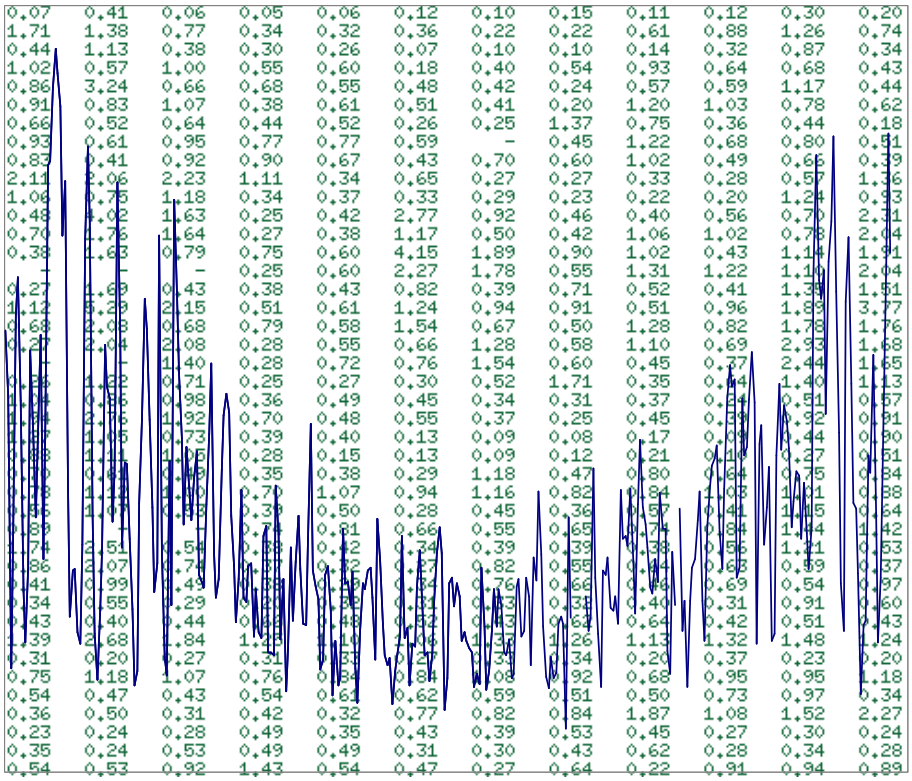
EMEP/CCC-Report 1/2009

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

Data Report 2007

Acidifying and eutrophying compounds and particulate matter

Anne-Gunn Hjellbrekke and Ann Mari Fjæraa



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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 were included in the monitoring programme (EB.AIR/GE.1/2004/5).

The EMEP data from 2007 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 89 stations and air data from 106 stations are presented in this report. The total number of measurement sites in this report is 122.

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 2007.

Country	Station codes	Station name	Location		Height above sea (m)
			Lat.	Long.	
Austria	AT0002R	Illmitz	47º46'N	16º46'E	117
	AT0005R	Vorhegg	46º40'N	12º58'E	1020
	AT0048R	Zoebelboden	47º50'N	14º26'E	899
Belarus	BY0004R	Vysokoe	55º20'N	23º26'E	163
Belgium	BE0001R	Offagne	49º52'N	5º12'E	430
	BE0032R	Eupen	50º37'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	33º02'N	33º03'E	532
Czech Rep.	CZ0001R	Svratouch	49º44'N	16º02'E	737
	CZ0003R	Košetice	49º35'N	15º05'E	534
Denmark	DK0003R	Tange	56º21'N	9º36'E	13
	DK0005R	Keldsnor	54º44'N	10º44'E	9
	DK0008R	Anholt	56º43'N	11º31'E	40
	DK0022R	Sepstrup Sande	55º05'N	9º36'E	60
	DK0031R	Ulborg	56º17'N	8º26'E	10
Estonia	EE0009R	Lahemaa	59º30'N	25º54'E	32
	EE0011R	Vilsandi	58º23'N	21º49'E	6
Finland	FI0004R	Ähtari	62º33'N	24º13'E	162
	FI0009R	Utö	59º47'N	21º23'E	7
	FI0017R	Virolahti II	60º31'N	27º41'E	4
	FI0022R	Oulanka	66º19'N	29º24'E	310
	FI0036R	Pallas (Matorova)	68º0'N	24º14'E	340
	FI0037R	Ähtari II	62º35'N	24º11'E	180
	FI0096G	Pallas (Sammaltunturi)	68º0'N	24 º9'E	340
France	FR0008R	Donon	48º30'N	7º08'E	775
	FR0009R	Revin	49º54'N	4º38'E	390
	FR0010R	Morvan	47º16'N	4º05'E	620
	FR0012R	Iraty	43º02'N	1º05'W	1300
	FR0013R	Peyrusse Vielle	47º22'N	0º06'E	236
	FR0014R	Montandon	47º11'N	6º30'E	746
	FR0015R	La Tardière	49º37'N	1º50'E	133
	FR0016R	Le Casset	45º39'N	6º31'E	1750
	FR0017R	Montfranc	46º08'N	1º23'E	497
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	53º09'N	13º02'E	62
	DE0008R	Schmücke	50º39'N	10º46'E	937
	DE0009R	Zingst	54º26'N	12º44'E	1
	DE0044R	Melpitz	52º31'N	12º55'E	86
Greece	GR0001R	Aliartos	38º22'N	23º05'E	110
	GR0002R	Finokalia	35º19'N	25º40'E	250
Hungary	HU0002R	K-puszta	46º58'N	19º35'E	125
Iceland	IS0002R	Irafoss	64º05N	21º01'W	61
	IS0090R	Reykjavik	64º05'N	21º01'W	66
	IS0091R	Storhofdi	63º24'N	20º17'W	118
Ireland	IE0001R	Valentina Observatory	51º56'N	10º14'W	9
	IE0005R	Oak Park	52º52'N	6º55'W	59
	IE0006R	Malin Head	55º22'N	7º20'W	20
	IE0007R	Glen Veagh	55º3'N	7º56'W	44
	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
Latvia	LV0010R	Rucava	56º13'N	21º13'E	18
	LV0016R	Zoseni	57º08'N	25º55'E	183

Table 1, cont.

Country	Station codes	Station name	Location		Height above sea (m)
			Lat.	Long.	
Lithuania	LT0015R	Preila	55º21'N	21º04'E	5
Netherlands	NL0007R	Eibergen	52º5'N	6º34'E	20
	NL0008R	Bilthoven	52º7'N	5º12'E	5
	NL0009R	Kollumerwaard	53º20'N	6º17'E	1
	NL0010R	Vredepeel	51º32'N	5º51'E	28
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
Poland	PL0002R	Jarczew	51º49'N	21º59'E	180
	PL0003R	Sniezka	50º44'N	15º44'E	1604
	PL0004R	Leba	54º45'N	17º32'E	2
	PL0005R	Diabla Gora	54º09'N	22º04'E	157
Portugal	PT0001R	Braganca	41º49'N	6º46'W	691
	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
Slovenia	SI0008R	Iskrba	45º34'N	14º52'E	520
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
Spain	ES0007R	Viznar	37º14'N	3º32'W	1265
	ES0008R	Niembro	43º27'N	4º51'W	134
	ES0009R	Campisabolos	41º17'N	3º9'W	1360
	ES0010R	Cabo de Creus	42º19'N	3º19'E	23
	ES0011R	Barcarrola	38º29'N	6º55'W	393
	ES0012R	Zarra	39º5'N	1º6'W	885
	ES0013R	Penausende	41º17'N	5º52'W	985
	ES0014R	Els Torms	41º24'N	0º43'E	470
	ES0015R	Risco Llamo	39º31'N	4º21'W	1241
	ES0016R	O Saviñao	43º13'N	7º41'W	506
	ES0017R	Montseny	41º46'N	2º21'E	700
Sweden	SE0005R	Bredkälen	63º51'N	15º20'E	404
	SE0008R	Hoburgen	56º55'N	18º09'E	58
	SE0011R	Vavihill	56º01'N	13º09'E	172
	SE0012R	Aspvreten	58º48'N	17º23'E	20
	SE0014R	Råö	57º24'N	11º55'E	5
	SE0035R	Vindeln	64º15'N	19º46'E	225
Switzerland	CH0001G	Jungfraujoch	46º33'N	7º59'E	3573
	CH0002R	Payerne	46º48'N	6º57'E	510
	CH0003R	Tänikon	47º29'N	8º54'E	540
	CH0004R	Chaumont	47º03'N	6º59'E	1130
	CH0005R	Rigi	47º04'N	8º28'E	1030
United Kingdom	GB0002R	Eskdalemuir	55º19'N	3º12'W	243
	GB0006R	Lough Navar	54º26'N	7º54'W	126
	GB0007R	Barcombe Mills	50º52'N	0º02'W	8
	GB0013R	Yarner Wood	50º36'N	3º43'W	119
	GB0014R	High Muffles	54º20'N	0º48'W	267
	GB0016R	Glen Dye	56º58'N	2º25'W	85
	GB0036R	Harwell	51º34'N	1º19'W	137
	GB0037R	Ladybower Res.	53º23'N	1º45'W	420
	GB0038R	Lullington Heath	50º47'N	0º10'W	120
	GB0043R	Narberth	51º14'N	4º42'W	160
	GB0045R	Wicken Fen	52º17'N	0º17'W	5
	GB0048R	Auchencorth Moss	55º51'N	3º12'W	190

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.

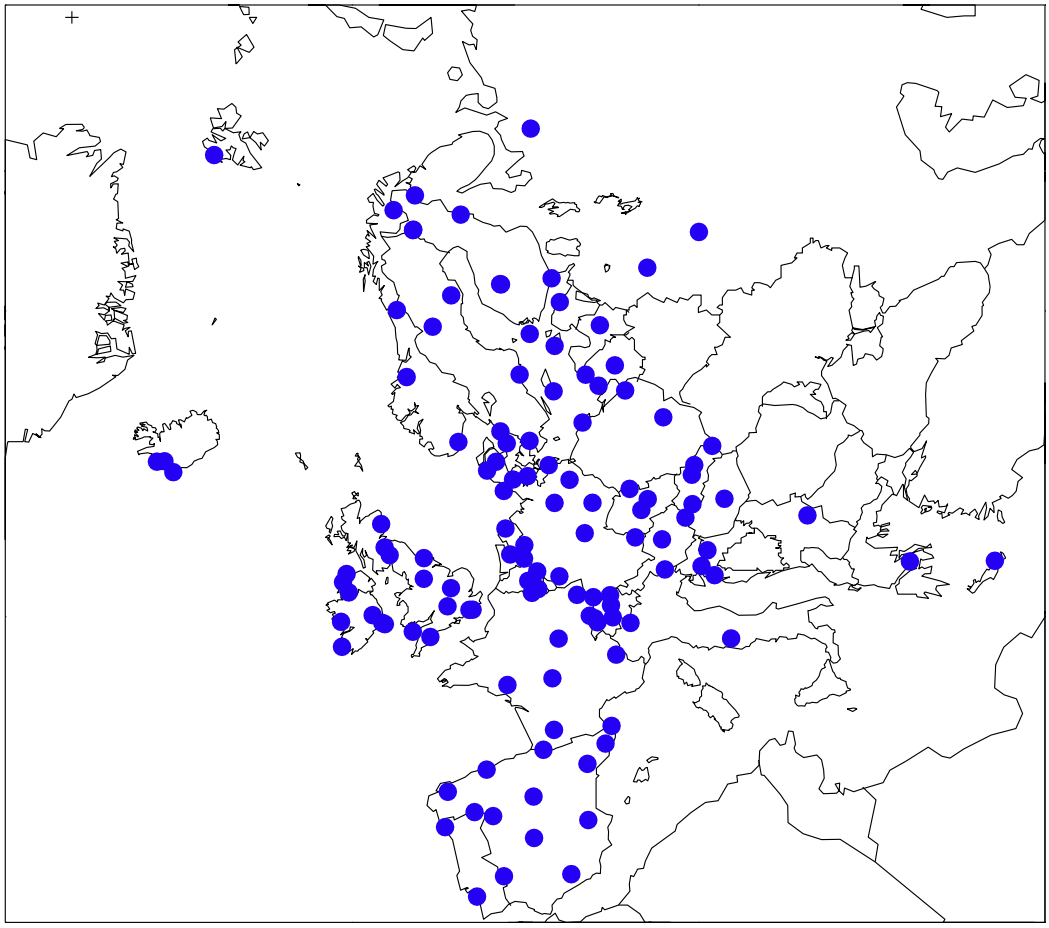

Figure 1: Location of the EMEP monitoring stations in operation in 2007. Sites with ozone/VOC measurements only are not included.

4. The measurement programme during 2007

EMEP's measurement programme during 2007 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 2007.

	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
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 2007 have been reported separately by Solberg (2009), while ozone data from 2007 have been reported by Fjæraa and Hjellbrekke (2009). Heavy metals and POPs were reported by Aas and Breivik (2009).

A list of data reports from EMEP/CCC can be found in Annex 5. The most recent data reports are also available on the web in pdf and word 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 25th laboratory intercomparison is representative for the 2007 data (Uggerud and Hjellbrekke, 2008).

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 and Table 8.

Table 3: Annual averages of main components in precipitation 2007.

Code	mm	mm off	pH	SO_4	XSO_4	NH4	NO_3	Na	Mg	Cl	Ca	K	cond
AT0002R	556.6	-	5.09	0.48	0.47	0.49	0.38	0.15	0.057	0.25	0.29	0.08	13
AT0005R	968.1	-	5.56	0.30	0.28	0.36	0.29	0.11	0.053	0.21	0.29	0.04	9
AT0048R	1519.9	-	5.13	0.27	0.26	0.45	0.40	0.12	0.033	0.18	0.14	0.04	11
BY0004R	564.2	-	6.43	0.34	0.27	0.54	0.16	0.69	0.234	1.22	2.16	0.74	42
CH0002R	1013.9	-	5.43	0.24	0.23	0.37	0.23	0.10	0.026	0.16	0.28	0.04	8
CH0004R	1279.1	-	5.23	0.20	0.19	0.23	0.20	0.11	0.024	0.17	0.20	0.05	7
CH0005R	1224.5	-	5.12	0.24	0.23	0.37	0.29	0.07	0.019	0.09	0.21	0.03	9
CZ0001R	917.9	-	4.92	0.56	0.55	0.57	0.41	0.14	0.030	0.24	0.23	0.06	16
CZ0003R	664.2	-	4.91	0.43	0.41	0.55	0.41	0.14	0.038	0.25	0.20	0.06	16
DE0001R	722.4	-	4.91	1.00	0.36	0.55	0.49	7.83	0.942	12.95	0.69	0.27	45
DE0002R	802.5	-	4.88	0.47	0.41	0.52	0.40	0.76	0.104	1.21	0.16	0.06	12
DE0003R	1616.9	-	5.02	0.28	0.26	0.28	0.27	0.21	0.034	0.33	0.17	0.05	9
DE0004R	803.6	-	4.87	0.38	0.35	0.31	0.27	0.31	0.052	0.53	0.21	0.03	11
DE0005R	1408.7	-	4.87	0.34	0.33	0.39	0.35	0.15	0.032	0.25	0.14	0.04	10
DE0007R	816.8	-	4.86	0.43	0.39	0.44	0.39	0.36	0.058	0.69	0.18	0.06	11
DE0008R	1552.7	-	4.84	0.42	0.40	0.45	0.36	0.26	0.040	0.42	0.13	0.05	13
DE0009R	770.9	-	4.93	0.48	0.38	0.44	0.39	1.11	0.167	1.88	0.27	0.11	15
DE0044R	578.6	-	4.98	0.52	0.50	0.65	0.45	0.30	0.062	0.52	0.29	0.07	13
DK0005R	600.6	-	5.08	0.55	0.38	0.56	0.50	2.11	0.262	3.72	0.32	0.18	-
DK0008R	598.5	-	4.73	0.47	0.26	0.19	0.36	2.44	0.273	4.24	0.24	0.12	-
DK0022R	870.8	-	4.87	0.46	0.29	0.37	0.39	2.07	0.225	3.56	0.16	0.09	-
DK0031R	764.4	-	4.86	0.53	0.22	0.24	0.32	3.71	0.419	6.42	0.19	0.17	-
EE0009R	623.9	-	4.74	0.33	0.31	0.16	0.25	0.24	0.045	0.34	0.40	0.06	9
EE0011R	816.8	-	5.02	0.42	0.30	1.08	0.19	1.42	0.179	1.83	0.62	0.17	21
ES0007R	423.4	-	6.62	0.40	0.37	0.45	0.27	0.28	0.223	0.35	1.22	0.16	18
ES0008R	574.8	-	5.10	1.01	0.59	0.48	0.51	5.76	0.631	8.18	0.73	0.33	45
ES0009R	457.4	-	5.75	0.46	0.44	0.42	0.39	0.23	0.088	0.28	1.01	0.14	18
ES0011R	430.4	-	5.89	0.31	0.28	0.30	0.22	0.44	0.080	0.53	0.70	0.19	10
ES0012R	387.8	-	6.10	0.49	0.46	0.40	0.36	0.45	0.131	0.52	1.46	0.14	16
ES0013R	337.2	-	5.78	0.29	0.27	0.33	0.19	0.23	0.047	0.23	0.36	0.14	9
ES0014R	253.6	-	6.63	0.90	0.84	0.95	0.67	0.52	0.229	0.88	2.21	0.35	29
ES0015R	441.6	-	6.33	0.63	0.60	0.70	0.42	0.33	0.092	0.52	0.88	0.15	18
ES0016R	706.4	-	5.24	0.61	0.49	0.30	0.22	2.07	0.181	2.35	0.52	0.20	25
FI0004R	602.9	-	4.79	0.23	0.22	0.13	0.22	0.14	0.025	0.24	0.08	0.06	11
FI0009R	346.0	562.2	4.67	0.46	0.30	0.26	0.42	1.92	0.242	3.33	0.24	0.12	27
FI0017R	614.5	-	4.68	0.49	0.46	0.29	0.35	0.28	0.058	0.49	0.21	0.20	17
FI0022R	509.1	-	4.79	0.18	0.17	0.07	0.14	0.08	0.014	0.12	0.04	0.04	9
FI0036R	645.0	-	4.84	0.16	0.15	0.06	0.12	0.08	0.013	0.14	0.03	0.03	8
FR0008R	1723.2	-	4.99	0.29	0.27	0.31	0.29	0.27	0.035	0.41	0.21	0.03	11
FR0009R	1351.0	-	5.01	0.44	0.38	0.52	0.40	0.73	0.094	1.15	0.23	0.07	16
FR0010R	1096.0	-	5.18	0.34	0.29	0.38	0.30	0.58	0.078	0.94	0.25	0.24	13
FR0012R	1490.5	-	5.15	0.36	0.31	0.32	0.23	0.62	0.083	1.00	0.28	0.05	12
FR0013R	718.0	-	5.07	0.50	0.39	0.38	0.29	1.31	0.169	2.18	0.42	0.09	19
FR0014R	1477.1	-	5.13	0.29	0.28	0.33	0.28	0.21	0.038	0.31	0.34	0.03	10
FR0015R	926.8	-	5.32	0.41	0.28	0.38	0.21	1.55	0.195	2.60	0.24	0.08	18
FR0016R	536.8	-	5.50	0.25	0.24	0.19	0.20	0.11	0.038	0.16	0.57	0.07	7
FR0017R	1272.3	-	5.23	0.30	0.25	0.29	0.22	0.61	0.079	1.00	0.27	0.05	11
GB0006R	1233.9	-	-	-	-	0.17	0.09	-	-	-	-	-	-
GB0013R	1202.0	-	-	-	-	2.48	0.18	-	-	-	-	-	-
HR0002R	-	1410.0	5.30	0.47	0.44	0.43	0.39	0.28	0.351	0.57	1.39	0.68	13
HR0004R	-	1840.5	5.35	0.56	0.49	0.41	0.41	0.57	0.316	0.94	1.83	0.55	16
HU0002R	309.4	436.1	5.53	0.71	0.62	0.49	0.46	1.38	0.144	1.11	0.78	0.15	21
IE0001R	1260.1	1349.0	5.27	0.76	0.09	0.09	0.07	8.34	0.998	14.46	0.37	0.43	60
IE0005R	772.5	-	5.46	0.26	0.16	0.24	0.12	1.26	0.135	1.92	0.13	0.06	13
IE0007R	1068.4	-	5.20	0.57	0.12	0.09	0.08	5.57	0.676	9.61	0.23	0.21	42
IE0009R	827.6	-	5.08	0.42	0.20	0.21	0.17	2.74	0.315	4.60	0.14	0.12	25
IS0002R	2481.2	-	5.44	0.42	0.10	-	0.07	3.93	0.476	7.03	0.22	0.25	31
IS0090R	1041.0	1124.2	5.51	1.11	0.21	0.33	0.12	11.08	1.283	20.44	0.60	0.37	46
IS0091R	1882.8	1991.0	5.70	12.83	0.43	0.69	0.18	139.74	18.908	282.92	6.54	5.30	771
IT0001R	558.1	-	5.62	1.20	1.00	0.73	0.56	1.85	0.395	3.42	1.99	0.82	30
IT0004R	962.9	-	5.34	0.50	0.48	0.97	0.60	0.24	0.044	0.27	0.38	0.05	14
LT0015R	814.7	-	4.82	0.46	0.31	0.38	0.35	1.72	-	2.91	0.30	0.14	22
LV0010R	985.8	-	4.83	0.38	0.33	0.32	0.34	0.56	0.097	0.86	0.25	0.09	20
LV0016R	782.9	-	5.09	0.26	0.24	0.34	0.23	0.28	0.082	0.29	0.30	0.10	12

Table 3, cont.

Code	mm	mm off	pH	SO_4	XSO_4	NH4	NO_3	Na	Mg	Cl	Ca	K	cond
NL0009R	837.2	-	5.39	0.63	0.36	0.56	0.35	3.22	0.389	5.89	0.29	0.22	33
NO0001R	1441.0	-	4.75	0.38	0.30	0.28	0.33	0.94	0.121	1.57	0.11	0.06	18
NO0015R	1293.3	-	5.28	0.23	0.07	0.14	0.08	1.98	0.262	3.66	0.13	0.10	17
NO0039R	1930.3	-	5.40	0.18	0.05	0.11	0.04	1.52	0.216	2.85	0.11	0.09	14
NO0055R	398.1	-	5.15	0.23	0.20	0.18	0.13	0.46	0.060	0.77	0.13	0.24	9
PL0002R	562.4	-	4.71	0.78	0.76	0.80	0.50	0.16	0.040	0.49	0.28	0.13	21
PL0003R	1272.5	-	4.48	0.84	0.81	0.38	0.74	0.43	0.133	0.54	0.46	0.33	26
PL0004R	775.2	-	4.70	0.39	0.33	0.39	0.39	0.78	0.101	1.56	0.16	0.09	20
PL0005R	576.0	827.2	4.81	0.54	0.50	0.52	0.46	0.39	0.066	0.82	0.21	0.09	16
PT0001R	-	459.5	5.79	0.42	0.36	0.55	0.20	0.70	0.106	1.20	1.32	0.16	21
PT0003R	-	792.4	4.90	0.49	0.24	0.30	0.08	2.94	0.376	5.56	0.27	0.14	28
PT0004R	-	354.7	5.11	0.55	0.33	0.21	0.26	2.70	0.375	5.21	1.22	0.24	29
RS0005R	610.5	-	4.64	1.30	1.26	0.91	0.49	0.63	0.107	0.68	2.02	0.37	25
RU0001R	471.5	-	5.09	0.61	0.38	0.35	0.03	2.47	0.420	3.14	0.63	1.00	17
RU0013R	657.9	-	5.40	0.49	0.40	0.35	0.17	0.91	0.281	1.73	0.59	0.80	14
RU0018R	564.0	-	4.84	0.47	0.38	0.35	0.27	0.67	0.234	1.41	0.52	0.49	12
RU0020R	743.5	-	5.20	0.53	0.43	0.58	0.36	0.94	0.212	1.71	0.47	0.53	15
SE0005R	143.9	-	5.09	0.16	0.15	0.11	0.11	0.15	0.029	0.21	0.12	0.03	6
SE0011R	890.4	-	4.96	0.34	0.26	0.38	0.34	1.01	0.127	1.61	0.16	0.04	17
SE0014R	860.3	-	4.85	0.63	0.25	0.37	0.35	4.49	0.459	7.72	0.31	0.16	40
SI0008R	1315.6	-	4.81	0.40	0.38	0.28	0.31	0.24	0.046	0.40	0.31	0.03	12
SK0002R	1086.6	-	4.93	0.53	0.52	0.43	0.30	0.23	0.041	0.19	0.16	0.07	13
SK0004R	789.7	-	4.80	0.54	0.52	0.59	0.28	0.25	0.041	0.28	0.28	0.20	16
SK0006R	737.5	-	4.54	0.53	0.52	0.32	0.38	0.19	0.030	0.19	0.18	0.08	18
SK0007R	551.1	-	5.08	0.49	0.48	0.49	0.34	0.14	0.064	0.18	0.33	0.11	13

Table 4: Annual averages of main components in air 2006.

Code	SO_2	NO_2	SO_4	XSO_4	SNO_3	NO_3	HNO_3	SNH_4	NH_4	NH_3
AT0002R	0.81	2.94	0.96	1.18	-	0.19	0.58	-	0.74	1.53
AT0005R	0.19	1.08	-	-	-	-	-	-	-	-
AT0048R	0.34	1.72	-	-	-	-	-	-	-	-
BE0001R	-	2.14	-	-	-	-	-	-	-	-
BE0032R	-	3.78	-	-	-	-	-	-	-	-
BE0035R	-	4.10	-	-	-	-	-	-	-	-
CH0001G	0.04	0.09	0.15	-	-	-	-	-	-	-
CH0002R	0.36	3.18	0.63	-	1.05	0.69	0.25	3.65	0.92	2.43
CH0003R	-	4.09	-	-	-	-	-	-	-	-
CH0004R	0.40	1.86	-	-	-	-	-	-	-	-
CH0005R	0.30	1.23	0.49	-	0.81	0.52	0.20	1.91	0.66	1.12
CZ0001R	1.06	2.66	0.72	-	0.79	-	-	1.85	-	-
CZ0003R	0.92	3.34	0.96	-	0.89	-	-	2.20	-	-
DE0001R	0.43	2.47	0.85	0.64	0.92	0.76	0.17	2.01	0.76	1.26
DE0002R	0.47	2.17	0.88	0.83	0.83	0.58	0.26	2.04	0.74	1.29
DE0003R	0.31	1.03	0.58	0.57	0.59	0.34	0.26	1.25	0.45	0.82
DE0007R	0.44	1.49	0.81	0.77	0.68	0.49	0.20	1.55	0.71	0.84
DE0008R	0.61	1.65	-	-	-	-	-	-	-	-
DE0009R	0.53	1.85	0.77	0.69	0.85	0.64	0.21	1.76	0.71	1.06
DE0044R	-	-	0.90	-	-	0.56	-	-	1.32	-
DK0003R	0.23	-	0.64	0.53	0.67	-	-	-	1.00	1.11
DK0005R	0.54	2.67	0.77	0.65	0.91	-	-	-	1.25	0.67
DK0008R	0.38	-	0.72	0.56	0.66	-	-	-	0.84	0.16
DK0031R	0.23	-	0.69	0.55	0.69	-	-	-	0.94	0.60
EE0009R	1.09	3.07	-	-	-	-	-	-	-	-
EE0011R	0.76	2.71	-	-	-	-	-	-	-	-
ES0007R	0.50	2.51	0.71	-	0.65	0.47	-	1.98	-	-
ES0008R	1.96	1.89	1.14	-	0.71	0.42	-	1.94	-	1.01
ES0009R	0.40	1.00	0.37	-	0.38	0.17	-	1.04	0.62	0.75
ES0010R	0.57	1.63	0.94	-	0.69	0.50	-	1.41	-	-
ES0011R	0.48	1.06	0.72	-	0.51	0.29	-	1.89	-	-
ES0012R	0.39	1.18	0.80	-	0.49	0.41	-	1.54	-	-
ES0013R	0.65	1.51	0.55	-	0.63	0.29	-	1.20	-	-
ES0014R	0.59	1.85	0.92	-	0.62	0.55	-	4.38	-	-
ES0015R	-	-	0.54	-	0.47	0.28	-	1.43	-	-
ES0016R	1.09	1.63	0.81	-	0.57	0.26	-	1.94	-	-
ES0017R	-	-	0.88	-	-	0.25	-	-	0.75	-
FI0009R	0.23	1.30	0.28	0.25	0.21	-	-	0.24	0.19	-
FI0017R	0.45	1.42	0.46	0.45	0.21	-	-	0.40	0.30	-
FI0022R	0.24	0.29	0.26	0.25	0.05	-	-	0.13	0.10	-
FI0036R	0.17	-	0.21	0.20	0.04	-	-	0.10	0.09	-
FI0037R	0.24	0.53	0.35	-	0.15	-	-	0.28	-	-
FI0096G	-	0.25	-	-	-	-	-	-	-	-
FR0008R	0.38	1.24	0.86	-	-	-	-	-	-	-
FR0009R	0.62	-	0.99	-	1.15	-	-	2.07	-	-
FR0010R	0.78	-	0.94	-	-	-	-	-	-	-
FR0012R	0.40	-	0.90	-	-	-	-	-	-	-
FR0013R	0.40	1.83	0.84	-	0.65	-	-	1.90	-	-
FR0014R	0.26	-	0.74	-	-	-	-	-	-	-
FR0015R	0.47	3.29	0.89	-	-	-	-	-	-	-
FR0016R	0.21	-	0.68	-	-	-	-	-	-	-
FR0017R	0.33	-	0.73	-	-	-	-	-	-	-

Table 4, cont.

Code	SO_2	NO_2	SO_4	XSO_4	SNO_3	NO_3	HNO_3	SNH_4	NH_4	NH_3
GB0002R	-	-	0.45	-	-	-	-	-	-	-
GB0006R	-	-	0.41	-	-	0.21	0.05	-	0.72	0.57
GB0007R	-	-	0.76	-	-	-	-	-	-	-
GB0013R	-	1.74	0.53	-	-	0.45	0.15	-	0.72	0.46
GB0014R	-	2.08	0.49	-	-	0.38	0.15	-	0.65	0.52
GB0016R	-	-	-	-	-	0.19	0.10	-	0.32	0.26
GB0036R	-	3.73	-	-	-	-	-	-	-	-
GB0037R	-	2.71	-	-	-	-	-	-	-	-
GB0038R	-	3.17	-	-	-	-	-	-	-	-
GB0043R	-	1.66	-	-	-	-	-	-	-	-
GB0045R	-	3.07	-	-	-	-	-	-	-	-
GR0001R	4.11	13.49	-	-	-	-	-	-	-	-
HU0002R	0.72	1.60	0.91	-	-	0.39	0.20	-	0.85	1.35
IE0001R	0.24	1.04	0.51	0.30	0.29	-	-	1.06	-	-
IE0005R	-	-	0.48	0.41	-	0.40	-	-	0.89	-
IE0006R	-	-	0.54	0.33	-	0.29	-	-	0.74	-
IE0008R	-	-	0.72	0.43	-	0.46	-	-	0.73	-
IS0002R	0.09	-	0.16	0.09	-	-	-	-	-	-
IS0091R	-	-	0.55	0.08	-	0.04	-	-	-	-
IT0001R	0.46	5.73	1.02	-	-	0.48	0.24	-	1.25	1.91
IT0004R	0.39	6.81	1.01	-	-	1.64	-	-	1.97	-
LT0015R	0.27	1.17	0.53	-	0.59	-	-	1.66	-	-
LV0010R	0.44	-	0.32	0.30	0.38	0.09	-	1.04	0.54	-
LV0016R	0.59	0.65	0.43	-	0.30	0.06	-	0.95	0.65	-
NL0007R	0.57	4.77	-	-	-	-	-	-	-	7.08
NL0008R	1.01	-	0.77	-	-	0.83	-	-	1.35	-
NL0009R	0.39	3.02	0.59	-	-	0.69	-	-	1.08	-
NL0010R	0.69	6.57	0.71	-	-	0.92	-	-	1.43	14.99
NO0001R	0.06	0.32	0.28	0.25	0.17	0.13	0.04	0.43	-	0.27
NO0015R	0.06	0.11	0.14	0.12	0.09	0.06	0.03	0.94	0.08	0.86
NO0039R	0.03	0.17	0.13	0.11	0.06	0.04	0.02	0.76	0.06	0.71
NO0042G	0.09	-	0.11	0.09	0.05	0.03	0.02	0.26	0.04	0.22
NO0055R	0.19	0.14	0.19	0.17	0.08	0.06	0.03	0.54	0.11	-
PL0002R	1.99	3.18	1.60	-	0.82	0.65	-	2.97	1.55	-
PL0003R	0.93	0.94	0.81	-	0.42	0.30	-	0.69	0.52	-
PL0004R	1.05	1.60	1.23	-	0.54	0.41	-	1.28	0.90	-
PL0005R	0.61	0.96	0.63	-	0.67	-	-	1.03	-	-
RS0005R	7.53	3.63	-	-	-	-	-	-	-	-
RU0018R	0.17	-	0.22	-	-	0.06	-	-	0.39	-
SE0005R	0.05	0.11	0.18	-	0.04	-	-	0.16	-	-
SE0008R	0.46	1.17	0.57	-	-	-	-	-	-	-
SE0011R	0.29	1.28	0.55	-	0.49	-	-	0.98	-	-
SE0014R	0.35	1.39	0.62	-	0.50	-	-	0.70	-	-
SI0008R	0.60	0.38	0.83	0.82	0.29	-	-	1.02	-	-
SK0002R	0.18	0.72	0.27	-	-	0.08	0.01	-	-	-
SK0004R	0.82	5.10	0.58	0.57	-	0.30	0.02	-	0.77	0.40
SK0006R	0.80	1.24	0.86	0.83	-	0.32	0.02	-	0.80	0.18

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

Code	Na	Ca	Mg	K	Cl
AT0002R	0.09	0.17	0.03	0.18	-
DE0001R	2.55	0.20	0.33	0.21	0.06
DE0002R	0.53	0.11	0.08	0.17	0.04
DE0003R	0.17	0.17	0.04	0.21	0.02
DE0007R	0.48	0.10	0.07	0.19	0.03
DE0009R	0.94	0.14	0.15	0.17	0.05
DK0003R	1.28	0.14	-	0.18	1.96
DK0005R	1.37	0.12	-	0.13	1.95
DK0008R	1.92	0.13	-	0.14	2.86
DK0031R	1.71	0.11	-	0.28	2.67
FI0009R	0.38	0.05	0.05	0.04	0.35
FI0017R	0.20	0.10	0.03	0.07	0.10
FI0022R	0.11	0.01	0.01	0.02	0.05
FI0036R	0.17	0.02	0.02	0.02	0.19
IE0001R	2.50	0.16	0.29	0.12	-
IE0005R	0.89	0.11	0.12	0.07	-
IE0006R	2.42	0.13	0.32	0.13	-
IE0008R	3.51	0.17	0.41	0.15	-
IS0002R	0.95	0.20	0.13	0.05	1.63
IS0091R	-	-	-	-	9.99
LV0010R	0.30	0.12	0.01	0.05	0.47
NL0008R	-	0.13	-	-	0.59
NL0009R	-	0.10	-	-	0.96
NL0010R	-	0.08	-	-	0.45
NO0001R	0.35	0.05	0.05	0.04	0.37
NO0015R	0.29	0.05	0.04	0.03	0.42
NO0039R	0.17	0.04	0.03	0.02	0.20
NO0042G	0.23	0.05	0.04	0.01	0.30
NO0055R	0.22	0.05	0.04	0.02	0.27
SI0008R	0.11	0.18	0.04	0.12	0.05
SK0004R	0.09	0.14	0.03	0.15	-
SK0006R	0.08	0.08	0.01	0.14	-

Table 6: Annual averages of particulate matter.

Code	PM_{10}	PM_{10}-$PM_{2.5}$	$PM_{2.5}$	PM_1	SPM
AT0002R	20.83	-	16.18	11.37	-
AT0005R	8.50	-	-	-	-
AT0048R	9.75	-	-	-	-
CH0001G	3.18	-	-	-	-
CH0002R	19.30	-	12.43	9.35	-
CH0003R	18.63	-	-	-	-
CH0004R	10.62	-	-	-	-
CH0005R	10.62	-	7.84	6.01	-
CY0002R	27.03	-	14.34	-	-
CZ0001R	22.62	-	-	-	-
CZ0003R	16.73	-	14.77	-	-
DE0001R	18.60	-	-	-	-
DE0002R	15.77	-	11.27	6.52	-
DE0003R	9.39	-	6.50	-	-
DE0007R	13.99	-	-	-	-
DE0008R	10.41	-	-	-	-
DE0009R	15.38	-	-	-	-
DE0044R	21.66	-	17.42	-	-
DK0005R	21.98	-	-	-	-
ES0007R	20.56	-	10.78	-	-
ES0008R	19.76	-	11.69	-	-
ES0009R	7.78	-	6.82	-	-
ES0010R	18.55	-	10.00	-	-
ES0011R	15.90	-	8.21	-	-
ES0012R	14.27	-	8.83	-	-
ES0013R	10.69	-	6.44	-	-
ES0014R	17.49	-	12.27	-	-
ES0015R	10.17	-	7.03	-	-
ES0016R	12.04	-	7.95	-	-
FR0009R	20.92	-	-	-	-
FR0013R	15.21	-	-	-	-
GB0006R	12.88	-	-	-	-
GB0036R	21.50	-	18.92	-	-
GB0043R	18.06	-	-	-	-
GB0048R	10.19	-	4.05	-	-
GR0001R	21.79	-	-	-	-
GR0002R	20.58	-	-	-	-
IE0031R	-	-	9.56	-	-
IT0001R	31.52	-	21.87	-	-
IT0004R	-	-	25.70	-	-
NL0007R	26.21	-	-	-	-
NL0009R	25.82	-	-	-	-
NL0010R	23.81	-	-	-	-
NO0001R	5.63	-	3.33	2.70	-
PL0005R	16.03	-	-	-	-
SE0011R	15.21	-	8.98	-	-
SE0012R	9.58	-	6.70	-	-
SE0035R	6.56	-	-	-	-
SI0008R	15.21	-	10.08	-	-
SK0002R	-	-	-	-	5.11
SK0004R	12.33	-	-	-	-
SK0006R	17.66	-	-	-	-
SK0007R	23.32	-	-	-	-

Table 7: Annual averages of elementary and organic carbon.

Code		EC	OC	TC
DE0044R	PM	1.11	1.53	-
ES0009R	PM	0.14	1.91	-
ES0017R	PM	0.17	1.74	1.91
IT0004R	PM	2.34	9.26	-
NO0001R	PM	0.14	0.84	0.98

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	µg N/m^3
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 any further errors are detected, the data will be corrected in the database. It is important that users make certain that they have access to the most recent version of the database. For the data presented here the latest alteration was 2 July, 2009.

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

Closer at home, and of equal significance to the presentation of our work, the secretarial work, and far beyond, has been performed by Ms. Kristine Aasarød. Mona Johnsrud and Mona Waagsbø have been very helpful with data flow and database maintenance.

12. List of participating institutions

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 Laboratories Wolff
Germany	Umweltbundesamt Leipzig (Melpitz), IFT
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
Latvia	Latvian Environment, Geology and Meteorology Agency
Lithuania	Environmental Physics and Chemistry Laboratory, Institute of Physics
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

Annex 1

Maps over Europe

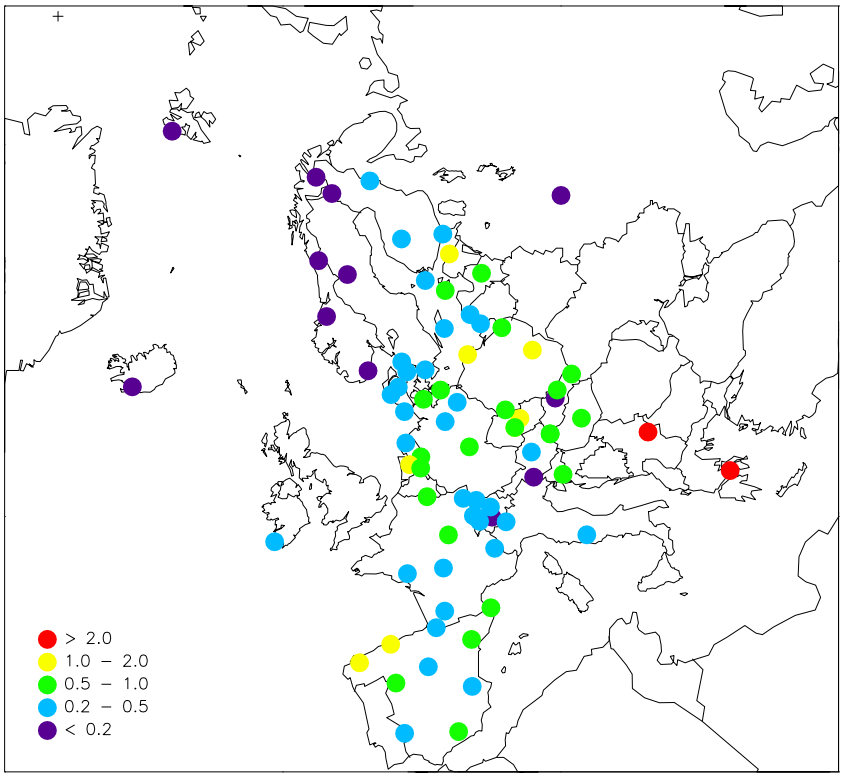

Figure 1.1: Geographical distribution of sulphur dioxide 2007. Unit: μg S/m^3.

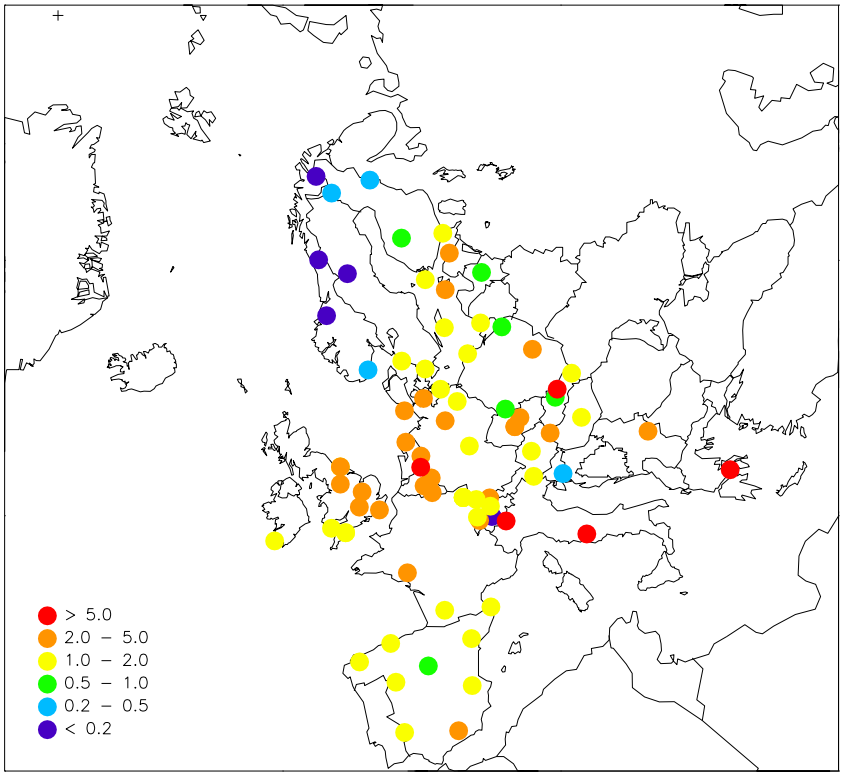

Figure 1.2: Geographical distribution of nitrogen dioxide 2007. Unit: μg N/m^3.

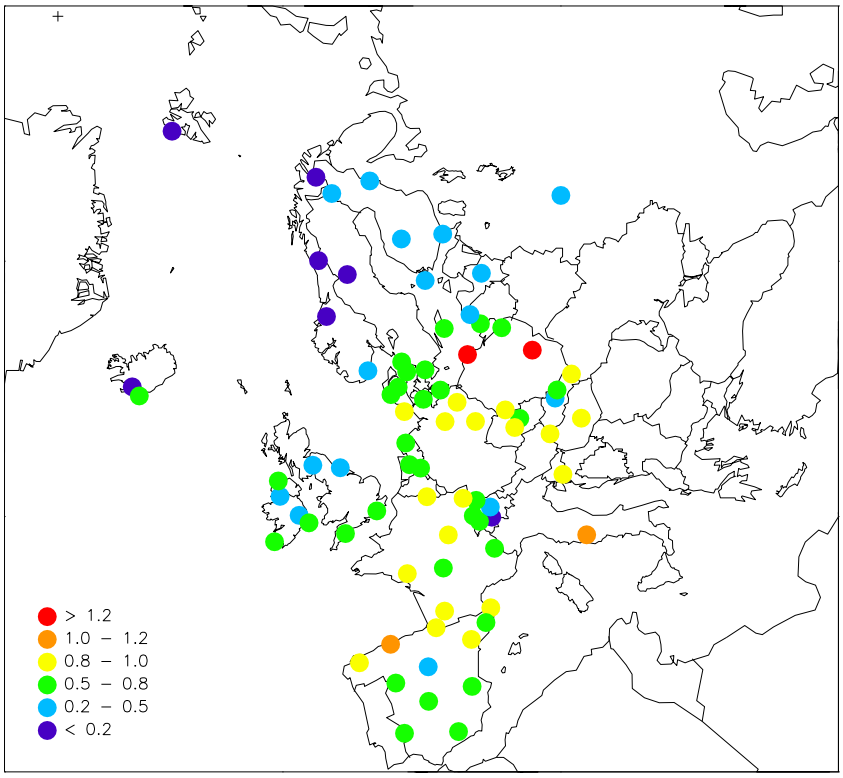

Figure 1.3: Geographical distribution of sulphate in aerosols 2007. Unit: μg S/m^3.

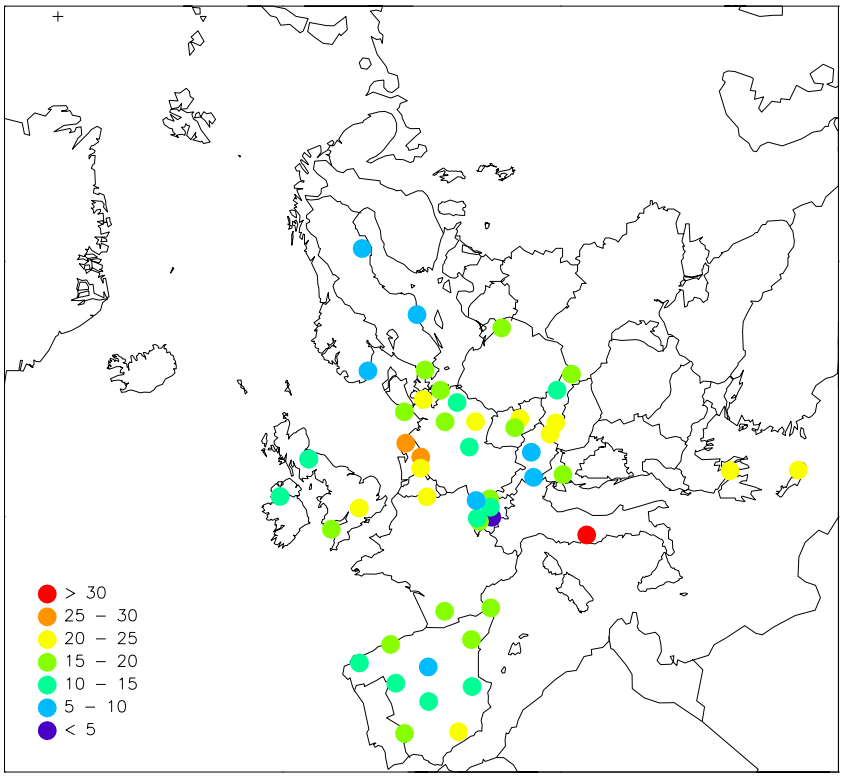

Figure 1.4: Geographical distribution of PM_{10} in aerosols 2007. Unit: μg S/m^3.

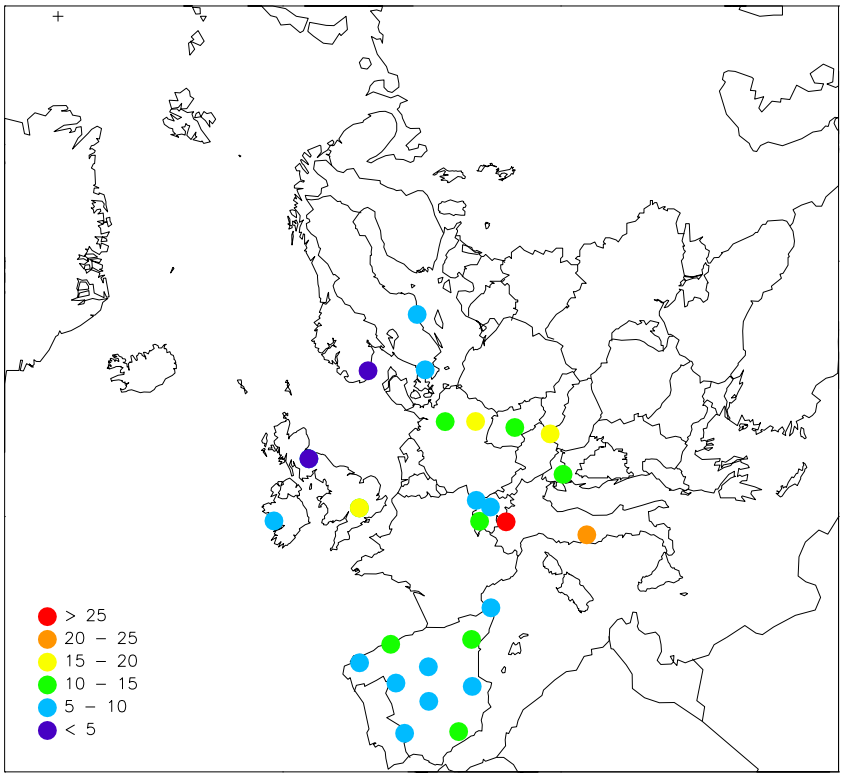

Figure 1.5: Geographical distribution of $PM_{2.5}$ in aerosols 2007. Unit: $\mu g\ S/m^3$.

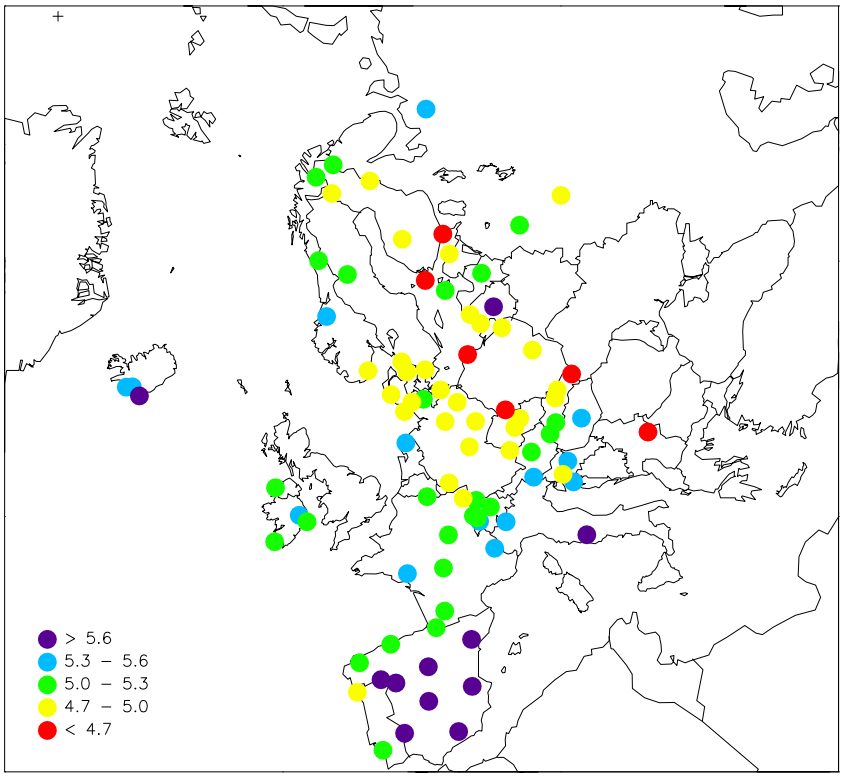

Figure 1.6: Geographical distribution of pH in precipitation 2007. Unit: pH units.

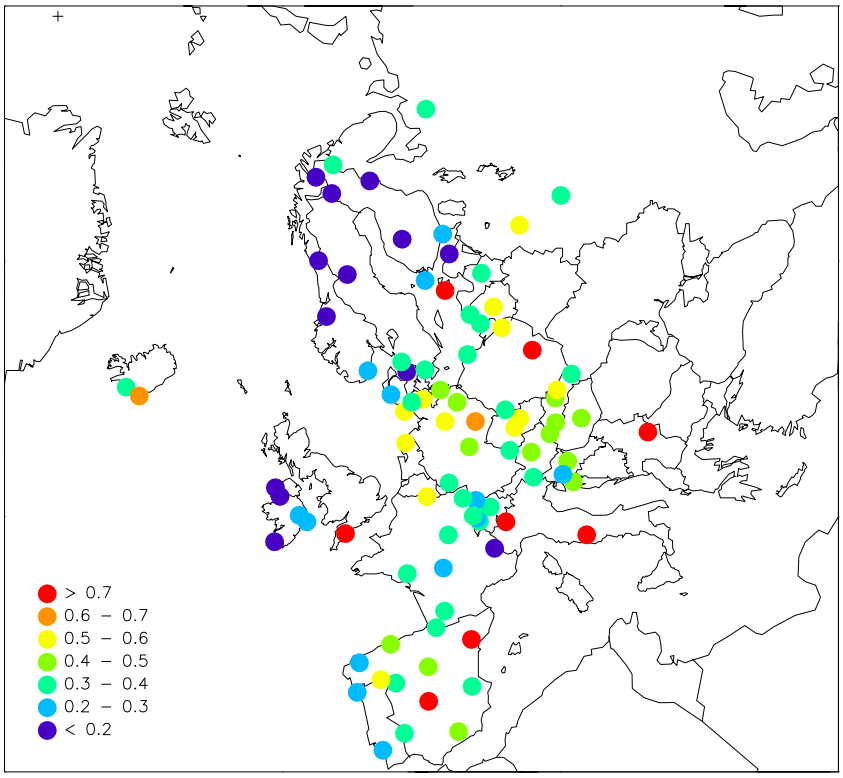

Figure 1.7: Geographical distribution of ammonium in precipitation 2007. Unit: mg N/l.

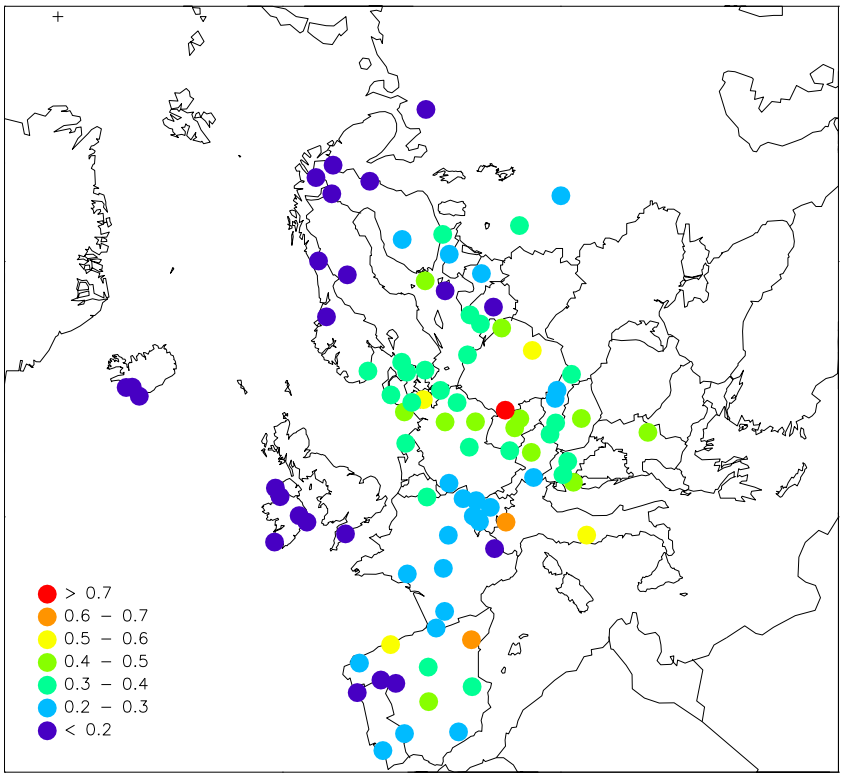

Figure 1.8: Geographical distribution of nitrate in precipitation 2007. Unit: mg N/l.

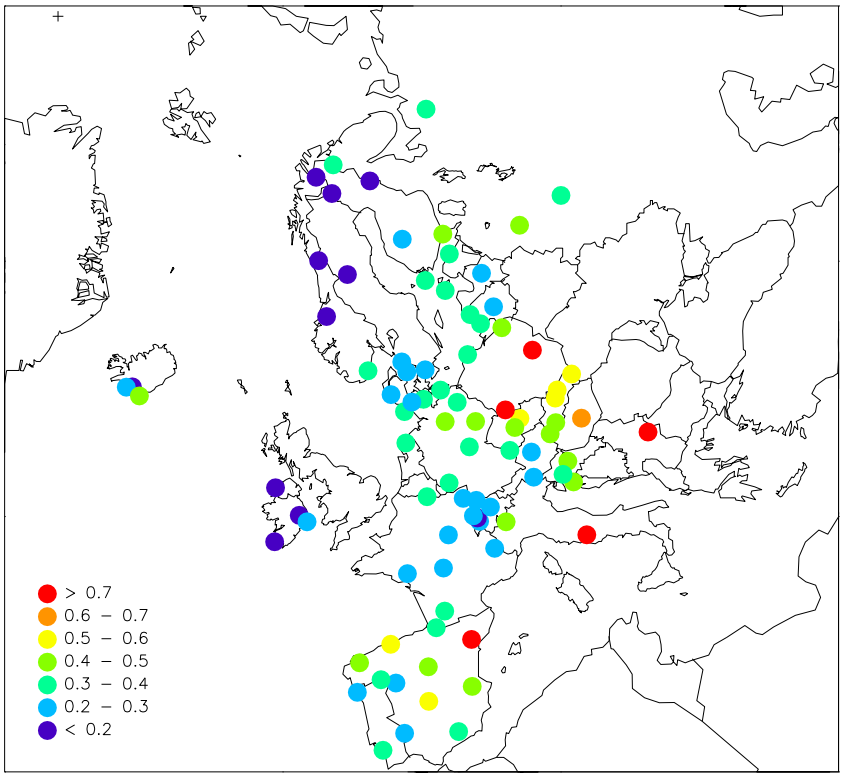

Figure 1.9: Geographical distribution of sulphate in precipitation 2007 (corrected for sea spray). Unit: mg S/l.

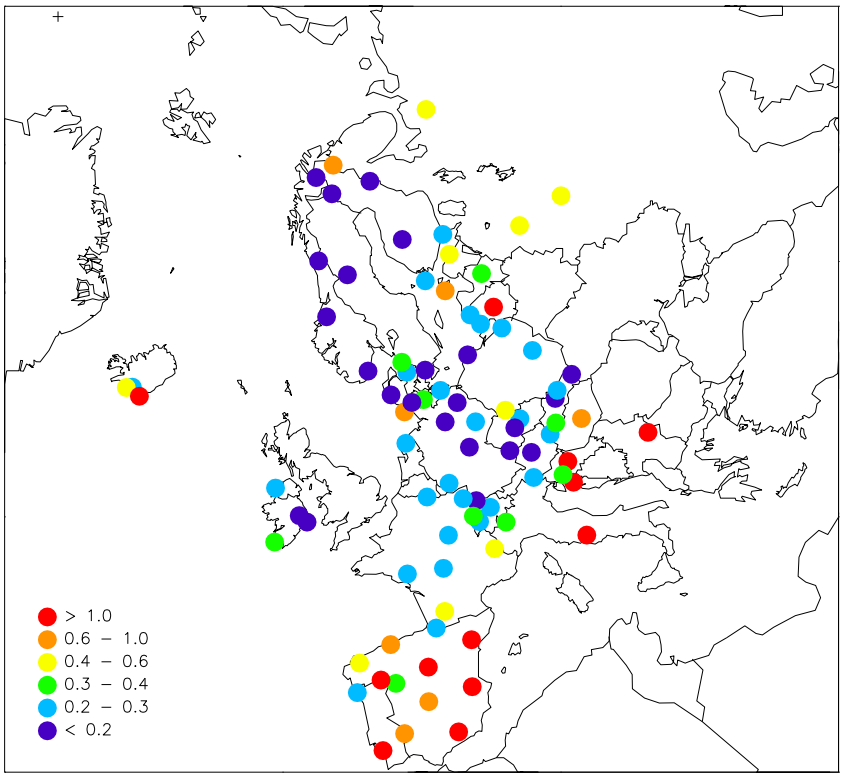

Figure 1.10: Geographical distribution of calcium in precipitation 2007. Unit: mg/l.

Annex 2

Annual statistics on precipitation data

AT0002R Illmitz

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.29	0.00	6.30	161.2	100.0	0	82
Cl-	0.25	0.00	3.70	140.1	100.0	2	82
K+	0.08	0.01	2.14	42.3	99.2	20	81
Mg++	0.057	0.014	1.142	31.5	100.0	0	82
NH4+	0.49	0.01	7.73	273.3	100.0	4	82
NO3-	0.38	0.00	5.74	213.9	100.0	0	82
Na+	0.15	0.01	2.60	82.7	99.2	0	81
Precip	-	0.0	31.8	556.6	100.0	283	365
SO4--	0.48	0.04	8.70	268.5	100.0	0	82
SO4-- corr	0.47	0.03	8.54	261.1	100.0	0	82
cond	13.01	2.00	137.00	7241.5	100.0	0	82
pH	5.09	4.01	6.69	4553.6	100.0	0	82

AT0005R Vorhegg

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.29	0.00	3.00	283.4	100.0	0	101
Cl-	0.21	0.00	6.10	204.1	100.0	5	101
K+	0.04	0.01	0.75	36.9	89.6	18	97
Mg++	0.053	0.005	0.740	51.7	100.0	4	101
NH4+	0.36	0.01	4.34	351.4	100.0	2	101
NO3-	0.29	0.02	5.58	280.8	100.0	0	101
Na+	0.11	0.01	1.83	109.4	100.0	0	101
Precip	-	0.0	33.3	968.1	99.7	262	364
SO4--	0.30	0.04	4.17	292.5	100.0	0	101
SO4-- corr	0.28	-0.18	4.14	274.1	100.0	0	101
cond	8.84	2.00	90.00	8556.7	100.0	0	101
pH	5.56	4.54	6.89	2657.8	100.0	0	101

AT0048R Zoebelboden

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.14	0.00	1.90	215.8	100.0	2	186
Cl-	0.18	0.00	9.00	267.4	100.0	0	186
K+	0.04	0.01	0.84	63.8	100.0	34	186
Mg++	0.033	0.005	0.328	50.1	100.0	14	186
NH4+	0.45	0.01	5.56	680.9	100.0	1	186
NO3-	0.40	0.06	3.71	612.3	100.0	0	186
Na+	0.12	0.01	4.20	181.7	100.0	12	186
Precip	-	0.0	36.4	1519.9	100.0	179	365
SO4--	0.27	0.04	2.19	416.6	100.0	0	186
SO4-- corr	0.26	0.04	2.17	395.7	100.0	0	186
cond	10.72	2.00	63.00	16292.0	100.0	0	186
pH	5.13	4.31	7.00	11178.5	100.0	0	186

BY0004R Vysokoe

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	2.16	0.20	11.20	1220.0	78.0	0	56
Cl-	1.22	0.60	4.50	688.2	41.5	0	19
K+	0.74	0.05	10.30	416.0	72.4	5	53
Mg++	0.234	0.020	1.480	132.1	78.1	0	56
NH4+	0.54	0.01	3.23	303.5	81.2	2	62
NO3-	0.16	0.01	1.03	90.7	85.3	0	66
Na+	0.69	0.01	7.40	387.5	78.6	0	58
Precip	-	0.6	38.8	564.2	100.0	254	365
SO4--	0.34	0.05	2.00	194.4	88.5	0	75
SO4-- corr	0.27	-0.02	1.80	151.4	78.9	0	54
cond	42.01	15.00	111.00	23700.8	80.4	0	60
pH	6.43	5.64	7.10	210.8	99.6	0	110

CH0002R Payerne

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.28	0.03	6.48	283.8	98.8	19	117
Cl-	0.16	0.01	3.57	164.9	98.8	1	117
K+	0.04	0.01	0.44	45.3	98.8	20	117
Mg++	0.026	0.001	0.350	26.6	98.8	0	117
NH4+	0.37	0.08	2.73	371.7	98.8	0	117
NO3-	0.23	0.04	2.09	237.0	98.8	0	117
Na+	0.10	0.01	1.97	101.8	98.8	3	117
Precip	-	0.0	59.5	1013.9	99.7	210	364
SO4--	0.24	0.03	1.65	239.5	98.8	0	117
SO4-- corr	0.23	0.03	1.61	230.9	98.8	0	117
cond	8.12	2.16	83.41	8234.4	99.5	0	129
pH	5.43	4.14	7.69	3778.7	99.5	0	129

CH0004R Chaumont

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.20	0.03	1.30	256.5	99.9	8	43
Cl-	0.17	0.02	0.97	215.8	99.9	0	43
K+	0.05	0.01	0.96	61.9	99.9	3	43
Mg++	0.024	0.005	0.111	30.4	99.9	0	43
NH4+	0.23	0.05	1.28	301.2	99.9	0	43
NO3-	0.20	0.07	1.26	262.5	99.9	0	43
Na+	0.11	0.02	0.62	135.3	99.9	0	43
Precip	-	0.0	119.5	1279.1	99.7	7	52
SO4--	0.20	0.04	0.72	255.6	99.9	0	43
SO4-- corr	0.19	0.04	0.70	244.0	99.9	0	43
cond	7.29	3.01	36.76	9330.3	100.0	0	44
pH	5.23	4.26	6.71	7549.7	100.0	0	44

CH0005R Rigi

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.21	0.03	4.69	255.3	99.0	18	112
Cl-	0.09	0.01	1.59	110.7	99.0	8	112
K+	0.03	0.01	0.85	37.3	99.0	23	112
Mg++	0.019	0.001	0.282	23.2	99.0	3	112
NH4+	0.37	0.03	3.50	456.7	99.0	0	112
NO3-	0.29	0.04	3.10	350.5	99.0	0	112
Na+	0.07	0.01	0.88	79.3	99.0	6	112
Precip	-	0.0	115.3	1224.5	98.4	211	359
SO4--	0.24	0.03	1.88	293.6	99.0	0	112
SO4-- corr	0.23	0.03	1.87	287.2	99.0	0	112
cond	9.21	2.17	76.42	11283.5	99.6	0	124
pH	5.12	4.13	7.18	9290.3	99.6	0	124

RS0005R Kamenicki vis

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	2.02	0.11	24.51	1234.9	94.5	0	97
Cl-	0.68	0.11	13.40	412.6	94.6	0	99
K+	0.37	0.02	6.68	226.2	94.6	0	98
Mg++	0.107	0.020	2.480	65.4	94.6	0	99
NH4+	0.91	0.09	8.61	556.1	94.6	0	98
NO3-	0.49	0.07	7.72	298.1	94.6	0	99
Na+	0.63	0.04	8.22	386.6	94.6	0	99
Precip	-	0.0	31.2	610.5	100.0	255	365
SO4--	1.30	0.20	10.18	796.5	94.6	0	98
SO4-- corr	1.26	0.18	9.99	768.0	94.6	0	98
cond	24.79	7.00	143.00	15133.8	99.0	0	104
pH	4.64	2.30	7.89	13825.2	99.8	0	108

CZ0001R Svratouch

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.23	0.02	6.46	210.7	92.0	1	44
Cl-	0.24	0.04	1.00	217.6	93.4	0	45
K+	0.06	0.02	0.46	53.0	93.4	0	45
Mg++	0.030	0.005	0.267	27.5	93.4	0	45
NH4+	0.57	0.07	7.18	526.7	85.4	0	41
NO3-	0.41	0.10	3.93	375.5	93.4	0	45
Na+	0.14	0.03	0.62	127.8	93.4	0	45
Precip	-	0.0	145.1	917.9	99.7	3	52
SO4--	0.56	0.06	5.33	514.7	93.4	0	45
SO4-- corr	0.55	0.06	5.30	502.5	93.4	0	45
cond	15.94	4.38	111.70	14627.9	93.4	0	45
pH	4.92	3.99	6.29	11062.6	93.4	0	45

CZ0003R Kosetice

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.20	0.02	4.79	132.4	89.6	3	105
Cl-	0.25	0.01	4.44	168.4	92.5	1	110
K+	0.06	0.00	2.56	37.9	92.5	1	106
Mg++	0.038	0.003	1.223	25.5	91.8	0	105
NH4+	0.55	0.09	12.89	368.3	95.3	0	124
NO3-	0.41	0.07	2.65	274.4	93.2	0	111
Na+	0.14	0.02	1.83	90.8	92.5	0	106
Precip	-	0.0	32.1	664.2	100.0	184	365
SO4--	0.43	0.02	2.93	284.3	93.2	0	111
SO4-- corr	0.41	0.02	2.92	275.9	93.2	0	111
cond	15.83	3.22	171.20	10515.0	94.1	0	117
pH	4.91	3.96	7.20	8114.9	94.3	0	118

DE0001R Westerland

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.69	0.09	6.41	498.4	99.8	0	43
Cl-	12.95	0.42	59.88	9355.2	99.8	0	43
K+	0.27	0.03	1.51	195.2	99.8	0	43
Mg++	0.942	0.050	5.830	680.4	99.8	0	43
NH4+	0.55	0.05	2.25	395.2	99.8	0	43
NO3-	0.49	0.14	1.58	357.1	99.8	0	43
Na+	7.83	0.23	38.12	5653.4	99.8	0	43
Precip	-	0.0	47.9	722.4	98.1	8	52
SO4--	1.00	0.27	3.67	726.0	99.8	0	43
SO4-- corr	0.36	-0.31	2.44	257.1	99.3	0	42
cond	45.34	9.90	188.90	32755.8	99.7	0	42
pH	4.91	3.92	6.51	8974.8	99.8	0	43

DE0002R Langenbrügge

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.16	0.02	1.48	128.0	99.8	2	42
Cl-	1.21	0.02	9.04	972.1	99.8	1	42
K+	0.06	0.01	0.37	44.8	99.8	16	42
Mg++	0.104	0.005	0.720	83.2	99.8	7	42
NH4+	0.52	0.17	3.27	415.2	99.8	0	42
NO3-	0.40	0.17	2.17	323.3	99.8	0	42
Na+	0.76	0.01	5.87	612.8	99.8	1	42
Precip	-	0.0	66.1	802.5	99.6	8	52
SO4--	0.47	0.21	2.08	374.4	99.8	0	42
SO4-- corr	0.41	0.17	1.93	325.5	99.8	0	42
cond	12.37	4.00	78.00	9929.4	99.8	0	42
pH	4.88	4.40	6.14	10615.2	99.8	0	42

DE0003R Schauinsland

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.17	0.01	0.79	269.6	100.0	5	46
Cl-	0.33	0.02	2.66	534.5	100.0	3	46
K+	0.05	0.01	0.29	74.5	100.0	23	46
Mg++	0.034	0.005	0.220	55.2	100.0	16	46
NH4+	0.28	0.09	1.97	456.0	100.0	0	46
NO3-	0.27	0.11	1.44	428.7	100.0	0	46
Na+	0.21	0.00	1.60	337.9	100.0	4	46
Precip	-	0.0	88.1	1616.9	99.6	6	52
SO4--	0.28	0.10	0.81	450.3	100.0	0	46
SO4-- corr	0.26	0.10	0.80	422.4	100.0	0	46
cond	9.08	3.00	34.00	14684.7	100.0	0	46
pH	5.02	4.42	5.85	15384.1	100.0	0	46

DE0004R Deuselbach

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.21	0.05	1.25	170.6	99.7	0	44
Cl-	0.53	0.01	5.48	427.2	99.7	1	44
K+	0.03	0.01	0.20	23.1	99.7	26	44
Mg++	0.052	0.005	0.400	41.8	99.7	8	44
NH4+	0.31	0.07	1.45	247.0	99.7	0	44
NO3-	0.27	0.08	1.13	216.5	99.7	0	44
Na+	0.31	0.01	3.42	250.8	99.7	3	44
Precip	-	0.0	55.9	803.6	99.6	5	52
SO4--	0.38	0.12	1.57	301.2	99.7	0	44
SO4-- corr	0.35	0.12	1.31	279.5	99.7	0	44
cond	10.83	3.00	40.00	8702.0	99.5	0	43
pH	4.87	4.38	6.27	10861.9	99.7	0	44

DE0005R Brotjacklriegel

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.14	0.01	0.90	198.2	100.0	7	48
Cl-	0.25	0.02	1.02	348.8	97.8	1	47
K+	0.04	0.01	0.80	63.7	97.8	16	47
Mg++	0.032	0.005	0.110	44.6	100.0	21	48
NH4+	0.39	0.17	2.85	552.6	100.0	0	48
NO3-	0.35	0.14	1.88	489.1	100.0	0	48
Na+	0.15	0.01	1.04	219.0	100.0	12	48
Precip	-	0.0	149.4	1408.7	99.6	4	52
SO4--	0.34	0.11	1.45	479.1	100.0	0	48
SO4-- corr	0.33	0.10	1.45	460.7	100.0	0	48
cond	10.06	2.00	35.00	14177.8	100.0	0	48
pH	4.87	4.03	6.35	19040.0	100.0	0	48

DE0007R Neuglobsow

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.18	0.07	0.94	150.7	99.8	0	45
Cl-	0.69	0.06	6.26	562.1	99.8	0	45
K+	0.06	0.01	0.94	44.6	97.1	18	44
Mg++	0.058	0.005	0.480	47.7	99.8	12	45
NH4+	0.44	0.12	2.02	359.8	99.8	0	45
NO3-	0.39	0.18	1.83	318.7	99.8	0	45
Na+	0.36	0.01	3.85	290.8	99.8	6	45
Precip	-	0.0	74.8	816.8	99.6	5	52
SO4--	0.43	0.22	1.67	347.9	99.8	0	45
SO4-- corr	0.39	0.19	1.56	322.1	99.8	0	45
cond	11.35	3.00	54.00	9273.0	99.8	0	45
pH	4.86	3.92	6.20	11410.7	99.8	0	45

DE0008R Schmücke

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.13	0.01	1.51	206.5	100.0	5	48
Cl-	0.42	0.02	1.92	646.0	100.0	1	48
K+	0.05	0.01	0.29	79.5	100.0	22	48
Mg++	0.040	0.005	0.170	61.8	100.0	12	48
NH4+	0.45	0.15	6.04	699.0	100.0	0	48
NO3-	0.36	0.15	3.24	560.5	100.0	0	48
Na+	0.26	0.01	1.25	395.7	100.0	7	48
Precip	-	0.0	107.5	1552.7	99.6	4	52
SO4--	0.42	0.13	5.22	651.2	100.0	0	48
SO4-- corr	0.40	0.12	5.18	617.4	100.0	0	48
cond	12.78	3.00	92.00	19836.8	100.0	0	48
pH	4.84	4.22	6.18	22299.5	100.0	0	48

DE0009R Zingst

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.27	0.08	1.72	204.5	100.0	0	46
Cl-	1.88	0.18	8.73	1427.9	100.0	0	46
K+	0.11	0.01	0.99	81.4	100.0	5	46
Mg++	0.167	0.020	0.580	126.8	100.0	0	46
NH4+	0.44	0.12	2.32	333.6	100.0	0	46
NO3-	0.39	0.11	1.63	293.2	100.0	0	46
Na+	1.11	0.09	5.24	845.0	100.0	0	46
Precip	-	0.0	74.2	757.8	99.6	6	52
SO4--	0.48	0.18	2.12	362.7	100.0	0	46
SO4-- corr	0.38	0.14	2.08	294.6	100.0	0	46
cond	15.38	5.80	43.20	11654.9	100.0	0	46
pH	4.93	4.33	6.07	8937.1	100.0	0	46

DE0044R Melpitz

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.29	0.07	1.06	169.4	99.7	0	43
Cl-	0.52	0.08	3.23	300.3	99.7	0	43
K+	0.07	0.01	0.34	39.3	99.7	8	43
Mg++	0.062	0.010	0.270	35.8	99.7	3	43
NH4+	0.65	0.12	5.96	375.2	99.7	0	43
NO3-	0.45	0.13	2.33	262.4	99.7	0	43
Na+	0.30	0.02	1.93	173.9	99.7	2	43
Precip	-	0.0	46.2	578.6	99.6	7	52
SO4--	0.52	0.16	4.11	301.8	99.7	0	43
SO4-- corr	0.50	0.15	4.00	287.1	99.7	0	43
cond	12.66	5.00	35.00	7326.2	99.7	0	43
pH	4.98	4.20	6.32	6021.6	99.7	0	43

DK0005R Keldsnor

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.32	0.16	3.39	189.2	97.6	0	20
Cl-	3.72	0.78	14.38	2234.7	97.6	0	20
K+	0.18	0.08	0.98	108.5	90.7	0	19
Mg++	0.262	0.069	1.242	157.4	97.6	0	20
NH4+	0.56	0.25	3.16	336.7	97.6	0	20
NO3-	0.50	0.23	3.45	302.7	97.6	0	20
Na+	2.11	0.45	11.20	1266.9	97.6	0	20
Precip	-	0.0	81.0	600.6	99.8	2	24
SO4--	0.55	0.30	3.36	332.9	97.6	0	20
SO4-- corr	0.38	0.16	2.50	227.5	97.6	0	20
pH	5.08	4.51	6.02	5027.3	97.6	0	20

DK0008R Anholt

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.24	0.07	1.40	144.1	100.0	0	24
Cl-	4.24	0.87	25.93	2534.5	100.0	0	24
K+	0.12	0.03	0.55	72.8	100.0	0	24
Mg++	0.273	0.061	1.681	163.3	100.0	0	24
NH4+	0.19	0.01	1.62	114.5	100.0	0	24
NO3-	0.36	0.13	2.65	216.8	100.0	0	24
Na+	2.44	0.52	12.46	1461.6	100.0	0	24
Precip	-	3.0	95.9	598.5	99.8	0	24
SO4--	0.47	0.22	1.91	278.7	100.0	0	24
SO4-- corr	0.26	0.08	1.07	158.1	100.0	0	24
pH	4.73	4.11	5.95	11257.2	100.0	0	24

DK0022R Sepstrup Sande

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.16	0.03	0.67	141.7	92.8	0	22
Cl-	3.56	0.38	14.14	3101.8	92.8	0	22
K+	0.09	0.03	0.30	81.1	89.2	0	21
Mg++	0.225	0.026	0.938	195.7	92.8	0	22
NH4+	0.37	0.14	1.26	324.4	92.8	0	22
NO3-	0.39	0.17	0.92	336.8	92.8	0	22
Na+	2.07	0.25	8.06	1803.8	92.8	0	22
Precip	-	0.0	66.2	870.8	99.8	1	24
SO4--	0.46	0.23	0.93	401.4	92.8	0	22
SO4-- corr	0.29	0.13	0.71	251.1	92.8	0	22
pH	4.87	4.53	6.24	11691.0	92.8	0	22

DK0031R Ulborg

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.19	0.03	0.76	142.7	93.3	0	17
Cl-	6.42	0.67	37.73	4904.5	93.3	0	17
K+	0.17	0.03	0.81	130.6	93.3	0	17
Mg++	0.419	0.023	2.497	320.4	93.3	0	17
NH4+	0.24	0.11	0.71	182.2	93.3	0	17
NO3-	0.32	0.13	0.64	244.0	93.3	0	17
Na+	3.71	0.34	19.60	2834.2	92.7	0	16
Precip	-	0.0	116.9	764.4	83.1	1	20
SO4--	0.53	0.24	1.83	406.5	93.3	0	17
SO4-- corr	0.22	0.12	0.41	171.4	93.3	0	17
pH	4.86	4.61	7.00	10664.1	93.3	0	17

EE0009R Lahemaa

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.40	0.04	5.28	251.0	93.8	0	141
Cl-	0.34	0.05	3.22	214.6	98.1	2	142
K+	0.06	0.01	0.70	38.5	72.7	23	122
Mg++	0.045	0.010	0.474	28.1	72.6	5	123
NH4+	0.16	0.01	1.60	99.2	79.7	14	123
NO3-	0.25	0.01	2.51	156.7	88.0	7	134
Na+	0.24	0.02	3.16	152.8	99.5	0	142
Precip	-	0.0	35.7	623.9	100.0	221	365
SO4--	0.33	0.02	3.84	205.8	99.6	0	143
SO4-- corr	0.31	0.01	3.67	192.6	99.6	0	143
cond	9.44	2.63	64.80	5889.4	97.2	0	117
pH	4.74	3.89	6.36	11356.2	95.8	0	118

EE0011R Vilsandi

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.62	0.20	1.80	507.9	100.0	0	22
Cl-	1.83	0.40	3.80	1497.6	100.0	0	22
K+	0.17	0.02	0.99	142.9	100.0	0	22
Mg++	0.179	0.060	0.590	146.1	100.0	0	22
NH4+	1.08	0.01	4.85	883.2	88.4	4	19
NO3-	0.19	0.01	0.59	155.2	93.0	4	20
Na+	1.42	0.20	3.57	1156.3	100.0	0	22
Precip	-	0.0	98.5	816.8	85.5	30	52
SO4--	0.42	0.28	1.19	341.3	100.0	0	22
SO4-- corr	0.30	0.14	0.89	246.4	100.0	0	22
cond	21.37	6.03	79.10	17452.5	100.0	0	22
pH	5.02	0.00	6.92	7781.0	100.0	30	52

ES0007R Víznar

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	1.22	0.36	19.70	517.8	84.1	0	42
Cl-	0.35	0.15	9.19	149.7	88.9	15	53
K+	0.16	0.06	0.80	67.8	84.1	0	42
Mg++	0.223	0.070	1.700	94.2	84.1	0	42
NH4+	0.45	0.02	3.08	191.2	85.2	2	47
NO3-	0.27	0.04	2.69	113.7	88.9	2	53
Na+	0.28	0.05	1.74	118.3	84.1	3	42
Precip	-	0.0	65.6	423.4	100.0	291	365
SO4--	0.40	0.11	3.04	168.5	88.9	0	53
SO4-- corr	0.37	0.11	2.89	158.0	88.9	0	53
cond	17.66	5.00	200.00	7476.3	90.4	0	59
pH	6.62	6.07	7.80	101.4	90.4	0	59

ES0008R Niembro

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.73	0.18	15.60	417.6	89.8	0	117
Cl-	8.18	0.62	94.10	4701.7	90.4	0	128
K+	0.33	0.09	9.10	188.5	89.8	0	117
Mg++	0.631	0.080	7.900	362.8	89.8	0	117
NH4+	0.48	0.02	7.29	278.2	89.3	1	117
NO3-	0.51	0.10	10.11	295.2	90.4	0	128
Na+	5.76	0.55	55.00	3309.5	89.8	0	117
Precip	-	0.0	60.6	574.8	100.0	219	365
SO4--	1.01	0.30	9.22	582.6	90.4	0	128
SO4-- corr	0.59	-0.23	8.60	338.4	90.4	0	128
cond	45.28	11.10	200.00	26027.0	90.6	0	132
pH	5.10	4.14	6.68	4574.4	90.6	0	132

ES0009R Campisabalos

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	1.01	0.14	8.30	463.5	65.8	0	58
Cl-	0.28	0.15	2.61	130.0	69.9	32	71
K+	0.14	0.05	0.49	64.6	65.8	0	58
Mg++	0.088	0.020	0.370	40.3	65.8	0	58
NH4+	0.42	0.02	2.34	193.8	68.5	2	66
NO3-	0.39	0.04	1.92	176.1	69.5	3	68
Na+	0.23	0.05	3.10	106.3	65.8	2	58
Precip	-	0.0	28.6	457.4	100.0	256	365
SO4--	0.46	0.04	2.33	210.1	69.9	3	71
SO4-- corr	0.44	0.01	2.24	200.9	69.9	3	71
cond	18.12	2.50	200.00	8288.8	72.5	2	79
pH	5.75	4.52	7.91	816.8	72.1	0	76

ES0011R Barcarrola

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.70	0.19	9.50	301.8	90.1	0	52
Cl-	0.53	0.15	7.17	228.5	90.2	11	53
K+	0.19	0.05	1.80	79.9	90.1	0	52
Mg++	0.080	0.030	0.600	34.3	90.1	0	52
NH4+	0.30	0.02	1.95	131.1	90.1	10	52
NO3-	0.22	0.04	1.64	93.6	90.2	8	53
Na+	0.44	0.05	5.70	189.4	90.1	1	52
Precip	-	0.0	35.6	430.4	100.0	298	365
SO4--	0.31	0.04	1.58	134.3	90.2	2	53
SO4-- corr	0.28	0.00	1.42	118.9	90.2	2	53
cond	10.22	2.50	64.00	4398.1	90.2	4	53
pH	5.89	4.98	7.12	558.4	90.2	0	53

ES0012R Zarra

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	1.46	0.20	28.30	566.1	78.8	0	48
Cl-	0.52	0.15	7.70	203.4	79.6	12	52
K+	0.14	0.05	0.81	55.4	78.8	0	48
Mg++	0.131	0.020	1.800	50.7	78.8	0	48
NH4+	0.40	0.02	1.74	155.3	78.9	1	49
NO3-	0.36	0.04	1.83	139.2	79.6	3	52
Na+	0.45	0.05	6.70	173.3	78.8	1	48
Precip	-	0.0	32.2	387.8	100.0	286	365
SO4--	0.49	0.07	3.93	192.0	79.6	0	52
SO4-- corr	0.46	0.06	3.77	177.9	79.6	0	52
cond	16.49	2.50	200.00	6395.8	80.5	2	56
pH	6.10	5.15	7.83	306.7	80.5	0	56

ES0013R Penausende

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.36	0.05	5.30	120.5	82.0	0	45
Cl-	0.23	0.15	2.68	78.9	83.5	27	51
K+	0.14	0.06	2.30	48.8	82.0	0	45
Mg++	0.047	0.010	0.240	15.7	82.0	1	45
NH4+	0.33	0.02	1.77	110.0	82.6	2	48
NO3-	0.19	0.04	1.88	64.6	83.5	12	51
Na+	0.23	0.05	1.51	79.0	82.0	3	45
Precip	-	0.0	33.6	337.2	100.0	279	365
SO4--	0.29	0.04	1.29	98.6	83.5	1	51
SO4-- corr	0.27	0.03	1.27	92.0	83.5	1	51
cond	8.62	2.50	200.00	2907.4	84.5	11	57
pH	5.78	4.73	7.27	558.7	84.5	0	57

ES0014R Els Torms

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	2.21	0.42	23.80	560.6	91.9	0	43
Cl-	0.88	0.15	5.54	222.8	92.8	3	48
K+	0.35	0.08	3.80	89.2	91.9	0	43
Mg++	0.229	0.020	1.100	58.1	91.9	0	43
NH4+	0.95	0.13	3.56	240.9	90.6	0	42
NO3-	0.67	0.24	4.04	169.1	92.8	0	48
Na+	0.52	0.05	4.40	130.7	91.9	2	43
Precip	-	0.0	32.0	253.6	100.0	294	365
SO4--	0.90	0.29	6.29	227.3	92.8	0	48
SO4-- corr	0.84	0.27	5.92	214.0	92.8	0	48
cond	28.79	10.90	160.30	7301.0	93.3	0	50
pH	6.63	6.27	7.72	59.6	93.3	0	50

ES0015R Risco Llamo

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.88	0.23	5.80	387.2	90.4	0	41
Cl-	0.52	0.15	5.82	229.3	91.3	11	45
K+	0.15	0.06	0.92	66.2	90.4	0	41
Mg++	0.092	0.030	0.410	40.7	90.4	0	41
NH4+	0.70	0.21	4.57	310.4	90.6	0	42
NO3-	0.42	0.11	2.63	187.6	91.3	0	45
Na+	0.33	0.05	2.58	146.0	90.4	6	41
Precip	-	0.0	51.8	441.6	49.6	113	181
SO4--	0.63	0.28	2.67	276.6	91.3	0	45
SO4-- corr	0.60	0.26	2.58	263.2	91.3	0	45
cond	17.90	6.80	162.40	7905.0	93.3	0	51
pH	6.33	5.30	7.03	209.2	93.3	0	51

ES0016R O Saviñao

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.52	0.06	6.10	364.7	70.4	0	90
Cl-	2.35	0.15	45.75	1663.6	73.0	3	106
K+	0.20	0.03	6.00	138.2	70.4	2	90
Mg++	0.181	0.030	3.500	128.1	70.4	0	90
NH4+	0.30	0.02	4.19	210.4	71.1	7	95
NO3-	0.22	0.04	3.22	152.9	73.0	17	106
Na+	2.07	0.17	26.50	1465.2	70.4	0	90
Precip	-	0.0	61.2	706.4	100.0	213	365
SO4--	0.61	0.11	8.33	434.6	73.0	0	106
SO4-- corr	0.49	0.06	6.20	347.7	73.0	0	106
cond	25.23	5.20	200.00	17825.1	76.1	0	116
pH	5.24	4.14	7.17	4056.7	76.1	0	116

FI0004R Ähtäri

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.08	0.02	0.67	50.8	99.9	0	47
Cl-	0.24	0.04	4.33	142.4	99.9	0	47
K+	0.06	0.01	1.82	38.4	99.9	0	47
Mg++	0.025	0.007	0.322	15.1	99.9	0	47
NH4+	0.13	0.04	0.94	80.9	99.9	0	47
NO3-	0.22	0.05	0.96	131.1	99.9	0	47
Na+	0.14	0.01	2.46	83.4	99.9	0	47
Precip	-	0.0	38.1	602.9	99.7	3	52
SO4--	0.23	0.07	1.27	139.5	99.9	0	47
SO4-- corr	0.22	0.07	1.25	132.3	99.9	0	47
cond	10.98	4.00	40.00	6622.4	99.9	0	47
pH	4.79	4.22	5.84	9881.3	99.9	0	47

FI0009R Utö

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.24	0.04	1.81	83.4	99.9	0	39
Cl-	3.33	0.27	22.85	1151.8	99.9	0	39
K+	0.12	0.03	0.70	39.9	99.9	0	39
Mg++	0.242	0.040	1.894	83.7	99.9	0	39
NH4+	0.26	0.04	2.28	88.8	99.9	0	39
NO3-	0.42	0.06	4.56	144.9	99.9	0	39
Na+	1.92	0.20	15.77	663.4	99.9	0	39
Precip	-	0.0	47.3	346.0	99.7	11	52
Precip off	-	0.00	31.50	562.2	100.0	197	365
SO4--	0.46	0.12	3.64	160.0	99.9	0	39
SO4-- corr	0.30	0.06	2.79	105.3	99.9	0	39
cond	27.08	8.00	173.00	9368.8	99.9	0	39
pH	4.67	3.68	6.62	7323.6	99.9	0	39

FI0017R Virolahti II

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.21	0.05	3.33	132.2	95.5	0	42
Cl-	0.49	0.05	1.86	299.0	95.5	0	42
K+	0.20	0.03	1.62	124.9	95.5	0	42
Mg++	0.058	0.012	0.388	35.6	95.5	0	42
NH4+	0.29	0.01	2.00	176.9	95.5	0	42
NO3-	0.35	0.00	2.27	214.5	95.5	1	42
Na+	0.28	0.04	1.23	174.4	95.5	0	42
Precip	-	0.0	72.3	614.5	99.7	3	52
SO4--	0.49	0.14	2.57	300.6	95.5	0	42
SO4-- corr	0.46	0.12	2.52	284.1	95.5	0	42
cond	17.21	7.00	58.00	10574.8	95.5	0	42
pH	4.68	4.02	6.64	12857.2	95.5	0	42

FI0022R Oulanka

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.04	0.01	0.28	22.0	100.0	0	50
Cl-	0.12	0.04	1.48	63.5	100.0	0	50
K+	0.04	0.01	0.32	22.5	100.0	0	50
Mg++	0.014	0.004	0.087	7.0	100.0	0	50
NH4+	0.07	0.01	1.35	36.4	100.0	0	50
NO3-	0.14	0.01	1.10	72.4	100.0	0	50
Na+	0.08	0.02	0.69	40.7	100.0	0	50
Precip	-	0.0	34.7	509.1	99.7	2	52
SO4--	0.18	0.06	1.90	91.8	100.0	0	50
SO4-- corr	0.17	0.06	1.89	88.2	100.0	0	50
cond	9.08	4.00	59.00	4620.4	100.0	0	50
pH	4.79	4.04	5.07	8167.3	100.0	0	50

FI0036R Pallas (Matorova)

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.03	0.01	0.31	19.5	100.0	0	48
Cl-	0.14	0.03	1.09	86.9	100.0	0	48
K+	0.03	0.01	0.23	18.0	100.0	0	48
Mg++	0.013	0.002	0.097	8.7	100.0	1	48
NH4+	0.06	0.00	0.35	39.5	100.0	2	48
NO3-	0.12	0.03	0.64	74.2	100.0	0	48
Na+	0.08	0.02	0.85	53.7	100.0	0	48
Precip	-	0.0	53.7	645.0	99.7	3	52
SO4--	0.16	0.02	1.06	100.8	100.0	0	48
SO4-- corr	0.15	0.02	1.00	95.9	100.0	0	48
cond	8.08	3.00	40.00	5210.8	100.0	0	48
pH	4.84	4.16	5.24	9272.4	100.0	0	48

FR0008R Donon

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.21	0.01	7.92	363.7	99.5	10	184
Cl-	0.41	0.03	7.79	699.1	99.5	18	184
K+	0.03	0.01	1.66	52.8	99.5	61	184
Mg++	0.035	0.010	0.600	61.0	99.5	79	184
NH4+	0.31	0.01	2.68	532.1	99.5	1	184
NO3-	0.29	0.05	1.74	508.0	99.5	0	184
Na+	0.27	0.01	4.87	457.5	99.5	12	184
Precip	-	0.1	43.8	1723.2	100.0	160	365
SO4--	0.29	0.05	2.09	507.9	99.5	0	184
SO4-- corr	0.27	0.04	2.08	469.8	99.5	0	184
cond	10.83	3.20	56.20	18665.2	99.6	0	188
pH	4.99	4.06	7.24	17519.4	99.6	0	188

FR0009R Revin

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.23	0.01	2.66	309.8	98.4	2	157
Cl-	1.15	0.03	29.09	1551.8	98.4	3	157
K+	0.07	0.01	1.54	97.1	98.4	25	157
Mg++	0.094	0.010	2.060	126.5	98.4	29	157
NH4+	0.52	0.06	4.19	701.1	98.4	0	157
NO3-	0.40	0.07	3.96	538.0	98.4	0	157
Na+	0.73	0.01	17.17	990.5	98.4	1	157
Precip	-	0.1	57.4	1351.0	100.0	168	365
SO4--	0.44	0.12	4.09	598.1	98.4	0	157
SO4-- corr	0.38	0.04	2.92	515.6	98.4	0	157
cond	15.71	5.00	160.00	21217.8	98.5	0	159
pH	5.01	3.96	6.71	13117.6	98.5	0	159

FR0010R Morvan

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.25	0.01	3.31	276.9	98.0	2	157
Cl-	0.94	0.03	13.90	1036.3	98.0	4	157
K+	0.24	0.01	10.26	269.0	98.0	13	157
Mg++	0.078	0.010	0.900	85.7	98.0	31	157
NH4+	0.38	0.01	2.57	418.9	98.0	1	157
NO3-	0.30	0.01	1.70	327.4	98.0	1	157
Na+	0.58	0.01	7.73	635.7	98.0	2	157
Precip	-	0.1	51.6	1096.0	100.0	183	365
SO4--	0.34	0.07	1.84	375.5	98.0	0	157
SO4-- corr	0.29	0.04	1.49	322.5	98.0	0	157
cond	12.96	2.80	60.70	14208.1	98.0	0	157
pH	5.18	4.16	7.02	7205.3	98.0	0	157

FR0012R Iraty

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.28	0.01	11.69	414.6	96.5	5	178
Cl-	1.00	0.03	14.33	1489.9	96.5	10	178
K+	0.05	0.01	3.67	69.8	96.5	44	178
Mg++	0.083	0.010	0.960	123.7	96.5	36	178
NH4+	0.32	0.01	8.33	480.2	96.5	2	178
NO3-	0.23	0.01	2.59	337.4	96.5	1	178
Na+	0.62	0.01	8.32	918.4	96.5	3	178
Precip	-	0.1	58.0	1490.5	100.0	169	365
SO4--	0.36	0.04	3.93	537.5	96.5	0	178
SO4-- corr	0.31	-0.08	3.76	461.4	96.5	0	178
cond	12.44	2.80	74.10	18542.2	97.1	0	179
pH	5.15	4.02	7.50	10517.2	97.1	0	179

FR0013R Peyrusse Vieille

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.42	0.01	18.14	303.0	97.8	2	123
Cl-	2.18	0.06	23.04	1563.2	97.8	0	123
K+	0.09	0.01	0.59	63.8	97.8	10	123
Mg++	0.169	0.010	1.580	121.3	97.8	10	123
NH4+	0.38	0.01	3.42	273.4	97.8	6	123
NO3-	0.29	0.03	2.56	208.6	97.8	0	123
Na+	1.31	0.04	13.04	938.3	97.8	0	123
Precip	-	0.1	32.8	718.0	100.0	204	365
SO4--	0.50	0.06	2.92	356.0	97.8	0	123
SO4-- corr	0.39	0.03	2.83	278.5	97.8	0	123
cond	18.98	3.80	99.90	13624.0	97.9	0	125
pH	5.07	3.74	7.55	6121.9	97.9	0	125

FR0014R Montandon

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.34	0.01	12.49	502.9	95.7	7	156
Cl-	0.31	0.03	6.59	455.5	95.7	19	156
K+	0.03	0.01	0.51	48.1	95.7	65	156
Mg++	0.038	0.010	0.480	55.5	95.7	63	156
NH4+	0.33	0.01	6.60	485.2	95.7	4	156
NO3-	0.28	0.03	4.85	419.8	95.7	1	156
Na+	0.21	0.01	3.90	313.1	95.7	9	156
Precip	-	0.1	107.2	1477.1	100.0	176	365
SO4--	0.29	0.05	3.75	432.7	95.7	0	156
SO4-- corr	0.28	0.05	3.68	406.9	95.7	0	156
cond	9.71	2.20	95.40	14335.0	95.8	0	158
pH	5.13	4.01	7.40	10867.2	95.8	0	158

FR0015R La Tardière

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.24	0.01	3.54	227.2	88.0	1	129
Cl-	2.60	0.03	34.62	2411.7	88.0	2	129
K+	0.08	0.01	1.03	74.3	88.0	11	129
Mg++	0.195	0.010	2.270	181.1	88.0	14	129
NH4+	0.38	0.06	4.29	350.6	88.0	0	129
NO3-	0.21	0.01	2.92	195.8	88.0	1	129
Na+	1.55	0.05	19.46	1440.4	88.0	0	129
Precip	-	0.1	32.8	926.8	100.0	186	365
SO4--	0.41	0.07	2.57	382.2	88.0	0	129
SO4-- corr	0.28	-0.01	2.54	262.4	88.0	0	129
cond	17.77	3.20	138.20	16465.6	88.0	0	129
pH	5.32	4.14	6.91	4415.2	88.0	0	129

FR0016R Le Casset

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.57	0.01	10.95	304.3	96.2	1	92
Cl-	0.16	0.03	2.08	85.9	96.2	24	92
K+	0.07	0.01	0.92	37.6	96.2	22	92
Mg++	0.038	0.010	0.510	20.2	96.2	48	92
NH4+	0.19	0.01	2.11	100.2	96.2	24	92
NO3-	0.20	0.01	2.54	105.3	96.2	2	92
Na+	0.11	0.01	1.44	60.9	96.2	19	92
Precip	-	0.1	31.5	536.8	100.0	266	365
SO4--	0.25	0.05	3.14	136.0	96.2	0	92
SO4-- corr	0.24	0.05	3.02	130.7	96.2	0	92
cond	7.46	1.40	67.30	4002.9	96.2	0	92
pH	5.50	4.74	7.25	1686.5	96.2	0	92

FR0017R Montfranc

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.27	0.01	11.43	343.0	94.9	4	159
Cl-	1.00	0.03	13.30	1276.8	94.9	11	159
K+	0.05	0.01	0.73	60.3	94.9	48	159
Mg++	0.079	0.010	0.950	101.1	94.9	46	159
NH4+	0.29	0.01	3.09	372.2	94.9	4	159
NO3-	0.22	0.01	2.89	275.7	94.9	1	159
Na+	0.61	0.01	7.77	777.6	94.9	3	159
Precip	-	0.1	59.2	1272.3	100.0	141	365
SO4--	0.30	0.04	3.44	383.0	94.9	0	159
SO4-- corr	0.25	0.02	3.31	318.5	94.9	0	159
cond	11.27	2.60	91.90	14332.8	95.0	0	160
pH	5.23	4.12	7.36	7538.8	95.0	0	160

GB0006R Lough Navar

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
NH4+	0.17	0.01	0.69	211.5	88.4	3	24
NO3-	0.09	0.01	0.32	105.1	88.4	3	24
Precip	-	6.0	143.0	1233.9	92.9	0	25

GB0013R Yarner Wood

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
NH4+	2.48	0.01	26.20	2983.0	100.0	1	19
NO3-	0.18	0.01	1.56	213.1	100.0	1	19
Precip	-	0.0	187.0	1202.0	100.0	8	26

HR0002R Puntijarka

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	1.39	0.11	10.00	1953.6	97.3	0	110
Cl-	0.57	0.10	3.26	802.9	96.5	0	107
K+	0.68	0.03	3.07	954.9	98.2	0	110
Mg++	0.351	0.024	2.552	494.3	97.3	0	110
NH4+	0.43	0.04	1.65	609.2	97.9	0	108
NO3-	0.39	0.10	2.54	546.3	98.3	0	111
Na+	0.28	0.04	2.23	401.4	97.9	0	109
Precip off	-	0.10	80.90	1410.0	39.7	0	145
SO4--	0.47	0.11	3.49	666.8	97.3	0	110
SO4-- corr	0.44	-0.00	3.43	619.3	97.3	0	110
cond	12.87	4.00	63.00	18143.3	97.9	0	117
pH	5.30	4.04	7.78	7001.6	88.8	0	122

HR0004R Zavizan

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	1.83	0.11	15.53	3374.4	99.7	0	124
Cl-	0.94	0.07	5.99	1724.0	98.1	0	120
K+	0.55	0.01	3.68	1005.9	98.3	0	122
Mg++	0.316	0.018	1.659	581.8	99.6	0	123
NH4+	0.41	0.00	1.37	757.4	94.4	0	115
NO3-	0.41	0.03	2.49	745.5	99.2	0	122
Na+	0.57	0.03	4.08	1050.8	98.2	0	121
Precip off	-	0.10	75.00	1840.5	37.5	0	137
SO4--	0.56	0.06	4.87	1030.4	99.6	0	123
SO4-- corr	0.49	-0.54	4.86	909.7	99.6	0	123
cond	15.97	3.00	91.00	29396.3	98.3	0	122
pH	5.35	4.37	7.10	8145.4	98.3	0	122

HU0002R K-puszta

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.78	0.19	3.96	239.8	99.3	0	67
Cl-	1.11	0.56	4.52	342.2	99.6	0	69
K+	0.15	0.03	0.85	45.8	99.3	2	67
Mg++	0.144	0.025	0.730	44.7	99.3	1	67
NH4+	0.49	0.00	2.70	152.5	100.0	5	72
NO3-	0.46	0.12	3.96	143.0	99.6	0	69
Na+	1.38	0.72	5.44	425.5	99.3	0	67
Precip	-	0.3	16.4	309.4	100.0	293	365
Precip off	-	0.40	22.40	436.1	99.7	293	364
SO4--	0.71	0.12	4.68	220.2	99.6	0	69
SO4-- corr	0.62	0.06	4.30	193.4	99.6	0	69
cond	21.14	9.20	101.90	6539.5	99.7	0	70
pH	5.53	4.59	6.79	919.0	99.6	0	69

IE0001R Valentia Observatory

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.37	0.03	8.20	461.0	98.8	14	183
Cl-	14.46	0.18	341.12	18226.3	98.6	0	179
K+	0.43	0.03	12.35	540.7	98.6	8	179
Mg++	0.998	0.025	24.602	1257.0	98.8	15	183
NH4+	0.09	0.02	6.75	114.3	98.6	72	182
NO3-	0.07	0.01	1.84	94.5	98.8	13	183
Na+	8.34	0.14	198.89	10511.2	98.8	0	183
Precip	-	0.0	72.1	1260.1	100.0	136	365
Precip off	-	0.00	48.90	1349.0	100.0	126	365
SO4--	0.76	0.01	16.24	954.1	98.8	1	183
SO4-- corr	0.09	-4.52	2.60	111.5	98.8	1	183
cond	59.95	4.10	1287.00	75539.5	98.8	0	183
pH	5.27	3.89	6.58	6815.0	98.8	0	183

IE0005R Oak Park

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.13	0.03	1.38	97.0	93.7	21	148
Cl-	1.92	0.03	43.41	1486.4	93.7	3	148
K+	0.06	0.03	0.90	47.8	93.7	60	148
Mg++	0.135	0.025	2.930	104.1	93.7	51	148
NH4+	0.24	0.02	1.44	188.2	93.7	8	148
NO3-	0.12	0.01	1.34	93.3	93.7	4	148
Na+	1.26	0.03	24.89	971.1	93.7	3	148
Precip	-	0.0	27.3	772.5	100.0	175	365
SO4--	0.26	0.04	2.32	202.0	93.7	0	148
SO4-- corr	0.16	-0.00	0.92	126.6	93.7	0	148
cond	13.10	2.40	178.90	10119.0	93.7	0	148
pH	5.46	4.50	6.73	2678.9	93.7	0	148

IE0007R Glen Veagh

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.23	0.03	2.29	243.2	95.0	38	177
Cl-	9.61	0.15	107.26	10267.5	95.0	0	177
K+	0.21	0.03	2.19	223.2	95.0	35	177
Mg++	0.676	0.025	7.419	722.3	95.0	29	177
NH4+	0.09	0.02	2.32	95.4	95.0	94	177
NO3-	0.08	0.01	1.50	89.4	95.0	13	177
Na+	5.57	0.11	63.95	5950.0	95.0	0	177
Precip	-	0.0	22.9	1068.4	86.0	99	314
SO4--	0.57	0.06	5.23	613.0	95.0	0	177
SO4-- corr	0.12	-0.01	3.39	125.4	95.0	0	177
cond	41.86	3.90	412.00	44718.8	95.0	0	177
pH	5.20	4.15	7.42	6802.4	95.0	0	177

IE0009R Johnstown Castle

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.14	0.03	1.10	117.5	93.2	31	138
Cl-	4.60	0.08	41.38	3808.3	93.2	0	138
K+	0.12	0.03	0.94	98.6	93.2	41	138
Mg++	0.315	0.025	2.685	260.7	93.2	30	138
NH4+	0.21	0.02	2.85	174.1	93.2	19	138
NO3-	0.17	0.01	3.95	138.5	93.2	4	138
Na+	2.74	0.09	23.68	2264.2	93.2	0	138
Precip	-	0.0	22.2	827.6	99.5	184	363
SO4--	0.42	0.06	3.18	350.8	93.2	0	138
SO4-- corr	0.20	-0.03	2.94	167.0	93.2	0	138
cond	24.96	3.50	165.40	20657.3	93.2	0	138
pH	5.08	3.59	7.07	6957.4	93.2	0	138

IS0002R Irafoss

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.22	0.10	7.80	536.0	100.0	23	171
Cl-	7.03	0.10	362.70	17430.4	100.0	1	171
K+	0.25	0.10	8.40	627.5	100.0	50	171
Mg++	0.476	0.100	24.500	1179.9	100.0	22	171
NO3-	0.07	0.01	0.95	163.3	100.0	14	171
Na+	3.93	0.10	206.80	9749.1	100.0	1	171
Precip	-	0.0	102.2	2481.2	100.0	194	365
SO4--	0.42	0.10	16.70	1054.2	100.0	9	171
SO4-- corr	0.10	-0.33	1.21	253.9	100.0	9	171
cond	30.66	2.00	1364.00	76064.9	99.7	0	158
pH	5.44	4.60	7.00	9055.8	100.0	0	170

IS0090R Reykjavik

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.60	0.03	12.30	623.1	100.0	0	48
Cl-	20.44	0.24	308.00	21276.3	100.0	0	48
K+	0.37	0.02	5.72	380.8	100.0	0	48
Mg++	1.283	0.030	21.300	1336.1	100.0	0	48
NH4+	0.33	0.01	6.68	343.6	100.0	1	48
NO3-	0.12	0.01	1.79	119.3	100.0	1	48
Na+	11.08	0.19	167.00	11538.5	100.0	0	48
Precip	-	0.0	53.5	1041.0	99.5	10	57
Precip off	-	0.00	64.80	1124.2	99.5	6	57
SO4--	1.11	0.08	18.00	1154.2	100.0	0	48
SO4-- corr	0.21	-0.34	4.02	220.1	100.0	0	48
cond	46.02	4.80	183.20	47908.7	100.0	0	48
pH	5.51	4.64	6.61	3222.4	100.0	0	48

IS0091R Storhofdi

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	6.54	0.24	45.00	12316.3	93.9	0	46
Cl-	282.92	5.69	1466.00	532681.7	93.9	0	46
K+	5.30	0.23	28.22	9975.6	93.9	0	46
Mg++	18.908	0.480	96.100	35599.2	93.9	0	46
NH4+	0.69	0.00	6.68	1307.3	93.9	20	46
NO3-	0.18	0.01	10.84	338.9	93.9	2	46
Na+	139.74	0.01	713.37	263099.8	93.9	2	46
Precip	-	0.0	93.5	1882.8	100.0	4	59
Precip off	-	0.00	111.00	1999.3	100.0	4	59
Precip off	-	4.00	207.00	1991.0	99.9	0	25
SO4--	12.83	0.44	102.00	24161.6	93.9	0	46
SO4-- corr	0.43	-21.84	42.91	812.7	93.9	0	46
cond	770.53	29.20	4000.00	1450740.7	93.9	0	46
pH	5.70	4.59	6.89	3761.6	93.9	0	46

IT0001R Montelibretti

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	1.99	0.32	8.70	1110.8	100.0	0	46
Cl-	3.42	0.23	25.80	1907.6	100.0	0	46
K+	0.82	0.03	38.90	458.4	100.0	0	46
Mg++	0.395	0.040	3.430	220.7	100.0	0	46
NH4+	0.73	0.01	13.19	408.2	100.0	0	46
NO3-	0.56	0.10	3.60	312.3	100.0	0	46
Na+	1.85	0.09	12.00	1032.3	100.0	0	46
Precip	-	0.0	42.5	558.1	100.0	319	365
SO4--	1.20	0.14	5.32	669.2	100.0	0	46
SO4-- corr	1.00	0.11	2.94	556.8	100.0	0	46
cond	29.98	5.30	315.00	16730.8	100.0	0	46
pH	5.62	4.90	6.90	1325.8	100.0	0	46

IT0004R Ispra

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.38	0.00	7.18	365.3	91.0	0	74
Cl-	0.27	0.00	5.60	256.8	91.0	0	73
K+	0.05	0.00	1.19	51.6	91.0	0	74
Mg++	0.044	0.000	1.110	42.3	91.0	0	74
NH4+	0.97	0.00	7.94	937.8	90.9	0	72
NO3-	0.60	0.00	7.96	582.8	90.8	0	71
Na+	0.24	0.00	3.57	230.4	91.0	0	72
Precip	-	0.0	91.4	962.9	100.0	279	365
SO4--	0.50	0.00	6.51	479.5	91.0	0	74
SO4-- corr	0.48	0.00	5.91	461.3	91.0	0	74
cond	14.24	3.65	60.20	13714.6	87.5	0	45
pH	5.34	4.23	6.63	4374.7	88.8	0	52

LT0015R Preila

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.30	0.03	4.95	242.8	100.0	0	115
Cl-	2.91	0.11	33.76	2373.1	100.0	0	115
K+	0.14	0.02	3.08	113.9	100.0	0	115
NH4+	0.38	0.01	3.80	305.8	100.0	0	115
NO3-	0.35	0.03	4.28	286.0	100.0	0	115
Na+	1.72	0.06	19.50	1404.7	100.0	0	115
Precip	-	0.0	43.4	814.7	99.7	249	364
SO4--	0.46	0.11	3.34	372.5	100.0	0	115
SO4-- corr	0.31	-0.54	2.59	254.9	100.0	0	115
cond	22.46	4.00	160.00	18299.9	99.9	0	112
pH	4.82	4.10	6.40	12345.6	99.9	0	113

LV0010R Rucava

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.25	0.01	1.97	246.2	93.0	6	112
Cl-	0.86	0.05	7.30	850.1	91.1	0	104
K+	0.09	0.01	1.14	85.7	91.0	28	111
Mg++	0.097	0.001	0.660	96.0	92.8	1	111
NH4+	0.32	0.01	3.16	313.9	95.9	5	131
NO3-	0.34	0.03	1.72	331.2	91.8	0	106
Na+	0.56	0.01	4.71	551.3	92.6	1	111
Precip	-	0.0	77.3	985.8	100.0	222	365
SO4--	0.38	0.05	1.75	370.3	91.8	0	106
SO4-- corr	0.33	0.03	1.72	321.9	91.8	0	106
cond	20.18	0.00	117.40	19892.0	96.1	0	134
pH	4.83	3.95	7.11	14741.6	96.1	0	133

LV0016R Zoseni

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.30	0.01	4.25	236.9	90.3	15	106
Cl-	0.29	0.02	2.33	225.9	84.0	2	87
K+	0.10	0.01	1.20	81.9	85.8	44	101
Mg++	0.082	0.001	0.510	64.0	88.1	5	103
NH4+	0.34	0.00	3.48	266.9	97.1	2	146
NO3-	0.23	0.03	1.24	182.4	84.4	0	88
Na+	0.28	0.01	2.67	216.5	90.3	8	106
Precip	-	0.0	30.4	782.9	100.0	179	365
SO4--	0.26	0.00	1.33	202.6	84.4	0	89
SO4-- corr	0.24	-0.01	1.31	184.8	84.4	0	88
cond	11.83	3.30	108.40	9261.5	96.6	0	143
pH	5.09	3.99	7.20	6360.2	97.1	0	144

NL0009R Kollumerwaard

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.29	0.04	4.46	243.2	82.6	0	91
Cl-	5.89	0.13	38.77	4928.1	85.0	0	116
H+	5.83	-263.00	46.20	4882.5	85.3	0	122
K+	0.22	0.03	1.00	182.2	82.6	0	91
Mg++	0.389	0.017	2.015	325.8	82.6	0	91
NH4+	0.56	0.08	7.02	469.9	84.2	0	105
NO3-	0.35	0.04	4.38	294.2	85.0	0	116
Na+	3.22	0.11	16.82	2697.1	82.6	0	91
Precip	-	0.0	22.2	837.2	100.0	182	365
SO4--	0.63	0.17	3.41	528.9	85.0	0	116
SO4-- corr	0.36	0.05	3.36	298.2	85.0	0	116
cond	32.56	6.00	124.00	27262.6	81.3	0	84
pH	5.39	4.57	6.86	3434.6	85.3	0	122

NO0001R Birkenes

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.11	0.01	1.18	162.5	99.5	1	153
Cl-	1.57	0.03	35.75	2270.0	99.5	0	153
K+	0.06	0.01	0.83	92.2	99.5	3	153
Mg++	0.121	0.005	2.182	175.0	99.5	6	153
NH4+	0.28	0.01	5.73	399.7	99.5	1	153
NO3-	0.33	0.01	4.98	470.6	99.5	2	153
Na+	0.94	0.01	18.56	1355.2	99.5	0	153
Precip	-	0.0	46.5	1441.0	100.0	165	365
SO4--	0.38	0.04	5.86	551.3	99.5	0	153
SO4-- corr	0.30	-0.01	4.34	439.0	99.5	0	153
cond	18.06	3.00	132.80	26029.5	99.0	0	138
pH	4.75	3.85	6.31	25915.6	98.9	0	135

NO0015R Tustervatn

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.13	0.01	1.44	170.1	98.1	2	203
Cl-	3.66	0.06	61.20	4732.9	98.3	0	203
K+	0.10	0.01	1.32	134.4	98.1	4	203
Mg++	0.262	0.005	4.141	339.1	98.2	5	204
NH4+	0.14	0.01	1.54	174.0	98.1	4	203
NO3-	0.08	0.01	1.34	106.3	98.3	6	203
Na+	1.98	0.01	47.28	2560.2	98.4	1	205
Precip	-	0.0	29.1	1293.3	100.0	120	365
SO4--	0.23	0.01	2.97	304.1	98.3	5	203
SO4-- corr	0.07	-0.05	0.77	91.4	98.3	5	203
cond	17.10	2.40	111.40	22117.3	97.1	0	187
pH	5.28	4.38	6.57	6760.6	96.9	0	186

NO0039R Kårvatn

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.11	0.01	1.26	220.0	99.7	0	186
Cl-	2.85	0.03	40.32	5504.4	100.0	0	190
K+	0.09	0.01	0.92	167.0	98.3	7	183
Mg++	0.216	0.005	2.091	417.6	99.9	16	189
NH4+	0.11	0.01	1.55	219.6	99.6	0	185
NO3-	0.04	0.01	0.99	73.8	99.9	34	188
Na+	1.52	0.02	17.36	2941.4	99.9	0	189
Precip	-	0.0	45.7	1930.3	99.7	174	364
SO4--	0.18	0.01	1.60	340.4	100.0	5	190
SO4-- corr	0.05	-0.09	1.09	94.3	100.0	5	190
cond	13.53	2.30	117.00	26109.6	99.8	0	184
pH	5.40	4.66	6.48	7710.7	99.5	0	178

NO0055R Karasjok

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.13	0.02	1.21	52.7	97.5	0	135
Cl-	0.77	0.07	17.12	305.6	98.0	0	136
K+	0.24	0.03	3.47	96.4	97.2	0	134
Mg++	0.060	0.005	0.848	23.7	97.5	4	135
NH4+	0.18	0.02	2.08	73.0	97.2	0	134
NO3-	0.13	0.01	0.89	51.2	98.0	1	136
Na+	0.46	0.04	8.84	184.3	97.5	0	135
Precip	-	0.0	17.5	398.1	99.7	198	364
SO4--	0.23	0.03	1.59	93.3	98.0	0	136
SO4-- corr	0.20	-0.03	1.35	78.1	98.0	0	136
cond	9.43	3.00	91.40	3755.4	95.2	0	114
pH	5.15	4.28	6.90	2816.8	94.8	0	112

PL0002R Jarczew

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.28	0.00	4.00	158.1	98.7	0	144
Cl-	0.49	0.00	7.00	277.3	98.9	0	149
K+	0.13	0.02	2.60	71.5	98.7	0	144
Mg++	0.040	0.006	0.550	22.5	98.7	0	144
NH4+	0.80	0.15	10.47	450.3	98.9	0	149
NO3-	0.50	0.09	5.20	282.9	98.9	0	149
Na+	0.16	0.02	3.60	87.9	98.7	0	144
Precip	-	0.0	22.7	562.4	100.0	198	365
SO4--	0.78	0.15	8.21	438.3	98.9	0	149
SO4-- corr	0.76	0.14	7.92	427.0	98.9	0	149
cond	21.22	4.80	190.20	11932.2	98.8	0	148
pH	4.71	3.84	7.10	10998.2	98.9	0	149

PL0003R Sniezka

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.46	0.10	2.10	578.9	99.3	0	198
Cl-	0.54	0.10	2.90	684.7	99.3	0	198
K+	0.33	0.07	2.15	413.4	99.3	0	198
Mg++	0.133	0.014	0.918	168.7	99.3	0	198
NH4+	0.38	0.10	1.96	484.4	99.3	0	198
NO3-	0.74	0.18	3.69	945.6	99.3	0	198
Na+	0.43	0.11	2.36	552.9	99.3	0	198
Precip	-	0.0	51.1	1272.5	100.0	122	365
SO4--	0.84	0.25	3.82	1071.2	99.3	0	198
SO4-- corr	0.81	0.24	3.69	1023.9	99.3	0	198
cond	26.33	9.00	106.00	33500.8	99.3	0	198
pH	4.48	3.98	4.96	42278.6	99.3	0	198

PL0004R Leba

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.16	0.00	3.00	124.9	97.9	0	156
Cl-	1.56	0.10	24.40	1205.6	97.9	0	157
K+	0.09	0.02	3.26	68.5	97.9	0	156
Mg++	0.101	0.009	1.500	77.9	97.9	0	156
NH4+	0.39	0.03	6.02	298.3	97.9	0	157
NO3-	0.39	0.08	6.70	301.2	97.9	0	157
Na+	0.78	0.02	11.50	603.2	97.9	0	156
Precip	-	0.0	22.9	775.2	100.0	183	365
SO4--	0.39	0.10	4.18	302.9	97.9	0	157
SO4-- corr	0.33	0.07	4.04	253.6	97.9	0	157
cond	19.79	5.00	231.00	15340.7	97.9	0	157
pH	4.70	3.38	6.92	15556.7	97.9	0	157

PL0005R Diabla Gora

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.21	0.00	1.30	119.6	98.5	0	126
Cl-	0.82	0.05	34.60	473.8	99.9	1	141
K+	0.09	0.00	0.95	52.9	98.2	1	124
Mg++	0.066	0.011	2.070	37.8	98.5	0	126
NH4+	0.52	0.01	3.88	298.8	99.9	0	141
NO3-	0.46	0.03	3.03	262.5	99.8	0	140
Na+	0.39	0.02	18.88	224.0	98.5	0	126
Precip	-	0.0	38.0	576.0	100.0	223	365
Precip off	-	0.00	42.40	827.2	100.0	177	365
SO4--	0.54	0.05	2.95	308.2	99.9	0	141
SO4-- corr	0.50	0.04	2.80	287.1	99.9	0	141
cond	15.61	4.00	75.00	8991.9	91.2	0	91
pH	4.81	3.93	6.70	8973.3	99.7	0	140

PT0001R Braganca

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	1.32	0.10	12.20	607.6	70.9	0	23
Cl-	1.20	0.20	4.70	551.3	70.9	0	23
K+	0.16	0.04	0.48	75.2	70.9	8	23
Mg++	0.106	0.015	0.290	48.5	70.9	1	23
NH4+	0.55	0.08	2.85	254.6	70.9	0	23
NO3-	0.20	0.01	1.38	89.6	70.9	8	23
Na+	0.70	0.01	7.22	323.8	70.9	1	23
Precip off	-	0.00	33.10	459.5	100.0	272	365
SO4--	0.42	0.09	0.97	191.6	70.9	0	23
SO4-- corr	0.36	0.07	0.81	164.0	70.9	0	23
cond	20.60	5.00	78.00	9464.1	70.9	0	23
pH	5.79	5.01	7.50	747.6	70.9	0	23

PT0003R Viana do Castelo

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.27	0.05	1.40	211.4	36.8	2	22
Cl-	5.56	1.70	14.70	4406.8	36.8	0	22
K+	0.14	0.04	0.93	113.1	36.8	10	22
Mg++	0.376	0.110	1.010	298.1	36.8	0	22
NH4+	0.30	0.01	3.14	235.6	36.8	7	22
NO3-	0.08	0.01	0.98	66.4	36.8	10	22
Na+	2.94	0.76	8.11	2330.9	36.8	0	22
Precip off	-	0.00	59.10	792.4	100.0	244	365
SO4--	0.49	0.24	1.49	385.6	36.8	0	22
SO4-- corr	0.24	0.00	0.94	191.4	36.8	0	22
cond	28.07	10.00	81.00	22245.9	36.8	0	22
pH	4.90	4.28	5.83	9881.1	36.8	0	22

PT0004R Monte Velho

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	1.22	0.10	7.90	431.2	85.9	0	19
Cl-	5.21	0.90	20.50	1849.5	85.9	0	19
K+	0.24	0.04	1.55	83.6	85.9	3	19
Mg++	0.375	0.050	1.580	133.0	85.9	0	19
NH4+	0.21	0.01	1.71	73.0	85.9	5	19
NO3-	0.26	0.01	1.96	92.3	85.9	1	19
Na+	2.70	0.28	12.67	957.1	85.9	0	19
Precip off	-	0.00	49.00	354.7	100.0	325	365
SO4--	0.55	0.03	1.98	194.2	85.9	1	19
SO4-- corr	0.33	-0.12	1.11	117.2	85.9	1	19
cond	29.06	9.00	127.00	10309.0	85.9	0	19
pH	5.11	4.37	7.28	2786.5	85.9	0	19

RU0001R Janiskoski

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.63	0.05	48.00	298.8	54.6	2	132
Cl-	3.14	0.15	9.35	1482.2	54.6	0	132
K+	1.00	0.05	3.40	470.9	54.6	0	132
Mg++	0.420	0.001	1.360	197.9	54.6	6	132
NH4+	0.35	0.02	4.14	164.7	54.6	34	132
NO3-	0.03	0.01	1.19	15.1	54.6	66	132
Na+	2.47	0.21	12.80	1166.6	54.6	0	132
Precip	-	0.0	30.9	471.5	99.7	232	364
SO4--	0.61	0.02	7.40	286.3	54.6	18	132
SO4-- corr	0.38	-0.27	6.76	178.8	54.6	18	132
cond	17.11	3.50	68.50	8069.9	54.6	0	132
pH	5.09	3.87	6.98	3865.9	38.6	0	112

RU0013R Pinega

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.59	0.05	9.13	386.8	100.0	1	179
Cl-	1.73	0.03	27.69	1140.5	100.0	1	179
K+	0.80	0.03	5.35	527.8	100.0	1	179
Mg++	0.281	0.000	1.880	184.6	100.0	1	179
NH4+	0.35	0.02	9.29	228.9	100.0	20	179
NO3-	0.17	0.01	2.26	112.2	100.0	27	179
Na+	0.91	0.04	17.76	600.7	100.0	0	179
Precip	-	0.0	33.7	657.9	100.0	186	365
SO4--	0.49	0.02	6.00	322.8	100.0	3	179
SO4-- corr	0.40	-0.02	5.81	260.7	100.0	3	179
cond	14.35	3.50	268.00	9438.0	99.9	0	178
pH	5.40	4.21	6.98	2604.8	97.4	0	147

RU0018R Danki

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.52	0.05	3.27	294.1	100.0	1	142
Cl-	1.41	0.12	7.97	793.1	100.0	0	142
K+	0.49	0.07	8.80	273.9	100.0	0	142
Mg++	0.234	0.010	1.250	131.9	100.0	0	142
NH4+	0.35	0.02	10.31	199.0	100.0	15	142
NO3-	0.27	0.01	2.73	151.5	100.0	10	142
Na+	0.67	0.06	19.31	380.0	100.0	0	142
Precip	-	0.0	28.4	564.0	100.0	223	365
SO4--	0.47	0.07	7.86	265.3	100.0	0	142
SO4-- corr	0.38	0.01	7.17	215.8	100.0	0	142
cond	11.92	5.40	80.00	6725.1	99.5	0	140
pH	4.84	3.85	7.39	8081.5	98.6	0	127

RU0020R Lesnoy

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.47	0.07	6.20	349.3	100.0	0	180
Cl-	1.71	0.13	30.49	1273.1	100.0	0	180
K+	0.53	0.05	25.20	395.9	100.0	0	180
Mg++	0.212	0.001	1.210	157.7	99.1	5	179
NH4+	0.58	0.02	6.75	428.6	100.0	9	180
NO3-	0.36	0.01	2.99	269.4	100.0	4	180
Na+	0.94	0.15	23.14	698.8	97.9	0	179
Precip	-	0.0	29.6	743.5	100.0	186	365
SO4--	0.53	0.05	4.54	392.9	100.0	0	180
SO4-- corr	0.43	-0.01	4.19	319.2	100.0	0	180
cond	15.04	4.00	218.00	11179.8	100.0	0	180
pH	5.20	4.13	7.37	4730.7	98.1	0	152

SE0005R Bredkälen

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.12	0.01	0.49	16.6	99.2	1	41
Cl-	0.21	0.01	3.03	30.9	99.2	2	41
K+	0.03	0.02	0.30	3.8	99.2	38	41
Mg++	0.029	0.005	0.140	4.1	99.2	14	41
NH4+	0.11	0.01	0.54	15.8	99.2	4	41
NO3-	0.11	0.03	0.32	16.0	99.2	0	41
Na+	0.15	0.03	2.21	21.9	99.2	22	41
Precip	-	0.0	11.2	143.9	100.0	16	63
SO4--	0.16	0.02	0.56	23.0	99.2	0	41
SO4-- corr	0.15	0.01	0.56	21.1	99.2	0	41
cond	6.20	0.50	19.00	892.8	97.2	2	38
pH	5.09	4.42	6.12	1160.6	100.0	0	47

SE0011R Vavihill

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.16	0.06	0.88	138.6	100.0	0	52
Cl-	1.61	0.01	10.84	1434.0	100.0	1	52
K+	0.04	0.02	0.68	32.2	100.0	39	52
Mg++	0.127	0.030	0.710	113.0	100.0	0	52
NH4+	0.38	0.07	1.61	339.5	100.0	0	52
NO3-	0.34	0.08	1.60	299.5	100.0	0	52
Na+	1.01	0.03	5.86	898.8	100.0	3	52
Precip	-	0.0	88.5	890.4	100.0	10	63
SO4--	0.34	0.09	0.90	307.2	100.0	0	52
SO4-- corr	0.26	0.07	0.86	231.3	100.0	0	52
cond	16.99	4.00	50.00	15124.0	100.0	0	52
pH	4.96	4.31	6.61	9720.8	100.0	0	52

SE0014R Råö

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.31	0.06	31.49	270.5	97.0	0	159
Cl-	7.72	0.09	1462.58	6638.8	97.0	0	160
K+	0.16	0.02	29.83	137.9	97.0	71	159
Mg++	0.459	0.030	21.370	394.8	96.8	0	158
NH4+	0.37	0.02	8.49	320.5	96.7	0	154
NO3-	0.35	0.03	5.73	304.9	97.0	0	160
Na+	4.49	0.03	852.47	3865.6	97.0	10	159
Precip	-	0.0	35.8	860.3	100.0	194	365
SO4--	0.63	0.03	67.58	541.7	97.0	0	160
SO4-- corr	0.25	-3.77	6.14	216.1	97.0	0	160
cond	39.77	1.00	4750.00	34210.2	95.2	0	133
pH	4.85	3.79	6.55	12221.8	97.1	0	164

SI0008R Iskrba

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.31	0.00	3.98	407.6	98.8	2	116
Cl-	0.40	0.00	10.84	526.0	99.3	5	122
K+	0.03	0.00	0.50	44.7	98.8	24	116
Mg++	0.046	0.002	0.856	60.4	98.8	9	116
NH4+	0.28	0.00	2.78	361.2	98.8	2	116
NO3-	0.31	0.03	2.95	410.5	99.3	0	123
Na+	0.24	0.00	6.61	317.9	98.8	5	116
Precip	-	0.0	44.9	1315.6	100.0	216	365
SO4--	0.40	0.03	4.90	526.1	99.3	0	123
SO4-- corr	0.38	0.03	4.89	496.8	99.3	0	122
cond	12.29	2.00	51.00	16174.0	93.3	0	92
pH	4.81	4.09	6.55	20178.3	96.6	0	93

SK0002R Chopok

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.16	0.01	1.77	170.8	97.4	0	174
Cl-	0.19	0.01	1.73	204.8	97.9	0	176
K+	0.07	0.01	1.01	77.7	97.5	0	175
Mg++	0.041	0.001	1.034	44.7	97.4	0	174
NH4+	0.43	0.06	2.59	468.6	97.0	0	173
NO3-	0.30	0.04	1.45	323.0	97.4	0	174
Na+	0.23	0.01	2.95	249.2	96.4	0	169
Precip	-	0.1	40.0	1086.6	100.0	156	365
SO4--	0.53	0.06	2.76	577.7	97.3	0	172
SO4-- corr	0.52	0.06	2.64	560.0	97.3	0	172
cond	13.34	3.83	37.07	14491.6	73.4	0	86
pH	4.93	4.38	6.06	12841.6	73.4	0	86

SK0004R Stará Lesná

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.28	0.03	16.74	217.3	96.0	0	110
Cl-	0.28	0.05	2.06	224.2	93.9	0	104
K+	0.20	0.01	2.78	158.4	95.8	0	109
Mg++	0.041	0.003	0.475	32.2	96.0	0	110
NH4+	0.59	0.00	3.48	463.5	95.2	0	107
NO3-	0.28	0.01	1.44	222.4	96.0	2	109
Na+	0.25	0.03	1.72	198.6	94.1	0	105
Precip	-	0.1	33.2	789.7	100.0	214	365
SO4--	0.54	0.11	2.61	428.5	96.0	0	109
SO4-- corr	0.52	0.10	2.50	411.5	96.0	0	109
cond	16.45	5.65	48.83	12988.3	78.2	0	53
pH	4.80	4.08	6.43	12588.5	78.2	0	53

SK0006R Starina

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.18	0.03	0.96	132.1	96.0	0	104
Cl-	0.19	0.02	1.69	142.0	96.1	0	104
K+	0.08	0.01	0.83	56.1	95.8	1	103
Mg++	0.030	0.006	0.202	22.1	96.0	0	104
NH4+	0.32	0.02	2.02	235.4	95.5	0	102
NO3-	0.38	0.01	2.01	279.8	96.1	1	105
Na+	0.19	0.02	2.13	138.0	96.3	0	105
Precip	-	0.1	34.2	737.5	100.0	246	365
SO4--	0.53	0.10	3.29	393.4	95.9	0	104
SO4-- corr	0.52	0.10	3.27	383.4	95.9	0	104
cond	18.44	7.19	40.03	13601.1	77.7	0	59
pH	4.54	4.12	5.38	21319.8	77.7	0	59

SK0007R Topolniky

January 2007 - December 2007

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.33	0.03	2.71	181.8	99.8	0	38
Cl-	0.18	0.03	1.51	101.5	99.8	0	38
K+	0.11	0.01	2.64	58.3	99.8	0	38
Mg++	0.064	0.003	0.283	35.5	99.8	0	38
NH4+	0.49	0.07	1.60	268.9	99.5	0	37
NO3-	0.34	0.03	1.27	189.9	99.5	0	37
Na+	0.14	0.02	0.93	78.7	99.4	0	36
Precip	-	0.6	68.3	551.1	97.8	0	39
SO4--	0.49	0.02	1.50	272.1	99.8	0	38
SO4-- corr	0.48	0.02	1.43	264.5	99.8	0	38
cond	13.33	2.84	35.37	7347.6	96.7	0	29
pH	5.08	4.46	6.30	4637.2	96.7	0	29

Annex 3

Annual statistics on gases and aerosol data

AT0002R Illmitz

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.17	0.21	0.11	2.42	0.01	0.03	0.11	0.50	3.01	98.9	0	361
HNO3	air	0.58	0.27	0.51	1.70	0.09	0.20	0.56	1.07	1.57	95.9	0	350
K+	aerosol	0.18	0.16	0.13	2.29	0.01	0.03	0.13	0.52	1.44	100.0	0	365
Mg++	aerosol	0.031	0.028	0.022	2.328	0.002	0.006	0.021	0.087	0.184	100.0	9	365
NH3	air	1.53	0.80	1.32	1.79	0.12	0.49	1.40	3.06	4.57	99.7	0	364
NH4+	aerosol	0.74	0.64	0.53	2.31	0.02	0.13	0.56	2.05	3.73	100.0	0	365
NO2	air	2.94	1.88	2.49	1.76	0.58	1.03	2.41	6.73	14.36	91.2	0	333
NO3-	aerosol	0.19	0.28	0.11	2.62	0.01	0.03	0.09	0.77	2.01	100.0	0	365
Na+	aerosol	0.09	0.07	0.07	1.91	0.01	0.02	0.07	0.18	0.69	100.0	0	365
PM1 mass	pm1	11.37	7.22	9.30	1.94	1.20	2.81	9.94	24.83	51.94	96.4	0	352
PM10 mass	pm10	20.83	13.86	16.88	1.95	2.33	5.24	17.94	51.45	73.97	100.0	0	365
PM25 mass	pm25	16.18	11.37	12.88	2.00	1.29	4.01	13.08	40.60	66.30	98.4	0	359
SO2 (filter)	air	0.81	0.73	0.57	2.46	0.01	0.13	0.62	2.03	6.42	95.9	0	350
SO2 (monitor)	air	0.89	1.13	0.49	3.01	0.01	0.09	0.46	3.12	12.57	92.9	0	8141
SO4--	aerosol	0.96	0.74	0.71	2.32	0.01	0.17	0.68	2.71	3.93	100.0	1	365
SO4-- corr	aerosol	1.18	1.04	0.82	2.45	-0.01	0.15	0.85	3.20	7.04	98.9	0	361

AT0005R Vorhegg

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	1.08	0.57	0.96	1.60	0.26	0.47	0.91	2.19	4.28	94.2	0	344
PM10 mass	pm10	8.50	6.28	6.40	2.23	0.34	1.62	6.75	20.58	41.68	92.3	0	337
SO2	air	0.19	0.24	0.13	2.92	0.00	0.00	0.12	0.70	2.52	93.6	0	8201

AT0048R Zoebelboden

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	1.72	1.14	1.46	1.75	0.36	0.63	1.35	3.99	11.33	95.9	0	350
PM10 mass	pm10	9.75	8.23	7.16	2.28	0.35	1.58	7.58	25.87	53.17	97.0	0	354
SO2	air	0.34	0.43	0.22	2.94	0.00	0.00	0.19	1.19	3.91	89.0	0	7797

BE0001R Offagne

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	2.14	2.04	1.51	2.39	0.00	0.23	1.58	5.88	16.95	90.7	0	7945

BE0032R Eupen

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	3.78	2.58	3.01	2.01	0.23	0.90	3.16	9.04	22.60	87.6	0	7675

BE0035R Vezin

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	4.10	2.88	3.17	2.24	0.00	0.68	3.39	9.72	23.73	92.1	0	8072

CH0001G Jungfraujoch

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	0.09	0.10	0.07	2.03	0.02	0.02	0.06	0.24	0.86	62.5	0	228
NO2	air	0.09	0.13	0.06	2.34	0.00	0.01	0.05	0.27	2.09	63.9	0	5595
PM10 mass	pm10	3.18	5.62	1.62	2.91	0.50	0.50	1.40	9.79	56.20	93.2	109	340
SO2	air	0.04	0.05	0.04	2.31	-0.05	-0.01	0.03	0.13	0.44	93.7	0	342
SO4--	aerosol	0.15	0.17	0.09	2.93	0.01	0.01	0.08	0.47	0.89	95.3	21	348

CH0002R Payerne

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3	air	0.25	0.07	0.24	1.31	0.15	0.15	0.25	0.42	0.47	99.6	0	26
HNO3+NO3-	air+aerosol	1.05	1.05	0.68	2.65	0.05	0.13	0.67	3.07	7.48	99.5	0	363
NH3	air	2.43	0.88	2.29	1.42	0.80	1.09	2.23	4.62	4.66	99.6	0	26
NH3+NH4+	air+aerosol	3.65	2.39	2.97	1.94	0.43	0.84	3.16	7.56	17.64	98.9	0	361
NH4+	aerosol	0.92	0.54	0.78	1.83	0.19	0.23	0.80	2.06	2.13	99.6	0	26
NO2	air	3.18	2.16	2.57	1.92	0.46	0.95	2.33	7.84	11.05	84.4	0	308
NO3-	aerosol	0.69	0.42	0.56	1.98	0.18	0.18	0.62	1.50	1.52	99.6	0	26
PM1 mass	pm1	9.35	5.77	7.74	1.89	1.60	2.47	8.30	19.42	34.00	96.7	0	353
PM10 mass	pm10	19.30	12.17	15.98	1.88	3.40	5.20	16.78	44.16	84.54	99.2	0	362
PM25 mass	pm25	12.43	9.68	9.62	2.05	1.70	2.92	9.80	32.88	62.60	99.7	0	364
SO2	air	0.36	0.25	0.28	2.12	0.02	0.07	0.29	0.89	1.53	99.2	0	362
SO4--	aerosol	0.63	0.38	0.51	2.04	0.05	0.13	0.54	1.35	2.03	99.5	0	363

CH0003R Tänikon

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	4.09	2.61	3.42	1.82	0.85	1.33	3.21	8.97	15.85	99.2	0	362
PM10 mass	pm10	18.63	12.29	15.09	1.96	1.66	4.73	15.66	43.34	85.12	100.0	0	365

CH0004R Chaumont

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	1.86	1.24	1.50	1.96	0.26	0.52	1.53	4.43	6.42	98.1	0	358
PM10 mass	pm10	10.62	7.71	8.08	2.23	0.50	1.78	8.70	24.33	55.52	97.3	4	355
SO2	air	0.40	0.37	0.28	2.72	-0.10	0.01	0.30	1.07	1.85	98.1	0	358

CH0005R Rigi

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3	air	0.20	0.07	0.19	1.37	0.09	0.10	0.18	0.40	0.45	99.6	0	26
HNO3+NO3-	air+aerosol	0.81	0.88	0.50	2.87	0.02	0.07	0.55	2.25	6.69	99.2	0	362
NH3	air	1.12	0.57	0.94	2.00	0.16	0.16	1.02	2.27	2.30	99.6	0	26
NH3+NH4+	air+aerosol	1.91	1.54	1.38	2.37	0.12	0.28	1.58	4.48	11.41	99.2	0	362
NH4+	aerosol	0.66	0.44	0.54	1.90	0.14	0.15	0.51	1.66	1.70	99.6	0	26
NO2	air	1.23	1.11	0.91	2.10	0.12	0.32	0.82	3.71	7.36	98.6	0	360
NO3-	aerosol	0.52	0.38	0.41	1.93	0.16	0.16	0.35	1.37	1.37	99.6	0	26
PM1 mass	pm1	6.01	3.91	4.89	2.00	0.50	1.33	5.40	11.50	33.70	94.5	8	345
PM10 mass	pm10	10.62	8.01	8.09	2.20	0.50	1.83	9.00	23.88	57.33	95.1	2	347
PM25 mass	pm25	7.84	6.47	5.89	2.23	0.50	1.30	6.60	16.11	54.10	96.4	7	352
SO2	air	0.30	0.20	0.24	2.01	0.01	0.08	0.25	0.69	1.32	98.4	0	359
SO4--	aerosol	0.49	0.33	0.37	2.31	0.01	0.07	0.45	1.11	1.88	97.8	1	357

RS0005R Kamenicki vis

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	3.63	5.23	2.92	1.83	0.00	1.20	2.70	7.70	93.00	93.2	0	340
SO2	air	7.53	5.06	5.97	2.00	2.50	2.50	6.00	17.50	20.00	77.3	0	282

CY0002R Ayia Marina

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
PM10 mass	pm10	27.03	19.19	22.50	1.82	3.00	9.00	22.00	67.00	157.00	88.2	0	322
PM10 mass	pm10	28.27	25.57	21.30	2.10	2.30	6.00	21.20	73.90	469.20	89.6	0	7850
PM25 mass	pm25	14.34	10.81	11.68	1.95	1.00	3.60	13.00	28.00	101.00	90.7	0	331

CZ0001R Svratouch

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.79	0.74	0.55	2.48	0.03	0.13	0.56	2.16	5.60	93.4	0	341
NH3+NH4+	air+aerosol	1.85	1.42	1.40	2.19	0.05	0.38	1.46	4.75	10.19	94.0	0	343
NO2	air	2.66	2.00	2.06	2.08	0.76	0.76	2.16	6.18	15.38	100.0	100	365
PM10 mass	pm10	22.62	10.71	20.11	1.66	5.00	8.00	20.00	45.80	58.00	44.1	0	161
SO2	air	1.06	1.07	0.70	2.58	0.05	0.16	0.75	3.27	8.08	93.4	0	341
SO4--	aerosol	0.72	0.64	0.45	3.10	0.00	0.06	0.55	2.04	3.20	93.4	3	341

CZ0003R Kosetice

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.89	0.68	0.69	2.08	0.04	0.19	0.70	2.21	4.68	98.4	0	359
NH3+NH4+	air+aerosol	2.20	1.37	1.80	1.96	0.10	0.55	1.94	4.89	7.96	98.1	0	358
NO2	air	2.72	1.50	2.43	1.59	0.47	1.17	2.39	5.24	15.44	94.0	0	8234
NO2	air	3.34	2.14	2.77	1.88	0.76	0.76	2.82	7.38	15.26	97.5	36	356
PM10 mass	pm10	16.73	9.51	14.57	1.69	5.00	6.00	15.00	31.35	72.00	52.6	0	192
PM25 mass	pm25	14.77	8.40	12.86	1.69	5.00	5.00	13.00	30.10	59.00	54.0	0	197
SO2	air	0.92	0.81	0.68	2.22	0.03	0.18	0.69	2.56	5.31	98.4	0	359
SO2	air	1.28	0.97	1.05	1.84	0.27	0.40	0.93	3.20	9.86	98.7	0	8645
SO4--	aerosol	0.96	0.77	0.69	2.41	0.00	0.18	0.73	2.43	5.08	98.4	1	359

DE0001R Westerland

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.20	0.25	0.13	2.65	0.01	0.03	0.14	0.55	1.72	96.7	10	353
Cl-	aerosol	0.06	0.07	0.03	3.25	0.01	0.01	0.04	0.20	0.52	50.1	36	183
HNO3	air	0.17	0.16	0.11	2.46	0.01	0.03	0.11	0.47	1.19	96.7	5	353
HNO3+NO3-	air+aerosol	0.92	0.79	0.61	2.73	0.10	0.10	0.70	2.64	4.17	96.7	55	353
K+	aerosol	0.21	0.16	0.18	1.69	0.01	0.10	0.17	0.47	1.34	96.7	1	353
Mg++	aerosol	0.327	0.407	0.216	2.486	0.005	0.050	0.250	0.716	3.830	96.7	2	353
NH3	air	1.26	0.91	0.92	2.70	0.01	0.23	1.07	3.33	4.47	96.7	6	353
NH3+NH4+	air+aerosol	2.01	1.55	1.49	2.30	0.20	0.20	1.66	4.93	8.42	96.4	21	352
NH4+	aerosol	0.76	1.05	0.18	9.27	0.01	0.01	0.33	3.11	6.11	96.4	77	352
NO2	air	2.47	2.96	1.41	2.90	0.14	0.28	1.41	9.68	18.28	87.4	0	319
NO3-	aerosol	0.76	0.72	0.39	4.55	0.01	0.01	0.53	2.37	3.83	96.7	24	353
Na+	aerosol	2.55	3.48	1.37	3.49	0.01	0.17	1.90	6.19	32.07	96.7	2	353
PM10 mass	pm10	18.60	9.90	16.44	1.64	5.50	7.30	16.40	38.57	61.90	94.5	0	345
SO2	air	0.43	0.35	0.33	2.17	0.00	0.08	0.32	1.12	2.08	96.7	4	353
SO4--	aerosol	0.85	0.52	0.70	2.08	0.01	0.28	0.72	1.85	2.96	96.7	3	353
SO4-- corr	aerosol	0.64	0.55	0.44	2.71	-0.12	0.08	0.50	1.67	2.95	96.7	3	353

DE0002R Langenbrügge

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.11	0.11	0.06	3.47	0.01	0.01	0.08	0.36	0.87	98.1	48	358
Cl-	aerosol	0.04	0.03	0.03	2.08	0.01	0.01	0.03	0.09	0.17	56.7	10	207
HNO3	air	0.26	0.24	0.18	2.37	0.01	0.05	0.18	0.70	2.00	98.1	1	358
HNO3+NO3-	air+aerosol	0.83	0.60	0.65	2.09	0.10	0.10	0.66	1.99	4.08	98.1	19	358
K+	aerosol	0.17	0.11	0.15	1.85	0.01	0.07	0.15	0.37	1.04	98.1	5	358
Mg++	aerosol	0.080	0.072	0.054	2.662	0.005	0.005	0.060	0.220	0.500	98.1	30	358
NH3	air	1.29	0.81	1.04	2.11	0.01	0.35	1.09	2.85	5.20	98.1	2	358
NH3+NH4+	air+aerosol	2.04	1.25	1.69	1.89	0.20	0.61	1.78	4.57	9.06	98.1	5	358
NH4+	aerosol	0.74	0.90	0.23	7.96	0.01	0.01	0.45	2.76	5.20	98.1	65	358
NO2	air	2.17	2.00	1.68	1.96	0.16	0.68	1.52	6.24	14.54	93.2	0	340
NO3-	aerosol	0.58	0.56	0.34	3.48	0.01	0.05	0.37	1.68	3.38	98.1	15	358
Na+	aerosol	0.53	0.61	0.25	4.24	0.01	0.01	0.32	1.70	4.07	98.1	19	358
PM1 mass	pm1	6.52	5.42	4.74	2.33	0.30	1.10	4.90	18.74	32.00	90.7	0	331
PM10 mass	pm10	15.77	9.95	13.29	1.79	2.20	5.02	13.20	35.54	69.90	90.7	0	331
PM25 mass	pm25	11.27	8.49	8.65	2.11	0.70	2.40	8.80	30.35	46.50	90.1	0	329
SO2	air	0.47	0.41	0.35	2.12	0.00	0.09	0.34	1.34	2.46	98.1	3	358
SO4--	aerosol	0.88	0.58	0.70	2.12	0.01	0.22	0.74	2.06	4.19	98.1	2	358
SO4-- corr	aerosol	0.83	0.59	0.65	2.24	-0.08	0.18	0.69	2.06	4.19	98.1	2	358

DE0003R Schauinsland

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.17	0.30	0.05	5.48	0.01	0.01	0.07	0.68	2.98	98.4	94	359
Cl-	aerosol	0.02	0.02	0.02	2.23	0.01	0.01	0.02	0.05	0.10	57.3	46	209
HNO3	air	0.26	0.20	0.19	2.22	0.01	0.06	0.20	0.66	1.46	98.6	2	360
HNO3+NO3-	air+aerosol	0.59	0.63	0.40	2.44	0.10	0.10	0.44	1.78	4.91	98.4	69	359
K+	aerosol	0.21	0.69	0.12	2.27	0.01	0.04	0.12	0.43	12.14	98.6	3	360
Mg++	aerosol	0.042	0.106	0.024	2.906	0.005	0.005	0.030	0.100	1.950	98.6	95	360
NH3	air	0.82	0.63	0.59	2.51	0.01	0.12	0.69	2.19	3.78	98.4	2	359
NH3+NH4+	air+aerosol	1.25	1.08	0.86	2.54	0.20	0.20	1.02	3.11	7.69	98.1	75	358
NH4+	aerosol	0.45	0.74	0.11	8.19	0.01	0.01	0.19	1.57	6.56	98.4	93	359
NO2	air	1.03	0.87	0.78	2.09	0.05	0.25	0.76	2.79	6.13	76.4	0	279
NO3-	aerosol	0.34	0.56	0.15	4.24	0.01	0.01	0.17	1.33	4.45	98.4	34	359
Na+	aerosol	0.17	0.25	0.06	5.53	0.01	0.01	0.08	0.63	2.57	98.6	98	360
PM10 mass	pm10	9.39	8.48	5.89	3.13	0.10	0.70	7.10	22.72	59.80	87.9	6	321
PM25 mass	pm25	6.50	5.96	4.08	3.15	-0.50	0.41	4.85	16.04	38.70	88.2	10	322
SO2	air	0.31	0.24	0.24	2.04	0.00	0.07	0.24	0.74	1.81	98.6	1	360
SO4--	aerosol	0.58	0.45	0.40	2.63	0.01	0.07	0.45	1.46	2.17	98.4	1	359
SO4-- corr	aerosol	0.57	0.45	0.38	2.79	0.00	0.06	0.44	1.45	2.17	98.4	1	359

DE0007R Neuglobsow

January 2007 - December 2007

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	0.05	3.88	0.01	0.01	0.06	0.32	0.95	99.7	73	364
Cl-	aerosol	0.03	0.03	0.02	2.20	0.01	0.01	0.02	0.06	0.32	58.4	26	213
HNO3	air	0.20	0.19	0.14	2.34	0.01	0.04	0.15	0.48	1.60	99.7	4	364
HNO3+NO3-	air+aerosol	0.68	0.53	0.52	2.13	0.10	0.10	0.49	1.87	3.32	99.7	26	364
K+	aerosol	0.19	0.21	0.13	2.34	0.01	0.04	0.13	0.65	1.48	99.7	6	364
Mg++	aerosol	0.075	0.069	0.050	2.759	0.005	0.005	0.060	0.198	0.540	99.7	36	364
NH3	air	0.84	0.66	0.61	2.40	0.01	0.12	0.65	2.12	3.79	99.2	0	362
NH3+NH4+	air+aerosol	1.55	0.98	1.25	2.02	0.20	0.40	1.36	3.41	5.32	99.2	16	362
NH4+	aerosol	0.71	0.83	0.25	7.17	0.01	0.01	0.46	2.58	4.57	99.7	56	364
NO2	air	1.49	1.49	1.16	1.91	0.19	0.51	1.05	4.13	13.13	85.8	0	313
NO3-	aerosol	0.49	0.51	0.28	3.58	0.01	0.01	0.31	1.65	3.16	99.7	18	364
Na+	aerosol	0.48	0.69	0.21	4.66	0.01	0.01	0.25	1.55	8.25	99.7	27	364
PM10 mass	pm10	13.99	8.76	11.54	1.99	0.10	4.30	11.80	32.15	47.30	91.5	2	334
SO2	air	0.44	0.61	0.26	2.68	0.00	0.06	0.23	1.65	5.21	99.7	5	364
SO4--	aerosol	0.81	0.59	0.61	2.45	0.01	0.18	0.65	2.07	3.37	99.7	5	364
SO4-- corr	aerosol	0.77	0.61	0.55	2.76	-0.32	0.12	0.61	2.06	3.37	99.7	5	364

DE0008R Schmücke

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	1.65	1.13	1.37	1.80	0.26	0.59	1.26	3.93	8.00	94.0	0	343
PM10 mass	pm10	10.41	8.76	7.15	2.56	0.30	1.20	7.70	27.93	52.70	91.5	0	334
SO2	air	0.61	0.71	0.36	3.00	0.03	0.03	0.40	2.35	3.95	98.6	21	360

DE0009R Zingst

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.14	0.19	0.10	2.68	0.01	0.01	0.11	0.38	2.82	96.2	17	351
Cl-	aerosol	0.05	0.06	0.04	2.27	0.01	0.01	0.04	0.12	0.67	57.5	12	210
HNO3	air	0.21	0.20	0.15	2.41	0.01	0.05	0.16	0.54	1.83	96.2	7	351
HNO3+NO3-	air+aerosol	0.85	0.63	0.65	2.17	0.10	0.10	0.66	2.26	3.72	96.2	21	351
K+	aerosol	0.17	0.20	0.14	2.08	0.01	0.04	0.14	0.42	2.86	95.9	6	350
Mg++	aerosol	0.154	0.183	0.111	2.333	0.005	0.030	0.120	0.340	2.890	95.9	6	350
NH3	air	1.06	0.80	0.76	2.75	0.01	0.20	0.85	2.63	4.44	96.2	6	351
NH3+NH4+	air+aerosol	1.76	1.29	1.35	2.15	0.20	0.20	1.40	4.53	7.42	95.9	18	350
NH4+	aerosol	0.71	0.86	0.23	7.54	0.01	0.01	0.43	2.79	4.39	95.9	60	350
NO2	air	1.85	1.41	1.53	1.81	0.36	0.65	1.42	4.26	12.83	91.2	0	333
NO3-	aerosol	0.64	0.59	0.42	2.92	0.01	0.09	0.43	1.93	3.37	96.2	7	351
Na+	aerosol	0.94	0.90	0.59	2.99	0.01	0.09	0.67	2.67	6.46	96.2	2	351
PM10 mass	pm10	15.38	10.03	12.92	1.79	3.10	4.88	12.20	39.12	53.50	91.5	0	334
SO2	air	0.53	0.52	0.40	2.06	0.00	0.11	0.38	1.47	4.84	96.2	4	351
SO4--	aerosol	0.77	0.52	0.62	2.07	0.01	0.20	0.65	1.71	3.54	96.2	1	351
SO4-- corr	aerosol	0.69	0.55	0.50	2.45	-0.06	0.09	0.57	1.70	3.54	96.2	1	351

DE0044R Melpitz

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm10	0.16	0.10	0.14	1.58	0.03	0.07	0.13	0.31	1.12	100.0	0	365
Ca++	pm25	0.10	0.04	0.09	1.53	0.00	0.04	0.09	0.17	0.40	100.0	0	365
Cl-	pm10	0.36	0.54	0.18	3.33	0.00	0.03	0.16	1.35	4.42	100.0	0	365
Cl-	pm25	0.16	0.19	0.10	2.57	0.00	0.03	0.09	0.51	1.59	100.0	0	365
K+	pm10	0.16	0.10	0.14	1.72	0.04	0.06	0.14	0.38	0.65	100.0	0	365
Mg++	pm10	0.054	0.043	0.043	1.900	0.005	0.016	0.041	0.147	0.338	100.0	0	365
Mg++	pm25	0.022	0.016	0.019	1.705	0.000	0.008	0.018	0.054	0.146	100.0	0	365
NH4+	pm10	1.44	1.19	1.10	2.06	0.22	0.34	1.06	4.04	7.54	100.0	0	365
NH4+	pm25	1.32	1.04	1.04	1.98	0.00	0.32	1.02	3.75	6.38	100.0	0	365
NO3-	pm10	0.70	0.67	0.48	2.41	0.08	0.12	0.44	2.04	4.92	100.0	0	365
NO3-	pm25	0.56	0.60	0.34	2.73	0.00	0.07	0.30	1.78	4.54	100.0	0	365
Na+	pm10	0.32	0.35	0.21	2.42	0.02	0.06	0.19	1.04	2.51	100.0	0	365
Na+	pm25	0.14	0.13	0.10	1.93	0.00	0.04	0.10	0.36	1.16	100.0	0	365
PM10 mass	pm10	21.66	11.13	19.16	1.65	4.82	7.86	19.45	41.26	83.84	100.0	0	365
PM25 mass	pm25	17.42	10.09	14.91	1.75	2.25	6.17	15.24	37.54	59.05	100.0	0	365
SO4--	pm10	0.98	0.70	0.80	1.87	0.17	0.29	0.77	2.54	5.61	100.0	0	365
SO4--	pm25	0.90	0.65	0.73	1.90	0.00	0.26	0.72	2.33	4.57	100.0	0	365
EC	pm10	1.62	1.20	1.28	2.02	0.11	0.40	1.35	3.86	7.90	100.0	0	365
EC	pm25	1.11	1.19	0.82	2.13	0.07	0.24	0.82	2.71	13.09	100.0	0	365
OC	pm10	2.67	1.99	2.08	2.08	0.20	0.57	2.28	6.61	14.60	100.0	0	365
OC	pm25	1.53	1.47	0.99	2.69	0.03	0.18	1.08	4.74	9.13	100.0	0	365

DK0003R Tange

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.14	0.14	0.10	2.16	-0.00	0.03	0.10	0.46	1.01	98.1	3	358
Cl-	aerosol	1.96	1.85	1.20	2.92	0.07	0.20	1.35	5.83	11.63	98.6	0	360
HNO3+NO3-	air+aerosol	0.67	0.63	0.45	2.54	0.03	0.10	0.46	2.00	3.62	98.1	0	358
K+	aerosol	0.18	0.12	0.16	1.86	-0.00	0.08	0.15	0.46	0.87	98.1	2	358
NH3	air	1.11	1.11	0.72	2.80	0.01	0.12	0.80	3.36	7.77	98.1	7	358
NH4+	aerosol	1.00	0.98	0.64	2.66	0.06	0.13	0.62	3.32	4.92	98.9	0	361
Na+	aerosol	1.28	1.36	0.79	3.00	0.00	0.11	0.94	3.44	17.11	99.5	3	363
SO2	air	0.23	0.33	0.13	2.75	0.00	0.04	0.11	0.84	3.33	98.4	3	359
SO4--	aerosol	0.64	0.47	0.51	1.94	0.00	0.18	0.50	1.45	2.99	98.9	0	361
SO4-- corr	aerosol	0.53	0.50	0.35	2.68	-0.14	0.06	0.37	1.43	2.96	98.9	0	361

DK0005R Keldsnor

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.12	0.12	0.10	2.23	-0.00	0.03	0.10	0.29	1.28	87.7	3	320
Cl-	aerosol	1.95	1.65	1.32	2.69	0.04	0.20	1.48	5.09	10.39	89.3	1	326
HNO3+NO3-	air+aerosol	0.91	0.79	0.63	2.50	0.01	0.12	0.71	2.50	5.31	89.3	0	326
K+	aerosol	0.13	0.08	0.11	1.93	-0.00	0.05	0.12	0.28	0.62	87.7	3	320
NH3	air	0.67	1.89	0.31	3.55	0.00	0.03	0.36	1.60	24.50	89.3	21	326
NH4+	aerosol	1.25	1.10	0.84	2.67	0.04	0.13	0.95	3.76	6.04	89.0	0	325
NO2	air	2.67	2.77	1.65	2.78	-0.26	0.32	1.72	8.11	24.64	95.0	214	8324
Na+	aerosol	1.37	1.03	1.01	2.43	0.03	0.18	1.12	3.14	6.04	89.3	0	326
PM10 mass	pm10	21.98	11.21	19.57	1.63	2.98	8.99	19.61	44.30	91.96	95.3	3	348
SO2	air	0.54	0.60	0.29	3.37	0.00	0.04	0.30	1.83	3.89	89.6	2	327
SO4--	aerosol	0.77	0.53	0.61	2.15	0.00	0.20	0.64	1.75	3.03	89.3	0	326
SO4-- corr	aerosol	0.65	0.56	0.46	2.61	-0.48	0.06	0.53	1.70	2.93	89.3	0	326

DK0008R Anholt

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.13	0.11	0.10	2.01	0.01	0.03	0.11	0.33	1.05	97.0	0	354
Cl-	aerosol	2.86	2.58	1.62	3.57	0.01	0.14	2.27	7.76	16.99	97.0	3	354
HNO3+NO3-	air+aerosol	0.66	0.65	0.44	2.55	0.01	0.09	0.47	1.86	5.17	96.4	0	352
K+	aerosol	0.14	0.07	0.12	1.56	0.02	0.06	0.13	0.24	0.56	97.0	0	354
NH3	air	0.16	0.18	0.08	4.65	0.00	0.00	0.12	0.47	1.25	97.3	89	355
NH4+	aerosol	0.84	0.88	0.52	2.71	0.05	0.10	0.56	2.77	6.15	97.3	0	355
Na+	aerosol	1.92	1.43	1.36	2.54	0.08	0.22	1.69	4.65	10.17	97.8	0	357
SO2	air	0.38	0.41	0.24	2.59	0.02	0.06	0.24	1.31	2.60	97.0	1	354
SO4--	aerosol	0.72	0.45	0.61	1.77	0.09	0.26	0.60	1.52	2.80	97.0	0	354
SO4-- corr	aerosol	0.56	0.49	0.37	2.84	-0.01	0.05	0.42	1.43	2.78	97.0	0	354

DK0031R Ulborg

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.11	0.11	0.08	2.08	0.00	0.03	0.09	0.30	0.87	96.4	0	352
Cl-	aerosol	2.67	2.49	1.59	3.16	0.07	0.22	2.05	7.57	20.46	95.3	0	348
HNO3+NO3-	air+aerosol	0.69	0.71	0.42	2.83	0.03	0.07	0.43	2.17	4.60	96.2	0	351
K+	aerosol	0.28	2.07	0.13	1.87	0.02	0.06	0.13	0.32	37.83	96.4	0	352
NH3	air	0.60	0.88	0.27	3.78	0.00	0.03	0.28	2.84	5.04	95.9	17	350
NH4+	aerosol	0.94	1.05	0.54	3.02	0.04	0.09	0.57	3.32	5.78	96.4	0	352
Na+	aerosol	1.71	1.41	1.10	2.92	0.05	0.14	1.50	4.35	10.87	96.7	0	353
SO2	air	0.23	0.30	0.13	2.83	0.01	0.03	0.12	0.86	2.17	96.2	3	351
SO4--	aerosol	0.69	0.48	0.57	1.86	0.15	0.22	0.55	1.65	3.18	96.7	0	353
SO4-- corr	aerosol	0.55	0.52	0.34	2.84	-0.04	0.05	0.38	1.63	3.15	96.7	0	353

EE0009R Lahemaa

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	3.07	2.28	2.52	1.88	0.38	0.82	2.59	6.54	22.67	97.5	0	356
SO2	air	1.09	1.54	0.63	2.70	0.05	0.14	0.60	3.78	14.41	98.4	0	359

EE0011R Vilsandi

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	2.71	2.30	2.05	2.13	0.12	0.62	2.07	7.46	18.05	96.4	0	352
SO2	air	0.76	0.74	0.55	2.21	0.04	0.17	0.52	2.13	6.06	96.4	0	352

ES0007R Viznar

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.65	0.31	0.59	1.54	0.16	0.31	0.59	1.23	2.66	99.2	0	362
NH3+NH4+	air+aerosol	1.98	1.01	1.72	1.77	0.16	0.57	1.89	3.84	6.17	98.9	0	361
NO2	air	2.51	2.64	1.71	2.39	0.03	0.48	1.61	7.73	25.94	93.8	0	8218
NO3-	pm10	0.47	0.25	0.41	1.64	0.06	0.19	0.42	0.92	1.98	97.3	0	355
PM10 mass	pm10	20.56	15.96	16.79	1.88	4.00	6.00	18.00	45.60	165.00	95.1	0	347
PM25 mass	pm25	10.78	5.50	9.53	1.67	2.00	4.00	10.00	20.00	47.00	93.2	0	340
SO2	air	0.50	0.66	0.34	2.25	0.08	0.10	0.30	1.52	18.76	92.2	0	8081
SO4--	pm10	0.71	0.36	0.62	1.67	0.17	0.27	0.61	1.43	2.08	97.3	0	355

ES0008R Niembro

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.71	0.58	0.57	1.86	0.16	0.25	0.53	1.90	4.81	96.2	0	351
NH3	air	1.01	0.52	0.78	2.81	0.01	0.06	0.95	2.22	2.45	99.7	2	52
NH3+NH4+	air+aerosol	1.94	1.27	1.48	2.39	0.03	0.23	1.77	4.17	10.00	97.0	0	354
NO2	air	1.89	1.75	1.31	2.44	0.04	0.27	1.37	5.14	19.55	95.9	0	8405
NO3-	pm10	0.42	0.41	0.32	2.23	0.01	0.11	0.32	1.02	4.01	88.5	2	323
PM10 mass	pm10	19.76	8.55	17.98	1.57	4.00	8.00	18.00	35.10	58.00	86.8	0	317
PM25 mass	pm25	11.69	7.18	9.98	1.75	2.00	4.00	10.00	26.00	55.00	88.5	0	323
SO2	air	1.96	3.04	0.97	3.17	0.08	0.18	0.89	7.27	39.28	92.1	0	8069
SO4--	pm10	1.14	0.85	0.93	1.84	0.23	0.37	0.90	2.71	7.01	88.5	0	323

ES0009R Campisabalos

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm10	0.23	0.22	0.18	1.95	0.04	0.06	0.17	0.56	1.59	39.7	0	145
Ca++	pm25	0.09	0.06	0.08	1.69	0.04	0.04	0.08	0.27	0.27	5.5	0	20
Cl-	pm10	0.39	0.29	0.34	1.65	0.20	0.20	0.27	1.37	1.47	6.0	0	22
Cl-	pm25	0.25	0.09	0.24	1.33	0.16	0.16	0.23	0.49	0.50	6.0	0	22
HNO3+NO3-	air+aerosol	0.38	0.16	0.36	1.44	0.15	0.21	0.35	0.66	1.26	96.4	0	352
K+	pm10	0.05	0.06	0.04	2.17	0.01	0.01	0.04	0.15	0.46	39.7	1	145
K+	pm25	0.03	0.03	0.02	2.30	0.01	0.01	0.01	0.11	0.11	4.9	0	18
Mg++	pm10	0.027	0.029	0.013	4.365	0.001	0.001	0.020	0.080	0.170	39.7	19	145
Mg++	pm25	0.018	0.008	0.016	1.577	0.010	0.010	0.020	0.030	0.030	2.7	0	10
NH3	air	0.75	0.44	0.58	2.29	0.06	0.08	0.73	1.67	1.82	95.9	0	50
NH3+NH4+	air+aerosol	1.04	0.59	0.87	1.93	0.01	0.30	0.99	2.06	4.84	94.5	1	345
NH4+	pm10	0.80	0.60	0.64	1.95	0.25	0.25	0.50	2.36	2.40	5.8	0	21
NH4+	pm25	0.62	0.41	0.50	2.00	0.11	0.11	0.57	1.86	1.86	4.9	0	18
NO2	air	1.00	0.81	0.76	2.18	0.03	0.18	0.80	2.43	11.99	86.7	0	7597
NO3-	pm10	0.20	0.16	0.16	2.01	0.01	0.05	0.17	0.51	1.17	36.4	1	133
NO3-	pm25	0.17	0.17	0.12	2.13	0.02	0.02	0.12	0.76	0.80	6.0	0	22
Na+	pm10	0.31	0.34	0.14	4.44	0.02	0.02	0.25	1.06	1.58	39.7	49	145
PM10 mass	pm10	7.78	5.68	6.12	2.07	1.00	1.00	7.00	21.10	29.00	37.5	0	137
PM25 mass	pm25	6.82	5.27	5.26	2.11	0.50	1.35	5.00	18.65	35.00	34.5	1	126
SO2	air	0.40	0.76	0.24	2.38	0.08	0.08	0.20	1.30	17.97	94.6	0	8290
SO4--	pm10	0.43	0.24	0.37	1.75	0.07	0.14	0.38	1.00	1.24	36.4	0	133
SO4--	pm25	0.37	0.23	0.32	1.75	0.15	0.15	0.28	0.85	0.85	6.0	0	22

ES0010R Cabo de Creus

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.69	0.45	0.59	1.70	0.16	0.26	0.58	1.41	5.05	98.9	0	361
NH3+NH4+	air+aerosol	1.41	0.74	1.20	1.86	0.01	0.42	1.30	2.74	5.58	98.4	1	359
NO2	air	1.63	1.15	1.36	1.81	0.04	0.54	1.34	3.63	20.08	92.2	0	8079
NO3-	pm10	0.50	0.31	0.43	1.68	0.12	0.19	0.43	1.06	2.92	94.8	0	346
PM10 mass	pm10	18.55	7.07	17.48	1.40	6.00	10.00	17.00	30.00	61.00	93.7	0	342
PM25 mass	pm25	10.00	4.89	9.06	1.55	3.00	5.00	9.00	18.00	46.00	91.2	0	333
SO2	air	0.57	0.25	0.53	1.52	0.08	0.24	0.55	0.96	5.01	95.0	0	8323
SO4--	pm10	0.94	0.54	0.82	1.68	0.27	0.38	0.79	1.96	4.46	94.8	0	346

ES0011R Barcarrola

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.51	0.27	0.45	1.56	0.18	0.24	0.42	1.05	2.03	96.4	0	352
NH3+NH4+	air+aerosol	1.89	0.92	1.60	1.98	0.05	0.51	1.85	3.50	5.02	98.9	0	361
NO2	air	1.06	0.72	0.86	1.97	0.09	0.26	0.90	2.45	8.49	95.1	0	8332
NO3-	pm10	0.29	0.16	0.26	1.57	0.05	0.14	0.24	0.58	1.18	96.4	0	352
PM10 mass	pm10	15.90	11.44	13.57	1.71	4.00	6.00	13.00	31.00	122.00	95.9	0	350
PM25 mass	pm25	8.21	4.74	7.11	1.72	1.00	3.00	7.00	17.00	49.00	92.9	0	339
SO2	air	0.48	0.64	0.29	2.56	0.08	0.08	0.26	1.58	9.19	95.8	0	8393
SO4--	pm10	0.72	0.51	0.60	1.77	0.21	0.27	0.56	1.94	3.63	96.4	0	352

ES0012R Zarra

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.49	0.23	0.45	1.56	0.14	0.22	0.44	0.92	1.75	96.2	0	351
NH3+NH4+	air+aerosol	1.54	0.71	1.32	1.91	0.05	0.36	1.55	2.58	4.18	91.8	0	335
NO2	air	1.18	0.73	1.02	1.69	0.08	0.46	1.00	2.51	10.69	95.1	0	8328
NO3-	pm10	0.41	0.21	0.37	1.59	0.11	0.17	0.37	0.81	1.84	93.2	0	340
PM10 mass	pm10	14.27	8.15	12.33	1.73	3.00	5.00	13.00	29.00	53.00	93.2	0	340
PM25 mass	pm25	8.83	4.39	7.78	1.68	2.00	3.00	8.00	16.00	27.00	89.9	0	328
SO2	air	0.39	0.50	0.29	2.06	0.08	0.09	0.26	1.06	20.46	97.2	0	8511
SO4--	pm10	0.80	0.45	0.69	1.76	0.20	0.28	0.68	1.65	2.39	93.2	0	340

ES0013R Penausende

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.63	0.65	0.51	1.80	0.16	0.24	0.46	1.77	9.40	97.8	0	357
NH3+NH4+	air+aerosol	1.20	0.72	1.01	1.94	0.01	0.43	1.03	2.31	7.29	98.1	3	358
NO2	air	1.51	1.27	1.19	1.99	0.03	0.40	1.17	3.93	17.35	92.9	0	8139
NO3-	pm10	0.29	0.21	0.24	1.80	0.02	0.11	0.23	0.73	1.50	96.2	0	351
PM10 mass	pm10	10.69	7.67	8.97	1.78	1.00	4.00	9.00	23.00	68.00	95.6	0	349
PM25 mass	pm25	6.44	3.88	5.48	1.77	1.00	2.00	5.00	14.00	26.00	93.2	0	340
SO2	air	0.65	1.07	0.38	2.52	0.08	0.11	0.30	2.24	13.58	90.3	0	7910
SO4--	pm10	0.55	0.30	0.48	1.70	0.09	0.22	0.47	1.17	1.73	96.2	0	351

ES0014R Els Torms

January 2007 - December 2007

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	0.37	0.55	1.63	0.19	0.26	0.52	1.32	2.45	98.6	0	360
NH3+NH4+	air+aerosol	4.38	2.31	3.66	2.02	0.08	1.29	4.00	9.97	10.06	98.9	0	361
NO2	air	1.85	1.22	1.57	1.76	0.04	0.68	1.54	3.96	14.07	95.3	0	8352
NO3-	pm10	0.55	0.40	0.46	1.77	0.11	0.19	0.44	1.29	2.72	94.5	0	345
PM10 mass	pm10	17.49	9.40	15.46	1.64	4.00	7.00	15.00	35.85	83.00	93.7	0	342
PM25 mass	pm25	12.27	6.51	10.71	1.71	3.00	4.00	11.00	24.60	38.00	89.6	0	327
SO2	air	0.59	1.08	0.36	2.46	0.08	0.10	0.32	1.87	35.24	92.2	0	8078
SO4--	pm10	0.92	0.48	0.79	1.73	0.21	0.31	0.82	1.93	2.57	94.5	0	345

ES0015R Risco Llamo

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.47	0.25	0.43	1.52	0.18	0.23	0.41	0.92	1.97	45.8	0	167
NH3+NH4+	air+aerosol	1.43	0.81	1.18	1.95	0.14	0.35	1.39	2.94	4.27	43.6	0	159
NO3-	pm10	0.28	0.17	0.24	1.80	0.04	0.06	0.24	0.58	1.39	41.6	0	152
PM10 mass	pm10	10.17	6.24	8.60	1.80	2.00	3.00	9.00	21.50	39.00	40.8	0	149
PM25 mass	pm25	7.03	3.77	6.14	1.70	1.00	3.00	6.00	14.00	21.00	40.3	0	147
SO4--	pm10	0.54	0.30	0.47	1.73	0.09	0.20	0.47	1.20	1.51	41.6	0	152

ES0016R O Saviñao

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.57	0.39	0.49	1.69	0.17	0.23	0.47	1.25	3.82	94.0	0	343
NH3+NH4+	air+aerosol	1.94	1.16	1.61	1.91	0.06	0.53	1.75	4.10	8.39	97.5	0	356
NO2	air	1.63	1.35	1.28	2.00	0.03	0.41	1.29	4.01	15.97	96.7	0	8467
NO3-	pm10	0.26	0.21	0.22	1.73	0.03	0.11	0.21	0.54	2.59	92.3	0	337
PM10 mass	pm10	12.04	6.63	10.52	1.68	3.00	5.00	10.00	25.00	51.00	92.3	0	337
PM25 mass	pm25	7.95	5.12	6.52	1.91	0.50	3.00	7.00	18.00	33.00	89.0	1	325
SO2	air	1.09	2.44	0.46	3.26	0.08	0.11	0.36	4.24	53.20	93.4	0	8183
SO4--	pm10	0.81	0.56	0.66	1.87	0.18	0.26	0.63	1.98	4.19	92.3	0	337

ES0017R Montseny

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm10	0.42	0.36	0.31	2.43	0.01	0.07	0.36	1.03	2.38	34.0	1	124
Ca++	pm25	0.09	0.12	0.06	2.62	0.00	0.01	0.07	0.38	0.72	13.7	1	50
Cl-	pm10	0.12	0.11	0.07	3.03	0.01	0.01	0.09	0.28	0.67	32.9	2	120
Cl-	pm25	0.08	0.16	0.03	3.85	0.01	0.01	0.04	0.19	1.14	13.7	8	50
K+	pm10	0.17	0.10	0.14	1.79	0.03	0.05	0.15	0.35	0.61	34.0	0	124
K+	pm25	0.10	0.06	0.08	2.09	0.01	0.02	0.08	0.21	0.29	13.7	1	50
Mg++	pm10	0.114	0.101	0.086	2.243	0.000	0.020	0.100	0.300	0.630	34.0	0	124
Mg++	pm25	0.031	0.039	0.020	2.437	0.005	0.005	0.021	0.106	0.241	13.7	5	50
NH4+	pm10	0.53	0.45	0.39	2.27	0.03	0.09	0.43	1.11	2.91	34.0	0	124
NH4+	pm25	0.75	0.62	0.55	2.36	0.06	0.07	0.57	1.87	3.61	13.7	0	50
NO3-	pm10	0.42	0.46	0.28	2.51	0.03	0.06	0.26	1.22	2.59	32.9	0	120
NO3-	pm25	0.25	0.37	0.12	3.15	0.03	0.03	0.07	1.19	1.92	13.7	0	50
Na+	pm10	0.33	0.29	0.23	2.44	0.00	0.04	0.22	0.92	1.49	34.0	0	124
Na+	pm25	0.13	0.10	0.10	2.16	0.01	0.03	0.08	0.41	0.44	13.7	0	50
SO4--	pm10	0.79	0.46	0.63	2.08	0.06	0.14	0.77	1.70	1.87	34.0	0	124
SO4--	pm25	0.88	0.52	0.70	2.15	0.07	0.16	0.82	1.89	2.13	13.7	0	50
EC	pm10	0.20	0.10	0.17	1.79	0.04	0.06	0.19	0.41	0.42	10.4	0	38
EC	pm25	0.17	0.08	0.15	1.79	0.02	0.05	0.15	0.33	0.34	10.4	0	38
OC	pm10	1.64	0.56	1.54	1.46	0.61	0.62	1.55	2.65	2.75	10.4	0	38
OC	pm25	1.74	0.70	1.60	1.54	0.48	0.58	1.70	3.23	3.46	10.4	0	38
TC	pm10	1.84	0.63	1.72	1.47	0.70	0.71	1.73	2.90	3.03	10.4	0	38
TC	pm25	1.91	0.77	1.76	1.54	0.55	0.60	1.91	3.52	3.74	10.4	0	38

FI0009R Utö

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.05	0.06	0.03	2.21	0.01	0.01	0.03	0.14	0.53	93.2	0	340
Cl-	aerosol	0.35	0.46	0.10	7.39	0.00	0.00	0.17	1.34	2.32	93.2	40	340
HNO3+NO3-	air+aerosol	0.21	0.16	0.15	2.31	0.01	0.03	0.17	0.53	1.12	93.2	3	340
K+	aerosol	0.04	0.03	0.03	2.40	0.00	0.01	0.03	0.10	0.22	93.2	7	340
Mg++	aerosol	0.047	0.038	0.034	2.271	0.001	0.009	0.034	0.126	0.228	93.2	1	340
NH3+NH4+	air+aerosol	0.24	0.21	0.17	2.26	0.02	0.05	0.18	0.65	1.77	92.3	0	337
NH4+	aerosol	0.19	0.19	0.11	2.92	0.00	0.02	0.12	0.57	1.24	93.2	0	340
NO2	air	1.30	1.59	0.80	2.85	-0.46	0.11	0.82	4.15	23.96	87.0	0	7618
Na+	aerosol	0.38	0.33	0.26	2.68	0.00	0.05	0.26	1.08	1.90	93.2	2	340
SO2	air	0.23	0.22	0.16	2.26	0.02	0.04	0.15	0.66	1.61	93.4	0	341
SO4--	aerosol	0.28	0.22	0.21	2.25	0.03	0.05	0.22	0.76	1.38	93.2	0	340
SO4-- corr	aerosol	0.25	0.22	0.17	2.69	0.01	0.03	0.18	0.74	1.34	93.2	0	340

FI0017R Virolahti II

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.10	0.14	0.05	2.93	0.00	0.01	0.05	0.41	1.03	99.5	0	363
Cl-	aerosol	0.10	0.17	0.02	6.55	0.00	0.00	0.03	0.41	1.61	99.5	97	363
HNO3+NO3-	air+aerosol	0.21	0.16	0.16	2.16	0.02	0.04	0.18	0.56	1.14	93.7	2	342
K+	aerosol	0.07	0.06	0.05	2.09	0.00	0.01	0.05	0.20	0.43	99.5	0	363
Mg++	aerosol	0.030	0.025	0.021	2.465	0.001	0.004	0.022	0.074	0.154	99.5	1	363
NH3+NH4+	air+aerosol	0.40	0.32	0.29	2.31	0.01	0.07	0.30	1.08	1.66	99.5	0	363
NH4+	aerosol	0.30	0.28	0.20	2.62	0.01	0.04	0.22	0.82	1.64	99.5	0	363
NO2	air	1.42	1.31	1.08	2.06	0.07	0.37	1.03	3.81	18.90	98.6	0	8639
Na+	aerosol	0.20	0.18	0.13	2.56	0.00	0.03	0.14	0.56	1.27	99.5	0	363
SO2	air	0.45	0.49	0.28	2.65	0.03	0.06	0.28	1.45	3.09	93.7	0	342
SO4--	aerosol	0.46	0.36	0.35	2.18	0.04	0.08	0.37	1.16	2.21	99.5	0	363
SO4-- corr	aerosol	0.45	0.36	0.33	2.29	0.03	0.07	0.36	1.16	2.21	99.5	0	363

FI0022R Oulanka

January 2007 - December 2007

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	1.94	0.00	0.00	0.01	0.04	0.09	99.5	0	52
Cl-	aerosol	0.05	0.10	0.01	6.11	0.00	0.00	0.01	0.31	0.51	99.5	8	52
HNO3+NO3-	air+aerosol	0.05	0.03	0.04	1.96	0.01	0.01	0.04	0.12	0.14	95.6	1	50
K+	aerosol	0.02	0.01	0.02	1.74	0.01	0.01	0.02	0.06	0.07	99.5	0	52
Mg++	aerosol	0.014	0.010	0.011	2.060	0.002	0.003	0.014	0.036	0.047	99.5	0	52
NH3+NH4+	air+aerosol	0.13	0.09	0.10	1.97	0.03	0.03	0.11	0.36	0.39	99.5	0	52
NH4+	aerosol	0.10	0.08	0.08	2.00	0.02	0.03	0.08	0.30	0.34	99.5	0	52
NO2	air	0.29	0.26	0.20	2.68	-0.05	0.02	0.22	0.80	2.56	73.5	0	6437
Na+	aerosol	0.11	0.08	0.08	2.31	0.01	0.02	0.11	0.30	0.40	99.5	0	52
SO2	air	0.24	0.34	0.12	3.32	0.01	0.01	0.12	1.18	1.52	95.6	0	50
SO4--	aerosol	0.26	0.15	0.22	1.83	0.05	0.08	0.24	0.59	0.80	99.5	0	52
SO4-- corr	aerosol	0.25	0.15	0.21	1.90	0.04	0.06	0.23	0.57	0.79	99.5	0	52

FI0036R Pallas (Matorova)

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.02	0.03	0.01	3.09	0.00	0.00	0.01	0.04	0.30	95.3	38	348
Cl-	aerosol	0.19	0.34	0.03	8.85	0.00	0.00	0.03	0.92	2.09	95.3	94	348
HNO3+NO3-	air+aerosol	0.04	0.04	0.03	2.27	0.00	0.01	0.03	0.13	0.30	89.6	60	327
K+	aerosol	0.02	0.02	0.01	2.88	0.00	0.00	0.01	0.06	0.13	95.3	30	348
Mg++	aerosol	0.021	0.026	0.010	3.389	0.001	0.001	0.010	0.074	0.164	95.3	22	348
NH3+NH4+	air+aerosol	0.10	0.12	0.07	2.48	0.01	0.01	0.06	0.34	1.12	95.3	0	348
NH4+	aerosol	0.09	0.11	0.05	2.72	0.00	0.01	0.05	0.28	1.05	95.3	3	348
Na+	aerosol	0.17	0.23	0.07	4.93	0.00	0.00	0.08	0.64	1.51	95.3	10	348
SO2	air	0.17	0.41	0.05	4.55	0.01	0.01	0.04	1.05	3.13	89.6	48	327
SO4--	aerosol	0.21	0.21	0.13	2.79	0.00	0.03	0.13	0.65	1.43	95.3	2	348
SO4-- corr	aerosol	0.20	0.21	0.11	3.13	0.00	0.02	0.11	0.65	1.41	95.3	2	348

FI0037R Ähtäri II

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.15	0.13	0.12	1.98	0.03	0.04	0.11	0.43	0.81	94.0	0	49
NH3+NH4+	air+aerosol	0.28	0.17	0.23	2.13	0.01	0.09	0.23	0.71	0.76	99.7	0	52
NO2	air	0.53	0.56	0.37	2.62	-0.11	0.02	0.37	1.57	8.12	86.3	0	7558
SO2	air	0.24	0.30	0.15	2.47	0.03	0.04	0.12	1.15	1.28	94.0	0	49
SO4--	aerosol	0.35	0.21	0.30	1.82	0.08	0.10	0.30	0.90	1.02	99.7	0	52

FI0096G Pallas (Sammaltunturi)

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	0.25	0.23	0.18	2.37	-0.08	0.04	0.17	0.75	1.88	95.8	0	8395

FR0008R Donon

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2 (7m)	air	1.24	1.70	1.25	2.37	0.00	0.00	0.61	4.30	19.52	96.8	0	8477
NO2 (16m)	air	1.26	1.72	1.25	2.38	0.00	0.00	0.61	4.58	18.30	96.8	0	8477
NO2 (30m)	air	1.26	1.72	1.25	2.40	0.00	0.00	0.61	4.58	16.47	98.3	0	8613
NO2 (44m)	air	1.25	1.71	1.24	2.40	0.00	0.00	0.61	4.27	18.30	98.3	0	8610
SO2	air	0.38	0.28	0.31	1.88	0.14	0.17	0.20	0.98	1.67	99.7	202	364
SO4--	aerosol	0.86	0.37	0.77	1.66	0.14	0.25	0.82	1.58	2.19	99.7	0	364

FR0009R Revin

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	1.15	1.29	0.73	2.57	0.09	0.18	0.69	4.14	7.29	26.3	0	96
NH3+NH4+	air+aerosol	2.07	1.90	1.45	2.36	0.20	0.32	1.35	7.00	9.05	26.3	0	96
PM10 mass	pm10	20.92	12.97	17.87	1.76	-2.80	7.22	17.68	45.38	127.12	89.3	0	7822
SO2	air	0.62	1.07	0.31	3.37	0.01	0.04	0.33	1.82	9.64	26.8	2	98
SO4--	aerosol	0.99	0.75	0.77	2.03	0.14	0.26	0.72	2.59	3.81	26.3	0	96

FR0010R Morvan

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
SO2	air	0.78	2.57	0.33	2.45	0.12	0.18	0.20	2.88	27.83	93.7	228	342
SO4--	aerosol	0.94	0.44	0.83	1.70	0.13	0.27	0.90	1.74	3.18	87.1	0	318

FR0012R Iraty

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
SO2	air	0.40	0.41	0.30	1.99	0.14	0.17	0.20	1.29	3.36	99.2	224	362
SO4--	aerosol	0.90	0.36	0.83	1.52	0.18	0.45	0.81	1.53	2.47	98.6	0	360

FR0013R Peyrusse Vieille

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.65	0.52	0.48	2.29	0.01	0.12	0.55	1.74	2.59	28.2	1	103
NH3+NH4+	air+aerosol	1.90	1.20	1.54	1.99	0.23	0.42	1.69	4.67	6.79	27.9	0	102
NO2	air	1.83	0.92	1.65	1.58	0.00	0.92	1.52	3.66	11.59	94.3	0	8258
PM10 mass	pm10	15.21	7.39	13.51	1.67	0.00	6.00	14.00	28.00	70.00	94.6	0	8283
SO2	air	0.40	0.61	0.20	3.38	0.01	0.01	0.21	1.38	3.88	28.2	6	103
SO4--	aerosol	0.84	0.54	0.68	1.98	0.07	0.20	0.70	1.84	2.73	28.2	0	103

FR0014R Montandon

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
SO2	air	0.26	0.21	0.23	1.57	0.12	0.15	0.19	0.57	3.14	95.6	272	349
SO4--	aerosol	0.74	0.38	0.63	1.83	0.11	0.19	0.71	1.40	1.91	95.6	0	349

FR0015R La Tardière

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	3.29	1.70	2.96	1.57	0.92	1.52	2.75	6.71	14.03	96.1	0	8422
SO2	air	0.47	0.55	0.36	1.96	0.14	0.16	0.38	1.05	8.59	99.5	141	363
SO4--	aerosol	0.89	0.51	0.77	1.73	0.16	0.30	0.81	1.98	3.43	97.5	0	356

FR0016R Le Casset

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
SO2	air	0.21	0.11	0.20	1.39	0.13	0.14	0.18	0.42	0.99	98.9	313	361
SO4--	aerosol	0.68	0.40	0.57	1.94	0.10	0.13	0.63	1.33	4.16	99.2	0	362

FR0017R Montfranc

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
SO2	air	0.33	0.39	0.26	1.80	0.15	0.17	0.19	0.81	5.39	94.2	247	344
SO4--	aerosol	0.73	0.42	0.61	1.90	0.11	0.18	0.71	1.42	3.23	94.0	0	343

GB0002R Eskdalemuir

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
SO4--	aerosol	0.45	0.38	0.34	2.04	0.06	0.10	0.36	1.14	2.56	96.7	0	353

GB0006R Lough Navar

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3	air	0.05	0.04	0.04	2.45	0.01	0.01	0.04	0.11	0.11	92.2	0	11
NH3	air	0.57	0.45	0.45	2.06	0.16	0.16	0.42	1.70	1.70	99.9	0	12
NH4+	aerosol	0.72	0.70	0.54	2.12	0.19	0.19	0.60	2.80	2.80	99.9	0	12
NO3-	aerosol	0.21	0.16	0.15	2.34	0.05	0.05	0.12	0.51	0.51	92.2	0	11
PM10 mass	pm10	12.88	7.80	10.98	1.81	-1.00	4.00	12.00	27.00	101.00	97.7	0	8556
SO4--	aerosol	0.41	0.40	0.29	2.24	0.00	0.07	0.27	1.30	2.39	60.8	0	222

GB0007R Barcombe Mills

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
SO4--	aerosol	0.76	0.58	0.61	1.92	0.05	0.25	0.54	2.23	3.25	66.6	0	243

GB0013R Yarner Wood

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3	air	0.15	0.08	0.14	1.69	0.06	0.06	0.14	0.32	0.32	99.9	0	12
NH3	air	0.46	0.40	0.36	1.95	0.16	0.16	0.32	1.60	1.60	99.9	0	12
NH4+	aerosol	0.72	0.70	0.54	2.12	0.19	0.19	0.60	2.80	2.80	99.9	0	12
NO2	air	1.71	2.00	1.27	2.19	0.00	0.18	1.16	5.06	21.20	90.9	0	7959
NO2	air	1.74	1.78	1.32	2.07	0.09	0.50	1.31	4.94	18.90	90.4	0	330
NO3-	aerosol	0.45	0.38	0.36	1.97	0.12	0.12	0.34	1.58	1.58	99.9	0	12
SO4--	aerosol	0.53	0.60	0.37	2.17	0.07	0.13	0.30	2.02	3.65	44.9	0	164

GB0014R High Muffles

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3	air	0.15	0.06	0.14	1.53	0.08	0.08	0.15	0.24	0.24	99.9	0	12
NH3	air	0.52	0.30	0.47	1.57	0.22	0.22	0.45	1.40	1.40	99.9	0	12
NH4+	aerosol	0.65	0.34	0.56	1.76	0.23	0.23	0.57	1.20	1.20	99.9	0	12
NO2	air	1.96	2.73	1.10	3.20	0.00	0.00	0.89	7.11	21.56	97.8	0	8568
NO2	air	2.08	2.40	1.30	2.75	0.04	0.27	1.31	6.05	19.90	83.6	0	305
NO3-	aerosol	0.38	0.23	0.32	1.79	0.13	0.13	0.28	0.76	0.76	99.9	0	12
SO4--	aerosol	0.49	0.46	0.36	2.08	0.05	0.10	0.33	1.48	2.77	55.9	0	204

GB0016R Glen Dye

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3	air	0.10	0.06	0.08	2.00	0.03	0.03	0.10	0.17	0.17	99.9	0	12
NH3	air	0.26	0.12	0.24	1.52	0.12	0.12	0.26	0.55	0.55	99.9	0	12
NH4+	aerosol	0.32	0.23	0.24	2.24	0.06	0.06	0.24	0.74	0.74	99.9	0	12
NO3-	aerosol	0.19	0.15	0.14	2.28	0.04	0.04	0.13	0.47	0.47	99.9	0	12

GB0036R Harwell

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	3.73	3.65	2.59	2.34	0.00	0.70	2.38	11.65	27.21	90.7	0	7946
PM10 mass	pm10	21.50	11.15	19.20	1.62	-3.00	9.00	20.00	40.00	151.00	96.7	0	8475
PM25 mass	pm25	11.56	5.83	10.45	1.56	-1.00	6.00	10.00	23.00	52.00	96.6	0	8463
PM25 mass	pm25	18.92	11.64	16.40	1.69	4.00	7.00	16.00	42.85	79.00	71.8	0	262

GB0037R Ladybower Res.

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	2.71	2.69	1.88	2.47	0.00	0.34	1.92	7.75	27.97	73.3	0	6417

GB0038R Lullington Heath

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	3.17	2.82	2.33	2.21	0.00	0.58	2.26	8.91	22.27	94.3	0	8261

GB0043R Narberth

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	1.66	1.77	1.24	2.09	0.00	0.40	1.22	4.30	18.76	89.4	0	7828
PM10 mass	pm10	18.06	10.37	15.87	1.68	-3.00	7.00	16.00	35.00	179.00	89.0	0	7795

GB0045R Wicken Fen

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	3.07	3.00	1.99	2.69	0.00	0.34	2.04	9.43	21.50	86.0	0	7533

GB0048R Auchencorth Moss

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
PM10 mass	pm10	6.42	8.30	5.06	2.45	-4.00	-1.00	4.00	21.00	82.00	98.4	0	8618
PM10 mass	pm10	10.19	6.38	8.39	1.90	2.00	3.00	8.50	24.00	30.00	35.6	0	130
PM25 mass	pm25	4.05	6.95	3.52	2.59	-4.00	-2.00	2.00	17.00	64.00	97.1	0	8508
PM25 mass	pm25	7.36	7.12	5.45	2.29	-1.00	1.00	5.00	19.00	46.00	92.3	0	337

GR0001R Aliartos

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	13.49	10.75	10.20	2.10	1.10	3.10	10.10	36.10	76.10	83.1	0	7279
PM10 mass	pm10	21.79	9.26	20.64	1.45	8.00	10.85	19.00	46.75	55.00	42.2	0	56
SO2	air	4.11	2.64	3.54	1.68	2.10	2.10	3.10	9.10	48.10	80.3	0	7032

GR0002R Finokalia

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
PM10 mass	pm10	20.58	15.67	15.36	2.42	0.21	3.29	18.12	49.28	149.04	25.1	0	2198

HU0002R K-puszta

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3	air	0.20	0.18	0.15	2.19	0.01	0.05	0.15	0.48	1.74	96.7	5	353
NH3	air	1.35	0.76	1.07	2.33	0.02	0.27	1.25	2.87	3.65	96.7	5	353
NH4+	aerosol	0.85	0.92	0.46	3.67	0.01	0.04	0.56	2.83	5.28	96.4	13	352
NO2	air	1.60	1.14	1.27	2.15	0.01	0.39	1.30	3.68	9.19	100.0	3	365
NO3-	aerosol	0.39	0.46	0.21	3.54	0.01	0.03	0.23	1.48	2.92	96.7	14	353
SO2	air	0.72	1.00	0.32	4.11	0.01	0.01	0.36	2.82	5.98	96.7	19	353
SO4--	aerosol	0.91	0.89	0.60	2.79	0.01	0.11	0.64	2.52	7.35	96.7	6	353

IE0001R Valentia Observatory

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.16	0.15	0.10	2.63	0.03	0.03	0.12	0.43	1.01	100.0	85	365
HNO3+NO3-	air+aerosol	0.29	0.40	0.17	2.50	0.04	0.06	0.13	1.22	2.54	99.7	0	364
K+	aerosol	0.12	0.09	0.09	2.09	0.03	0.03	0.10	0.27	0.57	100.0	59	365
Mg++	aerosol	0.289	0.298	0.158	3.397	0.025	0.025	0.190	0.871	2.010	100.0	82	365
NH3+NH4+	air+aerosol	1.06	0.76	0.89	1.77	0.09	0.43	0.79	2.80	4.86	99.7	0	364
NO2	air	1.04	1.01	0.69	2.52	0.05	0.20	0.70	2.88	7.00	99.5	5	363
Na+	aerosol	2.50	2.62	1.38	3.65	0.03	0.12	1.62	7.18	20.21	99.7	14	364
SO2	air	0.24	0.26	0.17	2.21	0.01	0.06	0.15	0.73	2.23	99.7	1	364
SO4--	aerosol	0.51	0.45	0.34	2.83	0.01	0.04	0.40	1.52	2.82	99.7	9	364
SO4-- corr	aerosol	0.30	0.46	0.14	4.46	-0.68	-0.01	0.13	1.41	2.74	99.7	9	364

IE0005R Oak Park

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.11	0.11	0.08	2.36	0.00	0.01	0.08	0.33	1.27	96.7	18	353
K+	aerosol	0.07	0.04	0.06	1.70	0.00	0.02	0.06	0.13	0.25	96.7	8	353
Mg++	aerosol	0.125	0.154	0.083	2.683	-0.020	0.000	0.070	0.473	1.060	96.7	31	353
NH4+	aerosol	0.89	1.31	0.51	2.76	0.00	0.10	0.44	2.98	9.92	96.7	2	353
NO3-	aerosol	0.40	0.52	0.21	3.16	0.00	0.04	0.19	1.62	2.73	96.7	4	353
Na+	aerosol	0.89	0.75	0.63	2.40	0.05	0.15	0.69	2.52	4.98	96.7	0	353
SO4--	aerosol	0.48	0.47	0.36	2.10	0.00	0.11	0.33	1.44	3.39	96.7	6	353
SO4-- corr	aerosol	0.41	0.47	0.26	2.65	-0.07	0.04	0.23	1.39	3.29	96.7	6	353

IE0006R Malin Head

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.13	0.07	0.11	1.82	0.00	0.04	0.11	0.28	0.48	98.1	2	358
K+	aerosol	0.13	0.08	0.11	1.81	0.00	0.04	0.11	0.29	0.53	98.1	1	358
Mg++	aerosol	0.317	0.218	0.246	2.177	0.010	0.070	0.260	0.750	1.300	98.1	2	358
NH4+	aerosol	0.74	1.02	0.38	3.37	0.01	0.04	0.31	2.79	9.10	98.1	0	358
NO3-	aerosol	0.29	0.45	0.12	3.82	0.00	0.02	0.12	1.49	3.47	98.1	3	358
Na+	aerosol	2.42	1.99	1.52	3.13	0.03	0.13	1.85	6.30	11.07	98.1	0	358
SO4--	aerosol	0.54	0.39	0.46	1.78	0.00	0.19	0.42	1.34	2.92	98.1	5	358
SO4-- corr	aerosol	0.33	0.41	0.19	3.08	-0.18	0.02	0.20	1.24	2.66	98.1	5	358

IE0008R Carnsore Point

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.17	0.12	0.14	1.90	0.02	0.05	0.14	0.43	0.66	100.0	0	365
K+	aerosol	0.15	0.11	0.12	1.99	0.02	0.04	0.11	0.37	0.56	100.0	0	365
Mg++	aerosol	0.409	0.393	0.252	2.917	0.000	0.030	0.280	1.272	1.930	100.0	1	365
NH4+	aerosol	0.73	1.12	0.43	2.81	0.00	0.06	0.39	2.34	9.83	100.0	4	365
NO3-	aerosol	0.46	0.70	0.22	3.14	0.02	0.05	0.18	1.75	6.72	100.0	0	365
Na+	aerosol	3.51	3.17	2.33	2.63	0.11	0.41	2.42	10.46	15.35	100.0	0	365
SO4--	aerosol	0.72	0.46	0.61	1.80	0.13	0.24	0.61	1.68	2.83	100.0	0	365
SO4-- corr	aerosol	0.43	0.48	0.26	2.86	-0.01	0.04	0.25	1.52	2.54	100.0	0	365

IE0031R Mace Head

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
PM25 mass	pm25	9.56	7.73	7.55	2.03	0.00	2.38	7.75	22.72	119.90	77.1	0	6751

IS0002R Irafoss

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.20	0.15	0.15	2.03	0.00	0.06	0.15	0.55	0.86	97.0	0	354
Cl-	aerosol	1.63	2.15	0.96	2.70	0.09	0.23	0.82	5.87	21.62	97.0	0	354
K+	aerosol	0.05	0.05	0.04	2.04	0.00	0.01	0.04	0.13	0.54	97.0	11	354
Mg++	aerosol	0.127	0.131	0.083	2.646	0.000	0.010	0.080	0.380	1.130	97.0	0	354
Na+	aerosol	0.95	1.04	0.62	2.65	0.02	0.14	0.61	2.93	9.84	97.0	0	354
SO2	air	0.09	0.14	0.03	5.58	0.01	0.01	0.03	0.34	1.43	97.5	172	356
SO4--	aerosol	0.16	0.14	0.12	2.22	0.01	0.03	0.12	0.43	0.99	97.0	0	354
SO4-- corr	aerosol	0.09	0.11	0.05	2.81	-0.19	0.01	0.05	0.28	0.91	97.0	0	354

IS0091R Storhofdi

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Cl-	aerosol	9.99	5.06	8.67	1.77	2.80	2.90	9.60	22.05	23.70	99.9	0	24
NO3-	aerosol	0.04	0.03	0.03	1.98	0.01	0.01	0.04	0.09	0.09	99.9	0	24
SO4--	aerosol	0.55	0.19	0.52	1.40	0.29	0.29	0.55	1.04	1.08	99.9	0	24
SO4-- corr	aerosol	0.08	0.09	0.07	2.53	-0.03	-0.03	0.06	0.28	0.31	99.9	0	24

IT0001R Montelibretti

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3	air	0.24	0.39	0.16	2.44	0.01	0.04	0.17	0.55	6.88	97.5	0	356
NH3	air	1.91	0.69	1.78	1.48	0.28	0.85	1.85	3.09	4.38	97.5	0	356
NH4+	aerosol	1.25	0.66	1.08	1.79	0.13	0.37	1.17	2.39	4.19	97.5	0	356
NO2	air	5.73	2.22	5.29	1.54	-0.10	2.42	5.40	9.88	11.80	99.5	0	363
NO3-	aerosol	0.83	0.50	0.69	1.84	0.08	0.24	0.74	1.84	3.41	97.5	0	356
NO3-	pm10_pm25	0.35	0.26	0.26	2.25	0.00	0.06	0.28	0.85	1.82	97.5	0	356
NO3-	pm25	0.48	0.46	0.31	2.59	0.00	0.07	0.31	1.46	2.94	97.5	0	356
PM10 mass	pm10	31.52	13.67	28.50	1.60	4.40	12.69	29.55	58.40	75.30	97.5	0	356
PM25 mass	pm25	21.87	9.98	19.47	1.67	3.80	7.40	20.90	40.04	65.90	91.8	0	335
SO2	air	0.46	0.28	0.38	1.84	0.04	0.13	0.39	0.99	1.74	97.5	0	356
SO4--	aerosol	1.13	0.66	0.95	1.81	0.14	0.39	0.94	2.44	3.66	97.5	0	356
SO4--	pm10_pm25	0.11	0.09	0.08	2.16	0.00	0.02	0.07	0.30	0.75	97.5	0	356
SO4--	pm25	1.02	0.64	0.84	1.93	0.07	0.29	0.86	2.32	3.59	97.5	0	356

IT0004R Ispra

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NH4+	pm25	1.97	1.73	1.25	2.92	0.03	0.20	1.54	5.40	9.21	90.4	0	330
NO2	air	6.81	3.71	5.91	1.72	0.88	2.64	5.51	13.86	20.44	83.8	0	306
NO3-	pm25	1.64	1.55	0.90	3.71	0.00	0.09	1.22	4.89	7.59	63.3	1	231
PM25 mass	pm25	25.70	21.44	17.42	2.67	0.00	2.76	17.87	73.19	104.24	88.2	0	322
SO2	air	0.39	0.40	0.24	2.66	0.03	0.06	0.21	1.16	2.23	87.4	0	319
SO4--	pm25	1.01	0.74	0.73	2.48	0.03	0.12	0.83	2.52	4.28	89.9	0	328
EC	pm25	2.34	2.21	1.50	2.66	0.08	0.33	1.32	7.15	10.75	90.7	0	331
OC	pm25	9.26	8.51	6.01	2.69	0.30	1.30	5.90	27.47	42.81	90.7	0	331

LT0015R Preila

January 2007 - December 2007

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	0.49	0.43	2.25	0.04	0.10	0.42	1.73	2.52	94.8	0	346
NH3+NH4+	air+aerosol	1.66	1.41	1.25	2.16	0.09	0.36	1.22	4.43	11.30	94.8	0	346
NO2	air	1.17	0.84	0.98	1.80	0.19	0.37	0.95	2.71	7.35	94.2	0	344
SO2	air	0.27	0.40	0.16	2.73	0.01	0.04	0.15	0.85	3.19	94.8	0	346
SO4--	aerosol	0.53	0.61	0.40	2.01	0.04	0.14	0.37	1.34	4.66	94.2	0	344

LV0010R Rucava

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.12	0.14	0.05	4.36	0.01	0.01	0.04	0.43	0.43	83.8	4	10
Cl-	aerosol	0.47	0.49	0.27	3.22	0.00	0.04	0.32	1.58	2.86	96.2	69	351
HNO3+NO3-	air+aerosol	0.38	0.39	0.26	2.43	0.02	0.06	0.27	1.07	2.76	97.0	2	354
K+	aerosol	0.05	0.04	0.03	2.65	0.01	0.01	0.03	0.14	0.14	75.3	1	9
Mg++	aerosol	0.015	0.017	0.006	6.031	0.001	0.001	0.010	0.050	0.050	75.6	2	9
NH3+NH4+	air+aerosol	1.04	0.78	0.82	2.06	0.07	0.24	0.85	2.34	5.77	97.8	0	357
NH4+	aerosol	0.54	0.50	0.36	2.60	0.02	0.06	0.39	1.44	3.92	97.3	11	355
NO3-	aerosol	0.09	0.11	0.05	2.91	0.01	0.01	0.05	0.31	0.79	97.8	10	357
Na+	aerosol	0.30	0.15	0.27	1.68	0.12	0.12	0.29	0.58	0.58	83.8	0	10
SO2	air	0.44	0.40	0.30	2.47	0.01	0.06	0.31	1.33	3.00	97.8	2	357
SO4--	aerosol	0.32	0.46	0.17	3.40	0.01	0.02	0.18	1.00	3.50	97.8	14	357
SO4-- corr	aerosol	0.30	0.45	0.13	4.27	-0.03	0.01	0.16	0.99	3.43	97.8	14	357

LV0016R Zoseni

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.30	0.26	0.22	2.24	0.02	0.05	0.23	0.88	1.91	95.9	2	350
NH3+NH4+	air+aerosol	0.95	0.66	0.77	1.99	0.00	0.23	0.80	2.14	5.40	97.5	7	356
NH4+	aerosol	0.65	0.57	0.48	2.31	0.00	0.10	0.52	1.77	4.13	97.8	11	357
NO2	air	0.65	0.63	0.45	2.45	0.01	0.09	0.45	2.10	3.96	95.9	13	350
NO3-	aerosol	0.06	0.06	0.04	2.43	0.01	0.01	0.04	0.18	0.52	95.9	10	350
SO2	air	0.59	0.56	0.40	2.57	0.02	0.08	0.40	1.86	2.82	95.6	3	349
SO4--	aerosol	0.43	0.44	0.28	2.67	0.01	0.05	0.29	1.39	3.04	96.2	7	351

NL0007R Eibergen

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NH3	air	7.08	4.79	5.94	1.78	0.90	2.58	5.58	16.47	43.03	86.2	0	7555
NO2	air	4.77	3.28	3.81	2.07	-1.13	1.08	3.92	11.97	19.30	88.4	0	7745
PM10 mass	pm10	26.21	17.64	21.23	2.10	-4.99	5.02	22.46	57.87	273.26	90.1	0	7890
SO2	air	0.57	0.88	0.48	2.99	-1.23	-0.36	0.39	2.12	9.80	71.1	0	6232

NL0008R Bilthoven

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.13	0.11	0.10	2.03	0.01	0.03	0.10	0.32	0.68	30.1	0	110
Cl-	aerosol	0.59	0.72	0.39	3.28	-0.16	-0.12	0.37	2.39	3.46	51.0	0	186
NH4+	aerosol	1.35	1.29	0.91	2.49	0.13	0.21	0.91	4.30	7.71	51.0	0	186
NO3-	aerosol	0.83	0.79	0.58	2.48	0.00	0.11	0.67	2.21	5.43	50.7	0	185
SO2	air	1.01	1.18	0.70	2.86	-0.54	-0.11	0.70	3.08	25.75	70.4	0	6167
SO4--	aerosol	0.77	0.74	0.54	2.27	0.05	0.16	0.51	2.34	4.82	51.0	0	186

NL0009R Kollumerwaard

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.10	0.11	0.07	2.52	-0.02	0.01	0.08	0.30	0.73	44.7	0	163
Cl-	aerosol	0.96	1.20	0.57	3.92	-0.38	-0.12	0.55	3.35	7.07	90.4	0	330
NH4+	aerosol	1.08	0.91	0.78	2.33	-0.12	0.18	0.81	2.84	5.57	90.7	0	331
NO2	air	3.02	2.94	2.12	2.88	-1.51	-0.08	2.32	9.06	20.56	96.4	0	8443
NO3-	aerosol	0.69	0.65	0.44	2.74	0.11	0.11	0.56	2.04	4.31	90.7	97	331
PM10 mass	pm10	25.82	14.74	22.20	1.87	-4.76	7.36	23.01	54.81	154.78	93.4	0	8185
SO2	air	0.39	0.59	0.39	2.91	-1.36	-0.35	0.31	1.45	5.59	99.3	0	8697
SO4--	aerosol	0.59	0.48	0.46	2.12	-0.05	0.11	0.45	1.72	2.51	90.4	0	330

NL0010R Vredepeel

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.08	0.10	0.06	2.60	-0.01	-0.00	0.06	0.29	0.64	22.2	0	81
Cl-	aerosol	0.45	0.58	0.30	3.45	-0.17	-0.09	0.28	1.59	4.42	74.5	0	272
NH3	air	14.99	11.81	11.65	2.02	1.24	3.77	11.50	39.64	114.04	90.2	0	7901
NH4+	aerosol	1.43	1.27	1.00	2.58	-0.24	0.11	1.09	4.06	7.40	74.5	0	272
NO2	air	6.57	3.86	5.59	1.78	0.30	2.22	5.52	14.43	25.66	97.8	0	8571
NO3-	aerosol	0.92	0.83	0.68	2.41	0.00	0.00	0.67	2.71	5.15	74.5	0	272
PM10 mass	pm10	23.81	18.57	18.00	2.42	-4.99	2.45	19.45	58.68	224.09	91.9	0	8052
SO2	air	0.69	1.14	0.53	3.07	-1.10	-0.36	0.44	2.58	14.09	85.9	0	7522
SO4--	aerosol	0.71	0.65	0.48	2.57	-0.12	0.09	0.51	2.15	3.92	74.5	0	272

NO0001R Birkenes

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.05	0.06	0.03	2.81	0.01	0.01	0.03	0.17	0.35	99.5	42	363
Cl-	aerosol	0.37	0.70	0.08	6.55	0.01	0.01	0.07	1.51	6.40	100.0	119	365
HNO3	air	0.04	0.06	0.02	2.74	0.01	0.01	0.01	0.17	0.52	97.8	205	357
HNO3+NO3-	air+aerosol	0.17	0.24	0.10	2.72	0.01	0.02	0.08	0.62	1.62	97.8	0	357
K+	aerosol	0.04	0.04	0.02	2.67	0.01	0.01	0.03	0.10	0.54	100.0	70	365
Mg++	aerosol	0.051	0.063	0.026	3.399	0.005	0.005	0.030	0.170	0.540	99.5	92	363
NH3	air	0.27	0.17	0.22	1.96	0.02	0.05	0.24	0.55	1.47	95.1	12	347
NH3+NH4+	air+aerosol	0.43	0.38	0.32	2.13	0.03	0.10	0.29	1.23	2.36	95.1	0	347
NO2	air	0.32	0.32	0.22	2.50	0.01	0.05	0.23	0.93	2.33	100.0	11	365
NO3-	aerosol	0.13	0.20	0.06	3.28	0.01	0.01	0.06	0.52	1.39	97.8	17	357
Na+	aerosol	0.35	0.48	0.16	3.97	0.01	0.02	0.17	1.16	4.48	100.0	13	365
PM1 mass	pm1	2.70	2.12	2.03	2.07	0.22	0.57	2.08	6.27	13.12	97.0	0	120
PM10 mass	pm10	5.63	3.19	4.29	1.94	0.24	1.44	4.76	11.84	17.84	97.0	0	120
PM25 mass	pm25	3.33	2.40	2.56	1.91	0.36	0.98	2.71	7.84	14.92	99.5	0	124
SO2	air	0.06	0.10	0.03	3.26	0.01	0.01	0.01	0.27	0.83	100.0	187	365
SO4--	aerosol	0.28	0.28	0.16	3.26	0.01	0.02	0.17	0.88	1.57	100.0	8	365
SO4-- corr	aerosol	0.25	0.28	0.12	4.01	-0.02	0.01	0.14	0.84	1.55	100.0	8	365
EC	pm10	0.14	0.14	0.10	2.16	0.00	0.01	0.08	0.38	1.11	100.0	0	126
OC	pm10	0.84	0.61	0.73	1.77	0.18	0.32	0.69	2.20	3.71	100.0	0	126
TC	pm10	0.98	0.73	0.83	1.77	0.21	0.39	0.79	2.54	4.82	100.0	0	126

NO0015R Tustervatn

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.05	0.07	0.03	3.02	0.01	0.01	0.03	0.18	0.48	97.3	56	355
Cl-	aerosol	0.42	0.71	0.10	6.71	0.01	0.01	0.10	1.79	4.93	95.3	109	348
HNO3	air	0.03	0.05	0.02	2.60	0.01	0.01	0.01	0.15	0.42	95.6	241	349
HNO3+NO3-	air+aerosol	0.09	0.13	0.05	2.57	0.01	0.02	0.04	0.35	0.98	93.7	0	342
K+	aerosol	0.03	0.03	0.01	2.63	0.01	0.01	0.02	0.08	0.17	97.3	113	355
Mg++	aerosol	0.044	0.059	0.020	3.498	0.005	0.005	0.020	0.170	0.380	97.3	118	355
NH3	air	0.86	0.91	0.57	2.56	0.02	0.13	0.58	2.63	7.07	95.3	3	348
NH3+NH4+	air+aerosol	0.94	0.94	0.65	2.38	0.04	0.14	0.65	2.68	7.31	95.3	0	348
NH4+	aerosol	0.08	0.14	0.03	4.37	0.01	0.01	0.02	0.36	0.99	95.6	117	349
NO2	air	0.11	0.17	0.07	3.00	0.01	0.01	0.09	0.27	2.27	97.5	73	356
NO3-	aerosol	0.06	0.10	0.03	3.29	0.01	0.01	0.02	0.22	0.93	93.7	67	342
Na+	aerosol	0.29	0.42	0.12	4.54	0.01	0.01	0.13	1.15	3.00	97.3	28	355
SO2	air	0.06	0.09	0.03	3.09	0.01	0.01	0.03	0.23	0.69	97.3	164	355
SO4--	aerosol	0.14	0.17	0.08	3.54	0.01	0.01	0.09	0.50	1.27	95.3	26	348
SO4-- corr	aerosol	0.12	0.17	0.05	4.89	-0.04	0.00	0.06	0.48	1.27	95.3	26	348

NO0039R Kårvatn

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.04	0.08	0.02	3.09	0.01	0.01	0.02	0.15	1.01	98.9	85	361
Cl-	aerosol	0.20	0.41	0.05	5.22	0.01	0.01	0.03	0.82	3.71	99.7	147	364
HNO3	air	0.02	0.03	0.01	2.13	0.01	0.01	0.01	0.09	0.18	95.9	268	350
HNO3+NO3-	air+aerosol	0.06	0.09	0.04	2.21	0.01	0.02	0.03	0.21	0.88	95.9	0	350
K+	aerosol	0.02	0.02	0.01	2.30	0.01	0.01	0.02	0.05	0.18	99.7	116	364
Mg++	aerosol	0.029	0.043	0.015	3.021	0.005	0.005	0.010	0.100	0.360	99.7	152	364
NH3	air	0.71	0.53	0.55	2.08	0.07	0.15	0.55	1.85	3.02	95.9	0	350
NH3+NH4+	air+aerosol	0.76	0.56	0.59	2.08	0.07	0.17	0.60	1.95	3.09	95.9	0	350
NH4+	aerosol	0.06	0.08	0.02	3.95	0.01	0.01	0.02	0.24	0.56	95.9	116	350
NO2	air	0.17	0.14	0.12	2.41	0.01	0.01	0.14	0.44	0.96	88.8	24	324
NO3-	aerosol	0.04	0.10	0.02	2.97	0.01	0.01	0.02	0.13	1.53	95.9	74	350
Na+	aerosol	0.17	0.24	0.08	3.79	0.01	0.01	0.08	0.54	2.10	99.7	27	364
SO2	air	0.03	0.06	0.02	2.48	0.01	0.01	0.01	0.13	0.49	99.7	247	364
SO4--	aerosol	0.13	0.23	0.07	3.34	0.01	0.01	0.07	0.42	3.73	99.2	28	362
SO4-- corr	aerosol	0.11	0.23	0.05	4.48	-0.01	0.00	0.06	0.41	3.73	99.2	28	362

NO0042G Spitsbergen, Zeppelinfjell

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.05	0.08	0.03	3.04	0.01	0.01	0.03	0.17	0.64	99.5	71	363
Cl-	aerosol	0.30	0.41	0.10	5.28	0.01	0.01	0.13	1.17	2.86	99.2	89	362
HNO3	air	0.02	0.03	0.01	1.84	0.01	0.01	0.01	0.06	0.29	97.8	305	357
HNO3+NO3-	air+aerosol	0.05	0.06	0.04	2.08	0.01	0.02	0.03	0.19	0.36	96.2	0	351
K+	aerosol	0.01	0.02	0.01	2.28	0.00	0.01	0.01	0.04	0.15	99.5	199	363
Mg++	aerosol	0.042	0.052	0.023	3.131	0.005	0.005	0.020	0.130	0.530	99.5	96	363
NH3	air	0.22	0.18	0.17	2.20	0.03	0.03	0.20	0.53	1.62	98.1	28	358
NH3+NH4+	air+aerosol	0.26	0.20	0.20	2.05	0.03	0.04	0.22	0.60	1.64	97.8	0	357
NH4+	aerosol	0.04	0.05	0.02	3.46	0.01	0.01	0.01	0.13	0.40	97.8	158	357
NO3-	aerosol	0.03	0.04	0.02	2.92	0.00	0.01	0.02	0.12	0.29	96.4	113	352
Na+	aerosol	0.23	0.27	0.11	4.15	0.01	0.01	0.14	0.78	1.82	99.5	28	363
SO2	air	0.09	0.18	0.04	3.13	0.01	0.01	0.03	0.36	1.85	99.5	148	363
SO4--	aerosol	0.11	0.10	0.06	3.57	0.00	0.01	0.07	0.33	0.48	98.1	43	358
SO4-- corr	aerosol	0.09	0.10	0.04	5.16	-0.09	0.00	0.06	0.32	0.46	98.1	43	358

NO0055R Karasjok

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.05	0.11	0.03	3.09	0.01	0.01	0.02	0.18	1.51	98.4	60	359
Cl-	aerosol	0.27	0.49	0.07	5.90	0.01	0.01	0.05	1.35	4.26	98.9	127	361
HNO3	air	0.03	0.04	0.02	2.33	0.01	0.01	0.01	0.12	0.29	96.2	259	351
HNO3+NO3-	air+aerosol	0.08	0.14	0.05	2.47	0.01	0.02	0.04	0.30	1.31	96.2	0	351
K+	aerosol	0.02	0.03	0.01	2.54	0.01	0.01	0.02	0.06	0.17	98.4	114	359
Mg++	aerosol	0.035	0.045	0.018	3.240	0.005	0.005	0.020	0.120	0.340	98.4	128	359
NH3+NH4+	air+aerosol	0.54	0.45	0.39	2.29	0.03	0.10	0.39	1.46	3.39	96.2	0	351
NH4+	aerosol	0.11	0.17	0.04	4.59	0.01	0.01	0.05	0.45	1.43	96.2	84	351
NO2	air	0.14	0.20	0.08	2.97	0.01	0.01	0.11	0.41	2.22	97.8	78	357
NO3-	aerosol	0.06	0.11	0.03	3.09	0.01	0.01	0.02	0.18	1.14	96.7	51	353
Na+	aerosol	0.22	0.29	0.10	3.90	0.01	0.01	0.11	0.85	2.63	98.4	21	359
SO2	air	0.19	0.56	0.04	4.76	0.01	0.01	0.03	1.00	5.75	98.4	154	359
SO4--	aerosol	0.19	0.20	0.11	3.19	0.01	0.02	0.12	0.61	1.28	98.9	13	361
SO4-- corr	aerosol	0.17	0.21	0.08	3.98	-0.01	0.01	0.10	0.61	1.27	98.9	13	361

PL0002R Jarczew

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.82	0.54	0.68	1.84	0.14	0.25	0.67	1.95	3.74	99.2	0	362
NH3+NH4+	air+aerosol	2.97	1.56	2.60	1.71	0.20	1.02	2.70	6.20	11.28	95.6	0	349
NH4+	aerosol	1.55	0.93	1.31	1.84	0.19	0.46	1.32	3.45	5.48	95.6	0	349
NO2	air	3.18	1.70	2.87	1.54	0.90	1.50	2.80	6.40	13.80	99.5	0	363
NO3-	aerosol	0.65	0.51	0.50	2.13	0.03	0.15	0.49	1.71	3.36	99.2	0	362
SO2	air	1.99	1.78	1.38	2.46	0.10	0.22	1.50	5.50	10.20	99.5	1	363
SO4--	aerosol	1.60	0.79	1.42	1.68	0.10	0.59	1.44	3.07	6.33	99.2	1	362

PL0003R Sniezka

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.42	0.24	0.35	1.90	0.04	0.11	0.37	0.89	1.27	100.0	0	365
NH3+NH4+	air+aerosol	0.69	0.39	0.58	1.87	0.07	0.17	0.61	1.42	1.91	100.0	0	365
NH4+	aerosol	0.52	0.29	0.42	2.00	0.03	0.12	0.46	1.06	1.38	100.0	4	365
NO2	air	0.94	0.54	0.79	1.83	0.20	0.30	0.80	2.07	3.00	100.0	0	365
NO3-	aerosol	0.30	0.17	0.25	1.91	0.03	0.08	0.26	0.63	0.86	100.0	0	365
SO2	air	0.93	0.51	0.80	1.75	0.20	0.30	0.80	2.00	2.70	100.0	0	365
SO4--	aerosol	0.81	0.44	0.68	1.93	0.10	0.21	0.75	1.58	2.13	100.0	16	365

PL0004R Leba

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.54	0.45	0.39	2.23	0.04	0.10	0.39	1.55	2.58	99.7	0	364
NH3+NH4+	air+aerosol	1.28	0.86	1.03	1.98	0.16	0.30	1.08	3.21	4.63	99.7	0	364
NH4+	aerosol	0.90	0.72	0.68	2.14	0.06	0.18	0.68	2.47	4.14	99.7	0	364
NO2	air	1.60	1.10	1.34	1.80	0.20	0.60	1.30	3.70	8.20	98.9	0	361
NO3-	aerosol	0.41	0.41	0.27	2.69	0.01	0.05	0.28	1.33	2.30	99.7	4	364
SO2	air	1.05	0.91	0.80	2.10	0.10	0.20	0.80	3.08	6.90	99.7	4	364
SO4--	aerosol	1.23	0.63	1.06	1.80	0.10	0.36	1.15	2.43	3.83	99.7	4	364

PL0005R Diabla Gora

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.67	0.58	0.51	2.08	0.04	0.18	0.47	1.87	4.01	95.3	0	348
NH3+NH4+	air+aerosol	1.03	0.61	0.88	1.79	0.04	0.34	0.86	2.42	3.65	95.3	0	348
NO2	air	0.96	0.89	0.75	2.00	0.01	0.30	0.69	2.82	8.29	99.7	1	364
PM10 mass	pm10	16.03	11.74	12.97	1.93	1.92	4.10	13.35	38.92	90.93	89.6	0	327
SO2	air	0.61	0.91	0.38	2.43	0.03	0.11	0.35	1.69	9.11	95.1	0	347
SO4--	aerosol	0.63	0.73	0.39	2.80	0.02	0.06	0.46	1.68	5.46	94.5	1	345

RU0018R Danki

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NH4+	aerosol	0.39	0.43	0.23	3.14	0.01	0.02	0.27	0.98	4.17	97.3	0	355
NO3-	aerosol	0.06	0.06	0.05	2.32	0.00	0.01	0.05	0.18	0.35	97.3	0	355
SO2	air	0.17	0.38	0.07	3.74	0.01	0.01	0.07	0.58	4.87	97.3	0	355
SO4--	aerosol	0.22	0.20	0.16	2.13	0.00	0.05	0.17	0.61	1.75	97.3	0	355

SE0005R Bredkälen

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.04	0.04	0.03	1.98	0.00	0.01	0.03	0.11	0.35	95.6	7	349
NH3+NH4+	air+aerosol	0.16	0.21	0.08	3.46	0.01	0.01	0.09	0.57	1.83	95.6	97	349
NO2	air	0.11	0.13	0.07	2.14	0.05	0.05	0.05	0.40	0.82	95.6	279	349
SO2	air	0.05	0.09	0.02	3.08	0.01	0.01	0.01	0.20	0.56	95.9	259	350
SO4--	aerosol	0.18	0.23	0.10	2.73	0.00	0.02	0.09	0.63	1.72	95.6	3	349

SE0008R Hoburgen

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	1.17	0.78	0.94	1.97	0.05	0.33	0.96	2.92	4.53	96.2	2	351
SO2	air	0.46	0.47	0.28	3.07	0.01	0.06	0.30	1.52	2.77	97.5	15	356
SO4--	aerosol	0.57	0.45	0.42	2.32	0.00	0.09	0.46	1.48	2.53	97.5	4	356

SE0011R Vavihill

January 2007 - December 2007

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	0.48	0.34	2.32	0.02	0.09	0.33	1.35	3.76	97.8	0	357
NH3+NH4+	air+aerosol	0.98	0.83	0.71	2.33	0.01	0.18	0.77	2.76	4.84	97.8	1	357
NO2	air	1.28	0.96	1.07	1.77	0.05	0.51	0.97	2.95	8.67	97.5	1	356
PM10 mass	pm10	15.21	10.34	12.80	2.02	-10.70	2.20	13.50	33.20	109.20	46.8	0	4096
PM25 mass	pm25	8.98	6.20	7.64	1.89	-13.30	2.50	7.50	22.00	46.70	24.0	0	2102
SO2	air	0.29	0.42	0.16	3.07	0.01	0.01	0.15	1.02	4.36	97.8	24	357
SO4--	aerosol	0.55	0.43	0.41	2.26	0.00	0.10	0.43	1.40	2.65	97.8	1	357

SE0012R Aspvreten

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
PM10 mass	pm10	9.58	7.75	7.58	2.35	-16.10	0.40	8.00	24.50	62.60	94.9	0	8314
PM25 mass	pm25	6.70	5.83	5.07	2.37	-12.20	0.60	5.20	18.60	57.50	97.1	0	8505

SE0014R Råö

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.50	0.52	0.34	2.34	0.05	0.09	0.32	1.40	3.96	98.9	0	361
NH3+NH4+	air+aerosol	0.70	0.66	0.47	2.54	0.01	0.09	0.48	2.00	3.94	99.2	2	362
NO2	air	1.39	0.96	1.18	1.74	0.29	0.54	1.09	3.19	8.34	100.0	0	365
SO2	air	0.35	0.27	0.27	2.28	0.01	0.07	0.28	0.90	1.73	99.2	7	362
SO4--	aerosol	0.62	0.39	0.50	2.03	0.05	0.13	0.54	1.38	2.30	99.2	0	362

SE0035R Vindeln

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
PM10 mass	pm10	6.56	5.22	5.42	2.02	-7.40	1.10	5.60	15.10	101.70	86.9	0	7609

SI0008R Iskrba

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.18	0.20	0.10	2.95	0.00	0.01	0.10	0.55	1.60	94.2	0	344
Cl-	aerosol	0.05	0.11	0.01	4.17	0.00	0.00	0.01	0.20	1.17	95.6	0	349
HNO3+NO3-	air+aerosol	0.29	0.52	0.20	2.39	0.01	0.04	0.20	0.69	8.87	95.6	0	349
K+	aerosol	0.12	0.10	0.10	1.88	0.01	0.04	0.10	0.27	1.29	95.6	0	349
Mg++	aerosol	0.035	0.034	0.020	3.169	0.001	0.002	0.022	0.105	0.169	94.2	0	344
NH3+NH4+	air+aerosol	1.02	0.74	0.80	2.10	0.09	0.19	0.92	2.13	8.80	95.6	0	349
NO2	air	0.38	0.26	0.31	1.90	0.02	0.11	0.33	0.86	1.81	93.2	0	340
Na+	aerosol	0.11	0.16	0.06	3.41	0.00	0.01	0.06	0.41	1.48	95.6	0	349
PM10 mass	pm10	15.21	7.33	13.47	1.67	2.80	5.35	14.50	29.00	46.90	95.6	0	349
PM25 mass	pm25	10.08	5.65	8.48	1.89	0.40	2.74	9.30	22.12	31.40	96.7	0	353
SO2	air	0.60	0.73	0.29	4.15	0.00	0.05	0.29	2.08	5.30	95.1	8	347
SO4--	aerosol	0.83	0.60	0.59	2.56	0.01	0.09	0.72	2.00	2.89	95.6	0	349
SO4-- corr	aerosol	0.82	0.60	0.58	2.58	0.01	0.09	0.71	1.99	2.88	95.6	0	349

SK0002R Chopok

January 2007 - December 2007

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	1.72	0.00	0.00	0.01	0.02	0.05	97.5	0	356
NO2	air	0.72	0.39	0.57	2.30	0.02	0.10	0.75	1.33	2.99	98.4	15	359
NO3-	aerosol	0.08	0.09	0.04	3.63	0.00	0.00	0.05	0.24	0.67	98.6	26	360
SO2	air	0.18	0.24	0.11	2.85	0.00	0.02	0.10	0.65	1.76	98.4	0	359
SO4--	aerosol	0.27	0.26	0.16	3.05	0.00	0.03	0.19	0.81	1.30	98.6	1	360
SPM	aerosol	5.11	3.97	3.55	2.49	0.54	0.63	3.88	13.18	17.30	84.1	0	50

SK0004R Stará Lesná

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.14	0.16	0.09	2.52	0.00	0.02	0.09	0.46	1.48	64.7	1	236
HNO3	air	0.02	0.01	0.02	1.94	0.01	0.01	0.02	0.05	0.07	15.3	0	56
K+	aerosol	0.15	0.20	0.10	2.22	0.01	0.03	0.10	0.48	2.31	64.9	0	237
Mg++	aerosol	0.025	0.020	0.019	2.116	0.001	0.006	0.018	0.068	0.155	64.7	3	236
NH3	air	0.40	0.35	0.28	2.41	0.05	0.08	0.30	1.02	2.47	64.9	0	237
NH4+	aerosol	0.77	0.47	0.64	1.95	0.02	0.19	0.68	1.66	2.93	64.9	0	237
NO2	air	5.10	4.40	3.34	2.65	0.49	0.81	3.44	13.90	15.21	10.4	0	38
NO3-	aerosol	0.30	0.21	0.25	1.85	0.07	0.10	0.23	0.75	0.94	15.3	0	56
Na+	aerosol	0.09	0.08	0.07	2.14	0.01	0.02	0.07	0.24	0.53	64.9	2	237
PM10 mass	pm10	12.33	6.40	10.84	1.68	3.50	3.79	11.10	25.97	36.46	80.5	0	49
SO2	air	0.82	0.84	0.47	3.07	0.08	0.08	0.46	2.63	4.11	15.3	0	56
SO4--	aerosol	0.58	0.48	0.44	2.06	0.14	0.17	0.40	1.72	2.15	15.3	0	56
SO4-- corr	aerosol	0.57	0.49	0.42	2.11	0.13	0.17	0.37	1.72	2.14	15.1	0	55

SK0006R Starina

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.08	0.09	0.06	2.26	0.00	0.01	0.05	0.27	0.66	50.1	0	183
HNO3	air	0.02	0.02	0.02	1.88	0.00	0.01	0.02	0.05	0.12	97.8	0	357
K+	aerosol	0.14	0.09	0.11	2.01	0.02	0.04	0.12	0.31	0.43	50.1	0	183
Mg++	aerosol	0.015	0.012	0.012	2.040	0.002	0.003	0.012	0.040	0.072	50.1	0	183
NH3	air	0.18	0.15	0.14	2.07	0.04	0.05	0.12	0.48	0.82	49.6	0	181
NH4+	aerosol	0.80	0.49	0.68	1.80	0.17	0.25	0.73	1.73	3.08	50.1	0	183
NO2	air	1.24	0.59	1.12	1.61	0.11	0.47	1.14	2.44	4.06	98.4	0	359
NO3-	aerosol	0.32	0.26	0.24	2.27	0.00	0.05	0.25	0.82	1.98	98.1	1	358
Na+	aerosol	0.08	0.08	0.05	2.90	0.00	0.01	0.05	0.22	0.50	50.1	1	183
PM10 mass	pm10	17.66	8.11	16.19	1.52	6.46	7.03	15.37	38.80	42.15	74.2	0	45
SO2	air	0.80	1.11	0.45	3.01	0.02	0.07	0.47	2.55	11.95	97.5	0	356
SO4--	aerosol	0.86	0.56	0.69	2.03	0.01	0.22	0.71	1.90	4.11	98.1	0	358
SO4-- corr	aerosol	0.83	0.59	0.66	2.04	0.04	0.21	0.69	2.02	4.11	49.9	0	182

SK0007R Topolniky

January 2007 - December 2007

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
PM10 mass	pm10	23.32	10.68	19.10	2.54	0.07	6.54	21.21	43.45	48.25	83.8	0	50

Annex 4

Overview of sampling and analytical methods 2007

Country: **Austria**		Main components and ozone - EMEP	Year: 2007	
	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
Acidity				
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 as for sulphate, citric acid impregnated Whatman 40 filters, 21.6 m^3/day	Daily	Ion chromatography
Acidity				

Country: **Belarus**		Main components and ozone - EMEP	Year: 2007	
	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			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: 2007	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
Precipitation amount		Instrumental: Rain gauge	Half hourly	Pulses counter
Precipitation amount, official gauge				
Sulphate				
Nitrate				
Ammonium				
Magnesium				
Sodium				
Chloride				
Calcium				
Potassium				
Conductivity				
pH				
Acidity				
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				
Acidity				

Country: **Bulgaria**		Main components and ozone - EMEP	Year: 2007	
	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	BG0053R	Instrumental: UV-fluorescence	Hourly	UV-fluorescence
Nitrogen dioxide	BG0053R	Instrumental: Chemiluminescence	Hourly	Chemiluminescence
Nitric acid				
Ammonia				
Ozone	BG0053R	UV-monitor	Hourly	UV-absorption
Sulphate				
Nitrate				
Ammonium				
Sodium				
Calcium				
Magnesium				
Potassium				
Chloride				
PM_{10}	BG0053R	Automatic analyser SM200	Daily	Beta absorption
PM_{10}	BG0053R	Low volume sampler 2.3 m^3/h, Quartz filter; EN 12341	Daily	Gravimetric method
$PM_{2.5}$	BG0053R	Low volume sampler 2.3 m^3/h, Quartz filter; EN 14907	Daily	Gravimetric method
Suspended particulate matter				
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				
Acidity				

Country: **Croatia**		Main components and ozone - EMEP	Year: 2007	
	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
Acidity				
Air				
Sulphur dioxide	All	Absorbing solution TCM, 1.6–2.5 m^3/day	Daily	Pararosanilin method
Nitrogen dioxide	All	Absorbing solution Trietanolamin, 1.6–2.5 m^3/day	Daily	Spectrophotometric, Griess 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				
Acidity				

Country: **Czech Republic**		Main components and ozone - EMEP	Year: 2007	
	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: 2007	
	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
Acidity				
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
Acidity				

Country: **Estonia**		Main components and ozone - EMEP	Year: 2007	
	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
Acidity				
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	Sampling High Volume Sampler	Weekly	Gravimetric
$PM_{2.5}$				
Suspended particulate matter				
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				
Acidity				

Country: **Finland**		Main components and ozone - EMEP	Year: 2007	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
Precipitation amount	All	NILU bulk sampler	Weekly	
Precipitation amount, official gauge	FI09		Daily	
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
Acidity				
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	Whatman 40 filter, 24 m^3/day	Daily/Weekly[1)]	Ion chromatography
Nitrate				
Ammonium				
Sodium				
Calcium				
Magnesium				
Potassium				
Chloride				
PM_{10}				
$PM_{2.5}$				
Suspended particulate matter				
Sum of nitric acid and nitrate	All	Whatman 40 + NaOH impregnated Whatman 40 filter, 24 m^3/day	Daily/Weekly[1)]	Ion chromatography
Sum of ammonia and ammonium	All	Oxalic acid impregnated Whatman 40 filter, 24 m^3/day	Daily/Weekly[1)]	Ion chromatography
Acidity				

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

Country: **France**		Main components and ozone - EMEP	Year: 2007	
	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
Acidity				
Mercury	FR13	Wet only	14 days	ICP-MS
Air				
Sulphur dioxide	FR08,FR10, FR12,FR14, FR15,FR16, FR17	Absorbing solution H_2O_2, 2.5 m^3/day	Daily	Ion chromatography
	FR13, FR09	KOH-impregnated Whatman 40 filter, 14.4 m^3/day (Filterpack)	Daily, twice per week	Ion Chromatography
Nitrogen dioxide	FR08,FR13, FR15	Instrumental: Chemiluminescence	Hourly	Chemiluminescence
Nitric acid				
Ammonia				
Ozone	All	UV-monitor	Hourly	UV-absorption
Sulphate	FR08 FR10, FR12, FR14, FR15, FR16, FR17	Whatman 40 filter, 2.5 m^3/day	Daily	Ion chromatography
	FR13, FR09	Teflon filter Pall Gelman Zefluor, 2 μm, 14.4 m^3/j	Daily, twice per week	Ion chromatography
Nitrate				
Ammonium				
Sodium				
Calcium				
Magnesium				
Potassium				
Chloride				
PM_{10}	FR09 FR13	TEOM FDMS TEOM (Tapered Element Oscillating Microbalance)	Hourly	TEOM FDMS TEOM
$PM_{2.5}$				
Suspended particulate matter				
Sum of nitric acid and nitrate	FR09, FR13	Teflon filter Pall Gelman Zefluor, 2 μm, 14.4 m^3/j + KOH impregnated Whatman 40, 14.4 m^3/day (Filterpack)	Daily, twice per week	Ion chromatography
Sum of ammonia and ammonium	FR09, FR13	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 per week	Ion chromatography
Acidity				

Country: **Germany**		Main components and ozone - EMEP	Year: 2007	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
Precipitation amount	DE01, DE02, DE03, DE04, DE05, DE07, DE08, DE09	Bulk (daily) at DE02, wet-only (weekly) at all 8	Daily / weekly	By volume
Precipitation amount, official gauge				
Sulphate	DE01, DE02, DE03, DE04, DE05, DE07, DE08, DE09	Bulk (daily) at DE02, wet-only (weekly) at all 8	Daily / weekly	Ion chromatography
Nitrate	DE01, DE02, DE03, DE04, DE05, DE07, DE08, DE09	Bulk (daily) at DE02, wet-only (weekly) at all 8	Daily / weekly	Ion chromatography
Ammonium	DE01, DE02, DE03, DE04, DE05, DE07, DE08, DE09	Bulk (daily) at DE02, wet-only (weekly) at all 8	Daily / weekly	Ion chromatography
Magnesium	DE01, DE02, DE03, DE04, DE05, DE07, DE08, DE09	Bulk (daily) at DE02, wet-only (weekly) at all 8	Daily / weekly	Ion chromatography
Sodium	DE01, DE02, DE03, DE04, DE05, DE07, DE08, DE09	Bulk (daily) at DE02, wet-only (weekly) at all 8	Daily / weekly	Ion chromatography
Chloride	DE01, DE02, DE03, DE04, DE05, DE07, DE08, DE09	Bulk (daily) at DE02, wet-only (weekly) at all 8	Daily / weekly	Ion chromatography
Calcium	DE01, DE02, DE03, DE04, DE05, DE07, DE08, DE09	Bulk (daily) at DE02, wet-only (weekly) at all 8	Daily / weekly	Ion chromatography
Potassium	DE01, DE02, DE03, DE04, DE05, DE07, DE08, DE09	Bulk (daily) at DE02, wet-only (weekly) at all 8	Daily / weekly	Ion chromatography
Conductivity	DE01, DE02, DE03, DE04, DE05, DE07, DE08, DE09	Bulk (daily) at DE02, wet-only (weekly) at all 8	Daily / weekly	Conductivity meter
pH	DE01, DE02, DE03, DE04, DE05, DE07, DE08, DE09	Bulk (daily) at DE02, wet-only (weekly) at all 8	Daily / weekly	pH meter
Acidity				
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
Acidity				

Country: **Greece**		Main components and ozone - EMEP	Year: 2007	
	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	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				
Acidity				

Country: **Hungary**		Main components and ozone - EMEP	Year: 2007	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
Precipitation amount	HU02	Wet-only	Daily	
Precipitation amount, official gauge				
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
Sodium	HU02	Wet-only	Daily	Atomic absorption method
Chloride	HU02	Wet-only	Daily	Ion chromatography
Calcium	HU02	Wet-only	Daily	Atomic absorption method
Potassium	HU02	Wet-only	Daily	Atomic absorption method
Conductivity	HU02	Wet-only	Daily	Conductivity meter
pH	HU02	Wet-only	Daily	pH meter
Acidity				
Air				
Sulphur dioxide	HU02	KOH-impregnated Whatman 40 filter, ~21 m^3/day	Daily	Ion chromatography
Nitrogen dioxide	HU02	Iodide method (impregnated glass sinter), ~0.8 m^3/day	Daily	Spectrophotometric, Griess method
Nitric acid	HU02	KOH-impregnated Whatman 40 filter, ~21 m^3/day	Daily	Ion chromatography
Ammonia	HU02	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
Sodium	HU02	Teflon filter, Millipore Fluoropore, 1 μm, ~21 m^3/day	Weekly	Atomic absorption method
Calcium	HU02	Teflon filter, Millipore Fluoropore, 1 μm, ~21 m^3/day	Weekly	Atomic absorption method
Magnesium	HU02	Teflon filter, Millipore Fluoropore, 1 μm, ~21 m^3/day	Weekly	Atomic absorption method
Potassium	HU02	Teflon filter, Millipore Fluoropore, 1 μm, ~21 m^3/day	Weekly	Atomic absorption method
Chloride				
	HU02	Teflon filter, Millipore Fluoropore, 1 μm, ~21 m^3/day	72 hour	Atomic absorption method
	HU02	Teflon filter, Millipore Fluoropore, 1 μm, ~21 m^3/day	72 hour	Atomic absorption method
PM_{10}	HU02	Particulate Analyzer	Hourly	Beta-absorption
$PM_{2.5}$				
Suspended particulate matter				
Sum of nitric acid and nitrate	HU02	KOH-impregnated Whatman 40 filter, ~21 m^3/day + Teflon filter, Millipore Fluoropore, 1 μm, ~21 m^3/day	Daily	Ion chromatography
Sum of ammonia and ammonium	HU02	Alkaline impregnated Whatman 40 filter, ~21 m^3/day + Teflon filter, Millipore Fluoropore, 1 μm, ~21 m^3/day	Daily	Spectrophotometric, Indophenol method
Acidity				

Country: **Iceland**		Main components and ozone - EMEP	Year: 2007	
	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
Acidity				
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				
Acidity				

Country: **Ireland: IE01 (lab.: Met Éireann)**		Main components and ozone - EMEP	Year: 2007	
	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
Acidity				
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
Acidity				

Country: **Ireland: (lab.: Met Éireann)**	Main components and ozone - EMEP		Year: 2007	
	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
Acidity				
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				
Acidity				

Country: **Italy: IT01 (lab.: CNR)**		Main components and ozone - EMEP	Year: 2007	
	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
Acidity				
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				
Acidity				

Country: **Italy, IT04 (lab.: JRC)**		Main components and ozone - EMEP	Year: 2007	
	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
Acidity				
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 From 05.04.2007–31.08.2007 sampling on Whatman 40 cellulose filter, 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				
Calcium				
Magnesium				
Potassium				
Chloride				
PM_{10}				
$PM_{2.5}$	IT04	Whatman quartz fibre filter QFF, 55 m^3/day	Daily	Weighing at 50% RH
Suspended particulate matter				
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				
Acidity				
EC/OC	IT04	Whatman quartz fibre filter QFF, 55 m^3/day	Daily	Thermo optical

Country: **Latvia**		Main components and ozone - EMEP	Year: 2007	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
Precipitation amount	All	Wet-only and bulk	Daily	Gravimetric
Precipitation amount, official gauge	All	Meteorological station	Daily	Gauge, Tretjakov type
Sulphate	All	LV10: Wet-only, LV16: Wet-only since 04.2007	Daily	Ion chromatography
Nitrate	All	LV10: Wet-only, LV16: Wet-only since 04.2007	Daily	Ion chromatography
Ammonium	All	LV10: Wet-only, LV16: Wet-only since 04.2007	Daily	Spectrophotometric, Indophenol method
Magnesium	All	LV10: Wet-only, LV16: Wet-only since 04.2007	Daily	ICP-MS
Sodium	All	LV10: Wet-only, LV16: Wet-only since 04.2007	Daily	ICP-MS
Chloride	All	LV10: Wet-only, LV16: Wet-only since 04.2007	Daily	Ion chromatography
Calcium	All	LV10: Wet-only, LV16: Wet-only since 04.2007	Daily	ICP-MS
Potassium	All	LV10: Wet-only, LV16: Wet-only since 04.2007	Daily	ICP-MS
Conductivity	All	LV10: Wet-only, LV16: Wet-only since 04.2007	Daily	Conductivity meter
pH	All	LV10: Wet-only, LV16: Wet-only since 04.2007	Daily	pH meter
Acidity				
Air				
Sulphur dioxide	All	KOH-impregnated Whatman 41 filter, 14-20 m^3/day	Daily	Ion chromatography
Nitrogen dioxide	All	Absorbing KI solution in absorbing tubes with glass granules, 0.2-0.4 m^3/day	Daily	Spectrophotometric, Griess method
Nitric acid				
Ammonia				
Ozone	All	UV-monitor	Hourly	UV-absorption
Sulphate	All	Whatman 41 filter, 14-20 m^3/day	Daily	Ion chromatography
Nitrate	All	Whatman 41 filter, 14-20 m^3/day	Daily	Ion chromatography
Ammonium	All	Whatman 41 filter, 14-20 m^3/day	Daily	Spectrophotometric, Indophenol method
Sodium	LV10	Whatman 41 filter, 14-20 m^3/day	monthly	ICP-MS
Calcium	LV10	Whatman 41 filter, 14-20 m^3/day	monthly	ICP-MS
Magnesium	LV10	Whatman 41 filter, 14-20 m^3/day	monthly	ICP-MS
Potassium	LV10	Whatman 41 filter, 14-20 m^3/day	monthly	ICP-MS
Chloride	LV10	Whatman 41 filter, 14-20 m^3/day	daily	Ion chromatography
PM_{10}				
$PM_{2.5}$				
Suspended particulate matter				
Sum of nitric acid and nitrate	All	KOH-impregnated Whatman 41 filter, 14-20 m^3/day	Daily	Ion chromatography
Sum of ammonia and ammonium	All	Oxalic acid impregnated Whatman 41 filter, 14-20 m^3/day	Daily	Spectrophotometric, Indophenol method
Acidity				

Country: **Lithuania**		Main components and ozone - EMEP	Year: 2007	
	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
Acidity				
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
Acidity				

Country: **The Netherlands**		Main components and ozone - EMEP	Year: 2007	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
Precipitation amount	All	Wet-only	Daily	
Precipitation amount, official gauge	All	Bulk	4 weekly	
Sulphate	NL0009	Wet-only	Daily [1]	Ion chromatography
Nitrate	NL0009	Wet-only	Daily [1]	Ion chromatography
Ammonium	NL0009	Wet-only	Daily [1]	CFA[2]
Magnesium	NL0009	Wet-only	Daily [1]	ICP/MS[3]
Sodium	NL0009	Wet-only	Daily [1]	ICP/MS
Chloride	NL0009	Wet-only	Daily [1]	Ion chromatography
Calcium	NL0009	Wet-only	Daily [1]	ICP/MS
Potassium	NL0009	Wet-only	Daily [1]	ICP/MS
Conductivity	NL0009	Wet-only	Daily [1]	Conductivity meter
pH	NL0009	Wet-only	Daily [1]	pH meter
Acidity	NL0009	Wet-only	Daily [1]	Titration
Air				
Sulphur dioxide	All	Instrumental: UV-fluorescence	Hourly	UV-fluorescence
Nitrogen dioxide	All	Instrumental: Chemiluminescence	Hourly	Chemiluminescence
Nitric acid				
Ammonia	NL10	Absorption in $NaHSO_4$, membrane separation, conductivity measurement	Hourly	Conductivity
Ozone	All	UV-monitor	Hourly	UV-absorption
Sulphate	All	Whatman 42 filter, 2.5 m^3/day, filter mounted behind denuder	Daily	Ion chromatography
Nitrate	All	Whatman 42 filter, 2.5 m^3/day, filter mounted behind denuder	Daily	Ion chromatography
Ammonium	All	Whatman 42 filter, 2.5 m^3/day, filter mounted behind denuder	Daily	CFA[2]
Sodium				
Calcium				
Magnesium				
Potassium				
Chloride	All	Whatman 42 filter, 2.5 m^3/day, filter mounted behind denuder	Daily	Ion chromatography
PM_{10}	All[4]	Instrumental: beta absorption	Hourly	Beta absorption
$PM_{2.5}$				
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
[4] measurements of PM_{10} at NL10 since 02-04-2003

Country: **Norway**		Main components and ozone - EMEP	Year: 2007	
	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
Acidity				
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				
Ammonium				
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
Acidity				
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: 2007	
	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
Acidity				
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
Acidity				

Country: **Poland: PL05 (lab. IEP)**		Main components and ozone - EMEP	Year: 2007	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
Precipitation amount	PL05	Wet-only	Daily	
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	Atomic emission method
Conductivity	PL05	Wet-only	Daily	Conductivity meter
pH	PL05	Wet-only	Daily	pH meter
Acidity				
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
$PM_{2.5}$				
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
Acidity				

Country: **Portugal**		Main components and ozone - EMEP	Year: 2007	
	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
Acidity				
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				
Acidity				

Country: **Russian Federation**		Main components and ozone - EMEP	Year: 2007	
	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
Acidity				
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				
Acidity				

Country: **Serbia**		Main components and ozone - EMEP	Year: 2007	
	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
Acidity				
Air				
Sulphur dioxide	RS05	Absorbing solution TCM, 1.6-2.5 m^3/day	Daily	Pararosanilin method
Nitrogen dioxide	RS05	Absorbing solution TGS, 1.6-2.5 m^3/day	Daily	Spectrophotometric, Griess 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				
Acidity				

Country: **Slovakia**			Main components and ozone - EMEP	Year: 2007	
		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
Nitrate		SK02,SK04, SK06, SK07l	Bulk: SK02 Wet-only: SK04, SK06, SK07	Daily: SK02, SK04, SK06 Weekly:SK07	Ion chromatography
Ammonium		SK02,SK04, SK06, SK07l	Bulk: SK02 Wet-only: SK04, SK06, SK07	Daily: SK02, SK04, SK06 Weekly:SK07	Ion chromatography
Magnesium		SK02,SK04, SK06, SK07	Bulk: SK02 Wet-only: SK04, SK06, SK07	Daily: SK02, SK04, SK06 Weekly:SK07	Ion chromatography
Sodium		SK02,SK04, SK06, SK07	Bulk: SK02 Wet-only: SK04, SK06, SK07	Daily: SK02, SK04, SK06 Weekly:SK07	Ion chromatography
Chloride		SK02,SK04, SK06, SK07l	Bulk: SK02 Wet-only: SK04, SK06, SK07	Daily: SK02, SK04, SK06 Weekly:SK07	Ion chromatography
Calcium		SK02,SK04, SK06, SK07l	Bulk: SK02 Wet-only: SK04, SK06, SK07	Daily: SK02, SK04, SK06 Weekly:SK07	Ion chromatography
Potassium		SK02,SK04, SK06, SK07l	Bulk: SK02 Wet-only: SK04, SK06, SK07	Daily: SK02, SK04, SK06 Weekly:SK07	Ion chromatography
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
Acidity					
Air					
Sulphur dioxide	*until 28.2.	SK02,SK04*,SK06	KOH-impregnated Whatman 40 filter, 26-30 m^3/day	Daily	Ion chromatography - Dionex
Nitrogen dioxide	*until 28.2.	SK02,SK04*,SK06	Absorbing solution NaOH and guajacol, 0.5-0.6 m^3/day	Daily	Spectrophotometric, Modified Salzman method
Nitric acid	*until 28.2.	SK02,SK04*,SK06	KOH-impregnated Whatman 40 filter, 26-30 m^3/day	Daily	Ion chromatography - Dionex
Ammonia	*until 4.9 **since 1.7	SK04*,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	*until 28.2	SK02,SK04*,SK06	Whatman 40 filter, 26-30 m^3/day	Daily	ITP until 31. March; IC – Dionex since 1.April
Nitrate	*until 28.2	SK02,SK04*,SK06	Whatman 40 filter, 26-30 m^3/day	Daily	ITP until 31. March; IC – Dionex since 1.April
Ammonium	*until 4.9 **since 1.7	SK04*SK06**	Whatman 40 filter, 26-30 m^3/day	Daily	Ion chromatography - Dionex
Sodium	*until 4.9 **since 1.7	SK04*SK06**	Whatman 40 filter, 26-30 m^3/day	Daily	Ion chromatography - Dionex
Calcium	*until 4.9 **since 1.7	SK04*SK06**	Whatman 40 filter, 26-30 m^3/day	Daily	Ion chromatography - Dionex
Magnesium	*until 4.9 **since 1.7	SK04*SK06**	Whatman 40 filter, 26-30 m^3/day	Daily	Ion chromatography - Dionex
Potassium	*until 4.9 **since 1.7	SK04*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					
Acidity					

Country: **Slovenia**		Main components and ozone - EMEP	Year: 2007	
	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
Acidity				
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				
Ammonia				
Ozone	SI08, SI31, SI32, SI33	UV-monitor	Hourly	UV-absorption
Carbon monoxide	SI32	Trace level analyzer	Hourly	ndir
Sulphate	SI08	Teflon filter, Gelman Zefluor 2 μm, 17-23 m^3/day	Daily	Ion chromatography
Nitrate				
Ammonium				
Sodium	SI08	Teflon filter, Gelman Zefluor 2 μm, 17-23 m^3/day	Daily	Ion chromatography
Calcium	SI08	Teflon filter, Gelman Zefluor 2 μm, 17-23 m^3/day	Daily	Ion chromatography
Magnesium	SI08	Teflon filter, Gelman Zefluor 2 μm, 17-23 m^3/day	Daily	Ion chromatography
Potassium	SI08	Teflon filter, Gelman Zefluor 2 μm, 17-23 m^3/day	Daily	Ion chromatography
Chloride	SI08	Teflon filter, Gelman Zefluor 2 μm, 17-23 m^3/day	Daily	Ion chromatography
PM_{10}	SI08	Low volume sampler, 2.3 m^3/h, Quartz filter, Whatman 47 mm	Daily	Gravimetric method
$PM_{2.5}$	SI08	Low volume sampler, 2.3 m^3/h, Glass filter, Whatman 47 mm	Daily	Gravimetric method
As in PM_{10}	SI08	Low volume sampler, 2.3 m^3/h, Quartz filter, Whatman 47 mm	Daily – analysis 1 sample/week	Gravimetric method
Cd in PM_{10}	SI08	Low volume sampler, 2.3 m^3/h, Quartz filter, Whatman 47 mm	Daily – analysis 1 sample/week	Gravimetric method
Ni in PM_{10}	SI08	Low volume sampler, 2.3 m^3/h, Quartz filter, Whatman 47 mm	Daily – analysis 1 sample/week	Gravimetric method
Pb in PM_{10}	SI08	Low volume sampler, 2.3 m^3/h, Quartz filter, Whatman 47 mm	Daily – analysis 1 sample/week	Gravimetric method
Suspended particulate matter				
Sum of nitric acid and nitrate	SI08	Teflon filter, Gelman Zefluor 2 μm + KOH impregnated Whatman 40 filter, 17-23 m^3/day	Daily	Ion chromatography
Sum of ammonia and ammonium	SI08	Teflon filter, Gelman Zefluor 2 μm + oxalic acid impregnated Whatman 40 filter, 17-23 m^3/day	Daily	Ion chromatography
Acidity				

Country: **Spain**		Main components and ozone - EMEP	Year: 2007	
	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
Acidity	All	Wet only	Daily	Calculated from pH
Air				
Sulphur dioxide	All	Instrumental: UV-fluorescence	Hourly	
Nitrogen dioxide	All	Instrumental: Chemiluminescence	Hourly	
Ammonia	ES08, ES09	Passive sampler	Weekly	Visible spectrophotometry, Indophenol method
Ozone	All	UV-monitor	Hourly	UV-absorption
Suspended particulate matter	All	Till 31/12/2002	Daily	Gravimetric method
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
VOCs	ES09	Canister	Twice a week	Gas chromatography with FID
Carbonyls	ES09	Cartridges of silica-DNPH	Twice a week	HPLC with UV-Vis detector
EC/OC PM_{10}	ES09	PM_{10} 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: 2007	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
Precipitation amount	All	Wet-only	Weekly except SE02; daily at SE02	
Precipitation amount, official gauge				
Sulphate	All	Wet-only	Weekly except SE02; daily at SE02	Ion chromatography
Nitrate	All	Wet-only	Weekly except SE02; daily at SE02	Ion chromatography
Ammonium	All	Wet-only	Weekly except SE02; daily at SE02	Spectrophotometric, Flow injection analysis
Magnesium	All	Wet-only	Weekly except SE02; daily at SE02	Ion chromatography
Sodium	All	Wet-only	Weekly except SE02; daily at SE02	Ion chromatography
Chloride	All	Wet-only	Weekly except SE02; daily at SE02	Ion chromatography
Calcium	All	Wet-only	Weekly except SE02; daily at SE02	Ion chromatography
Potassium	All	Wet-only	Weekly except SE02; daily at SE02	Ion chromatography
Conductivity	All	Wet-only	Weekly except SE02; daily at SE02	Conductivity meter
pH	All	Wet-only	Weekly except SE02; daily at SE02	pH meter
Acidity				
Air				
Sulphur dioxide	All	KOH-impregnated Whatman 40 filter, 20 m^3/day	Daily	Ion chromatography
Nitrogen dioxide	All	NaI-impregnated glass sinters, ~0.7 m^3/day	Daily	Spectrophotometric, Flow Injection Analysis
Nitric acid				
Ammonia				
Ozone	All	UV-monitor	Hourly	UV-absorption
Sulphate	All	Teflon filter, Gelman Zefluor 2 μm, 20 m^3/day	Daily	Ion chromatography
Nitrate				
Ammonium				
Sodium				
Calcium				
Magnesium				
Potassium				
Chloride				
PM_{10}		TEOM (Tapered Element Oscillating Microbalance	Hourly	TEOM
$PM_{2.5}$		TEOM (Tapered Element Oscillating Microbalance	Hourly	TEOM
Sum of nitric acid and nitrate	All except SE08	Aerosol filter as for sulphate + KOH-impregnated Whatman 40 filter, 20 m^3/day	Daily	Ion chromatography
Sum of ammonia and ammonium	All except SE08	Aerosol filter as for sulphate + Oxalic acid impregnated Whatman 40 filter, 20 m^3/day	Daily	Flow injection analysis
Acidity				

Country: **Switzerland**		Main components and ozone - EMEP	Year: 2007	
	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
Acidity				
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 / CEH DELTA-System, 0.5 m^3/day	Biweekly	Ion chromatography
Ammonia	CH02, CH05	Citric acid impregnated Mini-Denuder / CEH DELTA-System, 0.5 m^3/day	Biweekly	Ion chromatography
Ozone	All	Instrumental: UV-monitor	Hourly	UV-absorption
Sulphate	CH02, CH05	Schleicher & Schüll filter 589/4, 3.6 m^3/day (regularily checked against IC)	Daily	X-ray fluorescence (XRF)
Sulphate	CH01	Schleicher & Schüll filter 589/4, 4.1 m^3/day (regularily checked against IC)	Daily	X-ray fluorescence (XRF)
Nitrate	CH02, CH05	KOH impregnated Whatman 1 filter, Delrin filterholder / CEH DELTA-System, 0.5 m^3/day	Biweekly	Ion chromatography
Ammonium	CH02, CH05	Citric acid impregnated Whatman 1 filter, Delrin filterholder / CEH DELTA-System, 0.5 m^3/day	Biweekly	Ion chromatography
Sodium				
Calcium				
Magnesium				
Potassium				
Chloride				
PM_{10}	All	High Volume Samplers, Whatman QMA 1851-150, 720 m^3/day	Daily	Gravimetry
$PM_{2.5}$	CH02, CH05	High Volume Samplers, Whatman QMA 1851-150, 720 m^3/day	Daily	Gravimetry
PM_1	CH02, CH05	High Volume Samplers, Whatman QMA 1851-150, 720 m^3/day	Daily	Gravimetry
Suspended particulate matter				
Sum of nitric acid and nitrate	CH02, CH05	NaOH impregnated Whatman 40 filter / NILU filterholder, 18 m^3/day	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
Acidity				

Country: **Turkey**		Main components and ozone - EMEP	Year: 2007	
	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
Acidity				
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
Acidity				

Country: **United Kingdom**		Main components and ozone - EMEP	Year: 2007	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
Precipitation amount		Bulk collector	Weekly then fortnightly	
Precipitation amount, official gauge				
Sulphate		Bulk collector	Weekly then fortnightly	Ion chromatography
Nitrate		Bulk collector	Weekly then fortnightly	Ion chromatography
Ammonium		Bulk collector	Weekly then fortnightly	Ion chromatography
Magnesium		Bulk collector	Weekly then fortnightly	Ion chromatography
Sodium		Bulk collector	Weekly then fortnightly	Ion chromatography
Chloride		Bulk collector	Weekly then fortnightly	Ion chromatography
Calcium		Bulk collector	Weekly then fortnightly	Ion chromatography
Potassium		Bulk collector	Weekly then fortnightly	Ion chromatography
Conductivity		Bulk collector	Weekly then fortnightly	Conductivity meter
pH		Bulk collector	Weekly then fortnightly	pH meter
Acidity				
Air				
Sulphur dioxide		Filter pack	Fortnightly	Ion chromatography
Nitrogen dioxide		Automatic monitor	Hourly	Chemiluminescence
Nitric acid		Note 1		
Ammonia		Note 1		
Ozone		UV-monitor	Hourly	UV-absorption
Sulphate		Whatman 41 filter, 1.1 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				
Sum of ammonia and ammonium				
Acidity				

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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:

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

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

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% — is the 5 percentile computed from the histogram of the daily results. The data have been divided into 30 classes of equal size with the addition of two extreme classes. The 5 percentile has been computed by linear interpolation of the two closest class marks. The percentile has been computed for air components only.

50% — is the 50 percentile, defined as above and computed for air data only.

95% — is the 95 percentile, defined as above and computed for air data only.

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.