

Data Report 2012

Acidifying and eutrophying compounds and particulate matter

Anne-Gunn Hjellbrekke

0.07	0.41	0.06	0.05	0.06	0.12	0.10	0.15	0.11	0.12	0.30	0.20
1.71	1.38	0.77	0.34	0.32	0.36	0.22	0.22	0.61	0.88	1.26	0.74
0.44	1.13	0.38	0.30	0.26	0.07	0.10	0.10	0.14	0.32	0.87	0.34
1.02	0.57	1.00	0.55	0.60	0.18	0.40	0.54	0.93	0.64	0.68	0.43
0.86	3.24	0.66	0.68	0.55	0.48	0.42	0.24	0.57	0.59	1.17	0.44
0.91	0.83	1.07	0.38	0.61	0.51	0.41	0.20	1.20	1.03	0.78	0.62
0.66	0.52	0.64	0.44	0.52	0.26	0.25	1.37	0.75	0.36	0.44	0.18
0.93	0.61	0.95	0.77	0.77	0.59	-	0.45	1.22	0.68	0.80	0.51
0.83	0.41	0.92	0.90	0.67	0.43	0.70	0.60	1.02	0.49	0.66	0.39
2.11	2.06	2.23	1.11	0.34	0.65	0.27	0.27	0.33	0.28	0.57	1.36
1.06	0.75	1.18	0.34	0.37	0.33	0.29	0.23	0.22	0.20	1.24	0.93
0.48	1.02	1.63	0.25	0.42	2.77	0.92	0.46	0.40	0.56	0.70	2.31
0.70	1.76	1.64	0.27	0.38	1.17	0.50	0.42	1.06	1.02	0.78	2.04
0.38	1.63	0.79	0.75	0.60	4.15	1.89	0.90	1.02	0.43	1.14	1.91
-	-	-	0.25	0.60	2.27	1.78	0.55	1.31	1.22	1.10	2.04
0.27	1.69	0.43	0.38	0.43	0.82	0.39	0.71	0.52	0.41	1.33	1.51
1.12	3.29	2.15	0.51	0.61	1.24	0.94	0.91	0.51	0.96	1.89	3.77
0.63	2.03	0.68	0.79	0.58	1.54	0.67	0.50	1.28	0.82	1.78	1.76
0.27	2.04	2.08	0.28	0.55	0.66	1.28	0.58	1.10	0.69	2.93	1.68
0.36	1.32	0.71	0.25	0.27	0.30	0.52	1.71	0.35	0.64	1.40	1.13
1.14	0.86	0.98	0.36	0.49	0.45	0.34	0.31	0.37	0.54	0.51	0.57
1.14	2.76	1.92	0.70	0.48	0.55	0.37	0.25	0.45	0.53	0.92	0.91
1.17	1.76	0.73	0.39	0.40	0.13	0.09	0.08	0.17	0.09	0.44	0.90
0.38	1.11	0.05	0.28	0.15	0.13	0.09	0.12	0.21	0.10	0.27	0.51
0.10	0.43	0.49	0.35	0.38	0.29	1.18	0.47	0.80	0.84	0.75	0.84
0.78	1.13	1.00	0.70	1.07	0.94	1.16	0.82	0.84	1.03	1.31	0.88
0.36	1.07	0.33	0.39	0.50	0.28	0.45	0.36	0.57	0.41	1.15	0.64
0.89	-	-	0.74	0.81	0.66	0.55	0.65	0.74	0.84	1.34	1.42
0.74	2.51	0.54	0.33	0.42	0.34	0.39	0.39	0.33	0.56	1.21	0.53
0.86	2.07	0.74	0.37	0.32	0.27	0.82	0.55	0.44	0.63	0.89	0.37
0.41	0.99	0.43	0.35	0.25	0.34	0.76	0.66	0.64	0.69	0.54	0.97
0.34	0.55	0.29	0.23	0.30	0.31	0.33	0.33	0.40	0.31	0.91	0.60
0.43	0.40	0.44	0.43	0.48	0.52	0.43	0.51	0.64	0.42	0.51	0.43
1.39	2.68	1.84	1.45	1.14	2.04	1.37	1.26	1.13	1.32	1.48	1.24
0.31	0.20	0.27	0.31	0.33	0.27	0.31	0.34	0.20	0.37	0.23	0.20
0.75	1.18	1.07	0.76	0.84	0.84	0.88	0.92	0.68	0.95	0.95	1.18
0.54	0.47	0.43	0.54	0.61	0.62	0.59	0.51	0.50	0.73	0.97	0.34
0.36	0.50	0.31	0.42	0.32	0.77	0.82	0.84	1.87	1.08	1.52	2.27
0.23	0.24	0.28	0.49	0.35	0.43	0.39	0.53	0.45	0.27	0.30	0.24
0.35	0.24	0.53	0.49	0.49	0.31	0.30	0.43	0.62	0.28	0.34	0.28
0.54	0.53	0.92	1.43	0.54	0.47	0.27	0.64	0.22	0.91	0.94	0.89

NILU : EMEP/CCC-Report 3/2014
REFERENCE : O-7726
DATE : AUGUST 2014

**EMEP Co-operative Programme for Monitoring and Evaluation
of the Long-range Transmission of Air Pollutants
in Europe**

Data Report 2012
**Acidifying and eutrophying compounds and
particulate matter**

Anne-Gunn Hjellbrekke



Norwegian Institute for Air Research
PO Box 100, NO-2027 Kjeller, Norway

Contents

	Page
1. Introduction.....	5
2. The measurement network.....	5
3. Site codes.....	8
4. The measurement programme during 2011	8
5. Sampling and analytical methods.....	10
6. Laboratory intercomparison.....	10
7. Calculation of excess sulphate in precipitation	10
8. Annual summaries of the data	11
8.1 Maps over Europe.....	11
8.2 Annual summaries in tables.....	11
9. Update	20
10. References	20
11. Acknowledgements	21
12. List of participating institutions	22
Annex 1 Maps over Europe	23
Annex 2 Annual statistics on precipitation data.....	31
Annex 3 Annual statistics on gases and aerosol data	57
Annex 4 Overview of sampling and analytical methods 2012	83
Annex 5 List of data reports.....	127
Annex 6 Description of statistical calculation procedures.....	141
Annex 7 EMEP Data Quality Objectives (DQO)	145

Data Report 2012

Acidifying and eutrophying compounds and particulate matter

1. Introduction

Measurements of air quality in Europe have been carried out under the "Co-operative programme for monitoring and evaluation of the long-range transmission of air pollutants in Europe" (EMEP) since 1 October 1977. From the start, priority was given to sulphur dioxide and sulphate in air, and pH and sulphate in precipitation, gradually increasing to all main components in precipitation and ozone and nitrogen compounds in air. Furthermore, VOC, POPs, heavy metals and particulate matter are included in the monitoring programme (ECE/EB.AIR/GE.1/2009/15).

The EMEP data from 2012 for particulate matter, acidifying and eutrophying components in air and precipitation are presented in this report, which aims to give a short overview of the measurement data available. A complete set of data, including raw data, annual statistics and monthly means, can be downloaded from the web at <http://ebas.nilu.no> and <http://www.nilu.no/projects/ccc/>.

The air and precipitation samples were analysed at the laboratories in the participating countries and the results have been forwarded to the Chemical Co-ordinating Centre (CCC) at the Norwegian Institute for Air Research (NILU).

2. The measurement network

The locations of the measurement sites for acidifying and eutrophying components are given in Table 1 and Figure 1. In addition to the network presented here, there are additional sites with other types of measurements.

In total, precipitation data from 90 stations and air data from 116 stations are presented in this report. The total number of measurement sites in this report is 135.

In some parts of Europe, the site density is low and highly unsatisfactory. There is a need for more sites especially in the Mediterranean region and in the eastern parts of Europe.

For detailed information on sites and their surroundings please see descriptions at <http://www.nilu.no/projects/ccc/sitedescriptions/>.

Table 1: List of EMEP monitoring stations in operation in 2012.

Country	Station codes	Station name	Location		Height above sea (m)
			Lat.	Long.	
Armenia	AM0001R	Amberd	40°23'04"N	044°15'38"E	2080
Austria	AT0002R	Illmitz	47°46'00"N	016°46'00"E	117
	AT0005R	Vorhegg	46°40'40"N	012°58'20"E	1020
	AT0048R	Zoebelboden	47°50'19"N	014°26'29"E	899
Belarus	BY0004R	Vysokoe	52°20'00"N	023°26'00"E	163
Belgium	BE0001R	Offagne	49°52'40"N	005°12'13"E	430
	BE0032R	Eupen	50°37'46"N	006°00'04"E	295
	BE0035R	Vezin	50°30'12"N	004°59'22"E	160
Croatia	HR0002R	Puntijarka	45°54'00"N	015°58'00"E	988
	HR0004R	Zavizan	44°49'00"N	014°59'00"E	1594
Cyprus	CY0002R	Ayia Marina	35°02'21"N	033°03'29"E	532
Czech Rep.	CZ0001R	Svratouch	49°44'00"N	016°03'00"E	737
	CZ0003R	Košetice	49°35'00"N	015°05'00"E	534
	CZ0005R	Churanov	49°04'00"N	013°36'00"E	1118
Denmark	DK0003R	Tange	56°21'00"N	009°36'00"E	13
	DK0005R	Keldsnor	54°44'00"N	010°44'00"E	10
	DK0008R	Anholt	56°43'00"N	011°31'00"E	40
	DK0010G	Nord, Greenland	81°36'00"N	016°40'12"W	20
	DK0012R	Risoe	55°41'37"N	012°05'09"E	3
	DK0022R	Sepstrup Sande	55°05'00"N	009°36'00"E	60
	DK0031R	Ulborg	56°17'00"N	008°26'00"E	10
Estonia	EE0009R	Lahemaa	59°30'00"N	025°54'00"E	32
	EE0011R	Vilsandi	58°23'00"N	021°49'00"E	6
Finland	FI0004R	Ähtäri	62°32'00"N	024°13'18"E	162
	FI0009R	Utö	59°46'45"N	021°22'38"E	7
	FI0017R	Virolahti II	60°31'36"N	027°41'10"E	4
	FI0022R	Oulanka	66°19'13"N	029°24'06"E	310
	FI0036R	Pallas (Matorova)	68°00'00"N	024°14'23"E	340
	FI0037R	Ähtäri II	62°35'00"N	024°11'00"E	180
	FI0050R	Hyttiälä	61°51'00"N	024°17'00"E	181
France	FR0008R	Donon	48°30'00"N	007°08'00"E	775
	FR0009R	Revin	49°54'00"N	004°38'00"E	390
	FR0010R	Morvan	47°16'00"N	004°05'00"E	620
	FR0013R	Peyrusse Vieille	43°37'00"N	000°11'00"E	200
	FR0014R	Montandon	47°18'00"N	006°50'00"E	836
	FR0015R	La Tardière	46°39'00"N	000°45'00"W	133
	FR0016R	Le Casset	45°00'00"N	006°28'00"E	1750
	FR0017R	Montfranc	45°48'00"N	002°04'00"E	810
	FR0018R	La Coulonche	48°38'00"N	000°27'00"W	309
	FR0019R	Pic du Midi	42°56'12"N	000°08'31"E	2877
Germany	FR0030R	Puy de Dôme	45°46'00"N	002°57'00"E	1465
	DE0001R	Westerland	54°55'32"N	008°18'35"E	12
	DE0002R	Waldhof	52°48'08"N	010°45'34"E	74
	DE0003R	Schauinsland	47°54'53"N	007°54'31"E	1205
	DE0004R	Deuselbach	49°45'53"N	007°03'07"E	480
	DE0005R	Brotjacklriegel	48°49'10"N	013°13'09"E	1016
	DE0007R	Neuglobsow	53°10'00"N	013°02'00"E	62
	DE0008R	Schmücke	50°39'00"N	010°46'00"E	937
	DE0009R	Zingst	54°26'00"N	012°44'00"E	1
	DE0044R	Melpitz	51°31'48"N	012°55'48"E	86
Greece	GR0001R	Aliartos	38°22'00"N	023°05'00"E	110
Hungary	HU0002R	K-puszt	46°58'00"N	019°35'00"E	125
Iceland	IS0002R	Irafoss	64°05'00"N	021°01'00"W	66
	IS0091R	Storhofdi	63°24'00"N	020°17'00"W	118
Ireland	IE0001R	Valentia Observatory	51°56'23"N	010°14'40"W	11
	IE0005R	Oak Park	52°52'07"N	006°55'29"W	59
	IE0006R	Malin Head	55°22'30"N	007°20'34"W	20
	IE0007R	Glenveagh	55°03'07"N	007°56'24"W	44
	IE0008R	Carnsore Point	52°11'06"N	006°22'06"W	9
	IE0009R	Johnstown Castle	52°17'56"N	006°30'39"W	62
Italy	IT0001R	Montelibretti	42°06'00"N	012°38'00"E	48
	IT0004R	Ispira	45°48'00"N	008°38'00"E	209
Latvia	LV0010R	Rucava	56°09'43"N	021°10'23"E	18
Lithuania	LT0015R	Preila	55°21'00"N	021°04'00"E	5
Macedonia	MK0007R	Lazaropole	41°32'10"N	020°41'38"E	1332
Moldova	MD0013R	Leova II	46°29'18"N	028°17'01"E	166
Montenegro	ME0008R	Zabljak	43°09'00"N	019°08'00"E	1450

Table 1, cont.

Country	Station codes	Station name	Location		Height above sea (m)
			Lat.	Long.	
Netherlands	NL0007R	Eibergen	52°05'00"N	006°34'00"E	20
	NL0008R	Bilthoven	52°07'00"N	005°12'00"E	5
	NL0009R	Kollumerwaard	53°20'02"N	006°16'38"E	1
	NL0010R	Vredepeel	51°32'28"N	005°51'13"E	28
	NL0091R	De Zilk	52°18'00"N	004°30'00"E	4
	NL0644R	Cabauw Wielsekade	51°58'28"N	004°55'25"E	1
Norway	NO0001R	Birkenes	58°23'00"N	008°15'00"E	190
	NO0002R	Birkenes II	58°23'19"N	008°15'07"E	219
	NO0015R	Tustervatn	65°50'00"N	013°55'00"E	439
	NO0039R	Kårvatn	62°47'00"N	008°53'00"E	210
	NO0042G	Zeppelin mountain (Ny-Ålesund)	78°54'24"N	011°53'18"E	474
	NO0056R	Hurdal	60°22'21"N	011°04'41"E	300
Poland	PL0002R	Jarczew	51°49'00"N	021°59'00"E	180
	PL0003R	Sniezka	50°44'00"N	015°44'00"E	1603
	PL0004R	Leba	54°45'00"N	017°32'00"E	2
	PL0005R	Diabla Gora	54°09'00"N	022°04'00"E	157
Romania	RO0008R	Poiana Stampei	47°19'29"N	025°08'05"E	908
Russian Federation	RU0001R	Janiskoski	68°56'00"N	028°51'00"E	118
	RU0013R	Pinega	64°42'00"N	043°24'00"E	28
	RU0018R	Danki	54°54'00"N	037°48'00"E	150
	RU0020R	Lesnoy	56°31'48"N	032°56'24"E	340
Serbia	RS0005R	Kamenicki vis	43°24'00"N	021°57'00"E	813
Slovakia	SK0002R	Chopok	48°56'00"N	019°35'00"E	2008
	SK0004R	Stará Lesná	49°09'00"N	020°17'00"E	808
	SK0006R	Starina	49°03'00"N	022°16'00"E	345
	SK0007R	Topolníky	47°57'36"N	017°51'38"E	113
Slovenia	SI0008R	Iskrba	45°34'00"N	014°52'00"E	520
Spain	ES0001R	San Pablo de los Montes	39°32'52"N	004°20'55"W	917
	ES0005R	Noya	42°43'41"N	008°55'25"W	683
	ES0006R	Mahón	39°52'00"N	004°19'00"E	78
	ES0007R	Víznar	37°14'00"N	003°32'00"W	1265
	ES0008R	Niembro	43°26'32"N	004°51'01"W	134
	ES0009R	Campisábalos	41°16'52"N	003°08'34"W	1360
	ES0010R	Cabo de Creus	42°19'10"N	003°19'01"E	23
	ES0011R	Barcarrota	38°28'33"N	006°55'22"W	393
	ES0012R	Zarra	39°05'10"N	001°06'07"W	885
	ES0013R	Penausende	41°17'00"N	005°52'00"W	985
	ES0014R	Els Torms	41°24'00"N	000°43'00"E	470
	ES0016R	O Saviñao	43°13'52"N	007°41'59"W	506
	ES0017R	Doñana	37°01'50"N	006°19'55"W	5
	ES1778R	Montseny	41°46'00"N	002°21'00"E	700
	SE0005R	Bredkälén	63°51'00"N	015°20'00"E	404
	SE0011R	Vavihill	56°01'00"N	013°09'00"E	175
	SE0012R	Aspvreten	58°48'00"N	017°23'00"E	20
	SE0014R	Råö	57°23'38"N	011°54'50"E	5
Switzerland	CH0001G	Jungfrauoch	46°32'51"N	007°59'06"E	3578
	CH0002R	Payerne	46°48'47"N	006°56'41"E	489
	CH0003R	Tänikon	47°28'47"N	008°54'17"E	539
	CH0004R	Chaumont	47°02'59"N	006°58'46"E	1137
	CH0005R	Rigi	47°04'03"N	008°27'50"E	1031
United Kingdom	GB0002R	Eskdalemuir	55°18'47"N	003°12'15"W	243
	GB0006R	Lough Navar	54°26'35"N	007°52'12"W	126
	GB0013R	Yarner Wood	50°35'47"N	003°42'47"W	119
	GB0014R	High Muffles	54°20'04"N	000°48'27"W	267
	GB0015R	Strath Vaich Dam	57°44'04"N	004°46'28"W	270
	GB0031R	Aston Hill	52°30'14"N	003°01'59"W	370
	GB0033R	Bush	55°51'31"N	003°12'18"W	180
	GB0036R	Harwell	51°34'23"N	001°19'00"W	137
	GB0037R	Ladybower Res.	53°23'56"N	001°45'12"W	420
	GB0038R	Lullington Heath	50°47'34"N	000°10'46"E	120
	GB0043R	Narberth	51°14'00"N	004°42'00"W	160
	GB0045R	Wicken Fen	52°17'54"N	000°17'34"W	5
	GB0048R	Auchencorth Moss	55°47'32"N	003°14'34"W	260
	GB0050R	St. Osyth	51°46'41"N	001°04'56"E	8
	GB0051R	Market Harborough	52°33'16"N	000°46'20"W	145
	GB0053R	Charlton Mackrell	51°03'23"N	002°41'00"W	54
	GB0054R	Glen Saugh	56°54'26"N	002°33'33"W	85

3. Site codes

The site codes used in this report are the codes used for data submission and storage in the EMEP database. The codes consist of the two-letter ISO code for the countries, a four-digit number and a letter indicating the type of station, regional (R) or global (G). The station numbers have been retained from previous codes used.

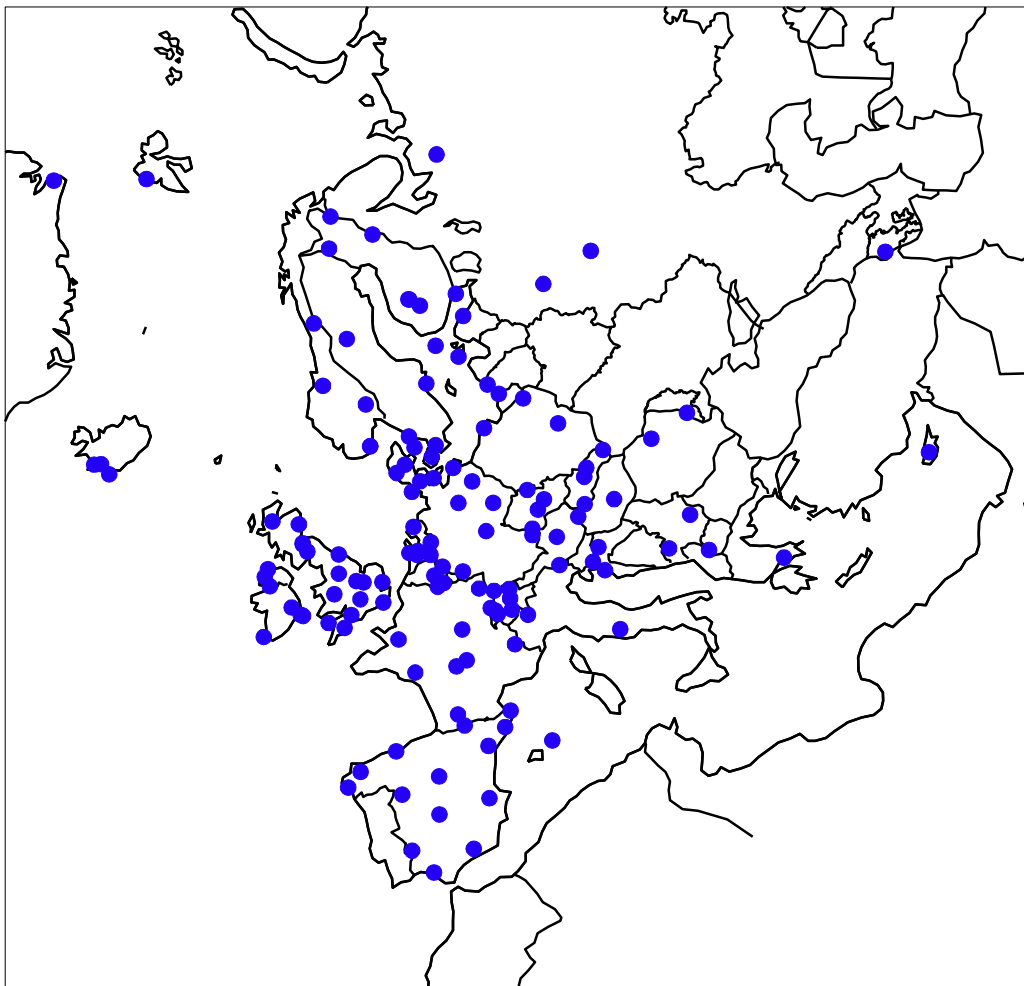


Figure 1: Location of the EMEP monitoring stations in operation in 2012. Sites with ozone/VOC measurements only are not included.

4. The measurement programme during 2012

EMEP's measurement programme during 2012 is presented in Table 2. A few sites have a less extensive measurement programme, as can be seen from the data tables in this report. Most sites measure air as well as precipitation components. However, some sites perform either the one or the other type of measurements.

Table 2: EMEP's measurement programme 2012.

	Components	Measurement period	Measurement frequency
Gas	SO ₂ , NO ₂	24 hours	daily
	O ₃	hourly means stored	continuously
	Light hydrocarbons C ₂ -C ₇	10-15 mins	twice weekly
	Ketones and aldehydes (VOC)	8 hours	twice weekly
	Hg	24 hours	weekly
Particles	SO ₄ ²⁻ , NH ₄ ⁺ , NO ₃ ⁻ , Ca ²⁺ , Mg ²⁺ , Na ⁺ , K ⁺ , Cl ⁻	24 hours	daily
	Cd, Pb (first priority), Cu, Zn, As, Cr, Ni (second priority)	weekly	weekly
	PM mass (PM ₁₀ + PM _{2.5})	24 hours	daily
	EC, OC and mineral dust in PM ₁₀	daily/weekly	daily/weekly
Gas + particles	HNO ₃ (g)+NO ₃ ⁻ (p), NH ₃ (g)+NH ₄ ⁺ (p)	24 hours	daily
	POPs (PAH, PCB, HCB, chlordane, lindane, α-HCH, DDT/DDE)	daily/weekly	once weekly
Precipitation	Amount, SO ₄ ²⁻ , NO ₃ ⁻ , Cl ⁻ , pH, NH ₄ ⁺ , Na ⁺ , Mg ²⁺ , Ca ²⁺ , K ⁺ , conductivity	24 hours/weekly	daily/weekly
	Hg, Cd, Pb (first priority), Cu, Zn, As, Cr, Ni (second priority)	weekly	weekly
	POPs (PAH, PCB, HCB, chlordane, lindane, α-HCH, DDT/DDE)	weekly	weekly

Measurements of VOC, heavy metals and POPs are made at a small number of sites only.

The VOC data from 2012 have been reported separately by Solberg (2014), while ozone data from 2012 have been reported by Hjellbrekke and Solberg (2014). Heavy metals and POPs were reported by Aas and Nizzetto (2014). More details on particulate matter measurements are presented in the status report (Fagerli et al., 2014).

A list of data reports from EMEP/CCC can be found in Annex 5. All data reports are also available on the web in pdf format at <http://www.nilu.no/projects/ccc/reports.html>.

5. Sampling and analytical methods

The recommended procedures for sampling and analysis of precipitation and air are described in the EMEP Manual for sampling and chemical analysis (EMEP/CCC, 2014). The methods used by the participating countries are given in Annex 4.

Generally, concentrations of gaseous nitric acid and ammonia, and of nitrate and ammonium in aerosol particles are determined by filter pack sampling. However, sampling artefacts due to the volatile nature of ammonium nitrate, and the possible interaction with strong acids, e.g. sulphuric acid, make separation of gases and particles by simple aerosol filters unreliable. Therefore only the sums of nitric acid and nitrate, and of ammonium and ammonia are unbiased.

6. Laboratory intercomparison

The 30th laboratory intercomparison is representative for the 2012 data. Results are presented at <http://www.nilu.no/projects/ccc/intercomparison/>.

A series of EMEP's sites will also report data to WMO, and common reporting and quality assurance routines have been developed between EMEP and WMO GAW.

7. Calculation of excess sulphate in precipitation

The sulphate in precipitation is stored in the database as reported, i.e. total sulphate, and as corrected, non-marine sulphate, i.e. total sulphate minus sulphate originating from sea-salt particles.

CCC has since 1994 used a routine worked out by the Canadian Air and Precipitation Monitoring Network (CAPMoN) for calculation of the marine contribution to sulphate in precipitation. The routine has further been adopted by the WMO GAW.

When the sulphate concentrations originating from sea-salt are larger than the total sulphate, and the corrected sulphate concentrations consequently become less than zero, negative concentrations have been stored in the database and have been used to calculate averages in the report in order to avoid bias in the aggregates. Negative concentrations are mainly caused by random errors in the data and occur when non sea-salt sulphate concentrations are low compared to total sulphate.

8. Annual summaries of the data

8.1 Maps over Europe

Geographical distributions based on annual means of SO_2 , NO_2 , SO_4^{2-} , PM_{10} and $\text{PM}_{2.5}$ in air and pH, NH_4^+ , NO_3^- , Ca and excess SO_4^{2-} in precipitation are shown in Annex 1.

8.2 Annual summaries in tables

Annual statistics of the precipitation data are given in Annex 2 and of the air data in Annex 3. The precipitation component summaries contain:

- the precipitation weighted arithmetic mean value,
- the minimum and maximum daily concentrations,
- the wet deposition,
- percent of total precipitation amount analysed for a specific component (completeness for precipitation data),
- the number of data below the detection limit.

The wet depositions have been obtained by multiplying the weighted mean concentration by the total amount of precipitation in the period. The concentrations for days with missing precipitation data have consequently been assumed to be equal to the weighted average of the period.

Concentrations less than zero may exist in the database for sulphate in precipitation corrected for sea-salt. This occurs whenever the sea-salt contribution is larger than the total sulphate concentration, and it is caused by random errors in the results. The negative values have been included in the estimation of the weighted arithmetic mean values.

For air components the statistical summaries in Annex 3 contain:

- arithmetic mean and standard deviation,
- geometric mean and standard deviation,
- minimum and maximum daily concentrations,
- 5-percentile, median and 95-percentile,
- data capture,
- the number of data below the detection limit and total number of samples.

A description of the calculation procedures is given in Annex 6.

In addition to the statistical summaries in Annex 2 and Annex 3 annual averages are summarized in Tables 3-6. The units used for the results in this report are given in Table 7.

Table 3: Annual averages of main components in precipitation 2012.

Code	mm	mm off	pH	SO ₄	XSO ₄	NH ₄	NO ₃	Na	Mg	Cl	Ca	K	cond
AM0001R	-	217.40	6.53	0.82	0.79	0.84	0.59	0.17	0.18	0.90	2.57	0.55	37
BY0004R	586.7	-	6.11	0.71	0.66	0.50	0.35	0.31	0.11	-	0.59	3.50	38
CH0002R	1040.4	-	5.59	0.17	0.17	0.39	0.26	0.08	0.02	0.14	0.23	0.03	7
CH0004R	1278.1	-	5.35	0.13	0.12	0.20	0.18	0.08	0.02	0.15	0.18	0.02	6
CH0005R	1391.4	-	5.58	0.19	0.19	0.43	0.29	0.08	0.02	0.12	0.23	0.03	8
CZ0001R	736.1	-	4.89	0.38	0.37	0.54	0.41	0.10	0.03	0.18	0.22	0.05	15
CZ0003R	722.2	-	5.22	0.33	0.32	0.50	0.38	0.06	0.03	0.20	0.48	0.09	13
CZ0005R	1205.0	-	5.01	0.29	0.28	0.43	0.33	0.08	0.02	0.23	0.31	0.04	12
DE0001R	979.4	-	5.17	0.59	0.23	0.51	0.39	4.27	0.52	7.70	0.26	0.17	42
DE0002R	597.9	-	5.14	0.30	0.26	0.56	0.38	0.40	0.05	0.70	0.10	0.04	14
DE0003R	1930.8	-	5.22	0.17	0.16	0.31	0.20	0.19	0.02	0.29	0.08	0.02	9
DE0004R	776.0	-	5.45	0.26	0.24	0.40	0.29	0.28	0.04	0.48	0.18	0.02	10
DE0005R	1288.7	-	5.17	0.19	0.17	0.38	0.32	0.12	0.01	0.24	0.07	0.02	9
DE0007R	569.6	-	5.19	0.33	0.30	0.62	0.44	0.44	0.05	0.63	0.22	0.06	14
DE0008R	1217.8	-	5.14	0.25	0.24	0.40	0.37	0.21	0.04	0.33	0.14	0.03	11
DE0009R	502.2	-	5.33	0.32	0.25	0.60	0.40	0.85	0.09	1.45	0.17	0.08	16
DE0044R	403.4	-	5.19	0.37	0.35	0.73	0.42	0.24	0.04	0.44	0.16	0.08	14
DK0005R	499.7	-	-	0.39	0.25	0.49	0.43	1.68	0.22	3.06	0.21	0.24	-
DK0008R	624.8	-	-	0.39	0.23	0.40	0.44	1.41	0.23	3.51	0.18	0.10	-
DK0022R	803.0	-	-	0.27	0.15	0.40	0.37	1.47	0.19	1.90	0.19	0.07	-
DK0031R	629.1	-	-	0.33	0.18	0.38	0.35	1.86	0.15	3.15	0.12	0.07	-
EE0009R	947.9	-	4.62	0.20	0.19	0.13	0.22	0.23	0.05	0.31	0.52	0.07	7
EE0011R	891.2	-	4.69	0.32	0.26	0.32	0.32	0.75	0.15	1.16	0.68	0.15	14
ES0001R	518.5	-	5.82	0.16	0.15	0.19	0.16	0.16	0.04	0.31	0.36	0.12	7
ES0005R	1840.8	-	5.39	0.29	0.14	0.06	0.07	1.73	0.21	2.86	0.14	0.08	16
ES0006R	174.7	-	5.63	2.60	0.20	0.23	0.69	28.79	3.56	47.28	2.88	1.04	193
ES0007R	599.7	-	6.49	0.27	0.25	0.32	0.21	0.22	0.18	0.43	1.34	0.12	14
ES0008R	948.2	-	4.57	0.58	0.32	0.30	0.80	2.85	0.42	4.88	0.53	0.18	41
ES0009R	298.2	-	6.28	0.51	0.47	1.08	0.72	0.50	0.18	0.72	2.20	0.22	27
ES0011R	444.2	-	6.18	0.14	0.11	0.17	0.16	0.38	0.17	0.55	0.54	0.20	9
ES0012R	350.5	-	6.00	0.30	0.26	0.29	0.26	0.44	0.11	0.66	1.13	0.09	13
ES0013R	421.0	-	5.93	0.20	0.18	0.41	0.26	0.27	0.07	0.39	0.37	0.07	9
ES0014R	406.7	-	6.35	0.39	0.37	0.53	0.40	0.35	0.14	0.52	1.59	0.11	17
ES0016R	1274.5	-	5.73	0.17	0.11	0.25	0.08	0.74	0.10	1.22	0.23	0.12	10
ES0017R	361.0	-	5.46	0.28	0.19	0.11	0.18	1.01	0.14	1.67	0.32	0.05	13
FI0004R	769.3	-	4.86	0.17	0.16	0.11	0.19	0.08	0.02	0.13	0.08	0.09	8
FI0017R	792.7	-	4.77	0.31	0.30	0.23	0.29	0.17	0.04	0.29	0.14	0.09	12
FI0022R	644.9	-	4.82	0.15	0.14	0.06	0.13	0.06	0.01	0.10	0.03	0.03	8
FI0036R	649.3	-	4.81	0.14	0.14	0.06	0.13	0.06	0.01	0.10	0.03	0.02	8
FR0008R	1559.1	-	5.31	0.20	0.18	0.28	0.24	0.37	0.04	0.34	0.15	0.04	8
FR0009R	1120.2	-	5.39	0.25	0.20	0.38	0.30	0.69	0.08	0.97	0.18	0.04	11
FR0010R	1155.1	-	5.56	0.19	0.15	0.25	0.22	0.57	0.06	0.72	0.24	0.12	9
FR0013R	732.5	-	5.51	0.27	0.19	0.25	0.21	0.98	0.13	1.47	0.47	0.11	13
FR0014R	1417.2	-	5.48	0.20	0.18	0.31	0.24	0.31	0.03	0.26	0.23	0.04	8
FR0015R	1064.8	-	5.71	0.26	0.13	0.24	0.14	1.56	0.20	2.48	0.34	0.08	16
FR0016R	802.7	-	5.62	0.15	0.14	0.14	0.17	0.21	0.04	0.15	0.54	0.05	7
FR0017R	1227.6	-	5.49	0.20	0.15	0.23	0.18	0.59	0.07	0.79	0.21	0.05	9
FR0018R	1010.3	-	5.62	0.23	0.14	0.28	0.18	1.19	0.14	1.81	0.17	0.06	13
GB0002R	1517.3	-	5.20	0.20	0.12	0.27	0.14	1.09	0.12	1.93	0.11	0.08	12
GB0006R	1559.6	-	5.40	0.31	0.10	0.15	0.07	2.56	0.30	4.53	0.22	0.12	21
GB0013R	1407.5	-	5.04	0.34	0.18	0.24	0.20	1.90	0.21	3.31	0.17	0.09	19
GB0014R	950.8	-	4.94	0.43	0.32	0.43	0.33	1.33	0.17	2.33	0.20	0.08	19
GB0015R	1210.7	-	5.14	0.32	0.04	0.09	0.07	3.14	0.36	5.52	0.20	0.13	25
GB0036R	789.1	-	5.20	0.28	0.22	0.37	0.25	0.72	0.09	1.26	0.18	0.06	12
GB0048R	1069.7	-	5.06	0.23	0.15	0.22	0.16	0.90	0.11	1.57	0.10	0.05	12
HR0002R	-	-	5.39	0.34	0.30	0.31	0.31	0.34	0.08	0.52	0.65	0.75	14
HR0004R	-	-	5.50	0.32	0.27	0.20	0.25	0.58	0.17	0.93	1.06	0.49	14
HU0002R	-	385.00	5.77	0.71	0.63	0.47	0.42	1.31	0.12	1.20	0.70	0.14	19
IE0001R	1481.3	1481.30	5.28	0.44	0.06	0.07	0.06	4.51	0.55	7.98	0.19	0.17	33
IE0007R	806.2	-	5.39	0.36	0.07	0.09	0.05	3.53	0.44	6.35	0.18	0.15	26
IE0009R	1167.2	1167.20	5.30	0.35	0.14	0.25	0.18	2.49	0.31	4.41	0.14	0.12	22
IS0002R	1764.6	-	5.48	0.26	0.07	-	0.12	2.29	0.27	4.21	0.12	0.18	19
IT0001R	649.0	-	6.02	0.56	0.35	0.03	0.42	2.48	0.51	4.83	3.57	0.21	27
IT0004R	1164.5	-	5.40	0.35	0.33	0.86	0.56	0.32	0.07	0.39	0.42	0.04	13
LT0015R	603.7	-	4.92	0.47	0.27	0.37	0.43	2.45	-	4.11	0.43	0.14	27

Table 3, cont.

Code	mm	mm off	pH	SO ₄	XSO ₄	NH ₄	NO ₃	Na	Mg	Cl	Ca	K	cond
MD0013R	477.0	-	5.80	1.19	1.12	0.27	0.62	0.79	0.30	1.52	-	0.20	20
ME0008R	1346.4	-	6.12	3.40	3.24	1.68	0.75	1.08	0.50	1.58	1.14	0.87	-
NL0009R	793.5	-	-	0.37	0.23	0.63	0.33	1.61	0.20	3.00	0.33	0.17	20
NO0001R	1992.9	-	4.86	0.31	0.22	0.33	0.38	1.07	0.13	1.87	0.16	0.09	19
NO0015R	775.4	-	5.41	0.18	0.02	0.14	0.07	1.89	0.24	3.50	0.12	0.10	17
NO0039R	1526.1	-	5.42	0.19	0.06	0.12	0.06	1.60	0.21	2.83	0.12	0.09	15
NO0056R	1130.1	-	4.93	0.19	0.16	0.21	0.27	0.25	0.03	0.41	0.07	0.04	11
PL0002R	549.2	-	4.93	0.55	0.54	0.58	0.40	0.14	0.04	0.32	0.27	0.11	15
PL0003R	1001.7	-	4.44	0.93	0.89	0.45	0.72	0.52	0.14	0.66	0.38	0.25	28
PL0004R	857.1	-	4.90	0.32	0.26	0.40	0.38	0.68	0.09	1.22	0.14	0.08	16
PL0005R	830.2	830.20	4.78	0.42	0.40	0.42	0.42	0.19	0.04	0.39	0.15	0.05	14
RS0005R	-	661.60	5.09	1.09	1.05	0.53	0.43	0.40	0.13	0.52	1.20	0.42	27
RU0001R	569.2	-	5.03	0.31	0.27	0.14	0.10	0.40	0.04	0.78	0.24	0.28	9
RU0013R	664.4	-	5.67	0.40	0.36	0.34	0.16	0.51	0.10	0.83	0.70	0.37	12
RU0018R	735.6	-	5.09	0.48	0.46	0.37	0.31	0.19	0.06	0.33	0.51	0.24	11
RU0020R	948.5	-	4.98	0.29	0.77	0.31	0.25	0.12	0.03	0.27	0.26	0.12	9
SE0011R	805.2	-	4.88	0.35	0.29	0.49	0.50	0.70	0.09	1.33	0.13	0.03	28
SE0012R	449.8	-	4.92	0.24	0.21	0.26	0.32	0.34	0.04	0.43	0.07	0.03	19
SE0014R	832.9	-	4.97	0.45	0.23	0.39	0.40	2.62	0.32	4.63	0.20	0.11	28
SI0008R	1541.0	-	5.02	0.31	0.29	0.25	0.23	0.20	0.05	0.35	0.25	0.04	9
SK0002R	992.8	-	4.74	0.43	0.42	0.40	0.26	0.13	0.03	0.16	0.19	0.04	11
SK0004R	-	-	4.64	0.42	0.41	0.30	0.25	0.17	0.02	0.15	0.22	0.04	17
SK0006R	-	-	4.83	0.55	0.53	0.38	0.38	0.14	0.03	0.19	0.24	0.08	15
SK0007R	431.9	-	4.89	0.41	0.40	0.48	0.39	0.12	0.04	0.15	0.35	0.04	13

Table 4: Annual averages of main components in air 2012.

Code	Matrix	SO ₂	NO ₂	SO ₄	XSO ₄	SNO ₃	NO ₃	HNO ₃	SNH ₄	NH ₄	NH ₃
AM0001R	air/aerosol	0.21	0.28	0.55	0.54	0.32	0.25	0.08	1.07	0.41	0.66
AT0002R	air/aerosol	0.92	2.67	-	-	-	-	-	-	-	-
AT0005R	air/aerosol	0.19	0.98	-	-	-	-	-	-	-	-
AT0048R	air/aerosol	0.31	1.37	-	-	-	-	-	-	-	-
BE0001R	air/aerosol	-	2.30	-	-	-	-	-	-	-	-
BE0032R	air/aerosol	-	3.70	-	-	-	-	-	-	-	-
BE0035R	air/aerosol	-	3.70	-	-	-	-	-	-	-	-
CH0001G	air/aerosol	0.03	0.11	0.11	0.05	-	0.04	-	-	0.05	-
CH0001G	pm1	-	-	0.05	0.05	-	0.02	-	-	0.04	-
CH0002R	air/aerosol	0.32	3.34	0.51	0.48	0.93	0.79	0.24	3.48	1.13	2.30
CH0003R	air/aerosol	-	3.77	-	-	-	-	-	-	-	-
CH0004R	air/aerosol	-	1.77	-	-	-	-	-	-	-	-
CH0005R	air/aerosol	0.20	1.15	0.37	0.35	0.63	0.47	0.18	1.70	0.79	1.03
CY0002R	air/aerosol	0.82	0.95	-	-	-	-	-	-	-	-
CY0002R	pm25	-	-	2.54	2.53	-	0.13	-	-	0.70	-
CZ0001R	air/aerosol	1.27	1.89	0.85	-	0.95	-	-	2.18	-	-
CZ0003R	air/aerosol	1.16	2.61	0.79	-	0.90	-	-	2.11	-	-
DE0001R	air/aerosol	0.33	2.13	-	-	-	-	-	-	-	-
DE0001R	pm25	-	-	0.50	0.46	-	0.43	-	-	0.74	-
DE0002R	air/aerosol	0.53	2.76	-	-	-	-	-	-	-	-
DE0002R	pm25	-	-	0.66	0.65	-	0.61	-	-	1.08	-
DE0003R	air/aerosol	0.30	0.78	-	-	-	-	-	-	-	-
DE0003R	pm25	-	-	0.30	0.30	-	0.20	-	-	0.47	-
DE0007R	air/aerosol	0.69	1.98	-	-	-	-	-	-	-	-
DE0007R	pm25	-	-	0.65	0.64	-	0.47	-	-	0.96	-
DE0008R	air/aerosol	0.63	2.05	-	-	-	-	-	-	-	-
DE0008R	pm25	-	-	0.39	0.38	-	-	-	-	0.60	-
DE0009R	air/aerosol	0.57	2.12	-	-	-	-	-	-	-	-
DE0009R	pm25	-	-	0.59	0.57	-	0.55	-	-	0.98	-
DE0044R	pm10	-	-	0.74	0.71	-	0.72	-	-	1.29	-
DE0044R	pm25	-	-	0.67	0.67	-	0.59	-	-	1.20	-
DK0003R	air/aerosol	0.15	-	0.53	0.44	0.66	-	-	1.83	0.92	0.90
DK0005R	air/aerosol	-	2.44	-	-	-	-	-	-	-	-
DK0008R	air/aerosol	0.25	1.55	0.60	0.48	0.65	-	-	0.92	0.74	0.18
DK0010G	air/aerosol	0.04	-	0.11	0.10	-	0.01	-	0.04	0.04	0.00
DK0012R	air/aerosol	0.28	2.80	0.58	0.51	0.86	-	-	1.86	1.07	0.78
DK0031R	air/aerosol	0.12	-	0.56	0.48	0.63	-	-	1.31	0.83	0.39
EE0009R	air/aerosol	0.66	0.89	-	-	-	-	-	-	-	-
EE0011R	air/aerosol	0.32	0.78	-	-	-	-	-	-	-	-
ES0001R	air/aerosol	0.23	0.98	-	-	0.33	-	-	-	-	0.87
ES0001R	pm10	-	-	0.36	0.34	-	0.23	-	-	0.28	-
ES0001R	pm25	-	-	0.23	0.21	-	0.01	-	-	0.18	-
ES0005R	air/aerosol	0.69	0.93	-	-	0.42	-	-	0.86	-	-
ES0005R	pm10	-	-	0.47	-	-	0.18	-	-	-	-
ES0006R	air/aerosol	0.18	1.24	-	-	0.62	-	-	1.49	-	-
ES0006R	pm10	-	-	0.86	-	-	0.40	-	-	-	-
ES0007R	air/aerosol	0.43	1.56	-	-	0.44	-	-	1.35	-	0.57
ES0007R	pm10	-	-	0.44	0.42	-	0.27	-	-	0.40	-
ES0007R	pm25	-	-	0.37	0.34	-	0.02	-	-	0.21	-
ES0008R	air/aerosol	0.46	1.30	-	-	0.67	-	-	1.67	-	0.70
ES0008R	pm10	-	-	0.66	0.57	-	0.34	-	-	0.33	-
ES0008R	pm25	-	-	0.36	0.35	-	0.01	-	-	0.17	-
ES0009R	air/aerosol	0.17	0.77	-	-	0.23	-	-	0.83	-	0.75
ES0009R	pm10	-	-	0.33	0.31	-	0.13	-	-	0.32	-
ES0009R	pm25	-	-	0.25	0.24	-	0.02	-	-	0.20	-
ES0010R	air/aerosol	0.27	0.86	-	-	0.71	-	-	1.19	-	-
ES0010R	pm10	-	-	0.65	-	-	0.39	-	-	-	-
ES0011R	air/aerosol	0.17	1.03	-	-	0.34	-	-	0.92	-	0.46
ES0011R	pm10	-	-	0.40	-	-	0.21	-	-	-	-
ES0012R	air/aerosol	0.29	0.79	-	-	0.46	-	-	1.31	-	-
ES0012R	pm10	-	-	0.52	-	-	0.33	-	-	-	-
ES0013R	air/aerosol	0.27	0.94	-	-	0.36	-	-	0.65	-	-
ES0013R	pm10	-	-	0.34	-	-	0.22	-	-	-	-
ES0014R	air/aerosol	0.36	1.08	-	-	0.60	-	-	2.92	-	2.92
ES0014R	pm10	-	-	0.56	0.52	-	0.36	-	-	0.60	-

Table 4, cont.

Code	Matrix	SO ₂	NO ₂	SO ₄	XSO ₄	SNO ₃	NO ₃	HNO ₃	SNH ₄	NH ₄	NH ₃
ES0014R	pm25	-	-	0.50	0.46	-	0.02	-	-	0.40	-
ES0016R	air/aerosol	0.19	1.14	-	-	0.44	-	-	1.52	-	-
ES0016R	pm10	-	-	0.43	-	-	0.22	-	-	-	-
ES0017R	air/aerosol	0.56	1.27	-	-	0.55	-	-	1.48	-	-
ES0017R	pm10	-	-	0.69	-	-	0.37	-	-	-	-
ES1778R	pm1	-	-	0.46	-	-	0.05	-	-	0.39	-
ES1778R	pm10	-	-	0.60	0.57	-	0.25	-	-	0.45	-
ES1778R	pm25	-	-	0.54	0.53	-	0.10	-	-	0.46	-
FI0009R	air/aerosol	0.39	0.94	0.41	0.37	0.32	-	-	0.36	0.29	-
FI0009R	pm25	-	-	0.32	0.29	-	0.09	-	-	0.24	-
FI0017R	air/aerosol	0.70	1.59	0.40	0.38	0.22	-	-	0.38	0.29	-
FI0017R	pm25	-	-	0.29	0.28	-	0.04	-	-	0.19	-
FI0022R	air/aerosol	0.44	0.55	0.25	0.24	0.06	-	-	0.13	0.10	-
FI0036R	air/aerosol	0.24	-	0.22	0.21	0.05	-	-	0.10	0.09	-
FI0036R	pm25	-	-	0.21	0.21	-	0.00	-	-	0.09	-
FI0037R	air/aerosol	0.22	0.74	0.32	0.31	0.13	-	-	0.25	0.19	-
FR0009R	air/aerosol	0.20	-	0.56	-	0.93	-	-	1.62	-	-
FR0013R	air/aerosol	0.13	-	0.53	-	0.79	-	-	1.91	-	-
FR0015R	air/aerosol	0.12	-	0.47	-	1.04	-	-	4.32	-	-
FR0030R	air/aerosol	0.37	-	-	-	-	-	-	-	-	-
GB0002R	air/aerosol	-	0.90	-	-	-	-	-	-	-	-
GB0006R	air/aerosol	-	-	-	-	0.15	0.13	0.04	0.58	0.20	0.38
GB0013R	air/aerosol	-	1.30	-	-	0.39	0.30	0.10	0.95	0.42	0.52
GB0014R	air/aerosol	-	1.87	-	-	0.40	0.27	0.14	1.01	0.41	0.59
GB0031R	air/aerosol	-	1.29	-	-	-	-	-	-	-	-
GB0033R	air/aerosol	-	1.91	-	-	-	-	-	-	-	-
GB0036R	air/aerosol	1.36	4.15	-	-	-	-	0.04	-	-	1.41
GB0036R	pm10	-	-	0.70	-	-	0.66	-	-	1.17	-
GB0036R	pm25	-	-	0.54	-	-	0.45	-	-	0.80	-
GB0037R	air/aerosol	1.77	3.34	-	-	-	-	-	-	-	-
GB0038R	air/aerosol	0.70	2.74	-	-	-	-	-	-	-	-
GB0043R	air/aerosol	0.69	1.73	-	-	-	-	-	-	-	-
GB0045R	air/aerosol	1.72	3.90	-	-	-	-	-	-	-	-
GB0048R	air/aerosol	0.11	-	-	-	-	-	0.02	-	-	1.04
GB0048R	pm10	-	-	0.48	-	-	0.42	-	-	0.76	-
GB0048R	pm25	-	-	0.40	-	-	0.35	-	-	0.69	-
GB0050R	air/aerosol	-	5.34	-	-	-	-	-	-	-	-
GB0051R	air/aerosol	-	4.66	-	-	-	-	-	-	-	-
GB0053R	air/aerosol	-	2.71	-	-	-	-	-	-	-	-
GB0054R	air/aerosol	-	-	-	-	0.26	0.20	0.05	0.46	0.26	0.19
GR0001R	air/aerosol	4.15	8.45	-	-	-	-	-	-	-	-
HU0002R	air/aerosol	1.20	1.81	1.13	-	0.76	0.51	0.25	-	1.01	1.29
IE0001R	air/aerosol	0.15	0.88	0.26	0.13	0.36	-	-	0.88	-	-
IE0005R	air/aerosol	-	-	0.37	0.30	-	0.32	-	-	0.60	-
IE0006R	air/aerosol	-	-	0.41	0.25	-	0.18	-	-	0.39	-
IE0008R	air/aerosol	-	-	0.53	0.29	-	0.27	-	-	0.46	-
IS0002R	air/aerosol	0.10	-	0.18	0.11	-	-	-	-	-	-
IS0091R	air/aerosol	-	-	0.44	0.12	-	0.06	-	-	-	-
IT0001R	air/aerosol	0.69	2.80	2.48	-	-	-	0.93	-	-	2.02
IT0001R	pm10_pm25	-	-	0.30	-	-	0.87	-	-	-	-
IT0001R	pm25	-	-	2.18	-	-	1.27	-	-	-	-
IT0004R	air/aerosol	0.45	5.47	-	-	-	-	-	-	-	-
IT0004R	pm25	-	-	2.13	-	-	3.77	-	-	1.91	-
LT0015R	air/aerosol	0.39	1.08	0.72	-	0.63	-	-	0.78	-	-
LV0010R	air/aerosol	0.31	0.79	-	-	-	-	-	-	-	-
MD0013R	air/aerosol	1.30	0.19	1.26	1.24	1.21	0.74	0.48	1.17	0.89	0.29
ME0008R	air/aerosol	4.40	5.12	-	-	-	-	-	-	-	-
MK0007R	air/aerosol	0.39	5.87	-	-	-	-	-	-	-	-
NL0007R	air/aerosol	0.46	4.23	-	-	-	-	-	-	-	7.71
NL0008R	air/aerosol	-	-	0.78	0.72	-	1.02	-	-	-	-
NL0009R	air/aerosol	0.24	0.95	0.69	0.63	-	0.99	-	-	1.44	-
NL0010R	air/aerosol	-	5.34	0.84	0.79	-	1.23	-	-	1.89	-
NL0091R	air/aerosol	0.71	1.54	0.78	0.69	-	0.97	-	-	1.30	1.58
NL0644R	air/aerosol	0.64	5.50	-	-	-	-	-	-	-	-

Table 4, cont.

Code	Matrix	SO ₂	NO ₂	SO ₄	XSO ₄	SNO ₃	NO ₃	HNO ₃	SNH ₄	NH ₄	NH ₃
NO0002R	air/aerosol	0.07	0.39	0.27	0.24	0.46	0.31	0.15	0.61	0.28	0.33
NO0015R	air/aerosol	0.05	0.17	0.12	0.11	0.25	0.17	0.08	1.07	0.16	0.91
NO0039R	air/aerosol	0.04	0.22	0.14	0.13	0.26	0.15	0.10	0.71	0.16	0.57
NO0042G	air/aerosol	0.06	-	0.12	0.10	0.22	0.15	0.07	0.36	0.11	0.25
NO0056R	air/aerosol	0.06	0.76	0.22	0.21	0.30	0.18	0.12	0.49	0.19	0.30
PL0002R	air/aerosol	1.23	2.90	1.15	-	0.75	0.64	-	3.04	1.52	-
PL0003R	air/aerosol	1.02	1.02	0.92	-	0.49	0.38	-	0.73	0.55	-
PL0004R	air/aerosol	0.79	1.54	0.99	-	0.56	0.46	-	1.46	0.96	-
PL0005R	air/aerosol	0.52	1.28	0.58	-	1.27	0.53	0.73	2.34	1.48	0.86
PL0005R	pm25	-	-	0.69	0.68	-	0.34	-	-	0.58	-
RO0008R	air/aerosol	3.04	-	-	-	-	-	-	-	-	-
RS0005R	air/aerosol	8.64	2.08	-	-	-	-	-	-	-	-
RU0018R	air/aerosol	0.45	-	0.70	-	-	0.34	-	-	0.43	-
RU0020R	air/aerosol	0.34	-	0.52	-	-	0.21	-	-	0.19	-
SE0005R	air/aerosol	0.07	0.12	0.12	0.12	0.03	-	-	0.13	-	-
SE0011R	air/aerosol	0.26	1.37	0.36	0.32	0.41	-	-	0.81	-	-
SE0012R	air/aerosol	0.21	0.60	0.31	0.29	0.19	-	-	0.33	-	-
SE0014R	air/aerosol	0.27	1.26	0.50	0.35	0.44	-	-	0.60	-	-
SI0008R	air/aerosol	0.33	0.63	0.67	0.66	0.25	-	-	0.80	-	-
SI0008R	pm25	-	-	2.25	2.25	-	0.41	-	-	0.95	-
SK0002R	air/aerosol	0.26	0.81	0.23	0.23	0.12	0.09	0.03	-	-	-
SK0006R	air/aerosol	0.86	1.24	0.65	0.65	0.34	0.29	0.05	1.00	0.58	0.41

Table 5: Annual averages of base cations and sodium and chloride in aerosols.

Code	Matrix	Na	Ca	Mg	K	Cl
AM0001R	aerosol	0.06	0.56	0.04	0.08	0.08
CH0001G	aerosol	0.02	0.08	0.01	0.01	0.00
CH0001G	pm1	0.00	0.01	0.00	0.01	0.00
CH0002R	aerosol	0.18	0.33	0.03	0.17	-
CH0005R	aerosol	0.11	0.24	0.02	0.07	-
CY0002R	pm25	0.12	0.22	0.02	0.07	0.03
CZ0003R	pm10	0.13	0.22	0.07	0.08	-
DE0001R	pm25	0.44	0.04	0.05	0.04	0.61
DE0002R	pm25	0.17	0.03	0.02	0.09	0.17
DE0003R	pm25	0.04	0.02	0.01	0.03	0.02
DE0007R	pm25	0.17	0.03	0.02	0.09	0.13
DE0008R	pm25	0.06	0.02	0.01	0.03	0.03
DE0009R	pm25	0.17	0.02	0.02	0.06	0.16
DE0044R	pm10	0.28	0.17	0.09	0.10	0.28
DE0044R	pm25	0.09	0.09	0.01	0.08	0.10
DK0003R	aerosol	1.07	0.12	-	0.11	1.74
DK0008R	aerosol	1.70	0.17	-	0.10	2.55
DK0010G	aerosol	0.13	0.02	-	0.01	0.15
DK0012R	aerosol	0.88	0.18	-	0.10	1.29
DK0031R	aerosol	1.45	0.13	-	0.10	2.33
ES0001R	pm10	0.31	0.34	0.05	0.09	0.19
ES0001R	pm25	0.14	0.12	0.02	0.06	0.05
ES0007R	pm10	0.32	0.70	0.08	0.20	0.14
ES0007R	pm25	0.15	0.33	0.04	0.13	0.06
ES0008R	pm10	1.48	0.32	0.18	0.14	1.13
ES0008R	pm25	0.20	0.10	0.02	0.04	0.09
ES0009R	pm10	0.27	0.37	0.03	0.07	0.12
ES0009R	pm25	0.09	0.17	0.01	0.04	0.04
ES0014R	pm10	0.56	0.48	0.08	0.13	0.14
ES0014R	pm25	0.20	0.15	0.02	0.06	0.08
ES1778R	pm1	0.03	0.01	0.00	0.05	0.05
ES1778R	pm10	0.35	0.26	0.10	0.14	0.20
ES1778R	pm25	0.09	0.06	0.03	0.07	0.09
FI0009R	aerosol	0.53	0.06	0.07	0.05	0.47
FI0009R	pm25	0.33	0.03	0.04	0.04	0.43
FI0017R	aerosol	0.17	0.07	0.03	0.05	0.08
FI0017R	pm25	0.07	0.01	0.01	0.03	0.01
FI0022R	aerosol	0.09	0.02	0.01	0.02	0.03
FI0036R	aerosol	0.11	0.01	0.01	0.02	0.09
FI0036R	pm25	0.04	0.00	0.01	0.01	0.01
FI0037R	aerosol	0.10	0.03	0.02	0.04	0.03
GB0036R	pm10	0.84	0.65	0.22	0.03	1.17
GB0036R	pm25	0.41	0.38	0.12	0.02	0.50
GB0048R	pm10	0.85	0.06	0.06	0.07	1.11
GB0048R	pm25	0.48	0.05	0.04	0.05	0.61
IE0001R	aerosol	1.49	0.09	0.18	0.07	2.53
IE0005R	aerosol	0.83	0.08	0.09	0.07	1.55
IE0006R	aerosol	1.93	0.09	0.22	0.09	3.42
IE0008R	aerosol	2.92	0.14	0.35	0.14	5.08
IS0002R	aerosol	0.86	0.22	0.16	0.06	0.60
IS0091R	aerosol	-	-	-	-	7.67
MD0013R	aerosol	0.15	0.21	0.07	0.29	0.42
NL0008R	aerosol	0.86	0.18	0.12	-	0.93
NL0009R	aerosol	0.94	0.13	0.13	-	1.12
NL0010R	aerosol	0.63	0.26	0.11	-	0.71
NL0091R	aerosol	-	-	-	-	1.61
NO0002R	aerosol	0.43	0.05	0.06	0.07	0.35
NO0015R	aerosol	0.18	0.03	0.03	0.06	0.23
NO0039R	aerosol	0.19	0.03	0.03	0.05	0.25
NO0042G	aerosol	0.23	0.03	0.04	0.05	0.26
NO0056R	aerosol	0.16	0.04	0.03	0.07	0.10
PL0005R	pm25	0.15	0.05	0.01	0.09	0.03
SE0005R	aerosol	0.10	0.03	0.02	0.02	0.11
SE0011R	aerosol	0.51	0.06	0.06	0.07	0.49
SE0012R	aerosol	0.26	0.04	0.03	0.04	0.14
SE0014R	aerosol	1.72	0.10	0.21	0.11	2.42
SI0008R	aerosol	0.13	0.16	0.05	0.17	0.05
SI0008R	pm25	0.05	0.08	0.02	0.15	0.05
SK0002R	aerosol	-	-	-	-	0.05
SK0006R	aerosol	0.06	0.07	0.01	0.10	0.12

Table 6: Annual averages of particulate matter.

Code	PM ₁₀	PM ₁₀ -PM _{2.5}	PM _{2.5}	PM ₁
AT0002R	20.08	-	14.13	12.77
AT0005R	8.92	-	-	-
AT0048R	8.80	-	-	-
CH0001G	2.91	-	-	-
CH0002R	14.93	-	10.55	7.44
CH0003R	13.91	-	-	-
CH0004R	7.77	-	-	-
CH0005R	7.42	-	5.36	-
CY0002R	21.65	-	15.51	-
CZ0001R	14.26	-	-	-
CZ0003R	19.35	-	15.54	-
CZ0005R	7.68	-	-	-
DE0001R	17.60	-	-	-
DE0002R	15.27	-	11.42	7.06
DE0003R	8.66	-	6.41	-
DE0007R	13.85	-	10.33	-
DE0008R	10.21	-	7.53	-
DE0009R	14.42	-	-	-
DE0044R	22.16	-	18.18	-
DK0012R	15.41	-	-	-
EE0009R	6.82	-	5.53	-
EE0011R	-	-	5.42	-
ES0001R	11.81	-	5.50	-
ES0005R	7.87	-	-	-
ES0006R	19.21	-	6.29	-
ES0007R	16.63	-	9.46	-
ES0008R	15.89	-	6.76	-
ES0009R	10.76	-	4.86	-
ES0010R	17.00	-	7.73	-
ES0011R	14.03	-	7.32	-
ES0012R	15.56	-	6.43	-
ES0013R	8.73	-	4.51	-
ES0014R	14.46	-	7.90	-
ES0016R	10.78	-	7.86	-
ES0017R	17.22	-	-	-
ES1778R	18.08	-	13.42	10.91
FI0009R	-	-	5.24	-
FI0017R	12.32	-	-	-
FI0050R	8.22	-	5.27	4.02
FR0009R	17.34	-	12.37	-
FR0010R	12.84	-	-	-
FR0013R	20.77	-	14.13	-
FR0014R	12.99	-	-	-
FR0015R	19.19	-	10.66	-
FR0018R	13.09	-	10.48	-
GB0006R	7.91	-	-	-
GB0036R	16.62	-	8.05	-
GB0043R	10.89	-	-	-
GB0048R	7.35	-	4.01	-
IT0001R	27.72	-	-	-
IT0004R	-	-	19.27	-
LV0010R	15.48	-	10.78	-
MD0013R	29.18	-	-	-
MK0007R	12.86	-	-	-
NL0007R	19.54	-	-	-
NL0009R	19.95	-	9.84	-
NL0010R	23.17	-	13.38	-
NL0091R	23.04	-	9.83	-
NL0644R	15.71	-	12.36	-
NO0002R	4.88	-	3.06	-
NO0039R	3.42	-	2.52	-
NO0056R	4.08	-	2.77	-
PL0005R	16.02	-	13.81	-
RO0008R	18.42	-	-	-
SE0005R	2.96	-	1.61	-
SE0011R	13.86	-	6.74	-
SE0012R	6.95	-	5.27	-
SE0014R	13.33	-	5.64	-
SI0008R	14.89	-	12.64	-

Table 7: EC/OC.

Code	Matrix	EC	OC	TC
CH0002R	pm25	0.38	1.81	-
CH0005R	pm25	0.20	1.12	-
CY0002R	pm25	0.17	1.15	-
CZ0003R	pm25	0.49	3.62	4.12
DE0002R	pm25	0.30	2.41	2.71
DE0003R	pm25	0.14	1.47	1.61
DE0007R	pm25	0.32	2.52	2.84
DE0008R	pm25	0.25	1.86	2.11
DE0044R	pm10	1.11	3.37	3.94
DE0044R	pm25	0.95	3.06	3.39
ES0001R	pm25	0.14	2.09	-
ES1778R	pm1	0.16	1.59	1.75
ES1778R	pm10	0.21	2.20	2.42
ES1778R	pm25	0.18	1.93	2.10
FI0009R	pm25	-	1.00	-
FI0017R	pm25	-	1.44	-
FI0022R	pm25	-	0.57	-
HU0002R	pm10	-	-	7.00
IT0004R	pm25	1.54	6.42	7.90
NL0644R	pm25	0.35	1.78	2.13
NO0002R	pm10	0.08	0.57	0.64
NO0002R	pm25	0.08	0.50	0.58
NO0039R	pm10	0.05	0.72	0.78
NO0039R	pm25	0.05	0.56	0.62
NO0056R	pm10	0.13	0.86	0.99
NO0056R	pm25	0.13	0.60	0.73
PL0005R	pm25	0.60	3.27	-
SE0012R	pm10	0.18	1.75	-
SI0008R	pm25	0.35	3.47	-

Table 8: Units used for precipitation components.

Precipitation components	Units for W. mean, Min., Max.	Units for depositions
Amount	mm	mm
SO ₄ ⁻	mg S/l	mg S/m ²
NO ₃ ⁻	mg N/l	mg N/m ²
Cl ⁻	mg Cl/l	mg Cl/m ²
NH ₄ ⁺	mg N/l	mg N/m ²
H ⁺	µe H ⁺ /l	µe H ⁺ /m ²
pH	pH-units	µe H ⁺ /m ²
Na ⁺	mg Na/l	mg Na/m ²
Mg ²⁺	mg Mg/l	mg Mg/m ²
K ⁺	mg K/l	mg K/m ²
Ca ²⁺	mg Ca/l	mg Ca/m ²

Table 9: Units used for air components.

Air components	Units for arithmetic and geometric mean values, arithmetic standard deviations, Min., Max, percentiles.
SO ₂	µg S/m ³
NO ₂ , NO	µg N/m ³
CO	ppb
HNO ₃	µg N/m ³
NH ₃	µg N/m ³
SO ₄ ²⁻	µg S/m ³
NO ₃ ⁻	µg N/m ³
NH ₄ ⁺	µg N/m ³
H ⁺	Ne H ⁺ /m ³
SPM, PM	µg/m ³
HNO ₃ + NO ₃ ⁻	µg N/m ³
NH ₃ + NH ₄ ⁺	µg N/m ³
Ca ⁺⁺	µg/m ³
Cl ⁻	µg/m ³
Mg ⁺⁺	µg/m ³
K ⁺	µg/m ³
Na ⁺	µg/m ³
OC	µg C/m ³
EC	µg C/m ³

9. Update

The data compiled in this report represent the best data available at present. If further errors are detected, the data will be corrected in the database. It is important that users make sure that they have access to the most recent version of the database. For the data presented here the latest alteration was 21 August, 2014.

Scientific use of the EMEP data should be based on fresh copies of the data. Copies can be requested from the CCC (e-mail: anne-gunn.hjellbrekke@nilu.no) or downloaded from the internet at <http://ebas.nilu.no> and <http://www.nilu.no/projects/ccc/>. Information about the EMEP network and measurement data can also be found at <http://www.emep.int>.

10. References

- Aas, W., Nizzetto, P.B. (2014) Heavy metals and POP measurements, 2012. Kjeller, NILU (EMEP/CCC-Report 4/2014).
- EMEP/CCC (2014) Manual for sampling and chemical analysis. Kjeller, Norwegian Institute for Air Research (EMEP/CCC-Report 1/2014). URL: <http://www.nilu.no/projects/ccc/manual/index.html> [Accessed 24 September 2014].
- Fagerli, H., Schulz, M., Gauss, M., Tsyro, S., Jonson, J.E., Benedictow, A., Simpson, D., Valdebenito, A., Griesfeller, J., Semeena, V.S., Wind, P., Olivie, D., Aas, W., Hjellbrekke, A.-G., Solberg, S., Tørseth, K., Yttri, K.E., Mareckova, K., Wankmüller, R., Karl, M., Alastuey, A., Hamburger, T., Posch, M., Tuovinen, J.-P. (2014) Transboundary particulate matter, photo-oxidants, acidifying and eutrophying components. Oslo, Norwegian Meteorological Institute - MSC-W (EMEP status report 1/2014).

Hjellbrekke, A.-G., Solberg, S. (2014) Ozone measurements 2012. Kjeller, NILU (EMEP/CCC-Report 2/2014).

Solberg, S. (2014) VOC measurements 2012. Kjeller, NILU (EMEP/CCC-Report 5/2014).

11. Acknowledgements

A large number of co-workers in participating countries have been involved in the many steps of collection of EMEP's measurement data. A list of participating institutes can be seen below. The staff at CCC wishes to express their gratitude and appreciation for continued good co-operation and efforts.

Closer at home the secretarial work, and far beyond, has been performed by Ms. Kristine Aasarød. Rita Larsen Våler and Mona Waagsbø have been very helpful with data flow and database maintenance.

12. List of participating institutions

Armenia	Environmental Impact Monitoring Center
Austria	Umweltbundesamt
Belarus	Institute for Problems of Natural Resources and Ecology
Belgium	CELINE - IRCEL
Commission of the European Communities	Joint Research Center. Ispra Establishment
Croatia	Meteorological and Hydrological Service of Croatia
Cyprus	Ministry of Labour and Social Insurance
Czech Republic	Czech Hydrometeorological Institute
Denmark	Department of Environmental Science, Aarhus University
Estonia	Estonian Environmental Research Laboratory Ltd.
Finland	Finnish Meteorological Institute (FMI)
France	I' Ecole des Mines de Douai
Georgia	National Environmental Agency
Germany	Umweltbundesamt Leibniz Institute for Tropospheric Research
Greece	Ministry of Environmental Physical Planning and Public Works University of Crete
Hungary	Meteorological Service, Institute for Atmospheric Physics, Dep. for Air Chemistry
Iceland	The Icelandic Meteorological Office
Ireland	Meteorological Service H.Q. Environmental Protection Agency (EPA)
Italy	C.N.R. Istituto Inquinamento Atmosferico
Kazakhstan	Hydrometeorological Monitoring
Latvia	Latvian Environment, Geology and Meteorology Agency
Lithuania	Center for Physical Sciences and Technology
Macedonia	Ministry of Environment and Physical Planning
Moldova	State Hydrometeorological Service
Montenegro	Hydrometeorological Institute of Montenegro
Netherlands	National Institute for Public Health and Environmental Protection (RIVM)
Norway	Norwegian Institute for Air Research (NILU)
Poland	Institute of Meteorology and Water Management Institute of Environmental Protection
Portugal	Instituto de Meteorologica
Romania	National Environmental Protection Agency
Russian Federation	Institute of Global Climate and Ecology
Serbia	Federal Hydrometeorological Institute
Slovakia	Slovak Hydrometeorological Institute
Slovenia	Environmental Agency of the Republic of Slovenia
Spain	Dirección General de Calidad y Evaluación Ambiental
Sweden	Swedish Environmental Research Institute (IVL)
Switzerland	Swiss Federal Laboratory of Testing Materials and Research (EMPA)
United Kingdom	Ricardo-AEA

Annex 1

Maps over Europe

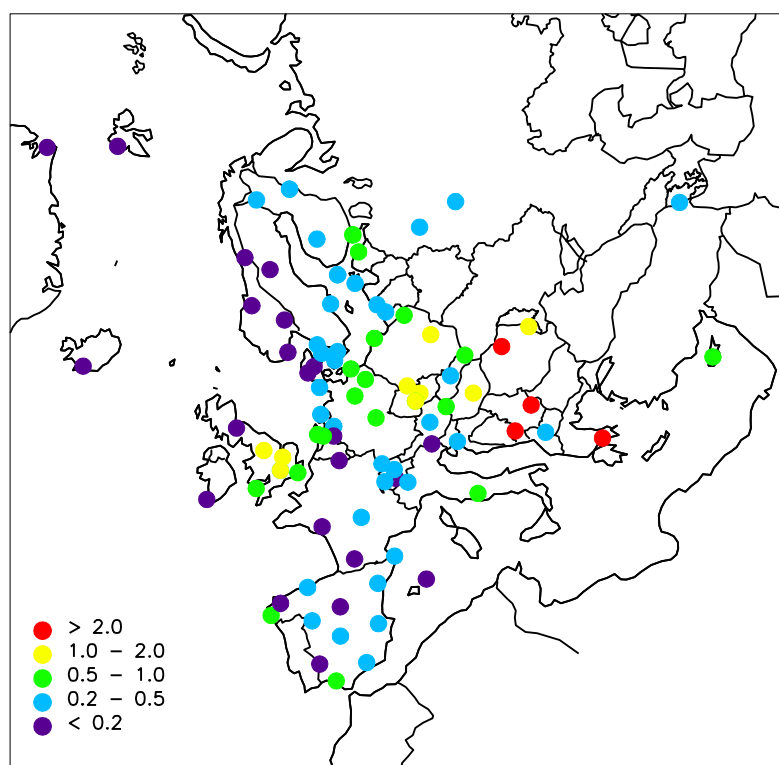


Figure 1.1: Geographical distribution of sulphur dioxide 2012. Unit: $\mu\text{g S/m}^3$.

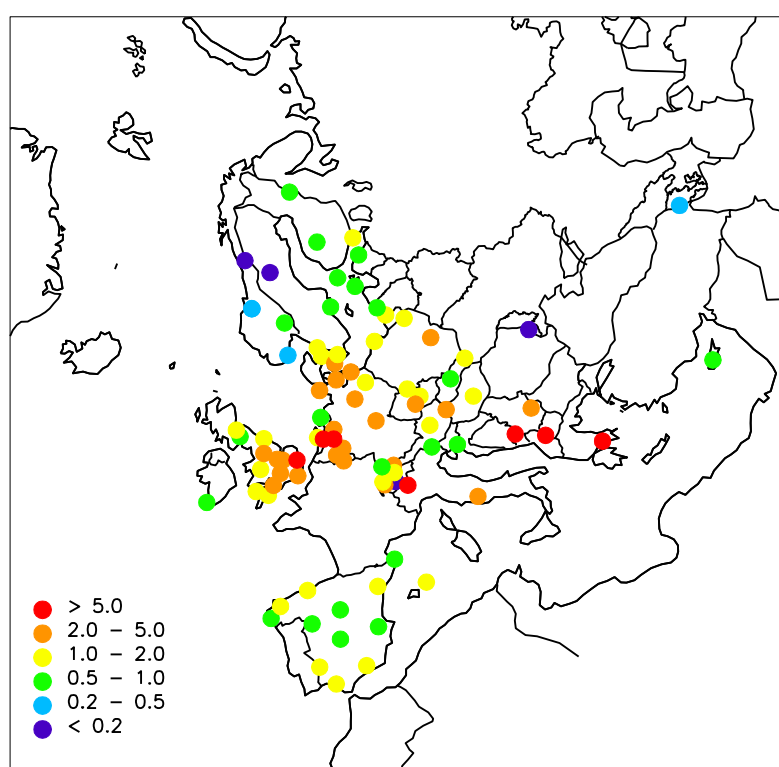


Figure 1.2: Geographical distribution of nitrogen dioxide 2012. Unit: $\mu\text{g N/m}^3$.

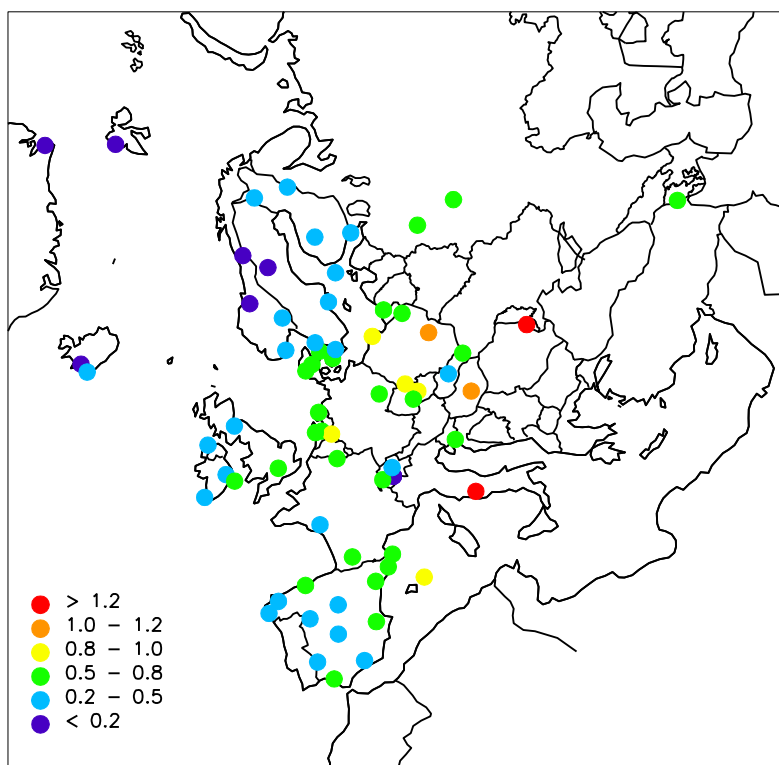


Figure 1.3: Geographical distribution of sulphate in aerosols 2012. Unit: $\mu\text{g S/m}^3$.

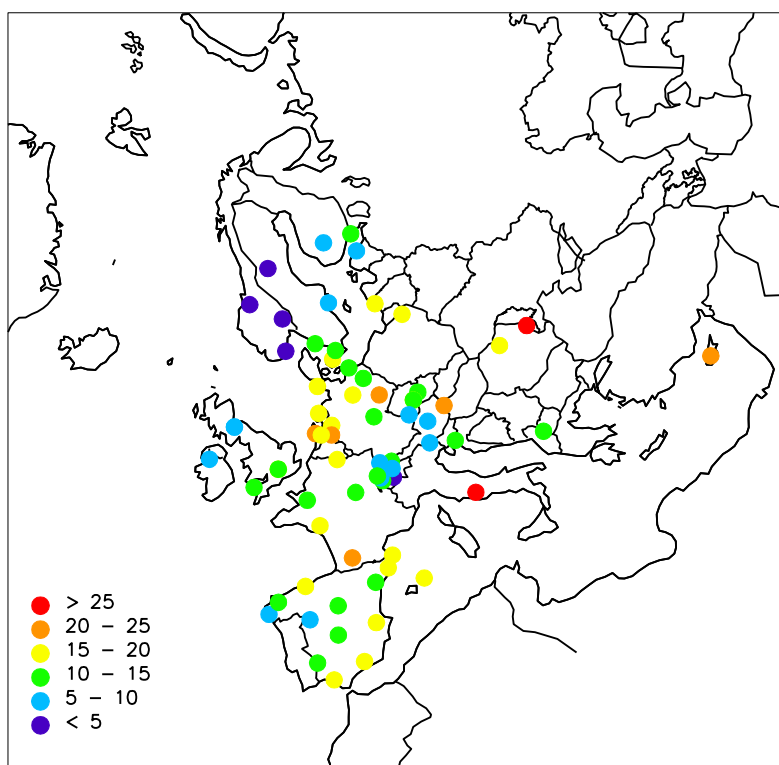


Figure 1.4: Geographical distribution of PM_{10} 2012. Unit: $\mu\text{g/m}^3$.

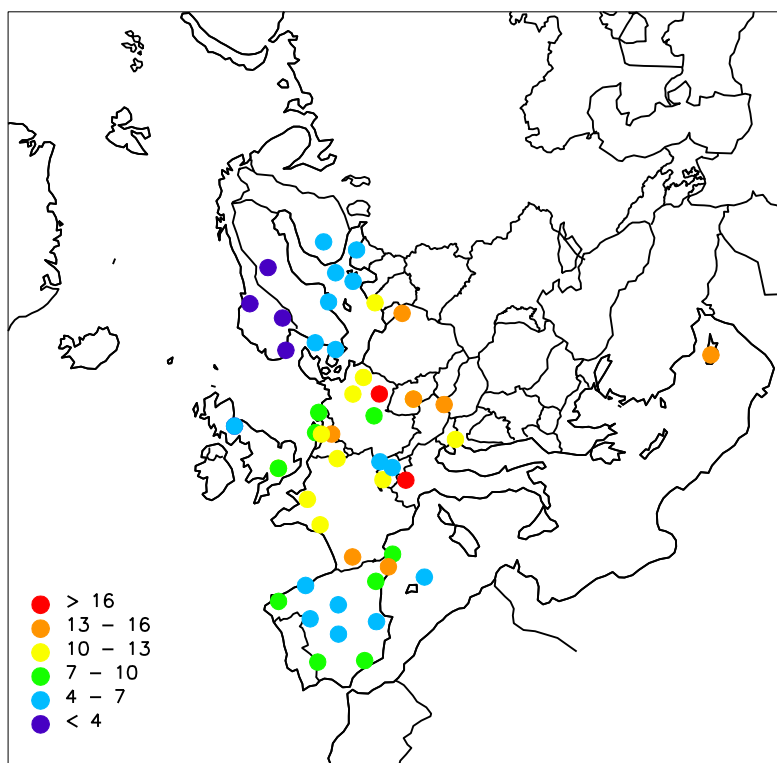


Figure 1.5: Geographical distribution of $PM_{2.5}$ 2012. Unit: $\mu g/m^3$.

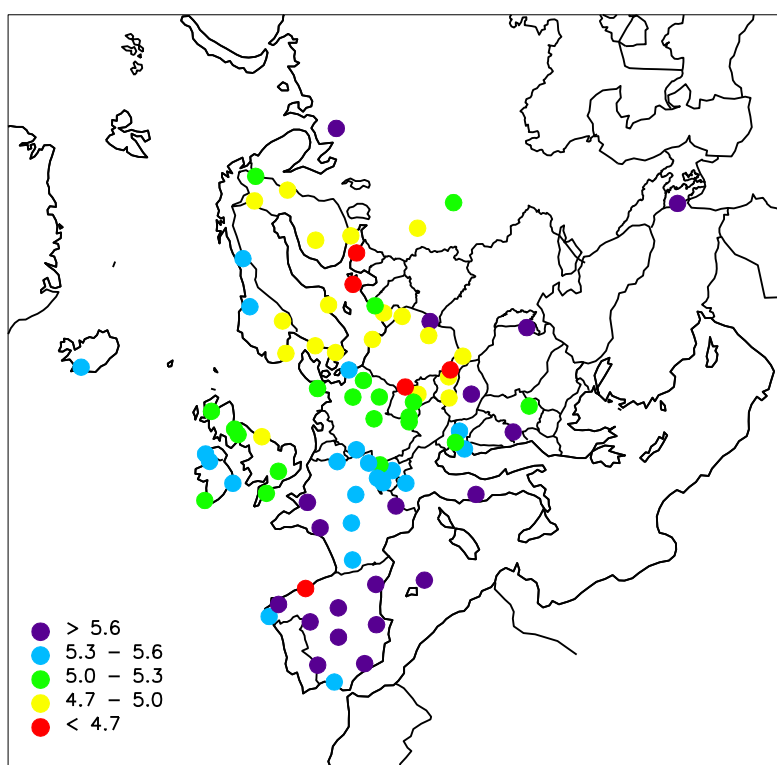


Figure 1.6: Geographical distribution of pH in precipitation 2012. Unit: pH units.

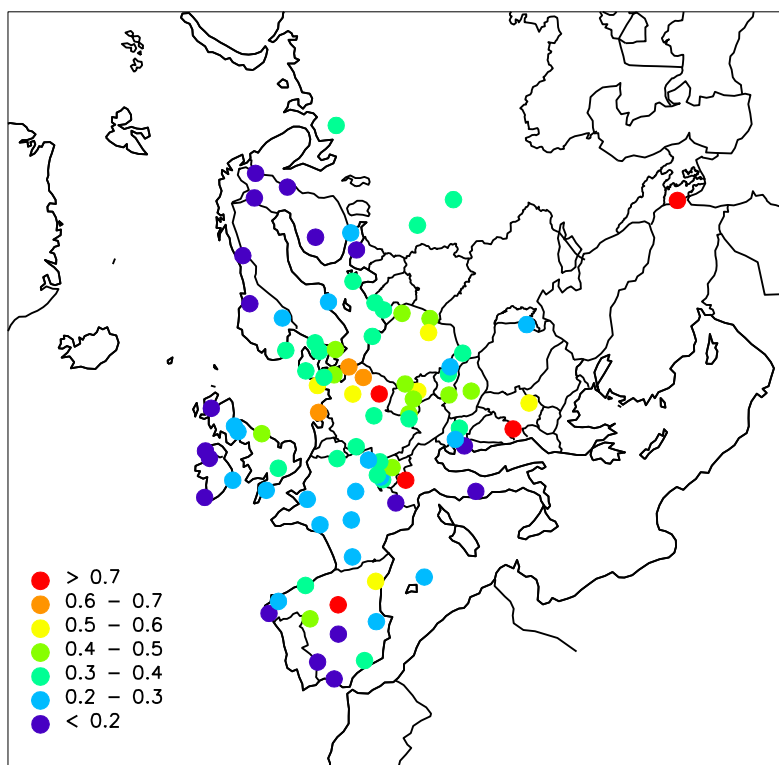


Figure 1.7: Geographical distribution of ammonium in precipitation 2012.
Unit: mg N/l.

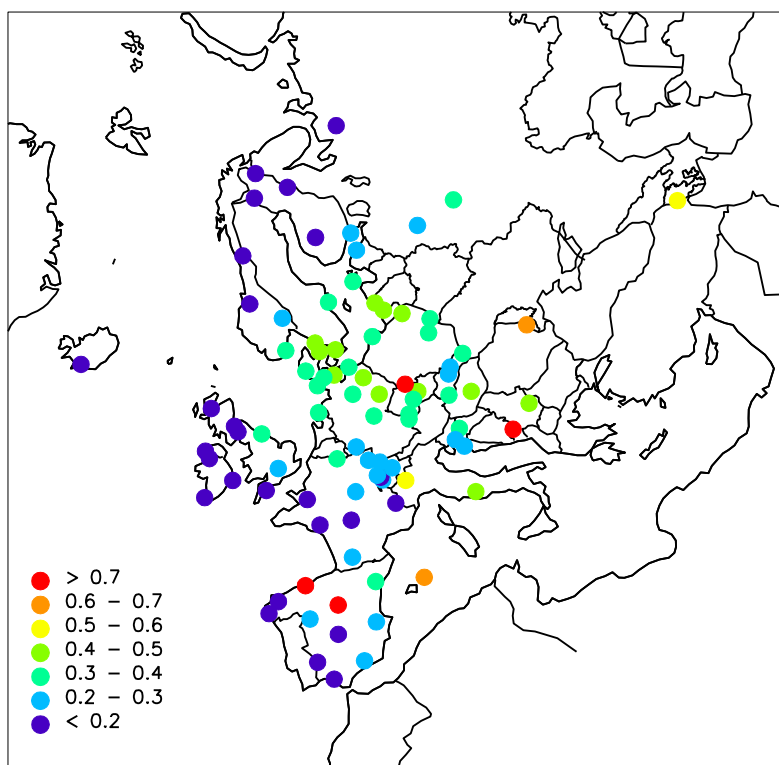


Figure 1.8: Geographical distribution of nitrate in precipitation 2012.
Unit: mg N/l.

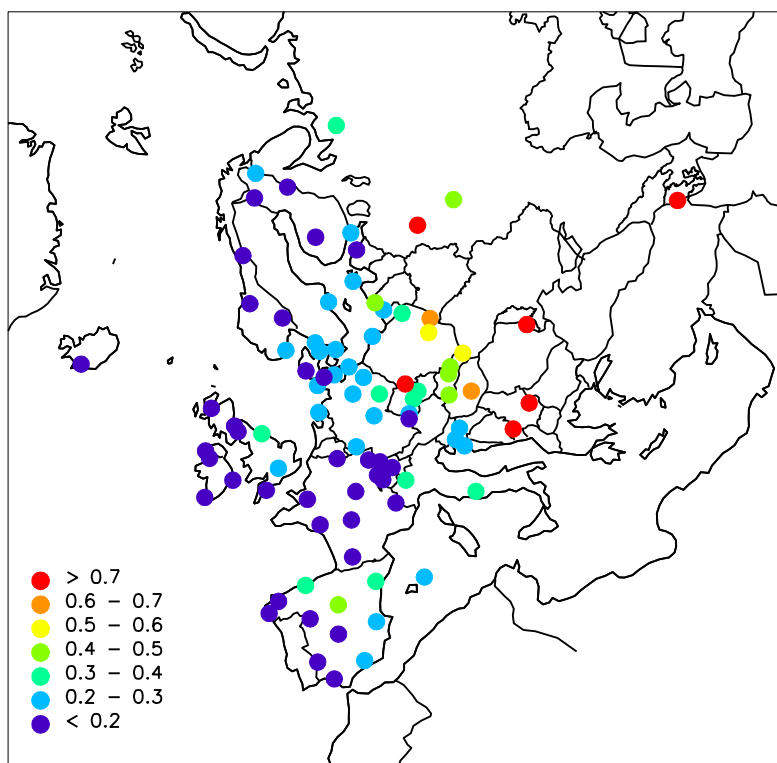


Figure 1.9: Geographical distribution of sulphate in precipitation 2012 (corrected for sea spray). Unit: mg S/l.

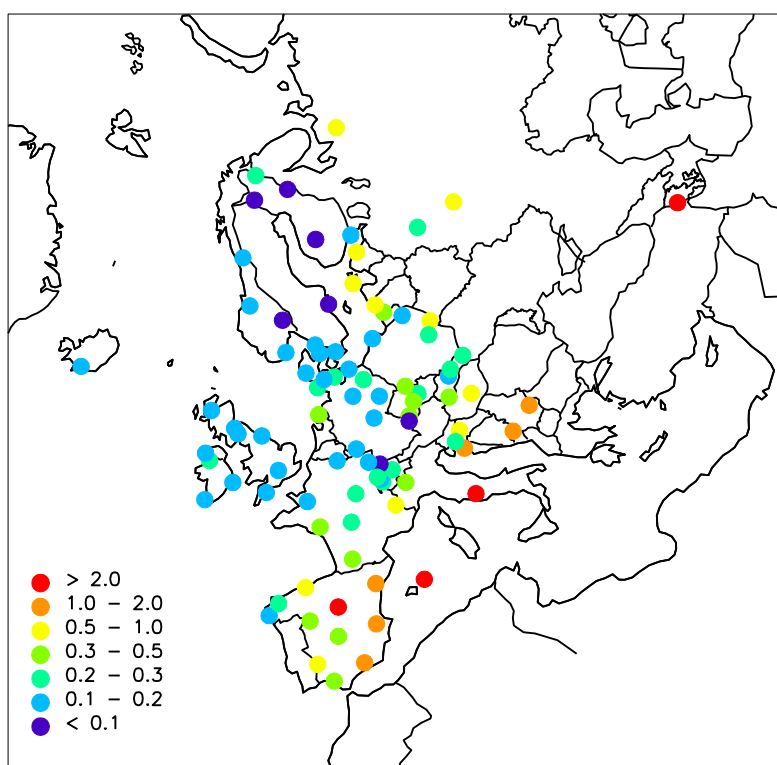


Figure 1.10: Geographical distribution of calcium in precipitation 2012. Unit: mg/l.

Annex 2

Annual statistics on precipitation data

AM0001R Amberd

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	2.57	0.60	8.77	557.7	97.1	0	29
Cl-	precip	0.90	0.05	3.88	196.2	100.0	0	32
K+	precip	0.55	0.01	3.65	120.6	100.0	0	32
Mg++	precip	0.182	0.038	0.966	39.6	99.2	0	31
NH4+	precip	0.84	0.18	2.40	183.3	100.0	0	32
NO3-	precip	0.59	0.17	1.42	128.7	100.0	0	32
Na+	precip	0.17	0.01	0.76	36.6	97.8	0	31
Precip off	precip	-	0.00	44.00	217.4	77.2	0	62
SO4--	precip	0.82	0.19	3.21	178.7	100.0	0	32
SO4-- corr	precip	0.79	0.16	3.20	172.1	100.0	0	32
cond	precip	36.75	7.50	142.30	7990.2	100.0	0	32
pH	precip	6.53	5.54	7.96	64.8	100.0	0	32

BY0004R Vysokoe

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.59	0.01	2.44	343.5	67.2	0	64
Cl-	precip	0.69	0.20	4.20	405.3	41.6	0	39
K+	precip	3.50	0.01	144.10	2055.8	68.1	0	65
Mg++	precip	0.113	0.010	0.460	66.4	67.8	0	65
NH4+	precip	0.50	0.04	3.93	292.3	65.0	0	64
NO3-	precip	0.35	0.04	1.35	205.4	68.2	0	69
Na+	precip	0.31	0.01	3.12	183.3	67.8	0	65
Precip	precip	-	0.0	52.0	586.7	99.9	0	367
SO4--	precip	0.71	0.11	2.29	417.7	68.5	0	65
SO4-- corr	precip	0.66	0.10	2.10	385.7	68.5	0	65
cond	precip	38.48	5.00	125.00	22578.3	69.3	0	71
pH	precip	6.11	5.32	6.96	460.1	64.5	0	65

CH0002R Payerne

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.23	0.02	3.14	241.5	100.0	0	46
Cl-	precip	0.14	0.02	2.49	149.3	100.0	0	46
K+	precip	0.03	0.00	0.43	33.4	100.0	0	46
Mg++	precip	0.020	0.002	0.217	21.0	100.0	0	46
NH4+	precip	0.39	0.11	1.37	404.3	100.0	0	46
NO3-	precip	0.26	0.06	1.40	271.2	100.0	0	46
Na+	precip	0.08	0.00	1.49	81.8	100.0	0	46
Precip	precip	-	0.0	77.8	1040.4	99.7	0	53
SO4--	precip	0.17	0.03	1.08	181.1	100.0	0	46
SO4-- corr	precip	0.17	0.03	1.02	174.1	100.0	0	46
cond	precip	7.36	2.41	36.25	7659.7	100.0	0	46
pH	precip	5.59	4.35	6.91	2672.5	100.0	0	46

CH0004R Chaumont

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.18	0.01	1.51	225.8	99.9	1	46
Cl-	precip	0.15	0.02	0.80	190.0	99.9	0	46
K+	precip	0.02	0.00	0.14	31.0	99.9	0	46
Mg++	precip	0.018	0.001	0.110	23.2	99.9	0	46
NH4+	precip	0.20	0.02	0.67	261.4	99.9	0	46
NO3-	precip	0.18	0.04	0.77	229.5	99.9	0	46
Na+	precip	0.08	0.01	0.47	108.4	99.9	0	46
Precip	precip	-	0.0	82.2	1278.1	98.1	0	53
SO4--	precip	0.13	0.00	0.48	167.5	99.9	0	46
SO4-- corr	precip	0.12	-0.00	0.47	158.4	99.9	0	46
cond	precip	6.08	2.24	23.18	7773.7	99.9	0	46
pH	precip	5.35	4.36	6.62	5729.2	99.9	0	46

CH0005R Rigi

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.23	0.01	2.79	318.8	100.0	0	47
Cl-	precip	0.12	0.02	1.55	161.9	100.0	0	47
K+	precip	0.03	0.00	0.39	40.3	100.0	0	47
Mg++	precip	0.019	0.002	0.194	26.4	100.0	0	47
NH4+	precip	0.43	0.05	3.67	601.0	100.0	0	47
NO3-	precip	0.29	0.06	3.17	402.0	100.0	0	47
Na+	precip	0.08	0.00	2.66	105.3	100.0	0	47
Precip	precip	-	0.0	129.5	1391.4	99.7	0	53
SO4--	precip	0.19	0.03	1.46	267.3	100.0	0	47
SO4-- corr	precip	0.19	0.02	1.42	259.3	100.0	0	47
cond	precip	7.77	2.28	60.57	10810.7	100.0	0	47
pH	precip	5.58	4.43	6.97	3638.7	100.0	0	47

CZ0001R Svratouch

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.22	0.03	2.30	165.1	98.1	0	40
Cl-	precip	0.18	0.00	1.41	135.2	98.1	1	40
K+	precip	0.05	0.01	0.66	39.0	98.1	0	40
Mg++	precip	0.026	0.002	0.106	19.2	98.1	1	40
NH4+	precip	0.54	0.09	3.12	399.3	98.1	0	40
NO3-	precip	0.41	0.17	2.55	305.5	98.1	0	40
Na+	precip	0.10	0.00	0.86	73.0	98.1	6	40
Precip	precip	-	0.0	63.2	736.1	100.0	0	53
SO4--	precip	0.38	0.14	2.02	281.3	98.1	0	40
SO4-- corr	precip	0.37	0.14	2.00	275.1	98.1	0	40
cond	precip	14.87	6.68	50.80	10942.0	98.1	0	40
pH	precip	4.89	4.14	6.51	9577.7	98.1	0	40

CZ0003R Kosetice

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.48	0.05	3.05	345.5	83.2	0	74
Cl-	precip	0.20	0.00	1.17	140.8	82.8	1	73
K+	precip	0.09	0.00	1.53	66.3	83.2	4	74
Mg++	precip	0.025	0.002	0.165	18.0	83.2	1	74
NH4+	precip	0.50	0.07	1.88	358.7	83.2	0	74
NO3-	precip	0.38	0.07	1.11	271.2	82.8	0	73
Na+	precip	0.06	0.00	0.60	43.8	83.2	12	74
Precip	precip	-	0.0	27.1	722.2	100.0	0	367
SO4--	precip	0.33	0.06	1.37	237.0	82.8	0	73
SO4-- corr	precip	0.32	0.05	1.37	231.6	82.8	0	73
cond	precip	13.18	4.19	40.40	9516.5	83.2	0	74
pH	precip	5.22	4.24	6.62	4387.5	83.2	0	74

CZ0005R Churanov

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.31	0.03	5.17	376.4	84.6	0	41
Cl-	precip	0.23	0.04	2.09	275.6	84.6	0	41
K+	precip	0.04	0.01	0.17	50.2	84.6	0	41
Mg++	precip	0.021	0.005	0.114	25.8	84.6	0	41
NH4+	precip	0.43	0.09	1.82	523.2	84.6	0	41
NO3-	precip	0.33	0.13	0.98	398.2	84.6	0	41
Na+	precip	0.08	0.00	0.93	99.7	84.6	6	41
Precip	precip	-	0.0	104.2	1205.0	99.4	0	52
SO4--	precip	0.29	0.03	1.73	350.1	84.6	0	41
SO4-- corr	precip	0.28	0.03	1.69	340.1	84.6	0	41
cond	precip	12.38	4.74	32.50	14918.7	84.6	0	41
pH	precip	5.01	4.43	6.33	11644.4	84.6	0	41

DE0001R Westerland

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.26	0.10	1.26	258.1	99.7	0	46
Cl-	precip	7.70	0.43	46.67	7542.0	99.7	0	46
K+	precip	0.17	0.01	0.96	164.1	99.7	2	46
Mg++	precip	0.515	0.036	3.138	504.1	99.7	0	46
NH4+	precip	0.51	0.12	5.03	501.3	99.7	0	46
NO3-	precip	0.39	0.08	2.88	378.0	99.7	0	46
Na+	precip	4.27	0.19	26.22	4183.4	99.7	0	46
Precip	precip	-	0.0	96.6	979.4	100.0	0	53
SO4--	precip	0.59	0.22	2.46	574.7	99.7	0	46
SO4-- corr	precip	0.23	0.03	1.47	222.8	99.7	0	46
cond	precip	42.18	8.80	185.80	41309.0	72.8	0	35
pH	precip	5.17	4.50	6.50	6558.8	77.9	0	37

DE0002R Waldhof

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.10	0.00	2.01	60.0	95.1	26	135
Cl-	precip	0.70	0.02	13.98	420.2	95.1	2	135
K+	precip	0.04	0.00	1.20	21.3	95.1	73	135
Mg++	precip	0.050	0.004	0.879	29.8	95.1	53	135
NH4+	precip	0.56	0.01	4.75	332.8	95.1	1	135
NO3-	precip	0.38	0.06	2.69	227.3	95.1	0	135
Na+	precip	0.40	0.00	7.84	239.6	95.1	39	135
Precip	precip	-	0.0	22.4	597.9	100.0	0	367
SO4--	precip	0.30	0.08	2.54	177.9	95.1	0	135
SO4-- corr	precip	0.26	0.06	2.51	157.7	95.1	0	135
cond	precip	13.56	4.40	60.40	8107.9	68.3	0	106
pH	precip	5.14	4.08	6.80	4336.5	68.4	0	107

DE0003R Schauinsland

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.08	0.00	1.98	157.8	96.3	93	165
Cl-	precip	0.29	0.02	7.74	559.9	96.3	7	165
K+	precip	0.02	0.00	0.28	29.9	96.3	136	165
Mg++	precip	0.015	0.001	0.425	29.1	96.3	112	165
NH4+	precip	0.31	0.01	3.23	599.6	96.4	1	166
NO3-	precip	0.20	0.03	2.70	394.0	96.4	0	166
Na+	precip	0.19	0.01	4.02	369.5	96.3	30	165
Precip	precip	-	0.0	60.5	1930.8	99.9	0	366
SO4--	precip	0.17	0.02	1.57	334.8	96.3	0	165
SO4-- corr	precip	0.16	0.02	1.56	306.7	96.3	0	165
cond	precip	8.99	2.10	64.00	17356.3	95.3	0	158
pH	precip	5.22	4.22	6.72	11686.6	95.3	0	157

DE0004R Deuselbach

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.18	0.00	2.29	139.2	99.9	5	45
Cl-	precip	0.48	0.09	2.60	373.9	99.9	0	45
K+	precip	0.02	0.01	0.27	18.1	99.9	32	45
Mg++	precip	0.037	0.003	0.180	28.8	99.9	14	45
NH4+	precip	0.40	0.01	2.12	309.4	99.9	1	45
NO3-	precip	0.29	0.08	1.66	226.6	99.9	0	45
Na+	precip	0.28	0.00	1.66	219.5	99.9	2	45
Precip	precip	-	0.0	54.2	776.0	99.4	0	52
SO4--	precip	0.26	0.09	1.09	205.5	99.9	0	45
SO4-- corr	precip	0.24	0.04	1.03	186.2	99.9	0	45
cond	precip	10.19	5.30	24.70	7908.1	99.4	0	40
pH	precip	5.45	4.67	6.48	2765.9	99.4	0	40

DE0005R Brotjacklriegel

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.07	0.01	0.59	93.8	100.0	19	45
Cl-	precip	0.24	0.06	1.87	308.3	100.0	0	45
K+	precip	0.02	0.00	0.31	24.6	100.0	34	45
Mg++	precip	0.014	0.003	0.147	18.4	100.0	33	45
NH4+	precip	0.38	0.01	2.46	489.2	100.0	1	45
NO3-	precip	0.32	0.11	1.38	409.2	100.0	0	45
Na+	precip	0.12	0.01	1.30	160.0	100.0	14	45
Precip	precip	-	0.0	108.8	1288.7	99.4	0	52
SO4--	precip	0.19	0.06	0.84	239.4	100.0	0	45
SO4-- corr	precip	0.17	0.05	0.82	224.9	100.0	0	45
cond	precip	9.12	5.20	26.60	11752.4	100.0	0	45
pH	precip	5.17	4.53	6.36	8782.5	100.0	0	45

DE0007R Neuglobsow

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.22	0.01	1.92	124.6	97.8	4	135
Cl-	precip	0.63	0.05	8.66	359.2	97.8	0	135
K+	precip	0.06	0.01	0.70	35.6	97.8	51	135
Mg++	precip	0.052	0.004	0.523	29.8	97.8	32	135
NH4+	precip	0.62	0.09	4.30	350.8	97.8	0	135
NO3-	precip	0.44	0.10	4.23	251.2	97.8	0	135
Na+	precip	0.44	0.00	5.57	252.7	97.8	16	135
Precip	precip	-	0.0	28.1	569.6	99.9	0	366
SO4--	precip	0.33	0.08	1.57	187.8	97.8	0	135
SO4-- corr	precip	0.30	0.05	1.50	170.6	97.8	0	135
cond	precip	13.88	3.70	69.30	7907.2	92.5	0	129
pH	precip	5.19	4.12	6.90	3638.7	92.5	0	129

DE0008R Schmücke

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.14	0.01	0.83	170.5	100.0	2	47
Cl-	precip	0.33	0.07	4.71	396.1	100.0	0	47
K+	precip	0.03	0.01	0.28	40.1	100.0	22	47
Mg++	precip	0.038	0.009	0.178	46.5	100.0	4	47
NH4+	precip	0.40	0.09	3.61	484.7	100.0	0	47
NO3-	precip	0.37	0.13	3.26	456.1	100.0	0	47
Na+	precip	0.21	0.00	4.98	252.5	100.0	12	47
Precip	precip	-	0.0	102.8	1217.8	99.4	0	52
SO4--	precip	0.25	0.10	2.31	306.5	100.0	0	47
SO4-- corr	precip	0.24	0.09	2.24	287.4	100.0	0	47
cond	precip	10.86	5.70	67.20	13222.7	95.9	0	46
pH	precip	5.14	4.40	6.50	8871.7	95.9	0	46

DE0009R Zingst

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.17	0.01	1.68	85.4	97.6	4	45
Cl-	precip	1.45	0.10	13.31	729.7	97.6	0	45
K+	precip	0.08	0.01	1.19	42.7	97.6	9	45
Mg++	precip	0.087	0.008	0.691	43.5	97.6	1	45
NH4+	precip	0.60	0.10	3.41	303.3	97.6	0	45
NO3-	precip	0.40	0.07	1.77	199.4	97.6	0	45
Na+	precip	0.85	0.02	7.38	426.5	97.6	1	45
Precip	precip	-	0.0	49.9	502.2	99.4	0	52
SO4--	precip	0.32	0.15	1.45	161.5	97.6	0	45
SO4-- corr	precip	0.25	-0.11	1.30	125.3	97.6	0	45
cond	precip	16.31	7.30	83.30	8190.1	82.0	0	40
pH	precip	5.33	4.40	6.80	2326.8	82.0	0	40

DE0044R Melpitz

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.16	0.01	0.59	65.6	99.4	2	32
Cl-	precip	0.44	0.05	2.38	177.3	99.4	0	32
K+	precip	0.08	0.00	0.46	31.6	99.4	11	32
Mg++	precip	0.039	0.003	0.213	15.6	99.4	6	32
NH4+	precip	0.73	0.08	3.74	295.5	99.4	0	32
NO3-	precip	0.42	0.13	1.50	167.8	99.4	0	32
Na+	precip	0.24	0.01	1.62	97.2	99.4	3	32
Precip	precip	-	0.0	40.2	403.4	99.4	0	52
SO4--	precip	0.37	0.13	1.32	149.6	99.4	0	32
SO4-- corr	precip	0.35	0.12	1.31	140.9	99.4	0	32
cond	precip	14.45	7.70	43.90	5828.5	99.4	0	32
pH	precip	5.19	4.47	6.61	2587.5	99.4	0	32

DK0005R Keldsno

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.21	0.06	1.70	106.8	83.0	0	19
Cl-	precip	3.06	0.23	10.42	1530.3	97.8	0	22
K+	precip	0.24	0.06	0.87	117.9	80.2	0	18
Mg++	precip	0.217	0.020	0.820	108.3	93.3	0	21
NH4+	precip	0.49	0.13	1.82	245.5	87.6	0	20
NO3-	precip	0.43	0.18	1.91	216.5	97.0	0	22
Na+	precip	1.68	0.27	6.81	840.8	97.8	0	22
Precip	precip	-	0.3	64.4	499.7	99.0	0	24
SO4--	precip	0.39	0.17	1.46	195.8	97.8	0	22
SO4-- corr	precip	0.25	0.13	0.89	125.7	97.8	0	22

DK0008R Anholt

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.18	0.05	0.67	110.4	100.0	0	23
Cl-	precip	3.51	0.57	16.10	2195.4	100.0	0	23
K+	precip	0.10	0.03	0.69	61.6	100.0	0	23
Mg++	precip	0.232	0.000	1.040	144.6	99.5	1	22
NH4+	precip	0.40	0.09	1.44	248.0	100.0	0	23
NO3-	precip	0.44	0.18	1.00	274.7	100.0	0	23
Na+	precip	1.41	0.27	6.81	883.2	95.2	0	22
Precip	precip	-	3.2	93.2	624.8	95.7	0	23
SO4--	precip	0.39	0.21	1.18	242.2	100.0	0	23
SO4-- corr	precip	0.23	0.08	1.09	141.3	100.0	0	23

DK0022R Sepstrup Sande

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.19	0.02	0.89	149.4	100.0	0	23
Cl-	precip	1.90	0.21	7.76	1528.0	91.8	0	22
K+	precip	0.07	0.01	0.23	56.7	91.9	0	22
Mg++	precip	0.189	0.020	0.584	152.0	83.7	0	21
NH4+	precip	0.40	0.14	1.20	319.9	91.9	0	23
NO3-	precip	0.37	0.20	0.85	300.4	100.0	0	23
Na+	precip	1.47	0.25	5.01	1177.1	97.2	0	22
Precip	precip	-	5.9	98.5	803.0	90.8	1	22
SO4--	precip	0.27	0.15	0.56	219.5	100.0	0	23
SO4-- corr	precip	0.15	-0.14	0.36	124.2	100.0	0	23

DK0031R Ulborg

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.12	0.04	0.41	76.4	89.2	0	17
Cl-	precip	3.15	0.70	13.43	1982.8	95.8	0	18
K+	precip	0.07	0.02	0.18	44.2	89.2	0	17
Mg++	precip	0.148	0.033	0.417	92.8	84.4	0	16
NH4+	precip	0.38	0.11	1.62	242.1	95.8	0	19
NO3-	precip	0.35	0.15	1.16	217.5	91.0	0	17
Na+	precip	1.86	0.41	7.54	1170.7	88.9	0	17
Precip	precip	-	0.6	87.0	629.1	78.8	1	19
SO4--	precip	0.33	0.16	0.81	205.2	95.8	0	18
SO4-- corr	precip	0.18	0.07	0.46	111.4	95.8	0	18

EE0009R Lahemaa

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.52	0.00	10.00	494.4	100.0	4	166
Cl-	precip	0.31	0.05	4.50	295.8	98.7	12	156
K+	precip	0.07	0.01	3.30	64.8	100.0	37	166
Mg++	precip	0.053	0.010	0.430	50.3	100.0	56	166
NH4+	precip	0.13	0.01	2.80	118.7	100.0	37	166
NO3-	precip	0.22	0.01	1.80	208.7	98.7	4	156
Na+	precip	0.23	0.01	3.80	215.2	100.0	8	166
Precip	precip	-	0.0	27.1	947.9	99.5	0	365
SO4--	precip	0.20	0.03	2.14	191.5	98.7	0	156
SO4-- corr	precip	0.19	0.02	2.14	175.4	98.7	0	156
cond	precip	7.43	5.00	64.00	7042.2	98.4	91	150
pH	precip	4.62	3.77	7.36	22987.7	98.4	0	150

EE0011R Vilsandi

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.68	0.20	2.40	603.6	100.0	0	24
Cl-	precip	1.16	0.20	3.60	1038.1	100.0	0	24
K+	precip	0.15	0.02	1.20	132.9	100.0	0	24
Mg++	precip	0.145	0.040	0.510	129.1	100.0	0	24
NH4+	precip	0.32	0.03	1.90	286.5	100.0	0	24
NO3-	precip	0.32	0.02	0.84	283.5	100.0	0	24
Na+	precip	0.75	0.06	2.50	665.7	100.0	0	24
Precip	precip	-	0.0	84.6	891.2	85.6	0	53
SO4--	precip	0.32	0.13	1.34	288.5	100.0	0	24
SO4-- corr	precip	0.26	0.07	1.32	232.3	100.0	0	24
cond	precip	13.62	5.00	42.00	12137.6	100.0	4	24
pH	precip	4.69	4.00	6.42	18275.4	100.0	0	24

ES0001R San Pablo de los Montes

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.36	0.05	6.50	188.1	98.6	5	54
Cl-	precip	0.31	0.15	3.45	158.5	99.6	24	61
K+	precip	0.12	0.03	1.01	63.3	98.6	18	54
Mg++	precip	0.044	0.010	0.330	22.6	98.6	6	54
NH4+	precip	0.19	0.02	3.72	100.3	99.2	8	58
NO3-	precip	0.16	0.04	2.00	82.8	99.6	13	61
Na+	precip	0.16	0.05	1.05	82.5	98.6	23	54
Precip	precip	-	0.0	45.3	518.5	99.7	0	365
SO4--	precip	0.16	0.05	1.33	84.4	99.6	15	61
SO4-- corr	precip	0.15	0.02	1.29	76.8	99.6	15	61
cond	precip	6.97	2.30	52.50	3615.6	100.0	0	66
pH	precip	5.82	5.18	7.29	791.2	100.0	0	66

ES0005R Noya

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.14	0.05	1.72	257.0	99.4	40	133
Cl-	precip	2.86	0.15	49.66	5265.2	99.7	4	139
K+	precip	0.08	0.03	3.90	156.0	99.4	52	133
Mg++	precip	0.207	0.010	1.700	381.7	99.4	1	133
NH4+	precip	0.06	0.02	0.66	103.6	99.6	43	137
NO3-	precip	0.07	0.04	1.68	133.1	99.7	74	139
Na+	precip	1.73	0.05	14.10	3181.3	99.4	1	133
Precip	precip	-	0.0	52.5	1840.8	99.7	0	365
SO4--	precip	0.29	0.05	2.83	531.0	99.7	12	139
SO4-- corr	precip	0.14	0.01	1.48	263.4	99.7	12	139
cond	precip	16.38	3.60	203.20	30152.3	99.7	0	139
pH	precip	5.39	4.42	7.02	7432.4	99.7	0	139

ES0006R Mahón

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	2.88	0.40	16.70	504.0	95.6	0	52
Cl-	precip	47.28	1.64	600.00	8261.7	99.5	0	59
K+	precip	1.04	0.14	12.00	182.5	95.6	0	52
Mg++	precip	3.563	0.490	39.000	622.7	95.6	0	52
NH4+	precip	0.23	0.02	1.32	40.1	99.5	13	59
NO3-	precip	0.69	0.04	3.26	120.2	99.5	2	59
Na+	precip	28.79	1.05	334.00	5031.1	95.6	0	52
Precip	precip	-	0.0	5.0	174.7	99.7	0	365
SO4--	precip	2.60	0.36	28.17	455.0	99.5	0	59
SO4-- corr	precip	0.20	-2.15	1.72	35.0	99.5	0	59
cond	precip	192.77	18.60	1918.00	33685.3	100.0	0	60
pH	precip	5.63	4.64	7.23	406.7	100.0	0	60

ES0007R Viznar

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	1.34	0.59	7.30	804.0	99.5	0	55
Cl-	precip	0.43	0.15	4.38	257.9	99.8	16	57
K+	precip	0.12	0.03	1.30	70.7	99.5	14	55
Mg++	precip	0.175	0.070	0.900	105.1	99.5	0	55
NH4+	precip	0.32	0.04	1.54	192.2	99.7	0	56
NO3-	precip	0.21	0.04	4.18	126.3	99.8	4	57
Na+	precip	0.22	0.05	1.65	133.0	99.5	13	55
Precip	precip	-	0.0	55.6	599.7	99.7	0	365
SO4--	precip	0.27	0.05	5.46	161.9	99.8	7	57
SO4-- corr	precip	0.25	0.03	5.26	151.0	99.8	7	57
cond	precip	13.81	5.20	131.80	8281.2	100.0	0	60
pH	precip	6.49	6.11	7.12	195.8	100.0	0	60

ES0008R Niembro

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.53	0.10	6.00	501.2	99.6	0	138
Cl-	precip	4.88	0.15	35.74	4626.9	100.0	2	147
K+	precip	0.18	0.03	12.00	166.7	99.6	10	138
Mg++	precip	0.420	0.040	3.800	398.7	99.6	0	138
NH4+	precip	0.30	0.02	7.75	287.3	99.9	1	144
NO3-	precip	0.80	0.04	86.22	762.6	100.0	1	147
Na+	precip	2.85	0.05	19.30	2705.7	99.6	1	138
Precip	precip	-	0.0	46.5	948.2	99.7	0	365
SO4--	precip	0.58	0.05	5.33	549.3	100.0	2	147
SO4-- corr	precip	0.32	-0.59	3.71	305.3	100.0	2	147
cond	precip	40.61	1.30	2280.00	38506.7	100.0	0	147
pH	precip	4.57	2.33	7.12	25417.3	99.3	0	146

ES0009R Campisabalos

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	2.20	0.32	26.70	656.4	99.0	0	70
Cl-	precip	0.72	0.15	12.63	213.8	99.5	11	74
K+	precip	0.22	0.03	5.80	65.4	99.0	13	70
Mg++	precip	0.181	0.020	1.800	54.0	99.0	0	70
NH4+	precip	1.08	0.20	13.21	321.7	99.1	0	71
NO3-	precip	0.72	0.08	7.93	213.9	99.5	0	74
Na+	precip	0.50	0.05	11.30	150.2	99.0	7	70
Precip	precip	-	0.0	26.3	298.2	99.7	0	365
SO4--	precip	0.51	0.05	5.07	152.4	99.5	5	74
SO4-- corr	precip	0.47	0.02	4.89	139.8	99.5	5	74
cond	precip	27.43	4.90	299.30	8179.5	100.0	0	82
pH	precip	6.28	5.62	7.36	156.9	100.0	0	82

ES0011R Barcarrota

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.54	0.19	7.60	238.1	99.9	0	61
Cl-	precip	0.55	0.15	5.64	244.0	100.0	17	62
K+	precip	0.20	0.03	7.70	90.1	99.9	20	61
Mg++	precip	0.166	0.060	2.700	73.6	99.9	0	61
NH4+	precip	0.17	0.02	1.45	74.3	100.0	4	62
NO3-	precip	0.16	0.04	4.78	70.9	100.0	10	62
Na+	precip	0.38	0.05	4.20	167.9	99.9	11	61
Precip	precip	-	0.0	39.6	444.2	99.7	0	365
SO4--	precip	0.14	0.05	2.02	62.2	100.0	15	62
SO4-- corr	precip	0.11	-0.05	1.74	48.8	100.0	15	62
cond	precip	9.06	3.00	78.90	4024.4	100.0	0	62
pH	precip	6.18	5.73	7.26	295.9	100.0	0	62

ES0012R Zarra

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	1.13	0.12	18.00	395.1	99.4	0	50
Cl-	precip	0.66	0.15	8.95	230.5	99.9	17	55
K+	precip	0.09	0.03	1.50	31.8	99.4	20	50
Mg++	precip	0.114	0.030	2.000	40.0	99.4	0	50
NH4+	precip	0.29	0.02	1.52	103.2	99.6	1	52
NO3-	precip	0.26	0.07	2.21	91.3	99.9	0	55
Na+	precip	0.44	0.05	9.20	152.6	99.4	9	50
Precip	precip	-	0.0	49.3	350.5	99.7	0	365
SO4--	precip	0.30	0.05	2.73	105.6	99.9	8	55
SO4-- corr	precip	0.26	0.03	2.42	92.7	99.9	8	55
cond	precip	12.99	3.80	124.70	4554.7	100.0	0	57
pH	precip	6.00	5.31	7.65	348.6	100.0	0	57

ES0013R Penausende

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.37	0.05	5.10	154.3	99.0	5	77
Cl-	precip	0.39	0.15	4.19	163.1	99.7	27	85
K+	precip	0.07	0.03	1.20	28.8	99.0	31	77
Mg++	precip	0.067	0.010	1.200	28.4	99.0	2	77
NH4+	precip	0.41	0.02	3.82	172.5	99.4	2	81
NO3-	precip	0.26	0.04	2.72	109.0	99.8	6	86
Na+	precip	0.27	0.05	2.90	112.3	99.0	16	77
Precip	precip	-	0.0	47.5	421.0	99.7	0	365
SO4--	precip	0.20	0.05	1.22	85.1	99.8	20	86
SO4-- corr	precip	0.18	0.00	1.13	75.8	99.7	20	85
cond	precip	8.95	2.10	150.60	3769.6	100.0	0	90
pH	precip	5.93	5.30	7.04	493.6	100.0	0	90

ES0014R Els Torns

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	1.59	0.15	6.70	647.0	99.9	0	42
Cl-	precip	0.52	0.15	2.16	212.9	100.0	12	43
K+	precip	0.11	0.03	0.48	45.1	99.9	3	42
Mg++	precip	0.143	0.040	0.800	58.3	99.9	0	42
NH4+	precip	0.53	0.09	3.42	217.0	100.0	0	43
NO3-	precip	0.40	0.08	4.18	161.6	100.0	0	43
Na+	precip	0.35	0.05	1.49	141.9	99.9	2	42
Precip	precip	-	0.0	45.6	406.7	99.7	0	365
SO4--	precip	0.39	0.05	1.82	159.7	100.0	2	43
SO4-- corr	precip	0.37	0.04	1.75	148.7	100.0	2	43
cond	precip	17.23	4.60	74.80	7008.0	100.0	0	43
pH	precip	6.35	5.86	7.08	182.3	100.0	0	43

ES0016R O Savifhao

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.23	0.05	9.90	290.5	99.0	11	109
Cl-	precip	1.22	0.15	32.90	1550.1	99.7	10	121
K+	precip	0.12	0.03	7.00	149.0	99.0	38	109
Mg++	precip	0.101	0.020	2.600	128.8	99.0	0	109
NH4+	precip	0.25	0.02	11.17	319.1	99.3	12	113
NO3-	precip	0.08	0.04	2.28	105.6	99.7	45	121
Na+	precip	0.74	0.05	20.10	945.7	99.0	3	109
Precip	precip	-	0.0	85.6	1274.5	99.7	0	365
SO4--	precip	0.17	0.05	4.91	222.4	99.7	19	121
SO4-- corr	precip	0.11	0.00	4.40	143.2	99.7	19	121
cond	precip	10.02	2.90	229.40	12764.8	100.0	0	130
pH	precip	5.73	5.26	7.43	2348.3	100.0	0	130

ES0017R Doñana

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.32	0.05	22.70	115.8	98.6	3	41
Cl-	precip	1.67	0.15	11.14	604.3	99.3	3	45
K+	precip	0.05	0.03	0.54	19.6	98.6	19	41
Mg++	precip	0.140	0.020	0.800	50.7	98.6	0	41
NH4+	precip	0.11	0.02	2.67	40.9	99.0	12	43
NO3-	precip	0.18	0.04	15.19	63.5	99.3	14	45
Na+	precip	1.01	0.05	7.00	362.9	98.6	1	41
Precip	precip	-	0.0	31.0	361.0	99.7	0	365
SO4--	precip	0.28	0.05	1.27	100.9	99.3	1	45
SO4-- corr	precip	0.19	0.01	1.10	68.3	99.3	1	45
cond	precip	12.91	3.90	215.10	4661.2	100.0	0	51
pH	precip	5.46	4.75	6.92	1252.6	100.0	0	51

FI0004R Ähtäri

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.08	0.01	0.87	59.0	91.3	0	46
Cl-	precip	0.13	0.02	1.34	100.5	91.3	0	46
K+	precip	0.09	0.01	0.58	72.7	88.6	1	45
Mg++	precip	0.021	0.003	0.096	16.5	91.3	0	46
NH4+	precip	0.11	0.01	0.50	85.4	91.3	0	46
NO3-	precip	0.19	0.02	1.41	150.0	91.3	0	46
Na+	precip	0.08	0.01	0.88	60.0	91.3	0	46
Precip	precip	-	0.0	61.7	769.3	99.8	0	53
SO4--	precip	0.17	0.04	0.61	130.8	91.3	0	46
SO4-- corr	precip	0.16	0.03	0.57	125.6	91.3	0	46
cond	precip	8.48	4.00	46.00	6526.6	91.3	0	46
pH	precip	4.86	4.03	5.73	10579.7	91.3	0	46

FI0017R Virolahti II

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.14	0.02	0.89	109.1	99.4	0	50
Cl-	precip	0.29	0.06	1.97	228.7	96.0	0	49
K+	precip	0.09	0.02	1.31	74.6	99.4	0	50
Mg++	precip	0.040	0.013	0.174	32.1	96.0	0	49
NH4+	precip	0.23	0.05	0.90	179.5	99.4	0	50
NO3-	precip	0.29	0.11	1.35	230.6	99.4	0	50
Na+	precip	0.17	0.03	1.08	133.2	96.0	0	49
Precip	precip	-	0.0	62.1	792.7	99.8	0	53
SO4--	precip	0.31	0.12	0.83	246.4	99.4	0	50
SO4-- corr	precip	0.30	0.12	0.81	236.2	96.0	0	49
cond	precip	12.41	6.00	46.00	9836.8	99.4	0	50
pH	precip	4.77	4.03	5.86	13463.8	99.4	0	50

FI0022R Oulanka

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.03	0.01	0.23	21.7	100.0	0	51
Cl-	precip	0.10	0.04	1.67	66.5	100.0	0	51
K+	precip	0.03	0.00	0.43	18.0	97.1	1	50
Mg++	precip	0.013	0.004	0.128	8.6	100.0	0	51
NH4+	precip	0.06	0.00	0.47	39.7	100.0	1	51
NO3-	precip	0.13	0.03	0.71	82.6	100.0	0	51
Na+	precip	0.06	0.01	0.98	36.6	100.0	0	51
Precip	precip	-	0.1	56.3	644.9	99.8	0	53
SO4--	precip	0.15	0.03	0.58	94.3	100.0	0	51
SO4-- corr	precip	0.14	0.03	0.57	91.1	100.0	0	51
cond	precip	8.27	3.00	24.00	5331.0	100.0	0	51
pH	precip	4.82	4.29	5.23	9817.4	100.0	0	51

FI0036R Pallas (Matorova)

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.03	0.01	0.14	19.9	100.0	0	50
Cl-	precip	0.10	0.02	0.49	62.5	98.4	0	49
K+	precip	0.02	0.00	0.16	14.7	100.0	2	50
Mg++	precip	0.013	0.003	0.049	8.5	100.0	0	50
NH4+	precip	0.06	0.01	0.33	37.9	100.0	0	50
NO3-	precip	0.13	0.02	1.41	82.6	100.0	0	50
Na+	precip	0.06	0.02	0.28	36.9	98.4	0	49
Precip	precip	-	0.0	39.9	649.3	99.7	0	52
SO4--	precip	0.14	0.01	0.77	93.4	100.0	1	50
SO4-- corr	precip	0.14	0.01	0.76	91.2	100.0	1	50
cond	precip	7.83	2.00	45.00	5083.8	100.0	0	50
pH	precip	4.81	3.98	5.34	10009.2	100.0	0	50

FR0008R Donon

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.15	0.01	11.11	231.5	89.3	4	159
Cl-	precip	0.34	0.03	3.89	528.9	89.3	13	159
K+	precip	0.04	0.01	0.52	55.8	89.3	50	159
Mg++	precip	0.036	0.010	0.500	56.9	89.3	58	159
NH4+	precip	0.28	0.01	5.28	435.2	89.3	2	159
NO3-	precip	0.24	0.03	3.71	372.1	89.3	0	159
Na+	precip	0.37	0.01	2.75	583.9	89.3	1	159
Precip	precip	-	0.0	45.8	1559.1	100.0	8	367
SO4--	precip	0.20	0.01	2.03	314.0	89.3	1	159
SO4-- corr	precip	0.18	0.00	1.93	275.4	89.3	1	159
cond	precip	8.27	2.00	72.80	12896.4	89.8	0	163
pH	precip	5.31	4.10	6.87	7704.3	89.8	0	163

FR0009R Revin

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.18	0.01	4.73	202.7	97.9	3	169
Cl-	precip	0.97	0.03	15.85	1085.2	97.9	4	169
K+	precip	0.04	0.01	0.74	49.5	97.9	23	169
Mg++	precip	0.078	0.010	0.940	87.5	97.9	35	169
NH4+	precip	0.38	0.01	4.00	427.7	97.9	4	169
NO3-	precip	0.30	0.01	3.53	339.5	97.9	1	169
Na+	precip	0.69	0.06	10.11	770.8	97.9	0	169
Precip	precip	-	0.0	40.4	1120.2	100.0	7	367
SO4--	precip	0.25	0.02	1.72	281.5	97.9	0	169
SO4-- corr	precip	0.20	0.01	1.61	222.3	97.9	0	169
cond	precip	11.35	1.90	72.50	12710.0	98.0	0	173
pH	precip	5.39	4.27	6.88	4518.2	98.0	0	173

FR0010R Morvan

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.24	0.01	6.97	272.6	94.7	6	154
Cl-	precip	0.72	0.03	12.73	836.6	94.7	6	154
K+	precip	0.12	0.01	2.51	143.0	94.7	19	154
Mg++	precip	0.063	0.010	0.860	72.4	94.7	41	154
NH4+	precip	0.25	0.01	3.16	286.9	94.7	11	154
NO3-	precip	0.22	0.01	2.39	258.8	94.7	3	154
Na+	precip	0.57	0.04	7.40	660.3	94.7	0	154
Precip	precip	-	0.0	44.4	1155.1	100.0	17	367
SO4--	precip	0.19	0.02	1.86	224.7	94.7	0	154
SO4-- corr	precip	0.15	0.01	1.76	176.7	94.7	0	154
cond	precip	9.07	1.90	61.80	10472.6	94.8	0	156
pH	precip	5.56	4.00	6.97	3187.7	94.8	0	156

FR0013R Peyrusse Vieille

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.47	0.03	10.69	342.3	90.1	0	114
Cl-	precip	1.47	0.03	15.99	1074.1	90.1	1	114
K+	precip	0.11	0.01	4.45	81.1	90.1	7	114
Mg++	precip	0.131	0.010	1.120	95.7	90.1	7	114
NH4+	precip	0.25	0.01	2.81	180.1	90.1	5	114
NO3-	precip	0.21	0.02	1.88	150.8	90.1	0	114
Na+	precip	0.98	0.06	9.20	714.5	90.1	0	114
Precip	precip	-	0.0	25.8	732.5	100.0	35	367
SO4--	precip	0.27	0.05	1.70	197.8	90.1	0	114
SO4-- corr	precip	0.19	0.01	1.47	139.5	90.1	0	114
cond	precip	13.13	3.10	68.70	9619.3	90.2	0	116
pH	precip	5.51	4.42	6.90	2281.8	90.2	0	116

FR0014R Montandon

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.23	0.01	9.76	324.2	90.1	9	153
Cl-	precip	0.26	0.03	4.58	364.4	90.1	14	153
K+	precip	0.04	0.01	2.18	55.1	90.1	65	153
Mg++	precip	0.034	0.010	0.500	48.0	90.1	59	153
NH4+	precip	0.31	0.01	9.11	437.5	90.1	23	153
NO3-	precip	0.24	0.01	5.36	346.1	90.1	4	153
Na+	precip	0.31	0.02	3.97	445.2	90.1	0	153
Precip	precip	-	0.0	49.0	1417.2	100.0	10	367
SO4--	precip	0.20	0.01	2.15	283.7	90.1	1	153
SO4-- corr	precip	0.18	0.01	2.08	255.8	90.1	1	153
cond	precip	8.27	1.80	89.50	11715.5	90.1	0	153
pH	precip	5.48	4.24	7.28	4644.2	90.1	0	153

FR0015R La Tardière

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.34	0.02	6.11	358.2	92.7	0	143
Cl-	precip	2.48	0.03	26.20	2637.4	92.7	1	143
K+	precip	0.08	0.01	1.15	85.2	92.7	10	143
Mg++	precip	0.200	0.010	1.840	212.8	92.7	9	143
NH4+	precip	0.24	0.01	4.52	250.7	92.7	4	143
NO3-	precip	0.14	0.01	3.38	153.2	92.7	2	143
Na+	precip	1.56	0.13	16.18	1660.3	92.7	0	143
Precip	precip	-	0.0	75.8	1064.8	100.0	13	367
SO4--	precip	0.26	0.03	2.22	275.3	92.7	0	143
SO4-- corr	precip	0.13	-0.03	2.04	139.0	92.7	0	143
cond	precip	15.68	2.20	135.90	16700.3	92.7	0	145
pH	precip	5.71	4.64	6.81	2065.9	92.7	0	145

FR0016R Le Casset

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.54	0.02	12.24	436.5	97.6	0	99
Cl-	precip	0.15	0.03	1.87	116.4	97.6	23	99
K+	precip	0.05	0.01	1.54	41.0	97.6	33	99
Mg++	precip	0.044	0.010	0.850	35.7	97.6	43	99
NH4+	precip	0.14	0.01	1.59	113.9	97.6	25	99
NO3-	precip	0.17	0.01	1.65	135.0	97.6	1	99
Na+	precip	0.21	0.02	1.39	166.5	97.6	0	99
Precip	precip	-	0.0	52.6	802.7	100.0	10	367
SO4--	precip	0.15	0.01	1.92	118.6	97.6	5	99
SO4-- corr	precip	0.14	0.00	1.80	108.4	97.6	5	99
cond	precip	7.11	1.80	113.20	5704.0	97.6	0	100
pH	precip	5.62	4.81	6.92	1922.0	97.6	0	100

FR0017R Montfranc

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.21	0.01	4.24	251.9	93.7	3	148
Cl-	precip	0.79	0.03	9.43	975.6	93.7	3	148
K+	precip	0.05	0.01	0.50	56.4	93.7	22	148
Mg++	precip	0.070	0.010	0.770	85.3	93.7	23	148
NH4+	precip	0.23	0.01	4.18	287.6	93.7	3	148
NO3-	precip	0.18	0.01	2.84	218.6	93.7	2	148
Na+	precip	0.59	0.06	5.27	729.8	93.7	0	148
Precip	precip	-	0.0	38.2	1227.6	100.0	13	367
SO4--	precip	0.20	0.04	1.50	242.8	93.7	0	148
SO4-- corr	precip	0.15	-0.01	1.43	186.7	93.7	0	148
cond	precip	9.08	2.50	84.00	11150.6	94.0	0	153
pH	precip	5.49	4.21	6.75	3978.2	94.0	0	153

FR0018R La Coulonche

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.17	0.01	4.51	168.5	90.6	3	154
Cl-	precip	1.81	0.03	41.38	1828.9	90.6	1	153
K+	precip	0.06	0.01	1.72	61.1	90.6	23	153
Mg++	precip	0.140	0.010	2.930	141.3	90.6	11	154
NH4+	precip	0.28	0.01	1.99	285.0	90.6	5	153
NO3-	precip	0.18	0.01	2.18	186.5	90.6	3	153
Na+	precip	1.19	0.14	25.08	1206.7	90.6	0	153
Precip	precip	-	0.0	35.6	1010.3	100.0	6	367
SO4--	precip	0.23	0.04	2.83	236.2	90.6	0	153
SO4-- corr	precip	0.14	-0.20	2.00	140.0	90.6	0	153
cond	precip	13.21	2.50	173.00	13340.5	91.2	0	157
pH	precip	5.62	3.82	6.85	2415.4	91.2	0	157

GB0002R Eskdalemuir

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.11	0.10	0.50	164.2	100.0	0	24
Cl-	precip	1.93	0.30	7.90	2932.0	100.0	0	24
K+	precip	0.08	0.00	0.20	117.5	100.0	0	24
Mg++	precip	0.118	0.000	0.481	179.5	100.0	0	24
NH4+	precip	0.27	0.10	1.10	409.3	100.0	0	24
NO3-	precip	0.14	0.05	0.80	219.0	100.0	0	24
Na+	precip	1.09	0.20	4.46	1659.6	100.0	0	24
Precip	precip	-	0.0	169.3	1517.3	92.3	0	25
SO4--	precip	0.20	0.10	0.70	304.9	100.0	0	24
SO4-- corr	precip	0.12	0.00	0.60	175.1	100.0	0	24
cond	precip	12.39	6.80	32.00	18793.1	100.0	0	24
pH	precip	5.20	4.60	6.50	9610.7	100.0	0	24

GB0006R Lough Navar

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.22	0.10	2.70	337.1	100.0	0	28
Cl-	precip	4.53	0.60	28.20	7060.4	100.0	0	28
K+	precip	0.12	0.00	0.70	192.1	100.0	1	28
Mg++	precip	0.302	0.000	1.900	471.6	100.0	0	28
NH4+	precip	0.15	0.00	0.90	239.2	100.0	0	28
NO3-	precip	0.07	0.00	0.80	108.0	100.0	3	28
Na+	precip	2.56	0.30	15.80	3985.0	100.0	0	28
Precip	precip	-	6.5	136.0	1559.6	100.0	0	28
SO4--	precip	0.31	0.10	1.40	483.8	100.0	0	28
SO4-- corr	precip	0.10	0.00	0.50	151.0	100.0	0	28
cond	precip	20.76	5.90	109.00	32380.3	100.0	0	28
pH	precip	5.40	4.80	6.60	6172.1	100.0	0	28

GB0013R Yarner Wood

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.17	0.10	0.70	237.9	100.0	0	25
Cl-	precip	3.31	0.60	9.10	4655.1	100.0	0	25
K+	precip	0.09	0.00	0.40	131.2	100.0	0	25
Mg++	precip	0.211	0.000	0.510	296.5	100.0	0	25
NH4+	precip	0.24	0.10	1.80	338.5	100.0	0	25
NO3-	precip	0.20	0.00	1.40	278.8	100.0	0	25
Na+	precip	1.90	0.40	4.69	2670.7	100.0	0	25
Precip	precip	-	0.0	180.5	1407.5	100.0	0	27
SO4--	precip	0.34	0.20	0.80	478.0	100.0	0	25
SO4-- corr	precip	0.18	0.08	0.70	256.6	100.0	0	25
cond	precip	19.13	9.30	35.00	26920.5	100.0	0	25
pH	precip	5.04	4.40	6.50	12955.3	100.0	0	25

GB0014R High Muffles

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.20	0.10	1.10	189.6	100.0	0	26
Cl-	precip	2.33	0.30	9.70	2210.8	100.0	0	26
K+	precip	0.08	0.00	0.20	74.5	100.0	0	26
Mg++	precip	0.168	0.000	0.600	159.8	100.0	0	26
NH4+	precip	0.43	0.10	1.00	408.1	100.0	0	26
NO3-	precip	0.33	0.16	0.70	315.3	100.0	0	26
Na+	precip	1.33	0.20	5.60	1266.9	100.0	0	26
Precip	precip	-	0.0	115.6	950.8	100.0	0	27
SO4--	precip	0.43	0.20	1.10	411.1	100.0	0	26
SO4-- corr	precip	0.32	0.10	0.60	306.6	100.0	0	26
cond	precip	18.69	10.50	48.00	17774.1	100.0	0	26
pH	precip	4.94	4.60	6.20	11037.5	100.0	0	26

GB0015R Strath Vaich Dam

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.20	0.10	0.70	241.4	100.0	0	24
Cl-	precip	5.52	0.30	14.80	6680.0	100.0	0	24
K+	precip	0.13	0.00	0.40	157.7	100.0	0	24
Mg++	precip	0.356	0.000	0.900	430.8	100.0	0	24
NH4+	precip	0.09	0.00	0.60	106.2	100.0	0	24
NO3-	precip	0.07	0.00	0.60	88.6	100.0	0	24
Na+	precip	3.14	0.20	8.50	3801.6	100.0	0	24
Precip	precip	-	0.0	150.9	1210.7	95.0	0	25
SO4--	precip	0.32	0.10	0.80	390.7	100.0	0	24
SO4-- corr	precip	0.04	0.00	0.50	47.2	100.0	0	24
cond	precip	24.61	6.50	58.50	29791.0	99.8	0	23
pH	precip	5.14	4.80	6.20	8734.2	99.8	0	23

GB0036R Harwell

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.18	0.03	1.68	144.7	99.8	0	169
Cl-	precip	1.26	0.07	22.30	991.0	99.8	0	169
K+	precip	0.06	0.01	1.00	51.2	99.8	3	169
Mg++	precip	0.088	0.015	1.105	69.3	99.8	0	169
NH4+	precip	0.37	0.07	9.40	290.5	99.8	0	169
NO3-	precip	0.25	0.01	6.91	199.4	99.8	0	169
Na+	precip	0.72	0.03	12.20	566.5	99.8	0	169
Precip	precip	-	0.0	26.6	789.1	99.7	0	365
SO4--	precip	0.28	0.01	4.42	220.8	99.8	0	169
SO4-- corr	precip	0.22	0.00	4.18	173.1	99.8	0	169
cond	precip	11.86	1.87	76.60	9359.4	99.2	0	146
pH	precip	5.20	3.83	7.09	4959.9	99.4	0	150

GB0048R Auchencorth Moss

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.10	0.01	3.83	109.5	100.0	7	226
Cl-	precip	1.57	0.03	76.30	1684.4	100.0	0	226
K+	precip	0.05	0.01	1.42	54.3	100.0	30	226
Mg++	precip	0.109	0.003	5.204	116.4	100.0	2	226
NH4+	precip	0.22	0.00	3.38	239.0	100.0	2	226
NO3-	precip	0.16	0.02	2.53	174.9	100.0	0	226
Na+	precip	0.90	-0.02	43.60	965.3	100.0	0	226
Precip	precip	-	0.0	42.8	1069.7	99.7	0	365
SO4--	precip	0.23	0.02	6.37	241.6	100.0	0	226
SO4-- corr	precip	0.15	-0.04	2.98	160.6	100.0	0	226
cond	precip	11.91	1.77	146.00	12737.8	98.7	0	184
pH	precip	5.06	4.23	6.82	9287.0	99.4	0	199

HR0002R Puntijarka

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.65	0.04	5.56	671.2	95.4	0	99
Cl-	precip	0.52	0.09	5.00	538.7	94.8	0	100
K+	precip	0.75	0.26	3.51	774.9	95.8	0	102
Mg++	precip	0.081	0.004	0.790	83.3	95.8	0	102
NH4+	precip	0.31	0.00	1.48	326.0	95.4	0	98
NO3-	precip	0.31	0.04	2.00	325.3	95.8	0	102
Na+	precip	0.34	0.04	3.41	349.2	94.8	0	100
Precip off	precip	-	0.10	62.50	1035.3	39.9	0	146
SO4--	precip	0.34	0.04	2.00	352.5	95.8	0	102
SO4-- corr	precip	0.30	-1.35	1.94	309.8	95.8	0	102
cond	precip	13.71	3.00	125.00	14194.6	95.7	0	115
pH	precip	5.39	3.91	7.67	4211.5	90.4	0	112

HR0004R Zavizan

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	1.06	0.04	33.80	1909.3	98.2	0	115
Cl-	precip	0.93	0.06	4.49	1677.5	97.7	0	112
K+	precip	0.49	0.20	5.07	885.5	98.2	0	115
Mg++	precip	0.165	0.004	7.933	297.2	98.2	0	115
NH4+	precip	0.20	0.01	1.27	358.0	97.4	0	111
NO3-	precip	0.25	0.03	2.05	441.1	98.2	0	115
Na+	precip	0.58	0.03	2.79	1047.8	97.7	0	111
Precip off	precip	-	0.10	92.20	1799.6	35.8	0	131
SO4--	precip	0.32	0.04	4.09	573.8	98.2	0	115
SO4-- corr	precip	0.27	0.03	3.98	485.2	98.2	0	115
cond	precip	14.42	3.00	238.00	25955.1	98.2	0	117
pH	precip	5.50	4.19	7.77	5720.6	94.6	0	115

HU0002R K-pusztá

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.70	0.03	7.08	255.9	98.0	1	60
Cl-	precip	1.20	0.73	6.25	440.7	99.4	0	69
K+	precip	0.14	0.03	1.30	52.1	98.3	2	61
Mg++	precip	0.118	0.025	0.700	43.3	98.0	7	60
NH4+	precip	0.47	0.02	2.55	174.4	99.0	8	68
NO3-	precip	0.42	0.01	2.02	153.2	99.3	3	69
Na+	precip	1.31	0.76	5.06	479.9	98.3	0	61
Precip off	precip	-	0.00	27.80	385.0	99.9	0	367
SO4--	precip	0.71	0.17	3.86	260.4	99.5	0	70
SO4-- corr	precip	0.63	0.13	3.58	231.3	99.4	0	69
cond	precip	18.67	8.10	83.40	6862.9	99.7	0	71
pH	precip	5.77	5.10	7.05	624.3	99.7	0	71

IE0001R Valentia Observatory

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.19	0.03	2.87	278.1	95.4	26	223
Cl-	precip	7.98	0.15	141.47	11820.4	95.4	0	223
K+	precip	0.17	0.03	3.19	253.4	95.4	40	223
Mg++	precip	0.551	0.025	9.481	816.9	95.4	16	223
NH4+	precip	0.07	0.02	1.02	104.3	95.4	92	223
NO3-	precip	0.06	0.01	1.08	91.1	95.4	9	223
Na+	precip	4.51	0.03	81.53	6675.7	95.4	1	223
Precip off	precip	-	0.00	54.50	1481.3	98.2	0	360
SO4--	precip	0.44	0.06	6.49	650.3	95.4	0	223
SO4-- corr	precip	0.06	-0.33	0.68	91.2	95.4	0	223
cond	precip	32.90	2.00	519.00	48730.1	95.4	0	223
pH	precip	5.28	4.46	6.38	7792.0	95.4	0	223

IE0007R Glenveagh

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.18	0.03	1.52	147.3	86.4	20	151
Cl-	precip	6.35	0.12	66.92	5118.6	85.8	0	150
K+	precip	0.15	0.03	1.47	121.0	85.8	44	150
Mg++	precip	0.442	0.025	4.643	356.1	85.8	19	150
NH4+	precip	0.09	0.02	0.84	70.6	84.0	72	145
NO3-	precip	0.05	0.01	0.57	36.6	84.3	51	148
Na+	precip	3.53	0.03	38.98	2848.8	85.8	1	150
Precip	precip	-	0.0	22.2	806.2	63.9	0	234
SO4--	precip	0.36	0.01	3.21	291.9	85.8	1	150
SO4-- corr	precip	0.07	-0.10	0.49	53.1	85.8	1	150
cond	precip	26.33	2.60	254.00	21226.9	85.8	0	150
pH	precip	5.39	4.65	7.01	3302.9	85.8	0	150

IE0009R Johnstown Castle

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.14	0.03	0.85	158.8	52.2	16	92
Cl-	precip	4.41	0.47	26.05	5151.3	51.5	0	91
K+	precip	0.12	0.03	2.45	136.5	51.5	17	91
Mg++	precip	0.311	0.025	1.907	363.2	51.5	4	91
NH4+	precip	0.25	0.02	1.27	287.8	51.5	11	92
NO3-	precip	0.18	0.01	1.50	207.2	51.5	1	91
Na+	precip	2.49	0.22	14.26	2902.2	51.5	0	91
Precip off	precip	-	0.00	33.90	1167.2	99.5	0	364
SO4--	precip	0.35	0.08	1.20	407.3	51.5	0	91
SO4-- corr	precip	0.14	-0.09	0.83	164.4	51.5	0	91
cond	precip	21.98	5.30	100.70	25660.5	51.5	0	91
pH	precip	5.30	4.44	6.51	5791.5	51.5	0	91

IS0002R Irafoss

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.12	0.00	1.80	213.9	97.6	0	150
Cl-	precip	4.21	0.20	52.70	7424.8	97.6	9	150
K+	precip	0.18	0.05	2.20	318.4	97.6	17	150
Mg++	precip	0.265	0.000	3.400	467.5	97.6	0	150
NO3-	precip	0.12	0.00	5.41	213.0	96.8	0	150
Na+	precip	2.29	0.10	28.20	4039.5	97.6	0	150
Precip	precip	-	0.0	89.1	1764.6	99.9	0	366
SO4--	precip	0.26	0.01	2.33	454.4	97.6	0	150
SO4-- corr	precip	0.07	-0.14	1.03	115.6	97.6	0	150
cond	precip	19.29	0.00	194.30	34036.0	97.0	0	136
pH	precip	5.48	4.80	6.90	5882.1	97.5	0	144

IT0001R Montelibretti

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	3.57	1.60	20.40	2314.4	100.0	0	29
Cl-	precip	4.83	0.23	26.04	3131.9	100.0	0	29
K+	precip	0.21	0.06	2.05	138.9	100.0	0	29
Mg++	precip	0.505	0.140	1.500	327.6	100.0	0	29
NH4+	precip	0.03	0.01	0.37	20.0	100.0	22	29
NO3-	precip	0.42	0.00	6.16	275.1	100.0	0	29
Na+	precip	2.48	0.14	11.00	1607.8	100.0	0	29
Precip	precip	-	0.0	60.8	649.0	100.0	0	355
SO4--	precip	0.56	0.15	3.93	360.7	100.0	0	29
SO4-- corr	precip	0.35	0.07	3.65	226.8	100.0	0	29
cond	precip	27.44	6.60	147.50	17806.5	100.0	0	29
pH	precip	6.02	4.50	6.70	618.0	100.0	0	29

IT0004R Ispra

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.42	0.00	7.07	490.4	100.0	0	97
Cl-	precip	0.39	0.02	25.77	454.2	100.0	0	97
K+	precip	0.04	0.00	1.00	47.1	98.6	0	96
Mg++	precip	0.066	0.004	1.370	76.7	100.0	0	97
NH4+	precip	0.86	0.03	6.34	1002.5	100.0	0	97
NO3-	precip	0.56	0.06	5.02	653.3	100.0	0	97
Na+	precip	0.32	0.02	11.17	371.6	100.0	0	97
Precip	precip	-	0.0	85.3	1164.5	99.7	0	365
SO4--	precip	0.35	0.01	2.63	412.3	100.0	0	97
SO4-- corr	precip	0.33	0.01	2.54	381.9	100.0	0	97
cond	precip	12.99	2.51	73.60	15127.1	98.5	0	71
pH	precip	5.40	4.34	6.86	4597.6	98.5	0	71

LT0015R Preila

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.43	0.10	2.54	259.2	99.6	0	99
Cl-	precip	4.11	0.06	36.23	2481.4	99.6	0	99
K+	precip	0.14	0.02	1.18	82.1	99.6	0	99
NH4+	precip	0.37	0.04	4.28	220.9	99.6	0	99
NO3-	precip	0.43	0.07	3.53	261.5	99.6	0	99
Na+	precip	2.45	0.05	27.50	1480.5	99.6	0	99
Precip	precip	-	0.0	36.5	603.7	99.7	0	366
SO4--	precip	0.47	0.06	3.92	283.2	99.6	0	99
SO4-- corr	precip	0.27	-0.01	2.14	160.7	99.6	0	99
cond	precip	27.45	6.00	185.00	16571.8	99.5	0	98
pH	precip	4.92	4.00	6.28	7238.5	99.6	0	99

LV0010R Rucava

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.57	0.09	2.28	471.0	82.1	5	36
Cl-	precip	1.46	0.17	5.97	1211.1	86.0	0	39
K+	precip	0.25	0.01	2.43	204.3	78.0	7	36
Mg++	precip	0.281	0.063	1.450	233.1	86.0	3	39
NH4+	precip	0.38	0.08	1.97	315.7	86.2	0	39
NO3-	precip	0.47	0.00	2.11	393.5	86.6	0	40
Na+	precip	0.94	0.00	3.27	776.4	86.6	1	40
Precip	precip	-	0.0	64.9	829.4	99.7	0	54
SO4--	precip	0.54	0.00	1.71	450.9	86.6	0	40
SO4-- corr	precip	0.46	0.00	1.60	383.0	86.6	0	40
cond	precip	18.52	8.70	53.00	15359.0	88.9	0	40
pH	precip	5.23	4.45	6.98	4919.2	86.5	0	40

MD0013R Leova II

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Cl-	precip	1.52	0.36	14.64	727.4	97.9	0	56
K+	precip	0.20	0.01	0.91	97.3	97.9	0	56
Mg++	precip	0.295	0.004	0.854	141.0	97.9	0	56
NH4+	precip	0.27	0.01	1.18	128.0	97.9	0	56
NO3-	precip	0.62	0.01	3.78	297.8	97.9	0	56
Na+	precip	0.79	0.11	5.47	378.7	97.9	0	56
Precip	precip	-	0.0	39.6	477.0	99.2	0	364
SO4--	precip	1.19	0.45	5.45	566.2	97.9	0	56
SO4-- corr	precip	1.12	0.44	5.37	533.0	97.9	0	56
cond	precip	19.79	5.20	109.40	9441.1	97.9	0	56
pH	precip	5.80	4.98	6.87	764.3	97.9	0	56

ME0008R Zabljak

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	1.14	0.22	5.45	1531.1	83.6	0	57
Cl-	precip	1.58	0.52	21.99	2132.0	95.6	0	89
K+	precip	0.87	0.00	11.56	1169.7	75.3	0	74
Mg++	precip	0.497	0.010	2.460	669.0	80.3	0	51
NH4+	precip	1.68	0.00	9.26	2258.2	96.3	0	96
NO3-	precip	0.75	0.00	4.68	1010.2	96.3	0	96
Na+	precip	1.08	0.00	9.09	1448.9	75.3	0	74
Precip	precip	-	0.0	69.4	1346.4	100.0	0	366
SO4--	precip	3.40	0.18	58.56	4575.9	96.3	0	96
SO4-- corr	precip	3.24	0.13	33.24	4358.4	96.1	0	94
pH	precip	6.12	5.20	8.32	1031.3	96.3	0	96

NL0009R Kollumerwaard

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.33	0.03	2.19	264.2	86.3	1	108
Cl-	precip	3.00	0.10	35.31	2382.0	87.2	0	125
H+	precip	5.78	4.68	7.52	4585.9	89.1	0	142
K+	precip	0.17	0.03	1.95	137.1	86.3	3	108
Mg++	precip	0.202	0.010	1.718	160.5	86.3	6	108
NH4+	precip	0.63	0.03	4.36	497.3	87.7	0	119
NO3-	precip	0.33	0.04	2.00	263.3	87.2	0	125
Na+	precip	1.61	0.06	13.87	1279.3	86.3	0	108
Precip	precip	-	0.0	22.1	793.5	99.7	183	366
SO4--	precip	0.37	0.02	2.29	297.2	87.2	1	125
SO4-- corr	precip	0.23	0.01	1.12	184.8	87.2	1	125
cond	precip	20.05	3.00	106.00	15907.2	82.4	0	88

NO0001R Birkenes

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.16	0.01	5.59	327.1	99.5	2	180
Cl-	precip	1.87	0.04	15.49	3720.5	99.5	0	180
K+	precip	0.09	0.01	2.32	173.0	99.5	15	180
Mg++	precip	0.130	0.005	1.050	258.8	99.5	11	180
NH4+	precip	0.33	0.01	6.06	648.9	99.5	5	180
NO3-	precip	0.38	0.01	5.44	756.2	99.5	4	180
Na+	precip	1.07	0.01	8.85	2140.6	99.5	0	180
Precip	precip	-	0.0	98.4	1992.9	99.7	0	366
SO4--	precip	0.31	0.02	3.35	627.3	99.5	0	180
SO4-- corr	precip	0.22	-0.10	3.13	448.0	99.5	0	180
cond	precip	19.24	3.00	144.00	38334.4	99.2	0	170
pH	precip	4.86	3.87	6.37	27572.9	99.2	0	169

NO0015R Tustervatn

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.12	0.01	0.63	90.5	99.9	0	49
Cl-	precip	3.50	0.07	28.34	2712.3	99.9	0	49
K+	precip	0.10	0.01	0.78	81.2	99.4	6	47
Mg++	precip	0.239	0.005	1.650	185.0	99.6	2	48
NH4+	precip	0.14	0.01	1.19	104.9	99.4	2	47
NO3-	precip	0.07	0.02	1.00	56.5	99.9	0	49
Na+	precip	1.89	0.03	13.63	1464.0	99.9	0	49
Precip	precip	-	0.0	62.7	775.4	98.1	0	54
SO4--	precip	0.18	0.02	1.04	141.2	99.9	0	49
SO4-- corr	precip	0.02	-0.32	0.83	19.3	99.9	0	49
cond	precip	17.12	3.00	96.00	13270.7	99.8	0	47
pH	precip	5.41	4.43	6.35	3000.8	99.2	0	45

NO0039R Kårvatn

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.12	0.01	0.67	178.1	97.8	1	47
Cl-	precip	2.83	0.01	11.86	4315.3	97.8	2	47
K+	precip	0.09	0.01	0.62	133.7	95.9	2	46
Mg++	precip	0.209	0.005	0.700	318.8	95.9	1	46
NH4+	precip	0.12	0.01	1.15	179.7	95.9	5	46
NO3-	precip	0.06	0.01	0.39	91.2	97.8	4	47
Na+	precip	1.60	0.01	5.84	2436.2	97.8	0	47
Precip	precip	-	0.0	186.3	1526.1	98.6	0	57
SO4--	precip	0.19	0.01	0.62	288.6	97.8	1	47
SO4-- corr	precip	0.06	-0.11	0.46	85.0	97.8	1	47
cond	precip	15.03	3.00	44.00	22943.4	97.8	0	45
pH	precip	5.42	4.70	6.26	5869.6	95.9	0	44

NO0056R Hurdal

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.07	0.01	0.43	76.8	100.0	1	54
Cl-	precip	0.41	0.03	5.23	460.4	100.0	0	54
K+	precip	0.04	0.01	0.52	48.7	100.0	3	54
Mg++	precip	0.030	0.005	0.156	34.1	100.0	8	54
NH4+	precip	0.21	0.01	1.22	239.4	100.0	3	54
NO3-	precip	0.27	0.01	1.03	308.3	100.0	2	54
Na+	precip	0.25	0.01	3.58	280.5	100.0	0	54
Precip	precip	-	0.0	82.8	1130.1	100.0	0	64
SO4--	precip	0.19	0.03	0.69	210.2	100.0	0	54
SO4-- corr	precip	0.16	0.00	0.61	186.3	100.0	0	54
cond	precip	10.99	2.00	35.00	12417.0	100.0	0	53
pH	precip	4.93	4.33	5.78	13294.6	100.0	0	53

PL0002R Jarczew

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.27	0.00	3.70	149.6	99.8	0	111
Cl-	precip	0.32	0.00	5.50	175.8	99.8	0	111
K+	precip	0.11	0.02	2.85	61.6	99.8	0	111
Mg++	precip	0.040	0.003	0.429	21.7	99.8	0	111
NH4+	precip	0.58	0.06	5.15	317.6	99.8	0	111
NO3-	precip	0.40	0.06	3.08	219.0	99.8	0	111
Na+	precip	0.14	0.02	2.43	75.9	99.8	0	111
Precip	precip	-	0.0	34.0	549.2	92.6	0	340
SO4--	precip	0.55	0.08	3.90	303.9	99.8	0	111
SO4-- corr	precip	0.54	0.08	3.85	297.5	99.8	0	111
cond	precip	15.34	3.00	83.00	8426.4	99.8	0	111
pH	precip	4.93	3.80	7.36	6509.4	99.8	0	111

PL0003R Sniezka

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.38	0.10	0.80	380.4	99.6	0	190
Cl-	precip	0.66	0.30	1.20	660.3	99.6	0	190
K+	precip	0.25	0.06	0.46	250.5	99.6	0	190
Mg++	precip	0.140	0.058	0.276	140.0	99.6	0	190
NH4+	precip	0.45	0.23	0.81	450.7	99.6	0	190
NO3-	precip	0.72	0.26	1.62	722.5	99.6	0	190
Na+	precip	0.52	0.19	1.02	517.2	99.6	0	190
Precip	precip	-	0.0	31.9	1001.7	94.8	0	348
SO4--	precip	0.93	0.42	2.27	930.0	99.6	0	190
SO4-- corr	precip	0.89	0.40	2.19	886.9	99.6	0	190
cond	precip	28.18	12.50	65.20	28230.6	99.6	0	190
pH	precip	4.44	4.02	4.78	36677.7	99.6	0	190

PL0004R Leba

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.14	0.00	2.40	123.6	99.8	0	179
Cl-	precip	1.22	0.10	16.70	1048.2	99.8	0	179
K+	precip	0.08	0.02	3.91	67.3	99.8	0	179
Mg++	precip	0.086	0.011	1.002	73.7	99.8	0	179
NH4+	precip	0.40	0.05	3.22	338.6	99.8	0	179
NO3-	precip	0.38	0.08	4.12	324.2	99.8	0	179
Na+	precip	0.68	0.05	8.30	579.1	99.8	0	179
Precip	precip	-	0.0	42.3	857.1	97.8	0	359
SO4--	precip	0.32	0.07	3.25	275.8	99.8	0	179
SO4-- corr	precip	0.26	0.05	3.22	226.4	99.8	0	179
cond	precip	15.82	5.00	131.20	13559.6	99.8	0	179
pH	precip	4.90	3.54	7.00	10875.7	99.8	0	179

PL0005R Diabla Gora

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.15	0.00	0.70	105.6	96.7	0	128
Cl-	precip	0.39	0.10	14.00	324.4	97.2	0	152
K+	precip	0.05	0.01	0.52	43.8	94.1	0	128
Mg++	precip	0.041	0.006	1.097	34.4	94.1	0	128
NH4+	precip	0.42	0.01	3.67	350.2	96.8	10	151
NO3-	precip	0.42	0.07	2.97	348.8	97.2	0	152
Na+	precip	0.19	0.01	9.38	156.0	94.1	0	128
Precip	precip	-	0.0	62.1	830.2	100.0	0	367
Precip off	precip	-	0.00	62.10	830.2	99.9	0	367
SO4--	precip	0.42	0.05	3.08	344.8	97.2	0	152
SO4-- corr	precip	0.40	0.02	3.04	330.1	97.2	0	152
cond	precip	14.43	4.00	53.00	11978.0	82.9	0	86
pH	precip	4.78	3.94	6.37	13676.0	97.3	0	154

RS0005R Kamenicki vis

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	1.20	0.12	19.21	796.6	95.8	0	93
Cl-	precip	0.52	0.09	8.73	341.1	96.8	0	100
K+	precip	0.42	0.04	9.50	275.3	95.8	0	93
Mg++	precip	0.131	0.000	1.910	86.7	95.8	1	93
NH4+	precip	0.53	0.00	5.30	350.8	95.8	7	93
NO3-	precip	0.43	0.07	2.88	286.8	96.8	0	100
Na+	precip	0.40	0.05	3.54	263.4	95.8	0	93
Precip off	precip	-	0.00	39.50	661.6	100.0	0	366
SO4--	precip	1.09	0.22	9.86	718.7	96.8	0	100
SO4-- corr	precip	1.05	0.20	9.76	695.9	96.8	0	100
cond	precip	26.99	7.40	157.90	17859.1	95.6	0	90
pH	precip	5.09	4.37	7.10	5380.9	95.6	0	90

RU0001R Janiskoski

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.24	0.01	1.62	138.9	100.0	0	182
Cl-	precip	0.78	0.07	20.85	442.9	100.0	0	182
K+	precip	0.28	0.03	2.96	161.9	100.0	0	182
Mg++	precip	0.043	0.007	0.895	24.4	100.0	0	182
NH4+	precip	0.14	0.01	1.67	78.0	100.0	0	182
NO3-	precip	0.10	0.01	1.58	57.3	100.0	0	182
Na+	precip	0.40	0.02	9.18	230.2	100.0	0	182
Precip	precip	-	0.0	22.2	569.2	100.0	0	367
SO4--	precip	0.31	0.01	5.77	174.2	100.0	0	182
SO4-- corr	precip	0.27	-0.08	5.72	155.1	100.0	0	182
cond	precip	8.78	3.20	45.20	4995.6	94.3	0	127
pH	precip	5.03	3.81	6.41	5279.9	96.6	0	145

RU0013R Pinega

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.70	0.02	6.56	465.6	100.0	0	170
Cl-	precip	0.83	0.08	9.68	548.9	100.0	0	170
K+	precip	0.37	0.01	4.47	243.1	100.0	0	170
Mg++	precip	0.101	0.001	1.336	67.0	100.0	0	170
NH4+	precip	0.34	0.03	2.55	223.8	100.0	0	170
NO3-	precip	0.16	0.01	1.74	106.0	100.0	0	169
Na+	precip	0.51	0.02	5.24	338.6	100.0	0	170
Precip	precip	-	0.0	44.8	664.4	99.9	0	367
SO4--	precip	0.40	0.04	4.01	267.9	100.0	0	170
SO4-- corr	precip	0.36	0.04	3.99	240.9	100.0	0	170
cond	precip	12.19	3.50	67.00	8099.3	95.5	0	121
pH	precip	5.67	4.86	6.97	1425.5	96.9	0	134

RU0018R Danki

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.51	0.12	7.52	371.9	100.0	0	150
Cl-	precip	0.33	0.03	5.40	245.9	100.0	0	150
K+	precip	0.24	0.04	4.72	179.5	100.0	0	150
Mg++	precip	0.056	0.011	0.445	41.1	100.0	0	150
NH4+	precip	0.37	0.01	3.45	273.7	100.0	0	150
NO3-	precip	0.31	0.01	3.81	227.1	100.0	0	150
Na+	precip	0.19	0.03	2.50	136.3	100.0	0	150
Precip	precip	-	0.0	45.9	735.6	100.0	0	367
SO4--	precip	0.48	0.04	5.37	352.2	100.0	0	150
SO4-- corr	precip	0.46	0.03	5.25	340.5	100.0	0	150
cond	precip	11.42	2.40	67.40	8400.7	98.7	0	132
pH	precip	5.09	4.20	6.66	5950.3	99.0	0	138

RU0020R Lesnoy

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.26	0.05	3.51	246.4	100.0	0	189
Cl-	precip	0.27	0.01	2.09	256.2	100.0	0	189
K+	precip	0.12	0.01	1.23	117.4	100.0	0	189
Mg++	precip	0.034	0.006	0.410	31.8	100.0	0	189
NH4+	precip	0.31	0.01	3.24	297.0	100.0	0	189
NO3-	precip	0.25	0.01	2.38	237.4	100.0	0	189
Na+	precip	0.12	0.02	1.35	109.7	100.0	0	189
Precip	precip	-	0.0	35.4	948.5	99.7	0	365
SO4--	precip	0.29	0.03	6.47	275.3	100.0	0	189
cond	precip	8.69	2.90	73.60	8239.1	95.5	0	152
pH	precip	4.98	4.22	6.59	9870.0	97.1	0	161

SE0011R Vavihill

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.13	0.03	0.39	106.4	100.0	3	11
Cl-	precip	1.33	0.44	2.79	1072.7	100.0	0	11
K+	precip	0.03	0.03	0.05	21.8	100.0	9	11
Mg++	precip	0.085	0.015	0.130	68.6	100.0	2	11
NH4+	precip	0.49	0.23	2.11	393.7	100.0	0	11
NO3-	precip	0.50	0.28	1.38	401.2	100.0	0	11
Na+	precip	0.70	0.13	1.16	566.0	100.0	0	11
Precip	precip	-	22.4	177.7	805.2	91.3	0	11
SO4--	precip	0.35	0.25	0.82	279.5	100.0	0	11
SO4-- corr	precip	0.29	0.21	0.73	230.6	100.0	0	11
cond	precip	28.18	11.00	105.00	22694.1	100.0	0	11
pH	precip	4.88	4.55	5.80	10553.7	100.0	0	11

SE0012R Aspvreten

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.07	0.03	0.22	31.5	100.0	6	11
Cl-	precip	0.43	0.24	1.34	191.3	100.0	0	11
K+	precip	0.03	0.03	0.13	15.5	100.0	8	11
Mg++	precip	0.035	0.015	0.210	15.9	100.0	7	11
NH4+	precip	0.26	0.08	0.51	116.5	100.0	0	11
NO3-	precip	0.32	0.15	0.44	144.5	100.0	0	11
Na+	precip	0.34	0.17	1.58	154.1	100.0	0	11
Precip	precip	-	12.9	75.0	449.8	82.6	0	11
SO4--	precip	0.24	0.13	0.41	106.4	100.0	0	11
SO4-- corr	precip	0.21	0.11	0.28	93.3	100.0	0	11
cond	precip	18.93	8.00	74.00	8478.4	100.0	0	10
pH	precip	4.92	4.68	5.29	5439.8	100.0	0	11

SE0014R Råö

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.20	0.03	5.39	165.6	99.6	40	146
Cl-	precip	4.63	0.13	256.78	3854.7	99.6	0	146
K+	precip	0.11	0.03	5.19	93.0	99.6	70	146
Mg++	precip	0.319	0.015	17.150	265.6	99.6	24	146
NH4+	precip	0.39	0.01	3.23	326.2	99.6	1	146
NO3-	precip	0.40	0.05	4.91	334.8	99.6	0	146
Na+	precip	2.62	0.03	144.77	2185.5	99.6	4	146
Precip	precip	-	0.0	26.5	832.9	100.0	0	367
SO4--	precip	0.45	0.03	12.16	372.8	99.6	0	146
SO4-- corr	precip	0.23	-0.55	1.94	189.9	99.6	0	146
cond	precip	28.16	4.00	992.00	23453.9	95.3	0	106
pH	precip	4.97	3.83	6.98	8857.4	99.8	0	156

SI0008R Iskrba

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.25	0.02	6.42	386.2	99.7	14	128
Cl-	precip	0.35	0.04	7.25	536.1	99.7	0	128
K+	precip	0.04	0.01	0.75	60.6	99.7	71	128
Mg++	precip	0.049	0.005	0.816	75.1	99.6	63	127
NH4+	precip	0.25	0.01	3.98	381.3	98.7	9	127
NO3-	precip	0.23	0.03	2.77	352.9	99.7	0	128
Na+	precip	0.20	0.00	4.81	313.7	98.7	4	127
Precip	precip	-	0.0	67.3	1541.0	100.0	0	367
SO4--	precip	0.31	0.03	5.12	471.6	99.7	0	128
SO4-- corr	precip	0.29	0.03	5.12	445.1	99.7	0	128
cond	precip	9.33	1.99	51.90	14381.3	97.1	1	92
pH	precip	5.02	4.06	6.64	14671.9	97.1	0	92

SK0002R Chopok

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.19	0.01	2.35	190.4	90.7	0	131
Cl-	precip	0.16	0.01	2.53	154.2	91.7	0	134
K+	precip	0.04	0.00	1.00	44.1	91.8	0	134
Mg++	precip	0.027	0.001	0.310	26.5	91.4	0	133
NH4+	precip	0.40	0.02	2.42	393.4	81.1	0	123
NO3-	precip	0.26	0.03	1.82	256.7	92.0	0	135
Na+	precip	0.13	0.01	1.77	124.9	91.3	0	131
Precip	precip	-	0.1	35.5	992.8	54.9	0	201
SO4--	precip	0.43	0.07	2.75	425.2	91.8	0	134
SO4-- corr	precip	0.42	0.07	2.71	416.2	91.8	0	134
cond	precip	10.59	4.07	33.93	10518.2	71.2	0	72
pH	precip	4.74	3.95	6.58	18192.2	71.8	0	73

SK0004R Stará Lesná

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.22	0.00	2.06	130.7	90.1	0	83
Cl-	precip	0.15	0.02	1.44	88.0	90.1	0	83
K+	precip	0.04	0.00	0.52	24.7	90.1	0	83
Mg++	precip	0.021	0.001	0.208	12.8	90.1	1	83
NH4+	precip	0.30	0.00	1.83	181.2	72.6	0	64
NO3-	precip	0.25	0.00	1.42	152.0	90.1	0	83
Na+	precip	0.17	0.01	1.06	104.2	86.7	0	78
Precip	precip	-	0.1	23.9	606.3	38.5	0	141
SO4--	precip	0.42	0.01	4.43	253.9	88.5	0	82
SO4-- corr	precip	0.41	0.00	4.39	247.3	88.5	0	82
cond	precip	17.19	5.60	52.30	10422.5	66.8	0	42
pH	precip	4.64	3.83	6.17	14013.2	70.4	0	43

SK0006R Starina

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.24	0.03	1.22	162.3	86.0	0	81
Cl-	precip	0.19	0.04	0.94	127.1	85.8	0	81
K+	precip	0.08	0.00	0.90	52.2	85.8	0	81
Mg++	precip	0.027	0.002	0.240	18.1	86.2	0	82
NH4+	precip	0.38	0.01	1.50	260.0	82.5	0	74
NO3-	precip	0.38	0.02	1.84	254.0	86.2	0	82
Na+	precip	0.14	0.01	0.68	95.7	85.5	0	80
Precip	precip	-	0.1	29.5	676.1	40.2	0	147
SO4--	precip	0.55	0.06	2.24	368.7	86.2	0	82
SO4-- corr	precip	0.53	0.05	2.18	360.2	86.2	0	82
cond	precip	14.58	4.33	37.10	9855.7	70.2	0	45
pH	precip	4.83	4.22	5.95	9955.0	70.2	0	45

SK0007R Topolnikiy

January 2012 - December 2012

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.35	0.04	1.23	153.2	98.5	0	33
Cl-	precip	0.15	0.02	0.52	64.2	98.5	1	33
K+	precip	0.04	0.01	0.79	19.1	97.9	0	34
Mg++	precip	0.039	0.000	0.350	16.7	99.7	0	35
NH4+	precip	0.48	0.01	1.90	208.4	99.7	0	35
NO3-	precip	0.39	0.01	1.69	170.0	99.7	1	35
Na+	precip	0.12	0.01	0.77	51.1	99.1	0	34
Precip	precip	-	0.0	41.4	431.9	99.5	0	45
SO4--	precip	0.41	0.01	2.06	178.2	99.7	1	35
SO4-- corr	precip	0.40	-0.01	2.01	173.6	99.7	1	35
cond	precip	13.19	5.67	28.50	5696.7	92.0	0	25
pH	precip	4.89	4.31	6.42	5515.7	92.0	0	25

Annex 3

Annual statistics on gases and aerosol data

AM0001R Amberd

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.56	0.51	0.32	3.62	0.00	0.02	0.46	1.77	2.24	70.2	0	258
Cl-	aerosol	0.08	0.10	0.04	3.14	0.00	0.01	0.05	0.26	0.87	73.0	7	268
HNO3	air	0.08	0.06	0.06	2.67	0.00	0.00	0.07	0.19	0.35	70.8	10	260
HNO3+NO3-	air+aerosol	0.32	0.26	0.22	2.88	0.00	0.03	0.28	0.89	1.63	69.7	12	256
K+	aerosol	0.08	0.07	0.05	2.65	0.00	0.01	0.05	0.25	0.47	73.0	0	268
Mg++	aerosol	0.041	0.052	0.020	3.752	0.000	0.002	0.022	0.165	0.297	71.0	0	261
NH3	air	0.66	0.51	0.40	3.74	0.00	0.02	0.61	1.50	2.85	71.9	0	264
NH3+NH4+	air+aerosol	1.07	0.63	0.81	2.58	0.02	0.08	0.99	2.34	3.67	64.2	0	236
NH4+	aerosol	0.41	0.40	0.25	3.30	0.00	0.03	0.31	1.42	1.92	64.5	0	237
NO2	air	0.28	0.30	0.15	3.80	0.00	0.01	0.19	0.94	1.70	55.2	0	203
NO3-	aerosol	0.25	0.26	0.15	3.50	0.00	0.01	0.19	0.92	1.43	71.3	3	262
Na+	aerosol	0.06	0.07	0.04	2.73	0.00	0.01	0.04	0.18	0.65	72.4	0	266
SO2	air	0.21	0.21	0.13	3.04	0.00	0.01	0.16	0.67	1.79	71.0	2	261
SO4--	aerosol	0.55	0.40	0.34	3.95	0.00	0.01	0.50	1.34	2.38	72.4	2	266
SO4-- corr	aerosol	0.54	0.40	0.34	4.14	-0.00	0.01	0.49	1.33	2.37	72.4	2	266

AT0002R Illmitz

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	2.67	1.68	2.27	1.76	0.00	0.95	2.21	6.25	10.58	99.5	0	364
PM1 mass	pm1	12.77	9.90	9.28	2.35	0.51	2.32	9.15	33.63	42.23	34.7	0	127
PM10 mass	pm10	20.08	14.46	16.00	1.96	2.26	5.26	15.19	51.82	81.63	98.1	0	359
PM25 mass	pm25	14.13	11.88	10.79	2.05	2.35	3.28	9.97	40.34	72.31	71.6	0	262
SO2	air	0.92	1.93	0.42	2.99	0.00	0.09	0.37	3.62	27.17	95.1	0	8352

AT0005R Vorhegg

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	0.98	0.67	0.84	1.67	0.27	0.47	0.74	2.49	4.44	96.2	0	352
PM10 mass	pm10	8.92	6.57	6.85	2.17	0.63	1.72	8.16	19.91	42.00	25.1	0	92
SO2	air	0.19	0.34	0.10	3.14	0.00	0.01	0.10	0.65	5.01	92.8	0	8151

AT0048R Zoebelboden

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	1.37	1.02	1.12	1.82	0.22	0.49	1.00	3.52	7.82	98.4	0	360
PM10 mass	pm10	8.80	7.42	6.36	2.38	0.25	1.37	7.13	24.76	42.45	29.0	0	106
SO2	air	0.31	0.84	0.12	3.18	0.00	0.02	0.11	1.00	14.42	94.4	0	8294

BE0001R Offagne

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	2.30	2.47	1.55	2.81	0.00	0.00	1.52	7.32	20.28	94.5	0	8297

BE0032R Eupen

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	3.70	3.35	2.56	2.43	0.00	0.61	2.59	10.83	24.70	95.9	0	8425

BE0035R Vezin

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	3.70	3.35	2.56	2.43	0.00	0.61	2.59	10.83	24.70	95.9	0	8425

CH0001G Jungfrauoch

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.08	0.14	0.04	3.18	0.00	0.00	0.03	0.35	0.75	15.3	0	56
Ca++	pm1	0.01	0.04	0.01	2.62	0.00	0.00	0.00	0.03	0.32	15.3	0	56
Cl-	aerosol	0.00	0.01	0.00	3.22	0.00	0.00	0.00	0.02	0.05	15.3	0	56
Cl-	pm1	0.00	0.00	0.00	2.08	0.00	0.00	0.00	0.00	0.00	15.3	0	56
K+	aerosol	0.01	0.02	0.01	2.77	0.00	0.00	0.00	0.04	0.10	15.3	0	56
K+	pm1	0.01	0.02	0.01	3.23	0.00	0.00	0.00	0.05	0.08	15.3	0	56
Mg++	aerosol	0.005	0.009	0.003	3.237	0.000	0.000	0.002	0.025	0.047	15.3	0	56
Mg++	pm1	0.000	0.001	0.000	2.138	0.000	0.000	0.000	0.002	0.003	15.3	0	56
NH4+	aerosol	0.05	0.05	0.03	3.11	0.00	0.00	0.03	0.16	0.18	15.3	0	56
NH4+	pm1	0.04	0.05	0.03	3.36	0.00	0.00	0.02	0.17	0.19	15.3	0	56
NO2	air	0.11	0.21	0.07	2.30	0.01	0.02	0.07	0.32	2.57	86.3	0	316
NO2	air	0.11	0.26	0.06	2.67	0.00	0.01	0.06	0.33	4.93	86.1	0	7566
NO3-	aerosol	0.02	0.03	0.01	3.77	0.00	0.00	0.01	0.08	0.12	15.3	0	56
NO3-	aerosol	0.03	0.03	0.02	3.12	0.00	0.00	0.02	0.08	0.18	15.6	0	57
NO3-	aerosol	0.04	0.05	0.03	3.39	0.00	0.00	0.03	0.15	0.19	15.3	0	56
NO3-	pm1	0.00	0.00	0.00	2.15	0.00	0.00	0.00	0.01	0.01	15.3	0	56
NO3-	pm1	0.02	0.03	0.01	3.05	0.00	0.00	0.01	0.08	0.18	15.6	0	57
NO3-	pm1	0.02	0.03	0.01	3.06	0.00	0.00	0.01	0.08	0.18	15.3	0	56
Na+	aerosol	0.02	0.02	0.01	3.02	0.00	0.00	0.01	0.06	0.15	15.3	0	56
Na+	pm1	0.00	0.00	0.00	2.12	0.00	0.00	0.00	0.01	0.02	15.3	0	56
PM10 mass	pm10	2.91	4.78	1.69	3.06	-0.50	-0.20	1.40	11.98	35.80	99.2	0	363
SO2	air	0.03	0.05	0.02	2.31	-0.02	-0.01	0.02	0.09	0.50	97.8	0	358
SO4--	aerosol	0.05	0.06	0.03	3.54	0.00	0.00	0.03	0.20	0.22	15.3	0	56
SO4--	aerosol	0.11	0.13	0.07	2.86	0.00	0.01	0.07	0.37	0.85	99.2	0	363
SO4--	pm1	0.05	0.06	0.02	4.19	0.00	0.00	0.02	0.16	0.21	15.3	0	56
SO4-- corr	aerosol	0.05	0.06	0.03	3.68	-0.00	-0.00	0.03	0.19	0.21	15.3	0	56
SO4-- corr	pm1	0.05	0.06	0.02	4.23	0.00	0.00	0.02	0.16	0.21	15.3	0	56

CH0002R Payerne

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.33	0.34	0.21	2.79	0.00	0.04	0.23	0.91	3.10	99.7	0	365
EC	pm25	0.38	0.37	0.28	2.10	0.06	0.11	0.26	1.43	1.98	17.8	0	65
HNO3	air	0.24	0.09	0.23	1.42	0.12	0.13	0.22	0.45	0.49	100.0	0	27
HNO3+NO3-	air+aerosol	0.93	0.88	0.62	2.54	0.07	0.13	0.57	2.76	4.60	100.0	0	366
K+	aerosol	0.17	0.16	0.13	2.21	0.00	0.03	0.12	0.48	1.35	99.7	0	365
Mg++	aerosol	0.032	0.023	0.025	2.184	0.001	0.006	0.027	0.077	0.136	99.7	0	365
NH3	air	2.30	1.29	1.92	1.88	0.42	0.45	2.00	5.21	5.49	100.0	0	27
NH3+NH4+	air+aerosol	3.48	2.24	2.79	2.02	0.31	0.82	3.10	7.97	12.76	99.7	0	365
NH4+	aerosol	1.13	0.82	0.88	2.01	0.31	0.32	0.84	3.00	3.21	100.0	0	27
NO2	air	3.34	2.30	2.70	1.92	0.44	0.93	2.63	7.73	16.41	97.0	0	355
NO3-	aerosol	0.79	0.57	0.61	2.03	0.21	0.23	0.57	1.92	1.93	100.0	0	27
Na+	aerosol	0.18	0.21	0.11	2.90	-0.01	0.01	0.10	0.67	1.32	99.7	0	365
OC	pm25	1.81	1.92	1.28	2.20	0.23	0.40	1.11	7.24	11.07	17.8	0	65
PM1 mass	pm1	7.44	5.42	5.93	1.99	1.20	1.60	6.40	17.58	29.20	24.9	0	91
PM10 mass	pm10	14.93	10.69	11.90	1.99	1.00	3.70	11.60	35.17	74.40	99.5	0	364
PM25 mass	pm25	10.55	9.00	7.77	2.23	0.80	2.06	8.20	31.61	44.80	24.6	0	90
SO2	air	0.32	0.40	0.24	1.93	0.06	0.10	0.21	0.67	3.44	99.5	0	364
SO4--	aerosol	0.51	0.51	0.37	2.14	0.04	0.10	0.39	1.16	4.28	99.5	0	364
SO4-- corr	aerosol	0.48	0.51	0.35	2.24	0.04	0.09	0.37	1.14	4.24	99.5	0	364

CH0003R Tänikon

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	3.77	2.46	3.11	1.87	0.50	1.19	2.98	8.37	16.41	100.0	0	366
PM10 mass	pm10	13.91	10.76	10.77	2.08	0.90	2.80	11.20	35.93	81.80	98.6	0	361

CH0004R Chaumont

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	1.77	1.20	1.46	1.84	0.31	0.60	1.41	4.54	7.64	100.0	0	366
PM10 mass	pm10	7.77	6.69	5.44	2.49	-0.70	0.94	5.80	21.93	39.20	100.0	0	366

CH0005R Rigi

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.24	0.35	0.12	3.81	-0.03	0.00	0.11	0.92	3.15	99.5	0	364
EC	pm25	0.20	0.23	0.16	1.87	0.00	0.04	0.14	0.80	1.36	8.5	0	31
HNO3	air	0.18	0.10	0.16	1.63	0.06	0.06	0.16	0.47	0.57	100.0	0	27
HNO3+NO3-	air+aerosol	0.63	0.58	0.42	2.55	0.03	0.08	0.43	1.91	3.21	99.5	0	364
K+	aerosol	0.07	0.08	0.05	2.15	0.00	0.02	0.05	0.24	0.64	99.5	0	364
Mg++	aerosol	0.023	0.022	0.015	2.848	0.000	0.002	0.017	0.070	0.150	99.5	0	364
NH3	air	1.03	0.72	0.67	3.07	0.05	0.05	0.95	2.35	2.39	100.0	0	27
NH3+NH4+	air+aerosol	1.70	1.28	1.21	2.44	0.12	0.23	1.42	4.31	6.20	99.5	0	364
NH4+	aerosol	0.79	0.55	0.62	2.01	0.14	0.14	0.56	2.16	2.22	96.2	0	26
NO2	air	1.15	1.29	0.80	2.18	0.09	0.29	0.71	4.47	7.16	85.5	0	313
NO3-	aerosol	0.47	0.31	0.38	1.87	0.10	0.11	0.34	1.23	1.32	100.0	0	27
Na+	aerosol	0.11	0.13	0.07	2.76	-0.01	0.00	0.07	0.40	1.02	99.5	0	364
OC	pm25	1.12	1.77	0.69	2.50	0.18	0.19	0.70	5.20	10.19	8.5	0	31
PM10 mass	pm10	7.42	6.73	5.01	2.62	-0.30	0.94	5.40	21.20	43.00	100.0	0	366
PM25 mass	pm25	5.36	5.52	3.47	2.87	-0.20	0.50	4.10	14.70	36.00	24.0	0	88
SO2	air	0.20	0.34	0.13	2.19	0.00	0.04	0.13	0.44	3.31	100.0	0	366
SO4--	aerosol	0.37	0.44	0.24	2.56	0.01	0.04	0.25	0.97	3.68	100.0	0	366
SO4-- corr	aerosol	0.35	0.44	0.22	2.60	0.01	0.04	0.23	0.95	3.67	100.0	0	366

CY0002R Ayia Marina

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm25	0.22	0.38	0.13	2.29	0.08	0.08	0.08	0.95	2.81	24.0	0	88
Cl-	pm25	0.03	0.07	0.02	1.83	0.02	0.02	0.02	0.16	0.48	24.3	0	89
EC	pm25	0.17	0.12	0.14	1.98	0.02	0.04	0.14	0.41	0.58	25.4	0	93
K+	pm25	0.07	0.07	0.05	2.40	0.02	0.02	0.06	0.19	0.35	24.0	0	88
Mg++	pm25	0.018	0.024	0.013	2.085	0.008	0.008	0.008	0.052	0.178	24.0	0	88
NH4+	pm25	0.70	0.46	0.55	2.25	0.04	0.11	0.65	1.38	2.58	24.0	0	88
NO2	air	0.95	0.53	0.84	1.59	0.15	0.42	0.79	1.90	7.69	90.9	0	7987
NO3-	pm25	0.13	0.15	0.08	2.69	0.02	0.02	0.07	0.42	1.05	24.3	0	89
Na+	pm25	0.12	0.08	0.09	2.35	0.01	0.01	0.10	0.33	0.44	24.0	0	88
OC	pm25	1.15	0.69	0.93	2.08	0.06	0.24	1.09	2.50	3.26	25.4	0	93
PM10 mass	pm10	21.65	14.33	19.03	1.63	2.90	8.62	19.40	40.50	154.50	97.0	0	355
PM25 mass	pm25	15.51	6.40	14.24	1.53	2.80	6.70	15.00	26.17	51.70	90.7	0	332
SO2	air	0.82	0.61	0.65	2.09	0.00	0.15	0.75	1.82	7.01	93.3	0	8192
SO4--	pm25	2.54	1.33	2.23	1.71	0.36	0.88	2.32	4.68	8.14	24.3	0	89
SO4-- corr	pm25	2.53	1.33	2.22	1.72	0.36	0.85	2.31	4.68	8.11	24.3	0	89

CZ0001R Svratouch

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.95	0.62	0.78	1.91	0.02	0.29	0.77	2.26	3.88	99.5	0	365
NH3+NH4+	air+aerosol	2.18	1.15	1.90	1.72	0.22	0.76	1.91	4.24	7.17	100.0	0	367
NO2	air	1.89	1.10	1.61	1.80	0.76	0.76	1.83	3.68	7.00	75.2	92	276
PM10 mass	pm10	14.26	8.33	12.21	1.76	1.50	4.00	12.00	30.30	58.00	45.1	2	166
SO2	air	1.27	1.95	0.74	2.67	0.05	0.17	0.70	3.98	18.17	100.0	0	367
SO4--	aerosol	0.85	0.61	0.68	1.98	0.10	0.23	0.67	2.08	3.27	99.7	0	366

CZ0003R Kosetice

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
CO	air	111.18	36.88	105.37	1.40	22.10	64.15	105.98	184.50	308.08	96.6	78	8489
Ca++	pm10	0.22	0.21	0.11	4.01	0.01	0.01	0.14	0.72	0.87	86.6	5	46
EC	pm25	0.49	0.56	0.31	2.81	0.01	0.07	0.32	1.57	3.61	15.6	2	57
HNO3+NO3-	air+aerosol	0.90	0.59	0.74	1.89	0.09	0.26	0.72	2.14	4.11	99.7	0	366
K+	pm10	0.08	0.05	0.07	1.56	0.04	0.04	0.07	0.21	0.30	100.0	0	53
Mg++	pm10	0.065	0.040	0.051	2.221	0.006	0.006	0.061	0.165	0.166	73.2	3	39
NH3+NH4+	air+aerosol	2.11	1.22	1.80	1.80	0.21	0.62	1.86	4.05	9.13	99.7	0	366
NO	air	0.46	0.84	0.26	2.59	0.00	0.10	0.19	1.62	25.77	94.3	3	8287
NO2	air	2.61	1.82	2.15	1.87	0.76	0.76	2.38	5.93	17.02	75.2	53	276
Na+	pm10	0.13	0.13	0.10	2.01	0.03	0.03	0.10	0.45	0.76	63.7	4	34
OC	pm25	3.62	2.83	3.07	1.70	1.22	1.44	3.09	7.41	20.36	15.6	0	57
PM10 mass	pm10	14.85	9.82	12.42	1.82	1.50	5.00	13.00	35.25	68.00	47.3	1	174
PM10 mass	pm10	19.35	14.99	14.88	2.14	1.00	4.00	15.00	47.00	120.00	97.6	107	8577
PM25 mass	pm25	12.75	11.02	9.16	2.38	1.00	1.00	10.00	34.00	88.00	97.6	442	8574
PM25 mass	pm25	15.54	9.81	13.36	1.72	1.50	5.00	13.00	38.20	65.00	45.7	1	168
SO2	air	0.86	1.47	0.51	2.48	0.05	0.15	0.45	2.44	11.91	99.5	0	365
SO2	air	1.16	1.92	0.64	2.77	0.12	0.12	0.53	3.87	21.32	93.6	1041	8218
SO4--	aerosol	0.79	0.63	0.62	2.01	0.10	0.20	0.60	2.21	3.57	99.7	0	366
TC	pm25	4.12	3.36	3.44	1.74	1.32	1.54	3.37	8.67	23.97	15.6	0	57

CZ0005R Churanov

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
PM10 mass	pm10	7.68	7.09	5.07	2.61	1.50	1.50	6.00	22.05	45.00	86.8	106	318

DE0001R Westerland

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm25	0.04	0.03	0.03	2.30	0.00	0.01	0.04	0.09	0.18	32.5	34	119
Cl-	pm25	0.61	0.98	0.22	5.08	0.01	0.01	0.24	2.33	6.36	32.5	10	119
K+	pm25	0.04	0.05	0.02	2.96	0.01	0.01	0.01	0.12	0.26	32.5	60	119
Mg++	pm25	0.049	0.063	0.029	2.720	0.002	0.006	0.029	0.174	0.422	32.5	0	119
NH4+	pm25	0.74	0.91	0.31	5.28	0.00	0.01	0.44	2.45	6.52	32.5	10	119
NO2	air	2.13	1.98	1.50	2.31	0.28	0.41	1.50	5.80	11.87	98.6	0	361
NO3-	pm25	0.43	0.67	0.18	3.83	0.02	0.03	0.14	1.84	4.56	32.5	0	119
Na+	pm25	0.44	0.59	0.24	3.12	0.01	0.04	0.26	1.53	3.91	32.5	2	119
PM10 mass	pm10	17.60	8.48	15.91	1.56	4.40	7.00	16.05	32.97	65.00	100.0	0	366
SO2	air	0.33	0.29	0.25	2.26	0.03	0.03	0.25	0.73	2.30	84.2	19	308
SO4--	pm25	0.50	0.41	0.38	2.08	0.06	0.10	0.39	1.50	2.39	32.5	0	119
SO4-- corr	pm25	0.46	0.43	0.32	2.65	-0.15	0.04	0.36	1.50	2.36	32.5	0	119

DE0002R Waldhof

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm25	0.03	0.02	0.02	2.51	0.00	0.00	0.01	0.07	0.10	32.5	62	119
Cl-	pm25	0.17	0.31	0.06	4.53	0.01	0.01	0.07	0.67	2.48	32.5	21	119
EC	pm25	0.30	0.23	0.25	1.88	0.04	0.09	0.25	0.77	1.33	16.7	0	61
K+	pm25	0.09	0.12	0.06	2.92	0.01	0.01	0.07	0.26	1.12	32.5	19	119
Mg++	pm25	0.018	0.026	0.011	2.683	0.001	0.003	0.011	0.083	0.187	32.5	3	119
NH4+	pm25	1.08	1.19	0.65	3.08	0.00	0.18	0.61	3.27	8.35	32.5	2	119
NO2	air	2.76	1.86	2.34	1.75	0.66	1.04	2.19	6.37	14.54	95.4	0	349
NO3-	pm25	0.61	0.90	0.21	5.07	0.01	0.01	0.20	2.20	6.53	32.5	0	119
Na+	pm25	0.17	0.22	0.10	2.85	0.01	0.01	0.11	0.74	1.57	32.5	6	119
OC	pm25	2.41	1.93	1.99	1.80	0.67	0.73	1.89	5.39	13.15	16.7	0	61
PM1 mass	pm1	7.06	4.92	5.81	1.90	0.10	2.10	5.90	15.38	43.60	99.2	1	363
PM10 mass	pm10	15.27	9.75	13.08	1.77	0.10	6.20	12.30	32.62	84.20	100.0	1	366
PM25 mass	pm25	11.42	9.10	9.07	1.97	0.10	3.60	8.45	28.80	78.30	100.0	1	366
SO2	air	0.53	0.69	0.36	2.33	0.03	0.10	0.35	1.54	6.85	99.2	9	363
SO4--	pm25	0.66	0.54	0.51	2.08	0.01	0.19	0.52	1.47	3.64	32.5	0	119
SO4-- corr	pm25	0.65	0.55	0.49	2.19	0.01	0.15	0.51	1.47	3.62	32.5	0	119
TC	pm25	2.71	2.12	2.26	1.76	0.81	0.86	2.22	5.80	14.48	16.7	0	61

DE0003R Schauinsland

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
CO	air	136.56	39.14	132.38	1.27	50.90	96.10	130.20	198.37	490.40	99.3	0	8726
Ca++	pm25	0.02	0.03	0.01	2.47	0.00	0.00	0.01	0.07	0.22	32.8	86	120
Cl-	pm25	0.02	0.04	0.01	2.67	0.00	0.00	0.01	0.08	0.43	32.8	93	120
EC	pm25	0.14	0.18	0.09	2.52	0.01	0.02	0.10	0.47	1.12	16.4	0	60
K+	pm25	0.03	0.04	0.02	2.89	0.01	0.01	0.01	0.12	0.28	32.8	65	120
Mg++	pm25	0.006	0.009	0.003	3.377	0.001	0.001	0.004	0.016	0.084	32.8	31	120
NH4+	pm25	0.47	0.58	0.26	3.29	0.00	0.04	0.28	1.66	3.53	32.8	3	120
NO2	air	0.78	0.77	0.58	2.04	0.17	0.24	0.50	2.54	4.46	91.3	0	334
NO3-	pm25	0.20	0.48	0.06	3.99	0.01	0.01	0.04	1.06	3.25	32.8	0	120
Na+	pm25	0.04	0.08	0.02	3.47	0.01	0.01	0.03	0.15	0.76	32.8	54	120
OC	pm25	1.47	1.31	1.07	2.22	0.23	0.29	1.10	4.35	7.36	16.4	0	60
PM10 mass	pm10	8.66	6.95	6.44	2.22	0.40	1.70	6.70	24.66	37.70	100.0	0	366
PM25 mass	pm25	6.41	5.80	4.62	2.28	0.10	1.23	4.65	19.82	35.30	100.0	1	366
SO2	air	0.30	0.50	0.18	2.72	0.03	0.03	0.20	0.69	5.35	98.6	44	361
SO4--	pm25	0.30	0.29	0.18	3.59	0.00	0.02	0.23	0.84	2.01	32.8	4	120
SO4-- corr	pm25	0.30	0.29	0.17	3.75	0.00	0.02	0.22	0.83	2.01	32.8	4	120
TC	pm25	1.61	1.47	1.17	2.22	0.25	0.30	1.19	4.82	8.48	16.4	0	60

DE0007R Neuglobsow

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
CO	air	162.23	63.94	153.78	1.35	86.60	106.80	143.60	291.50	699.20	98.5	0	8651
Ca++	pm25	0.03	0.02	0.02	2.50	0.00	0.00	0.02	0.08	0.11	33.3	58	122
Cl-	pm25	0.13	0.24	0.05	4.73	0.00	0.01	0.06	0.37	1.59	33.3	31	122
EC	pm25	0.32	0.33	0.23	2.15	0.04	0.08	0.23	0.87	1.93	16.4	0	60
K+	pm25	0.09	0.09	0.06	2.89	0.01	0.01	0.07	0.28	0.56	33.3	22	122
Mg++	pm25	0.016	0.020	0.010	2.858	0.001	0.001	0.011	0.044	0.141	33.3	6	122
NH4+	pm25	0.96	1.08	0.59	3.01	0.00	0.14	0.62	2.84	7.73	33.3	1	122
NO2	air	1.98	1.49	1.66	1.73	0.50	0.84	1.45	4.89	12.13	97.5	0	357
NO3-	pm25	0.47	0.87	0.12	6.26	0.00	0.01	0.12	1.69	7.54	33.3	1	122
Na+	pm25	0.17	0.18	0.12	2.53	0.01	0.03	0.12	0.44	1.26	33.3	3	122
OC	pm25	2.52	2.46	1.90	2.04	0.55	0.60	1.82	9.29	15.34	16.4	0	60
PM10 mass	pm10	13.85	9.45	11.67	1.77	0.70	5.40	11.15	32.08	71.40	99.5	0	364
PM25 mass	pm25	10.33	8.80	8.10	1.94	1.70	3.13	7.50	27.96	64.60	100.0	0	366
SO2	air	0.69	0.82	0.53	1.88	0.15	0.22	0.45	1.98	7.40	100.0	0	366
SO4--	pm25	0.65	0.54	0.47	2.74	0.00	0.11	0.52	1.50	3.46	33.3	2	122
SO4-- corr	pm25	0.64	0.55	0.47	2.57	-0.00	0.11	0.51	1.50	3.46	33.3	2	122
TC	pm25	2.84	2.75	2.15	2.01	0.64	0.70	2.15	10.15	16.91	16.4	0	60

DE0008R Schmücke

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm25	0.02	0.03	0.01	2.53	0.00	0.00	0.01	0.07	0.19	33.3	91	122
Cl-	pm25	0.03	0.05	0.01	3.42	0.00	0.00	0.01	0.13	0.24	33.3	82	122
EC	pm25	0.25	0.35	0.16	2.48	0.01	0.04	0.17	1.20	2.04	16.9	0	62
K+	pm25	0.03	0.04	0.02	2.75	0.01	0.01	0.01	0.09	0.26	33.3	77	122
Mg++	pm25	0.008	0.008	0.004	3.744	0.001	0.001	0.006	0.024	0.036	33.3	27	122
NH4+	pm25	0.60	0.61	0.35	3.62	0.00	0.02	0.43	1.86	3.71	33.3	5	122
NO2	air	2.05	1.78	1.67	1.77	0.52	0.83	1.48	5.06	15.54	89.9	0	329
Na+	pm25	0.06	0.07	0.02	3.85	0.01	0.01	0.03	0.21	0.33	33.3	52	122
OC	pm25	1.86	1.73	1.37	2.21	0.14	0.36	1.42	4.82	10.52	16.9	0	62
PM10 mass	pm10	10.21	7.84	7.86	2.15	0.10	2.13	8.25	27.36	61.20	100.0	1	366
PM25 mass	pm25	7.53	7.09	5.44	2.28	0.10	1.30	5.30	21.66	58.50	100.0	1	366
SO2	air	0.63	1.03	0.37	2.72	0.03	0.10	0.35	1.59	8.35	99.2	15	363
SO4--	pm25	0.39	0.32	0.24	3.69	0.00	0.02	0.33	1.16	1.43	33.3	4	122
SO4-- corr	pm25	0.38	0.32	0.23	3.89	0.00	0.02	0.32	1.15	1.43	33.3	4	122
TC	pm25	2.11	2.03	1.55	2.20	0.15	0.41	1.57	5.23	12.56	16.9	0	62

DE0009R Zingst

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm25	0.02	0.02	0.02	2.47	0.00	0.00	0.01	0.07	0.09	33.1	69	121
Cl-	pm25	0.16	0.28	0.05	5.61	0.00	0.01	0.07	0.67	1.83	33.1	37	121
K+	pm25	0.06	0.08	0.03	3.11	0.01	0.01	0.04	0.21	0.67	33.1	44	121
Mg++	pm25	0.020	0.023	0.013	2.441	0.001	0.004	0.012	0.063	0.145	33.1	1	121
NH4+	pm25	0.98	1.24	0.55	3.26	0.00	0.08	0.53	2.85	10.33	33.1	1	121
NO2	air	2.12	1.34	1.82	1.69	0.23	0.91	1.69	4.66	11.46	97.0	0	355
NO3-	pm25	0.55	0.98	0.18	4.58	0.01	0.03	0.14	2.02	8.33	33.1	0	121
Na+	pm25	0.17	0.20	0.10	2.85	0.01	0.02	0.10	0.54	1.24	33.1	4	121
PM10 mass	pm10	14.42	9.59	12.40	1.68	3.00	5.97	11.65	34.41	75.60	100.0	0	366
SO2	air	0.57	0.63	0.45	1.84	0.10	0.20	0.40	1.42	6.00	100.0	0	366
SO4--	pm25	0.59	0.47	0.46	2.06	0.07	0.12	0.50	1.23	2.72	33.1	0	121
SO4-- corr	pm25	0.57	0.48	0.42	2.38	0.01	0.08	0.49	1.22	2.71	33.1	0	121

DE0044R Melpitz

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm10	0.17	0.25	0.12	2.02	0.01	0.04	0.11	0.37	2.66	99.2	0	363
Ca++	pm25	0.09	0.15	0.07	1.90	0.00	0.03	0.06	0.17	1.79	98.9	0	363
Cl-	pm10	0.28	0.47	0.09	4.94	0.00	0.01	0.10	1.23	3.42	99.2	0	363
Cl-	pm25	0.10	0.15	0.04	4.32	0.00	0.00	0.04	0.39	0.94	98.6	0	362
EC	pm10	0.58	0.59	0.42	2.09	0.08	0.15	0.38	1.96	3.57	99.2	0	363
EC	pm10	1.11	1.57	0.82	1.99	0.12	0.28	0.81	2.70	20.32	99.2	0	363
EC	pm25	0.49	0.45	0.37	2.11	0.07	0.11	0.33	1.54	2.73	99.2	0	363
EC	pm25	0.95	1.55	0.67	2.11	0.08	0.20	0.67	2.22	19.98	99.2	0	364
K+	pm10	0.10	0.10	0.07	2.09	0.00	0.03	0.07	0.33	0.96	99.2	0	363
K+	pm25	0.08	0.10	0.05	2.65	0.00	0.01	0.04	0.32	0.99	98.9	0	363
Mg++	pm10	0.095	0.110	0.052	3.135	0.000	0.008	0.054	0.352	0.575	99.2	0	363
Mg++	pm25	0.012	0.017	0.008	2.670	0.000	0.001	0.007	0.037	0.172	77.0	0	283
NH4+	pm10	1.29	1.21	0.89	2.36	0.05	0.23	0.86	3.88	6.69	99.2	0	363
NH4+	pm25	1.20	1.09	0.84	2.37	0.04	0.19	0.82	3.52	6.13	98.9	0	363
NO3-	pm10	0.72	0.72	0.45	2.75	0.04	0.08	0.46	2.25	4.07	99.2	0	363
NO3-	pm25	0.59	0.68	0.28	3.75	0.02	0.04	0.30	2.07	3.52	98.9	0	363
Na+	pm10	0.28	0.33	0.16	2.89	0.00	0.03	0.17	0.89	2.36	99.2	0	363
Na+	pm25	0.09	0.11	0.06	2.50	0.00	0.01	0.05	0.32	0.84	98.9	0	363
OC	pm10	2.41	2.12	1.86	1.99	0.33	0.65	1.73	6.71	13.59	99.2	0	363
OC	pm10	3.37	3.30	2.53	2.10	0.10	0.75	2.49	9.02	37.10	99.2	0	363
OC	pm25	1.97	2.01	1.42	2.17	0.11	0.50	1.30	5.99	12.72	99.2	0	364
OC	pm25	3.06	3.47	2.17	2.23	0.05	0.57	2.12	8.98	35.60	99.2	0	363
PM10 mass	pm10	22.16	11.32	20.10	1.53	5.80	10.73	19.18	43.68	104.65	99.2	0	364
PM25 mass	pm25	18.18	10.55	16.11	1.60	5.11	8.26	15.63	37.74	97.77	99.2	0	364
SO4--	pm10	0.74	0.54	0.60	1.86	0.09	0.20	0.58	1.63	4.33	99.2	0	364
SO4--	pm25	0.67	0.50	0.55	1.90	0.07	0.18	0.53	1.49	4.05	98.9	0	363
SO4-- corr	pm10	0.71	0.54	0.57	1.97	0.06	0.17	0.56	1.62	4.30	99.2	0	363
SO4-- corr	pm25	0.67	0.50	0.54	1.94	0.04	0.16	0.53	1.48	4.03	98.9	0	363
TC	pm10	3.94	3.80	2.99	2.05	0.18	0.96	2.89	11.02	40.59	99.2	0	363
TC	pm25	3.39	3.82	2.42	2.17	0.14	0.73	2.29	10.61	38.34	99.2	0	363

DK0003R Tange

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.12	0.11	0.09	2.50	-0.01	0.02	0.09	0.33	0.80	91.0	3	334
Cl-	aerosol	1.74	1.64	1.09	2.80	0.06	0.19	1.07	5.53	6.87	91.5	0	335
HNO3+NO3-	air+aerosol	0.66	0.64	0.46	2.35	0.06	0.10	0.45	1.87	5.88	93.1	0	341
K+	aerosol	0.11	0.08	0.09	1.85	0.00	0.04	0.09	0.24	0.55	90.4	1	332
NH3	air	0.90	1.00	0.56	3.04	0.00	0.07	0.63	2.82	9.90	91.0	0	334
NH3+NH4+	air+aerosol	1.83	1.50	1.47	1.87	0.29	0.57	1.39	4.42	13.46	90.2	0	331
NH4+	aerosol	0.92	0.91	0.63	2.48	0.06	0.12	0.64	2.69	8.36	90.6	0	332
Na+	aerosol	1.07	0.94	0.71	2.70	-0.01	0.11	0.70	3.22	4.38	90.6	1	332
SO2	air	0.15	0.20	0.08	2.83	0.01	0.02	0.07	0.46	1.73	91.0	0	334
SO4--	aerosol	0.53	0.36	0.44	1.83	0.04	0.16	0.43	1.13	2.68	91.2	0	334
SO4-- corr	aerosol	0.44	0.38	0.32	2.38	-0.13	0.06	0.32	1.11	2.65	91.2	0	334

DK0005R Keldsnor

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	0.53	1.62	0.17	3.66	-0.12	0.03	0.12	2.13	34.91	89.4	4375	7854
NO2	air	2.44	2.42	1.59	2.62	-0.05	0.33	1.68	7.35	20.74	84.3	137	7403

DK0008R Anholt

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.17	0.16	0.12	2.38	0.00	0.03	0.12	0.47	1.47	93.9	0	344
Cl-	aerosol	2.55	2.27	1.50	3.40	0.01	0.13	1.91	7.15	13.44	96.2	0	353
HNO3+NO3-	air+aerosol	0.65	0.56	0.46	2.39	0.02	0.11	0.47	1.86	3.48	96.7	1	355
K+	aerosol	0.10	0.05	0.08	2.05	0.00	0.02	0.09	0.19	0.41	93.9	0	344
NH3	air	0.18	0.26	0.08	4.82	-0.01	0.00	0.11	0.63	2.22	96.7	10	355
NH3+NH4+	air+aerosol	0.92	0.82	0.67	2.24	0.07	0.18	0.66	2.49	5.35	95.6	10	351
NH4+	aerosol	0.74	0.70	0.50	2.45	0.05	0.12	0.50	2.33	4.41	95.6	0	351
NO	air	0.22	0.44	0.11	2.69	0.01	0.03	0.09	0.76	8.28	40.3	2409	3542
NO2	air	1.55	1.52	1.07	2.36	-0.03	0.28	1.02	4.37	20.92	71.7	227	6294
Na+	aerosol	1.70	1.22	1.24	2.46	0.05	0.22	1.42	4.27	6.99	86.6	0	318
SO2	air	0.25	0.25	0.16	2.59	0.01	0.04	0.16	0.72	1.64	95.9	0	352
SO4--	aerosol	0.60	0.34	0.52	1.72	0.08	0.20	0.53	1.22	2.81	95.9	0	352
SO4-- corr	aerosol	0.48	0.37	0.34	2.47	-0.18	0.06	0.40	1.14	2.74	95.9	0	352

DK0010G Nord, Greenland

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.02	0.02	0.01	2.74	0.00	0.00	0.02	0.06	0.07	62.8	1	40
Cl-	aerosol	0.15	0.29	0.06	5.39	-0.01	-0.00	0.04	0.63	1.58	62.8	0	40
K+	aerosol	0.01	0.02	0.01	2.95	0.00	0.00	0.01	0.05	0.09	62.8	1	40
NH3	air	0.00	0.00	0.00	2.45	-0.01	-0.01	0.00	0.01	0.01	62.8	1	40
NH3+NH4+	air+aerosol	0.04	0.03	0.03	2.14	0.00	0.01	0.03	0.09	0.10	62.8	1	40
NH4+	aerosol	0.04	0.03	0.03	2.19	0.00	0.01	0.02	0.09	0.10	62.8	1	40
NO3-	aerosol	0.01	0.01	0.01	1.72	0.00	0.01	0.01	0.03	0.03	62.8	1	40
Na+	aerosol	0.13	0.16	0.07	3.91	0.00	0.01	0.10	0.46	0.82	62.8	0	40
SO2	air	0.04	0.07	0.02	4.60	0.00	0.00	0.01	0.21	0.27	61.2	0	39
SO4--	aerosol	0.11	0.10	0.07	3.20	0.00	0.01	0.09	0.32	0.36	61.2	0	39
SO4-- corr	aerosol	0.10	0.10	0.06	3.59	0.00	0.00	0.08	0.30	0.35	61.2	0	39

DK0012R Risoe

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.18	0.17	0.13	2.28	-0.34	0.03	0.13	0.55	1.08	93.4	1	342
Cl-	aerosol	1.29	1.33	0.76	3.01	0.02	0.12	0.81	4.35	6.70	94.0	0	344
HNO3+NO3-	air+aerosol	0.86	0.78	0.61	2.52	0.01	0.16	0.65	2.19	8.46	95.6	6	350
K+	aerosol	0.10	0.07	0.09	1.89	0.01	0.03	0.09	0.25	0.67	93.7	0	343
NH3	air	0.78	0.97	0.39	4.37	0.00	0.01	0.55	2.31	7.99	95.4	0	349
NH3+NH4+	air+aerosol	1.86	1.72	1.41	2.14	0.01	0.42	1.44	4.23	18.14	93.2	0	342
NH4+	aerosol	1.07	1.00	0.78	2.29	0.00	0.17	0.82	2.72	10.49	93.4	0	342
NO	air	0.49	1.46	0.18	3.55	-0.26	0.02	0.15	1.67	40.19	85.0	3615	7470
NO2	air	2.80	2.72	1.95	2.46	-0.98	0.41	1.94	8.32	22.74	90.2	230	7923
Na+	aerosol	0.88	0.76	0.58	2.62	0.05	0.11	0.63	2.55	3.68	94.0	0	344
PM10 mass	pm10	15.41	7.53	13.67	1.67	1.76	5.79	13.73	30.91	53.24	75.1	0	275
SO2	air	0.28	0.31	0.18	2.42	0.03	0.05	0.18	0.89	2.85	95.6	0	350
SO4--	aerosol	0.58	0.38	0.49	1.78	0.11	0.18	0.48	1.23	2.65	94.0	0	344
SO4-- corr	aerosol	0.51	0.40	0.39	2.22	0.03	0.09	0.42	1.23	2.63	94.0	0	344

DK0031R Ulborg

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.13	0.10	0.10	2.10	0.01	0.03	0.11	0.35	0.78	66.9	0	245
Cl-	aerosol	2.33	2.07	1.37	3.31	-0.03	0.12	1.53	6.50	8.88	67.8	1	249
HNO3+NO3-	air+aerosol	0.63	0.64	0.39	2.81	0.01	0.06	0.39	1.83	5.18	88.5	4	325
K+	aerosol	0.10	0.06	0.09	1.74	0.01	0.03	0.10	0.20	0.44	67.1	0	246
NH3	air	0.39	0.55	0.19	3.58	0.00	0.02	0.20	1.57	3.49	67.8	1	249
NH3+NH4+	air+aerosol	1.31	1.21	0.90	2.41	0.09	0.22	0.89	3.92	8.09	67.8	1	249
NH4+	aerosol	0.83	0.89	0.52	2.75	0.03	0.09	0.51	2.63	7.54	88.5	0	325
Na+	aerosol	1.45	1.26	0.91	2.92	0.03	0.15	0.95	4.16	5.26	52.7	0	194
SO2	air	0.12	0.16	0.06	3.12	0.00	0.01	0.07	0.35	1.55	67.8	0	249
SO4--	aerosol	0.56	0.36	0.46	1.98	0.01	0.17	0.49	1.26	2.77	67.8	0	249
SO4-- corr	aerosol	0.48	0.39	0.33	2.61	0.01	0.06	0.39	1.24	2.72	67.8	0	249

EE0009R Lahemaa

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
CO	air	133.54	35.03	129.83	1.25	51.54	103.08	120.26	214.75	317.83	97.4	0	8554
NO2	air	0.89	1.10	0.55	2.69	-0.09	0.09	0.55	2.86	14.71	99.0	0	8693
PM10 mass	pm10	6.82	3.61	6.05	1.62	2.40	3.00	6.00	15.80	19.00	100.0	0	366
PM25 mass	pm25	5.53	5.18	3.70	2.60	0.10	0.80	3.70	15.06	36.90	93.7	0	343
SO2	air	0.66	1.49	0.36	2.72	-0.30	0.05	0.30	2.10	40.59	97.7	0	8582

EE0011R Vilsandi

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	0.78	0.89	0.51	2.62	-0.09	0.09	0.52	2.34	17.72	95.9	0	8427
PM25 mass	pm25	5.42	5.25	3.41	3.01	0.00	0.30	3.80	15.86	37.80	94.5	0	346
SO2	air	0.32	0.45	0.20	2.54	-0.05	0.05	0.20	1.05	5.36	95.9	0	8426

ES0001R San Pablo de los Montes

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm10	0.34	0.43	0.20	2.66	0.04	0.06	0.15	1.21	2.54	51.9	0	190
Ca++	pm25	0.12	0.10	0.10	1.96	0.03	0.04	0.08	0.41	0.44	9.0	0	33
Cl-	pm10	0.19	0.22	0.12	2.50	0.06	0.06	0.06	0.73	0.88	9.6	21	35
Cl-	pm25	0.05	0.06	0.04	1.77	0.03	0.03	0.03	0.23	0.38	9.6	30	35
EC	pm25	0.14	0.14	0.12	2.09	0.00	0.00	0.12	0.42	0.69	10.9	0	40
HNO3+NO3-	air+aerosol	0.33	0.13	0.31	1.54	0.04	0.20	0.30	0.60	1.01	99.8	8	366
K+	pm10	0.09	0.09	0.07	2.03	0.01	0.02	0.06	0.23	0.83	51.1	0	187
K+	pm25	0.06	0.07	0.04	2.69	0.01	0.01	0.04	0.22	0.24	9.0	4	33
Mg++	pm10	0.048	0.041	0.035	2.250	0.010	0.010	0.035	0.130	0.250	51.9	7	190
Mg++	pm25	0.018	0.013	0.015	1.734	0.010	0.010	0.010	0.060	0.060	9.0	7	33
NH3	air	0.87	0.52	0.71	1.97	0.32	0.32	0.92	1.83	1.95	57.4	12	30
NH4+	pm10	0.28	0.15	0.25	1.63	0.12	0.12	0.23	0.68	0.69	9.6	0	35
NH4+	pm25	0.18	0.10	0.16	1.64	0.07	0.08	0.14	0.41	0.45	9.6	0	35
NO	air	0.06	0.11	0.03	2.57	0.00	0.01	0.02	0.21	2.94	98.3	0	8638
NO2	air	0.98	0.86	0.73	2.16	0.02	0.22	0.72	2.58	10.52	98.3	0	8638
NO3-	pm10	0.23	0.19	0.16	2.55	0.01	0.03	0.19	0.69	1.05	97.8	15	358
NO3-	pm25	0.01	0.01	0.01	1.44	0.00	0.00	0.01	0.03	0.04	9.6	1	35
Na+	pm10	0.31	0.22	0.24	2.10	0.05	0.05	0.25	0.75	1.56	51.9	16	190
Na+	pm25	0.14	0.13	0.09	2.58	0.02	0.02	0.08	0.37	0.40	9.0	4	33
OC	pm25	2.09	1.20	1.84	1.64	0.79	0.81	1.75	5.41	6.67	11.5	0	42
PM10 mass	pm10	11.81	12.39	8.93	2.01	1.00	3.00	9.00	28.20	101.00	97.0	0	355
PM25 mass	pm25	5.50	3.43	4.61	1.83	1.00	2.00	5.00	12.00	23.00	94.3	0	346
SO2	air	0.23	0.25	0.18	1.95	0.01	0.07	0.18	0.58	4.34	98.7	0	8669
SO4--	pm10	0.36	0.25	0.29	1.93	0.02	0.11	0.29	0.91	1.54	97.8	1	358
SO4--	pm25	0.23	0.13	0.20	1.74	0.05	0.07	0.20	0.58	0.60	9.6	0	35
SO4-- corr	pm10	0.34	0.24	0.27	1.98	0.01	0.10	0.27	0.88	1.47	97.8	1	358
SO4-- corr	pm25	0.21	0.12	0.18	1.74	0.05	0.06	0.18	0.53	0.55	9.6	0	35

ES0005R Noya

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.42	0.24	0.37	1.62	0.04	0.22	0.35	0.86	2.15	97.6	4	358
NH3+NH4+	air+aerosol	0.86	0.55	0.73	1.80	0.10	0.25	0.75	1.89	4.20	94.3	0	346
NO	air	0.07	0.30	0.03	3.30	0.00	0.00	0.02	0.30	23.86	98.4	0	8645
NO2	air	0.93	0.95	0.51	3.66	0.01	0.03	0.66	2.64	16.31	98.4	0	8645
NO3-	pm10	0.18	0.22	0.09	3.61	0.01	0.01	0.10	0.58	1.76	85.6	58	314
PM10 mass	pm10	7.87	6.82	5.65	2.33	1.00	1.00	6.00	20.90	44.00	82.0	1	301
SO2	air	0.69	0.96	0.49	2.13	0.00	0.16	0.46	1.86	25.21	99.0	0	8696
SO4--	pm10	0.47	0.49	0.31	2.62	0.02	0.06	0.33	1.43	3.58	85.6	9	314

ES0006R Mahón

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.62	0.22	0.59	1.42	0.20	0.33	0.58	1.08	1.39	97.3	0	357
NH3+NH4+	air+aerosol	1.49	0.66	1.35	1.57	0.22	0.64	1.36	2.70	3.84	97.6	0	358
NO	air	0.11	0.55	0.04	2.97	0.00	0.01	0.03	0.33	14.60	98.1	0	8620
NO2	air	1.24	1.67	0.77	2.65	0.01	0.16	0.74	3.96	20.77	98.1	0	8620
NO3-	pm10	0.40	0.20	0.35	1.91	0.01	0.10	0.37	0.77	1.15	94.3	5	345
PM10 mass	pm10	19.21	7.48	17.74	1.52	1.00	9.00	18.00	32.00	46.00	94.1	0	345
PM25 mass	pm25	6.29	2.97	5.78	1.49	1.00	3.00	6.00	13.00	24.00	53.8	0	197
SO2	air	0.18	0.24	0.15	1.86	0.00	0.06	0.13	0.39	11.42	98.1	0	8621
SO4--	pm10	0.86	0.46	0.76	1.63	0.07	0.39	0.73	1.74	2.92	94.3	0	346

ES0007R Viznar

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm10	0.70	0.58	0.45	2.92	0.02	0.06	0.62	2.02	2.55	47.8	1	175
Ca++	pm25	0.33	0.27	0.22	2.61	0.05	0.05	0.34	0.90	1.33	9.0	0	33
Cl-	pm10	0.14	0.19	0.09	2.13	0.06	0.06	0.06	0.68	0.97	9.6	23	35
Cl-	pm25	0.06	0.06	0.05	1.66	0.03	0.03	0.04	0.26	0.32	9.6	31	35
HNO3+NO3-	air+aerosol	0.44	0.18	0.40	1.53	0.03	0.19	0.41	0.77	1.17	95.4	1	350
K+	pm10	0.20	0.14	0.15	2.22	0.01	0.03	0.17	0.46	0.74	47.0	0	172
K+	pm25	0.13	0.07	0.11	2.06	0.01	0.02	0.14	0.25	0.33	9.0	1	33
Mg++	pm10	0.077	0.054	0.058	2.262	0.010	0.010	0.060	0.180	0.270	47.8	5	175
Mg++	pm25	0.036	0.025	0.027	2.225	0.010	0.010	0.040	0.079	0.100	9.0	0	33
NH3	air	0.57	0.43	0.46	1.86	0.32	0.32	0.32	1.55	1.55	34.4	13	18
NH3+NH4+	air+aerosol	1.35	0.63	1.22	1.60	0.09	0.58	1.27	2.42	4.69	96.5	0	354
NH4+	pm10	0.40	0.23	0.34	1.77	0.13	0.14	0.36	0.82	1.08	9.6	0	35
NH4+	pm25	0.21	0.12	0.19	1.66	0.09	0.10	0.17	0.47	0.47	9.6	0	35
NO	air	0.27	0.89	0.12	2.93	0.00	0.01	0.08	0.96	23.82	95.1	0	8352
NO2	air	1.56	2.04	0.88	3.10	0.02	0.09	0.93	5.08	23.64	95.1	0	8352
NO3-	pm10	0.27	0.17	0.20	2.45	0.01	0.02	0.25	0.58	0.83	92.7	20	340
NO3-	pm25	0.02	0.01	0.02	1.76	0.01	0.01	0.02	0.05	0.07	9.6	0	35
Na+	pm10	0.32	0.23	0.24	2.23	0.05	0.05	0.28	0.84	1.23	47.8	19	175
Na+	pm25	0.15	0.10	0.12	1.86	0.04	0.05	0.12	0.39	0.39	9.0	0	33
PM10 mass	pm10	16.63	13.87	12.71	2.07	2.00	4.00	14.00	50.00	91.00	92.4	0	339
PM25 mass	pm25	9.46	5.34	8.05	1.80	2.00	3.00	8.00	20.70	32.00	83.1	0	305
SO2	air	0.43	0.52	0.30	2.30	0.00	0.08	0.30	1.20	10.44	95.3	0	8373
SO4--	pm10	0.44	0.24	0.38	1.83	0.02	0.12	0.39	0.92	1.38	92.7	1	340
SO4--	pm25	0.37	0.20	0.32	1.69	0.11	0.12	0.34	0.81	1.01	9.6	0	35
SO4-- corr	pm10	0.42	0.23	0.36	1.83	0.02	0.11	0.37	0.88	1.32	92.6	1	339
SO4-- corr	pm25	0.34	0.18	0.30	1.70	0.10	0.11	0.31	0.75	0.93	9.6	0	35

ES0008R Niembro

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm10	0.32	0.27	0.25	1.98	0.05	0.09	0.23	0.89	1.90	56.8	0	208
Ca++	pm25	0.10	0.06	0.09	1.68	0.04	0.04	0.08	0.25	0.27	9.6	0	35
Cl-	pm10	1.13	1.46	0.42	4.91	0.06	0.06	0.52	4.87	6.47	9.6	11	35
Cl-	pm25	0.09	0.13	0.05	2.62	0.03	0.03	0.03	0.46	0.51	9.6	26	35
HNO3+NO3-	air+aerosol	0.67	0.51	0.55	1.83	0.04	0.25	0.52	1.77	3.56	96.5	2	354
K+	pm10	0.14	0.13	0.11	1.97	0.03	0.03	0.11	0.34	1.02	56.0	0	205
K+	pm25	0.04	0.03	0.03	2.14	0.01	0.01	0.03	0.13	0.13	9.6	1	35
Mg++	pm10	0.179	0.113	0.147	1.970	0.010	0.040	0.160	0.376	0.700	56.8	0	208
Mg++	pm25	0.022	0.011	0.019	1.605	0.010	0.010	0.020	0.044	0.060	9.6	1	35
NH3	air	0.70	0.41	0.59	1.79	0.32	0.32	0.67	1.41	2.01	97.5	22	51
NH3+NH4+	air+aerosol	1.67	0.94	1.46	1.66	0.42	0.66	1.40	3.78	6.27	94.6	0	347
NH4+	pm10	0.33	0.37	0.23	2.16	0.08	0.08	0.20	1.20	2.06	9.6	0	35
NH4+	pm25	0.17	0.25	0.12	2.12	0.03	0.04	0.10	0.60	1.55	9.6	0	35
NO	air	0.18	0.29	0.10	2.66	0.00	0.02	0.08	0.67	4.16	95.4	0	8381
NO2	air	1.30	1.11	0.95	2.31	0.02	0.23	1.00	3.48	11.23	95.4	0	8381
NO3-	pm10	0.34	0.37	0.22	2.69	0.01	0.05	0.24	1.08	2.50	94.6	10	347
NO3-	pm25	0.01	0.01	0.01	1.46	0.00	0.00	0.00	0.02	0.03	9.6	5	35
Na+	pm10	1.48	0.90	1.20	2.06	0.05	0.32	1.38	3.06	4.93	56.8	2	208
Na+	pm25	0.20	0.11	0.18	1.75	0.06	0.07	0.18	0.45	0.53	9.6	0	35
PM10 mass	pm10	15.89	8.92	13.73	1.74	2.00	5.00	14.00	32.00	73.00	89.2	0	327
PM25 mass	pm25	6.76	5.89	5.36	1.90	1.00	2.00	5.00	18.00	46.00	94.6	0	347
SO2	air	0.46	0.59	0.35	2.02	0.00	0.11	0.34	1.17	17.64	96.3	0	8460
SO4--	pm10	0.66	0.45	0.55	1.76	0.13	0.20	0.54	1.37	3.93	94.6	0	347
SO4--	pm25	0.36	0.30	0.29	1.86	0.10	0.10	0.28	1.05	1.77	9.6	0	35
SO4-- corr	pm10	0.57	0.45	0.46	1.91	0.05	0.16	0.44	1.31	3.75	94.5	0	346
SO4-- corr	pm25	0.35	0.30	0.27	1.94	0.08	0.09	0.27	1.04	1.75	9.6	0	35

ES0009R Campisabalos

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm10	0.37	0.43	0.23	2.70	0.03	0.05	0.22	1.38	2.77	94.8	0	347
Ca++	pm25	0.17	0.11	0.13	2.04	0.02	0.03	0.14	0.40	0.53	16.4	0	60
Cl-	pm10	0.12	0.19	0.08	1.97	0.06	0.06	0.06	0.81	0.98	16.4	50	60
Cl-	pm25	0.04	0.03	0.04	1.49	0.03	0.03	0.04	0.17	0.18	16.4	54	60
HNO3+NO3-	air+aerosol	0.23	0.09	0.21	1.50	0.03	0.14	0.21	0.42	0.64	89.7	5	329
K+	pm10	0.07	0.08	0.05	2.45	0.01	0.01	0.05	0.27	0.56	94.0	1	344
K+	pm25	0.04	0.04	0.03	2.24	0.01	0.01	0.04	0.11	0.16	16.4	5	60
Mg++	pm10	0.033	0.029	0.025	2.127	0.010	0.010	0.030	0.090	0.180	94.8	17	347
Mg++	pm25	0.015	0.008	0.013	1.552	0.010	0.010	0.010	0.030	0.040	16.4	9	60
NH3	air	0.75	0.39	0.64	1.79	0.32	0.32	0.78	1.45	1.70	95.6	19	50
NH3+NH4+	air+aerosol	0.83	0.46	0.72	1.75	0.17	0.31	0.69	1.77	2.30	92.2	0	338
NH4+	pm10	0.32	0.21	0.27	1.83	0.09	0.10	0.29	0.87	1.06	16.4	0	60
NH4+	pm25	0.20	0.13	0.17	1.87	0.05	0.06	0.17	0.44	0.73	16.4	0	60
NO	air	0.03	0.07	0.02	2.29	0.00	0.00	0.02	0.10	1.64	96.4	0	8467
NO2	air	0.77	0.76	0.61	1.89	0.03	0.24	0.58	1.81	14.29	96.4	0	8467
NO3-	pm10	0.13	0.10	0.09	2.40	0.01	0.02	0.10	0.31	0.58	94.5	45	346
NO3-	pm25	0.02	0.01	0.02	1.80	0.00	0.00	0.01	0.06	0.06	16.4	2	60
Na+	pm10	0.27	0.19	0.21	2.15	0.05	0.05	0.22	0.65	1.25	94.8	46	347
Na+	pm25	0.09	0.08	0.06	2.09	0.02	0.02	0.07	0.30	0.41	16.4	9	60
PM10 mass	pm10	10.76	14.30	7.41	2.16	0.00	2.57	6.66	30.57	217.80	87.6	0	7696
PM25 mass	pm25	4.86	3.38	3.84	2.04	1.00	1.00	4.00	11.40	22.00	85.0	0	311
SO2	air	0.17	0.12	0.14	2.05	0.00	0.04	0.16	0.38	1.69	97.0	0	8524
SO4--	pm10	0.33	0.22	0.26	2.02	0.02	0.08	0.29	0.79	1.40	94.5	2	346
SO4--	pm25	0.25	0.15	0.21	1.82	0.04	0.06	0.22	0.53	0.91	16.4	0	60
SO4-- corr	pm10	0.31	0.21	0.24	2.08	0.02	0.06	0.27	0.76	1.38	94.5	2	346
SO4-- corr	pm25	0.24	0.14	0.20	1.84	0.04	0.05	0.22	0.52	0.91	16.4	0	60

ES0010R Cabo de Creus

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.71	0.50	0.61	1.69	0.20	0.29	0.57	1.58	4.65	95.4	0	350
NH3+NH4+	air+aerosol	1.19	0.57	1.08	1.58	0.26	0.53	1.06	2.34	3.43	96.0	0	352
NO	air	0.08	0.15	0.03	3.39	0.00	0.01	0.02	0.33	2.40	95.8	0	8412
NO2	air	0.86	0.88	0.60	2.34	0.02	0.15	0.62	2.34	13.25	95.8	0	8412
NO3-	pm10	0.39	0.25	0.31	2.29	0.01	0.08	0.33	0.93	1.53	93.0	8	341
PM10 mass	pm10	17.00	7.40	15.81	1.44	6.00	9.00	15.00	29.00	80.00	91.1	0	334
PM25 mass	pm25	7.73	4.71	6.73	1.65	2.00	3.00	7.00	18.00	40.00	92.4	0	339
SO2	air	0.27	0.11	0.25	1.45	0.03	0.14	0.24	0.46	1.30	96.9	0	8515
SO4--	pm10	0.65	0.45	0.54	1.79	0.16	0.24	0.50	1.55	3.31	93.0	0	341

ES0011R Barcarrota

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.34	0.17	0.30	1.76	0.03	0.16	0.30	0.70	1.11	96.5	11	354
NH3	air	0.46	0.28	0.41	1.58	0.32	0.32	0.32	1.20	1.20	30.1	12	16
NH3+NH4+	air+aerosol	0.92	0.53	0.80	1.71	0.27	0.36	0.74	1.98	3.16	99.0	0	363
NO	air	0.10	0.17	0.06	2.24	0.00	0.02	0.05	0.30	5.20	95.7	0	8408
NO2	air	1.03	0.82	0.78	2.15	0.02	0.23	0.78	2.57	11.46	95.7	0	8408
NO3-	pm10	0.21	0.12	0.17	2.29	0.01	0.03	0.19	0.44	0.65	91.8	16	336
PM10 mass	pm10	14.03	11.18	11.45	1.82	3.00	5.00	11.00	32.15	86.00	91.8	0	336
PM25 mass	pm25	7.32	4.72	6.11	1.83	2.00	2.00	6.00	16.00	39.00	88.9	0	326
SO2	air	0.17	0.19	0.12	2.09	0.00	0.05	0.10	0.52	3.52	97.5	0	8561
SO4--	pm10	0.40	0.31	0.33	1.85	0.06	0.15	0.30	1.17	1.97	91.8	0	336

ES0012R Zarra

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.46	0.21	0.42	1.59	0.03	0.21	0.44	0.83	1.82	97.0	1	355
NH3+NH4+	air+aerosol	1.31	0.53	1.19	1.57	0.21	0.52	1.26	2.24	2.96	99.7	0	365
NO	air	0.05	0.06	0.04	2.24	0.00	0.01	0.03	0.15	0.90	97.8	0	8589
NO2	air	0.79	0.54	0.62	2.09	0.01	0.17	0.65	1.83	4.99	97.8	0	8589
NO3-	pm10	0.33	0.20	0.25	2.53	0.01	0.03	0.30	0.70	1.68	97.8	16	358
PM10 mass	pm10	15.56	39.83	10.60	2.18	0.41	3.25	10.15	37.11	806.00	95.3	0	8367
PM25 mass	pm25	6.43	4.72	5.25	1.90	1.00	2.00	6.00	13.10	57.00	97.3	0	357
SO2	air	0.29	0.19	0.25	1.80	0.00	0.09	0.24	0.61	4.88	97.4	0	8556
SO4--	pm10	0.52	0.37	0.41	2.03	0.04	0.15	0.39	1.28	2.25	97.8	0	358

ES0013R Penausende

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.36	0.19	0.33	1.52	0.12	0.19	0.30	0.71	1.60	98.7	0	362
NH3+NH4+	air+aerosol	0.65	0.40	0.50	2.36	0.04	0.08	0.60	1.54	2.15	96.8	0	355
NO	air	0.08	0.09	0.07	1.89	0.01	0.02	0.07	0.20	1.99	94.7	0	8320
NO2	air	0.94	0.70	0.75	1.97	0.09	0.25	0.73	2.29	6.60	94.7	0	8320
NO3-	pm10	0.22	0.21	0.15	2.85	0.01	0.01	0.17	0.57	1.77	86.9	25	318
PM10 mass	pm10	8.73	9.64	6.54	2.14	0.00	1.98	6.61	20.59	201.10	96.7	0	8491
PM25 mass	pm25	4.51	3.19	3.71	1.86	1.00	1.00	3.50	10.00	30.00	92.2	0	338
SO2	air	0.27	0.19	0.23	1.64	0.04	0.12	0.22	0.56	2.58	98.2	0	8623
SO4--	pm10	0.34	0.27	0.28	1.84	0.04	0.11	0.28	0.76	2.85	86.9	0	318

ES0014R Els Torms

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm10	0.48	0.39	0.35	2.18	0.08	0.11	0.34	1.27	2.40	40.2	0	147
Ca++	pm25	0.15	0.09	0.13	1.83	0.04	0.04	0.12	0.36	0.38	7.4	0	27
Cl-	pm10	0.14	0.16	0.09	2.59	0.04	0.04	0.04	0.52	0.66	9.6	18	35
Cl-	pm25	0.08	0.08	0.06	2.03	0.04	0.04	0.04	0.28	0.36	9.6	27	35
HNO3+NO3-	air+aerosol	0.60	0.33	0.53	1.63	0.04	0.28	0.52	1.26	2.56	96.8	2	355
K+	pm10	0.13	0.14	0.10	1.84	0.03	0.04	0.09	0.34	1.23	39.3	0	144
K+	pm25	0.06	0.05	0.05	2.12	0.01	0.01	0.05	0.20	0.25	7.4	1	27
Mg++	pm10	0.077	0.058	0.059	2.158	0.010	0.014	0.060	0.180	0.370	40.2	0	147
Mg++	pm25	0.021	0.012	0.018	1.762	0.010	0.010	0.020	0.046	0.050	7.4	2	27
NH3	air	2.92	1.53	2.44	2.03	0.32	0.32	2.87	6.64	6.64	36.3	1	19
NH3+NH4+	air+aerosol	2.92	1.04	2.72	1.50	0.47	1.26	2.84	4.81	5.90	98.4	0	361
NH4+	pm10	0.60	0.48	0.45	2.12	0.12	0.13	0.45	1.81	2.20	9.6	0	35
NH4+	pm25	0.40	0.36	0.29	2.32	0.05	0.07	0.32	1.21	1.89	9.6	0	35
NO	air	0.10	0.20	0.06	2.94	0.00	0.00	0.06	0.32	4.49	97.7	0	8580
NO2	air	1.08	0.93	0.78	2.31	0.04	0.17	0.85	2.80	9.64	97.7	0	8580
NO3-	pm10	0.36	0.31	0.26	2.32	0.01	0.10	0.27	0.94	2.50	91.3	9	334
NO3-	pm25	0.02	0.02	0.02	1.96	0.00	0.01	0.02	0.08	0.09	9.6	0	35
Na+	pm10	0.56	0.43	0.41	2.37	0.05	0.05	0.48	1.36	2.38	40.2	8	147
Na+	pm25	0.20	0.13	0.15	2.18	0.04	0.05	0.14	0.41	0.42	7.4	0	27
PM10 mass	pm10	14.46	12.37	11.95	1.81	3.00	5.00	12.00	30.00	169.00	90.4	0	331
PM25 mass	pm25	7.90	5.79	6.46	1.88	1.00	2.00	6.00	17.00	63.00	91.1	0	334
SO2	air	0.36	0.38	0.27	2.07	0.02	0.08	0.26	0.96	8.83	98.8	0	8675
SO4--	pm10	0.56	0.39	0.45	1.92	0.11	0.18	0.45	1.32	2.50	91.3	0	334
SO4--	pm25	0.50	0.42	0.40	1.87	0.12	0.14	0.40	1.45	2.44	9.6	0	35
SO4-- corr	pm10	0.52	0.37	0.42	1.96	0.10	0.14	0.41	1.26	2.44	91.3	0	334
SO4-- corr	pm25	0.46	0.38	0.37	1.88	0.11	0.13	0.37	1.33	2.24	9.6	0	35

ES0016R O Saviñao

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.44	0.25	0.39	1.63	0.04	0.22	0.36	0.94	2.02	96.8	4	355
NH3+NH4+	air+aerosol	1.52	0.82	1.32	1.71	0.34	0.50	1.30	3.39	4.44	97.3	0	357
NO	air	0.27	0.28	0.20	2.36	0.00	0.03	0.25	0.51	7.47	94.7	0	8315
NO2	air	1.14	1.15	0.79	2.34	0.04	0.18	0.79	3.11	15.14	94.7	0	8315
NO3-	pm10	0.22	0.20	0.15	2.65	0.01	0.01	0.17	0.62	1.44	88.5	16	324
PM10 mass	pm10	10.78	7.02	9.09	1.79	0.78	3.47	8.97	24.78	107.70	97.2	0	8540
PM25 mass	pm25	7.86	6.73	6.07	2.00	1.00	2.00	6.00	19.00	63.00	78.5	0	288
SO2	air	0.19	0.38	0.10	2.65	0.00	0.04	0.07	0.80	6.28	98.5	0	8649
SO4--	pm10	0.43	0.28	0.36	1.80	0.07	0.16	0.34	1.08	1.52	88.5	0	324

ES0017R Doñana

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.55	0.26	0.50	1.52	0.20	0.27	0.47	1.10	1.97	95.4	0	350
NH3+NH4+	air+aerosol	1.48	0.63	1.35	1.54	0.49	0.61	1.38	2.75	3.50	95.2	0	349
NO	air	0.16	0.37	0.07	2.97	0.01	0.01	0.06	0.61	11.02	96.8	0	8501
NO2	air	1.27	0.96	0.99	2.07	0.02	0.29	0.99	3.25	8.34	96.8	0	8501
NO3-	pm10	0.37	0.24	0.27	2.72	0.01	0.02	0.32	0.83	1.14	75.7	18	277
PM10 mass	pm10	17.22	13.60	14.43	1.78	1.00	6.00	15.00	33.20	132.00	75.7	0	277
SO2	air	0.56	0.69	0.39	2.20	0.00	0.14	0.36	1.76	10.74	96.9	0	8508
SO4--	pm10	0.69	0.44	0.57	1.88	0.02	0.18	0.55	1.59	2.54	75.7	1	277

ES1778R Montseny

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm1	0.01	0.01	0.01	2.05	0.00	0.00	0.01	0.03	0.05	21.9	28	80
Ca++	pm10	0.26	0.20	0.19	2.49	0.01	0.04	0.19	0.68	0.95	20.5	1	75
Ca++	pm25	0.06	0.06	0.04	2.76	0.00	0.00	0.05	0.19	0.31	20.5	3	75
Cl-	pm1	0.05	0.06	0.03	3.66	0.00	0.01	0.04	0.19	0.30	21.9	23	80
Cl-	pm10	0.20	0.22	0.12	3.00	0.01	0.01	0.16	0.57	1.45	20.5	0	75
Cl-	pm25	0.09	0.10	0.04	3.85	0.00	0.01	0.05	0.28	0.56	20.5	14	75
EC	pm1	0.16	0.08	0.15	1.59	0.00	0.06	0.15	0.31	0.47	32.8	0	120
EC	pm10	0.21	0.10	0.19	1.75	0.02	0.07	0.21	0.42	0.54	32.0	0	117
EC	pm25	0.18	0.07	0.16	1.60	0.02	0.07	0.17	0.31	0.45	27.6	0	101
K+	pm1	0.05	0.04	0.04	2.21	0.00	0.01	0.04	0.13	0.17	21.9	3	80
K+	pm10	0.14	0.09	0.12	1.94	0.01	0.05	0.12	0.31	0.48	20.5	1	75
K+	pm25	0.07	0.05	0.06	2.14	0.01	0.02	0.06	0.19	0.21	20.5	0	75
Mg++	pm1	0.004	0.006	0.010	1.449	0.000	0.000	0.000	0.019	0.020	21.9	4	80
Mg++	pm10	0.099	0.065	0.077	2.186	0.005	0.020	0.080	0.210	0.350	20.5	1	75
Mg++	pm25	0.034	0.027	0.028	2.100	0.000	0.000	0.020	0.100	0.100	20.5	0	75
NH4+	pm1	0.39	0.34	0.27	2.44	0.03	0.04	0.32	1.04	1.89	21.9	0	80
NH4+	pm10	0.45	0.43	0.29	2.75	0.02	0.04	0.32	1.58	2.07	20.5	0	75
NH4+	pm25	0.46	0.40	0.32	2.53	0.02	0.05	0.33	1.33	2.12	20.5	0	75
NO3-	pm1	0.05	0.09	0.03	2.80	0.00	0.00	0.02	0.32	0.44	21.9	8	80
NO3-	pm10	0.25	0.26	0.17	2.39	0.02	0.05	0.18	0.77	1.48	20.5	0	75
NO3-	pm25	0.10	0.15	0.05	2.98	0.00	0.01	0.04	0.44	0.84	20.5	0	75
Na+	pm1	0.03	0.03	0.02	2.03	0.00	0.00	0.02	0.09	0.17	21.9	4	80
Na+	pm10	0.35	0.29	0.23	2.81	0.01	0.04	0.26	1.03	1.10	20.5	1	75
Na+	pm25	0.09	0.07	0.06	2.38	0.01	0.01	0.07	0.22	0.40	20.5	0	75
OC	pm1	1.59	0.70	1.43	1.62	0.42	0.57	1.50	3.06	3.40	32.8	0	120
OC	pm10	2.20	0.92	2.02	1.54	0.66	0.95	2.02	3.94	4.68	32.0	0	117
OC	pm25	1.93	0.91	1.72	1.63	0.64	0.74	1.73	3.76	4.39	27.6	0	101
PM1 mass	pm1	10.91	4.68	9.84	1.62	2.50	4.11	10.80	17.10	25.80	21.9	0	80
PM10 mass	pm10	18.08	7.81	16.32	1.61	3.61	6.75	16.80	33.06	35.00	20.5	0	75
PM25 mass	pm25	13.42	5.67	12.14	1.61	3.20	4.08	13.30	24.10	29.00	20.5	0	75
SO4--	pm1	0.46	0.33	0.35	2.16	0.07	0.09	0.40	1.15	1.56	21.9	0	80
SO4--	pm10	0.60	0.45	0.45	2.40	0.01	0.13	0.54	1.58	2.08	20.5	0	75
SO4--	pm25	0.54	0.39	0.41	2.18	0.10	0.11	0.45	1.38	1.91	20.5	0	75
SO4-- corr	pm10	0.57	0.44	0.42	2.46	0.01	0.11	0.47	1.56	2.07	20.5	0	75
SO4-- corr	pm25	0.53	0.39	0.40	2.21	0.09	0.10	0.45	1.36	1.91	20.5	0	75
TC	pm1	1.75	0.75	1.58	1.60	0.46	0.64	1.65	3.23	3.65	32.8	0	120
TC	pm10	2.42	0.99	2.21	1.53	0.72	1.01	2.23	4.30	5.09	32.0	0	117
TC	pm25	2.10	0.96	1.89	1.61	0.69	0.80	1.92	4.04	4.68	27.6	0	101

FI0009R Utö

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.06	0.05	0.04	2.13	0.00	0.01	0.04	0.17	0.32	96.8	2	355
Ca++	pm25	0.03	0.02	0.02	2.17	0.00	0.01	0.03	0.10	0.10	99.8	0	53
Cl-	aerosol	0.47	0.54	0.16	7.13	0.00	0.00	0.29	1.55	3.46	96.8	33	355
Cl-	pm25	0.43	0.40	0.28	2.88	0.02	0.02	0.32	1.29	2.07	94.1	0	50
HN03+NO3-	air+aerosol	0.32	0.25	0.23	2.37	0.01	0.05	0.25	0.80	1.84	96.8	1	355
K+	aerosol	0.05	0.03	0.04	2.06	0.00	0.01	0.04	0.11	0.17	96.8	3	355
K+	pm25	0.04	0.02	0.03	1.84	0.00	0.01	0.03	0.08	0.09	96.0	0	51
Mg++	aerosol	0.065	0.048	0.048	2.441	0.001	0.008	0.054	0.153	0.246	96.8	1	355
Mg++	pm25	0.036	0.021	0.031	1.841	0.004	0.013	0.032	0.086	0.104	94.1	0	50
NH3+NH4+	air+aerosol	0.36	0.31	0.25	2.37	0.01	0.06	0.26	0.92	2.71	96.7	0	354
NH4+	aerosol	0.29	0.30	0.18	2.85	0.00	0.03	0.20	0.84	2.66	96.8	1	355
NH4+	pm25	0.24	0.16	0.18	2.30	0.02	0.03	0.22	0.56	0.66	99.8	0	53
NO2	air	0.94	0.98	0.63	2.63	-0.36	0.09	0.64	2.80	11.75	97.2	0	8534
NO3-	pm25	0.09	0.08	0.06	2.23	0.01	0.02	0.06	0.25	0.50	99.8	0	53
Na+	aerosol	0.53	0.40	0.37	2.67	0.00	0.06	0.44	1.29	2.08	96.8	0	355
Na+	pm25	0.33	0.22	0.27	1.98	0.03	0.08	0.28	0.79	1.14	94.1	0	50
OC	pm25	1.00	0.70	0.84	1.78	0.01	0.41	0.77	2.47	7.81	35.6	0	1041
PM25 mass	pm25	5.24	5.03	3.50	2.57	0.20	0.70	3.70	14.80	65.60	95.9	0	8428
SO2	air	0.29	0.34	0.17	3.01	0.01	0.03	0.19	0.95	2.32	97.3	13	357
SO2	air	0.39	0.51	0.26	2.52	-0.05	0.05	0.25	1.30	8.66	95.9	0	8420
SO4--	aerosol	0.41	0.32	0.31	2.28	0.01	0.08	0.35	1.07	1.91	96.8	1	355
SO4--	pm25	0.32	0.20	0.23	2.87	0.00	0.03	0.27	0.76	0.83	99.8	0	53
SO4-- corr	aerosol	0.37	0.32	0.24	2.78	0.01	0.04	0.30	1.02	1.86	96.8	1	355
SO4-- corr	pm25	0.29	0.21	0.22	2.89	-0.01	-0.00	0.24	0.76	0.82	93.7	0	49

FI0017R Virolahti II

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.07	0.09	0.04	2.78	0.00	0.01	0.04	0.26	0.63	99.2	4	364
Ca++	pm25	0.01	0.01	0.01	1.92	0.00	0.00	0.01	0.04	0.04	97.1	0	52
Cl-	aerosol	0.08	0.15	0.02	5.90	0.00	0.00	0.02	0.38	1.22	99.2	96	364
Cl-	pm25	0.01	0.02	0.00	3.90	0.00	0.00	0.00	0.03	0.14	97.1	4	52
HN03+NO3-	air+aerosol	0.22	0.20	0.15	2.38	0.02	0.04	0.15	0.63	1.28	99.2	0	364
K+	aerosol	0.05	0.04	0.04	2.09	0.01	0.01	0.04	0.15	0.28	99.2	0	364
K+	pm25	0.03	0.01	0.03	1.56	0.01	0.01	0.02	0.06	0.07	97.1	0	52
Mg++	aerosol	0.026	0.023	0.017	2.763	0.001	0.003	0.018	0.074	0.146	99.2	6	364
Mg++	pm25	0.008	0.005	0.007	1.784	0.002	0.002	0.008	0.017	0.026	97.1	0	52
NH3+NH4+	air+aerosol	0.38	0.33	0.27	2.35	0.02	0.07	0.28	1.02	2.51	99.2	0	364
NH4+	aerosol	0.29	0.31	0.18	2.89	0.00	0.03	0.18	0.95	2.48	99.2	1	364
NH4+	pm25	0.19	0.13	0.15	1.97	0.03	0.05	0.14	0.49	0.59	97.1	0	52
NO2	air	1.59	2.25	1.01	2.39	0.03	0.30	0.91	4.78	22.05	98.7	0	8672
NO3-	pm25	0.04	0.05	0.02	2.36	0.01	0.01	0.02	0.10	0.32	97.1	0	52
Na+	aerosol	0.17	0.17	0.10	2.91	0.00	0.02	0.11	0.52	1.09	99.0	5	363
Na+	pm25	0.07	0.04	0.06	1.78	0.01	0.02	0.06	0.14	0.21	97.1	0	52
OC	pm25	1.44	1.25	1.10	2.05	0.09	0.38	1.04	3.78	13.32	25.4	0	744
PM10 mass	pm10	12.32	14.35	8.14	2.60	0.40	1.50	8.80	32.10	383.00	98.5	0	8652
SO2	air	0.51	0.81	0.22	3.79	0.01	0.03	0.23	2.64	5.41	99.8	10	366
SO2	air	0.70	1.21	0.30	3.63	-0.05	0.05	0.25	3.30	17.97	98.7	0	8672
SO4--	aerosol	0.40	0.34	0.28	2.37	0.01	0.06	0.28	1.01	2.60	99.2	0	364
SO4--	pm25	0.29	0.14	0.25	1.65	0.08	0.11	0.25	0.58	0.67	97.1	0	52
SO4-- corr	aerosol	0.38	0.34	0.26	2.50	0.01	0.05	0.27	1.00	2.54	99.2	0	364
SO4-- corr	pm25	0.28	0.15	0.25	1.68	0.08	0.11	0.25	0.58	0.67	96.7	0	51

FI0022R Oulanka

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.02	0.01	0.01	2.07	0.00	0.00	0.01	0.05	0.06	95.7	0	51
Cl-	aerosol	0.03	0.06	0.01	5.23	0.00	0.00	0.01	0.19	0.25	95.7	11	51
HN03+NO3-	air+aerosol	0.06	0.06	0.04	2.47	0.01	0.01	0.04	0.24	0.25	95.7	2	51
K+	aerosol	0.02	0.02	0.02	2.00	0.00	0.01	0.02	0.05	0.08	95.7	0	51
Mg++	aerosol	0.013	0.008	0.011	1.934	0.002	0.003	0.012	0.028	0.041	95.7	0	51
NH3+NH4+	air+aerosol	0.13	0.11	0.10	2.12	0.03	0.03	0.10	0.33	0.60	95.7	0	51
NH4+	aerosol	0.10	0.10	0.07	2.27	0.01	0.02	0.07	0.32	0.58	95.7	0	51
NO2	air	0.55	0.75	0.31	2.81	-0.06	0.06	0.27	2.16	8.13	94.4	0	8291
Na+	aerosol	0.09	0.07	0.07	2.05	0.02	0.02	0.07	0.22	0.36	95.7	0	51
OC	pm25	0.57	0.58	0.40	2.43	-0.13	0.09	0.40	1.49	5.41	26.9	0	788
SO2	air	0.25	0.39	0.12	3.65	0.00	0.01	0.12	1.24	1.57	96.8	2	52
SO2	air	0.44	0.68	0.25	2.71	-0.10	0.05	0.20	1.85	9.01	96.3	0	8455
SO4--	aerosol	0.25	0.18	0.19	2.08	0.02	0.05	0.22	0.70	0.91	95.7	0	51
SO4-- corr	aerosol	0.24	0.18	0.18	2.14	0.02	0.04	0.21	0.69	0.90	95.7	0	51

FI0036R Pallas (Matorova)

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.01	0.01	0.01	2.92	0.00	0.00	0.01	0.03	0.16	97.9	72	359
Ca++	pm25	0.00	0.00	0.00	2.18	0.00	0.00	0.00	0.01	0.01	84.6	0	45
Cl-	aerosol	0.09	0.16	0.02	6.91	0.00	0.00	0.02	0.41	1.52	97.6	107	358
Cl-	pm25	0.01	0.02	0.00	8.39	0.00	0.00	0.00	0.05	0.09	84.6	16	45
HNO3+NO3-	air+aerosol	0.05	0.07	0.03	2.78	0.00	0.00	0.03	0.20	0.47	97.9	73	359
K+	aerosol	0.02	0.02	0.01	2.61	0.00	0.00	0.01	0.05	0.13	97.9	25	359
K+	pm25	0.01	0.01	0.01	2.24	0.00	0.00	0.01	0.04	0.05	82.7	0	44
Mg++	aerosol	0.013	0.017	0.008	3.009	0.001	0.001	0.008	0.041	0.183	97.9	29	359
Mg++	pm25	0.005	0.004	0.004	2.086	0.001	0.001	0.004	0.015	0.022	84.6	0	45
NH3+NH4+	air+aerosol	0.10	0.12	0.07	2.52	0.00	0.01	0.06	0.37	0.94	97.9	0	359
NH4+	aerosol	0.09	0.12	0.05	2.97	0.00	0.01	0.05	0.36	0.92	97.9	1	359
NH4+	pm25	0.09	0.08	0.07	2.12	0.01	0.02	0.07	0.28	0.46	84.6	0	45
NO3-	pm25	0.00	0.00	0.00	3.72	0.00	0.00	0.00	0.01	0.01	84.6	5	45
Na+	aerosol	0.11	0.13	0.05	4.39	0.00	0.00	0.06	0.35	1.03	97.6	12	358
Na+	pm25	0.04	0.03	0.03	2.02	0.01	0.01	0.03	0.12	0.18	84.6	0	45
SO2	air	0.24	0.56	0.04	6.27	0.01	0.01	0.03	1.32	6.05	98.2	100	360
SO4--	aerosol	0.22	0.24	0.13	2.99	0.00	0.02	0.13	0.73	1.62	97.9	2	359
SO4--	pm25	0.21	0.17	0.16	2.25	0.03	0.03	0.17	0.57	0.89	84.6	0	45
SO4-- corr	aerosol	0.21	0.24	0.12	3.32	0.00	0.01	0.12	0.73	1.62	97.9	2	359
SO4-- corr	pm25	0.21	0.17	0.16	2.29	0.03	0.03	0.17	0.57	0.89	84.6	0	45

FI0037R Ähtäri II

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.03	0.02	0.02	1.90	0.01	0.01	0.02	0.07	0.09	99.8	0	53
Cl-	aerosol	0.03	0.08	0.01	5.10	0.00	0.00	0.01	0.18	0.48	99.8	8	53
HNO3+NO3-	air+aerosol	0.13	0.12	0.09	2.30	0.01	0.02	0.09	0.40	0.67	99.8	0	53
K+	aerosol	0.04	0.02	0.04	1.62	0.01	0.01	0.03	0.08	0.09	99.8	0	53
Mg++	aerosol	0.016	0.009	0.014	1.750	0.003	0.005	0.014	0.035	0.054	99.8	0	53
NH3+NH4+	air+aerosol	0.25	0.15	0.21	1.86	0.06	0.08	0.20	0.58	0.73	99.8	0	53
NH4+	aerosol	0.19	0.15	0.14	2.08	0.03	0.04	0.13	0.57	0.72	99.8	0	53
NO2	air	0.74	0.98	0.44	2.69	-0.03	0.09	0.40	2.41	10.26	99.5	0	8739
Na+	aerosol	0.10	0.07	0.09	1.91	0.02	0.03	0.09	0.25	0.41	99.8	0	53
SO2	air	0.22	0.35	0.10	3.42	0.00	0.01	0.07	1.16	1.52	99.8	1	53
SO4--	aerosol	0.32	0.22	0.26	1.91	0.07	0.08	0.27	0.88	1.02	99.8	0	53
SO4-- corr	aerosol	0.31	0.22	0.25	1.96	0.06	0.07	0.26	0.88	1.01	99.8	0	53

FI0050R Hyytiälä

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	0.05	0.16	0.03	3.72	-0.06	-0.02	0.01	0.24	1.94	47.8	0	4202
PM1 mass	pm1	4.02	2.75	3.16	1.94	0.85	0.93	3.10	10.12	12.82	53.7	0	74
PM10 mass	pm10	8.22	6.71	6.26	2.10	1.37	2.01	6.25	22.07	34.33	53.7	0	74
PM25 mass	pm25	5.27	3.57	4.24	1.85	1.20	1.58	4.01	11.80	19.89	53.7	0	74

FR0009R Revin

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.93	0.82	0.61	2.51	0.08	0.12	0.61	2.81	3.37	67.1	0	71
NH3+NH4+	air+aerosol	1.62	1.39	1.12	2.43	0.07	0.22	1.07	5.10	6.23	70.1	0	74
PM10 mass	pm10	17.34	10.96	14.72	1.77	1.00	6.00	14.00	41.00	92.00	89.6	0	7873
PM25 mass	pm25	12.37	10.16	9.62	2.01	0.00	3.00	9.00	35.00	79.00	92.0	0	8078
SO2	air	0.20	0.31	0.09	3.66	0.01	0.01	0.10	0.88	2.28	98.8	8	104
SO4--	aerosol	0.56	0.48	0.43	2.04	0.11	0.13	0.40	1.58	2.95	98.8	0	104

FR0010R Morvan

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
PM10 mass	pm10	12.84	9.59	9.99	2.19	0.00	2.00	11.00	31.00	80.00	83.5	0	7331

FR0013R Peyrusse Vieille

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.79	0.73	0.52	2.66	0.03	0.08	0.54	2.52	3.62	68.2	0	72
NH3+NH4+	air+aerosol	1.91	1.18	1.45	2.27	0.13	0.28	1.69	4.22	5.21	72.0	0	76
PM10 mass	pm10	20.77	9.86	18.74	1.58	1.00	9.00	19.00	39.00	92.00	89.8	0	7888
PM25 mass	pm25	14.13	9.10	11.94	1.78	1.00	5.00	12.00	32.00	83.00	63.9	0	5616
SO2	air	0.13	0.19	0.07	2.83	0.01	0.01	0.08	0.42	1.37	95.0	5	100
SO4--	aerosol	0.53	0.45	0.38	2.36	0.01	0.12	0.41	1.42	2.82	93.9	1	99

FR0014R Montandon

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
PM10 mass	pm10	12.99	9.85	10.20	2.08	0.00	3.00	10.00	33.00	99.00	95.6	0	8397

FR0015R La Tardière

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	1.04	1.12	0.60	2.75	0.10	0.12	0.59	4.01	5.56	64.1	0	68
NH3+NH4+	air+aerosol	4.32	3.52	3.09	2.20	0.58	0.88	3.29	13.01	16.40	69.8	0	74
NO	air	0.79	0.90	0.84	1.81	0.00	0.00	0.47	1.87	21.47	76.4	0	6710
PM10 mass	pm10	19.19	12.00	16.27	1.78	1.00	7.00	16.00	44.00	106.00	91.2	0	8009
PM25 mass	pm25	10.66	10.84	7.08	2.47	1.00	2.00	7.00	34.00	82.00	89.1	0	7826
SO2	air	0.12	0.22	0.05	3.18	0.01	0.01	0.04	0.35	1.93	97.7	9	103
SO4--	aerosol	0.47	0.39	0.38	1.87	0.03	0.15	0.34	1.19	2.44	97.7	0	103

FR0018R La Coulonche

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
PM10 mass	pm10	13.09	11.98	9.44	2.32	0.00	2.00	10.00	38.00	93.00	98.4	0	8641
PM25 mass	pm25	10.48	11.87	7.09	2.43	0.00	1.00	7.00	37.00	91.00	94.0	0	8253

FR0019R Pic du Midi

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
CO	air	144.47	27.40	142.10	1.20	79.84	106.82	142.29	186.66	475.28	98.6	0	8659

FR0030R Puy de Dôme

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
CO	air	164.49	39.41	160.53	1.24	86.04	116.88	160.91	222.79	426.73	81.0	0	7111
SO2	air	0.37	0.37	0.30	1.80	0.02	0.13	0.27	0.92	8.63	98.4	0	8640

GB0002R Eskdalemuir

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	0.10	0.25	0.45	1.82	0.00	0.00	0.00	0.70	7.10	98.6	0	8660
NO2	air	0.90	1.08	0.70	2.12	0.00	0.00	0.60	2.70	12.70	98.6	0	8660

GB0006R Lough Navar

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3	air	0.04	0.03	0.03	2.15	0.01	0.01	0.04	0.11	0.11	90.1	0	11
HNO3+NO3-	air+aerosol	0.15	0.07	0.13	1.76	0.05	0.05	0.13	0.30	0.30	90.1	0	11
NH3	air	0.38	0.28	0.28	2.07	0.12	0.12	0.30	1.04	1.04	99.4	0	12
NH3+NH4+	air+aerosol	0.58	0.39	0.46	1.83	0.17	0.17	0.44	1.35	1.35	99.4	0	12
NH4+	aerosol	0.20	0.14	0.16	1.78	0.05	0.05	0.15	0.61	0.61	99.4	0	12
NO3-	aerosol	0.13	0.09	0.10	1.96	0.04	0.04	0.10	0.37	0.37	99.4	0	12
PM10 mass	pm10	7.91	5.93	6.50	2.03	-4.00	1.00	7.00	19.00	65.00	75.5	0	6631

GB0013R Yarner Wood

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3	air	0.10	0.05	0.09	1.65	0.04	0.04	0.09	0.20	0.20	91.7	0	10
HNO3+NO3-	air+aerosol	0.39	0.30	0.35	1.77	0.19	0.19	0.30	1.17	1.17	91.7	0	10
NH3	air	0.52	0.38	0.45	2.08	0.13	0.13	0.52	1.43	1.43	91.7	0	10
NH3+NH4+	air+aerosol	0.95	0.76	0.83	1.95	0.25	0.25	0.85	2.95	2.95	91.7	0	10
NH4+	aerosol	0.42	0.41	0.35	2.12	0.12	0.12	0.37	1.52	1.52	91.7	0	10
NO	air	0.25	0.56	0.52	1.78	0.00	0.00	0.00	0.70	16.80	97.5	0	8563
NO2	air	1.30	1.52	1.02	2.21	0.00	0.00	0.80	4.28	15.90	97.5	0	8563
NO3-	aerosol	0.30	0.28	0.25	1.89	0.13	0.13	0.20	1.07	1.07	91.7	0	10

GB0014R High Muffles

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3	air	0.14	0.07	0.12	1.66	0.06	0.06	0.12	0.27	0.27	99.3	0	12
HNO3+NO3-	air+aerosol	0.40	0.17	0.38	1.48	0.20	0.20	0.37	0.81	0.81	91.4	0	11
NH3	air	0.59	0.46	0.49	1.92	0.14	0.14	0.49	1.90	1.90	99.3	0	12
NH3+NH4+	air+aerosol	1.01	0.76	0.88	1.72	0.40	0.40	0.85	3.19	3.19	91.4	0	11
NH4+	aerosol	0.41	0.30	0.36	1.64	0.21	0.21	0.31	1.29	1.29	91.4	0	11
NO	air	0.24	0.99	0.47	2.36	0.00	0.00	0.00	0.90	22.40	97.0	0	8521
NO2	air	1.87	2.26	1.33	2.48	0.00	0.00	1.20	6.00	26.10	97.0	0	8521
NO3-	aerosol	0.27	0.16	0.25	1.52	0.14	0.14	0.23	0.72	0.72	91.4	0	11

GB0031R Aston Hill

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	0.16	0.41	0.51	1.97	0.00	0.00	0.00	0.70	6.90	97.9	0	8596
NO2	air	1.29	1.84	1.01	2.51	0.00	0.00	0.70	5.00	15.90	97.9	0	8596

GB0033R Bush

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	0.53	0.96	0.66	1.93	0.00	0.00	0.50	1.40	29.50	76.4	0	6714
NO2	air	1.91	2.20	1.38	2.49	0.00	0.00	1.20	6.20	21.30	76.4	0	6714

GB0036R Harwell

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm10	0.65	0.59	0.49	2.07	0.00	0.16	0.48	1.82	8.15	67.7	42	5944
Ca++	pm25	0.38	0.27	0.30	2.12	0.00	0.11	0.31	0.91	2.47	66.1	116	5808
Cl-	pm10	1.17	1.43	0.46	5.56	0.01	0.01	0.67	4.07	12.09	49.6	493	4360
Cl-	pm25	0.50	0.73	0.15	6.45	0.01	0.01	0.25	1.84	7.59	49.3	1021	4331
HNO3	air	0.04	0.09	0.03	2.29	0.00	0.00	0.03	0.12	4.65	44.1	322	3873
K+	pm10	0.03	0.07	0.02	2.68	0.00	0.00	0.01	0.18	1.22	67.4	5122	5921
K+	pm25	0.02	0.05	0.01	2.36	0.00	0.01	0.01	0.09	0.88	66.3	5309	5824
Mg++	pm10	0.224	0.259	0.115	3.708	0.000	0.005	0.120	0.777	2.110	67.7	461	5944
Mg++	pm25	0.121	0.136	0.066	3.742	0.000	0.005	0.080	0.420	0.970	66.6	1030	5847
NH3	air	1.41	1.73	0.83	2.81	0.01	0.15	0.77	4.96	39.24	70.0	7	6150
NH4+	pm10	1.17	1.83	0.42	5.19	0.01	0.01	0.48	4.77	14.51	67.7	475	5944
NH4+	pm25	0.80	1.40	0.19	7.57	0.00	0.01	0.27	3.53	11.88	66.6	1260	5847
NO	air	1.17	3.79	0.36	4.04	0.00	0.00	0.20	6.14	52.20	52.3	0	4590
NO2	air	4.15	3.77	2.88	2.51	0.00	0.50	3.00	11.50	33.20	52.3	0	4590
NO3-	pm10	0.66	0.82	0.36	3.12	0.00	0.06	0.32	2.48	6.22	41.1	6	3608
NO3-	pm25	0.45	0.62	0.23	3.33	0.00	0.03	0.20	1.86	4.57	41.2	35	3620
Na+	pm10	0.84	0.82	0.50	3.13	0.01	0.07	0.56	2.49	5.69	67.7	199	5943
Na+	pm25	0.41	0.42	0.24	3.26	0.00	0.01	0.26	1.25	3.59	66.4	384	5830
PM10 mass	pm10	11.96	8.25	10.03	1.77	3.00	4.00	10.00	29.00	54.00	94.5	0	346
PM10 mass	pm10	16.62	10.69	14.19	1.74	-4.00	6.00	14.00	38.00	97.00	97.2	0	8538
PM25 mass	pm25	8.05	7.89	5.96	2.16	-1.00	1.95	5.00	25.05	50.00	92.3	0	338
PM25 mass	pm25	12.82	9.62	10.63	1.80	-1.00	5.00	10.00	32.00	87.00	97.2	0	8542
SO2	air	0.21	0.67	0.12	2.20	0.01	0.05	0.10	0.53	21.36	43.6	22	3826
SO2	air	1.36	3.70	1.44	1.89	0.00	0.00	1.40	3.10	142.60	98.4	0	8647
SO4--	pm10	0.70	0.72	0.51	2.09	0.00	0.18	0.46	1.96	6.90	47.2	2	4142
SO4--	pm25	0.54	0.56	0.39	2.12	0.06	0.14	0.35	1.52	5.08	46.6	0	4093

GB0037R Ladybower Res.

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	1.85	1.66	1.47	2.21	0.00	0.00	1.40	4.90	29.90	97.7	0	8582
NO2	air	3.34	2.62	2.63	2.00	0.00	0.80	2.70	8.48	20.90	97.7	0	8582
SO2	air	1.77	1.45	1.66	1.86	0.00	0.00	1.40	4.40	14.80	88.9	0	7810

GB0038R Lullington Heath

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	0.45	1.12	0.50	2.24	0.00	0.00	0.20	1.40	20.50	98.6	0	8659
NO2	air	2.74	2.35	2.10	2.04	0.00	0.60	2.00	7.50	22.30	98.6	0	8659
SO2	air	0.70	0.93	1.28	1.70	0.00	0.00	0.00	2.00	13.20	87.8	0	7711

GB0043R Narberth

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	0.66	1.22	0.63	1.97	0.00	0.00	0.50	1.80	32.30	75.9	0	6670
NO2	air	1.73	2.34	1.07	2.69	0.00	0.10	1.00	6.60	23.30	75.9	0	6670
PM10 mass	pm10	10.89	9.52	8.61	2.13	-4.00	1.00	9.00	27.00	205.00	97.2	0	8535
SO2	air	0.69	0.86	1.14	1.69	0.00	0.00	0.40	1.60	11.70	98.8	0	8676

GB0045R Wicken Fen

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	4.20	5.37	2.18	3.41	0.00	0.20	2.10	14.30	73.20	87.7	0	7704
NO2	air	3.90	2.57	3.18	1.92	0.20	1.00	3.20	8.80	21.70	87.7	0	7704
SO2	air	1.72	1.11	1.70	1.72	0.00	0.00	1.40	3.90	10.00	93.4	0	8202

GB0048R Auchencorth Moss

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm10	0.06	0.07	0.05	2.47	0.00	0.01	0.05	0.16	1.22	70.1	356	6159
Ca++	pm25	0.05	0.03	0.04	1.96	0.00	0.00	0.04	0.09	0.54	66.6	369	5846
Cl-	pm10	1.11	1.38	0.52	3.82	0.00	0.06	0.54	3.99	8.87	55.7	18	4896
Cl-	pm25	0.61	0.75	0.32	3.25	0.00	0.05	0.30	2.16	6.18	53.8	17	4730
HNO3	air	0.02	0.02	0.02	1.91	0.00	0.00	0.01	0.06	0.26	52.4	225	4603
K+	pm10	0.07	0.07	0.05	2.02	0.00	0.02	0.06	0.16	2.61	70.3	64	6178
K+	pm25	0.05	0.04	0.04	2.03	0.00	0.01	0.04	0.11	1.05	66.8	199	5864
Mg++	pm10	0.062	0.070	0.039	2.929	0.000	0.000	0.040	0.210	0.520	70.1	399	6161
Mg++	pm25	0.035	0.038	0.028	2.281	0.000	0.000	0.020	0.110	0.310	66.6	352	5847
NH3	air	1.04	1.30	0.69	2.31	0.04	0.21	0.62	3.21	21.02	67.1	38	5894
NH4+	pm10	0.76	1.36	0.29	4.19	0.00	0.02	0.27	3.17	15.15	66.8	167	5868
NH4+	pm25	0.69	1.13	0.28	3.94	0.00	0.03	0.27	2.87	11.38	63.9	80	5613
NO3-	pm10	0.42	0.86	0.15	4.05	0.00	0.02	0.12	2.06	11.33	60.7	32	5334
NO3-	pm25	0.35	0.72	0.12	3.89	0.00	0.02	0.10	1.71	7.40	59.2	28	5202
Na+	pm10	0.85	0.74	0.57	2.56	0.02	0.11	0.63	2.39	4.98	68.0	19	5970
Na+	pm25	0.48	0.43	0.34	2.39	0.00	0.08	0.33	1.36	2.78	65.0	31	5711
PM10 mass	pm10	7.12	5.95	5.58	2.00	1.00	2.00	6.00	18.60	54.00	80.1	0	293
PM10 mass	pm10	7.35	6.82	5.76	2.11	-4.00	1.00	6.00	20.00	68.00	92.5	0	8122
PM25 mass	pm25	3.82	5.92	3.28	2.43	-4.00	-1.00	2.00	15.00	56.00	93.5	0	8211
PM25 mass	pm25	4.01	4.37	3.08	2.10	-2.00	1.00	3.00	12.00	43.00	92.9	0	340
SO2	air	0.11	0.44	0.06	2.48	0.00	0.02	0.05	0.24	13.78	53.2	21	4671
SO4--	pm10	0.48	0.52	0.31	2.50	0.01	0.08	0.30	1.50	4.26	60.7	3	5335
SO4--	pm25	0.40	0.42	0.27	2.45	0.01	0.07	0.26	1.25	3.80	59.2	10	5201

GB0050R St. Osyth

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	2.42	3.01	1.69	2.48	0.00	0.00	1.60	7.20	43.60	97.4	0	8559
NO2	air	5.34	3.76	4.33	1.92	0.00	1.60	4.20	13.50	31.50	97.4	0	8559

GB0051R Market Harborough

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	1.73	2.46	1.17	2.77	0.00	0.00	0.70	7.10	20.70	52.8	0	4639
NO2	air	4.66	3.13	3.77	1.99	0.00	1.10	3.90	11.30	23.50	52.8	0	4639

GB0053R Charlton Mackrell

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	0.56	1.38	0.59	2.23	0.00	0.00	0.30	1.70	25.70	94.4	0	8293
NO2	air	2.71	2.58	1.92	2.34	0.00	0.50	1.80	8.50	21.30	94.4	0	8293

GB0054R Glen Saugh

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3	air	0.05	0.04	0.05	2.24	0.00	0.00	0.06	0.12	0.12	81.8	0	10
HNO3+NO3-	air+aerosol	0.26	0.11	0.24	1.65	0.09	0.09	0.26	0.42	0.42	62.7	0	8
NH3	air	0.19	0.10	0.16	1.81	0.05	0.05	0.19	0.41	0.41	81.8	0	10
NH3+NH4+	air+aerosol	0.46	0.24	0.41	1.74	0.14	0.14	0.47	0.98	0.98	70.4	0	9
NH4+	aerosol	0.26	0.14	0.23	1.74	0.09	0.09	0.27	0.57	0.57	78.0	0	10
NO3-	aerosol	0.20	0.09	0.18	1.61	0.08	0.08	0.19	0.34	0.34	70.4	0	9

GR0001R Aliartos

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	3.23	3.31	2.58	1.85	1.10	1.10	2.10	7.10	57.10	99.4	0	8732
NO2	air	8.45	5.21	7.15	1.78	1.10	3.10	7.10	19.10	48.10	99.4	0	8732
SO2	air	4.15	5.03	3.38	1.71	2.10	2.10	3.10	8.10	103.10	99.4	0	8730

HU0002R K-pusztá

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3	air	0.25	0.18	0.19	2.57	0.00	0.06	0.22	0.52	2.00	96.2	7	353
HNO3+NO3-	air+aerosol	0.76	0.67	0.60	1.90	0.10	0.25	0.54	2.00	4.53	96.1	0	352
NH3	air	1.29	0.85	0.90	3.32	0.00	0.15	1.15	3.01	4.07	96.1	5	352
NH3	air	1.29	0.85	0.90	3.32	0.00	0.15	1.15	3.01	4.07	96.1	5	352
NH4+	aerosol	1.01	1.11	0.57	3.54	0.00	0.06	0.64	3.47	6.58	96.1	3	352
NO2	air	1.81	1.00	1.57	1.72	0.26	0.66	1.56	3.75	7.42	99.9	0	366
NO3-	aerosol	0.51	0.63	0.31	2.66	0.02	0.08	0.28	1.69	3.96	96.1	0	352
SO2	air	1.20	1.61	0.67	2.89	0.04	0.14	0.59	4.06	13.27	96.2	0	353
SO4--	aerosol	1.13	0.92	0.86	2.11	0.07	0.24	0.86	2.85	6.51	96.2	0	353
TC	pm10	4.69	0.65	4.66	1.14	4.24	4.24	4.49	5.83	5.83	1.4	0	5
TC	pm10	5.30	1.50	5.15	1.29	4.21	4.21	4.87	7.86	7.86	1.4	0	5
TC	pm10	7.00	3.30	6.10	1.84	1.75	1.75	8.61	11.34	11.34	2.5	0	9
TC	pm10	10.14	7.61	7.91	1.93	2.95	2.95	6.73	29.94	29.94	4.9	0	17

IE0001R Valentia Observatory

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.09	0.06	0.07	1.99	0.03	0.03	0.08	0.20	0.36	95.6	78	351
Cl-	aerosol	2.53	2.27	1.47	3.40	0.03	0.13	2.01	7.51	11.26	95.8	2	351
HNO3+NO3-	air+aerosol	0.36	0.52	0.22	2.41	0.02	0.07	0.18	1.38	5.40	95.9	0	352
K+	aerosol	0.07	0.05	0.05	2.01	0.03	0.03	0.06	0.17	0.35	95.9	148	352
Mg++	aerosol	0.183	0.157	0.119	2.778	0.025	0.025	0.150	0.500	0.820	95.9	80	352
NH3+NH4+	air+aerosol	0.88	0.79	0.70	1.85	0.24	0.32	0.62	2.09	6.84	95.6	0	351
NO2	air	0.88	0.91	0.58	2.49	0.05	0.10	0.60	2.65	7.40	95.4	4	350
Na+	aerosol	1.49	1.25	0.92	3.30	0.03	0.08	1.22	4.12	6.42	95.9	9	352
SO2	air	0.15	0.16	0.11	2.16	0.01	0.03	0.10	0.42	1.32	98.4	3	361
SO4--	aerosol	0.26	0.18	0.20	2.25	0.01	0.05	0.23	0.55	1.29	95.9	8	352
SO4-- corr	aerosol	0.13	0.17	0.08	2.79	-0.08	0.01	0.07	0.44	1.21	95.8	8	351

IE0005R Oak Park

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.08	0.06	0.07	1.82	0.01	0.03	0.06	0.18	0.40	95.6	8	350
Cl-	aerosol	1.55	1.20	1.19	2.09	0.14	0.33	1.19	4.04	7.89	95.6	0	350
K+	aerosol	0.07	0.04	0.06	1.66	0.02	0.03	0.06	0.15	0.50	95.6	0	350
Mg++	aerosol	0.095	0.076	0.072	2.133	0.010	0.020	0.070	0.255	0.510	95.6	13	350
NH4+	aerosol	0.60	0.72	0.44	2.05	0.10	0.19	0.36	1.96	8.15	95.6	0	350
NO3-	aerosol	0.32	0.46	0.16	2.98	0.02	0.04	0.14	1.20	3.55	95.6	0	350
Na+	aerosol	0.83	0.67	0.62	2.23	0.06	0.15	0.62	2.25	4.50	95.6	0	350
SO4--	aerosol	0.37	0.27	0.30	1.86	0.06	0.12	0.28	0.94	2.13	95.6	0	350
SO4-- corr	aerosol	0.30	0.28	0.21	2.39	-0.15	0.05	0.20	0.88	2.07	95.6	0	350

IE0006R Malin Head

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.09	0.06	0.08	1.90	0.01	0.03	0.08	0.22	0.45	88.8	0	325
Cl-	aerosol	3.42	2.70	2.57	2.18	0.29	0.66	2.65	8.73	19.99	97.5	0	357
K+	aerosol	0.09	0.06	0.07	1.85	0.01	0.03	0.08	0.20	0.40	97.5	1	357
Mg++	aerosol	0.220	0.179	0.160	2.332	0.020	0.030	0.170	0.591	1.270	97.5	8	357
NH4+	aerosol	0.39	0.37	0.29	2.01	0.02	0.12	0.26	1.13	2.51	94.5	1	346
NO3-	aerosol	0.18	0.25	0.09	3.26	0.01	0.01	0.07	0.77	1.51	94.5	1	346
Na+	aerosol	1.93	1.53	1.45	2.18	0.16	0.37	1.51	5.20	11.37	97.5	0	357
SO4--	aerosol	0.41	0.26	0.35	1.70	0.08	0.15	0.34	0.86	2.13	97.5	0	357
SO4-- corr	aerosol	0.25	0.28	0.15	3.07	-0.04	0.01	0.14	0.77	2.06	97.5	0	357

IE0008R Carnsore Point

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.14	0.09	0.11	1.92	0.02	0.04	0.11	0.31	0.62	91.8	0	336
Cl-	aerosol	5.08	4.99	3.51	2.45	0.27	0.75	3.71	13.56	61.46	100.0	0	366
K+	aerosol	0.14	0.17	0.11	1.93	0.02	0.04	0.11	0.31	2.97	100.0	1	366
Mg++	aerosol	0.346	0.360	0.233	2.560	0.020	0.040	0.260	0.930	4.820	99.7	5	365
NH4+	aerosol	0.46	0.40	0.36	1.92	0.02	0.16	0.32	1.30	2.65	96.7	2	354
NO3-	aerosol	0.27	0.34	0.16	2.75	0.01	0.04	0.15	1.08	2.21	96.7	0	354
Na+	aerosol	2.92	3.04	2.02	2.46	0.10	0.42	2.13	7.55	42.30	100.0	0	366
SO4--	aerosol	0.53	0.47	0.45	1.80	0.01	0.18	0.45	1.07	7.71	100.0	1	366
SO4-- corr	aerosol	0.29	0.34	0.18	2.86	-0.02	0.02	0.18	0.89	4.17	100.0	1	366

IS0002R Irafoss

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.22	0.29	0.10	3.87	0.01	0.01	0.11	0.66	2.73	91.3	101	335
Cl-	aerosol	0.60	0.84	0.28	3.52	0.05	0.05	0.28	2.40	6.56	91.2	102	334
K+	aerosol	0.06	0.10	0.04	2.24	0.01	0.01	0.03	0.15	1.44	90.9	114	333
Mg++	aerosol	0.157	0.150	0.099	2.903	0.000	0.010	0.110	0.502	0.930	91.3	8	335
Na+	aerosol	0.86	0.99	0.47	3.21	0.02	0.06	0.48	2.95	7.43	91.3	16	335
SO2	air	0.10	0.14	0.05	3.51	0.00	0.01	0.04	0.40	1.12	93.7	131	344
SO4--	aerosol	0.18	0.16	0.12	2.64	0.00	0.02	0.14	0.52	1.25	91.3	1	335
SO4-- corr	aerosol	0.11	0.14	0.06	3.03	0.00	0.01	0.06	0.41	1.10	91.3	1	335

IS0091R Storhofdi

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Cl-	aerosol	7.67	3.63	6.84	1.69	2.50	2.50	7.05	14.60	14.60	65.7	0	16
NO3-	aerosol	0.06	0.03	0.06	1.54	0.00	0.00	0.06	0.10	0.10	65.7	0	16
SO4--	aerosol	0.44	0.12	0.43	1.31	0.29	0.29	0.43	0.73	0.73	65.7	0	16
SO4-- corr	aerosol	0.12	0.22	0.13	3.19	-0.36	-0.36	0.10	0.47	0.47	65.7	0	16

IT0001R Montelibretti

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HN03	air	0.93	0.72	0.66	2.22	0.07	0.17	0.66	2.59	3.16	100.0	0	54
NH3	air	2.02	0.80	1.82	1.55	0.57	0.77	1.81	3.60	3.65	100.0	0	54
NO2	air	2.80	1.57	2.45	1.67	0.63	1.07	2.30	6.45	9.83	98.1	0	359
NO3-	pm10_pm25	0.87	0.89	0.52	2.73	0.06	0.10	0.52	2.97	4.13	100.0	0	54
NO3-	pm25	1.27	0.92	0.90	2.61	0.09	0.14	1.28	3.24	3.73	100.0	0	54
PM10 mass	pm10	27.72	12.85	24.87	1.62	5.20	10.35	26.15	48.97	97.00	89.1	0	326
SO2	air	0.69	0.66	0.47	2.24	0.10	0.12	0.46	2.14	3.44	100.0	0	54
SO4--	aerosol	2.48	1.74	1.79	2.16	0.17	0.54	1.69	6.38	8.05	100.0	0	54
SO4--	pm10_pm25	0.30	0.18	0.25	1.88	0.03	0.10	0.26	0.71	0.91	100.0	0	54
SO4--	pm25	2.18	1.68	1.49	2.30	0.15	0.41	1.27	5.79	7.79	100.0	0	54

IT0004R Ispra

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
EC	pm25	1.53	1.50	1.00	2.59	0.00	0.21	0.84	5.00	7.58	95.8	0	351
EC	pm25	1.54	1.50	1.01	2.58	0.00	0.23	0.84	5.00	7.58	95.1	0	348
NH4+	pm25	1.91	2.30	1.07	3.06	0.03	0.16	1.10	7.04	14.18	95.1	0	348
NO2	air	5.47	3.69	4.56	1.79	1.28	2.10	3.96	13.32	21.06	98.6	0	362
NO3-	pm25	3.77	6.35	0.99	6.34	-0.10	0.03	0.94	17.05	40.48	95.1	0	348
OC	pm25	6.36	6.18	4.13	2.62	0.15	0.87	3.88	19.48	41.39	95.5	0	350
OC	pm25	6.42	6.19	4.19	2.61	0.15	0.88	3.93	19.51	41.39	94.8	0	347
PM25 mass	pm25	19.27	18.26	13.14	2.46	0.92	2.59	12.69	55.30	122.87	93.2	0	341
SO2	air	0.45	0.65	0.28	2.44	-0.12	0.07	0.26	1.45	5.71	88.5	0	325
SO4--	pm25	2.13	1.65	1.53	2.46	-0.02	0.27	1.73	5.29	9.71	95.1	0	348
TC	pm25	7.90	7.58	5.17	2.58	0.22	1.12	4.70	24.05	48.66	95.5	0	350

LT0015R Preila

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HN03+NO3-	air+aerosol	0.63	0.63	0.47	2.14	0.06	0.13	0.44	1.64	6.38	82.9	0	304
NH3+NH4+	air+aerosol	0.78	0.74	0.53	2.52	0.03	0.12	0.58	2.10	5.91	82.9	0	304
NO2	air	1.08	0.75	0.90	1.81	0.19	0.34	0.88	2.36	7.06	91.0	0	334
SO2	air	0.39	0.68	0.19	2.97	0.02	0.04	0.17	1.73	4.35	82.6	0	303
SO4--	aerosol	0.72	0.52	0.60	1.81	0.13	0.23	0.56	1.87	3.14	82.9	0	304

LV0010R Rucava

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	0.79	0.54	0.64	1.93	0.10	0.24	0.62	1.80	3.69	98.9	5	362
PM10 mass	pm10	15.48	10.14	12.58	1.93	2.00	4.53	12.70	35.60	56.20	83.1	0	304
PM25 mass	pm25	10.78	8.36	8.18	2.12	1.10	2.40	8.00	28.36	45.60	89.3	0	327
SO2	air	0.31	0.42	0.16	3.55	0.00	0.01	0.18	1.08	2.99	98.6	2	361

MD0013R Leova II

January 2012 - December 2012

Component		Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.21	0.27	0.06	6.19	0.01	0.01	0.10	0.78	1.26	31.7	55	117
Cl-	aerosol	0.42	0.27	0.32	2.25	0.01	0.06	0.36	0.96	1.25	31.7	1	117
HNO3	air	0.48	0.33	0.40	1.81	0.15	0.19	0.42	1.21	1.83	29.6	0	109
HNO3+NO3-	air+aerosol	1.21	0.61	1.06	1.72	0.26	0.35	1.12	2.39	3.35	30.4	0	112
K+	aerosol	0.29	0.17	0.23	2.03	0.03	0.07	0.27	0.59	0.77	31.7	0	117
Mg++	aerosol	0.075	0.134	0.032	3.330	0.010	0.010	0.030	0.433	0.840	31.7	51	117
NH3	air	0.29	0.29	0.20	2.37	0.03	0.03	0.20	0.97	1.72	31.5	8	116
NH3+NH4+	air+aerosol	1.17	0.67	0.98	1.91	0.13	0.27	1.04	2.64	3.06	30.2	0	111
NH4+	aerosol	0.89	0.62	0.65	2.53	0.01	0.10	0.81	2.15	2.80	30.1	1	111
NO2	air	0.19	0.13	0.14	2.64	0.01	0.01	0.18	0.40	0.85	99.2	0	364
NO3-	aerosol	0.74	0.51	0.52	2.79	0.01	0.08	0.67	1.73	2.28	30.9	3	114
Na+	aerosol	0.15	0.12	0.12	1.90	0.01	0.04	0.12	0.32	1.07	31.7	3	117
PM10 mass	pm10	29.18	18.92	18.24	4.19	0.25	0.25	27.10	67.64	88.63	31.7	10	117
SO2	air	1.30	1.02	0.90	2.54	0.03	0.16	0.82	3.31	3.84	23.9	0	88
SO4--	aerosol	1.26	0.92	0.93	2.32	0.11	0.16	1.01	3.15	3.77	29.0	0	107
SO4-- corr	aerosol	1.24	0.92	0.91	2.35	0.10	0.16	1.00	3.14	3.75	29.0	0	107

ME0008R Zabljak

January 2012 - December 2012

Component		Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	5.12	3.34	4.20	1.85	2.50	2.50	2.50	11.00	17.00	98.6	0	361
SO2	air	4.40	4.60	3.40	1.83	2.50	2.50	2.50	14.25	37.00	96.7	0	354

MK0007R Lazaropole

January 2012 - December 2012

Component		Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	5.87	6.51	2.68	4.09	0.08	0.40	3.14	19.97	31.52	10.0	0	881
PM10 mass	pm10	12.86	9.87	8.61	3.06	0.01	1.62	10.21	30.59	89.35	30.8	0	2707
SO2	air	0.39	0.02	0.39	1.04	0.31	0.36	0.40	0.42	0.55	15.8	0	1389

NL0007R Eibergen

January 2012 - December 2012

Component		Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NH3	air	7.71	5.73	6.18	1.95	0.25	2.31	6.17	19.00	49.57	91.5	0	8035
NO	air	1.04	2.84	0.38	3.77	-0.45	0.00	0.32	4.67	58.96	96.0	0	8436
NO2	air	4.23	3.06	3.29	2.08	0.01	0.98	3.37	10.67	19.82	95.2	0	8360
PM10 mass	pm10	19.54	15.51	15.06	2.35	-4.95	1.46	16.15	49.81	133.20	88.6	0	7787
SO2	air	0.46	0.84	0.47	2.68	-1.42	-0.40	0.34	1.89	16.32	95.6	0	8394

NL0008R Bilthoven

January 2012 - December 2012

Component		Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.18	0.09	0.16	1.65	0.05	0.07	0.15	0.37	0.48	49.7	0	182
Cl-	aerosol	0.93	1.28	0.47	3.22	0.06	0.07	0.47	3.37	8.01	98.6	0	362
Mg++	aerosol	0.122	0.092	0.096	1.972	0.013	0.034	0.098	0.343	0.549	49.7	1	182
NO3-	aerosol	1.02	0.98	0.71	2.34	0.12	0.20	0.67	3.44	6.49	98.6	0	362
Na+	aerosol	0.86	0.74	0.61	2.37	0.07	0.13	0.66	2.61	4.23	49.7	0	182
SO4--	aerosol	0.78	0.63	0.64	1.84	0.11	0.25	0.59	1.94	4.96	98.6	0	362
SO4-- corr	aerosol	0.72	0.65	0.55	2.12	0.03	0.16	0.54	1.89	4.93	98.6	0	362

NL0009R Kollumerwaard

January 2012 - December 2012

Component		Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
CO	air	176.98	63.52	167.53	1.39	20.05	102.29	166.90	293.11	649.46	51.5	0	4520
Ca++	aerosol	0.13	0.08	0.11	1.75	0.01	0.05	0.11	0.30	0.58	47.3	5	173
Cl-	aerosol	1.12	1.36	0.63	2.97	0.08	0.10	0.63	4.33	8.92	95.1	0	349
Mg++	aerosol	0.127	0.101	0.094	2.262	0.004	0.025	0.100	0.314	0.560	47.3	3	173
NH4+	aerosol	1.44	1.64	0.68	4.10	0.02	0.05	0.79	4.56	10.06	95.1	0	349
NO	air	0.72	2.34	0.27	3.89	-0.60	-0.05	0.21	2.65	51.17	97.7	0	8586
NO2	air	0.95	0.89	0.64	2.53	-0.00	0.13	0.67	2.82	6.52	97.5	0	8561
NO3-	aerosol	0.99	0.90	0.68	2.46	0.07	0.14	0.73	2.90	6.21	95.1	0	348
Na+	aerosol	0.94	0.86	0.62	2.62	0.04	0.12	0.68	2.59	4.60	47.3	1	173
PM10 mass	pm10	19.95	13.70	16.16	2.16	-4.91	2.77	17.74	44.87	156.97	91.2	0	8008
PM25 mass	pm25	9.84	8.97	6.91	2.38	0.15	1.72	6.63	26.67	54.54	96.2	0	352
SO2	air	0.24	0.52	0.32	2.87	-1.39	-0.51	0.20	0.98	5.33	99.1	0	8705
SO4--	aerosol	0.69	0.52	0.57	1.81	0.11	0.23	0.55	1.54	4.33	95.1	0	348
SO4-- corr	aerosol	0.63	0.54	0.47	2.22	-0.05	0.09	0.49	1.51	4.32	95.1	0	348

NL0010R Vredepeel

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.26	0.22	0.20	2.03	0.03	0.07	0.18	0.65	1.91	50.0	2	183
Cl-	aerosol	0.71	0.89	0.41	2.80	0.06	0.09	0.41	2.35	5.80	99.7	0	366
Mg++	aerosol	0.109	0.066	0.092	1.833	0.015	0.031	0.094	0.237	0.392	50.0	1	183
NH4+	aerosol	1.89	1.99	1.07	3.16	0.04	0.16	1.17	6.21	12.86	99.7	0	366
NO	air	1.71	4.16	0.55	4.26	-0.23	0.04	0.44	7.99	76.97	98.1	0	8613
NO2	air	5.34	3.83	4.13	2.11	-0.62	1.16	4.24	13.32	21.30	98.0	0	8612
NO3-	aerosol	1.23	1.05	0.89	2.25	0.09	0.23	0.89	3.45	5.68	99.7	0	366
Na+	aerosol	0.63	0.54	0.46	2.28	0.06	0.13	0.46	1.83	3.21	50.0	0	183
PM10 mass	pm10	23.17	17.80	17.75	2.40	-7.22	1.94	19.56	56.87	144.72	89.9	0	7898
PM25 mass	pm25	13.38	10.53	10.33	2.07	0.88	3.27	9.89	33.99	94.57	95.6	0	350
SO4--	aerosol	0.84	0.66	0.67	1.87	0.18	0.27	0.63	2.15	5.05	99.7	0	366
SO4-- corr	aerosol	0.79	0.67	0.61	2.04	0.07	0.20	0.60	2.11	4.99	99.7	0	366

NL0091R De Zilk

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Cl-	aerosol	1.61	1.87	0.85	3.41	0.06	0.09	0.92	5.96	10.92	94.8	0	348
NH3	air	1.58	2.23	0.93	2.74	-0.30	0.21	0.87	5.44	28.99	87.2	0	7660
NH4+	aerosol	1.30	1.83	0.51	4.48	0.02	0.04	0.55	5.82	12.37	94.8	0	348
NO	air	1.60	4.74	0.36	5.27	-0.31	-0.02	0.25	8.50	120.75	95.4	0	8384
NO2	air	1.54	1.34	1.01	2.70	-0.04	0.16	1.10	4.33	9.69	95.3	0	8373
NO3-	aerosol	0.97	0.99	0.65	2.40	0.09	0.17	0.63	3.16	6.47	94.8	0	348
PM10 mass	pm10	23.04	18.83	17.50	2.43	-5.01	1.76	19.05	57.97	300.28	85.0	0	7469
PM25 mass	pm25	9.83	10.44	6.95	2.20	1.08	2.21	6.25	32.74	92.35	85.8	0	314
SO2	air	0.71	0.76	0.54	2.92	-0.84	-0.14	0.56	2.15	8.40	95.1	0	8355
SO4--	aerosol	0.78	0.56	0.66	1.72	0.17	0.30	0.63	1.90	4.61	94.8	0	348
SO4-- corr	aerosol	0.69	0.53	0.55	2.02	0.06	0.13	0.57	1.74	4.22	94.8	0	348

NL0644R Cabauw Wielsekeade

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
EC	pm25	0.35	0.31	0.28	1.92	0.04	0.12	0.26	0.89	2.57	24.9	0	91
NO	air	1.66	3.93	0.52	4.66	-0.92	-0.02	0.40	8.01	53.50	60.2	0	5288
NO2	air	5.50	3.64	4.39	2.02	0.22	1.32	4.59	12.79	21.75	60.0	0	5269
OC	pm25	1.78	1.46	1.39	2.03	0.00	0.42	1.25	5.01	8.04	24.9	0	91
PM10 mass	pm10	15.71	11.47	12.65	2.19	-4.83	1.47	13.59	37.05	109.91	58.7	0	5152
PM25 mass	pm25	12.36	11.24	9.37	2.06	1.86	3.17	9.08	30.44	98.14	49.5	0	181
SO2	air	0.64	0.85	0.54	2.81	-1.36	-0.35	0.49	2.17	13.12	90.0	0	7902
TC	pm25	2.13	1.68	1.67	2.02	0.13	0.58	1.62	5.48	10.17	24.9	0	91

NO0002R Birkenes II

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.05	0.04	0.03	2.68	0.01	0.01	0.03	0.13	0.27	99.5	46	365
Cl-	aerosol	0.35	0.61	0.08	6.31	0.01	0.01	0.07	1.65	4.78	99.5	116	365
EC	pm10	0.08	0.04	0.07	1.64	0.03	0.03	0.07	0.20	0.24	87.6	0	46
EC	pm25	0.08	0.05	0.07	1.74	0.03	0.03	0.07	0.19	0.28	91.5	0	48
HNO3	air	0.15	0.15	0.08	3.64	0.01	0.01	0.10	0.46	0.78	91.0	67	334
HNO3+NO3-	air+aerosol	0.46	0.46	0.28	2.86	0.01	0.04	0.31	1.26	3.20	91.0	0	334
K+	aerosol	0.07	0.06	0.05	2.23	0.01	0.01	0.05	0.17	0.53	99.5	7	365
Mg++	aerosol	0.061	0.061	0.036	3.066	0.005	0.005	0.040	0.197	0.410	99.5	47	365
NH3	air	0.33	0.23	0.26	2.15	0.02	0.07	0.26	0.78	1.40	92.9	8	341
NH3+NH4+	air+aerosol	0.61	0.53	0.44	2.24	0.04	0.12	0.44	1.80	3.53	92.9	0	341
NH4+	aerosol	0.28	0.39	0.11	4.94	0.01	0.01	0.14	0.93	2.98	92.9	41	341
NO2	air	0.39	0.46	0.26	2.50	0.01	0.05	0.29	1.14	4.38	99.4	9	364
NO3-	aerosol	0.31	0.37	0.17	3.16	0.01	0.03	0.17	0.94	3.07	92.9	6	341
Na+	aerosol	0.43	0.49	0.22	3.89	0.01	0.02	0.25	1.51	3.44	99.5	13	365
OC	pm10	0.57	0.25	0.51	1.58	0.18	0.20	0.53	1.16	1.33	87.6	0	46
OC	pm25	0.50	0.26	0.44	1.66	0.16	0.19	0.49	1.15	1.25	91.5	0	48
PM10 mass	pm10	4.88	2.59	4.28	1.67	1.49	1.83	4.50	11.17	13.63	88.5	0	47
PM25 mass	pm25	3.06	2.08	2.38	2.18	0.10	0.84	2.60	7.75	10.41	94.2	1	50
SO2	air	0.07	0.09	0.04	2.94	0.01	0.01	0.04	0.24	0.81	99.5	96	365
SO4--	aerosol	0.27	0.26	0.17	2.83	0.01	0.03	0.18	0.81	1.79	99.5	4	365
SO4-- corr	aerosol	0.24	0.26	0.13	3.24	-0.03	0.02	0.13	0.80	1.76	99.5	4	365
TC	pm10	0.64	0.29	0.58	1.57	0.20	0.24	0.59	1.26	1.57	87.6	0	46
TC	pm25	0.58	0.30	0.52	1.65	0.20	0.22	0.56	1.30	1.54	91.5	0	48

NO0015R Tustervatn

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.03	0.02	0.02	2.57	0.01	0.01	0.02	0.07	0.12	99.7	99	366
Cl-	aerosol	0.23	0.49	0.04	5.82	0.01	0.01	0.02	1.18	4.33	99.5	182	365
HNO3	air	0.08	0.09	0.04	3.30	0.01	0.01	0.05	0.29	0.45	88.7	120	325
HNO3+NO3-	air+aerosol	0.25	0.35	0.13	3.00	0.02	0.02	0.12	0.94	2.45	88.5	0	325
K+	aerosol	0.06	0.10	0.03	2.91	0.01	0.01	0.03	0.18	1.06	99.7	55	366
Mg++	aerosol	0.029	0.039	0.015	3.097	0.005	0.005	0.010	0.117	0.300	99.7	152	366
NH3	air	0.91	0.94	0.63	2.30	0.05	0.15	0.60	2.71	6.84	88.8	0	326
NH3+NH4+	air+aerosol	1.07	0.97	0.80	2.12	0.09	0.24	0.76	2.99	6.93	88.5	0	325
NH4+	aerosol	0.16	0.29	0.05	5.35	0.01	0.01	0.05	0.68	2.29	89.3	81	328
NO2	air	0.17	0.13	0.12	2.58	0.01	0.01	0.16	0.45	0.81	98.1	38	360
NO3-	aerosol	0.17	0.29	0.08	3.50	0.01	0.01	0.07	0.74	2.03	89.1	12	327
Na+	aerosol	0.18	0.29	0.06	5.10	0.01	0.01	0.07	0.79	2.35	99.7	63	366
SO2	air	0.05	0.11	0.02	2.70	0.01	0.01	0.01	0.17	1.38	99.2	208	364
SO4--	aerosol	0.12	0.16	0.06	3.42	0.01	0.01	0.07	0.42	1.26	99.5	32	365
SO4-- corr	aerosol	0.11	0.16	0.05	3.54	-0.04	0.01	0.05	0.40	1.26	99.5	32	365

NO0039R Kårvatn

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.03	0.04	0.02	2.67	0.01	0.01	0.03	0.09	0.44	93.7	73	344
Cl-	aerosol	0.25	0.49	0.05	6.13	0.01	0.01	0.02	1.35	3.28	93.4	168	343
EC	pm10	0.05	0.03	0.04	1.92	0.01	0.01	0.04	0.12	0.17	95.8	0	51
EC	pm25	0.05	0.03	0.05	1.75	0.01	0.02	0.04	0.12	0.17	95.8	0	51
HNO3	air	0.10	0.13	0.05	3.63	0.01	0.01	0.06	0.45	0.59	87.4	109	321
HNO3+NO3-	air+aerosol	0.26	0.32	0.14	3.15	0.01	0.02	0.15	0.96	2.35	87.2	0	320
K+	aerosol	0.05	0.09	0.03	2.71	0.01	0.01	0.03	0.16	1.10	93.7	36	344
Mg++	aerosol	0.031	0.039	0.017	3.004	0.005	0.005	0.020	0.120	0.260	93.7	118	344
NH3	air	0.57	0.39	0.46	1.94	0.03	0.14	0.48	1.29	3.81	87.4	1	321
NH3+NH4+	air+aerosol	0.71	0.61	0.56	1.98	0.06	0.18	0.55	1.68	6.95	87.4	0	321
NH4+	aerosol	0.16	0.50	0.05	5.00	0.01	0.01	0.06	0.64	6.17	87.7	77	322
NO2	air	0.22	0.37	0.16	2.20	0.01	0.03	0.17	0.41	6.61	95.6	13	351
NO2	air	0.22	0.38	0.16	2.20	0.01	0.03	0.17	0.41	6.61	95.5	13	350
NO3-	aerosol	0.15	0.23	0.07	3.50	0.01	0.01	0.08	0.65	1.77	87.2	18	320
Na+	aerosol	0.19	0.29	0.07	5.00	0.01	0.01	0.08	0.74	2.04	93.7	56	344
OC	pm10	0.72	0.68	0.53	2.10	0.21	0.22	0.44	2.36	3.29	95.8	0	51
OC	pm25	0.56	0.51	0.42	2.00	0.16	0.18	0.32	1.89	2.34	95.8	0	51
PM10 mass	pm10	3.42	2.82	2.72	1.87	0.70	1.11	2.70	11.05	14.77	97.5	0	53
PM25 mass	pm25	2.52	2.71	1.70	2.37	0.09	0.51	1.48	9.50	14.35	95.6	0	52
SO2	air	0.04	0.05	0.02	2.67	0.01	0.01	0.01	0.14	0.38	93.7	173	344
SO4--	aerosol	0.14	0.17	0.08	3.31	0.01	0.01	0.09	0.46	1.30	93.4	15	343
SO4-- corr	aerosol	0.13	0.17	0.07	3.40	-0.01	0.01	0.07	0.45	1.23	93.4	15	343
TC	pm10	0.78	0.69	0.58	2.04	0.22	0.24	0.49	2.40	3.42	95.8	0	51
TC	pm25	0.62	0.53	0.48	1.94	0.18	0.21	0.37	1.99	2.41	95.8	0	51

NO0042G Zeppelin mountain (Ny-Ålesund)

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.03	0.03	0.02	2.37	0.00	0.01	0.03	0.08	0.24	96.2	44	353
Cl-	aerosol	0.26	0.54	0.08	5.04	0.01	0.01	0.10	0.98	6.53	97.0	98	356
HNO3	air	0.07	0.09	0.03	3.34	0.01	0.01	0.03	0.26	0.49	90.7	161	333
HNO3+NO3-	air+aerosol	0.22	0.27	0.12	2.98	0.01	0.02	0.10	0.75	2.69	90.7	0	333
K+	aerosol	0.05	0.06	0.03	2.60	0.00	0.01	0.03	0.14	0.74	95.9	43	352
Mg++	aerosol	0.039	0.046	0.024	2.800	0.000	0.005	0.030	0.110	0.510	96.4	76	354
NH3	air	0.25	0.15	0.21	1.88	0.02	0.07	0.22	0.52	0.95	90.2	9	331
NH3+NH4+	air+aerosol	0.36	0.28	0.29	1.98	0.03	0.09	0.27	0.89	2.66	89.6	0	329
NH4+	aerosol	0.11	0.20	0.03	5.16	0.00	0.01	0.04	0.45	2.43	90.2	115	331
NO3-	aerosol	0.15	0.22	0.07	3.38	0.01	0.01	0.07	0.56	2.61	90.7	16	333
Na+	aerosol	0.23	0.29	0.12	3.56	0.00	0.01	0.14	0.67	2.59	96.4	19	354
SO2	air	0.06	0.16	0.02	3.13	0.01	0.01	0.01	0.23	1.60	97.0	201	356
SO4--	aerosol	0.12	0.13	0.06	3.49	0.01	0.01	0.07	0.39	0.82	97.0	31	356
SO4-- corr	aerosol	0.10	0.13	0.05	3.52	-0.20	0.00	0.05	0.37	0.79	97.0	31	356

NO0056R Hurdal

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.04	0.04	0.02	2.66	0.01	0.01	0.03	0.12	0.40	98.6	65	362
Cl-	aerosol	0.10	0.25	0.03	4.07	0.01	0.01	0.01	0.55	3.07	98.6	220	362
EC	pm10	0.13	0.08	0.11	1.66	0.04	0.06	0.10	0.30	0.39	96.2	0	52
EC	pm25	0.13	0.08	0.11	1.77	0.02	0.05	0.10	0.28	0.42	96.2	0	52
HNO3	air	0.12	0.13	0.07	3.20	0.01	0.01	0.07	0.36	1.02	91.3	66	335
HNO3+NO3-	air+aerosol	0.30	0.34	0.19	2.68	0.02	0.03	0.20	0.85	2.53	91.3	0	335
K+	aerosol	0.07	0.08	0.05	2.32	0.01	0.01	0.05	0.18	0.94	98.6	13	362
Mg++	aerosol	0.027	0.032	0.015	2.862	0.005	0.005	0.020	0.090	0.280	98.6	134	362
NH3	air	0.30	0.19	0.24	1.92	0.03	0.08	0.27	0.62	1.30	91.3	4	335
NH3+NH4+	air+aerosol	0.49	0.36	0.39	2.01	0.03	0.13	0.39	1.25	2.16	91.3	0	335
NH4+	aerosol	0.19	0.27	0.07	5.20	0.01	0.01	0.09	0.83	1.57	91.8	64	337
NO2	air	0.76	1.07	0.48	2.50	0.01	0.11	0.47	2.54	12.76	99.2	2	364
NO3-	aerosol	0.18	0.25	0.10	3.05	0.01	0.02	0.10	0.59	2.10	91.8	9	337
Na+	aerosol	0.16	0.23	0.07	4.29	0.01	0.01	0.08	0.63	2.16	98.6	44	362
OC	pm10	0.86	0.40	0.77	1.59	0.35	0.35	0.72	1.68	2.14	96.2	0	52
OC	pm25	0.60	0.30	0.54	1.57	0.20	0.30	0.52	1.29	1.64	96.2	0	52
PM10 mass	pm10	4.08	1.95	3.64	1.57	1.48	1.71	3.50	7.93	10.85	94.3	0	51
PM25 mass	pm25	2.77	1.61	2.25	2.10	0.06	0.85	2.28	6.07	8.58	96.2	0	52
SO2	air	0.06	0.09	0.03	3.08	0.01	0.01	0.03	0.25	0.59	98.1	146	360
SO4--	aerosol	0.22	0.22	0.13	3.27	0.01	0.02	0.15	0.69	1.13	98.6	10	362
SO4-- corr	aerosol	0.21	0.21	0.12	3.36	0.00	0.01	0.14	0.69	1.13	98.6	10	362
TC	pm10	0.99	0.43	0.90	1.52	0.42	0.44	0.90	1.94	2.53	96.2	0	52
TC	pm25	0.73	0.36	0.66	1.56	0.22	0.36	0.65	1.55	2.06	96.2	0	52

PL0002R Jarczew

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.75	0.61	0.57	2.08	0.09	0.19	0.55	1.95	3.51	99.2	0	364
NH3+NH4+	air+aerosol	3.04	1.57	2.68	1.66	0.49	1.15	2.76	6.19	11.87	99.2	0	364
NH4+	aerosol	1.52	1.01	1.29	1.77	0.12	0.52	1.25	3.50	7.67	99.2	0	364
NO2	air	2.90	1.43	2.60	1.60	0.30	1.20	2.60	6.20	9.20	98.0	0	359
NO3-	aerosol	0.64	0.57	0.46	2.21	0.08	0.14	0.41	1.80	3.29	99.2	0	364
SO2	air	1.23	1.22	0.81	2.59	0.10	0.20	0.85	3.77	8.20	99.2	13	364
SO4--	aerosol	1.15	0.70	0.97	1.85	0.10	0.33	1.05	2.45	5.36	99.2	5	364

PL0003R Sniezka

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.49	0.23	0.43	1.68	0.05	0.18	0.45	0.91	1.45	100.0	0	367
NH3+NH4+	air+aerosol	0.73	0.37	0.62	1.88	0.03	0.19	0.70	1.35	2.00	100.0	1	367
NH4+	aerosol	0.55	0.28	0.45	2.03	0.03	0.12	0.52	1.03	1.48	100.0	6	367
NO2	air	1.02	0.48	0.92	1.61	0.20	0.40	0.90	1.90	2.60	100.0	0	367
NO3-	aerosol	0.38	0.18	0.33	1.70	0.03	0.13	0.34	0.71	1.25	100.0	0	367
SO2	air	1.02	0.47	0.92	1.61	0.30	0.40	0.90	1.90	2.50	100.0	0	367
SO4--	aerosol	0.92	0.45	0.79	1.85	0.10	0.26	0.86	1.71	2.27	100.0	10	367

PL0004R Leba

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.56	0.62	0.40	2.23	0.06	0.11	0.38	1.52	6.99	98.9	0	363
NH3+NH4+	air+aerosol	1.46	0.93	1.24	1.79	0.29	0.45	1.26	3.02	9.72	98.9	0	363
NH4+	aerosol	0.96	0.81	0.76	1.96	0.12	0.24	0.74	2.27	9.02	98.9	0	363
NO2	air	1.54	1.07	1.25	1.88	0.30	0.40	1.20	3.51	7.20	97.3	0	357
NO3-	aerosol	0.46	0.56	0.30	2.50	0.03	0.06	0.28	1.42	6.09	98.9	0	363
SO2	air	0.79	0.88	0.54	2.33	0.10	0.10	0.50	2.42	7.10	97.0	18	356
SO4--	aerosol	0.99	0.46	0.88	1.70	0.10	0.35	0.95	1.82	2.72	98.9	4	363

PL0005R Diabla Gora

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm25	0.05	0.03	0.04	2.14	0.00	0.01	0.04	0.13	0.15	85.8	0	53
Cl-	pm25	0.03	0.03	0.03	1.76	0.01	0.02	0.02	0.11	0.12	85.2	0	52
EC	pm25	0.60	0.52	0.43	2.37	0.00	0.10	0.44	1.54	3.89	100.0	0	367
HNO3	air	0.73	0.58	0.58	1.92	0.14	0.20	0.57	1.98	3.67	99.7	0	366
HNO3+NO3-	air+aerosol	1.27	1.00	0.98	2.00	0.22	0.35	0.89	3.47	5.34	99.4	0	364
K+	pm25	0.09	0.07	0.07	2.10	0.01	0.02	0.06	0.27	0.29	85.8	0	53
Mg++	pm25	0.014	0.007	0.012	1.625	0.005	0.006	0.012	0.028	0.034	85.8	0	53
NH3	air	0.86	0.76	0.58	2.79	0.01	0.08	0.60	2.47	4.50	100.0	0	367
NH3+NH4+	air+aerosol	2.34	0.91	2.17	1.49	0.20	1.16	2.12	4.24	5.55	99.7	0	366
NH4+	aerosol	1.48	0.71	1.30	1.82	0.01	0.53	1.39	2.89	4.80	99.7	0	366
NH4+	pm25	0.58	0.49	0.41	2.28	0.07	0.09	0.37	1.74	2.04	85.8	0	53
NO2	air	1.28	0.86	1.03	1.97	0.11	0.34	1.00	3.03	4.57	98.0	0	359
NO3-	aerosol	0.53	0.60	0.35	2.35	0.07	0.10	0.32	1.45	4.03	99.5	0	365
NO3-	pm25	0.34	0.36	0.18	3.37	0.02	0.03	0.17	1.12	1.40	85.2	0	52
Na+	pm25	0.15	0.08	0.13	1.58	0.04	0.06	0.13	0.32	0.51	85.8	0	53
OC	pm25	3.27	2.93	2.30	2.44	0.02	0.53	2.40	8.65	20.70	100.0	0	367
PM10 mass	pm10	16.02	9.64	13.61	1.77	2.78	5.49	12.78	34.41	56.28	93.2	0	342
PM25 mass	pm25	13.81	10.57	10.86	1.99	1.42	3.89	9.99	33.20	70.60	99.7	0	366
SO2	air	0.52	0.44	0.41	1.92	0.09	0.16	0.40	1.31	3.37	99.7	0	366
SO4--	aerosol	0.58	0.47	0.45	2.05	0.07	0.14	0.44	1.55	2.92	99.5	0	365
SO4--	pm25	0.69	0.53	0.55	1.84	0.17	0.24	0.51	1.77	2.97	85.8	0	53
SO4-- corr	pm25	0.68	0.53	0.54	1.87	0.15	0.22	0.51	1.77	2.95	85.8	0	53

RO0008R Poiana Stampei

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
PM10 mass	pm10	18.42	10.38	15.68	1.80	3.09	5.68	16.90	39.61	63.05	96.2	0	352
SO2	air	3.04	1.70	2.70	1.60	0.03	1.42	2.58	6.17	19.10	76.0	0	6673

RS0005R Kamenicki vis

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	2.08	3.79	0.84	3.12	0.30	0.30	0.61	12.02	18.90	88.8	100	325
SO2	air	8.64	5.98	6.08	2.71	0.75	0.75	8.30	18.70	46.50	89.9	45	329

RU0018R Danki

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NH4+	aerosol	0.43	0.33	0.28	3.25	0.01	0.01	0.35	1.09	1.90	100.0	0	367
NO3-	aerosol	0.34	0.35	0.23	2.45	0.02	0.05	0.23	1.08	2.91	100.0	0	367
SO2	air	0.45	0.97	0.13	4.87	0.01	0.01	0.13	1.86	9.61	100.0	0	367
SO4--	aerosol	0.70	0.57	0.51	2.33	0.01	0.13	0.52	1.80	3.64	100.0	0	367

RU0020R Lesnoy

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NH4+	aerosol	0.19	0.19	0.13	2.58	0.01	0.01	0.14	0.38	1.32	99.5	0	52
NO3-	aerosol	0.21	0.25	0.12	3.15	0.01	0.01	0.14	0.74	1.34	99.5	0	52
SO2	air	0.34	0.59	0.09	5.22	0.01	0.01	0.09	1.95	2.10	99.5	0	52
SO4--	aerosol	0.52	0.43	0.32	3.54	0.01	0.01	0.41	1.47	1.95	99.5	0	52

SE0005R Bredkålen

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.03	0.00	0.03	1.00	0.03	0.03	0.03	0.03	0.03	99.7	366	366
Cl-	aerosol	0.11	0.20	0.05	3.13	0.03	0.03	0.03	0.56	1.65	99.7	273	366
HNO3+NO3-	air+aerosol	0.03	0.03	0.02	2.42	0.01	0.01	0.02	0.08	0.26	99.7	65	366
K+	aerosol	0.02	0.01	0.02	1.25	0.01	0.01	0.01	0.01	0.07	99.7	356	366
Mg++	aerosol	0.017	0.010	0.016	1.292	0.015	0.015	0.015	0.015	0.120	99.7	356	366
NH3+NH4+	air+aerosol	0.13	0.19	0.07	3.26	0.01	0.01	0.08	0.42	2.45	99.7	64	366
NO2	air	0.12	0.15	0.08	2.26	0.05	0.05	0.05	0.44	1.00	99.7	286	366
Na+	aerosol	0.10	0.13	0.05	2.84	0.03	0.03	0.03	0.37	1.00	99.7	251	366
PM10 mass	pm10	2.96	1.64	2.57	1.71	0.60	1.10	2.55	6.20	10.20	98.2	0	360
PM25 mass	pm25	1.61	1.22	1.27	2.00	0.00	0.40	1.20	4.20	8.20	95.1	0	349
SO2	air	0.07	0.09	0.03	3.64	0.01	0.01	0.04	0.25	0.84	99.7	95	366
SO4--	aerosol	0.12	0.14	0.07	3.18	0.01	0.01	0.07	0.46	1.04	99.7	31	366
SO4-- corr	aerosol	0.12	0.15	0.06	3.38	-0.01	0.01	0.07	0.46	1.04	99.7	31	366
SPM	aerosol	0.40	0.18	0.38	1.21	0.38	0.38	0.38	0.38	2.05	99.7	361	366

SE0011R Vavihill

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.06	0.07	0.04	2.28	0.03	0.03	0.03	0.20	0.40	96.2	257	353
Cl-	aerosol	0.49	0.83	0.12	5.63	0.03	0.03	0.11	2.33	6.48	97.0	172	356
HNO3+NO3-	air+aerosol	0.41	0.45	0.29	2.25	0.02	0.09	0.30	1.04	5.65	95.9	0	352
K+	aerosol	0.07	0.04	0.05	2.24	0.01	0.01	0.07	0.14	0.28	96.7	91	355
Mg++	aerosol	0.062	0.067	0.037	2.754	0.015	0.015	0.015	0.200	0.480	97.0	188	356
NH3+NH4+	air+aerosol	0.81	0.71	0.58	2.37	0.05	0.14	0.62	2.00	5.61	95.6	0	351
NO2	air	1.37	1.23	1.09	1.84	0.35	0.50	0.98	3.70	9.69	95.6	0	351
Na+	aerosol	0.51	0.53	0.28	3.66	0.03	0.03	0.35	1.65	3.78	96.7	59	355
PM10 mass	pm10	13.86	8.50	11.94	1.74	-1.80	4.90	12.00	28.10	104.10	97.1	0	8530
PM25 mass	pm25	6.74	7.00	4.68	2.65	-3.00	0.30	5.00	18.80	67.20	89.6	0	7869
SO2	air	0.26	0.26	0.18	2.48	0.01	0.05	0.17	0.78	1.95	96.4	5	354
SO4--	aerosol	0.36	0.26	0.29	1.95	0.03	0.09	0.31	0.78	2.09	96.7	0	355
SO4-- corr	aerosol	0.32	0.26	0.23	2.34	0.02	0.04	0.25	0.75	2.09	96.7	0	355
SPM	aerosol	1.30	1.92	0.72	2.66	0.38	0.38	0.38	4.83	19.72	97.5	242	358

SE0012R Aspvreten

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.04	0.05	0.03	1.75	0.03	0.03	0.03	0.15	0.45	100.0	331	367
Cl-	aerosol	0.14	0.23	0.05	3.35	0.03	0.03	0.03	0.69	1.42	100.0	248	367
EC	pm10	0.18	0.14	0.14	2.00	0.03	0.05	0.13	0.52	0.78	30.3	0	111
HNO3+NO3-	air+aerosol	0.19	0.21	0.13	2.25	0.01	0.03	0.14	0.43	2.75	99.7	0	366
K+	aerosol	0.04	0.04	0.03	2.25	0.01	0.01	0.01	0.11	0.29	100.0	225	367
Mg++	aerosol	0.029	0.028	0.022	1.970	0.015	0.015	0.015	0.090	0.160	100.0	279	367
NH3+NH4+	air+aerosol	0.33	0.35	0.23	2.51	0.01	0.05	0.23	0.81	4.22	100.0	5	367
NO2	air	0.60	0.52	0.47	2.04	0.05	0.21	0.44	1.48	4.31	100.0	13	367
Na+	aerosol	0.26	0.22	0.16	3.13	0.03	0.03	0.20	0.68	1.31	100.0	87	367
OC	pm10	1.75	0.98	1.48	1.87	0.23	0.45	1.68	3.82	4.82	30.9	0	113
PM10 mass	pm10	6.95	4.80	5.62	2.00	0.10	2.02	5.75	15.79	30.10	68.0	0	250
PM25 mass	pm25	5.27	4.80	3.94	2.44	-10.90	0.30	4.20	13.40	57.50	98.5	0	8656
SO2	air	0.21	0.22	0.13	2.73	0.01	0.03	0.14	0.63	1.90	100.0	9	367
SO4--	aerosol	0.31	0.28	0.21	2.61	0.01	0.04	0.23	0.88	2.15	100.0	3	367
SO4-- corr	aerosol	0.29	0.28	0.19	2.77	-0.01	0.03	0.21	0.87	2.14	100.0	3	367

SE0014R Råö

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.10	0.09	0.07	2.69	0.03	0.03	0.10	0.26	0.40	99.7	181	366
Cl-	aerosol	2.42	2.91	0.69	7.82	0.03	0.03	1.28	8.92	18.12	99.7	80	366
HNO3+NO3-	air+aerosol	0.44	0.45	0.30	2.46	0.02	0.06	0.32	1.31	4.77	99.5	0	365
K+	aerosol	0.11	0.08	0.09	2.21	0.01	0.01	0.10	0.24	0.64	99.7	43	366
Mg++	aerosol	0.214	0.206	0.109	3.859	0.015	0.015	0.160	0.650	1.210	99.7	99	366
NH3+NH4+	air+aerosol	0.60	0.66	0.41	2.39	0.01	0.11	0.41	1.66	7.69	99.5	1	365
NO2	air	1.26	0.88	1.04	1.83	0.26	0.42	0.97	3.15	6.15	100.0	0	367
Na+	aerosol	1.72	1.68	0.81	4.72	0.03	0.03	1.23	5.31	9.72	99.7	36	366
PM10 mass	pm10	13.33	7.07	11.64	1.70	2.70	4.60	12.50	25.46	56.90	96.2	0	353
PM25 mass	pm25	5.64	3.47	4.85	1.71	0.60	2.20	4.60	12.68	22.20	95.8	0	351
SO2	air	0.27	0.22	0.21	2.10	0.02	0.06	0.21	0.75	1.60	99.5	1	365
SO4--	aerosol	0.50	0.30	0.41	2.03	0.01	0.11	0.48	0.98	2.28	99.7	1	366
SO4-- corr	aerosol	0.35	0.31	0.24	2.74	0.00	0.03	0.27	0.90	2.18	99.7	1	366
SPM	aerosol	0.96	1.32	0.60	2.29	0.38	0.38	0.38	3.46	10.81	99.5	269	365

SI0008R Iskrba

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.16	0.12	0.12	2.32	0.00	0.04	0.12	0.39	0.94	98.6	151	362
Ca++	pm25	0.08	0.04	0.07	1.56	0.03	0.03	0.08	0.12	0.36	44.4	18	163
Cl-	aerosol	0.05	0.09	0.02	3.49	0.00	0.00	0.02	0.22	0.95	98.5	300	361
Cl-	pm25	0.05	0.06	0.04	1.67	0.02	0.02	0.05	0.08	0.69	44.4	22	163
EC	pm25	0.35	0.31	0.27	2.04	0.05	0.09	0.25	1.08	1.91	44.4	0	163
HNO3+NO3-	air+aerosol	0.25	0.20	0.19	2.05	0.02	0.06	0.19	0.64	1.28	94.3	2	346
K+	aerosol	0.17	0.12	0.13	1.95	0.00	0.05	0.13	0.43	0.82	98.5	4	361
K+	pm25	0.15	0.11	0.12	1.97	0.03	0.04	0.11	0.39	0.62	44.5	0	164
Mg++	aerosol	0.051	0.037	0.040	2.294	0.001	0.016	0.042	0.117	0.329	98.6	73	362
Mg++	pm25	0.024	0.019	0.012	4.077	0.002	0.002	0.031	0.045	0.087	44.4	60	163
NH3+NH4+	air+aerosol	0.80	0.47	0.65	2.00	0.10	0.18	0.73	1.68	2.50	91.5	0	336
NH4+	pm25	0.95	0.80	0.68	2.37	0.06	0.12	0.72	2.87	3.85	44.4	0	163
NO2	air	0.63	0.42	0.54	1.70	0.05	0.30	0.48	1.58	2.84	98.8	0	362
NO3-	pm25	0.41	0.81	0.17	3.43	0.03	0.03	0.11	2.18	5.17	44.5	25	164
Na+	aerosol	0.13	0.17	0.07	3.39	0.00	0.01	0.08	0.48	1.10	98.4	93	361
Na+	pm25	0.05	0.06	0.03	2.97	0.01	0.01	0.03	0.18	0.33	44.5	26	164
OC	pm25	3.47	2.04	3.10	1.55	1.31	1.75	2.93	7.92	15.78	44.5	0	164
PM10 mass	pm10	14.89	8.07	13.20	1.62	2.90	6.18	13.50	30.74	73.90	91.3	0	335
PM25 mass	pm25	12.64	7.71	11.00	1.67	2.70	5.06	10.80	27.90	73.90	88.5	0	325
SO2	air	0.33	0.54	0.15	3.26	0.00	0.03	0.12	1.38	3.51	95.4	2	350
SO4--	aerosol	0.67	0.65	0.46	2.52	0.01	0.09	0.49	1.92	5.23	98.6	3	362
SO4--	pm25	2.25	2.01	1.55	2.57	0.06	0.29	1.67	7.35	10.23	44.5	3	164
SO4-- corr	aerosol	0.66	0.65	0.45	2.54	0.01	0.09	0.48	1.92	5.21	98.6	3	362
SO4-- corr	pm25	2.25	2.01	1.54	2.58	0.04	0.29	1.67	7.35	10.21	44.5	3	164

SK0002R Chopok

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Cl-	aerosol	0.05	0.04	0.04	2.84	0.00	0.00	0.04	0.14	0.28	95.6	0	351
HNO3	air	0.03	0.02	0.02	2.22	0.00	0.01	0.02	0.07	0.15	98.4	0	361
HNO3+NO3-	air+aerosol	0.12	0.12	0.07	2.77	0.01	0.02	0.08	0.36	0.78	98.4	0	361
NO2	air	0.81	0.51	0.66	2.02	0.01	0.21	0.72	1.70	3.93	98.9	2	363
NO3-	aerosol	0.09	0.10	0.05	3.24	0.00	0.01	0.06	0.30	0.69	98.9	0	363
SO2	air	0.26	0.28	0.18	2.46	0.00	0.05	0.16	0.83	2.47	98.4	0	361
SO4--	aerosol	0.23	0.26	0.13	3.03	0.01	0.02	0.14	0.77	1.77	98.9	0	363
SO4-- corr	aerosol	0.23	0.26	0.13	3.13	-0.16	0.01	0.14	0.77	1.77	98.9	0	363

SK0006R Starina

January 2012 - December 2012

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.07	0.08	0.04	2.58	0.00	0.01	0.04	0.19	0.89	97.3	3	357
Cl-	aerosol	0.12	0.08	0.10	2.14	0.00	0.03	0.10	0.29	0.49	95.1	0	349
HNO3	air	0.05	0.05	0.04	2.12	0.00	0.01	0.03	0.14	0.39	96.4	0	354
HNO3+NO3-	air+aerosol	0.34	0.27	0.27	2.07	0.01	0.09	0.27	0.91	1.74	95.9	0	352
K+	aerosol	0.10	0.11	0.06	2.90	0.00	0.01	0.06	0.34	0.67	97.5	7	358
Mg++	aerosol	0.013	0.011	0.010	2.107	0.000	0.002	0.010	0.032	0.098	97.5	33	358
NH3	air	0.41	0.37	0.28	2.58	0.01	0.05	0.33	1.08	2.55	97.5	0	358
NH3+NH4+	air+aerosol	1.00	0.55	0.86	1.73	0.11	0.36	0.87	2.07	3.63	97.5	0	358
NH4+	aerosol	0.58	0.42	0.47	1.99	0.01	0.17	0.46	1.50	2.44	97.5	1	358
NO2	air	1.24	0.64	1.10	1.64	0.16	0.52	1.10	2.68	4.91	92.7	0	340
NO3-	aerosol	0.29	0.24	0.22	2.21	0.00	0.07	0.23	0.81	1.55	95.9	0	352
Na+	aerosol	0.06	0.06	0.04	3.17	0.00	0.00	0.04	0.18	0.49	96.7	36	355
SO2	air	0.86	1.44	0.45	2.97	0.02	0.09	0.38	3.40	16.08	96.4	0	354
SO4--	aerosol	0.65	0.60	0.47	2.35	0.01	0.12	0.50	1.72	3.86	95.9	0	352
SO4-- corr	aerosol	0.65	0.60	0.46	2.39	0.00	0.11	0.50	1.71	3.85	95.9	0	352

Annex 4

Overview of sampling and analytical methods 2012

Country: Armenia		Main components and ozone - EMEP		Year: 2012	
	Station	Sampling	Sampling frequency	Analysis method	
Precipitation					
Precipitation amount	AM0001R				
Precipitation amount, official gauge	AM0001R	Meteorological station	every event	By volume	
Sulphate	AM0001R	Wet-only ¹	every event	Ion chromatography	
Nitrate	AM0001R	Wet-only	every event	Ion chromatography	
Ammonium	AM0001R	Wet-only	every event	Spectrophotometric, by Nessler reagent	
Magnesium	AM0001R	Wet-only	every event	ICP-MS ²	
Sodium	AM0001R	Wet-only	every event	ICP-MS	
Chloride	AM0001R	Wet-only	every event	Ion chromatography	
Calcium	AM0001R	Wet-only	every event	ICP-MS	
Potassium	AM0001R	Wet-only	every event	ICP-MS	
Conductivity	AM0001R	Wet-only	every event	Conductivity meter	
pH	AM0001R	Wet-only	every event	pH meter	
Acidity					
Air					
Sulphur dioxide	AM0001R	KOH-impregnated Whatman 40 filter 20–25 m³/day (Filterpack)	Daily	Ion chromatography	
Nitrogen dioxide	AM0001R	NaI-impregnated glass sinters, 0.6 m³/day	Daily	Spectrophotometric, Griess method	
Nitric acid	AM0001R	KOH-impregnated Whatman 40 filter 20–25 m³/day (Filterpack)	Daily	Ion chromatography	
Ammonia	AM0001R	Oxalic acid-impregnated Whatman 40 filter, 20–25 m³/day (Filterpack)	Daily	Spectrophotometric, Nessler method	
Ozone	AM0001R	UV-monitor	Hourly	UV-absorption	
Sulphate	AM0001R	Teflon filter, Pall Zefluor 2 µm, 47 mm diameter, 20–25 m³/day (Filterpack)	Daily	Ion chromatography	
Nitrate	AM0001R	Teflon filter, Pall Zefluor 2 µm, 47 mm diameter, 20–25 m³/day (Filterpack)	Daily	Ion chromatography	
Ammonium	AM0001R	Teflon filter, Pall Zefluor 2 µm, 47 mm diameter, 20–25 m³/day (Filterpack)	Daily	Spectrophotometric, Nessler method	
Sodium	AM0001R	Teflon filter, Pall Zefluor 2 µm, 47 mm diameter, 20–25 m³/day (Filterpack)	Daily	ICP-MS	
Calcium	AM0001R	Teflon filter, Pall Zefluor 2 µm, 47 mm diameter, 20–25 m³/day (Filterpack)	Daily	ICP-MS	
Magnesium	AM0001R	Teflon filter, Pall Zefluor 2 µm, 47 mm diameter, 20–25 m³/day (Filterpack)	Daily	ICP-MS	
Potassium	AM0001R	Teflon filter, Pall Zefluor 2 µm, 47 mm diameter, 20–25 m³/day (Filterpack)	Daily	ICP-MS	
Chloride	AM0001R	Teflon filter, Pall Zefluor 2 µm, 47 mm diameter, 20–25 m³/day (Filterpack)	Daily	Ion chromatography	
PM ₁₀					
PM _{2.5}					
PM ₁					
Suspended particulate matter					
Sum of nitric acid and nitrate		KOH-impregnated Whatman 40 filter + Teflon filter, 20–25 m³/day	Daily	Ion chromatography	
Sum of ammonia and ammonium		Oxalic acid-impregnated Whatman 40 filter +Teflon filter, 20–25 m³/day	Daily	Spectrophotometric, Nessler method	
Acidity					

1. Snow sampler was used in case of snow events.

2. Inductively Coupled Plasma Mass Spectrometry

Country: Austria		Main components and ozone - EMEP	Year: 2012	
	Station	Sampling	Sampling frequency	Analysis method
Precipitation				
Precipitation amount				
Precipitation amount, official gauge				
Sulphate				
Nitrate				
Ammonium				
Magnesium				
Sodium				
Chloride				
Calcium				
Potassium				
Conductivity				
pH				
Air				
Sulphur dioxide	All	Instrumental: UV-fluorescence	Hourly	UV-fluorescence
Sulphur dioxide				
Nitrogen dioxide	All	Instrumental: Chemiluminescence	Daily	
Nitric acid				
Ammonia				
Ozone	All	UV-monitor	Hourly	UV-absorption
Sulphate				
Nitrate				
Ammonium				
Sodium				
Calcium				
Magnesium				
Potassium				
Chloride				
PM ₁₀	AT02 AT05, AT48	High Volume Sampler, glass fibre filters with organic binder, 720 m ³ /day, EN 12341	Daily Every 3 rd day	Micro balance
PM _{2.5}	AT02	High Volume Sampler, glass fibre filters with organic binder, 720 m ³ /day, EN 12341	Daily	Micro balance
PM ₁	AT02	High Volume Sampler, glass fibre filters with organic binder, 720 m ³ /day, EN 14907	Daily	Micro balance
Suspended particulate matter				
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				

Country: Belarus		Main components and ozone - EMEP		Year: 2012	
	Station	Sampling	Sampling frequency	Analysis method	
Precipitation					
Precipitation amount		Bulk			
Precipitation amount, official gauge					
Sulphate		Bulk	Daily	Turbidimetry	
Nitrate		Bulk	Daily	Photometry	
Ammonium		Bulk	Daily	Photometry with Nessler reactive	
Magnesium		Bulk	Daily	AAS	
Sodium		Bulk	Daily	AAS	
Chloride		Bulk	Daily	Mercurimetric	
Calcium		Bulk	Daily	AAS	
Potassium		Bulk	Daily	AAS	
Conductivity		Bulk	Daily	Conductivity meter	
pH		Bulk	Daily	pH meter	
Acidity			Daily	Titration	
Air					
Sulphur dioxide					
Sulphur dioxide					
Nitrogen dioxide					
Nitric acid					
Ammonia					
Ozone					
Sulphate					
Nitrate					
Ammonium					
Sodium					
Calcium					
Magnesium					
Potassium					
Chloride					
PM ₁₀					
PM _{2.5}					
Suspended particulate matter					
Sum of nitric acid and nitrate					
Sum of ammonia and ammonium					
Acidity					

Country: Belgium		Main components and ozone - EMEP		Year: 2012	
	Station	Sampling	Sampling frequency	Analysis method	
Precipitation					
Precipitation amount					
Precipitation amount, official gauge					
Sulphate					
Nitrate					
Ammonium					
Magnesium					
Sodium					
Chloride					
Calcium					
Potassium					
Conductivity					
pH					
Air					
Sulphur dioxide		Instrumental: UV-fluorescence	Half hourly	UV-fluorescence	
Sulphur dioxide					
Nitrogen dioxide		Instrumental: Chemiluminescence	Half hourly	Chemiluminescence	
Nitric acid					
Ammonia					
Ozone		Instrumental: UV monitor	Half hourly	UV absorption	
Sulphate					
Nitrate					
Ammonium					
Sodium					
Calcium					
Magnesium					
Potassium					
Chloride					
PM ₁₀		Instrumental: Beta absorption	Two-hourly	Beta absorption	
PM _{2.5}					
Suspended particulate matter					
Sum of nitric acid and nitrate					
Sum of ammonia and ammonium					

Country: Croatia		Main components and ozone - EMEP		Year: 2012	
	Station	Sampling	Sampling frequency	Analysis method	
Precipitation					
Precipitation amount	All				
Precipitation amount, official gauge		Rain gauge	Daily		
Sulphate	All	Bulk	Daily	Ion chromatography	
Nitrate	All	Bulk	Daily	Ion chromatography	
Ammonium	All	Bulk	Daily	Ion chromatography	
Magnesium	All	Bulk	Daily	Ion chromatography	
Sodium	All	Bulk	Daily	Ion chromatography	
Chloride	All	Bulk	Daily	Ion chromatography	
Calcium	All	Bulk	Daily	Ion chromatography	
Potassium	All	Bulk	Daily	Ion chromatography	
Conductivity	All	Bulk	Daily	Conductivity meter	
pH	All	Bulk	Daily	pH meter	
Air					
Sulphur dioxide					
Nitrogen dioxide					
Nitric acid					
Ammonia					
Ozone					
Sulphate					
Nitrate					
Ammonium					
Sodium					
Calcium					
Magnesium					
Potassium					
Chloride					
PM ₁₀					
PM _{2.5}					
Suspended particulate matter					
Sum of nitric acid and nitrate					
Sum of ammonia and ammonium					

Country: Cyprus		Main components and ozone - EMEP		Year: 2012
	Station	Sampling	Sampling frequency	Analysis method
Precipitation				
Precipitation amount				
Precipitation amount, official gauge				
Sulphate				
Nitrate				
Ammonium				
Magnesium				
Sodium				
Chloride				
Calcium				
Potassium				
Conductivity				
pH				
Air				
Sulphur dioxide	CY02	Instrumental: UV-fluorescence	Hourly	UV-fluorescence
Nitrogen dioxide	CY02	Instrumental: Chemiluminescence	Hourly	Chemiluminescence
Nitric acid				
Ammonia				
Ozone	CY02	UV-monitor	Hourly	UV absorption
Sulphate PM _{2.5}	CY02	Low volume sampler	Daily	ICP-OES
Nitrate PM _{2.5}	CY02	Low volume sampler	Daily	ICP-OES
Ammonium PM _{2.5}	CY02	Low volume sampler	Daily	ICP-OES
Sodium PM _{2.5}	CY02	Low volume sampler	Daily	ICP-OES
Calcium PM _{2.5}	CY02	Low volume sampler	Daily	ICP-OES
Magnesium PM _{2.5}	CY02	Low volume sampler	Daily	ICP-OES
Potassium PM _{2.5}	CY02	Low volume sampler	Daily	ICP-OES
Chloride PM _{2.5}	CY02	Low volume sampler	Daily	ICP-OES
PM ₁₀	CY02	High volume sampler	Daily	
PM _{2.5}	CY	Low volume sampler	Daily	
PM ₁				
Suspended particulate matter				
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				

Country: Czech Republic		Main components and ozone - EMEP	Year: 2012	
	Station	Sampling	Sampling frequency	Analysis method
Precipitation				
Precipitation amount, official gauge	All	Meteorological Station	Daily	Automatically gauge
Fluoride	All	Wet-only (daily) at CZ03, bulk (weekly) at CZ01	Daily, weekly	Ion Chromatography
Sulphate	All	Wet-only (daily) at CZ03, bulk (weekly) at CZ01	Daily, weekly	Ion chromatography
Nitrate	All	Wet-only (daily) at CZ03, bulk (weekly) at CZ01	Daily, weekly	Ion chromatography
Ammonium	All	Wet-only (daily) at CZ03, bulk (weekly) at CZ01	Daily, weekly	Spectrophotometric, Indophenol method, SFA, FIA
Magnesium	All	Wet-only (daily) at CZ03, bulk (weekly) at CZ01	Daily, weekly	F-AAS
Sodium	All	Wet-only (daily) at CZ03, bulk (weekly) at CZ01	Daily, weekly	F-AAS
Chloride	All	Wet-only (daily) at CZ03, bulk (weekly) at CZ01	Daily, weekly	Ion chromatography
Calcium	All	Wet-only (daily) at CZ03, bulk (weekly) at CZ01	Daily, weekly	F-AAS
Potassium	All	Wet-only (daily) at CZ03, bulk (weekly) at CZ01	Daily, weekly	F-AAS
Conductivity	All	Wet-only (daily) at CZ03, bulk (weekly) at CZ01	Daily, weekly	Conductivity electrode
pH	All	Wet-only (daily) at CZ03, bulk (weekly) at CZ01	Daily, weekly	pH electrode
Air				
Sulphur dioxide	All	KOH-impregnated Whatman 40 filter, 20 m ³ /day	Daily	Ion chromatography
Sulphur dioxide	CZ3	UV-fluorescence - monitor	Hourly	UV-fluorescence
Nitrogen dioxide	All	Absorbing solution NaOH and guajacol, 0.72 m ³ /day	Daily	Spectrophotometric, modified Jacobs - Hochheiser method
Nitrogen dioxide	CZ3	Chemiluminescence - monitor	Hourly	Chemiluminescence
Sum of nitric acid and nitrate	All	KOH-impregnated Whatman 40 filter, 20 m ³ /day + Whatman 40 filter, 20 m ³ /day	Daily	Ion Chromatography
Sum of ammonia and ammonium	All	Citric acid impregnated Whatman 40 filter, 20 m ³ /day + Whatman filter, 20 m ³ /day	Daily	Spectrophotometric, Indophenol method, SFA
Ozone	All	UV-monitor	Hourly	UV-absorption
Sulphate	All	Whatman 40, filter 47 mm, 20 m ³ /day	Daily	Ion chromatography
Sodium	CZ3	Filter 47 mm, 20 m ³ /day	Every 6 nd day, weekly	Ion chromatography
Calcium	CZ3	Filter 47 mm, 20 m ³ /day	Every 6 nd day, weekly	Ion chromatography
Magnesium	CZ3	Filter 47 mm, 20 m ³ /day	Every 6 nd day, weekly	Ion chromatography
Potassium	CZ3	Filter 47 mm, 20 m ³ /day	Every 6 nd day, weekly	Ion chromatography
PM ₁₀	All	Filter 47 mm, 55 m ³ /day	Every 2 nd day	Gravimetric
PM ₁₀	CZ3	Beta absorption - monitor	Hourly	Beta absorption
PM _{2.5}	CZ3	Filter 47 mm, 55 m ³ /day	Every 2 nd day	Gravimetric
Suspended particulate matter				

Country: Denmark		Main components and ozone - EMEP		Year: 2012
	Station	Sampling	Sampling frequency	Analysis method
Precipitation				
Precipitation amount	DK05, DK08, DK22, DK31	Wet-only	Two-weekly	
Precipitation amount, official gauge				
Sulphate	DK05, DK08, DK22, DK31	Wet-only	Two-weekly	Ion chromatography
Nitrate	DK05, DK08, DK22, DK31	Wet-only	Two-weekly	Ion chromatography
Ammonium	DK05, DK08, DK22, DK31	Wet-only	Two-weekly	ISO 11732 CFA (continuously flow analysis) and spectrophotometric detection
Magnesium	DK05, DK08, DK22, DK31	Wet-only	Two-weekly	Atomic absorption method
Sodium	DK05, DK08, DK22, DK31	Wet-only	Two-weekly	Atomic emission method
Chloride	DK05, DK08, DK22, DK31	Wet-only	Two-weekly	Ion chromatography
Calcium	DK05, DK08, DK22, DK31	Wet-only	Two-weekly	Atomic absorption method
Potassium	DK05, DK08, DK22, DK31	Wet-only	Two-weekly	Atomic emission method
Conductivity	DK05, DK08, DK22, DK31	Wet-only	Two-weekly	Conductivity meter
pH	DK05, DK08, DK22, DK31	Wet-only	Two-weekly	pH meter
Air				
Sulphur dioxide	DK05, DK08, DK22, DK31	KOH-impregnated Whatman 41 filters, 58 m ³ /day	Daily	Ion chromatography
Nitrogen dioxide	DK05	Monitor	Hourly	Chemiluminescence
Nitrogen oxide	DK08	Monitor	Hourly	Chemiluminescence
Nitric acid				
Ammonia	DK03, DK05, DK08, DK31	Oxalic acid impregnated Whatman 41, 58 m ³ /day	Daily	ISO 11732 CFA (continuously flow analysis) and spectrophotometric detection
Ozone	DK05, DK31, DK41	UV-monitor	Hourly	UV-absorption
Sulphate	DK03, DK05, DK08, DK31	Millipore RAWP 1.2 µm, 58 m ³ /day	Daily	Ion chromatography
Nitrate				
Ammonium	DK03, DK05, DK08, DK31	Millipore RAWP 1.2 µm, 58 m ³ /day	Daily	ISO 11732 CFA (continuously flow analysis) and spectrophotometric detection
Sodium	DK03, DK05, DK08, DK31	Millipore RAWP 1.2 µm, 58 m ³ /day	Daily	Atomic absorption method
Calcium				
Magnesium				
Potassium				
Chloride	DK03, DK05, DK08, DK31	Millipore RAWP 1.2 µm, 58 m ³ /day		Atomic absorption method
PM ₁₀	DK05	SM200	Daily	Beta absorption
PM _{2.5}				
Suspended particulate matter				
Sum of nitric acid and nitrate	DK03, DK05, DK08, DK31	Aerosol filter as for sulphate + KOH-impregnated Whatman 41, 58 m ³ /day	Daily	Ion chromatography
Sum of ammonia and ammonium				Replaced by separate measurements of ammonia and ammonium

Country: Estonia		Main components and ozone - EMEP		Year: 2012	
	Station	Sampling	Sampling frequency	Analysis method	
Precipitation					
Precipitation amount	All	Bulk	Weekly		
Precipitation amount, official gauge					
Sulphate	All	Bulk	Weekly	Ion chromatography	
Nitrate	All	Bulk	Weekly	Ion chromatography	
Ammonium	All	Bulk	Weekly	Spectrophotometric, Indophenol method	
Magnesium	All	Bulk	Weekly	Atomic absorption method	
Sodium	All	Bulk	Weekly	Atomic emission method, addition of caesium	
Chloride	All	Bulk	Weekly	Ion chromatography	
Calcium	All	Bulk	Weekly	Atomic absorption method, addition of lanthanum	
Potassium	All	Bulk	Weekly	Atomic emission method, addition of caesium	
Conductivity	All	Bulk	Weekly	Conductivity meter	
pH	All	Bulk	Weekly	pH meter	
Air					
Sulphur dioxide					
Sulphur dioxide	All	Instrumental: UV fluorescence	Daily/Hourly	UV fluorescence	
Nitrogen dioxide					
Nitrogen dioxide	All	Instrumental: Chemiluminescence	Daily/Hourly	Chemiluminescence	
Nitric acid					
Ammonia					
Ozone	All	UV monitor	Daily/Hourly	UV absorption	
Sulphate					
Nitrate					
Ammonium					
Sodium					
Calcium					
Magnesium					
Potassium					
Chloride					
PM ₁₀	EE09	High Volume Sampler	Weekly	Gravimetric	
PM _{2.5}					
Suspended particulate matter					
Sum of nitric acid and nitrate					
Sum of ammonia and ammonium					

Country: Finland		Main components and ozone - EMEP	Year: 2012	
	Station	Sampling	Sampling frequency	Analysis method
Precipitation				
Precipitation amount	All	NILU bulk sampler	Weekly	
Precipitation amount, official gauge				
Sulphate	All	NILU bulk sampler	Weekly	Ion chromatography
Nitrate	All	NILU bulk sampler	Weekly	Ion chromatography
Ammonium	All	NILU bulk sampler	Weekly	Ion chromatography
Magnesium	All	NILU bulk sampler	Weekly	Ion chromatography
Sodium	All	NILU bulk sampler	Weekly	Ion chromatography
Chloride	All	NILU bulk sampler	Weekly	Ion chromatography
Calcium	All	NILU bulk sampler	Weekly	Ion chromatography
Potassium	All	NILU bulk sampler	Weekly	Ion chromatography
Conductivity	All	NILU bulk sampler	Weekly	Conductivity meter
pH	All	NILU bulk sampler	Weekly	pH meter
Air				
Sulphur dioxide	All	NaOH-impregnated Whatman 40 filters, 24 m ³ /day	Daily/Weekly ¹⁾	Ion chromatography
Nitrogen dioxide	All	Instrumental: Chemiluminescence	Hourly	Chemiluminescence
Nitric acid				
Ammonia				
Ozone	All	UV-monitor	Hourly	UV-absorption
Sulphate	All	Teflon filter, Millipore Fluoropore 3 µm, 24 m ³ /day	Daily/Weekly ¹⁾	Ion chromatography
Nitrate				
Ammonium				
Sodium	All	Teflon filter, Millipore Fluoropore 3 µm, 24 m ³ /day	Daily/Weekly ¹⁾	Ion chromatography
Calcium	All	Teflon filter, Millipore Fluoropore 3 µm, 24 m ³ /day	Daily/Weekly ¹⁾	Ion chromatography
Magnesium	All	Teflon filter, Millipore Fluoropore 3 µm, 24 m ³ /day	Daily/Weekly ¹⁾	Ion chromatography
Potassium	All	Teflon filter, Millipore Fluoropore 3 µm, 24 m ³ /day	Daily/Weekly ¹⁾	Ion chromatography
Chloride	All	Teflon filter, Millipore Fluoropore 3 µm, 24 m ³ /day	Daily/Weekly ¹⁾	Ion chromatography
PM ₁₀				
PM _{2.5}				
Suspended particulate matter				
Sum of nitric acid and nitrate	All	Aerosol filter as for sulphate + NaOH impregnated Whatman 40 filter, 24 m ³ /day	Daily/Weekly ¹⁾	Ion chromatography
Sum of ammonia and ammonium	All	Aerosol filter as for sulphate + oxalic acid impregnated Whatman 40 filter, 24 m ³ /day	Daily/Weekly ¹⁾	Ion chromatography

1) Daily: FI09 and FI17 and FI36; Weekly: FI22 and FI37

Country: France		Main components and ozone - EMEP	Year: 2012	
	Station	Sampling	Sampling frequency	Analysis method
Precipitation				
Precipitation amount	FR08, FR09, FR10, FR13, FR14, FR15, FR16, FR17, FR18	Wet-only	Daily	
Precipitation amount, official gauge	FR08, FR09, FR10, FR13, FR14, FR15, FR16, FR17, FR18	Bulk	Daily	
Sulphate	FR08, FR09, FR10, FR13, FR14, FR15, FR16, FR17, FR18	Wet-only	Daily	Ion chromatography
Nitrate	FR08, FR09, FR10, FR13, FR14, FR15, FR16, FR17, FR18	Wet-only	Daily	Ion chromatography
Ammonium	FR08, FR09, FR10, FR13, FR14, FR15, FR16, FR17, FR18	Wet-only	Daily	Ion chromatography
Magnesium	FR08, FR09, FR10, FR13, FR14, FR15, FR16, FR17, FR18	Wet-only	Daily	Ion chromatography
Sodium	FR08, FR09, FR10, FR13, FR14, FR15, FR16, FR17, FR18	Wet-only	Daily	Ion chromatography
Chloride	FR08, FR09, FR10, FR13, FR14, FR15, FR16, FR17, FR18	Wet-only	Daily	Ion chromatography
Calcium	FR08, FR09, FR10, FR13, FR14, FR15, FR16, FR17, FR18	Wet-only	Daily	Ion chromatography
Potassium	FR08, FR09, FR10, FR13, FR14, FR15, FR16, FR17, FR18	Wet-only	Daily	Ion chromatography
Conductivity	FR08, FR09, FR10, FR13, FR14, FR15, FR16, FR17, FR18	Wet-only	Daily	Conductivity meter
pH	FR08, FR09, FR10, FR13, FR14, FR15, FR16, FR17, FR18	Wet-only	Daily	pH meter
Air				
Sulphur dioxide	FR09, FR13, FR15	KOH-impregnated Whatman 40 filter, 14.4 m³/day (Filterpack)	Daily, twice a week	Ion chromatography
Nitrogen dioxide NO₂/NO/NOₓ	FR09, FR13, FR15FR30	Instrumental: Chemiluminescence, trace level	Hourly	Chemiluminescence
Nitric acid	FR09, FR13, FR15	KOH-impregnated Whatman 40 filter, 14.4 m³/day (Filterpack)	Daily, twice a week	Ion chromatography
Ammonia	FR09, FR13, FR15	Citric acid-impregnated Whatman 40 filter, 14.4 m³/day (Filterpack)	Daily, twice a week	Ion chromatography
Ozone	FR08, FR09, FR10, FR13, FR14, FR15, FR16, FR17, FR18, FR19, FR30	UV-monitor	Hourly	UV-absorption
Sulphate	FR09 FR13, FR15	Teflon filter Pall Gelman Zefluor, 2 µm, 14.4 m³/j	Daily, twice a week	Ion chromatography
Nitrate	FR09 FR13, FR15	Teflon filter Pall Gelman Zefluor, 2 µm, 14.4 m³/j	Daily, twice a week	Ion chromatography
Ammonium	FR09 FR13, FR15	Teflon filter Pall Gelman Zefluor, 2 µm, 14.4 m³/j	Daily, twice a week	Ion chromatography
Sodium				
Calcium				
Magnesium				
Potassium				
Chloride				
PM₁₀	FR09, FR10, FR13, FR14, FR15, FR18	TEOM FDMS	Hourly	TEOM FDMS
PM₂.₅	FR09, FR13, FR15, FR18	TEOM FDMS	Hourly	TEOM FDMS
Suspended particulate matter				
Sum of nitric acid and nitrate	FR09, FR13, FR15	Teflon filter Pall Gelman Zefluor, 2 µm, 14.4 m³/j + KOH impregnated Whatman 40, 14.4 m³/day (Filterpack)	Daily, twice a week	Ion chromatography
Sum of ammonia and ammonium	FR09, FR13, FR15	Teflon filter Pall Gelman Zefluor, 2 µm, 14.4 m³/j + citric acid impregnated Whatman 40, 14.4 m³/day (Filterpack)	Daily, twice a week	Ion chromatography

Country: Georgia		Main components and ozone - EMEP		Year: 2012	
	Station	Sampling	Sampling frequency	Analysis method	
Precipitation					
Precipitation amount					
Precipitation amount, official gauge					
Sulphate					
Nitrate					
Ammonium					
Magnesium					
Sodium					
Chloride					
Calcium					
Potassium					
Conductivity					
pH					
Air					
Sulphur dioxide	GE01		24h every 3 days		
Nitrogen dioxide					
Nitric acid					
Ammonia	GE01		24h every 3 days		
Ozone					
Sulphate	GE01		24h every 3 days	IC	
Nitrate	GE01		24h every 3 days	IC	
Ammonium	GE01		24h every 3 days	Spectrophotometry	
Sodium					
Calcium					
Magnesium					
Potassium					
Chloride	GE01		24h every 3 days	IC	
PM ₁₀					
PM _{2.5}					
PM ₁					
Suspended particulate matter					
Sum of nitric acid and nitrate	GE01		24h every 3 days		
Sum of ammonia and ammonium	GE01		24h every 3 days		

Country: Germany		Main components and ozone - EMEP	Year: 2012	
	Station	Sampling	Sampling frequency	Analysis method
Precipitation				
Precipitation amount	DE01, DE02, DE03, DE04, DE05, DE07, DE08, DE09	Daily wet only at DE02, DE03 and DE07, weekly wet-only at the other sites	Daily / weekly	By volume
Precipitation amount, official gauge				
Sulphate	DE01, DE02, DE03, DE04, DE05, DE07, DE08, DE09	Daily wet only at DE02, DE03 and DE07, weekly wet-only at the other sites	Daily / weekly	Ion chromatography
Nitrate	DE01, DE02, DE03, DE04, DE05, DE07, DE08, DE09	Daily wet only at DE02, DE03 and DE07, weekly wet-only at the other sites	Daily / weekly	Ion chromatography
Ammonium	DE01, DE02, DE03, DE04, DE05, DE07, DE08, DE09	Daily wet only at DE02, DE03 and DE07, weekly wet-only at the other sites	Daily / weekly	Ion chromatography
Magnesium	DE01, DE02, DE03, DE04, DE05, DE07, DE08, DE09	Daily wet only at DE02, DE03 and DE07, weekly wet-only at the other sites	Daily / weekly	Ion chromatography
Sodium	DE01, DE02, DE03, DE04, DE05, DE07, DE08, DE09	Daily wet only at DE02, DE03 and DE07, weekly wet-only at the other sites	Daily / weekly	Ion chromatography
Chloride	DE01, DE02, DE03, DE04, DE05, DE07, DE08, DE09	Daily wet only at DE02, DE03 and DE07, weekly wet-only at the other sites	Daily / weekly	Ion chromatography
Calcium	DE01, DE02, DE03, DE04, DE05, DE07, DE08, DE09	Daily wet only at DE02, DE03 and DE07, weekly wet-only at the other sites	Daily / weekly	Ion chromatography
Potassium	DE01, DE02, DE03, DE04, DE05, DE07, DE08, DE09	Daily wet only at DE02, DE03 and DE07, weekly wet-only at the other sites	Daily / weekly	Ion chromatography
Conductivity	DE01, DE02, DE03, DE04, DE05, DE07, DE08, DE09	Daily wet only at DE02, DE03 and DE07, weekly wet-only at the other sites	Daily / weekly	Conductivity meter
pH	DE01, DE02, DE03, DE04, DE05, DE07, DE08, DE09	Daily wet only at DE02, DE03 and DE07, weekly wet-only at the other sites	Daily / weekly	pH meter
Air				
Sulphur dioxide	DE01, DE02, DE03, DE07, DE08, DE09	Monitor (trace level instrument)	Half hourly	UV fluorescence
Nitrogen dioxide	DE01, DE02, DE03, DE07, DE08, DE09	NaJ-impregnated glass sinters, 0.7 m ³ /day	Daily	Flow injection analysis
Nitric acid	DE02, DE07	KOH-impregnated Whatman 40 filter, 22 m ³ /day (Filterpack)	Daily	Ion chromatography
Ammonia	DE02, DE07	Oxalic acid-impregnated Whatman 40 filter, 22 m ³ /day (Filterpack)	Daily	Ion chromatography
Ozone	DE01, DE02, DE03, DE07, DE08, DE09	UV-monitor	Half hourly	UV-absorption
Sulphate	DE02, DE07	Teflon filter, 22 m ³ /day (Filterpack)	Daily	Ion chromatography
Nitrate	DE02, DE07	Teflon filter, 22 m ³ /day (Filterpack)	Daily	Ion chromatography
Ammonium	DE02, DE07	Teflon filter, 22 m ³ /day (Filterpack)	Daily	Ion chromatography
Sodium	DE02, DE07	Teflon filter, 22 m ³ /day (Filterpack)	Daily	Ion chromatography
Calcium	DE02, DE07	Teflon filter, 22 m ³ /day (Filterpack)	Daily	Ion chromatography
Magnesium	DE02, DE07	Teflon filter, 22 m ³ /day (Filterpack)	Daily	Ion chromatography
Potassium	DE02, DE07	Teflon filter, 22 m ³ /day (Filterpack)	Daily	Ion chromatography
Chloride	DE02, DE07	Teflon filter, 22 m ³ /day (Filterpack)	Daily	Ion chromatography
PM ₁₀	DE01, DE02, DE03, DE07, DE08, DE09	Digitel High Volume Sampler DHA 80, glass fibre filters ø15 cm, Machery Nagel MN 85/90	Daily	Gravimetric by weight
PM _{2.5}	DE02, DE03, DE07, DE08	Digitel High Volume Sampler DHA 80, glass fibre filters ø15 cm, Machery Nagel MN 85/90	Daily	Gravimetric by weight
PM ₁	DE02	Digitel High Volume Sampler DHA 80, glass fibre filters ø15 cm, Machery Nagel MN 85/90	Daily	Gravimetric by weight
Suspended particulate matter				
Sum of nitric acid and nitrate	DE02, DE07	Filter pack method	Daily	Ion chromatography
Sum of ammonia and ammonium	DE02, DE07	Filter pack method	Daily	Ion chromatography
Sulphate in PM _{2.5}	DE01, DE02, DE03, DE07, DE08, DE09	Leckel Low Volume Sampler, 2.3 m ³ /day	Every 3 rd day	Ion chromatography
Nitrate in PM _{2.5}	DE01, DE02, DE03, DE07, DE08, DE09	Leckel Low Volume Sampler, 2.3 m ³ /day	Every 3 rd day	Ion chromatography
Ammonium in PM _{2.5}	DE01, DE02, DE03, DE07, DE08, DE09	Leckel Low Volume Sampler, 2.3 m ³ /day	Every 3 rd day	Ion chromatography
Sodium in PM _{2.5}	DE01, DE02, DE03, DE07, DE08, DE09	Leckel Low Volume Sampler, 2.3 m ³ /day	Every 3 rd day	Ion chromatography
Calcium in PM _{2.5}	DE01, DE02, DE03, DE07, DE08, DE09	Leckel Low Volume Sampler, 2.3 m ³ /day	Every 3 rd day	Ion chromatography
Magnesium in PM _{2.5}	DE01, DE02, DE03, DE07, DE08, DE09	Leckel Low Volume Sampler, 2.3 m ³ /day	Every 3 rd day	Ion chromatography
Potassium in PM _{2.5}	DE01, DE02, DE03, DE07, DE08, DE09	Leckel Low Volume Sampler, 2.3 m ³ /day	Every 3 rd day	Ion chromatography
Chloride in PM _{2.5}	DE01, DE02, DE03, DE07, DE08, DE09	Leckel Low Volume Sampler, 2.3 m ³ /day	Every 3 rd day	Ion chromatography
Acidity				

Country: Greece		Main components and ozone - EMEP		Year: 2012	
	Station	Sampling	Sampling frequency	Analysis method	
Precipitation					
Precipitation amount					
Precipitation amount, official gauge					
Sulphate					
Nitrate					
Ammonium					
Magnesium					
Sodium					
Chloride					
Calcium					
Potassium					
Conductivity					
pH					
Air					
Sulphur dioxide	GR01	Instrumental UV-fluorescence	Hourly	UV-fluorescence	
Nitrogen dioxide	GR01	Instrumental Chemiluminescence	Hourly	Chemiluminescence	
Nitric acid					
Ammonia					
Ozone	GR01	UV-monitor	Hourly	UV-absorption	
Sulphate					
Nitrate					
Ammonium					
Sodium					
Calcium					
Magnesium					
Potassium					
Chloride					
PM ₁₀					
PM _{2.5}					
Suspended particulate matter					
Sum of nitric acid and nitrate					
Sum of ammonia and ammonium					

Country: Hungary		Main components and ozone - EMEP		Year: 2012	
	Station	Sampling	Sampling frequency	Analysis method	
Precipitation					
Precipitation amount	HU02	Wet-only	Daily		
Precipitation amount, official gauge	HU02	Wet-only	Daily		
Sulphate	HU02	Wet-only	Daily	Ion chromatography	
Nitrate	HU02	Wet-only	Daily	Ion chromatography	
Ammonium	HU02	Wet-only	Daily	Spectrophotometric, Indophenol method	
Magnesium	HU02	Wet-only	Daily	Atomic absorption method (flame)	
Sodium	HU02	Wet-only	Daily	Atomic absorption method (flame)	
Chloride	HU02	Wet-only	Daily	Ion chromatography	
Calcium	HU02	Wet-only	Daily	Atomic absorption method (flame)	
Potassium	HU02	Wet-only	Daily	Atomic absorption method (flame)	
Conductivity	HU02	Wet-only	Daily	Conductivity meter	
pH	HU02	Wet-only	Daily	pH meter	
Acidity					
Lead	HU02	Wet-only	weekly	Atomic absorption method (furnace)	
Cadmium	HU02	Wet-only	weekly	Atomic absorption method (furnace)	
Air					
Sulphur dioxide	HU02	KOH-impregnated Whatman 40 filter, ~21 m³/day	Daily	Ion chromatography	
Nitrogen dioxide	HU02	Iodide method (impregnated glass sinter), ~0.8 m³/day	Daily	Spectrophotometric, Griess method	
Nitric acid	HU02	KOH-impregnated Whatman 40 filter, ~21 m³/day	Daily	Ion chromatography	
Ammonia	HU02	Citric-acid impregnated Whatman 40 filter, ~21 m³/day	Daily	Spectrophotometric, Indophenol method	
Ozone	HU02	UV-monitor	Hourly	UV-absorption	
Sulphate	HU02	Teflon filter, Millipore Fluoropore, 1 µm, ~21 m³/day	Daily	Ion chromatography	
Nitrate	HU02	Teflon filter, Millipore Fluoropore, 1 µm, ~21 m³/day	Daily	Ion chromatography	
Ammonium	HU02	Teflon filter, Millipore Fluoropore, 1 µm, ~21 m³/day	Daily	Spectrophotometric, Indophenol method	
Sodium	HU02	Teflon filter, Millipore Fluoropore, 1 µm, ~21 m³/day	Daily	Atomic absorption method (flame)	
Calcium	HU02	Teflon filter, Millipore Fluoropore, 1 µm, ~21 m³/day	Daily	Atomic absorption method (flame)	
Magnesium	HU02	Teflon filter, Millipore Fluoropore, 1 µm, ~21 m³/day	Daily	Atomic absorption method (flame)	
Potassium	HU02	Teflon filter, Millipore Fluoropore, 1 µm, ~21 m³/day	Daily	Atomic absorption method (flame)	
Chloride					
PM ₁₀					
PM _{2.5}					
PM ₁					
Suspended particulate matter					
Sum of nitric acid and nitrate					
Sum of ammonia and ammonium					
Acidity					
Lead	HU02	Teflon filter, Millipore Fluoropore, 1 µm, ~21 m³/day	3 days	Atomic absorption method (furnace)	
Cadmium	HU02	Teflon filter, Millipore Fluoropore, 1 µm, ~21 m³/day	3 days	Atomic absorption method (furnace)	

Country: Iceland		Main components and ozone - EMEP		Year: 2012 and 2012	
	Station	Sampling	Sampling frequency	Analysis method	
Precipitation					
Precipitation amount	IS02	NILU bulk sampler	Daily	By volume	
Precipitation amount, official gauge					
Sulphate	IS02	NILU bulk sampler	Daily	Spectrophotometry by FIA	
Nitrate	IS02	NILU bulk sampler	Daily	Spectrophotometry by FIA	
Ammonium					
Magnesium	IS02	NILU bulk sampler	Daily	ICP-AES	
Sodium	IS02	NILU bulk sampler	Daily	ICP-AES	
Chloride	IS02	NILU bulk sampler	Daily	ICP-AES	
Calcium	IS02	NILU bulk sampler	Daily	ICP-AES	
Potassium	IS02	NILU bulk sampler	Daily	ICP-AES	
Conductivity	IS02	NILU bulk sampler	Daily	Conductivity meter	
pH	IS02	NILU bulk sampler	Daily	pH meter	
Acidity					
Air					
Sulphur dioxide	IS02	KOH impregnated Whatman 40 filter, 30 m³/day	Daily	ICP-AES	
Nitrogen dioxide					
Nitric acid					
Ammonia					
Ozone					
Sulphate	IS02	Whatman 40 filter, 30 m³/day, prefilter for aerosol	Daily	ICP-AES	
Nitrate					
Ammonium					
Sodium	IS02	Whatman 40 filter, 30 m³/day, prefilter for aerosol	Daily	ICP-AES	
Calcium	IS02	Whatman 40 filter, 30 m³/day, prefilter for aerosol	Daily	ICP-AES	
Magnesium	IS02	Whatman 40 filter, 30 m³/day, prefilter for aerosol	Daily	ICP-AES	
Potassium	IS02	Whatman 40 filter, 30 m³/day, prefilter for aerosol	Daily	ICP-AES	
Chloride	IS02	Whatman 40 filter, 30 m³/day, prefilter for aerosol	Daily	ICP-AES	
PM ₁₀					
PM _{2.5}					
PM ₁					
Suspended particulate matter					
Sum of nitric acid and nitrate					
Sum of ammonia and ammonium					
Acidity					

Country: Ireland: IE01 (lab.: Met Éireann)		Main components and ozone - EMEP		Year: 2012	
	Station	Sampling	Sampling frequency	Analysis method	
Precipitation					
Precipitation amount	IE01	Wet-only	Daily		
Precipitation amount, official gauge	IE01	Rain gauge	Daily		
Sulphate	IE01	Wet-only	Daily	Ion chromatography	
Nitrate	IE01	Wet-only	Daily	Ion chromatography	
Ammonium	IE01	Wet-only	Daily	Ion chromatography	
Magnesium	IE01	Wet-only	Daily	Ion chromatography	
Sodium	IE01	Wet-only	Daily	Ion chromatography	
Chloride	IE01	Wet-only	Daily	Ion chromatography	
Calcium	IE01	Wet-only	Daily	Ion chromatography	
Potassium	IE01	Wet-only	Daily	Ion chromatography	
Conductivity	IE01	Wet-only	Daily	Conductivity meter	
pH	IE01	Wet-only	Daily	pH meter	
Air					
Sulphur dioxide	IE01	KOH-impregnated Whatman 40 filter, 20-25 m³/day	Daily	Ion chromatography	
Nitrogen dioxide	IE01	NaI method (glass sinter) 0.7 m³/day	Daily	Spectrophotometric, EMEP Manual 4.11	
Nitric acid					
Ammonia					
Ozone					
Sulphate	IE01	Teflon filter, PALL Zefluor 2 µm, 47 mm diameter, 20-25 m³/day	Daily	Ion chromatography	
Nitrate					
Ammonium					
Sodium	IE01	Teflon filter, PALL Zefluor 2 µm, 47 mm diameter, 20-25 m³/day	Daily	Ion chromatography	
Calcium	IE01	Teflon filter, PALL Zefluor 2 µm, 47 mm diameter, 20-25 m³/day	Daily	Ion chromatography	
Magnesium	IE01	Teflon filter, PALL Zefluor 2 µm, 47 mm diameter, 20-25 m³/day	Daily	Ion chromatography	
Potassium	IE01	Teflon filter, PALL Zefluor 2 µm, 47 mm diameter, 20-25 m³/day	Daily	Ion chromatography	
Chloride					
PM ₁₀					
PM _{2.5}					
Suspended particulate matter					
Sum of nitric acid and nitrate	IE01	Aerosol filter as for sulphate + KOH impregnated filter as for SO ₂ , 20-25 m³/day	Daily	Ion chromatography	
Sum of ammonia and ammonium	IE01	Aerosol filter as for sulphate + citric acid impregnated filter, 20-25 m³/day	Daily	Ion chromatography	

Country: Ireland: (lab.: Met Éireann)		Main components and ozone - EMEP		Year: 2012	
	Station	Sampling	Sampling frequency	Analysis method	
Precipitation					
Precipitation amount	IE05, IE07, IE09	Wet-only	Daily		
Precipitation amount, official gauge					
Sulphate	IE05, IE07, IE09	Wet-only	Daily	Ion chromatography	
Nitrate	IE05, IE07, IE09	Wet-only	Daily	Ion chromatography	
Ammonium	IE05, IE07, IE09	Wet-only	Daily	Ion chromatography	
Magnesium	IE05, IE07, IE09	Wet-only	Daily	Ion chromatography	
Sodium	IE05, IE07, IE09	Wet-only	Daily	Ion chromatography	
Chloride	IE05, IE07, IE09	Wet-only	Daily	Ion chromatography	
Calcium	IE05, IE07, IE09	Wet-only	Daily	Ion chromatography	
Potassium	IE05, IE07, IE09	Wet-only	Daily	Ion chromatography	
Conductivity	IE05, IE07, IE09	Wet-only	Daily	Conductivity meter	
pH	IE05, IE07, IE09	Wet-only	Daily	pH meter	
Air					
Sulphur dioxide					
Nitrogen dioxide					
Nitric acid					
Ammonia					
Ozone					
Sulphate	IE05, IE06, IE08	Whatman 41 filters, 1441 150, 720 m³/day	Daily	Ion chromatography	
Nitrate	IE05, IE06, IE08	Whatman 41 filters, 1441 150, 720 m³/day	Daily	Ion chromatography	
Ammonium	IE05, IE06, IE08	Whatman 41 filters, 1441 150, 720 m³/day	Daily	Ion chromatography	
Sodium	IE05, IE06, IE08	Whatman 41 filters, 1441 150, 720 m³/day	Daily	Ion chromatography	
Calcium	IE05, IE06, IE08	Whatman 41 filters, 1441 150, 720 m³/day	Daily	Ion chromatography	
Magnesium	IE05, IE06, IE08	Whatman 41 filters, 1441 150, 720 m³/day	Daily	Ion chromatography	
Potassium	IE05, IE06, IE08	Whatman 41 filters, 1441 150, 720 m³/day	Daily	Ion chromatography	
Chloride					
PM ₁₀					
PM _{2.5}					
Suspended particulate matter					
Sum of nitric acid and nitrate					
Sum of ammonia and ammonium					

Country: Italy: IT01 (lab.: CNR)	Main components and ozone - EMEP		Year: 2012	
	Station	Sampling	Sampling frequency	Analysis method
Precipitation				
Precipitation amount	IT01	Wet-only	Daily	
Precipitation amount, official gauge				
Sulphate	IT01	Wet-only	Daily	Ion chromatography
Nitrate	IT01	Wet-only	Daily	Ion chromatography
Ammonium	IT01	Wet-only	Daily	Ion chromatography
Magnesium	IT01	Wet-only	Daily	Ion chromatography
Sodium	IT01	Wet-only	Daily	Ion chromatography
Chloride	IT01	Wet-only	Daily	Ion chromatography
Calcium	IT01	Wet-only	Daily	Ion chromatography
Potassium	IT01	Wet-only	Daily	Ion chromatography
Conductivity	IT01	Wet-only	Daily	Conductivity meter
pH	IT01	Wet-only	Daily	pH meter
Air				
Sulphur dioxide	IT01	Diffusion tubes NaCl and Na2CO3 + glycerine, 17 m³/day	Once a week	Ion chromatography
Nitrogen dioxide	IT01	Instrumental: Chemiluminescence	Daily	Chemiluminescence
Nitric acid	IT01	Diffusion tubes NaCl, 17 m³/day	Once a week	Ion chromatography
Ammonia	IT01	Diffusion tubes H3PO3, 17 m³/day	Once a week	Ion chromatography
Ozone	IT01	UV-monitor	Hourly	UV-absorption
Sulphate	IT01	Nylasorb filter, 17 m³/day	Once a week	Ion chromatography
Nitrate	IT01	Nylasorb filter, 17 m³/day	Once a week	Ion chromatography
Ammonium	IT01	Phosphorous acid impregnated filter, 17 m³/day	Once a week	Ion chromatography
Sodium				
Calcium				
Magnesium				
Potassium				
Chloride				
PM ₁₀	IT01	Beta gauge monitor 24 m³/day	Daily	Beta gauge monitor
PM _{2.5}				
Suspended particulate matter				
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				

Country: Italy, IT04 (lab.: JRC)	Main components and ozone - EMEP		Year: 2012	
	Station	Sampling	Sampling frequency	Analysis method
Precipitation				
Precipitation amount	IT04	Wet-only	Daily	Sampler gauge
Precipitation amount, official gauge				
Sulphate	IT04	Wet-only	Daily	Ion chromatography
Nitrate	IT04	Wet-only	Daily	Ion chromatography
Ammonium	IT04	Wet-only	Daily	Ion chromatography
Magnesium	IT04	Wet-only	Daily	Ion chromatography
Sodium	IT04	Wet-only	Daily	Ion chromatography
Chloride	IT04	Wet-only	Daily	Ion chromatography
Calcium	IT04	Wet-only	Daily	Ion chromatography
Potassium	IT04	Wet-only	Daily	Ion chromatography
Conductivity	IT04	Wet-only	Daily	Conductivity meter
pH	IT04	Wet-only	Daily	pH meter
Air				
Sulphur dioxide	IT04	Instrumental: UV-fluorescence	Daily	UV-fluorescence
Nitrogen dioxide	IT04	Instrumental: Chemiluminescence	Daily	Chemiluminescence
Nitric acid				
Ammonia				
Ozone	IT04	UV-monitor	Hourly	UV-absorption
Sulphate	IT04	PALL Life Sciences QFF (type TISSUEQUARTZ 2500QAT-UP), 24 m³/day	Daily	Ion chromatography
Nitrate	IT04	PALL Life Sciences QFF (type TISSUEQUARTZ 2500QAT-UP), 24 m³/day	Daily	Ion chromatography
Ammonium	IT04	PALL Life Sciences QFF (type TISSUEQUARTZ 2500QAT-UP), 24 m³/day	Daily	Ion chromatography
Sodium	IT04	PALL Life Sciences QFF (type TISSUEQUARTZ 2500QAT-UP), 24 m³/day	Daily	Ion chromatography
Calcium	IT04	PALL Life Sciences QFF (type TISSUEQUARTZ 2500QAT-UP), 24 m³/day	Daily	Ion chromatography
Magnesium	IT04	PALL Life Sciences QFF (type TISSUEQUARTZ 2500QAT-UP), 24 m³/day	Daily	Ion chromatography
Potassium	IT04	PALL Life Sciences QFF (type TISSUEQUARTZ 2500QAT-UP), 24 m³/day	Daily	Ion chromatography
Chloride	IT04	PALL Life Sciences QFF (type TISSUEQUARTZ 2500QAT-UP), 24 m³/day	Daily	Ion chromatography
PM ₁₀				
PM _{2.5}	IT04	PALL Life Sciences QFF (type TISSUEQUARTZ 2500QAT-UP), 24 m³/day	Daily	Weighing at 20% RH
Suspended particulate matter				
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				
EC/OC	IT04	AirMonitors Denuder, PALL Life Sciences QFF (type TISSUEQUARTZ 2500QAT-UP), 24 m³/day	Daily	Thermo optical, EUSAAR 2 protocol

Country: Kazakhstan		Main components and ozone - EMEP		Year: 2012	
	Station	Sampling	Sampling frequency	Analysis method	
Precipitation					
Precipitation amount					
Precipitation amount, official gauge					
Sulphate					
Nitrate					
Ammonium					
Magnesium					
Sodium					
Chloride					
Calcium					
Potassium					
Conductivity					
pH					
Acidity					
Air					
Sulphur dioxide					
Nitrogen dioxide					
Nitric acid					
Ammonia					
Ozone					
Sulphate PM ₁₀	KZ01		Daily	IC	
Nitrate PM ₁₀	KZ01		Daily	IC	
Ammonium					
Sodium					
Calcium					
Magnesium					
Potassium					
Chloride PM ₁₀	KZ01		Daily	IC	
PM ₁₀					
PM _{2.5}					
PM ₁					
Suspended particulate matter					
Sum of nitric acid and nitrate					
Sum of ammonia and ammonium					
Acidity					

Country: Latvia		Main components and ozone - EMEP	Year: 2012	
	Station	Sampling	Sampling frequency	Analysis method
Precipitation				
Precipitation amount	LV10	Wet-only	Weekly	Gravimetric
Precipitation amount, official gauge	LV10	Meteorological station	Daily	Gauge, Tretjakov type
Sulphate	LV10	Wet-only	Weekly	Ion chromatography
Nitrate	LV10	Wet-only	Weekly	Ion chromatography
Ammonium	LV10	Wet-only	Weekly	Spectrophotometric, Indophenol method
Magnesium	LV10	Wet-only	Weekly	ICP-MS
Sodium	LV10	Wet-only	Weekly	ICP-MS
Chloride	LV10	Wet-only	Weekly	Ion chromatography
Calcium	LV10	Wet-only	Weekly	ICP-MS
Potassium	LV10	Wet-only	Weekly	ICP-MS
Conductivity	LV10	Wet-only	Weekly	Conductivity meter
pH	LV10	Wet-only	Weekly	pH meter
Acidity				
Air				
Sulphur dioxide	LV10	KOH-impregnated Whatman 41 filter, 23 m³/day	Daily	Ion chromatography
Nitrogen dioxide	LV10	Nal-impregnated glass sinters, 0.7 m³/day	Daily	Spectrophotometric, Griess method
Nitric acid				
Ammonia				
O ₃	LV10, LV16	UV-monitor	Hourly	UV-absorption
Sulphate PM _{2.5}	LV10	Teflon filter, 386.4 m³/weekly	Weekly	Ion chromatography
Nitrate PM _{2.5}	LV10	Teflon filter, 386.4 m³/weekly	Weekly	Ion chromatography
Ammonium PM _{2.5}	LV10	Teflon filter, 386.4 m³/weekly	Weekly	Ion chromatography
Sodium PM _{2.5}	LV10	Teflon filter, 386.4 m³/weekly	Weekly	Ion chromatography
Calcium PM _{2.5}	LV10	Teflon filter, 386.4 m³/weekly	Weekly	Ion chromatography
Magnesium PM _{2.5}	LV10	Teflon filter, 386.4 m³/weekly	Weekly	Ion chromatography
Potassium PM _{2.5}	LV10	Teflon filter, 386.4 m³/weekly	Weekly	Ion chromatography
Chloride PM _{2.5}	LV10	Teflon filter, 386.4 m³/weekly	Weekly	Ion chromatography
PM ₁₀	LV10	Low volume sampler, 2.3 m³/h, Teflon filter, 47 mm	Daily	Beta absorption
PM _{2.5}	LV10	Low volume sampler, 2.3 m³/h, Teflon filter, 47 mm	Daily	Beta absorption
PM ₁				
Suspended particulate matter				
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				
Acidity				

Country: Lithuania		Main components and ozone - EMEP		Year: 2012	
	Station	Sampling	Sampling frequency	Analysis method	
Precipitation					
Precipitation amount	LT15	Wet-only	Daily	By weight	
Precipitation amount, official gauge					
Sulphate	LT15	Wet-only	Daily	Ion chromatography	
Nitrate	LT15	Wet-only	Daily	Ion chromatography	
Ammonium	LT15	Wet-only	Daily	Spectrophotometric, Indophenol method	
Magnesium					
Sodium	LT15	Wet-only	Daily	Atomic emission method	
Chloride	LT15	Wet-only	Daily	Ion chromatography	
Calcium	LT15	Wet-only	Daily	Atomic absorption method	
Potassium	LT15	Wet-only	Daily	Atomic emission method	
Conductivity	LT15	Wet-only	Daily	Conductivity meter	
pH	LT15	Wet-only	Daily	pH meter	
Acidity					
Air					
Sulphur dioxide	LT15	KOH-impregnated Whatman 40 filter, 20 m³/day	Daily	Ion chromatography	
Nitrogen dioxide	LT15	NaI-impregnated glass sinters, 0.7 m³/day	Daily	Spectrophotometric, Griess method	
Nitric acid					
Ammonia					
Ozone	LT15	UV-monitor	Hourly	UV-absorption	
Sulphate	LT15	Teflon filter, Pall Zefluor 2 µm, 47 mm diameter, 20m³/day (Filterpack)	Daily	Ion chromatography	
Nitrate					
Ammonium					
Sodium					
Calcium					
Magnesium					
Potassium					
Chloride					
PM ₁₀					
PM _{2.5}					
PM ₁					
Suspended particulate matter					
Sum of nitric acid and nitrate	LT15	Aerosol filter as for sulphate + KOH impregnated Whatman 40 filter as for SO ₂ , 20 m³/day	Daily	Ion chromatography	
Sum of ammonia and ammonium	LT15	Aerosol filter as for sulphate + oxalic acid impregnated Whatman 40 filter, 20 m³/day	Daily	Spectrophotometric, Indophenol method	
Acidity					

Country: Macedonia		Main components and ozone - EMEP		Year: 2012	
	Station	Sampling	Sampling frequency	Analysis method	
Precipitation					
Precipitation amount					
Precipitation amount, official gauge					
Sulphate					
Nitrate					
Ammonium					
Magnesium					
Sodium					
Chloride					
Calcium					
Potassium					
Conductivity					
pH					
Air					
Sulphur dioxide	MK07	Instrumental: UV-fluorescence	Hourly	UV-fluorescence	
Nitrogen dioxide	MK07	Instrumental: Chemiluminescence	Hourly	Chemiluminescence	
Nitric acid					
Ammonia					
Ozone	MK07	Instrumental: UV-Monitor	Hourly	UV-absorption	
Sulphate					
Nitrate					
Ammonium					
Sodium					
Calcium					
Magnesium					
Potassium					
Chloride					
PM ₁₀	MK07	Instrumental: beta absorption	Hourly	Beta absorption	
PM _{2.5}					
PM ₁					
Suspended particulate matter					
Sum of nitric acid and nitrate					
Sum of ammonia and ammonium					

Country: Moldova		Main components and ozone - EMEP		Year: 2012	
	Station	Sampling	Sampling frequency	Analysis method	
Precipitation					
Precipitation amount	MD13	NILU bulk sampler	Daily	By volume	
Precipitation amount, official gauge					
Sulphate	MD13	NILU bulk sampler	Daily	Ion chromatography	
Nitrate	MD13	NILU bulk sampler	Daily	Ion chromatography	
Ammonium	MD13	NILU bulk sampler	Daily	Ion chromatography	
Magnesium	MD13	NILU bulk sampler	Daily	Ion chromatography	
Sodium	MD13	NILU bulk sampler	Daily	Ion chromatography	
Chloride	MD13	NILU bulk sampler	Daily	Ion chromatography	
Calcium	MD13	NILU bulk sampler	Daily	Ion chromatography	
Potassium	MD13	NILU bulk sampler	Daily	Ion chromatography	
Conductivity	MD13	NILU bulk sampler	Daily	Conductivity meter	
pH	MD13	NILU bulk sampler	Daily	pH meter; potentiometric, glass electrode	
Air					
Sulphur dioxide	MD13	KOH-impregnated Whatman 40 filter 25 m³/day	Daily	Ion chromatography	
Nitrogen dioxide					
Nitric acid					
Ammonia					
Ozone					
Sulphate	MD13	Teflon filter, Gelman Zefluor 2 µm, 25 m³/day	Daily	Ion chromatography	
Nitrate	MD13	Teflon filter, Gelman Zefluor 2 µm, 25 m³/day	Daily	Ion chromatography	
Ammonium	MD13	Teflon filter, Gelman Zefluor 2 µm, 25 m³/day	Daily	Ion chromatography	
Sodium	MD13	Teflon filter, Gelman Zefluor 2 µm, 25 m³/day	Daily	Ion chromatography	
Calcium	MD13	Teflon filter, Gelman Zefluor 2 µm, 25 m³/day	Daily	Ion chromatography	
Magnesium	MD13	Teflon filter, Gelman Zefluor 2 µm, 25 m³/day	Daily	Ion chromatography	
Potassium	MD13	Teflon filter, Gelman Zefluor 2 µm, 25 m³/day	Daily	Ion chromatography	
Chloride	MD13	Teflon filter, Gelman Zefluor 2 µm, 25 m³/day	Daily	Ion chromatography	
PM ₁₀	MD13	Teflon filter, Gelman Zefluor 2 µm, 25 m³/day	Daily	Ion chromatography	
PM _{2.5}					
PM ₁					
Suspended particulate matter					
Sum of nitric acid and nitrate	MD13	Aerosol filter as for sulphate + KOH impregnated filter as for SO ₂ , 25 m³/day	Daily	Ion chromatography	
Sum of ammonia and ammonium	MD13	Aerosol filter as for sulphate + oxalic acid impregnated filter, 25 m³/day	Daily	Spectrophotometric, Indophenol method and IC	
EC/OC					

Country: Montenegro		Main components and ozone - EMEP	Year: 2012	
	Station	Sampling	Sampling frequency	Analysis method
Precipitation				
Precipitation amount	Zabljak	Wet-only	daily	
Precipitation amount, official gauge	Zabljak	Meteorological station	daily	
Sulphate	Zabljak	Wet-only	daily	Spectrophotometry
Nitrate	Zabljak	Wet-only	daily	Spectrophotometry
Ammonium	Zabljak	Wet-only	daily	Spectrophotometry
Magnesium	Zabljak	Wet-only	daily	By calculation
Sodium	Zabljak	Wet-only	daily	Flame photometry
Chloride	Zabljak	Wet-only	daily	Titrimetric method
Calcium	Zabljak	Wet-only	daily	Titrimetric method
Potassium	Zabljak	Wet-only	daily	Flame photometry
Conductivity	Zabljak	Wet-only	daily	Conductivity meter
pH	Zabljak	Wet-only	daily	pH meter, glass electrode
Acidity	Zabljak	Wet-only	daily	Titrimetric method
Air				
Sulphur dioxide	Zabljak	Absorbing solution	daily	Spectrophotometry
Nitrogen dioxide	Zabljak	Absorbing solution	daily	Spectrophotometry
Nitric acid				
Ammonia				
Ozone				
Sulphate				
Nitrate				
Ammonium				
Sodium				
Calcium				
Magnesium				
Potassium				
Chloride				
PM ₁₀				
PM _{2.5}				
PM ₁				
Suspended particulate matter				
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				
Acidity				

Country: The Netherlands		Main components and ozone - EMEP	Year: 2012	
	Station	Sampling	Sampling frequency	Analysis method
Precipitation				
Precipitation amount	NL09	Wet-only	Daily	
Precipitation amount, official gauge				
Sulphate	NL09	Wet-only	Daily ¹	Ion chromatography
Nitrate	NL09	Wet-only	Daily ¹	Ion chromatography
Ammonium	NL09	Wet-only	Daily ¹	CFA ²
Magnesium	NL09	Wet-only	Daily ¹	HR-ICP/MS ³
Sodium	NL09	Wet-only	Daily ¹	HR-ICP/MS
Chloride	NL09	Wet-only	Daily ¹	Ion chromatography
Calcium	NL09	Wet-only	Daily ¹	HR-ICP/MS
Potassium	NL09	Wet-only	Daily ¹	HR-ICP/MS
Conductivity	NL09	Wet-only	Daily ¹	Conductivity meter
pH	NL09	Wet-only	Daily ¹	pH meter
Acidity	NL09	Wet-only	Daily ¹	Titration
Air				
Sulphur dioxide	NL07,NL09,NL10,NL91,NL644R	Instrumental: UV-fluorescence	Hourly	UV-fluorescence
Nitrogen dioxide	NL07,NL09,NL10,NL91,NL644R	Instrumental: Chemiluminescence	Hourly	Chemiluminescence
Nitric acid				
Ammonia	NL07,NL91	Absorption in NaHSO ₄ , membrane separation, conductivity measurement	Hourly	Conductivity
Ozone	NL07,NL09,NL10, NL91,NL644R	UV-monitor	Hourly	UV-absorption
Sulphate	NL08,NL09,NL10,NL91	Whatman QMA filter 47 mm, 55.2 m ³ /day	Daily	Ion chromatography
Nitrate	NL08,NL09,NL10,NL91	Whatman QMA filter 47 mm, 55.2 m ³ /day	Daily	Ion chromatography
Ammonium	NL08,NL09,NL10,NL91	Whatman QMA filter 47 mm, 55.2 m ³ /day	Daily	CFA ²
Sodium	NL08, NL09, NL10	Teflon filter, Pall Zefluor 2 µm, 47 mm diameter, 27.6 m ³ /day	Every other day	HR-ICP/MS
Calcium	NL08, NL09, NL10	Teflon filter, Pall Zefluor 2 µm, 47 mm diameter, 27.6 m ³ /day	Every other day	HR-ICP/MS
Magnesium	NL08, NL09, NL10	Teflon filter, Pall Zefluor 2 µm, 47 mm diameter, 27.6 m ³ /day	Every other day	HR-ICP/MS
Potassium				
Chloride	NL08,NL09,NL10,NL91	Whatman QMA filter 47 mm, 55.2 m ³ /day	Daily	Ion chromatography
PM ₁₀	NL07,NL09,NL10,NL91	Instrumental: beta absorption	Hourly	Beta absorption
PM _{2.5}	NL09,NL10,NL11,NL91,NL644R	Whatman QMA filter 47 mm, 55.2 m ³ /day	Daily	Gravimetric
Suspended particulate matter				
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				
Acidity				

¹ precipitation measurements on daily basis are only carried out on station NL0009; On both EMEP stations (NL0009 and NL0010) precipitation is carried out on a 4 weekly basis.

² continuous flow analysis

³ inductively coupled plasma/mass spectrometry

Country: Norway		Main components and ozone - EMEP	Year: 2012	
	Station	Sampling	Sampling frequency	Analysis method
Precipitation				
Precipitation amount	All	NILU bulk sampler	Daily	By volume
Precipitation amount, official gauge				
Sulphate	All	NILU bulk sampler	Daily	Ion chromatography
Nitrate	All	NILU bulk sampler	Daily	Ion chromatography
Ammonium	All	NILU bulk sampler	Daily	Ion chromatography
Magnesium	All	NILU bulk sampler	Daily	Ion chromatography
Sodium	All	NILU bulk sampler	Daily	Ion chromatography
Chloride	All	NILU bulk sampler	Daily	Ion chromatography
Calcium	All	NILU bulk sampler	Daily	Ion chromatography
Potassium	All	NILU bulk sampler	Daily	Ion chromatography
Conductivity	All	NILU bulk sampler	Daily	Conductivity meter
pH	All	NILU bulk sampler	Daily	pH meter; potentiometric, glass electrode
Air				
Sulphur dioxide	All	KOH-impregnated Whatman 40 filter 25 m ³ /day	Daily	Ion chromatography
Nitrogen dioxide	All	NaI-impregnated glass sinters, 0.7 m ³ /day	Daily	Spectrophotometric, Griess method
Nitric acid				
Ammonia				
Ozone	All	UV-monitor	Hourly	UV-absorption
Sulphate	All	Teflon filter, Gelman Zefluor 2 µm, 25 m ³ /day	Daily	Ion chromatography
Nitrate	All	Teflon filter, Gelman Zefluor 2 µm, 25 m ³ /day	Daily	Ion chromatography
Ammonium	All	Teflon filter, Gelman Zefluor 2 µm, 25 m ³ /day	Daily	Ion chromatography
Sodium	All	Teflon filter, Gelman Zefluor 2 µm, 25 m ³ /day	Daily	Ion chromatography
Calcium	All	Teflon filter, Gelman Zefluor 2 µm, 25 m ³ /day	Daily	Ion chromatography
Magnesium	All	Teflon filter, Gelman Zefluor 2 µm, 25 m ³ /day	Daily	Ion chromatography
Potassium	All	Teflon filter, Gelman Zefluor 2 µm, 25 m ³ /day	Daily	Ion chromatography
Chloride	All	Teflon filter, Gelman Zefluor 2 µm, 25 m ³ /day	Daily	Ion chromatography
PM ₁₀	NO01	KleinfILTERgerät Whatman QM-A 47 mm	6+1	by weight, RH 50%
PM _{2.5}	NO01	KleinfILTERgerät Whatman QM-A 47 mm	6+1	by weight, RH 50%
PM ₁	NO01	KleinfILTERgerät Whatman QM-A 47 mm	6+1	by weight, RH 50%
Suspended particulate matter				
Sum of nitric acid and nitrate	All	Aerosol filter as for sulphate + KOH impregnated filter as for SO ₂ , 25 m ³ /day	Daily	Ion chromatography
Sum of ammonia and ammonium	All	Aerosol filter as for sulphate + oxalic acid impregnated filter, 25 m ³ /day	Daily	Spectrophotometric, Indophenol method and IC
EC/OC	NO01	KleinfILTERgerät Whatman QM-A 47 mm, 55 m ³ /day	6+1	Thermal optical transmission

Country: Poland: PL02, PL03, PL04 (lab. IMWM)		Main components and ozone - EMEP		Year: 2012	
	Station	Sampling	Sampling frequency	Analysis method	
Precipitation					
Precipitation amount	All	Bulk	Daily		
Precipitation amount, official gauge					
Sulphate	All	Bulk	Daily	Ion chromatography	
Nitrate	All	Bulk	Daily	Ion chromatography	
Ammonium	All	Bulk	Daily	Spectrophotometric, Chloramin T	
Magnesium	All	Bulk	Daily	Atomic absorption method	
Sodium	All	Bulk	Daily	Atomic absorption method	
Chloride	All	Bulk	Daily	Ion chromatography	
Calcium	All	Bulk	Daily	Atomic absorption method	
Potassium	All	Bulk	Daily	Atomic absorption method	
Conductivity	All	Bulk	Daily	Conductivity meter	
pH	All	Bulk	Daily	pH meter	
Air					
Sulphur dioxide	All	KOH-impregnated Whatman 40 filter, 3.5-4.2 m³/day	Daily	Thorin	
Nitrogen dioxide	All	Absorbing solution TGS, 0.7 m³/day	Daily	Spectrophotometric, Griess method	
Nitric acid					
Ammonia					
Ozone	All	UV-monitor	Hourly	UV-absorption	
Sulphate	All	Whatman 40 filter, 3.5-4.2 m³/day	Daily	Thorin	
Nitrate	All	Whatman 40 filter, 3.5-4.2 m³/day	Daily	Spectrophotometric, Griess after hydrazine reduction	
Ammonium	All	Whatman 40 filter, 3.5-4.2 m³/day	Daily	Spectrophotometric, Chloramin T	
Sodium					
Calcium					
Magnesium					
Potassium					
Chloride					
PM ₁₀					
PM _{2,5}					
Suspended particulate matter					
Sum of nitric acid and nitrate	All	NaF impregnated Whatman 40 filter, 3.5-4.2 m³/day	Daily	Spectrophotometric, Griess after hydrazine reduction	
Sum of ammonia and ammonium	All	Oxalic acid impregnated Whatman 40 filter, 3.5-4.2 m³/day	Daily	Spectrophotometric, Chloramin T	

Country: Poland: PL05 (lab. IEP)		Main components and ozone - EMEP		Year: 2012	
	Station	Sampling	Sampling frequency	Analysis method	
Precipitation					
Precipitation amount	PL05	Wet-only	Daily	By weight	
Precipitation amount, official gauge	PL05	Total	Daily	Standard rain gauge	
Sulphate	PL05	Wet-only	Daily	Capillary Electrophoresis	
Nitrate	PL05	Wet-only	Daily	Capillary Electrophoresis	
Ammonium	PL05	Wet-only	Daily	Spectrophotometric, Indophenol method	
Magnesium	PL05	Wet-only	Daily	Plasma emission spectrometry	
Sodium	PL05	Wet-only	Daily	Plasma emission spectrometry	
Chloride	PL05	Wet-only	Daily	Capillary Electrophoresis	
Calcium	PL05	Wet-only	Daily	Plasma emission spectrometry	
Potassium	PL05	Wet-only	Daily	Plasma emission spectrometry	
Conductivity	PL05	Wet-only	Daily	Conductivity meter	
pH	PL05	Wet-only	Daily	pH meter	
Air					
Sulphur dioxide	PL05	KOH-impregnated Whatman 40 filter, 16 m³/day	Daily	Capillary Electrophoresis	
Nitrogen dioxide	PL05	Iodide method (impregnated glass sinter), 0.7 m³/day	Daily	Spectrophotometric, Griess method	
Nitric acid					
Ammonia					
Ozone	PL05	UV-monitor	Hourly	UV-absorption	
Sulphate	PL05	Teflon filter PALL Zefluor 2 µm, 16 m³/day	Daily	Capillary Electrophoresis	
Sulphate	PL05	QMA Whatman filter, 750 m³/day (PM2,5)	Daily/Weekly (anal.)	Ion chromatography	
Nitrate	PL05	QMA Whatman filter, 750 m³/day (PM2,5)	Daily/Weekly (anal.)	Ion chromatography	
Ammonium	PL05	QMA Whatman filter, 750 m³/day (PM2,5)	Daily/Weekly (anal.)	Ion chromatography	
Sodium	PL05	QMA Whatman filter, 750 m³/day (PM2,5)	Daily/Weekly (anal.)	Plasma emission spectrometry	
Calcium	PL05	QMA Whatman filter, 750 m³/day (PM2,5)	Daily/Weekly (anal.)	Plasma emission spectrometry	
Magnesium	PL05	QMA Whatman filter, 750 m³/day (PM2,5)	Daily/Weekly (anal.)	Plasma emission spectrometry	
Potassium	PL05	QMA Whatman filter, 750 m³/day (PM2,5)	Daily/Weekly (anal.)	Plasma emission spectrometry	
Chloride	PL05	QMA Whatman filter, 750 m³/day (PM2,5)	Daily/Weekly (anal.)	Ion chromatography	
EC/OC	PL05	QMA Whatman filter, 750 m³/day (PM2,5)	Daily	Thermo optical	
PM ₁₀	PL05	High Volume Sampler (750 m³/day)	Daily	By weight	
PM _{2.5}	PL05	High Volume Sampler (750 m³/day)	Daily	By weight	
Suspended particulate matter					
Sum of nitric acid and nitrate	PL05	Aerosol Teflon filter PALL Zefluor 2 µm + NaOH impregnated Whatman 40 filter, 16 m³/day	Daily	Capillary Electrophoresis	
Sum of ammonia and ammonium	PL05	Aerosol Teflon filter PALL Zefluor 2 µm + Oxalic acid impregnated Whatman 40 filter, 16 m³/day	Daily	Spectrophotometric, Indophenol method	

Country: Portugal		Main components and ozone - EMEP		Year: 2012	
	Station	Sampling	Sampling frequency	Analysis method	
Precipitation					
Precipitation amount					
Precipitation amount, official gauge	All	Rain gauge	Daily		
Sulphate	All	Bulk	Daily	Ion chromatography	
Nitrate	All	Bulk	Daily	Ion chromatography	
Ammonium	All	Bulk	Daily	Spectrophotometric, Indophenol method	
Magnesium	All	Bulk	Daily	Ion chromatography	
Sodium	All	Bulk	Daily	Ion chromatography	
Chloride	All	Bulk	Daily	Ion chromatography	
Calcium	All	Bulk	Daily	Ion chromatography	
Potassium	All	Bulk	Daily	Ion chromatography	
Conductivity	All	Bulk	Daily	Conductivity meter	
pH	All	Bulk	Daily	pH meter	
Air					
Sulphur dioxide					
Sulphur dioxide					
Nitrogen dioxide					
Nitric acid					
Ammonia					
Ozone	PT04	UV-monitor	Hourly	UV-absorption	
Sulphate					
Nitrate					
Ammonium					
Sodium					
Calcium					
Magnesium					
Potassium					
Chloride					
PM ₁₀					
PM _{2.5}					
Suspended particulate matter					
Sum of nitric acid and nitrate					
Sum of ammonia and ammonium					

Country: Romania		Main components and ozone - EMEP		Year: 2012	
	Station	Sampling	Sampling frequency	Analysis method	
Precipitation					
Precipitation amount					
Precipitation amount, official gauge					
Sulphate					
Nitrate					
Ammonium					
Magnesium					
Sodium					
Chloride					
Calcium					
Potassium					
Conductivity					
pH					
Acidity					
Air					
Sulphur dioxide	EM-3 RO0008R	Instrumental: UV-fluorescence monitor	Hourly	UV-fluorescence	
Nitrogen dioxide	EM-3 RO0008R	Instrumental: Chemiluminescence monitor	Hourly	Chemiluminescence	
Nitric acid					
Ammonia					
Ozone	EM-3 RO0008R	Instrumental:UV-monitor	Hourly	UV-absorption	
Sulphate					
Nitrate					
Ammonium					
Sodium					
Calcium					
Magnesium					
Potassium					
Chloride					
PM ₁₀	EM-3 RO0008R	Low volume sampler 2,3m³/hour	Daily	Gravimetric	
PM _{2.5}					
PM ₁					
Suspended particulate matter					
Sum of nitric acid and nitrate					
Sum of ammonia and ammonium					
Acidity					

Country: Russian Federation		Main components and ozone - EMEP		Year: 2012	
	Station	Sampling	Sampling frequency	Analysis method	
Precipitation					
Precipitation amount	All	Bulk	Daily		
Precipitation amount, official gauge					
Sulphate	All	Bulk	Daily	Ion chromatography	
Nitrate	All	Bulk	Daily	Ion chromatography	
Ammonium	All	Bulk	Daily	Ion chromatography	
Magnesium	All	Bulk	Daily	Ion chromatography	
Sodium	All	Bulk	Daily	Ion chromatography	
Chloride	All	Bulk	Daily	Ion chromatography	
Calcium	All	Bulk	Daily	Ion chromatography	
Potassium	All	Bulk	Daily	Ion chromatography	
Conductivity	All	Bulk	Daily	Conductivity meter	
pH	All	Bulk	Daily	pH meter	
Air					
Sulphur dioxide	RU01	NaOH-impregnated Whatman 40 filter, 10-15 m³/day	Daily	UV-fluorescence	
Sulphur dioxide	RU16, RU18	NaOH-impregnated Whatman 40 filter, 10-15 m³/day	Daily	Ion chromatography	
Nitrogen dioxide					
Nitric acid					
Ammonia					
Ozone					
Sulphate	All	Whatman 40 filter, 10-15 m³/day	Daily	Ion chromatography	
Nitrate	All	Whatman 40 filter, 10-15 m³/day	Daily	Ion chromatography	
Ammonium	All	Whatman 40 filter, 10-15 m³/day	Daily	Ion chromatography	
Sodium					
Calcium					
Magnesium					
Potassium					
Chloride					
PM ₁₀					
PM _{2.5}					
Suspended particulate matter					
Sum of nitric acid and nitrate					
Sum of ammonia and ammonium					

Country: Serbia		Main components and ozone - EMEP		Year: 2012	
	Station	Sampling	Sampling frequency	Analysis method	
Precipitation					
Precipitation amount					
Precipitation amount, official gauge	RS05	Meteorological rain gauge	Daily		
Sulphate	RS05	Bulk	Daily	Ion chromatography	
Nitrate	RS05	Bulk	Daily	Ion chromatography	
Ammonium	RS05	Bulk	Daily	Ion chromatography	
Magnesium	RS05	Bulk	Daily	Ion chromatography	
Sodium	RS05	Bulk	Daily	Ion chromatography	
Chloride	RS05	Bulk	Daily	Ion chromatography	
Calcium	RS05	Bulk	Daily	Ion chromatography	
Potassium	RS05	Bulk	Daily	Ion chromatography	
Conductivity	RS05	Bulk	Daily	Conductivity meter	
pH	RS05	Bulk	Daily	pH meter	
Air					
Sulphur dioxide	RS05	Absorbing solution H ₂ O ₂ , 1.5-2.5 m³/day	Daily	Thorin Spectrophotometric method	
Nitrogen dioxide	RS05	Absorbing solution NaOH, 1.5-2.5 m³/day	Daily	Modified Griess Saltzman method	
Nitric acid					
Ammonia					
Ozone					
Sulphate					
Nitrate					
Ammonium					
Sodium					
Calcium					
Magnesium					
Potassium					
Chloride					
PM ₁₀					
PM _{2.5}					
Suspended particulate matter					
Sum of nitric acid and nitrate					
Sum of ammonia and ammonium					

Country: Slovakia		Main components and ozone - EMEP		Year: 2012
	Station	Sampling	Sampling frequency	Analysis method
Precipitation				
Precipitation amount	SK02,SK04, SK06, SK07	Bulk: SK02: Wet-only: SK04, SK06, SK07	Daily	
Precipitation amount, official gauge	SK02,SK04, SK06, SK07	Reported from professional meteorological rain-gauges	Daily	
Sulphate	SK02,SK04, SK06, SK07	Bulk: SK02 Wet-only: SK04, SK06, SK07	Daily: SK02, SK04, SK06 Weekly:SK07	Ion chromatography – Dionex
Nitrate	SK02,SK04, SK06, SK07	Bulk: SK02 Wet-only: SK04, SK06, SK07	Daily: SK02, SK04, SK06 Weekly:SK07	Ion chromatography – Dionex
Ammonium	SK02,SK04, SK06, SK07	Bulk: SK02 Wet-only: SK04, SK06, SK07	Daily: SK02, SK04, SK06 Weekly:SK07	Ion chromatography – Dionex
Magnesium	SK02,SK04, SK06, SK07	Bulk: SK02 Wet-only: SK04, SK06, SK07	Daily: SK02, SK04, SK06 Weekly:SK07	Ion chromatography – Dionex
Sodium	SK02,SK04, SK06, SK07	Bulk: SK02 Wet-only: SK04, SK06, SK07	Daily: SK02, SK04, SK06 Weekly:SK07	Ion chromatography – Dionex
Chloride	SK02,SK04, SK06, SK07	Bulk: SK02 Wet-only: SK04, SK06, SK07	Daily: SK02, SK04, SK06 Weekly:SK07	Ion chromatography – Dionex
Calcium	SK02,SK04, SK06, SK07	Bulk: SK02 Wet-only: SK04, SK06, SK07	Daily: SK02, SK04, SK06 Weekly:SK07	Ion chromatography – Dionex
Potassium	SK02,SK04, SK06, SK07	Bulk: SK02 Wet-only: SK04, SK06, SK07	Daily: SK02, SK04, SK06 Weekly:SK07	Ion chromatography - Dionex
Conductivity	SK02,SK04, SK06, SK07	Bulk: SK02 Wet-only: SK04, SK06, SK07	Daily: SK02, SK04, SK06 Weekly:SK07	Conductivity meter
pH	SK02,SK04, SK06, SK07	Bulk: SK02 Wet-only: SK04, SK06, SK07	Daily: SK02, SK04, SK06 Weekly:SK07	pH meter
Air				
Sulphur dioxide	SK02,SK06	KOH-impregnated Whatman 40 filter, 26-30 m ³ /day	Daily	Ion chromatography - Dionex
Nitrogen dioxide	SK02,SK06	Absorbing solution NaOH and guajacol, 0.5-0.6 m ³ /day	Daily	Spectrophotometric, Modified Salzman method
Nitric acid	SK02,SK06	KOH-impregnated Whatman 40 filter, 26-30 m ³ /day	Daily	Ion chromatography - Dionex
Ammonia	SK06	Citric acid-impregnated Whatman 40 filter, 26-30 m ³ /day	Daily	Ion chromatography - Dionex
Ozone	SK02,SK04,SK06, SK07	UV-monitor	Hourly	UV-absorption
Sulphate	SK02,SK06	Whatman 40 filter, 26-30 m ³ /day	Daily	Ion chromatography - Dionex
Nitrate	SK02,SK06	Whatman 40 filter, 26-30 m ³ /day	Daily	Ion chromatography - Dionex I
Ammonium	SK06	Whatman 40 filter, 26-30 m ³ /day	Daily	Ion chromatography - Dionex
Sodium	SK06	Whatman 40 filter, 26-30 m ³ /day	Daily	Ion chromatography - Dionex
Calcium	SK06	Whatman 40 filter, 26-30 m ³ /day	Daily	Ion chromatography - Dionex
Magnesium	SK06	Whatman 40 filter, 26-30 m ³ /day	Daily	Ion chromatography - Dionex
Potassium	SK06	Whatman 40 filter, 26-30 m ³ /day	Daily	Ion chromatography - Dionex
Chloride	SK02,SK06	Whatman 40 filter, 26-30 m ³ /day	Daily	Ion chromatography - Dionex
PM ₁₀	SK04, SK06, SK07	Partisol R&P, Sartorius nitrocellulose filter, 24 m ³ /day	Weekly	Gravimetric method
PM _{2.5}				
Suspended particulate matter	SK02	Sartorius nitrocellulose filter, 26-30 m ³ /day	Weekly	Gravimetric method
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				

Country: Slovenia		Main components and ozone - EMEP		Year: 2012	
	Station	Sampling	Sampling frequency	Analysis method	
Precipitation					
Precipitation amount	SI08	Wet-only	Daily	By weight	
Precipitation amount, official gauge	SI08	Bulk	Daily		
Sulphate	SI08	Wet-only	Daily	Ion chromatography	
Nitrate	SI08	Wet-only	Daily	Ion chromatography	
Ammonium	SI08	Wet-only	Daily	Ion chromatography	
Magnesium	SI08	Wet-only	Daily	Ion chromatography	
Sodium	SI08	Wet-only	Daily	Ion chromatography	
Chloride	SI08	Wet-only	Daily	Ion chromatography	
Calcium	SI08	Wet-only	Daily	Ion chromatography	
Potassium	SI08	Wet-only	Daily	Ion chromatography	
Conductivity	SI08	Wet-only	Daily	Conductivity meter	
pH	SI08	Wet-only	Daily	pH meter	
Air					
Sulphur dioxide	SI08	KOH-impregnated Whatman 40 filter, 17-23 m³/day	Daily	Ion chromatography	
Nitrogen dioxide	SI08	Nal-impregnated glass sinters, ~0.7 m³/day	Daily	Spectrophotometric, Griess method	
Nitric acid	SI08	KOH-impregnated Whatman 40 filter, 17-23 m³/day	Daily	Ion chromatography	
Ammonia	SI08	Oxalic acid impregnated Whatman 40 filter, 17-23 m³/day	Daily	Ion chromatography	
Carbon monoxide	SI32	Trace level analyzer	Hourly	ndir	
Sulphate	SI08	Teflon filter, Pall Zefluor 2 µm, 17-23 m³/day	Daily	Ion chromatography	
Nitrate	SI08	Teflon filter, Pall Zefluor 2 µm, 17-23 m³/day	Daily	Ion chromatography	
Ammonium	SI08	Teflon filter, Pall Zefluor 2 µm, 17-23 m³/day	Daily	Ion chromatography	
Sodium	SI08	Teflon filter, Pall Zefluor 2 µm, 17-23 m³/day	Daily	Ion chromatography	
Calcium	SI08	Teflon filter, Pall Zefluor 2 µm, 17-23 m³/day	Daily	Ion chromatography	
Magnesium	SI08	Teflon filter, Pall Zefluor 2 µm, 17-23 m³/day	Daily	Ion chromatography	
Potassium	SI08	Teflon filter, Pall Zefluor 2 µm, 17-23 m³/day	Daily	Ion chromatography	
Chloride	SI08	Teflon filter, Pall Zefluor 2 µm, 17-23 m³/day	Daily	Ion chromatography	
PM ₁₀	SI08	Low volume sampler, 2.3 m³/h, Quartz filter, 47 mm	Daily	Gravimetric method	
PM _{2.5}	SI08	Low volume sampler, 2.3 m³/h, Glass filter, 47 mm	Daily	Gravimetric method	
Sum of nitric acid and nitrate	SI08	Teflon filter, Pall Zefluor 2 µm + KOH impregnated Whatman 40 filter, 17-23 m³/day	Daily	Ion chromatography	
Sum of ammonia and ammonium	SI08	Teflon filter, Pall Zefluor 2 µm + oxalic acid impregnated Whatman 40 filter, 17-23 m³/day	Daily	Ion chromatography	

Country: Spain		Main components and ozone - EMEP	Year: 2012	
	Station	Sampling	Sampling frequency	Analysis method
Precipitation	All (except ES10)			
Precipitation amount	All	Wet-only	Daily	
Sulphate	All	Wet-only	Daily	Ion chromatography
Nitrate	All	Wet-only	Daily	Ion chromatography
Ammonium	All	Wet-only	Daily	Visible spectrophotometry, Indophenol method
Magnesium	All	Wet-only	Daily	Atomic absorption spectroscopy
Sodium	All	Wet-only	Daily	Atomic absorption spectroscopy
Chloride	All	Wet-only	Daily	Ion chromatography
Calcium	All	Wet-only	Daily	Atomic absorption spectroscopy
Potassium	All	Wet-only	Daily	Atomic absorption spectroscopy
Conductivity	All	Wet-only	Daily	Conductivity meter
pH	All	Wet-only	Daily	pH meter
Heavy metals (As, Cd, Cr, Cu, Ni, Pb, Zn)	ES08, ES09	Wet-only	Weekly	ICP-mass
Air				
Sulphur dioxide	All	Instrumental: UV-fluorescence	Hourly	Pulsed UV-Fluorescence
Nitrogen dioxide/NO/NOx	All	Instrumental: Chemiluminescence	Hourly	Chemiluminescence
Ozone	All	UV-monitor	Hourly	UV-absorption
Ammonia	ES08, ES09 In 2012 ES01, ES07, ES11 and ES14 started measuring	Passive sampler	Weekly	Visible spectrophotometry, Indophenol method
PM ₁₀	All	High volume sampler	Daily	Gravimetric method
PM _{2.5}	ES01, ES06 (started in 2012), ES07, ES08, ES09, ES10, ES11, ES12, ES13, ES14, ES16	High volume sampler	Daily	Gravimetric method
Sulphate PM ₁₀	All	Whatman GF/A filter, 720 m ³ /day (ES07, ES08, ES10, ES11, ES12, ES13, ES14, ES16) / 1632 m ³ /day (ES01, ES05, ES06, ES09, ES17)	Daily	Ion chromatography
Nitrate PM ₁₀	All	Whatman GF/A filter, 720 m ³ /day (ES07, ES08, ES10, ES11, ES12, ES13, ES14, ES16) / 1632 m ³ /day (ES01, ES05, ES06, ES09, ES17)	Daily	Ion chromatography
Sum of nitric acid and nitrate	All	NaOH impregnated Whatman 40 filter, 35 m ³ /day	Daily	Ion chromatography
Sum of ammonia and ammonium	All	Oxalic acid impregnated Whatman 40 filter, 35 m ³ /day	Daily	Visible spectrophotometry, Indophenol method
Ammonium PM ₁₀	ES09	High volume sampler	24 hour, once a week	Visible spectrophotometry, Indophenol method
Sodium PM ₁₀	ES09	High volume sampler	Daily	Atomic absorption spectroscopy
Calcium PM ₁₀	ES09	High volume sampler	Daily	Atomic absorption spectroscopy
Magnesium PM ₁₀	ES09	High volume sampler	Daily	Atomic absorption spectroscopy
Potassium PM ₁₀	ES09	High volume sampler	Daily	Atomic absorption spectroscopy
Chloride PM ₁₀	ES09	High volume sampler	24 hour, once a week	Ion chromatography
Sulphate PM _{2.5}	ES09	High volume sampler	24 hour, once a week	Ion chromatography
Nitrate PM _{2.5}	ES09	High volume sampler	24 hour, once a week	Ion chromatography
Sodium PM _{2.5}	ES09	High volume sampler	24 hour, once a week	Atomic absorption spectroscopy
Calcium PM _{2.5}	ES09	High volume sampler	24 hour, once a week	Atomic absorption spectroscopy
Magnesium PM _{2.5}	ES09	High volume sampler	24 hour, once a week	Atomic absorption spectroscopy

Country: Spain , cont.		Main components and ozone - EMEP		Year: 2012	
	Station	Sampling	Sampling frequency	Analysis method	
Air					
Potassium PM _{2.5}	ES09	High volume sampler	24 hour, once a week	Atomic absorption spectroscopy	
Ammonium PM _{2.5}	ES09	High volume sampler	24 hour, once a week	Visible spectrophotometry, Indophenol method	
Chloride PM _{2.5}	ES09	High volume sampler	24 hour, once a week	Ion chromatography	
VOCs	ES09	Canister	Twice a week	Gas chromatography with FID	
Carbonyls	ES09	Cartridges of silica-DNPH	Twice a week	HPLC with UV-Vis detector	
EC/OC PM ₁₀	ES09	PM10 low volume sampler (55 m³/day)	24 hour, once a week	Thermal optical	
EC/OC PM _{2.5}	ES09	PM2.5 low volume sampler (55 m³/day)	24 hour, once a week	Thermal optical	
Heavy metals (As, Cd, Cr, Cu, Ni, Pb, Zn) Cu – only in ES09	ES08, ES09	PM10 high volume sampler	24 hour, once a week	ICP mass	
PAHs	ES08	PM10 high volume sampler	24 hour, once every 8 days	Gas chromatography – mass spectrometry	
CAMPAIGNS (56 days) *					
Air					
Heavy metals (As, Cd, Cr, Cu, Ni, Pb, Zn)	ES01; ES06; ES07; ES8; ES14	PM10 high volume sampler	24 hour, once a week	ICP mass	
PAHs	ES01; ES06; ES07; ES8; ES14	PM10 high volume sampler	24 hour, once a week	Gas chromatography – mass spectrometry	
TGM	ES8	Continuously	Hourly		
Total deposition					
Heavy metals (As, Cd, Cr, Cu, Ni, Pb, Zn)	ES01; ES06; ES07; ES8; ES14	Bulk sampler	Monthly – 4 months (campaign)	ICP-mass	
PAHs	ES01; ES06; ES07; ES8; ES14	Bulk sampler	Monthly – 4 months (campaign)	Gas chromatography – mass spectrometry	
Hg	ES01; ES06; ES07; ES8; ES14	Bulk sampler	Monthly – 4 months (campaign)	Atomic absorption spectroscopy	

***: According to Directive 2008/50/EC**

Country: Sweden		Main components and ozone - EMEP	Year: 2012	
	Station	Sampling	Sampling frequency	Analysis method
Precipitation				
Precipitation amount	SE05, SE11, SE12, SE14	Wet-only	Daily: SE05, SE14; monthly: SE11, SE12	
Precipitation amount, official gauge				
Sulphate	SE05, SE11, SE12, SE14	Wet-only	Daily: SE05, SE14; monthly: SE11, SE12	Ion chromatography
Nitrate	SE05, SE11, SE12, SE14	Wet-only	Daily: SE05, SE14; monthly: SE11, SE12	Ion chromatography
Ammonium	SE05, SE11, SE12, SE14	Wet-only	Daily: SE05, SE14; monthly: SE11, SE12	Spectrophotometric, Flow injection analysis
Magnesium	SE05, SE11, SE12, SE14	Wet-only	Daily: SE05, SE14; monthly: SE11, SE12	Ion chromatography
Sodium	SE05, SE11, SE12, SE14	Wet-only	Daily: SE05, SE14; monthly: SE11, SE12	Ion chromatography
Chloride	SE05, SE11, SE12, SE14	Wet-only	Daily: SE05, SE14; monthly: SE11, SE12	Ion chromatography
Calcium	SE05, SE11, SE12, SE14	Wet-only	Daily: SE05, SE14; monthly: SE11, SE12	Ion chromatography
Potassium	SE05, SE11, SE12, SE14	Wet-only	Daily: SE05, SE14; monthly: SE11, SE12	Ion chromatography
Conductivity	SE05, SE11, SE12, SE14	Wet-only	Daily: SE05, SE14; monthly: SE11, SE12	Conductivity meter
pH	SE05, SE11, SE12, SE14	Wet-only	Daily: SE05, SE14; monthly: SE11, SE12	pH meter
Air				
Sulphur dioxide	SE05, SE11, SE12, SE14	KOH-impregnated Whatman 40 filter, 20 m³/day	Daily	Ion chromatography
Nitrogen dioxide	SE05, SE11, SE12, SE14	Nal-impregnated glass sinters, ~0.7 m³/day	Daily	Spectrophotometric, Flow Injection Analysis
Nitric acid				
Ammonia				
Ozone	SE05, SE11, SE12, SE13, SE14, SE32, SE35, SE39	UV-monitor	Hourly	UV-absorption
Sulphate	SE05, SE11, SE12, SE14	Teflon filter, Mitex membrane, 20 m³/day	Daily	Ion chromatography
Nitrate				
Ammonium				
Sodium	SE05, SE11, SE12, SE14	Teflon filter, Mitex membrane, 20 m³/day	Daily	Ion chromatography
Calcium	SE05, SE11, SE12, SE14	Teflon filter, Mitex membrane, 20 m³/day	Daily	Ion chromatography
Magnesium	SE05, SE11, SE12, SE14	Teflon filter, Mitex membrane, 20 m³/day	Daily	Ion chromatography
Potassium	SE05, SE11, SE12, SE14	Teflon filter, Mitex membrane, 20 m³/day	Daily	Ion chromatography
Chloride	SE05, SE11, SE12, SE14	Teflon filter, Mitex membrane, 20 m³/day	Daily	Ion chromatography
PM ₁₀	SE11, SE12	TEOM (Tapered Element Oscillating Microbalance	Hourly	TEOM
PM _{2.5}	SE11, SE12	TEOM (Tapered Element Oscillating Microbalance	Hourly	TEOM
PM ₁₀	SE05, SE14	IVL Sampler PModell S10	Daily	Gravimetric
PM _{2.5}	SE05, SE14	IVL Sampler PModell S10	Daily	Gravimetric
Sum of nitric acid and nitrate	SE05, SE11, SE12, SE14	Aerosol filter as for sulphate + KOH-impregnated Whatman 40 filter, 20 m³/day	Daily	Ion chromatography
Sum of ammonia and ammonium	SE05, SE11, SE12, SE14	Aerosol filter as for sulphate + Oxalic acid impregnated Whatman 40 filter, 20 m³/day	Daily	Spectrophotometric, Flow injection analysis

Country: Switzerland		Main components and ozone - EMEP		Year: 2012	
	Station	Sampling	Sampling frequency	Analysis method	
Precipitation					
Precipitation amount	CH02, CH04, CH05	Wet-only	Weekly		
Precipitation amount, official gauge					
Sulphate	CH02, CH04, CH05	Wet-only	Weekly	Ion chromatography	
Nitrate	CH02, CH04, CH05	Wet-only	Weekly	Ion chromatography	
Ammonium	CH02, CH04, CH05	Wet-only	Weekly	Ion chromatography	
Magnesium	CH02, CH04, CH05	Wet-only	Weekly	Ion chromatography	
Sodium	CH02, CH04, CH05	Wet-only	Weekly	Ion chromatography	
Chloride	CH02, CH04, CH05	Wet-only	Weekly	Ion chromatography	
Calcium	CH02, CH04, CH05	Wet-only	Weekly	Ion chromatography	
Potassium	CH02, CH04, CH05	Wet-only	Weekly	Ion chromatography	
Conductivity	CH02, CH04, CH05	Wet-only	Weekly	Conductivity meter	
pH	CH02, CH04, CH05	Wet-only	Weekly	pH meter	
Air					
Sulphur dioxide	CH01, CH02, CH05	Instrumental: UV-fluorescence	Daily	UV-fluorescence	
Nitrogen dioxide	CH01, CH02, CH05	Instrumental: Chemiluminescence-monitor	Daily	Chemiluminescence (photolytic converter)	
Nitrogen dioxide	CH03, CH04	Instrumental: Chemiluminescence-monitor	Daily	Chemiluminescence (molybdenum converter)	
Nitric acid	CH02, CH05	KOH impregnated Mini-Denuder / modified CEH DELTA-System, 0.5 m³/day	Biweekly	Ion chromatography	
Ammonia	CH02, CH05	Citric acid impregnated Mini-Denuder / modified CEH DELTA-System, 0.5 m³/day	Biweekly	Ion chromatography	
Ozone	All	Instrumental: UV-monitor	Hourly	UV-absorption	
Sulphate	CH02, CH05	High Volume Samplers, Pallflex XP56 Tissuequartz 2500 QAT-UP, 720 m³/day	Daily	Ion chromatography	
Sulphate	CH01	High Volume Samplers, Pallflex XP56 Tissuequartz 2500 QAT-UP, 1075 m³/day	Daily	Ion chromatography	
Nitrate	CH02, CH05	KOH impregnated Whatman 1 filter, Delrin filterholder / modified CEH DELTA-System, 0.5 m³/day	Biweekly	Ion chromatography	
Ammonium	CH02, CH05	Citric acid impregnated Sartorius 11306 filter, Delrin filterholder / modified CEH DELTA-System, 0.5 m³/day	Biweekly	Ion chromatography	
Sodium	CH02, CH05	Citric acid impregnated Whatman 40 filter / NILU filterholder, 18 m³/day			
Calcium	CH02, CH05	Citric acid impregnated Whatman 40 filter / NILU filterholder, 18 m³/day			
Magnesium	CH02, CH05	Citric acid impregnated Whatman 40 filter / NILU filterholder, 18 m³/day			
Potassium	CH02, CH05	Citric acid impregnated Whatman 40 filter / NILU filterholder, 18 m³/day			
Chloride					
PM ₁₀	CH01	High Volume Samplers, Pallflex XP56 Tissuequartz 2500 QAT-UP, 1075 m³/day	Daily	Gravimetry	
PM ₁₀	CH02, CH03, CH04, CH05	High Volume Samplers, Pallflex XP56 Tissuequartz 2500 QAT-UP, 720 m³/day	Daily	Gravimetry	
PM _{2.5}	CH02, CH05	High Volume Samplers, Pallflex XP56 Tissuequartz 2500 QAT-UP, 720 m³/day	Daily	Gravimetry	
PM ₁	CH02	High Volume Samplers, Pallflex XP56 Tissuequartz 2500 QAT-UP, 720 m³/day	Daily	Gravimetry	
Suspended particulate matter					
Sum of nitric acid and nitrate	CH02, CH05	NaOH impregnated Whatman 40 filter / NILU filterholder, 18 m³/day	Daily	Ion chromatography	
Sum of ammonia and ammonium	CH02, CH05	Citric acid impregnated Whatman 40 filter / NILU filterholder, 18 m³/day	Daily	Ion chromatography	

Country: Turkey		Main components and ozone - EMEP		Year: 2012	
	Station	Sampling	Sampling frequency	Analysis method	
Precipitation					
Precipitation amount	All	Wet-only	Daily		
Precipitation amount, official gauge					
Sulphate	All	Wet-only	Daily	Ion chromatography	
Nitrate	All	Wet-only	Daily	Ion chromatography	
Ammonium	All	Wet-only	Daily	Spectrophotometric, Indophenol method	
Magnesium	All	Wet-only	Daily	Atomic absorption method	
Sodium	All	Wet-only	Daily	Atomic absorption method	
Chloride	All	Wet-only	Daily	Ion chromatography	
Calcium	All	Wet-only	Daily	Atomic absorption method	
Potassium	All	Wet-only	Daily	Atomic absorption method	
Conductivity	All	Wet-only	Daily	Conductivity meter	
pH	All	Wet-only	Daily	pH meter	
Air					
Sulphur dioxide	All	KOH-impregnated Whatman 40 filter, 32 m³/day	Daily	Ion chromatography	
Nitrogen dioxide	All	NaI-impregnated glass sinters, 0.72 m³/day	Daily	Spectrophotometric	
Nitric acid					
Ammonia					
Ozone					
Sulphate	All	Teflon filter, Gelman Zefluor 2 µm, 27 m³/day	Daily	Ion chromatography	
Nitrate					
Ammonium					
Sodium					
Calcium					
Magnesium					
Potassium					
Chloride					
PM ₁₀					
PM _{2.5}					
Suspended particulate matter					
Sum of nitric acid and nitrate	All	KOH-impregnated Whatman 40 filter, 32 m³/day	Daily	Ion chromatography	
Sum of ammonia and ammonium	All	Citric acid impregnated Whatman 40 filter, 32 m³/day	Daily	Spectrophotometric, Indophenol method	

Country: United Kingdom		Main components and ozone - EMEP	Year: 2012	
	Station	Sampling	Sampling frequency	Analysis method
Precipitation				
Precipitation amount	GB02, GB06, GB13, GB14, GB15	Bulk collector	Fortnightly	Mass of water collected
Precipitation amount, official gauge				
Sulphate	GB02, GB06, GB13, GB14, GB15	Bulk collector	Fortnightly	Ion chromatography
Nitrate	GB02, GB06, GB13, GB14, GB15	Bulk collector	Fortnightly	Ion chromatography
Ammonium	GB02, GB06, GB13, GB14, GB15	Bulk collector	Fortnightly	Ion chromatography
Magnesium	GB02, GB06, GB13, GB14, GB15	Bulk collector	Fortnightly	Ion chromatography
Sodium	GB02, GB06, GB13, GB14, GB15	Bulk collector	Fortnightly	Ion chromatography
Chloride	GB02, GB06, GB13, GB14, GB15	Bulk collector	Fortnightly	Ion chromatography
Calcium	GB02, GB06, GB13, GB14, GB15	Bulk collector	Fortnightly	Ion chromatography
Potassium	GB02, GB06, GB13, GB14, GB15	Bulk collector	Fortnightly	Ion chromatography
Conductivity	GB02, GB06, GB13, GB14, GB15	Bulk collector	Fortnightly	Conductivity meter
pH	GB02, GB06, GB13, GB14, GB15	Bulk collector	Fortnightly	pH meter
Air				
Sulphur dioxide	GB36, GB37, GB38, GB43, GB45	Instrumental	Hourly	UV fluorescence
Sulphur dioxide	GB48	Instrumental	Hourly	Online IC
Nitrogen dioxide	14 sites	Instrumental	Hourly	Chemiluminescence
Nitrogen monoxide	14 sites	Instrumental	Hourly	Chemiluminescence
Nitric acid	GB06, GB13, GB14, GB54	Delta sampler (low volume denuder and filter pack)	Monthly	Ion chromatography
Nitric Acid	GB48	Instrumental	Hourly	Online IC
Ammonia	GB06, GB13, GB14, GB54	Delta sampler (low volume denuder and filter pack)	Monthly	Florria
Ammonia	GB48	Instrumental	Hourly	Online IC
Ozone	20 sites	UV-monitor	Hourly	UV-absorption
Sulphate	GB06, GB13, GB14, GB54	Delta sampler (low volume denuder and filter pack)	Monthly	Ion chromatography
Nitrate	GB06, GB13, GB14, GB54	Delta sampler (low volume denuder and filter pack)	Monthly	Ion chromatography
Ammonium	GB06, GB13, GB14, GB54	Delta sampler (low volume denuder and filter pack)	Monthly	
Sodium	GB06, GB13, GB14, GB54	Delta sampler (low volume denuder and filter pack)	Monthly	
Calcium	GB06, GB13, GB14, GB54	Delta sampler (low volume denuder and filter pack)	Monthly	
Magnesium	GB06, GB13, GB14, GB54	Delta sampler (low volume denuder and filter pack)	Monthly	
Potassium	GB06, GB13, GB14, GB54	Delta sampler (low volume denuder and filter pack)	Monthly	
Chloride	GB06, GB13, GB14, GB54	Delta sampler (low volume denuder and filter pack)	Monthly	
PM ₁₀	GB06, GB36, GB43, GB48	FDMS, Partisol and volatile correction model to TEOM data	Daily/hourly	
PM _{2.5}	GB36, GB48	FDMS and Partisol	Daily/hourly	
Ammonium PM ₁₀ , PM _{2.5}	GB36, GB48	Instrumental	Hourly	Online IC
Calcium PM ₁₀ , PM _{2.5}	GB36, GB48	Instrumental	Hourly	Online IC
Chloride PM ₁₀ , PM _{2.5}	GB36, GB48	Instrumental	Hourly	Online IC
Magnesium PM ₁₀ , PM _{2.5}	GB36, GB48	Instrumental	Hourly	Online IC
Nitrate PM ₁₀ , PM _{2.5}	GB36, GB48	Instrumental	Hourly	Online IC
Potassium PM ₁₀ , PM _{2.5}	GB36, GB48	Instrumental	Hourly	Online IC
Sodium PM ₁₀ , PM _{2.5}	GB36, GB48	Instrumental	Hourly	Online IC
Sulphate PM ₁₀ , PM _{2.5}	GB36, GB48	Instrumental	Hourly	Online IC
Suspended particulate matter				
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				

Annex 5

List of data reports

Data Report October 1977-September 1978.

EMEP/CCC-Report 3/80 by J. Schaug, H. Dovland, J.E. Skjelmoen.
Lillestrøm, Norwegian Institute for Air Research, 1980.

Data Report October 1978-September 1979.

EMEP/CCC-Report 4/81 by J.E. Skjelmoen, H. Dovland, J. Schaug.
Lillestrøm, Norwegian Institute for Air Research, 1981.

Data Report October 1979-September 1980.

EMEP/CCC-Report 5/84 by J.E. Skjelmoen, J. Schaug.
Lillestrøm, Norwegian Institute for Air Research, 1984.

Data Report October 1980-September 1981.

EMEP/CCC-Report 6/84 by J.E. Skjelmoen, J. Schaug.
Lillestrøm, Norwegian Institute for Air Research, 1984.

Data Report October 1981-September 1982.

EMEP/CCC-Report 2/85 by K. Nodop, J.E. Skjelmoen, J. Schaug.
Lillestrøm, Norwegian Institute for Air Research, 1985.

Data Report October 1982-December 1982.

EMEP/CCC-Report 4/86 by J. Schaug, A. Harstad, T. Krognes, J.E. Skjelmoen.
Lillestrøm, Norwegian Institute for Air Research, 1986.

Data Report January 1983-December 1983.

EMEP/CCC-Report 5/86 by J. Schaug, A. Harstad, T. Krognes, J.E. Skjelmoen.
Lillestrøm, Norwegian Institute for Air Research, 1986.

Data Report January 1984-June 1984.

EMEP/CCC-Report 1/87 by J. Schaug, J. Pacyna, A. Harstad, T. Krognes,
J.E. Skjelmoen.
Lillestrøm, Norwegian Institute for Air Research, 1987.

Data Report July 1984-December 1984.

EMEP/CCC-Report 2/87 by J. Schaug, J. Pacyna, A. Harstad, T. Krognes,
J.E. Skjelmoen.
Lillestrøm, Norwegian Institute for Air Research, 1987.

Data Report January 1985-June 1985.

EMEP/CCC-Report 5/87 by J. Pacyna, J. Schaug, A. Harstad, T. Krognes,
J.E. Skjelmoen.
Lillestrøm, Norwegian Institute for Air Research, 1987.

Data Report July 1985-December 1985.

EMEP/CCC-Report 6/87 by J. Pacyna, J. Schaug, A. Harstad, T. Krognes,
J.E. Skjelmoen
Lillestrøm, Norwegian Institute for Air Research, 1987.

European Precipitation Chemistry Atlas.

An Atlas of monthly and seasonal maps of precipitation amount, non-marine sulphate, nitrate, ammonium and hydrogen ion concentrations and depositions based on the EMEP precipitation network: October 1977 to September 1982. EMEP/CCC-Report 5/88 by R.J. Barthelmie, T.D. Davies, G. Farmer, J. Schaug. Norwich/Lillestrøm, Climatic Research Unit, University of East Anglia/Norwegian Institute for Air Research, 1988.

Data Report 1986. Part 1: Annual summaries.

EMEP/CCC-Report 6/88 by J. Schaug, J.E. Skjelmoen, S.E. Walker, A. Harstad, K. Nodop, J. Pacyna
Lillestrøm, Norwegian Institute for Air Research, 1988.

Data Report 1986. Part 2: Monthly and seasonal summaries.

EMEP/CCC-Report 7/88 by J. Schaug, J.E. Skjelmoen, S.E. Walker, A. Harstad, K. Nodop, J. Pacyna
Lillestrøm, Norwegian Institute for Air Research, 1988.

Data Report 1987. Part 1: Annual summaries.

EMEP/CCC-report 1/89 by J. Schaug, J.E. Skjelmoen, S.-E. Walker, U. Pedersen, A. Harstad
Lillestrøm, Norwegian Institute for Air Research, 1989.

Data Report 1987. Part 2: Monthly and seasonal summaries.

EMEP/CCC-Report 2/89 by J. Schaug, J.E. Skjelmoen, S.E. Walker, U. Pedersen, A. Harstad.
Lillestrøm, Norwegian Institute for Air Research, 1989.

Ozone measurements January-December 1985.

EMEP/CCC-Report 3/89 by U. Feister, U. Pedersen.
Potsdam/Lillestrøm, Meteorological Service of the GDR/Norwegian Institute for Air Research, 1989.

Data Report 1988. Part 1: Annual summaries.

EMEP/CCC-Report 4/90 by U. Pedersen, J. Schaug, J.E. Skjelmoen, J.E. Hanssen.
Lillestrøm, Norwegian Institute for Air Research, 1990.

Data Report 1988. Part 2: Monthly and seasonal summaries.

EMEP/CCC-Report 5/90 by J. Schaug, U. Pedersen, J.E. Skjelmoen, J.E. Hanssen.
Lillestrøm, Norwegian Institute for Air Research, 1990.

European Precipitation Chemistry Atlas (Volume 2).

An Atlas of monthly and seasonal maps of precipitation amount, non-marine sulphate, nitrate, ammonium and hydrogen ion concentrations and depositions based on the EMEP precipitation network: October 1982 to December 1985. EMEP/CCC-Report 6/90 by T.D. Davies, R.J. Barthelmie, M. Varley, S. Dorling, G. Farmer, J. Schaug.
Norwich/Lillestrøm, Climatic Research Unit, University of East Anglia/Norwegian Institute for Air Research, 1990.

Ozone measurements January-December 1986.

EMEP/CCC-Report 8/90 by U. Feister, U. Pedersen, E. Schulz, S. Hechler.
Potsdam/Lillestrøm, Meteorological Service of the GDR/Norwegian Institute for Air Research, 1990.

Data Report 1989. Part 1: Annual summaries.

EMEP/CCC-Report 2/91 by J. Schaug, U. Pedersen, J.E. Skjelmoen.
Lillestrøm, Norwegian Institute for Air Research, 1991.

Data Report 1989. Part 2: Monthly and seasonal summaries.

EMEP/CCC-Report 3/91 by J. Schaug, U. Pedersen, J.E. Skjelmoen.
Lillestrøm, Norwegian Institute for Air Research, 1991.

Ozone Data Report 1988.

EMEP/CCC-Report 1/92 by U. Pedersen.
Lillestrøm, Norwegian Institute for Air Research, 1992.

Data Report 1990. Part 1: Annual summaries.

EMEP/CCC-Report 2/92 by U. Pedersen, J. Schaug, J.E. Skjelmoen.
Lillestrøm, Norwegian Institute for Air Research, 1992.

Data Report 1990. Part 2: Monthly and Seasonal Summaries.

EMEP/CCC-Report 3/92 by J. Schaug, U. Pedersen, J.E. Skjelmoen and
I. Kvalvågnes.
Lillestrøm, Norwegian Institute for Air Research, 1992.

European Precipitation Chemistry Atlas (Volume 3). An Atlas of monthly and seasonal maps of precipitation amount, non-sea-salt sulphate, nitrate, ammonium and hydrogen ion concentrations and depositions based on the EMEP precipitation chemistry network: January 1986 to December 1989.

EMEP/CCC-Report 6/92 by T.D. Davies, S. Glynn, R.J. Barthelmie.
Norwich/Lillestrøm, Climate Research Unit, University of East Anglia,
Norwegian Institute for Air Research, 1992.

Ozone Data Report 1989.

EMEP/CCC-Report 2/93 by U. Pedersen and I. Kvalvågnes.
Lillestrøm, Norwegian Institute for Air Research, 1993.

Data Report 1991. Part 1: Annual summaries.

EMEP/CCC-Report 4/93 by J. Schaug, U. Pedersen, J.E. Skjelmoen and
I. Kvalvågnes.
Lillestrøm, Norwegian Institute for Air Research, 1993.

Data Report 1991. Part 2: Monthly and seasonal summaries.

EMEP/CCC-Report 5/93 by J. Schaug, U. Pedersen, J.E. Skjelmoen and
I. Kvalvågnes.
Lillestrøm, Norwegian Institute for Air Research, 1993.

VOC measurements August 1992-June 1993.

EMEP/CCC-Report 6/93 by S. Solberg, N. Schmidbauer, C. Dye, U. Pedersen and J. Schaug.

Lillestrøm, Norwegian Institute for Air Research, 1993.

VOC measurements 1993.

EMEP/CCC-Report 3/94 by S. Solberg, C. Dye and N. Schmidbauer.

Lillestrøm, Norwegian Institute for Air Research, 1994.

Data Report 1992. Part 1: Annual summaries.

EMEP/CCC-Report 4/94 by J. Schaug, U. Pedersen, J.E. Skjelmoen, K. Arnesen, A. Bartonova.

Lillestrøm, Norwegian Institute for Air Research, 1992.

Data Report 1992. Part 2: Monthly and seasonal summaries.

EMEP/CCC-Report 5/94 by J. Schaug, U. Pedersen, J.E. Skjelmoen and K. Arnesen.

Lillestrøm, Norwegian Institute for Air Research, 1993.

Ozone Measurements 1990-1992.

EMEP/CCC-Report 4/95 by A.-G. Hjellbrekke.

Kjeller, Norwegian Institute for Air Research, 1995.

Data Report 1993. Part 1: Annual summaries.

EMEP/CCC-Report 7/95 by A.-G. Hjellbrekke, G. Lövblad, K. Sjöberg, J. Schaug, J.E. Skjelmoen.

Kjeller, Norwegian Institute for Air Research, 1995.

Data Report 1993. Part 2: Monthly and seasonal summaries.

EMEP/CCC-Report 8/95 by G. Lövblad, A.-G. Hjellbrekke, K. Sjöberg, J. Schaug, J.E. Skjelmoen.

Kjeller, Norwegian Institute for Air Research, 1995.

Ozone Measurements 1993-1994.

EMEP/CCC-Report 1/96 by A.G. Hjellbrekke.

Kjeller, Norwegian Institute for Air Research, 1996.

Data Report 1994. Part 1: Annual summaries.

EMEP/CCC-Report 4/96 by A.-G. Hjellbrekke, J. Schaug, J.E. Skjelmoen.

Kjeller, Norwegian Institute for Air Research, 1996.

Data Report 1994. Part 2: Monthly and seasonal summaries.

EMEP/CCC-Report 5/96 by A.-G. Hjellbrekke, J. Schaug, J.E. Skjelmoen.

Kjeller, Norwegian Institute for Air Research, 1996.

VOC measurements 1994–1995.

EMEP/CCC-Report 6/96 by S. Solberg, C. Dye and N. Schmidbauer.

Kjeller, Norwegian Institute for Air Research, 1996.

Heavy metals and POPs within the ECE region.
 EMEP/CCC-Report 8/96 by T. Berg, A.-G. Hjellbrekke, J.E. Skjelmoen.
 Kjeller, Norwegian Institute for Air Research, 1996.

Ozone Measurements 1995.
 EMEP/CCC-Report 3/97 by A.-G. Hjellbrekke.
 Kjeller, Norwegian Institute for Air Research, 1997.

Data Report 1995. Part 1: Annual summaries.
 EMEP/CCC-Report 4/97 by A.-G. Hjellbrekke, J. Schaug, J.E. Hanssen,
 J.E. Skjelmoen.
 Kjeller, Norwegian Institute for Air Research, 1997.

Data Report 1995. Part 2: Monthly and seasonal summaries.
 EMEP/CCC-Report 5/97 by A.-G. Hjellbrekke, J. Schaug, J.E. Hanssen,
 J.E. Skjelmoen.
 Kjeller, Norwegian Institute for Air Research, 1997.

VOC measurements 1996.
 EMEP/CCC-Report 7/97 by S. Solberg, C. Dye and N. Schmidbauer.
 Kjeller, Norwegian Institute for Air Research, 1997.

Data Report 1996. Part 1: Annual summaries.
 EMEP/CCC-Report 1/98 by A.-G. Hjellbrekke and J.E. Hanssen.
 Kjeller, Norwegian Institute for Air Research, 1998.

Data Report 1996. Part 2: Monthly and seasonal summaries.
 EMEP/CCC-Report 2/98 by A.-G. Hjellbrekke and J.E. Hanssen.
 Kjeller, Norwegian Institute for Air Research, 1998.

Ozone Measurements 1996.
 EMEP/CCC-Report 3/98 by A.-G. Hjellbrekke.
 Kjeller, Norwegian Institute for Air Research, 1998.

VOC measurements 1997.
 EMEP/CCC-Report 4/98 by S. Solberg, P. Coddeville, C. Dye, J. Honzak and
 N. Schmidbauer.
 Kjeller, Norwegian Institute for Air Research, 1998.

Ozone Measurements 1997.
 EMEP/CCC-Report 2/99 by A.-G. Hjellbrekke.
 Kjeller, Norwegian Institute for Air Research, 1999.

Data Report 1997. Part 1: Annual summaries.
 EMEP/CCC-Report 3/99 by A.-G. Hjellbrekke.
 Kjeller, Norwegian Institute for Air Research, 1999.

Data Report 1997. Part 2: Monthly and seasonal summaries.
 EMEP/CCC-Report 4/99 by A.-G. Hjellbrekke.
 Kjeller, Norwegian Institute for Air Research, 1999.

VOC measurements 1998.

EMEP/CCC-Report 5/99 by S. Solberg.

Kjeller, Norwegian Institute for Air Research, 1999.

Heavy metals and POPs within the ECE region 1997.

EMEP/CCC-Report 7/99 by T. Berg and A.-G. Hjellbrekke.

Kjeller, Norwegian Institute for Air Research, 1999.

Heavy metals and POPs in Europe 1998.

EMEP/CCC-Report 2/2000 by T. Berg, A.-G. Hjellbrekke and R. Larsen.

Kjeller, Norwegian Institute for Air Research, 2000.

Data Report 1998. Part 1: Annual summaries.

EMEP/CCC-Report 3/2000 by A.-G. Hjellbrekke.

Kjeller, Norwegian Institute for Air Research, 2000.

Data Report 1998. Part 2: Monthly and seasonal summaries.

EMEP/CCC-Report 4/2000 by A.-G. Hjellbrekke.

Kjeller, Norwegian Institute for Air Research, 2000.

Ozone Measurements 1998.

EMEP/CCC-Report 5/2000 by A.-G. Hjellbrekke.

Kjeller, Norwegian Institute for Air Research, 2000.

Ozone Measurements 1999.

EMEP/CCC-Report 1/2001 by A.-G. Hjellbrekke and S. Solberg.

Kjeller, Norwegian Institute for Air Research, 2001.

Data Report 1999. Acidifying and eutrophying compounds. Part 1: Annual summaries.

EMEP/CCC-Report 2/2001 by A.-G. Hjellbrekke.

Kjeller, Norwegian Institute for Air Research, 2001.

Data Report 1999. Acidifying and eutrophying compounds. Part 2: Monthly and seasonal summaries.

EMEP/CCC-Report 3/2001 by A.-G. Hjellbrekke.

Kjeller, Norwegian Institute for Air Research, 2001.

VOC measurements 1999.

EMEP/CCC-Report 7/2001 by S. Solberg, C. Dye, M. Roemer and N. Schmidbauer.

Kjeller, Norwegian Institute for Air Research, 2001.

Heavy metals and POPs within the ECE region in 1999.

EMEP/CCC-Report 9/2001 by T. Berg, A.-G. Hjellbrekke and R. Larsen.

Kjeller, Norwegian Institute for Air Research, 2001.

Ozone measurements 2000.

EMEP/CCC-Report 5/2002 by A.-G. Hjellbrekke and S. Solberg.

Kjeller, Norwegian Institute for Air Research, 2002.

Data Report 2000. Acidifying and eutrophying compounds. Part 1: Annual summaries.

EMEP/CCC-Report 6/2002 by A.-G. Hjellbrekke.
Kjeller, Norwegian Institute for Air Research, 2002.

Data Report 2000. Acidifying and eutrophying compounds. Part 2: Monthly and seasonal summaries.

EMEP/CCC-Report 7/2002 by A.-G. Hjellbrekke.
Kjeller, Norwegian Institute for Air Research, 2002.

VOC measurements 2000.

EMEP/CCC-Report 8/2002 by S. Solberg, C. Dye, N. Schmidbauer, M. Wallasch and R. Junek.
Kjeller, Norwegian Institute for Air Research, 2002.

Heavy metals and POPs within the EMEP region 2000.

EMEP/CCC-Report 9/2002 by T. Berg, A.-G. Hjellbrekke and R. Larsen.
Kjeller, Norwegian Institute for Air Research, 2002.

Heavy metals and POP measurements, 2001.

EMEP/CCC-Report 1/2003 by W. Aas and A.-G. Hjellbrekke.
Kjeller, Norwegian Institute for Air Research, 2003.

VOC measurements 2001.

EMEP/CCC-Report 2/2003 by S. Solberg.
Kjeller, Norwegian Institute for Air Research, 2003.

Data Report 2001. Acidifying and eutrophying compounds.

EMEP/CCC-Report 3/2003 by A.-G. Hjellbrekke.
Kjeller, Norwegian Institute for Air Research, 2003.

Ozone measurements 2001.

EMEP/CCC-Report 4/2003 by A.-G. Hjellbrekke and S. Solberg.
Kjeller, Norwegian Institute for Air Research, 2003.

Data Report 2002. Acidifying and eutrophying compounds.

EMEP/CCC-Report 1/2004 by A.-G. Hjellbrekke.
Kjeller, Norwegian Institute for Air Research, 2004.

Ozone measurements 2002.

EMEP/CCC-Report 2/2004 by A.-G. Hjellbrekke and S. Solberg.
Kjeller, Norwegian Institute for Air Research, 2004.

Heavy metals and POP measurements, 2002.

EMEP/CCC-Report 7/2004 by W. Aas and K. Breivik.
Kjeller, Norwegian Institute for Air Research, 2004.

VOC measurements 2002.

EMEP/CCC-Report 8/2004 by S. Solberg.
Kjeller, Norwegian Institute for Air Research, 2004.

Data Report 2003. Acidifying and eutrophying compounds.
EMEP/CCC-Report 3/2005 by A.-G. Hjellbrekke.
Kjeller, Norwegian Institute for Air Research, 2005.

Ozone measurements 2003.
EMEP/CCC-Report 4/2005 by A.-G. Hjellbrekke and S. Solberg.
Kjeller, Norwegian Institute for Air Research, 2005.

Heavy metals and POP measurements, 2003.
EMEP/CCC-Report 9/2005 by W. Aas and K. Breivik.
Kjeller, Norwegian Institute for Air Research, 2005.

VOC measurements 2003.
EMEP/CCC-Report 10/2005 by S. Solberg.
Kjeller, Norwegian Institute for Air Research, 2005.

Data Report 2004. Acidifying and eutrophying compounds.
EMEP/CCC-Report 1/2006 by A.M. Fjæraa.
Kjeller, Norwegian Institute for Air Research, 2006.

Ozone measurements 2004.
EMEP/CCC-Report 2/2006 by A.M. Fjæraa.
Kjeller, Norwegian Institute for Air Research, 2006.

Heavy metals and POP measurements, 2004.
EMEP/CCC-Report 7/2006 by W. Aas and K. Breivik.
Kjeller, Norwegian Institute for Air Research, 2006.

VOC measurements 2004.
EMEP/CCC-Report 8/2006 by S. Solberg.
Kjeller, Norwegian Institute for Air Research, 2006.

Data Report 2005. Acidifying and eutrophying compounds.
EMEP/CCC-Report 1/2007 by A.-G. Hjellbrekke and A.M. Fjæraa.
Kjeller, Norwegian Institute for Air Research, 2007.

Ozone measurements 2005.
EMEP/CCC-Report 2/2007 by A.M. Fjæraa and A.-G. Hjellbrekke.
Kjeller, Norwegian Institute for Air Research, 2007.

Heavy metals and POP measurements, 2005.
EMEP/CCC-Report 6/2007 by W. Aas and K. Breivik.
Kjeller, Norwegian Institute for Air Research, 2007.

VOC measurements 2005.
EMEP/CCC-Report 7/2007 by S. Solberg.
Kjeller, Norwegian Institute for Air Research, 2007.

Data Report 2006. Acidifying and eutrophying compounds.
EMEP/CCC-Report 1/2008 by A.-G. Hjellbrekke and A.M. Fjæraa.
Kjeller, Norwegian Institute for Air Research, 2008.

Ozone measurements 2006.
EMEP/CCC-Report 2/2008 by A.M. Fjæraa and A.-G. Hjellbrekke.
Kjeller, Norwegian Institute for Air Research, 2008.

Heavy metals and POP measurements, 2006.
EMEP/CCC-Report 4/2008 by W. Aas and K. Breivik.
Kjeller, Norwegian Institute for Air Research, 2008.

VOC measurements 2006.
EMEP/CCC-Report 5/2008 by S. Solberg.
Kjeller, Norwegian Institute for Air Research, 2008.

Data Report 2007. Acidifying and eutrophying compounds.
EMEP/CCC-Report 1/2009 by A.-G. Hjellbrekke and A.M. Fjæraa.
Kjeller, Norwegian Institute for Air Research, 2009.

Ozone measurements 2007.
EMEP/CCC-Report 2/2009 by A.M. Fjæraa and A.-G. Hjellbrekke.
Kjeller, Norwegian Institute for Air Research, 2009.

Heavy metals and POP measurements, 2007.
EMEP/CCC-Report 3/2009 by W. Aas and K. Breivik.
Kjeller, Norwegian Institute for Air Research, 2009.

VOC measurements 2007.
EMEP/CCC-Report 4/2009 by S. Solberg.
Kjeller, Norwegian Institute for Air Research, 2009.

Data Report 2008. Acidifying and eutrophying compounds.
EMEP/CCC-Report 1/2010 by A.-G. Hjellbrekke and A.M. Fjæraa.
Kjeller, Norwegian Institute for Air Research, 2010.

Ozone measurements 2008.
EMEP/CCC-Report 2/2010 by A.M. Fjæraa and A.-G. Hjellbrekke.
Kjeller, Norwegian Institute for Air Research, 2010.

Heavy metals and POP measurements, 2008.
EMEP/CCC-Report 3/2010 by W. Aas and K. Breivik.
Kjeller, Norwegian Institute for Air Research, 2010.

VOC measurements 2008.
EMEP/CCC-Report 4/2010 by S. Solberg.
Kjeller, Norwegian Institute for Air Research, 2010.

Data Report 2009. Acidifying and eutrophying compounds.
EMEP/CCC-Report 1/2011 by A.-G. Hjellbrekke and A.M. Fjæraa.
Kjeller, Norwegian Institute for Air Research, 2011.

Ozone measurements 2009.
EMEP/CCC-Report 2/2011 by A.-G. Hjellbrekke, S. Solberg and A.M. Fjæraa.
Kjeller, Norwegian Institute for Air Research, 2011.

Heavy metals and POP measurements, 2009.
EMEP/CCC-Report 3/2011 by W. Aas and K. Breivik.
Kjeller, Norwegian Institute for Air Research, 2011.

VOC measurements 2009.
EMEP/CCC-Report 6/2011 by S. Solberg.
Kjeller, Norwegian Institute for Air Research, 2011.

Data Report 2010. Acidifying and eutrophying compounds.
EMEP/CCC-Report 1/2012 by A.-G. Hjellbrekke and A.M. Fjæraa.
Kjeller, Norwegian Institute for Air Research, 2012.

Ozone measurements 2010.
EMEP/CCC-Report 2/2012 by A.-G. Hjellbrekke, S. Solberg and A.M. Fjæraa.
Kjeller, Norwegian Institute for Air Research, 2012.

Heavy metals and POP measurements, 2010.
EMEP/CCC-Report 3/2012 by W. Aas and K. Breivik.
Kjeller, Norwegian Institute for Air Research, 2012.

VOC measurements 2010.
EMEP/CCC-Report 4/2012 by S. Solberg.
Kjeller, Norwegian Institute for Air Research, 2012.

Data Report 2011. Acidifying and eutrophying compounds.
EMEP/CCC-Report 2/2013 by A.-G. Hjellbrekke and A.M. Fjæraa.
Kjeller, Norwegian Institute for Air Research, 2013.

Ozone measurements 2011.
EMEP/CCC-Report 3/2013 by A.-G. Hjellbrekke, S. Solberg and A.M. Fjæraa.
Kjeller, Norwegian Institute for Air Research, 2013.

Heavy metals and POP measurements, 2011.
EMEP/CCC-Report 4/2013 by W. Aas and K. Breivik.
Kjeller, Norwegian Institute for Air Research, 2013.

VOC measurements 2011.
EMEP/CCC-Report 5/2013 by S. Solberg.
Kjeller, Norwegian Institute for Air Research, 2013.

Ozone measurements 2012.

EMEP/CCC-Report 2/2014 by A.-G. Hjellbrekke and S. Solberg.
Kjeller, Norwegian Institute for Air Research, 2014.

Data Report 2012. Acidifying and eutrophying compounds.

EMEP/CCC-Report 3/2014 by A.-G. Hjellbrekke.
Kjeller, Norwegian Institute for Air Research, 2014.

Heavy metals and POP measurements, 2012.

EMEP/CCC-Report 4/2014 by W. Aas and P.B. Nizzetto.
Kjeller, Norwegian Institute for Air Research, 2014.

VOC measurements 2012.

EMEP/CCC-Report 5/2014 by S. Solberg.
Kjeller, Norwegian Institute for Air Research, 2014.

Annex 6

Description of statistical calculation procedures

The geometric standard deviation is a dimensionless factor. If the data come from a random sample of independent data in a normal distribution, about 95% of the data will lie between

$$\overline{c_a} - 2sd_a \text{ and } \overline{c_a} + 2sd_a$$

and between

$$\frac{\overline{c_g}}{sd_g^2} \text{ and } \overline{c_g} \cdot sd_g^2$$

if the data come from a lognormal distribution.

In the computations of mean values and other statistics, the concentrations below the detection limit have been set equal to one half of the actual limit. An overview of the statistics and definitions is given below.

W.mean $\hat{c}$ is the precipitation weighted arithmetic mean concentration used for precipitation components:

$$\hat{c} = \frac{1}{\sum_i p_i} \cdot \sum_i c_i \cdot p_i$$

where p_i is precipitation amount day i with the measured concentration c_i of a specific component.

Arit mean $\overline{c_a}$ is the arithmetic mean value used for air components only, and N is number of days with data:

$$\overline{c_a} = \frac{1}{N} \sum_i c_i$$

Arit sd sd_a is the arithmetic standard deviation from the arithmetic mean value. It is computed for air components only:

$$sd_a = \left(\frac{\sum_i (c_i - \overline{c_a})^2}{N - 1} \right)^{\frac{1}{2}}$$

Geom mean $\overline{c_g}$ is the geometric mean value used for air components only, and it is computed from the arithmetic mean of $\ln c$:

$$\overline{\ln c} = \frac{1}{N} \cdot \sum_i \ln c_i$$

$$\overline{c_g} = \exp(\overline{\ln c})$$

Geom sd sd_g is the geometric standard deviation from the geometric mean value. It is computed for air components only, and it is based on the standard deviation of $\ln c$:

$$sdlnc = \left(\frac{\sum_i (\ln c_i - \overline{\ln c})^2}{N - 1} \right)^{\frac{1}{2}}$$

$$sd_g = \exp(sdlnc)$$

Min is the minimum value reported for a specific component, and it is printed both for precipitation and air components.

5%, 50%, 95% is the 5, 50 and 95 percentile, computed for air data only using the method of nearest rank:

$$n = \frac{P}{100} \cdot N + \frac{1}{2}$$

is the P-th percentile $0 \leq P \leq 100$ of N ordered values, rounding n to the nearest integer and then taking the value corresponding to that rank.

Max is the maximum value reported for a specific component, and it is given for precipitation and air components.

Dep is the wet deposition of a specific precipitation component. The deposition is the product of the total precipitation amount measured and the weighted arithmetic mean of a component measured at a site.

% anal for precipitation components this is the percent of the total precipitation reported analysed for a specific component, and for air components based on the number of days with data.

Num bel is the number of data below the detection limit (not used for precipitation amount).

Num day is the number of days with measurements for a specific component.

Annex 7

EMEP Data Quality Objectives (DQO)

- 10% accuracy or better for oxidized sulphur and oxidized nitrogen in single analysis in the laboratory,
- 15% accuracy or better for other components in the laboratory,
- 0.1 units for pH,
- 15–25% uncertainty for the combined sampling and chemical analysis (components to be specified later),
- 90% data completeness of the daily values.
- The targets, with respect to precision and detection limit follow the DQO of the WMO GAW precipitation programme (WMO, 2004):

Measurement parameter	Detection limits	Precision	
		Overall	Laboratory
pH (pH units)		± 0.1 pH unit at pH > 5 ± 0.03 pH unit at pH < 5	± 0.04 pH unit at pH > 5 ± 0.02 pH unit at pH < 5
SO ₄ ²⁻ (mg S L ⁻¹)	0.02	0.02	0.01
NO ₃ ⁻ (mg N L ⁻¹)	0.02	0.01	0.01
Cl ⁻ (mg L ⁻¹)	0.04	0.02	0.02
NH ₄ ⁺ (mg N L ⁻¹)	0.02	0.02	0.01
Ca ⁺⁺ (mg L ⁻¹)	0.02	0.02	0.01
Mg ⁺⁺ (mg L ⁻¹)	0.01	0.01	0.01
Na ⁺ (mg L ⁻¹)	0.02	0.01	0.01
K ⁺ (mg L ⁻¹)	0.02	0.01	0.01
Standard Gauge Precipitation Depth (mm)	0.02	0.2 daily 0.3 weekly	n/a n/a
Sample Depth (mm)	0.2	0.1 daily 0.3 weekly	n/a n/a

n/a: Not applicable

The targets for the wet analysis of components extracted from air filters are the same as for precipitation. For SO₂ the limit above for sulphate is valid for the medium volume method with impregnated filter. For NO₂ determined as NO₂⁻ in solution the accuracy for the lowest concentrations is 0.01 mg N/l.