

Data Report 2010

Acidifying and eutrophying compounds and particulate matter

Anne-Gunn Hjellbrekke and Ann Mari Fjæraa

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
0.27	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	1.05	0.73	0.39	0.40	0.13	0.09	0.08	0.17	0.09	0.44	0.90
0.88	1.11	1.05	0.28	0.15	0.13	0.09	0.12	0.21	0.19	0.27	0.51
0.00	0.43	0.49	0.35	0.38	0.29	1.18	0.47	0.80	0.64	0.75	0.84
0.78	1.12	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	0.21	0.66	0.55	0.65	0.74	0.84	1.14	1.42
0.74	2.51	0.54	0.33	0.42	0.34	0.39	0.39	0.38	0.56	1.21	0.53
0.86	2.07	0.74	0.37	0.32	0.27	0.82	0.55	0.44	0.65	0.99	0.37
0.41	0.99	0.43	0.38	0.25	0.34	0.76	0.66	0.48	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	0.48	0.52	0.43	0.51	0.61	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	0.93	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

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

Data Report 2010
**Acidifying and eutrophying compounds and
particulate matter**

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Contents

	Page
1. Introduction.....	5
2. The measurement network.....	5
3. Site codes.....	8
4. The measurement programme during 2010	9
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	19
10. References	19
11. Acknowledgements	20
12. List of participating institutions	21
Annex 1 Maps over Europe	23
Annex 2 Annual statistics on precipitation data.....	31
Annex 3 Annual statistics on gases and aerosol data	55
Annex 4 Overview of sampling and analytical methods 2010	77
Annex 5 List of data reports.....	121
Annex 6 Description of statistical calculation procedures.....	133
Annex 7 EMEP Data Quality Objectives (DQO)	137

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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 2010 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 86 stations and air data from 116 stations are presented in this report. The total number of measurement sites in this report is 134.

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 2010.

Country	Station codes	Station name	Location		Height above sea (m)
			Lat.	Long.	
Armenia	AM0001R	Amberd	40°23'N	44°15'E	2080
Austria	AT0002R	Illmitz	47°46'N	16°46'E	117
	AT0005R	Vorhegg	46°40'N	12°58'E	1020
	AT0048R	Zoebelboden	47°50'N	14°26'E	899
Belarus	BY0004R	Vysokoe	52°20'N	23°26'E	163
Belgium	BE0001R	Offagne	49°52'N	5°12'E	430
	BE0032R	Eupen	51°27'N	6°00'E	295
	BE0035R	Vezin	50°30'N	4°59'E	160
Croatia	HR0002R	Puntijarka	45°54'N	15°58'E	988
	HR0004R	Zavizan	44°49'N	14°59'E	1594
Cyprus	CY0002R	Ayia Marina	35°02'N	33°03'E	532
Czech Rep.	CZ0001R	Svratouch	49°44'N	16°03'E	737
	CZ0003R	Kosetice	49°35'N	15°05'E	534
Denmark	DK0003R	Tange	56°21'N	9°36'E	13
	DK0005R	Keldsnor	54°44'N	10°44'E	10
	DK0008R	Anholt	56°43'N	11°31'E	40
	DK0012R	Risoe	55°41'N	12°05'E	3
	DK0022R	Sepstrup Sande	55°05'N	9°36'E	60
	DK0031R	Ulborg	56°17'N	8°26'E	10
Estonia	EE0009R	Lahemaa	59°30'N	25°54'E	32
	EE0011R	Vilsandi	58°23'N	21°49'E	6
Finland	FI0004R	Ähtari	62°32'N	24°13'E	162
	FI0009R	Utö	59°46'N	21°22'E	7
	FI0017R	Virolahti II	60°31'N	27°41'E	4
	FI0022R	Oulanka	66°19'N	29°24'E	310
	FI0036R	Pallas (Matorova)	68°00'N	24°14'E	340
	FI0037R	Ähtari II	62°35'N	24°11'E	180
	FI0050R	Hyytiälä	61°51'N	24°17'E	181
France	FR0008R	Donon	48°30'N	7°08'E	775
	FR0009R	Revin	49°54'N	4°38'E	390
	FR0010R	Morvan	47°16'N	4°05'E	620
	FR0013R	Peyrusse Vieille	43°37'N	0°11'E	200
	FR0014R	Montandon	47°18'N	6°50'E	836
	FR0015R	La Tardière	46°39'N	0°45'W	133
	FR0016R	Le Casset	45°00'N	6°28'E	1750
	FR0017R	Montfranc	45°48'N	2°04'E	810
	FR0018R	La Coulonche	48°38'N	0°27'W	309
	FR0030R	Puy de Dôme	45°46'N	2°57'E	1465
Georgia	GE0001R	Abastumani	41°45'N	42°49'E	1650
Germany	DE0001R	Westerland	54°55'N	8°18'E	12
	DE0002R	Langenbrügge/Waldhof	52°48'N	10°45'E	74
	DE0003R	Schauinsland	47°55'N	7°54'E	1205
	DE0004R	Deuselbach	49°46'N	7°03'E	480
	DE0005R	Brotjacklriegel	48°49'N	13°13'E	1016
	DE0007R	Neuglobsow	53°10'N	13°02'E	62
	DE0008R	Schmücke	50°39'N	10°46'E	937
	DE0009R	Zingst	54°26'N	12°44'E	1
	DE0044R	Melpitz	51°31'N	12°55'E	86
Greece	GR0001R	Aliartos	38°22'N	23°05'E	110
	GR0002R	Finokalia	35°19'N	25°40'E	250
Hungary	HU0002R	K-pusztá	46°58'N	19°35'E	125
Iceland	IS0002R	Irafoss	64°05'N	21°01'W	66
Ireland	IE0001R	Valentia Observatory	51°56'N	10°14'W	11
	IE0005R	Oak Park	52°52'N	6°55'W	59
	IE0006R	Malin Head	55°22'N	7°20'W	20
	IE0007R	Glenveagh	55°03'N	7°56'W	44
	IE0008R	Carnsore Point	52°11'N	6°22'W	9
	IE0009R	Johnstown Castle	52°18'N	6°30'W	62
Italy	IT0001R	Montelibretti	42°06'N	12°38'E	48
	IT0004R	Ispra	45°48'N	8°38'E	209
Latvia	LV0010R	Rucava	56°09'N	21°10'E	18
	LV0016R	Zoseni	57°08'N	25°54'E	188
Lithuania	LT0015R	Preila	55°21'N	21°04'E	5
Macedonia	MK0007R	Lazaropole	41°19'N	20°25'E	1332
Moldova	MD0013R	Leova II	46°29'N	28°17'E	166

Table 1, cont.

Country	Station codes	Station name	Location		Height above sea (m)
			Lat.	Long.	
Montenegro	ME0008R	Zabljak	43°09'N	19°08'E	1450
Netherlands	NL0007R	Eibergen	52°05'N	6°34'E	20
	NL0008R	Bilthoven	52°07'N	5°12'E	5
	NL0009R	Kollumerwaard	53°20'N	6°16'E	1
	NL0010R	Vredepeel	51°32'N	5°51'E	28
	NL0011R	Cabauw	51°58'N	4°55'E	60
	NL0091R	De Zilk	52°18'N	4°30'E	4
Norway	NO0001R	Birkenes	58°23'N	8°15'E	190
	NO0002R	Birkenes II	58°23'N	8°15'E	219
	NO0015R	Tustervatn	65°50'N	13°55'E	439
	NO0039R	Kårvatn	62°47'N	8°53'E	210
	NO0042G	Spitsbergen, Zeppelinfjell	78°54'N	11°53'E	474
	NO0055R	Karasjok	69°28'N	25°13'E	333
Poland	NO0056R	Hurdal	60°22'N	11°04'E	300
	PL0002R	Jarczew	51°49'N	21°59'E	180
	PL0003R	Sniezka	50°44'N	15°44'E	1603
	PL0004R	Leba	54°45'N	17°32'E	2
Portugal	PL0005R	Diabla Gora	54°09'N	22°04'E	157
	PT0001R	Braganca	41°49'N	6°46'W	690
	PT0003R	Viana do Castelo	41°42'N	8°48'W	16
Romania	PT0004R	Monte Velho	38°05'N	8°48'W	43
	RO0008R	Poiana Stampei	47°19'N	25°08'E	908
Russian Federation	RU0001R	Janiskoski	68°56'N	28°51'E	118
	RU0013R	Pinega	64°42'N	43°24'E	28
	RU0018R	Danki	54°54'N	37°48'E	150
	RU0020R	Lesnoy	56°31'N	32°56'E	340
Serbia	RS0005R	Kamenicki vis	43°24'N	21°57'E	813
Slovakia	SK0002R	Chopok	48°56'N	19°35'E	2008
	SK0004R	Stará Lesná	49°09'N	20°17'E	808
	SK0006R	Starina	49°03'N	22°16'E	345
	SK0007R	Topolniky	47°57'N	17°51'E	113
Slovenia	SI0008R	Iskrba	45°34'N	14°52'E	520
	SI0032R	Krvavec	46°18'N	14°32'E	1740
Spain	ES0001R	San Pablo de los Montes	39°33'N	4°20'W	917
	ES0006R	Mahon	39°52'N	4°19'E	78
	ES0007R	Viznar	37°14'N	3°32'W	1265
	ES0008R	Niembro	43°26'N	4°51'W	134
	ES0009R	Campisabalos	41°17'N	3°08'W	1360
	ES0010R	Cabo de Creus	42°19'N	3°19'E	23
	ES0011R	Barcarrola	38°28'N	6°55'W	393
	ES0012R	Zarra	39°05'N	1°06'W	885
	ES0013R	Penausende	41°17'N	5°52'W	985
	ES0014R	Els Torms	41°24'N	0°43'E	470
	ES0016R	O Saviñao	43°14'N	7°42'W	506
	ES0017R	Doñana	37°01'N	6°20'W	5
	ES1778R	Montseny	41°46'N	2°21'E	700
Sweden	SE0005R	Bredkålen	63°51'N	15°20'E	404
	SE0011R	Vavihill	56°01'N	13°09'E	175
	SE0012R	Aspvreten	58°48'N	17°23'E	20
	SE0014R	Råö	57°23'N	11°55'E	5
Switzerland	CH0001G	Jungfrauoch	46°33'N	7°59'E	3578
	CH0002R	Payerne	46°48'N	6°56'E	489
	CH0003R	Tänikon	47°28'N	8°54'E	539
	CH0004R	Chaumont	47°03'N	6°58'E	1137
	CH0005R	Rigi	47°04'N	8°28'E	1031
United Kingdom	GB0002R	Eskdalemuir	55°18'N	3°12'W	243
	GB0006R	Lough Navar	54°26'N	7°52'W	126
	GB0013R	Yarner Wood	50°35'N	3°42'W	119
	GB0014R	High Muffles	54°20'N	0°48'W	267
	GB0015R	Strath Vaich Dam	57°44'N	4°46'W	270
	GB0031R	Aston Hill	52°30'N	3°02'W	370
	GB0033R	Bush	55°51'N	3°12'W	180
	GB0036R	Harwell	51°34'N	1°19'W	137
	GB0037R	Ladybower Res.	53°24'N	1°45'W	420
	GB0038R	Lullington Heath	50°47'N	0°10'E	120

Table 1, cont.

Country	Station codes	Station name	Location		Height above sea (m)
			Lat.	Long.	
United Kingdom, cont.	GB0043R	Narberth	51°14'N	4°42'W	160
	GB0045R	Wicken Fen	52°18'N	0°17'W	5
	GB0048R	Auchencorth Moss	55°47'N	3°14'W	260
	GB0050R	St. Osyth	51°46'N	1°05'E	8
	GB0051R	Market Harborough	52°33'N	0°46'W	145
	GB0053R	Charlton Mackrell	51°03'N	2°41'W	54
	GB0054R	Glen Saugh	56°54'N	2°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.

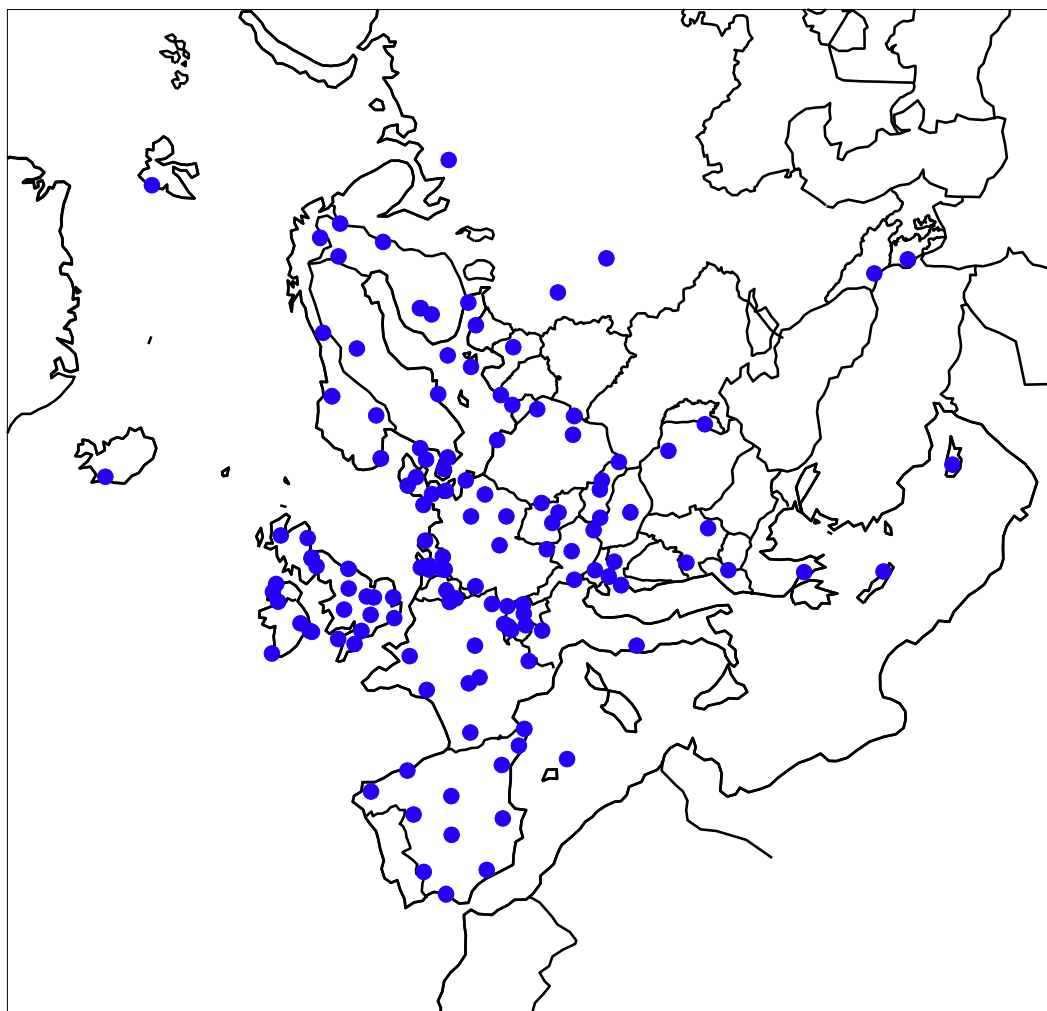


Figure 1: Location of the EMEP monitoring stations in operation in 2010. Sites with ozone/VOC measurements only are not included.

4. The measurement programme during 2010

EMEP's measurement programme during 2010 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 2010.

	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 2010 have been reported separately by Solberg (2012), while ozone data from 2010 have been reported by Hjellbrekke and Fjæraa (2012). Heavy metals and POPs were reported by Aas and Breivik (2012). More details on particulate matter measurements are presented in the PM status report (EMEP, 2012).

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, 1995 – revised 2002). The latest version is also available on the web at <http://www.nilu.no/projects/ccc/manual/>. 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 28th laboratory intercomparison is representative for the 2010 data (Uggerud and Hjellbrekke, 2011).

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.

Excess sulphate data as calculated with the old routine are available from the CCC as a continuation of the data series upon request.

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^{--} , PM_{10} and $\text{PM}_{2.5}$ in air and pH, NH_4^+ , NO_3^- , Ca and excess SO_4^{--} 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 2010.

Code	mm	mm off	pH	SO ₄	XSO ₄	NH ₄	NO ₃	Na	Mg	Cl	Ca	K	cond
AM0001R	-	528.70	6.28	0.79	0.76	0.53	0.35	0.34	0.15	0.64	2.24	0.32	27
BY0004R	765.7	-	6.53	0.75	0.69	0.75	0.43	0.57	0.23	0.66	1.14	0.62	39
CH0002R	670.6	-	5.37	0.17	0.16	0.41	0.27	0.08	0.02	0.14	0.20	0.04	8
CH0004R	946	-	5.22	0.15	0.15	0.24	0.22	0.07	0.02	0.12	0.16	0.03	7
CH0005R	1419.3	-	5.18	0.20	0.20	0.48	0.33	0.05	0.01	0.07	0.16	0.03	9
CZ0001R	886.6	-	4.94	0.41	0.40	0.49	0.34	0.07	0.02	0.15	0.26	0.05	13
CZ0003R	878.3	-	4.91	0.36	0.36	0.45	0.33	0.08	0.04	0.26	0.36	0.05	13
DE0002R	714.7	-	5.00	0.29	0.26	0.51	0.37	0.32	0.04	0.56	0.11	0.03	13
DE0003R	1689.2	-	5.03	0.19	0.18	0.27	0.26	0.10	0.01	0.20	0.09	0.01	8
DE0004R	687.9	-	5.11	0.23	0.22	0.39	0.31	0.15	0.03	0.35	0.16	0.02	9
DE0005R	1191.6	-	4.95	0.21	0.21	0.46	0.35	0.04	0.01	0.19	0.09	0.03	10
DE0007R	715.6	-	4.93	0.35	0.33	0.58	0.43	0.38	0.05	0.41	0.17	0.04	15
DE0008R	1171.9	-	4.96	0.26	0.25	0.45	0.37	0.13	0.01	0.25	0.06	0.02	12
DE0044R	691.8	-	5.04	0.41	0.40	0.74	0.45	0.11	0.02	0.29	0.14	0.05	13
DK0005R	532.7	-	-	0.38	0.29	0.55	0.43	1.26	0.15	2.23	0.20	0.15	-
DK0008R	617.5	-	-	0.37	0.24	0.44	0.43	1.54	0.15	2.73	0.13	0.06	-
DK0022R	719.6	-	-	0.29	0.22	0.51	0.32	0.91	0.12	1.61	0.10	0.07	-
DK0031R	649.6	-	-	0.33	0.15	0.30	0.29	2.06	0.23	3.62	0.14	0.09	-
EE0009R	673.6	-	4.39	0.33	0.28	0.19	0.24	0.64	0.12	0.40	0.60	0.09	10
EE0011R	760.7	-	4.45	0.36	0.30	0.32	0.29	0.79	0.14	0.82	0.49	0.27	14
ES0001R	1245.8	-	5.70	0.16	0.12	0.13	0.12	0.41	0.06	0.66	0.39	0.07	7
ES0006R	715.2	-	5.46	0.86	0.18	0.12	0.33	8.00	0.98	12.21	1.19	0.34	56
ES0007R	928.4	-	6.26	0.27	0.23	0.46	0.18	0.40	0.24	0.67	0.91	0.12	15
ES0008R	518.4	-	3.09	0.89	0.46	0.51	0.78	5.17	0.66	8.39	0.79	0.22	55
ES0009R	665.8	-	5.74	0.28	0.24	0.29	0.41	0.48	0.12	0.75	1.02	0.10	14
ES0011R	747	-	5.87	0.21	0.15	0.15	0.16	0.82	0.14	1.26	0.76	0.22	12
ES0012R	431	-	6.06	0.29	0.26	0.31	0.37	0.33	0.12	0.60	1.29	0.09	14
ES0013R	357.8	-	5.83	0.25	0.21	0.49	0.32	0.46	0.10	0.68	0.56	0.16	12
ES0014R	437.4	-	6.16	0.34	0.32	0.43	0.50	0.25	0.15	0.32	1.47	0.27	17
ES0016R	1177	-	5.51	0.36	0.21	0.20	0.10	1.80	0.25	2.83	0.36	0.12	18
ES0017R	1100.4	-	5.41	0.36	0.14	0.10	0.09	2.51	0.41	4.26	0.30	0.11	23
FI0004R	568	-	4.87	0.23	0.22	0.16	0.23	0.08	0.03	0.15	0.11	0.11	10
FI0017R	511.8	-	4.68	0.46	0.44	0.30	0.37	0.20	0.05	0.36	0.24	0.14	16
FI0022R	477.5	-	4.79	0.24	0.23	0.11	0.17	0.09	0.02	0.16	0.10	0.05	10
FI0036R	474.4	-	4.83	0.19	0.18	0.08	0.14	0.10	0.02	0.19	0.06	0.06	9
FR0008R	1541.8	-	4.93	0.21	0.21	0.31	0.29	0.12	0.04	0.22	0.17	0.05	12
FR0009R	1150	-	5.19	0.26	0.24	0.46	0.32	0.33	0.07	0.58	0.26	0.07	14
FR0010R	918	-	5.21	0.23	0.21	0.34	0.28	0.28	0.05	0.48	0.22	0.13	12
FR0013R	789.6	-	5.10	0.25	0.20	0.33	0.25	0.60	0.10	1.01	0.22	0.06	14
FR0014R	1099.7	-	5.13	0.22	0.21	0.35	0.34	0.09	0.04	0.17	0.23	0.06	11
FR0015R	677	-	5.60	0.34	0.18	0.42	0.21	1.80	0.26	3.41	0.35	0.12	22
FR0016R	695.8	-	5.34	0.15	0.14	0.20	0.15	0.09	0.05	0.16	0.40	0.09	10
FR0017R	1197.5	-	5.23	0.17	0.15	0.26	0.17	0.27	0.06	0.46	0.17	0.04	10
FR0018R	777.5	-	5.46	0.21	0.16	0.35	0.20	0.59	0.10	1.07	0.20	0.06	12
GB0002R	726.2	-	5.25	0.25	0.14	0.32	0.22	1.25	0.13	2.15	0.14	0.08	13
GB0006R	884.5	-	5.46	0.30	0.10	0.16	0.09	2.42	0.25	4.54	0.32	0.14	19
GB0013R	838.8	-	5.11	0.31	0.18	0.24	0.21	1.61	0.17	2.67	0.18	0.11	16
GB0014R	766.7	-	4.91	0.55	0.35	0.52	0.43	2.30	0.27	3.96	0.33	0.12	26
GB0015R	774.2	-	5.16	0.30	0.09	0.06	0.09	2.53	0.28	4.36	0.23	0.11	49
GB0048R	731.7	-	4.98	0.27	0.20	0.29	0.24	0.86	0.10	1.53	0.10	0.06	5
HR0002R	-	1613.20	5.23	0.40	0.38	0.33	0.27	0.30	0.04	0.42	0.46	0.85	11
HR0004R	-	2352.40	5.55	0.34	0.30	0.25	0.28	0.38	0.06	0.61	0.81	0.72	11
HU0002R	1010.4	989.20	5.63	0.51	0.46	0.35	0.28	1.06	0.08	0.69	0.43	0.10	14
IE0001R	1199.4	918.40	5.25	0.49	0.09	0.09	0.08	4.76	0.62	8.28	0.23	0.27	35
IE0005R	505.9	766.00	5.71	0.16	0.08	0.16	0.07	1.00	0.13	1.81	0.10	0.07	10
IE0007R	469.5	-	5.32	0.27	0.11	0.14	0.10	1.90	0.23	3.47	0.08	0.08	17
IE0009R	621.4	1032.80	5.22	0.36	0.12	0.13	0.10	2.83	0.33	5.03	0.12	0.11	24
IS0002R	1223.5	-	5.36	0.30	0.13	-	0.05	2.14	0.25	3.99	0.17	0.20	18
IT0001R	717.3	-	5.92	0.12	0.07	0.07	0.15	0.70	0.16	0.64	1.77	0.17	27
IT0004R	1745.6	-	5.43	0.39	0.36	0.72	0.50	0.26	0.05	0.35	0.35	0.04	13
LT0015R	660.6	-	5.01	0.58	0.40	0.39	0.56	2.39	-	3.12	0.37	0.15	26
LV0010R	955.9	-	4.99	0.31	0.27	0.31	0.39	0.56	0.16	0.85	0.22	0.06	16
MD0013R	691.4	-	5.46	0.70	0.63	0.57	0.58	0.39	0.17	2.28	1.07	0.28	17
NL0009R	595.6	-	5.54	0.46	0.24	0.61	0.34	2.52	0.31	4.57	0.23	0.13	26

Table 3, cont.

Code	mm	mm off	pH	SO ₄	XSO ₄	NH ₄	NO ₃	Na	Mg	Cl	Ca	K	cond
NO0001R	1112.6	-	4.69	0.44	0.38	0.36	0.46	0.75	0.08	1.35	0.10	0.06	20
NO0015R	912.9	-	5.35	0.17	0.11	0.15	0.08	0.77	0.08	1.21	0.06	0.09	10
NO0039R	1464.6	-	5.36	0.13	0.07	0.12	0.05	0.61	0.06	1.07	0.03	0.06	8
NO0055R	39.7	-	5.35	0.17	0.09	0.38	0.23	1.02	0.05	1.93	0.17	1.10	12
NO0056R	809	-	4.88	0.29	0.28	0.36	0.35	0.24	0.02	0.41	0.09	0.21	13
PL0002R	615.5	-	4.98	0.47	0.46	0.52	0.33	0.10	0.03	0.30	0.22	0.12	13
PL0003R	1311.1	-	4.50	1.11	1.05	0.53	0.75	0.69	0.15	0.80	0.48	0.32	29
PL0004R	826.4	-	4.87	0.33	0.29	0.34	0.33	0.50	0.06	0.94	0.16	0.08	15
PL0005R	621.1	739.60	5.03	0.37	0.36	0.46	0.34	0.08	0.03	0.24	0.18	0.06	10
RS0005R	750.7	-	5.29	0.85	0.82	0.52	0.42	0.46	0.13	0.70	1.28	0.28	29
RU0001R	353.8	-	4.94	0.30	0.29	0.08	0.04	0.22	0.04	0.34	0.11	0.12	10
RU0013R	438.5	-	5.56	0.48	0.43	0.71	0.22	0.56	0.20	0.82	0.51	0.55	22
RU0018R	530.8	-	5.10	0.38	0.37	0.42	0.26	0.16	0.05	0.41	0.29	0.18	13
RU0020R	746.8	-	5.43	0.32	0.30	0.47	0.25	0.19	0.05	0.31	0.25	0.21	13
SE0011R	483.3	-	4.91	0.39	0.34	0.61	0.51	0.58	0.07	1.13	0.20	0.08	18
SE0012R	493.7	-	4.75	0.29	0.27	0.35	0.34	0.19	0.03	0.38	0.07	0.04	14
SE0014R	526.3	-	4.99	0.48	0.31	0.63	0.45	2.13	0.26	3.79	0.34	0.13	27
SI0008R	1571.5	-	4.93	0.27	0.26	0.06	0.24	0.20	0.04	0.32	0.21	0.04	10
SK0002R	1377.4	-	5.00	0.42	0.42	0.36	0.23	0.12	0.04	0.13	0.15	0.08	10
SK0004R	1037.3	-	4.93	0.39	0.38	0.29	0.23	0.11	0.04	0.13	0.19	0.10	11
SK0006R	939.3	-	4.89	0.41	0.41	0.28	0.26	0.12	0.04	0.14	0.19	0.13	11
SK0007R	926.3	-	4.95	0.45	0.44	0.44	0.37	0.10	0.05	0.15	0.23	0.09	14

Table 4: Annual averages of main components in air 2010.

Code	SO ₂	NO ₂	SO ₄	XSO ₄	SNO ₃	NO ₃	HNO ₃	SNH ₄	NH ₄	NH ₃
AM0001R	0.26	3.27	0.76	0.75	-	0.45	0.07	-	0.42	0.95
AT0002R	0.98	3.30	-	-	-	-	-	-	-	-
AT0005R	0.23	1.34	-	-	-	-	-	-	-	-
AT0048R	0.33	1.81	-	-	-	-	-	-	-	-
BE0001R	-	3.23	-	-	-	-	-	-	-	-
BE0032R	-	4.73	-	-	-	-	-	-	-	-
BE0035R	-	4.98	-	-	-	-	-	-	-	-
CH0001G	0.05	0.09	0.10	-	-	-	-	-	-	-
CH0002R	0.34	3.60	0.61	0.59	1.15	0.85	0.28	3.83	1.39	2.30
CH0003R	-	4.31	-	-	-	-	-	-	-	-
CH0004R	-	2.08	-	-	-	-	-	-	-	-
CH0005R	0.27	1.46	0.46	0.44	0.86	0.60	0.20	1.86	1.04	0.86
CY0002R	1.05	0.92	1.21	1.19	-	0.04	-	-	-	-
CZ0001R	1.30	2.08	0.82	-	0.88	-	-	2.07	-	-
CZ0003R	0.97	2.40	0.87	-	0.88	-	-	2.21	-	-
DE0002R	0.84	2.79	-	-	-	-	-	-	-	-
DE0003R	0.40	1.08	-	-	-	-	-	-	-	-
DE0007R	0.92	1.87	-	-	-	-	-	-	-	-
DE0008R	0.75	1.91	-	-	-	-	-	-	-	-
DE0044R	-	-	0.90	0.90	-	0.79	-	-	1.60	-
DK0003R	0.24	-	0.61	0.55	0.64	-	-	2.19	1.05	1.14
DK0005R	0.68	2.43	0.89	0.81	1.05	-	-	2.17	1.39	0.81
DK0008R	0.33	2.53	0.65	0.55	0.63	-	-	1.03	0.81	0.21
DK0012R	0.28	3.54	0.57	0.55	0.60	-	-	-	1.10	0.45
DK0031R	0.28	-	0.65	0.56	0.69	-	-	1.91	1.15	0.65
EE0009R	1.55	2.94	-	-	-	-	-	-	-	-
EE0011R	1.34	2.73	-	-	-	-	-	-	-	-
ES0001R	0.32	0.96	0.39	-	0.43	0.27	-	1.60	-	-
ES0006R	0.20	1.17	0.91	-	0.59	0.43	-	1.11	-	-
ES0007R	0.32	2.06	0.46	-	0.35	0.34	-	1.36	-	-
ES0008R	0.43	1.63	0.65	-	0.53	0.28	-	1.76	-	0.91
ES0009R	0.16	0.46	0.36	0.33	0.30	0.02	-	1.17	0.36	0.86
ES0010R	0.32	0.75	0.66	-	0.35	0.40	-	1.50	-	-
ES0011R	0.18	0.90	0.46	-	0.33	0.23	-	1.35	-	-
ES0012R	0.16	1.30	0.56	-	0.42	0.35	-	1.35	-	-
ES0013R	0.26	1.15	0.33	-	0.35	0.21	-	1.08	-	-
ES0014R	0.30	1.12	0.58	-	0.44	0.40	-	3.79	-	-
ES0016R	0.15	0.98	0.44	-	0.24	0.18	-	1.40	-	-
ES0017R	0.51	1.95	0.79	-	0.54	0.41	-	1.69	-	-
ES1778R	-	-	0.44	0.43	-	0.15	-	-	0.44	-
FI0009R	0.46	-	0.49	0.46	0.39	-	-	0.42	0.27	-
FI0017R	0.72	-	0.54	0.53	0.27	-	-	0.48	0.27	-
FI0022R	0.35	-	0.37	0.36	0.07	-	-	0.17	0.11	-
FI0036R	0.31	-	0.28	0.27	0.05	-	-	0.11	0.07	-
FI0037R	0.30	-	0.41	0.40	0.15	-	-	0.33	0.17	-
FR0009R	0.38	-	0.69	-	0.90	-	-	1.66	-	-
FR0013R	0.24	-	0.67	-	0.70	-	-	1.68	-	-
FR0015R	0.22	-	0.75	-	1.12	-	-	5.32	-	-
FR0030R	0.14	-	-	-	-	-	-	-	-	-
GB0002R	-	0.90	-	-	-	-	-	-	-	-
GB0006R	-	-	-	-	0.16	0.22	0.05	0.53	0.21	0.35
GB0013R	-	1.50	-	-	0.43	0.29	0.12	0.86	0.42	0.43
GB0014R	-	1.84	-	-	0.38	0.26	0.12	1.17	0.40	0.77
GB0031R	-	1.85	-	-	-	-	-	-	-	-
GB0033R	-	2.64	-	-	-	-	-	-	-	-

Table 4, cont.

Code	SO ₂	NO ₂	SO ₄	XSO ₄	SNO ₃	NO ₃	HNO ₃	SNH ₄	NH ₄	NH ₃
GB0036R	0.95	3.63	1.59	-	-	2.02	-	-	-	-
GB0037R	1.62	3.00	-	-	-	-	-	-	-	-
GB0038R	0.69	3.12	-	-	-	-	-	-	-	-
GB0043R	1.31	1.45	-	-	-	-	-	-	-	-
GB0045R	0.98	3.37	-	-	-	-	-	-	-	-
GB0048R	0.21	-	0.32	0.03	-	0.27	0.02	-	0.61	1.23
GB0050R	-	4.28	-	-	-	-	-	-	-	-
GB0051R	-	3.57	-	-	-	-	-	-	-	-
GB0053R	-	3.70	-	-	-	-	-	-	-	-
GB0054R	-	-	-	-	0.16	0.12	0.04	0.39	0.18	0.21
GE0001R	0.24	-	0.83	0.79	0.29	0.16	-	0.02	0.02	0.02
GR0001R	1.63	3.99	-	-	-	-	-	-	-	-
HU0002R	1.03	2.27	1.00	-	0.78	0.44	0.34	2.23	1.11	1.13
IE0001R	0.30	1.52	0.35	0.20	0.41	-	-	0.95	-	-
IE0005R	-	-	0.41	0.35	-	0.31	-	-	0.59	-
IE0006R	-	-	0.41	0.26	-	0.16	-	-	0.31	-
IE0008R	-	-	0.56	0.34	-	0.37	-	-	0.61	-
IS0002R	0.11	-	0.19	0.10	-	-	-	-	-	-
IT0001R	0.34	4.46	0.69	-	-	0.31	0.16	-	1.16	1.47
IT0004R	0.23	6.52	0.74	-	-	0.71	-	-	1.35	-
LT0015R	0.42	1.02	1.08	-	0.70	-	-	1.44	-	-
LV0010R	-	-	0.26	0.25	-	0.03	-	-	0.72	-
MD0013R	0.09	0.40	0.17	0.16	0.18	0.15	0.09	0.30	0.22	0.19
ME0008R	1.52	0.89	-	-	-	-	-	-	-	-
MK0007R	3.48	0.73	-	-	-	-	-	-	-	-
NL0007R	0.43	5.27	-	-	-	-	-	-	-	8.02
NL0008R	0.68	-	0.87	0.86	-	1.19	-	-	1.48	-
NL0009R	0.33	3.14	0.80	0.79	-	-	-	-	-	-
NL0010R	0.56	5.49	0.94	0.94	-	1.38	-	-	1.81	-
NL0011R	0.46	7.27	-	-	-	-	-	-	-	-
NL0091R	1.11	5.51	0.88	0.87	-	1.04	-	-	1.25	1.36
NO0001R	-	0.45	-	0.06	-	-	0.17	-	0.17	-
NO0002R	0.12	0.31	0.29	0.27	0.23	0.15	0.08	-	0.20	-
NO0015R	0.08	0.12	0.15	0.15	0.10	0.07	0.02	-	0.11	-
NO0039R	0.03	0.25	0.14	0.13	0.08	0.05	0.02	-	0.10	-
NO0042G	0.07	-	0.13	0.12	0.06	0.04	0.02	-	0.05	-
NO0055R	0.58	0.39	0.30	0.29	0.07	0.02	0.05	-	0.17	-
NO0056R	0.07	0.66	0.21	0.20	0.16	0.11	0.05	-	0.18	-
PL0002R	1.63	3.01	1.49	-	0.79	0.67	-	3.00	1.33	-
PL0003R	1.02	1.00	0.86	-	0.51	0.40	-	0.75	0.56	-
PL0004R	1.18	1.66	1.24	-	0.63	0.51	-	1.34	0.86	-
PL0005R	0.62	1.10	0.66	-	0.85	0.40	0.45	2.02	1.23	0.79
RO0008R	2.30	4.22	-	-	-	-	-	-	-	-
RS0005R	5.73	2.89	-	-	-	-	-	-	-	-
RU0018R	0.17	-	0.19	-	-	0.07	-	-	0.39	-
RU0020R	0.04	-	0.14	-	-	0.03	-	-	0.13	-
SE0005R	0.12	0.11	0.17	-	0.04	-	-	0.20	-	-
SE0011R	0.32	1.06	0.48	-	0.46	-	-	0.93	-	-
SE0012R	0.26	0.79	0.39	-	0.23	-	-	0.40	-	-
SE0014R	0.34	1.27	0.50	-	0.47	-	-	0.67	-	-
SI0008R	0.63	0.56	0.88	0.88	0.22	0.08	-	0.95	0.82	-
SK0002R	0.22	0.77	0.26	-	-	0.10	0.01	-	-	-
SK0006R	0.71	1.13	0.83	0.82	-	0.31	0.02	-	0.84	0.27

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

Code	Matrix	Na	Ca	Mg	K	Cl
AM0001R	Aerosol	0.12	1.09	0.08	0.15	0.12
CH0002R	Aerosol	0.17	0.36	0.03	0.19	-
CH0005R	Aerosol	0.10	0.21	0.02	0.08	-
CY0002R	PM _{2.5}	0.25	-	0.04	0.17	0.14
CZ0003R	Aerosol	1.05	0.31	0.28	0.27	-
DE0044R	PM ₁₀	0.17	0.41	0.11	0.15	0.26
DE0044R	PM _{2.5}	0.07	0.06	0.01	0.15	0.13
DK0003R	Aerosol	0.89	0.10	-	0.13	1.35
DK0005R	Aerosol	1.01	0.12	-	0.13	1.42
DK0008R	Aerosol	1.34	0.12	-	0.10	1.95
DK0012R	Aerosol	0.76	0.11	-	0.13	1.14
DK0031R	Aerosol	1.16	0.09	-	0.11	1.80
ES0009R	PM ₁₀	0.41	0.29	0.04	0.06	0.20
ES0009R	PM _{2.5}	0.25	0.08	0.01	0.04	0.09
ES1778R	PM ₁₀	0.32	0.33	0.10	0.14	0.33
ES1778R	PM _{2.5}	0.08	0.05	0.02	0.08	0.21
ES1778R	PM ₁	0.04	0.02	0.01	0.04	0.16
FI0009R	Aerosol	0.41	0.07	0.05	0.05	0.29
FI0017R	Aerosol	0.14	0.13	0.03	0.07	0.04
FI0022R	Aerosol	0.12	0.03	0.02	0.03	0.03
FI0036R	Aerosol	0.15	0.02	0.02	0.02	0.13
FI0037R	Aerosol	0.10	0.05	0.02	0.05	0.03
GB0036R	PM ₁₀	-	-	-	-	0.74
GB0048R	PM ₁₀	0.55	0.11	0.05	0.05	1.05
GB0048R	PM _{2.5}	0.29	0.07	0.04	0.04	0.56
GE0001R	Aerosol	-	-	-	-	0.16
IE0001R	Aerosol	1.83	0.10	0.22	0.09	3.03
IE0005R	Aerosol	0.72	0.09	0.10	0.07	-
IE0006R	Aerosol	1.73	0.09	0.21	0.08	3.10
IE0008R	Aerosol	2.52	0.12	0.32	0.13	-
IS0002R	Aerosol	0.91	0.35	0.15	0.05	2.17
LV0010R	PM _{2.5}	0.12	0.13	0.01	0.10	0.05
MD0013R	Aerosol	0.07	0.18	0.03	0.05	0.28
NL0008R	Aerosol	-	0.19	-	-	0.88
NL0009R	Aerosol	-	0.14	-	-	0.97
NL0010R	Aerosol	-	0.27	-	-	0.67
NL0091R	Aerosol	-	-	-	-	1.40
NO0001R	Aerosol	0.02	0.01	0.01	0.06	-
NO0002R	Aerosol	0.30	0.03	0.03	0.04	0.26
NO0015R	Aerosol	0.15	0.01	0.01	0.02	1.16
NO0039R	Aerosol	0.13	0.01	0.01	0.02	0.13
NO0042G	Aerosol	0.19	0.02	0.02	0.02	0.25
NO0055R	Aerosol	0.13	0.01	0.01	0.03	0.18
NO0056R	Aerosol	0.11	0.02	0.01	0.04	0.07
PL0005R	PM _{2.5}	1.29	0.14	0.04	0.12	0.18
SI0008R	Aerosol	0.09	0.14	0.04	0.13	0.04
SI0008R	PM _{2.5}	0.04	0.07	0.02	0.12	0.03
SK0006R	Aerosol	0.08	0.09	0.02	0.15	-

Table 6: Annual averages of particulate matter.

Code	PM ₁₀	PM _{2.5}	PM ₁	SPM
AT0002R	23.79	19.33	15.22	-
AT0005R	8.99	-	-	-
AT0048R	9.31	-	-	-
CH0001G	2.20	-	-	-
CH0002R	16.31	14.75	10.24	-
CH0003R	16.30	-	-	-
CH0004R	8.54	-	-	-
CH0005R	8.57	7.92	6.22	-
CY0002R	30.32	15.71	-	-
CZ0001R	15.97	-	-	-
CZ0003R	16.95	15.24	-	-
DE0001R	18.36	-	-	-
DE0002R	18.04	15.09	8.97	-
DE0003R	10.05	8.15	-	-
DE0007R	16.52	11.50	-	-
DE0008R	11.38	6.87	-	-
DE0009R	17.03	-	-	-
DE0044R	23.40	19.30	-	-
DK0005R	17.43	-	-	-
DK0012R	19.71	-	-	-
ES0001R	11.00	5.93	-	-
ES0006R	25.38	-	-	-
ES0007R	15.96	9.22	-	-
ES0008R	15.43	9.24	-	-
ES0009R	10.32	5.65	-	-
ES0010R	16.45	7.86	-	-
ES0011R	15.19	7.64	-	-
ES0012R	12.49	5.47	-	-
ES0013R	8.32	4.86	-	-
ES0014R	12.60	7.31	-	-
ES0016R	11.09	6.20	-	-
ES0017R	15.75	-	-	-
ES1778R	18.29	12.36	10.30	-
FI0050R	5.54	6.57	4.62	-
FR0009R	25.64	18.52	-	-
FR0013R	21.57	13.52	-	-
FR0015R	20.23	14.95	-	-
FR0018R	16.57	11.59	-	-
GB0006R	10.34	-	-	-
GB0036R	15.99	10.29	-	-
GB0043R	8.30	-	-	-
GB0048R	7.79	4.03	-	-
GR0002R	25.33	-	-	-
HU0002R	27.78	-	-	-
IT0001R	26.99	-	-	-
IT0004R	-	17.92	-	-
LV0010R	14.55	11.95	-	-
LV0016R	15.79	10.48	-	-
MD0013R	4.72	-	-	-
MK0007R	17.04	-	-	-
NL0007R	27.02	-	-	-
NL0009R	21.83	13.61	-	-
NL0010R	24.56	17.91	-	-
NL0011R	-	17.22	-	-
NL0091R	22.62	-	-	-
NO0001R	5.17	3.27	-	-
NO0002R	5.86	3.40	-	-
NO0039R	3.89	3.19	-	-
NO0056R	4.84	3.85	-	-
PL0005R	18.73	15.21	-	-
RO0008R	17.46	-	-	-

Table 6, cont.

Code	PM ₁₀	PM _{2.5}	PM ₁	SPM
SE0005R	3.63	2.07	-	-
SE0011R	13.74	7.19	-	-
SE0012R	8.29	5.70	-	-
SE0014R	11.72	6.51	-	-
SI0008R	14.39	11.60	-	-
SK0002R	-	-	-	4.93
SK0004R	14.11	-	-	-
SK0006R	15.84	-	-	-
SK0007R	24.51	-	-	-

Table 7: EC/OC.

Code	Matrix	EC	OC	TC
CZ0003R	PM _{2.5}	0.48	3.17	3.65
DE0002R	PM _{2.5}	0.36	3.25	3.60
DE0003R	PM _{2.5}	0.16	1.82	1.97
DE0008R	PM _{2.5}	0.22	1.83	2.05
DE0044R	PM ₁₀	1.60	3.08	-
DE0044R	PM _{2.5}	1.34	2.61	-
ES0009R	PM ₁₀	0.12	1.86	-
ES0009R	PM _{2.5}	0.10	1.78	-
ES1778R	PM ₁₀	0.23	1.75	1.97
ES1778R	PM _{2.5}	0.22	1.53	-
FR0030R	PM _{2.5}	1.97	2.63	2.65
GB0036R	PM ₁₀	0.38	1.84	2.22
HU0002R	PM ₁₀	-	-	8.35
IT0004R	PM _{2.5}	1.27	5.81	7.08
NO0002R	PM ₁₀	0.11	0.90	1.00
NO0002R	PM _{2.5}	0.10	0.67	0.77
PL0005R	PM _{2.5}	2.13	1.62	-
SE0011R	PM ₁₀	0.18	1.62	1.80
SE0012R	PM ₁₀	0.31	1.63	-
SI0008R	PM _{2.5}	0.38	3.38	-

Table 8: Units used for precipitation components.

Precipitation components	Units for W. mean, Min., Max.	Units for depositions
Amount	mm	mm
SO ₄ ²⁻	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 8 August, 2012.

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

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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	National Environmental Research Institute (DMI)
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)
Turkey	Refik Saydam Centre of Hygiene
United Kingdom	AEA Technology Centre for Ecology & Hydrology

Annex 1

Maps over Europe

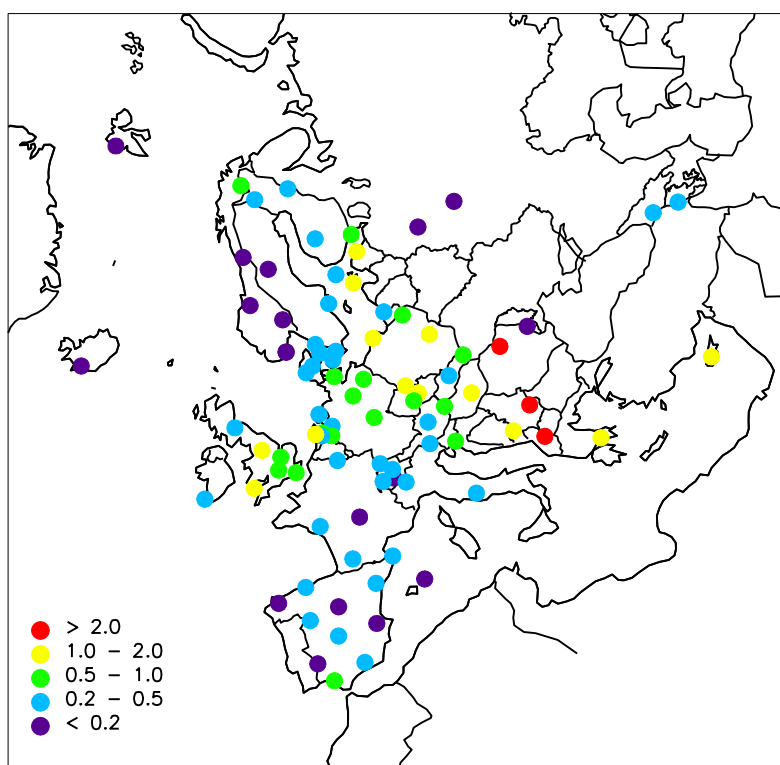


Figure 1.1: Geographical distribution of sulphur dioxide 2010. Unit: $\mu\text{g S/m}^3$.

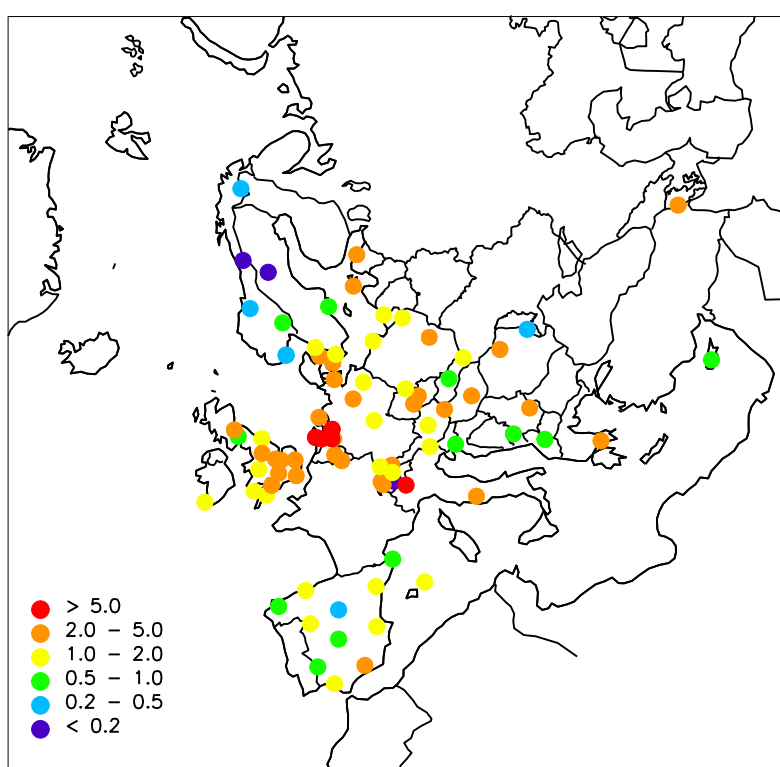


Figure 1.2: Geographical distribution of nitrogen dioxide 2010. Unit: $\mu\text{g N/m}^3$.

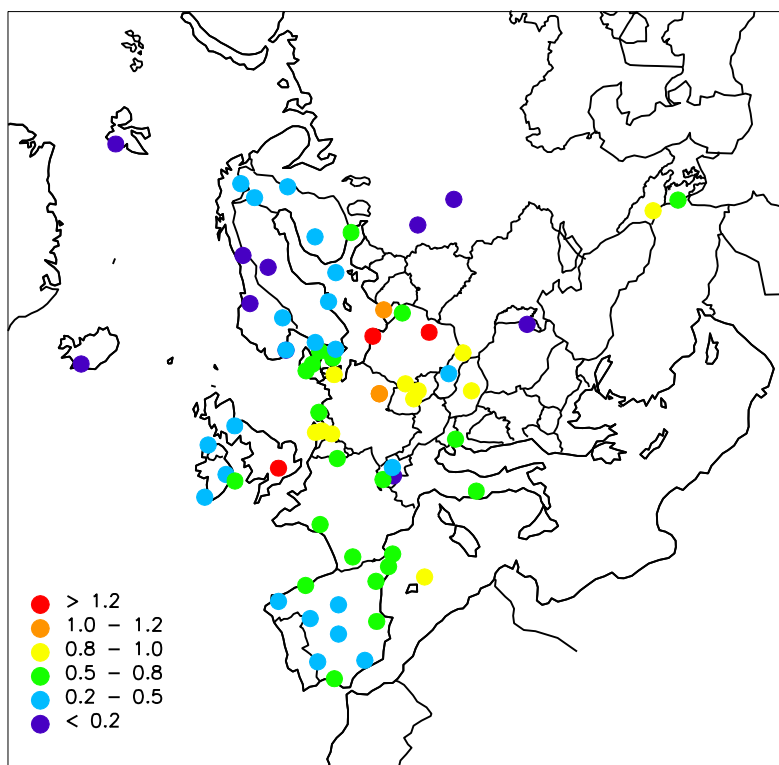


Figure 1.3: Geographical distribution of sulphate in aerosols 2010. Unit: $\mu\text{g S/m}^3$.

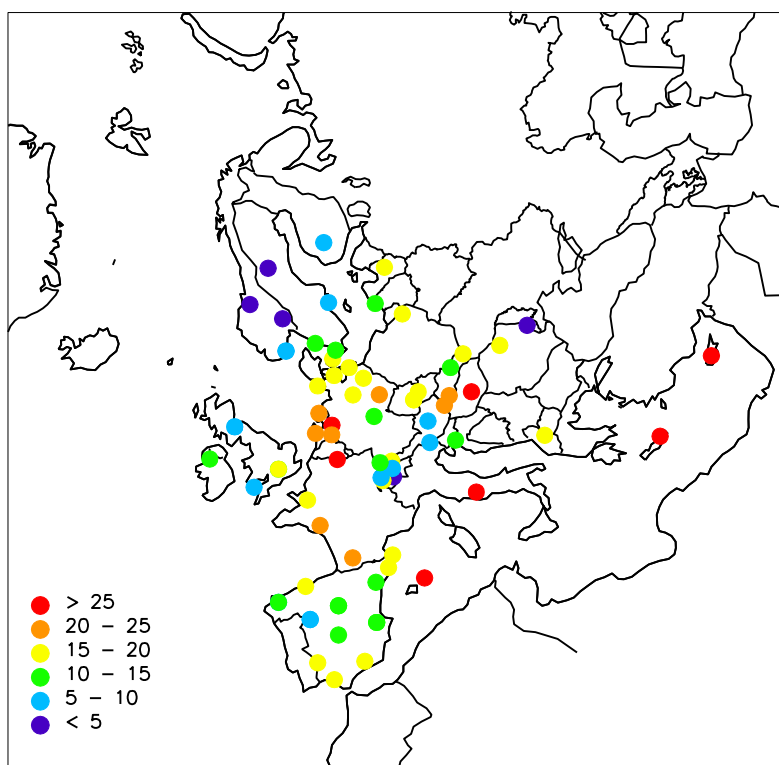


Figure 1.4: Geographical distribution of PM_{10} 2010. Unit: $\mu\text{g/m}^3$.

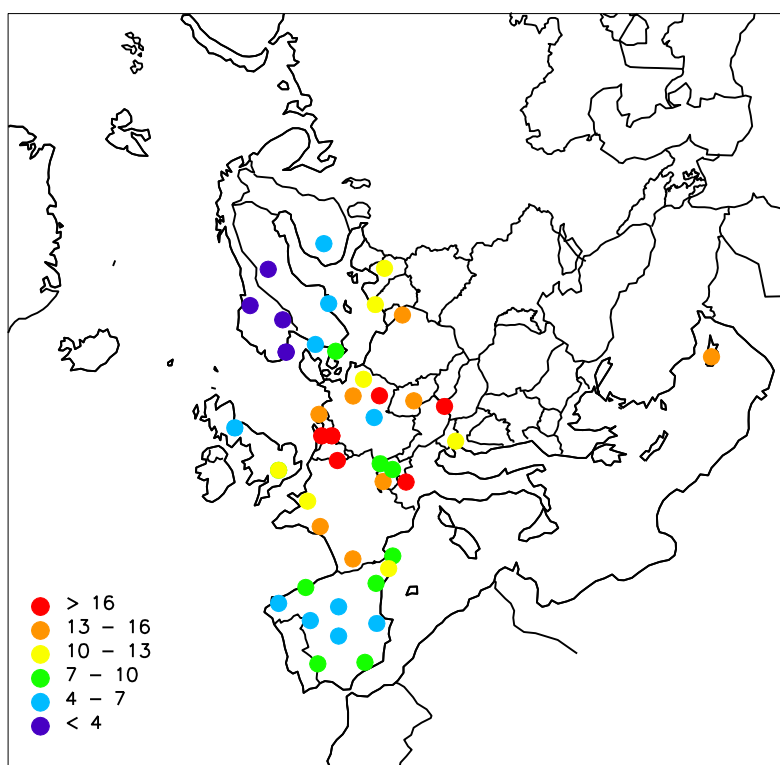


Figure 1.5: Geographical distribution of $PM_{2.5}$ 2010. Unit: $\mu g/m^3$.

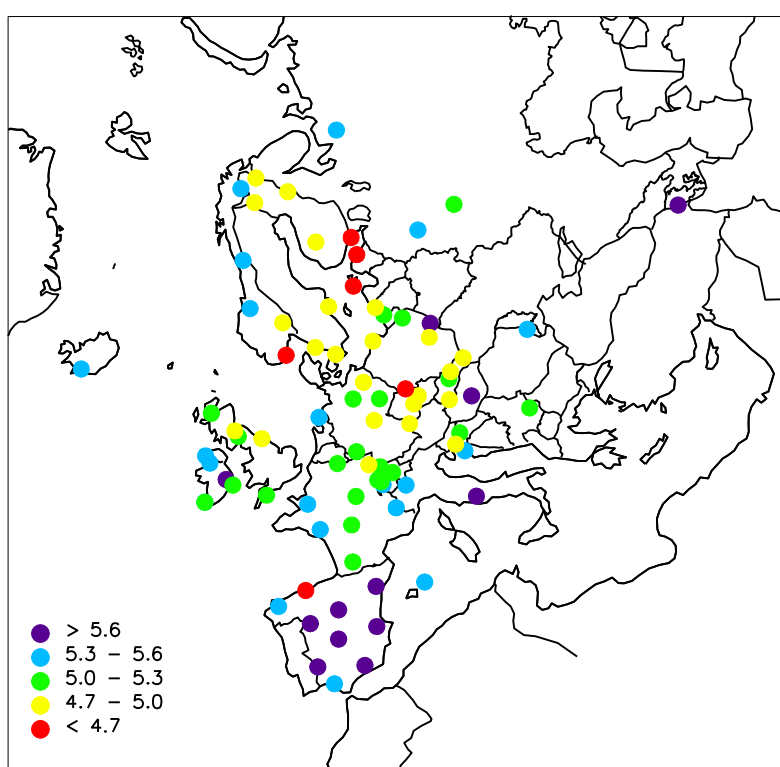


Figure 1.6: Geographical distribution of pH in precipitation 2010. Unit: pH units.

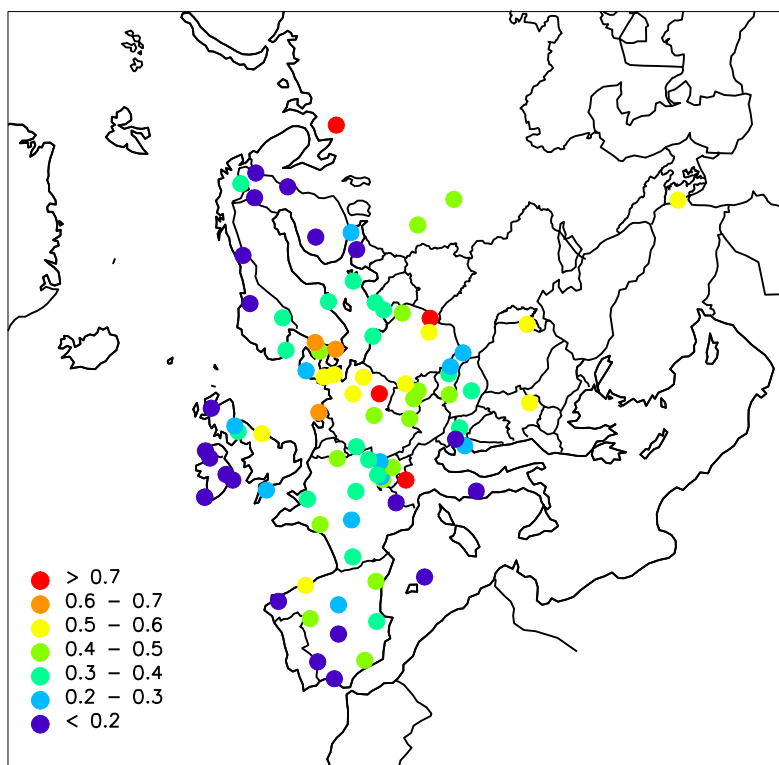


Figure 1.7: Geographical distribution of ammonium in precipitation 2010.
Unit: mg N/l.

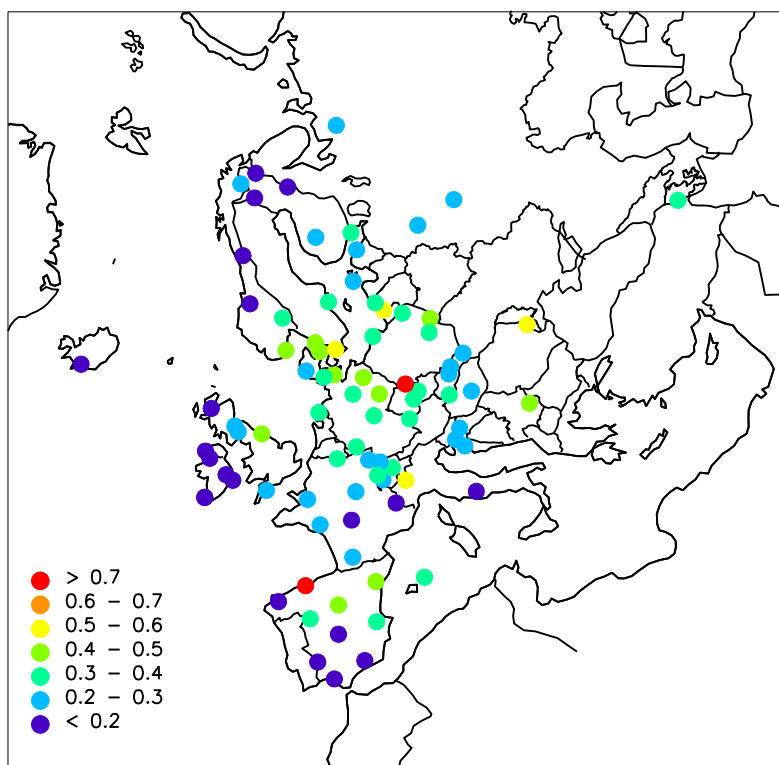


Figure 1.8: Geographical distribution of nitrate in precipitation 2010.
Unit: mg N/l.

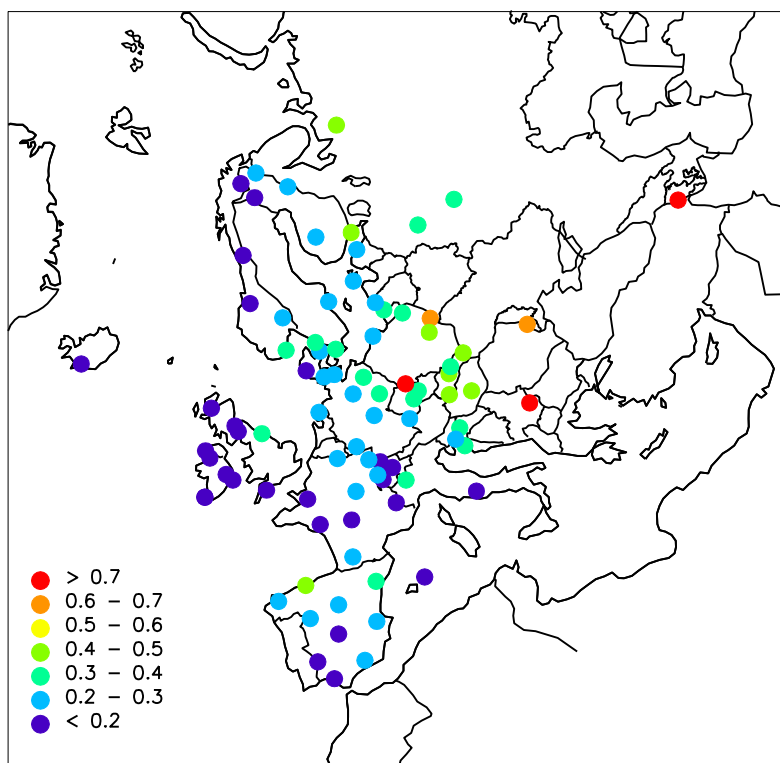


Figure 1.9: Geographical distribution of sulphate in precipitation 2010 (corrected for sea spray). Unit: mg S/l.

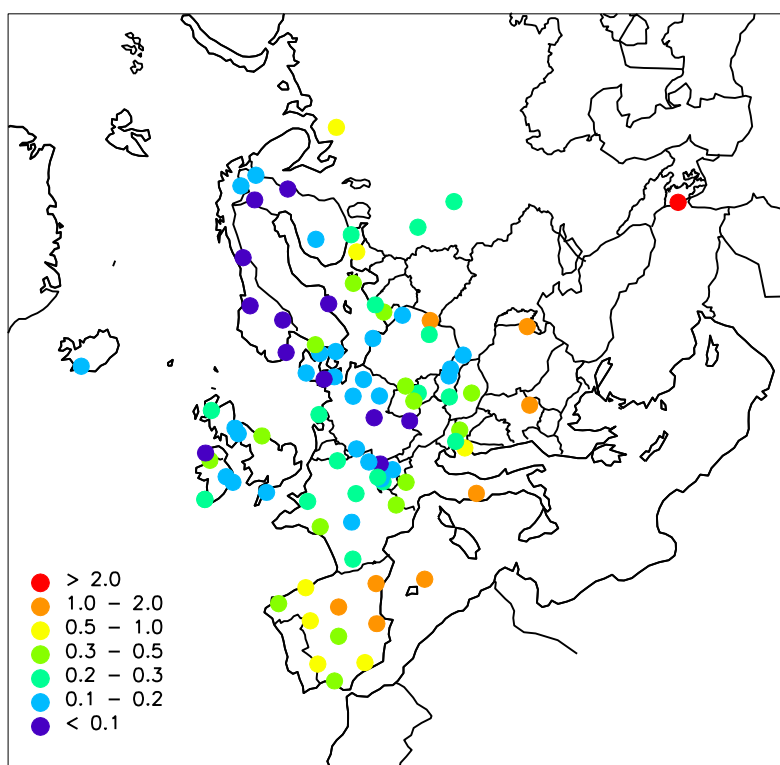


Figure 1.10: Geographical distribution of calcium in precipitation 2010. Unit: mg/l.

Annex 2

Annual statistics on precipitation data

AM0001R Amberd

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	2.24	0.14	11.34	1182.7	91.1	0	75
Cl-	precip	0.64	0.04	6.01	337.5	99.3	0	80
K+	precip	0.32	0.00	3.91	168.8	99.0	0	79
Mg++	precip	0.149	0.001	1.737	78.9	99.3	0	80
NH4+	precip	0.53	0.17	1.02	279.4	99.3	0	80
NO3-	precip	0.35	0.05	3.81	184.2	99.3	0	80
Na+	precip	0.34	0.00	3.46	179.8	99.3	0	80
Precip off	precip	-	0.00	25.10	528.7	99.4	79	161
SO4--	precip	0.79	0.10	3.57	417.8	99.3	0	80
SO4-- corr	precip	0.76	0.09	3.54	403.3	99.3	0	80
cond	precip	27.48	4.20	178.80	14529.3	99.3	0	80
pH	precip	6.28	5.42	7.98	278.9	99.3	0	80

BY0004R Vysokoe

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	1.14	0.01	16.20	872.8	94.8	0	104
Cl-	precip	0.66	0.20	2.90	507.7	71.0	0	54
K+	precip	0.62	0.01	9.98	476.2	94.8	0	104
Mg++	precip	0.230	0.030	2.670	175.8	94.8	0	104
NH4+	precip	0.75	0.10	7.10	576.7	98.0	0	108
NO3-	precip	0.43	0.12	1.45	328.5	97.0	0	107
Na+	precip	0.57	0.01	6.84	434.6	96.5	0	109
Precip	precip	-	0.0	43.2	765.7	99.9	246	365
SO4--	precip	0.75	0.09	10.91	574.5	94.8	0	97
SO4-- corr	precip	0.69	0.08	3.62	524.5	93.2	0	94
cond	precip	39.05	11.00	92.00	29906.0	90.2	0	103
pH	precip	6.53	6.00	6.98	228.7	27.6	0	48

CH0002R Payerne

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.20	0.01	6.62	134.7	98.2	4	110
Cl-	precip	0.14	0.02	1.96	97.0	98.2	0	110
K+	precip	0.04	0.00	0.55	27.4	98.2	0	110
Mg++	precip	0.019	0.001	0.415	12.7	98.2	0	110
NH4+	precip	0.41	0.07	2.10	275.2	98.2	0	110
NO3-	precip	0.27	0.04	2.44	183.1	98.2	0	110
Na+	precip	0.08	0.00	1.08	52.7	98.2	3	110
Precip	precip	-	0.0	31.6	670.6	100.0	212	365
SO4--	precip	0.17	0.02	1.79	114.4	98.2	0	110
SO4-- corr	precip	0.16	0.02	1.77	109.8	98.2	0	110
cond	precip	7.90	1.83	57.50	5298.2	98.9	0	118
pH	precip	5.37	4.15	7.34	2879.5	98.9	0	118

CH0004R Chaumont

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.16	0.03	1.40	154.8	99.9	0	46
Cl-	precip	0.12	0.01	0.86	109.9	99.9	1	46
K+	precip	0.03	0.00	0.42	28.0	99.9	0	46
Mg++	precip	0.015	0.002	0.103	14.3	99.9	0	46
NH4+	precip	0.24	0.04	1.52	231.6	99.9	0	46
NO3-	precip	0.22	0.05	1.37	211.8	99.9	0	46
Na+	precip	0.07	0.01	0.45	61.6	99.9	0	46
Precip	precip	-	0.0	80.5	946.0	99.2	2	52
SO4--	precip	0.15	0.02	1.01	143.5	99.9	0	46
SO4-- corr	precip	0.15	0.02	0.99	138.3	99.9	0	46
cond	precip	6.76	2.24	28.97	6398.4	99.9	0	46
pH	precip	5.22	4.56	6.68	5659.4	99.9	0	46

CH0005R Rigi

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.16	0.01	2.42	222.3	99.3	6	139
Cl-	precip	0.07	0.01	1.81	106.3	99.3	9	139
K+	precip	0.03	0.00	0.52	40.4	99.3	1	139
Mg++	precip	0.013	0.001	0.265	18.8	99.3	2	139
NH4+	precip	0.48	0.02	5.82	675.4	99.3	0	139
NO3-	precip	0.33	0.04	3.65	465.7	99.3	0	139
Na+	precip	0.05	0.00	1.29	69.4	99.3	2	139
Precip	precip	-	0.0	77.8	1419.3	99.2	183	362
SO4--	precip	0.20	0.01	5.12	288.8	99.3	0	139
SO4-- corr	precip	0.20	0.01	5.01	283.0	99.3	0	139
cond	precip	9.17	1.91	108.20	13009.2	99.5	0	143
pH	precip	5.18	3.92	7.02	9289.3	99.5	0	143

CZ0001R Svratouch

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.26	0.02	2.26	228.7	99.3	2	45
Cl-	precip	0.15	0.03	2.59	130.9	99.3	0	45
K+	precip	0.05	0.01	0.73	40.9	99.3	0	45
Mg++	precip	0.024	0.005	0.293	21.4	99.3	0	45
NH4+	precip	0.49	0.03	9.81	437.8	100.0	0	48
NO3-	precip	0.34	0.14	1.52	305.7	99.3	0	45
Na+	precip	0.07	0.01	1.18	63.7	99.3	4	45
Precip	precip	-	0.0	84.0	886.6	98.8	2	52
SO4--	precip	0.41	0.08	1.23	359.2	99.3	0	45
SO4-- corr	precip	0.40	0.08	1.22	353.3	99.3	0	45
cond	precip	12.85	2.86	43.80	11393.7	99.3	0	45
pH	precip	4.94	4.19	6.28	10305.6	99.3	0	45

CZ0003R Kosetice

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.36	0.02	15.61	316.9	91.5	9	101
Cl-	precip	0.26	0.02	19.79	231.8	88.1	0	104
K+	precip	0.05	0.00	0.35	44.6	91.5	5	101
Mg++	precip	0.039	0.001	0.443	34.0	91.5	7	101
NH4+	precip	0.45	0.02	4.20	395.0	95.7	0	119
NO3-	precip	0.33	0.08	2.56	286.5	87.8	0	103
Na+	precip	0.08	0.01	1.44	70.3	91.5	23	101
Precip	precip	-	0.0	87.2	878.3	99.9	169	365
SO4--	precip	0.36	0.06	4.16	319.3	88.0	0	103
SO4-- corr	precip	0.36	0.06	4.16	312.8	88.0	0	103
cond	precip	13.13	4.94	85.70	11532.8	96.0	0	122
pH	precip	4.91	3.80	7.30	10880.2	95.7	0	119

DE0002R Waldhof

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.11	0.00	1.67	79.9	98.4	42	148
Cl-	precip	0.56	0.06	19.40	396.4	98.4	0	149
K+	precip	0.03	0.00	0.78	20.8	98.4	96	148
Mg++	precip	0.038	0.003	1.260	27.2	98.4	71	148
NH4+	precip	0.51	0.05	6.57	367.5	98.4	0	148
NO3-	precip	0.37	0.10	3.69	266.2	98.4	0	149
Na+	precip	0.32	0.00	11.66	226.6	98.4	48	148
Precip	precip	-	0.0	44.3	714.7	99.9	187	365
SO4--	precip	0.29	0.06	3.35	206.9	98.4	0	149
SO4-- corr	precip	0.26	-0.03	3.23	188.2	98.4	0	150
cond	precip	12.63	4.00	84.00	9029.3	96.3	0	138
pH	precip	5.00	4.01	6.80	7135.8	96.3	0	138

DE0003R Schauinsland

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.09	-0.01	1.71	148.6	99.6	67	178
Cl-	precip	0.20	0.01	5.84	342.4	97.1	4	176
K+	precip	0.01	0.00	0.88	26.1	99.6	131	178
Mg++	precip	0.013	0.003	0.312	21.8	99.6	115	178
NH4+	precip	0.27	0.00	7.69	447.4	99.6	18	178
NO3-	precip	0.26	0.05	5.38	439.7	99.6	0	178
Na+	precip	0.10	0.00	4.06	161.7	97.1	68	176
Precip	precip	-	0.0	58.9	1689.2	99.9	169	365
SO4--	precip	0.19	0.05	3.71	319.8	99.6	0	178
SO4-- corr	precip	0.18	0.04	3.64	311.9	99.6	0	179
cond	precip	8.40	2.00	88.00	14192.0	99.3	0	176
pH	precip	5.03	4.11	6.45	15636.7	99.3	0	176

DE0004R Deuselbach

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.16	0.01	0.94	108.9	99.3	4	44
Cl-	precip	0.35	0.11	1.37	242.9	99.3	0	44
K+	precip	0.02	0.00	0.15	11.9	99.3	32	44
Mg++	precip	0.027	0.003	0.101	18.3	99.3	17	44
NH4+	precip	0.39	0.08	3.66	269.5	99.3	0	44
NO3-	precip	0.31	0.11	1.91	212.8	99.3	0	44
Na+	precip	0.15	0.00	2.39	102.5	99.3	14	44
Precip	precip	-	0.0	72.3	687.9	95.0	1	50
SO4--	precip	0.23	0.10	1.23	160.6	99.3	0	44
SO4-- corr	precip	0.22	0.08	1.18	150.3	99.3	0	44
cond	precip	9.24	5.00	41.00	6360.1	99.3	0	44
pH	precip	5.11	4.35	6.36	5404.7	99.3	0	44

DE0005R Brotjacklriegel

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.09	0.00	1.01	100.9	100.0	11	52
Cl-	precip	0.19	0.10	1.16	222.5	100.0	0	52
K+	precip	0.03	0.00	0.38	38.8	100.0	33	52
Mg++	precip	0.010	0.003	0.126	12.1	100.0	38	52
NH4+	precip	0.46	0.01	4.79	550.3	100.0	2	52
NO3-	precip	0.35	0.11	2.68	416.4	100.0	0	52
Na+	precip	0.04	0.00	0.69	52.0	100.0	30	52
Precip	precip	-	0.0	84.0	1191.6	100.0	1	53
SO4--	precip	0.21	0.01	1.66	252.9	100.0	1	52
SO4-- corr	precip	0.21	0.00	1.62	247.5	100.0	1	52
cond	precip	9.76	5.00	50.00	11627.0	100.0	0	52
pH	precip	4.95	4.37	6.54	13309.2	100.0	0	52

DE0007R Neuglobsow

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.17	0.00	2.16	120.3	97.0	20	122
Cl-	precip	0.41	0.05	11.08	291.7	97.0	0	122
K+	precip	0.04	0.00	1.05	31.7	97.0	67	122
Mg++	precip	0.048	0.003	0.704	34.1	97.0	55	122
NH4+	precip	0.58	0.01	4.05	416.9	97.0	1	122
NO3-	precip	0.43	0.00	3.01	308.6	97.0	1	122
Na+	precip	0.38	0.00	8.52	268.5	97.0	24	122
Precip	precip	-	0.0	60.9	715.6	99.9	200	365
SO4--	precip	0.35	0.07	1.99	252.4	97.0	0	122
SO4-- corr	precip	0.33	-0.28	1.97	233.6	97.0	0	122
cond	precip	14.79	4.00	68.00	10585.2	95.2	0	122
pH	precip	4.93	4.14	6.68	8465.3	95.2	0	122

DE0008R Schmücke

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.06	0.00	1.19	75.2	100.0	25	50
Cl-	precip	0.25	0.07	2.30	289.7	100.0	0	50
K+	precip	0.02	0.00	0.37	21.5	100.0	32	50
Mg++	precip	0.013	0.003	0.267	14.7	100.0	32	50
NH4+	precip	0.45	0.09	2.61	525.8	100.0	0	50
NO3-	precip	0.37	0.13	1.85	431.6	100.0	0	50
Na+	precip	0.13	0.00	1.68	155.2	100.0	15	50
Precip	precip	-	0.0	89.0	1171.9	100.0	2	53
SO4--	precip	0.26	0.09	1.57	306.1	100.0	0	50
SO4-- corr	precip	0.25	0.09	1.54	293.5	100.0	0	50
cond	precip	11.92	5.00	46.00	13967.5	100.0	0	50
pH	precip	4.96	4.16	6.33	13000.7	100.0	0	50

DE0044R Melpitz

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.14	0.00	0.83	100.3	100.0	4	39
Cl-	precip	0.29	0.12	3.13	197.9	100.0	0	39
K+	precip	0.05	0.01	0.36	34.9	100.0	11	39
Mg++	precip	0.021	0.003	0.208	14.7	100.0	17	39
NH4+	precip	0.74	0.12	4.06	509.3	100.0	0	39
NO3-	precip	0.45	0.15	1.98	307.9	100.0	0	39
Na+	precip	0.11	0.00	4.43	75.7	100.0	13	39
Precip	precip	-	0.0	116.0	691.8	100.0	14	53
SO4--	precip	0.41	0.13	2.02	282.1	100.0	0	39
SO4-- corr	precip	0.40	0.12	2.02	274.9	100.0	0	39
cond	precip	12.73	6.00	63.00	8804.6	100.0	0	39
pH	precip	5.04	3.98	6.65	6298.0	100.0	0	39

DK0005R Keldsnor

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.20	0.05	0.56	106.2	90.4	0	18
Cl-	precip	2.23	0.41	13.12	1189.9	83.7	0	18
K+	precip	0.15	0.04	0.48	80.3	85.1	0	17
Mg++	precip	0.152	0.029	0.810	81.2	90.4	0	18
NH4+	precip	0.55	0.15	2.11	290.5	90.4	0	18
NO3-	precip	0.43	0.18	1.62	228.4	91.6	0	19
Na+	precip	1.26	0.22	7.26	670.5	82.5	0	17
Precip	precip	-	1.9	62.5	532.7	89.6	0	24
SO4--	precip	0.38	0.21	1.22	202.2	91.6	0	19
SO4-- corr	precip	0.29	0.12	1.11	154.9	91.6	0	19

DK0008R Anholt

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.13	0.04	0.27	81.2	87.3	0	17
Cl-	precip	2.73	0.51	10.14	1686.7	87.3	0	17
K+	precip	0.06	0.01	0.22	34.8	73.5	0	15
Mg++	precip	0.148	0.028	0.650	91.3	77.5	0	16
NH4+	precip	0.44	0.15	1.39	272.6	82.8	0	16
NO3-	precip	0.43	0.18	1.35	262.9	87.3	0	17
Na+	precip	1.54	0.27	5.74	953.4	87.3	0	17
Precip	precip	-	0.1	65.8	617.5	89.9	0	23
SO4--	precip	0.37	0.20	0.73	229.1	87.3	0	17
SO4-- corr	precip	0.24	0.12	0.62	149.3	87.3	0	17

DK0022R Sepstrup Sande

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.10	0.04	0.33	68.5	76.7	0	15
Cl-	precip	1.61	0.12	4.07	1160.5	75.7	0	14
K+	precip	0.07	0.02	0.15	51.0	63.1	0	13
Mg++	precip	0.116	0.017	0.282	83.5	68.8	0	14
NH4+	precip	0.51	0.18	1.88	366.4	71.0	0	14
NO3-	precip	0.32	0.00	0.74	232.9	75.7	1	14
Na+	precip	0.91	0.07	2.41	654.0	76.7	0	15
Precip	precip	-	5.4	88.3	719.6	89.6	0	23
SO4--	precip	0.29	0.20	0.55	211.9	75.7	0	14
SO4-- corr	precip	0.22	0.11	0.51	157.0	75.7	0	14

DK0031R Ulborg

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.14	0.04	0.40	92.5	77.0	0	16
Cl-	precip	3.62	0.54	13.73	2354.4	74.5	0	15
K+	precip	0.09	0.02	0.30	57.1	75.7	0	15
Mg++	precip	0.227	0.047	0.891	147.3	73.9	0	14
NH4+	precip	0.30	0.11	1.03	194.5	73.2	0	14
NO3-	precip	0.29	0.19	0.85	186.5	68.2	0	14
Na+	precip	2.06	0.50	7.30	1340.1	77.0	0	16
Precip	precip	-	0.0	81.4	649.6	86.3	0	22
SO4--	precip	0.33	0.18	0.83	214.1	68.2	0	14
SO4-- corr	precip	0.15	0.09	0.34	100.3	68.2	0	14

EE0009R Lahemaa

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.60	0.02	4.20	402.8	99.9	27	163
Cl-	precip	0.40	0.05	2.20	271.3	100.0	5	164
K+	precip	0.09	0.01	1.03	61.4	99.9	16	163
Mg++	precip	0.117	0.010	0.410	79.1	99.9	28	163
NH4+	precip	0.19	0.01	3.97	126.6	99.9	56	163
NO3-	precip	0.24	0.01	2.40	159.5	100.0	0	164
Na+	precip	0.64	0.02	2.28	430.6	99.9	0	163
Precip	precip	-	0.0	35.0	673.6	99.9	201	365
SO4--	precip	0.33	0.04	2.32	223.8	100.0	0	164
SO4-- corr	precip	0.28	0.00	2.29	190.1	100.0	0	164
cond	precip	10.35	5.00	46.00	6971.4	95.1	48	124
pH	precip	4.39	3.39	6.26	27459.1	95.3	0	125

EE0011R Vilsandi

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.49	0.00	6.10	375.4	100.0	0	25
Cl-	precip	0.82	0.20	6.00	627.5	96.1	0	24
K+	precip	0.27	0.02	3.05	205.3	100.0	0	25
Mg++	precip	0.136	0.016	1.270	103.4	100.0	0	25
NH4+	precip	0.32	0.01	10.10	244.3	100.0	0	25
NO3-	precip	0.29	0.01	0.99	219.3	100.0	0	25
Na+	precip	0.79	0.16	3.32	600.0	100.0	0	25
Precip	precip	-	1.3	77.7	760.7	100.0	28	53
SO4--	precip	0.36	0.11	1.42	274.0	100.0	0	25
SO4-- corr	precip	0.30	0.05	1.32	227.4	100.0	0	25
cond	precip	14.00	5.00	78.80	10648.5	100.0	5	25
pH	precip	4.45	3.60	6.60	26797.9	100.0	0	25

ES0001R San Pablo de los Montes

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.39	0.10	10.60	490.3	88.0	0	97
Cl-	precip	0.66	0.15	5.45	826.9	89.3	30	107
K+	precip	0.07	0.03	0.54	87.2	88.0	30	97
Mg++	precip	0.063	0.020	0.600	77.9	88.0	0	97
NH4+	precip	0.13	0.02	1.68	164.2	88.5	35	103
NO3-	precip	0.12	0.04	3.02	150.4	89.3	41	107
Na+	precip	0.41	0.05	4.20	507.7	88.0	13	97
Precip	precip	-	0.0	57.0	1245.8	100.0	242	365
SO4--	precip	0.16	0.05	2.54	195.5	89.3	24	107
SO4-- corr	precip	0.12	0.01	2.42	154.1	89.3	24	108
cond	precip	7.45	1.80	102.90	9276.0	89.9	0	113
pH	precip	5.70	4.66	7.27	2476.2	89.9	0	113

ES0006R Mahon

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	1.19	0.19	17.00	853.6	78.6	0	68
Cl-	precip	12.21	1.28	353.30	8732.1	78.8	0	72
K+	precip	0.34	0.05	15.00	245.8	78.6	0	68
Mg++	precip	0.975	0.110	23.000	697.5	78.6	0	68
NH4+	precip	0.12	0.02	2.53	82.0	78.8	20	72
NO3-	precip	0.33	0.04	9.38	233.4	78.8	7	72
Na+	precip	8.00	0.78	190.00	5719.3	78.6	0	68
Precip	precip	-	0.0	95.7	715.2	100.0	236	365
SO4--	precip	0.86	0.14	18.87	613.8	78.8	0	72
SO4-- corr	precip	0.18	-0.93	4.94	132.1	78.8	0	72
cond	precip	55.86	8.80	1125.00	39948.8	78.9	0	73
pH	precip	5.46	4.79	7.56	2509.3	78.9	0	73

ES0007R Viznar

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.91	0.20	10.40	838.4	91.3	0	90
Cl-	precip	0.67	0.15	6.14	618.4	92.2	30	102
K+	precip	0.12	0.03	2.90	108.0	91.3	26	90
Mg++	precip	0.237	0.080	2.500	219.1	91.3	0	90
NH4+	precip	0.46	0.02	3.56	421.9	91.4	1	93
NO3-	precip	0.18	0.04	8.14	167.3	92.2	15	102
Na+	precip	0.40	0.05	5.50	370.6	91.3	18	90
Precip	precip	-	0.0	38.4	928.4	100.0	243	365
SO4--	precip	0.27	0.05	7.18	245.9	92.2	5	102
SO4-- corr	precip	0.23	0.04	6.89	215.7	92.2	5	103
cond	precip	15.20	4.20	241.80	14028.3	95.7	0	110
pH	precip	6.26	4.25	7.72	508.8	95.7	0	110

ES0008R Niembro

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.79	0.13	10.50	410.9	85.6	0	146
Cl-	precip	8.39	0.65	59.20	4348.4	89.1	0	160
K+	precip	0.22	0.03	1.02	115.7	85.6	7	146
Mg++	precip	0.656	0.040	4.100	339.9	85.6	0	146
NH4+	precip	0.51	0.02	4.19	262.1	87.8	1	151
NO3-	precip	0.78	0.04	13.29	404.5	89.1	3	160
Na+	precip	5.17	0.30	32.00	2681.1	85.6	0	146
Precip	precip	-	0.0	26.0	518.4	100.0	218	365
SO4--	precip	0.89	0.13	7.68	460.1	89.1	0	160
SO4-- corr	precip	0.46	-0.30	6.21	239.5	89.1	0	161
cond	precip	55.48	7.00	551.00	28762.0	89.2	0	167
pH	precip	3.09	2.00	6.99	423376.2	89.2	10	167

ES0009R Campisabalos

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	1.02	0.06	15.30	676.5	84.2	0	92
Cl-	precip	0.75	0.15	6.98	501.0	86.0	16	106
K+	precip	0.10	0.03	0.97	63.4	84.2	16	92
Mg++	precip	0.120	0.020	1.100	79.8	84.2	0	92
NH4+	precip	0.29	0.02	3.17	193.7	85.7	4	101
NO3-	precip	0.41	0.04	5.82	272.2	86.0	4	106
Na+	precip	0.48	0.05	5.30	322.9	84.2	9	92
Precip	precip	-	0.0	22.8	665.8	100.0	230	365
SO4--	precip	0.28	0.05	4.59	187.0	86.0	6	106
SO4-- corr	precip	0.24	0.00	4.42	160.0	86.0	7	107
cond	precip	13.54	3.00	172.10	9015.1	86.2	0	110
pH	precip	5.74	4.78	7.76	1206.8	86.2	0	110

ES0011R Barcarrola

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.76	0.14	14.30	568.9	89.6	0	89
Cl-	precip	1.26	0.15	20.43	939.5	91.0	7	91
K+	precip	0.22	0.03	4.90	166.4	89.6	10	89
Mg++	precip	0.144	0.010	1.500	107.7	89.6	1	89
NH4+	precip	0.15	0.02	7.25	114.1	91.0	17	91
NO3-	precip	0.16	0.04	8.50	117.8	91.0	34	91
Na+	precip	0.82	0.05	9.20	610.3	89.6	3	89
Precip	precip	-	0.0	40.6	747.0	100.0	262	365
SO4--	precip	0.21	0.05	3.59	159.0	91.0	17	91
SO4-- corr	precip	0.15	-0.01	2.82	108.5	91.0	17	92
cond	precip	12.38	2.20	127.10	9226.0	91.0	0	91
pH	precip	5.87	4.94	7.16	997.1	91.0	0	91

ES0012R Zarra

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	1.29	0.12	20.40	556.9	69.9	0	77
Cl-	precip	0.60	0.15	7.72	259.8	71.3	15	88
K+	precip	0.09	0.03	2.30	40.6	69.9	21	77
Mg++	precip	0.122	0.020	1.300	52.5	69.9	0	77
NH4+	precip	0.31	0.05	2.75	132.8	71.0	0	82
NO3-	precip	0.37	0.04	3.89	159.3	71.3	7	88
Na+	precip	0.33	0.05	5.20	140.0	69.9	12	77
Precip	precip	-	0.0	28.8	431.0	100.0	274	365
SO4--	precip	0.29	0.05	2.46	126.1	71.3	6	88
SO4-- corr	precip	0.26	0.01	2.02	113.9	71.3	7	89
cond	precip	14.19	2.70	138.40	6114.0	71.4	0	89
pH	precip	6.06	5.30	7.58	376.1	71.4	0	89

ES0013R Penausende

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.56	0.05	3.32	202.0	67.9	0	89
Cl-	precip	0.68	0.15	3.58	241.6	68.0	26	92
K+	precip	0.16	0.03	5.40	58.4	67.9	31	89
Mg++	precip	0.100	0.010	0.430	35.8	67.9	2	89
NH4+	precip	0.49	0.02	4.14	176.4	67.9	4	90
NO3-	precip	0.32	0.04	1.63	112.6	68.0	18	92
Na+	precip	0.46	0.05	2.00	164.6	67.9	9	89
Precip	precip	-	0.0	19.0	357.8	99.7	257	364
SO4--	precip	0.25	0.05	1.31	88.0	68.0	17	92
SO4-- corr	precip	0.21	0.01	1.24	74.2	68.0	17	93
cond	precip	12.06	2.50	84.00	4313.9	69.0	2	101
pH	precip	5.83	4.98	6.76	533.6	69.0	0	101

ES0014R Els Torms

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	1.47	0.20	10.00	643.1	74.1	0	47
Cl-	precip	0.32	0.15	1.56	141.7	74.1	17	47
K+	precip	0.27	0.03	3.10	119.0	74.1	11	47
Mg++	precip	0.148	0.010	1.000	64.9	74.1	1	47
NH4+	precip	0.43	0.02	4.49	188.7	74.1	1	47
NO3-	precip	0.50	0.04	3.84	218.9	74.1	2	47
Na+	precip	0.25	0.05	1.13	107.8	74.1	11	47
Precip	precip	-	0.0	46.6	437.4	100.0	269	365
SO4--	precip	0.34	0.05	1.77	146.4	74.1	1	47
SO4-- corr	precip	0.32	0.04	1.70	137.8	74.1	1	47
cond	precip	16.76	2.60	88.90	7330.9	74.1	0	47
pH	precip	6.16	5.67	7.16	305.4	74.1	0	47

ES0016R O Savinao

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.36	0.05	1.60	429.7	65.3	10	122
Cl-	precip	2.83	0.15	9.51	3330.9	68.7	20	130
K+	precip	0.12	0.03	1.80	136.8	65.3	26	122
Mg++	precip	0.245	0.020	0.800	288.5	65.3	0	122
NH4+	precip	0.20	0.02	12.54	230.8	67.0	15	126
NO3-	precip	0.10	0.04	0.79	121.6	68.7	71	130
Na+	precip	1.80	0.05	7.20	2117.3	65.3	3	122
Precip	precip	-	0.0	111.6	1177.0	99.5	197	363
SO4--	precip	0.36	0.05	1.57	422.0	68.7	19	130
SO4-- corr	precip	0.21	0.02	1.29	247.0	68.7	19	131
cond	precip	17.95	2.00	119.00	21126.7	69.2	0	134
pH	precip	5.51	4.50	6.82	3664.5	69.2	0	134

ES0017R Donana

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.30	0.04	27.30	330.9	64.0	2	65
Cl-	precip	4.26	0.15	31.26	4688.5	65.6	5	69
K+	precip	0.11	0.02	3.00	119.8	64.0	11	65
Mg++	precip	0.414	0.010	3.600	455.2	64.0	1	65
NH4+	precip	0.10	0.02	0.99	106.3	64.0	21	65
NO3-	precip	0.09	0.04	1.42	103.6	65.6	29	69
Na+	precip	2.51	0.05	19.80	2758.0	64.0	3	65
Precip	precip	-	0.0	69.8	1100.4	100.0	233	365
SO4--	precip	0.36	0.05	5.82	394.4	65.6	3	69
SO4-- corr	precip	0.14	-0.04	4.16	150.1	65.6	3	69
cond	precip	22.82	2.40	107.80	25105.9	65.6	0	68
pH	precip	5.41	4.44	7.86	4253.8	65.6	0	69

FI0004R Ähtäri

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.11	0.02	1.52	62.6	99.9	0	49
Cl-	precip	0.15	0.05	1.79	87.1	99.9	0	49
K+	precip	0.11	0.01	10.48	60.7	89.8	0	47
Mg++	precip	0.032	0.007	0.760	18.0	99.9	0	49
NH4+	precip	0.16	0.01	0.81	89.8	99.9	0	49
NO3-	precip	0.23	0.03	1.05	131.3	99.9	0	49
Na+	precip	0.08	0.02	1.03	46.4	99.9	0	49
Precip	precip	-	0.0	92.0	568.0	99.1	1	52
SO4--	precip	0.23	0.06	0.77	131.2	99.9	0	49
SO4-- corr	precip	0.22	0.04	0.73	127.2	99.9	0	50
cond	precip	9.87	4.00	42.00	5607.5	99.9	0	49
pH	precip	4.87	4.10	6.87	7733.3	99.9	0	49

FI0017R Virolahti II

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.24	0.03	3.03	121.7	100.0	0	50
Cl-	precip	0.36	0.04	2.77	184.0	100.0	0	50
K+	precip	0.14	0.01	2.67	74.4	100.0	0	50
Mg++	precip	0.052	0.010	0.474	26.7	100.0	0	50
NH4+	precip	0.30	0.01	2.66	153.0	100.0	0	50
NO3-	precip	0.37	0.06	2.79	190.9	100.0	0	50
Na+	precip	0.20	0.01	1.60	102.6	100.0	0	50
Precip	precip	-	0.0	38.0	511.8	99.1	1	52
SO4--	precip	0.46	0.10	3.22	233.8	100.0	0	50
SO4-- corr	precip	0.44	0.09	3.20	225.0	100.0	0	51
cond	precip	16.08	4.00	90.00	8229.7	100.0	0	50
pH	precip	4.68	3.98	6.70	10678.9	100.0	0	50

FI0022R Oulanka

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.10	0.00	0.76	45.3	91.5	1	50
Cl-	precip	0.16	0.01	2.12	77.4	91.5	1	50
K+	precip	0.05	0.00	0.54	24.7	91.5	2	50
Mg++	precip	0.022	0.002	0.129	10.5	91.5	3	50
NH4+	precip	0.11	0.00	0.94	53.6	91.5	1	50
NO3-	precip	0.17	0.03	1.11	82.6	91.5	0	50
Na+	precip	0.09	0.01	1.17	44.7	91.5	0	50
Precip	precip	-	0.0	40.5	477.5	99.1	1	52
SO4--	precip	0.24	0.07	1.62	113.3	91.5	0	50
SO4-- corr	precip	0.23	0.06	1.61	109.5	91.5	0	51
cond	precip	9.91	5.00	63.00	4733.6	91.5	0	50
pH	precip	4.79	3.91	5.48	7748.0	91.5	0	50

FI0036R Pallas (Matorova)

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.06	0.01	2.22	26.1	100.0	0	49
Cl-	precip	0.19	0.04	5.16	90.0	100.0	0	49
K+	precip	0.06	0.00	0.38	26.8	100.0	2	49
Mg++	precip	0.022	0.005	0.360	10.4	100.0	0	49
NH4+	precip	0.08	0.01	1.40	39.5	100.0	0	49
NO3-	precip	0.14	0.02	1.06	67.4	100.0	0	49
Na+	precip	0.10	0.02	2.70	50.0	100.0	0	49
Precip	precip	-	0.0	44.2	474.4	99.1	2	52
SO4--	precip	0.19	0.05	1.62	89.1	100.0	0	49
SO4-- corr	precip	0.18	0.04	1.62	84.9	100.0	0	49
cond	precip	8.65	4.00	46.00	4103.5	100.0	0	49
pH	precip	4.83	4.00	6.20	6978.3	100.0	0	49

FR0008R Donon

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.17	0.03	1.94	270.2	98.2	8	174
Cl-	precip	0.22	0.03	2.85	343.4	98.5	3	180
K+	precip	0.05	0.03	1.21	70.4	98.2	96	174
Mg++	precip	0.039	0.025	0.180	59.4	98.2	109	174
NH4+	precip	0.31	0.02	3.32	472.9	98.2	5	174
NO3-	precip	0.29	0.04	2.38	440.9	98.5	0	180
Na+	precip	0.12	0.03	1.79	179.8	98.2	60	174
Precip	precip	-	0.1	44.6	1541.8	99.9	151	365
SO4--	precip	0.21	0.03	1.93	332.3	98.5	0	180
SO4-- corr	precip	0.21	0.03	1.84	317.6	98.5	0	180
cond	precip	11.86	2.40	101.70	18290.2	99.0	0	191
pH	precip	4.93	4.01	6.41	18002.0	99.0	0	191

FR0009R Revin

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.26	0.03	2.03	297.0	83.9	3	114
Cl-	precip	0.58	0.03	7.38	666.0	84.4	1	120
K+	precip	0.07	0.03	1.43	76.4	83.9	47	114
Mg++	precip	0.069	0.025	0.440	79.1	83.9	49	114
NH4+	precip	0.46	0.05	2.90	530.6	83.9	0	114
NO3-	precip	0.32	0.01	3.20	370.0	84.4	2	120
Na+	precip	0.33	0.03	3.64	376.0	83.9	16	114
Precip	precip	-	0.1	51.0	1150.0	99.3	186	363
SO4--	precip	0.26	0.01	2.04	302.9	84.4	2	120
SO4-- corr	precip	0.24	0.01	1.98	271.5	84.4	2	120
cond	precip	14.13	2.40	79.30	16252.8	86.5	0	128
pH	precip	5.19	3.90	6.67	7393.9	86.5	0	127

FR0010R Morvan

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.22	0.03	1.99	198.2	88.3	9	120
Cl-	precip	0.48	0.03	6.68	438.0	88.5	2	125
K+	precip	0.13	0.03	1.39	122.9	88.3	33	120
Mg++	precip	0.054	0.025	0.390	49.3	88.3	62	120
NH4+	precip	0.34	0.02	2.98	309.6	88.3	6	120
NO3-	precip	0.28	0.01	2.22	256.0	88.5	3	125
Na+	precip	0.28	0.03	4.40	255.7	88.3	18	120
Precip	precip	-	0.1	44.0	918.0	99.9	195	365
SO4--	precip	0.23	0.01	1.48	210.6	88.5	2	125
SO4-- corr	precip	0.21	0.00	1.46	189.2	88.5	2	125
cond	precip	11.92	2.50	129.90	10941.5	89.3	0	130
pH	precip	5.21	3.96	7.23	5654.4	89.3	0	130

FR0013R Peyrusse Vieille

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.22	0.05	2.28	173.9	93.4	0	112
Cl-	precip	1.01	0.07	12.70	801.6	94.4	0	118
K+	precip	0.06	0.03	0.40	50.5	93.4	44	112
Mg++	precip	0.096	0.025	0.850	76.2	93.4	40	112
NH4+	precip	0.33	0.02	2.37	259.1	93.4	7	112
NO3-	precip	0.25	0.02	1.81	194.3	94.4	0	118
Na+	precip	0.60	0.03	7.04	474.1	93.4	9	112
Precip	precip	-	0.1	45.6	789.6	99.9	209	365
SO4--	precip	0.25	0.01	1.75	200.5	94.4	1	118
SO4-- corr	precip	0.20	-0.10	1.68	160.5	94.4	1	118
cond	precip	14.49	2.50	103.30	11440.3	96.0	0	133
pH	precip	5.10	4.23	6.93	6252.6	96.0	0	133

FR0014R Montandon

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.23	0.03	2.94	250.1	96.1	6	137
Cl-	precip	0.17	0.03	2.73	181.3	96.2	3	141
K+	precip	0.06	0.03	1.17	60.7	96.1	75	137
Mg++	precip	0.038	0.025	0.190	41.6	96.1	88	137
NH4+	precip	0.35	0.02	3.90	381.8	96.1	2	137
NO3-	precip	0.34	0.02	3.10	369.2	96.5	0	142
Na+	precip	0.09	0.03	1.75	100.1	96.1	60	137
Precip	precip	-	0.1	73.6	1099.7	99.9	183	365
SO4--	precip	0.22	0.02	2.20	241.5	96.5	0	142
SO4-- corr	precip	0.21	0.02	2.19	234.2	96.5	0	142
cond	precip	11.28	1.10	71.10	12399.4	97.6	0	148
pH	precip	5.13	4.20	7.06	8103.7	97.6	0	148

FR0015R La Tardiere

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.35	0.03	4.06	235.6	96.4	2	108
Cl-	precip	3.41	0.03	61.06	2310.4	96.9	1	112
K+	precip	0.12	0.03	1.53	78.7	96.4	24	108
Mg++	precip	0.257	0.025	4.490	174.2	96.4	25	108
NH4+	precip	0.42	0.02	3.50	282.2	96.4	1	108
NO3-	precip	0.21	0.01	2.86	142.2	96.9	0	112
Na+	precip	1.80	0.03	32.90	1221.2	96.4	4	108
Precip	precip	-	0.1	34.6	677.0	99.9	214	365
SO4--	precip	0.34	0.03	3.91	228.7	96.9	0	112
SO4-- corr	precip	0.18	-0.18	1.39	124.3	96.9	0	112
cond	precip	22.18	4.10	256.10	15015.9	97.8	0	119
pH	precip	5.60	4.54	7.00	1703.7	97.8	0	119

FR0016R Le Casset

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.40	0.03	6.68	280.1	94.0	1	97
Cl-	precip	0.16	0.03	2.96	109.2	94.2	10	100
K+	precip	0.09	0.03	7.59	60.1	94.0	44	97
Mg++	precip	0.049	0.025	0.950	33.9	94.0	58	97
NH4+	precip	0.20	0.02	6.91	136.3	94.0	24	97
NO3-	precip	0.15	0.01	1.69	106.6	94.2	0	100
Na+	precip	0.09	0.03	1.89	61.1	94.0	52	97
Precip	precip	-	0.1	22.9	695.8	99.9	244	365
SO4--	precip	0.15	0.01	2.69	103.1	94.2	2	100
SO4-- corr	precip	0.14	-0.10	2.61	98.8	94.2	2	100
cond	precip	9.93	2.30	86.80	6905.7	93.5	0	107
pH	precip	5.34	4.20	7.37	3174.7	94.7	0	108

FR0017R Montfranc

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.17	0.03	1.97	207.0	94.9	11	142
Cl-	precip	0.46	0.03	6.72	551.3	96.1	4	146
K+	precip	0.04	0.03	0.50	50.2	94.9	79	142
Mg++	precip	0.058	0.025	0.510	69.8	94.9	74	142
NH4+	precip	0.26	0.02	4.26	308.7	94.9	15	142
NO3-	precip	0.17	0.02	3.39	209.4	95.9	0	145
Na+	precip	0.27	0.03	3.53	320.6	94.9	40	142
Precip	precip	-	0.1	47.6	1197.5	99.9	183	365
SO4--	precip	0.17	0.01	5.64	203.6	96.1	2	146
SO4-- corr	precip	0.15	-0.01	5.56	178.2	96.1	2	146
cond	precip	10.45	1.70	164.00	12509.8	96.4	0	150
pH	precip	5.23	3.62	6.88	7019.1	96.4	0	150

FR0018R La Coulonche

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.20	0.03	0.96	159.2	93.2	2	106
Cl-	precip	1.07	0.03	23.85	832.4	93.5	1	108
K+	precip	0.06	0.03	0.33	44.1	92.6	41	105
Mg++	precip	0.096	0.025	1.070	74.4	93.2	33	106
NH4+	precip	0.35	0.02	1.59	272.9	93.2	1	106
NO3-	precip	0.20	0.02	3.25	158.4	93.5	0	108
Na+	precip	0.59	0.03	6.80	456.8	93.2	8	106
Precip	precip	-	0.1	56.4	777.5	99.9	171	365
SO4--	precip	0.21	0.04	1.30	167.2	93.5	0	108
SO4-- corr	precip	0.16	-0.03	1.07	126.6	93.5	0	108
cond	precip	12.46	1.30	113.60	9684.3	94.8	0	120
pH	precip	5.46	3.93	6.93	2680.5	94.8	0	120

GB0002R Eskdalemuir

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.14	0.04	0.75	105.5	100.0	0	19
Cl-	precip	2.15	0.40	8.80	1561.5	100.0	0	19
K+	precip	0.08	0.05	0.31	59.9	100.0	0	19
Mg++	precip	0.134	0.022	0.526	97.0	100.0	0	19
NH4+	precip	0.32	0.15	1.44	229.3	100.0	0	19
NO3-	precip	0.22	0.08	1.08	156.7	100.0	0	19
Na+	precip	1.25	0.28	5.57	911.2	100.0	0	19
Precip	precip	-	0.0	116.3	726.2	84.7	4	23
SO4--	precip	0.25	0.11	0.96	180.0	100.0	0	19
SO4-- corr	precip	0.14	0.07	0.54	104.4	100.0	0	19
cond	precip	12.85	6.00	47.00	9328.7	100.0	0	19
pH	precip	5.25	4.69	6.23	4115.6	100.0	0	19

GB0006R Lough Navar

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.32	0.06	2.95	281.0	99.9	0	28
Cl-	precip	4.54	0.20	26.90	4013.9	99.9	0	28
K+	precip	0.14	0.03	0.66	119.6	99.9	0	28
Mg++	precip	0.254	0.040	1.660	224.3	99.9	0	28
NH4+	precip	0.16	0.01	0.88	138.8	99.9	3	28
NO3-	precip	0.09	0.01	0.47	81.6	99.9	1	28
Na+	precip	2.42	0.21	14.60	2138.6	99.9	0	28
Precip	precip	-	0.0	105.3	884.5	100.0	3	32
SO4--	precip	0.30	0.13	1.30	264.0	99.9	0	28
SO4-- corr	precip	0.10	0.01	0.53	85.7	99.9	0	28
cond	precip	19.30	5.00	103.00	17069.7	99.1	0	26
pH	precip	5.46	5.10	6.93	3047.2	99.9	0	28

GB0013R Yarner Wood

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.18	0.07	1.66	149.9	100.0	0	24
Cl-	precip	2.67	0.50	7.50	2237.0	100.0	0	24
K+	precip	0.11	0.05	0.50	90.9	100.0	0	24
Mg++	precip	0.171	0.040	0.470	143.5	100.0	0	24
NH4+	precip	0.24	0.01	1.20	199.6	100.0	1	24
NO3-	precip	0.21	0.05	1.63	179.7	100.0	0	24
Na+	precip	1.61	0.33	4.34	1351.8	100.0	0	24
Precip	precip	-	0.0	139.7	838.8	94.2	6	29
SO4--	precip	0.31	0.16	1.40	257.6	100.0	0	24
SO4-- corr	precip	0.18	0.10	1.21	150.0	100.0	0	24
cond	precip	15.86	7.00	30.00	13300.0	99.7	0	22
pH	precip	5.11	4.20	6.27	6512.6	100.0	0	24

GB0014R High Muffles

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.33	0.10	1.24	251.7	100.0	0	23
Cl-	precip	3.96	0.40	11.60	3033.3	100.0	0	23
K+	precip	0.12	0.03	0.33	93.5	100.0	0	23
Mg++	precip	0.268	0.040	0.820	205.4	100.0	0	23
NH4+	precip	0.52	0.23	1.10	400.0	100.0	0	23
NO3-	precip	0.43	0.13	1.15	328.8	100.0	0	23
Na+	precip	2.30	0.27	6.93	1764.9	100.0	0	23
Precip	precip	-	0.0	88.0	766.7	96.2	3	26
SO4--	precip	0.55	0.26	1.37	420.0	100.0	0	23
SO4-- corr	precip	0.35	0.21	0.83	272.2	100.0	0	23
cond	precip	25.50	8.00	61.00	19553.3	100.0	0	23
pH	precip	4.91	4.49	6.31	9426.4	100.0	0	23

GB0015R Strath Vaich Dam

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.23	0.07	0.93	176.9	100.0	0	25
Cl-	precip	4.36	0.20	11.50	3375.9	100.0	0	25
K+	precip	0.11	0.01	0.27	82.2	100.0	1	25
Mg++	precip	0.275	0.020	0.690	212.8	100.0	0	25
NH4+	precip	0.06	0.01	0.38	48.4	100.0	3	25
NO3-	precip	0.09	0.01	0.69	68.9	100.0	1	25
Na+	precip	2.53	0.18	6.22	1955.4	100.0	0	25
Precip	precip	-	4.1	96.8	774.2	100.0	0	25
SO4--	precip	0.30	0.08	0.75	235.0	100.0	0	25
SO4-- corr	precip	0.09	0.01	0.56	71.2	100.0	0	25
cond	precip	48.72	4.00	455.00	37722.0	99.5	0	24
pH	precip	5.16	4.40	6.25	5400.2	100.0	0	25

GB0048R Auchencorth Moss

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.10	0.00	2.61	73.9	97.9	0	167
Cl-	precip	1.53	0.05	24.93	1118.2	97.9	0	167
K+	precip	0.06	0.00	0.84	42.3	97.9	0	167
Mg++	precip	0.095	0.000	1.670	69.2	97.9	0	167
NH4+	precip	0.29	0.02	3.05	211.4	97.9	0	167
NO3-	precip	0.24	0.02	3.64	173.1	97.9	0	167
Na+	precip	0.86	0.02	14.70	628.3	97.9	0	167
Precip	precip	-	0.0	22.3	731.7	100.0	161	365
SO4--	precip	0.27	0.02	3.26	195.8	97.9	0	167
SO4-- corr	precip	0.20	-0.24	2.84	143.3	97.9	0	167
cond	precip	5.23	3.92	6.51	3824.6	93.5	0	120
pH	precip	4.98	3.92	6.51	7725.2	97.9	0	167

HR0002R Puntijarka

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.46	0.09	3.86	746.0	94.8	0	134
Cl-	precip	0.42	0.05	2.54	683.6	94.3	0	129
K+	precip	0.85	0.24	5.34	1367.2	94.8	0	134
Mg++	precip	0.040	0.001	0.558	65.2	94.8	0	134
NH4+	precip	0.33	0.04	1.99	527.9	94.4	0	130
NO3-	precip	0.27	0.05	3.89	442.6	94.8	0	134
Na+	precip	0.30	0.05	2.49	484.8	94.7	0	132
Precip off	precip	-	0.00	65.30	1613.2	99.9	182	365
SO4--	precip	0.40	0.05	3.15	649.3	94.8	0	134
SO4-- corr	precip	0.38	0.04	3.02	611.9	94.9	0	135
cond	precip	11.34	3.00	84.00	18293.3	95.4	0	146
pH	precip	5.23	4.03	7.17	9586.1	95.4	0	146

HR0004R Zavizan

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.81	0.09	17.43	1915.7	99.6	0	170
Cl-	precip	0.61	0.05	2.84	1433.5	98.9	0	163
K+	precip	0.72	0.28	1.91	1693.7	99.6	0	170
Mg++	precip	0.059	0.002	0.702	139.8	99.6	0	170
NH4+	precip	0.25	0.04	1.65	586.2	97.3	0	162
NO3-	precip	0.28	0.05	2.31	657.8	99.6	0	170
Na+	precip	0.38	0.04	1.82	893.7	99.0	0	164
Precip off	precip	-	0.00	119.70	2352.4	99.9	176	365
SO4--	precip	0.34	0.05	5.75	787.4	99.6	0	170
SO4-- corr	precip	0.30	0.03	5.73	711.4	99.6	0	171
cond	precip	11.46	3.00	168.00	26969.1	99.7	0	172
pH	precip	5.55	4.64	7.81	6615.0	99.7	0	172

HU0002R K-pusztá

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.43	0.12	3.79	438.1	99.1	0	122
Cl-	precip	0.69	0.11	6.44	695.2	99.8	0	138
K+	precip	0.10	0.02	1.03	106.5	99.1	14	122
Mg++	precip	0.080	0.025	0.520	80.7	99.1	22	122
NH4+	precip	0.35	0.01	2.54	358.9	99.6	12	132
NO3-	precip	0.28	0.01	22.58	283.1	100.0	1	141
Na+	precip	1.06	0.22	4.76	1068.7	99.1	0	122
Precip	precip	-	0.2	59.1	1010.4	99.9	224	365
Precip off	precip	-	0.20	57.60	989.2	99.9	224	365
SO4--	precip	0.51	0.06	7.90	514.7	99.8	0	138
SO4-- corr	precip	0.46	-0.04	7.67	464.2	99.8	0	138
cond	precip	14.21	5.90	63.50	14357.7	99.6	0	128
pH	precip	5.63	4.40	6.72	2391.4	96.7	0	127

IE0001R Valentia Observatory

January 2010 - December 2010

Wet only sampler

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.23	0.03	4.12	281.2	94.0	26	165
Cl-	precip	7.12	0.11	131.19	8542.2	94.0	0	165
K+	precip	0.17	0.03	3.45	200.4	94.0	25	165
Mg++	precip	0.514	0.025	12.002	616.8	94.0	9	165
NH4+	precip	0.09	0.02	1.82	103.8	94.0	68	165
NO3-	precip	0.06	0.01	1.79	73.1	94.0	15	165
Na+	precip	4.06	0.03	91.87	4871.5	94.0	1	165
Precip	precip	-	0.0	66.7	1199.4	91.1	131	333
SO4--	precip	0.43	0.03	7.69	516.9	94.0	0	165
SO4-- corr	precip	0.09	-0.06	1.80	109.7	94.0	0	165
cond	precip	30.66	2.80	616.00	36776.6	94.0	0	165
pH	precip	5.30	3.95	7.33	5993.0	94.0	0	165

Bulk sampler

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.23	0.03	1.91	263.0	89.9	27	103
Cl-	precip	8.28	0.17	86.10	9628.0	89.9	0	103
K+	precip	0.27	0.03	3.92	319.0	89.9	10	103
Mg++	precip	0.615	0.025	6.595	714.9	89.9	17	103
NH4+	precip	0.12	0.02	1.91	145.0	89.9	38	103
NO3-	precip	0.08	0.01	0.89	94.9	89.9	3	103
Na+	precip	4.76	0.07	48.91	5529.7	89.9	0	103
Precip	precip	-	0.0	93.6	1162.2	74.8	113	273
SO4--	precip	0.49	0.01	4.11	575.3	89.9	6	103
SO4-- corr	precip	0.10	-0.06	0.86	112.7	89.9	6	103
cond	precip	35.46	3.70	363.00	41207.2	89.9	0	103
pH	precip	5.25	4.59	6.43	6475.8	89.9	0	103

IE0005R Oak Park

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.10	0.03	2.51	52.2	82.2	42	87
Cl-	precip	1.81	0.03	51.17	915.0	82.2	4	87
K+	precip	0.07	0.03	3.10	33.3	82.2	65	87
Mg++	precip	0.130	0.025	3.289	65.9	82.2	42	87
NH4+	precip	0.16	0.02	1.67	81.1	75.0	23	85
NO3-	precip	0.07	0.01	1.43	33.0	82.2	4	87
Na+	precip	1.00	0.03	28.35	508.0	82.2	8	87
Precip	precip	-	0.0	35.6	505.9	75.3	139	275
Precip off	precip	-	0.00	47.10	766.0	98.6	148	360
SO4--	precip	0.16	0.03	2.47	82.2	82.2	1	91
SO4-- corr	precip	0.08	-0.05	0.69	39.3	82.2	1	91
cond	precip	10.38	2.30	183.70	5248.6	82.2	0	87
pH	precip	5.71	4.66	6.74	981.5	82.2	0	87

IE0007R Glenveagh

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.08	0.03	0.63	36.0	98.6	33	95
Cl-	precip	3.47	0.11	31.88	1631.1	98.6	0	95
K+	precip	0.08	0.03	0.68	38.5	98.5	27	94
Mg++	precip	0.225	0.025	2.204	105.8	98.6	16	95
NH4+	precip	0.14	0.02	0.97	67.4	98.5	35	94
NO3-	precip	0.10	0.01	0.68	48.3	98.6	4	95
Na+	precip	1.90	0.03	17.55	891.4	98.6	1	95
Precip	precip	-	0.0	21.8	469.5	43.8	37	160
SO4--	precip	0.27	0.04	1.56	124.9	98.6	0	95
SO4-- corr	precip	0.11	-0.03	0.68	51.0	98.6	0	95
cond	precip	17.29	3.20	116.70	8119.3	98.6	0	95
pH	precip	5.32	4.38	6.99	2240.5	98.6	0	95

IE0009R Johnstown Castle

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.12	0.03	2.64	74.0	83.6	39	104
Cl-	precip	5.03	0.15	29.36	3125.6	76.8	0	101
K+	precip	0.11	0.03	0.65	67.3	84.0	28	104
Mg++	precip	0.330	0.025	2.262	205.3	83.3	20	105
NH4+	precip	0.13	0.02	1.85	79.5	76.8	34	102
NO3-	precip	0.10	0.01	1.85	65.1	76.8	15	101
Na+	precip	2.83	0.03	16.75	1760.4	76.8	1	101
Precip	precip	-	0.0	24.6	621.4	85.2	167	311
Precip off	precip	-	0.00	60.50	1032.8	99.2	149	362
SO4--	precip	0.36	0.05	2.04	222.1	76.8	2	101
SO4-- corr	precip	0.12	-0.03	1.10	74.4	76.8	2	101
cond	precip	23.82	2.80	112.90	14803.8	76.8	0	101
pH	precip	5.22	4.45	6.64	3743.9	76.8	0	101

IS0002R Irafoss

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.17	0.00	2.80	210.9	99.7	0	128
Cl-	precip	3.99	0.10	82.40	4881.4	99.7	3	128
K+	precip	0.20	0.05	3.80	244.2	99.7	31	128
Mg++	precip	0.247	0.000	4.400	302.0	99.7	0	128
NO3-	precip	0.05	0.00	0.66	60.9	99.7	6	128
Na+	precip	2.14	0.05	37.50	2618.6	99.7	2	128
Precip	precip	-	0.2	66.0	1223.5	99.9	236	365
SO4--	precip	0.30	0.00	3.60	368.7	99.7	1	128
SO4-- corr	precip	0.13	-0.20	1.60	155.5	99.7	1	128
cond	precip	18.32	2.40	165.60	22408.1	99.1	0	118
pH	precip	5.36	4.20	6.90	5298.5	99.7	0	128

IT0001R Montelibretti

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	1.77	0.06	5.58	1272.9	100.0	0	47
Cl-	precip	0.64	0.12	3.62	460.7	100.0	0	47
K+	precip	0.17	0.03	0.72	123.4	100.0	0	47
Mg++	precip	0.163	0.010	0.550	116.6	100.0	0	47
NH4+	precip	0.07	0.00	0.26	51.1	100.0	0	47
NO3-	precip	0.15	0.00	1.61	106.0	100.0	0	47
Na+	precip	0.70	0.01	2.33	502.4	100.0	0	47
Precip	precip	-	0.0	42.3	717.3	100.0	303	350
SO4--	precip	0.12	0.03	0.64	89.2	100.0	0	47
SO4-- corr	precip	0.07	-0.10	0.54	50.3	100.0	0	47
cond	precip	27.34	11.22	166.70	19610.4	100.0	0	47
pH	precip	5.92	4.56	6.97	873.1	100.0	0	47

IT0004R Ispra

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.35	0.02	15.89	613.5	95.7	0	123
Cl-	precip	0.35	0.02	15.89	613.5	95.7	0	123
K+	precip	0.04	0.00	0.89	60.5	90.7	0	118
Mg++	precip	0.046	0.002	1.074	80.7	95.7	0	123
NH4+	precip	0.72	0.03	8.21	1259.1	95.7	0	123
NO3-	precip	0.50	0.05	7.31	880.6	95.7	0	123
Na+	precip	0.26	0.01	9.39	454.7	95.7	0	123
Precip	precip	-	0.0	101.8	1745.6	99.9	236	365
SO4--	precip	0.39	0.02	5.39	672.7	95.7	0	123
SO4-- corr	precip	0.36	0.01	4.95	632.8	95.7	0	123
cond	precip	13.32	2.55	91.70	23257.1	90.6	0	96
pH	precip	5.43	4.36	7.42	6547.1	84.1	0	100

LT0015R Preila

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.37	0.05	6.30	241.5	99.5	0	86
Cl-	precip	3.12	0.32	53.52	2064.1	99.5	0	86
K+	precip	0.15	0.00	1.24	98.2	99.5	0	86
NH4+	precip	0.39	0.02	4.57	259.3	99.5	0	86
NO3-	precip	0.56	0.14	4.72	370.4	99.5	0	86
Na+	precip	2.39	0.25	29.30	1576.5	99.5	0	86
Precip	precip	-	0.0	35.0	660.6	99.9	270	365
SO4--	precip	0.58	0.12	4.09	384.0	99.5	0	86
SO4-- corr	precip	0.40	-1.41	3.28	262.2	99.5	0	86
cond	precip	25.57	8.50	270.00	16890.1	99.5	0	86
pH	precip	5.01	3.95	6.66	6416.0	99.5	0	86

LV0010R Rucava

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.22	0.06	1.19	213.1	38.6	4	13
Cl-	precip	0.85	0.09	1.98	810.7	37.5	0	11
K+	precip	0.06	0.01	0.15	55.0	38.6	6	13
Mg++	precip	0.163	0.010	0.300	155.4	38.6	4	13
NH4+	precip	0.31	0.13	1.25	297.8	38.6	0	13
NO3-	precip	0.39	0.20	0.96	373.7	37.5	0	11
Na+	precip	0.56	0.01	1.07	535.7	38.6	1	13
Precip	precip	-	0.0	99.5	955.9	100.0	5	53
SO4--	precip	0.31	0.21	0.80	300.1	37.5	0	11
SO4-- corr	precip	0.27	0.15	0.76	253.8	37.5	0	11
cond	precip	16.35	9.30	28.00	15629.1	38.6	0	12
pH	precip	4.99	4.42	6.44	9762.7	38.6	0	13

MD0013R Leova II

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	1.07	0.16	4.93	737.0	82.3	2	76
Cl-	precip	2.28	0.52	27.48	1577.1	84.9	1	77
K+	precip	0.28	0.07	8.78	197.3	81.0	2	75
Mg++	precip	0.168	0.019	1.534	116.0	82.5	3	77
NH4+	precip	0.57	0.13	5.58	396.1	82.5	1	77
NO3-	precip	0.58	0.17	2.62	404.8	84.9	2	77
Na+	precip	0.39	0.08	2.65	270.3	82.5	2	77
Precip	precip	-	0.0	66.4	691.4	99.9	240	365
SO4--	precip	0.70	0.24	2.91	482.3	84.9	2	77
SO4-- corr	precip	0.63	0.19	2.75	438.0	84.9	2	77
cond	precip	17.18	5.20	130.10	11875.9	78.7	0	69
pH	precip	5.46	4.19	7.24	2384.9	85.2	0	78

NL0009R Kollumerwaard

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.23	0.03	1.44	135.5	63.2	0	48
Cl-	precip	4.57	0.14	34.75	2720.1	65.7	0	67
H+	precip	5.74	-109.10	37.70	3417.2	65.9	0	70
K+	precip	0.13	0.02	1.47	78.5	63.2	0	48
Mg++	precip	0.307	0.012	2.372	183.2	63.2	0	48
NH4+	precip	0.61	0.10	3.15	365.2	64.6	0	57
NO3-	precip	0.34	0.00	2.92	202.4	65.7	0	67
Na+	precip	2.52	0.09	19.25	1504.3	63.2	0	48
Precip	precip	-	0.0	21.0	595.6	67.4	112	246
SO4--	precip	0.46	0.14	4.06	273.3	65.7	0	67
SO4-- corr	precip	0.24	0.03	3.87	143.0	65.7	0	67
cond	precip	25.93	8.00	137.00	15444.1	62.2	0	44
pH	precip	5.54	4.77	6.10	1739.0	65.9	0	70

NO0001R Birkenes

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.10	0.01	1.22	106.7	99.3	2	143
Cl-	precip	1.35	0.01	26.14	1500.2	99.3	1	143
K+	precip	0.06	0.01	1.80	71.6	99.3	9	143
Mg++	precip	0.083	0.005	1.500	92.5	99.3	18	143
NH4+	precip	0.36	0.01	4.53	401.4	99.3	12	143
NO3-	precip	0.46	0.01	2.79	510.9	99.3	2	143
Na+	precip	0.75	0.01	14.23	830.2	99.3	0	143
Precip	precip	-	0.0	83.4	1112.6	99.9	170	365
SO4--	precip	0.44	0.01	5.35	487.1	99.3	0	143
SO4-- corr	precip	0.38	0.00	4.16	418.2	99.3	0	144
cond	precip	19.82	2.00	193.00	22048.1	99.0	0	136
pH	precip	4.69	3.78	6.61	22590.5	98.5	0	126

NO0015R Tustervatn

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.06	0.01	0.34	52.1	97.6	2	68
Cl-	precip	1.21	0.04	6.31	1101.3	97.6	0	68
K+	precip	0.09	0.01	1.40	81.3	96.3	5	66
Mg++	precip	0.077	0.005	0.506	70.2	97.6	6	68
NH4+	precip	0.15	0.01	2.13	140.7	96.3	0	66
NO3-	precip	0.08	0.01	1.48	75.1	97.6	3	68
Na+	precip	0.77	0.02	4.51	700.1	97.6	0	68
Precip	precip	-	0.0	80.3	912.9	98.5	34	111
SO4--	precip	0.17	0.01	1.16	155.5	97.6	3	68
SO4-- corr	precip	0.11	-0.05	1.01	98.0	97.6	3	68
cond	precip	9.95	2.00	41.00	9080.3	97.6	0	68
pH	precip	5.35	4.72	6.33	4062.5	96.2	0	64

NO0039R Kårvatn

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.03	0.01	0.45	48.3	100.0	1	60
Cl-	precip	1.07	0.05	6.23	1571.6	100.0	0	60
K+	precip	0.06	0.01	0.92	91.6	100.0	2	60
Mg++	precip	0.061	0.005	0.519	89.9	100.0	5	60
NH4+	precip	0.12	0.01	0.97	175.7	99.8	3	59
NO3-	precip	0.05	0.01	1.22	73.9	100.0	11	60
Na+	precip	0.61	0.03	4.11	894.7	100.0	0	60
Precip	precip	-	0.0	157.8	1464.6	96.4	53	113
SO4--	precip	0.13	0.01	1.11	187.1	100.0	2	60
SO4-- corr	precip	0.07	-0.08	0.77	108.5	100.0	2	61
cond	precip	8.46	2.00	26.00	12397.1	100.0	0	58
pH	precip	5.36	4.75	6.22	6395.0	99.7	0	55

NO0055R Karasjok

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.17	0.02	1.34	6.6	76.6	0	16
Cl-	precip	1.93	0.34	22.24	76.5	76.6	0	16
K+	precip	1.10	0.12	11.41	43.7	76.6	0	16
Mg++	precip	0.051	0.016	0.313	2.0	76.6	0	16
NH4+	precip	0.38	0.01	3.97	15.0	76.6	0	16
NO3-	precip	0.23	0.08	0.90	9.1	76.6	0	16
Na+	precip	1.02	0.23	10.56	40.6	76.6	0	16
Precip	precip	-	0.0	7.0	39.7	16.2	34	59
SO4--	precip	0.17	0.05	0.91	6.9	76.6	0	16
SO4-- corr	precip	0.09	0.01	0.32	3.6	76.6	0	16
cond	precip	12.34	5.00	37.00	489.7	72.8	0	13
pH	precip	5.35	4.69	7.76	176.2	71.5	0	12

NO0056R Hurdal

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.09	0.02	0.68	74.2	94.2	0	44
Cl-	precip	0.41	0.05	6.83	332.0	94.2	0	44
K+	precip	0.21	0.01	1.80	167.1	94.2	1	44
Mg++	precip	0.021	0.005	0.183	17.2	94.2	9	44
NH4+	precip	0.36	0.02	1.38	291.5	94.2	0	44
NO3-	precip	0.35	0.06	1.13	283.3	94.2	0	44
Na+	precip	0.24	0.02	3.79	194.7	94.2	0	44
Precip	precip	-	0.0	86.0	809.0	97.2	65	110
SO4--	precip	0.29	0.03	1.00	238.3	94.2	0	44
SO4-- corr	precip	0.28	0.03	0.95	226.2	94.2	0	44
cond	precip	12.52	3.00	62.00	10125.4	94.2	0	44
pH	precip	4.88	4.26	6.16	10707.7	94.1	0	43

PL0002R Jarczew

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.22	0.00	2.80	132.8	98.3	0	132
Cl-	precip	0.30	0.10	5.00	182.7	98.3	0	132
K+	precip	0.12	0.01	2.07	75.3	98.3	0	132
Mg++	precip	0.029	0.004	0.281	17.8	98.3	0	132
NH4+	precip	0.52	0.09	3.88	317.3	98.3	0	132
NO3-	precip	0.33	0.05	3.46	203.7	98.3	0	132
Na+	precip	0.10	0.01	1.90	64.0	98.3	0	132
Precip	precip	-	0.0	52.4	615.5	90.9	179	332
SO4--	precip	0.47	0.05	3.63	286.6	98.3	0	132
SO4-- corr	precip	0.46	0.05	3.56	280.4	98.3	0	133
cond	precip	13.26	2.30	97.10	8159.9	98.3	0	132
pH	precip	4.98	3.79	7.00	6379.5	98.3	0	132

PL0003R Sniezka

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.48	0.20	1.10	631.1	99.5	0	206
Cl-	precip	0.80	0.40	1.60	1048.6	99.5	0	206
K+	precip	0.32	0.10	0.89	421.4	99.5	0	206
Mg++	precip	0.154	0.032	0.506	202.5	99.5	0	206
NH4+	precip	0.53	0.22	1.23	696.9	99.5	0	206
NO3-	precip	0.75	0.27	1.83	977.7	99.5	0	206
Na+	precip	0.69	0.27	1.43	898.1	99.5	0	206
Precip	precip	-	0.0	56.6	1311.1	96.7	109	353
SO4--	precip	1.11	0.52	2.36	1453.9	99.5	0	206
SO4-- corr	precip	1.05	0.50	2.27	1378.8	99.5	0	207
cond	precip	29.05	14.80	66.90	38083.6	99.5	0	206
pH	precip	4.50	3.98	4.82	41569.3	99.5	0	206

PL0004R Leba

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.16	0.00	3.00	130.9	99.7	0	140
Cl-	precip	0.94	0.10	12.50	773.8	99.7	0	140
K+	precip	0.08	0.01	2.20	64.0	99.7	0	140
Mg++	precip	0.063	0.005	0.847	52.2	99.7	0	140
NH4+	precip	0.34	0.04	5.29	277.2	99.7	0	140
NO3-	precip	0.33	0.06	4.53	268.8	99.7	0	140
Na+	precip	0.50	0.01	6.06	414.5	99.7	0	140
Precip	precip	-	0.0	47.0	826.4	92.6	182	338
SO4--	precip	0.33	0.06	2.64	274.0	99.7	0	140
SO4-- corr	precip	0.29	0.03	2.60	238.5	99.7	0	140
cond	precip	14.57	5.40	93.50	12042.5	99.7	0	140
pH	precip	4.87	3.78	6.71	11063.2	99.7	0	140

PL0005R Diabla Gora

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.18	0.00	1.40	115.2	98.2	0	120
Cl-	precip	0.24	0.00	3.80	148.2	98.0	0	135
K+	precip	0.06	0.01	0.40	34.1	98.2	0	120
Mg++	precip	0.033	0.004	0.292	20.5	98.2	0	120
NH4+	precip	0.46	0.01	4.28	285.7	100.0	10	136
NO3-	precip	0.34	0.03	3.03	209.4	100.0	0	136
Na+	precip	0.08	0.01	1.81	50.9	98.2	0	120
Precip	precip	-	0.0	37.5	621.1	99.9	229	365
Precip off	precip	-	0.00	49.00	739.6	99.9	171	365
SO4--	precip	0.37	0.08	2.77	231.0	100.0	0	136
SO4-- corr	precip	0.36	0.07	2.75	225.6	100.0	0	136
cond	precip	9.93	4.00	41.00	6167.7	91.7	0	86
pH	precip	5.03	3.87	6.81	5838.2	99.6	0	135

RS0005R Kamenicki vis

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	1.28	0.01	7.59	961.2	77.0	0	90
Cl-	precip	0.70	0.10	2.89	528.3	77.0	0	90
K+	precip	0.28	0.01	8.48	211.6	83.4	0	97
Mg++	precip	0.129	0.010	0.980	96.6	77.0	0	90
NH4+	precip	0.52	0.01	20.19	391.9	78.1	0	91
NO3-	precip	0.42	0.01	11.62	312.6	84.1	0	104
Na+	precip	0.46	0.05	6.67	345.5	78.1	0	91
Precip	precip	-	0.0	28.4	750.7	99.9	204	365
SO4--	precip	0.85	0.02	8.42	641.4	84.1	0	104
SO4-- corr	precip	0.82	-0.16	8.15	612.4	84.0	0	103
cond	precip	29.31	6.00	341.00	22002.6	95.1	0	146
pH	precip	5.29	3.25	8.00	3806.8	96.3	0	147

RU0001R Janiskoski

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.11	0.03	0.63	38.0	100.0	0	58
Cl-	precip	0.34	0.05	3.59	119.0	100.0	0	58
K+	precip	0.12	0.02	0.71	42.2	100.0	0	58
Mg++	precip	0.037	0.006	0.341	13.0	100.0	0	58
NH4+	precip	0.08	0.01	1.23	29.4	100.0	0	58
NO3-	precip	0.04	0.01	0.21	12.9	100.0	0	58
Na+	precip	0.22	0.03	3.00	79.0	100.0	0	58
Precip	precip	-	0.0	40.5	353.8	100.0	307	365
SO4--	precip	0.30	0.05	3.59	108.0	100.0	0	58
SO4-- corr	precip	0.29	-0.02	3.56	101.1	100.0	0	58
cond	precip	10.11	4.90	56.40	3576.5	90.4	0	47
pH	precip	4.94	3.94	6.20	4071.6	97.4	0	55

RU0013R Pinega

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.51	0.07	4.22	222.6	100.0	0	155
Cl-	precip	0.82	0.06	11.52	360.5	100.0	0	155
K+	precip	0.55	0.06	6.14	240.7	100.0	0	155
Mg++	precip	0.198	0.021	1.982	87.0	100.0	0	155
NH4+	precip	0.71	0.01	6.92	313.6	100.0	0	155
NO3-	precip	0.22	0.01	3.07	96.2	100.0	0	155
Na+	precip	0.56	0.08	9.13	244.1	100.0	0	155
Precip	precip	-	0.0	23.7	438.5	100.0	210	365
SO4--	precip	0.48	0.04	4.70	208.6	100.0	0	155
SO4-- corr	precip	0.43	0.03	4.63	188.1	100.0	0	155
cond	precip	21.96	4.70	224.20	9627.8	92.7	0	109
pH	precip	5.56	4.37	6.91	1194.5	95.0	0	119

RU0018R Danki

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.29	0.06	2.06	152.1	100.0	0	120
Cl-	precip	0.41	0.02	31.00	218.0	100.0	0	120
K+	precip	0.18	0.02	2.68	93.8	100.0	0	120
Mg++	precip	0.047	0.012	0.313	24.7	100.0	0	120
NH4+	precip	0.42	0.01	5.48	224.4	100.0	0	120
NO3-	precip	0.26	0.01	1.84	140.1	100.0	0	120
Na+	precip	0.16	0.04	4.53	85.9	99.9	0	119
Precip	precip	-	0.0	24.8	530.8	100.0	245	365
SO4--	precip	0.38	0.06	2.03	202.8	100.0	0	120
SO4-- corr	precip	0.37	0.05	2.02	195.6	100.0	0	120
cond	precip	13.30	5.10	79.40	7059.5	83.4	0	87
pH	precip	5.10	3.93	6.87	4230.0	98.1	0	107

RU0020R Lesnoy

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.25	0.01	3.18	189.0	100.0	0	167
Cl-	precip	0.31	0.02	7.16	229.9	100.0	0	167
K+	precip	0.21	0.01	5.44	157.1	100.0	0	167
Mg++	precip	0.049	0.001	0.565	36.4	100.0	0	167
NH4+	precip	0.47	0.01	10.00	351.8	100.0	0	167
NO3-	precip	0.25	0.01	3.61	185.6	100.0	0	167
Na+	precip	0.19	0.02	3.61	141.7	100.0	0	167
Precip	precip	-	0.0	40.0	746.8	100.0	198	365
SO4--	precip	0.32	0.03	5.06	239.5	100.0	0	167
SO4-- corr	precip	0.30	0.03	4.97	227.7	100.0	0	167
cond	precip	13.01	4.10	238.70	9713.2	98.3	0	131
pH	precip	5.43	4.45	7.63	2752.3	98.7	0	136

SE0011R Vavihill

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.20	0.05	0.70	96.8	100.0	0	13
Cl-	precip	1.13	0.27	2.67	545.0	100.0	0	13
K+	precip	0.08	0.03	0.56	39.2	100.0	3	13
Mg++	precip	0.073	0.015	0.170	35.2	100.0	1	13
NH4+	precip	0.61	0.23	3.28	293.8	100.0	0	13
NO3-	precip	0.51	0.29	2.29	248.3	100.0	0	13
Na+	precip	0.58	0.15	1.55	279.4	100.0	0	13
Precip	precip	-	5.5	98.9	483.3	99.9	0	13
SO4--	precip	0.39	0.28	1.11	188.8	100.0	0	13
SO4-- corr	precip	0.34	0.21	1.08	165.2	100.0	0	13
cond	precip	17.92	10.00	43.00	8659.4	100.0	0	13
pH	precip	4.91	4.28	6.86	5939.9	100.0	0	13

SE0012R Aspvreten

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.07	0.03	0.16	32.9	100.0	6	11
Cl-	precip	0.38	0.08	0.78	188.1	100.0	0	11
K+	precip	0.04	0.03	0.13	18.1	97.3	9	10
Mg++	precip	0.027	0.015	0.070	13.2	97.3	7	10
NH4+	precip	0.35	0.09	1.22	172.1	100.0	0	11
NO3-	precip	0.34	0.15	0.81	166.4	100.0	0	11
Na+	precip	0.19	0.03	0.46	94.9	100.0	4	11
Precip	precip	-	13.3	56.2	493.7	91.0	0	11
SO4--	precip	0.29	0.17	0.58	143.9	100.0	0	11
SO4-- corr	precip	0.27	0.15	0.56	135.4	100.0	0	12
cond	precip	13.70	6.00	28.00	6764.9	100.0	0	11
pH	precip	4.75	4.31	5.94	8813.2	100.0	0	11

SE0014R Råstorp

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.34	0.03	3.36	179.2	99.1	27	134
Cl-	precip	3.79	0.10	19.71	1994.8	99.1	0	134
K+	precip	0.13	0.03	1.02	66.5	98.9	69	133
Mg++	precip	0.255	0.015	1.370	134.0	98.9	32	133
NH4+	precip	0.63	0.01	4.77	329.9	99.1	1	134
NO3-	precip	0.45	0.05	3.76	234.3	99.1	0	134
Na+	precip	2.13	0.03	14.84	1118.8	99.1	8	134
Precip	precip	-	0.0	27.0	526.3	99.9	201	359
SO4--	precip	0.48	0.07	2.01	254.2	99.1	0	134
SO4-- corr	precip	0.31	0.04	1.80	161.0	99.1	0	134
cond	precip	26.98	4.00	79.00	14201.2	87.9	0	70
pH	precip	4.99	3.95	7.48	5437.7	99.7	0	150

SI0008R Iskrba

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.21	0.01	4.09	326.7	99.0	14	143
Cl-	precip	0.32	0.01	4.99	502.3	99.4	29	146
K+	precip	0.04	0.00	1.65	63.9	99.0	40	143
Mg++	precip	0.043	0.003	0.449	67.6	99.0	30	143
NH4+	precip	0.06	0.00	0.70	88.3	99.0	12	143
NO3-	precip	0.24	0.03	2.98	384.6	99.4	0	146
Na+	precip	0.20	0.01	3.53	311.4	99.0	52	143
Precip	precip	-	0.0	44.8	1571.5	99.9	183	365
SO4--	precip	0.27	0.01	4.84	427.6	99.4	3	146
SO4-- corr	precip	0.26	0.01	4.82	401.6	99.4	3	147
cond	precip	9.65	1.90	88.50	15163.4	97.9	1	125
pH	precip	4.93	3.93	6.80	18502.9	97.9	0	125

SK0002R Chopok

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.15	0.01	3.59	209.8	96.1	0	180
Cl-	precip	0.13	0.01	2.04	177.0	96.1	1	180
K+	precip	0.08	0.01	0.49	108.7	96.0	0	179
Mg++	precip	0.035	0.001	0.740	48.8	96.1	1	180
NH4+	precip	0.36	0.03	3.64	491.7	96.0	0	179
NO3-	precip	0.23	0.04	2.16	314.6	96.1	0	180
Na+	precip	0.12	0.01	2.84	169.3	96.1	0	180
Precip	precip	-	0.1	43.4	1377.4	99.9	129	365
SO4--	precip	0.42	0.03	4.13	583.7	96.1	0	180
SO4-- corr	precip	0.42	0.03	3.89	572.9	96.1	0	180
cond	precip	10.30	3.40	37.70	14193.6	67.4	0	65
pH	precip	5.00	4.27	6.22	13643.9	67.4	0	65

SK0004R Stara Lesna

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.19	0.02	1.88	201.3	95.3	0	117
Cl-	precip	0.13	0.01	3.00	136.0	95.3	1	117
K+	precip	0.10	0.00	1.07	108.1	95.3	0	117
Mg++	precip	0.043	0.002	1.006	44.9	95.3	0	117
NH4+	precip	0.29	0.00	3.91	304.0	90.1	0	114
NO3-	precip	0.23	0.00	4.69	241.7	95.3	3	117
Na+	precip	0.11	0.01	2.13	111.4	95.3	0	117
Precip	precip	-	0.1	44.8	1037.3	99.9	187	365
SO4--	precip	0.39	0.02	2.30	407.2	95.0	0	116
SO4-- corr	precip	0.38	0.01	2.24	398.5	95.0	0	116
cond	precip	10.74	3.30	32.90	11142.4	75.8	0	65
pH	precip	4.93	4.35	6.18	12151.2	75.8	0	65

SK0006R Starina

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.19	0.02	1.49	175.9	92.8	0	117
Cl-	precip	0.14	0.02	1.91	128.6	92.8	0	117
K+	precip	0.13	0.01	4.19	125.0	92.8	0	117
Mg++	precip	0.039	0.003	0.165	36.5	92.8	0	117
NH4+	precip	0.28	0.00	2.02	259.0	86.0	0	110
NO3-	precip	0.26	0.01	1.91	247.5	92.8	0	117
Na+	precip	0.12	0.01	1.62	108.3	92.5	0	116
Precip	precip	-	0.1	36.2	939.3	99.9	189	365
SO4--	precip	0.41	0.04	2.46	389.9	92.8	0	117
SO4-- corr	precip	0.41	0.04	2.45	381.8	92.8	0	118
cond	precip	11.38	3.60	53.20	10690.5	73.8	0	64
pH	precip	4.89	4.07	5.90	11951.8	73.8	0	64

SK0007R Topolniki

January 2010 - December 2010

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.23	0.07	1.81	216.8	99.9	0	43
Cl-	precip	0.15	0.05	1.31	140.1	99.9	0	43
K+	precip	0.09	0.01	0.59	82.3	99.9	0	43
Mg++	precip	0.045	0.010	0.272	42.1	99.9	0	43
NH4+	precip	0.44	0.03	1.65	404.3	98.2	0	42
NO3-	precip	0.37	0.07	2.04	343.2	99.9	0	43
Na+	precip	0.10	0.02	0.65	88.8	99.9	0	43
Precip	precip	-	0.8	73.3	926.3	97.5	0	44
SO4--	precip	0.45	0.06	1.44	414.8	99.9	0	43
SO4-- corr	precip	0.44	0.06	1.40	407.3	99.9	0	44
cond	precip	13.52	2.98	43.73	12526.5	88.2	0	32
pH	precip	4.95	4.24	5.93	10351.7	88.2	0	32

Annex 3

Annual statistics on gases and aerosol data

AM0001R Amberd

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	1.09	1.21	0.50	4.81	0.00	0.02	0.68	3.66	7.01	95.3	0	349
Cl-	aerosol	0.12	0.13	0.07	2.85	0.00	0.01	0.08	0.36	0.86	95.9	0	351
HNO3	air	0.07	0.06	0.05	2.75	0.00	0.01	0.06	0.19	0.29	96.4	0	353
K+	aerosol	0.15	0.14	0.09	3.42	0.00	0.01	0.11	0.43	0.67	94.8	0	347
Mg++	aerosol	0.078	0.079	0.040	4.271	0.000	0.001	0.053	0.228	0.553	95.3	0	349
NH3	air	0.95	0.44	0.84	1.66	0.12	0.35	0.87	1.74	2.26	97.5	0	357
NH4+	aerosol	0.42	0.16	0.39	1.58	0.03	0.17	0.41	0.71	0.89	97.0	0	355
NO2	air	3.27	1.30	2.98	1.59	0.26	1.39	3.11	5.30	7.17	78.6	0	288
NO3-	aerosol	0.45	0.45	0.27	3.36	0.00	0.04	0.30	1.61	2.46	89.3	0	327
Na+	aerosol	0.12	0.11	0.07	3.27	0.00	0.01	0.10	0.33	0.55	95.6	0	350
SO2	air	0.26	0.29	0.14	3.48	0.00	0.01	0.17	0.86	2.05	95.4	0	349
SO4--	aerosol	0.76	0.52	0.54	3.20	0.00	0.13	0.67	1.65	4.25	95.9	0	351
SO4-- corr	aerosol	0.75	0.52	0.56	2.92	-0.01	0.13	0.66	1.62	4.23	95.9	0	351

AT0002R Illmitz

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	3.30	2.14	2.86	1.66	1.00	1.51	2.62	7.82	14.89	95.3	0	348
PM1 mass	pm1	15.22	10.89	12.10	1.98	1.96	3.94	11.74	39.30	57.11	89.6	0	327
PM10 mass	pm10	23.79	17.54	18.82	1.98	3.06	6.10	17.64	61.86	100.82	98.6	0	360
PM25 mass	pm25	19.33	15.65	14.57	2.12	2.60	4.22	13.25	53.98	79.70	99.7	0	364
SO2	air	0.98	1.89	0.42	3.52	-0.01	0.06	0.41	4.05	30.96	94.1	0	8246

AT0005R Vorhegg

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	1.34	0.95	1.14	1.71	0.43	0.58	1.03	3.51	7.48	93.7	0	342
PM10 mass	pm10	8.99	7.47	6.36	2.43	0.52	1.26	6.74	21.26	52.72	99.7	0	364
SO2	air	0.23	0.29	0.18	1.80	0.04	0.09	0.15	0.58	7.26	93.2	0	8167

AT0048R Zoebelboden

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	1.81	1.56	1.42	1.92	0.33	0.61	1.22	5.08	9.38	93.4	0	341
PM10 mass	pm10	9.31	8.40	6.44	2.46	0.21	1.24	6.45	27.29	47.19	97.8	0	357
SO2	air	0.33	0.49	0.20	2.69	0.00	0.04	0.20	0.89	6.38	83.4	0	7305

BE0001R Offagne

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	3.23	2.67	2.38	2.23	0.00	0.61	2.44	8.83	19.18	96.7	0	8473

BE0032R Eupen

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	4.73	3.70	3.48	2.31	0.00	0.91	3.65	12.48	26.80	94.1	0	8246

BE0035R Vezin

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	4.98	3.60	3.87	2.09	0.30	1.22	3.96	12.18	25.27	97.2	0	8515

CH0001G Jungfrauojoch

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
CO	air	92.55	17.69	90.92	1.21	49.52	65.87	91.33	125.33	187.98	95.1	0	8334
NO	air	0.02	0.05	0.01	2.79	0.00	0.00	0.01	0.07	1.24	79.6	0	6973
NO2	air	0.09	0.09	0.06	2.24	0.01	0.02	0.05	0.28	0.65	74.0	0	270
NO2	air	0.09	0.15	0.05	2.66	0.00	0.01	0.05	0.31	2.49	74.1	0	6488
PM10 mass	pm10	2.20	4.46	1.07	3.04	0.25	1.00	7.59	50.10	98.6	78	360	
SO2	air	0.05	0.19	0.03	2.52	0.01	0.01	0.03	0.12	3.13	95.6	136	349
SO4--	aerosol	0.10	0.13	0.06	3.00	0.00	0.01	0.05	0.35	0.94	98.1	6	358

CH0002R Payerne

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.36	0.32	0.24	2.61	0.05	0.05	0.26	1.01	1.88	99.7	63	364
HNO3	air	0.28	0.09	0.26	1.35	0.15	0.15	0.25	0.51	0.52	95.9	0	25
HNO3+NO3-	air+aerosol	1.15	1.08	0.80	2.36	0.07	0.22	0.73	3.36	9.08	98.4	0	359
K+	aerosol	0.19	0.20	0.14	2.18	0.02	0.05	0.12	0.51	2.35	99.7	9	364
Mg++	aerosol	0.030	0.021	0.023	2.144	0.007	0.007	0.027	0.073	0.135	99.2	89	362
NH3	air	2.30	0.87	2.11	1.55	0.70	0.77	2.28	4.17	4.21	95.9	0	25
NH3+NH4+	air+aerosol	3.83	1.98	3.35	1.71	0.69	1.23	3.47	7.10	14.92	99.5	0	363
NH4+	aerosol	1.39	0.96	1.12	1.94	0.38	0.39	1.13	3.79	4.02	95.9	0	25
NO2	air	3.60	2.38	2.96	1.87	0.52	1.12	2.79	8.47	14.25	98.9	0	361
NO3-	aerosol	0.85	0.57	0.69	1.91	0.27	0.28	0.50	2.21	2.31	95.9	0	25
Na+	aerosol	0.17	0.15	0.12	2.25	0.05	0.05	0.12	0.47	0.91	99.7	147	364
PM1 mass	pm1	10.24	7.59	7.76	2.22	0.50	1.98	8.10	26.96	45.40	47.9	2	175
PM10 mass	pm10	16.31	10.96	13.32	1.91	2.00	4.51	13.54	38.60	87.00	98.9	0	361
PM25 mass	pm25	14.75	12.52	10.42	2.38	1.00	2.20	10.50	40.64	74.70	47.9	0	175
SO2	air	0.34	0.33	0.26	2.06	0.02	0.08	0.26	0.82	3.71	100.0	0	365
SO4--	aerosol	0.61	0.58	0.47	2.06	0.05	0.13	0.47	1.50	4.85	99.7	0	364
SO4-- corr	aerosol	0.59	0.58	0.44	2.14	0.04	0.10	0.44	1.48	4.84	99.7	0	364

CH0003R Tänikon

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	4.31	3.04	3.50	1.89	0.72	1.33	3.39	10.42	22.15	100.0	0	365
PM10 mass	pm10	16.30	11.80	13.15	1.92	1.60	4.91	12.96	39.48	81.20	99.5	0	363

CH0004R Chaumont

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	2.08	1.37	1.73	1.81	0.46	0.68	1.69	4.91	7.73	99.5	0	363
PM10 mass	pm10	8.54	6.99	6.20	2.34	0.39	1.41	6.49	22.05	46.41	98.9	0	361

CH0005R Rigi

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.21	0.27	0.12	2.72	0.05	0.05	0.10	0.83	1.62	99.7	174	364
HNO3	air	0.20	0.10	0.19	1.46	0.10	0.10	0.18	0.52	0.56	95.9	0	25
HNO3+NO3-	air+aerosol	0.86	0.81	0.59	2.45	0.03	0.13	0.60	2.64	6.09	99.2	0	362
K+	aerosol	0.08	0.08	0.06	2.09	0.02	0.02	0.06	0.23	0.73	99.7	63	364
Mg++	aerosol	0.021	0.020	0.015	2.209	0.007	0.007	0.007	0.061	0.108	99.7	183	364
NH3	air	0.86	0.59	0.60	2.79	0.06	0.07	0.88	2.23	2.58	95.9	0	25
NH3+NH4+	air+aerosol	1.86	1.36	1.39	2.26	0.12	0.33	1.57	4.40	9.28	99.7	0	364
NH4+	aerosol	1.04	0.63	0.91	1.67	0.37	0.38	0.83	2.80	3.04	95.9	0	25
NO2	air	1.46	1.57	0.97	2.37	0.11	0.28	0.84	4.73	9.58	100.0	0	365
NO3-	aerosol	0.60	0.38	0.53	1.65	0.24	0.25	0.45	1.68	1.89	95.9	0	25
Na+	aerosol	0.10	0.10	0.08	1.95	0.05	0.05	0.05	0.30	0.67	99.7	223	364
PM1 mass	pm1	6.22	5.92	4.14	2.56	0.50	0.50	4.10	20.36	27.40	45.5	9	166
PM10 mass	pm10	8.57	7.69	5.86	2.55	-0.11	1.37	6.10	25.50	41.80	91.2	3	333
PM25 mass	pm25	7.92	8.48	4.92	2.69	0.50	1.12	4.80	28.77	43.30	39.5	4	144
SO2	air	0.27	0.23	0.22	1.79	0.06	0.09	0.20	0.66	2.17	99.2	0	362
SO4--	aerosol	0.46	0.48	0.32	2.37	0.02	0.08	0.33	1.25	3.65	95.6	0	349
SO4-- corr	aerosol	0.44	0.47	0.29	2.49	0.01	0.06	0.31	1.23	3.62	95.6	0	349

CY0002R Ayia Marina

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Cl-	pm25	0.14	0.04	0.13	1.48	0.01	0.06	0.13	0.21	0.32	34.8	0	127
K+	pm25	0.17	0.09	0.14	1.70	0.02	0.07	0.14	0.37	0.56	34.5	0	126
Mg++	pm25	0.043	0.031	0.034	2.003	0.005	0.009	0.034	0.105	0.216	34.5	0	126
NO2	air	0.92	0.56	0.79	1.73	0.03	0.30	0.79	1.98	6.79	96.4	0	8445
NO3-	pm25	0.04	0.03	0.03	2.12	0.00	0.01	0.03	0.09	0.20	34.8	0	127
Na+	pm25	0.25	0.10	0.23	1.48	0.05	0.12	0.23	0.42	0.59	34.5	0	126
PM10 mass	pm10	30.32	23.06	25.42	1.76	4.00	10.64	24.20	65.38	210.10	97.3	0	355
PM25 mass	pm25	15.71	12.67	13.29	1.74	1.60	5.28	13.30	28.48	174.10	91.5	0	334
SO2	air	1.05	1.05	0.72	2.33	0.05	0.20	0.65	3.05	10.26	83.6	0	7324
SO4--	pm25	1.21	0.89	0.94	2.14	0.06	0.25	1.03	2.79	6.16	34.8	0	127
SO4-- corr	pm25	1.19	0.89	0.91	2.19	0.05	0.24	1.00	2.78	6.12	34.8	0	127

CZ0001R Svratouch

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.88	0.53	0.74	1.88	0.06	0.23	0.76	1.95	3.19	96.6	0	353
NH3+NH4+	air+aerosol	2.07	0.95	1.85	1.63	0.33	0.76	1.97	3.72	7.03	97.7	0	357
NO2	air	2.08	1.12	1.78	1.78	0.76	0.76	1.95	4.29	6.21	98.8	92	361
PM10 mass	pm10	15.97	7.96	14.19	1.64	2.50	6.00	14.00	31.00	46.00	44.4	1	162
SO2	air	1.30	1.50	0.79	2.74	0.01	0.15	0.79	4.64	10.63	96.9	1	354
SO4--	aerosol	0.82	0.59	0.64	2.16	0.04	0.17	0.71	2.05	3.81	96.6	0	353

CZ0003R Kosetice

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
CO	air	112.62	34.22	107.27	1.38	22.10	64.36	108.99	171.63	328.25	95.3	62	8345
Ca++	aerosol	0.31	0.22	0.27	1.58	0.09	0.12	0.25	1.07	1.25	6.8	0	25
EC	pm25	0.48	0.33	0.39	2.00	0.11	0.13	0.37	1.17	1.36	15.9	0	58
HNO3+NO3-	air+aerosol	0.88	0.53	0.74	1.84	0.13	0.27	0.74	1.88	3.02	98.8	0	361
K+	aerosol	0.27	0.07	0.26	1.34	0.09	0.15	0.25	0.41	0.41	8.5	0	31
Mg++	aerosol	0.275	0.072	0.265	1.345	0.091	0.136	0.258	0.410	0.411	7.7	0	28
NH3+NH4+	air+aerosol	2.21	1.01	1.98	1.66	0.17	0.80	2.14	4.14	5.81	99.1	0	362
NO	air	0.44	0.56	0.23	3.22	0.05	0.05	0.23	1.51	6.29	96.1	2033	8422
NO2	air	2.40	1.25	2.09	1.74	0.76	0.76	2.22	4.79	7.61	99.4	59	363
NO2	air	2.88	1.65	2.52	1.65	0.23	1.22	2.45	6.06	15.32	96.1	0	8421
Na+	aerosol	1.05	0.27	1.02	1.32	0.36	0.59	1.01	1.64	1.65	8.5	0	31
OC	pm25	3.17	2.90	2.25	2.26	0.46	0.59	2.02	9.94	13.03	15.9	0	58
PM10 mass	pm10	16.95	9.99	14.46	1.79	2.50	6.00	15.00	37.00	64.00	46.0	4	168
PM10 mass	pm10	19.32	13.59	14.73	2.28	1.00	3.00	17.00	46.00	128.00	97.8	252	8566
PM25 mass	pm25	15.24	8.06	13.49	1.64	2.50	6.00	14.00	32.25	54.00	47.7	1	174
SO2	air	0.97	1.26	0.57	2.68	0.08	0.14	0.49	3.70	8.49	98.8	0	361
SO2	air	1.31	1.90	0.65	3.25	0.12	0.12	0.67	5.20	21.46	97.6	1820	8550
SO4--	aerosol	0.87	0.69	0.67	2.17	0.02	0.20	0.68	2.34	4.47	98.8	0	361
TC	pm25	3.65	3.18	2.67	2.17	0.57	0.84	2.31	10.91	14.20	15.9	0	58

DE0001R Westerland

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
PM10 mass	pm10	18.36	10.80	15.83	1.72	2.90	6.46	15.80	43.21	75.70	100.0	0	365

DE0002R Waldhof

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
EC	pm25	0.36	0.25	0.30	1.79	0.10	0.11	0.25	1.08	1.15	11.0	0	40
NO2	air	2.79	2.22	2.23	1.90	0.28	0.90	2.08	7.58	13.83	94.8	0	346
OC	pm25	3.25	2.18	2.69	1.84	0.96	0.96	2.85	9.34	9.51	11.0	0	40
PM1 mass	pm1	8.97	6.62	7.19	1.98	0.10	2.50	7.20	20.27	46.80	100.0	1	365
PM10 mass	pm10	18.04	12.80	15.01	1.79	2.70	6.40	14.30	45.04	91.90	100.0	0	365
PM25 mass	pm25	15.09	13.26	11.38	2.06	2.60	3.78	10.60	42.44	84.70	75.3	0	275
SO2	air	0.84	1.44	0.52	2.46	0.03	0.20	0.50	2.80	14.90	97.8	8	357
TC	pm25	3.60	2.36	3.02	1.81	1.06	1.19	3.15	10.33	10.55	11.0	0	40

DE0003R Schauinsland

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
CO	air	156.84	50.95	150.83	1.30	84.20	108.40	144.80	257.00	597.10	87.0	0	7618
EC	pm25	0.16	0.10	0.13	2.05	0.02	0.03	0.15	0.37	0.38	8.5	0	31
NO2	air	1.08	0.98	0.81	2.05	0.17	0.29	0.75	2.98	6.16	93.4	0	341
OC	pm25	1.82	1.21	1.49	1.91	0.44	0.51	1.53	4.64	5.71	8.5	0	31
PM10 mass	pm10	10.05	8.99	7.10	2.38	0.60	1.40	7.50	25.30	71.50	98.4	0	359
PM25 mass	pm25	8.15	6.97	5.88	2.32	0.60	1.10	6.30	22.07	49.70	69.3	0	253
SO2	air	0.40	0.50	0.28	2.17	0.03	0.10	0.25	1.20	5.00	100.0	8	365
TC	pm25	1.97	1.28	1.62	1.91	0.47	0.55	1.77	4.88	6.03	8.5	0	31

DE0007R Neuglobsow

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
CO	air	185.34	87.13	171.53	1.44	237.90	112.00	156.90	384.90	785.80	71.3	0	6242
NO2	air	1.87	1.64	1.41	2.06	0.28	0.57	1.19	5.45	10.45	97.8	0	357
PM10 mass	pm10	16.52	12.22	13.45	1.86	2.60	5.51	12.70	43.92	77.40	98.9	0	361
PM25 mass	pm25	11.50	8.33	9.17	1.95	2.00	3.15	8.80	29.30	41.40	29.9	0	109
SO2	air	0.92	1.70	0.47	2.75	0.03	0.15	0.40	4.33	12.60	99.7	3	364

DE0008R Schmücke

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
EC	pm25	0.22	0.15	0.18	1.83	0.04	0.07	0.18	0.64	0.81	10.1	0	37
NO2	air	1.91	1.36	1.53	1.96	0.28	0.63	1.49	4.69	9.24	98.9	0	361
OC	pm25	1.83	1.18	1.50	1.92	0.37	0.38	1.62	5.15	5.19	10.1	0	37
PM10 mass	pm10	11.38	7.78	9.16	2.00	1.20	2.53	10.10	23.07	56.50	100.0	0	365
PM25 mass	pm25	6.87	4.61	5.22	2.42	0.10	1.10	6.30	16.35	26.00	29.9	2	109
SO2	air	0.75	1.03	0.42	3.15	0.03	0.03	0.45	2.46	10.85	99.7	27	364
TC	pm25	2.05	1.28	1.71	1.88	0.41	0.50	1.84	5.47	5.97	10.1	0	37

DE0009R Zingst

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
PM10 mass	pm10	17.03	11.38	14.16	1.82	3.20	5.50	13.20	41.28	83.10	99.5	0	363

DE0044R Melpitz

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm10	0.15	0.48	0.10	2.50	0.00	0.01	0.11	0.33	8.91	95.1	0	347
Ca++	pm10	0.41	0.40	0.27	2.54	0.00	0.06	0.30	1.12	7.61	68.3	0	5981
Ca++	pm25	0.06	0.09	0.05	2.80	0.00	0.00	0.05	0.16	1.25	95.3	0	348
Cl-	pm10	0.26	0.33	0.13	3.45	0.01	0.01	0.14	0.92	2.62	95.1	0	347
Cl-	pm10	0.26	0.36	0.14	2.89	0.00	0.03	0.12	0.94	4.89	44.5	0	3894
Cl-	pm25	0.13	0.15	0.07	3.19	0.00	0.01	0.08	0.48	1.26	95.3	0	348
EC	pm10	1.60	2.64	0.96	2.44	0.13	0.24	0.96	5.79	22.68	95.1	0	347
EC	pm25	1.34	2.26	0.80	2.41	0.11	0.23	0.73	5.07	18.12	95.3	0	348
K+	pm10	0.15	0.18	0.12	1.98	0.01	0.04	0.11	0.41	7.23	49.0	0	4289
K+	pm10	0.19	0.19	0.13	2.31	0.02	0.04	0.12	0.58	1.05	95.1	0	347
K+	pm25	0.15	0.18	0.08	3.06	0.00	0.01	0.09	0.54	1.13	95.3	0	348
Mg++	pm10	0.031	0.030	0.023	2.542	0.000	0.000	0.023	0.100	0.178	95.1	0	347
Mg++	pm10	0.111	0.117	0.079	2.255	0.002	0.022	0.078	0.323	1.332	73.2	0	6409
Mg++	pm25	0.010	0.013	0.008	2.657	0.000	0.000	0.007	0.029	0.104	95.3	0	348
NH4+	pm10	1.64	1.73	0.96	3.19	0.02	0.09	1.10	4.96	14.21	80.7	0	7066
NH4+	pm10	1.73	1.46	1.27	2.24	0.12	0.35	1.18	4.87	9.15	95.1	0	347
NH4+	pm25	1.60	1.40	1.16	2.29	0.01	0.34	1.06	4.62	8.37	95.1	0	347
NO3-	pm10	0.95	0.94	0.55	3.23	0.01	0.09	0.64	2.93	5.53	95.1	0	347
NO3-	pm10	1.21	1.20	0.75	2.89	0.01	0.12	0.81	3.37	10.50	81.2	0	7116
NO3-	pm25	0.79	0.87	0.38	3.89	0.02	0.04	0.49	2.67	4.67	95.3	0	348
Na+	pm10	0.17	0.21	0.10	2.72	0.00	0.02	0.10	0.58	3.24	36.5	0	3200
Na+	pm10	0.24	0.34	0.14	3.16	0.00	0.02	0.14	0.78	3.93	94.5	0	345
Na+	pm25	0.07	0.09	0.05	2.92	0.00	0.00	0.05	0.25	0.54	95.3	0	348
OC	pm10	3.08	2.87	2.35	2.02	0.33	0.79	2.27	7.79	21.15	95.1	0	347
OC	pm25	2.61	2.84	1.83	2.22	0.39	0.55	1.68	8.57	20.78	95.3	0	348
PM10 mass	pm10	23.40	17.03	19.90	1.70	5.96	9.18	19.04	53.69	137.23	95.1	0	347
PM25 mass	pm25	19.30	15.61	15.69	1.83	3.19	6.64	14.73	51.42	119.16	95.3	0	348
SO4--	pm10	1.01	1.05	0.74	2.08	0.09	0.26	0.70	3.29	8.35	95.1	0	347
SO4--	pm10	1.06	1.19	0.72	2.36	0.01	0.18	0.72	3.45	9.88	81.2	0	7112
SO4--	pm25	0.90	0.93	0.66	2.08	0.13	0.21	0.64	2.81	7.19	95.3	0	348
SO4-- corr	pm10	0.99	1.05	0.72	2.12	0.08	0.24	0.69	3.26	8.31	95.1	0	347
SO4-- corr	pm10	1.06	1.20	0.72	2.33	-0.01	0.20	0.72	3.44	9.83	79.0	0	6924
SO4-- corr	pm25	0.90	0.93	0.66	2.09	0.13	0.21	0.63	2.80	7.18	95.3	0	348

DK0003R Tange

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.10	0.08	0.08	2.33	-0.01	0.02	0.08	0.27	0.48	80.0	10	292
Cl-	aerosol	1.35	1.30	0.90	2.57	0.04	0.19	0.86	4.12	8.28	88.1	0	322
HNO3+NO3-	air+aerosol	0.64	0.68	0.37	3.56	0.00	0.02	0.41	1.79	5.11	93.9	22	343
K+	aerosol	0.13	0.12	0.10	2.10	0.00	0.04	0.10	0.34	1.15	81.6	36	298
NH3	air	1.14	0.97	0.71	3.63	-0.00	0.02	0.85	3.08	6.94	72.8	16	266
NH3+NH4+	air+aerosol	2.19	1.48	1.77	2.02	0.05	0.55	1.78	4.63	9.13	55.3	17	202
NH4+	aerosol	1.05	1.03	0.70	2.54	0.03	0.15	0.69	3.24	5.71	74.4	3	272
Na+	aerosol	0.89	0.74	0.64	2.37	0.00	0.14	0.68	2.48	4.65	86.8	1	317
SO2	air	0.24	0.43	0.12	3.11	0.00	0.02	0.11	0.82	3.52	87.9	11	321
SO4--	aerosol	0.61	0.49	0.48	2.12	0.01	0.16	0.50	1.53	4.52	88.7	2	324
SO4-- corr	aerosol	0.55	0.51	0.38	2.58	0.01	0.07	0.41	1.53	4.52	88.7	2	324

DK0005R Keldsno

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.12	0.09	0.10	2.04	-0.02	0.02	0.10	0.30	0.53	39.7	4	145
Cl-	aerosol	1.42	1.07	0.99	2.54	0.09	0.17	1.20	3.69	4.50	44.4	0	162
HNO3+NO3-	air+aerosol	1.05	0.86	0.72	2.79	0.01	0.13	0.85	2.45	5.38	45.8	5	167
K+	aerosol	0.13	0.07	0.10	2.00	-0.01	0.03	0.11	0.26	0.40	38.9	16	142
NH3	air	0.81	1.15	0.17	11.40	-0.00	0.00	0.42	3.57	5.77	36.2	42	132
NH3+NH4+	air+aerosol	2.17	1.79	1.65	2.08	0.27	0.53	1.65	6.45	8.93	29.9	35	109
NH4+	aerosol	1.39	1.22	1.01	2.24	0.17	0.25	0.97	3.92	7.63	37.8	0	138
NO	air	0.38	0.72	0.20	2.94	-0.13	0.04	0.17	1.40	21.70	92.5	4891	8102
NO2	air	2.43	2.50	1.57	2.64	-0.12	0.32	1.56	7.25	30.69	92.7	197	8123
Na+	aerosol	1.01	0.59	0.83	2.00	0.08	0.22	0.95	2.22	2.51	45.5	0	166
PM10 mass	pm10	17.43	15.00	14.33	1.92	0.00	4.22	14.60	38.50	202.60	93.9	20	343
SO2	air	0.68	1.02	0.31	3.72	0.01	0.03	0.32	2.55	6.34	42.7	3	156
SO4--	aerosol	0.89	0.78	0.71	1.89	0.20	0.27	0.70	2.34	5.84	44.7	0	163
SO4-- corr	aerosol	0.81	0.79	0.60	2.18	0.07	0.14	0.61	2.27	5.84	44.7	0	163

DK0008R Anholt

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.12	0.08	0.09	2.13	-0.01	0.03	0.10	0.29	0.44	82.2	4	300
Cl-	aerosol	1.95	1.80	1.09	3.56	0.01	0.09	1.32	5.75	7.47	93.2	1	340
HNO3+NO3-	air+aerosol	0.63	0.67	0.43	2.39	0.02	0.12	0.40	1.95	5.67	95.3	2	348
K+	aerosol	0.10	0.05	0.08	1.90	-0.00	0.03	0.08	0.21	0.31	82.5	51	301
NH3	air	0.21	0.31	0.07	6.13	-0.00	0.00	0.10	0.75	1.98	79.9	102	292
NH3+NH4+	air+aerosol	1.03	1.05	0.70	2.39	0.09	0.17	0.72	3.11	7.63	68.7	93	251
NH4+	aerosol	0.81	0.86	0.52	2.59	0.04	0.11	0.50	2.59	5.95	80.7	2	295
NO	air	0.29	0.52	0.15	2.98	0.01	0.03	0.15	1.01	16.52	87.2	5207	7643
NO2	air	2.53	2.94	1.64	2.47	0.07	0.43	1.54	8.07	31.27	87.5	17	7666
Na+	aerosol	1.34	0.95	0.99	2.33	0.06	0.19	1.10	3.14	4.24	88.5	0	323
SO2	air	0.33	0.30	0.23	2.41	0.03	0.06	0.22	0.90	1.99	88.4	0	323
SO4--	aerosol	0.65	0.42	0.54	1.83	0.08	0.20	0.56	1.43	3.42	93.1	0	340
SO4-- corr	aerosol	0.55	0.45	0.40	2.42	0.04	0.07	0.43	1.35	3.42	93.1	0	340

DK0012R Risoe

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.11	0.07	0.09	1.96	0.00	0.03	0.10	0.27	0.33	34.2	2	125
Cl-	aerosol	1.14	1.46	0.56	3.50	0.01	0.12	0.48	5.03	6.83	33.3	2	122
HNO3+NO3-	air+aerosol	0.60	0.65	0.32	3.78	0.01	0.02	0.39	1.93	4.49	40.2	13	147
K+	aerosol	0.13	0.08	0.11	1.74	0.00	0.04	0.11	0.29	0.66	33.1	8	121
NH3	air	0.45	0.40	0.26	3.89	0.00	0.01	0.39	1.19	2.09	33.9	17	124
NH4+	aerosol	1.10	0.90	0.76	2.50	0.09	0.16	0.77	3.08	4.12	33.3	0	122
NO	air	0.61	1.86	0.17	4.59	-1.46	0.01	0.12	2.26	29.79	36.1	2034	3159
NO2	air	3.54	3.53	2.42	2.40	0.20	0.57	2.42	10.32	26.31	36.3	6	3181
Na+	aerosol	0.76	0.83	0.45	3.08	0.00	0.07	0.42	2.71	4.06	35.3	1	129
PM10 mass	pm10	19.71	11.39	17.41	1.82	0.00	3.20	17.20	43.20	52.60	32.5	7	119
SO2	air	0.28	0.40	0.16	2.55	0.00	0.05	0.13	1.20	3.08	38.0	1	139
SO4--	aerosol	0.57	0.45	0.43	2.11	0.00	0.14	0.40	1.38	2.50	33.3	1	122
SO4-- corr	aerosol	0.55	0.46	0.41	2.19	-0.12	0.10	0.38	1.38	2.50	33.3	1	122

DK0031R Ulborg

January 2010 - December 2010

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	1.98	0.01	0.02	0.07	0.21	0.45	73.7	9	269
Cl-	aerosol	1.80	1.77	1.11	2.82	0.11	0.20	1.05	5.86	8.68	93.1	0	340
HNO3+NO3-	air+aerosol	0.69	0.72	0.43	2.84	0.01	0.08	0.45	1.90	5.56	96.6	7	353
K+	aerosol	0.11	0.08	0.10	1.75	0.02	0.04	0.09	0.27	0.70	73.7	24	269
NH3	air	0.65	0.72	0.34	3.87	0.00	0.01	0.41	1.98	4.93	70.6	21	258
NH3+NH4+	air+aerosol	1.91	1.44	1.44	2.24	0.14	0.31	1.61	5.05	8.95	55.5	24	203
NH4+	aerosol	1.15	1.11	0.71	2.90	0.03	0.09	0.73	3.39	5.88	77.2	4	282
Na+	aerosol	1.16	1.02	0.77	2.70	0.04	0.14	0.84	3.35	5.70	91.2	0	333
SO2	air	0.28	0.59	0.12	3.43	0.00	0.02	0.11	1.08	4.18	90.1	28	329
SO4--	aerosol	0.65	0.56	0.51	1.95	0.10	0.17	0.53	1.52	4.38	94.4	0	345
SO4-- corr	aerosol	0.56	0.58	0.38	2.55	-0.07	0.07	0.40	1.49	4.36	94.4	0	345

EE0009R Lahemaa

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	2.94	2.36	2.27	2.06	0.29	0.79	2.16	7.95	15.62	96.7	0	353
SO2	air	1.55	2.27	0.92	2.57	0.08	0.22	0.84	5.41	18.48	99.7	0	364

EE0011R Vilsandi

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	2.73	2.21	1.94	2.40	0.14	0.45	2.18	7.08	12.59	97.3	0	355
SO2	air	1.34	1.49	0.87	2.47	0.05	0.22	0.82	4.68	11.19	97.8	0	357

ES0001R San Pablo de los Montes

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.43	0.21	0.38	1.69	0.04	0.17	0.40	0.88	1.45	99.9	7	365
NH3+NH4+	air+aerosol	1.60	0.91	1.33	1.92	0.12	0.39	1.47	3.28	4.55	99.9	0	365
NO	air	0.11	0.12	0.09	1.88	0.00	0.04	0.08	0.26	2.53	99.0	0	8675
NO2	air	0.96	0.88	0.72	2.10	0.04	0.21	0.73	2.50	10.52	99.1	0	8680
NO3-	pm10	0.27	0.17	0.22	2.02	0.01	0.06	0.24	0.66	1.03	97.8	2	357
PM10 mass	pm10	11.00	10.89	8.37	2.04	2.00	3.00	9.00	23.00	99.00	97.3	0	355
PM25 mass	pm25	5.93	3.97	4.79	1.98	1.00	1.15	5.00	12.00	30.00	93.7	0	342
SO2	air	0.32	0.45	0.24	2.06	0.00	0.06	0.26	0.66	26.47	99.3	0	8695
SO4--	pm10	0.39	0.20	0.34	1.75	0.02	0.13	0.36	0.75	1.44	97.8	1	357

ES0006R Mahon

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.59	0.24	0.53	1.66	0.03	0.27	0.56	1.02	2.07	95.0	5	347
NH3+NH4+	air+aerosol	1.11	0.51	1.00	1.60	0.16	0.43	1.04	2.10	2.81	97.2	0	355
NO	air	0.16	0.75	0.04	3.25	0.00	0.02	0.02	0.54	22.03	98.7	0	8650
NO2	air	1.17	1.80	0.68	2.62	0.02	0.16	0.61	4.28	21.30	98.7	0	8645
NO3-	pm10	0.43	0.23	0.35	2.25	0.01	0.10	0.40	0.85	2.07	89.2	11	326
PM10 mass	pm10	25.38	13.62	23.32	1.48	6.00	12.00	24.00	40.00	191.00	86.5	0	316
SO2	air	0.20	0.24	0.16	1.84	0.00	0.07	0.16	0.42	11.16	99.0	0	8671
SO4--	pm10	0.91	0.47	0.81	1.64	0.05	0.38	0.78	1.95	2.78	89.2	0	326

ES0007R Viznar

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.35	0.13	0.33	1.50	0.03	0.19	0.33	0.59	1.01	95.8	3	350
NH3+NH4+	air+aerosol	1.36	0.96	1.09	1.98	0.14	0.34	1.17	3.07	7.81	95.0	0	347
NO	air	0.35	1.27	0.10	4.04	0.00	0.01	0.07	1.29	31.71	96.1	0	8415
NO2	air	2.06	2.41	1.36	2.45	0.02	0.35	1.31	6.45	28.05	96.1	0	8421
NO3-	pm10	0.34	0.18	0.29	1.93	0.01	0.08	0.32	0.67	1.09	93.1	1	340
PM10 mass	pm10	15.96	12.26	12.58	2.03	1.00	4.00	14.50	37.00	104.00	92.5	0	338
PM25 mass	pm25	9.22	5.35	7.80	1.83	2.00	3.00	9.00	18.00	45.00	83.8	0	306
SO2	air	0.32	0.55	0.18	2.69	0.00	0.06	0.14	1.08	11.92	96.4	0	8445
SO4--	pm10	0.46	0.24	0.40	1.76	0.02	0.16	0.40	0.92	1.66	93.1	0	340

ES0008R Niembro

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.53	0.37	0.42	2.09	0.03	0.11	0.43	1.25	2.57	94.4	5	345
NH3	air	0.91	0.65	0.32	10.66	0.00	0.00	0.97	2.30	2.95	95.9	11	50
NH3+NH4+	air+aerosol	1.76	0.95	1.50	1.82	0.12	0.57	1.61	3.56	5.21	97.5	0	356
NO	air	0.24	0.37	0.12	3.03	0.00	0.02	0.12	0.85	6.13	98.2	0	8603
NO2	air	1.63	1.32	1.24	2.17	0.02	0.37	1.27	4.11	12.38	98.3	0	8614
NO3-	pm10	0.28	0.23	0.21	2.35	0.01	0.04	0.23	0.71	1.58	94.7	5	346
PM10 mass	pm10	15.43	8.13	13.78	1.61	4.00	6.00	14.00	29.80	92.00	93.9	0	343
PM25 mass	pm25	9.24	4.73	8.20	1.63	2.00	4.00	8.00	20.00	25.00	92.2	0	337
SO2	air	0.43	0.69	0.26	2.61	0.00	0.06	0.25	1.36	15.96	98.7	0	8650
SO4--	pm10	0.65	0.47	0.53	1.89	0.07	0.19	0.52	1.61	3.77	94.7	0	346

ES0009R Campisabalos

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm10	0.29	0.33	0.17	2.92	0.02	0.02	0.18	0.94	2.13	89.9	17	328
Ca++	pm25	0.08	0.06	0.07	1.77	0.02	0.03	0.07	0.21	0.42	13.2	0	48
Cl-	pm10	0.20	0.37	0.09	2.66	0.06	0.06	0.06	1.06	1.82	13.2	40	48
Cl-	pm25	0.09	0.18	0.04	2.41	0.03	0.03	0.03	0.67	0.72	13.2	41	48
EC	pm10	0.12	0.09	0.09	2.10	0.01	0.02	0.09	0.31	0.46	12.3	0	45
EC	pm25	0.10	0.06	0.09	2.10	0.01	0.02	0.10	0.23	0.25	7.7	0	28
HNO3+NO3-	air+aerosol	0.30	0.14	0.28	1.60	0.03	0.14	0.28	0.57	1.11	96.1	5	351
K+	pm10	0.06	0.08	0.04	2.15	0.01	0.01	0.04	0.15	1.06	89.9	2	328
K+	pm25	0.04	0.04	0.02	2.27	0.01	0.01	0.02	0.12	0.20	13.2	2	48
Mg++	pm10	0.035	0.032	0.025	2.428	0.001	0.010	0.030	0.080	0.310	89.9	13	328
Mg++	pm25	0.014	0.010	0.012	1.539	0.010	0.010	0.010	0.042	0.060	13.2	10	48
NH3	air	0.86	0.56	0.30	10.64	0.00	0.00	0.94	1.70	2.21	94.0	11	49
NH3+NH4+	air+aerosol	1.17	0.64	1.01	1.72	0.31	0.39	1.06	2.41	3.83	90.6	0	331
NH4+	pm10	0.43	0.99	0.21	2.50	0.05	0.05	0.19	3.02	5.25	13.2	0	48
NH4+	pm25	0.36	0.80	0.19	2.38	0.05	0.07	0.17	2.52	4.21	13.2	0	48
NO	air	0.03	0.08	0.02	2.32	0.00	0.01	0.02	0.10	4.83	97.2	0	8518
NO2	air	0.46	0.48	0.32	2.44	0.01	0.06	0.35	1.17	8.42	97.4	0	8529
NO3-	pm10	0.17	0.12	0.13	2.15	0.01	0.04	0.14	0.38	0.89	89.9	13	328
NO3-	pm25	0.02	0.02	0.02	2.00	0.01	0.01	0.01	0.06	0.09	13.2	0	48
Na+	pm10	0.41	0.25	0.31	2.27	0.02	0.05	0.36	0.87	1.22	89.9	27	328
Na+	pm25	0.25	0.40	0.11	3.57	0.02	0.02	0.12	1.44	1.72	13.2	11	48
OC	pm10	1.86	0.83	1.72	1.48	0.95	0.97	1.54	3.87	4.55	12.3	0	45
OC	pm25	1.78	0.58	1.69	1.39	0.82	0.87	1.66	3.21	3.38	7.7	0	28
PM10 mass	pm10	10.32	9.54	7.87	2.03	0.73	2.72	7.31	26.11	105.70	81.2	0	7116
PM10 mass	pm10	11.01	10.64	8.67	1.91	2.00	3.00	8.00	23.10	106.00	89.9	0	328
PM25 mass	pm25	5.65	3.15	4.85	1.79	1.00	2.00	5.00	11.30	24.00	80.3	0	293
SO2	air	0.16	0.14	0.12	2.13	0.00	0.04	0.11	0.42	1.84	97.5	0	8539
SO4--	pm10	0.36	0.22	0.29	2.00	0.02	0.08	0.33	0.77	1.47	89.9	2	328
SO4-- corr	pm10	0.33	0.21	0.27	2.12	0.01	0.07	0.31	0.71	1.46	89.9	2	328

ES0010R Cabo de Creus

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.35	0.20	0.30	1.77	0.03	0.13	0.30	0.73	1.47	92.2	5	337
NH3+NH4+	air+aerosol	1.50	0.70	1.33	1.69	0.19	0.54	1.43	2.82	3.43	89.8	0	328
NO	air	0.11	0.17	0.06	3.00	0.00	0.01	0.06	0.38	4.04	95.9	0	8405
NO2	air	0.75	0.75	0.49	2.64	0.02	0.10	0.51	2.26	7.04	96.0	0	8411
NO3-	pm10	0.40	0.23	0.34	1.87	0.01	0.12	0.35	0.89	1.27	85.9	1	314
PM10 mass	pm10	16.45	9.04	15.18	1.45	6.00	9.00	15.00	27.00	116.00	85.7	0	313
PM25 mass	pm25	7.86	3.76	7.20	1.50	3.00	4.00	7.00	14.00	35.00	81.3	0	297
SO2	air	0.32	0.17	0.29	1.50	0.06	0.15	0.29	0.56	4.59	96.2	0	8424
SO4--	pm10	0.66	0.41	0.57	1.71	0.15	0.27	0.53	1.62	2.28	85.9	0	314

ES0011R Barcarrola

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.33	0.17	0.28	1.94	0.03	0.08	0.30	0.66	1.10	97.8	16	357
NH3+NH4+	air+aerosol	1.35	0.71	1.16	1.77	0.13	0.43	1.23	2.65	4.30	96.2	0	351
NO	air	0.07	0.21	0.03	2.76	0.00	0.01	0.03	0.24	6.13	98.1	0	8592
NO2	air	0.90	0.89	0.65	2.17	0.04	0.20	0.63	2.42	9.77	98.1	0	8591
NO3-	pm10	0.23	0.14	0.18	2.47	0.01	0.01	0.21	0.48	0.83	84.0	18	307
PM10 mass	pm10	15.19	12.41	12.40	1.85	1.00	5.00	12.00	31.00	115.00	82.7	0	302
PM25 mass	pm25	7.64	5.93	6.16	1.93	1.00	2.00	6.00	17.00	61.00	81.4	0	297
SO2	air	0.18	0.22	0.12	2.28	0.00	0.04	0.10	0.58	2.45	98.8	0	8658
SO4--	pm10	0.46	0.27	0.39	1.73	0.05	0.17	0.39	0.94	1.67	84.0	0	307

ES0012R Zarra

January 2010 - December 2010

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	0.23	0.37	1.67	0.03	0.16	0.37	0.83	1.87	96.1	1	351
NH3+NH4+	air+aerosol	1.35	0.71	1.15	1.81	0.17	0.45	1.32	2.71	4.03	95.3	0	348
NO	air	0.18	0.14	0.13	2.33	0.00	0.03	0.15	0.46	1.52	99.1	0	8682
NO2	air	1.30	0.80	1.11	1.74	0.11	0.45	1.08	2.96	7.21	99.2	0	8692
NO3-	pm10	0.35	0.23	0.29	1.85	0.02	0.10	0.30	0.70	3.00	95.5	0	349
PM10 mass	pm10	11.89	8.67	9.82	1.84	2.00	4.00	10.00	24.50	80.00	95.5	0	349
PM10 mass	pm10	12.49	10.21	9.78	2.00	0.62	3.22	9.76	30.12	144.50	79.1	0	6926
PM25 mass	pm25	5.47	3.22	4.66	1.79	1.00	2.00	5.00	11.30	21.00	96.6	0	353
SO2	air	0.16	0.21	0.11	2.37	0.00	0.04	0.10	0.44	5.12	99.5	0	8716
SO4--	pm10	0.56	0.39	0.46	1.87	0.07	0.17	0.47	1.25	3.09	95.5	0	349

ES0013R Penausende

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.35	0.20	0.31	1.60	0.03	0.16	0.30	0.71	1.52	96.6	1	353
NH3+NH4+	air+aerosol	1.08	0.64	0.89	1.99	0.05	0.27	0.97	2.26	5.51	99.4	0	363
NO	air	0.06	0.17	0.03	2.77	0.00	0.01	0.02	0.19	5.02	98.5	0	8628
NO2	air	1.15	1.09	0.85	2.19	0.02	0.25	0.85	2.87	18.14	98.6	0	8640
NO3-	pm10	0.21	0.14	0.17	2.05	0.01	0.04	0.18	0.51	0.86	95.0	2	347
PM10 mass	pm10	8.32	5.75	6.99	1.79	0.06	2.86	6.82	18.45	91.34	81.6	0	7146
PM10 mass	pm10	8.72	8.26	6.99	1.89	1.00	3.00	7.00	18.00	94.00	95.0	0	347
PM25 mass	pm25	4.86	3.70	3.96	1.89	1.00	1.00	4.00	11.00	35.00	93.6	0	342
SO2	air	0.26	0.17	0.22	1.71	0.03	0.10	0.21	0.58	3.04	99.4	0	8706
SO4--	pm10	0.33	0.18	0.28	1.78	0.04	0.10	0.29	0.69	1.09	95.0	0	347

ES0014R Els Torms

January 2010 - December 2010

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	0.28	0.38	1.75	0.03	0.19	0.37	0.96	2.24	96.6	4	353
NH3+NH4+	air+aerosol	3.79	3.60	2.92	2.04	0.27	0.71	3.04	7.42	23.32	92.0	0	336
NO	air	0.07	0.21	0.03	3.37	0.00	0.00	0.01	0.28	4.95	98.5	0	8628
NO2	air	1.12	1.01	0.83	2.29	0.01	0.22	0.86	2.81	14.16	98.7	0	8643
NO3-	pm10	0.40	0.32	0.32	2.08	0.01	0.12	0.32	0.87	2.98	90.6	5	331
PM10 mass	pm10	12.60	8.03	10.96	1.68	2.00	5.00	11.00	22.80	89.00	90.6	0	331
PM25 mass	pm25	7.31	4.76	6.20	1.77	1.00	3.00	6.00	15.30	37.00	85.7	0	313
SO2	air	0.30	0.35	0.22	2.09	0.02	0.07	0.20	0.79	10.14	98.8	0	8659
SO4--	pm10	0.58	0.34	0.49	1.81	0.11	0.19	0.51	1.26	2.48	90.6	0	331

ES0016R O Savinao

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.24	0.13	0.20	1.98	0.03	0.03	0.22	0.49	0.81	90.9	24	332
NH3+NH4+	air+aerosol	1.40	0.76	1.17	1.91	0.13	0.31	1.32	2.77	4.48	93.9	0	343
NO	air	0.07	0.11	0.04	2.72	0.00	0.01	0.04	0.24	1.82	94.3	0	8263
NO2	air	0.98	0.52	0.84	1.76	0.02	0.35	0.86	2.02	4.05	94.4	0	8270
NO3-	pm10	0.18	0.11	0.14	2.17	0.01	0.03	0.16	0.39	0.75	82.7	8	302
PM10 mass	pm10	8.77	4.55	7.77	1.63	2.00	4.00	8.00	18.00	36.00	81.8	0	299
PM10 mass	pm10	11.09	6.22	9.60	1.72	0.04	4.01	9.66	22.59	65.66	80.7	0	7069
PM25 mass	pm25	6.20	3.69	5.35	1.72	1.00	2.00	5.00	13.70	35.00	72.6	0	265
SO2	air	0.15	0.13	0.12	1.99	0.00	0.04	0.10	0.41	2.55	95.4	0	8361
SO4--	pm10	0.44	0.27	0.36	1.90	0.05	0.12	0.38	0.99	1.33	82.7	0	302

ES0017R Donana

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.54	0.26	0.47	1.77	0.03	0.20	0.49	1.08	1.47	94.7	6	346
NH3+NH4+	air+aerosol	1.69	0.86	1.50	1.63	0.36	0.67	1.56	3.26	5.57	93.6	0	342
NO	air	0.22	0.47	0.11	3.05	0.00	0.02	0.09	0.86	10.80	91.6	0	8026
NO2	air	1.95	1.66	1.41	2.33	0.02	0.33	1.46	5.17	16.70	91.7	0	8031
NO3-	pm10	0.41	0.23	0.34	1.95	0.02	0.10	0.38	0.87	1.28	76.9	3	281
PM10 mass	pm10	15.75	7.90	13.97	1.71	1.00	6.00	15.00	28.00	80.00	68.1	0	249
SO2	air	0.51	0.73	0.34	2.29	0.00	0.10	0.34	1.40	12.42	91.4	0	8006
SO4--	pm10	0.79	0.47	0.66	1.89	0.02	0.29	0.65	1.74	2.68	76.9	2	281

ES1778R Montseny

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm1	0.02	0.03	0.01	2.67	0.01	0.01	0.01	0.07	0.17	20.0	32	73
Ca++	pm10	0.33	0.57	0.18	3.00	0.01	0.03	0.18	1.01	4.06	19.6	1	72
Ca++	pm25	0.05	0.09	0.03	2.86	0.01	0.01	0.03	0.17	0.61	20.2	10	74
Cl-	pm1	0.16	0.18	0.08	4.13	0.01	0.01	0.10	0.65	0.91	20.3	8	74
Cl-	pm10	0.33	0.42	0.17	3.65	0.01	0.02	0.21	1.05	3.03	19.6	2	72
Cl-	pm25	0.21	0.26	0.09	4.42	0.01	0.01	0.12	0.67	1.57	20.2	9	74
EC	pm10	0.23	0.12	0.20	1.89	0.01	0.07	0.22	0.50	0.72	17.8	0	65
EC	pm25	0.22	0.12	0.20	1.85	0.00	0.04	0.21	0.49	0.70	18.9	0	69
K+	pm1	0.04	0.03	0.04	1.81	0.01	0.01	0.04	0.09	0.17	20.0	0	73
K+	pm10	0.14	0.22	0.10	2.18	0.01	0.03	0.11	0.27	1.72	19.6	1	72
K+	pm25	0.08	0.07	0.06	1.84	0.02	0.03	0.06	0.25	0.39	20.2	0	74
Mg++	pm1	0.009	0.011	0.006	1.924	0.005	0.005	0.005	0.040	0.050	20.0	64	73
Mg++	pm10	0.103	0.201	0.061	2.418	0.005	0.020	0.060	0.207	1.580	19.6	1	72
Mg++	pm25	0.020	0.033	0.011	2.559	0.005	0.005	0.010	0.068	0.250	20.2	34	74
NH4+	pm1	0.30	0.35	0.17	3.37	0.01	0.02	0.21	0.94	2.24	20.3	2	74
NH4+	pm10	0.36	0.43	0.21	2.90	0.01	0.03	0.24	1.23	2.44	19.6	0	72
NH4+	pm25	0.44	0.63	0.23	3.36	0.01	0.02	0.23	1.75	4.13	20.2	0	74
NO3-	pm1	0.07	0.12	0.04	2.30	0.00	0.00	0.04	0.33	0.77	20.3	6	74
NO3-	pm10	0.25	0.26	0.18	2.22	0.00	0.05	0.16	0.82	1.60	19.6	1	72
NO3-	pm25	0.15	0.25	0.07	3.26	0.01	0.01	0.05	0.77	1.45	20.2	3	74
Na+	pm1	0.04	0.02	0.03	1.64	0.01	0.02	0.03	0.09	0.13	20.0	1	73
Na+	pm10	0.32	0.27	0.22	2.60	0.01	0.06	0.27	0.99	1.15	19.6	1	72
Na+	pm25	0.08	0.05	0.07	1.85	0.01	0.03	0.07	0.21	0.28	20.2	0	74
OC	pm10	1.75	0.70	1.59	1.56	0.47	0.75	1.84	2.94	3.38	17.8	0	65
OC	pm25	1.53	0.67	1.40	1.54	0.58	0.64	1.42	2.76	4.21	18.9	0	69
PM1 mass	pm1	10.30	4.74	8.86	1.88	1.00	2.30	10.80	17.35	22.60	20.3	0	74
PM10 mass	pm10	18.29	12.78	15.23	1.89	0.90	5.03	15.90	33.56	93.90	19.9	0	73
PM25 mass	pm25	12.36	6.20	10.67	1.78	2.20	3.65	11.80	23.20	32.30	20.2	0	74
SO4--	pm1	0.44	0.30	0.33	2.34	0.04	0.09	0.36	0.98	1.04	20.3	0	74
SO4--	pm10	0.54	0.36	0.41	2.20	0.06	0.10	0.43	1.20	1.37	19.6	0	72
SO4--	pm25	0.44	0.32	0.35	2.17	0.00	0.04	0.32	1.12	1.21	20.2	3	74
SO4-- corr	pm1	0.44	0.30	0.33	2.34	0.04	0.09	0.36	0.98	1.04	20.3	0	74
SO4-- corr	pm10	0.51	0.35	0.38	2.36	0.03	0.08	0.40	1.18	1.36	19.6	0	72
SO4-- corr	pm25	0.43	0.32	0.34	2.23	-0.01	0.04	0.31	1.11	1.20	20.2	3	74
TC	pm10	1.97	0.78	1.81	1.56	0.48	0.84	2.00	3.22	3.60	17.8	0	65

FI0009R Utö

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.07	0.11	0.04	2.68	0.00	0.01	0.04	0.25	1.15	99.4	0	363
Cl-	aerosol	0.29	0.46	0.07	7.58	0.00	0.00	0.09	1.39	3.11	98.8	45	361
HNO3+NO3-	air+aerosol	0.39	0.39	0.28	2.27	0.02	0.07	0.30	0.96	4.94	98.8	4	361
K+	aerosol	0.05	0.04	0.04	2.47	0.00	0.01	0.04	0.15	0.23	99.4	6	363
Mg++	aerosol	0.053	0.045	0.037	2.478	0.001	0.008	0.039	0.150	0.307	98.8	2	361
NH3+NH4+	air+aerosol	0.42	0.43	0.28	2.44	0.03	0.07	0.29	1.14	4.82	99.4	0	363
NH4+	aerosol	0.27	0.32	0.17	2.74	0.01	0.03	0.18	0.85	3.66	99.4	0	363
Na+	aerosol	0.41	0.37	0.27	2.90	0.00	0.04	0.29	1.21	2.24	98.8	1	361
SO2	air	0.46	0.58	0.29	2.54	0.03	0.06	0.29	1.54	4.42	98.8	0	361
SO4--	aerosol	0.49	0.35	0.37	2.23	0.05	0.08	0.41	1.16	2.09	99.4	0	363
SO4-- corr	aerosol	0.46	0.35	0.32	2.54	0.02	0.05	0.37	1.15	2.06	98.8	0	361

FI0017R Virolahti II

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.13	0.24	0.06	3.46	0.00	0.01	0.05	0.56	2.71	99.4	2	363
Cl-	aerosol	0.04	0.09	0.01	5.20	0.00	0.00	0.01	0.22	0.64	99.4	132	363
HNO3+NO3-	air+aerosol	0.27	0.22	0.20	2.36	0.01	0.04	0.23	0.68	1.49	99.4	13	363
K+	aerosol	0.07	0.06	0.05	2.21	0.01	0.01	0.05	0.17	0.44	99.4	1	363
Mg++	aerosol	0.028	0.029	0.019	2.429	0.001	0.004	0.021	0.075	0.260	99.4	1	363
NH3+NH4+	air+aerosol	0.48	0.42	0.34	2.30	0.04	0.09	0.34	1.16	4.26	95.3	0	348
NH4+	aerosol	0.27	0.24	0.19	2.47	0.01	0.04	0.19	0.74	1.47	99.4	0	363
Na+	aerosol	0.14	0.14	0.09	2.84	0.00	0.02	0.10	0.43	1.29	99.4	3	363
SO2	air	0.72	0.94	0.37	3.47	0.01	0.04	0.38	2.24	7.26	99.7	2	364
SO4--	aerosol	0.54	0.41	0.40	2.24	0.04	0.10	0.44	1.28	3.07	99.4	0	363
SO4-- corr	aerosol	0.53	0.41	0.39	2.31	0.04	0.08	0.43	1.27	3.06	99.4	0	363

FI0022R Oulanka

January 2010 - December 2010

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	2.33	0.00	0.01	0.02	0.08	0.25	96.6	0	51
Cl-	aerosol	0.03	0.05	0.01	3.92	0.00	0.00	0.01	0.18	0.25	96.6	13	51
HNO3+NO3-	air+aerosol	0.07	0.07	0.05	2.13	0.01	0.01	0.05	0.21	0.48	93.1	5	49
K+	aerosol	0.03	0.02	0.03	1.82	0.01	0.01	0.03	0.07	0.12	96.6	0	51
Mg++	aerosol	0.017	0.012	0.013	2.052	0.002	0.004	0.014	0.041	0.069	96.6	0	51
NH3+NH4+	air+aerosol	0.17	0.13	0.14	2.00	0.03	0.05	0.12	0.45	0.64	92.8	0	49
NH4+	aerosol	0.11	0.09	0.09	2.07	0.01	0.03	0.09	0.30	0.50	96.6	0	51
Na+	aerosol	0.12	0.10	0.08	2.50	0.00	0.02	0.09	0.33	0.53	96.6	0	51
SO2	air	0.35	0.48	0.17	3.42	0.01	0.03	0.16	1.64	2.12	95.0	0	50
SO4--	aerosol	0.37	0.21	0.32	1.78	0.05	0.11	0.33	0.88	0.96	96.6	0	51
SO4-- corr	aerosol	0.36	0.20	0.31	1.82	0.03	0.11	0.31	0.86	0.95	97.5	0	52

FI0036R Pallas (Matorova)

January 2010 - December 2010

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	2.97	0.00	0.00	0.01	0.05	0.14	91.2	37	333
Cl-	aerosol	0.13	0.29	0.02	7.60	0.00	0.00	0.02	0.68	3.16	90.9	98	332
HNO3+NO3-	air+aerosol	0.05	0.06	0.03	2.63	0.00	0.00	0.03	0.16	0.51	91.2	68	333
K+	aerosol	0.02	0.02	0.01	3.35	0.00	0.00	0.01	0.06	0.10	91.2	47	333
Mg++	aerosol	0.018	0.022	0.010	3.051	0.001	0.001	0.010	0.058	0.198	90.9	21	332
NH3+NH4+	air+aerosol	0.11	0.12	0.07	2.68	0.01	0.01	0.07	0.39	0.70	91.2	0	333
NH4+	aerosol	0.07	0.09	0.05	2.84	0.00	0.01	0.04	0.28	0.50	91.2	10	333
Na+	aerosol	0.15	0.19	0.07	4.86	0.00	0.00	0.07	0.52	1.04	90.9	10	332
SO2	air	0.31	0.72	0.06	6.80	0.01	0.01	0.04	1.59	8.29	91.7	82	335
SO4--	aerosol	0.28	0.28	0.16	3.54	0.00	0.01	0.18	0.86	1.30	91.2	13	333
SO4-- corr	aerosol	0.27	0.28	0.14	3.81	-0.02	0.01	0.17	0.85	1.29	90.9	13	332

FI0037R Ähtäri II

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.05	0.08	0.03	2.71	0.00	0.01	0.02	0.26	0.39	96.6	0	51
Cl-	aerosol	0.03	0.05	0.01	4.81	0.00	0.00	0.01	0.18	0.22	96.6	8	51
HNO3+NO3-	air+aerosol	0.15	0.10	0.12	2.02	0.03	0.03	0.14	0.37	0.45	94.7	0	50
K+	aerosol	0.05	0.03	0.04	1.84	0.01	0.01	0.05	0.11	0.14	96.6	0	51
Mg++	aerosol	0.019	0.013	0.016	1.885	0.003	0.004	0.017	0.050	0.073	96.6	0	51
NH3+NH4+	air+aerosol	0.33	0.18	0.28	1.83	0.08	0.09	0.30	0.69	0.80	90.9	0	48
NH4+	aerosol	0.17	0.10	0.15	1.94	0.02	0.04	0.16	0.36	0.46	96.6	0	51
Na+	aerosol	0.10	0.06	0.09	1.89	0.01	0.03	0.10	0.22	0.28	96.6	0	51
SO2	air	0.30	0.48	0.16	3.15	0.01	0.03	0.13	1.32	2.69	96.6	1	51
SO4--	aerosol	0.41	0.22	0.35	1.84	0.06	0.12	0.39	0.82	0.92	96.6	0	51
SO4-- corr	aerosol	0.40	0.22	0.34	1.88	0.04	0.11	0.39	0.81	0.91	97.5	0	52

FI0050R Hyytiälä

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
PM1 mass	pm1	4.62	3.92	3.46	2.14	0.62	0.94	3.31	12.11	30.21	97.0	0	154
PM10 mass	pm10	5.54	4.57	4.26	2.04	0.95	1.40	3.98	15.19	34.55	96.4	0	153
PM25 mass	pm25	6.57	5.47	5.08	1.99	1.54	1.80	4.79	19.11	39.79	94.2	0	150

FR0009R Revin

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.90	0.79	0.59	2.91	0.01	0.10	0.60	2.53	3.90	87.4	2	92
NH3+NH4+	air+aerosol	1.66	1.51	1.07	3.14	0.01	0.18	1.14	5.15	7.88	90.1	2	95
PM10 mass	pm10	25.64	11.09	23.54	1.52	5.00	12.00	24.00	45.00	105.00	92.0	0	8059
PM25 mass	pm25	18.52	10.34	16.14	1.69	1.00	7.00	16.00	38.00	91.00	82.1	0	7189
SO2	air	0.38	0.41	0.19	3.73	0.01	0.01	0.25	1.37	1.95	83.3	9	88
SO4--	aerosol	0.69	0.63	0.41	3.56	0.01	0.01	0.51	2.42	2.83	89.3	5	94

FR0013R Peyrusse Vieille

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.70	0.71	0.43	3.21	0.01	0.01	0.51	2.19	4.68	88.5	6	93
NH3+NH4+	air+aerosol	1.68	1.28	1.06	3.73	0.01	0.10	1.31	4.29	6.11	90.4	3	95
PM10 mass	pm10	21.57	9.32	19.75	1.53	0.00	10.00	20.00	40.00	88.00	93.8	0	8219
PM25 mass	pm25	13.52	8.32	11.49	1.78	0.00	5.00	11.00	31.00	73.00	95.8	0	8389
SO2	air	0.24	0.30	0.12	3.46	0.01	0.01	0.11	0.96	1.72	92.3	16	97
SO4--	aerosol	0.67	0.58	0.39	3.71	0.01	0.01	0.52	1.89	3.23	89.6	6	94

FR0015R La Tardiere

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	1.12	1.11	0.71	2.97	0.01	0.15	0.73	3.88	5.27	92.3	3	97
NH3+NH4+	air+aerosol	5.32	3.71	4.11	2.15	0.42	1.03	4.74	12.62	23.89	93.4	0	98
PM10 mass	pm10	20.23	10.63	17.81	1.66	2.00	8.00	18.00	41.00	90.00	97.6	0	8548
PM25 mass	pm25	14.95	9.01	12.81	1.73	1.00	6.00	12.00	33.00	78.00	95.9	0	8400
SO2	air	0.22	0.25	0.12	3.35	0.01	0.01	0.17	0.80	1.29	90.4	17	95
SO4--	aerosol	0.75	0.66	0.51	2.87	0.01	0.07	0.61	2.06	4.71	95.1	3	100

FR0018R La Coulonche

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
PM10 mass	pm10	16.57	9.97	14.06	1.82	0.00	5.00	14.00	36.00	82.00	69.6	0	6096
PM25 mass	pm25	11.59	8.97	9.24	1.97	-1.00	3.00	9.00	29.00	88.00	73.7	0	6459

FR0030R Puy de Dome

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
CO	air	183.19	53.82	176.17	1.31	118.09	127.36	163.42	281.56	353.42	100.0	0	365
EC	pm25	1.97	3.93	0.22	8.35	0.00	0.00	0.11	9.99	9.99	28.1	0	52
OC	pm25	2.63	3.63	1.36	2.92	0.30	0.39	0.99	9.99	9.99	28.1	0	52
SO2	air	0.14	0.23	0.08	2.84	0.02	0.02	0.07	0.51	4.12	91.8	0	8046
TC	pm25	2.65	3.62	1.35	3.11	0.05	0.38	0.95	9.99	9.99	28.1	0	52

GB0002R Eskdalemuir

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	0.31	0.37	0.61	1.43	0.00	0.00	0.00	0.70	5.60	97.7	0	8556
NO2	air	0.90	1.08	0.77	2.15	0.00	0.00	0.60	2.80	10.90	97.5	0	8541

GB0006R Lough Navar

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3	air	0.05	0.07	0.03	2.82	0.00	0.00	0.03	0.26	0.26	92.1	1	11
HNO3+NO3-	air+aerosol	0.16	0.10	0.13	2.00	0.04	0.04	0.12	0.34	0.34	92.1	0	11
NH3	air	0.35	0.18	0.31	1.70	0.14	0.14	0.35	0.70	0.70	99.7	0	12
NH3+NH4+	air+aerosol	0.53	0.19	0.50	1.48	0.26	0.26	0.52	0.89	0.89	91.5	0	11
NH4+	aerosol	0.21	0.06	0.20	1.37	0.12	0.12	0.20	0.32	0.32	91.5	0	11
NO3-	aerosol	0.22	0.41	0.12	2.82	0.03	0.03	0.10	1.50	1.50	99.7	0	12
PM10 mass	pm10	10.34	7.45	8.47	1.98	-4.00	2.00	9.00	24.00	169.00	76.8	0	6729

GB0013R Yarner Wood

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3	air	0.12	0.07	0.10	1.95	0.03	0.03	0.12	0.27	0.27	92.1	0	11
HNO3+NO3-	air+aerosol	0.43	0.20	0.38	1.78	0.14	0.14	0.48	0.69	0.69	83.6	0	10
NH3	air	0.43	0.24	0.37	1.78	0.15	0.15	0.34	0.81	0.81	99.7	0	12
NH3+NH4+	air+aerosol	0.86	0.38	0.79	1.56	0.40	0.40	0.69	1.51	1.51	91.2	0	11
NH4+	aerosol	0.42	0.17	0.37	1.74	0.09	0.09	0.45	0.70	0.70	91.2	0	11
NO	air	0.31	0.44	0.42	1.90	0.00	0.00	0.30	0.70	15.10	97.6	0	8548
NO2	air	1.50	1.57	1.07	2.44	0.00	0.10	1.00	4.70	15.40	97.6	0	8548
NO3-	aerosol	0.29	0.16	0.20	3.33	0.01	0.01	0.30	0.57	0.57	91.2	0	11

GB0014R High Muffles

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3	air	0.12	0.06	0.10	2.06	0.01	0.01	0.12	0.23	0.23	99.7	0	12
HNO3+NO3-	air+aerosol	0.38	0.13	0.35	1.55	0.11	0.11	0.40	0.55	0.55	99.7	0	12
NH3	air	0.77	0.82	0.54	2.28	0.20	0.20	0.52	3.18	3.18	99.7	0	12
NH3+NH4+	air+aerosol	1.17	0.97	0.90	2.12	0.28	0.28	0.92	3.82	3.82	99.7	0	12
NH4+	aerosol	0.40	0.22	0.33	2.11	0.08	0.08	0.36	0.83	0.83	99.7	0	12
NO	air	0.32	0.32	0.27	2.28	0.00	0.00	0.23	0.85	3.08	92.0	0	336
NO	air	0.32	0.53	0.45	1.90	0.00	0.00	0.20	1.00	10.60	92.1	0	8071
NO2	air	1.84	1.91	1.33	2.40	0.00	0.10	1.20	5.50	20.40	92.1	0	8071
NO3-	aerosol	0.26	0.13	0.21	2.21	0.03	0.03	0.26	0.43	0.43	99.7	0	12

GB0031R Aston Hill

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	0.56	0.69	0.62	1.79	0.00	0.00	0.60	1.40	14.10	98.9	0	8667
NO2	air	1.85	2.36	1.22	2.58	0.00	0.00	1.00	6.40	19.60	98.9	0	8667

GB0033R Bush

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	0.85	1.81	0.66	1.96	0.00	0.00	0.60	2.10	50.90	98.3	0	8609
NO2	air	2.64	2.95	1.69	2.73	0.00	0.20	1.60	8.70	23.70	98.3	0	8609

GB0036R Harwell

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Cl-	pm10	0.74	0.86	0.38	3.76	0.00	0.04	0.47	2.26	7.17	86.3	0	315
EC	pm10	0.38	0.49	0.23	5.35	0.00	0.00	0.21	1.35	2.82	86.3	0	315
NO	air	0.76	2.62	0.80	2.72	0.00	0.00	0.00	2.80	53.40	97.5	0	8537
NO2	air	3.63	3.66	2.48	2.65	0.00	0.10	2.40	11.80	28.30	97.5	0	8537
NO3-	pm10	2.02	2.33	1.24	2.75	0.01	0.28	1.20	7.67	16.55	86.3	0	315
OC	pm10	1.84	1.09	1.55	1.85	0.07	0.55	1.57	3.91	7.20	86.3	0	315
PM10 mass	pm10	11.40	6.85	10.00	1.65	0.00	5.00	10.00	24.60	44.00	80.3	0	293
PM10 mass	pm10	15.99	10.09	13.66	1.75	-1.00	6.00	13.00	35.00	121.00	76.5	0	6702
PM25 mass	pm25	8.64	6.77	6.81	1.99	0.00	2.00	7.00	22.10	44.00	89.9	0	328
PM25 mass	pm25	10.29	7.90	8.18	1.98	-3.00	3.00	8.00	26.00	64.00	98.6	0	8635
SO2	air	0.95	2.26	1.30	1.84	0.00	0.00	0.70	2.70	72.50	98.8	0	8659
SO4--	pm10	1.59	1.07	1.31	1.93	0.04	0.46	1.35	3.60	8.63	86.3	0	315
TC	pm10	2.22	1.49	1.80	1.96	0.07	0.59	1.78	5.07	9.95	86.3	0	315

GB0037R Ladybower Res.

January 2010 - December 2010

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	0.70	2.04	0.00	0.00	0.00	1.60	42.40	94.1	0	8246
NO2	air	3.00	2.66	2.23	2.23	0.00	0.60	2.20	8.20	23.30	94.1	0	8246
SO2	air	1.62	1.88	1.51	2.03	0.00	0.00	1.20	4.50	31.60	89.2	0	7813

GB0038R Lullington Heath

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	0.49	1.15	0.61	1.95	0.00	0.00	0.40	1.40	45.30	96.5	0	8456
NO2	air	3.12	2.50	2.43	2.04	0.00	0.70	2.40	8.20	20.70	96.5	0	8456
SO2	air	0.69	0.85	1.15	1.72	0.00	0.00	0.40	2.00	8.90	97.2	0	8511

GB0043R Narberth

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	0.59	1.47	0.61	1.75	0.00	0.00	0.60	1.10	51.50	94.6	0	8283
NO2	air	1.45	1.82	1.05	2.33	0.00	0.00	0.90	4.50	40.80	94.6	0	8283
PM10 mass	pm10	8.30	8.50	6.91	2.41	-4.00	-1.00	7.00	25.00	111.00	49.9	0	4372
SO2	air	1.31	1.22	1.73	1.72	0.00	0.00	1.50	3.50	7.90	80.6	0	7061

GB0045R Wicken Fen

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	1.81	3.33	1.02	2.72	0.00	0.00	0.70	6.30	36.50	96.6	0	8459
NO2	air	3.37	2.70	2.51	2.25	0.00	0.60	2.60	9.10	18.60	96.6	0	8459
SO2	air	0.98	0.89	1.23	1.69	0.00	0.00	1.10	2.70	9.60	94.3	0	8258

GB0048R Auchencorth Moss

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm10	0.11	0.13	0.06	3.71	-0.00	0.01	0.08	0.33	2.62	44.6	567	3904
Ca++	pm25	0.07	0.08	0.04	2.86	0.00	0.01	0.05	0.20	2.10	46.2	738	4043
Cl-	pm10	1.05	1.21	0.58	3.35	0.01	0.06	0.67	3.64	8.46	34.5	0	3023
Cl-	pm25	0.56	0.64	0.34	2.75	0.02	0.06	0.38	1.77	6.49	33.8	0	2960
HNO3	air	0.02	0.02	0.02	2.11	0.00	0.00	0.02	0.06	0.29	31.3	418	2738
K+	pm10	0.05	0.06	0.04	2.27	0.00	0.01	0.04	0.11	2.29	45.1	1300	3949
K+	pm25	0.04	0.06	0.03	2.14	0.00	0.01	0.03	0.09	1.79	46.1	1825	4041
Mg++	pm10	0.048	0.045	0.035	2.380	-0.007	0.007	0.040	0.108	1.258	44.8	344	3928
Mg++	pm25	0.036	0.033	0.028	2.029	0.001	0.008	0.030	0.078	1.122	46.2	327	4043
NH3	air	1.23	1.25	0.88	2.28	0.01	0.26	0.88	3.43	15.82	42.1	85	3690
NH4+	pm10	0.63	0.87	0.24	5.09	0.00	0.01	0.32	2.59	7.26	44.9	356	3935
NH4+	pm25	0.61	0.84	0.26	4.30	0.00	0.01	0.28	2.53	7.11	46.0	331	4029
NO3-	pm10	0.30	0.52	0.12	3.85	0.00	0.02	0.11	1.32	4.84	37.9	500	3318
NO3-	pm25	0.27	0.50	0.10	4.07	0.00	0.01	0.08	1.33	4.56	38.0	434	3332
Na+	pm10	0.55	0.70	0.33	2.88	0.00	0.06	0.35	1.62	11.14	39.0	356	3417
Na+	pm25	0.29	0.32	0.19	2.53	0.00	0.04	0.18	0.91	3.97	38.3	0	3351
PM10 mass	pm10	7.12	6.18	6.05	2.15	-4.00	0.00	6.00	19.00	45.00	68.7	0	6020
PM10 mass	pm10	7.79	5.10	6.52	1.82	1.00	2.00	6.00	18.00	36.00	95.6	0	349
PM25 mass	pm25	4.03	5.61	3.77	2.47	-4.00	-2.00	2.00	15.00	43.00	70.0	0	6131
PM25 mass	pm25	4.27	3.84	3.54	2.02	-3.00	0.00	3.00	12.00	26.00	84.7	0	309
SO2	air	0.21	0.66	0.08	3.03	0.00	0.02	0.07	0.60	13.32	31.8	158	2786
SO4--	pm10	0.33	0.33	0.23	2.39	0.00	0.07	0.24	0.94	4.19	37.8	0	3310
SO4--	pm25	0.32	0.33	0.22	2.45	0.00	0.06	0.22	0.98	3.50	38.1	0	3335
SO4-- corr	pm10	-0.37	5.07	0.19	2.52	-41.82	0.01	0.18	0.88	4.15	37.6	0	3293
SO4-- corr	pm25	0.03	3.07	0.20	2.51	-34.71	0.04	0.20	0.95	3.32	37.9	0	3318

GB0050R St. Osyth

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	2.35	3.67	1.61	2.96	0.00	0.00	1.10	9.20	41.40	94.8	0	8304
NO2	air	4.28	3.81	3.05	2.38	0.00	0.60	3.10	12.78	26.00	94.8	0	8304

GB0051R Market Harborough

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	0.83	2.13	0.79	2.17	0.00	0.00	0.50	2.50	50.80	92.5	0	8099
NO2	air	3.57	3.34	2.53	2.41	0.00	0.50	2.40	10.60	22.70	92.5	0	8099

GB0053R Charlton Mackrell

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	0.69	1.58	0.75	2.59	0.00	0.00	0.20	3.20	20.40	53.8	0	4716
NO2	air	3.70	3.12	2.64	2.45	0.00	0.50	2.80	10.00	22.60	53.8	0	4716

GB0054R Glen Saugh

January 2010 - December 2010

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	0.04	2.37	0.00	0.00	0.04	0.11	0.11	83.6	0	10
HNO3+NO3-	air+aerosol	0.16	0.09	0.12	2.72	0.01	0.01	0.17	0.28	0.28	83.6	0	10
NH3	air	0.21	0.21	0.16	2.08	0.06	0.06	0.15	0.83	0.83	99.7	0	12
NH3+NH4+	air+aerosol	0.39	0.23	0.35	1.60	0.23	0.23	0.28	0.99	0.99	91.2	0	11
NH4+	aerosol	0.18	0.06	0.17	1.45	0.07	0.07	0.18	0.26	0.26	91.2	0	11
NO3-	aerosol	0.12	0.07	0.12	1.61	0.00	0.00	0.12	0.20	0.20	91.2	0	11

GE0001R Abastumani

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Cl-	aerosol	0.16	0.83	0.11	3.91	0.00	0.01	0.11	1.45	5.14	33.2	0	43
HNO3+NO3-	air+aerosol	0.29	0.92	0.20	3.55	0.00	0.03	0.23	1.26	6.00	33.2	0	43
NH3	air	0.02	0.08	0.04	2.91	-0.01	0.00	0.02	0.27	0.34	33.2	0	43
NH3+NH4+	air+aerosol	0.02	0.10	0.02	4.00	-0.01	0.00	0.02	0.37	0.44	33.2	27	43
NH4+	aerosol	0.02	0.10	0.04	2.72	0.00	0.00	0.03	0.36	0.43	33.2	30	43
NO3-	aerosol	0.16	0.21	0.06	5.15	0.00	0.00	0.07	0.46	1.26	33.2	0	43
SO2	air	0.24	0.23	0.06	4.20	0.00	0.01	0.03	0.73	0.93	33.2	20	43
SO4--	aerosol	0.83	0.73	0.13	9.71	0.00	0.00	0.24	2.02	2.39	33.2	0	43
SO4-- corr	aerosol	0.79	0.73	0.48	3.19	-0.09	-0.08	0.21	2.00	2.33	33.2	0	43

GR0001R Aliartos

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	1.54	1.97	1.09	2.13	0.47	0.47	0.93	4.20	43.90	68.7	0	6016
NO2	air	3.99	3.60	2.73	2.46	0.30	0.60	2.70	11.60	27.40	68.7	0	6017
SO2	air	1.63	1.88	1.34	1.66	1.00	1.00	1.00	3.50	57.10	84.2	0	7372

GR0002R Finokalia

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
PM10 mass	pm10	25.33	53.24	15.80	2.26	1.15	4.95	14.68	74.88	1222.92	45.3	0	3966

HU0002R K-puszt

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3	air	0.34	0.33	0.22	2.72	0.01	0.04	0.23	1.21	1.60	98.3	4	359
HNO3+NO3-	air+aerosol	0.78	0.55	0.62	2.03	0.07	0.18	0.64	1.83	3.14	98.3	0	359
NH3	air	1.13	0.79	0.79	2.77	0.02	0.12	0.99	2.69	3.51	98.3	8	359
NH3+NH4+	air+aerosol	2.23	1.15	1.94	1.74	0.47	0.70	2.08	4.49	6.02	98.3	0	359
NH4+	aerosol	1.11	1.17	0.61	3.64	0.01	0.09	0.65	3.93	6.00	98.3	9	359
NO2	air	2.27	1.30	1.94	1.83	0.01	0.86	1.89	4.82	9.01	99.9	1	365
NO3-	aerosol	0.44	0.50	0.25	2.93	0.01	0.05	0.23	1.51	3.00	98.3	1	359
PM10 mass	pm10	27.78	21.01	21.56	2.05	1.10	6.80	21.45	72.58	163.37	96.3	0	8436
SO2	air	1.03	1.21	0.60	2.90	0.01	0.12	0.55	3.77	8.62	98.3	1	359
SO4--	aerosol	1.00	0.76	0.77	2.12	0.11	0.20	0.79	2.55	4.67	98.3	0	359
TC	pm10	8.35	7.38	6.37	2.04	2.30	2.38	6.03	30.50	35.48	7.9	0	29

IE0001R Valentia Observatory

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.10	0.10	0.07	2.40	0.03	0.03	0.08	0.27	1.11	99.9	141	365
Cl-	aerosol	3.03	3.69	1.80	3.05	0.03	0.25	2.02	8.39	51.37	100.0	1	366
HNO3+NO3-	air+aerosol	0.41	0.56	0.21	3.06	0.01	0.05	0.17	1.70	3.69	97.4	1	356
K+	aerosol	0.09	0.09	0.07	2.02	0.03	0.03	0.08	0.20	1.24	99.9	81	365
Mg++	aerosol	0.224	0.270	0.135	2.887	0.025	0.025	0.150	0.624	3.700	99.9	70	365
NH3+NH4+	air+aerosol	0.95	0.70	0.76	1.94	0.04	0.32	0.70	2.50	4.55	96.9	1	354
NO2	air	1.52	1.26	1.13	2.18	0.10	0.40	1.00	4.29	6.10	93.2	0	340
Na+	aerosol	1.83	2.06	1.18	2.77	0.03	0.20	1.29	4.87	28.50	99.9	2	365
SO2	air	0.30	0.41	0.16	3.01	0.01	0.04	0.12	1.16	2.72	97.4	5	356
SO4--	aerosol	0.35	0.25	0.28	2.03	0.02	0.07	0.32	0.79	2.28	98.0	1	358
SO4-- corr	aerosol	0.20	0.23	0.12	2.92	-0.11	0.01	0.11	0.70	1.38	98.0	1	358

IE0005R Oak Park

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.09	0.07	0.07	2.24	0.01	0.02	0.06	0.23	0.39	73.2	29	267
K+	aerosol	0.07	0.04	0.06	1.62	0.02	0.03	0.06	0.15	0.20	72.3	1	264
Mg++	aerosol	0.101	0.080	0.076	2.171	0.010	0.020	0.080	0.260	0.470	73.2	11	267
NH4+	aerosol	0.59	0.45	0.48	1.86	0.16	0.21	0.44	1.65	2.46	69.9	0	255
NO3-	aerosol	0.31	0.31	0.20	2.63	0.03	0.05	0.20	1.00	1.66	70.7	0	258
Na+	aerosol	0.72	0.61	0.52	2.38	0.03	0.11	0.58	1.93	3.80	73.2	0	267
SO4--	aerosol	0.41	0.24	0.35	1.80	0.01	0.16	0.35	0.94	1.28	73.2	1	267
SO4-- corr	aerosol	0.35	0.24	0.28	1.94	-0.06	0.09	0.27	0.85	1.25	73.2	1	267

IE0006R Malin Head

January 2010 - December 2010

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	2.05	0.01	0.02	0.08	0.22	0.47	100.0	21	364
Cl-	aerosol	3.10	2.14	2.45	2.05	0.34	0.72	2.58	7.69	12.46	100.0	0	364
K+	aerosol	0.08	0.05	0.07	1.72	0.01	0.03	0.08	0.18	0.28	100.0	1	364
Mg++	aerosol	0.215	0.151	0.167	2.157	0.010	0.043	0.180	0.515	0.920	100.0	1	364
NH4+	aerosol	0.31	0.20	0.26	1.78	0.02	0.12	0.25	0.79	1.10	90.1	1	328
NO3-	aerosol	0.16	0.21	0.08	3.31	0.00	0.01	0.07	0.66	0.97	94.5	1	344
Na+	aerosol	1.73	1.20	1.35	2.12	0.11	0.35	1.47	4.21	7.05	100.0	0	364
SO4--	aerosol	0.41	0.25	0.36	1.63	0.11	0.17	0.34	0.95	2.03	100.0	0	364
SO4-- corr	aerosol	0.26	0.26	0.17	2.64	0.00	0.03	0.18	0.84	1.79	100.0	0	364

IE0008R Carnsore Point

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.12	0.10	0.09	2.25	0.01	0.02	0.10	0.33	0.70	97.5	10	356
K+	aerosol	0.13	0.10	0.10	2.00	0.01	0.04	0.09	0.33	0.63	97.5	2	356
Mg++	aerosol	0.323	0.328	0.208	2.628	0.000	0.040	0.200	1.031	2.110	97.5	3	356
NH4+	aerosol	0.61	0.56	0.46	2.07	0.10	0.16	0.42	2.08	2.72	96.7	0	353
NO3-	aerosol	0.37	0.41	0.23	2.73	0.01	0.05	0.21	1.36	1.97	96.7	1	353
Na+	aerosol	2.52	2.58	1.58	2.75	0.02	0.29	1.58	8.16	16.84	97.5	0	356
SO4--	aerosol	0.56	0.31	0.48	1.76	0.01	0.21	0.48	1.23	1.98	97.5	1	356
SO4-- corr	aerosol	0.34	0.29	0.25	2.33	-0.09	0.04	0.26	0.93	1.88	97.5	1	356

IS0002R Irafoss

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.35	0.29	0.27	2.00	0.01	0.13	0.22	1.03	2.21	98.8	0	361
Cl-	aerosol	2.17	2.01	1.43	2.77	0.02	0.29	2.02	5.55	17.89	98.8	6	361
K+	aerosol	0.05	0.04	0.05	1.68	0.01	0.02	0.05	0.12	0.28	98.8	0	361
Mg++	aerosol	0.151	0.145	0.111	2.145	0.010	0.030	0.110	0.467	1.250	98.8	0	361
Na+	aerosol	0.91	0.86	0.71	1.94	0.07	0.28	0.64	2.25	7.62	98.8	0	361
SO2	air	0.11	0.23	0.05	3.49	0.00	0.01	0.04	0.41	2.61	99.3	99	363
SO4--	aerosol	0.19	0.18	0.14	2.05	0.02	0.04	0.15	0.42	2.29	98.8	0	361
SO4-- corr	aerosol	0.10	0.17	0.07	2.86	-0.26	-0.02	0.06	0.29	2.12	98.9	0	362

IT0001R Montelibretti

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3	air	0.16	0.13	0.12	2.28	0.03	0.03	0.10	0.42	0.46	14.2	0	52
NH3	air	1.47	0.63	1.33	1.58	0.46	0.58	1.35	2.54	2.94	14.2	0	52
NH4+	aerosol	1.16	0.67	0.97	1.88	0.17	0.34	1.00	2.45	2.89	14.2	0	52
NO2	air	4.46	1.64	4.18	1.43	1.11	2.30	4.12	8.10	9.83	97.3	0	355
NO3-	aerosol	0.51	0.33	0.43	1.81	0.14	0.17	0.43	1.20	1.86	14.2	0	52
NO3-	pm10_pm25	0.20	0.13	0.16	1.98	0.03	0.04	0.15	0.48	0.56	14.2	0	52
NO3-	pm25	0.31	0.30	0.23	2.21	0.05	0.08	0.20	1.03	1.60	14.2	0	52
PM10 mass	pm10	26.99	11.46	24.59	1.56	5.00	11.00	25.00	48.00	78.00	100.0	0	365
SO2	air	0.34	0.21	0.27	2.13	0.04	0.05	0.31	0.78	0.94	14.2	0	52
SO4--	aerosol	0.78	0.47	0.64	1.95	0.14	0.17	0.68	1.62	2.24	14.2	0	52
SO4--	pm10_pm25	0.09	0.04	0.08	1.60	0.03	0.03	0.07	0.18	0.23	14.2	0	52
SO4--	pm25	0.69	0.46	0.53	2.20	0.08	0.11	0.59	1.52	2.11	14.2	0	52

IT0004R Ispra

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
EC	pm25	1.27	0.99	0.93	2.33	0.07	0.18	0.90	3.12	5.20	98.4	0	359
NH4+	pm25	1.35	1.53	0.77	3.23	-0.02	0.09	0.92	4.26	10.54	97.5	2	356
NO2	air	6.52	3.26	5.93	1.52	2.34	3.19	5.79	12.14	30.19	89.5	0	327
NO3-	pm25	0.71	1.17	0.24	5.66	-0.12	-0.02	0.17	3.28	7.98	97.5	26	356
OC	pm25	5.81	5.36	3.61	3.11	-0.14	0.38	3.91	16.39	33.38	98.4	0	359
PM25 mass	pm25	17.92	15.77	11.99	2.71	0.07	2.36	12.54	52.99	81.67	92.3	0	337
SO2	air	0.23	0.27	0.13	3.14	0.00	0.01	0.14	0.72	2.05	79.9	0	292
SO4--	pm25	0.74	0.64	0.49	2.74	-0.01	0.08	0.53	2.05	3.15	97.5	1	356
TC	pm25	7.08	6.25	4.46	3.05	0.03	0.56	4.72	19.54	38.46	98.4	0	359

LT0015R Preila

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.70	0.49	0.57	1.88	0.08	0.21	0.56	1.67	3.54	96.1	0	351
NH3+NH4+	air+aerosol	1.44	1.05	1.13	2.08	0.07	0.30	1.21	3.26	8.66	96.1	0	351
NO2	air	1.02	0.77	0.85	1.78	0.17	0.35	0.84	2.34	8.36	97.2	0	355
SO2	air	0.42	0.68	0.24	2.65	0.02	0.06	0.22	1.29	5.18	96.1	0	351
SO4--	aerosol	1.08	0.52	0.98	1.55	0.32	0.47	0.98	2.13	3.59	96.1	0	351

LV0010R Rucava

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm25	0.13	0.20	0.08	2.42	0.03	0.03	0.08	0.83	0.83	28.2	1	15
Cl-	pm25	0.05	0.08	0.03	3.10	0.00	0.00	0.03	0.28	0.28	28.2	5	15
K+	pm25	0.10	0.07	0.08	1.71	0.05	0.05	0.08	0.26	0.26	28.2	0	15
Mg++	pm25	0.012	0.006	0.010	1.896	0.002	0.002	0.011	0.025	0.025	28.2	2	15
NH4+	pm25	0.72	0.41	0.64	1.62	0.34	0.34	0.60	1.85	1.85	26.8	0	14
NO3-	pm25	0.03	0.04	0.01	4.43	0.00	0.00	0.02	0.15	0.15	28.2	0	15
Na+	pm25	0.12	0.06	0.10	1.78	0.04	0.04	0.11	0.23	0.23	28.2	0	15
PM10 mass	pm10	14.55	9.49	11.71	1.99	1.60	3.51	11.75	33.29	51.80	79.5	0	290
PM25 mass	pm25	11.95	8.53	9.33	2.07	0.70	3.00	9.05	29.37	52.20	74.5	0	272
SO4--	pm25	0.26	0.14	0.23	1.60	0.13	0.13	0.21	0.64	0.64	28.2	0	15
SO4-- corr	pm25	0.25	0.14	0.22	1.63	0.12	0.12	0.20	0.62	0.62	28.2	0	15

LV0016R Zoseni

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
PM10 mass	pm10	15.79	11.06	12.43	2.05	1.40	3.63	13.40	37.29	63.10	89.3	0	326
PM25 mass	pm25	10.48	7.10	8.11	2.18	0.30	2.00	9.30	24.95	37.30	93.4	0	341

MD0013R Leova II

January 2010 - December 2010

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	0.12	2.29	0.03	0.03	0.12	0.52	1.03	77.5	0	284
Cl-	aerosol	0.28	0.46	0.15	2.83	0.01	0.04	0.13	1.27	3.85	77.8	0	285
HNO3	air	0.09	0.03	0.09	1.39	0.04	0.05	0.08	0.16	0.21	32.9	0	121
HNO3+NO3-	air+aerosol	0.18	0.22	0.12	2.50	0.01	0.03	0.12	0.68	1.83	77.8	3	285
K+	aerosol	0.05	0.07	0.03	2.58	0.01	0.01	0.03	0.18	0.52	77.5	0	284
Mg++	aerosol	0.026	0.020	0.023	1.556	0.010	0.010	0.020	0.068	0.180	77.5	15	284
NH3	air	0.19	0.18	0.14	2.25	0.06	0.06	0.10	0.62	0.81	32.9	0	121
NH3+NH4+	air+aerosol	0.30	0.47	0.12	4.45	0.01	0.01	0.12	1.07	3.54	77.5	0	284
NH4+	aerosol	0.22	0.43	0.06	5.35	0.01	0.01	0.05	0.96	3.50	77.5	2	284
NO2	air	0.40	0.38	0.28	2.40	0.01	0.06	0.29	1.03	3.00	99.1	0	362
NO3-	aerosol	0.15	0.22	0.08	2.78	0.01	0.03	0.06	0.62	1.83	77.8	3	285
Na+	aerosol	0.07	0.08	0.05	1.95	0.01	0.03	0.04	0.21	0.66	77.5	3	284
PM10 mass	pm10	4.72	7.38	2.45	2.89	0.50	0.50	2.00	17.43	52.20	77.7	15	284
SO2	air	0.09	0.15	0.06	2.60	0.01	0.02	0.05	0.27	1.01	32.9	0	121
SO4--	aerosol	0.17	0.28	0.09	2.99	0.01	0.03	0.06	0.56	2.34	77.8	2	285
SO4-- corr	aerosol	0.16	0.28	0.08	3.14	-1.42	0.02	0.06	0.53	2.33	77.8	2	285

ME0008R Zabljak

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	0.89	0.49	0.83	1.36	0.76	0.76	0.76	1.83	4.87	86.2	0	315
SO2	air	1.52	0.94	1.40	1.42	1.25	1.25	1.25	3.51	9.02	90.6	0	331

MK0007R Lazaropole

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	0.73	0.33	0.66	1.59	0.17	0.36	0.96	0.99	6.69	46.8	0	4104
PM10 mass	pm10	17.04	17.58	10.57	3.17	0.01	1.90	11.99	50.31	248.76	44.8	0	3927
SO2	air	3.48	2.58	2.97	1.66	0.29	1.98	2.30	8.01	27.13	37.4	0	3276

NL0007R Eibergen

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NH3	air	8.02	5.58	6.68	1.81	1.28	2.58	6.43	18.28	58.18	91.5	0	8012
NO	air	1.02	3.12	0.45	5.56	-2.17	-0.34	0.11	5.63	33.34	98.8	0	8652
NO2	air	5.27	2.92	4.60	1.68	0.50	2.11	4.34	11.80	16.67	99.7	0	364
NO2	air	5.27	3.56	4.26	1.95	0.02	1.50	4.21	13.06	20.75	99.3	0	8699
PM10 mass	pm10	27.02	20.12	20.76	2.37	-5.53	3.31	22.80	63.35	164.86	87.4	0	7659
SO2	air	0.43	0.96	0.36	3.22	-1.34	-0.40	0.24	1.65	14.96	89.0	0	7799

NL0008R Bilthoven

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.19	0.13	0.16	1.84	0.01	0.06	0.16	0.42	0.95	49.3	0	180
Cl-	aerosol	0.88	0.93	0.57	2.56	0.10	0.12	0.56	2.76	6.49	81.4	0	297
NH4+	aerosol	1.48	1.61	0.86	3.12	0.03	0.10	0.95	4.75	11.48	99.5	0	363
NO3-	aerosol	1.19	1.03	0.86	2.23	0.10	0.25	0.84	3.28	6.68	99.7	0	364
SO2	air	0.68	0.91	0.56	2.97	-1.15	-0.27	0.51	2.27	14.04	99.6	0	8724
SO4--	aerosol	0.87	0.62	0.72	1.80	0.13	0.27	0.73	2.01	5.59	99.7	0	364
SO4-- corr	aerosol	0.86	0.62	0.72	1.80	-0.07	0.27	0.72	1.99	5.57	99.7	0	364

NL0009R Kollumerwaard

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.14	0.10	0.11	2.00	0.01	0.04	0.11	0.35	0.59	49.0	0	179
Cl-	aerosol	0.97	1.04	0.61	2.64	0.10	0.14	0.60	3.27	7.16	89.0	0	325
NO	air	0.61	2.31	0.33	4.70	-1.98	-0.37	0.08	3.21	33.04	95.4	0	8361
NO2	air	3.14	3.37	1.92	2.93	-1.00	0.28	2.02	10.03	23.73	95.4	0	8361
PM10 mass	pm10	21.83	16.16	17.38	2.10	-2.75	4.30	17.75	54.44	177.41	93.6	0	8196
PM25 mass	pm25	13.61	12.92	10.02	2.14	0.96	3.23	8.87	38.09	95.81	82.5	0	301
SO2	air	0.33	0.67	0.30	2.97	-0.68	-0.30	0.23	1.15	8.54	99.6	0	8728
SO4--	aerosol	0.80	0.65	0.64	1.87	0.14	0.23	0.63	1.99	5.94	98.4	0	359
SO4-- corr	aerosol	0.79	0.64	0.64	1.88	0.11	0.23	0.61	1.99	5.90	98.4	0	359

NL0010R Vredepeel

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.27	0.22	0.20	2.13	0.01	0.07	0.19	0.77	1.19	49.3	0	180
Cl-	aerosol	0.67	0.65	0.46	2.34	0.10	0.12	0.46	2.10	4.24	84.4	0	308
NH4+	aerosol	1.81	1.68	1.23	2.58	0.04	0.20	1.28	4.86	11.36	98.9	0	361
NO	air	1.68	5.08	0.68	5.44	-2.30	-0.54	0.23	9.28	59.97	91.7	0	8030
NO2	air	5.49	4.17	4.16	2.16	0.20	1.12	4.25	14.26	29.24	94.7	0	8299
NO3-	aerosol	1.38	1.00	1.10	1.98	0.18	0.35	1.06	3.29	6.76	99.2	0	362
PM10 mass	pm10	24.56	17.00	19.46	2.22	-3.94	3.74	21.31	54.93	195.44	91.8	0	8040
PM25 mass	pm25	16.37	12.88	12.96	2.07	0.02	4.82	12.55	40.51	102.16	98.6	0	360
PM25 mass	pm25	17.91	13.18	14.96	1.79	2.29	5.81	14.67	36.91	107.24	79.7	0	291
SO2	air	0.56	0.89	0.46	2.96	-1.03	-0.32	0.38	2.08	11.16	94.2	0	8251
SO4--	aerosol	0.94	0.69	0.79	1.79	0.13	0.30	0.78	2.14	5.84	99.2	0	362
SO4-- corr	aerosol	0.94	0.69	0.79	1.79	0.13	0.30	0.78	2.09	5.82	99.2	0	362

NL0011R Cabauw

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	2.80	6.65	0.78	5.42	-0.53	-0.12	0.51	14.91	82.97	97.0	0	8496
NO2	air	7.27	5.35	5.47	2.22	0.31	1.35	5.69	18.30	32.82	97.0	0	8495
PM25 mass	pm25	17.22	13.06	14.14	1.83	3.39	5.44	13.72	38.62	93.43	65.8	0	240
SO2	air	0.46	0.80	0.45	2.88	-1.12	-0.45	0.36	1.82	9.68	88.0	0	7709

NL0091R De Zilk

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Cl-	aerosol	1.40	1.57	0.79	3.08	0.10	0.12	0.82	4.76	9.64	84.7	0	309
NH3	air	1.35	1.78	0.73	3.23	-0.09	0.08	0.68	5.00	15.68	98.1	0	358
NH3	air	1.36	2.09	0.70	3.29	-0.16	0.05	0.57	4.93	31.10	92.4	0	8096
NH4+	aerosol	1.25	1.59	0.58	3.81	0.03	0.06	0.64	4.41	10.42	92.6	0	338
NO	air	2.17	4.70	0.68	5.42	-0.44	-0.12	0.55	9.34	36.18	95.3	0	348
NO	air	2.17	6.10	0.53	6.96	-1.31	-0.28	0.20	12.72	92.88	94.1	0	8239
NO2	air	5.50	4.15	4.01	2.42	0.09	0.88	4.37	14.90	20.57	95.6	0	349
NO2	air	5.51	4.99	3.40	3.13	-0.29	0.41	3.93	16.14	28.75	94.2	0	8251
NO3-	aerosol	1.04	1.05	0.69	2.47	0.04	0.18	0.64	3.17	6.19	95.1	0	347
PM10 mass	pm10	22.62	17.57	17.71	2.25	-4.66	2.88	19.07	54.15	223.63	92.1	0	8069
SO2	air	1.11	0.98	0.79	2.57	-0.37	0.12	0.81	3.07	6.08	100.0	0	365
SO2	air	1.11	1.49	0.68	3.10	-0.62	-0.02	0.66	3.81	16.99	99.7	0	8733
SO4--	aerosol	0.88	0.60	0.75	1.71	0.19	0.33	0.75	1.82	5.75	95.1	0	347
SO4-- corr	aerosol	0.87	0.60	0.74	1.73	-0.02	0.32	0.73	1.81	5.70	95.1	0	347

N00002R Birkenes II

January 2010 - December 2010

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	0.01	2.72	0.01	0.01	0.01	0.08	0.24	99.9	127	365
Cl-	aerosol	0.26	0.55	0.06	5.64	0.01	0.01	0.05	1.17	5.49	99.6	132	364
EC	pm10	0.11	0.06	0.09	1.73	0.02	0.03	0.10	0.24	0.32	94.2	0	50
EC	pm25	0.10	0.07	0.08	1.89	0.01	0.03	0.08	0.26	0.40	96.2	0	51
HNO3	air	0.08	0.09	0.04	3.18	0.01	0.01	0.05	0.29	0.58	99.9	117	365
HNO3+NO3-	air+aerosol	0.23	0.31	0.12	3.15	0.01	0.02	0.14	0.72	3.33	99.6	0	364
K+	aerosol	0.04	0.04	0.02	2.63	0.01	0.01	0.03	0.10	0.33	99.9	60	365
Mg++	aerosol	0.027	0.044	0.013	3.020	0.005	0.005	0.010	0.117	0.440	99.9	159	365
NH4+	aerosol	0.20	0.28	0.08	4.89	0.01	0.01	0.11	0.82	2.35	99.9	52	365
NO2	air	0.31	0.27	0.23	2.27	0.01	0.07	0.22	0.86	1.75	99.9	5	365
NO3-	aerosol	0.15	0.26	0.06	4.27	0.01	0.01	0.07	0.60	2.75	99.6	54	364
Na+	aerosol	0.30	0.41	0.14	3.92	0.01	0.01	0.17	1.14	3.79	99.9	11	365
OC	pm10	0.90	0.40	0.80	1.62	0.25	0.28	0.84	1.79	2.25	94.2	0	50
OC	pm25	0.67	0.39	0.58	1.64	0.25	0.27	0.62	1.53	2.37	96.2	0	51
PM10 mass	pm10	5.86	4.17	4.60	2.06	0.53	1.20	4.58	15.91	22.25	94.2	0	50
PM25 mass	pm25	3.40	2.40	2.77	1.90	0.65	0.81	3.18	8.53	14.94	94.2	0	50
SO2	air	0.12	0.17	0.06	3.45	0.01	0.01	0.06	0.40	1.88	99.9	80	365
SO4--	aerosol	0.29	0.29	0.18	3.05	0.01	0.03	0.21	0.88	1.71	99.6	3	364
SO4-- corr	aerosol	0.27	0.28	0.17	3.02	-0.04	0.02	0.18	0.84	1.65	99.6	3	364
TC	pm10	1.00	0.44	0.90	1.59	0.30	0.34	0.96	1.97	2.53	94.2	0	50
TC	pm25	0.77	0.45	0.67	1.64	0.28	0.29	0.71	1.80	2.77	96.2	0	51

N00015R Tustervatn

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.01	0.02	0.01	2.19	0.01	0.01	0.01	0.04	0.17	98.3	204	359
Cl-	aerosol	1.16	1.04	0.34	9.24	0.01	0.01	1.07	2.87	41.1	35	150	
HNO3	air	0.02	0.03	0.02	2.12	0.01	0.01	0.01	0.08	0.28	99.9	285	365
HNO3+NO3-	air+aerosol	0.10	0.18	0.05	2.63	0.02	0.02	0.04	0.40	2.33	99.4	0	363
K+	aerosol	0.02	0.02	0.01	2.41	0.01	0.01	0.01	0.06	0.10	98.3	134	359
Mg++	aerosol	0.013	0.019	0.008	2.291	0.005	0.005	0.005	0.050	0.140	98.3	255	359
NH4+	aerosol	0.11	0.18	0.04	4.89	0.01	0.01	0.04	0.42	2.24	98.3	105	359
NO2	air	0.12	0.09	0.10	1.97	0.01	0.04	0.10	0.27	0.71	98.0	14	358
NO3-	aerosol	0.07	0.16	0.03	3.91	0.01	0.01	0.03	0.32	2.05	99.4	105	363
Na+	aerosol	0.15	0.22	0.06	4.48	0.01	0.01	0.06	0.59	1.38	98.3	51	359
SO2	air	0.08	0.30	0.02	3.11	0.01	0.01	0.01	0.32	4.00	99.9	216	365
SO4--	aerosol	0.15	0.17	0.10	2.73	0.01	0.02	0.09	0.48	1.05	99.4	7	363
SO4-- corr	aerosol	0.15	0.17	0.09	2.81	0.00	0.02	0.09	0.47	1.05	97.8	7	358

N00039R Kårvatn

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.01	0.02	0.01	2.28	0.01	0.01	0.01	0.04	0.14	98.5	177	360
Cl-	aerosol	0.13	0.27	0.04	4.56	0.01	0.01	0.01	0.64	2.91	99.9	184	365
HNO3	air	0.02	0.03	0.01	2.08	0.01	0.01	0.01	0.09	0.22	99.4	272	363
HNO3+NO3-	air+aerosol	0.08	0.11	0.05	2.47	0.01	0.02	0.04	0.30	1.07	99.4	0	363
K+	aerosol	0.02	0.02	0.02	2.51	0.01	0.01	0.02	0.07	0.17	98.5	101	360
Mg++	aerosol	0.012	0.018	0.008	2.216	0.005	0.005	0.005	0.049	0.180	98.5	253	360
NH4+	aerosol	0.10	0.19	0.03	4.69	0.01	0.01	0.04	0.36	2.86	98.5	107	360
NO2	air	0.25	0.27	0.17	2.36	0.01	0.05	0.16	0.74	2.35	99.4	12	363
NO3-	aerosol	0.05	0.10	0.02	3.65	0.01	0.01	0.02	0.23	1.06	99.9	108	365
Na+	aerosol	0.13	0.18	0.05	4.27	0.01	0.01	0.06	0.51	1.68	98.5	41	360
PM10 mass	pm10	3.89	2.33	3.16	2.04	0.56	0.68	3.79	9.14	10.13	57.5	0	30
PM25 mass	pm25	3.19	2.25	2.47	2.14	0.66	0.74	3.13	9.20	9.22	59.5	0	31
SO2	air	0.03	0.07	0.02	2.36	0.01	0.01	0.01	0.10	0.86	99.4	237	363
SO4--	aerosol	0.14	0.13	0.09	2.74	0.01	0.02	0.09	0.41	0.84	99.9	8	365
SO4-- corr	aerosol	0.13	0.13	0.08	2.87	-0.07	0.01	0.08	0.41	0.84	100.0	8	366

N00042G Zeppelin mountain (Ny-Ålesund)

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
CO	air	138.56	32.57	134.55	1.28	79.62	86.25	142.18	185.87	215.77	70.7	0	258
Ca++	aerosol	0.02	0.03	0.01	2.69	0.01	0.01	0.01	0.07	0.44	95.8	130	350
Cl-	aerosol	0.25	0.43	0.08	5.14	0.01	0.01	0.10	1.03	3.51	95.8	104	350
HNO3	air	0.02	0.02	0.01	1.75	0.01	0.01	0.01	0.05	0.24	95.0	313	347
HNO3+NO3-	air+aerosol	0.06	0.14	0.03	2.14	0.01	0.02	0.02	0.21	1.72	95.0	0	347
K+	aerosol	0.02	0.02	0.01	2.53	0.01	0.01	0.01	0.07	0.17	95.8	155	350
Mg++	aerosol	0.021	0.036	0.011	2.749	0.000	0.005	0.005	0.070	0.320	95.8	186	350
NH4+	aerosol	0.05	0.12	0.02	3.86	0.01	0.01	0.01	0.16	1.55	95.0	160	347
NO3-	aerosol	0.04	0.13	0.01	3.10	0.01	0.01	0.01	0.12	1.70	95.0	169	347
Na+	aerosol	0.19	0.25	0.08	4.68	0.01	0.01	0.12	0.66	1.79	95.8	44	350
SO2	air	0.07	0.19	0.03	3.31	0.01	0.01	0.01	0.33	2.50	95.8	196	350
SO4--	aerosol	0.13	0.12	0.08	3.17	0.01	0.01	0.10	0.37	0.73	95.8	24	350
SO4-- corr	aerosol	0.12	0.11	0.07	3.10	-0.01	0.01	0.09	0.36	0.70	95.9	24	351

NO0055R Karasjok

January 2010 - December 2010

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	2.00	0.01	0.01	0.01	0.03	0.03	6.6	12	24
Cl-	aerosol	0.18	0.35	0.04	5.53	0.01	0.01	0.01	1.23	1.49	13.2	28	48
HNO3	air	0.05	0.07	0.03	2.73	0.01	0.01	0.01	0.29	0.32	6.6	13	24
HNO3+NO3-	air+aerosol	0.07	0.08	0.05	2.20	0.02	0.02	0.04	0.33	0.36	6.6	0	24
K+	aerosol	0.03	0.03	0.02	2.58	0.01	0.01	0.02	0.12	0.14	6.6	5	24
Mg++	aerosol	0.013	0.020	0.008	2.333	0.005	0.005	0.005	0.082	0.090	6.6	19	24
NH4+	aerosol	0.17	0.17	0.09	3.39	0.01	0.01	0.12	0.66	0.72	6.6	0	24
NO2	air	0.39	1.37	0.16	2.79	0.01	0.04	0.16	0.75	10.63	16.2	1	59
NO3-	aerosol	0.02	0.01	0.01	2.39	0.01	0.01	0.01	0.05	0.07	13.2	22	48
Na+	aerosol	0.13	0.20	0.05	4.04	0.01	0.01	0.04	0.79	0.85	6.6	2	24
SO2	air	0.58	1.34	0.07	7.86	0.01	0.01	0.03	5.12	5.83	6.6	10	24
SO4--	aerosol	0.30	0.25	0.18	3.36	0.01	0.01	0.29	0.72	1.15	13.2	0	48
SO4-- corr	aerosol	0.29	0.26	0.19	3.31	0.00	0.00	0.31	0.72	1.14	13.2	0	49

NO0056R Hurdal

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.02	0.03	0.01	2.54	0.01	0.01	0.01	0.06	0.31	69.0	96	253
Cl-	aerosol	0.07	0.13	0.03	3.55	0.01	0.01	0.01	0.30	0.85	69.3	147	254
HNO3	air	0.05	0.06	0.03	2.79	0.01	0.01	0.03	0.16	0.48	69.0	107	253
HNO3+NO3-	air+aerosol	0.16	0.25	0.09	2.90	0.01	0.02	0.08	0.53	2.85	69.0	0	253
K+	aerosol	0.04	0.03	0.03	2.70	0.01	0.01	0.03	0.10	0.20	69.0	44	253
Mg++	aerosol	0.009	0.011	0.007	1.874	0.005	0.005	0.005	0.040	0.080	69.0	193	253
NH4+	aerosol	0.18	0.26	0.06	5.31	0.01	0.01	0.09	0.60	2.52	69.0	52	253
NO2	air	0.66	0.80	0.43	2.46	0.01	0.11	0.41	2.02	6.97	96.1	1	351
NO3-	aerosol	0.11	0.21	0.04	3.92	0.01	0.01	0.05	0.41	2.62	69.3	43	254
Na+	aerosol	0.11	0.13	0.06	3.41	0.01	0.01	0.06	0.42	0.79	69.0	19	253
PM10 mass	pm10	4.84	2.36	4.34	1.61	1.50	1.62	4.24	11.04	11.44	47.4	0	25
PM25 mass	pm25	3.85	2.15	3.30	1.81	0.71	0.83	3.60	8.81	9.00	41.6	0	22
SO2	air	0.07	0.10	0.03	3.10	0.01	0.01	0.03	0.29	0.72	69.0	91	253
SO4--	aerosol	0.21	0.22	0.13	2.94	0.01	0.02	0.12	0.68	1.29	69.3	6	254
SO4-- corr	aerosol	0.20	0.22	0.13	2.93	-0.01	0.01	0.11	0.68	1.29	69.3	6	254

PL0002R Jarczew

January 2010 - December 2010

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	0.57	0.63	1.98	0.08	0.21	0.60	1.98	3.73	97.5	0	356
NH3+NH4+	air+aerosol	3.00	1.88	2.57	1.73	0.67	1.10	2.52	7.22	12.65	98.0	0	358
NH4+	aerosol	1.33	1.02	1.01	2.16	0.11	0.26	1.07	3.48	7.87	98.0	0	358
NO2	air	3.01	1.70	2.64	1.68	0.10	1.20	2.60	6.22	12.50	96.1	1	351
NO3-	aerosol	0.67	0.56	0.49	2.25	0.05	0.13	0.47	1.96	3.73	97.5	0	356
SO2	air	1.63	1.61	1.02	2.77	0.10	0.20	1.00	5.10	9.00	98.0	14	358
SO4--	aerosol	1.49	0.88	1.23	1.96	0.10	0.33	1.41	3.04	6.56	98.0	4	358

PL0003R Sniezka

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.51	0.28	0.44	1.81	0.06	0.15	0.46	0.99	1.66	99.9	0	365
NH3+NH4+	air+aerosol	0.75	0.45	0.61	2.00	0.03	0.18	0.69	1.58	2.72	99.9	2	365
NH4+	aerosol	0.56	0.34	0.44	2.18	0.03	0.09	0.52	1.19	1.96	99.9	9	365
NO2	air	1.00	0.54	0.86	1.78	0.20	0.30	0.90	2.07	2.60	99.9	0	365
NO3-	aerosol	0.40	0.22	0.34	1.82	0.05	0.12	0.36	0.80	1.32	99.9	0	365
SO2	air	1.02	0.56	0.86	1.82	0.20	0.30	0.90	2.10	2.90	99.9	0	365
SO4--	aerosol	0.86	0.49	0.70	2.04	0.10	0.10	0.77	1.76	2.54	99.9	21	365

PL0004R Leba

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.63	0.53	0.45	2.38	0.04	0.09	0.47	1.70	2.94	98.6	0	360
NH3+NH4+	air+aerosol	1.34	0.93	1.05	2.10	0.03	0.28	1.04	3.27	5.49	99.4	1	363
NH4+	aerosol	0.86	0.75	0.59	2.46	0.03	0.13	0.64	2.47	5.28	99.4	1	363
NO2	air	1.66	1.28	1.30	1.99	0.30	0.40	1.20	4.56	7.00	93.9	0	343
NO3-	aerosol	0.51	0.47	0.33	2.73	0.01	0.05	0.34	1.46	2.50	98.6	1	360
SO2	air	1.18	1.19	0.79	2.43	0.10	0.20	0.80	4.16	7.30	99.4	4	363
SO4--	aerosol	1.24	0.69	1.04	1.93	0.10	0.34	1.15	2.43	5.01	99.4	8	363

PL0005R Diabla Gora

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm25	0.14	0.06	0.13	1.60	0.04	0.04	0.14	0.23	0.23	99.7	0	12
Cl-	pm25	0.18	0.06	0.16	2.38	0.01	0.01	0.20	0.24	0.24	99.7	1	12
EC	pm25	2.13	2.62	1.20	3.10	0.18	0.18	1.02	7.58	7.58	99.7	0	12
HNO3	air	0.45	0.35	0.34	2.14	0.05	0.11	0.35	1.22	1.88	99.9	0	365
HNO3+NO3-	air+aerosol	0.85	0.71	0.63	2.21	0.08	0.20	0.62	2.13	4.04	99.9	0	365
K+	pm25	0.12	0.06	0.10	1.95	0.02	0.02	0.11	0.23	0.23	99.7	0	12
Mg++	pm25	0.039	0.019	0.032	2.159	0.005	0.005	0.040	0.070	0.070	99.7	2	12
NH3	air	0.79	0.63	0.56	2.57	0.00	0.09	0.62	2.05	3.79	99.9	0	365
NH3+NH4+	air+aerosol	2.02	0.93	1.80	1.66	0.15	0.68	1.86	3.75	6.29	99.9	0	365
NH4+	aerosol	1.23	0.72	1.02	1.93	0.12	0.30	1.12	2.50	4.19	99.9	0	365
NO2	air	1.10	0.94	0.83	2.13	0.02	0.24	0.86	3.29	7.00	99.1	0	362
NO3-	aerosol	0.40	0.43	0.25	2.63	0.02	0.06	0.23	1.29	2.75	99.9	0	365
Na+	pm25	1.29	1.01	1.01	2.08	0.28	0.28	0.93	3.73	3.73	99.7	0	12
OC	pm25	1.62	1.40	1.24	2.11	0.41	0.41	1.07	4.69	4.69	99.7	0	12
PM10 mass	pm10	18.73	11.95	15.69	1.81	3.27	6.25	14.86	43.12	77.40	98.1	0	359
PM25 mass	pm25	15.21	11.04	11.94	2.05	1.07	3.68	11.82	37.50	69.08	98.1	0	359
SO2	air	0.62	0.62	0.43	2.31	0.07	0.13	0.41	2.05	3.99	99.9	0	365
SO4--	aerosol	0.66	0.52	0.48	2.31	0.04	0.11	0.52	1.77	2.60	99.9	0	365

RO0008R Poiana Stampei

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
CO	air	96.87	163.74	50.77	2.91	0.00	8.59	42.95	377.96	2611.36	86.8	0	7602
NO2	air	4.22	2.03	3.73	1.67	0.07	1.53	3.76	7.91	16.41	73.9	0	6472
PM10 mass	pm10	17.46	10.42	14.54	1.88	2.36	4.36	14.99	38.05	49.96	80.0	0	292
SO2	air	2.30	1.25	2.01	1.91	-0.51	0.51	2.24	4.23	15.28	80.4	0	7041

RS0005R Kamenicki vis

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	2.89	1.41	2.62	1.53	1.50	1.50	2.40	5.75	9.70	82.7	0	302
SO2	air	5.73	3.78	4.59	1.99	1.50	1.50	5.00	12.55	25.80	95.3	0	348

RU0018R Danki

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NH4+	aerosol	0.39	0.30	0.27	2.81	0.01	0.02	0.31	0.93	1.61	95.1	0	347
NO3-	aerosol	0.07	0.08	0.05	2.58	0.00	0.01	0.05	0.24	0.52	95.1	0	347
SO2	air	0.17	0.36	0.08	3.24	0.01	0.01	0.08	0.65	5.56	96.7	0	353
SO4--	aerosol	0.19	0.18	0.13	2.47	0.00	0.03	0.14	0.54	1.33	95.1	0	347

RU0020R Lesnoy

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NH4+	aerosol	0.13	0.08	0.10	2.10	0.01	0.03	0.12	0.27	0.36	94.0	0	49
NO3-	aerosol	0.03	0.03	0.03	2.13	0.00	0.00	0.02	0.09	0.11	94.0	0	49
SO2	air	0.04	0.03	0.03	2.27	0.01	0.01	0.03	0.12	0.13	94.0	0	49
SO4--	aerosol	0.14	0.13	0.10	2.75	0.01	0.01	0.12	0.49	0.68	94.0	0	49

SE0005R Bredkålen

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.04	0.03	0.03	2.06	0.01	0.01	0.03	0.11	0.20	98.6	0	360
NH3+NH4+	air+aerosol	0.20	0.43	0.10	3.32	0.01	0.01	0.11	0.58	7.00	98.8	50	361
NO2	air	0.11	0.16	0.07	2.11	0.05	0.05	0.05	0.39	1.81	99.1	302	362
PM10 mass	pm10	3.63	3.04	2.90	1.93	0.50	1.00	2.95	8.36	33.00	95.3	0	348
PM25 mass	pm25	2.07	1.52	1.61	2.09	0.10	0.50	1.60	5.09	9.00	93.1	0	340
SO2	air	0.12	0.27	0.04	4.34	0.01	0.01	0.04	0.55	2.75	98.8	91	361
SO4--	aerosol	0.17	0.18	0.09	3.61	0.01	0.01	0.11	0.55	1.11	98.8	35	361

SE0011R Vavihill

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
EC	pm10	0.18	0.12	0.15	2.00	0.01	0.06	0.14	0.43	0.61	56.1	0	69
HNO3+NO3-	air+aerosol	0.46	0.47	0.31	2.46	0.01	0.07	0.31	1.38	3.79	96.6	0	353
NH3+NH4+	air+aerosol	0.93	0.81	0.66	2.42	0.04	0.13	0.70	2.36	6.25	96.6	0	353
NO2	air	1.06	0.73	0.89	1.77	0.23	0.36	0.82	2.68	6.05	96.1	0	351
OC	pm10	1.62	0.93	1.39	1.73	0.46	0.60	1.39	3.63	5.08	56.1	0	69
PM10 mass	pm10	13.74	9.59	11.06	2.06	-4.70	3.00	11.50	33.55	86.70	78.6	0	6889
PM25 mass	pm25	7.19	7.88	4.74	2.96	-4.90	-0.20	4.70	24.17	57.10	86.6	0	7585
SO2	air	0.32	0.36	0.21	2.54	0.01	0.05	0.20	1.12	3.35	96.6	2	353
SO4--	aerosol	0.48	0.38	0.36	2.27	0.01	0.08	0.38	1.13	2.79	96.6	1	353
TC	pm10	1.80	1.04	1.54	1.73	0.52	0.68	1.62	4.04	5.69	56.1	0	69

SE0012R Aspvreten

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
EC	pm10	0.31	0.31	0.22	2.17	0.00	0.08	0.20	0.83	1.77	32.3	0	118
HNO3+NO3-	air+aerosol	0.23	0.20	0.17	2.18	0.02	0.04	0.17	0.60	1.83	99.7	0	364
NH3+NH4+	air+aerosol	0.40	0.35	0.28	2.59	0.01	0.06	0.31	1.05	2.40	99.9	9	365
NO2	air	0.79	0.72	0.60	2.04	0.05	0.23	0.58	2.12	7.53	98.8	5	361
OC	pm10	1.63	1.57	1.25	1.98	0.27	0.47	1.18	5.86	12.30	32.3	0	118
PM10 mass	pm10	8.29	6.27	6.71	1.89	1.00	2.40	6.60	20.35	47.80	73.6	0	269
PM25 mass	pm25	5.70	5.64	4.21	2.48	-6.40	0.10	4.30	16.70	51.60	69.9	0	6126
SO2	air	0.26	0.32	0.15	3.21	0.01	0.03	0.15	0.92	2.06	99.9	15	365
SO4--	aerosol	0.39	0.33	0.27	2.52	0.02	0.05	0.30	1.04	2.41	99.7	0	364

SE0014R Råðö

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.47	0.52	0.31	2.47	0.01	0.08	0.30	1.53	4.30	98.0	0	358
NH3+NH4+	air+aerosol	0.67	0.71	0.45	2.49	0.01	0.09	0.47	2.04	6.28	98.0	1	358
NO2	air	1.27	0.86	1.05	1.86	0.05	0.38	1.04	2.96	6.36	98.6	1	360
PM10 mass	pm10	11.72	7.14	9.87	1.83	2.10	3.50	10.15	24.06	50.50	95.8	0	350
PM25 mass	pm25	6.51	4.64	5.42	1.82	1.20	2.10	5.40	14.36	46.10	95.3	0	348
SO2	air	0.34	0.25	0.24	2.54	0.01	0.05	0.27	0.82	1.49	98.0	13	358
SO4--	aerosol	0.50	0.33	0.38	2.36	0.01	0.09	0.44	1.13	2.03	98.0	5	358

SI0008R Iskrba

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.14	0.16	0.08	3.01	0.00	0.01	0.08	0.48	1.25	91.5	17	334
Ca++	pm25	0.07	0.03	0.06	1.65	0.02	0.02	0.07	0.12	0.19	48.5	17	177
Cl-	aerosol	0.04	0.10	0.01	6.37	0.00	0.00	0.01	0.19	1.23	91.5	180	334
Cl-	pm25	0.03	0.07	0.02	1.75	0.01	0.01	0.01	0.07	0.65	48.5	157	177
EC	pm25	0.38	0.35	0.28	2.16	0.04	0.09	0.27	0.98	2.70	48.5	8	177
HNO3+NO3-	air+aerosol	0.22	0.20	0.16	2.23	0.02	0.04	0.15	0.64	1.24	91.5	0	334
K+	aerosol	0.13	0.08	0.11	1.75	0.02	0.04	0.10	0.30	0.51	91.5	0	334
K+	pm25	0.12	0.10	0.09	2.05	0.01	0.03	0.09	0.34	0.53	48.5	0	177
Mg++	aerosol	0.041	0.045	0.023	3.670	0.001	0.001	0.026	0.142	0.302	91.5	24	334
Mg++	pm25	0.018	0.011	0.014	2.353	0.002	0.002	0.017	0.037	0.083	48.5	24	177
NH3+NH4+	air+aerosol	0.95	0.61	0.75	2.06	0.11	0.19	0.84	2.10	3.07	91.5	0	334
NH4+	pm25	0.82	0.71	0.55	2.69	0.02	0.10	0.59	2.26	3.58	48.5	0	177
NO2	air	0.56	0.34	0.49	1.63	0.07	0.27	0.44	1.29	2.00	86.0	0	314
NO3-	pm25	0.08	0.14	0.04	2.92	0.00	0.01	0.03	0.42	0.89	48.5	0	177
Na+	aerosol	0.09	0.13	0.04	3.74	0.00	0.00	0.05	0.33	1.12	91.5	40	334
Na+	pm25	0.04	0.04	0.03	2.33	0.01	0.01	0.03	0.10	0.33	48.5	24	177
OC	pm25	3.38	2.00	2.96	1.63	0.91	1.32	2.96	7.63	12.68	48.5	0	177
PM10 mass	pm10	14.39	9.34	11.99	1.83	2.60	4.40	12.35	31.62	64.60	96.9	0	354
PM25 mass	pm25	11.60	8.87	9.16	2.02	0.50	2.86	9.30	27.34	64.80	96.1	0	351
SO2	air	0.63	1.12	0.26	3.93	0.00	0.04	0.26	2.42	9.99	91.5	98	334
SO4--	aerosol	0.80	0.74	0.50	3.04	0.02	0.05	0.59	2.30	5.01	91.5	43	334
SO4--	pm25	0.88	0.84	0.60	2.56	0.04	0.11	0.64	2.45	5.80	48.5	0	177
SO4-- corr	aerosol	0.79	0.74	0.49	3.08	0.02	0.05	0.57	2.29	5.00	91.6	43	335
SO4-- corr	pm25	0.88	0.83	0.59	2.58	0.03	0.11	0.63	2.44	5.79	48.5	0	177

SI0032R Krvavec

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
CO	air	156.11	38.02	152.12	1.25	77.31	111.67	146.03	231.93	463.86	90.3	0	7910

SK0002R Chopok

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3	air	0.01	0.01	0.01	2.08	0.00	0.00	0.01	0.03	0.08	96.9	0	354
NO2	air	0.77	0.37	0.65	1.96	0.01	0.24	0.75	1.43	2.02	96.6	4	353
NO3-	aerosol	0.10	0.13	0.06	2.71	0.00	0.01	0.06	0.33	1.10	96.9	0	354
SO2	air	0.22	0.30	0.12	3.01	0.01	0.02	0.12	0.84	2.66	96.6	0	353
SO4--	aerosol	0.26	0.27	0.15	2.96	0.00	0.02	0.17	0.78	1.69	96.9	0	354
SPM	aerosol	4.93	3.39	3.69	2.46	0.30	0.51	4.82	12.53	14.52	94.0	0	49

SK0004R Stara Lesna

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
PM10 mass	pm10	14.11	4.58	12.27	1.47	4.83	4.89	13.37	20.85	20.96	92.1	0	33

SK0006R Starina

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.09	0.09	0.07	2.42	0.00	0.02	0.07	0.25	0.60	99.6	5	364
HNO3	air	0.02	0.03	0.01	2.18	0.00	0.01	0.01	0.07	0.26	98.8	0	361
K+	aerosol	0.15	0.14	0.11	2.21	0.00	0.04	0.11	0.42	1.42	99.6	1	364
Mg++	aerosol	0.016	0.012	0.012	2.189	0.000	0.003	0.013	0.039	0.082	99.6	17	364
NH3	air	0.27	0.29	0.17	2.64	0.03	0.04	0.18	0.77	2.21	99.6	0	364
NH4+	aerosol	0.84	0.58	0.68	2.01	0.04	0.23	0.68	1.98	4.24	99.6	0	364
NO2	air	1.13	0.59	0.98	1.79	0.01	0.47	1.00	2.23	4.09	99.1	1	362
NO3-	aerosol	0.31	0.25	0.24	2.13	0.00	0.07	0.25	0.75	2.21	99.1	0	362
Na+	aerosol	0.08	0.07	0.06	2.31	0.00	0.01	0.06	0.20	0.62	99.6	9	364
PM10 mass	pm10	15.84	6.08	14.49	1.48	4.21	7.12	13.86	28.23	37.38	98.6	0	51
SO2	air	0.71	1.31	0.24	4.35	0.01	0.03	0.20	3.12	14.19	97.7	0	357
SO4--	aerosol	0.83	0.63	0.64	2.16	0.01	0.18	0.67	2.12	4.50	99.1	0	362
SO4-- corr	aerosol	0.82	0.63	0.63	2.21	0.00	0.18	0.66	2.11	4.49	99.1	0	362

SK0007R Topolniky

January 2010 - December 2010

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
PM10 mass	pm10	24.51	11.00	21.68	1.55	10.12	11.07	21.56	47.22	59.28	98.6	0	49

Annex 4

Overview of sampling and analytical methods 2010

Country: Armenia		Main components and ozone - EMEP		Year: 2010	
	Station	Sampling	Sampling frequency	Analysis method	
Precipitation					
Precipitation amount	AM01				
Precipitation amount, official gauge	AM01	Meteorological station	every event	By volume	
Sulphate	AM01	Wet-only ¹	every event	Ion chromatography	
Nitrate	AM01	Wet-only	every event	Ion chromatography	
Ammonium	AM01	Wet-only	every event	Spectrophotometric, with Nessler's reagent	
Magnesium	AM01	Wet-only	every event	ICP-MS	
Sodium	AM01	Wet-only	every event	ICP-MS	
Chloride	AM01	Wet-only	every event	Ion chromatography	
Calcium	AM01	Wet-only	every event	ICP-MS	
Potassium	AM01	Wet-only	every event	ICP-MS	
Conductivity	AM01	Wet-only	every event	Conductivity meter	
pH	AM01	Wet-only	every event	pH meter	
Air					
Sulphur dioxide	AM01	KOH-impregnated Whatman 40 filter 20÷25 m ³ /day (Filterpack)	Daily	Ion chromatography	
Nitrogen dioxide	AM01	Nal-impregnated glass sinters, 0.6 m ³ /day	Daily	Spectrophotometric, Griess method	
Nitric acid	AM01	KOH-impregnated Whatman 40 filter 20÷25 m ³ /day (Filterpack)	Daily	Ion chromatography	
Ammonia	AM01	Oxalic acid-impregnated Whatman 40 filter, 20÷25 m ³ /day (Filterpack)	Daily	Spectrophotometric, with Nessler's reagent	
Ozone	AM01	UV-monitor	Hourly	UV-absorption	
Sulphate	AM01	Teflon filter, Pall Zefluor 2 µm, 47 mm diameter, 20÷25 m ³ /day (Filterpack)	Daily	Ion chromatography	
Nitrate	AM01	Teflon filter, Pall Zefluor 2 µm, 47 mm diameter, 20÷25 m ³ /day (Filterpack)	Daily	Ion chromatography	
Ammonium	AM01	Teflon filter, Pall Zefluor 2 µm, 47 mm diameter, 20÷25 m ³ /day (Filterpack)	Daily	Spectrophotometric, with Nessler's reagent	
Sodium	AM01	Teflon filter, Pall Zefluor 2 µm, 47 mm diameter, 20÷25 m ³ /day (Filterpack)	Daily	ICP-MS	
Calcium	AM01	Teflon filter, Pall Zefluor 2 µm, 47 mm diameter, 20÷25 m ³ /day (Filterpack)	Daily	ICP-MS	
Magnesium	AM01	Teflon filter, Pall Zefluor 2 µm, 47 mm diameter, 20÷25 m ³ /day (Filterpack)	Daily	ICP-MS	
Potassium	AM01	Teflon filter, Pall Zefluor 2 µm, 47 mm diameter, 20÷25 m ³ /day (Filterpack)	Daily	ICP-MS	
Chloride	AM01	Teflon filter, Pall Zefluor 2 µm, 47 mm diameter, 20÷25 m ³ /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 m ³ /day		Ion chromatography	
Sum of ammonia and ammonium		Oxalic acid-impregnated Whatman 40 filter +Teflon filter, 20÷25 m ³ /day		Spectrophotometric, with Nessler's reagent	

Country: Austria		Main components and ozone - EMEP		Year: 2010	
	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	Ion chromatography	
Magnesium	All	Wet-only	Daily	Ion chromatography	
Sodium	All	Wet-only	Daily	Ion chromatography	
Chloride	All	Wet-only	Daily	Ion chromatography	
Calcium	All	Wet-only	Daily	Ion chromatography	
Potassium	All	Wet-only	Daily	Ion chromatography	
Conductivity	All	Wet-only	Daily	Conductivity meter	
pH	All	Wet-only	Daily	pH meter	
Air					
Sulphur dioxide	All	Instrumental: UV-fluorescence	Hourly	UV-fluorescence	
Sulphur dioxide	AT02	KOH-impregnated Whatman 40 filters, 21.6 m³/day	Daily	Ion chromatography	
Nitrogen dioxide	All	Instrumental: Chemiluminescence	Daily		
Nitric acid					
Ammonia					
Ozone	All	UV-monitor	Hourly	UV-absorption	
Sulphate	AT02	Teflon filter, PALL Zefluor 2 µm, 47 mm diameter, 21.6 m³/day	Daily	Ion chromatography	
Nitrate	AT02	Teflon filter, PALL Zefluor 2 µm, 47 mm diameter, 21.6 m³/day	Daily	Ion chromatography	
Ammonium	AT02	Teflon filter, PALL Zefluor 2 µm, 47 mm diameter, 21.6 m³/day	Daily	Ion chromatography	
Sodium	AT02	Teflon filter, PALL Zefluor 2 µm, 47 mm diameter, 21.6 m³/day	Daily	Ion chromatography	
Calcium	AT02	Teflon filter, PALL Zefluor 2 µm, 47 mm diameter, 21.6 m³/day	Daily	Ion chromatography	
Magnesium	AT02	Teflon filter, PALL Zefluor 2 µm, 47 mm diameter, 21.6 m³/day	Daily	Ion chromatography	
Potassium	AT02	Teflon filter, PALL Zefluor 2 µm, 47 mm diameter, 21.6 m³/day	Daily	Ion chromatography	
Chloride					
PM ₁₀	All	High Volume Sampler, glass fibre filters with organic binder, 720 m³/day, EN 12341	Daily	Micro balance	
PM _{2.5}	AT02	High Volume Sampler, glass fibre filters with organic binder, 720 m³/day, EN 14907	Daily	Micro balance	
PM ₁	AT02	High Volume Sampler, glass fibre filters with organic binder, 720 m³/day, weighing acc. EN 12341	Daily	Micro balance	
Suspended particulate matter					
Sum of nitric acid and nitrate	AT02	Aerosol as for sulphate, KOH impregnated Whatman 40 filters, 21.6 m³/day	Daily	Ion chromatography	
Sum of ammonia and ammonium	AT02	Aerosol, citric acid impregnated Whatman 40 filters, 21.6 m³/day	Daily	Ion chromatography	

Country: Belarus		Main components and ozone - EMEP		Year: 2010	
	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: 2010	
	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: 2010	
	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					
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: 2010
	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: 2010	
	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 th day, weekly	Ion chromatography
Calcium	CZ3	Filter 47 mm, 20 m ³ /day	Every 6 th day, weekly	Ion chromatography
Magnesium	CZ3	Filter 47 mm, 20 m ³ /day	Every 6 th day, weekly	Ion chromatography
Potassium	CZ3	Filter 47 mm, 20 m ³ /day	Every 6 th 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: 2010
	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: 2010	
	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: 2010	
	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: 2010	
	Station	Sampling	Sampling frequency	Analysis method
Precipitation				
Precipitation amount	All	Wet-only	Daily	
Precipitation amount, official gauge	All	Bulk	Daily	
Sulphate	All	Wet-only	Daily	Ion chromatography
Nitrate	All	Wet-only	Daily	Ion chromatography
Ammonium	All	Wet-only	Daily	Ion chromatography
Magnesium	All	Wet-only	Daily	Ion chromatography
Sodium	All	Wet-only	Daily	Ion chromatography
Chloride	All	Wet-only	Daily	Ion chromatography
Calcium	All	Wet-only	Daily	Ion chromatography
Potassium	All	Wet-only	Daily	Ion chromatography
Conductivity	All	Wet-only	Daily	Conductivity meter
pH	All	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	FR08,FR13, FR15, FR19, FR30	Instrumental: Chemiluminescence, trace level	Hourly	Chemiluminescence
Nitric acid				
Ammonia				
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				
Ammonium				
Sodium				
Calcium				
Magnesium				
Potassium				
Chloride				
PM₁₀	FR09, FR13, FR15, FR30, 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: 2010	
	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: 2010	
	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	SO ₂ monitor TE 43i-TLE	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	DE01, DE02, DE03, DE07, DE09	KOH-impregnated Whatman 40 filter, 22 m ³ /day (Filterpack)	Daily	Ion chromatography
Ammonia	DE01, DE02, DE03, DE07, DE09	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	DE01, DE02, DE03, DE07, DE09	Teflon filter, 22 m ³ /day (Filterpack)	Daily	Ion chromatography
Nitrate	DE01, DE02, DE03, DE07, DE09	Teflon filter, 22 m ³ /day (Filterpack)	Daily	Ion chromatography
Ammonium	DE01, DE02, DE03, DE07, DE09	Teflon filter, 22 m ³ /day (Filterpack)	Daily	Ion chromatography
Sodium	DE01, DE02, DE03, DE07, DE09	Teflon filter, 22 m ³ /day (Filterpack)	Daily	Ion chromatography
Calcium	DE01, DE02, DE03, DE07, DE09	Teflon filter, 22 m ³ /day (Filterpack)	Daily	Ion chromatography
Magnesium	DE01, DE02, DE03, DE07, DE09	Teflon filter, 22 m ³ /day (Filterpack)	Daily	Ion chromatography
Potassium	DE01, DE02, DE03, DE07, DE09	Teflon filter, 22 m ³ /day (Filterpack)	Daily	Ion chromatography
Chloride	DE01, DE02, DE03, DE07, DE09	Teflon filter, 22 m ³ /day (Filterpack)	Daily	Ion chromatography
PM ₁₀	DE01, DE02, DE03, DE07, DE09	Digitel High Volume Sampler DHA 80, round aerosol 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, round aerosol filters ø15 cm, Machery Nagel MN 85/90	Daily	Gravimetric by weight
PM ₁	DE02	Digitel High Volume Sampler DHA 80, round aerosol filters ø15 cm, Machery Nagel MN 85/90	Daily	Gravimetric by weight
Suspended particulate matter				
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				

Country: Greece		Main components and ozone - EMEP		Year: 2010	
	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: 2010
	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				
Air				
Sulphur dioxide	HU02	KOH-impregnated Whatman 40 filter, ~21 m ³ /day	Daily	Ion chromatography
Nitrogen dioxide	HU02	Iodide method (impregnated glass sinter), ~0.8 m ³ /day	Daily	Spectrophotometric, Griess method
Nitric acid	HU02	KOH-impregnated Whatman 40 filter, ~21 m ³ /day	Daily	Ion chromatography
Ammonia	HU02	Citric-acid impregnated Whatman 40 filter, ~21 m ³ /day	Daily	Spectrophotometric, Indophenol method
Ozone	HU02	UV-monitor	Hourly	UV-absorption
Sulphate	HU02	Teflon filter, Millipore Fluoropore, 1 µm, ~21 m ³ /day	Daily	Ion chromatography
Nitrate	HU02	Teflon filter, Millipore Fluoropore, 1 µm, ~21 m ³ /day	Daily	Ion chromatography
Ammonium	HU02	Teflon filter, Millipore Fluoropore, 1 µm, ~21 m ³ /day	Daily	Spectrophotometric, Indophenol method
Sodium	HU02	Teflon filter, Millipore Fluoropore, 1 µm, ~21 m ³ /day	Daily	Atomic absorption method (flame)
Calcium	HU02	Teflon filter, Millipore Fluoropore, 1 µm, ~21 m ³ /day	Daily	Atomic absorption method (flame)
Magnesium	HU02	Teflon filter, Millipore Fluoropore, 1 µm, ~21 m ³ /day	Daily	Atomic absorption method (flame)
Potassium	HU02	Teflon filter, Millipore Fluoropore, 1 µm, ~21 m ³ /day	Daily	Atomic absorption method (flame)
Chloride				
PM ₁₀	HU02	Particulate Analyzer	Hourly	Beta-absorption
PM _{2.5}				
PM ₁				
Suspended particulate matter				
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				
Acidity				

Country: Iceland		Main components and ozone - EMEP	Year: 2010	
	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	Ion chromatography
Nitrate	IS02	NILU bulk sampler	Daily	Ion chromatography
Ammonium				
Magnesium	IS02	NILU bulk sampler	Daily	ICP-OES
Sodium	IS02	NILU bulk sampler	Daily	ICP-OES
Chloride	IS02	NILU bulk sampler	Daily	Jan-Feb: Spectrophotometry by FIA; Mar-Dec: Ion chromatography
Calcium	IS02	NILU bulk sampler	Daily	ICP-OES
Potassium	IS02	NILU bulk sampler	Daily	ICP-OES
Conductivity	IS02	NILU bulk sampler	Daily	Conductivity meter
pH	IS02	NILU bulk sampler	Daily	pH meter
Air				
Sulphur dioxide	IS02	KOH impregnated Whatman 40 filter, 30 m ³ /day	Daily	ICP-OES except Ion chromatography in Mar-Jun
Nitrogen dioxide				
Nitric acid				
Ammonia				
Ozone				
Sulphate	IS02	Whatman 40 filter, 30 m ³ /day, prefilter for aerosol	Daily	ICP-AES
Nitrate				
Ammonium				
Sodium	IS02	Whatman 40 filter, 30 m ³ /day, prefilter for aerosol	Daily	ICP-AES
Calcium	IS02	Whatman 40 filter, 30 m ³ /day, prefilter for aerosol	Daily	ICP-AES
Magnesium	IS02	Whatman 40 filter, 30 m ³ /day, prefilter for aerosol	Daily	ICP-AES
Potassium				
Chloride				
PM ₁₀				
PM _{2.5}				
Suspended particulate matter				
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				

Country: Ireland: IE01 (lab.: Met Éireann)		Main components and ozone - EMEP		Year: 2010	
	Station	Sampling	Sampling frequency	Analysis method	
Precipitation					
Precipitation amount	IE01	Bulk	Daily		
Precipitation amount, official gauge	IE01	Rain gauge	Daily		
Sulphate	IE01	Bulk	Daily	Ion chromatography	
Nitrate	IE01	Bulk	Daily	Ion chromatography	
Ammonium	IE01	Bulk	Daily	Ion chromatography	
Magnesium	IE01	Bulk	Daily	Ion chromatography	
Sodium	IE01	Bulk	Daily	Ion chromatography	
Chloride	IE01	Bulk	Daily	Ion chromatography	
Calcium	IE01	Bulk	Daily	Ion chromatography	
Potassium	IE01	Bulk	Daily	Ion chromatography	
Conductivity	IE01	Bulk	Daily	Conductivity meter	
pH	IE01	Bulk	Daily	pH meter	
Air					
Sulphur dioxide	IE01	KOH-impregnated Whatman 40 filter, 20-25 m³/day	Daily	Ion chromatography	
Nitrogen dioxide	IE01	Nal 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: 2010	
	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: 2010	
	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}	IT01	Beta gauge monitor 24 m³/day	Daily	Beta gauge monitor
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: 2010	
	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: 2010	
	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: 2010	
	Station	Sampling	Sampling frequency	Analysis method	
Precipitation					
Precipitation amount	Rucava	Wet-only	Weekly	Gravimetric	
Precipitation amount, official gauge	Rucava	Meteorological station	Daily	Gauge, Tretjakov type	
Sulphate	Rucava	Wet-only	Weekly	Ion chromatography	
Nitrate	Rucava	Wet-only	Weekly	Ion chromatography	
Ammonium	Rucava	Wet-only	Weekly	Spectrophotometric, Indophenol method	
Magnesium	Rucava	Wet-only	Weekly	ICP-MS	
Sodium	Rucava	Wet-only	Weekly	ICP-MS	
Chloride	Rucava	Wet-only	Weekly	Ion chromatography	
Calcium	Rucava	Wet-only	Weekly	ICP-MS	
Potassium	Rucava	Wet-only	Weekly	ICP-MS	
Conductivity	Rucava	Wet-only	Weekly	Conductivity meter	
pH	Rucava	Wet-only	Weekly	pH meter	
Air					
O ₃	All	UV-monitor	Hourly	UV-absorption	
PM ₁₀	Rucava	Low volume sampler, 2.3 m ³ /h, Teflon filter, 47 mm	Daily	Beta absorption	
PM _{2.5}	Rucava	Low volume sampler, 2.3 m ³ /h, Teflon filter, 47 mm	Daily	Beta absorption	
Sulphate PM _{2.5}	Rucava	Teflon filter, 386.4 m ³ /weekly	Weekly	Ion chromatography	
Nitrate PM _{2.5}	Rucava	Teflon filter, 386.4 m ³ /weekly	Weekly	Ion chromatography	
Ammonium PM _{2.5}	Rucava	Teflon filter, 386.4 m ³ /weekly	Weekly	Ion chromatography	
Sodium PM _{2.5}	Rucava	Teflon filter, 386.4 m ³ /weekly	Weekly	Ion chromatography	
Calcium PM _{2.5}	Rucava	Teflon filter, 386.4 m ³ /weekly	Weekly	Ion chromatography	
Magnesium PM _{2.5}	Rucava	Teflon filter, 386.4 m ³ /weekly	Weekly	Ion chromatography	
Potassium PM _{2.5}	Rucava	Teflon filter, 386.4 m ³ /weekly	Weekly	Ion chromatography	
Chloride PM _{2.5}	Rucava	Teflon filter, 386.4 m ³ /weekly	Weekly	Ion chromatography	

Country: Lithuania		Main components and ozone - EMEP	Year: 2010	
	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 m ³ /day	Daily	Ion chromatography
Nitrogen dioxide	LT15	Nal-impregnated glass sinters, 0.7 m ³ /day	Daily	Spectrophotometric, Griess method
Nitric acid				
Ammonia				
Ozone	LT15	UV-monitor	Hourly	UV-absorption
Sulphate	LT15	Whatman 40 filter, 20 m ³ /day	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 filter as for SO ₂ , 20 m ³ /day	Daily	Ion chromatography
Sum of ammonia and ammonium	LT15	Aerosol filter as for sulphate + oxalic acid impregnated filter, 20 m ³ /day	Daily	Spectrophotometric, Indophenol method
Acidity				

Country: Macedonia		Main components and ozone - EMEP		Year: 2010	
	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: 2010	
	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: 2010	
	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	ME08	Absorbing solution	Daily	Spectrophotometry	
Nitrogen dioxide	ME08	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: 2010	
	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	ICP/MS ³
Sodium	NL09	Wet-only	Daily ¹	ICP/MS
Chloride	NL09	Wet-only	Daily ¹	Ion chromatography
Calcium	NL09	Wet-only	Daily ¹	ICP/MS
Potassium	NL09	Wet-only	Daily ¹	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	All	Instrumental: UV-fluorescence	Hourly	UV-fluorescence
Nitrogen dioxide	NL07,NL09,NL10,NL11,NL91	Instrumental: Chemiluminescence	Hourly	Chemiluminescence
Nitric acid				
Ammonia	NL07,NL91	Absorption in NaHSO ₄ , membrane separation, conductivity measurement	Hourly	Conductivity
Ozone	NL07,NL09,NL10,NL11,NL91	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				
Calcium	NL08,NL09,NL10	Teflon filter, Pall Zefluor 2 µm, 47 mm diameter, 27.6 m ³ /day	Every other day	ICP/MS
Magnesium				
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}	NL08,NL09,NL10,NL11,NL91	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: 2010	
	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 m³/day	Daily	Ion chromatography	
Nitrogen dioxide	All	NaI-impregnated glass sinters, 0.7 m³/day	Daily	Spectrophotometric, Griess method	
Nitric acid					
Ammonia					
Ozone	All	UV-monitor	Hourly	UV-absorption	
Sulphate	All	Teflon filter, Gelman Zefluor 2 µm, 25 m³/day	Daily	Ion chromatography	
Nitrate	All	Teflon filter, Gelman Zefluor 2 µm, 25 m³/day	Daily	Ion chromatography	
Ammonium	All	Teflon filter, Gelman Zefluor 2 µm, 25 m³/day	Daily	Ion chromatography	
Sodium	All	Teflon filter, Gelman Zefluor 2 µm, 25 m³/day	Daily	Ion chromatography	
Calcium	All	Teflon filter, Gelman Zefluor 2 µm, 25 m³/day	Daily	Ion chromatography	
Magnesium	All	Teflon filter, Gelman Zefluor 2 µm, 25 m³/day	Daily	Ion chromatography	
Potassium	All	Teflon filter, Gelman Zefluor 2 µm, 25 m³/day	Daily	Ion chromatography	
Chloride	All	Teflon filter, Gelman Zefluor 2 µm, 25 m³/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 m³/day	Daily	Ion chromatography	
Sum of ammonia and ammonium	All	Aerosol filter as for sulphate + oxalic acid impregnated filter, 25 m³/day	Daily	Spectrophotometric, Indophenol method and IC	
EC/OC	NO01	KleinfILTERgerät Whatman QM-A 47 mm, 55 m³/day	6+1	Thermal optical transmission	

Country: Poland: PL02, PL03, PL04 (lab. IMWM)		Main components and ozone - EMEP		Year: 2010	
	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 PL02: XII 2010, 0.9-1.0 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: 2010	
	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/Monthly (anal.)	Ion chromatography
Nitrate	PL05	QMA Whatman filter, 750 m³/day (PM2,5)	Daily/Monthly (anal.)	Ion chromatography
Ammonium	PL05	QMA Whatman filter, 750 m³/day (PM2,5)	Daily/Monthly (anal.)	Ion chromatography
Sodium	PL05	QMA Whatman filter, 750 m³/day (PM2,5)	Daily/Monthly (anal.)	Ion chromatography
Calcium	PL05	QMA Whatman filter, 750 m³/day (PM2,5)	Daily/Monthly (anal.)	Ion chromatography
Magnesium	PL05	QMA Whatman filter, 750 m³/day (PM2,5)	Daily/Monthly (anal.)	Ion chromatography
Potassium	PL05	QMA Whatman filter, 750 m³/day (PM2,5)	Daily/Monthly (anal.)	Ion chromatography
Chloride	PL05	QMA Whatman filter, 750 m³/day (PM2,5)	Daily/Monthly (anal.)	Ion chromatography
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: 2010	
	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: Russian Federation		Main components and ozone - EMEP		Year: 2010	
	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: 2010	
	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 m ³ /day	Daily	Thorin Spectrophotometric method	
Nitrogen dioxide	RS05	Absorbing solution NaOH, 1.5-2.5 m ³ /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: 2010	
	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				
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: 2010	
	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	KOH-impregnated Whatman 40 filter, 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: 2010	
	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	Passive sampler	Weekly	Visible spectrophotometry, Indophenol method
PM ₁₀	All	High volume sampler	Daily	Gravimetric method
PM _{2.5}	ES01, 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, S13, 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, S13, 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
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

Country: Spain , cont.		Main components and ozone - EMEP		Year: 2010
	Station	Sampling	Sampling frequency	Analysis method
Air				
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	PM ₁₀ low volume sampler (55 m ³ /day)	24 hour, once a week	Thermal optical
EC/OC PM _{2.5}	ES09	PM _{2.5} low volume sampler (55 m ³ /day)	24 hour, once a week	Thermal optical
Heavy metals (As, Cd, Cr, Cu, Ni, Pb, Zn)	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 (52 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
Hg	ES01; ES06; ES07; ES8; ES14	PM10 high volume sampler	24 hour, once a week	Atomic absorption spectroscopy
Total deposition				
Heavy metals (As, Cd, Cr, Cu, Ni, Pb, Zn)	ES01; ES06; ES07; ES8; ES14	Bulk sampler	52 days (campaign)	ICP-mass
PAHs	ES01; ES06; ES07; ES8; ES14	Bulk sampler	52 days (campaign)	Gas chromatography – mass spectrometry
Hg	ES01; ES06; ES07; ES8; ES14	Bulk sampler	52 days (campaign)	Atomic absorption spectroscopy

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

Country: Sweden		Main components and ozone - EMEP	Year: 2010	
	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	Flow injection analysis

Country: Switzerland		Main components and ozone - EMEP	Year: 2010	
	Station	Sampling	Sampling frequency	Analysis method
Precipitation				
Precipitation amount	CH02, CH04, CH05	Wet-only	Daily at CH02, CH05; weekly at CH04	
Precipitation amount, official gauge				
Sulphate	CH02, CH04, CH05	Wet-only	Daily at CH02, CH05; weekly at CH04	Ion chromatography
Nitrate	CH02, CH04, CH05	Wet-only	Daily at CH02, CH05; weekly at CH04	Ion chromatography
Ammonium	CH02, CH04, CH05	Wet-only	Daily at CH02, CH05; weekly at CH04	Ion chromatography
Magnesium	CH02, CH04, CH05	Wet-only	Daily at CH02, CH05; weekly at CH04	Ion chromatography
Sodium	CH02, CH04, CH05	Wet-only	Daily at CH02, CH05; weekly at CH04	Ion chromatography
Chloride	CH02, CH04, CH05	Wet-only	Daily at CH02, CH05; weekly at CH04	Ion chromatography
Calcium	CH02, CH04, CH05	Wet-only	Daily at CH02, CH05; weekly at CH04	Ion chromatography
Potassium	CH02, CH04, CH05	Wet-only	Daily at CH02, CH05; weekly at CH04	Ion chromatography
Conductivity	CH02, CH04, CH05	Wet-only	Daily at CH02, CH05; weekly at CH04	Conductivity meter
pH	CH02, CH04, CH05	Wet-only	Daily at CH02, CH05; weekly at CH04	pH meter
Air				
Sulphur dioxide	CH01, CH02, CH04, 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	Whatman 40 filter, 3.6 m³/day (regularly checked against IC) from 01.08.10 High Volume Samplers, Pallflex XP56 Tissuequartz 2500 QAT-UP, 720 m³/day	Daily	Ion chromatography
Sulphate	CH01	Whatman 40 filter, 4.1 m³/day (regularly checked against IC) from 01.08.10 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, 1075 m³/day	Daily	Gravimetry
PM _{2.5}	CH02, CH05	High Volume Samplers, Pallflex XP56 Tissuequartz 2500 QAT-UP, 1075 m³/day	Daily	Gravimetry
PM ₁	CH02, CH05	High Volume Samplers, Pallflex XP56 Tissuequartz 2500 QAT-UP, 1075 m³/day	Daily	Gravimetry
Suspended particulate matter				
Sum of nitric acid and nitrate	CH02, CH05	KOH impregnated Whatman 40 filter / NILU filterholder, 18 m³/day from 17.11.2010 1% NaOH	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: 2010	
	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: 2010	
	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

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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.