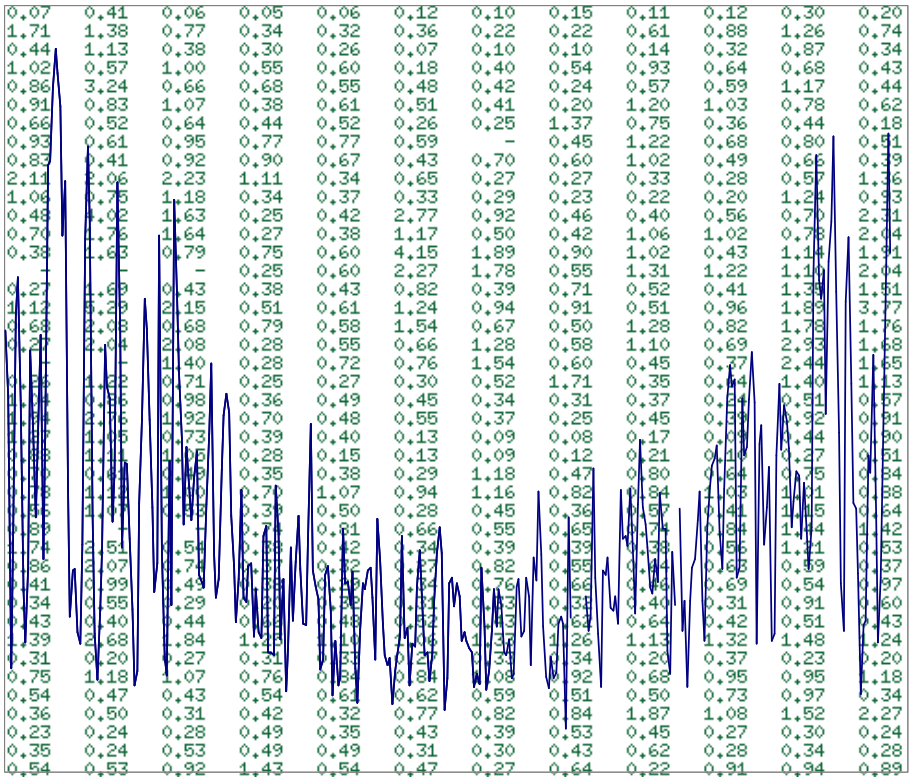
EMEP/CCC-Report 1/2011

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

Data Report 2009

Acidifying and eutrophying compounds and particulate matter

Anne-Gunn Hjellbrekke and Ann Mari Fjæraa



NILU
Norwegian Institute for Air Research
PO Box 100, NO-2027 Kjeller, Norway
Chemical Co-ordinating Centre of EMEP (CCC)

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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 2009 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 95 stations and air data from 119 stations are presented in this report. The total number of measurement sites in this report is 140.

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 2009.

Country	Station codes	Station name	Location		Height above sea (m)
			Lat.	Long.	
Armenia	AM0001R	Amberd	40º23'N	44º15'E	2080
Austria	AT0002R	Illmitz	47º46'N	16º46'E	117
	AT0005R	Vorhegg	46º40'N	12º58'E	1020
	AT0034G	Sonnblick	47º03'N	12º57'E	3106
	AT0048R	Zoebelboden	47º50'N	14º26'E	899
Belarus	BY0004R	Vysokoe	52º20'N	23º26'E	163
Belgium	BE0001R	Offagne	49º52'N	5º12'E	430
	BE0032R	Eupen	51º27'N	6º00'E	295
	BE0035R	Vezin	50º30'N	4º59'E	160
Croatia	HR0002R	Puntijarka	45º54'N	15º58'E	988
	HR0004R	Zavizan	44º49'N	14º59'E	1594
Cyprus	CY0002R	Ayia Marina	35º02'N	33º03'E	532
Czech Rep.	CZ0001R	Svratouch	49º44'N	16º03'E	737
	CZ0003R	Kosetice	49º35'N	15º05'E	534
Denmark	DK0003R	Tange	56º21'N	9º36'E	13
	DK0005R	Keldsnor	54º44'N	10º44'E	10
	DK0008R	Anholt	56º43'N	11º31'E	40
	DK0020R	Pedersker	55º01'N	14º56'E	5
	DK0022R	Sepstrup Sande	55º05'N	9º36'E	60
	DK0031R	Ulborg	56º17'N	8º26'E	10
	DK0041R	Lille Valby	55º41'N	12º07'E	10
Estonia	EE0009R	Lahemaa	59º30'N	25º54'E	32
	EE0011R	Vilsandi	58º23'N	21º49'E	6
Finland	FI0004R	Ähtari	62º32'N	24º13'E	162
	FI0009R	Utö	59º46'N	21º22'E	7
	FI0017R	Virolahti II	60º31'N	27º41'E	4
	FI0022R	Oulanka	66º19'N	29º24'E	310
	FI0036R	Pallas (Matorova)	68º00'N	24º14'E	340
	FI0037R	Ähtari II	62º35'N	24º11'E	180
	FI0050R	Hyytiälä	61º51'N	24º17'E	181
	FI0096G	Pallas (Sammaltunturi)	68º00'N	24º09'E	340
France	FR0008R	Donon	48º30'N	7º08'E	775
	FR0009R	Revin	49º54'N	4º38'E	390
	FR0010R	Morvan	47º16'N	4º05'E	620
	FR0013R	Peyrusse Vieille	43º37'N	0º11'E	200
	FR0014R	Montandon	47º18'N	6º50'E	836
	FR0015R	La Tardiére	46º39'N	0º45'W	133
	FR0016R	Le Casset	45º00'N	6º28'E	1750
	FR0017R	Montfranc	45º48'N	2º04'E	810
	FR0018R	La Coulonche	48º38'N	0º27'W	309
	FR0030R	Puy de Dôme	45º46'N	2º57'E	1465
Georgia	GE0001R	Abastumani	41º45'N	42º49'E	1650
Germany	DE0001R	Westerland	54º55'N	8º18'E	12
	DE0002R	Langenbrügge	52º48'N	10º45'E	74
	DE0003R	Schauinsland	47º55'N	7º54'E	1205
	DE0004R	Deuselbach	49º46'N	7º03'E	480
	DE0005R	Brotjacklriegel	48º49'N	13º13'E	1016
	DE0007R	Neuglobsow	53º10'N	13º02'E	62
	DE0008R	Schmücke	50º39'N	10º46'E	937
	DE0009R	Zingst	54º26'N	12º44'E	1
	DE0044R	Melpitz	51º31'N	12º55'E	86
Greece	GR0001R	Aliartos	38º22'N	23º05'E	110
	GR0002R	Finokalia	35º19'N	25º40'E	259
Hungary	HU0002R	K-puszta	46º58'N	19º35'E	125
Iceland	IS0002R	Irafoss	64º05'N	21º01'W	66
	IS0091R	Storhofdi	63º24'N	20º17'W	118
Ireland	IE0001R	Valentia Observatory	51º56'N	10º14'W	11
	IE0005R	Oak Park	52º52'N	6º55'W	59
	IE0006R	Malin Head	55º22'N	7º20'W	20
	IE0008R	Carnsore Point	52º11'N	6º22'W	9
	IE0009R	Johnstown Castle	52º18'N	6º30'W	62
	IE0031R	Mace Head	53º10'N	9º30'W	15
Italy	IT0001R	Montelibretti	42º06'N	12º38'E	48
	IT0004R	Ispra	45º48'N	8º38'E	209
Kazakhstan	KZ0001R	Borovoe	53º07'N	70º17'E	0
Latvia	LV0010R	Rucava	56º09'N	21º10'E	18
	LV0016R	Zoseni	57º08'N	25º54'E	188

Table 1, cont.

Country	Station codes	Station name	Location		Height above sea (m)
			Lat.	Long.	
Lithuania	LT0015R	Preila	55º21'N	21º04'E	5
Macedonia	MK0007R	Lazaropole	41º19'N	20º25'E	1332
Moldova	MD0013R	Leova II	46º29'N	28º17'E	166
Montenegro	ME0008R	Zabljak	43º09'N	19º08'E	1450
Netherlands	NL0007R	Eibergen	52º05'N	6º34'E	20
	NL0008R	Bilthoven	52º07'N	5º12'E	5
	NL0009R	Kollumerwaard	53º20'N	6º16'E	1
	NL0010R	Vredepeel	51º32'N	5º51'E	28
	NL0011R	Cabauw	51º58'N	4º55'E	60
	NL0091R	De Zilk	52º18'N	4º30'E	4
Norway	NO0001R	Birkenes	58º23'N	8º15'E	190
	NO0015R	Tustervatn	65º50'N	13º55'E	439
	NO0039R	Kårvatn	62º47'N	8º53'E	210
	NO0042G	Spitsbergen, Zeppelinfjell	78º54'N	11º53'E	474
	NO0055R	Karasjok	69º28'N	25º13'E	333
	NO0056R	Hurdal	60º22'N	11º04'E	300
Poland	PL0002R	Jarczew	51º49'N	21º59'E	180
	PL0003R	Sniezka	50º44'N	15º44'E	1603
	PL0004R	Leba	54º45'N	17º32'E	2
	PL0005R	Diabla Gora	54º09'N	22º04'E	157
Portugal	PT0001R	Braganca	41º49'N	6º46'W	690
	PT0003R	Viana do Castelo	41º42'N	8º48'W	16
	PT0004R	Monte Velho	38º05'N	8º48'W	43
Russian Federation	RU0001R	Janiskoski	68º56'N	28º51'E	118
	RU0013R	Pinega	64º42'N	43º24'E	28
	RU0018R	Danki	54º54'N	37º48'E	150
	RU0020R	Lesnoy	56º31'N	32º56'E	340
Serbia	RS0005R	Kamenicki vis	43º24'N	21º57'E	813
Slovakia	SK0002R	Chopok	48º56'N	19º35'E	2008
	SK0004R	Stará Lesná	49º09'N	20º17'E	808
	SK0006R	Starina	49º03'N	22º16'E	345
	SK0007R	Topolniky	47º57'N	17º51'E	113
Slovenia	SI0008R	Iskrba	45º34'N	14º52'E	520
	SI0032R	Krvavec	46º18'N	14º32'E	1740
Spain	ES0001R	San Pablo de los Montes	39º33'N	4º20'W	917
	ES0007R	Viznar	37º14'N	3º32'W	1265
	ES0008R	Niembro	43º26'N	4º51'W	134
	ES0009R	Campisabalos	41º17'N	3º08'W	1360
	ES0010R	Cabo de Creus	42º19'N	3º19'E	23
	ES0011R	Barcarrola	38º28'N	6º55'W	393
	ES0012R	Zarra	39º05'N	1º06'W	885
	ES0013R	Penausende	41º17'N	5º52'W	985
	ES0014R	Els Torms	41º24'N	0º43'E	470
	ES0016R	O Saviñao	43º14'N	7º42'W	506
	ES0017R	Doñana	37º01'N	6º20'W	5
	ES1778R	Montseny	41º46'N	2º21'E	700
Sweden	SE0005R	Bredkälen	63º51'N	15º20'E	404
	SE0011R	Vavihill	56º01'N	13º09'E	175
	SE0012R	Aspvreten	58º48'N	17º23'E	20
	SE0014R	Råö	57º23'N	11º55'E	5
Switzerland	CH0001G	Jungfraujoch	46º33'N	7º59'E	3578
	CH0002R	Payerne	46º48'N	6º56'E	489
	CH0003R	Tänikon	47º28'N	8º54'E	539
	CH0004R	Chaumont	47º03'N	6º58'E	1137
	CH0005R	Rigi	47º04'N	8º28'E	1031
United Kingdom	GB0002R	Eskdalemuir	55º18'N	3º12'W	243
	GB0006R	Lough Navar	54º26'N	7º52'W	126
	GB0007R	Barcombe Mills	50º52'N	0º02'W	8
	GB0013R	Yarner Wood	50º35'N	3º42'W	119
	GB0014R	High Muffles	54º20'N	0º48'W	267
	GB0015R	Strath Vaich Dam	57º44'N	4º46'W	270
	GB0031R	Aston Hill	52º30'N	3º02'W	370
	GB0033R	Bush	55º51'N	3º12'W	180
	GB0036R	Harwell	51º34'N	1º19'W	137
	GB0037R	Ladybower Res.	53º24'N	1º45'W	420
	GB0038R	Lullington Heath	50º47'N	0º10'E	120

Table 1, cont.

Country	Station codes	Station name	Location		Height above sea (m)
			Lat.	Long.	
United Kingdom, cont.	GB0043R	Narberth	51º14'N	4º42'W	160
	GB0045R	Wicken Fen	52º18'N	0º17'W	5
	GB0048R	Auchencorth Moss	55º47'N	3º14'W	260
	GB0050R	St. Osyth	51º46'N	1º05'E	8
	GB0051R	Market Harborough	52º33'N	0º46'W	145
	GB0053R	Charlton Mackrell	51º03'N	2º41'W	54
	GB0054R	Glen Saugh	56º54'N	2º33'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.

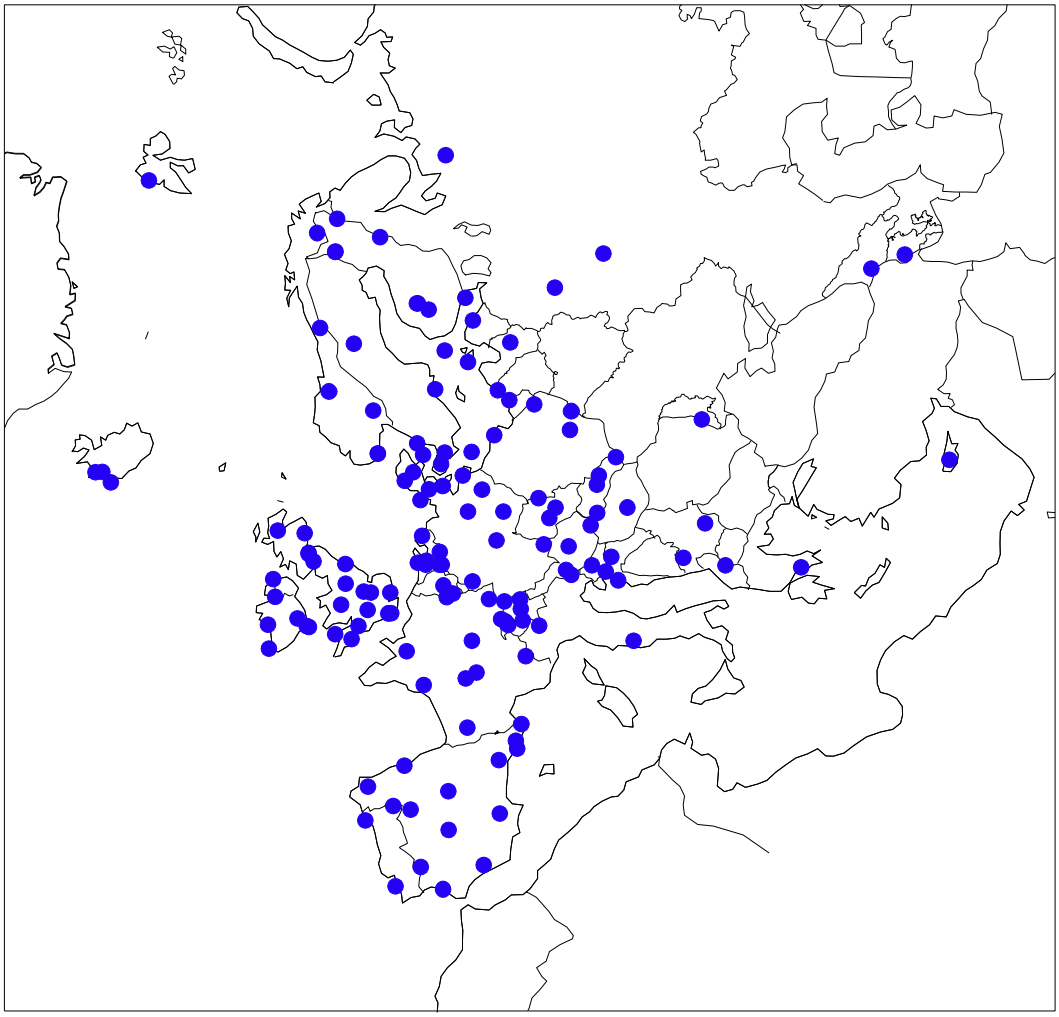

Figure 1: Location of the EMEP monitoring stations in operation in 2009. Sites with ozone/VOC measurements only are not included.

4. The measurement programme during 2009

EMEP's measurement programme during 2009 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 2009.

	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 2009 have been reported separately by Solberg (2011), while ozone data from 2009 have been reported by Hjellbrekke and Fjæraa (2011). Heavy metals and POPs were reported by Aas and Breivik (2011). More details on particulate matter measurements are presented in the PM status report (EMEP, 2011).

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, 1996 – revised 2001). 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 27th laboratory intercomparison is representative for the 2009 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 $PM_{2.5}$ 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 2009.

Code	mm	mm off	pH	SO_4	XSO_4	NH_4	NO_3	Na	Mg	Cl	Ca	K	cond
AM0001R	-	584.60	6.02	0.89	-	0.77	0.39	0.43	0.25	0.76	2.54	0.38	35
AT0002R	564.6	655.30	5.47	0.53	0.52	1.11	0.49	0.19	0.06	0.24	0.40	0.20	18
AT0005R	1085.8	1606.30	5.62	0.20	0.19	0.29	0.22	0.09	0.04	0.12	0.25	0.03	7
AT0048R	1684.8	1805.20	5.24	0.23	0.22	0.44	0.39	0.06	0.02	0.10	0.17	0.04	10
BY0004R	707.7	-	6.11	0.82	0.71	0.98	0.47	0.75	0.30	0.93	1.71	1.29	48
CH0002R	765.0	-	5.40	0.22	0.21	0.42	0.29	0.13	0.03	0.21	0.38	0.04	9
CH0004R	952.8	-	5.23	0.22	0.21	0.33	0.28	0.12	0.03	0.20	0.32	0.05	9
CH0005R	1217.4	-	5.34	0.21	0.21	0.46	0.29	0.07	0.02	0.10	0.28	0.05	9
CZ0001R	757.0	-	4.73	0.48	0.47	0.69	0.49	0.10	0.04	0.18	0.37	0.06	16
CZ0003R	703.2	-	4.88	0.44	0.43	0.59	0.47	0.13	0.05	0.20	0.41	0.07	15
DE0001R	779.8	-	5.02	-	-	0.55	1.71	4.71	0.54	8.03	1.11	0.17	40
DE0002R	632.8	-	5.01	0.29	0.27	0.56	0.39	0.20	0.02	0.37	0.15	0.04	11
DE0003R	1522.5	-	5.12	0.24	0.23	0.40	0.30	0.21	0.03	0.38	0.24	0.05	9
DE0004R	694.4	-	5.12	0.22	0.20	0.30	0.27	0.29	0.03	0.39	0.15	0.04	8
DE0005R	1335.2	-	5.04	0.21	0.21	0.41	0.33	0.12	0.01	0.24	0.09	0.07	9
DE0007R	499.8	-	4.95	0.28	0.26	0.42	0.39	0.24	0.03	0.43	0.21	0.06	11
DE0008R	1200.9	-	4.91	0.29	0.27	0.44	0.43	0.13	0.03	0.28	0.12	0.03	12
DE0009R	542.0	-	5.02	0.36	0.28	0.51	0.43	-	0.12	1.63	0.34	0.17	16
DE0044R	508.7	-	5.20	0.46	0.44	0.93	0.51	0.19	0.03	0.37	0.20	0.08	13
DK0005R	438.1	-	4.96	0.44	0.32	0.58	0.53	1.45	0.15	2.54	0.18	0.16	-
DK0008R	606.4	-	4.82	0.42	0.25	0.40	0.42	1.96	0.23	3.57	0.15	0.09	-
DK0020R	484.3	-	4.79	0.49	-	0.53	0.61	1.40	0.15	2.25	0.16	0.13	-
DK0022R	719.9	-	4.94	0.37	0.25	0.47	0.42	1.48	0.17	2.53	0.24	0.07	-
DK0031R	739.0	-	4.97	0.43	0.24	0.35	0.36	2.36	0.30	4.62	0.14	0.12	-
EE0009R	686.5	-	4.41	0.24	0.22	0.11	0.17	0.33	0.05	0.41	0.55	0.07	7
EE0011R	655.9	-	4.63	0.40	0.32	0.49	0.42	0.96	0.21	1.42	0.94	0.36	16
ES0001R	913.8	-	5.73	0.11	0.08	0.11	0.16	0.43	0.06	0.55	0.32	0.10	8
ES0007R	982.4	-	6.33	0.27	0.24	0.38	0.21	0.40	0.16	0.52	0.95	0.19	17
ES0008R	549.0	-	5.07	0.79	0.29	0.22	0.38	6.23	0.60	9.28	0.53	0.31	59
ES0009R	803.0	-	6.31	0.48	0.42	0.52	0.82	0.71	0.23	0.91	2.88	0.32	27
ES0011R	794.0	-	5.86	0.23	0.13	0.06	0.12	1.36	0.15	1.98	0.50	0.14	13
ES0012R	599.2	-	6.11	0.26	0.23	0.25	0.24	0.33	0.09	0.31	1.13	0.10	12
ES0013R	353.0	-	5.99	0.15	0.11	0.22	0.13	0.48	0.07	0.50	0.30	0.13	9
ES0014R	436.6	-	6.32	0.26	0.23	0.31	0.27	0.32	0.08	0.32	0.76	0.10	11
ES0016R	1240.2	-	5.65	0.22	0.08	0.14	0.08	2.01	0.19	2.48	0.25	0.14	16
ES0017R	1147.8	-	5.86	0.40	0.18	0.05	0.12	3.28	0.32	4.14	0.59	0.17	23
FI0004R	439.4	-	4.79	0.22	0.21	0.16	0.24	0.10	0.03	0.17	0.09	0.06	10
FI0017R	540.5	-	4.71	0.37	0.35	0.23	0.31	0.28	0.05	0.48	0.17	0.16	14
FI0022R	552.0	-	4.84	0.17	0.16	0.07	0.12	0.08	0.02	0.13	0.05	0.04	8
FI0036R	398.5	-	4.79	0.19	0.18	0.08	0.14	0.08	0.01	0.14	0.04	0.03	9
FR0008R	1246.1	-	5.10	0.21	0.19	0.31	0.28	0.20	0.05	0.35	0.17	0.05	21
FR0009R	1106.9	-	5.38	0.25	0.21	0.39	0.30	0.43	0.08	0.82	0.23	0.08	17
FR0010R	1057.0	-	5.38	0.19	0.15	0.29	0.20	0.36	0.06	0.61	0.20	0.13	16
FR0013R	774.2	-	5.43	0.28	0.20	0.34	0.22	0.95	0.13	1.67	0.35	0.09	29
FR0014R	966.7	-	5.24	0.22	0.20	0.36	0.30	0.17	0.05	0.28	0.30	0.06	14
FR0015R	779.8	-	5.71	0.30	0.16	0.35	0.18	1.74	0.24	3.11	0.26	0.10	29
FR0016R	636.3	-	5.56	0.16	0.15	0.15	0.18	0.11	0.05	0.22	0.38	0.08	16
FR0017R	1199.8	-	5.43	0.18	0.15	0.24	0.17	0.39	0.07	0.65	0.22	0.05	17
FR0018R	856.8	-	5.81	0.23	0.14	0.34	0.18	1.05	0.15	1.94	0.21	0.08	28
GB0002R	1045.9	-	5.20	0.23	0.09	0.16	0.09	1.75	0.15	2.63	0.12	0.07	13
GB0006R	1466.8	-	5.42	0.33	0.09	0.15	0.09	3.03	0.28	5.00	0.23	0.16	21
GB0013R	1112.0	-	4.99	0.41	0.13	0.16	0.19	3.29	0.32	5.33	0.23	0.17	24
GB0014R	778.6	-	4.95	0.48	0.35	0.44	0.40	1.61	0.14	2.38	0.28	0.14	18
GB0015R	1140.3	-	5.18	0.26	0.06	0.07	0.09	2.49	0.24	4.01	0.16	0.13	18
GB0048R	900.5	-	5.27	0.20	0.10	0.19	0.12	1.27	0.09	1.87	0.08	0.08	10
HR0002R	-	1083.80	5.23	0.51	0.48	0.45	0.35	0.29	0.15	0.44	0.84	1.54	16
HR0004R	-	1835.50	5.67	0.34	0.28	0.30	0.32	0.69	0.08	0.65	0.90	1.16	13
HU0002R	390.0	438.70	5.50	0.86	0.79	0.52	0.45	1.23	0.11	1.14	0.60	0.13	20
IE0001R	2654.7	2174.50	5.30	0.88	0.06	0.12	0.07	9.81	1.25	16.95	0.42	0.46	67
IE0005R	1025.5	1123.70	5.42	0.17	0.08	0.12	0.06	1.06	0.13	1.90	0.12	0.05	11
IE0009R	1162.6	1422.80	5.17	0.38	0.12	0.14	0.13	3.15	0.38	5.48	0.15	0.12	26
IS0002R	1590.5	-	5.50	0.31	0.12	-	0.06	2.30	0.29	4.75	0.15	0.21	22
IS0090R	881.3	709.40	5.60	0.75	0.26	0.48	0.09	6.55	0.70	13.27	0.31	0.26	55
IS0091R	1340.8	1742.50	5.63	6.28	1.07	0.15	0.07	65.31	7.91	200.15	2.60	2.60	478
IT0001R	920.0	-	5.56	0.74	0.52	0.23	0.75	2.45	0.44	3.35	3.59	0.49	35
IT0004R	1676.2	-	5.44	0.33	0.31	0.71	0.55	0.33	0.04	0.27	0.31	0.04	12
LT0015R	461.1	-	4.81	0.61	0.38	0.51	0.78	2.79	-	4.19	0.50	0.22	32

Table 3, cont.

Code	mm	mm off	pH	SO_4	XSO_4	NH_4	NO_3	Na	Mg	Cl	Ca	K	cond
LV0010R	716.5	-	4.87	0.30	0.25	0.29	0.31	0.60	0.10	0.98	0.19	0.07	16
LV0016R	803.6	-	5.08	0.18	0.17	0.16	0.16	0.11	0.05	0.14	0.18	0.10	9
NL0009R	692.2	-	5.48	0.39	0.25	0.58	0.33	1.58	0.19	2.98	0.27	0.12	21
NO0001R	1806.9	-	4.72	0.43	0.33	0.36	0.44	1.23	0.15	1.97	0.10	0.07	23
NO0015R	1155.1	-	5.40	0.12	0.05	0.11	0.06	0.80	0.10	1.60	0.06	0.06	9
NO0039R	1314.5	-	5.46	0.12	0.05	0.08	0.05	0.79	0.09	1.40	0.06	0.08	9
NO0055R	345.3	-	5.14	0.35	0.32	0.16	0.13	0.38	0.06	0.62	0.19	0.26	11
NO0056R	909.5	-	5.09	0.23	0.21	0.24	0.27	0.34	0.04	0.58	0.14	0.14	12
PL0002R	661.9	-	5.05	0.55	0.54	0.63	0.39	0.12	0.04	0.33	0.23	0.10	14
PL0003R	1181.3	-	4.65	0.87	0.82	0.47	0.64	0.60	0.15	0.68	0.38	0.30	23
PL0004R	661.2	-	4.89	0.35	0.27	0.31	0.32	0.98	0.12	1.92	0.17	0.10	18
PL0005R	591.8	695.70	4.90	0.39	0.38	0.41	0.37	0.14	0.04	0.32	0.15	0.05	12
PT0001R	-	679.00	5.50	0.23	0.17	0.34	0.15	0.59	0.19	1.07	1.03	0.31	15
PT0003R	-	1583.20	4.79	0.41	0.16	0.13	0.08	3.13	0.40	5.97	0.27	0.22	33
PT0004R	-	584.40	4.74	0.48	0.15	0.15	0.11	3.93	0.52	7.08	0.37	0.26	34
RS0005R	834.7	-	5.09	1.00	0.97	0.45	0.41	0.38	0.17	0.43	0.93	0.65	20
RU0001R	454.1	-	4.83	0.45	0.43	0.12	0.07	0.29	0.06	0.44	0.24	0.10	10
RU0013R	608.1	-	5.45	0.39	0.35	0.35	0.14	0.49	0.11	0.75	0.38	0.39	11
RU0018R	546.8	-	4.93	0.50	0.48	0.33	0.27	0.20	0.05	0.27	0.36	0.15	12
RU0020R	833.0	-	5.22	0.37	0.34	0.34	0.25	0.42	0.04	0.61	0.29	0.32	13
SE0005R	137.1	-	5.04	0.17	0.16	0.13	0.14	0.16	0.03	0.11	0.09	0.06	10
SE0011R	569.8	-	4.98	0.38	0.30	0.51	0.41	0.99	0.12	1.70	0.14	0.07	18
SE0012R	413.8	-	4.64	0.31	0.29	0.35	0.36	0.30	0.04	0.51	0.05	0.06	16
SE0014R	666.1	-	5.00	0.52	0.30	0.67	0.42	2.62	0.32	4.61	0.37	0.21	29
SI0008R	1233.0	-	4.93	0.41	0.38	0.08	0.29	0.28	0.06	0.53	0.40	0.04	12
SK0002R	1519.8	-	4.83	0.42	0.41	0.41	0.26	0.07	0.02	0.11	0.13	0.06	12
SK0004R	828.7	-	4.88	0.40	0.39	0.31	0.25	0.14	0.03	0.17	0.23	0.10	12
SK0006R	788.8	-	4.80	0.65	0.64	0.46	0.42	0.20	0.04	0.15	0.30	0.11	16
SK0007R	587.6	-	5.01	0.45	0.44	0.45	0.38	0.13	0.04	0.16	0.35	0.08	15

Table 4: Annual averages of main components in air 2009.

Code	SO_2	NO_2	SO_4	XSO_4	SNO_3	NO_3	HNO_3	SNH_4	NH_4	NH_3
AM0001R	0.18	2.23	0.69	0.68	-	0.27	0.05	-	0.49	0.86
AT0002R	0.81	2.75	0.97	0.96	-	1.25	0.64	-	1.91	1.67
AT0005R	0.21	1.11	-	-	-	-	-	-	-	-
AT0048R	0.26	1.63	-	-	-	-	-	-	-	-
BE0001R	-	2.73	-	-	-	-	-	-	-	-
BE0032R	-	4.21	-	-	-	-	-	-	-	-
BE0035R	-	4.68	-	-	-	-	-	-	-	-
CH0001G	0.04	0.10	0.11	-	-	-	-	-	-	-
CH0002R	0.35	3.66	0.54	0.52	1.08	0.94	0.29	3.89	1.46	2.35
CH0003R	-	4.45	-	-	-	-	-	-	-	-
CH0004R	0.33	1.84	-	-	-	-	-	-	-	-
CH0005R	0.23	1.15	0.41	0.40	0.80	0.66	0.19	1.92	0.95	0.98
CY0002R	1.11	0.70	1.35	-	-	0.03	-	-	0.18	-
CZ0001R	0.93	2.70	0.77	-	0.75	-	-	2.04	-	-
CZ0003R	0.67	2.59	0.79	-	0.76	-	-	2.09	-	-
DE0001R	-	2.36	-	-	-	-	-	-	-	-
DE0002R	-	2.78	-	-	-	-	-	-	-	-
DE0003R	-	0.91	-	-	-	-	-	-	-	-
DE0007R	-	2.06	-	-	-	-	-	-	-	-
DE0008R	-	2.03	-	-	-	-	-	-	-	-
DE0009R	-	2.15	-	-	-	-	-	-	-	-
DE0044R	-	-	0.80	-	-	0.74	-	-	1.57	-
DK0003R	0.19	-	0.62	0.54	0.78	-	-	-	1.08	1.00
DK0005R	0.57	2.79	0.76	0.66	1.04	-	-	-	1.33	0.56
DK0008R	0.39	2.15	0.67	0.54	0.71	-	-	-	0.84	0.17
DK0031R	0.16	-	0.64	0.53	0.77	-	-	-	1.06	0.64
EE0009R	1.20	2.25	-	-	-	-	-	-	-	-
EE0011R	0.82	2.08	-	-	-	-	-	-	-	-
ES0001R	0.18	0.86	0.57	-	0.56	0.42	-	1.64	-	-
ES0007R	0.24	1.43	0.57	-	0.61	0.42	-	1.49	-	-
ES0008R	0.61	1.32	0.81	-	0.62	0.42	-	1.54	-	0.77
ES0009R	0.22	0.43	0.54	-	0.43	0.13	-	1.30	0.34	1.07
ES0010R	0.25	1.16	0.78	-	0.56	0.46	-	1.53	-	-
ES0011R	0.20	1.17	0.57	-	0.42	0.30	-	1.38	-	-
ES0012R	0.18	0.98	0.74	-	0.59	0.47	-	1.54	-	-
ES0013R	0.25	1.13	0.43	-	0.35	0.28	-	0.83	-	-
ES0014R	0.31	0.83	0.74	-	0.64	0.47	-	2.75	-	-
ES0016R	0.21	1.08	0.59	-	0.49	0.27	-	1.60	-	-
ES0017R	0.29	1.54	0.90	-	0.76	0.46	-	1.57	-	-
ES1778R	-	-	0.54	-	-	0.45	-	-	0.91	-
FI0009R	0.35	0.86	0.47	0.42	0.31	-	-	0.36	0.23	-
FI0017R	0.43	1.39	0.47	0.46	0.20	-	-	0.38	0.23	-
FI0022R	0.22	0.33	0.28	0.27	0.04	-	-	0.13	0.08	-
FI0036R	0.17	-	0.26	0.25	0.04	-	-	0.11	0.09	-
FI0037R	0.21	0.53	0.38	0.37	0.12	-	-	0.28	0.16	-
FI0096G	-	0.19	-	-	-	-	-	-	-	-
FR0009R	0.27	2.68	0.48	-	1.61	-	-	1.52	-	-
FR0013R	0.25	1.35	0.81	-	2.67	-	-	3.89	-	-
FR0015R	0.20	2.89	0.68	-	1.68	-	-	4.03	-	-
FR0030R	0.18	-	-	-	-	-	-	-	-	-
GB0002R	-	1.31	0.38	-	-	-	-	-	-	-
GB0006R	-	-	0.40	-	-	0.13	0.04	-	0.23	0.32
GB0007R	-	-	0.67	-	-	-	-	-	-	-
GB0013R	-	1.31	0.54	-	-	0.36	0.13	-	0.48	0.40
GB0014R	-	2.28	0.57	-	-	0.37	0.14	-	0.55	0.56

Table 4, cont.

Code	SO_2	NO_2	SO_4	XSO_4	SNO_3	NO_3	HNO_3	SNH_4	NH_4	NH_3
GB0031R	-	1.62	-	-	-	-	-	-	-	-
GB0033R	-	2.21	-	-	-	-	-	-	-	-
GB0036R	0.90	3.03	-	-	-	-	-	-	-	-
GB0037R	1.36	2.97	-	-	-	-	-	-	-	-
GB0038R	0.81	3.17	-	-	-	-	-	-	-	-
GB0043R	1.36	1.57	-	-	-	-	-	-	-	-
GB0045R	0.87	3.55	-	-	-	-	-	-	-	-
GB0048R	0.10	1.15	0.40	-	-	0.25	0.02	-	0.60	1.12
GB0050R	-	3.57	-	-	-	-	-	-	-	-
GB0051R	-	3.64	-	-	-	-	-	-	-	-
GB0053R	-	2.74	-	-	-	-	-	-	-	-
GB0054R	-	-	-	-	-	0.18	0.10	-	0.36	0.36
GE0001R	0.34	-	0.38	0.37	0.81	0.11	0.61	0.19	0.09	0.09
GR0001R	1.49	4.32	-	-	-	-	-	-	-	-
HU0002R	1.38	1.90	1.37	-	-	0.55	0.28	-	1.12	1.26
IE0001R	0.15	1.10	0.37	0.17	0.25	-	-	0.66	-	-
IE0005R	-	-	0.40	0.32	-	0.35	-	-	0.67	-
IE0006R	-	-	0.41	0.27	-	0.23	-	-	0.62	-
IE0008R	-	-	0.56	0.28	-	0.28	-	-	0.51	-
IS0002R	0.08	-	0.47	0.40	-	-	-	-	-	-
IS0091R	-	-	0.56	0.10	-	0.05	-	-	-	-
IT0001R	0.36	4.43	0.74	-	-	0.30	0.19	-	1.09	1.86
IT0004R	-	-	0.78	-	-	0.72	-	-	1.41	-
KZ0001R	-	-	0.53	-	-	0.10	-	-	-	-
LT0015R	0.39	0.83	0.83	-	0.56	-	-	1.52	-	-
LV0010R	0.38	0.68	0.76	-	0.44	0.42	-	0.81	0.58	-
LV0016R	0.28	0.42	0.56	-	0.28	0.20	-	0.71	0.47	-
MD0013R	0.75	-	0.56	0.53	1.26	1.09	0.27	1.59	0.94	0.95
ME0008R	1.55	2.85	-	-	-	-	-	-	-	-
MK0007R	6.72	-	-	-	-	-	-	-	-	-
NL0007R	0.51	5.95	-	-	-	-	-	-	-	8.06
NL0008R	0.71	-	0.86	0.81	-	1.11	-	-	1.30	-
NL0009R	0.36	3.32	0.73	0.68	-	1.08	-	-	1.23	-
NL0010R	0.56	7.43	0.95	0.93	-	1.36	-	-	1.66	14.72
NL0011R	0.41	6.83	0.96	-	-	-	-	-	-	-
NL0091R	1.29	5.58	0.89	0.81	-	1.06	-	-	1.18	1.89
NO0001R	0.06	0.44	-	0.28	0.26	-	0.08	0.16	0.20	0.08
NO0015R	0.05	0.11	0.15	0.14	0.07	0.05	0.03	-	0.06	-
NO0039R	0.03	0.17	0.14	0.12	0.06	0.03	0.03	0.10	0.06	0.10
NO0042G	0.09	-	0.15	0.14	0.05	0.03	0.02	-	0.04	-
NO0055R	0.18	0.15	0.25	0.23	0.09	0.05	0.04	-	0.12	-
NO0056R	0.04	0.71	0.21	0.20	0.17	0.09	0.08	-	0.12	-
PL0002R	1.35	2.70	1.48	-	0.64	0.53	-	2.50	1.30	-
PL0003R	0.96	0.94	0.81	-	0.49	0.36	-	0.61	0.48	-
PL0004R	1.11	1.46	1.30	-	0.53	0.41	-	1.24	0.91	-
PL0005R	0.54	0.87	0.64	-	1.01	0.52	0.49	1.71	0.82	0.89
RS0005R	9.81	3.57	-	-	-	-	-	-	-	-
RU0018R	0.12	-	0.15	-	-	0.05	-	-	0.30	-
SE0005R	0.07	0.12	0.16	-	0.05	-	-	0.16	-	-
SE0011R	0.30	1.21	0.46	-	0.43	-	-	0.89	-	-
SE0012R	0.18	0.64	0.40	-	0.22	-	-	0.38	-	-
SE0014R	0.32	1.27	0.57	-	0.48	-	-	0.71	-	-
SI0008R	0.91	0.56	0.88	0.88	0.21	-	-	1.00	-	-
SK0002R	0.23	0.67	0.28	-	-	0.11	0.01	-	-	-
SK0006R	0.60	1.10	0.79	0.78	-	0.29	0.02	-	0.71	0.22

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

Code	Matrix	Na	Ca	Mg	K	Cl
AM0001R	Aerosol	0.11	0.85	0.10	0.11	0.11
AT0002R	Aerosol	0.07	0.11	0.02	0.25	-
CH0002R	Aerosol	0.18	0.40	0.04	0.17	-
CH0005R	Aerosol	0.12	0.30	0.03	0.08	-
CY0002R	$PM_{2.5}$	0.35	0.17	0.03	0.03	0.25
DE0044R	PM_{10}	0.24	0.12	0.04	0.21	0.28
DE0044R	$PM_{2.5}$	0.08	0.05	0.03	0.16	0.13
DK0003R	Aerosol	2.32	0.27	-	0.32	1.98
DK0005R	Aerosol	1.25	0.16	-	0.15	1.38
DK0008R	Aerosol	1.56	0.12	-	0.13	1.91
DK0031R	Aerosol	1.34	0.10	-	0.14	1.87
ES0009R	PM_{10}	0.40	0.40	0.03	0.07	1.02
ES0009R	$PM_{2.5}$	0.07	0.06	0.01	0.03	0.52
ES1778R	PM_{10}	0.46	0.64	0.22	0.25	0.81
ES1778R	$PM_{2.5}$	0.09	0.07	0.02	0.11	0.58
FI0009R	Aerosol	0.50	0.06	0.06	0.05	0.40
FI0017R	Aerosol	0.18	0.08	0.03	0.05	0.09
FI0022R	Aerosol	0.10	0.01	0.01	0.02	0.03
FI0036R	Aerosol	0.14	0.01	0.02	0.02	0.14
FI0037R	Aerosol	0.12	0.03	0.02	0.04	0.04
GB0036R	PM_{10}	1.15	0.12	0.09	0.10	1.73
GB0036R	$PM_{2.5}$	0.65	0.04	0.06	0.06	0.85
GB0048R	PM_{10}	0.91	0.17	0.11	0.15	0.97
GB0048R	$PM_{2.5}$	0.70	0.10	0.07	0.19	0.59
GE0001R	Aerosol	-	-	-	-	0.18
IE0001R	Aerosol	2.38	0.11	0.28	0.12	-
IE0005R	Aerosol	0.94	0.09	0.11	0.07	-
IE0006R	Aerosol	1.77	0.10	0.27	0.12	-
IE0008R	Aerosol	3.38	0.16	0.41	0.15	-
IS0002R	Aerosol	0.91	0.17	0.13	0.04	1.84
IS0091R	Aerosol	-	-	-	-	9.91
KZ0001R	PM_{10}	-	-	-	-	0.15
LV0010R	$PM_{2.5}$	0.49	0.26	0.02	0.10	0.25
LV0016R	$PM_{2.5}$	0.41	0.20	0.02	0.04	0.10
MD0013R	Aerosol	0.30	0.71	0.12	0.27	0.56
NL0008R	Aerosol	-	0.23	-	-	1.03
NL0009R	Aerosol	-	0.14	-	-	1.04
NL0010R	Aerosol	-	0.29	-	-	0.78
NL0011R	PM_{10}	0.63	-	-	-	1.37
NL0091R	Aerosol	-	-	-	-	1.69
NO0015R	Aerosol	0.21	0.04	0.03	0.02	0.27
NO0039R	Aerosol	0.15	0.03	0.02	0.03	0.15
NO0042G	Aerosol	0.19	0.03	0.03	0.02	0.23
NO0055R	Aerosol	0.20	0.03	0.02	0.03	0.23
NO0056R	Aerosol	0.14	0.03	0.02	0.04	0.07
SI0008R	Aerosol	0.10	0.17	0.04	0.13	0.06
SK0006R	Aerosol	0.06	0.10	0.02	0.12	-

Table 6: Annual averages of particulate matter.

Code	PM_{10}	$PM_{2.5}$	PM_1	SPM
AT0002R	21.83	17.24	11.53	-
AT0005R	8.68	-	-	-
AT0048R	8.77	-	-	-
CH0001G	2.68	-	-	-
CH0002R	17.67	12.13	8.32	-
CH0003R	17.06	-	-	-
CH0004R	8.89	-	-	-
CH0005R	10.00	7.09	5.12	-
CY0002R	23.39	14.44	-	-
CZ0001R	15.10	-	-	-
CZ0003R	16.43	15.60	-	-
DE0001R	17.21	-	-	-
DE0002R	15.61	11.76	6.88	-
DE0003R	9.18	6.96	-	-
DE0007R	13.36	-	-	-
DE0008R	10.27	-	-	-
DE0009R	14.52	-	-	-
DE0044R	20.93	16.54	-	-
DK0005R	18.95	-	-	-
DK0041R	18.29	-	-	-
EE0009R	6.88	-	-	-
ES0001R	11.23	6.03	-	-
ES0007R	17.10	9.50	-	-
ES0008R	17.52	9.97	-	-
ES0009R	10.75	5.57	-	-
ES0010R	16.82	8.03	-	-
ES0011R	14.03	6.89	-	-
ES0012R	14.25	6.41	-	-
ES0013R	9.03	5.17	-	-
ES0014R	13.64	7.99	-	-
ES0016R	10.33	6.89	-	-
ES0017R	16.17	-	-	-
ES1778R	27.14	17.33	9.50	-
FI0050R	4.49	3.84	3.17	-
FR0009R	22.66	15.45	-	-
FR0013R	17.85	10.83	-	-
FR0015R	18.43	11.23	-	-
FR0018R	13.47	8.71	-	-
GB0006R	10.20	-	-	-
GB0036R	13.80	8.68	-	-
GB0043R	11.47	-	-	-
GB0048R	7.00	3.36	-	-
GR0002R	17.36	-	-	-
HU0002R	27.83	-	-	-
IE0031R	-	8.60	-	-
IT0001R	29.86	-	-	-
IT0004R	-	19.07	-	-
LV0010R	18.77	16.74	-	-
LV0016R	16.75	11.51	-	-
MD0013R	15.62	-	-	-
MK0007R	17.30	-	-	-
NL0007R	25.19	-	-	-
NL0009R	21.23	11.47	-	-
NL0010R	24.47	19.27	-	-
NL0011R	-	16.37	-	-
NL0091R	23.58	14.46	-	-
NO0001R	5.92	3.53	-	-
NO0002R	3.89	2.26	-	-
PL0005R	16.32	13.16	-	-

Table 6, cont.

Code	PM_{10}	$PM_{2.5}$	PM_1	SPM
SE0011R	14.55	7.45	-	-
SE0012R	6.60	6.13	-	-
SE0014R	14.59	6.26	-	-
SI0008R	15.70	12.27	-	-
SK0002R	-	-	-	4.92
SK0004R	12.93	-	-	-
SK0006R	15.26	-	-	-
SK0007R	22.54	-	-	-

Table 7: EC/OC

Code	Matrix	EC	OC	TC	OCp	TCp
DE0044R	$PM_{2.5}$	1.28	2.11	-	-	-
DE0044R	PM_{10}	1.30	2.74	-	-	-
ES0009R	$PM_{2.5}$	0.13	1.93	-	-	-
ES0009R	PM_{10}	0.15	2.26	-	-	-
ES1778R	PM_1	0.23	2.38	-	-	-
ES1778R	$PM_{2.5}$	0.25	3.07	-	-	-
ES1778R	PM_{10}	0.40	2.65	-	-	-
NO0001R	PM_{10}	0.10	0.79	0.89	-	-

Table 8: Units used for precipitation components.

Precipitation components	Units for W. mean, Min., Max.	Units for depositions
Amount	mm	mm
SO_4^{--}	mg S/l	mg S/m^2
NO_3^-	mg N/l	mg N/m^2
Cl^-	mg Cl/l	mg Cl/m^2
NH_4^+	mg N/l	mg N/m^2
H^+	µe H^+/l	µe H^+/m^2
pH	pH-units	µe H^+/m^2
Na^+	mg Na/l	mg Na/m^2
Mg^{2+}	mg Mg/l	mg Mg/m^2
K^+	mg K/l	mg K/m^2
Ca^{2+}	mg Ca/l	mg Ca/m^2

Table 9: Units used for air components.

Air components	Units for arithmetic and geometric mean values, arithmetic standard deviations, Min., Max, percentiles.
SO_2	µg S/m^3
NO_2, NO	µg N/m^3
CO	ppb
HNO_3	µg N/m^3
NH_3	µg N/m^3
SO_4^{2-}	µg S/m^3
NO_3^-	µg N/m^3
NH_4^+	µg N/m^3
H^+	Ne H^+/m^3
SPM, PM	µg/m^3
HNO_3 + NO_3^-	µg N/m^3
NH_3 + NH_4^+	µg N/m^3
Ca^{++}	µg/m^3
Cl^-	µg/m^3
Mg^{++}	µg/m^3
K^+	µg/m^3
Na^+	µg/m^3
OC	µg C/m^3
EC	µg C/m^3

9. Update

The data compiled in this report represent the best data available at present. If further errors are detected, the data will be corrected in the database. It is important that users make sure that they have access to the most recent version of the database. For the data presented here the latest alteration was 24 June, 2011.

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.

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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	l' 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
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 Evaluacíon 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

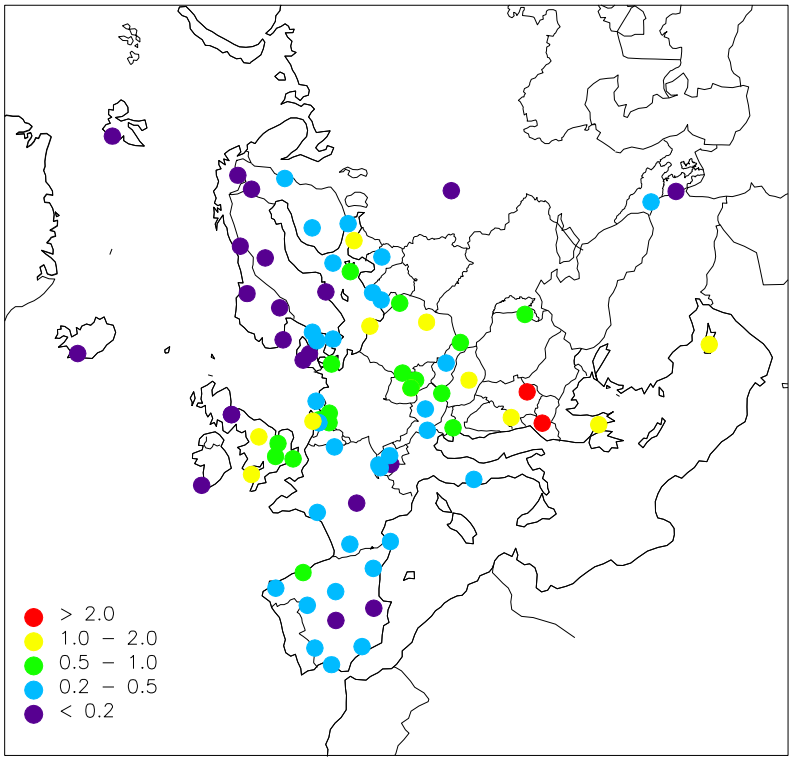

Figure 1.1: Geographical distribution of sulphur dioxide 2009. Unit: μg S/m^3.

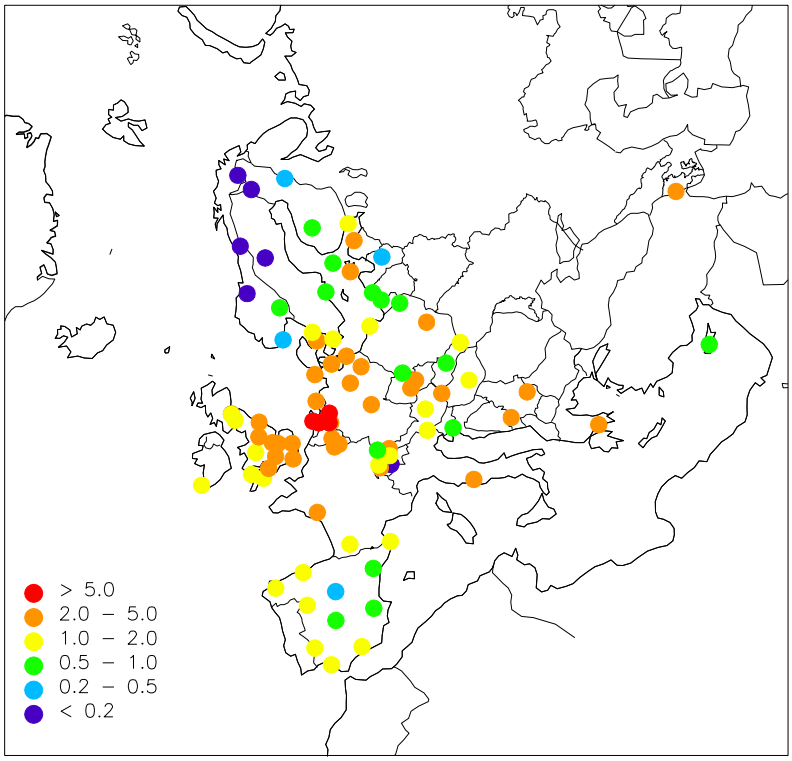

Figure 1.2: Geographical distribution of nitrogen dioxide 2009. Unit: μg N/m^3.

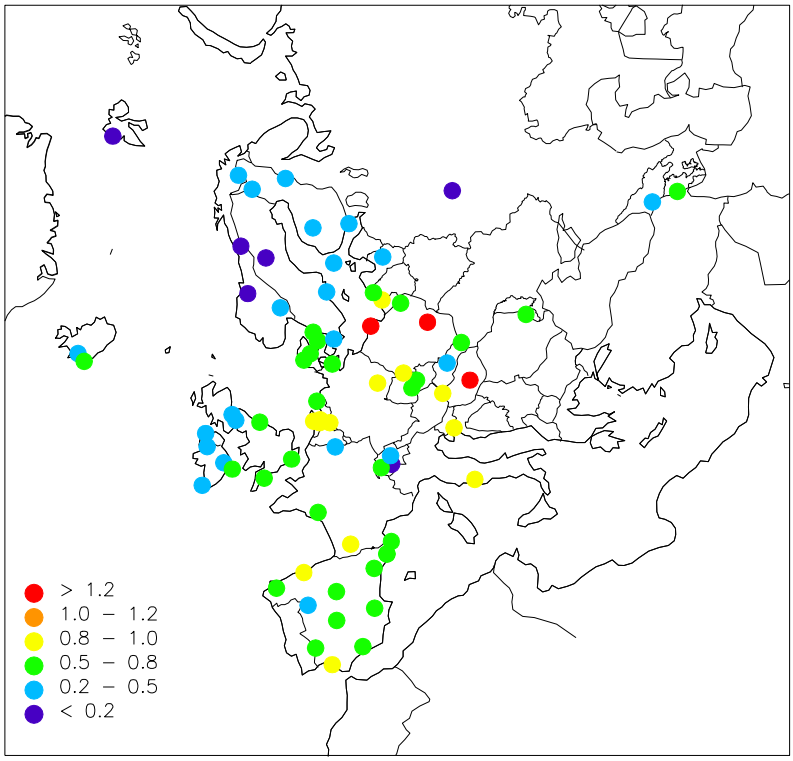

Figure 1.3: Geographical distribution of sulphate in aerosols 2009. Unit: μg S/m^3.

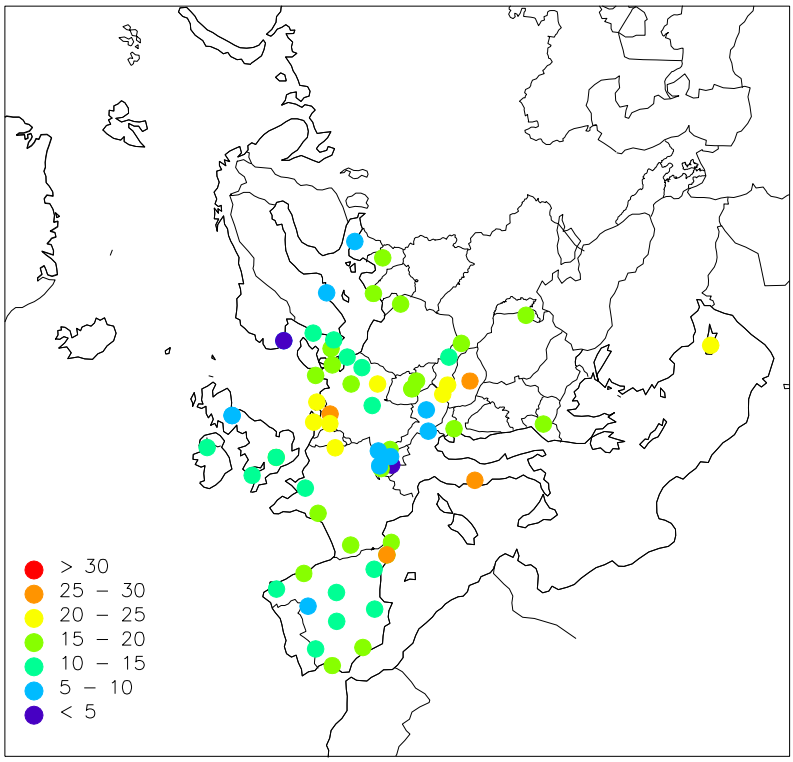

Figure 1.4: Geographical distribution of PM_{10} 2009. Unit: μg/m^3.

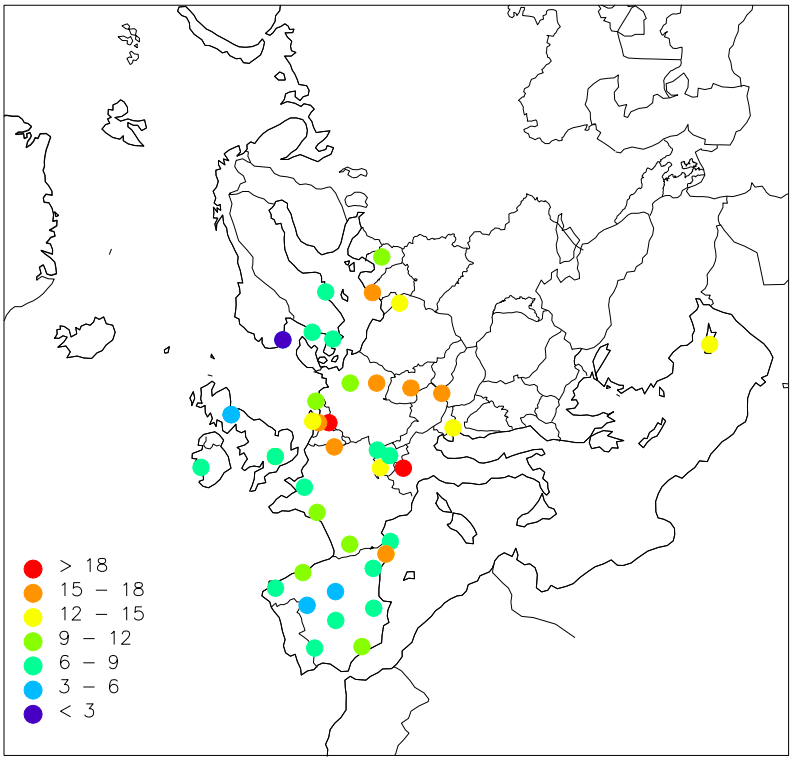

Figure 1.5: Geographical distribution of $PM_{2.5}$ 2009. Unit: $\mu g/m^3$.

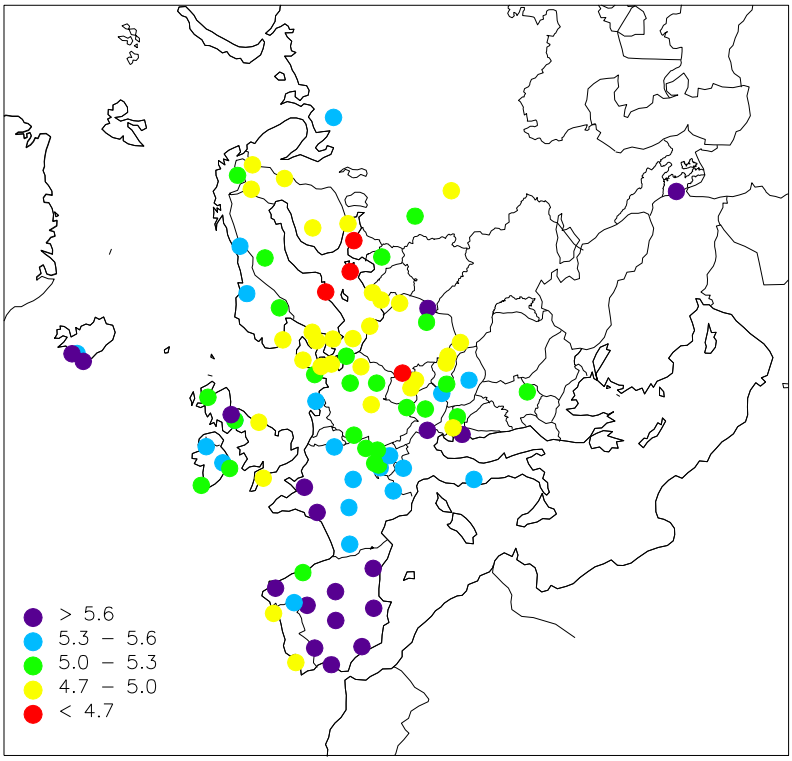

Figure 1.6: Geographical distribution of pH in precipitation 2009. Unit: pH units.

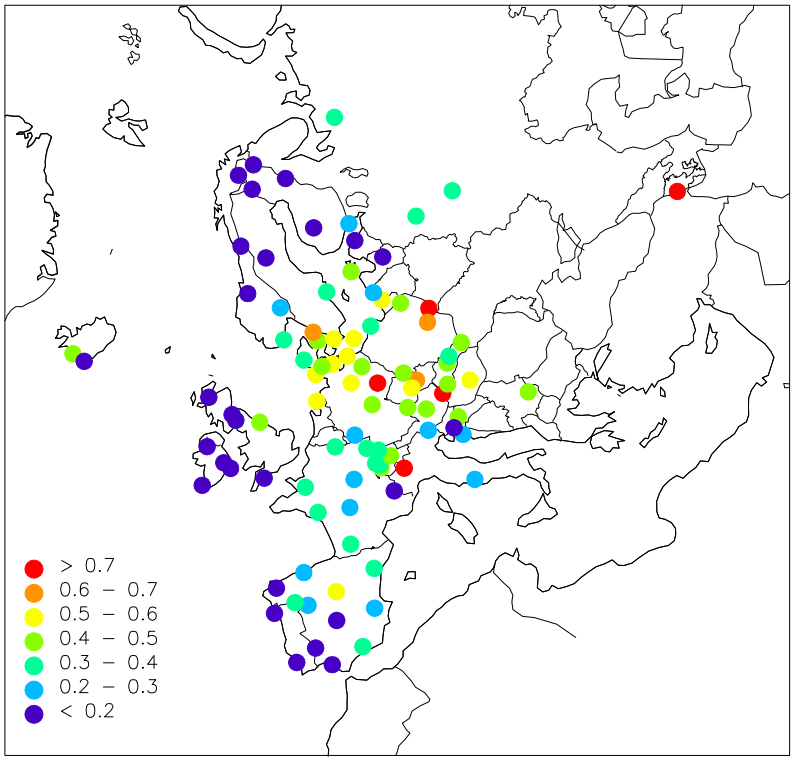

Figure 1.7: Geographical distribution of ammonium in precipitation 2009. Unit: mg N/l.

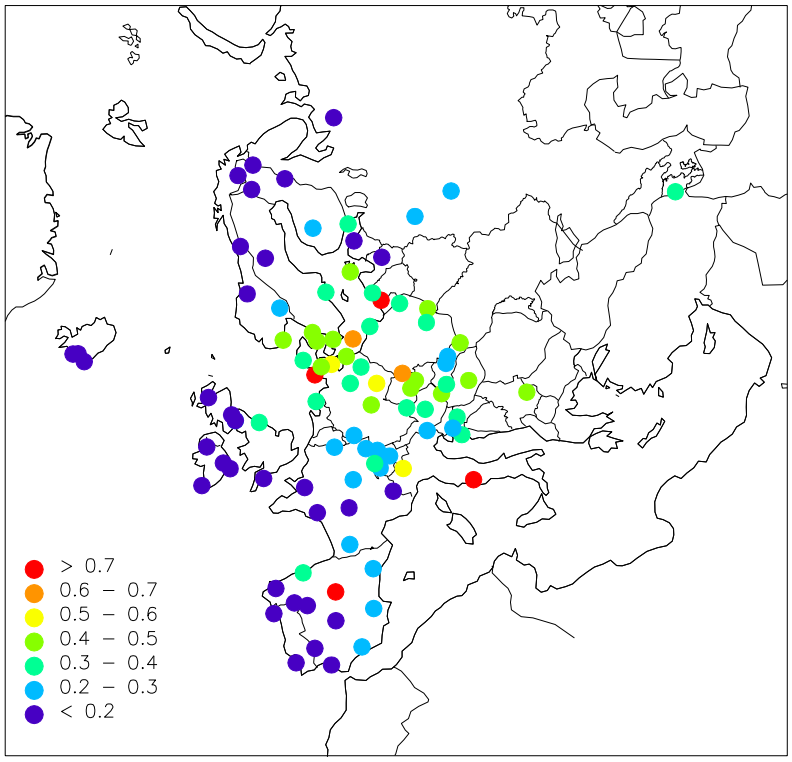

Figure 1.8: Geographical distribution of nitrate in precipitation 2009. Unit: mg N/l.

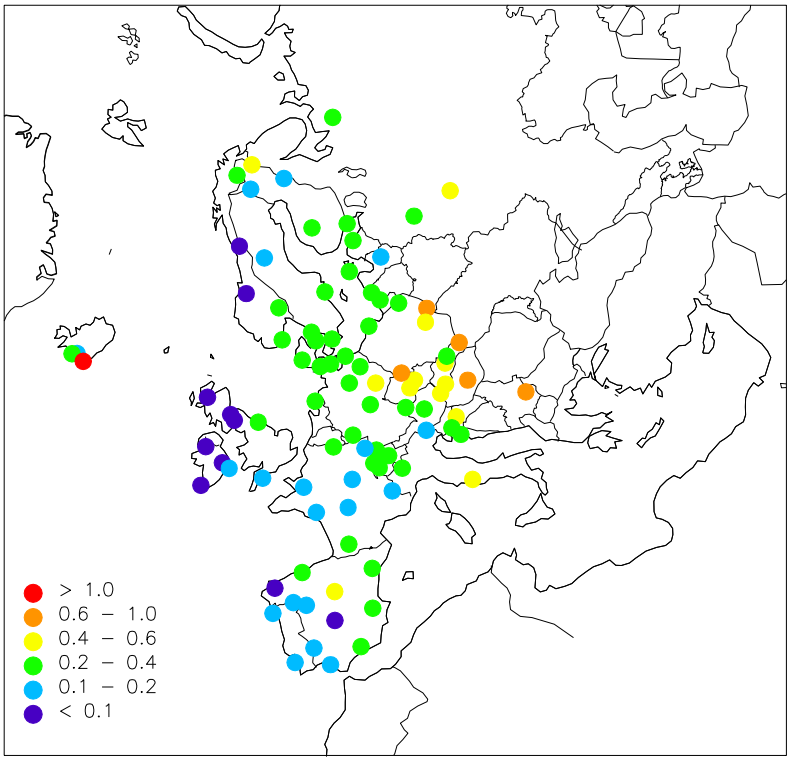

Figure 1.9: Geographical distribution of sulphate in precipitation 2009 (corrected for sea spray). Unit: mg S/l.

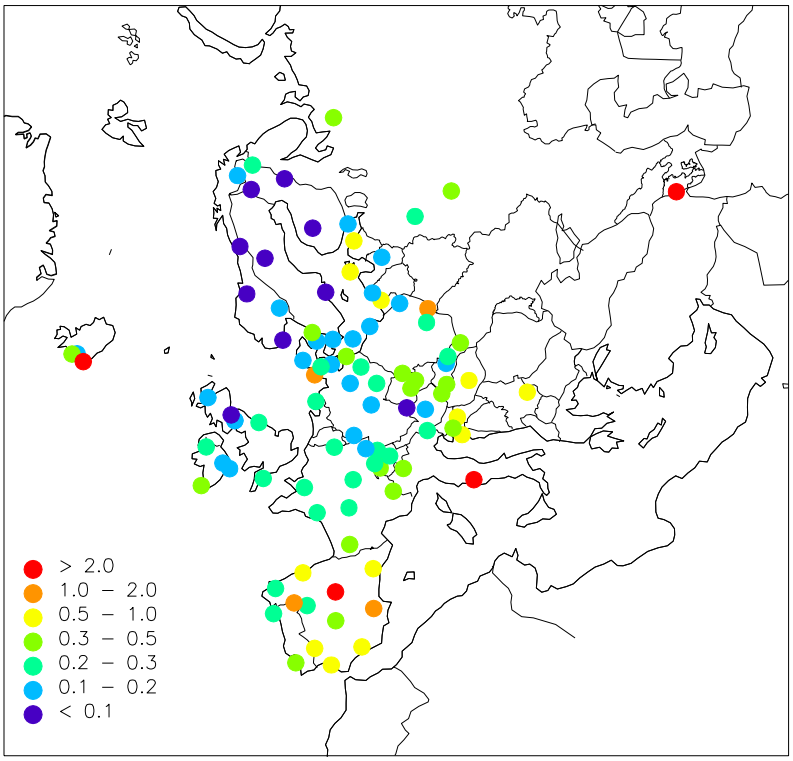

Figure 1.10: Geographical distribution of calcium in precipitation 2009. Unit: mg/l.

Annex 2

Annual statistics on precipitation data

AM0001R Amberd

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	2.54	0.32	22.40	1481.9	97.3	0	90
Cl-	precip	0.76	0.06	7.17	445.2	99.8	0	94
K+	precip	0.38	0.02	5.71	221.3	98.8	0	93
Mg++	precip	0.245	0.005	2.014	143.0	98.8	0	93
NH4+	precip	0.77	0.02	1.49	447.2	99.8	0	94
NO3-	precip	0.39	0.01	2.44	229.2	99.8	0	94
Na+	precip	0.43	0.01	4.72	253.9	98.8	0	93
Precip off	precip	-	0.00	23.00	584.6	98.4	93	188
SO4--	precip	0.89	0.04	5.90	519.5	99.3	0	92
cond	precip	35.45	5.00	184.00	20727.2	99.8	0	94
pH	precip	6.02	4.63	8.34	560.2	99.8	0	94

AT0002R Illmitz

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.40	0.10	6.70	225.7	100.0	0	107
Cl-	precip	0.24	0.00	7.20	138.1	100.0	3	107
K+	precip	0.20	0.01	10.04	112.7	100.0	9	107
Mg++	precip	0.059	0.000	1.700	33.5	100.0	1	107
NH4+	precip	1.11	0.06	18.31	628.8	99.9	0	106
NO3-	precip	0.49	0.08	15.67	275.1	100.0	0	107
Na+	precip	0.19	0.02	5.58	106.9	100.0	0	107
Precip	precip	-	0.0	33.3	564.6	100.0	259	366
Precip off	precip	-	0.00	66.10	655.3	100.0	218	366
SO4--	precip	0.53	0.04	8.02	301.3	100.0	0	107
SO4-- corr	precip	0.52	0.04	7.62	293.3	100.0	0	107
cond	precip	18.40	3.00	251.00	10390.0	100.0	0	107
pH	precip	5.47	3.58	7.45	1921.9	100.0	0	107

AT0005R Vorhegg

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.25	0.00	31.10	271.8	100.0	0	121
Cl-	precip	0.12	0.00	2.10	129.4	100.0	30	121
K+	precip	0.03	0.01	0.76	29.2	100.0	55	121
Mg++	precip	0.036	0.005	0.938	38.8	100.0	14	121
NH4+	precip	0.29	0.01	4.60	318.6	100.0	13	121
NO3-	precip	0.22	0.02	3.23	242.2	100.0	0	121
Na+	precip	0.09	0.01	1.59	94.6	81.7	13	108
Precip	precip	-	0.0	33.3	1085.8	100.0	245	366
Precip off	precip	-	0.00	143.30	1606.3	95.1	185	348
SO4--	precip	0.20	0.01	3.37	217.9	100.0	4	121
SO4-- corr	precip	0.19	-0.00	3.35	204.0	100.0	4	122
cond	precip	7.00	1.00	163.00	7597.1	99.9	0	120
pH	precip	5.62	4.17	7.56	2610.1	99.9	0	120

AT0048R Zoebelboden

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.17	0.00	3.10	292.9	100.0	1	182
Cl-	precip	0.10	0.00	3.60	160.4	100.0	26	180
K+	precip	0.04	0.01	1.68	62.3	100.0	49	182
Mg++	precip	0.024	0.005	0.458	40.5	100.0	16	182
NH4+	precip	0.44	0.05	9.92	741.2	100.0	0	182
NO3-	precip	0.39	0.06	4.77	705.9	93.1	0	180
Na+	precip	0.06	0.01	3.31	105.9	100.0	20	182
Precip	precip	-	0.0	33.3	1684.8	100.0	184	366
Precip off	precip	-	0.00	63.30	1805.2	96.3	113	352
SO4--	precip	0.23	0.01	2.38	393.1	100.0	0	180
SO4-- corr	precip	0.22	0.00	2.27	376.0	100.0	0	180
cond	precip	9.76	2.00	140.00	16448.5	100.0	0	182
pH	precip	5.24	3.97	7.30	9658.8	100.0	0	181

BY0004R Vysokoe

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	1.71	0.02	12.98	1206.4	96.4	0	109
Cl-	precip	0.93	0.30	2.20	655.8	35.5	0	30
K+	precip	1.29	0.02	16.50	911.4	96.4	0	109
Mg++	precip	0.297	0.030	4.060	210.2	90.7	0	100
NH4+	precip	0.98	0.04	5.61	692.6	98.8	0	118
NO3-	precip	0.47	0.05	2.54	335.6	74.2	0	79
Na+	precip	0.75	0.02	6.85	533.2	96.4	0	109
Precip	precip	-	0.0	32.9	707.7	100.0	244	366
SO4--	precip	0.82	0.11	7.46	580.3	95.1	0	99
SO4-- corr	precip	0.71	0.08	3.81	502.7	93.7	0	94
cond	precip	47.54	12.00	110.00	33647.0	95.3	0	102
pH	precip	6.11	5.01	7.40	544.5	100.0	0	123

CH0002R Payerne

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.38	0.01	12.24	287.5	98.9	10	114
Cl-	precip	0.21	0.01	2.38	161.9	98.9	1	114
K+	precip	0.04	0.00	0.65	26.6	98.9	0	114
Mg++	precip	0.033	0.001	0.565	24.9	98.9	0	114
NH4+	precip	0.42	0.07	2.74	318.6	98.9	0	114
NO3-	precip	0.29	0.05	1.93	221.0	98.9	0	114
Na+	precip	0.13	0.00	1.57	96.5	98.9	4	114
Precip	precip	-	0.0	41.3	765.0	99.7	221	364
SO4--	precip	0.22	0.03	2.37	167.7	98.9	0	114
SO4-- corr	precip	0.21	0.02	2.23	159.3	98.9	0	114
cond	precip	9.11	2.25	85.04	6972.2	99.3	0	120
pH	precip	5.40	4.36	7.47	3053.0	99.3	0	120

CH0004R Chaumont

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.32	0.01	6.27	301.7	99.9	2	43
Cl-	precip	0.20	0.04	1.44	194.9	99.9	0	43
K+	precip	0.05	0.01	0.71	47.3	99.9	0	43
Mg++	precip	0.032	0.001	0.457	30.6	99.9	0	43
NH4+	precip	0.33	0.05	2.17	314.4	99.9	0	43
NO3-	precip	0.28	0.04	2.80	266.8	99.9	0	43
Na+	precip	0.12	0.01	1.00	118.4	99.9	0	43
Precip	precip	-	0.0	79.8	952.8	98.9	7	52
SO4--	precip	0.22	0.03	1.58	210.6	99.9	0	43
SO4-- corr	precip	0.21	0.03	1.52	200.5	99.9	0	44
cond	precip	8.97	2.49	66.04	8549.0	100.0	0	44
pH	precip	5.23	4.17	7.27	5658.6	100.0	0	44

CH0005R Rigi

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.28	0.01	2.03	335.2	99.1	11	124
Cl-	precip	0.10	0.01	1.88	124.0	99.1	4	124
K+	precip	0.05	0.00	0.67	62.7	99.1	1	124
Mg++	precip	0.024	0.001	0.175	29.1	99.1	2	124
NH4+	precip	0.46	0.03	3.06	558.3	99.1	0	124
NO3-	precip	0.29	0.03	1.98	356.4	99.1	0	124
Na+	precip	0.07	0.00	1.32	78.8	99.1	4	124
Precip	precip	-	0.0	53.2	1217.4	98.6	195	360
SO4--	precip	0.21	0.01	1.56	257.8	99.1	0	124
SO4-- corr	precip	0.21	0.01	1.55	250.8	99.1	0	124
cond	precip	8.83	1.98	53.83	10750.6	99.3	0	129
pH	precip	5.34	4.02	7.09	5597.7	99.3	0	129

CZ0001R Svratouch

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.37	0.05	2.73	280.5	98.3	0	44
Cl-	precip	0.18	0.03	0.90	135.9	99.0	0	46
K+	precip	0.06	0.01	0.95	47.0	98.3	0	44
Mg++	precip	0.036	0.005	0.360	27.3	98.3	0	44
NH4+	precip	0.69	0.02	2.61	524.4	99.0	0	47
NO3-	precip	0.49	0.00	2.41	369.2	99.0	1	46
Na+	precip	0.10	0.01	0.45	76.5	98.3	1	44
Precip	precip	-	0.0	53.2	757.0	98.6	4	52
SO4--	precip	0.48	0.03	2.71	364.0	99.0	0	46
SO4-- corr	precip	0.47	0.02	2.69	356.6	99.0	0	47
cond	precip	16.22	2.30	64.50	12278.4	99.0	0	46
pH	precip	4.73	4.14	6.65	13959.2	99.0	0	46

CZ0003R Kosetice

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.41	0.02	5.42	287.8	89.9	5	108
Cl-	precip	0.20	0.04	1.48	140.7	93.6	0	121
K+	precip	0.07	0.00	0.71	46.3	89.9	1	108
Mg++	precip	0.048	0.006	0.357	33.8	89.9	0	108
NH4+	precip	0.59	0.03	6.50	412.0	93.3	0	127
NO3-	precip	0.47	0.10	3.25	330.1	93.6	0	121
Na+	precip	0.13	0.02	1.00	89.4	89.9	0	108
Precip	precip	-	0.0	35.8	703.2	99.9	170	365
SO4--	precip	0.44	0.04	2.16	311.6	93.6	0	121
SO4-- corr	precip	0.43	0.04	2.13	303.8	93.6	0	121
cond	precip	14.88	3.30	88.10	10466.2	92.8	0	124
pH	precip	4.88	3.84	7.36	9164.7	92.7	0	123

DE0001R Westerland

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	1.11	0.08	10.86	869.7	100.0	0	47
Cl-	precip	8.03	0.44	30.52	6259.7	100.0	0	47
K+	precip	0.17	0.04	0.55	135.2	100.0	0	47
Mg++	precip	0.536	0.036	2.020	417.8	100.0	0	47
NH4+	precip	0.55	0.09	2.70	431.8	100.0	0	47
NO3-	precip	1.71	0.50	5.25	1332.8	100.0	0	47
Na+	precip	4.71	0.26	16.83	3674.1	100.0	0	47
Precip	precip	-	0.0	53.5	779.8	99.0	5	52
cond	precip	39.75	5.80	128.00	30997.9	94.0	0	45
pH	precip	5.02	4.39	7.52	7418.8	94.0	0	45

DE0002R Langenbrügge

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.15	-0.01	11.90	96.6	98.9	37	137
Cl-	precip	0.37	0.01	14.62	231.8	98.4	5	145
K+	precip	0.04	-0.01	0.72	25.9	98.9	84	137
Mg++	precip	0.023	-0.002	1.160	14.6	98.9	63	137
NH4+	precip	0.56	0.02	3.70	354.7	98.9	1	137
NO3-	precip	0.39	0.04	2.97	249.4	98.4	0	145
Na+	precip	0.20	-0.01	8.75	128.2	98.9	26	137
Precip	precip	-	0.0	41.0	632.8	99.9	218	365
SO4--	precip	0.29	0.06	2.17	182.1	98.4	0	145
SO4-- corr	precip	0.27	0.06	2.16	173.2	98.4	0	145
cond	precip	11.21	4.00	113.00	7092.9	99.1	0	133
pH	precip	5.01	4.11	7.34	6236.0	99.3	0	135

DE0003R Schauinsland

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.24	0.00	6.02	368.5	99.9	17	171
Cl-	precip	0.38	0.01	5.22	572.4	99.9	1	171
K+	precip	0.05	0.01	0.46	73.8	99.9	82	171
Mg++	precip	0.028	0.001	0.311	43.3	99.9	76	171
NH4+	precip	0.40	0.00	3.88	601.4	99.9	14	171
NO3-	precip	0.30	0.04	2.00	457.4	99.9	0	171
Na+	precip	0.21	-6.00	3.15	326.2	99.9	59	185
Precip	precip	-	0.0	50.4	1522.5	98.0	185	358
SO4--	precip	0.24	0.04	1.67	373.0	99.9	0	171
SO4-- corr	precip	0.23	0.04	1.64	346.1	99.9	0	172
cond	precip	9.45	2.00	113.00	14380.4	99.7	0	168
pH	precip	5.12	4.18	7.57	11452.8	99.8	0	170

DE0004R Deuselbach

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.15	0.01	0.73	102.2	99.6	3	43
Cl-	precip	0.39	0.01	14.97	272.9	99.6	1	43
K+	precip	0.04	0.01	0.83	31.1	99.6	23	43
Mg++	precip	0.027	0.000	1.020	19.0	99.6	16	43
NH4+	precip	0.30	0.01	3.33	207.4	99.6	2	43
NO3-	precip	0.27	0.03	2.10	188.2	99.6	0	43
Na+	precip	0.29	0.01	9.81	202.0	99.6	5	43
Precip	precip	-	0.0	55.1	694.4	80.4	3	49
SO4--	precip	0.22	0.04	1.34	154.5	99.6	0	43
SO4-- corr	precip	0.20	0.04	1.22	141.6	99.6	0	43
cond	precip	8.32	3.00	77.00	5780.4	99.6	0	43
pH	precip	5.12	4.46	6.48	5275.3	99.6	0	43

DE0005R Brotjacklriegel

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.09	0.01	0.38	124.9	99.9	8	47
Cl-	precip	0.24	0.10	1.05	327.5	99.9	0	47
K+	precip	0.07	0.01	0.60	86.4	99.9	23	47
Mg++	precip	0.014	0.000	0.060	18.9	99.9	36	47
NH4+	precip	0.41	0.02	3.31	543.0	99.9	1	47
NO3-	precip	0.33	0.12	1.80	441.7	99.9	0	47
Na+	precip	0.12	0.00	1.16	157.4	99.9	16	47
Precip	precip	-	0.0	103.2	1335.2	85.3	3	52
SO4--	precip	0.21	0.07	1.08	286.3	99.9	0	47
SO4-- corr	precip	0.21	0.07	1.06	275.0	99.9	0	47
cond	precip	8.51	4.00	32.00	11367.7	99.9	0	47
pH	precip	5.04	4.37	6.62	12119.0	99.9	0	47

DE0007R Neuglobsow

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.21	0.01	3.04	105.3	99.2	4	107
Cl-	precip	0.43	0.02	5.32	215.7	98.6	1	105
K+	precip	0.06	0.01	0.49	29.9	99.2	32	107
Mg++	precip	0.033	0.001	0.359	16.6	99.2	24	107
NH4+	precip	0.42	0.07	2.66	210.5	99.2	0	107
NO3-	precip	0.39	0.06	1.83	193.4	98.6	0	105
Na+	precip	0.24	-6.00	3.56	120.0	99.2	16	108
Precip	precip	-	0.0	43.0	499.8	99.9	252	365
SO4--	precip	0.28	0.08	1.23	139.6	98.6	0	105
SO4-- corr	precip	0.26	0.08	1.19	129.0	98.6	0	105
cond	precip	11.43	4.00	44.00	5714.4	99.0	0	105
pH	precip	4.95	4.18	7.10	5629.6	99.7	0	110

DE0008R Schmücke

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.12	0.01	0.73	150.0	100.0	9	49
Cl-	precip	0.28	0.01	1.17	337.6	100.0	1	49
K+	precip	0.03	0.01	0.20	36.5	100.0	28	49
Mg++	precip	0.028	0.003	0.230	33.1	100.0	25	49
NH4+	precip	0.44	0.00	1.96	523.3	100.0	1	49
NO3-	precip	0.43	0.02	1.18	512.2	100.0	0	49
Na+	precip	0.13	0.00	0.94	156.5	100.0	16	49
Precip	precip	-	0.0	86.7	1200.9	85.3	3	52
SO4--	precip	0.29	0.02	1.27	344.2	100.0	0	49
SO4-- corr	precip	0.27	0.02	1.27	329.2	100.0	0	49
cond	precip	11.91	2.00	45.00	14309.1	99.9	0	48
pH	precip	4.91	4.15	8.52	14772.9	100.0	0	49

DE0009R Zingst

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.34	0.11	2.52	186.9	100.0	0	48
Cl-	precip	1.63	0.19	6.10	883.6	100.0	0	48
K+	precip	0.17	0.01	2.20	94.5	100.0	15	48
Mg++	precip	0.120	0.003	0.474	65.2	100.0	2	48
NH4+	precip	0.51	0.00	3.92	276.8	100.0	5	48
NO3-	precip	0.43	0.12	1.56	233.5	100.0	0	48
Precip	precip	-	0.0	28.9	542.0	97.1	3	51
SO4--	precip	0.36	0.11	1.03	196.0	100.0	0	48
SO4-- corr	precip	0.28	-0.02	0.90	150.7	100.0	0	48
cond	precip	16.29	7.00	64.00	8829.7	100.0	0	48
pH	precip	5.02	4.29	6.69	5125.4	100.0	0	48

DE0044R Melpitz

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.20	0.05	0.81	103.2	100.0	0	44
Cl-	precip	0.37	0.15	1.69	189.4	100.0	0	44
K+	precip	0.08	0.01	0.68	41.0	100.0	13	44
Mg++	precip	0.030	0.005	0.150	15.4	100.0	17	44
NH4+	precip	0.93	0.23	4.60	471.5	100.0	0	44
NO3-	precip	0.51	0.13	2.12	259.9	100.0	0	44
Na+	precip	0.19	0.01	1.26	96.7	100.0	11	44
Precip	precip	-	0.0	43.3	508.7	85.3	8	52
SO4--	precip	0.46	0.18	2.82	235.1	100.0	0	44
SO4-- corr	precip	0.44	0.18	2.74	225.4	100.0	0	44
cond	precip	12.57	7.00	54.00	6392.1	100.0	0	44
pH	precip	5.20	4.47	6.62	3207.0	100.0	0	44

DK0005R Keldsnor

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.18	0.08	0.61	81.0	82.2	0	20
Cl-	precip	2.54	0.89	9.58	1111.8	92.2	0	21
K+	precip	0.16	0.06	0.40	68.8	75.1	0	19
Mg++	precip	0.147	0.048	0.298	64.2	87.3	0	21
NH4+	precip	0.58	0.15	3.11	256.1	78.9	0	20
NO3-	precip	0.53	0.21	2.04	232.8	92.5	0	22
Na+	precip	1.45	0.51	4.92	633.4	92.5	0	22
Precip	precip	-	0.0	52.1	438.1	99.8	0	24
SO4--	precip	0.44	0.22	1.38	191.1	92.5	0	22
SO4-- corr	precip	0.32	0.12	1.24	138.5	92.5	0	22
pH	precip	4.96	4.34	6.80	4837.3	78.9	0	20

DK0008R Anholt

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.15	0.06	0.36	91.5	92.0	0	21
Cl-	precip	3.57	0.40	10.55	2162.8	98.9	0	21
K+	precip	0.09	0.03	0.24	54.5	91.7	0	21
Mg++	precip	0.226	0.022	0.651	136.8	100.0	0	22
NH4+	precip	0.40	0.06	2.79	243.5	91.7	0	21
NO3-	precip	0.42	0.12	1.74	256.3	100.0	0	22
Na+	precip	1.96	0.09	6.17	1188.5	100.0	0	22
Precip	precip	-	0.0	68.7	606.4	99.8	1	24
SO4--	precip	0.42	0.23	0.96	255.8	100.0	0	22
SO4-- corr	precip	0.25	0.07	0.89	153.6	100.0	0	22
pH	precip	4.82	4.06	6.66	9140.3	100.0	0	22

DK0020R Pedersker

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.16	0.04	0.63	77.8	84.1	0	19
Cl-	precip	2.25	0.58	8.97	1088.1	84.1	0	19
K+	precip	0.13	0.04	0.48	61.2	82.1	0	18
Mg++	precip	0.145	0.031	0.555	70.3	84.1	0	19
NH4+	precip	0.53	0.23	1.17	258.1	82.1	0	18
NO3-	precip	0.61	0.31	1.36	293.8	84.1	0	19
Na+	precip	1.40	0.53	4.55	679.1	84.1	0	19
Precip	precip	-	0.0	46.0	484.3	99.8	0	24
SO4--	precip	0.49	0.27	0.91	237.8	84.1	0	19
pH	precip	4.79	4.29	6.42	7777.2	84.1	0	19

DK0022R Sepstrup Sande

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.24	0.03	1.45	170.6	87.0	0	22
Cl-	precip	2.53	0.02	10.93	1824.0	87.0	0	22
K+	precip	0.07	0.02	0.24	52.6	80.5	0	21
Mg++	precip	0.165	0.019	0.705	118.6	87.0	0	22
NH4+	precip	0.47	0.16	2.85	340.3	80.5	0	21
NO3-	precip	0.42	0.15	1.15	305.9	87.0	0	22
Na+	precip	1.48	0.26	6.41	1066.1	87.0	0	22
Precip	precip	-	0.3	93.0	719.9	96.0	0	23
SO4--	precip	0.37	0.23	0.74	268.1	87.0	0	22
SO4-- corr	precip	0.25	0.10	0.53	182.5	87.0	0	22
pH	precip	4.94	4.44	6.88	8191.0	80.5	0	21

DK0031R Ulborg

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.14	0.04	0.85	106.7	100.0	0	22
Cl-	precip	4.62	0.75	17.89	3413.1	94.8	0	19
K+	precip	0.12	0.03	0.70	89.4	84.6	0	18
Mg++	precip	0.302	0.029	1.006	222.9	95.7	0	20
NH4+	precip	0.35	0.06	1.13	256.3	99.4	0	21
NO3-	precip	0.36	0.19	0.99	264.5	99.4	0	21
Na+	precip	2.36	0.44	9.39	1741.0	94.7	0	19
Precip	precip	-	4.8	80.2	739.0	87.2	0	21
SO4--	precip	0.43	0.22	1.02	316.1	99.4	0	21
SO4-- corr	precip	0.24	0.11	0.45	176.9	99.4	0	21
pH	precip	4.97	4.61	5.84	7950.4	98.4	0	20

EE0009R Lahemaa

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.55	0.00	5.30	377.7	80.0	5	123
Cl-	precip	0.41	0.00	9.80	284.9	78.2	5	126
K+	precip	0.07	0.01	1.42	51.4	100.0	19	141
Mg++	precip	0.045	0.010	0.550	31.1	100.0	43	141
NH4+	precip	0.11	0.01	1.57	73.5	100.0	25	141
NO3-	precip	0.17	0.01	1.76	117.4	100.0	20	141
Na+	precip	0.33	0.02	5.15	224.6	100.0	0	141
Precip	precip	-	0.0	48.4	686.5	99.9	224	365
SO4--	precip	0.24	0.04	8.41	167.3	100.0	0	141
SO4-- corr	precip	0.22	0.01	8.03	151.7	100.0	0	141
cond	precip	7.47	5.00	53.00	5129.0	97.3	71	123
pH	precip	4.41	3.71	6.84	26637.6	97.3	0	123

EE0011R Vilsandi

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.94	0.00	5.40	619.9	100.0	2	19
Cl-	precip	1.42	0.40	5.10	932.6	24.7	0	14
K+	precip	0.36	0.02	3.39	237.7	100.0	0	19
Mg++	precip	0.206	0.040	1.170	135.0	100.0	0	19
NH4+	precip	0.49	0.01	11.40	324.7	100.0	3	19
NO3-	precip	0.42	0.01	2.87	275.9	100.0	3	19
Na+	precip	0.96	0.21	2.13	630.0	100.0	0	19
Precip	precip	-	0.0	96.1	655.9	85.1	33	52
SO4--	precip	0.40	0.10	2.73	261.5	100.0	0	19
SO4-- corr	precip	0.32	0.05	2.56	209.7	100.0	0	19
cond	precip	15.91	5.00	96.00	10433.8	100.0	5	19
pH	precip	4.63	0.00	7.11	15449.6	100.0	33	52

ES0001R San Pablo de los Montes

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.32	0.07	9.10	291.1	79.9	0	61
Cl-	precip	0.55	0.15	7.01	504.0	85.4	20	67
K+	precip	0.10	0.03	0.43	94.0	79.9	3	61
Mg++	precip	0.060	0.020	0.460	55.0	79.9	0	61
NH4+	precip	0.11	0.02	1.75	100.7	80.1	24	63
NO3-	precip	0.16	0.04	1.57	146.7	85.4	22	67
Na+	precip	0.43	0.06	4.70	391.8	79.9	1	61
Precip	precip	-	0.0	76.2	913.8	100.0	282	365
SO4--	precip	0.11	0.04	1.17	103.1	85.4	9	67
SO4-- corr	precip	0.08	0.01	1.07	72.4	85.4	9	67
cond	precip	7.87	2.60	50.70	7161.9	85.7	0	71
pH	precip	5.73	4.62	7.23	1689.3	85.7	0	71

ES0007R Víznar

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.95	0.23	22.90	925.1	86.7	0	56
Cl-	precip	0.52	0.15	9.64	508.3	88.2	16	60
K+	precip	0.19	0.05	4.20	187.9	86.7	0	56
Mg++	precip	0.161	0.030	1.500	157.3	86.7	0	56
NH4+	precip	0.38	0.06	5.13	370.3	88.1	0	59
NO3-	precip	0.21	0.04	9.72	205.3	88.2	13	60
Na+	precip	0.40	0.06	3.30	392.8	86.7	3	56
Precip	precip	-	0.0	148.2	982.4	100.0	279	365
SO4--	precip	0.27	0.04	10.28	267.3	88.2	1	60
SO4-- corr	precip	0.24	0.02	9.83	233.9	88.2	1	60
cond	precip	16.86	3.80	339.00	16431.0	90.8	0	71
pH	precip	6.33	5.22	7.70	451.8	90.8	0	71

ES0008R Niembro

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.53	0.08	5.30	292.7	92.8	0	126
Cl-	precip	9.28	0.41	86.38	5082.5	93.4	0	132
K+	precip	0.31	0.06	3.10	168.1	92.8	0	126
Mg++	precip	0.596	0.040	6.000	326.2	92.8	0	126
NH4+	precip	0.22	0.02	1.91	121.6	93.2	4	128
NO3-	precip	0.38	0.04	3.67	206.8	93.4	9	132
Na+	precip	6.23	0.36	56.00	3413.2	92.8	0	126
Precip	precip	-	0.0	27.8	549.0	100.0	229	365
SO4--	precip	0.79	0.11	5.43	430.1	93.4	0	132
SO4-- corr	precip	0.29	-0.57	2.51	157.4	93.4	0	132
cond	precip	59.26	6.00	1166.00	32460.1	93.4	0	134
pH	precip	5.07	3.48	6.45	4717.8	93.4	0	134

ES0009R Campisabalos

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	2.88	0.20	22.80	2300.0	85.9	0	67
Cl-	precip	0.91	0.15	11.25	729.4	88.7	9	72
K+	precip	0.32	0.06	0.98	252.4	85.9	0	67
Mg++	precip	0.231	0.040	1.500	184.8	85.9	0	67
NH4+	precip	0.52	0.02	2.07	416.2	86.2	14	69
NO3-	precip	0.82	0.04	4.25	658.8	88.7	5	72
Na+	precip	0.71	0.16	8.40	570.5	85.9	0	67
Precip	precip	-	0.0	124.8	803.0	100.0	250	365
SO4--	precip	0.48	0.04	2.90	383.0	88.7	1	72
SO4-- corr	precip	0.42	0.02	2.69	334.2	88.7	1	72
cond	precip	27.50	4.20	158.60	21966.4	88.9	0	77
pH	precip	6.31	5.20	7.58	394.7	88.9	0	77

ES0011R Barcarrola

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.50	0.18	1.74	400.3	70.9	0	50
Cl-	precip	1.98	0.15	16.76	1569.8	70.9	2	50
K+	precip	0.14	0.03	2.90	111.8	70.9	1	50
Mg++	precip	0.148	0.050	0.900	117.2	70.9	0	50
NH4+	precip	0.06	0.02	0.99	43.3	70.9	19	50
NO3-	precip	0.12	0.04	1.23	97.4	70.9	20	50
Na+	precip	1.36	0.21	10.70	1077.2	70.9	0	50
Precip	precip	-	0.0	95.0	794.0	100.0	279	365
SO4--	precip	0.23	0.04	0.99	184.6	70.9	3	50
SO4-- corr	precip	0.13	-0.03	0.83	104.3	70.9	3	50
cond	precip	13.44	2.50	70.10	10666.5	70.9	1	50
pH	precip	5.86	5.60	6.53	1090.9	70.9	0	50

ES0012R Zarra

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	1.13	0.13	44.50	674.4	69.8	0	56
Cl-	precip	0.31	0.15	6.77	185.4	79.8	31	66
K+	precip	0.10	0.03	1.80	63.1	69.8	8	56
Mg++	precip	0.091	0.020	1.900	54.2	69.8	0	56
NH4+	precip	0.25	0.02	1.41	149.2	78.0	8	63
NO3-	precip	0.24	0.04	5.17	146.8	79.8	17	66
Na+	precip	0.33	0.06	4.40	197.1	69.8	2	56
Precip	precip	-	0.0	57.2	599.2	100.0	288	365
SO4--	precip	0.26	0.04	10.04	153.1	79.8	12	66
SO4-- corr	precip	0.23	0.00	9.67	136.3	79.8	12	66
cond	precip	12.33	2.60	258.00	7382.7	79.8	0	67
pH	precip	6.11	4.67	7.89	465.6	79.8	0	67

ES0013R Penausende

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.30	0.09	2.95	105.3	55.2	0	45
Cl-	precip	0.50	0.15	3.78	176.6	58.5	11	50
K+	precip	0.13	0.05	0.81	45.5	55.2	0	45
Mg++	precip	0.070	0.020	0.440	24.4	55.2	0	45
NH4+	precip	0.22	0.02	2.85	77.7	55.3	6	46
NO3-	precip	0.13	0.04	0.92	45.9	58.5	17	50
Na+	precip	0.48	0.13	3.60	169.1	55.2	0	45
Precip	precip	-	0.0	18.2	353.0	100.0	258	365
SO4--	precip	0.15	0.04	1.33	53.8	58.5	6	50
SO4-- corr	precip	0.11	0.01	1.20	40.1	58.5	6	50
cond	precip	8.97	2.70	59.20	3151.8	60.0	0	52
pH	precip	5.99	5.46	6.97	360.6	60.0	0	52

ES0014R Els Torms

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.76	0.21	12.10	330.6	63.7	0	35
Cl-	precip	0.32	0.15	2.21	140.1	63.8	8	36
K+	precip	0.10	0.03	0.96	45.7	63.7	3	35
Mg++	precip	0.083	0.030	0.800	36.3	63.7	0	35
NH4+	precip	0.31	0.02	3.81	135.8	63.8	3	36
NO3-	precip	0.27	0.04	2.91	119.6	63.8	2	36
Na+	precip	0.32	0.13	1.77	140.0	63.7	0	35
Precip	precip	-	0.0	59.0	436.6	100.0	283	365
SO4--	precip	0.26	0.07	2.10	112.2	63.8	0	36
SO4-- corr	precip	0.23	0.04	1.97	100.4	63.8	0	36
cond	precip	11.48	3.60	91.60	5008.6	63.8	0	36
pH	precip	6.32	5.94	7.34	209.5	63.8	0	36

ES0016R O Saviñao

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.25	0.07	2.50	312.9	84.2	0	105
Cl-	precip	2.48	0.15	13.42	3068.0	87.6	11	116
K+	precip	0.14	0.03	0.90	167.3	84.2	4	105
Mg++	precip	0.194	0.030	1.000	240.1	84.2	0	105
NH4+	precip	0.14	0.02	1.74	176.8	85.4	13	111
NO3-	precip	0.08	0.04	1.54	97.8	87.6	73	116
Na+	precip	2.01	0.16	13.40	2482.8	84.2	0	105
Precip	precip	-	0.0	59.4	1240.2	100.0	208	365
SO4--	precip	0.22	0.04	1.56	275.4	87.6	7	116
SO4-- corr	precip	0.08	-0.19	1.38	104.4	87.6	7	116
cond	precip	15.70	2.80	72.70	19411.7	88.8	0	122
pH	precip	5.65	4.23	6.72	2748.6	88.8	0	122

ES0017R Doñana

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.59	0.11	22.20	674.2	57.3	0	44
Cl-	precip	4.14	0.15	14.91	4745.8	58.0	2	48
K+	precip	0.17	0.03	0.51	198.3	57.3	1	44
Mg++	precip	0.316	0.030	1.100	362.0	57.3	0	44
NH4+	precip	0.05	0.02	0.89	61.8	58.0	26	48
NO3-	precip	0.12	0.04	2.65	134.5	58.0	24	48
Na+	precip	3.28	0.19	13.70	3755.0	57.3	0	44
Precip	precip	-	0.0	67.6	1147.8	100.0	190	365
SO4--	precip	0.40	0.09	1.51	452.7	58.0	0	48
SO4-- corr	precip	0.18	-0.04	1.41	208.8	58.0	0	48
cond	precip	23.49	5.10	122.60	26896.0	58.2	0	49
pH	precip	5.86	4.84	7.57	1582.2	58.1	0	48

FI0004R Ähtäri

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.09	0.01	2.42	40.3	96.3	1	45
Cl-	precip	0.17	0.03	2.20	73.8	96.3	0	45
K+	precip	0.06	0.00	0.61	26.5	96.3	1	45
Mg++	precip	0.025	0.002	0.229	10.9	96.3	1	45
NH4+	precip	0.16	0.00	1.80	69.2	96.3	1	45
NO3-	precip	0.24	0.06	1.53	105.1	96.3	0	45
Na+	precip	0.10	0.01	1.41	44.1	96.3	0	45
Precip	precip	-	0.0	32.9	439.4	98.8	2	52
SO4--	precip	0.22	0.08	1.80	95.4	96.3	0	45
SO4-- corr	precip	0.21	0.07	1.78	91.7	96.3	0	46
cond	precip	10.42	4.00	43.00	4578.0	96.3	0	45
pH	precip	4.79	4.16	5.87	7084.2	96.3	0	45

FI0017R Virolahti II

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.17	0.02	1.18	94.6	96.8	0	45
Cl-	precip	0.48	0.05	3.15	260.8	96.8	0	45
K+	precip	0.16	0.01	1.04	85.0	96.8	0	45
Mg++	precip	0.051	0.010	0.378	27.7	96.8	0	45
NH4+	precip	0.23	0.00	1.11	123.0	96.8	2	45
NO3-	precip	0.31	0.08	1.99	169.9	96.8	0	45
Na+	precip	0.28	0.02	2.36	149.5	96.8	0	45
Precip	precip	-	0.0	44.0	540.5	98.8	3	52
SO4--	precip	0.37	0.06	2.19	200.3	96.8	0	45
SO4-- corr	precip	0.35	0.05	2.18	186.8	96.8	0	46
cond	precip	14.46	6.00	56.00	7818.1	96.8	0	45
pH	precip	4.71	4.04	6.12	10463.4	96.8	0	45

FI0022R Oulanka

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.05	0.00	0.59	26.3	100.0	1	51
Cl-	precip	0.13	0.03	1.27	69.4	100.0	0	51
K+	precip	0.04	0.00	0.37	21.5	100.0	1	51
Mg++	precip	0.015	0.002	0.134	8.3	100.0	1	51
NH4+	precip	0.07	0.01	1.50	38.9	100.0	0	51
NO3-	precip	0.12	0.02	1.21	68.9	100.0	0	51
Na+	precip	0.08	0.01	0.96	41.8	100.0	0	51
Precip	precip	-	0.0	39.5	552.0	98.8	1	52
SO4--	precip	0.17	0.04	1.96	92.3	100.0	0	51
SO4-- corr	precip	0.16	0.04	1.89	88.7	100.0	0	52
cond	precip	8.01	3.00	47.00	4419.5	100.0	0	51
pH	precip	4.84	4.02	5.23	7986.5	100.0	0	51

FI0036R Pallas (Matorova)

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.04	0.00	0.64	14.8	99.4	1	46
Cl-	precip	0.14	0.04	0.96	53.9	99.4	0	46
K+	precip	0.03	0.00	0.34	11.5	99.4	2	46
Mg++	precip	0.014	0.006	0.085	5.5	99.4	0	46
NH4+	precip	0.08	0.00	1.40	32.9	99.4	1	46
NO3-	precip	0.14	0.01	0.85	54.8	99.4	1	46
Na+	precip	0.08	0.02	0.61	32.4	99.4	0	46
Precip	precip	-	0.0	44.7	398.5	96.9	3	51
SO4--	precip	0.19	0.01	1.73	75.5	99.4	1	46
SO4-- corr	precip	0.18	0.00	1.68	72.7	99.4	1	47
cond	precip	8.94	3.00	55.00	3561.0	99.4	0	46
pH	precip	4.79	4.00	5.67	6457.7	99.4	0	46

FR0008R Donon

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.17	0.03	13.26	207.5	98.5	15	149
Cl-	precip	0.35	0.03	9.66	431.8	98.9	1	155
K+	precip	0.05	0.03	1.87	58.9	98.5	94	149
Mg++	precip	0.050	0.025	0.760	61.7	98.5	80	149
NH4+	precip	0.31	0.02	5.72	385.7	98.5	8	149
NO3-	precip	0.28	0.03	8.10	345.4	98.9	0	155
Na+	precip	0.20	0.03	4.63	253.1	98.5	30	149
Precip	precip	-	0.0	39.0	1246.1	99.9	185	365
SO4--	precip	0.21	0.02	4.01	263.0	98.9	0	155
SO4-- corr	precip	0.19	0.01	3.80	240.4	98.9	0	155
cond	precip	21.30	4.00	245.10	26536.3	99.5	0	170
pH	precip	5.10	3.96	8.01	9870.9	99.5	0	170

FR0009R Revin

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.23	0.03	1.97	253.7	96.5	8	140
Cl-	precip	0.82	0.03	24.60	904.2	96.4	1	142
K+	precip	0.08	0.03	0.83	88.9	96.5	61	140
Mg++	precip	0.081	0.025	1.360	89.2	96.5	46	140
NH4+	precip	0.39	0.02	2.91	435.6	96.5	1	140
NO3-	precip	0.30	0.08	5.44	330.9	96.4	0	142
Na+	precip	0.43	0.03	8.84	476.8	96.5	11	140
Precip	precip	-	0.0	38.0	1106.9	99.9	178	365
SO4--	precip	0.25	0.01	3.86	277.4	96.4	5	142
SO4-- corr	precip	0.21	-0.09	3.79	235.2	96.4	5	142
cond	precip	17.36	4.70	130.40	19217.4	96.9	0	151
pH	precip	5.38	4.21	8.73	4610.1	97.6	0	155

FR0010R Morvan

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.20	0.03	2.31	215.8	94.3	7	131
Cl-	precip	0.61	0.03	8.24	646.2	94.5	1	134
K+	precip	0.13	0.03	2.86	140.2	94.3	42	131
Mg++	precip	0.061	0.025	0.560	64.5	94.3	55	131
NH4+	precip	0.29	0.02	1.98	301.9	94.3	6	131
NO3-	precip	0.20	0.02	2.25	212.3	94.5	0	134
Na+	precip	0.36	0.03	4.47	380.2	94.3	19	131
Precip	precip	-	0.0	39.2	1057.0	99.9	156	365
SO4--	precip	0.19	0.01	1.75	196.8	94.5	3	134
SO4-- corr	precip	0.15	-0.01	1.68	162.9	94.5	3	134
cond	precip	15.76	2.70	291.40	16662.8	95.8	0	147
pH	precip	5.38	3.94	8.56	4399.3	95.8	0	147

FR0013R Peyrusse Vieille

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.35	0.03	3.41	272.6	84.1	4	101
Cl-	precip	1.67	0.07	11.94	1295.3	84.8	0	106
K+	precip	0.09	0.03	1.69	71.1	84.1	45	101
Mg++	precip	0.134	0.025	0.870	103.8	84.1	27	101
NH4+	precip	0.34	0.02	2.65	263.8	84.1	4	101
NO3-	precip	0.22	0.02	1.65	172.4	84.8	0	106
Na+	precip	0.95	0.03	13.67	734.9	84.1	6	101
Precip	precip	-	0.0	39.6	774.2	99.6	211	364
SO4--	precip	0.28	0.01	1.94	216.3	84.8	5	106
SO4-- corr	precip	0.20	-0.15	1.83	157.9	84.8	5	106
cond	precip	28.55	0.50	257.40	22103.7	83.5	0	117
pH	precip	5.43	4.40	8.95	2851.5	85.8	0	119

FR0014R Montandon

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.30	0.03	9.32	287.6	96.7	6	136
Cl-	precip	0.28	0.06	7.97	272.0	97.1	0	141
K+	precip	0.06	0.03	1.15	54.8	96.6	82	135
Mg++	precip	0.050	0.025	0.620	48.0	96.7	72	136
NH4+	precip	0.36	0.02	3.14	348.3	96.7	2	136
NO3-	precip	0.30	0.04	3.20	293.7	97.1	0	141
Na+	precip	0.17	0.03	4.90	168.5	96.7	23	136
Precip	precip	-	0.0	35.0	966.7	99.9	193	365
SO4--	precip	0.22	0.01	1.92	211.2	97.1	2	141
SO4-- corr	precip	0.20	-0.01	1.82	196.1	97.1	3	142
cond	precip	14.13	3.00	147.10	13659.8	97.5	0	149
pH	precip	5.24	4.14	8.89	5624.9	97.5	0	149

FR0015R La Tardière

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.26	0.03	4.44	203.0	94.9	2	109
Cl-	precip	3.11	0.07	61.31	2428.3	95.1	0	111
K+	precip	0.10	0.03	0.89	81.3	94.8	29	108
Mg++	precip	0.241	0.025	2.690	187.7	94.9	17	109
NH4+	precip	0.35	0.02	1.34	275.2	94.9	1	109
NO3-	precip	0.18	0.01	1.02	139.1	95.1	0	111
Na+	precip	1.74	0.03	21.32	1357.7	94.9	2	109
Precip	precip	-	0.0	24.0	779.8	99.9	197	365
SO4--	precip	0.30	0.01	2.50	238.1	95.1	3	111
SO4-- corr	precip	0.16	-0.17	0.98	124.4	95.1	3	111
cond	precip	28.96	5.00	179.90	22580.0	94.7	0	116
pH	precip	5.71	4.39	8.97	1503.0	96.0	0	120

FR0016R Le Casset

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.38	0.03	13.10	244.4	87.6	1	87
Cl-	precip	0.22	0.03	9.14	140.4	88.1	8	91
K+	precip	0.08	0.03	1.53	49.7	87.6	39	87
Mg++	precip	0.048	0.025	0.500	30.9	87.6	48	87
NH4+	precip	0.15	0.02	1.77	98.5	87.6	26	87
NO3-	precip	0.18	0.02	3.27	116.0	88.1	0	91
Na+	precip	0.11	0.03	2.09	67.9	87.6	39	87
Precip	precip	-	0.0	41.0	636.3	99.9	263	365
SO4--	precip	0.16	0.01	4.31	103.5	88.1	11	91
SO4-- corr	precip	0.15	-0.00	3.88	96.0	88.1	12	92
cond	precip	15.87	2.80	386.00	10100.5	88.7	0	100
pH	precip	5.56	4.57	8.16	1750.8	88.7	0	100

FR0017R Montfranc

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.22	0.03	2.41	261.0	97.1	11	128
Cl-	precip	0.65	0.03	6.77	782.8	97.5	1	134
K+	precip	0.05	0.03	0.85	60.5	97.1	86	128
Mg++	precip	0.070	0.025	0.750	83.6	97.1	62	128
NH4+	precip	0.24	0.02	3.45	286.5	97.1	18	128
NO3-	precip	0.17	0.03	2.32	200.9	97.5	0	134
Na+	precip	0.39	0.03	5.20	467.2	97.1	17	128
Precip	precip	-	0.0	59.2	1199.8	99.9	196	365
SO4--	precip	0.18	0.01	1.51	217.2	97.5	2	134
SO4-- corr	precip	0.15	-0.04	1.41	177.4	97.5	2	134
cond	precip	16.64	3.70	117.70	19961.9	95.8	0	138
pH	precip	5.43	4.05	8.86	4413.2	97.9	0	141

FR0018R La Coulonche

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.21	0.03	2.43	181.8	89.4	3	107
Cl-	precip	1.94	0.03	11.39	1664.0	89.7	1	110
K+	precip	0.08	0.03	0.79	67.4	89.4	35	107
Mg++	precip	0.149	0.025	0.930	127.2	89.4	23	107
NH4+	precip	0.34	0.09	1.58	289.5	89.4	0	107
NO3-	precip	0.18	0.01	1.09	151.9	89.7	1	110
Na+	precip	1.05	0.03	7.39	898.3	89.4	2	107
Precip	precip	-	0.0	27.4	856.8	99.9	150	365
SO4--	precip	0.23	0.01	0.85	198.0	89.7	2	110
SO4-- corr	precip	0.14	-0.02	0.80	122.0	89.7	2	110
cond	precip	27.98	5.60	174.00	23976.3	90.9	0	123
pH	precip	5.81	4.57	8.88	1330.0	90.9	0	123

GB0002R Eskdalemuir

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
daily								
Ca++	precip	0.16	0.04	2.85	92.2	100.0	0	90
Cl-	precip	3.24	0.00	20.10	1907.7	100.0	0	90
K+	precip	0.14	0.01	1.19	80.6	100.0	0	90
Mg++	precip	0.202	0.013	1.662	118.6	100.0	0	90
NH4+	precip	0.35	0.01	6.68	206.3	100.0	0	90
NO3-	precip	0.20	0.01	6.12	119.5	100.0	1	90
Na+	precip	1.90	0.08	11.09	1118.9	100.0	0	90
Precip	precip	-	0.0	28.9	588.4	39.5	54	145
SO4--	precip	0.32	0.01	2.55	190.4	100.0	1	90
cond	precip	18.29	3.00	93.00	10762.0	99.0	0	78
pH	precip	5.39	4.73	6.46	2366.9	100.0	0	90
biweekly								
Ca++	precip	0.12	0.06	0.38	126.1	100.0	0	19
Cl-	precip	2.63	0.70	6.10	2753.9	100.0	0	19
K+	precip	0.07	0.01	0.43	71.2	100.0	1	19
Mg++	precip	0.145	0.024	0.435	151.7	100.0	0	19
NH4+	precip	0.16	0.01	1.02	166.4	100.0	1	19
NO3-	precip	0.09	0.01	0.62	90.1	100.0	2	19
Na+	precip	1.75	0.39	4.11	1826.2	100.0	0	19
Precip	precip	-	0.0	156.3	1045.9	80.8	3	22
SO4--	precip	0.23	0.12	0.55	245.6	100.0	0	19
SO4-- corr	precip	0.09	0.01	0.35	96.7	100.0	0	19
cond	precip	12.66	5.00	35.00	13239.6	100.0	0	19
pH	precip	5.20	4.61	6.42	6535.9	100.0	0	19

GB0006R Lough Navar

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.23	0.09	0.90	330.9	100.0	0	27
Cl-	precip	5.00	0.50	17.50	7335.3	100.0	0	27
K+	precip	0.16	0.04	0.54	229.9	100.0	0	27
Mg++	precip	0.279	0.040	1.050	409.7	100.0	0	27
NH4+	precip	0.15	0.01	0.58	215.2	100.0	0	27
NO3-	precip	0.09	0.01	0.38	138.5	100.0	1	27
Na+	precip	3.03	0.28	9.49	4439.0	100.0	0	27
Precip	precip	-	6.8	170.7	1466.8	100.0	0	27
SO4--	precip	0.33	0.15	0.87	490.3	100.0	0	27
SO4-- corr	precip	0.09	-0.01	0.26	127.3	100.0	0	27
cond	precip	20.61	5.00	69.00	30222.8	99.5	0	26
pH	precip	5.42	5.07	6.25	5543.2	100.0	0	27

GB0013R Yarner Wood

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.23	0.09	0.79	249.7	100.0	0	23
Cl-	precip	5.33	1.00	9.50	5922.5	100.0	0	23
K+	precip	0.17	0.06	0.29	183.3	100.0	0	23
Mg++	precip	0.322	0.080	0.570	358.6	100.0	0	23
NH4+	precip	0.16	0.04	1.14	180.8	100.0	0	23
NO3-	precip	0.19	0.05	1.36	213.7	100.0	0	23
Na+	precip	3.29	0.69	5.85	3653.0	100.0	0	23
Precip	precip	-	0.0	173.8	1112.0	88.2	1	24
SO4--	precip	0.41	0.23	1.08	451.2	100.0	0	23
SO4-- corr	precip	0.13	0.03	0.93	147.6	100.0	0	23
cond	precip	24.11	10.00	37.00	26811.9	99.7	0	22
pH	precip	4.99	4.69	5.80	11275.9	100.0	0	23

GB0014R High Muffles

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.28	0.09	1.50	216.9	100.0	0	23
Cl-	precip	2.38	0.40	18.90	1854.9	100.0	0	23
K+	precip	0.14	0.05	0.54	110.1	100.0	0	23
Mg++	precip	0.143	0.040	1.240	111.3	100.0	0	23
NH4+	precip	0.44	0.12	1.90	341.2	100.0	0	23
NO3-	precip	0.40	0.24	0.85	309.7	100.0	0	23
Na+	precip	1.61	0.23	10.53	1254.6	100.0	0	23
Precip	precip	-	0.0	102.4	778.6	92.1	1	24
SO4--	precip	0.48	0.29	1.45	377.1	100.0	0	23
SO4-- corr	precip	0.35	0.10	1.06	272.5	100.0	0	23
cond	precip	17.64	8.00	55.00	13730.3	96.3	0	21
pH	precip	4.95	4.39	6.45	8660.6	100.0	0	23

GB0015R Strath Vaich Dam

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.16	0.06	0.29	183.4	100.0	0	24
Cl-	precip	4.01	0.70	8.40	4568.9	100.0	0	24
K+	precip	0.13	0.02	0.78	143.9	100.0	0	24
Mg++	precip	0.237	0.030	0.550	269.8	100.0	0	24
NH4+	precip	0.07	-0.01	1.30	76.2	100.0	0	24
NO3-	precip	0.09	0.02	0.42	98.2	100.0	0	24
Na+	precip	2.49	0.39	5.01	2839.2	100.0	0	24
Precip	precip	-	0.0	112.2	1140.3	99.1	1	25
SO4--	precip	0.26	0.10	0.54	301.5	100.0	0	24
SO4-- corr	precip	0.06	-0.03	0.46	67.0	100.0	0	24
cond	precip	17.72	4.00	36.00	20207.5	100.0	0	24
pH	precip	5.18	4.59	6.61	7580.1	100.0	0	24

GB0048R Auchencorth Moss

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.08	0.00	1.12	74.9	98.5	0	225
Cl-	precip	1.87	0.05	19.08	1681.8	98.5	0	225
K+	precip	0.08	0.00	0.75	71.0	98.5	0	225
Mg++	precip	0.094	0.000	1.390	84.6	98.5	0	225
NH4+	precip	0.19	0.01	3.83	174.0	98.5	0	225
NO3-	precip	0.12	0.01	2.08	106.1	98.5	0	225
Na+	precip	1.27	0.03	11.76	1144.5	98.5	0	225
Precip	precip	-	0.0	23.9	900.5	98.6	98	360
SO4--	precip	0.20	0.03	2.95	185.0	98.5	0	225
SO4-- corr	precip	0.10	-0.03	2.15	89.5	98.5	0	225
cond	precip	9.73	1.82	69.10	8763.6	84.7	0	119
pH	precip	5.27	4.39	6.40	4786.7	98.5	0	225

HR0002R Puntijarka

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.84	0.04	8.20	914.9	98.4	0	123
Cl-	precip	0.44	0.10	2.91	474.2	97.9	0	121
K+	precip	1.54	0.30	11.93	1673.3	98.4	0	123
Mg++	precip	0.152	0.006	1.161	164.7	98.4	0	123
NH4+	precip	0.45	0.00	1.95	483.2	97.1	0	119
NO3-	precip	0.35	0.07	3.48	383.7	98.4	0	123
Na+	precip	0.29	0.07	2.03	310.6	98.3	0	122
Precip off	precip	-	0.10	46.00	1083.8	42.9	0	157
SO4--	precip	0.51	0.08	3.62	555.0	98.4	0	123
SO4-- corr	precip	0.48	0.08	3.58	523.7	98.4	0	123
cond	precip	15.77	1.00	282.00	17092.0	99.0	0	134
pH	precip	5.23	4.19	7.77	6324.8	99.0	0	134

HR0004R Zavizan

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.90	0.12	15.86	1652.0	99.8	0	143
Cl-	precip	0.65	0.05	3.13	1193.0	99.3	0	141
K+	precip	1.16	0.27	6.75	2133.7	99.8	0	143
Mg++	precip	0.076	0.007	0.879	139.8	99.8	0	143
NH4+	precip	0.30	0.01	1.26	544.7	99.0	0	136
NO3-	precip	0.32	0.00	2.87	580.6	99.8	0	143
Na+	precip	0.69	0.04	13.26	1265.3	99.5	0	141
Precip off	precip	-	0.10	82.10	1835.5	42.4	0	155
SO4--	precip	0.34	0.00	5.01	618.9	99.8	0	143
SO4-- corr	precip	0.28	-0.90	4.91	512.1	99.8	0	144
cond	precip	12.54	3.00	200.00	23025.3	99.8	0	144
pH	precip	5.67	4.38	7.52	3961.5	99.8	0	144

HU0002R K-puszta

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.60	0.18	2.55	232.8	96.3	0	67
Cl-	precip	1.14	0.23	6.63	445.0	99.6	0	94
K+	precip	0.13	0.03	1.13	50.7	96.3	1	67
Mg++	precip	0.109	0.025	0.510	42.4	96.3	6	67
NH4+	precip	0.52	0.01	2.96	201.3	98.8	2	88
NO3-	precip	0.45	0.11	3.59	174.1	99.6	0	93
Na+	precip	1.23	0.30	5.80	480.6	96.3	0	67
Precip	precip	-	0.0	30.6	390.0	99.9	266	365
Precip off	precip	-	0.10	33.10	438.7	99.9	266	365
SO4--	precip	0.86	0.18	6.63	337.3	99.2	0	90
SO4-- corr	precip	0.79	0.15	6.37	307.8	99.2	0	90
cond	precip	19.56	9.00	90.90	7629.8	98.3	0	79
pH	precip	5.50	4.27	6.96	1242.1	98.3	0	79

IE0001R Valentia Observatory

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.42	0.03	14.72	1105.1	94.1	15	203
Cl-	precip	16.95	0.28	688.07	44996.4	94.1	0	203
K+	precip	0.46	0.03	16.71	1232.5	94.0	14	202
Mg++	precip	1.247	0.025	52.551	3309.5	94.1	15	203
NH4+	precip	0.12	0.02	6.74	329.3	93.6	81	199
NO3-	precip	0.07	0.01	1.01	182.0	94.1	17	203
Na+	precip	9.81	0.17	397.92	26056.8	94.1	0	203
Precip	precip	-	0.0	74.2	2654.7	99.6	98	364
Precip off	precip	-	0.00	51.80	2174.5	99.9	91	365
SO4--	precip	0.88	0.01	31.94	2342.6	94.1	1	203
SO4-- corr	precip	0.06	-1.37	1.32	168.7	94.1	1	203
cond	precip	67.24	2.40	2470.00	178499.4	94.1	0	203
pH	precip	5.30	3.93	6.92	13389.2	94.1	0	202

IE0005R Oak Park

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.12	0.03	1.77	125.4	92.6	18	172
Cl-	precip	1.90	0.03	17.73	1949.7	92.6	2	172
K+	precip	0.05	0.03	0.63	54.7	92.6	94	172
Mg++	precip	0.134	0.025	1.261	137.7	92.6	43	172
NH4+	precip	0.12	0.02	3.66	118.8	92.6	51	172
NO3-	precip	0.06	0.01	2.88	63.9	92.6	60	172
Na+	precip	1.06	0.03	9.95	1090.4	92.6	4	172
Precip	precip	-	0.0	25.7	1025.5	99.2	151	362
Precip off	precip	-	0.00	32.10	1123.7	99.5	108	363
SO4--	precip	0.17	0.01	1.83	174.2	92.6	8	172
SO4-- corr	precip	0.08	-0.07	1.79	86.6	92.6	8	172
cond	precip	10.76	1.80	73.50	11029.9	92.6	0	172
pH	precip	5.42	4.39	6.69	3902.0	92.6	0	172

IE0009R Johnstown Castle

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.15	0.03	1.20	172.2	99.1	21	178
Cl-	precip	5.48	0.20	57.73	6374.7	99.1	0	178
K+	precip	0.12	0.03	1.37	144.4	99.1	41	178
Mg++	precip	0.378	0.025	3.996	438.9	99.1	15	178
NH4+	precip	0.14	0.02	1.39	164.5	98.6	55	173
NO3-	precip	0.13	0.01	1.73	146.2	98.7	24	174
Na+	precip	3.15	0.09	32.26	3661.7	99.1	0	178
Precip	precip	-	0.0	24.2	1162.6	99.7	162	364
Precip off	precip	-	0.00	44.30	1422.8	98.6	120	360
SO4--	precip	0.38	0.05	2.71	444.8	99.1	0	178
SO4-- corr	precip	0.12	-0.07	1.44	139.0	99.1	0	178
cond	precip	26.27	3.50	207.00	30542.1	99.1	0	178
pH	precip	5.17	4.11	6.53	7882.1	99.1	0	178

IS0002R Irafoss

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.15	0.00	3.10	237.7	97.7	0	160
Cl-	precip	4.75	0.10	576.50	7551.5	98.0	0	159
K+	precip	0.21	0.00	8.30	331.1	97.7	18	160
Mg++	precip	0.288	0.000	5.600	458.3	97.7	0	160
NO3-	precip	0.06	0.00	0.92	98.2	97.7	1	158
Na+	precip	2.30	0.00	44.60	3651.6	97.7	0	160
Precip	precip	-	0.0	74.6	1590.5	99.9	197	365
SO4--	precip	0.31	0.00	7.70	497.4	97.7	2	160
SO4-- corr	precip	0.12	-0.15	6.66	198.9	97.7	2	161
cond	precip	22.07	1.90	412.00	35097.6	97.5	0	143
pH	precip	5.50	4.90	7.40	5060.9	98.6	0	165

IS0091R Storhofdi

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	2.60	0.10	14.13	3482.8	90.4	2	50
Cl-	precip	200.15	3.82	1242.40	268360.9	90.4	0	50
K+	precip	2.60	0.11	13.64	3489.7	90.4	0	50
Mg++	precip	7.910	0.330	44.400	10605.4	90.4	4	50
NH4+	precip	0.15	0.01	1.55	205.6	90.4	26	50
NO3-	precip	0.07	0.01	0.67	97.9	90.4	28	50
Na+	precip	65.31	3.02	369.82	87572.9	90.4	0	50
Precip	precip	-	0.1	94.9	1340.8	100.0	0	58
Precip off	precip	-	0.10	107.00	1795.6	100.0	0	58
Precip off	precip	-	5.00	209.00	1742.5	99.6	0	24
SO4--	precip	6.28	0.18	38.84	8424.5	90.4	0	50
SO4-- corr	precip	1.07	-10.85	17.90	1436.1	90.4	0	50
cond	precip	478.14	24.70	2000.00	641093.1	90.4	0	50
pH	precip	5.63	4.76	6.68	3167.0	90.2	0	45

IT0001R Montelibretti

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	3.59	1.00	11.10	3300.9	100.0	0	37
Cl-	precip	3.35	0.40	34.60	3081.1	100.0	0	37
K+	precip	0.49	0.10	2.00	449.7	100.0	0	37
Mg++	precip	0.443	0.100	2.300	407.8	100.0	0	37
NH4+	precip	0.23	0.00	1.30	211.0	40.3	0	14
NO3-	precip	0.75	0.00	4.40	689.6	100.0	0	37
Na+	precip	2.45	0.20	13.50	2252.8	100.0	0	37
Precip	precip	-	0.0	62.0	920.0	100.0	321	358
SO4--	precip	0.74	0.30	2.40	678.8	100.0	0	37
SO4-- corr	precip	0.52	0.01	2.40	479.3	100.0	0	39
cond	precip	35.13	11.80	150.00	32324.1	100.0	0	37
pH	precip	5.56	4.60	7.30	2555.8	100.0	0	37

IT0004R Ispra

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.31	0.02	3.81	523.4	98.3	0	107
Cl-	precip	0.27	0.01	12.51	450.3	96.5	0	105
K+	precip	0.04	0.00	1.07	73.2	98.3	0	107
Mg++	precip	0.042	0.001	0.899	70.4	98.3	0	107
NH4+	precip	0.71	0.00	16.67	1191.1	97.1	0	103
NO3-	precip	0.55	0.01	15.82	917.5	98.3	0	107
Na+	precip	0.33	0.02	6.65	557.9	98.3	0	107
Precip	precip	-	0.0	94.8	1676.2	99.9	231	365
SO4--	precip	0.33	0.01	5.40	545.1	98.3	0	107
SO4-- corr	precip	0.31	0.01	5.28	513.4	98.3	0	107
cond	precip	11.83	2.83	91.70	19822.5	96.6	0	81
pH	precip	5.44	4.41	7.10	6086.0	97.7	0	95

LT0015R Preila

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.50	0.07	4.80	230.9	99.8	0	95
Cl-	precip	4.19	0.11	42.52	1930.5	99.8	0	95
K+	precip	0.22	0.04	2.70	102.9	99.8	0	95
NH4+	precip	0.51	0.03	7.40	235.2	99.8	0	95
NO3-	precip	0.78	0.15	8.73	360.4	99.8	0	95
Na+	precip	2.79	0.08	24.20	1288.6	99.8	0	95
Precip	precip	-	0.0	28.6	461.1	100.0	268	366
SO4--	precip	0.61	0.13	5.59	280.8	99.8	0	95
SO4-- corr	precip	0.38	-0.02	4.75	172.9	99.8	0	95
cond	precip	32.27	7.50	175.00	14880.6	99.8	0	95
pH	precip	4.81	3.98	6.58	7174.7	99.8	0	95

LV0010R Rucava

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.19	0.01	1.19	137.0	84.7	34	82
Cl-	precip	0.98	0.01	13.30	705.1	84.1	1	72
K+	precip	0.07	0.01	0.49	48.0	86.9	51	85
Mg++	precip	0.097	0.010	0.990	69.3	86.9	34	85
NH4+	precip	0.29	0.02	2.97	208.6	96.9	21	138
NO3-	precip	0.31	0.05	2.42	225.1	84.1	0	72
Na+	precip	0.60	0.01	6.89	431.6	86.9	7	85
Precip	precip	-	0.0	44.1	716.5	99.9	189	365
SO4--	precip	0.30	0.05	2.47	212.9	84.1	0	72
SO4-- corr	precip	0.25	0.05	2.43	177.9	84.1	0	72
cond	precip	16.00	2.80	59.90	11467.5	96.6	1	134
pH	precip	4.87	4.11	6.81	9681.4	96.6	0	134

LV0016R Zoseni

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.18	0.03	1.26	143.7	82.3	50	82
Cl-	precip	0.14	0.02	0.90	110.1	80.6	12	75
K+	precip	0.10	0.01	6.70	81.9	82.9	56	84
Mg++	precip	0.049	0.010	0.320	39.3	82.9	60	84
NH4+	precip	0.16	0.02	1.89	129.1	95.0	43	142
NO3-	precip	0.16	0.02	1.17	126.3	80.6	0	75
Na+	precip	0.11	0.01	0.82	86.6	82.9	44	84
Precip	precip	-	0.0	45.1	803.6	99.9	164	365
SO4--	precip	0.18	0.02	0.89	142.5	80.6	0	75
SO4-- corr	precip	0.17	0.02	0.88	135.7	80.6	0	75
cond	precip	8.72	2.50	55.40	7004.6	94.6	0	138
pH	precip	5.08	4.01	7.11	6711.0	94.6	0	138

NL0009R Kollumerwaard

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.27	0.04	1.37	184.1	80.6	0	91
Cl-	precip	2.98	0.05	64.04	2059.6	83.4	0	116
H+	precip	2.49	-152.80	88.20	1723.4	84.3	0	131
K+	precip	0.12	0.00	1.23	83.6	80.6	0	91
Mg++	precip	0.192	0.017	1.558	132.6	80.6	0	91
NH4+	precip	0.58	0.08	2.33	400.4	82.0	0	100
NO3-	precip	0.33	0.05	1.96	231.3	83.4	0	116
Na+	precip	1.58	0.04	13.04	1097.3	80.6	0	91
Precip	precip	-	0.0	22.2	692.2	100.0	172	365
SO4--	precip	0.39	0.06	3.23	270.6	83.4	0	116
SO4-- corr	precip	0.25	0.05	1.17	172.1	83.4	0	116
cond	precip	20.74	4.70	103.00	14354.9	79.3	0	85
pH	precip	5.48	4.23	6.73	2294.3	84.3	0	131

NO0001R Birkenes

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.10	0.01	0.93	175.2	99.6	0	175
Cl-	precip	1.97	0.01	33.31	3560.6	99.6	1	175
K+	precip	0.07	0.01	1.32	132.0	99.6	4	175
Mg++	precip	0.146	0.005	2.874	264.0	99.6	7	175
NH4+	precip	0.36	0.01	5.83	660.1	99.6	8	175
NO3-	precip	0.44	0.01	7.63	792.1	99.6	0	175
Na+	precip	1.23	0.02	26.69	2212.8	99.6	0	175
Precip	precip	-	0.0	62.4	1806.9	100.0	149	366
SO4--	precip	0.43	0.01	5.79	773.5	99.6	1	175
SO4-- corr	precip	0.33	-0.28	3.79	591.4	99.6	1	175
cond	precip	22.60	3.50	308.70	40837.4	99.4	0	165
pH	precip	4.72	3.72	7.06	34377.5	99.4	0	164

NO0015R Tustervatn

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.06	0.01	1.02	71.0	96.4	1	165
Cl-	precip	1.60	0.01	13.98	1853.2	96.4	3	165
K+	precip	0.06	0.01	1.25	63.1	96.4	8	164
Mg++	precip	0.097	0.005	0.904	112.6	96.4	19	165
NH4+	precip	0.11	0.01	3.21	125.6	96.4	22	164
NO3-	precip	0.06	0.01	3.04	71.5	96.4	31	165
Na+	precip	0.80	0.01	7.79	926.2	96.4	2	165
Precip	precip	-	0.0	36.5	1155.1	99.9	165	365
SO4--	precip	0.12	0.01	1.41	137.3	96.4	19	165
SO4-- corr	precip	0.05	-0.06	1.37	62.7	96.4	19	165
cond	precip	9.20	2.10	57.10	10632.0	96.1	0	158
pH	precip	5.40	4.42	6.82	4601.4	95.7	0	150

NO0039R Kårvatn

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.06	0.01	0.90	77.5	100.0	0	169
Cl-	precip	1.40	0.01	26.18	1835.9	100.0	1	169
K+	precip	0.08	0.01	1.48	102.3	99.9	4	168
Mg++	precip	0.093	0.005	1.920	122.3	100.0	9	169
NH4+	precip	0.08	0.01	6.05	102.3	99.3	18	167
NO3-	precip	0.05	0.01	3.55	68.1	100.0	40	169
Na+	precip	0.79	0.03	16.76	1035.8	100.0	0	169
Precip	precip	-	0.0	53.0	1314.5	100.0	206	366
SO4--	precip	0.12	0.01	2.79	153.1	100.0	8	169
SO4-- corr	precip	0.05	-0.14	1.93	69.1	100.0	8	169
cond	precip	8.77	2.20	40.40	11529.1	99.7	0	159
pH	precip	5.46	4.39	6.84	4508.1	99.1	0	157

NO0055R Karasjok

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.19	0.04	1.08	66.4	99.2	0	88
Cl-	precip	0.62	0.01	9.99	213.8	98.7	1	86
K+	precip	0.26	0.03	3.61	89.0	95.4	0	84
Mg++	precip	0.055	0.005	0.468	18.9	99.2	2	88
NH4+	precip	0.16	0.01	2.44	56.3	95.4	2	84
NO3-	precip	0.13	0.01	1.09	45.0	99.2	1	88
Na+	precip	0.38	0.06	4.81	131.0	99.2	0	88
Precip	precip	-	0.0	29.6	345.3	99.9	263	365
SO4--	precip	0.35	0.03	2.72	121.7	99.2	0	88
SO4-- corr	precip	0.32	-0.07	2.67	111.1	99.2	0	88
cond	precip	10.99	3.40	56.40	3794.6	98.2	0	79
pH	precip	5.14	4.13	7.00	2484.8	93.1	0	67

NO0056R Hurdal

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.14	0.02	0.79	123.6	98.9	0	119
Cl-	precip	0.58	0.04	4.97	526.7	98.6	0	119
K+	precip	0.14	0.03	0.92	123.6	98.9	0	119
Mg++	precip	0.035	0.005	0.377	31.6	98.9	15	119
NH4+	precip	0.24	0.01	1.01	222.1	91.1	1	110
NO3-	precip	0.27	0.01	1.30	249.0	90.8	1	110
Na+	precip	0.34	0.03	3.27	308.5	98.9	0	119
Precip	precip	-	0.0	35.0	909.5	99.7	242	364
SO4--	precip	0.23	0.02	1.09	212.5	98.6	0	119
SO4-- corr	precip	0.21	-0.01	1.08	187.9	98.6	0	119
cond	precip	11.61	3.10	38.50	10562.4	98.9	0	118
pH	precip	5.09	4.22	7.09	7372.7	98.9	0	119

PL0002R Jarczew

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.23	0.00	2.40	155.1	96.7	0	152
Cl-	precip	0.33	0.10	5.00	216.4	96.7	0	152
K+	precip	0.10	0.01	2.00	67.9	96.7	0	152
Mg++	precip	0.037	0.004	0.302	24.2	96.7	0	152
NH4+	precip	0.63	0.10	3.90	419.3	96.7	0	152
NO3-	precip	0.39	0.08	2.65	257.3	96.7	0	152
Na+	precip	0.12	0.01	1.50	81.6	96.7	0	152
Precip	precip	-	0.0	24.2	661.9	96.9	186	354
SO4--	precip	0.55	0.08	4.30	365.6	96.7	0	152
SO4-- corr	precip	0.54	0.08	4.27	355.1	96.7	0	152
cond	precip	14.38	3.20	90.20	9517.4	96.7	0	152
pH	precip	5.05	3.93	6.94	5913.1	96.7	0	152

PL0003R Sniezka

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.38	0.10	1.20	443.0	90.9	0	192
Cl-	precip	0.68	0.20	1.80	808.4	90.9	0	192
K+	precip	0.30	0.08	1.28	355.8	90.9	0	192
Mg++	precip	0.146	0.003	0.540	172.2	90.9	0	192
NH4+	precip	0.47	0.12	1.34	555.0	90.9	0	192
NO3-	precip	0.64	0.12	1.97	759.0	90.9	0	192
Na+	precip	0.60	0.12	1.44	706.1	90.9	0	192
Precip	precip	-	0.0	44.4	1181.3	99.4	113	363
SO4--	precip	0.87	0.28	2.42	1029.1	90.9	0	192
SO4-- corr	precip	0.82	0.24	2.31	968.6	90.9	0	192
cond	precip	22.98	7.20	73.20	27144.2	90.9	0	192
pH	precip	4.65	4.03	5.37	26656.9	90.9	0	192

PL0004R Leba

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.17	0.00	1.30	110.2	99.3	0	145
Cl-	precip	1.92	0.10	29.20	1269.8	99.3	0	145
K+	precip	0.10	0.01	2.50	62.7	99.3	0	145
Mg++	precip	0.122	0.008	1.770	80.4	99.3	0	145
NH4+	precip	0.31	0.05	3.06	205.2	98.5	0	143
NO3-	precip	0.32	0.09	4.09	213.9	99.3	0	145
Na+	precip	0.98	0.02	15.41	650.5	99.3	0	145
Precip	precip	-	0.0	27.1	661.2	97.2	178	355
SO4--	precip	0.35	0.09	2.67	230.6	99.3	0	145
SO4-- corr	precip	0.27	0.04	2.32	177.3	99.3	0	145
cond	precip	17.53	3.70	146.10	11589.1	99.3	0	145
pH	precip	4.89	3.63	6.03	8503.6	99.3	0	145

PL0005R Diabla Gora

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.15	0.00	1.00	87.8	96.4	0	113
Cl-	precip	0.32	0.00	4.70	188.5	99.6	0	131
K+	precip	0.05	0.01	0.25	32.1	96.6	0	114
Mg++	precip	0.038	0.002	0.247	22.7	96.6	0	114
NH4+	precip	0.41	0.01	6.28	239.4	99.9	1	132
NO3-	precip	0.37	0.06	3.10	216.3	99.6	0	131
Na+	precip	0.14	0.01	2.02	80.0	96.7	0	115
Precip	precip	-	0.0	34.8	591.8	100.0	233	366
Precip off	precip	-	0.00	37.50	695.7	100.0	192	366
SO4--	precip	0.39	0.08	3.08	230.8	99.6	0	131
SO4-- corr	precip	0.38	0.07	3.02	221.7	99.6	0	131
cond	precip	11.56	4.00	43.00	6841.6	88.8	0	81
pH	precip	4.90	3.86	6.64	7471.7	99.9	0	132

PT0001R Braganca

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	1.03	0.10	13.00	701.4	46.6	0	28
Cl-	precip	1.07	0.10	7.80	724.4	46.6	0	28
K+	precip	0.31	0.04	2.42	209.0	46.6	1	28
Mg++	precip	0.190	0.040	1.800	128.7	46.6	0	28
NH4+	precip	0.34	0.01	4.49	232.9	46.6	1	28
NO3-	precip	0.15	0.01	1.71	100.6	46.6	2	28
Na+	precip	0.59	0.01	4.69	399.3	46.6	2	28
Precip off	precip	-	0.00	30.70	679.0	99.9	249	365
SO4--	precip	0.23	0.06	1.90	154.2	46.6	0	28
SO4-- corr	precip	0.17	-0.00	1.89	117.3	46.6	0	28
cond	precip	14.79	4.00	94.00	10039.5	46.6	0	28
pH	precip	5.50	5.00	7.00	2142.7	46.6	0	28

PT0003R Viana do Castelo

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.27	0.05	2.50	423.6	80.5	2	77
Cl-	precip	5.97	0.40	33.00	9453.4	80.5	0	77
K+	precip	0.22	0.04	0.75	345.9	80.5	1	77
Mg++	precip	0.402	0.060	2.030	635.7	80.5	0	77
NH4+	precip	0.13	0.01	2.30	203.0	80.5	10	77
NO3-	precip	0.08	0.01	1.42	124.9	80.5	28	77
Na+	precip	3.13	0.39	15.72	4950.7	80.5	0	77
Precip off	precip	-	0.00	59.00	1583.2	99.9	222	365
SO4--	precip	0.41	0.03	1.47	657.1	80.5	1	77
SO4-- corr	precip	0.16	-0.53	1.00	247.8	80.5	1	77
cond	precip	32.70	4.00	334.00	51771.2	80.5	0	77
pH	precip	4.79	4.00	6.20	25764.1	80.5	0	77

PT0004R Monte Velho

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.37	0.05	1.20	217.8	93.4	1	34
Cl-	precip	7.08	1.20	33.00	4135.6	93.4	0	34
K+	precip	0.26	0.04	0.73	150.1	93.4	2	34
Mg++	precip	0.520	0.110	2.210	303.6	93.4	0	34
NH4+	precip	0.15	0.01	1.40	88.7	93.4	7	34
NO3-	precip	0.11	0.01	0.47	64.6	93.4	4	34
Na+	precip	3.93	0.50	16.94	2296.1	93.4	0	34
Precip off	precip	-	0.00	40.30	584.4	99.9	312	365
SO4--	precip	0.48	0.11	1.56	281.0	93.4	0	34
SO4-- corr	precip	0.15	-0.01	0.62	90.7	93.4	0	34
cond	precip	33.83	12.00	100.00	19767.3	93.4	0	34
pH	precip	4.74	4.00	6.10	10552.9	93.4	0	34

RS0005R Kamenicki vis

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.93	0.13	6.14	773.0	83.9	0	94
Cl-	precip	0.43	0.06	4.62	360.5	89.0	0	95
K+	precip	0.65	0.06	6.82	541.0	82.8	0	86
Mg++	precip	0.170	0.030	1.220	142.0	89.0	0	95
NH4+	precip	0.45	0.01	4.49	376.5	87.9	0	87
NO3-	precip	0.41	0.07	6.71	338.0	98.7	0	117
Na+	precip	0.38	0.06	5.43	318.7	89.0	0	95
Precip	precip	-	0.0	60.2	834.7	100.0	231	366
SO4--	precip	1.00	0.01	12.34	837.8	98.7	0	117
SO4-- corr	precip	0.97	-0.00	12.17	810.2	98.7	0	117
cond	precip	20.25	5.00	155.00	16906.5	82.8	0	86
pH	precip	5.09	3.63	7.40	6721.9	99.8	0	129

RU0001R Janiskoski

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.24	0.00	0.91	110.1	100.0	1	94
Cl-	precip	0.44	0.01	1.59	199.7	100.0	0	94
K+	precip	0.10	0.01	0.80	44.9	100.0	0	94
Mg++	precip	0.056	0.001	4.000	25.4	100.0	0	94
NH4+	precip	0.12	0.00	3.24	52.6	100.0	1	94
NO3-	precip	0.07	0.00	0.27	31.0	100.0	1	94
Na+	precip	0.29	0.00	1.53	131.7	100.0	0	94
Precip	precip	-	0.0	25.6	454.1	100.1	272	366
SO4--	precip	0.45	0.00	1.76	205.1	100.0	0	94
SO4-- corr	precip	0.43	-0.04	1.71	195.4	100.0	0	94
cond	precip	10.19	2.00	36.00	4629.1	98.0	0	89
pH	precip	4.83	4.24	5.98	6797.0	98.9	0	91

RU0013R Pinega

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.38	0.01	3.96	232.9	100.0	1	184
Cl-	precip	0.75	0.06	9.62	456.4	100.0	0	184
K+	precip	0.39	0.04	37.18	235.0	100.0	0	184
Mg++	precip	0.105	0.004	3.192	63.9	100.0	0	184
NH4+	precip	0.35	0.01	18.78	213.2	100.0	1	184
NO3-	precip	0.14	0.01	3.11	86.7	100.0	0	184
Na+	precip	0.49	0.06	5.14	301.3	100.0	0	184
Precip	precip	-	0.0	39.6	608.1	100.1	182	366
SO4--	precip	0.39	0.01	11.66	238.6	100.0	0	184
SO4-- corr	precip	0.35	-0.05	10.75	213.7	100.0	0	184
cond	precip	11.21	3.60	51.40	6818.5	95.3	0	144
pH	precip	5.45	4.16	7.31	2160.1	96.0	0	144

RU0018R Danki

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.36	0.01	2.35	195.4	100.0	0	159
Cl-	precip	0.27	0.02	2.94	148.2	100.0	0	159
K+	precip	0.15	0.02	3.24	84.3	100.0	0	159
Mg++	precip	0.050	0.001	0.479	27.4	100.0	0	159
NH4+	precip	0.33	0.00	2.17	180.7	100.0	0	159
NO3-	precip	0.27	0.01	2.52	144.9	100.0	0	159
Na+	precip	0.20	0.00	3.85	111.3	100.0	0	159
Precip	precip	-	0.0	21.7	546.8	100.1	207	366
SO4--	precip	0.50	0.03	4.01	275.5	100.0	0	159
SO4-- corr	precip	0.48	0.01	916.29	264.9	100.0	0	365
cond	precip	11.99	2.00	78.40	6556.3	97.3	0	131
pH	precip	4.93	3.96	7.16	6444.3	98.0	0	135

RU0020R Lesnoy

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.29	0.01	5.34	245.2	100.0	0	210
Cl-	precip	0.61	0.04	21.99	504.9	100.0	0	210
K+	precip	0.32	0.01	9.65	267.9	100.0	0	210
Mg++	precip	0.037	0.001	0.918	31.1	100.0	0	210
NH4+	precip	0.34	0.01	2.51	280.0	100.0	0	210
NO3-	precip	0.25	0.01	2.47	204.5	100.0	0	210
Na+	precip	0.42	0.05	13.74	346.3	100.0	0	210
Precip	precip	-	0.0	25.1	833.0	100.1	156	366
SO4--	precip	0.37	0.01	4.56	309.8	100.0	0	210
SO4-- corr	precip	0.34	-0.69	4.44	283.0	100.0	0	210
cond	precip	12.52	3.40	192.20	10428.9	98.2	0	163
pH	precip	5.22	4.29	7.05	4995.4	96.1	0	155

SE0005R Bredkälen

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.09	0.03	0.69	12.0	94.4	32	68
Cl-	precip	0.11	0.01	1.18	15.1	94.4	13	68
K+	precip	0.06	0.03	1.10	7.9	94.4	53	68
Mg++	precip	0.028	0.015	0.560	3.9	94.4	56	68
NH4+	precip	0.13	0.01	1.30	18.0	94.0	13	67
NO3-	precip	0.14	0.01	0.87	18.9	94.4	7	68
Na+	precip	0.16	0.03	4.40	21.4	94.4	38	68
Precip	precip	-	0.0	14.4	137.1	99.9	227	352
SO4--	precip	0.17	0.02	0.84	23.8	94.4	0	68
SO4-- corr	precip	0.16	0.01	0.82	21.9	94.4	0	68
cond	precip	10.09	2.00	93.00	1383.8	61.0	0	18
pH	precip	5.04	4.33	6.55	1264.9	98.1	0	99

SE0011R Vavihill

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.14	0.03	0.86	81.2	94.4	3	13
Cl-	precip	1.70	0.35	4.34	969.1	94.4	0	13
K+	precip	0.07	0.03	0.25	42.8	94.4	7	13
Mg++	precip	0.118	0.015	0.240	67.5	94.4	3	13
NH4+	precip	0.51	0.22	2.24	287.8	94.4	0	13
NO3-	precip	0.41	0.20	1.17	232.9	94.4	0	13
Na+	precip	0.99	0.19	2.22	565.5	94.4	0	13
Precip	precip	-	3.2	91.1	569.8	83.0	0	15
SO4--	precip	0.38	0.25	0.76	218.2	94.4	0	13
SO4-- corr	precip	0.30	0.16	0.70	171.2	94.4	0	13
cond	precip	18.03	12.00	38.00	10272.3	94.4	0	13
pH	precip	4.98	4.62	6.43	5959.3	94.4	0	13

SE0012R Aspvreten

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.05	0.03	0.51	22.2	91.0	6	10
Cl-	precip	0.51	0.19	0.78	208.9	91.0	0	10
K+	precip	0.06	0.03	0.21	23.6	91.0	7	10
Mg++	precip	0.036	0.015	0.070	14.8	91.0	5	10
NH4+	precip	0.35	0.01	2.83	145.1	91.0	1	10
NO3-	precip	0.36	0.16	1.77	149.2	91.0	0	10
Na+	precip	0.30	0.03	0.47	124.6	91.0	1	10
Precip	precip	-	0.0	59.8	413.8	96.9	1	12
SO4--	precip	0.31	0.16	1.27	129.1	91.0	0	10
SO4-- corr	precip	0.29	0.15	1.25	118.2	91.0	0	10
cond	precip	15.61	9.00	37.00	6458.1	91.0	0	10
pH	precip	4.64	3.76	6.31	9445.0	91.0	0	10

SE0014R Råö

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.37	0.03	7.69	246.7	97.2	9	141
Cl-	precip	4.61	0.01	98.16	3070.5	97.2	1	141
K+	precip	0.21	0.03	6.31	138.2	97.2	47	141
Mg++	precip	0.323	0.015	5.950	215.4	97.2	10	141
NH4+	precip	0.67	0.03	23.01	443.8	97.2	0	141
NO3-	precip	0.42	0.01	3.18	281.3	97.2	0	141
Na+	precip	2.62	0.03	59.27	1746.3	97.2	3	141
Precip	precip	-	0.0	26.8	666.1	99.9	201	365
SO4--	precip	0.52	0.06	4.71	345.4	97.2	0	141
SO4-- corr	precip	0.30	-0.25	3.19	200.5	97.2	0	141
cond	precip	28.72	3.00	187.00	19130.1	89.7	0	86
pH	precip	5.00	3.88	8.09	6743.8	97.5	0	152

SI0008R Iskrba

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.40	0.02	3.56	495.1	65.9	0	88
Cl-	precip	0.53	0.02	16.68	652.6	99.3	0	138
K+	precip	0.04	0.00	2.37	46.5	98.5	22	128
Mg++	precip	0.055	0.003	0.980	67.6	98.5	10	128
NH4+	precip	0.08	0.00	0.85	104.1	95.8	1	128
NO3-	precip	0.29	0.01	4.39	355.6	99.3	0	138
Na+	precip	0.28	0.01	7.28	348.6	98.5	22	128
Precip	precip	-	0.0	41.0	1233.0	99.9	199	365
SO4--	precip	0.41	0.05	4.05	503.3	99.3	0	138
SO4-- corr	precip	0.38	0.04	4.03	470.2	99.3	0	138
cond	precip	11.61	3.00	43.00	14317.2	96.1	0	105
pH	precip	4.93	4.16	6.50	14601.8	96.1	0	105

SK0002R Chopok

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.13	0.00	1.85	199.3	98.8	0	188
Cl-	precip	0.11	0.01	2.25	171.1	99.0	1	189
K+	precip	0.06	0.01	2.19	94.8	98.8	0	188
Mg++	precip	0.021	0.001	0.387	32.7	98.8	3	188
NH4+	precip	0.41	0.03	4.58	620.9	98.5	0	187
NO3-	precip	0.26	0.02	3.55	398.5	99.0	0	189
Na+	precip	0.07	0.01	1.47	103.5	98.8	0	188
Precip	precip	-	0.0	69.6	1519.8	99.9	142	365
SO4--	precip	0.42	0.04	3.42	639.2	99.0	0	189
SO4-- corr	precip	0.41	0.03	3.37	629.8	99.0	0	189
cond	precip	12.50	2.50	41.20	18990.7	82.1	0	90
pH	precip	4.83	4.16	6.46	22531.8	82.1	0	90

SK0004R Stará Lesná

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.23	0.01	3.39	194.8	86.5	0	111
Cl-	precip	0.17	0.01	4.74	141.9	86.5	0	111
K+	precip	0.10	0.01	1.42	83.8	86.5	0	111
Mg++	precip	0.031	0.001	0.335	26.1	86.5	1	111
NH4+	precip	0.31	0.01	3.23	254.6	85.8	0	110
NO3-	precip	0.25	0.00	2.63	208.7	86.5	5	111
Na+	precip	0.14	0.01	3.09	118.2	86.5	0	111
Precip	precip	-	0.0	43.6	828.7	99.9	196	365
SO4--	precip	0.40	0.06	2.94	332.9	86.5	0	111
SO4-- corr	precip	0.39	0.03	2.90	323.6	86.5	0	111
cond	precip	11.90	5.00	39.50	9864.2	73.9	0	52
pH	precip	4.88	4.18	5.85	11011.0	73.9	0	52

SK0006R Starina

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.30	0.01	5.36	237.1	85.0	0	112
Cl-	precip	0.15	0.02	1.66	118.9	85.0	0	112
K+	precip	0.11	0.02	0.97	88.9	85.0	0	112
Mg++	precip	0.039	0.001	0.386	31.0	85.0	0	112
NH4+	precip	0.46	0.02	1.67	363.4	85.0	0	112
NO3-	precip	0.42	0.06	2.31	330.3	85.0	0	112
Na+	precip	0.20	0.01	7.18	155.5	85.0	0	112
Precip	precip	-	0.0	27.5	788.8	99.9	196	365
SO4--	precip	0.65	0.08	3.79	508.6	85.0	0	112
SO4-- corr	precip	0.64	0.07	3.70	500.8	85.0	0	112
cond	precip	15.81	6.70	41.80	12467.5	67.0	0	53
pH	precip	4.80	4.24	5.81	12378.0	67.0	0	53

SK0007R Topolniky

January 2009 - December 2009

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.35	0.01	5.50	208.4	95.4	0	43
Cl-	precip	0.16	0.03	1.51	96.0	95.4	0	43
K+	precip	0.08	0.01	0.43	46.2	95.4	0	43
Mg++	precip	0.043	0.001	0.325	25.2	95.4	0	43
NH4+	precip	0.45	0.04	2.82	262.8	95.4	0	43
NO3-	precip	0.38	0.04	2.40	224.5	95.4	0	43
Na+	precip	0.13	0.00	1.14	76.9	95.4	0	43
Precip	precip	-	0.0	47.7	587.6	96.6	2	48
SO4--	precip	0.45	0.04	3.17	266.0	95.4	0	43
SO4-- corr	precip	0.44	0.04	3.16	258.5	95.4	0	43
cond	precip	14.59	6.70	34.70	8572.2	85.1	0	30
pH	precip	5.01	4.44	6.30	5776.7	85.1	0	30

Annex 3

Annual statistics on gases and aerosol data

AM0001R Amberd

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.85	1.02	0.36	4.71	0.00	0.02	0.42	3.41	4.65	87.4	0	319
Cl-	aerosol	0.11	0.11	0.06	3.31	0.00	0.01	0.07	0.35	0.60	89.3	0	326
HNO3	air	0.05	0.03	0.04	2.23	0.00	0.01	0.04	0.11	0.17	89.8	0	328
K+	aerosol	0.11	0.09	0.07	2.91	0.00	0.01	0.09	0.29	0.53	87.9	0	321
Mg++	aerosol	0.098	0.144	0.034	5.292	0.000	0.001	0.038	0.456	0.869	88.2	0	322
NH3	air	0.86	0.36	0.78	1.67	0.01	0.40	0.81	1.54	2.15	90.4	0	330
NH4+	aerosol	0.49	0.26	0.42	1.78	0.07	0.15	0.44	0.98	1.34	90.4	0	330
NO2	air	2.23	1.03	1.99	1.62	0.55	0.88	2.04	4.26	5.14	100.0	0	365
NO3-	aerosol	0.27	0.24	0.17	3.13	0.00	0.03	0.21	0.76	1.19	89.8	0	328
Na+	aerosol	0.11	0.10	0.07	3.29	0.00	0.01	0.07	0.34	0.48	87.6	0	320
SO2	air	0.18	0.16	0.12	2.78	0.00	0.02	0.12	0.51	0.92	89.0	0	325
SO4--	aerosol	0.69	0.44	0.54	2.23	0.00	0.14	0.58	1.57	2.74	89.8	0	328
SO4-- corr	aerosol	0.68	0.44	0.53	2.30	0.00	0.13	0.56	1.57	2.73	89.8	0	328

AT0002R Illmitz

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
CO	air	246.63	129.33	220.78	1.57	99.00	126.00	195.00	519.00	975.00	94.0	0	8234
Ca++	aerosol	0.11	0.18	0.07	2.23	0.01	0.02	0.07	0.33	2.09	91.6	0	335
HNO3	air	0.64	0.34	0.56	1.68	0.11	0.22	0.56	1.34	2.25	91.6	0	335
K+	aerosol	0.25	0.23	0.17	2.43	0.02	0.04	0.17	0.73	1.50	91.6	0	335
Mg++	aerosol	0.023	0.035	0.017	2.096	0.005	0.005	0.016	0.059	0.417	91.6	0	335
NH3	air	1.67	0.86	1.45	1.78	0.07	0.54	1.51	3.02	6.32	91.0	0	333
NH4+	aerosol	1.91	5.53	0.76	2.90	0.08	0.16	0.70	3.87	47.20	91.6	0	335
NO2	air	2.75	1.75	2.34	1.75	0.55	1.00	2.26	6.18	11.95	99.5	0	363
NO3-	aerosol	1.25	5.38	0.17	4.15	0.01	0.04	0.12	2.02	43.00	91.6	0	335
Na+	aerosol	0.07	0.05	0.05	1.94	0.01	0.02	0.05	0.16	0.40	91.6	0	335
PM1 mass	pm1	11.53	8.18	9.41	1.89	1.14	2.97	9.23	29.55	49.01	91.8	0	335
PM10 mass	pm10	21.83	15.42	17.91	1.87	2.77	6.21	18.18	52.17	116.82	98.1	0	358
PM25 mass	pm25	17.24	13.58	13.53	1.99	1.48	4.52	13.40	46.56	83.80	97.3	0	355
SO2	air	0.81	1.26	0.43	2.94	-0.01	0.08	0.39	2.94	13.75	94.6	0	8287
SO4--	aerosol	0.97	0.94	0.73	2.09	0.11	0.21	0.71	2.73	7.70	91.6	0	335
SO4-- corr	aerosol	0.96	0.94	0.72	2.10	0.11	0.21	0.70	2.71	7.70	91.6	0	335

AT0005R Vorhegg

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
CO	air	182.72	51.20	176.97	1.27	102.00	129.00	170.00	287.00	521.00	95.6	0	8376
NO2	air	1.11	0.63	1.00	1.56	0.31	0.56	0.91	2.66	4.19	99.5	0	363
PM10 mass	pm10	8.68	6.33	6.47	2.27	0.26	1.58	6.90	20.66	33.21	91.8	0	335
SO2	air	0.21	0.13	0.18	1.63	0.06	0.10	0.17	0.48	1.20	95.3	0	8345

AT0034G Sonnblick

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
CO	air	143.76	30.50	141.01	1.21	62.00	107.00	137.00	197.00	406.00	95.5	0	8370

AT0048R Zoebelboden

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	1.63	1.13	1.38	1.74	0.40	0.63	1.27	3.85	8.23	95.3	0	348
PM10 mass	pm10	8.77	6.34	6.37	2.48	0.12	1.09	7.58	21.80	37.92	99.2	0	362
SO2	air	0.26	0.30	0.17	2.64	0.00	0.02	0.16	0.82	3.37	90.9	0	7967

BE0001R Offagne

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	2.73	2.52	1.99	2.35	0.00	0.31	1.83	7.63	21.66	96.3	0	8433

BE0032R Eupen

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	4.21	3.40	3.21	2.09	0.31	0.92	3.05	10.98	29.28	97.3	0	8523

BE0035R Vezin

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	4.68	3.64	3.57	2.14	0.31	0.92	3.66	12.20	25.62	97.2	0	8516

CH0001G Jungfraujoch

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
CO	air	82.52	18.70	80.65	1.23	44.27	57.54	79.79	117.14	261.89	95.6	0	8376
NO	air	0.02	0.07	0.02	2.55	0.00	0.00	0.00	0.07	1.40	82.4	0	7222
NO2	air	0.10	0.20	0.06	2.31	0.01	0.02	0.05	0.28	2.56	84.1	0	307
NO2	air	0.10	0.24	0.05	2.65	0.00	0.01	0.04	0.31	3.78	80.7	0	7071
PM10 mass	pm10	2.68	3.49	1.60	2.67	0.20	0.40	1.50	9.12	27.30	98.1	0	358
SO2	air	0.04	0.04	0.04	2.02	-0.04	-0.01	0.03	0.11	0.42	95.1	0	347
SO4--	aerosol	0.11	0.10	0.07	2.60	0.01	0.01	0.07	0.33	0.55	98.4	20	359

CH0002R Payerne

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.40	0.34	0.27	2.55	0.07	0.07	0.32	0.99	2.64	99.5	90	363
HNO3	air	0.29	0.06	0.28	1.26	0.16	0.16	0.29	0.42	0.42	100.0	0	27
HNO3+NO3-	air+aerosol	1.08	0.96	0.77	2.26	0.13	0.24	0.68	3.26	4.83	100.0	0	365
K+	aerosol	0.17	0.15	0.14	2.04	0.02	0.05	0.12	0.45	1.63	99.5	9	363
Mg++	aerosol	0.035	0.026	0.028	2.017	0.012	0.012	0.031	0.081	0.186	99.5	127	363
NH3	air	2.35	1.11	2.03	1.71	0.59	0.67	2.15	4.72	5.07	100.0	0	27
NH3+NH4+	air+aerosol	3.89	2.04	3.38	1.73	0.75	1.25	3.51	7.74	13.82	99.7	0	364
NH4+	aerosol	1.46	0.98	1.21	1.98	0.39	0.39	1.19	3.54	3.76	100.0	0	27
NO2	air	3.66	2.51	3.02	1.85	0.70	1.14	3.00	8.47	15.62	100.0	0	365
NO3-	aerosol	0.94	0.65	0.77	1.99	0.29	0.29	0.73	2.45	2.47	100.0	0	27
Na+	aerosol	0.18	0.19	0.12	2.36	0.05	0.05	0.13	0.49	1.80	99.5	144	363
PM1 mass	pm1	8.32	5.62	6.81	1.89	1.10	2.40	6.75	21.60	32.60	98.1	0	358
PM10 mass	pm10	17.67	10.21	15.16	1.74	4.24	6.18	14.96	39.60	59.85	98.1	0	358
PM25 mass	pm25	12.13	9.03	9.62	1.96	2.10	3.19	9.00	33.35	48.60	98.1	0	358
SO2	air	0.35	0.21	0.29	1.80	0.03	0.11	0.29	0.75	1.47	100.0	0	365
SO4--	aerosol	0.54	0.37	0.43	1.98	0.05	0.13	0.45	1.28	2.13	99.7	0	364
SO4-- corr	aerosol	0.52	0.37	0.41	2.06	0.04	0.11	0.43	1.27	2.11	99.2	0	362

CH0003R Tänikon

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	4.45	3.00	3.71	1.82	0.68	1.48	3.68	9.97	21.20	99.7	0	364
PM10 mass	pm10	17.06	10.66	14.39	1.79	2.54	5.35	14.23	40.44	71.60	99.7	0	364

CH0004R Chaumont

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	1.84	1.16	1.57	1.75	0.40	0.65	1.46	4.12	7.71	100.0	0	365
PM10 mass	pm10	8.89	5.81	6.87	2.28	0.08	1.65	7.53	19.52	30.53	100.0	0	365
SO2	air	0.33	0.19	0.28	1.78	0.06	0.11	0.28	0.70	1.18	97.0	0	354

CH0005R Rigi

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.30	0.36	0.18	2.70	0.07	0.07	0.15	0.92	2.69	98.1	169	358
HNO3	air	0.19	0.06	0.18	1.40	0.08	0.08	0.19	0.33	0.35	100.0	0	27
HNO3+NO3-	air+aerosol	0.80	0.72	0.55	2.47	0.04	0.11	0.53	2.34	3.87	99.5	0	363
K+	aerosol	0.08	0.07	0.06	2.05	0.02	0.02	0.06	0.20	0.70	98.1	75	358
Mg++	aerosol	0.029	0.025	0.022	2.003	0.012	0.012	0.012	0.077	0.192	98.1	189	358
NH3	air	0.98	0.71	0.61	3.14	0.03	0.07	0.84	2.30	2.47	100.0	0	27
NH3+NH4+	air+aerosol	1.92	1.39	1.42	2.35	0.11	0.26	1.67	4.65	8.11	97.8	0	357
NH4+	aerosol	0.95	0.60	0.81	1.83	0.28	0.29	0.70	2.28	2.34	100.0	0	27
NO2	air	1.15	1.25	0.79	2.26	0.08	0.23	0.69	3.96	9.30	99.7	0	364
NO3-	aerosol	0.66	0.44	0.56	1.83	0.21	0.21	0.49	1.64	1.64	100.0	0	27
Na+	aerosol	0.12	0.13	0.09	2.10	0.05	0.05	0.05	0.37	0.88	98.1	207	358
PM1 mass	pm1	5.12	3.63	3.84	2.38	0.00	0.70	4.50	12.66	19.00	93.4	0	341
PM10 mass	pm10	10.00	7.10	7.64	2.23	-0.12	1.70	8.46	25.43	38.68	98.4	0	359
PM25 mass	pm25	7.09	5.43	5.31	2.24	0.30	1.27	5.85	17.14	31.80	96.4	0	352
SO2	air	0.23	0.13	0.20	1.68	0.05	0.09	0.20	0.51	0.84	100.0	0	365
SO4--	aerosol	0.41	0.29	0.31	2.20	0.01	0.07	0.34	1.03	1.86	99.5	1	363
SO4-- corr	aerosol	0.40	0.30	0.30	2.33	0.00	0.07	0.33	1.03	1.85	98.1	1	358

CY0002R Ayia Marina

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm25	0.17	0.31	0.09	2.83	0.02	0.02	0.08	0.51	2.72	58.4	0	213
Cl-	pm25	0.25	0.18	0.21	1.83	0.05	0.05	0.21	0.51	1.25	60.8	0	222
K+	pm25	0.03	0.02	0.02	1.69	0.01	0.01	0.02	0.05	0.13	44.4	0	162
Mg++	pm25	0.027	0.034	0.019	2.073	0.006	0.006	0.017	0.071	0.247	50.7	0	185
NH4+	pm25	0.18	0.15	0.12	2.67	0.02	0.02	0.15	0.39	0.88	59.7	0	218
NO2	air	0.70	0.48	0.58	1.82	-0.03	0.23	0.58	1.60	5.57	98.5	0	8630
NO3-	pm25	0.03	0.04	0.02	2.36	0.00	0.00	0.02	0.10	0.32	60.8	0	222
Na+	pm25	0.35	0.28	0.29	1.85	0.10	0.10	0.26	0.90	1.85	60.8	0	222
PM10 mass	pm10	23.39	28.64	17.92	1.94	3.80	5.90	18.95	53.34	363.10	99.2	0	362
PM25 mass	pm25	14.44	11.09	12.20	1.75	1.20	5.10	12.80	27.75	98.80	90.1	0	329
SO2	air	1.11	0.81	0.91	1.98	-0.01	0.30	0.94	2.57	7.61	94.2	0	8255
SO4--	pm25	1.35	0.66	1.21	1.63	0.45	0.45	1.20	2.68	4.37	60.8	0	222

CZ0001R Svratouch

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.75	0.53	0.58	2.19	0.03	0.12	0.64	1.60	4.65	87.9	0	321
NH3+NH4+	air+aerosol	2.04	1.15	1.77	1.71	0.29	0.72	1.79	3.88	9.81	88.4	0	323
NO2	air	2.70	1.05	2.51	1.49	0.76	1.52	2.50	4.57	9.62	86.2	13	315
PM10 mass	pm10	15.10	7.17	13.58	1.59	5.00	6.00	14.00	28.40	45.00	34.2	0	125
SO2	air	0.93	0.89	0.67	2.26	0.05	0.17	0.69	2.45	6.48	87.9	0	321
SO4--	aerosol	0.77	0.65	0.53	2.73	0.00	0.06	0.60	2.04	4.51	87.9	1	321

CZ0003R Kosetice

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
CO	air	109.26	40.74	101.63	1.49	22.10	54.49	102.98	181.50	351.84	94.7	174	8294
HNO3+NO3-	air+aerosol	0.76	0.56	0.62	1.84	0.12	0.23	0.60	1.64	6.86	99.4	0	363
NH3+NH4+	air+aerosol	2.09	1.08	1.86	1.64	0.17	0.89	1.76	4.15	9.17	99.9	0	365
NO2	air	2.59	1.24	2.28	1.71	0.76	0.76	2.47	4.67	8.89	99.4	51	363
NO2	air	2.70	1.68	2.33	1.70	0.52	0.99	2.33	5.65	18.11	95.9	0	8400
PM10 mass	pm10	16.43	10.23	14.03	1.77	2.50	6.00	14.00	36.10	65.00	53.9	5	197
PM10 mass	pm10	18.12	13.64	13.83	2.24	1.00	3.00	15.00	42.00	159.00	98.9	249	8664
PM25 mass	pm25	15.60	8.61	13.67	1.69	2.50	6.00	13.00	31.30	57.00	53.6	4	196
SO2	air	0.67	0.69	0.46	2.29	0.08	0.12	0.41	2.36	4.43	99.1	0	362
SO2	air	1.29	1.25	0.93	2.19	0.12	0.40	0.80	3.87	11.20	96.7	190	8474
SO4--	aerosol	0.79	0.63	0.61	2.06	0.02	0.18	0.62	1.95	5.39	99.1	0	362

DE0001R Westerland

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	2.36	2.27	1.52	2.69	0.15	0.23	1.67	7.10	14.20	97.5	0	356
PM10 mass	pm10	17.21	7.70	15.63	1.56	4.25	7.19	15.85	31.02	50.98	99.7	0	364

DE0002R Langenbrügge

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	2.78	2.27	2.21	1.91	0.52	0.89	2.00	7.40	13.83	92.9	0	339
PM1 mass	pm1	6.88	4.25	5.75	1.88	0.10	2.18	5.90	15.83	32.21	98.9	1	361
PM10 mass	pm10	15.61	8.68	13.70	1.66	3.74	6.19	13.17	32.27	67.71	99.7	0	364
PM25 mass	pm25	11.76	7.88	9.71	1.85	2.46	3.84	9.40	27.55	58.07	100.0	0	365

DE0003R Schauinsland

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	0.91	0.72	0.72	1.90	0.15	0.30	0.63	2.31	5.43	91.8	0	335
PM10 mass	pm10	9.18	7.07	6.79	2.28	0.53	1.49	7.41	23.23	48.76	95.9	0	350
PM25 mass	pm25	6.96	5.42	5.13	2.32	0.10	1.32	5.70	18.01	34.97	97.3	1	355

DE0007R Neuglobsow

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	2.06	2.04	1.49	2.12	0.24	0.55	1.24	6.23	14.22	99.5	0	363
PM10 mass	pm10	13.36	7.67	11.68	1.66	3.26	5.64	10.89	29.09	44.97	99.7	0	364

DE0008R Schmücke

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	2.03	1.52	1.62	1.94	0.30	0.61	1.47	4.98	11.61	98.4	0	359
PM10 mass	pm10	10.27	8.17	7.90	2.11	1.17	2.05	8.50	24.30	76.17	100.0	0	365

DE0009R Zingst

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	2.15	1.57	1.74	1.89	0.33	0.65	1.71	5.30	11.14	98.1	0	358
PM10 mass	pm10	14.52	8.46	12.58	1.70	2.84	5.13	12.15	32.52	51.02	100.0	0	365

DE0044R Melpitz

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm10	0.12	0.08	0.09	2.25	0.00	0.02	0.10	0.29	0.54	97.8	0	357
Ca++	pm25	0.05	0.04	0.03	2.91	0.00	0.00	0.04	0.13	0.31	88.5	0	323
Cl-	pm10	0.28	0.47	0.12	4.12	0.00	0.01	0.13	0.92	5.17	97.8	0	357
Cl-	pm25	0.13	0.18	0.06	4.13	0.00	0.00	0.07	0.51	1.31	88.2	0	322
EC	pm10	1.30	1.16	0.98	2.15	0.02	0.31	0.95	3.70	9.12	97.8	0	357
EC	pm25	1.28	1.22	0.94	2.20	0.00	0.26	0.94	4.21	10.70	88.5	0	323
K+	pm10	0.21	0.38	0.14	2.08	0.02	0.06	0.13	0.56	5.48	97.8	0	357
K+	pm25	0.16	0.23	0.11	2.39	0.01	0.03	0.10	0.48	3.26	88.5	0	323
Mg++	pm10	0.042	0.035	0.032	2.050	0.003	0.009	0.033	0.090	0.285	97.8	0	357
Mg++	pm25	0.033	0.207	0.011	2.591	0.000	0.001	0.010	0.038	3.000	88.5	0	323
NH4+	pm10	1.69	1.59	1.19	2.31	0.08	0.30	1.12	5.31	9.51	97.8	0	357
NH4+	pm25	1.57	1.42	1.13	2.24	0.14	0.30	1.09	4.96	8.75	88.5	0	323
NO3-	pm10	0.88	0.94	0.54	2.82	0.05	0.11	0.56	2.38	7.71	97.8	0	357
NO3-	pm25	0.74	0.83	0.36	3.83	0.02	0.04	0.45	2.17	6.15	88.5	0	323
Na+	pm10	0.24	0.27	0.14	3.08	0.00	0.02	0.14	0.68	2.27	96.2	0	351
Na+	pm25	0.08	0.10	0.05	3.04	0.00	0.00	0.05	0.23	0.92	88.5	0	323
OC	pm10	2.74	1.79	2.29	1.82	0.45	0.88	2.19	6.61	11.18	97.8	0	357
OC	pm25	2.11	1.58	1.67	2.00	0.20	0.58	1.62	5.69	9.05	88.5	0	323
PM10 mass	pm10	20.93	11.05	18.59	1.62	4.90	8.17	18.52	44.38	77.00	97.8	0	357
PM25 mass	pm25	16.54	10.17	13.99	1.78	3.24	5.57	14.07	38.81	59.24	88.5	0	323
SO4--	pm10	0.89	0.60	0.73	1.88	0.12	0.25	0.72	2.23	3.54	97.8	0	357
SO4--	pm25	0.80	0.54	0.65	1.93	0.10	0.21	0.65	2.01	3.01	88.5	0	323

DK0003R Tange

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.27	1.01	0.11	2.70	-0.05	0.02	0.10	0.51	9.29	94.2	9	344
Cl-	aerosol	1.98	6.43	0.35	8.09	-0.03	0.01	0.28	6.46	92.14	94.2	89	344
HNO3+NO3-	air+aerosol	0.78	0.70	0.55	2.40	0.05	0.12	0.57	2.14	5.38	92.8	0	339
K+	aerosol	0.32	1.01	0.17	2.01	-0.01	0.08	0.15	0.39	8.82	94.2	4	344
NH3	air	1.00	1.03	0.58	3.54	0.00	0.03	0.78	3.27	7.75	93.6	20	342
NH4+	aerosol	1.08	0.97	0.73	2.52	0.03	0.14	0.72	3.12	6.67	93.1	1	340
Na+	aerosol	2.32	9.71	0.73	3.39	-0.00	0.12	0.73	3.44	89.22	95.5	6	349
SO2	air	0.19	0.19	0.12	2.54	0.01	0.03	0.12	0.60	1.17	94.7	2	346
SO4--	aerosol	0.62	0.41	0.51	1.90	0.03	0.19	0.50	1.39	2.51	93.3	0	341
SO4-- corr	aerosol	0.54	0.44	0.39	2.36	-0.00	0.08	0.41	1.40	2.48	93.4	0	342

DK0005R Keldsnor

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.16	0.34	0.11	2.29	0.00	0.03	0.11	0.39	6.18	95.3	7	348
Cl-	aerosol	1.38	1.75	0.44	6.47	-0.04	0.01	0.44	5.06	9.93	95.3	66	348
HNO3+NO3-	air+aerosol	1.04	0.82	0.77	2.28	0.03	0.18	0.86	2.66	6.57	95.3	1	348
K+	aerosol	0.15	0.10	0.13	1.79	0.00	0.07	0.13	0.27	1.41	95.0	5	347
NH3	air	0.56	0.58	0.25	5.54	-0.00	0.00	0.41	1.78	3.64	95.3	63	348
NH4+	aerosol	1.33	1.15	0.94	2.41	0.02	0.21	1.00	3.76	8.40	94.2	1	344
NO	air	0.45	0.97	0.20	3.08	-0.05	0.05	0.16	1.72	20.73	89.4	5036	7834
NO2	air	2.79	2.59	1.91	2.45	0.13	0.43	2.02	8.03	24.68	89.4	28	7834
Na+	aerosol	1.25	0.78	0.98	2.17	0.03	0.21	1.15	2.71	4.80	94.8	1	347
PM10 mass	pm10	18.95	14.93	15.94	1.85	0.00	5.70	16.40	38.70	219.50	96.9	15	354
SO2	air	0.57	0.53	0.35	3.08	0.00	0.04	0.42	1.66	4.14	95.3	3	348
SO4--	aerosol	0.76	0.48	0.64	1.88	0.00	0.25	0.66	1.64	3.64	95.0	1	347
SO4-- corr	aerosol	0.66	0.50	0.50	2.29	0.00	0.12	0.54	1.63	3.61	94.8	1	347

DK0008R Anholt

January 2009 - December 2009

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	2.31	0.00	0.02	0.10	0.36	0.76	94.7	7	346
Cl-	aerosol	1.91	2.55	0.59	7.38	-0.04	-0.00	0.82	7.35	14.28	94.7	66	346
HNO3+NO3-	air+aerosol	0.71	0.80	0.49	2.41	0.02	0.11	0.52	1.88	10.82	95.3	1	348
K+	aerosol	0.13	0.08	0.11	1.60	0.01	0.05	0.12	0.22	1.29	94.7	18	346
NH3	air	0.17	0.20	0.07	5.26	-0.02	-0.00	0.10	0.52	1.53	95.8	122	350
NH4+	aerosol	0.84	1.20	0.51	2.73	0.01	0.10	0.54	2.51	17.43	95.3	2	348
NO	air	0.28	0.45	0.18	2.28	-0.00	0.06	0.15	0.86	9.79	88.5	5635	7754
NO2	air	2.15	2.17	1.44	2.47	0.12	0.35	1.44	6.70	24.84	88.5	92	7754
Na+	aerosol	1.56	1.22	1.11	2.49	0.03	0.25	1.23	3.91	6.65	95.5	2	349
SO2	air	0.39	0.59	0.25	2.58	0.00	0.05	0.27	0.94	9.83	95.5	2	349
SO4--	aerosol	0.67	0.78	0.54	1.94	0.00	0.19	0.55	1.41	13.30	95.5	1	349
SO4-- corr	aerosol	0.54	0.77	0.37	2.48	-0.00	0.07	0.41	1.29	12.79	95.6	1	350

DK0031R Ulborg

January 2009 - December 2009

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	2.24	0.00	0.02	0.09	0.24	0.72	98.0	16	358
Cl-	aerosol	1.87	2.52	0.42	9.51	-0.03	-0.00	0.49	7.32	11.98	98.0	105	358
HNO3+NO3-	air+aerosol	0.77	0.69	0.53	2.50	0.03	0.11	0.56	2.07	5.57	97.5	1	356
K+	aerosol	0.14	0.21	0.13	1.54	0.04	0.07	0.12	0.25	3.90	98.0	4	358
NH3	air	0.64	0.96	0.27	4.43	-0.01	0.01	0.26	2.92	5.95	97.5	37	356
NH4+	aerosol	1.06	1.00	0.70	2.57	0.07	0.14	0.72	3.18	6.89	97.7	0	357
Na+	aerosol	1.34	1.24	0.80	3.05	0.04	0.12	0.94	3.90	6.37	97.7	2	357
SO2	air	0.16	0.15	0.10	2.65	0.01	0.02	0.11	0.49	1.10	98.0	21	358
SO4--	aerosol	0.64	0.41	0.54	1.79	0.14	0.20	0.53	1.44	2.67	97.7	0	357
SO4-- corr	aerosol	0.53	0.44	0.38	2.39	0.02	0.07	0.41	1.34	2.63	97.8	0	358

DK0041R Lille Valby

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
PM10 mass	pm10	18.29	10.05	16.29	1.60	4.30	8.15	16.65	34.65	89.10	96.9	5	354

EE0009R Lahemaa

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	2.25	1.84	1.75	2.06	0.13	0.49	1.85	5.53	16.33	97.8	0	357
PM10 mass	pm10	6.88	2.55	6.41	1.45	2.60	3.07	6.50	12.52	15.40	100.0	0	53
SO2	air	1.20	1.27	0.81	2.39	0.03	0.22	0.74	4.03	7.48	95.6	1	349

EE0011R Vilsandi

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	2.08	1.65	1.60	2.16	0.03	0.48	1.73	5.08	11.48	97.5	1	356
SO2	air	0.82	0.56	0.66	1.98	0.03	0.22	0.69	2.01	4.23	96.4	1	352

ES0001R San Pablo de los Montes

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.56	0.20	0.53	1.36	0.29	0.35	0.50	0.96	1.76	99.9	0	365
NH3+NH4+	air+aerosol	1.64	0.96	1.34	1.99	0.09	0.38	1.48	3.35	5.56	99.9	0	365
NO	air	0.12	0.41	0.06	2.25	0.00	0.02	0.06	0.24	5.58	99.1	0	8682
NO2	air	0.86	0.71	0.65	2.21	0.02	0.15	0.70	1.97	7.84	99.1	0	8682
NO3-	pm10	0.42	0.24	0.36	1.74	0.01	0.18	0.34	0.96	1.56	95.9	1	350
PM10 mass	pm10	11.23	7.37	9.03	2.02	1.00	3.00	10.00	23.65	67.00	94.8	0	346
PM25 mass	pm25	6.03	3.39	5.03	1.91	0.50	2.00	6.00	12.00	22.00	93.6	1	342
SO2	air	0.18	0.16	0.14	2.02	0.00	0.04	0.14	0.41	3.26	99.3	0	8700
SO4--	pm10	0.57	0.22	0.54	1.45	0.10	0.32	0.54	0.97	1.87	95.9	0	350

ES0007R Víznar

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.61	0.28	0.56	1.51	0.22	0.28	0.55	1.25	1.79	91.0	0	333
NH3+NH4+	air+aerosol	1.49	0.89	1.18	2.21	0.03	0.29	1.40	3.12	5.41	89.3	0	327
NO	air	0.28	1.28	0.05	4.63	0.00	0.00	0.03	1.14	28.63	99.1	0	8679
NO2	air	1.43	2.21	0.67	3.58	0.01	0.08	0.71	5.48	23.02	99.1	0	8679
NO3-	pm10	0.42	0.25	0.36	1.78	0.01	0.14	0.38	1.03	1.81	94.0	1	344
PM10 mass	pm10	17.10	10.91	13.73	2.03	1.00	4.00	15.00	37.00	71.00	90.7	0	332
PM25 mass	pm25	9.50	5.42	8.04	1.84	0.50	3.00	9.00	20.00	41.00	88.1	1	322
SO2	air	0.24	0.34	0.15	2.51	0.00	0.04	0.12	0.80	6.78	99.1	0	8684
SO4--	pm10	0.57	0.26	0.52	1.56	0.08	0.25	0.51	1.05	1.83	94.0	0	344

ES0008R Niembro

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.62	0.48	0.53	1.68	0.22	0.28	0.48	1.40	4.61	93.2	0	340
NH3	air	0.77	0.49	0.60	2.20	0.13	0.13	0.78	1.53	2.05	90.1	21	47
NH3+NH4+	air+aerosol	1.54	1.00	1.21	2.17	0.03	0.38	1.31	3.37	6.75	95.5	0	349
NO	air	0.18	0.40	0.08	3.06	0.01	0.03	0.05	0.75	6.64	97.9	0	8575
NO2	air	1.32	1.35	0.81	2.97	0.02	0.11	0.90	3.77	18.43	97.9	0	8575
NO3-	pm10	0.42	0.48	0.31	2.01	0.04	0.13	0.27	1.21	4.72	94.4	0	345
PM10 mass	pm10	17.52	9.92	15.39	1.65	3.00	7.00	15.00	36.00	68.00	94.2	0	344
PM25 mass	pm25	9.97	6.54	8.40	1.80	1.00	3.00	8.00	23.00	46.00	89.5	0	327
SO2	air	0.61	0.88	0.38	2.48	0.02	0.10	0.36	1.90	26.74	98.9	0	8660
SO4--	pm10	0.81	0.46	0.71	1.67	0.20	0.31	0.70	1.69	3.02	94.4	0	345

ES0009R Campisabalos

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm10	0.40	0.37	0.25	2.96	0.01	0.04	0.28	1.15	2.36	91.2	10	334
Ca++	pm25	0.06	0.06	0.05	2.23	0.01	0.01	0.05	0.19	0.31	12.7	1	47
Cl-	pm10	1.02	0.47	0.87	1.86	0.15	0.16	1.15	1.89	2.56	13.0	0	48
Cl-	pm25	0.52	0.22	0.45	1.84	0.09	0.09	0.49	0.78	0.79	13.0	0	48
EC	pm10	0.15	0.11	0.12	2.31	0.01	0.02	0.12	0.40	0.47	20.3	0	74
EC	pm25	0.13	0.09	0.10	2.02	0.02	0.03	0.10	0.36	0.46	12.1	0	44
HNO3+NO3-	air+aerosol	0.43	0.20	0.40	1.47	0.17	0.21	0.40	0.77	1.93	90.1	0	329
K+	pm10	0.07	0.07	0.05	2.23	0.01	0.01	0.05	0.18	0.62	91.2	0	334
K+	pm25	0.03	0.02	0.02	2.15	0.01	0.01	0.03	0.08	0.09	12.7	3	47
Mg++	pm10	0.034	0.024	0.026	2.324	0.001	0.010	0.030	0.080	0.150	91.2	6	334
Mg++	pm25	0.006	0.007	0.002	5.003	0.001	0.001	0.001	0.020	0.030	12.7	27	47
NH3	air	1.07	0.77	0.81	2.28	0.13	0.13	0.97	2.59	4.11	95.9	15	50
NH3+NH4+	air+aerosol	1.30	0.68	1.07	2.11	0.03	0.27	1.26	2.36	4.50	90.5	0	331
NH4+	pm10	0.34	0.32	0.29	1.93	0.10	0.10	0.24	1.08	1.86	13.0	0	48
NH4+	pm25	0.34	0.22	0.30	1.70	0.11	0.12	0.28	0.73	1.41	13.0	0	48
NO	air	0.06	0.09	0.04	2.02	0.00	0.01	0.04	0.15	2.25	97.2	0	8517
NO2	air	0.43	0.67	0.28	2.39	0.01	0.06	0.29	1.19	17.55	97.2	0	8517
NO3-	pm10	0.25	0.13	0.22	1.72	0.01	0.09	0.22	0.41	1.27	91.0	4	333
NO3-	pm25	0.13	0.09	0.12	1.58	0.03	0.05	0.12	0.19	0.72	13.0	0	48
Na+	pm10	0.40	0.24	0.30	2.60	0.02	0.02	0.37	0.80	1.35	91.2	27	334
Na+	pm25	0.07	0.04	0.06	1.84	0.02	0.02	0.06	0.17	0.25	12.7	7	47
OC	pm10	2.26	0.95	2.08	1.52	0.80	1.02	2.13	4.18	5.10	20.3	0	74
OC	pm25	1.93	0.72	1.79	1.47	0.57	0.97	1.94	3.40	4.22	12.1	0	44
PM10 mass	pm10	10.75	7.47	8.09	2.30	0.50	2.00	9.00	25.00	48.00	88.2	2	323
PM25 mass	pm25	5.57	3.14	4.45	2.16	0.50	1.00	5.00	11.00	18.00	88.5	13	324
SO2	air	0.22	0.14	0.18	1.84	0.02	0.06	0.20	0.48	1.44	97.6	0	8554
SO4--	pm10	0.54	0.25	0.50	1.55	0.05	0.30	0.49	0.95	2.50	91.0	0	333

ES0010R Cabo de Creus

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.56	0.27	0.51	1.52	0.21	0.28	0.49	1.11	1.88	89.0	0	326
NH3+NH4+	air+aerosol	1.53	0.81	1.30	1.84	0.18	0.35	1.38	3.08	4.56	92.7	0	339
NO2	air	1.16	1.01	0.87	2.18	0.03	0.23	0.86	3.11	14.59	98.6	0	8634
NO3-	pm10	0.46	0.27	0.40	1.77	0.05	0.17	0.38	1.02	1.53	87.9	0	322
PM10 mass	pm10	16.82	5.65	15.89	1.41	5.00	9.00	16.00	27.00	39.00	87.1	0	319
PM25 mass	pm25	8.03	3.83	7.18	1.62	1.00	3.00	7.00	15.20	22.00	86.2	0	315
SO2	air	0.25	0.07	0.24	1.36	0.06	0.14	0.25	0.36	0.84	98.8	0	8654
SO4--	pm10	0.78	0.44	0.68	1.68	0.16	0.32	0.66	1.70	2.79	87.9	0	322

ES0011R Barcarrola

January 2009 - December 2009

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	0.18	0.40	1.40	0.18	0.26	0.37	0.78	1.53	98.1	0	359
NH3+NH4+	air+aerosol	1.38	0.67	1.21	1.72	0.25	0.44	1.27	2.68	3.18	98.9	0	362
NO	air	0.07	0.18	0.03	2.81	0.00	0.01	0.03	0.24	4.96	98.2	0	8598
NO2	air	1.17	1.31	0.86	2.12	0.02	0.25	0.86	2.98	17.43	98.2	0	8598
NO3-	pm10	0.30	0.12	0.28	1.50	0.05	0.15	0.28	0.56	0.78	91.4	0	334
PM10 mass	pm10	14.03	7.25	12.36	1.66	3.00	6.00	12.00	31.00	35.00	90.6	0	331
PM25 mass	pm25	6.89	3.69	5.94	1.75	1.00	2.00	6.00	15.00	19.00	82.2	0	301
SO2	air	0.20	0.28	0.13	2.41	0.00	0.04	0.10	0.66	4.11	98.4	0	8620
SO4--	pm10	0.57	0.28	0.52	1.54	0.19	0.27	0.48	1.13	2.00	91.4	0	334

ES0012R Zarra

January 2009 - December 2009

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	0.28	0.53	1.53	0.21	0.28	0.52	1.10	1.79	95.9	0	351
NH3+NH4+	air+aerosol	1.54	0.92	1.23	2.14	0.05	0.25	1.41	3.12	5.21	94.5	0	346
NO	air	0.09	0.10	0.06	2.05	0.00	0.03	0.07	0.26	2.06	98.3	0	8609
NO2	air	0.98	0.60	0.82	1.96	0.03	0.27	0.87	2.01	7.80	98.3	0	8609
NO3-	pm10	0.47	0.30	0.40	1.74	0.08	0.15	0.38	1.01	2.66	94.0	0	344
PM10 mass	pm10	14.25	8.58	11.77	1.92	2.00	4.00	13.00	29.80	53.00	93.7	0	343
PM25 mass	pm25	6.41	3.61	5.40	1.87	1.00	2.00	6.00	12.00	31.00	94.2	0	345
SO2	air	0.18	0.16	0.13	2.22	0.01	0.04	0.13	0.51	1.58	98.6	0	8640
SO4--	pm10	0.74	0.39	0.64	1.73	0.19	0.26	0.66	1.53	2.21	94.0	0	344

ES0013R Penausende

January 2009 - December 2009

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	0.16	0.33	1.46	0.15	0.21	0.30	0.73	1.03	98.1	0	359
NH3+NH4+	air+aerosol	0.83	0.72	0.55	2.72	0.03	0.07	0.69	2.22	4.74	96.2	0	352
NO	air	0.06	0.10	0.04	2.42	0.00	0.01	0.03	0.20	1.98	98.8	0	8659
NO2	air	1.13	0.83	0.85	2.35	0.03	0.26	0.90	2.74	8.80	98.8	0	8659
NO3-	pm10	0.28	0.19	0.24	1.67	0.03	0.12	0.23	0.56	1.48	93.4	0	342
PM10 mass	pm10	9.03	5.28	7.59	1.84	1.00	3.00	8.00	19.00	34.00	93.4	0	342
PM25 mass	pm25	5.17	3.38	4.26	1.88	1.00	1.70	4.00	12.00	25.00	91.2	0	333
SO2	air	0.25	0.18	0.20	1.99	0.00	0.08	0.20	0.58	2.61	99.1	0	8684
SO4--	pm10	0.43	0.19	0.40	1.50	0.06	0.21	0.39	0.81	1.35	93.4	0	342

ES0014R Els Torms

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.64	0.36	0.56	1.59	0.25	0.30	0.53	1.32	2.44	95.6	0	350
NH3+NH4+	air+aerosol	2.75	1.86	2.23	1.96	0.18	0.68	2.29	5.95	15.34	89.9	0	329
NO	air	0.06	0.12	0.04	2.12	0.00	0.01	0.03	0.16	2.93	98.4	0	8618
NO2	air	0.83	0.90	0.62	2.10	0.04	0.19	0.61	2.16	15.80	98.4	0	8618
NO3-	pm10	0.47	0.33	0.40	1.72	0.12	0.16	0.37	1.01	2.74	92.6	0	339
PM10 mass	pm10	13.64	7.62	11.60	1.81	3.00	4.00	13.00	27.00	45.00	92.1	0	337
PM25 mass	pm25	7.99	5.37	6.48	1.95	1.00	2.00	7.00	18.40	38.00	84.9	0	311
SO2	air	0.31	0.38	0.22	2.04	0.05	0.09	0.19	0.90	5.84	99.3	0	8698
SO4--	pm10	0.74	0.41	0.64	1.71	0.22	0.27	0.63	1.52	2.33	92.6	0	339

ES0016R O Saviñao

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.49	0.31	0.43	1.56	0.21	0.25	0.39	1.11	3.08	95.1	0	348
NH3+NH4+	air+aerosol	1.60	1.05	1.24	2.21	0.11	0.23	1.38	3.64	6.04	95.6	0	350
NO	air	0.06	0.10	0.04	2.79	0.00	0.00	0.03	0.23	1.61	98.5	0	8627
NO2	air	1.08	0.69	0.87	2.06	0.00	0.26	0.89	2.49	7.46	98.5	0	8627
NO3-	pm10	0.27	0.19	0.23	1.64	0.06	0.12	0.21	0.60	1.99	89.6	0	328
PM10 mass	pm10	10.33	6.29	8.79	1.77	2.00	3.00	9.00	21.00	47.00	88.5	0	324
PM25 mass	pm25	6.89	5.60	5.21	2.11	0.50	2.00	5.00	17.00	33.00	76.2	1	279
SO2	air	0.21	0.25	0.15	2.23	0.01	0.06	0.12	0.72	2.98	98.9	0	8667
SO4--	pm10	0.59	0.30	0.52	1.63	0.18	0.24	0.49	1.18	1.79	89.6	0	328

ES0017R Doñana

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.76	0.32	0.70	1.47	0.28	0.41	0.65	1.37	2.16	94.7	0	346
NH3+NH4+	air+aerosol	1.57	0.92	1.32	1.83	0.18	0.43	1.40	3.18	6.59	93.9	0	343
NO	air	0.19	0.44	0.07	3.54	0.00	0.01	0.05	0.85	9.19	95.3	0	8349
NO2	air	1.54	1.42	0.97	3.00	0.02	0.11	1.17	4.18	14.28	95.3	0	8349
NO3-	pm10	0.46	0.20	0.41	1.58	0.08	0.19	0.42	0.85	1.25	89.0	0	325
PM10 mass	pm10	16.17	8.10	14.44	1.67	1.00	7.00	15.50	28.35	100.00	85.4	0	312
SO2	air	0.29	0.36	0.20	2.28	0.00	0.06	0.18	0.91	5.12	95.7	0	8385
SO4--	pm10	0.90	0.43	0.82	1.52	0.28	0.45	0.78	1.82	3.18	89.0	0	325

ES1778R Montseny

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm1	0.02	0.04	0.01	2.73	0.01	0.01	0.01	0.14	0.22	8.2	17	30
Ca++	pm1	0.04	0.06	0.02	3.08	0.01	0.01	0.02	0.12	0.35	8.0	19	59
Ca++	pm10	0.47	0.43	0.29	3.09	0.01	0.03	0.37	1.44	2.00	19.5	0	71
Ca++	pm10	0.64	0.42	0.50	2.12	0.08	0.14	0.55	1.51	1.87	7.0	0	52
Ca++	pm25	0.06	0.07	0.04	3.13	0.01	0.01	0.04	0.21	0.51	23.3	15	85
Ca++	pm25	0.07	0.06	0.05	2.52	0.01	0.01	0.06	0.17	0.41	7.7	4	57
Cl-	pm1	0.43	0.51	0.08	11.70	0.01	0.01	0.31	1.64	1.80	8.0	25	59
Cl-	pm1	0.62	0.63	0.30	4.83	0.01	0.01	0.37	2.22	2.86	8.2	2	30
Cl-	pm10	0.69	0.83	0.41	3.05	0.00	0.05	0.44	2.77	4.39	18.9	2	69
Cl-	pm10	0.81	0.78	0.30	8.02	0.01	0.01	0.61	2.63	3.62	7.0	9	52
Cl-	pm25	0.51	0.54	0.26	4.35	0.01	0.01	0.36	1.57	2.69	23.3	5	85
Cl-	pm25	0.58	0.76	0.09	13.05	0.01	0.01	0.18	2.37	2.59	7.7	23	57
EC	pm1	0.23	0.17	0.18	2.38	0.00	0.00	0.20	0.65	0.80	8.0	1	59
EC	pm10	0.40	0.27	0.31	2.31	0.02	0.06	0.35	0.99	1.20	7.0	0	52
EC	pm25	0.25	0.19	0.20	2.40	0.00	0.00	0.24	0.70	0.75	7.7	2	57
K+	pm1	0.07	0.04	0.06	1.95	0.01	0.02	0.07	0.13	0.15	8.2	0	30
K+	pm1	0.10	0.05	0.08	2.12	0.01	0.01	0.09	0.17	0.24	8.0	2	59
K+	pm10	0.18	0.13	0.14	2.09	0.03	0.04	0.16	0.53	0.65	19.5	0	71
K+	pm10	0.25	0.12	0.22	1.75	0.06	0.07	0.25	0.48	0.49	7.0	0	52
K+	pm25	0.08	0.04	0.06	2.00	0.01	0.02	0.07	0.16	0.22	23.3	2	85
K+	pm25	0.11	0.06	0.10	2.12	0.00	0.01	0.11	0.20	0.23	7.7	3	57
Mg++	pm1	0.008	0.008	0.006	1.651	0.005	0.005	0.005	0.020	0.050	8.0	47	59
Mg++	pm1	0.009	0.008	0.007	1.765	0.005	0.005	0.005	0.029	0.040	8.2	20	30
Mg++	pm10	0.166	0.138	0.116	2.499	0.005	0.030	0.130	0.512	0.550	19.5	1	71
Mg++	pm10	0.218	0.115	0.189	1.809	0.040	0.067	0.210	0.434	0.490	7.0	0	52
Mg++	pm25	0.020	0.017	0.015	2.175	0.005	0.005	0.020	0.051	0.100	7.7	12	57
Mg++	pm25	0.025	0.025	0.016	2.578	0.005	0.005	0.020	0.080	0.140	23.3	24	85
NH4+	pm1	0.58	0.46	0.41	2.53	0.06	0.08	0.46	1.67	1.75	8.2	0	30
NH4+	pm1	0.96	0.65	0.71	2.44	0.06	0.10	0.80	2.23	2.42	8.0	0	59
NH4+	pm10	0.63	0.54	0.39	3.25	0.01	0.02	0.50	1.69	2.63	19.5	0	71
NH4+	pm10	1.54	1.13	1.12	2.59	0.06	0.14	1.33	4.05	4.89	7.0	0	52
NH4+	pm25	0.63	0.52	0.44	2.58	0.03	0.06	0.52	1.87	3.01	23.3	0	85
NH4+	pm25	0.91	0.64	0.65	2.77	0.02	0.05	0.72	2.34	2.50	7.7	0	57
NO3-	pm1	0.11	0.26	0.04	4.77	0.00	0.00	0.02	0.95	1.04	8.2	6	30
NO3-	pm1	0.33	0.34	0.20	3.11	0.01	0.02	0.18	1.23	1.62	8.0	1	59
NO3-	pm10	0.28	0.30	0.17	2.83	0.01	0.03	0.18	0.89	1.57	19.2	0	70
NO3-	pm10	0.85	0.60	0.59	2.88	0.04	0.05	0.76	2.12	2.23	7.0	0	52
NO3-	pm25	0.11	0.18	0.05	3.19	0.00	0.01	0.04	0.52	1.14	23.3	2	85
NO3-	pm25	0.45	0.41	0.27	3.21	0.01	0.02	0.29	1.46	1.70	7.7	0	57
Na+	pm1	0.04	0.06	0.02	3.28	0.01	0.01	0.02	0.14	0.36	8.0	23	59
Na+	pm1	0.05	0.03	0.04	1.97	0.01	0.01	0.04	0.11	0.15	8.2	1	30
Na+	pm10	0.46	0.48	0.30	2.61	0.02	0.08	0.27	1.71	1.93	7.0	0	52
Na+	pm10	0.47	0.46	0.29	3.02	0.01	0.05	0.28	1.55	1.82	19.5	1	71
Na+	pm25	0.09	0.09	0.06	3.03	0.01	0.01	0.07	0.28	0.55	7.7	4	57
Na+	pm25	0.12	0.12	0.08	2.61	0.01	0.01	0.08	0.37	0.76	23.3	4	85
OC	pm1	2.38	1.13	2.15	1.62	0.70	0.80	2.30	4.80	5.90	8.0	0	59
OC	pm10	2.65	1.34	2.35	1.73	0.43	0.76	2.37	5.00	7.82	7.0	0	52
OC	pm25	3.07	1.17	2.91	1.42	1.10	1.59	2.90	6.00	7.30	7.7	0	57
PM1 mass	pm1	9.50	4.10	8.65	1.57	4.30	4.30	9.85	17.34	17.50	8.2	0	30
PM1 mass	pm1	13.30	6.22	11.82	1.69	2.30	4.60	12.60	25.30	29.80	8.0	0	59
PM10 mass	pm10	19.83	9.12	17.54	1.70	4.70	6.18	19.10	35.74	40.30	19.5	0	71
PM10 mass	pm10	27.14	13.03	24.05	1.77	4.73	6.17	27.68	55.82	67.26	7.0	0	52
PM25 mass	pm25	12.48	5.58	11.16	1.64	3.40	4.60	12.30	22.64	26.70	23.3	0	85
PM25 mass	pm25	17.33	8.00	15.42	1.69	4.00	5.34	16.23	31.18	38.60	7.7	0	57
SO4--	pm1	0.48	0.23	0.42	1.73	0.09	0.14	0.47	0.88	0.97	8.0	0	59
SO4--	pm1	0.55	0.49	0.37	2.53	0.07	0.07	0.41	1.85	2.05	8.2	0	30
SO4--	pm10	0.76	0.56	0.55	2.42	0.07	0.10	0.63	1.97	2.79	19.5	0	71
SO4--	pm10	0.78	0.39	0.68	1.88	0.13	0.16	0.80	1.54	1.58	7.0	0	52
SO4--	pm25	0.54	0.27	0.46	1.92	0.04	0.13	0.56	1.00	1.22	7.7	0	57
SO4--	pm25	0.62	0.48	0.46	2.35	0.05	0.09	0.54	1.56	2.91	23.3	0	85

FI0009R Utö

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.06	0.07	0.04	2.29	0.00	0.01	0.04	0.21	0.53	98.6	0	360
Cl-	aerosol	0.40	0.56	0.10	8.43	0.00	0.00	0.17	1.79	2.79	98.6	45	360
HNO3+NO3-	air+aerosol	0.31	0.22	0.24	2.22	0.01	0.05	0.26	0.77	1.31	98.6	1	360
K+	aerosol	0.05	0.04	0.04	2.01	0.01	0.01	0.04	0.12	0.35	98.6	0	360
Mg++	aerosol	0.063	0.053	0.044	2.379	0.003	0.010	0.044	0.186	0.257	98.6	0	360
NH3+NH4+	air+aerosol	0.36	0.28	0.27	2.28	0.01	0.06	0.30	0.97	1.54	98.0	0	358
NH4+	aerosol	0.23	0.20	0.16	2.57	0.00	0.03	0.18	0.65	1.06	98.6	0	360
NO2	air	0.86	0.84	0.58	2.56	-0.24	0.11	0.61	2.47	10.71	97.6	0	8554
Na+	aerosol	0.50	0.45	0.33	2.62	0.01	0.06	0.33	1.53	2.15	98.6	0	360
SO2	air	0.35	0.30	0.27	2.12	0.01	0.08	0.26	0.96	2.60	98.8	1	361
SO4--	aerosol	0.47	0.34	0.35	2.25	0.01	0.08	0.39	1.23	2.15	98.6	1	360
SO4-- corr	aerosol	0.42	0.34	0.30	2.51	-0.01	0.04	0.35	1.18	2.13	98.6	1	361

FI0017R Virolahti II

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.08	0.12	0.04	2.80	0.00	0.01	0.04	0.28	1.21	99.9	1	365
Cl-	aerosol	0.09	0.16	0.02	5.98	0.00	0.00	0.02	0.42	1.06	99.9	81	365
HNO3+NO3-	air+aerosol	0.20	0.16	0.15	2.38	0.00	0.03	0.16	0.56	1.08	99.7	9	364
K+	aerosol	0.05	0.03	0.04	2.05	0.00	0.01	0.05	0.12	0.25	99.9	3	365
Mg++	aerosol	0.028	0.028	0.018	2.677	0.001	0.003	0.018	0.095	0.154	99.9	3	365
NH3+NH4+	air+aerosol	0.38	0.28	0.29	2.17	0.03	0.07	0.33	0.95	1.63	99.4	0	363
NH4+	aerosol	0.23	0.19	0.16	2.48	0.01	0.03	0.17	0.63	1.08	99.9	0	365
NO2	air	1.39	1.32	1.06	1.99	0.11	0.40	0.96	3.77	19.33	98.2	0	8606
Na+	aerosol	0.18	0.20	0.10	3.39	0.00	0.01	0.11	0.65	1.28	99.9	3	365
SO2	air	0.43	0.45	0.26	3.00	0.01	0.04	0.26	1.41	2.88	99.7	2	364
SO4--	aerosol	0.47	0.43	0.35	2.27	0.03	0.07	0.36	1.18	3.98	99.9	0	365
SO4-- corr	aerosol	0.46	0.43	0.33	2.36	0.03	0.07	0.35	1.17	3.97	100.0	0	366

FI0022R Oulanka

January 2009 - December 2009

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	1.83	0.00	0.01	0.01	0.03	0.05	98.8	0	52
Cl-	aerosol	0.03	0.06	0.01	4.94	0.00	0.00	0.01	0.21	0.22	98.8	9	52
HNO3+NO3-	air+aerosol	0.04	0.03	0.04	1.67	0.01	0.02	0.04	0.13	0.15	98.8	1	52
K+	aerosol	0.02	0.02	0.02	1.94	0.01	0.01	0.02	0.07	0.07	98.8	0	52
Mg++	aerosol	0.014	0.008	0.011	1.991	0.001	0.004	0.013	0.031	0.038	98.8	0	52
NH3+NH4+	air+aerosol	0.13	0.08	0.11	1.82	0.04	0.04	0.12	0.29	0.44	96.9	0	51
NH4+	aerosol	0.08	0.06	0.07	1.94	0.01	0.02	0.07	0.19	0.34	98.8	0	52
NO2	air	0.33	0.29	0.23	2.46	-0.01	0.04	0.26	0.90	3.53	95.0	0	8320
Na+	aerosol	0.10	0.07	0.07	2.27	0.00	0.02	0.08	0.23	0.30	98.8	0	52
SO2	air	0.22	0.28	0.13	2.92	0.02	0.03	0.12	0.85	1.35	98.8	0	52
SO4--	aerosol	0.28	0.16	0.23	1.80	0.05	0.07	0.25	0.61	0.77	98.8	0	52
SO4-- corr	aerosol	0.27	0.16	0.22	1.90	0.04	0.06	0.24	0.61	0.77	100.0	0	53

FI0036R Pallas (Matorova)

January 2009 - December 2009

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	2.68	0.00	0.00	0.01	0.04	0.07	99.7	33	364
Cl-	aerosol	0.14	0.23	0.03	7.86	0.00	0.00	0.03	0.66	1.88	99.7	100	364
HNO3+NO3-	air+aerosol	0.04	0.03	0.03	2.28	0.00	0.01	0.03	0.12	0.18	99.7	107	364
K+	aerosol	0.02	0.01	0.01	2.70	0.00	0.00	0.01	0.04	0.10	99.7	34	364
Mg++	aerosol	0.018	0.020	0.011	2.936	0.001	0.002	0.011	0.056	0.148	99.7	13	364
NH3+NH4+	air+aerosol	0.11	0.10	0.07	2.40	0.01	0.02	0.07	0.31	0.70	99.7	0	364
NH4+	aerosol	0.09	0.10	0.06	2.73	0.00	0.01	0.06	0.28	0.70	99.7	1	364
Na+	aerosol	0.14	0.17	0.06	5.06	0.00	0.00	0.08	0.48	1.21	99.7	13	364
SO2	air	0.17	0.42	0.04	5.34	0.01	0.01	0.04	0.85	5.33	99.9	87	365
SO4--	aerosol	0.26	0.26	0.17	2.70	0.00	0.03	0.19	0.76	1.65	99.7	1	364
SO4-- corr	aerosol	0.25	0.26	0.14	3.07	0.00	0.02	0.18	0.76	1.65	99.7	1	365

FI0037R Ähtäri II

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.03	0.02	0.02	2.00	0.00	0.01	0.02	0.09	0.11	98.8	0	52
Cl-	aerosol	0.04	0.06	0.01	5.80	0.00	0.00	0.01	0.19	0.24	98.8	9	52
HNO3+NO3-	air+aerosol	0.12	0.06	0.11	1.72	0.03	0.04	0.11	0.25	0.27	98.8	0	52
K+	aerosol	0.04	0.01	0.04	1.47	0.01	0.02	0.04	0.07	0.08	98.8	0	52
Mg++	aerosol	0.018	0.010	0.016	1.813	0.002	0.007	0.015	0.040	0.050	98.8	0	52
NH3+NH4+	air+aerosol	0.28	0.14	0.25	1.65	0.10	0.10	0.26	0.58	0.66	98.8	0	52
NH4+	aerosol	0.16	0.11	0.13	2.10	0.02	0.03	0.14	0.41	0.51	98.8	0	52
NO2	air	0.53	0.63	0.31	2.97	-0.10	0.04	0.30	1.73	5.82	78.0	0	6830
Na+	aerosol	0.12	0.09	0.10	2.08	0.01	0.03	0.09	0.34	0.36	98.8	0	52
SO2	air	0.21	0.27	0.13	2.53	0.03	0.04	0.10	0.99	1.28	98.8	0	52
SO4--	aerosol	0.38	0.26	0.32	1.93	0.06	0.08	0.33	1.06	1.15	98.8	0	52
SO4-- corr	aerosol	0.37	0.26	0.29	2.03	0.05	0.07	0.32	1.05	1.15	100.0	0	53

FI0096G Pallas (Sammaltunturi)

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	0.19	0.18	0.14	2.29	-0.02	0.03	0.14	0.53	1.82	97.5	0	8545

FR0009R Revin

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	1.61	3.25	0.91	3.38	0.00	0.00	0.58	8.74	17.80	25.9	0	95
NH3+NH4+	air+aerosol	1.52	2.79	1.13	2.81	0.00	0.00	0.98	5.04	23.47	26.2	0	96
NO	air	0.70	0.83	0.60	1.48	0.41	0.47	0.53	1.18	12.90	72.8	0	6373
NO2	air	2.68	2.52	2.02	2.05	0.35	0.68	1.92	7.05	22.02	72.8	0	6373
PM10 mass	pm10	22.66	12.15	20.27	1.58	2.00	10.00	20.00	45.00	102.00	98.7	0	8646
PM25 mass	pm25	15.45	10.05	13.24	1.71	0.00	6.00	13.00	35.00	82.00	98.1	0	8594
SO2	air	0.27	0.37	0.14	4.03	0.00	0.00	0.11	1.02	2.09	28.1	14	103
SO4--	aerosol	0.48	0.45	0.39	2.88	0.00	0.00	0.43	1.54	2.12	28.7	4	105

FR0013R Peyrusse Vieille

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	2.67	6.60	0.83	3.89	0.00	0.02	0.64	18.61	35.07	24.6	0	90
NH3+NH4+	air+aerosol	3.89	7.79	1.85	3.26	0.00	0.08	1.66	16.22	55.02	23.7	0	87
NO	air	0.06	0.20	0.54	1.40	0.00	0.00	0.00	0.47	2.33	72.1	0	6317
NO2	air	1.35	0.92	1.12	1.82	0.30	0.30	1.22	2.74	9.13	72.1	0	6317
PM10 mass	pm10	17.85	8.16	16.13	1.58	1.00	8.00	16.00	34.00	57.00	67.9	0	5945
PM25 mass	pm25	10.83	6.43	9.20	1.79	1.00	4.00	9.00	24.00	45.00	70.0	0	6134
SO2	air	0.25	0.38	0.12	3.74	0.00	0.01	0.14	0.86	2.59	27.0	18	99
SO4--	aerosol	0.81	0.85	0.37	5.11	0.00	0.01	0.54	2.73	4.02	26.5	11	97

FR0015R La Tardière

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	1.68	4.13	0.82	3.64	0.00	0.00	0.64	3.90	30.40	28.1	2	103
NH3+NH4+	air+aerosol	4.03	5.68	2.81	3.10	0.00	0.00	3.07	10.32	53.04	28.7	0	105
NO	air	0.65	1.16	0.79	2.16	0.00	0.00	0.46	2.56	18.74	84.8	0	7432
NO2	air	2.89	1.95	2.35	1.94	0.24	0.64	2.43	6.39	15.83	85.0	0	7448
PM10 mass	pm10	18.43	11.98	15.62	1.76	2.00	6.00	15.00	44.00	87.00	65.8	0	5763
PM25 mass	pm25	11.23	8.55	9.06	1.89	1.00	3.00	9.00	29.00	71.00	69.6	0	6099
SO2	air	0.20	0.20	0.12	3.15	0.00	0.01	0.14	0.64	0.99	28.4	16	104
SO4--	aerosol	0.68	0.62	0.37	4.38	0.01	0.01	0.56	2.21	3.12	28.7	12	105

FR0018R La Coulonche

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
PM10 mass	pm10	13.47	7.89	11.31	1.89	0.00	3.00	12.00	29.00	75.00	47.8	0	4184
PM25 mass	pm25	8.71	6.93	6.96	2.09	0.00	1.00	7.00	24.00	55.00	57.6	0	5046

FR0030R Puy de Dôme

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
CO	air	135.97	31.01	132.77	1.24	67.50	94.30	132.30	196.19	383.00	77.2	0	6761
SO2	air	0.18	0.22	0.13	2.02	0.01	0.05	0.13	0.47	5.99	95.7	0	8381

GB0002R Eskdalemuir

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	0.35	0.32	0.46	1.68	0.00	0.00	0.40	0.90	2.60	93.8	0	8216
NO2	air	1.31	1.04	1.08	2.02	0.00	0.20	1.20	3.10	14.00	93.8	0	8216
SO4--	aerosol	0.38	0.32	0.30	2.01	0.07	0.10	0.28	1.02	1.61	30.5	0	112

GB0006R Lough Navar

January 2009 - December 2009

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	1.85	0.01	0.01	0.04	0.11	0.11	99.7	0	12
NH3	air	0.32	0.24	0.27	1.75	0.13	0.13	0.26	1.03	1.03	99.7	0	12
NH4+	aerosol	0.23	0.14	0.19	1.87	0.08	0.08	0.19	0.51	0.51	99.7	0	12
NO3-	aerosol	0.13	0.08	0.11	1.94	0.04	0.04	0.11	0.31	0.31	83.0	0	10
PM10 mass	pm10	10.20	7.79	8.07	2.13	-7.00	2.00	8.00	24.00	77.00	97.3	0	8527
SO4--	aerosol	0.40	0.39	0.29	2.20	0.03	0.11	0.27	1.29	2.20	31.9	0	117

GB0007R Barcombe Mills

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
SO4--	aerosol	0.67	0.42	0.57	1.81	0.15	0.21	0.56	1.55	2.33	32.1	0	118

GB0013R Yarner Wood

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3	air	0.13	0.07	0.11	1.99	0.03	0.03	0.12	0.26	0.26	99.7	0	12
NH3	air	0.40	0.19	0.35	1.67	0.14	0.14	0.33	0.79	0.79	99.7	0	12
NH4+	aerosol	0.48	0.36	0.38	2.15	0.11	0.11	0.31	1.13	1.13	91.5	0	11
NO	air	0.27	0.50	0.43	1.98	0.00	0.00	0.00	0.70	11.00	87.0	0	7621
NO2	air	1.31	1.52	1.04	2.25	0.00	0.00	0.90	4.00	15.60	87.0	0	7621
NO3-	aerosol	0.36	0.23	0.30	1.94	0.09	0.09	0.30	0.77	0.77	83.0	0	10
SO4--	aerosol	0.54	0.42	0.42	2.11	0.07	0.10	0.44	1.51	2.19	27.5	0	101

GB0014R High Muffles

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3	air	0.14	0.07	0.12	1.92	0.03	0.03	0.12	0.25	0.25	83.0	0	10
NH3	air	0.56	0.45	0.41	2.34	0.07	0.07	0.46	1.66	1.66	83.0	0	10
NH4+	aerosol	0.55	0.38	0.43	2.19	0.09	0.09	0.40	1.29	1.29	83.0	0	10
NO	air	0.55	0.86	0.44	1.95	0.00	0.00	0.40	1.60	10.90	56.2	0	4922
NO2	air	2.28	2.77	1.27	3.18	0.00	0.10	1.20	8.38	19.00	56.2	0	4922
NO3-	aerosol	0.37	0.24	0.29	2.32	0.06	0.06	0.31	0.80	0.80	66.3	0	8
SO4--	aerosol	0.57	0.40	0.48	1.78	0.13	0.20	0.44	1.30	2.42	31.9	0	117

GB0031R Aston Hill

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	0.39	0.50	0.56	1.93	0.00	0.00	0.20	1.40	6.70	90.9	0	7959
NO2	air	1.62	1.88	1.30	2.19	0.00	0.00	1.20	5.00	23.60	90.9	0	7959

GB0033R Bush

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	0.52	2.19	0.65	2.15	0.00	0.00	0.00	1.40	79.30	87.2	0	7639
NO2	air	2.21	2.44	1.59	2.47	0.00	0.00	1.30	7.10	24.90	85.4	0	7477

GB0036R Harwell

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm10	0.12	0.21	0.06	3.28	0.00	0.02	0.02	0.43	3.91	24.7	0	2165
Ca++	pm25	0.04	0.14	0.02	2.76	0.00	0.01	0.01	0.17	8.53	54.9	3762	4805
Cl-	pm10	1.73	1.59	1.07	2.87	0.07	0.20	1.18	5.02	7.81	9.9	0	868
Cl-	pm25	0.85	0.73	0.58	2.53	0.01	0.14	0.60	2.47	3.42	10.5	0	921
K+	pm10	0.10	0.17	0.04	4.07	0.00	0.01	0.07	0.30	2.21	24.7	4060	2165
K+	pm25	0.06	0.14	0.02	3.65	0.00	0.01	0.01	0.24	1.96	54.9	3455	4805
Mg++	pm10	0.086	0.108	0.047	2.877	0.001	0.018	0.039	0.338	0.603	24.7	3078	2165
Mg++	pm25	0.055	0.067	0.036	2.325	0.001	0.018	0.027	0.181	1.019	54.9	2178	4805
NH4+	pm10	0.92	1.52	0.27	6.42	0.00	0.01	0.38	4.06	19.10	24.4	392	2140
NH4+	pm25	0.69	1.20	0.16	7.36	0.00	0.01	0.24	3.19	12.51	54.9	1560	4805
NO	air	1.06	2.02	0.88	2.07	0.00	0.00	0.70	2.80	38.50	98.1	0	8594
NO2	air	3.03	3.38	1.92	2.79	0.00	0.20	1.70	10.20	25.30	98.1	0	8594
NO3-	pm10	0.91	1.07	0.56	2.55	0.09	0.15	0.48	3.25	7.70	19.9	3443	1746
NO3-	pm25	0.64	0.80	0.39	2.59	0.00	0.11	0.34	2.34	8.45	49.6	508	4344
Na+	pm10	1.15	1.17	0.75	2.64	0.06	0.13	0.88	3.08	18.04	23.7	0	2077
Na+	pm25	0.65	0.70	0.43	2.42	0.03	0.11	0.42	1.81	7.96	48.7	0	4269
PM10 mass (lvs)	pm10	13.80	8.48	11.99	1.67	3.00	6.00	12.00	34.00	63.00	92.9	0	339
PM10 mass(TEOM)	pm10	16.21	9.52	14.09	1.71	-3.00	6.00	14.00	34.00	223.00	94.6	0	8284
PM25 mass (lvs)	pm25	8.68	7.64	6.60	2.04	1.00	2.00	6.00	27.00	51.00	88.2	0	322
PM25 mass(TEOM)	pm25	9.41	4.87	8.40	1.67	-4.00	3.00	9.00	18.00	45.00	75.1	0	6577
SO2	air	0.90	1.12	1.02	1.84	0.00	0.00	0.70	2.30	41.70	96.7	0	8467
SO4--	pm10	0.75	0.52	0.64	1.77	0.06	0.27	0.61	1.71	5.10	20.2	0	1766
SO4--	pm25	0.53	0.40	0.41	2.21	0.00	0.11	0.42	1.34	3.62	49.6	0	4345

GB0037R Ladybower Res.

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	0.67	1.12	0.59	1.78	0.00	0.00	0.60	1.40	37.40	77.4	0	6781
NO2	air	2.97	3.16	1.95	2.65	0.00	0.30	2.00	9.60	25.40	77.4	0	6781
SO2	air	1.36	1.66	1.42	1.90	0.00	0.00	1.20	3.70	51.30	79.4	0	6953

GB0038R Lullington Heath

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	0.61	1.16	0.60	2.19	0.00	0.00	0.40	1.80	23.40	93.9	0	8225
NO2	air	3.17	2.41	2.54	1.93	0.00	0.90	2.40	8.20	19.70	93.9	0	8225
SO2	air	0.81	1.05	1.03	2.02	0.00	0.00	0.70	2.40	13.70	95.9	0	8400

GB0043R Narberth

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	0.61	0.59	0.56	1.74	0.00	0.00	0.60	1.20	29.80	92.5	0	8100
NO2	air	1.57	1.63	1.20	2.01	0.00	0.40	1.20	4.50	34.90	92.5	0	8100
PM10 mass	pm10	11.47	16.74	8.79	2.23	-4.00	1.00	9.00	28.00	633.00	96.3	0	8436
SO2	air	1.36	1.20	1.35	1.77	0.00	0.00	1.20	3.10	37.60	96.1	0	8421

GB0045R Wicken Fen

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	1.26	3.10	0.70	2.59	0.00	0.00	0.60	4.20	50.90	94.2	0	8256
NO2	air	3.55	3.36	2.48	2.37	0.00	0.60	2.40	10.50	29.40	94.2	0	8256
SO2	air	0.87	0.91	0.97	1.92	0.00	0.00	0.70	2.60	9.70	98.3	0	8611

GB0048R Auchencorth Moss

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm10	0.17	0.18	0.10	3.07	0.00	0.01	0.11	0.48	1.16	47.8	255	4185
Ca++	pm25	0.10	0.08	0.06	2.78	0.00	0.01	0.07	0.26	0.63	48.6	365	4255
Cl-	pm10	0.97	1.06	0.55	3.16	0.01	0.09	0.60	3.03	7.32	20.2	0	1770
Cl-	pm25	0.59	0.60	0.37	2.78	0.00	0.08	0.41	1.76	4.56	18.8	0	1644
HNO3	air	0.02	0.05	0.01	2.61	0.00	0.00	0.01	0.04	1.39	15.7	353	1379
K+	pm10	0.15	0.32	0.08	2.79	0.00	0.01	0.07	0.52	2.67	49.3	521	4316
K+	pm25	0.19	0.53	0.07	3.06	0.00	0.01	0.06	0.55	3.33	49.1	530	4297
Mg++	pm10	0.112	0.255	0.049	3.313	0.001	0.006	0.052	0.235	1.929	49.2	376	4309
Mg++	pm25	0.073	0.126	0.038	3.136	-0.001	0.005	0.042	0.220	2.257	49.0	481	4289
NH3	air	1.12	1.61	0.68	2.56	0.03	0.16	0.63	3.58	22.82	21.3	19	1870
NH4+	pm10	0.59	1.00	0.31	2.95	0.00	0.06	0.29	2.17	10.57	49.3	47	4320
NH4+	pm25	0.60	0.96	0.31	3.03	0.00	0.06	0.28	2.27	10.03	49.0	218	4290
NO	air	0.13	0.94	0.06	2.40	-4.33	0.03	0.04	0.38	51.71	99.1	16102	17364
NO2	air	1.15	1.51	0.72	2.78	-0.27	0.09	0.69	3.80	20.19	99.1	2962	17359
NO3-	pm10	0.28	0.66	0.09	4.49	0.00	0.01	0.10	1.03	6.93	41.0	440	3595
NO3-	pm25	0.25	0.65	0.08	4.63	0.00	0.00	0.08	0.99	6.62	39.9	530	3497
Na+	pm10	0.91	0.88	0.60	2.60	0.00	0.12	0.64	2.99	14.17	48.9	105	4284
Na+	pm25	0.70	0.91	0.43	2.62	0.00	0.08	0.44	2.32	7.87	48.8	0	4279
PM10 mass(TEOM)	pm10	6.61	7.88	5.40	2.31	-4.00	-1.00	5.00	20.00	138.00	54.1	0	4735
PM10 mass (lvs)	pm10	7.00	5.37	5.66	1.95	0.00	2.00	6.00	15.55	39.00	95.3	0	348
PM25 mass(TEOM)	pm25	3.36	5.76	3.41	2.39	-4.00	-2.00	2.00	14.00	131.00	97.6	0	8547
PM25 mass (lvs)	pm25	4.46	4.38	3.57	2.02	-1.00	1.00	4.00	12.00	30.00	87.9	0	321
SO2	air	0.10	0.21	0.05	2.62	0.00	0.01	0.05	0.28	2.84	15.8	91	1385
SO2	air	0.19	0.78	0.09	3.52	-1.16	-0.06	0.07	0.60	27.29	99.2	12868	17380
SO4--	pm10	0.43	0.46	0.28	2.82	0.00	0.06	0.31	1.29	6.26	41.2	0	3611
SO4--	pm25	0.40	0.44	0.26	2.88	0.00	0.05	0.29	1.24	5.11	39.7	0	3478

GB0050R St. Osyth

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
CO	air	158.89	48.42	152.95	1.30	103.00	111.50	145.90	257.40	557.70	95.4	0	8353
NO	air	0.80	2.56	0.62	3.00	0.00	0.00	0.20	3.30	102.20	96.3	0	8433
NO2	air	3.57	3.45	2.36	2.64	0.00	0.40	2.40	10.90	42.20	96.3	0	8433

GB0051R Market Harborough

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
CO	air	204.50	74.16	192.25	1.43	103.00	103.00	197.30	300.30	1690.30	77.7	0	6807
NO	air	0.55	1.55	0.64	2.59	0.00	0.00	0.00	2.30	34.40	92.4	0	8097
NO2	air	3.64	3.44	2.59	2.26	0.00	0.70	2.40	11.20	24.20	92.4	0	8097

GB0053R Charlton Mackrell

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	0.64	1.29	0.66	2.15	0.00	0.00	0.40	1.90	26.30	95.5	0	8370
NO2	air	2.74	2.42	2.04	2.25	0.00	0.50	2.00	7.80	18.20	95.5	0	8370

GB0054R Glen Saugh

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3	air	0.10	0.05	0.09	1.62	0.04	0.04	0.09	0.20	0.20	83.8	0	10
NH3	air	0.36	0.34	0.24	2.62	0.06	0.06	0.30	1.19	1.19	83.8	0	10
NH4+	aerosol	0.36	0.39	0.26	2.20	0.07	0.07	0.22	1.40	1.40	83.8	0	10
NO3-	aerosol	0.18	0.06	0.17	1.40	0.11	0.11	0.16	0.30	0.30	58.6	0	7

GE0001R Abastumani

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Cl-	aerosol	0.18	0.21	0.11	2.48	0.02	0.03	0.10	0.61	1.15	14.2	0	52
HNO3	air	0.61	1.88	0.17	3.67	0.00	0.00	0.12	4.72	11.85	14.2	0	52
HNO3+NO3-	air+aerosol	0.81	2.02	0.24	4.12	0.01	0.02	0.24	5.20	12.06	14.2	0	52
NH3	air	0.09	0.18	0.14	2.98	-0.04	-0.02	0.00	0.56	0.85	14.2	0	52
NH3+NH4+	air+aerosol	0.19	0.21	0.10	3.73	-0.01	0.00	0.10	0.68	0.95	14.2	0	52
NH4+	aerosol	0.09	0.08	0.07	2.24	0.00	0.01	0.07	0.27	0.41	14.2	0	52
NO3-	aerosol	0.11	0.19	0.05	3.29	0.00	0.00	0.04	0.34	1.29	14.2	0	52
SO2	air	0.34	0.49	0.20	2.62	0.02	0.06	0.17	1.54	2.47	14.2	0	52
SO4--	aerosol	0.38	0.34	0.26	2.44	0.03	0.06	0.22	1.18	1.53	14.2	0	52
SO4-- corr	aerosol	0.37	0.34	0.24	2.67	0.01	0.05	0.22	1.16	1.52	14.2	0	52

GR0001R Aliartos

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	1.54	3.02	0.81	2.43	0.50	0.50	0.50	7.00	41.10	66.6	0	5830
NO2	air	4.32	3.63	2.96	2.53	0.30	0.60	3.10	11.90	22.60	66.6	0	5830
SO2	air	1.49	1.78	1.29	1.49	1.10	1.10	1.10	3.10	48.10	96.2	0	8429

HU0002R K-puszta

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3	air	0.28	0.26	0.21	2.17	0.01	0.06	0.24	0.58	2.19	99.4	2	363
NH3	air	1.26	0.82	0.89	2.82	0.02	0.14	1.11	2.69	3.91	99.4	11	363
NH4+	aerosol	1.12	1.12	0.70	2.99	0.01	0.13	0.75	3.50	6.71	99.4	5	363
NO2	air	1.90	1.15	1.63	1.72	0.27	0.74	1.59	4.24	7.88	99.4	0	363
NO3-	aerosol	0.55	0.59	0.36	2.48	0.02	0.09	0.31	1.86	4.48	99.4	0	363
PM10 mass	pm10	27.83	19.50	22.49	1.95	1.47	7.05	23.69	64.54	176.35	99.2	0	8687
SO2	air	1.38	2.13	0.70	3.27	0.01	0.09	0.66	4.95	19.26	99.4	1	363
SO4--	aerosol	1.37	1.42	1.02	2.08	0.16	0.33	0.98	3.58	10.98	99.4	0	363

IE0001R Valentia Observatory

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.11	0.10	0.08	2.37	0.03	0.03	0.09	0.29	1.09	99.7	109	365
HNO3+NO3-	air+aerosol	0.25	0.40	0.15	2.44	0.01	0.05	0.12	1.00	3.36	99.5	2	364
K+	aerosol	0.12	0.10	0.09	2.21	0.03	0.03	0.10	0.27	1.11	99.7	80	365
Mg++	aerosol	0.279	0.290	0.165	3.124	0.025	0.025	0.210	0.760	3.370	99.7	69	365
NH3+NH4+	air+aerosol	0.66	0.64	0.49	2.14	0.04	0.22	0.44	1.97	4.65	99.7	7	365
NO2	air	1.10	1.30	0.73	2.44	0.05	0.20	0.70	3.40	9.80	94.2	6	345
Na+	aerosol	2.38	2.22	1.48	3.22	0.03	0.16	1.89	6.13	24.99	99.7	9	365
SO2	air	0.15	0.25	0.09	2.66	0.01	0.02	0.07	0.53	2.16	99.7	11	365
SO4--	aerosol	0.37	0.26	0.28	2.32	0.01	0.06	0.32	0.80	2.09	99.7	8	365
SO4-- corr	aerosol	0.17	0.24	0.09	3.66	-0.09	-0.01	0.08	0.71	1.67	99.7	8	365

IE0005R Oak Park

January 2009 - December 2009

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	2.04	-0.01	0.02	0.07	0.23	0.54	99.7	10	364
K+	aerosol	0.07	0.04	0.06	1.61	0.01	0.03	0.06	0.14	0.34	99.7	0	364
Mg++	aerosol	0.107	0.086	0.081	2.314	-0.010	0.010	0.090	0.280	0.590	99.7	15	364
NH4+	aerosol	0.67	0.86	0.47	2.10	0.10	0.18	0.38	2.17	8.62	99.7	0	364
NO3-	aerosol	0.35	0.66	0.17	3.15	0.02	0.03	0.13	1.20	7.00	99.7	0	364
Na+	aerosol	0.94	0.70	0.70	2.29	0.04	0.15	0.77	2.29	4.74	99.7	0	364
SO4--	aerosol	0.40	0.33	0.33	1.83	0.09	0.15	0.30	1.00	2.47	99.7	0	364
SO4-- corr	aerosol	0.32	0.34	0.22	2.37	0.02	0.06	0.21	0.97	2.37	99.7	0	364

IE0006R Malin Head

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.10	0.06	0.09	1.83	0.02	0.03	0.09	0.22	0.50	99.5	0	363
K+	aerosol	0.12	0.09	0.10	1.90	0.02	0.04	0.10	0.30	0.54	98.6	0	360
Mg++	aerosol	0.269	0.236	0.196	2.278	0.020	0.050	0.220	0.688	2.470	100.0	0	365
NH4+	aerosol	0.62	0.69	0.40	2.40	0.09	0.14	0.29	2.33	3.52	97.8	0	357
NO3-	aerosol	0.23	0.31	0.11	3.59	0.00	0.02	0.10	0.74	2.07	99.2	0	362
Na+	aerosol	1.77	1.41	1.18	2.89	0.01	0.15	1.43	4.58	7.42	100.0	1	365
SO4--	aerosol	0.41	0.25	0.36	1.65	0.10	0.17	0.34	0.88	1.85	100.0	0	365
SO4-- corr	aerosol	0.27	0.28	0.17	2.89	-0.01	0.01	0.17	0.81	1.81	100.0	0	365

IE0008R Carnsore Point

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.16	0.09	0.13	1.88	0.02	0.05	0.13	0.35	0.51	98.1	0	358
K+	aerosol	0.15	0.09	0.13	1.89	0.02	0.04	0.13	0.34	0.48	98.1	0	358
Mg++	aerosol	0.414	0.308	0.298	2.451	0.010	0.059	0.335	1.051	1.580	98.1	1	358
NH4+	aerosol	0.51	0.50	0.39	2.01	0.09	0.15	0.33	1.56	3.46	98.1	0	358
NO3-	aerosol	0.28	0.33	0.16	2.93	0.01	0.03	0.14	0.89	2.46	98.1	0	358
Na+	aerosol	3.38	2.39	2.52	2.33	0.10	0.50	2.77	8.00	12.32	98.1	0	358
SO4--	aerosol	0.56	0.27	0.51	1.58	0.11	0.23	0.52	1.09	2.14	98.1	0	358
SO4-- corr	aerosol	0.28	0.27	0.19	2.60	-0.01	0.03	0.20	0.81	2.01	98.1	0	358

IE0031R Mace Head

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
PM25 mass	pm25	8.60	6.07	6.72	2.17	0.05	1.73	7.30	19.70	68.40	82.3	0	7212

IS0002R Irafoss

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.17	0.07	0.16	1.49	0.00	0.10	0.16	0.26	0.78	97.7	0	357
Cl-	aerosol	1.84	1.78	1.37	2.06	0.35	0.47	1.22	5.36	12.50	97.7	0	357
K+	aerosol	0.04	0.02	0.04	1.41	0.02	0.03	0.04	0.08	0.13	97.7	0	357
Mg++	aerosol	0.126	0.105	0.101	1.877	0.000	0.040	0.090	0.321	1.080	97.7	0	357
Na+	aerosol	0.91	0.80	0.70	2.01	0.02	0.29	0.63	2.75	5.74	97.7	0	357
SO2	air	0.08	0.09	0.05	2.69	0.01	0.01	0.05	0.28	0.56	97.2	161	355
SO4--	aerosol	0.47	0.35	0.37	2.04	0.00	0.13	0.35	1.22	2.05	97.7	0	357
SO4-- corr	aerosol	0.40	0.34	0.31	2.14	-0.09	0.03	0.29	1.07	2.00	97.8	0	358

IS0091R Storhofdi

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Cl-	aerosol	9.91	5.79	8.73	1.68	2.26	2.63	9.62	28.36	33.14	99.8	0	24
NO3-	aerosol	0.05	0.04	0.04	2.50	0.01	0.01	0.05	0.12	0.12	99.9	0	25
SO4--	aerosol	0.56	0.21	0.52	1.43	0.25	0.26	0.56	1.13	1.25	99.8	0	24
SO4-- corr	aerosol	0.10	0.18	0.12	2.82	-0.29	-0.24	0.05	0.46	0.47	99.9	0	25

IT0001R Montelibretti

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3	air	0.19	0.16	0.13	2.45	0.02	0.03	0.14	0.50	0.86	92.3	0	337
NH3	air	1.86	0.81	1.66	1.68	0.12	0.72	1.84	3.22	4.58	92.1	0	336
NH4+	aerosol	1.09	0.64	0.89	2.00	0.08	0.23	0.97	2.33	3.65	92.3	0	337
NO2	air	4.43	2.12	3.86	1.76	0.40	1.49	4.29	8.00	11.13	89.3	0	326
NO3-	aerosol	0.55	0.35	0.45	1.89	0.08	0.15	0.49	1.26	2.43	92.3	0	337
NO3-	pm10_pm25	0.25	0.20	0.18	2.33	0.02	0.03	0.20	0.64	1.34	92.1	0	336
NO3-	pm25	0.30	0.28	0.20	2.59	0.02	0.05	0.19	0.92	1.46	92.3	0	337
PM10 mass	pm10	29.86	14.60	26.95	1.65	0.00	9.54	29.30	51.51	154.60	92.3	0	337
SO2	air	0.36	0.26	0.28	2.10	0.04	0.07	0.31	0.81	1.84	92.3	0	337
SO4--	aerosol	0.84	0.52	0.68	2.05	0.02	0.19	0.77	1.77	3.15	92.3	0	337
SO4--	pm10_pm25	0.10	0.09	0.07	2.12	0.02	0.02	0.07	0.30	0.74	92.3	0	337
SO4--	pm25	0.74	0.50	0.58	2.20	0.03	0.13	0.67	1.64	2.96	92.1	0	336

IT0004R Ispra

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NH4+	pm25	1.41	1.58	0.82	3.03	0.01	0.13	0.91	4.64	9.73	95.5	0	349
NO3-	pm25	0.72	1.26	0.19	5.80	0.00	0.01	0.15	3.29	8.67	93.9	0	343
PM25 mass	pm25	19.07	16.91	13.02	2.58	0.08	2.33	12.97	54.73	82.13	97.8	0	358
SO4--	pm25	0.78	0.55	0.56	2.54	0.01	0.11	0.70	1.82	3.25	97.2	0	355

KZ0001R Borovoe

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Cl-	pm10	0.15	0.24	0.09	2.76	0.00	0.02	0.07	0.64	2.12	52.5	0	192
NO3-	pm10	0.10	0.09	0.07	2.35	0.00	0.02	0.06	0.29	0.60	52.6	0	192
SO4--	pm10	0.53	0.39	0.40	2.33	0.01	0.07	0.45	1.29	2.44	53.1	0	193

LT0015R Preila

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.56	0.47	0.42	2.22	0.03	0.11	0.46	1.48	3.41	98.4	0	360
NH3+NH4+	air+aerosol	1.52	1.23	1.15	2.16	0.16	0.33	1.23	3.55	7.93	98.1	0	359
NO2	air	0.83	0.53	0.71	1.73	0.14	0.29	0.68	1.85	3.74	96.1	0	351
SO2	air	0.39	0.59	0.24	2.45	0.04	0.08	0.20	1.39	5.70	98.1	0	359
SO4--	aerosol	0.83	0.51	0.72	1.72	0.00	0.32	0.72	1.86	3.33	98.3	0	359

LV0010R Rucava

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm25	0.26	0.26	0.16	2.62	0.02	0.04	0.13	0.88	1.10	86.6	3	46
Cl-	pm25	0.25	0.18	0.19	2.09	0.03	0.05	0.20	0.69	0.74	86.6	0	46
HNO3+NO3-	air+aerosol	0.44	0.37	0.33	2.27	0.03	0.08	0.35	1.10	3.18	99.1	0	362
K+	pm25	0.10	0.06	0.08	1.92	0.01	0.02	0.08	0.24	0.26	86.6	11	46
Mg++	pm25	0.023	0.019	0.017	2.172	0.002	0.010	0.010	0.060	0.088	86.6	34	46
NH3+NH4+	air+aerosol	0.81	0.49	0.67	1.91	0.07	0.20	0.73	1.68	3.67	99.4	0	363
NH4+	aerosol	0.58	0.44	0.40	2.83	0.01	0.04	0.50	1.32	3.14	98.5	31	360
NO2	air	0.68	0.48	0.54	2.12	0.05	0.15	0.56	1.64	3.39	97.4	13	356
NO3-	aerosol	0.04	0.08	0.02	3.12	0.00	0.00	0.02	0.17	0.74	99.9	53	365
NO3-	pm25	0.42	0.22	0.36	1.75	0.09	0.13	0.35	0.93	0.96	86.6	0	46
Na+	pm25	0.49	0.71	0.17	4.75	0.02	0.02	0.17	2.21	2.34	86.6	16	46
PM10 mass	pm10	18.77	13.16	14.74	2.07	1.40	3.98	16.00	48.82	65.60	74.2	0	271
PM25 mass	pm25	16.74	12.94	11.84	2.56	0.10	2.10	13.10	43.18	66.20	72.1	0	263
SO2	air	0.38	0.53	0.23	2.59	0.02	0.05	0.23	1.43	4.74	99.9	0	365
SO4--	aerosol	0.50	0.41	0.38	2.23	0.02	0.08	0.42	1.37	3.35	99.6	0	364
SO4--	pm25	0.76	0.45	0.39	8.42	0.00	0.00	0.67	1.79	2.13	86.6	4	46

LV0016R Zoseni

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm25	0.20	0.26	0.09	4.09	0.00	0.01	0.12	0.95	1.26	80.8	10	43
Cl-	pm25	0.10	0.07	0.07	3.40	0.00	0.00	0.09	0.24	0.24	80.8	4	43
HNO3+NO3-	air+aerosol	0.28	0.24	0.20	2.19	0.01	0.06	0.21	0.75	1.92	96.3	0	352
K+	pm25	0.04	0.03	0.03	2.27	0.01	0.01	0.04	0.11	0.16	80.8	20	43
Mg++	pm25	0.018	0.015	0.014	1.978	0.002	0.010	0.010	0.050	0.070	80.8	36	43
NH3+NH4+	air+aerosol	0.71	0.41	0.59	1.86	0.08	0.19	0.63	1.57	2.14	99.9	0	365
NH4+	aerosol	0.47	0.34	0.34	2.62	0.01	0.04	0.40	1.21	1.91	99.9	26	365
NO2	air	0.42	0.48	0.27	2.67	0.01	0.05	0.28	1.35	4.78	99.4	53	363
NO3-	aerosol	0.01	0.02	0.01	2.23	0.00	0.00	0.01	0.03	0.24	96.3	118	352
NO3-	pm25	0.20	0.09	0.18	1.51	0.08	0.08	0.19	0.43	0.49	80.8	0	43
Na+	pm25	0.41	0.59	0.15	4.17	0.02	0.02	0.10	1.81	2.02	80.8	20	43
PM10 mass	pm10	16.75	13.02	12.48	2.26	1.00	2.75	13.50	50.73	63.60	57.5	0	210
PM25 mass	pm25	11.51	8.71	8.49	2.39	0.30	1.50	9.70	27.61	59.40	54.2	0	198
SO2	air	0.28	0.45	0.14	2.92	0.00	0.03	0.14	1.08	3.98	96.1	2	351
SO4--	aerosol	0.48	0.41	0.36	2.20	0.01	0.10	0.36	1.32	2.61	99.9	2	365
SO4--	pm25	0.56	0.31	0.49	1.72	0.10	0.15	0.46	1.35	1.40	80.8	0	43

MD0013R Leova II

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.71	1.67	0.36	3.46	0.01	0.09	0.40	1.73	24.36	85.7	14	313
Cl-	aerosol	0.56	0.94	0.27	3.49	0.01	0.03	0.27	1.86	8.65	87.9	9	321
HNO3	air	0.27	0.22	0.20	2.20	0.01	0.06	0.23	0.66	1.48	90.1	0	329
HNO3+NO3-	air+aerosol	1.26	1.85	0.69	2.78	0.08	0.17	0.59	5.55	12.30	89.5	0	327
K+	aerosol	0.27	0.34	0.16	2.96	0.01	0.02	0.17	0.89	3.15	88.1	13	322
Mg++	aerosol	0.122	0.377	0.043	3.656	0.005	0.005	0.050	0.379	4.810	83.8	33	306
NH3	air	0.95	1.34	0.40	4.61	0.01	0.02	0.46	3.74	10.59	81.8	13	299
NH3+NH4+	air+aerosol	1.59	1.82	0.73	4.50	0.01	0.05	0.77	5.54	10.59	90.9	7	332
NH4+	aerosol	0.94	1.23	0.32	6.18	0.01	0.01	0.42	3.36	7.04	71.2	20	260
NO3-	aerosol	1.09	1.92	0.28	7.23	0.01	0.01	0.39	5.65	12.09	81.8	28	299
Na+	aerosol	0.30	0.74	0.13	3.50	0.01	0.01	0.13	1.12	10.33	82.1	15	300
PM10 mass	pm10	15.62	15.94	3.34	14.80	0.05	0.05	12.60	45.16	84.30	89.8	91	328
SO2	air	0.75	1.96	0.20	4.18	0.01	0.03	0.17	4.57	13.73	88.7	8	324
SO4--	aerosol	0.56	0.91	0.12	8.41	0.01	0.01	0.14	2.57	7.16	82.9	60	303
SO4-- corr	aerosol	0.53	0.89	0.17	8.81	-0.15	-0.01	0.12	2.52	6.97	82.9	60	303

ME0008R Zabljak

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	2.85	1.21	2.71	1.31	2.50	2.50	2.50	6.00	9.00	89.2	300	326
SO2	air	1.55	1.04	1.41	1.43	1.25	1.25	1.25	3.50	10.00	94.5	309	345

MK0007R Lazaropole

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
PM10 mass	pm10	17.30	13.04	13.14	2.26	0.00	3.18	14.43	40.08	148.56	60.2	0	5273
SO2	air	6.72	4.54	6.00	1.54	0.55	3.41	5.40	14.09	88.40	65.1	0	5702

NL0007R Eibergen

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NH3	air	8.06	5.26	6.89	1.72	1.54	3.09	6.70	17.50	93.27	88.0	0	7713
NO	air	1.51	5.23	0.51	5.26	-0.76	-0.36	0.26	7.05	60.42	98.1	0	8596
NO2	air	5.95	4.28	4.81	1.92	0.41	1.67	4.68	14.36	30.75	98.1	0	8596
PM10 mass	pm10	25.19	22.41	18.89	2.56	-8.17	1.89	20.43	63.91	362.33	89.8	0	7866
SO2	air	0.51	0.85	0.46	2.89	-1.30	-0.41	0.36	1.88	8.84	99.5	0	8718

NL0008R Bilthoven

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.23	0.14	0.20	1.67	0.05	0.09	0.19	0.42	1.23	49.0	0	179
Cl-	aerosol	1.03	1.16	0.61	2.82	0.10	0.12	0.62	3.24	9.19	83.6	0	305
NH4+	aerosol	1.30	1.43	0.71	3.31	0.03	0.08	0.75	4.35	10.63	95.6	0	349
NO3-	aerosol	1.11	0.97	0.83	2.12	0.16	0.28	0.76	3.23	7.02	95.6	0	349
SO2	air	0.71	0.88	0.51	3.02	-0.79	-0.14	0.48	2.36	9.37	99.2	0	8692
SO4--	aerosol	0.86	0.67	0.72	1.72	0.24	0.34	0.68	1.86	8.17	95.9	0	350
SO4-- corr	aerosol	0.81	0.70	0.65	1.90	0.10	0.25	0.61	1.95	7.74	83.6	0	305

NL0009R Kollumerwaard

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
CO	air	208.43	92.85	189.78	1.57	-34.00	87.00	195.00	380.55	865.00	96.9	0	8488
Ca++	aerosol	0.14	0.10	0.12	1.91	0.02	0.04	0.12	0.34	0.74	45.8	0	167
Cl-	aerosol	1.04	1.07	0.65	2.69	0.10	0.13	0.61	3.46	6.14	91.2	0	333
NH4+	aerosol	1.23	1.29	0.65	3.58	0.03	0.06	0.77	4.13	7.37	95.6	0	349
NO	air	0.71	2.32	0.32	4.82	-0.69	-0.17	0.14	3.30	43.61	94.8	0	8303
NO2	air	3.32	3.19	2.14	2.79	-0.24	0.38	2.33	9.81	23.04	94.8	0	8303
NO3-	aerosol	1.08	0.94	0.75	2.42	0.06	0.18	0.75	2.76	5.87	98.4	0	359
PM10 mass	pm10	21.23	16.12	17.15	2.21	-10.28	1.63	18.00	51.90	160.94	92.2	0	8078
PM25 mass	pm25	11.47	7.90	9.33	1.92	0.71	3.66	8.94	28.12	46.66	69.0	0	252
SO2	air	0.36	0.59	0.40	2.77	-1.50	-0.51	0.30	1.37	4.45	93.9	0	8223
SO4--	aerosol	0.73	0.47	0.62	1.72	0.15	0.29	0.57	1.69	3.38	98.4	0	359
SO4-- corr	aerosol	0.68	0.50	0.55	1.93	0.10	0.20	0.52	1.72	3.36	91.2	0	333

NL0010R Vredepeel

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.29	0.20	0.24	1.81	0.07	0.10	0.22	0.75	1.26	49.6	0	181
Cl-	aerosol	0.78	0.75	0.52	2.49	0.10	0.12	0.50	2.39	4.47	89.9	0	328
NH3	air	14.72	10.51	12.01	1.88	2.06	4.37	11.37	34.81	110.31	91.4	0	8006
NH4+	aerosol	1.66	1.76	1.04	2.81	0.04	0.18	1.17	5.20	18.08	99.7	0	364
NO	air	2.47	6.94	0.75	4.62	-1.87	-0.21	0.52	12.42	96.80	97.1	0	8506
NO2	air	7.43	4.63	6.33	1.75	1.37	2.69	6.10	16.55	34.70	97.1	0	8506
NO3-	aerosol	1.36	1.13	1.05	2.05	0.17	0.32	1.05	3.40	9.39	99.7	0	364
PM10 mass	pm10	24.47	21.60	18.61	2.32	-5.39	3.01	19.56	60.70	582.24	91.3	0	7996
PM25 mass	pm25	19.27	13.38	15.94	1.83	3.53	6.38	15.26	44.44	91.34	87.7	0	320
SO2	air	0.56	0.92	0.53	3.00	-1.13	-0.47	0.41	2.15	8.81	97.0	0	8498
SO4--	aerosol	0.95	0.76	0.78	1.79	0.24	0.33	0.74	2.06	7.53	99.7	0	364
SO4-- corr	aerosol	0.93	0.79	0.73	1.93	0.12	0.27	0.73	2.10	7.49	89.9	0	328

NL0011R Cabauw

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	2.93	7.25	0.75	5.85	-1.09	-0.11	0.50	15.69	76.81	96.2	0	8428
NO	air	2.95	5.92	1.13	3.97	-0.66	0.08	0.94	13.48	47.73	96.4	0	352
NO2	air	6.83	4.87	5.24	2.16	0.13	1.41	5.42	16.43	35.47	96.2	0	8428
NO2	air	6.84	3.84	5.89	1.74	1.57	2.45	5.85	14.00	24.54	96.4	0	352
PM25 mass	pm25	16.37	11.93	13.44	1.84	3.13	5.68	12.94	37.93	90.14	100.0	0	365
SO2	air	0.41	0.51	0.43	2.25	-0.48	-0.32	0.39	1.25	3.29	97.8	0	357
SO2	air	0.41	0.71	0.40	2.79	-0.91	-0.41	0.32	1.54	7.43	97.7	0	8555
SO4--	pm10	0.96	0.69	0.80	1.81	0.00	0.35	0.71	2.41	5.04	7.4	0	650

NL0091R De Zilk

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Cl-	aerosol	1.69	1.82	0.95	3.11	0.10	0.13	0.95	5.25	13.62	94.0	0	343
NH3	air	1.89	2.60	1.09	2.92	-0.05	0.16	1.03	6.64	37.07	87.1	0	7633
NH4+	aerosol	1.18	1.52	0.54	3.87	0.03	0.05	0.64	4.48	10.11	98.1	0	358
NO	air	1.96	6.20	0.59	6.25	-0.83	-0.30	0.18	10.90	78.81	96.8	0	8476
NO2	air	5.58	5.10	3.52	2.95	-0.57	0.47	3.85	16.06	36.83	96.8	0	8476
NO3-	aerosol	1.06	0.98	0.78	2.17	0.11	0.25	0.68	3.18	6.61	99.2	0	362
PM10 mass	pm10	23.58	22.85	18.69	2.28	-9.06	1.85	20.20	53.32	676.96	92.0	0	8062
PM25 mass	pm25	14.46	13.10	11.25	1.97	2.31	4.21	10.62	37.82	148.66	94.8	0	346
SO2	air	1.29	1.42	0.91	2.83	-1.34	-0.08	0.94	3.96	12.97	98.6	0	8636
SO4--	aerosol	0.89	0.74	0.77	1.63	0.26	0.41	0.71	1.97	10.84	99.2	0	362
SO4-- corr	aerosol	0.81	0.75	0.66	1.85	0.15	0.25	0.61	1.92	10.21	94.0	0	343

NO0001R Birkenes

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
EC	pm10	0.10	0.05	0.09	1.87	0.02	0.02	0.10	0.20	0.20	98.1	0	52
HNO3	air	0.08	0.09	0.04	3.43	0.01	0.01	0.04	0.29	0.47	97.3	147	356
HNO3+NO3-	air+aerosol	0.26	0.36	0.12	3.32	0.01	0.02	0.12	1.10	2.77	97.3	0	356
NH4+	aerosol	0.20	0.32	0.06	6.26	0.01	0.01	0.07	0.91	2.12	98.1	98	359
NO2	air	0.44	0.43	0.32	2.31	0.01	0.08	0.31	1.25	3.97	98.1	3	359
OC	pm10	0.79	0.42	0.69	1.65	0.28	0.30	0.69	1.62	2.35	98.1	0	52
PM10 mass	pm10	5.92	3.51	5.07	1.72	1.67	1.98	5.42	11.82	21.38	84.7	0	45
PM25 mass	pm25	3.53	2.58	2.85	1.89	0.95	1.04	2.85	8.13	15.33	98.1	0	52
SO2	air	0.06	0.08	0.03	2.99	0.01	0.01	0.02	0.20	0.58	99.2	171	363
SO4-- corr	aerosol	0.28	0.26	0.17	3.18	-0.01	0.02	0.21	0.76	1.71	99.2	3	363
TC	pm10	0.89	0.44	0.79	1.60	0.32	0.35	0.79	1.72	2.48	98.1	0	52

NO0015R Tustervatn

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.04	0.10	0.02	2.88	0.01	0.01	0.02	0.10	1.26	99.4	100	363
Cl-	aerosol	0.27	0.43	0.07	6.09	0.01	0.01	0.06	1.17	2.25	98.3	144	359
HNO3	air	0.03	0.04	0.02	2.03	0.01	0.01	0.01	0.08	0.39	99.4	308	363
HNO3+NO3-	air+aerosol	0.07	0.13	0.04	2.39	0.02	0.02	0.04	0.28	1.28	98.0	0	358
K+	aerosol	0.02	0.02	0.01	2.35	0.01	0.01	0.02	0.05	0.11	99.4	133	363
Mg++	aerosol	0.026	0.037	0.013	2.995	0.005	0.005	0.010	0.090	0.280	99.4	172	363
NH4+	aerosol	0.06	0.12	0.02	4.28	0.01	0.01	0.02	0.25	1.60	99.1	154	362
NO2	air	0.11	0.09	0.07	2.78	0.01	0.01	0.09	0.32	0.72	93.1	56	340
NO3-	aerosol	0.05	0.11	0.02	3.64	0.01	0.01	0.02	0.18	1.08	98.0	141	358
Na+	aerosol	0.21	0.29	0.08	5.09	0.01	0.01	0.10	0.79	1.90	99.4	53	363
SO2	air	0.05	0.15	0.02	2.56	0.01	0.01	0.01	0.17	1.93	99.7	253	364
SO4--	aerosol	0.15	0.15	0.09	3.22	0.01	0.01	0.11	0.47	1.03	98.3	23	359
SO4-- corr	aerosol	0.14	0.16	0.07	4.16	-0.01	0.00	0.09	0.43	1.02	98.4	24	360

NO0039R Kårvatn

January 2009 - December 2009

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	0.01	2.62	0.01	0.01	0.01	0.07	0.38	99.7	121	365
Cl-	aerosol	0.15	0.32	0.04	4.69	0.01	0.01	0.02	0.66	2.95	100.0	175	366
HNO3	air	0.03	0.04	0.02	2.20	0.01	0.01	0.01	0.13	0.46	100.0	293	366
HNO3+NO3-	air+aerosol	0.06	0.08	0.04	2.17	0.01	0.02	0.03	0.20	0.62	100.0	0	366
K+	aerosol	0.03	0.06	0.02	2.65	0.01	0.01	0.02	0.08	1.00	100.0	108	366
Mg++	aerosol	0.018	0.033	0.010	2.589	0.005	0.005	0.005	0.060	0.420	100.0	225	366
NH4+	aerosol	0.06	0.11	0.02	4.24	0.01	0.01	0.02	0.24	1.05	99.7	166	365
NO2	air	0.17	0.19	0.11	2.93	0.01	0.01	0.13	0.55	1.25	99.7	63	365
NO3-	aerosol	0.03	0.05	0.01	3.06	0.01	0.01	0.01	0.10	0.50	100.0	166	366
Na+	aerosol	0.15	0.27	0.06	4.30	0.01	0.01	0.06	0.54	3.57	100.0	44	366
SO2	air	0.03	0.04	0.02	2.09	0.01	0.01	0.01	0.10	0.36	100.0	266	366
SO4--	aerosol	0.14	0.15	0.08	3.11	0.01	0.01	0.09	0.41	1.40	100.0	13	366
SO4-- corr	aerosol	0.12	0.15	0.07	3.69	-0.11	0.01	0.08	0.40	1.40	100.0	13	366

NO0042G Spitsbergen, Zeppelinfjell

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
CO	air	117.24	28.72	113.64	1.29	72.93	77.06	121.49	157.62	183.97	93.4	0	341
CO	air	134.22	22.58	132.12	1.20	81.01	89.02	139.11	163.25	199.72	40.0	0	1752
Ca++	aerosol	0.03	0.05	0.02	2.77	0.01	0.01	0.02	0.09	0.56	94.5	100	345
Cl-	aerosol	0.23	0.33	0.08	5.04	0.01	0.01	0.11	0.86	2.62	95.0	99	347
HNO3	air	0.02	0.02	0.01	1.60	0.01	0.01	0.01	0.04	0.21	89.2	305	326
HNO3+NO3-	air+aerosol	0.05	0.08	0.04	1.91	0.01	0.02	0.03	0.11	1.10	89.0	0	325
K+	aerosol	0.02	0.02	0.01	2.49	0.01	0.01	0.01	0.06	0.17	94.5	180	345
Mg++	aerosol	0.027	0.036	0.015	2.900	0.000	0.005	0.020	0.098	0.300	94.2	142	344
NH4+	aerosol	0.04	0.07	0.02	3.45	0.00	0.01	0.02	0.15	0.81	89.0	134	325
NO3-	aerosol	0.03	0.07	0.02	2.84	0.01	0.01	0.02	0.08	0.94	89.5	118	327
Na+	aerosol	0.19	0.22	0.09	4.27	0.01	0.01	0.14	0.60	1.57	94.5	39	345
SO2	air	0.09	0.21	0.03	3.27	0.01	0.01	0.01	0.46	2.35	94.7	179	346
SO4--	aerosol	0.15	0.18	0.08	3.79	0.01	0.01	0.09	0.51	1.13	95.0	32	347
SO4-- corr	aerosol	0.14	0.17	0.06	4.98	-0.01	0.00	0.08	0.49	1.07	95.0	32	347

NO0055R Karasjok

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.03	0.03	0.02	2.46	0.01	0.01	0.02	0.08	0.25	95.1	60	347
Cl-	aerosol	0.23	0.41	0.05	5.75	0.01	0.01	0.03	1.03	3.93	95.3	150	348
HNO3	air	0.04	0.07	0.02	2.50	0.01	0.01	0.01	0.18	0.62	93.4	251	341
HNO3+NO3-	air+aerosol	0.09	0.20	0.05	2.58	0.02	0.02	0.04	0.38	2.21	93.1	0	340
K+	aerosol	0.03	0.03	0.02	2.42	0.01	0.01	0.02	0.08	0.35	95.3	76	348
Mg++	aerosol	0.022	0.029	0.012	2.770	0.005	0.005	0.005	0.080	0.270	95.3	181	348
NH4+	aerosol	0.12	0.19	0.04	5.20	0.01	0.01	0.04	0.46	1.91	93.2	109	340
NO2	air	0.15	0.12	0.11	2.24	0.01	0.01	0.11	0.34	1.06	90.3	27	330
NO3-	aerosol	0.05	0.17	0.02	3.52	0.01	0.01	0.02	0.15	2.03	93.1	122	340
Na+	aerosol	0.20	0.26	0.09	3.98	0.01	0.01	0.10	0.75	2.34	95.3	23	348
SO2	air	0.18	0.43	0.05	4.50	0.01	0.01	0.04	0.95	5.81	95.5	149	349
SO4--	aerosol	0.25	0.24	0.15	3.16	0.01	0.02	0.18	0.74	1.31	95.3	9	348
SO4-- corr	aerosol	0.23	0.24	0.12	3.93	-0.00	0.01	0.16	0.72	1.31	95.3	9	349

NO0056R Hurdal

January 2009 - December 2009

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	2.51	0.01	0.01	0.02	0.10	0.28	99.7	60	364
Cl-	aerosol	0.07	0.18	0.02	3.63	0.01	0.01	0.01	0.33	2.07	99.7	240	364
HNO3	air	0.08	0.09	0.04	3.30	0.01	0.01	0.04	0.26	0.48	96.4	133	352
HNO3+NO3-	air+aerosol	0.17	0.22	0.09	3.09	0.01	0.02	0.10	0.66	1.35	96.4	0	352
K+	aerosol	0.04	0.03	0.03	2.26	0.01	0.01	0.03	0.08	0.16	99.7	37	364
Mg++	aerosol	0.016	0.027	0.009	2.476	0.005	0.005	0.005	0.068	0.300	99.7	240	364
NH4+	aerosol	0.12	0.16	0.04	5.47	0.01	0.01	0.05	0.44	1.00	96.4	112	352
NO2	air	0.71	1.00	0.44	2.46	0.06	0.12	0.43	2.31	11.78	99.9	0	365
NO3-	aerosol	0.09	0.15	0.03	4.36	0.01	0.01	0.04	0.45	1.08	96.4	93	352
Na+	aerosol	0.14	0.20	0.06	3.67	0.01	0.01	0.07	0.61	1.35	99.7	31	364
SO2	air	0.04	0.06	0.03	2.65	0.01	0.01	0.02	0.18	0.57	99.7	183	364
SO4--	aerosol	0.21	0.20	0.12	3.08	0.01	0.02	0.14	0.57	1.61	99.7	8	364
SO4-- corr	aerosol	0.20	0.20	0.11	3.41	-0.00	0.01	0.14	0.53	1.61	99.7	8	365

PL0002R Jarczew

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.64	0.48	0.50	2.04	0.02	0.17	0.52	1.59	3.29	98.8	0	361
NH3+NH4+	air+aerosol	2.50	1.32	2.21	1.63	0.42	1.00	2.16	5.26	8.28	98.8	0	361
NH4+	aerosol	1.30	0.85	1.08	1.86	0.21	0.38	1.08	2.95	5.40	98.8	0	361
NO2	air	2.70	1.38	2.41	1.62	0.20	1.10	2.40	5.60	11.60	98.3	0	359
NO3-	aerosol	0.53	0.44	0.39	2.26	0.01	0.11	0.38	1.42	3.04	98.8	2	361
SO2	air	1.35	1.21	0.97	2.33	0.10	0.20	1.00	3.60	8.70	98.8	9	361
SO4--	aerosol	1.48	0.67	1.31	1.71	0.10	0.54	1.42	2.82	3.86	98.8	3	361

PL0003R Sniezka

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.49	0.26	0.42	1.72	0.09	0.16	0.43	1.04	1.31	95.5	0	349
NH3+NH4+	air+aerosol	0.61	0.34	0.52	1.90	0.03	0.17	0.55	1.25	1.77	95.5	2	349
NH4+	aerosol	0.48	0.28	0.39	2.10	0.03	0.10	0.45	0.99	1.52	95.5	8	349
NO2	air	0.94	0.47	0.82	1.69	0.20	0.30	0.80	1.80	2.30	95.5	0	349
NO3-	aerosol	0.36	0.19	0.31	1.73	0.05	0.12	0.31	0.78	0.97	95.5	0	349
SO2	air	0.96	0.48	0.84	1.72	0.20	0.30	0.90	1.90	2.20	95.5	0	349
SO4--	aerosol	0.81	0.44	0.67	2.01	0.10	0.10	0.76	1.60	2.47	95.5	20	349

PL0004R Leba

January 2009 - December 2009

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	0.46	0.39	2.21	0.04	0.10	0.36	1.41	3.49	99.4	0	363
NH3+NH4+	air+aerosol	1.24	0.79	1.02	1.89	0.13	0.37	1.02	2.82	4.94	99.4	0	363
NH4+	aerosol	0.91	0.71	0.69	2.12	0.09	0.19	0.66	2.44	4.64	99.4	0	363
NO2	air	1.46	1.07	1.19	1.88	0.20	0.40	1.20	4.00	8.10	96.9	0	354
NO3-	aerosol	0.41	0.41	0.29	2.37	0.02	0.07	0.28	1.21	3.22	99.4	0	363
SO2	air	1.11	0.74	0.88	2.11	0.10	0.20	1.00	2.70	4.40	99.4	11	363
SO4--	aerosol	1.30	0.60	1.13	1.81	0.10	0.38	1.26	2.29	3.64	99.4	7	363

PL0005R Diabla Gora

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3	air	0.49	0.34	0.42	1.71	0.11	0.19	0.40	1.17	2.68	99.9	0	365
HNO3+NO3-	air+aerosol	1.01	0.79	0.79	1.98	0.22	0.28	0.74	2.64	4.98	99.9	0	365
NH3	air	0.89	0.50	0.76	1.77	0.15	0.28	0.78	1.92	2.67	99.9	0	365
NH3+NH4+	air+aerosol	1.71	0.98	1.51	1.62	0.36	0.72	1.45	3.88	6.63	99.9	0	365
NH4+	aerosol	0.82	0.72	0.58	2.60	0.01	0.08	0.65	2.19	5.29	99.9	0	365
NO2	air	0.87	0.75	0.69	2.05	0.03	0.21	0.75	2.10	10.38	99.9	0	365
NO3-	aerosol	0.52	0.62	0.29	2.93	0.03	0.06	0.28	1.68	4.36	99.9	0	365
PM10 mass	pm10	16.32	12.61	12.68	2.15	0.33	2.90	14.21	40.53	115.39	99.4	0	363
PM25 mass	pm25	13.16	11.62	9.59	2.35	0.27	2.24	10.77	34.17	104.77	99.4	0	363
SO2	air	0.54	0.77	0.35	2.39	0.03	0.10	0.32	1.56	8.11	99.9	0	365
SO4--	aerosol	0.64	0.62	0.46	2.26	0.04	0.12	0.44	2.11	4.84	99.9	0	365

RS0005R Kamenicki vis

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	3.57	3.03	2.83	1.86	1.30	1.50	2.45	11.20	16.30	94.0	0	344
SO2	air	9.81	6.93	7.72	2.06	1.50	2.50	8.25	25.91	46.50	89.0	0	326

RU0018R Danki

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NH4+	aerosol	0.30	0.18	0.24	2.12	0.01	0.07	0.26	0.64	1.11	91.9	0	336
NO3-	aerosol	0.05	0.05	0.04	2.40	0.00	0.00	0.03	0.15	0.30	91.9	0	336
SO2	air	0.12	0.23	0.06	3.17	0.01	0.01	0.05	0.40	2.72	91.9	0	336
SO4--	aerosol	0.15	0.13	0.12	2.30	0.00	0.02	0.12	0.41	0.94	91.9	0	336

SE0005R Bredkälen

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.05	0.06	0.04	2.20	0.00	0.00	0.04	0.14	0.59	99.7	21	364
NH3+NH4+	air+aerosol	0.16	0.17	0.09	3.30	0.01	0.01	0.11	0.53	0.99	99.9	89	365
NO2	air	0.12	0.15	0.08	2.29	0.05	0.05	0.05	0.45	0.94	99.1	271	362
SO2	air	0.07	0.13	0.03	3.63	0.01	0.01	0.01	0.30	1.20	99.7	212	364
SO4--	aerosol	0.16	0.17	0.10	2.90	0.01	0.01	0.10	0.53	1.23	99.9	0	365

SE0011R Vavihill

January 2009 - December 2009

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	0.35	0.32	2.27	0.02	0.07	0.33	1.08	2.72	98.8	0	361
NH3+NH4+	air+aerosol	0.89	0.64	0.67	2.28	0.01	0.16	0.74	2.16	4.78	98.8	3	361
NO2	air	1.21	0.85	1.01	1.75	0.28	0.44	0.94	2.85	5.64	98.0	0	358
PM10 mass	pm10	14.55	8.47	12.32	1.86	-14.20	4.10	13.10	30.74	72.60	84.6	0	7411
PM25 mass	pm25	7.45	6.09	6.06	2.37	-11.20	-0.40	6.50	19.00	48.00	91.9	0	8051
SO2	air	0.30	0.28	0.20	2.84	0.01	0.01	0.22	0.88	1.73	98.8	19	361
SO4--	aerosol	0.46	0.31	0.36	2.08	0.02	0.09	0.40	1.04	1.84	98.8	0	361

SE0012R Aspvreten

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.22	0.16	0.17	2.15	0.01	0.04	0.18	0.52	1.09	98.3	0	359
NH3+NH4+	air+aerosol	0.38	0.31	0.28	2.45	0.01	0.07	0.31	1.04	2.08	98.3	12	359
NO2	air	0.64	0.57	0.51	1.90	0.05	0.23	0.49	1.67	7.05	99.7	6	364
PM10 mass	pm10	6.60	5.67	4.79	2.53	-2.50	0.50	5.00	18.40	38.80	29.6	0	2593
PM25 mass	pm25	6.13	5.29	4.52	2.46	-5.30	0.50	4.90	16.80	47.30	93.5	0	8191
SO2	air	0.18	0.17	0.11	3.14	0.01	0.01	0.13	0.50	1.65	98.3	49	359
SO4--	aerosol	0.40	0.32	0.30	2.26	0.01	0.06	0.34	0.96	2.44	98.3	0	359

SE0014R Råö

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.48	0.44	0.34	2.46	0.03	0.06	0.36	1.34	3.58	96.1	0	351
NH3+NH4+	air+aerosol	0.71	0.65	0.50	2.37	0.01	0.10	0.51	1.98	4.56	96.1	1	351
NO2	air	1.27	0.93	1.06	1.80	0.29	0.45	1.03	2.56	8.59	99.7	0	364
PM10 mass	pm10	14.59	8.26	12.38	1.83	1.10	4.03	14.45	29.02	57.20	94.2	0	344
PM25 mass	pm25	6.26	3.71	5.36	1.75	0.80	2.08	5.60	13.24	27.60	97.2	0	355
SO2	air	0.32	0.23	0.23	2.69	0.01	0.05	0.28	0.84	1.15	96.1	16	351
SO4--	aerosol	0.57	0.36	0.45	2.13	0.02	0.11	0.53	1.23	2.25	96.4	0	352

SI0008R Iskrba

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.17	0.20	0.09	3.68	0.00	0.01	0.10	0.60	1.41	97.2	25	355
Cl-	aerosol	0.06	0.14	0.01	5.64	0.00	0.00	0.02	0.26	1.27	97.2	138	355
HNO3+NO3-	air+aerosol	0.21	0.17	0.17	2.00	0.03	0.05	0.18	0.46	2.16	97.2	0	355
K+	aerosol	0.13	0.10	0.10	2.02	0.00	0.03	0.10	0.32	0.73	97.2	1	355
Mg++	aerosol	0.042	0.057	0.021	4.051	0.001	0.001	0.024	0.129	0.583	97.3	39	356
NH3+NH4+	air+aerosol	1.00	0.62	0.82	1.95	0.06	0.26	0.86	2.08	3.84	97.2	0	355
NO2	air	0.56	0.37	0.48	1.66	0.19	0.26	0.43	1.37	2.87	93.3	0	341
Na+	aerosol	0.10	0.16	0.04	4.28	0.00	0.00	0.04	0.43	1.35	97.2	68	355
PM10 mass	pm10	15.70	10.69	13.29	1.81	0.50	5.27	14.00	28.64	99.70	96.6	0	353
PM25 mass	pm25	12.27	10.17	9.72	2.03	0.50	2.90	10.60	24.70	94.90	96.6	0	353
SO2	air	0.91	2.25	0.41	3.37	0.00	0.08	0.33	3.14	38.17	97.2	1	355
SO4--	aerosol	0.88	1.02	0.56	2.90	0.00	0.10	0.58	2.31	9.12	97.2	3	355
SO4-- corr	aerosol	0.88	1.02	0.57	2.63	-0.00	0.09	0.58	2.31	9.12	97.3	3	356

SI0032R Krvavec

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
CO	air	167.36	38.08	163.73	1.23	90.00	120.00	160.00	240.00	500.00	87.8	0	7694

SK0002R Chopok

January 2009 - December 2009

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	2.02	0.00	0.00	0.01	0.03	0.07	98.9	0	362
NO2	air	0.67	0.42	0.48	2.89	0.00	0.07	0.60	1.51	2.32	98.9	9	362
NO3-	aerosol	0.11	0.11	0.06	3.07	0.00	0.01	0.07	0.31	0.94	99.2	0	363
SO2	air	0.23	0.28	0.14	2.81	0.01	0.03	0.14	0.72	3.04	99.2	0	363
SO4--	aerosol	0.28	0.30	0.15	3.29	0.01	0.02	0.15	0.89	1.73	99.2	0	363
SPM	aerosol	4.92	4.03	3.12	3.25	0.00	0.21	3.85	12.72	14.40	99.7	0	53

SK0004R Stará Lesná

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
PM10 mass	pm10	12.93	5.52	12.38	1.51	3.59	6.85	12.26	24.08	31.63	99.7	0	50

SK0006R Starina

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.10	0.12	0.07	2.23	0.00	0.02	0.07	0.31	1.13	97.7	0	357
HNO3	air	0.02	0.01	0.01	1.86	0.00	0.01	0.01	0.04	0.07	97.2	0	355
K+	aerosol	0.12	0.09	0.09	1.98	0.00	0.04	0.09	0.32	0.61	97.7	0	357
Mg++	aerosol	0.017	0.010	0.015	1.806	0.001	0.005	0.016	0.040	0.061	97.7	0	357
NH3	air	0.22	0.20	0.14	2.50	0.02	0.04	0.15	0.54	1.81	97.7	0	357
NH4+	aerosol	0.71	0.37	0.63	1.69	0.04	0.27	0.67	1.47	3.17	97.7	0	357
NO2	air	1.10	0.90	0.83	2.37	0.01	0.24	0.93	2.52	7.70	97.2	4	355
NO3-	aerosol	0.29	0.23	0.23	2.02	0.00	0.07	0.23	0.69	2.28	97.7	0	357
Na+	aerosol	0.06	0.05	0.04	2.40	0.00	0.01	0.05	0.15	0.42	97.7	2	357
PM10 mass	pm10	15.26	6.10	14.17	1.47	5.16	7.85	13.84	29.26	31.17	99.7	0	53
SO2	air	0.60	0.79	0.33	2.99	0.03	0.05	0.33	2.16	5.19	97.4	0	356
SO4--	aerosol	0.79	0.48	0.65	1.96	0.01	0.22	0.68	1.71	3.22	97.7	0	357
SO4-- corr	aerosol	0.78	0.48	0.65	1.97	0.01	0.22	0.68	1.70	3.21	97.7	0	357

SK0007R Topolniky

January 2009 - December 2009

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
PM10 mass	pm10	22.54	8.05	21.47	1.39	10.64	12.26	21.01	42.90	47.36	98.4	0	51

Annex 4

Overview of sampling and analytical methods 2009

Country: **Armenia**		Main components and ozone - EMEP	Year: 2009	
	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, by Nessler 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	NaI-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, by Nessler 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, by Nessler 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				
Sum of ammonia and ammonium				

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

Country: **Austria**		Main components and ozone - EMEP	Year: 2009	
	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 m^3/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 m^3/day	Daily	Ion chromatography
Nitrate	AT02	Teflon filter, PALL Zefluor 2 µm, 47 mm diameter, 21.6 m^3/day	Daily	Ion chromatography
Ammonium	AT02	Teflon filter, PALL Zefluor 2 µm, 47 mm diameter, 21.6 m^3/day	Daily	Ion chromatography
Sodium	AT02	Teflon filter, PALL Zefluor 2 µm, 47 mm diameter, 21.6 m^3/day	Daily	Ion chromatography
Calcium	AT02	Teflon filter, PALL Zefluor 2 µm, 47 mm diameter, 21.6 m^3/day	Daily	Ion chromatography
Magnesium	AT02	Teflon filter, PALL Zefluor 2 µm, 47 mm diameter, 21.6 m^3/day	Daily	Ion chromatography
Potassium	AT02	Teflon filter, PALL Zefluor 2 µm, 47 mm diameter, 21.6 m^3/day	Daily	Ion chromatography
Chloride				
PM_{10}	All	High Volume Sampler, glass fibre filters with organic binder, 720 m^3/day, EN 12341	Daily	Micro balance
$PM_{2.5}$	AT02	High Volume Sampler, glass fibre filters with organic binder, 720 m^3/day, EN 14907	Daily	Micro balance
PM_1	AT02	High Volume Sampler, glass fibre filters with organic binder, 720 m^3/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 m^3/day	Daily	Ion chromatography
Sum of ammonia and ammonium	AT02	Aerosol, citric acid impregnated Whatman 40 filters, 21.6 m^3/day	Daily	Ion chromatography

Country: **Belarus**		Main components and ozone - EMEP	Year: 2009	
	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: 2009	
	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: 2009	
	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: 2009	
	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: 2009	
	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
Nitric acid				
Ammonia				
Ozone	All	UV-monitor	Hourly	UV-absorption
Sulphate	All	Whatman 40 filter, 20 m^3 /day	Daily	Ion chromatography
Nitrate				
Ammonium				
Sodium				
Calcium				
Magnesium				
Potassium				
Chloride				
PM_{10}	All	Filter 47 mm, 55 m^3/day	Every 2nd day	Gravimetric
PM_{10}	CZ3	Beta absorption - monitor	Hourly	Beta absorption
$PM_{2.5}$	All	Filter 47 mm, 55 m^3/day	Every 2nd day	Gravimetric
Suspended particulate matter				
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

Country: **Denmark**		Main components and ozone - EMEP	Year: 2009	
	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: 2009	
	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: 2009	
	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: 2009	
	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 m^3/day (Filterpack)	Daily, twice a week	Ion chromatography
Nitrogen dioxide NO_2/NO/NO_x	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 m^3/j	Daily, twice a week	Ion chromatography
Nitrate				
Ammonium				
Sodium				
Calcium				
Magnesium				
Potassium				
Chloride				
PM_{10}	FR09, FR13, FR15, FR30, FR18	TEOM FDMS	Hourly	TEOM FDMS
$PM_{2.5}$	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 m^3/j + KOH impregnated Whatman 40, 14.4 m^3/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 m^3/j + citric acid impregnated Whatman 40, 14.4 m^3/day (Filterpack)	Daily, twice a week	Ion chromatography

Country: **Georgia**		Main components and ozone - EMEP	Year: 2009	
	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: 2009	
	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	KOH-impregnated Whatman 40 filter, 22 m^3/day (Filterpack)	Daily	Ion chromatography
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	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	DE01, DE02, DE03, DE07, DE09	Teflon filter + KOH impregnated filter, 22 m^3/day (Filterpack)	Daily	Ion chromatography
Sum of ammonia and ammonium	DE01, DE02, DE03, DE07, DE09	Aerosol filter + oxalic acid impregnated filter, 22 m^3/day (Filterpack)	Daily	Flow injection analysis

Country: **Greece**		Main components and ozone - EMEP	Year: 2009	
	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: 2009	
	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
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	Alkaline 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
PM_{10}	HU02	Particulate Analyzer	Hourly	Beta-absorption

Country: **Iceland**		Main components and ozone - EMEP	Year: 2009	
	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: 2009	
	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 m^3/day	Daily	Ion chromatography
Nitrogen dioxide	IE01	NaI method (glass sinter) 0.7 m^3/day	Daily	Spectrophotometric, EMEP Manual 4.11
Nitric acid				
Ammonia				
Ozone				
Sulphate	IE01	Teflon filter, PALL Zefluor 2 μm, 47 mm diameter, 20-25 m^3/day	Daily	Ion chromatography
Nitrate				
Ammonium				
Sodium	IE01	Teflon filter, PALL Zefluor 2 μm, 47 mm diameter, 20-25 m^3/day	Daily	Ion chromatography
Calcium	IE01	Teflon filter, PALL Zefluor 2 μm, 47 mm diameter, 20-25 m^3/day	Daily	Ion chromatography
Magnesium	IE01	Teflon filter, PALL Zefluor 2 μm, 47 mm diameter, 20-25 m^3/day	Daily	Ion chromatography
Potassium	IE01	Teflon filter, PALL Zefluor 2 μm, 47 mm diameter, 20-25 m^3/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 m^3/day	Daily	Ion chromatography
Sum of ammonia and ammonium	IE01	Aerosol filter as for sulphate + citric acid impregnated filter, 20-25 m^3/day	Daily	Ion chromatography

Country: **Ireland: (lab.: Met Éireann)**	Main components and ozone - EMEP		Year: 2009	
	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 m^3/day	Daily	Ion chromatography
Nitrate	IE05, IE06, IE08	Whatman 41 filters, 1441 150, 720 m^3/day	Daily	Ion chromatography
Ammonium	IE05, IE06, IE08	Whatman 41 filters, 1441 150, 720 m^3/day	Daily	Ion chromatography
Sodium	IE05, IE06, IE08	Whatman 41 filters, 1441 150, 720 m^3/day	Daily	Ion chromatography
Calcium	IE05, IE06, IE08	Whatman 41 filters, 1441 150, 720 m^3/day	Daily	Ion chromatography
Magnesium	IE05, IE06, IE08	Whatman 41 filters, 1441 150, 720 m^3/day	Daily	Ion chromatography
Potassium	IE05, IE06, IE08	Whatman 41 filters, 1441 150, 720 m^3/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: 2009	
	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 m^3/day	Daily	Ion chromatography
Nitrogen dioxide	IT01	Instrumental: Chemiluminescence	Daily	Chemiluminescence
Nitric acid	IT01	Diffusion tubes NaCl, 17 m^3/day	Daily	Ion chromatography
Ammonia	IT01	Diffusion tubes H3PO3, 17 m^3/day	Daily	Ion chromatography
Ozone	IT01	UV-monitor	Hourly	UV-absorption
Sulphate	IT01	Nylasorb filter, 17 m^3/day	Daily	Ion chromatography
Nitrate	IT01	Nylasorb filter, 17 m^3/day	Daily	Ion chromatography
Ammonium	IT01	Phosphorous acid impregnated filter, 17 m^3/day	Daily	Ion chromatography
Sodium				
Calcium				
Magnesium				
Potassium				
Chloride				
PM_{10}	IT01	Beta gauge monitor 24 m^3/day	Daily	Beta gauge monitor
$PM_{2.5}$	IT01	Beta gauge monitor 24 m^3/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: 2009	
	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 m^3/day	Daily	Ion chromatography
Nitrate	IT04	PALL Life Sciences QFF (type TISSUEQUARTZ 2500QAT-UP), 24 m^3/day	Daily	Ion chromatography
Ammonium	IT04	PALL Life Sciences QFF (type TISSUEQUARTZ 2500QAT-UP), 24 m^3/day	Daily	Ion chromatography
Sodium	IT04	PALL Life Sciences QFF (type TISSUEQUARTZ 2500QAT-UP), 24 m^3/day	Daily	Ion chromatography
Calcium	IT04	PALL Life Sciences QFF (type TISSUEQUARTZ 2500QAT-UP), 24 m^3/day	Daily	Ion chromatography
Magnesium	IT04	PALL Life Sciences QFF (type TISSUEQUARTZ 2500QAT-UP), 24 m^3/day	Daily	Ion chromatography
Potassium	IT04	PALL Life Sciences QFF (type TISSUEQUARTZ 2500QAT-UP), 24 m^3/day	Daily	Ion chromatography
Chloride	IT04	PALL Life Sciences QFF (type TISSUEQUARTZ 2500QAT-UP), 24 m^3/day	Daily	Ion chromatography
PM_{10}				
$PM_{2.5}$	IT04	PALL Life Sciences QFF (type TISSUEQUARTZ 2500QAT-UP), 24 m^3/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 m^3/day	Daily	Thermo optical, EUSAAR 2 protocol

Country: **Kazakhstan**		Main components and ozone - EMEP	Year: 2009	
	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: 2009	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
Precipitation amount	All	Wet-only	Daily	Gravimetric
Precipitation amount, official gauge	All	Meteorological station	Daily	Gauge, Tretjakov type
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	ICP-MS
Sodium	All	Wet-only	Daily	ICP-MS
Chloride	All	Wet-only	Daily	Ion chromatography
Calcium	All	Wet-only	Daily	ICP-MS
Potassium	All	Wet-only	Daily	ICP-MS
Conductivity	All	Wet-only	Daily	Conductivity meter
pH	All	Wet-only	Daily	pH meter
Air				
Sulphur dioxide	All	KOH-impregnated Whatman 41 filter, 16-23 m^3/day	Daily	Ion chromatography
Nitrogen dioxide	All	NaI-impregnated glass sinters, 0.3-0.7 m^3/day	Daily	Spectrophotometric, Griess method
Nitric acid				
Ammonia				
Ozone	All	UV-monitor	Hourly	UV-absorption
Sulphate	All	Whatman 41 filter, 16-23 m^3/day	Daily	Ion chromatography
Nitrate	All	Whatman 41 filter, 16-23 m^3/day	Daily	Ion chromatography
Ammonium	All	Whatman 41 filter, 16-23 m^3/day	Daily	Spectrophotometric, Indophenol method
PM_{10}	All	Membrane filter, mixed cellulose ester, 0.45 µm, 24 m^3/day	Daily	Beta absorption
$PM_{2.5}$	All	Membrane filter, mixed cellulose ester, 0.45 µm, 24 m^3/day	Daily	Beta absorption
Sulphate $PM_{2.5}$	All	Membrane filter, mixed cellulose ester, 0.45 µm, 168 m^3/week	Weekly	Ion chromatography
Nitrate $PM_{2.5}$	All	Membrane filter, mixed cellulose ester, 0.45 µm, 168 m^3/week	Weekly	Ion chromatography
Sodium $PM_{2.5}$	All	Membrane filter, mixed cellulose ester, 0.45 µm, 168 m^3/week	Weekly	Ion chromatography
Calcium $PM_{2.5}$	All	Membrane filter, mixed cellulose ester, 0.45 µm, 168 m^3/week	Weekly	Ion chromatography
Magnesium $PM_{2.5}$	All	Membrane filter, mixed cellulose ester, 0.45 µm, 168 m^3/week	Weekly	Ion chromatography
Potassium $PM_{2.5}$	All	Membrane filter, mixed cellulose ester, 0.45 µm, 168 m^3/week	Weekly	Ion chromatography
Chloride $PM_{2.5}$	All	Membrane filter, mixed cellulose ester, 0.45 µm, 168 m^3/week	Weekly	Ion chromatography
Suspended particulate matter				
Sum of nitric acid and nitrate	All	Aerosol filter as for sulphate + KOH-impregnated filter as for SO_2, 16-23 m^3/day	Daily	Ion chromatography
Sum of ammonia and ammonium	All	Aerosol filter as for sulphate + oxalic acid impregnated filter, 16-23 m^3/day	Daily	Spectrophotometric, Indophenol method

Country: **Lithuania**		Main components and ozone - EMEP	Year: 2009	
	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				
Sodium	All	Wet-only	Daily	Atomic emission method
Chloride	All	Wet-only	Daily	Ion chromatography
Calcium	All	Wet-only	Daily	Atomic absorption method
Potassium	All	Wet-only	Daily	Atomic emission method
Conductivity	All	Wet-only	Daily	Conductivity meter
pH	All	Wet-only	Daily	pH meter
Air				
Sulphur dioxide	All	KOH-impregnated Whatman 40 filter, 24 m^3/day	Daily	Ion chromatography
Nitrogen dioxide	All	KI-method (glass sinter), 0.4-0.7 m^3/day	Daily	Spectrophotometric, Griess method
Nitric acid				
Ammonia				
Ozone	All	UV-monitor	Hourly	UV-absorption
Sulphate	All	Whatman 40 filter, 24 m^3/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, 16-17 m^3/day	Daily	Ion chromatography
Sum of ammonia and ammonium	All	Oxalic acid impregnated Whatman 40 filter, 16-17 m^3/day	Daily	Spectrophotometric, Indophenol method

Country: **Macedonia**		Main components and ozone - EMEP	Year: 2009	
	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				
Nitric acid				
Ammonia				
Ozone				
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: 2009	
	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 m^3/day	Daily	Ion chromatography
Nitrogen dioxide				
Nitric acid				
Ammonia				
Ozone				
Sulphate	MD13	Teflon filter, Gelman Zefluor 2 µm, 25 m^3/day	Daily	Ion chromatography
Nitrate	MD13	Teflon filter, Gelman Zefluor 2 µm, 25 m^3/day	Daily	Ion chromatography
Ammonium	MD13	Teflon filter, Gelman Zefluor 2 µm, 25 m^3/day	Daily	Ion chromatography
Sodium	MD13	Teflon filter, Gelman Zefluor 2 µm, 25 m^3/day	Daily	Ion chromatography
Calcium	MD13	Teflon filter, Gelman Zefluor 2 µm, 25 m^3/day	Daily	Ion chromatography
Magnesium	MD13	Teflon filter, Gelman Zefluor 2 µm, 25 m^3/day	Daily	Ion chromatography
Potassium	MD13	Teflon filter, Gelman Zefluor 2 µm, 25 m^3/day	Daily	Ion chromatography
Chloride	MD13	Teflon filter, Gelman Zefluor 2 µm, 25 m^3/day	Daily	Ion chromatography
PM_{10}	MD13	Teflon filter, Gelman Zefluor 2 µm, 25 m^3/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 m^3/day	Daily	Ion chromatography
Sum of ammonia and ammonium	MD13	Aerosol filter as for sulphate + oxalic acid impregnated filter, 25 m^3/day	Daily	Spectrophotometric, Indophenol method and IC
EC/OC				

Country: **Montenegro**		Main components and ozone - EMEP	Year: 2009	
	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: 2009	
	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,NL10,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: 2009	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
Precipitation amount	All	NILU bulk sampler	Daily	By volume
Precipitation amount, official gauge				
Sulphate	All	NILU bulk sampler	Daily	Ion chromatography
Nitrate	All	NILU bulk sampler	Daily	Ion chromatography
Ammonium	All	NILU bulk sampler	Daily	Ion chromatography
Magnesium	All	NILU bulk sampler	Daily	Ion chromatography
Sodium	All	NILU bulk sampler	Daily	Ion chromatography
Chloride	All	NILU bulk sampler	Daily	Ion chromatography
Calcium	All	NILU bulk sampler	Daily	Ion chromatography
Potassium	All	NILU bulk sampler	Daily	Ion chromatography
Conductivity	All	NILU bulk sampler	Daily	Conductivity meter
pH	All	NILU bulk sampler	Daily	pH meter; potentiometric, glass electrode
Air				
Sulphur dioxide	All	KOH-impregnated Whatman 40 filter 25 m^3/day	Daily	Ion chromatography
Nitrogen dioxide	All	NaI-impregnated glass sinters, 0.7 m^3/day	Daily	Spectrophotometric, Griess method
Nitric acid				
Ammonia				
Ozone	All	UV-monitor	Hourly	UV-absorption
Sulphate	All	Teflon filter, Gelman Zefluor 2 µm, 25 m^3/day	Daily	Ion chromatography
Nitrate	All	Teflon filter, Gelman Zefluor 2 µm, 25 m^3/day	Daily	Ion chromatography
Ammonium	All	Teflon filter, Gelman Zefluor 2 µm, 25 m^3/day	Daily	Ion chromatography
Sodium	All	Teflon filter, Gelman Zefluor 2 µm, 25 m^3/day	Daily	Ion chromatography
Calcium	All	Teflon filter, Gelman Zefluor 2 µm, 25 m^3/day	Daily	Ion chromatography
Magnesium	All	Teflon filter, Gelman Zefluor 2 µm, 25 m^3/day	Daily	Ion chromatography
Potassium	All	Teflon filter, Gelman Zefluor 2 µm, 25 m^3/day	Daily	Ion chromatography
Chloride	All	Teflon filter, Gelman Zefluor 2 µm, 25 m^3/day	Daily	Ion chromatography
PM_{10}	NO01	Kleinfiltergerät Whatman QM-A 47 mm	6+1	by weight, RH 50%
$PM_{2.5}$	NO01	Kleinfiltergerät Whatman QM-A 47 mm	6+1	by weight, RH 50%
PM_1	NO01	Kleinfiltergerät Whatman QM-A 47 mm	6+1	by weight, RH 50%
Suspended particulate matter				
Sum of nitric acid and nitrate	All	Aerosol filter as for sulphate + KOH impregnated filter as for SO_2, 25 m^3/day	Daily	Ion chromatography
Sum of ammonia and ammonium	All	Aerosol filter as for sulphate + oxalic acid impregnated filter, 25 m^3/day	Daily	Spectrophotometric, Indophenol method and IC
EC/OC	NO01	Kleinfiltergerät Whatman QM-A 47 mm, 55 m^3/day	6+1	Thermal optical transmission

Country: **Poland: PL02, PL03, PL04 (lab. IMWM)**	Main components and ozone - EMEP		Year: 2009	
	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 m^3/day	Daily	Thorin
Nitrogen dioxide	All	Absorbing solution TGS, 0.7 m^3/day	Daily	Spectrophotometric, Griess method
Nitric acid				
Ammonia				
Ozone	All	UV-monitor	Hourly	UV-absorption
Sulphate	All	Whatman 40 filter, 3.5-4.2 m^3/day	Daily	Thorin
Nitrate	All	Whatman 40 filter, 3.5-4.2 m^3/day	Daily	Spectrophotometric, Griess after hydrazine reduction
Ammonium	All	Whatman 40 filter, 3.5-4.2 m^3/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 m^3/day	Daily	Spectrophotometric, Griess after hydrazine reduction
Sum of ammonia and ammonium	All	Oxalic acid impregnated Whatman 40 filter, 3.5-4.2 m^3/day	Daily	Spectrophotometric, Chloramin T

Country: **Poland: PL05 (lab. IEP)**		Main components and ozone - EMEP	Year: 2009	
	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 m^3/day	Daily	Capillary Electrophoresis
Nitrogen dioxide	PL05	Iodide method (impregnated glass sinter), 0.7 m^3/day	Daily	Spectrophotometric, Griess method
Nitric acid				
Ammonia				
Ozone	PL05	UV-monitor	Hourly	UV-absorption
Sulphate	PL05	Teflon filter PALL Zefluor 2 μm, 16 m^3/day	Daily	Capillary Electrophoresis
Nitrate				
Ammonium				
Sodium				
Calcium				
Magnesium				
Potassium				
Chloride				
PM_{10}	PL05	High Volume Sampler (750 m^3/day)	Daily	By weight
$PM_{2.5}$	PL05	High Volume Sampler (750 m^3/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 m^3/day	Daily	Capillary Electrophoresis
Sum of ammonia and ammonium	PL05	Aerosol Teflon filter PALL Zefluor 2 μm + Oxalic acid impregnated Whatman 40 filter, 16 m^3/day	Daily	Spectrophotometric, Indophenol method

Country: **Portugal**		Main components and ozone - EMEP	Year: 2009	
	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: 2009	
	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 m^3/day	Daily	UV-fluorescence
Sulphur dioxide	RU16, RU18	NaOH-impregnated Whatman 40 filter, 10-15 m^3/day	Daily	Ion chromatography
Nitrogen dioxide				
Nitric acid				
Ammonia				
Ozone				
Sulphate	All	Whatman 40 filter, 10-15 m^3/day	Daily	Ion chromatography
Nitrate	All	Whatman 40 filter, 10-15 m^3/day	Daily	Ion chromatography
Ammonium	All	Whatman 40 filter, 10-15 m^3/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: 2009	
	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_2O_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: 2009	
	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, SK07l	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 l
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: 2009	
	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 m^3/day	Daily	Ion chromatography
Nitrogen dioxide	SI08	NaI-impregnated glass sinters, ~0.7 m^3/day	Daily	Spectrophotometric, Griess method
Nitric acid	SI08	KOH-impregnated Whatman 40 filter, 17-23 m^3/day	Daily	Ion chromatography
Ammonia	SI08	Oxalic acid impregnated Whatman 40 filter, 17-23 m^3/day	Daily	Ion chromatography
Carbon monoxide	SI32	Trace level analyzer	Hourly	ndir
Sulphate	SI08	Teflon filter, Pall Zefluor 2 μm, 17-23 m^3/day	Daily	Ion chromatography
Nitrate	SI08	KOH-impregnated Whatman 40 filter, 17-23 m^3/day	Daily	Ion chromatography
Ammonium	SI08	Teflon filter, Pall Zefluor 2 μm, 17-23 m^3/day	Daily	Ion chromatography
Sodium	SI08	Teflon filter, Pall Zefluor 2 μm, 17-23 m^3/day	Daily	Ion chromatography
Calcium	SI08	Teflon filter, Pall Zefluor 2 μm, 17-23 m^3/day	Daily	Ion chromatography
Magnesium	SI08	Teflon filter, Pall Zefluor 2 μm, 17-23 m^3/day	Daily	Ion chromatography
Potassium	SI08	Teflon filter, Pall Zefluor 2 μm, 17-23 m^3/day	Daily	Ion chromatography
Chloride	SI08	Teflon filter, Pall Zefluor 2 μm, 17-23 m^3/day	Daily	Ion chromatography
PM_{10}	SI08	Low volume sampler, 2.3 m^3/h, Quartz filter, 47 mm	Daily	Gravimetric method
$PM_{2.5}$	SI08	Low volume sampler, 2.3 m^3/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 m^3/day	Daily	Ion chromatography
Sum of ammonia and ammonium	SI08	Teflon filter, Pall Zefluor 2 μm + oxalic acid impregnated Whatman 40 filter, 17-23 m^3/day	Daily	Ion chromatography

Country: **Spain**		Main components and ozone - EMEP	Year: 2009	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation	**All (except ES10)**			
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	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
Air				
Sulphur dioxide	All	Instrumental: UV-fluorescence	Hourly	Pulsed UV-Fluorescence
Nitrogen dioxide/NO/NOx	All	Instrumental: Chemiluminescence	Hourly	Chemiluminiscence
Ammonia	ES08, ES09	Passive sampler	Weekly	Visible spectrophotometry, Indophenol method
Ozone	All	UV-monitor	Hourly	UV-absorption
PM_{10}	All	High volume sampler	Daily	Gravimetric method
$PM_{2.5}$	All	High volume sampler	Daily	Gravimetric method
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
Sulphate PM_{10}	All	Whatman GF/A filter, 720 m^3/day	Daily	Ion chromatography
Nitrate PM_{10}	All	Whatman GF/A filter, 720 m^3/day (from 02/2003)	Daily	Ion chromatography
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
Ammonium PM_{10}	ES09	High volume sampler	24 hour, once a week	Visible spectrophotometry, Indophenol method
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
EC/OC PM_{10}	ES09	PM_{10} High volume sampler	24 hour, once a week	Thermal optical
EC/OC $PM_{2.5}$	ES09	$PM_{2.5}$ High volume sampler	24 hour, once a week	Thermal optical

Country: **Sweden**		Main components and ozone - EMEP	Year: 2009	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
Precipitation amount	SE05, SE11, SE14	Wet-only	Weekly except SE14; daily at SE14	
Precipitation amount, official gauge				
Sulphate	SE05, SE11, SE14	Wet-only	Weekly except SE14; daily at SE14	Ion chromatography
Nitrate	SE05, SE11, SE14	Wet-only	Weekly except SE14; daily at SE14	Ion chromatography
Ammonium	SE05, SE11, SE14	Wet-only	Weekly except SE14; daily at SE14	Spectrophotometric, Flow injection analysis
Magnesium	SE05, SE11, SE14	Wet-only	Weekly except SE14; daily at SE14	Ion chromatography
Sodium	SE05, SE11, SE14	Wet-only	Weekly except SE14; daily at SE14	Ion chromatography
Chloride	SE05, SE11, SE14	Wet-only	Weekly except SE14; daily at SE14	Ion chromatography
Calcium	SE05, SE11, SE14	Wet-only	Weekly except SE14; daily at SE14	Ion chromatography
Potassium	SE05, SE11, SE14	Wet-only	Weekly except SE14; daily at SE14	Ion chromatography
Conductivity	SE05, SE11, SE14	Wet-only	Weekly except SE14; daily at SE14	Conductivity meter
pH	SE05, SE11, SE14	Wet-only	Weekly except SE14; daily at SE14	pH meter
Air				
Sulphur dioxide	SE05, SE08, SE11, SE14	KOH-impregnated Whatman 40 filter, 20 m^3/day	Daily	Ion chromatography
Nitrogen dioxide	SE05, SE08, SE11, SE14	NaI-impregnated glass sinters, ~0.7 m^3/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, SE08, SE11, SE14	Teflon filter, Gelman Zefluor 2 μm, 20 m^3/day	Daily	Ion chromatography
Nitrate				
Ammonium				
Sodium				
Calcium				
Magnesium				
Potassium				
Chloride				
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}	SE14	IVL Sampler PModell S10	Daily	Gravimetric
$PM_{2.5}$	SE14	IVL Sampler PModell S10	Daily	Gravimetric
Sum of nitric acid and nitrate	SE05, SE11, SE14	Aerosol filter as for sulphate + KOH-impregnated Whatman 40 filter, 20 m^3/day	Daily	Ion chromatography
Sum of ammonia and ammonium	SE05, SE11, SE14	Aerosol filter as for sulphate + Oxalic acid impregnated Whatman 40 filter, 20 m^3/day	Daily	Flow injection analysis

Country: **Switzerland**		Main components and ozone - EMEP	Year: 2009	
	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 m^3/day	Biweekly	Ion chromatography
Ammonia	CH02, CH05	Citric acid impregnated Mini-Denuder / modified CEH DELTA-System, 0.5 m^3/day	Biweekly	Ion chromatography
Ozone	All	Instrumental: UV-monitor	Hourly	UV-absorption
Sulphate	CH02, CH05	Whatman 40 filter, 3.6 m^3/day (regularily checked against IC)	Daily	Ion chromatography
Sulphate	CH01	Whatman 40 filter, 4.1 m^3/day (regularily checked against IC)	Daily	Ion chromatography
Nitrate	CH02, CH05	KOH impregnated Whatman 1 filter, Delrin filterholder / modified CEH DELTA-System, 0.5 m^3/day	Biweekly	Ion chromatography
Ammonium	CH02, CH05	Citric acid impregnated Sartorius 11306 filter, Delrin filterholder / modified CEH DELTA-System, 0.5 m^3/day	Biweekly	Ion chromatography
Sodium	CH02, CH05	Citric acid impregnated Whatman 40 filter / NILU filterholder, 18 m^3/day		
Calcium	CH02, CH05	Citric acid impregnated Whatman 40 filter / NILU filterholder, 18 m^3/day		
Magnesium	CH02, CH05	Citric acid impregnated Whatman 40 filter / NILU filterholder, 18 m^3/day		
Potassium	CH02, CH05	Citric acid impregnated Whatman 40 filter / NILU filterholder, 18 m^3/day		
Chloride				
PM_{10}	All	High Volume Samplers, Whatman QMA 1851-150, 720 m^3/day from 01.05.2009 Pallflex XP56 Tissuequartz 2500 QAT-UP	Daily	Gravimetry
$PM_{2.5}$	CH02, CH05	High Volume Samplers, Whatman QMA 1851-150, 720 m^3/day from 01.05.2009 Pallflex XP56 Tissuequartz 2500 QAT-UP	Daily	Gravimetry
PM_1	CH02, CH05	High Volume Samplers, Whatman QMA 1851-150, 720 m^3/day from 01.05.2009 Pallflex XP56 Tissuequartz 2500 QAT-UP	Daily	Gravimetry
Suspended particulate matter				
Sum of nitric acid and nitrate	CH02, CH05	NaOH impregnated Whatman 40 filter / NILU filterholder, 18 m^3/day from 01.07.2009 1M KOH	Daily	Ion chromatography
Sum of ammonia and ammonium	CH02, CH05	Citric acid impregnated Whatman 40 filter / NILU filterholder, 18 m^3/day	Daily	Ion chromatography

Country: **Turkey**		Main components and ozone - EMEP	Year: 2009	
	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 m^3/day	Daily	Ion chromatography
Nitrogen dioxide	All	NaI-impregnated glass sinters, 0.72 m^3/day	Daily	Spectrophotometric
Nitric acid				
Ammonia				
Ozone				
Sulphate	All	Teflon filter, Gelman Zefluor 2 μm, 27 m^3/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 m^3/day	Daily	Ion chromatography
Sum of ammonia and ammonium	All	Citric acid impregnated Whatman 40 filter, 32 m^3/day	Daily	Spectrophotometric, Indophenol method

Country: **United Kingdom**		Main components and ozone - EMEP	Year: 2009	
	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
Nitratae PM_{10}, $PM_{2.5}$	GB36, GB48	Instrumental	Hourly	Online IC
Potassium PM_{10}, $PM_{2.5}$	GB36, GB48	Instrumental	Hourly	Online IC
Sodium PM_{10}, $PM_{2.5}$	GB36, GB48	Instrumental	Hourly	Online IC
Sulphate PM_{10}, $PM_{2.5}$	GB36, GB48	Instrumental	Hourly	Online IC
Suspended particulate matter				
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				

Annex 5

List of data reports

Data Report October 1977-September 1978.
EMEP/CCC-Report 3/80 by J. Schaug, H. Dovland, J.E. Skjelmoen.
Lillestrøm, Norwegian Institute for Air Research, 1980.

Data Report October 1978-September 1979.
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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

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

and between

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

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:

$$\overline{lnc} = \frac{1}{N} \cdot \sum_i lnc_i$$

$$\overline{c_g} = exp\left(\overline{lnc}\right)$$

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:

$$sdlnc = \left(\frac{\sum_i (lnc_i - \overline{lnc})^2}{N-1} \right)^{\frac{1}{2}}$$

$$sd_g = exp(sdlnc)$$

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 SO_2 the limit above for sulphate is valid for the medium volume method with impregnated filter. For NO_2 determined as NO_2^- in solution the accuracy for the lowest concentrations is 0.01 mg N/l.