1	0	0	0	0	0	5	5	ATL
BAS	0	0	0	4	1	9	0	0	0	2	2	0	0	0	0	0	1	0	1	5	0	0	8	0	0	1	0	0	54	49	BAS
BLS	0	0	0	0	0	1	0	2	1	4	0	0	0	0	0	4	1	0	0	0	1	0	0	0	0	0	0	0	19	7	BLS
MED	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	11	10	MED
NOS	0	0	0	4	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3	2	0	1	11	0	0	2	0	0	74	72	NOS
AST	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	0	0	0	0	0	0	0	6	0	2	0	0	5	0	AST
NOA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	0	NOA
EXC	0	0	0	1	0	2	0	1	1	10	0	0	0	0	0	2	1	1	1	1	0	1	2	0	0	1	0	0	42	23	EXC
EU	0	0	0	3	0	8	1	4	2	1	1	1	1	0	0	0	1	0	3	2	0	3	7	0	0	2	0	0	113	102	EU
	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	

Table C.24: 2011 country-to-country blame matrices for **fine NO_3**.
Units: ng/m^3 per 15% emis. red. of NH_3. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	
AL	84	0	1	0	1	0	1	0	0	0	1	2	0	0	0	0	1	0	0	11	1	2	0	-0	3	-0	0	0	0	0	0	AL
AM	0	19	-0	10	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	0	-0	-0	-0	2	0	-0	-0	-0	-0	0	0	0	-0	-0	-0	-0	AM
AT	0	0	65	0	1	1	0	0	7	0	10	43	0	0	1	0	7	1	0	0	5	9	0	0	23	0	0	0	0	0	0	AT
AZ	-0	2	-0	40	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	5	0	-0	-0	-0	-0	0	0	1	-0	-0	-0	-0	AZ
BA	1	0	3	0	41	0	0	0	1	0	3	6	0	0	0	0	1	0	0	0	16	7	0	0	5	0	0	0	0	0	0	BA
BE	0	0	3	0	0	78	0	0	3	-0	3	50	1	0	1	0	57	17	0	0	0	1	2	0	3	0	0	0	3	0	0	BE
BG	0	0	1	0	0	0	29	1	0	0	1	2	0	0	0	0	1	0	0	5	1	2	0	-0	1	0	0	0	0	0	1	BG
BY	0	0	1	0	0	1	0	56	0	-0	2	11	2	0	0	0	2	2	0	0	0	2	0	-0	1	0	1	4	0	1	1	BY
CH	-0	0	4	0	0	1	-0	0	68	-0	1	25	0	0	1	0	18	1	0	-0	0	1	0	-0	40	0	0	0	0	0	0	CH
CY	0	0	0	0	0	0	0	0	0	8	0	0	0	-0	0	0	0	0	0	0	0	0	0	-0	0	-0	0	0	0	0	0	CY
CZ	0	0	15	0	1	2	0	1	2	0	89	56	1	0	1	0	11	2	0	0	4	16	0	-0	5	0	0	0	0	0	0	CZ
DE	0	0	8	0	0	8	0	1	4	-0	10	150	2	0	1	0	22	7	0	0	1	2	1	0	4	0	0	0	1	0	0	DE
DK	0	0	1	0	0	6	0	1	1	-0	4	66	72	0	0	0	13	19	0	0	0	1	2	0	1	-0	0	1	0	0	0	DK
EE	0	0	0	0	0	1	0	6	0	0	1	8	3	18	0	1	1	3	0	0	0	0	0	0	0	0	1	4	0	6	0	EE
ES	0	0	0	0	0	0	0	0	0	-0	0	2	0	0	61	-0	8	0	0	0	0	0	0	-0	1	0	0	0	0	0	0	ES
FI	0	0	0	0	0	0	0	1	0	-0	0	3	1	1	0	11	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	FI
FR	0	0	2	0	0	5	-0	0	5	-0	2	21	0	0	5	0	97	6	0	-0	0	1	1	0	10	0	0	0	0	0	0	FR
GB	0	0	1	0	0	5	0	0	1	-0	1	14	1	0	1	0	25	81	0	0	0	0	4	0	2	-0	0	0	0	0	0	GB
GE	0	2	0	10	-0	-0	0	-0	0	0	-0	-0	-0	-0	0	-0	-0	-0	30	0	0	-0	-0	-0	0	0	0	-0	-0	-0	-0	GE
GL	0	0	-0	0	0	-0	-0	0	-0	0	-0	0	0	0	0	0	-0	0	0	0	0	-0	0	0	-0	0	0	0	-0	0	0	GL
GR	2	0	0	0	0	0	5	0	0	0	0	1	0	0	0	0	0	0	0	45	0	1	0	-0	2	0	0	0	0	0	0	GR
HR	0	0	8	0	9	0	0	0	1	0	5	11	0	0	0	0	2	0	0	0	60	16	0	-0	26	0	0	0	0	0	0	HR
HU	0	0	10	0	2	1	1	1	2	0	9	19	0	0	0	0	4	1	0	0	15	103	0	-0	8	0	0	0	0	0	0	HU
IE	0	0	0	0	0	2	0	0	0	-0	0	3	0	0	1	0	10	28	0	0	0	0	26	0	1	-0	0	0	0	0	0	IE
IS	0	0	0	-0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	IS
IT	0	0	4	0	1	0	0	0	3	0	1	5	0	0	1	0	3	0	0	0	3	2	0	-0	162	0	0	0	0	0	0	IT
KG	0	0	0	0	0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	-0	-0	0	13	2	-0	-0	-0	-0	KG
KZT	0	0	0	0	-0	-0	0	0	-0	-0	0	0	0	0	-0	0	-0	-0	0	0	0	0	-0	-0	-0	0	17	0	-0	0	0	KZT
LT	0	0	0	0	0	1	0	14	0	0	2	19	5	0	0	0	4	4	0	0	0	1	1	0	1	0	1	40	0	3	0	LT
LU	0	0	5	0	0	29	0	0	3	0	5	81	0	0	2	0	56	8	0	0	0	1	1	-0	3	0	0	0	22	0	0	LU
LV	0	0	0	0	0	1	0	10	0	0	1	13	4	1	0	0	2	4	0	0	0	1	0	0	1	0	1	15	0	21	0	LV
MD	0	0	1	0	0	0	3	3	0	0	2	5	0	0	0	0	1	0	0	0	1	3	0	-0	1	0	2	0	0	0	54	MD
ME	12	0	1	0	4	0	0	0	0	-0	1	3	0	0	0	0	1	0	0	1	2	3	0	0	2	0	0	0	0	0	0	ME
MK	8	0	1	0	1	0	2	0	0	0	1	3	0	0	0	0	1	0	0	24	1	4	0	-0	1	0	0	0	0	0	0	MK
MT	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	0	2	0	0	0	0	0	0	0	14	0	0	0	0	0	0	MT
NL	0	0	3	0	0	24	0	0	2	-0	4	58	2	0	1	0	33	29	0	0	0	1	3	0	2	-0	0	0	1	0	0	NL
NO	0	0	0	0	0	1	0	0	0	-0	0	5	2	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	NO
PL	0	0	3	0	0	2	0	4	1	-0	14	45	4	0	0	0	6	4	0	0	1	7	1	-0	3	0	0	1	0	0	0	PL
PT	0	0	0	0	0	0	0	0	0	-0	0	0	0	-0	20	-0	2	0	0	-0	0	0	0	-0	0	0	-0	0	0	0	0	PT
RO	0	0	2	0	0	0	3	1	1	0	2	5	0	0	0	0	2	0	0	1	2	10	0	-0	2	0	1	0	0	0	3	RO
RS	2	0	3	0	4	0	2	0	1	0	3	8	0	0	0	0	2	0	0	2	7	16	0	-0	2	0	0	0	0	0	0	RS
RUE	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	0	3	0	0	0	0	RUE
SE	0	0	0	0	0	1	0	1	0	-0	1	12	7	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	SE
SI	0	0	23	0	2	0	0	0	2	-0	6	15	0	0	0	0	3	0	0	0	30	11	0	-0	59	0	0	0	0	0	0	SI
SK	0	0	7	0	1	1	0	1	1	0	16	21	1	0	0	0	5	1	0	0	5	45	0	-0	4	0	0	0	0	0	0	SK
TJ	-0	0	-0	0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	0	1	-0	-0	-0	-0	TJ
TM	0	0	0	0	-0	-0	-0	0	0	0	-0	-0	-0	-0	0	-0	-0	-0	0	0	0	0	-0	-0	0	0	3	0	-0	0	0	TM
TR	0	0	0	0	0	0	1	0	0	0	0	0	0	-0	0	-0	0	-0	0	0	0	0	0	-0	0	0	0	0	0	0	0	TR
UA	0	0	1	0	0	0	1	7	0	0	1	5	0	0	0	0	1	1	0	0	0	3	0	0	1	0	2	0	0	0	4	UA
UZ	-0	0	0	0	-0	-0	-0	0	-0	-0	-0	0	-0	0	-0	-0	-0	-0	0	0	0	0	-0	-0	-0	1	7	0	-0	0	0	UZ
ATL	0	0	0	0	0	0	0	0	0	-0	0	1	0	0	1	0	4	2	0	0	0	0	1	0	0	0	0	0	0	0	0	ATL
BAS	0	0	1	0	0	2	0	3	0	-0	2	39	19	1	0	2	5	7	0	0	0	1	1	0	0	0	0	2	0	1	0	BAS
BLS	0	0	0	0	0	0	3	0	0	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	0	0	0	1	BLS
MED	0	0	1	0	0	0	0	0	0	0	0	1	0	0	2	0	2	0	0	1	0	0	0	0	13	0	0	0	0	0	0	MED
NOS	0	0	1	0	0	10	0	0	1	-0	2	36	7	0	1	0	31	41	0	0	0	0	3	0	1	0	0	0	0	0	0	NOS
AST	0	0	0	0	0	-0	0	0	0	0	-0	0	0	0	-0	0	-0	-0	0	0	0	0	-0	-0	0	0	1	0	-0	0	0	AST
NOA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	0	-0	0	0	0	0	0	NOA
EXC	0	0	1	0	0	1	0	1	0	0	1	6	1	0	2	0	4	2	0	0	0	1	0	0	3	0	4	0	0	0	0	EXC
EU	0	0	4	0	0	3	1	1	2	0	5	26	2	0	9	1	19	8	0	2	1	5	1	0	15	0	0	1	0	0	0	EU
	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	

Table C.24 Cont.: 2011 country-to-country blame matrices for **fine NO_3**.
Units: ng/m^3 per 15% emis. red. of NH_3. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	
AL	1	8	0	0	0	1	0	3	25	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	149	28	AL
AM	-0	0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	0	11	-0	0	0	0	0	0	0	4	0	0	0	41	-0	AM
AT	0	0	0	1	0	4	0	2	4	0	0	10	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	197	180	AT
AZ	-0	-0	-0	-0	-0	-0	-0	-0	-0	2	-0	-0	-0	0	0	2	-0	0	0	0	0	0	0	2	0	0	0	52	-0	AZ
BA	1	0	0	0	0	2	0	4	20	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	117	36	BA
BE	0	0	-0	21	0	4	0	0	0	0	0	0	0	-0	0	-0	0	0	0	0	0	0	0	0	-0	1	0	250	245	BE
BG	0	1	0	0	0	1	0	20	14	1	0	0	1	0	0	4	0	0	0	0	0	0	0	0	0	1	0	89	64	BG
BY	0	0	0	2	0	27	0	2	1	7	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	1	0	128	62	BY
CH	0	0	-0	1	0	1	0	0	0	0	0	1	0	-0	0	-0	0	0	0	0	0	0	0	0	-0	1	0	161	92	CH
CY	0	0	0	0	0	0	-0	0	0	0	0	0	0	-0	0	3	0	0	0	0	0	0	0	1	0	0	0	12	9	CY
CZ	0	0	0	3	0	19	0	4	6	0	0	2	9	0	0	0	0	0	0	0	0	0	0	0	0	1	0	249	235	CZ
DE	0	0	-0	13	0	13	0	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	252	244	DE
DK	0	0	-0	16	1	16	0	1	1	0	4	0	1	-0	0	0	0	0	0	0	0	0	0	0	0	1	0	228	223	DK
EE	0	0	0	2	0	9	0	0	0	5	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	72	60	EE
ES	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	75	75	ES
FI	0	0	0	0	0	2	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	23	FI
FR	0	0	0	3	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	161	155	FR
GB	0	0	-0	8	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	1	0	144	143	GB
GE	0	0	-0	-0	-0	0	-0	0	0	1	-0	-0	-0	0	0	6	-0	0	0	0	0	0	0	1	0	0	0	51	0	GE
GL	0	0	0	0	0	0	-0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	GL
GR	0	3	0	0	0	1	0	3	6	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	74	59	GR
HR	0	0	0	1	0	4	0	5	18	0	0	8	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	180	90	HR
HU	0	0	0	1	0	10	0	16	18	0	0	4	13	0	0	0	0	0	0	0	0	0	0	0	0	1	0	240	201	HU
IE	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	74	73	IE
IS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	IS
IT	0	0	0	0	0	1	0	1	1	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	193	184	IT
KG	0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	1	0	0	-0	6	0	0	0	0	0	1	-0	0	0	22	-0	KG
KZT	0	0	-0	-0	-0	0	-0	0	0	8	0	-0	0	0	0	0	0	1	0	0	0	0	0	1	-0	0	0	27	0	KZT
LT	0	0	0	5	0	37	0	1	0	7	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	153	129	LT
LU	0	0	-0	7	0	3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	-0	1	0	231	226	LU
LV	0	0	0	3	0	17	0	1	0	5	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	108	91	LV
MD	0	0	0	0	0	8	0	38	2	6	0	0	1	0	0	1	3	0	0	0	0	0	0	0	0	1	0	139	67	MD
ME	19	1	0	0	0	2	0	3	31	0	0	0	1	-0	-0	0	0	-0	0	0	0	0	0	0	0	1	0	89	19	ME
MK	0	55	0	0	0	1	0	5	37	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	147	44	MK
MT	0	0	53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	76	74	MT
NL	0	0	-0	97	0	8	0	1	1	0	0	0	1	-0	0	0	0	0	0	0	0	0	0	0	0	1	0	269	265	NL
NO	0	0	0	1	5	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	16	NO
PL	0	0	0	5	0	123	0	4	2	2	1	1	5	0	0	0	0	0	0	0	0	0	0	0	0	1	0	238	228	PL
PT	0	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	54	54	PT
RO	0	0	0	0	0	3	0	77	10	2	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	1	0	130	109	RO
RS	1	4	0	0	0	3	0	17	101	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	185	64	RS
RUE	0	0	0	0	0	1	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	2	RUE
SE	0	0	-0	3	1	4	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51	49	SE
SI	0	0	0	1	0	5	0	4	8	0	0	79	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	252	209	SI
SK	0	0	0	1	0	22	0	11	6	0	0	2	68	0	0	0	0	0	0	0	0	0	0	0	0	1	0	222	207	SK
TJ	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	7	0	0	-0	4	0	0	0	0	0	1	-0	0	0	13	-0	TJ
TM	-0	0	-0	-0	-0	0	-0	0	0	1	-0	0	0	0	5	0	0	3	0	0	0	0	0	1	0	0	0	13	-0	TM
TR	0	0	0	0	-0	0	-0	1	0	1	0	0	0	0	0	55	0	0	0	0	0	0	0	1	0	0	0	58	2	TR
UA	0	0	0	1	0	12	0	9	1	13	0	0	1	0	0	0	7	0	0	0	0	0	0	0	0	1	0	73	37	UA
UZ	-0	-0	-0	-0	-0	0	-0	0	0	1	0	-0	0	2	1	0	0	15	0	0	0	0	0	1	-0	0	0	27	0	UZ
ATL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	10	ATL
BAS	0	0	-0	7	0	23	0	1	0	2	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	136	129	BAS
BLS	0	0	0	0	0	1	0	8	1	8	0	0	0	0	0	9	1	0	0	0	0	0	0	0	0	0	0	38	15	BLS
MED	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	25	22	MED
NOS	0	0	0	20	1	4	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	160	157	NOS
AST	0	0	0	-0	-0	0	-0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	6	0	0	0	4	0	AST
NOA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	-0	0	1	1	NOA
EXC	0	0	0	1	0	3	0	2	1	11	0	0	0	0	0	2	0	1	0	0	0	0	0	0	0	1	0	51	28	EXC
EU	0	0	0	4	0	13	1	6	2	1	2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	139	131	EU
	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	

Table C.25: 2011 country-to-country blame matrices for **fine NO_3**.
Units: ng/m^3 per 15% emis. red. of VOC. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	
AL	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	AL
AM	-0	1	-0	-2	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-2	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	AM
AT	0	0	4	-0	0	-0	0	0	1	0	0	0	0	-0	0	-0	0	-0	0	0	1	1	0	0	2	0	-0	-0	-0	-0	0	AT
AZ	-0	-0	-0	-3	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-3	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	AZ
BA	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	BA
BE	0	0	2	0	0	5	0	1	3	0	1	14	0	0	1	0	8	7	0	0	0	1	0	0	6	0	0	0	0	0	0	BE
BG	-0	-0	-0	-0	-0	-0	0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	BG
BY	0	-0	0	-0	-0	-0	-0	1	0	-0	0	0	-0	0	0	0	0	-0	-0	0	0	0	-0	0	0	-0	-0	-0	0	-0	-0	BY
CH	0	0	2	0	0	-0	0	0	3	0	0	2	0	-0	0	0	1	-0	0	0	0	0	0	0	-1	0	0	-0	-0	-0	0	CH
CY	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	0	0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	-0	CY
CZ	0	0	2	-0	-0	0	-0	0	1	0	2	3	0	0	0	0	1	0	0	0	0	1	0	0	1	0	-0	0	0	0	0	CZ
DE	0	0	4	0	0	1	0	0	2	0	2	13	0	0	1	0	4	2	0	0	1	1	0	0	5	0	0	0	0	0	0	DE
DK	0	0	1	0	0	1	0	0	1	0	2	11	1	0	0	0	3	1	0	0	0	0	0	0	2	0	0	0	0	0	0	DK
EE	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	EE
ES	0	-0	-0	-0	-0	-0	0	0	-0	0	-0	-0	-0	-0	1	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	ES
FI	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	0	-0	-0	-0	-0	-0	0	-0	-0	-0	0	-0	-0	-0	-0	-0	FI
FR	0	0	1	-0	0	0	0	0	1	0	0	3	-0	0	0	0	3	0	0	0	0	0	0	0	2	0	0	0	0	0	0	FR
GB	0	0	0	0	0	1	0	0	0	0	0	3	0	0	0	0	3	5	0	0	0	0	0	0	2	0	0	0	0	0	0	GB
GE	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-4	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	GE
GL	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	GL
GR	-0	0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	GR
HR	0	-0	0	-0	-0	-0	-0	-0	0	0	-0	-0	-0	-0	0	-0	0	-0	-0	0	1	0	0	0	0	-0	-0	-0	-0	-0	-0	HR
HU	0	-0	1	-0	-0	0	-0	0	0	-0	0	1	0	-0	0	-0	1	0	-0	0	1	3	0	0	0	-0	-0	-0	0	-0	-0	HU
IE	0	0	0	0	0	-0	0	-0	0	0	-0	-0	-0	-0	0	-0	-0	-0	0	0	0	0	0	-0	0	0	-0	-0	-0	-0	0	IE
IS	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	IS
IT	0	0	2	0	0	0	0	0	1	0	0	1	0	0	0	0	2	0	0	0	1	0	0	0	67	0	0	0	0	0	0	IT
KG	-0	-0	-0	-0	-0	0	-0	0	-0	-0	0	0	0	0	-0	0	-0	0	0	-0	-0	0	0	0	-0	1	0	0	0	0	0	KG
KZT	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	KZT
LT	0	-0	0	-0	-0	-0	0	0	0	-0	0	0	-0	-0	0	-0	0	-0	-0	0	-0	0	-0	0	-0	-0	-0	0	-0	0	-0	LT
LU	0	0	3	0	0	2	0	0	3	0	2	13	0	0	1	0	6	2	0	0	1	1	0	0	6	0	0	0	0	0	0	LU
LV	0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	0	0	0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	0	-0	0	-0	LV
MD	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	MD
ME	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	ME
MK	0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	MK
MT	0	0	-0	0	0	-0	0	0	-0	0	-0	-0	0	0	-0	0	-0	-0	0	0	0	0	-0	0	-0	0	0	0	-0	0	0	MT
NL	0	0	2	0	0	5	0	1	2	0	2	20	0	0	1	0	9	9	0	0	0	1	0	0	6	0	0	0	0	0	0	NL
NO	0	-0	0	-0	0	0	-0	-0	0	0	0	0	0	0	-0	0	0	-0	-0	0	0	-0	-0	0	0	0	-0	-0	-0	-0	0	NO
PL	0	0	1	-0	0	0	0	0	0	0	1	3	0	0	0	0	1	0	0	0	0	1	0	0	1	0	-0	0	0	0	0	PL
PT	-0	-0	-0	-0	-0	-0	0	0	-0	0	-0	-0	-0	-0	0	-0	-0	-0	-0	0	-0	-0	-0	0	-0	-0	-0	0	-0	-0	0	PT
RO	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	RO
RS	0	-0	0	-0	0	0	-0	-0	0	-0	0	0	-0	-0	0	-0	0	0	-0	0	0	0	0	0	0	-0	-0	-0	0	-0	-0	RS
RUE	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	RUE
SE	0	-0	0	-0	-0	0	-0	-0	0	-0	0	1	0	0	0	0	0	0	-0	0	0	-0	0	0	0	0	-0	-0	0	0	-0	SE
SI	0	-0	1	-0	-0	0	0	-0	0	0	-0	0	-0	-0	0	-0	0	0	-0	0	2	0	0	0	5	-0	-0	-0	0	-0	-0	SI
SK	0	-0	1	-0	-0	0	-0	0	0	0	0	1	0	-0	0	-0	0	0	-0	-0	0	2	0	0	0	-0	-0	-0	0	-0	-0	SK
TJ	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	0	-0	0	0	-0	0	-0	-0	-0	-0	-0	-0	-0	0	-0	0	-0	0	-0	0	0	TJ
TM	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	TM
TR	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	TR
UA	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	UA
UZ	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	UZ
ATL	0	-0	-0	-0	0	-0	0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	ATL
BAS	0	-0	0	-0	0	0	0	-0	0	0	0	2	0	0	0	0	1	0	-0	0	0	0	0	0	0	-0	-0	-0	0	0	-0	BAS
BLS	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	BLS
MED	-0	-0	0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	0	0	1	-0	-0	-0	-0	-0	-0	MED
NOS	0	0	0	0	0	1	0	0	0	0	0	4	0	0	0	0	2	1	0	0	0	0	0	0	1	0	0	0	0	0	0	NOS
AST	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	AST
NOA	-0	0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	NOA
EXC	0	-0	0	-0	0	0	-0	-0	0	-0	0	0	0	-0	0	-0	0	0	-0	0	0	0	0	-0	1	0	-0	-0	0	-0	-0	EXC
EU	0	0	1	-0	0	0	0	0	1	0	0	2	0	0	0	0	1	1	0	0	0	0	0	0	6	0	-0	0	0	0	0	EU
	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	

Table C.25 Cont.: 2011 country-to-country blame matrices for **fine NO_3**.
Units: ng/m^3 per 15% emis. red. of VOC. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	
AL	-0	0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-2	0	0	-2	-2	AL
AM	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-5	0	0	-5	-1	AM
AT	0	0	0	-0	0	-0	0	0	0	-0	-0	1	0	0	-0	0	0	-0	0	0	0	0	0	-0	0	-2	0	0	12	10	AT
AZ	-0	-0	-0	-0	-0	-0	-0	-0	-0	-2	-0	-0	-0	0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-4	0	0	-12	-2	AZ
BA	0	-0	0	-0	-0	-1	-0	-1	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-2	0	0	-6	-4	BA
BE	0	0	0	4	0	3	0	1	1	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	7	0	0	61	55	BE
BG	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	0	-0	-0	-0	0	-1	0	0	-3	-2	BG
BY	-0	0	0	-0	-0	1	0	-0	-0	-1	-0	0	0	-0	-0	-0	-0	-0	0	-0	-0	0	-0	-0	0	-2	0	0	2	2	BY
CH	0	0	0	-0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-2	0	0	10	6	CH
CY	-0	0	0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	CY
CZ	0	0	0	0	0	2	0	-0	-0	0	0	0	1	0	-0	0	0	-0	0	0	0	0	0	0	0	0	0	0	17	15	CZ
DE	0	0	0	2	0	3	0	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	48	41	DE
DK	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	29	27	DK
EE	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-1	0	0	-1	-0	EE
ES	0	0	0	-0	0	-0	0	0	0	0	0	-0	-0	-0	-0	0	-0	-0	0	-0	0	-0	-0	-0	-0	-1	0	0	-0	-0	ES
FI	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	0	-0	0	0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	0	0	0	0	FI
FR	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	0	13	11	FR
GB	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	19	17	GB
GE	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-3	0	0	-8	-1	GE
GL	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	GL
GR	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	0	0	-4	-3	GR
HR	0	0	0	-0	-0	-1	0	-1	-0	-0	-0	0	-0	-0	-0	0	-0	-0	0	-0	-0	0	-0	-0	0	-2	0	0	-1	-1	HR
HU	0	0	0	0	0	0	0	-1	0	-0	0	1	0	-0	-0	-0	-0	-0	0	0	-0	0	0	-0	0	-1	0	0	6	5	HU
IE	0	0	0	-0	-0	-0	0	0	0	0	-0	0	0	0	0	0	0	0	0	-0	0	0	-0	0	0	-2	0	0	-1	-1	IE
IS	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	IS
IT	0	0	0	0	0	1	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	80	76	IT
KG	-0	-0	-0	0	0	0	-0	0	-0	0	0	-0	0	0	-0	-0	0	0	-0	0	-0	-0	0	-0	-0	-0	0	0	1	-0	KG
KZT	-0	-0	-0	-0	-0	-0	-0	-0	-0	-2	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-2	0	0	-3	-1	KZT
LT	0	0	0	-0	-0	1	0	0	-0	-0	-0	0	0	-0	-0	0	-0	-0	0	-0	-0	0	-0	-0	0	-2	0	0	1	1	LT
LU	0	0	0	1	0	2	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	48	42	LU
LV	-0	0	0	-0	0	0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	0	-0	-0	0	-1	0	0	-1	-1	LV
MD	-0	-0	0	-0	-0	-1	-0	-0	-0	-2	-0	-0	-0	-0	-0	-1	-1	-0	-0	-0	-0	-0	-0	-0	-0	-3	0	0	-8	-4	MD
ME	0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	0	0	-5	-3	ME
MK	0	0	0	-0	-0	-1	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-2	0	0	-6	-4	MK
MT	0	0	0	-0	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	-0	0	0	-0	-0	0	-0	0	0	0	-0	-0	MT
NL	0	0	0	8	0	4	0	1	1	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	11	0	0	78	71	NL
NO	0	0	0	-0	0	-0	-0	-0	-0	-0	0	0	-0	0	-0	0	-0	-0	0	0	0	0	0	-0	0	-0	0	0	0	0	NO
PL	0	0	0	0	0	5	0	0	0	-0	0	0	1	-0	-0	0	0	-0	0	0	0	0	0	0	0	0	0	0	17	16	PL
PT	0	0	0	-0	-0	-0	1	0	0	-0	0	-0	-0	-0	-0	0	-0	-0	0	-0	0	-0	-0	-0	-0	-1	0	0	0	0	PT
RO	-0	-0	0	-0	-0	-1	-0	-1	-0	-1	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	0	-3	0	0	-7	-5	RO
RS	0	0	0	-0	-0	-0	0	-2	2	-1	-0	0	-0	-0	-0	-0	-1	-0	0	-0	-0	0	0	-0	0	-2	0	0	1	-1	RS
RUE	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	0	0	-1	-0	RUE
SE	0	-0	0	0	0	0	0	-0	-0	-0	0	0	-0	-0	-0	0	-0	-0	0	0	0	0	0	-0	0	0	0	0	1	1	SE
SI	0	0	0	0	0	-1	0	-1	-0	-0	-0	5	-0	-0	-0	0	-0	-0	0	-0	0	0	0	-0	0	-2	0	0	11	10	SI
SK	0	-0	0	0	0	1	0	-1	-0	-0	0	0	1	-0	-0	0	-0	-0	0	0	-0	0	0	-0	0	-1	0	0	6	6	SK
TJ	-0	-0	-0	-0	-0	0	-0	-0	-0	0	0	-0	-0	0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-1	0	0	0	-0	TJ
TM	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	0	0	-1	-0	TM
TR	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-2	0	0	-4	-1	TR
UA	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-1	0	0	-3	-2	UA
UZ	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-1	0	0	-1	-0	UZ
ATL	0	0	0	-0	-0	-0	0	-0	0	-0	-0	0	-0	-0	-0	0	-0	-0	0	-0	0	0	-0	-0	0	-0	0	0	-0	-0	ATL
BAS	0	0	0	0	0	0	0	-0	0	-0	0	0	0	-0	-0	0	-0	-0	0	0	0	0	0	-0	0	0	0	0	5	5	BAS
BLS	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	0	0	-2	-1	BLS
MED	-0	-0	0	-0	-0	-0	0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	0	-0	0	0	1	1	MED
NOS	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	14	13	NOS
AST	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-1	0	0	-1	-0	AST
NOA	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	NOA
EXC	0	0	0	0	-0	0	0	-0	0	-0	-0	0	0	0	-0	-0	-0	-0	0	0	-0	0	0	-0	0	-1	0	0	2	2	EXC
EU	0	0	0	0	0	1	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	14	EU
	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	

Table C.26: 2011 country-to-country blame matrices for **coarse NO_3**.
Units: ng/m^3 per 15% emis. red. of SO_x. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	
AL	1	0	0	-0	2	0	2	0	0	0	1	0	0	0	0	-0	0	0	-0	3	0	0	-0	-0	0	-0	-0	0	0	0	0	AL
AM	-0	1	-0	2	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	1	-0	-0	-0	-0	-0	-0	0	0	-0	-0	-0	0	AM
AT	0	0	2	0	2	0	1	0	0	-0	2	7	0	0	0	0	1	1	0	0	1	1	0	0	2	-0	0	0	0	0	0	AT
AZ	-0	0	-0	4	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	1	-0	-0	-0	-0	-0	-0	0	1	-0	-0	-0	-0	AZ
BA	0	0	0	0	6	0	1	0	0	0	1	2	0	0	0	-0	0	0	-0	0	1	0	0	-0	1	-0	-0	0	0	0	0	BA
BE	0	0	0	0	1	3	0	0	0	-0	2	7	0	0	1	0	7	5	-0	0	0	0	0	0	0	0	0	0	0	0	0	BE
BG	0	0	0	0	1	0	5	0	0	0	1	0	-0	0	-0	-0	0	-0	0	1	0	0	-0	-0	0	0	0	0	0	0	0	BG
BY	0	0	0	0	1	0	0	2	0	-0	1	4	0	0	0	0	0	1	-0	0	0	0	0	-0	0	0	0	2	0	0	0	BY
CH	0	0	0	0	0	0	0	0	1	-0	1	4	0	0	0	0	2	1	0	0	0	0	0	0	3	0	0	0	0	0	0	CH
CY	-0	0	-0	-0	0	-0	0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	CY
CZ	0	0	1	0	4	1	1	0	0	0	6	13	0	0	0	0	3	1	-0	0	1	2	0	0	1	0	0	0	0	0	0	CZ
DE	0	0	0	0	1	1	1	0	0	-0	2	14	0	0	1	0	4	3	-0	0	0	0	0	0	0	0	0	0	0	0	0	DE
DK	0	0	0	0	1	1	1	0	0	-0	2	7	1	0	0	0	3	7	-0	0	0	0	0	0	0	0	0	0	0	0	0	DK
EE	0	0	0	0	0	0	0	1	-0	-0	1	2	0	1	0	1	0	2	-0	0	0	0	0	0	-0	-0	0	1	0	0	0	EE
ES	-0	0	0	0	0	0	0	0	0	-0	0	1	0	-0	7	-0	1	0	0	-0	0	0	0	-0	0	0	0	-0	0	-0	0	ES
FI	0	0	0	0	0	0	0	0	-0	-0	0	1	0	0	0	3	0	1	-0	0	-0	0	0	0	-0	-0	0	0	0	0	0	FI
FR	0	0	0	0	0	1	0	0	0	-0	1	4	0	0	2	-0	6	2	0	0	0	0	0	0	1	0	0	0	0	0	0	FR
GB	0	0	0	0	0	1	0	0	0	-0	1	4	0	0	0	0	2	9	-0	0	0	0	0	0	0	-0	0	0	0	0	0	GB
GE	-0	1	-0	2	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	3	-0	-0	-0	-0	-0	-0	0	0	-0	-0	-0	-0	GE
GL	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	0	0	-0	-0	-0	-0	GL
GR	0	0	0	-0	1	-0	3	0	0	0	0	0	-0	-0	-0	-0	0	-0	-0	2	0	0	-0	-0	0	0	0	0	0	-0	0	GR
HR	0	0	1	0	6	0	1	0	0	0	2	4	0	0	0	-0	1	0	-0	0	2	1	0	-0	3	-0	0	0	0	0	0	HR
HU	0	0	1	0	5	0	1	0	0	0	3	6	0	0	0	0	1	1	-0	0	1	6	0	-0	1	0	0	0	0	0	0	HU
IE	0	0	0	-0	0	0	0	0	0	-0	0	1	0	0	0	0	1	7	-0	0	0	0	1	0	0	-0	0	0	0	0	0	IE
IS	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	0	0	-0	0	0	-0	-0	-0	-0	0	0	-0	-0	-0	0	0	0	-0	IS
IT	0	0	0	0	2	0	0	0	0	0	1	1	0	0	0	-0	1	0	-0	0	1	0	-0	-0	7	0	0	0	0	0	0	IT
KG	-0	0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	-0	-0	KG
KZT	-0	0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	0	3	-0	-0	-0	-0	KZT
LT	0	0	0	0	0	0	0	1	0	-0	1	5	0	0	0	0	1	3	-0	0	0	0	0	0	0	-0	0	3	0	0	0	LT
LU	0	0	0	0	1	3	0	0	0	-0	2	10	0	0	1	0	7	4	0	0	0	0	0	0	0	0	0	0	0	0	0	LU
LV	0	0	0	0	0	0	0	1	-0	-0	1	4	0	1	0	1	0	3	-0	0	0	0	0	0	0	-0	0	2	0	0	0	LV
MD	0	0	0	0	1	0	2	1	0	-0	1	1	0	0	0	-0	0	0	-0	0	0	1	-0	-0	0	0	1	0	0	0	0	MD
ME	0	0	0	0	2	0	1	0	0	0	1	1	0	-0	0	-0	0	0	0	0	0	0	-0	-0	0	-0	0	0	0	0	0	ME
MK	1	0	0	0	1	0	3	0	0	0	1	1	0	0	-0	-0	0	0	-0	3	0	0	-0	-0	0	-0	-0	0	0	0	0	MK
MT	0	-0	0	-0	1	0	0	-0	0	0	0	0	-0	-0	0	-0	0	0	-0	0	0	0	-0	-0	2	0	-0	-0	0	-0	0	MT
NL	0	0	0	0	1	2	1	0	0	-0	2	6	0	0	0	0	5	7	0	0	0	0	0	0	0	0	0	0	0	0	0	NL
NO	0	0	0	-0	0	0	0	0	0	-0	0	1	0	0	0	0	0	1	-0	0	0	0	0	0	-0	0	0	0	0	0	0	NO
PL	0	0	0	0	1	1	0	0	0	-0	4	11	0	0	0	0	2	2	-0	0	0	1	0	-0	0	0	0	0	0	0	0	PL
PT	-0	0	0	0	0	0	-0	-0	0	-0	0	0	0	-0	5	-0	0	0	0	-0	0	0	0	-0	-0	-0	0	-0	0	-0	0	PT
RO	0	0	0	0	2	0	2	0	0	-0	1	2	0	0	0	-0	0	0	0	0	0	1	-0	-0	0	0	0	0	0	0	0	RO
RS	0	0	0	0	3	0	2	0	0	0	2	3	0	0	0	-0	1	0	-0	1	0	2	0	-0	0	0	0	0	0	0	0	RS
RUE	-0	0	-0	0	0	-0	0	0	-0	-0	0	0	0	0	-0	0	-0	-0	0	-0	-0	0	-0	-0	-0	0	1	0	-0	0	0	RUE
SE	0	0	0	0	0	0	0	0	0	-0	1	3	0	0	0	0	1	2	-0	0	0	0	0	0	-0	-0	0	0	0	0	0	SE
SI	0	0	1	0	5	0	1	0	0	-0	2	5	0	0	0	0	1	0	-0	0	3	1	0	-0	6	-0	0	0	0	0	0	SI
SK	0	0	1	0	3	0	1	0	0	-0	5	6	0	0	0	0	2	1	-0	0	1	5	0	-0	1	0	0	0	0	0	0	SK
TJ	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	-0	-0	TJ
TM	-0	0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	0	1	-0	-0	-0	-0	TM
TR	0	0	-0	0	0	-0	0	-0	-0	0	0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	-0	-0	-0	-0	0	-0	-0	-0	0	TR
UA	0	0	0	0	1	0	0	1	0	-0	1	1	0	0	0	0	0	0	0	0	0	0	-0	-0	0	0	1	0	0	0	0	UA
UZ	-0	0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	0	2	-0	-0	-0	-0	UZ
ATL	-0	0	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	1	-0	0	0	0	0	0	0	0	0	0	0	0	0	ATL
BAS	0	0	0	0	0	1	0	0	0	-0	1	5	1	0	0	1	1	4	-0	0	0	0	0	0	0	-0	0	0	0	0	0	BAS
BLS	0	0	0	0	0	-0	1	0	-0	0	0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	-0	-0	-0	0	0	0	-0	0	0	BLS
MED	0	0	0	-0	1	0	0	-0	0	0	0	0	-0	-0	1	-0	1	0	-0	0	0	0	-0	-0	1	-0	-0	-0	0	-0	0	MED
NOS	0	0	0	0	0	1	0	0	0	-0	1	4	0	0	0	0	2	7	-0	0	0	0	0	0	0	0	0	0	0	0	0	NOS
AST	-0	0	-0	0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	-0	-0	AST
NOA	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	NOA
EXC	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	EXC
EU	0	0	0	0	1	1	1	0	0	0	1	4	0	0	1	0	2	2	-0	0	0	0	0	0	1	0	0	0	0	0	0	EU
	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	

Table C.26 Cont.: 2011 country-to-country blame matrices for **coarse NO_3**.
Units: ng/m^3 per 15% emis. red. of SO_x. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	
AL	0	2	0	0	-0	2	-0	1	5	0	-0	0	1	-0	-0	0	1	-0	-0	0	0	1	0	-0	0	0	0	0	21	10	AL
AM	-0	0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	0	0	1	0	0	-0	-0	0	-0	-0	0	0	0	-0	0	4	-0	AM
AT	0	0	0	0	-0	3	0	1	3	0	0	1	1	-0	0	0	1	0	0	0	0	1	0	0	0	1	0	0	30	23	AT
AZ	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	0	0	0	0	0	-0	-0	0	-0	-0	1	-0	0	-0	0	6	-1	AZ
BA	0	0	0	0	-0	3	0	1	5	0	-0	0	1	-0	-0	0	1	-0	0	0	0	1	0	0	0	0	0	0	24	12	BA
BE	0	0	0	1	0	4	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	0	1	0	0	33	30	BE
BG	0	1	0	-0	-0	2	-0	4	3	0	-0	0	0	0	0	1	2	0	-0	-0	0	0	-0	0	0	0	0	0	22	13	BG
BY	0	0	-0	0	0	14	0	0	0	3	0	0	1	-0	0	-0	3	0	0	1	0	0	1	0	-0	0	0	0	35	26	BY
CH	0	0	0	0	-0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	15	13	CH
CY	0	0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	5	-0	-0	-0	-0	0	0	-0	0	0	0	0	0	4	-1	CY
CZ	0	0	0	0	0	6	0	1	4	0	0	0	1	0	0	0	2	0	0	0	0	1	1	0	0	1	0	0	51	39	CZ
DE	0	0	0	1	0	5	0	0	1	0	0	0	0	0	0	0	1	0	1	1	0	0	2	0	0	1	0	0	39	35	DE
DK	0	0	-0	1	0	5	0	1	1	0	0	0	0	0	0	0	1	0	1	2	0	0	5	0	-0	1	1	0	35	30	DK
EE	0	0	-0	0	0	5	0	0	0	2	1	0	0	-0	-0	0	1	0	0	2	0	-0	2	0	-0	0	0	0	20	15	EE
ES	0	-0	0	0	0	0	0	0	0	-0	-0	0	0	-0	0	0	0	0	1	0	0	2	0	0	0	1	0	0	11	10	ES
FI	0	0	-0	0	0	1	-0	0	0	1	1	-0	0	-0	-0	-0	0	0	0	1	0	-0	1	0	-0	0	0	0	11	9	FI
FR	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	1	0	0	22	21	FR
GB	0	0	-0	0	0	1	0	0	0	-0	0	0	0	-0	0	0	0	0	2	0	0	0	2	0	-0	0	0	0	20	19	GB
GE	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	0	0	1	0	0	-0	-0	0	-0	-0	0	-0	0	0	0	7	-0	GE
GL	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	0	0	-0	-0	-0	-0	0	-0	1	0	0	-0	-0	GL
GR	0	1	0	-0	-0	1	-0	2	2	0	-0	0	0	-0	0	1	1	0	-0	-0	0	1	-0	0	0	0	0	0	15	9	GR
HR	0	0	0	0	-0	4	0	2	6	0	0	0	1	-0	0	0	1	-0	0	0	0	2	0	0	0	1	0	0	36	20	HR
HU	0	0	0	0	-0	7	0	4	6	0	0	0	3	0	0	0	2	0	0	0	0	1	0	0	0	1	0	0	50	35	HU
IE	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	-0	-0	0	-0	2	0	0	0	1	-0	0	0	0	0	11	11	IE
IS	-0	-0	-0	0	0	0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	0	0	-0	0	0	0	0	1	0	IS
IT	0	0	0	0	-0	2	0	0	1	-0	-0	0	0	-0	0	0	0	0	0	0	0	4	0	0	0	1	0	0	18	14	IT
KG	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	2	-0	-0	-0	-0	-0	0	-0	0	-0	0	3	-0	KG
KZT	-0	-0	-0	-0	-0	-0	-0	-0	-0	3	-0	-0	-0	0	0	-0	0	0	-0	-0	-0	-0	-0	0	-0	0	-0	0	5	-1	KZT
LT	0	0	-0	1	0	12	0	0	0	2	1	0	0	-0	0	-0	2	0	0	2	0	0	2	0	-0	1	0	0	35	29	LT
LU	0	0	0	1	0	4	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	1	0	0	36	33	LU
LV	0	0	-0	0	0	8	0	0	0	2	1	0	0	-0	0	0	2	0	0	2	0	0	2	0	-0	1	0	0	28	22	LV
MD	0	0	-0	0	-0	8	-0	5	1	2	-0	0	1	0	0	1	6	0	-0	0	0	-0	-0	0	-0	1	0	0	33	20	MD
ME	1	1	0	0	-0	2	0	1	5	0	0	0	1	-0	-0	0	1	0	-0	0	0	0	0	0	0	0	0	0	18	7	ME
MK	0	2	0	0	-0	2	-0	2	6	0	-0	0	1	-0	-0	0	1	-0	-0	0	0	0	0	-0	0	0	0	0	24	12	MK
MT	0	0	0	0	-0	0	-0	0	0	-0	-0	0	0	0	-0	0	0	-0	-0	-0	0	7	-0	-0	0	0	0	1	5	4	MT
NL	0	0	0	1	0	5	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	4	0	0	1	1	0	33	30	NL
NO	0	0	-0	0	0	1	0	0	0	0	0	0	0	0	-0	-0	0	0	0	0	-0	0	1	0	-0	0	0	0	6	5	NO
PL	0	0	0	1	0	16	0	1	1	1	0	0	1	0	0	0	2	0	0	1	0	0	2	0	0	1	0	0	48	42	PL
PT	0	-0	-0	0	-0	0	2	0	0	-0	-0	0	0	0	0	0	0	0	4	0	0	1	0	0	0	1	0	0	7	7	PT
RO	0	0	0	0	-0	5	-0	8	3	1	-0	0	1	0	0	0	3	0	-0	0	0	0	0	0	0	0	0	0	31	21	RO
RS	0	1	0	0	-0	4	0	4	9	0	-0	0	1	-0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	35	19	RS
RUE	0	0	-0	-0	-0	1	-0	0	0	4	0	-0	0	0	0	0	1	0	-0	0	0	-0	0	0	-0	0	0	0	7	1	RUE
SE	0	0	-0	0	1	2	0	0	0	0	1	0	0	0	-0	0	0	0	0	1	0	0	2	0	-0	0	0	0	14	12	SE
SI	0	0	0	0	-0	4	0	1	5	0	0	1	1	-0	0	0	1	0	0	0	0	2	0	0	0	1	0	0	39	25	SI
SK	0	0	0	0	-0	9	0	3	3	0	0	0	5	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	49	39	SK
TJ	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	1	-0	-0	-0	-0	-0	0	-0	0	-0	0	1	-0	TJ
TM	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	0	0	-0	-0	1	-0	-0	-0	-0	-0	0	-0	0	-0	0	2	-1	TM
TR	0	0	-0	-0	-0	0	-0	0	0	0	-0	-0	0	-0	0	7	0	0	-0	-0	0	0	-0	0	-0	0	0	0	8	0	TR
UA	0	0	-0	0	-0	8	-0	1	1	5	0	0	1	0	0	0	5	0	-0	0	0	0	0	0	-0	0	0	0	29	15	UA
UZ	-0	-0	-0	-0	-0	-0	-0	-0	-0	1	-0	-0	-0	0	0	-0	0	2	-0	-0	-0	-0	-0	0	-0	0	-0	0	4	-1	UZ
ATL	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	ATL
BAS	0	0	-0	1	0	5	0	1	0	1	1	0	0	-0	0	0	1	0	1	3	0	0	3	0	-0	1	0	0	26	23	BAS
BLS	0	0	-0	-0	-0	2	-0	1	0	2	-0	0	0	0	0	2	3	0	-0	-0	1	0	-0	0	-0	0	0	0	12	3	BLS
MED	0	0	0	0	-0	1	0	0	0	-0	-0	0	0	-0	-0	1	0	-0	0	-0	0	4	-0	0	0	0	0	0	8	5	MED
NOS	0	0	-0	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	4	0	0	1	1	0	22	21	NOS
AST	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	-0	0	0	0	-0	0	1	-0	AST
NOA	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	0	-0	0	0	-0	0	0	-1	-0	NOA
EXC	0	0	0	0	0	1	0	0	0	3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	10	5	EXC
EU	0	0	0	0	0	4	0	1	1	0	0	0	0	0	0	0	1	0	1	0	0	1	1	0	0	1	0	0	24	20	EU
	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	

Table C.27: 2011 country-to-country blame matrices for **coarse NO_3**.
Units: ng/m^3 per 15% emis. red. of NO_x. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	
AL	8	0	2	0	3	1	6	0	1	0	3	8	0	0	2	0	4	2	0	23	3	4	0	0	16	0	0	0	0	0	0	AL
AM	0	3	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	1	0	0	0	0	AM
AT	0	0	12	0	1	1	1	0	2	0	4	21	0	0	2	0	7	3	0	1	4	4	0	0	16	0	0	0	1	0	0	AT
AZ	0	1	0	23	0	0	0	0	0	0	0	1	0	0	0	0	0	1	5	0	0	0	0	0	0	0	2	0	0	0	0	AZ
BA	1	0	5	0	17	1	4	0	1	0	6	15	1	0	3	0	6	3	0	5	6	7	0	0	17	0	0	0	0	0	0	BA
BE	0	0	2	0	0	3	0	0	1	0	3	16	0	0	4	0	20	16	0	0	0	1	1	0	4	0	0	0	1	0	0	BE
BG	0	0	3	0	1	1	23	2	1	0	3	11	1	0	1	0	4	3	0	9	1	4	0	0	3	0	0	0	0	0	2	BG
BY	0	0	1	0	0	2	0	5	0	0	3	16	2	1	1	2	4	8	0	0	0	2	0	0	2	0	0	2	0	1	1	BY
CH	0	0	3	0	0	1	0	0	5	0	1	9	0	0	3	0	13	2	0	0	0	1	0	0	19	0	0	0	0	0	0	CH
CY	0	0	1	0	0	0	2	0	0	5	1	2	0	0	1	0	1	1	0	8	0	1	0	0	4	0	0	0	0	0	0	CY
CZ	0	0	8	0	2	3	2	1	1	0	9	29	1	0	2	0	11	6	0	1	3	8	0	0	6	0	0	0	1	0	0	CZ
DE	0	0	4	0	0	3	0	1	1	0	4	23	1	0	3	0	14	10	0	0	1	2	0	0	4	0	0	0	1	0	0	DE
DK	0	0	1	0	0	3	0	1	0	0	4	17	3	0	1	1	7	26	0	1	0	1	1	0	1	0	0	0	1	0	0	DK
EE	0	0	1	0	0	2	0	3	0	0	2	13	3	2	1	4	3	10	0	0	0	0	0	0	0	0	0	2	0	1	0	EE
ES	0	0	1	0	0	1	0	0	0	0	1	3	0	0	52	0	10	3	0	0	0	0	0	0	5	0	0	0	0	0	0	ES
FI	0	0	0	0	0	1	0	2	0	0	1	6	1	1	0	6	2	4	0	0	0	0	0	0	0	0	0	1	0	0	0	FI
FR	0	0	2	0	0	2	0	0	1	0	2	11	0	0	14	0	31	9	0	0	0	1	1	0	12	0	0	0	1	0	0	FR
GB	0	0	1	0	0	1	0	0	0	0	1	8	1	0	3	0	9	21	0	0	0	0	2	0	2	0	0	0	0	0	0	GB
GE	0	1	0	9	0	0	0	0	0	0	0	1	0	0	0	0	0	0	14	0	0	0	0	0	0	0	1	0	0	0	0	GE
GL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	GL
GR	2	0	2	0	1	1	15	1	1	0	2	7	0	0	2	0	3	3	0	31	1	3	0	0	10	0	0	0	0	0	1	GR
HR	1	0	8	0	12	2	3	1	1	0	7	20	1	0	4	0	7	4	0	4	12	9	0	0	28	0	0	0	1	0	0	HR
HU	0	0	9	0	3	2	3	1	1	0	8	25	1	0	3	0	8	5	0	1	4	17	0	0	9	0	0	0	1	0	1	HU
IE	0	0	0	0	0	1	0	0	0	0	0	2	0	0	2	0	4	18	0	0	0	0	3	0	1	0	0	0	0	0	0	IE
IS	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	2	0	0	0	0	0	2	0	0	0	0	0	0	0	IS
IT	0	0	5	0	2	1	1	0	1	0	2	8	0	0	8	0	16	2	0	2	4	3	0	0	71	0	0	0	0	0	0	IT
KG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	3	0	0	0	0	KG
KZT	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	1	0	0	0	0	0	0	0	1	10	0	0	0	0	KZT
LT	0	0	1	0	0	3	0	3	0	0	3	19	4	1	1	2	4	12	0	0	0	1	0	0	1	0	0	3	0	1	0	LT
LU	0	0	3	0	0	4	0	0	1	0	4	18	0	0	5	0	22	11	0	0	0	1	1	0	4	0	0	0	1	0	0	LU
LV	0	0	1	0	0	2	0	3	0	0	2	17	3	1	1	3	4	12	0	0	0	1	0	0	1	0	0	2	0	2	0	LV
MD	0	0	3	0	0	2	6	4	1	0	6	18	1	0	1	1	5	6	0	2	1	5	0	0	2	0	1	1	0	0	3	MD
ME	3	0	3	0	6	1	4	0	1	0	4	9	0	0	2	0	4	2	0	8	3	5	0	0	13	0	0	0	0	0	0	ME
MK	2	0	2	0	2	1	12	1	1	0	3	9	0	0	2	0	3	2	0	22	1	5	0	0	7	0	0	0	0	0	1	MK
MT	1	0	2	0	2	1	2	0	1	0	1	5	0	0	14	0	18	3	0	5	2	1	0	0	65	0	0	0	0	0	0	MT
NL	0	0	2	0	0	3	0	1	1	0	3	14	1	0	2	0	13	21	0	0	0	1	1	0	2	0	0	0	1	0	0	NL
NO	0	0	0	0	0	1	0	0	0	0	1	5	1	0	1	1	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	NO
PL	0	0	3	0	1	3	1	2	1	0	6	27	2	0	2	1	7	10	0	0	1	4	0	0	3	0	0	1	1	0	0	PL
PT	0	0	0	0	0	1	0	0	0	0	0	2	0	0	37	0	6	4	0	0	0	0	0	0	2	0	0	0	0	0	0	PT
RO	0	0	4	0	1	1	6	2	1	0	5	15	1	0	1	1	5	4	0	2	1	7	0	0	4	0	0	0	0	0	2	RO
RS	1	0	5	0	3	1	9	1	1	0	6	16	1	0	2	0	5	3	0	5	2	9	0	0	7	0	0	0	0	0	1	RS
RUE	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	1	1	1	0	0	0	0	0	0	0	0	2	0	0	0	0	RUE
SE	0	0	0	0	0	1	0	1	0	0	1	10	2	0	1	2	3	8	0	0	0	1	0	0	0	0	0	0	0	0	0	SE
SI	0	0	12	0	5	2	2	1	1	0	5	20	0	0	3	0	7	3	0	2	14	7	0	0	35	0	0	0	1	0	0	SI
SK	0	0	7	0	1	2	2	1	1	0	10	25	1	0	2	0	7	6	0	1	2	17	0	0	6	0	0	0	1	0	0	SK
TJ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	TJ
TM	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	1	7	0	0	0	0	TM
TR	0	0	1	0	0	0	2	1	0	0	1	2	0	0	0	0	1	1	1	2	0	0	0	0	1	0	0	0	0	0	0	TR
UA	0	0	2	0	0	2	2	5	0	0	4	16	1	0	1	1	4	6	0	1	0	3	0	0	2	0	1	1	0	0	1	UA
UZ	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	2	10	0	0	0	0	UZ
ATL	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	ATL
BAS	0	0	1	0	0	2	0	2	0	0	2	16	4	1	1	4	4	14	0	0	0	1	1	0	1	0	0	1	0	1	0	BAS
BLS	0	0	2	1	0	1	4	3	0	0	3	10	1	0	1	1	3	3	2	2	0	2	0	0	1	0	1	1	0	0	2	BLS
MED	1	0	2	0	2	1	4	1	1	0	2	6	0	0	15	0	15	3	0	11	2	2	0	0	38	0	0	0	0	0	0	MED
NOS	0	0	1	0	0	2	0	0	0	0	2	11	2	0	2	0	8	25	0	0	0	1	1	0	2	0	0	0	0	0	0	NOS
AST	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	AST
NOA	0	0	1	0	1	0	2	0	0	0	1	3	0	0	8	0	6	1	0	6	1	1	0	0	13	0	0	0	0	0	0	NOA
EXC	0	0	1	0	0	1	1	1	0	0	1	4	0	0	2	1	3	3	0	1	0	1	0	0	2	0	2	0	0	0	0	EXC
EU	0	0	3	0	1	2	2	1	1	0	3	12	1	0	10	1	11	8	0	2	1	2	0	0	10	0	0	0	0	0	0	EU
	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	

Table C.27 Cont.: 2011 country-to-country blame matrices for **coarse NO_3**.
Units: ng/m^3 per 15% emis. red. of NO_x. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	
AL	1	7	0	1	0	7	0	5	24	3	0	1	2	0	0	4	3	0	1	1	1	22	2	0	0	5	0	0	145	88	AL
AM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	6	0	0	0	0	0	0	0	2	0	2	0	0	27	2	AM
AT	0	0	0	2	0	7	0	2	5	1	0	4	2	0	0	0	2	0	1	1	0	4	3	0	0	4	0	0	107	91	AT
AZ	0	0	0	0	0	1	0	0	0	14	0	0	0	0	1	3	3	1	0	0	0	0	1	4	0	3	0	0	59	6	AZ
BA	1	2	0	2	0	13	0	7	26	2	0	1	3	0	0	1	4	0	1	1	0	10	3	0	0	5	0	0	162	99	BA
BE	0	0	0	2	1	5	1	0	1	0	0	0	1	0	0	0	1	0	7	1	0	2	13	0	0	6	0	0	85	81	BE
BG	0	1	0	1	1	13	0	21	11	14	1	0	2	0	0	10	19	0	1	2	5	5	3	0	0	5	0	0	168	105	BG
BY	0	0	0	3	1	21	0	2	1	16	2	0	2	0	0	0	9	0	2	6	0	1	9	0	0	4	0	0	112	77	BY
CH	0	0	0	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	3	2	0	0	4	0	0	63	57	CH
CY	0	0	0	0	0	2	0	2	2	5	0	0	0	0	0	119	4	0	0	0	3	53	1	1	0	6	0	0	165	31	CY
CZ	0	0	0	3	1	13	0	4	7	2	1	2	3	0	0	0	4	0	2	2	0	2	6	0	0	5	0	0	136	114	CZ
DE	0	0	0	3	1	9	0	1	2	1	1	1	1	0	0	0	2	0	3	2	0	2	10	0	0	5	0	0	96	87	DE
DK	0	0	0	4	4	17	0	1	1	2	2	0	1	0	0	0	3	0	5	6	0	1	23	0	0	5	0	0	108	95	DK
EE	0	0	0	3	2	12	0	0	0	11	5	0	1	0	0	0	3	0	2	12	0	0	11	0	0	3	0	0	84	64	EE
ES	0	0	0	1	0	1	5	0	0	0	0	0	0	0	0	0	0	0	9	0	0	24	2	0	0	8	0	0	87	85	ES
FI	0	0	0	1	2	5	0	0	0	8	4	0	0	0	0	0	1	0	1	6	0	0	5	0	0	2	0	0	46	33	FI
FR	0	0	0	2	0	2	1	0	0	0	0	1	0	0	0	0	0	0	9	1	0	10	8	0	0	6	0	0	98	94	FR
GB	0	0	0	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	9	1	0	1	10	0	0	5	0	0	58	56	GB
GE	0	0	0	0	0	1	0	0	0	5	0	0	0	0	0	5	2	0	0	0	2	0	0	1	0	2	0	0	42	4	GE
GL	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	3	0	0	0	0	GL
GR	0	4	0	1	0	8	0	10	9	7	0	0	1	0	0	21	10	0	1	1	3	29	2	0	0	5	0	0	158	100	GR
HR	1	1	0	2	0	15	0	8	21	3	0	3	4	0	0	1	5	0	1	1	0	13	4	0	0	5	0	0	187	129	HR
HU	0	1	0	2	1	22	0	13	12	4	1	2	6	0	0	0	8	0	1	2	1	4	5	0	0	5	0	0	175	138	HU
IE	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	1	5	0	0	4	0	0	36	35	IE
IS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	-0	2	0	0	10	7	IS
IT	0	1	0	1	0	6	0	2	4	1	0	3	1	0	0	1	1	0	1	1	0	40	2	0	0	5	0	0	152	135	IT
KG	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	0	0	14	0	0	0	0	0	1	0	3	0	0	29	1	KG
KZT	0	0	0	0	0	2	0	0	0	28	0	0	0	0	0	0	3	2	0	1	0	0	1	1	0	3	0	0	55	8	KZT
LT	0	0	0	4	2	20	0	1	1	10	4	0	1	0	0	0	7	0	2	11	0	0	13	0	0	4	0	0	110	86	LT
LU	0	0	0	3	0	5	1	0	1	1	0	0	1	0	0	0	1	0	5	1	0	2	9	0	0	5	0	0	89	84	LU
LV	0	0	0	4	2	15	0	1	0	11	4	0	1	0	0	0	5	0	2	12	0	0	13	0	0	3	0	0	99	77	LV
MD	0	0	0	2	1	29	0	18	3	24	1	0	3	0	0	4	30	0	2	3	3	2	6	0	0	5	0	0	185	112	MD
ME	5	3	0	1	0	9	0	5	27	2	0	1	2	0	0	1	2	0	1	1	0	12	2	0	0	5	0	0	127	72	ME
MK	0	7	0	1	0	8	0	8	22	4	0	0	2	0	0	7	5	0	1	1	1	7	2	0	0	5	0	0	141	88	MK
MT	0	1	4	1	0	3	1	2	5	1	0	1	1	0	0	3	1	0	2	0	0	148	2	0	1	7	0	0	147	131	MT
NL	0	0	0	2	1	9	0	1	1	1	0	0	1	0	0	0	1	0	7	2	0	1	16	0	0	5	0	0	84	78	NL
NO	0	0	0	1	4	3	0	0	0	1	2	0	0	0	0	0	0	0	2	2	0	0	5	0	0	2	0	0	28	22	NO
PL	0	0	0	4	1	21	0	3	2	5	1	1	3	0	0	0	7	0	2	6	0	1	10	0	0	5	0	0	127	106	PL
PT	0	0	0	1	0	1	15	0	0	0	0	0	0	0	0	0	0	0	25	0	0	6	2	0	0	9	0	0	70	70	PT
RO	0	1	0	2	1	19	0	28	7	12	1	1	3	0	0	3	18	0	1	2	3	2	4	0	0	5	0	0	158	109	RO
RS	1	2	0	2	0	14	0	17	23	5	0	1	4	0	0	2	8	0	1	1	1	4	4	0	0	5	0	0	158	108	RS
RUE	0	0	0	0	0	2	0	0	0	21	1	0	0	0	0	0	3	0	0	1	0	0	1	0	0	2	0	0	38	11	RUE
SE	0	0	0	2	3	9	0	1	0	3	4	0	0	0	0	0	1	0	2	6	0	0	9	0	0	2	0	0	55	46	SE
SI	0	1	0	2	0	12	0	5	14	2	0	8	3	0	0	0	3	0	1	1	0	12	3	0	0	5	0	0	173	131	SI
SK	0	0	0	2	1	25	0	9	7	3	1	2	9	0	0	0	7	0	2	2	0	2	5	0	0	5	0	0	160	135	SK
TJ	0	0	0	0	0	0	0	0	0	1	0	0	0	8	1	0	0	12	0	0	0	0	0	2	0	4	0	0	26	0	TJ
TM	0	0	0	0	0	2	0	0	0	14	0	0	0	1	5	1	2	10	0	1	0	0	1	4	0	5	0	0	51	7	TM
TR	0	0	0	0	0	3	0	2	1	8	0	0	0	0	0	44	7	0	0	0	4	6	1	1	0	4	0	0	80	17	TR
UA	0	0	0	2	1	25	0	6	2	33	1	0	2	0	0	4	28	0	1	4	2	1	6	0	0	4	0	0	159	83	UA
UZ	0	0	0	0	0	1	0	0	0	17	0	0	0	3	2	1	2	18	0	1	0	0	1	2	0	4	0	0	63	7	UZ
ATL	0	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	5	0	0	0	2	0	0	4	0	0	15	12	ATL
BAS	0	0	0	4	2	15	0	1	1	6	5	0	1	0	0	0	3	0	3	16	0	0	14	0	0	4	0	0	96	80	BAS
BLS	0	0	0	1	1	14	0	9	2	40	1	0	2	0	0	18	34	0	1	2	17	3	3	0	0	4	0	0	167	62	BLS
MED	0	1	1	1	0	5	1	4	5	4	0	1	1	0	0	27	4	0	2	1	2	110	2	0	1	7	0	0	163	114	MED
NOS	0	0	0	3	4	6	0	0	0	1	1	0	0	0	0	0	1	0	8	3	0	1	22	0	0	5	0	0	76	69	NOS
AST	0	0	0	0	0	1	0	0	0	6	0	0	0	0	1	7	1	2	0	0	0	3	0	4	0	4	0	0	26	4	AST
NOA	0	1	0	0	0	2	0	2	2	1	0	0	0	0	0	9	1	0	1	0	1	46	1	0	1	9	0	0	64	47	NOA
EXC	0	0	0	1	1	4	0	1	1	16	1	0	0	0	0	2	3	1	1	1	0	2	2	0	0	3	0	0	57	28	EXC
EU	0	0	0	2	1	8	1	4	2	3	1	1	1	0	0	1	3	0	5	3	0	9	7	0	0	5	0	0	101	85	EU
	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	

Table C.28: 2011 country-to-country blame matrices for **coarse NO_3**.
Units: ng/m^3 per 15% emis. red. of NH_3. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	
AL	-7	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-1	-0	-0	-1	-0	-1	-0	-0	-1	-0	-0	-0	-0	-0	-0	AL
AM	0	-2	-0	-4	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	AM
AT	-0	-0	-10	-0	-0	-0	-0	-0	-2	-0	-3	-16	-0	-0	-0	-0	-4	-1	-0	-0	-3	-4	-0	-0	-10	-0	-0	-0	-0	-0	-0	AT
AZ	-0	-0	-0	-10	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	AZ
BA	-0	-0	-1	-0	-4	-0	-0	-0	-0	-0	-1	-4	-0	-0	-0	-0	-1	-0	-0	-0	-4	-3	-0	-0	-3	-0	-0	-0	-0	-0	-0	BA
BE	-0	-0	-2	-0	-0	-10	-0	-0	-1	-0	-1	-19	-0	-0	-1	-0	-22	-6	-0	-0	-0	-0	-1	-0	-2	-0	-0	-0	-1	-0	-0	BE
BG	-0	-0	-0	-0	-0	-0	-5	-0	-0	-0	-0	-2	-0	-0	-0	-0	-1	-0	-0	-1	-0	-1	-0	-0	-1	-0	-0	-0	-0	-0	-0	BG
BY	-0	-0	-0	-0	-0	-0	-0	-15	-0	-0	-1	-6	-1	-0	-0	-0	-2	-1	-0	-0	-0	-1	-0	-0	-1	-0	-0	-2	-0	-0	-0	BY
CH	-0	-0	-1	-0	-0	-0	-0	-0	-10	-0	-0	-9	-0	-0	-0	-0	-7	-0	-0	-0	-0	-0	-0	-0	-15	-0	-0	-0	-0	-0	-0	CH
CY	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	CY
CZ	-0	-0	-6	-0	-0	-1	-0	-0	-1	-0	-16	-22	-0	-0	-0	-0	-6	-1	-0	-0	-3	-8	-0	-0	-3	-0	-0	-0	-0	-0	-0	CZ
DE	-0	-0	-3	-0	-0	-3	-0	-0	-1	-0	-4	-36	-1	-0	-0	-0	-10	-3	-0	-0	-1	-1	-0	-0	-2	-0	-0	-0	-0	-0	-0	DE
DK	-0	-0	-1	-0	-0	-2	-0	-0	-0	0	-2	-25	-13	-0	-0	-0	-5	-6	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	DK
EE	-0	-0	-0	-0	-0	-0	-0	-2	-0	-0	-0	-4	-1	-3	-0	-0	-1	-2	-0	-0	-0	-0	-0	-0	-0	-0	-0	-2	-0	-2	-0	EE
ES	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-14	-0	-4	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	ES
FI	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-2	-0	-0	-0	-3	-0	-1	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	FI
FR	-0	-0	-1	-0	-0	-2	-0	-0	-2	-0	-1	-9	-0	-0	-2	-0	-25	-2	-0	-0	-0	-0	-0	-0	-4	-0	-0	-0	-0	-0	-0	FR
GB	-0	-0	-0	-0	-0	-2	-0	-0	-0	-0	-0	-7	-0	-0	-0	-0	-9	-20	-0	-0	-0	-0	-2	-0	-1	-0	-0	-0	-0	-0	-0	GB
GE	0	-1	-0	-5	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-5	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	GE
GL	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	GL
GR	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-5	-0	-1	-0	-0	-1	-0	-0	-0	-0	-0	-0	GR
HR	-0	-0	-3	-0	-2	-0	-0	-0	-1	-0	-2	-7	-0	-0	-0	-0	-2	-1	-0	-0	-11	-6	-0	-0	-10	-0	-0	-0	-0	-0	-0	HR
HU	-0	-0	-3	-0	-0	-0	-0	-0	-1	-0	-3	-10	-0	-0	-0	-0	-3	-1	-0	-0	-5	-26	-0	-0	-4	-0	-0	-0	-0	-0	-0	HU
IE	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-2	-0	-0	-0	-0	-5	-12	-0	-0	-0	-0	-6	-0	-0	-0	-0	-0	-0	-0	-0	IE
IS	0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	IS
IT	-0	-0	-2	-0	-0	-0	-0	-0	-1	-0	-1	-3	-0	-0	-0	-0	-1	-0	-0	-0	-1	-1	-0	-0	-35	-0	-0	-0	-0	-0	-0	IT
KG	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	KG
KZT	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-4	-0	-0	-0	-0	KZT
LT	-0	-0	-0	-0	-0	-1	-0	-4	-0	-0	-1	-9	-2	-0	-0	-0	-2	-2	-0	-0	-0	-0	-0	-0	-1	-0	-0	-7	-0	-1	-0	LT
LU	-0	-0	-2	-0	-0	-8	-0	-0	-1	-0	-2	-25	-0	-0	-1	-0	-21	-4	-0	-0	-0	-0	-0	-0	-2	-0	-0	-0	-2	-0	-0	LU
LV	-0	-0	-0	-0	-0	-1	-0	-3	-0	-0	-0	-7	-2	-0	-0	-0	-1	-2	-0	-0	-0	-0	-0	-0	-0	-0	-0	-5	-0	-4	-0	LV
MD	-0	-0	-1	-0	-0	-0	-1	-2	-0	-0	-1	-3	-0	-0	-0	-0	-1	-1	-0	-0	-0	-2	-0	-0	-1	-0	-0	-0	-0	-0	-8	MD
ME	-1	-0	-1	-0	-0	-0	-0	-0	-0	0	-1	-2	-0	-0	-0	-0	-1	-0	-0	-0	-1	-1	-0	-0	-1	-0	-0	-0	-0	-0	-0	ME
MK	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-2	-0	-0	-0	-0	-1	-0	-0	-4	-1	-2	-0	-0	-1	-0	-0	-0	-0	-0	-0	MK
MT	-0	0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-2	0	-0	-0	-0	-0	-0	MT
NL	-0	-0	-1	-0	-0	-6	-0	-0	-1	-0	-2	-20	-1	-0	-0	-0	-12	-9	-0	-0	-0	-1	-1	-0	-1	-0	-0	-0	-0	-0	-0	NL
NO	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-3	-1	-0	-0	-0	-1	-1	-0	0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	NO
PL	-0	-0	-1	-0	-0	-1	-0	-2	-0	-0	-4	-20	-2	-0	-0	-0	-4	-2	-0	-0	-1	-3	-0	-0	-2	-0	-0	-0	-0	-0	-0	PL
PT	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-7	-0	-2	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	PT
RO	-0	-0	-1	-0	-0	-0	-1	-1	-1	-0	-1	-3	-0	-0	-0	-0	-1	-0	-0	-0	-1	-5	-0	-0	-1	-0	-0	-0	-0	-0	-1	RO
RS	-0	-0	-1	-0	-1	-0	-0	-0	-0	-0	-1	-5	-0	-0	-0	-0	-2	-0	-0	-1	-2	-7	-0	-0	-1	-0	-0	-0	-0	-0	-0	RS
RUE	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	RUE
SE	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-6	-3	-0	-0	-0	-2	-2	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	SE
SI	-0	-0	-5	-0	-1	-0	-0	-0	-1	-0	-2	-9	-0	-0	-0	-0	-2	-0	-0	-0	-10	-5	-0	-0	-21	-0	-0	-0	-0	-0	-0	SI
SK	-0	-0	-3	-0	-0	-1	-0	-0	-1	-0	-5	-11	-0	-0	-0	-0	-3	-1	-0	-0	-2	-17	-0	-0	-2	-0	-0	-0	-0	-0	-0	SK
TJ	-0	0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	TJ
TM	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	TM
TR	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	TR
UA	-0	-0	-0	-0	-0	-0	-0	-4	-0	-0	-1	-3	-0	-0	-0	-0	-1	-1	-0	-0	-0	-2	-0	-0	-0	-0	-1	-0	-0	-0	-1	UA
UZ	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-3	-0	-0	-0	-0	UZ
ATL	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-2	-1	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	ATL
BAS	-0	-0	-0	-0	-0	-1	-0	-1	-0	-0	-1	-13	-5	-0	-0	-0	-2	-3	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	BAS
BLS	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	BLS
MED	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-1	-0	-2	-0	-0	-0	-0	-0	-0	-0	-4	-0	-0	-0	-0	-0	-0	MED
NOS	-0	-0	-0	-0	-0	-2	-0	-0	-0	-0	-1	-12	-2	-0	-0	-0	-8	-10	-0	-0	-0	-0	-1	-0	-1	-0	-0	-0	-0	-0	-0	NOS
AST	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	AST
NOA	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	NOA
EXC	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-2	-0	-0	-0	-0	-1	-1	-0	-0	-0	-0	-0	-0	-1	-0	-1	-0	-0	-0	-0	EXC
EU	-0	-0	-1	-0	-0	-1	-0	-0	-1	-0	-1	-9	-1	-0	-2	-0	-6	-3	-0	-0	-1	-2	-0	-0	-4	-0	-0	-0	-0	-0	-0	EU
	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	

Table C.28 Cont.: 2011 country-to-country blame matrices for **coarse NO_3**.
Units: ng/m^3 per 15% emis. red. of NH_3. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	
AL	-0	-1	-0	-0	-0	-1	-0	-1	-6	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-26	-11	AL
AM	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-2	-0	-0	0	0	0	0	0	-1	-0	-0	0	0	-10	-0	AM
AT	-0	-0	-0	-1	-0	-1	-0	-1	-2	-0	-0	-3	-1	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-62	-54	AT
AZ	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-1	-0	-0	0	0	0	0	0	-1	-0	-0	0	0	-15	-0	AZ
BA	-0	-0	-0	-0	-0	-1	-0	-2	-7	-0	-0	-0	-1	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-35	-19	BA
BE	-0	-0	-0	-5	-0	-2	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-74	-71	BE
BG	-0	-0	-0	-0	-0	-1	-0	-7	-4	-1	-0	-0	-0	-0	-0	-1	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-28	-21	BG
BY	-0	-0	-0	-1	-0	-11	-0	-1	-0	-3	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-49	-29	BY
CH	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-46	-36	CH
CY	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-2	-0	-0	0	0	0	0	0	-0	-0	0	0	0	-4	-1	CY
CZ	-0	-0	-0	-1	-0	-4	-0	-1	-3	-0	-0	-1	-3	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-1	0	0	-83	-75	CZ
DE	-0	-0	-0	-4	-0	-4	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-76	-73	DE
DK	-0	-0	-0	-6	-0	-5	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-70	-68	DK
EE	-0	-0	-0	-1	-0	-3	-0	-0	-0	-2	-1	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-25	-21	EE
ES	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-22	-21	ES
FI	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-9	-8	FI
FR	-0	-0	-0	-2	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-52	-50	FR
GB	-0	-0	-0	-3	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-45	-45	GB
GE	0	0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-2	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-13	-0	GE
GL	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-1	0	0	-0	-0	GL
GR	-0	-1	-0	-0	-0	-1	-0	-2	-2	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-17	-13	GR
HR	-0	-0	0	-1	-0	-2	-0	-2	-8	-0	-0	-2	-1	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-61	-38	HR
HU	-0	-0	-0	-1	-0	-3	-0	-6	-7	-0	-0	-1	-3	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-81	-66	HU
IE	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-27	-27	IE
IS	0	0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-1	-1	IS
IT	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-48	-45	IT
KG	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	0	0	0	0	0	-0	-0	-0	0	0	-3	-0	KG
KZT	-0	-0	-0	-0	-0	-0	-0	-0	-0	-4	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-9	-1	KZT
LT	-0	-0	-0	-2	-0	-13	-0	-0	-0	-3	-1	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-53	-45	LT
LU	-0	-0	-0	-3	-0	-2	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-74	-72	LU
LV	-0	-0	-0	-2	-0	-6	-0	-0	-0	-2	-1	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-39	-33	LV
MD	-0	-0	-0	-0	-0	-3	-0	-11	-1	-3	-0	-0	-0	-0	-0	-0	-1	-0	0	0	0	0	0	-0	-0	-0	0	0	-42	-27	MD
ME	-2	-0	-0	-0	-0	-1	-0	-1	-7	-0	-0	-0	-0	-0	0	-0	-0	0	0	0	0	0	0	-0	-0	-0	0	0	-22	-11	ME
MK	-0	-4	-0	-0	-0	-1	-0	-2	-9	-0	-0	-0	-1	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-31	-15	MK
MT	-0	-0	-3	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	0	0	0	0	0	0	-0	-0	0	0	0	-8	-7	MT
NL	-0	-0	-0	-12	-0	-4	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-72	-70	NL
NO	-0	0	-0	-1	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-10	-9	NO
PL	-0	-0	-0	-2	-0	-24	-0	-1	-1	-1	-0	-0	-2	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-75	-70	PL
PT	-0	-0	-0	-0	-0	-0	-4	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-15	-15	PT
RO	-0	-0	-0	-0	-0	-2	-0	-18	-4	-1	-0	-0	-1	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-44	-36	RO
RS	-0	-1	-0	-0	-0	-2	-0	-6	-19	-0	-0	-0	-1	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-54	-30	RS
RUE	-0	-0	-0	-0	-0	-0	-0	-0	-0	-5	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-8	-1	RUE
SE	-0	-0	-0	-1	-0	-2	-0	-0	-0	-0	-3	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-22	-21	SE
SI	-0	-0	-0	-1	-0	-2	-0	-2	-4	-0	-0	-11	-1	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-76	-60	SI
SK	-0	-0	-0	-1	-0	-5	-0	-4	-3	-0	-0	-1	-10	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-71	-64	SK
TJ	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-1	0	0	0	0	0	-0	0	-0	0	0	-2	-0	TJ
TM	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-1	-0	-0	-1	0	0	0	0	0	-0	-0	0	0	0	-5	-0	TM
TR	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-8	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-11	-1	TR
UA	-0	-0	-0	-0	-0	-4	-0	-3	-0	-5	-0	-0	-0	-0	-0	-0	-1	-0	0	0	0	0	0	-0	-0	-0	0	0	-31	-18	UA
UZ	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-2	0	0	0	0	0	-0	-0	-0	0	0	-8	-1	UZ
ATL	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-4	-4	ATL
BAS	-0	-0	-0	-3	-0	-6	-0	-0	-0	-1	-3	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-44	-42	BAS
BLS	-0	-0	-0	-0	-0	-1	-0	-3	-0	-3	-0	-0	-0	-0	-0	-1	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-14	-7	BLS
MED	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	0	-0	0	0	-11	-10	MED
NOS	-0	-0	-0	-5	-0	-2	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-45	-44	NOS
AST	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-1	-0	-0	0	0	-2	-0	AST
NOA	0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	0	0	0	-1	-1	NOA
EXC	-0	-0	-0	-0	-0	-1	-0	-0	-0	-3	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-16	-10	EXC
EU	-0	-0	-0	-1	-0	-3	-0	-2	-1	-0	-1	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-44	-40	EU
	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	

Table C.29: 2011 country-to-country blame matrices for **coarse NO_3**.
Units: ng/m^3 per 15% emis. red. of VOC. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	
AL	-0	-0	0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	1	-0	0	0	0	-1	-0	-0	-0	0	-0	-0	AL
AM	-0	-0	-0	-1	-0	0	-0	-0	-0	-0	0	0	-0	-0	-0	-0	-0	0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	AM
AT	-0	-0	-0	-0	0	-0	-0	0	-0	-0	-0	-1	0	-0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	AT
AZ	-0	-0	-0	-2	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	AZ
BA	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	0	-0	-0	-0	-0	-0	-0	-0	BA
BE	0	-0	0	-0	0	0	0	0	0	-0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	-0	0	0	0	BE
BG	0	-0	-0	-0	0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	BG
BY	0	-0	0	-0	0	-0	0	-0	0	-0	0	0	-0	-0	0	-0	0	-0	-0	0	0	0	-0	-0	0	0	-0	-0	-0	0	-0	BY
CH	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	CH
CY	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	0	0	0	-0	-0	-0	-0	0	-0	-0	-0	-0	0	0	-0	-0	0	0	0	-0	-0	CY
CZ	-0	-0	0	-0	0	-0	-0	0	0	-0	0	-0	0	0	0	-0	0	-0	-0	-0	0	1	-0	0	-0	-0	-0	-0	-0	-0	-0	CZ
DE	0	-0	0	-0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	-0	0	0	0	-0	0	0	-0	0	0	-0	0	0	DE
DK	0	-0	0	-0	0	0	0	0	0	-0	0	1	0	0	0	0	1	0	-0	0	0	0	-0	-0	1	-0	-0	-0	0	-0	-0	DK
EE	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	0	-0	0	-0	-0	-0	0	-0	0	-0	-0	-0	0	-0	-0	-0	-0	-0	EE
ES	-0	0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-1	0	-0	-0	-0	0	-0	-0	-0	0	-1	-0	-0	-0	-0	-0	-0	ES
FI	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	FI
FR	0	-0	0	-0	0	0	0	0	-0	0	0	0	-0	0	-0	0	-0	-0	-0	0	-0	0	-0	-0	-1	0	0	-0	-0	-0	-0	FR
GB	0	-0	0	-0	0	0	0	0	0	-0	0	1	-0	0	0	0	1	0	-0	0	0	0	-0	-0	1	0	-0	0	0	0	0	GB
GE	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-2	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	GE
GL	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	GL
GR	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-1	-0	-0	-0	-0	-0	-0	GR
HR	-0	-0	0	-0	0	-0	-0	-0	0	-0	-0	-1	-0	-0	0	-0	-0	-0	-0	-0	0	0	-0	0	2	-0	-0	-0	-0	-0	-0	HR
HU	0	-0	0	-0	0	-0	-0	-0	0	-0	-0	-0	0	-0	0	-0	0	-0	-0	-0	0	1	-0	0	0	-0	-0	-0	-0	-0	-0	HU
IE	0	0	0	-0	0	0	0	-0	0	0	-0	0	0	-0	-0	-0	0	0	0	0	0	0	-0	-0	0	0	-0	-0	-0	-0	-0	IE
IS	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	IS
IT	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	0	0	2	-0	-0	-0	-0	-0	-0	IT
KG	-0	-0	-0	-0	-0	0	-0	0	0	-0	0	0	0	0	-0	0	-0	0	-0	-0	-0	-0	0	0	-0	-0	-0	0	0	0	-0	KG
KZT	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	KZT
LT	0	-0	0	-0	0	-0	0	-0	0	-0	0	-0	-0	-0	0	-0	0	-0	-0	0	0	0	-0	-0	0	-0	-0	-0	-0	-0	-0	LT
LU	0	-0	0	-0	0	0	0	0	0	-0	0	1	0	-0	0	0	0	0	-0	0	0	0	-0	0	0	-0	-0	-0	0	-0	0	LU
LV	0	-0	-0	-0	0	-0	0	-0	-0	-0	0	-0	-0	-0	0	-0	-0	-0	-0	0	0	0	-0	-0	0	0	-0	-0	-0	-0	-0	LV
MD	0	-0	0	-0	0	-0	0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	MD
ME	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-1	-0	-0	-0	-0	-0	-0	ME
MK	0	-0	0	-0	0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1	-0	0	-0	0	-0	-0	-0	-0	-0	-0	-0	MK
MT	-0	0	-0	0	-0	0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	0	0	-2	0	0	-0	0	-0	-0	MT
NL	0	-0	0	-0	0	0	0	0	0	0	0	1	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	-0	0	-0	0	NL
NO	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	NO
PL	0	-0	0	-0	0	0	0	-0	0	0	1	1	0	0	0	-0	1	-0	-0	0	0	1	-0	0	0	-0	-0	0	-0	0	-0	PL
PT	-0	-0	-0	-0	-0	-0	0	-0	-0	0	-0	-0	-0	0	-1	0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	0	-0	0	-0	PT
RO	0	-0	0	-0	0	-0	0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	RO
RS	0	-0	0	-0	0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	1	-0	0	-0	-0	-0	-0	-0	-0	-0	RS
RUE	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	RUE
SE	0	-0	0	-0	-0	0	-0	-0	0	-0	0	0	0	-0	-0	-0	0	-0	-0	0	0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	SE
SI	-0	-0	-0	-0	0	-0	-0	0	0	-0	-0	-1	0	-0	0	-0	-0	-0	-0	-0	0	-0	-0	0	3	-0	-0	-0	-0	-0	-0	SI
SK	0	-0	0	-0	0	-0	-0	-0	0	-0	0	0	0	-0	0	-0	0	-0	-0	-0	0	2	-0	0	0	-0	-0	-0	-0	-0	-0	SK
TJ	-0	-0	0	-0	0	0	-0	0	0	-0	0	0	0	0	0	0	0	0	-0	-0	0	0	0	0	0	0	-0	0	0	0	0	TJ
TM	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	TM
TR	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	TR
UA	0	-0	0	-0	0	-0	0	-0	0	-0	0	0	-0	-0	0	-0	0	-0	-0	-0	0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	UA
UZ	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	UZ
ATL	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	ATL
BAS	0	-0	0	-0	0	0	0	-0	0	0	0	1	0	0	0	-0	0	-0	-0	0	0	0	-0	-0	0	-0	-0	0	-0	-0	-0	BAS
BLS	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	BLS
MED	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	-1	-0	-0	-0	0	-0	-0	MED
NOS	0	-0	0	-0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	-0	0	0	0	-0	-0	1	-0	-0	0	0	0	0	NOS
AST	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	AST
NOA	-0	0	-0	0	-0	-0	-0	0	-0	-0	-0	-0	0	0	-0	0	-0	-0	0	-0	-0	-0	0	0	-1	0	0	0	0	0	-0	NOA
EXC	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	EXC
EU	0	-0	0	-0	0	0	0	-0	0	-0	0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	0	-0	-0	-0	-0	-0	-0	EU
	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	

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Units: ng/m^3 per 15% emis. red. of VOC. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	
AL	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-3	0	0	-3	-2	AL
AM	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	0	0	-3	-0	AM
AT	-0	-0	0	-0	-0	0	0	-0	0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-3	0	0	-2	-2	AT
AZ	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-2	0	0	-6	-1	AZ
BA	-0	-0	0	-0	-0	-1	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-4	0	0	-5	-4	BA
BE	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	-0	0	0	0	-0	0	0	0	0	0	0	-3	0	0	5	4	BE
BG	-0	0	-0	-0	-0	-1	-0	-1	0	-2	-0	0	-0	-0	-0	1	-1	-0	-0	-0	-0	-0	-0	-0	-0	-5	0	0	-5	-2	BG
BY	0	0	0	-0	-0	1	0	0	0	-1	-0	0	0	0	-0	-0	-0	-0	0	-0	-0	0	-0	-0	0	-3	0	0	1	2	BY
CH	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-2	0	0	-2	-2	CH
CY	-0	-0	-0	0	0	0	-0	-0	-0	-0	0	-0	0	-0	-0	-4	-0	-0	-0	0	-0	-0	0	-0	-0	-4	0	0	-5	-1	CY
CZ	-0	0	0	-0	-0	1	0	0	0	-0	-0	0	0	-0	-0	0	-0	-0	0	-0	0	0	-0	-0	0	-3	0	0	2	2	CZ
DE	0	0	0	0	-0	1	0	0	0	0	0	0	0	-0	-0	0	0	-0	0	0	0	0	0	-0	0	-2	0	0	4	4	DE
DK	0	0	0	0	-0	1	0	0	0	-0	0	0	0	-0	-0	0	-0	-0	0	0	0	0	0	-0	0	-2	0	0	6	6	DK
EE	0	0	0	-0	-0	0	0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	0	-0	0	0	-3	0	0	-2	-1	EE
ES	-0	-0	-0	-0	0	-0	-0	-0	-0	0	-0	-0	-0	0	-0	0	-0	-0	-0	-0	0	-0	-0	-0	0	-4	0	0	-3	-3	ES
FI	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-2	0	0	-1	-1	FI
FR	0	0	-0	0	0	0	-0	0	0	0	-0	-0	0	-0	-0	0	0	-0	-0	0	0	-0	0	-0	-0	-3	0	0	-0	-0	FR
GB	0	0	0	0	-0	0	0	0	0	0	-0	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	-2	0	0	5	4	GB
GE	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-2	0	0	-4	-1	GE
GL	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	GL
GR	-0	0	-0	-0	-0	-0	-0	-1	-0	-1	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-5	0	0	-6	-3	GR
HR	-0	-0	0	-0	-0	-0	0	-1	0	-1	-0	0	-0	-0	-0	-0	-0	-0	0	-0	-0	0	-0	-0	0	-4	0	0	-1	-1	HR
HU	0	-0	0	-0	-0	0	0	-0	0	-1	-0	0	0	-0	-0	-0	-0	-0	0	-0	-0	0	-0	-0	0	-3	0	0	1	2	HU
IE	0	0	0	0	-0	-0	-0	0	0	0	-0	0	0	0	0	0	-0	0	-0	-0	0	0	0	0	0	-2	0	0	1	1	IE
IS	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	0	0	-1	-1	IS
IT	-0	-0	0	-0	-0	-0	0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	0	-3	0	0	-1	0	IT
KG	-0	-0	-0	0	0	0	-0	-0	-0	0	0	-0	0	-0	-0	-0	-0	-0	-0	0	-0	-0	0	-0	-0	-1	0	0	-0	-0	KG
KZT	-0	-0	-0	-0	-0	-0	-0	-0	-0	-3	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-4	0	0	-6	-2	KZT
LT	0	0	0	-0	-0	0	0	0	0	-0	-0	0	0	-0	-0	-0	-0	-0	0	-0	-0	0	-0	-0	0	-3	0	0	-1	0	LT
LU	0	0	0	0	0	0	0	0	0	0	-0	0	0	-0	-0	0	0	-0	-0	0	0	0	0	-0	0	-2	0	0	4	4	LU
LV	0	0	0	-0	-0	0	0	-0	0	-0	-0	0	0	0	-0	-0	-0	-0	-0	-0	-0	0	-0	0	0	-3	0	0	-2	-1	LV
MD	-0	0	0	-0	-0	0	-0	1	0	-2	-0	0	0	-0	-0	0	-0	-0	-0	-0	-0	0	-0	-0	0	-5	0	0	-1	1	MD
ME	-0	-0	-0	-0	-0	-1	-0	-1	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-4	0	0	-6	-4	ME
MK	-0	0	-0	-0	-0	-1	-0	-1	-0	-1	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-4	0	0	-3	-2	MK
MT	-0	-0	0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	-0	0	-0	-0	-0	-0	0	-0	-5	0	0	-5	-4	MT
NL	0	0	0	1	0	1	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	-2	0	0	7	6	NL
NO	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	0	-0	-0	-1	0	0	-1	-1	NO
PL	0	0	0	0	0	2	0	0	0	-0	0	0	0	-0	-0	0	-0	-0	0	0	-0	0	0	-0	0	-2	0	0	5	5	PL
PT	-0	-0	-0	-0	0	-0	0	-0	-0	0	0	-0	-0	-0	-0	0	0	-0	-0	-0	0	-0	-0	-0	-0	-4	0	0	-2	-2	PT
RO	0	0	0	-0	-0	-1	-0	1	0	-1	-0	0	-0	-0	-0	0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-5	0	0	-3	-1	RO
RS	-0	0	0	-0	-0	-0	-0	-1	0	-1	-0	0	0	-0	-0	0	-1	-0	0	-0	-0	-0	-0	-0	0	-4	0	0	-3	-2	RS
RUE	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-2	0	0	-2	-1	RUE
SE	-0	-0	0	0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	-0	0	-2	0	0	-0	0	SE
SI	-0	-0	0	-0	0	-0	0	-1	0	-0	-0	0	-0	-0	-0	-0	-0	-0	0	-0	-0	0	-0	-0	0	-3	0	0	-0	0	SI
SK	0	0	0	-0	0	1	0	0	0	-1	0	0	0	-0	-0	-0	-0	-0	0	0	-0	0	0	-0	0	-3	0	0	4	4	SK
TJ	-0	-0	-0	0	0	0	0	0	0	0	0	0	0	-0	-0	-0	0	-0	0	0	0	-0	0	-0	-0	-1	0	0	-0	0	TJ
TM	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-4	0	0	-4	-1	TM
TR	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-3	0	0	-3	-1	TR
UA	0	0	0	-0	-0	1	-0	0	0	-1	-0	0	0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	0	-4	0	0	0	2	UA
UZ	-0	-0	-0	-0	-0	-0	-0	-0	-0	-2	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-4	0	0	-4	-1	UZ
ATL	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-2	0	0	-1	-1	ATL
BAS	0	0	0	0	-0	0	0	-0	0	-0	-0	0	0	-0	-0	0	-0	-0	0	0	0	0	0	-0	0	-2	0	0	2	2	BAS
BLS	-0	-0	-0	-0	-0	-1	-0	-1	-0	-3	-0	-0	-0	-0	-0	0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-5	0	0	-9	-4	BLS
MED	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	0	-0	-0	-0	-0	-0	-0	-5	0	0	-5	-3	MED
NOS	0	0	0	0	-0	0	0	0	0	0	0	0	0	-0	-0	0	0	-0	0	0	0	0	0	-0	0	-2	0	0	5	5	NOS
AST	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-2	0	0	-1	-0	AST
NOA	-0	-0	-0	-0	0	-0	-0	-0	-0	0	0	-0	-0	0	0	-0	-0	0	-0	0	-0	-0	-0	-0	-0	-3	0	0	-2	-2	NOA
EXC	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-2	0	0	-2	-1	EXC
EU	-0	0	0	0	-0	0	-0	-0	0	-0	-0	0	0	-0	-0	0	-0	-0	-0	-0	-0	-0	0	-0	0	-3	0	0	0	0	EU
	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	

Table C.28: 2011 country-to-country blame matrices for **coarse NO_3**.
Units: ng/m^3 per 15% emis. red. of NH_3. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	
AL	-7	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-1	-0	-0	-1	-0	-1	-0	-0	-1	-0	-0	-0	-0	-0	-0	AL
AM	0	-2	-0	-4	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	AM
AT	-0	-0	-10	-0	-0	-0	-0	-0	-2	-0	-3	-16	-0	-0	-0	-0	-4	-1	-0	-0	-3	-4	-0	-0	-10	-0	-0	-0	-0	-0	-0	AT
AZ	-0	-0	-0	-10	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	AZ
BA	-0	-0	-1	-0	-4	-0	-0	-0	-0	-0	-1	-4	-0	-0	-0	-0	-1	-0	-0	-0	-4	-3	-0	-0	-3	-0	-0	-0	-0	-0	-0	BA
BE	-0	-0	-2	-0	-0	-10	-0	-0	-1	-0	-1	-19	-0	-0	-1	-0	-22	-6	-0	-0	-0	-0	-1	-0	-2	-0	-0	-0	-1	-0	-0	BE
BG	-0	-0	-0	-0	-0	-0	-5	-0	-0	-0	-0	-2	-0	-0	-0	-0	-1	-0	-0	-1	-0	-1	-0	-0	-1	-0	-0	-0	-0	-0	-0	BG
BY	-0	-0	-0	-0	-0	-0	-0	-15	-0	-0	-1	-6	-1	-0	-0	-0	-2	-1	-0	-0	-0	-1	-0	-0	-1	-0	-0	-2	-0	-0	-0	BY
CH	-0	-0	-1	-0	-0	-0	-0	-0	-10	-0	-0	-9	-0	-0	-0	-0	-7	-0	-0	-0	-0	-0	-0	-0	-15	-0	-0	-0	-0	-0	-0	CH
CY	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	CY
CZ	-0	-0	-6	-0	-0	-1	-0	-0	-1	-0	-16	-22	-0	-0	-0	-0	-6	-1	-0	-0	-3	-8	-0	-0	-3	-0	-0	-0	-0	-0	-0	CZ
DE	-0	-0	-3	-0	-0	-3	-0	-0	-1	-0	-4	-36	-1	-0	-0	-0	-10	-3	-0	-0	-1	-1	-0	-0	-2	-0	-0	-0	-0	-0	-0	DE
DK	-0	-0	-1	-0	-0	-2	-0	-0	-0	0	-2	-25	-13	-0	-0	-0	-5	-6	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	DK
EE	-0	-0	-0	-0	-0	-0	-0	-2	-0	-0	-0	-4	-1	-3	-0	-0	-1	-2	-0	-0	-0	-0	-0	-0	-0	-0	-0	-2	-0	-2	-0	EE
ES	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-14	-0	-4	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	ES
FI	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-2	-0	-0	-0	-3	-0	-1	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	FI
FR	-0	-0	-1	-0	-0	-2	-0	-0	-2	-0	-1	-9	-0	-0	-2	-0	-25	-2	-0	-0	-0	-0	-0	-0	-4	-0	-0	-0	-0	-0	-0	FR
GB	-0	-0	-0	-0	-0	-2	-0	-0	-0	-0	-0	-7	-0	-0	-0	-0	-9	-20	-0	-0	-0	-0	-2	-0	-1	-0	-0	-0	-0	-0	-0	GB
GE	0	-1	-0	-5	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-5	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	GE
GL	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	GL
GR	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-5	-0	-1	-0	-0	-1	-0	-0	-0	-0	-0	-0	GR
HR	-0	-0	-3	-0	-2	-0	-0	-0	-1	-0	-2	-7	-0	-0	-0	-0	-2	-1	-0	-0	-11	-6	-0	-0	-10	-0	-0	-0	-0	-0	-0	HR
HU	-0	-0	-3	-0	-0	-0	-0	-0	-1	-0	-3	-10	-0	-0	-0	-0	-3	-1	-0	-0	-5	-26	-0	-0	-4	-0	-0	-0	-0	-0	-0	HU
IE	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-2	-0	-0	-0	-0	-5	-12	-0	-0	-0	-0	-6	-0	-0	-0	-0	-0	-0	-0	-0	IE
IS	0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	IS
IT	-0	-0	-2	-0	-0	-0	-0	-0	-1	-0	-1	-3	-0	-0	-0	-0	-1	-0	-0	-0	-1	-1	-0	-0	-35	-0	-0	-0	-0	-0	-0	IT
KG	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	KG
KZT	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-4	-0	-0	-0	-0	KZT
LT	-0	-0	-0	-0	-0	-1	-0	-4	-0	-0	-1	-9	-2	-0	-0	-0	-2	-2	-0	-0	-0	-0	-0	-0	-1	-0	-0	-7	-0	-1	-0	LT
LU	-0	-0	-2	-0	-0	-8	-0	-0	-1	-0	-2	-25	-0	-0	-1	-0	-21	-4	-0	-0	-0	-0	-0	-0	-2	-0	-0	-0	-2	-0	-0	LU
LV	-0	-0	-0	-0	-0	-1	-0	-3	-0	-0	-0	-7	-2	-0	-0	-0	-1	-2	-0	-0	-0	-0	-0	-0	-0	-0	-0	-5	-0	-4	-0	LV
MD	-0	-0	-1	-0	-0	-0	-1	-2	-0	-0	-1	-3	-0	-0	-0	-0	-1	-1	-0	-0	-0	-2	-0	-0	-1	-0	-0	-0	-0	-0	-8	MD
ME	-1	-0	-1	-0	-0	-0	-0	-0	-0	0	-1	-2	-0	-0	-0	-0	-1	-0	-0	-0	-1	-1	-0	-0	-1	-0	-0	-0	-0	-0	-0	ME
MK	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-2	-0	-0	-0	-0	-1	-0	-0	-4	-1	-2	-0	-0	-1	-0	-0	-0	-0	-0	-0	MK
MT	-0	0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-2	0	-0	-0	-0	-0	-0	MT
NL	-0	-0	-1	-0	-0	-6	-0	-0	-1	-0	-2	-20	-1	-0	-0	-0	-12	-9	-0	-0	-0	-1	-1	-0	-1	-0	-0	-0	-0	-0	-0	NL
NO	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-3	-1	-0	-0	-0	-1	-1	-0	0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	NO
PL	-0	-0	-1	-0	-0	-1	-0	-2	-0	-0	-4	-20	-2	-0	-0	-0	-4	-2	-0	-0	-1	-3	-0	-0	-2	-0	-0	-0	-0	-0	-0	PL
PT	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-7	-0	-2	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	PT
RO	-0	-0	-1	-0	-0	-0	-1	-1	-1	-0	-1	-3	-0	-0	-0	-0	-1	-0	-0	-0	-1	-5	-0	-0	-1	-0	-0	-0	-0	-0	-1	RO
RS	-0	-0	-1	-0	-1	-0	-0	-0	-0	-0	-1	-5	-0	-0	-0	-0	-2	-0	-0	-1	-2	-7	-0	-0	-1	-0	-0	-0	-0	-0	-0	RS
RUE	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	RUE
SE	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-6	-3	-0	-0	-0	-2	-2	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	SE
SI	-0	-0	-5	-0	-1	-0	-0	-0	-1	-0	-2	-9	-0	-0	-0	-0	-2	-0	-0	-0	-10	-5	-0	-0	-21	-0	-0	-0	-0	-0	-0	SI
SK	-0	-0	-3	-0	-0	-1	-0	-0	-1	-0	-5	-11	-0	-0	-0	-0	-3	-1	-0	-0	-2	-17	-0	-0	-2	-0	-0	-0	-0	-0	-0	SK
TJ	-0	0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	TJ
TM	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	TM
TR	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	TR
UA	-0	-0	-0	-0	-0	-0	-0	-4	-0	-0	-1	-3	-0	-0	-0	-0	-1	-1	-0	-0	-0	-2	-0	-0	-0	-0	-1	-0	-0	-0	-1	UA
UZ	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-3	-0	-0	-0	-0	UZ
ATL	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-2	-1	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	ATL
BAS	-0	-0	-0	-0	-0	-1	-0	-1	-0	-0	-1	-13	-5	-0	-0	-0	-2	-3	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	BAS
BLS	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	BLS
MED	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-1	-0	-2	-0	-0	-0	-0	-0	-0	-0	-4	-0	-0	-0	-0	-0	-0	MED
NOS	-0	-0	-0	-0	-0	-2	-0	-0	-0	-0	-1	-12	-2	-0	-0	-0	-8	-10	-0	-0	-0	-0	-1	-0	-1	-0	-0	-0	-0	-0	-0	NOS
AST	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	AST
NOA	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	NOA
EXC	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-2	-0	-0	-0	-0	-1	-1	-0	-0	-0	-0	-0	-0	-1	-0	-1	-0	-0	-0	-0	EXC
EU	-0	-0	-1	-0	-0	-1	-0	-0	-1	-0	-1	-9	-1	-0	-2	-0	-6	-3	-0	-0	-1	-2	-0	-0	-4	-0	-0	-0	-0	-0	-0	EU
	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	

Table C.28 Cont.: 2011 country-to-country blame matrices for **coarse NO_3**.
Units: ng/m^3 per 15% emis. red. of NH_3. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	
AL	-0	-1	-0	-0	-0	-1	-0	-1	-6	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-26	-11	AL
AM	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-2	-0	-0	0	0	0	0	0	-1	-0	-0	0	0	-10	-0	AM
AT	-0	-0	-0	-1	-0	-1	-0	-1	-2	-0	-0	-3	-1	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-62	-54	AT
AZ	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-1	-0	-0	0	0	0	0	0	-1	-0	-0	0	0	-15	-0	AZ
BA	-0	-0	-0	-0	-0	-1	-0	-2	-7	-0	-0	-0	-1	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-35	-19	BA
BE	-0	-0	-0	-5	-0	-2	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-74	-71	BE
BG	-0	-0	-0	-0	-0	-1	-0	-7	-4	-1	-0	-0	-0	-0	-0	-1	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-28	-21	BG
BY	-0	-0	-0	-1	-0	-11	-0	-1	-0	-3	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-49	-29	BY
CH	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-46	-36	CH
CY	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-2	-0	-0	0	0	0	0	0	-0	-0	0	0	0	-4	-1	CY
CZ	-0	-0	-0	-1	-0	-4	-0	-1	-3	-0	-0	-1	-3	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-1	0	0	-83	-75	CZ
DE	-0	-0	-0	-4	-0	-4	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-76	-73	DE
DK	-0	-0	-0	-6	-0	-5	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-70	-68	DK
EE	-0	-0	-0	-1	-0	-3	-0	-0	-0	-2	-1	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-25	-21	EE
ES	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-22	-21	ES
FI	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-9	-8	FI
FR	-0	-0	-0	-2	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-52	-50	FR
GB	-0	-0	-0	-3	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-45	-45	GB
GE	0	0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-2	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-13	-0	GE
GL	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-1	0	0	-0	-0	GL
GR	-0	-1	-0	-0	-0	-1	-0	-2	-2	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-17	-13	GR
HR	-0	-0	0	-1	-0	-2	-0	-2	-8	-0	-0	-2	-1	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-61	-38	HR
HU	-0	-0	-0	-1	-0	-3	-0	-6	-7	-0	-0	-1	-3	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-81	-66	HU
IE	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-27	-27	IE
IS	0	0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-1	-1	IS
IT	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-48	-45	IT
KG	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	0	0	0	0	0	-0	-0	-0	0	0	-3	-0	KG
KZT	-0	-0	-0	-0	-0	-0	-0	-0	-0	-4	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-9	-1	KZT
LT	-0	-0	-0	-2	-0	-13	-0	-0	-0	-3	-1	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-53	-45	LT
LU	-0	-0	-0	-3	-0	-2	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-74	-72	LU
LV	-0	-0	-0	-2	-0	-6	-0	-0	-0	-2	-1	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-39	-33	LV
MD	-0	-0	-0	-0	-0	-3	-0	-11	-1	-3	-0	-0	-0	-0	-0	-0	-1	-0	0	0	0	0	0	-0	-0	-0	0	0	-42	-27	MD
ME	-2	-0	-0	-0	-0	-1	-0	-1	-7	-0	-0	-0	-0	-0	0	-0	-0	0	0	0	0	0	0	-0	-0	-0	0	0	-22	-11	ME
MK	-0	-4	-0	-0	-0	-1	-0	-2	-9	-0	-0	-0	-1	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-31	-15	MK
MT	-0	-0	-3	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	0	0	0	0	0	0	-0	-0	0	0	0	-8	-7	MT
NL	-0	-0	-0	-12	-0	-4	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-72	-70	NL
NO	-0	0	-0	-1	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-10	-9	NO
PL	-0	-0	-0	-2	-0	-24	-0	-1	-1	-1	-0	-0	-2	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-75	-70	PL
PT	-0	-0	-0	-0	-0	-0	-4	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-15	-15	PT
RO	-0	-0	-0	-0	-0	-2	-0	-18	-4	-1	-0	-0	-1	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-44	-36	RO
RS	-0	-1	-0	-0	-0	-2	-0	-6	-19	-0	-0	-0	-1	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-54	-30	RS
RUE	-0	-0	-0	-0	-0	-0	-0	-0	-0	-5	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-8	-1	RUE
SE	-0	-0	-0	-1	-0	-2	-0	-0	-0	-0	-3	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-22	-21	SE
SI	-0	-0	-0	-1	-0	-2	-0	-2	-4	-0	-0	-11	-1	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-76	-60	SI
SK	-0	-0	-0	-1	-0	-5	-0	-4	-3	-0	-0	-1	-10	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-71	-64	SK
TJ	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-1	0	0	0	0	0	-0	0	-0	0	0	-2	-0	TJ
TM	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-1	-0	-0	-1	0	0	0	0	0	-0	-0	0	0	0	-5	-0	TM
TR	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-8	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-11	-1	TR
UA	-0	-0	-0	-0	-0	-4	-0	-3	-0	-5	-0	-0	-0	-0	-0	-0	-1	-0	0	0	0	0	0	-0	-0	-0	0	0	-31	-18	UA
UZ	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-2	0	0	0	0	0	-0	-0	-0	0	0	-8	-1	UZ
ATL	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-4	-4	ATL
BAS	-0	-0	-0	-3	-0	-6	-0	-0	-0	-1	-3	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-44	-42	BAS
BLS	-0	-0	-0	-0	-0	-1	-0	-3	-0	-3	-0	-0	-0	-0	-0	-1	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-14	-7	BLS
MED	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	0	-0	0	0	-11	-10	MED
NOS	-0	-0	-0	-5	-0	-2	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-45	-44	NOS
AST	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-1	-0	-0	0	0	-2	-0	AST
NOA	0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	0	0	0	-1	-1	NOA
EXC	-0	-0	-0	-0	-0	-1	-0	-0	-0	-3	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-16	-10	EXC
EU	-0	-0	-0	-1	-0	-3	-0	-2	-1	-0	-1	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	0	-0	-0	-0	0	0	-44	-40	EU
	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	

Table C.29: 2011 country-to-country blame matrices for **coarse NO_3**.
Units: ng/m^3 per 15% emis. red. of VOC. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	
AL	-0	-0	0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	1	-0	0	0	0	-1	-0	-0	-0	0	-0	-0	AL
AM	-0	-0	-0	-1	-0	0	-0	-0	-0	-0	0	0	-0	-0	-0	-0	-0	0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	AM
AT	-0	-0	-0	-0	0	-0	-0	0	-0	-0	-0	-1	0	-0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	AT
AZ	-0	-0	-0	-2	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	AZ
BA	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	0	-0	-0	-0	-0	-0	-0	-0	BA
BE	0	-0	0	-0	0	0	0	0	0	-0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	-0	0	0	0	BE
BG	0	-0	-0	-0	0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	BG
BY	0	-0	0	-0	0	-0	0	-0	0	-0	0	0	-0	-0	0	-0	0	-0	-0	0	0	0	-0	-0	0	0	-0	-0	-0	0	-0	BY
CH	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	CH
CY	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	0	0	0	-0	-0	-0	-0	0	-0	-0	-0	-0	0	0	-0	-0	0	0	0	-0	-0	CY
CZ	-0	-0	0	-0	0	-0	-0	0	0	-0	0	-0	0	0	0	-0	0	-0	-0	-0	0	1	-0	0	-0	-0	-0	-0	-0	-0	-0	CZ
DE	0	-0	0	-0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	-0	0	0	0	-0	0	0	-0	0	0	-0	0	0	DE
DK	0	-0	0	-0	0	0	0	0	0	-0	0	1	0	0	0	0	1	0	-0	0	0	0	-0	-0	1	-0	-0	-0	0	-0	-0	DK
EE	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	0	-0	0	-0	-0	-0	0	-0	0	-0	-0	-0	0	-0	-0	-0	-0	-0	EE
ES	-0	0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-1	0	-0	-0	-0	0	-0	-0	-0	0	-1	-0	-0	-0	-0	-0	-0	ES
FI	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	FI
FR	0	-0	0	-0	0	0	0	0	-0	0	0	0	-0	0	-0	0	-0	-0	-0	0	-0	0	-0	-0	-1	0	0	-0	-0	-0	-0	FR
GB	0	-0	0	-0	0	0	0	0	0	-0	0	1	-0	0	0	0	1	0	-0	0	0	0	-0	-0	1	0	-0	0	0	0	0	GB
GE	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-2	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	GE
GL	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	GL
GR	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-1	-0	-0	-0	-0	-0	-0	GR
HR	-0	-0	0	-0	0	-0	-0	-0	0	-0	-0	-1	-0	-0	0	-0	-0	-0	-0	-0	0	0	-0	0	2	-0	-0	-0	-0	-0	-0	HR
HU	0	-0	0	-0	0	-0	-0	-0	0	-0	-0	-0	0	-0	0	-0	0	-0	-0	-0	0	1	-0	0	0	-0	-0	-0	-0	-0	-0	HU
IE	0	0	0	-0	0	0	0	-0	0	0	-0	0	0	-0	-0	-0	0	0	0	0	0	0	-0	-0	0	0	-0	-0	-0	-0	-0	IE
IS	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	IS
IT	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	0	0	2	-0	-0	-0	-0	-0	-0	IT
KG	-0	-0	-0	-0	-0	0	-0	0	0	-0	0	0	0	0	-0	0	-0	0	-0	-0	-0	-0	0	0	-0	-0	-0	0	0	0	-0	KG
KZT	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	KZT
LT	0	-0	0	-0	0	-0	0	-0	0	-0	0	-0	-0	-0	0	-0	0	-0	-0	0	0	0	-0	-0	0	-0	-0	-0	-0	-0	-0	LT
LU	0	-0	0	-0	0	0	0	0	0	-0	0	1	0	-0	0	0	0	0	-0	0	0	0	-0	0	0	-0	-0	-0	0	-0	0	LU
LV	0	-0	-0	-0	0	-0	0	-0	-0	-0	0	-0	-0	-0	0	-0	-0	-0	-0	0	0	0	-0	-0	0	0	-0	-0	-0	-0	-0	LV
MD	0	-0	0	-0	0	-0	0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	MD
ME	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-1	-0	-0	-0	-0	-0	-0	ME
MK	0	-0	0	-0	0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	1	-0	0	-0	0	-0	-0	-0	-0	-0	-0	-0	MK
MT	-0	0	-0	0	-0	0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	0	0	-2	0	0	-0	0	-0	-0	MT
NL	0	-0	0	-0	0	0	0	0	0	0	0	1	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	-0	0	-0	0	NL
NO	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	NO
PL	0	-0	0	-0	0	0	0	-0	0	0	1	1	0	0	0	-0	1	-0	-0	0	0	1	-0	0	0	-0	-0	0	-0	0	-0	PL
PT	-0	-0	-0	-0	-0	-0	0	-0	-0	0	-0	-0	-0	0	-1	0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	0	-0	0	-0	PT
RO	0	-0	0	-0	0	-0	0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	RO
RS	0	-0	0	-0	0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	1	-0	0	-0	-0	-0	-0	-0	-0	-0	RS
RUE	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	RUE
SE	0	-0	0	-0	-0	0	-0	-0	0	-0	0	0	0	-0	-0	-0	0	-0	-0	0	0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	SE
SI	-0	-0	-0	-0	0	-0	-0	0	0	-0	-0	-1	0	-0	0	-0	-0	-0	-0	-0	0	-0	-0	-0	3	-0	-0	-0	-0	-0	-0	SI
SK	0	-0	0	-0	0	-0	-0	-0	0	-0	0	0	0	-0	0	-0	0	-0	-0	-0	0	2	-0	0	0	-0	-0	-0	-0	-0	-0	SK
TJ	-0	-0	0	-0	0	0	-0	0	0	-0	0	0	0	0	0	0	0	0	-0	-0	0	0	0	0	0	0	-0	0	0	0	0	TJ
TM	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	TM
TR	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	TR
UA	0	-0	0	-0	0	-0	0	-0	0	-0	0	0	-0	-0	0	-0	0	-0	-0	-0	0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	UA
UZ	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	UZ
ATL	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	ATL
BAS	0	-0	0	-0	0	0	0	-0	0	0	0	1	0	0	0	-0	0	-0	-0	0	0	0	-0	-0	0	-0	-0	0	-0	0	-0	BAS
BLS	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	BLS
MED	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	-1	-0	-0	-0	0	-0	-0	MED
NOS	0	-0	0	-0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	-0	0	0	0	-0	-0	1	-0	-0	0	0	0	0	NOS
AST	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	AST
NOA	-0	0	-0	0	-0	-0	-0	0	-0	-0	-0	-0	0	0	-0	0	-0	-0	0	-0	-0	-0	0	0	-1	0	0	0	0	0	-0	NOA
EXC	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	EXC
EU	0	-0	0	-0	0	0	0	-0	0	-0	0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	0	-0	-0	-0	-0	-0	-0	EU
	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	

Table C.29 Cont.: 2011 country-to-country blame matrices for **coarse NO_3**.
Units: ng/m^3 per 15% emis. red. of VOC. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	
AL	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-3	0	0	-3	-2	AL
AM	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	0	0	-3	-0	AM
AT	-0	-0	0	-0	-0	0	0	-0	0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-3	0	0	-2	-2	AT
AZ	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-2	0	0	-6	-1	AZ
BA	-0	-0	0	-0	-0	-1	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-4	0	0	-5	-4	BA
BE	0	0	0	0	0	0	0	0	0	0	0	0	0	-0	-0	0	0	0	-0	0	0	0	0	0	0	-3	0	0	5	4	BE
BG	-0	0	-0	-0	-0	-1	-0	-1	0	-2	-0	0	-0	-0	-0	1	-1	-0	-0	-0	-0	-0	-0	-0	-0	-5	0	0	-5	-2	BG
BY	0	0	0	-0	-0	1	0	0	0	-1	-0	0	0	0	-0	-0	-0	-0	0	-0	-0	0	-0	-0	0	-3	0	0	1	2	BY
CH	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-2	0	0	-2	-2	CH
CY	-0	-0	-0	0	0	0	-0	-0	-0	-0	0	-0	0	-0	-0	-4	-0	-0	-0	0	-0	-0	0	-0	-0	-4	0	0	-5	-1	CY
CZ	-0	0	0	-0	-0	1	0	0	0	-0	-0	0	0	-0	-0	0	-0	-0	0	-0	0	0	-0	-0	0	-3	0	0	2	2	CZ
DE	0	0	0	0	-0	1	0	0	0	0	0	0	0	-0	-0	0	0	-0	0	0	0	0	0	-0	0	-2	0	0	4	4	DE
DK	0	0	0	0	-0	1	0	0	0	-0	0	0	0	-0	-0	0	-0	-0	0	0	0	0	0	-0	0	-2	0	0	6	6	DK
EE	0	0	0	-0	-0	0	0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	0	-0	0	0	-3	0	0	-2	-1	EE
ES	-0	-0	-0	-0	0	-0	-0	-0	-0	0	-0	-0	-0	0	-0	0	-0	-0	-0	-0	0	-0	-0	-0	0	-4	0	0	-3	-3	ES
FI	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-2	0	0	-1	-1	FI
FR	0	0	-0	0	0	0	-0	0	0	0	-0	-0	0	-0	-0	0	0	-0	-0	0	0	-0	0	-0	-0	-3	0	0	-0	-0	FR
GB	0	0	0	0	-0	0	0	0	0	0	-0	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	-2	0	0	5	4	GB
GE	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-2	0	0	-4	-1	GE
GL	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	GL
GR	-0	0	-0	-0	-0	-0	-0	-1	-0	-1	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-5	0	0	-6	-3	GR
HR	-0	-0	0	-0	-0	-0	0	-1	0	-1	-0	0	-0	-0	-0	-0	-0	-0	0	-0	-0	0	-0	-0	0	-4	0	0	-1	-1	HR
HU	0	-0	0	-0	-0	0	0	-0	0	-1	-0	0	0	-0	-0	-0	-0	-0	0	-0	-0	0	-0	-0	0	-3	0	0	1	2	HU
IE	0	0	0	0	-0	-0	-0	0	0	0	-0	0	0	0	0	0	-0	0	-0	-0	0	0	0	0	0	-2	0	0	1	1	IE
IS	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	0	0	-1	-1	IS
IT	-0	-0	0	-0	-0	-0	0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	0	-3	0	0	-1	0	IT
KG	-0	-0	-0	0	0	0	-0	-0	-0	0	0	-0	0	-0	-0	-0	-0	-0	-0	0	-0	-0	0	-0	-0	-1	0	0	-0	-0	KG
KZT	-0	-0	-0	-0	-0	-0	-0	-0	-0	-3	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-4	0	0	-6	-2	KZT
LT	0	0	0	-0	-0	0	0	0	0	-0	-0	0	0	-0	-0	-0	-0	-0	0	-0	-0	0	-0	-0	0	-3	0	0	-1	0	LT
LU	0	0	0	0	0	0	0	0	0	0	-0	0	0	-0	-0	0	0	-0	-0	0	0	0	0	-0	0	-2	0	0	4	4	LU
LV	0	0	0	-0	-0	0	0	-0	0	-0	-0	0	0	0	-0	-0	-0	-0	-0	-0	-0	0	-0	0	0	-3	0	0	-2	-1	LV
MD	-0	0	0	-0	-0	0	-0	1	0	-2	-0	0	0	-0	-0	0	-0	-0	-0	-0	-0	0	-0	-0	0	-5	0	0	-1	1	MD
ME	-0	-0	-0	-0	-0	-1	-0	-1	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-4	0	0	-6	-4	ME
MK	-0	0	-0	-0	-0	-1	-0	-1	-0	-1	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-4	0	0	-3	-2	MK
MT	-0	-0	0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	-0	-0	-0	0	-0	-0	-0	-0	0	-0	-5	0	0	-5	-4	MT
NL	0	0	0	1	0	1	0	0	0	0	0	0	0	-0	0	0	0	0	0	0	0	0	0	0	0	-2	0	0	7	6	NL
NO	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	0	-0	-0	-1	0	0	-1	-1	NO
PL	0	0	0	0	0	2	0	0	0	-0	0	0	0	-0	-0	0	-0	-0	0	0	-0	0	0	-0	0	-2	0	0	5	5	PL
PT	-0	-0	-0	-0	0	-0	0	-0	-0	0	0	-0	-0	-0	-0	0	0	-0	-0	-0	0	-0	-0	-0	-0	-4	0	0	-2	-2	PT
RO	0	0	0	-0	-0	-1	-0	1	0	-1	-0	0	-0	-0	-0	0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-5	0	0	-3	-1	RO
RS	-0	0	0	-0	-0	-0	-0	-1	0	-1	-0	0	0	-0	-0	0	-1	-0	0	-0	-0	-0	-0	-0	0	-4	0	0	-3	-2	RS
RUE	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-2	0	0	-2	-1	RUE
SE	-0	-0	0	0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0	-0	0	-2	0	0	-0	0	SE
SI	-0	-0	0	-0	0	-0	0	-1	0	-0	-0	0	-0	-0	-0	-0	-0	-0	0	-0	-0	0	-0	-0	0	-3	0	0	-0	0	SI
SK	0	0	0	-0	0	1	0	0	0	-1	0	0	0	-0	-0	-0	-0	-0	0	0	-0	0	0	-0	0	-3	0	0	4	4	SK
TJ	-0	-0	-0	0	0	0	0	0	0	0	0	0	0	-0	-0	-0	0	-0	0	0	0	-0	0	-0	-0	-1	0	0	-0	0	TJ
TM	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-4	0	0	-4	-1	TM
TR	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-0	-3	0	0	-3	-1	TR
UA	0	0	0	-0	-0	1	-0	0	0	-1	-0	0	0	-0	-0	-0	-0	-0	-0	-0	-0	0	-0	-0	0	-4	0	0	0	2	UA
UZ	-0	-0	-0	-0	-0	-0	-0	-0	-0	-2	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-4	0	0	-4	-1	UZ
ATL	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-2	0	0	-1	-1	ATL
BAS	0	0	0	0	-0	0	0	-0	0	-0	-0	0	0	-0	-0	0	-0	-0	0	0	0	0	0	-0	0	-2	0	0	2	2	BAS
BLS	-0	-0	-0	-0	-0	-1	-0	-1	-0	-3	-0	-0	-0	-0	-0	0	-1	-0	-0	-0	-0	-0	-0	-0	-0	-5	0	0	-9	-4	BLS
MED	-0	-0	-0	-0	-0	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	-0	0	-0	-0	-0	-0	-0	-0	-5	0	0	-5	-3	MED
NOS	0	0	0	0	-0	0	0	0	0	0	0	0	0	-0	-0	0	0	-0	0	0	0	0	0	-0	0	-2	0	0	5	5	NOS
AST	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-2	0	0	-1	-0	AST
NOA	-0	-0	-0	-0	0	-0	-0	-0	-0	0	0	-0	-0	0	0	-0	-0	0	-0	0	-0	-0	-0	-0	-0	-3	0	0	-2	-2	NOA
EXC	-0	-0	-0	-0	-0	-0	-0	-0	-0	-1	-0	0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-0	-2	0	0	-2	-1	EXC
EU	-0	0	0	0	-0	0	-0	-0	0	-0	-0	0	0	-0	-0	0	-0	-0	-0	-0	-0	-0	0	-0	0	-3	0	0	0	0	EU
	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	

Table C.30: 2011 country-to-country blame matrices for **fine EC**.
Units: ng/m^3 per 15% emis. red. of PPM. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	
AL	32	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3	0	1	0	0	1	0	0	0	0	0	0	AL
AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	AM
AT	0	0	27	0	0	0	0	0	1	0	1	6	0	0	0	0	1	0	0	0	1	3	0	0	3	0	0	0	0	0	0	AT
AZ	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	AZ
BA	0	0	1	0	10	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	3	2	0	0	1	0	0	0	0	0	0	BA
BE	0	0	0	0	0	34	0	0	0	0	0	10	0	0	0	0	20	2	0	0	0	0	0	0	0	0	0	0	1	0	0	BE
BG	0	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	BG
BY	0	0	0	0	0	0	0	25	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	BY
CH	0	0	2	0	0	0	0	0	22	0	0	5	0	0	0	0	6	0	0	0	0	0	0	0	5	0	0	0	0	0	0	CH
CY	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	CY
CZ	0	0	4	0	0	0	0	0	0	0	18	9	0	0	0	0	2	0	0	0	0	3	0	0	0	0	0	0	0	0	0	CZ
DE	0	0	3	0	0	1	0	0	1	0	1	41	0	0	0	0	5	1	0	0	0	1	0	0	0	0	0	0	0	0	0	DE
DK	0	0	0	0	0	1	0	0	0	0	0	5	17	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	DK
EE	0	0	0	0	0	0	0	1	0	0	0	1	0	12	0	3	0	0	0	0	0	0	0	0	0	0	0	1	0	4	0	EE
ES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	ES
FI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	FI
FR	0	0	0	0	0	1	0	0	1	0	0	3	0	0	1	0	38	1	0	0	0	0	0	0	1	0	0	0	0	0	0	FR
GB	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	3	22	0	0	0	0	1	0	0	0	0	0	0	0	0	GB
GE	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	GE
GL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	GL
GR	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	22	0	0	0	0	1	0	0	0	0	0	0	GR
HR	0	0	2	0	3	0	1	0	0	0	1	2	0	0	0	0	1	0	0	0	16	5	0	0	3	0	0	0	0	0	0	HR
HU	0	0	3	0	0	0	0	0	0	0	1	2	0	0	0	0	1	0	0	0	3	41	0	0	1	0	0	0	0	0	0	HU
IE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	7	0	0	0	0	0	0	0	0	IE
IS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	IS
IT	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	51	0	0	0	0	0	0	IT
KG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	KG
KZT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	KZT
LT	0	0	0	0	0	0	0	5	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0	4	0	LT
LU	0	0	1	0	0	6	0	0	0	0	1	17	0	0	0	0	25	1	0	0	0	0	0	0	0	0	0	0	21	0	0	LU
LV	0	0	0	0	0	0	0	2	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	3	0	21	0	LV
MD	0	0	0	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	7	MD
ME	4	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	ME
MK	3	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	6	0	1	0	0	0	0	0	0	0	0	0	MK
MT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	6	0	0	0	0	0	0	MT
NL	0	0	0	0	0	9	0	0	0	0	0	16	0	0	0	0	7	4	0	0	0	0	0	0	0	0	0	0	0	0	0	NL
NO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO
PL	0	0	0	0	0	0	0	1	0	0	2	4	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	PL
PT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PT
RO	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	RO
RS	1	0	1	0	1	0	2	0	0	0	0	1	0	0	0	0	0	0	0	1	1	4	0	0	0	0	0	0	0	0	0	RS
RUE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	RUE
SE	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	SE
SI	0	0	7	0	0	0	0	0	0	0	1	2	0	0	0	0	1	0	0	0	7	3	0	0	7	0	0	0	0	0	0	SI
SK	0	0	2	0	0	0	0	0	0	0	2	2	0	0	0	0	1	0	0	0	1	13	0	0	0	0	0	0	0	0	0	SK
TJ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	TJ
TM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	TM
TR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	TR
UA	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	UA
UZ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	UZ
ATL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	ATL
BAS	0	0	0	0	0	0	0	0	0	0	0	2	2	1	0	4	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	BAS
BLS	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	BLS
MED	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0	0	1	0	0	0	0	5	0	0	0	0	0	0	MED
NOS	0	0	0	0	0	1	0	0	0	0	0	2	1	0	0	0	3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	NOS
AST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	AST
NOA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	NOA
EXC	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	EXC
EU	0	0	1	0	0	1	1	0	0	0	1	5	0	0	2	1	6	2	0	1	0	2	0	0	4	0	0	0	0	0	0	EU
	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	

Table C.30 Cont.: 2011 country-to-country blame matrices for **fine EC**.
Units: ng/m^3 per 15% emis. red. of PPM. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	
AL	1	3	0	0	0	1	0	1	5	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	51	9	AL
AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	5	0	AM
AT	0	0	0	0	0	1	0	1	0	0	0	8	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	57	54	AT
AZ	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	9	0	AZ
BA	1	0	0	0	0	1	0	2	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28	11	BA
BE	0	0	0	4	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	76	75	BE
BG	0	0	0	0	0	1	0	11	2	1	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	51	46	BG
BY	0	0	0	0	0	7	0	1	0	1	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	41	14	BY
CH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	18	CH
CY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	5	0	0	0	0	0	0	15	6	CY
CZ	0	0	0	0	0	8	0	1	0	0	0	1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	56	55	CZ
DE	0	0	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	62	60	DE
DK	0	0	0	1	0	3	0	0	0	0	1	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	33	32	DK
EE	0	0	0	0	0	2	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	26	24	EE
ES	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0	0	22	22	ES
FI	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	18	FI
FR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	47	47	FR
GB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0	0	28	28	GB
GE	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	7	0	GE
GL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	GL
GR	0	1	0	0	0	0	0	2	1	0	0	0	0	0	0	1	0	0	0	0	0	3	0	0	0	0	0	0	35	30	GR
HR	0	0	0	0	0	2	0	3	3	0	0	8	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	51	28	HR
HU	0	0	0	0	0	5	0	10	2	0	0	4	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	85	78	HU
IE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	10	10	IE
IS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	IS
IT	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	61	59	IT
KG	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	4	0	0	0	0	0	0	0	0	0	0	9	0	KG
KZT	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	8	0	KZT
LT	0	0	0	0	0	8	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	36	30	LT
LU	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	75	74	LU
LV	0	0	0	0	0	3	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	36	33	LV
MD	0	0	0	0	0	4	0	24	0	1	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	45	33	MD
ME	14	0	0	0	0	1	0	1	5	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	31	6	ME
MK	0	20	0	0	0	1	0	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44	15	MK
MT	0	0	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	0	0	0	0	0	0	37	36	MT
NL	0	0	0	27	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	67	66	NL
NO	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	2	NO
PL	0	0	0	0	0	54	0	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	73	70	PL
PT	0	0	0	0	0	0	24	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	31	31	PT
RO	0	0	0	0	0	2	0	70	1	1	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	84	81	RO
RS	1	1	0	0	0	2	0	10	23	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51	23	RS
RUE	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	1	RUE
SE	0	0	0	0	1	1	0	0	0	0	3	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	9	8	SE
SI	0	0	0	0	0	2	0	2	1	0	0	104	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	138	129	SI
SK	0	0	0	0	0	11	0	4	1	0	0	1	43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	84	82	SK
TJ	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	3	0	0	0	0	0	1	0	0	0	0	12	0	TJ
TM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	1	0	0	0	0	8	0	TM
TR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	0	0	0	0	0	1	0	0	0	0	0	0	25	1	TR
UA	0	0	0	0	0	4	0	4	0	2	0	0	1	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	23	12	UA
UZ	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	13	0	0	0	0	0	0	0	0	0	0	18	0	UZ
ATL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	ATL
BAS	0	0	0	0	0	4	0	0	0	1	2	0	0	0	0	0	0	0	0	3	0	0	1	0	0	0	0	0	21	20	BAS
BLS	0	0	0	0	0	1	0	3	0	2	0	0	0	0	0	5	1	0	0	0	3	0	0	0	0	0	0	0	16	7	BLS
MED	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	12	0	0	0	0	0	0	16	12	MED
NOS	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	4	0	0	0	0	0	15	14	NOS
AST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	4	0	0	0	0	2	0	AST
NOA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	3	2	NOA
EXC	0	0	0	0	0	1	0	1	0	3	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	15	9	EXC
EU	0	0	0	0	0	5	1	5	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	44	42	EU
	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	

Table C.31: 2011 country-to-country blame matrices for **coarse EC**.
Units: ng/m^3 per 15% emis. red. of PPM. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	
AL	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	AL
AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	AM
AT	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	AT
AZ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	AZ
BA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	BA
BE	0	0	0	0	0	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	BE
BG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	BG
BY	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	BY
CH	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	CH
CY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	CY
CZ	0	0	0	0	0	0	0	0	0	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	CZ
DE	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	DE
DK	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	DK
EE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	EE
ES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	ES
FI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	FI
FR	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	FR
GB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	GB
GE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	GE
GL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	GL
GR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	GR
HR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	HR
HU	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	HU
IE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	IE
IS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	IS
IT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	IT
KG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	KG
KZT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	KZT
LT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	LT
LU	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	LU
LV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	LV
MD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	MD
ME	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	ME
MK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	MK
MT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	MT
NL	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	NL
NO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO
PL	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PL
PT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PT
RO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	RO
RS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	RS
RUE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	RUE
SE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	SE
SI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	SI
SK	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	SK
TJ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	TJ
TM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	TM
TR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	TR
UA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	UA
UZ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	UZ
ATL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	ATL
BAS	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	BAS
BLS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	BLS
MED	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	MED
NOS	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	NOS
AST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	AST
NOA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NOA
EXC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	EXC
EU	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	EU
	AL	AM	AT	AZ	BA	BE	BG	BY	CH	CY	CZ	DE	DK	EE	ES	FI	FR	GB	GE	GR	HR	HU	IE	IS	IT	KG	KZT	LT	LU	LV	MD	

Table C.31 Cont.: 2011 country-to-country blame matrices for **coarse EC**.
Units: ng/m^3 per 15% emis. red. of PPM. **Emitters →, Receptors ↓**. (Based on ECMWF meteorology.)

	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	
AL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	AL
AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	AM
AT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	AT
AZ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	AZ
BA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	BA
BE	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6	BE
BG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	BG
BY	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	BY
CH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	2	CH
CY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	CY
CZ	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	7	CZ
DE	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	15	DE
DK	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	DK
EE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	EE
ES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	ES
FI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	FI
FR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	FR
GB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	GB
GE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	GE
GL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	GL
GR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	GR
HR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	HR
HU	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	HU
IE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	IE
IS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	IS
IT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	IT
KG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	KG
KZT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	KZT
LT	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	LT
LU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	8	LU
LV	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	LV
MD	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	MD
ME	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	ME
MK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	MK
MT	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	4	4	MT
NL	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	11	11	NL
NO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NO
PL	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	16	PL
PT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	PT
RO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	RO
RS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	RS
RUE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	RUE
SE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	SE
SI	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	SI
SK	0	0	0	0	0	3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	SK
TJ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	TJ
TM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	TM
TR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	TR
UA	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	UA
UZ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	UZ
ATL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	ATL
BAS	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	BAS
BLS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	BLS
MED	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	MED
NOS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	NOS
AST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	AST
NOA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NOA
EXC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	EXC
EU	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	EU
	ME	MK	MT	NL	NO	PL	PT	RO	RS	RUE	SE	SI	SK	TJ	TM	TR	UA	UZ	ATL	BAS	BLS	MED	NOS	AST	NOA	BIC	DMS	VOL	EXC	EU	