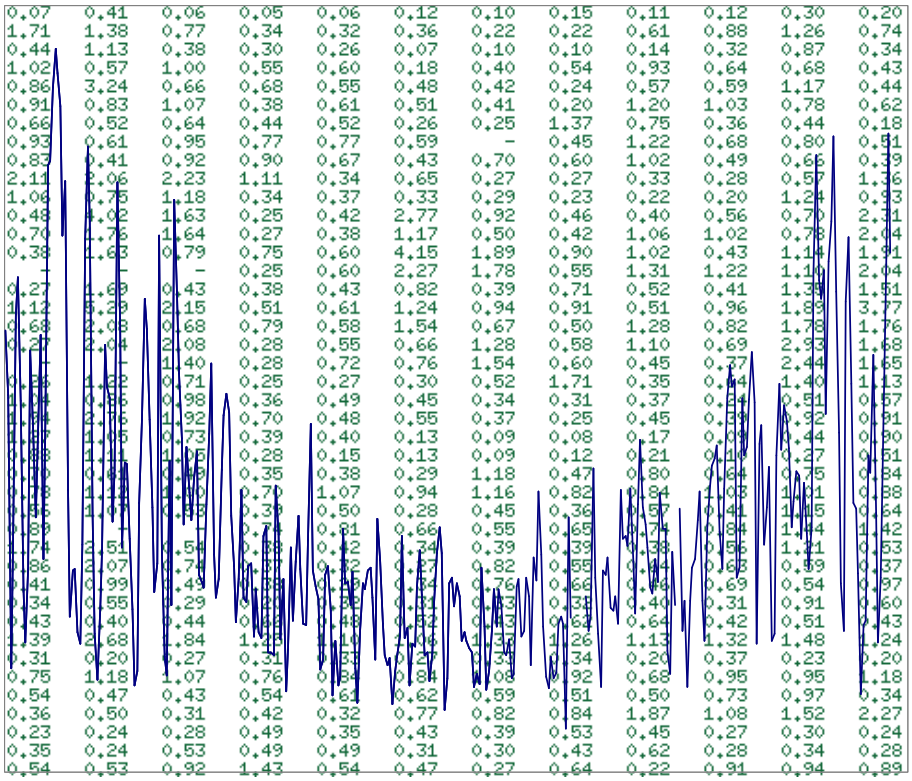
EMEP/CCC-Report 1/2008

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

Data Report 2006

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 2006 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://www.nilu.no/projects/ccc/ under 'Measurement data'.

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 92 stations and air data from 104 stations are presented in this report. The total number of measurement sites in this report is 121.

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 2006.

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
	FI0037R	Ähtari II	62º35'N	24º11'E	180
	FI0096G	Pallas/Särkijärvi	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
	RU0016R	Shepeljovo	59º58'N	29º07'E	4
	RU0020R	Lesnoy	56º31'N	32º56'E	340
Serbia	CS0005R	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
	SK0005R	Liesek	49º22'N	19º41'E	892
	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
Turkey	TR0001R	Cubuk II	40º30'N	33º00'E	1169
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
	GB0015R	Strath Vaich Dam	57º44'N	4º46'W	270
	GB0016R	Glen Dye	56º58'N	2º25'W	85
	GB0036R	Harwell	51º34'N	1º19'W	137
	GB0043R	Narberth	51º14'N	4º42'W	160
	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.

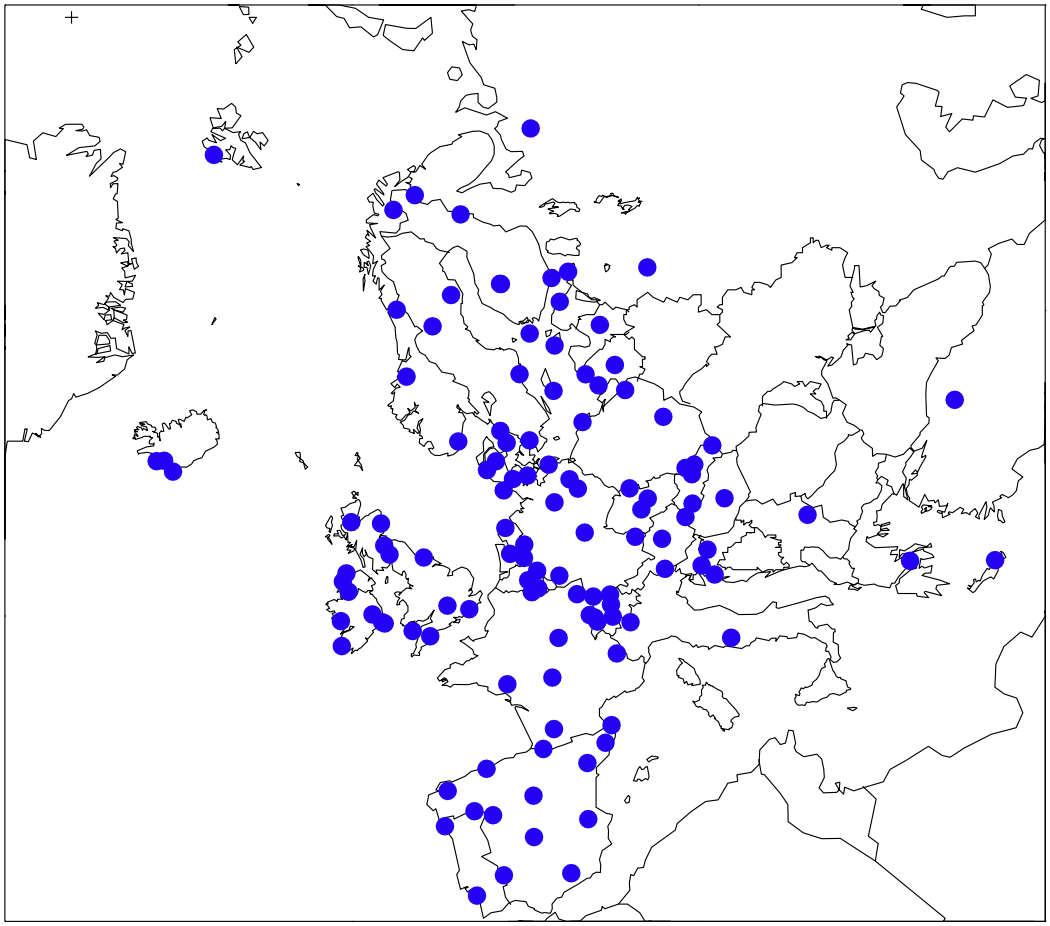

Figure 1: Location of the EMEP monitoring stations in operation in 2006. Sites with ozone/VOC measurements only are not included.

4. The measurement programme during 2006

EMEP's measurement programme during 2006 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 2006.

	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 2006 have been reported separately by Solberg (2008), while ozone data from 2006 have been reported by Fjæraa and Hjellbrekke (2008). Heavy metals and POPs were reported by Aas and Breivik (2008).

A list of data reports from EMEP/CCC can be found in Annex 5. The most resent 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 24th laboratory intercomparison is representative for the 2006 data. The data quality of the 2006 data are evaluated in the data quality report (Aas, 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.

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

7. Calculation of excess sulphate in precipitation

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

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

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

8. Annual summaries of the data

8.1 Maps over Europe

Geographical distributions based on annual means of SO_2, NO_2 SO_4^{--}, 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 2006.

Code	mm	mm off	pH	SO_4	XSO_4	NH4	NO_3	Na	Mg	Cl	Ca	K	cond
AT0002R	384.9	-	4.92	0.54	0.52	0.49	0.42	0.13	0.069	0.15	0.32	0.07	15
AT0005R	850.1	-	5.53	0.27	0.26	0.36	0.29	0.10	0.042	0.12	0.25	0.06	9
AT0048R	1395.6	-	5.13	0.29	0.28	0.49	0.36	0.07	0.023	0.09	0.14	0.03	10
BY0004R	594.5	-	6.02	1.02	0.77	0.71	0.41	0.97	0.382	1.39	1.55	1.03	41
CH0002R	932.7	-	5.48	0.25	0.24	0.53	0.26	0.08	0.033	0.13	0.32	0.08	9
CH0004R	1389.0	-	5.17	0.22	0.21	0.31	0.22	0.07	0.021	0.11	0.20	0.05	8
CH0005R	1271.2	-	5.11	0.27	0.27	0.45	0.33	0.07	0.022	0.10	0.24	0.04	10
CS0005R	597.8	-	5.02	1.15	1.09	0.48	0.54	0.74	0.205	0.70	1.53	0.26	22
CZ0001R	961.5	-	4.80	0.54	0.53	0.61	0.46	0.11	0.024	0.19	0.13	0.08	17
CZ0003R	648.5	-	4.79	0.44	0.43	0.60	0.43	0.10	0.027	0.18	0.14	0.07	17
DE0001R	741.5	-	4.86	0.84	0.41	0.49	0.47	5.28	0.643	8.84	0.32	0.19	42
DE0002R	467.6	-	4.93	0.47	0.43	0.82	0.60	0.49	0.084	0.81	0.22	0.06	17
DE0003R	1917.5	-	4.92	0.26	0.25	0.27	0.28	0.14	0.023	0.24	0.16	0.03	9
DE0004R	752.8	-	4.98	0.32	0.29	0.38	0.32	0.23	0.044	0.40	0.21	0.02	10
DE0005R	1337.8	-	4.92	0.30	0.29	0.44	0.38	0.09	0.019	0.17	0.16	0.04	11
DE0007R	466.2	-	4.91	0.47	0.43	0.70	0.55	0.34	0.062	0.57	0.24	0.07	15
DE0008R	1181.0	-	4.85	0.40	0.38	0.49	0.45	0.22	0.037	0.34	0.15	0.05	12
DE0009R	609.1	-	4.93	0.47	0.39	0.53	0.46	0.94	0.145	1.58	0.28	0.10	16
DK0005R	471.2	-	5.33	0.65	0.42	0.94	0.65	1.87	0.557	4.24	0.54	0.55	-
DK0008R	687.0	-	4.67	0.44	0.29	0.28	0.42	1.91	0.207	3.16	0.14	0.10	-
DK0022R	880.4	-	4.97	0.47	0.34	0.52	0.49	1.52	0.160	2.71	0.13	0.09	-
DK0031R	973.6	-	4.85	0.46	0.26	0.35	0.38	2.39	0.257	4.13	0.29	0.15	-
EE0009R	444.5	-	4.85	0.29	0.27	0.17	0.25	0.30	0.055	0.44	0.34	0.09	10
EE0011R	532.5	-	4.76	0.61	0.53	0.55	0.40	0.87	0.128	1.36	0.38	0.26	19
ES0007R	491.2	-	6.52	0.39	0.36	0.38	0.27	0.38	0.218	0.43	1.56	0.12	18
ES0008R	372.6	-	4.69	1.16	0.86	0.41	0.78	4.23	0.414	5.43	0.61	0.25	47
ES0009R	496.6	-	5.36	0.46	0.42	0.50	0.84	0.44	0.151	0.38	1.36	0.14	17
ES0011R	513.6	-	5.77	0.34	0.25	0.15	0.21	1.06	0.148	1.63	0.60	0.21	13
ES0012R	378.4	-	6.33	0.82	0.75	0.41	0.82	0.83	0.346	0.98	4.63	0.21	34
ES0013R	349.2	-	5.87	0.33	0.30	0.23	0.24	0.42	0.065	0.54	0.45	0.16	10
ES0014R	235.0	-	6.22	0.98	0.88	0.78	0.85	0.57	0.302	1.17	3.07	0.35	32
ES0015R	711.8	-	6.01	0.42	0.38	0.33	0.29	0.42	0.089	0.62	0.78	0.13	13
ES0016R	989.2	-	5.62	0.31	0.23	0.19	0.14	1.18	0.126	1.65	0.30	0.12	13
FI0004R	511.9	-	4.72	0.26	0.25	0.16	0.26	0.12	0.024	0.21	0.07	0.08	12
FI0009R	315.9	513.0	4.59	0.46	0.36	0.35	0.53	1.12	0.143	1.79	0.16	0.09	24
FI0017R	474.3	-	4.58	0.51	0.48	0.36	0.42	0.33	0.053	0.56	0.14	0.10	20
FI0022R	461.7	-	4.78	0.22	0.21	0.11	0.17	0.10	0.017	0.17	0.05	0.05	10
FR0008R	1587.2	-	4.98	0.31	0.29	0.36	0.31	0.19	0.023	0.31	0.18	0.02	11
FR0009R	1228.8	-	5.12	0.41	0.37	0.56	0.37	0.46	0.052	0.75	0.24	0.04	14
FR0010R	1062.5	-	5.17	0.31	0.28	0.41	0.30	0.34	0.035	0.53	0.20	0.08	11
FR0012R	1059.2	-	5.26	0.36	0.33	0.32	0.21	0.35	0.052	0.55	0.47	0.03	11
FR0013R	701.0	-	5.25	0.41	0.35	0.39	0.27	0.72	0.098	1.23	0.50	0.05	14
FR0014R	1428.6	-	5.07	0.29	0.28	0.37	0.30	0.13	0.025	0.23	0.30	0.05	10
FR0015R	995.8	-	5.32	0.46	0.28	0.37	0.19	2.11	0.251	3.66	0.22	0.08	21
FR0016R	775.0	-	5.43	0.23	0.22	0.19	0.19	0.10	0.035	0.18	0.62	0.06	8
FR0017R	1221.8	-	5.25	0.29	0.26	0.36	0.20	0.33	0.050	0.55	0.29	0.07	10
GB0002R	1509.5	-	5.02	0.34	0.20	0.38	0.20	1.68	0.176	2.72	0.14	0.11	15
GB0006R	1367.8	-	5.24	0.32	0.10	0.17	0.10	2.63	0.275	4.28	0.25	0.13	20
GB0013R	1057.4	-	4.84	0.59	0.31	0.38	0.29	3.33	0.369	5.46	0.26	0.16	30
GB0014R	841.7	-	4.77	0.58	0.45	0.52	0.39	1.50	0.187	2.42	0.28	0.13	21
GB0015R	1305.5	-	4.99	0.30	0.09	0.12	0.12	3.56	0.255	4.34	0.16	0.16	21
GB0048R	404.5	-	4.88	0.28	0.20	0.30	0.19	1.04	0.108	1.67	0.11	0.08	13
HR0002R	-	1181.5	5.34	0.48	0.46	0.52	0.32	0.23	0.415	0.37	1.98	0.42	15
HR0004R	-	1559.3	5.18	0.56	0.53	0.43	0.57	0.45	0.536	0.80	2.12	0.16	15
HU0002R	291.6	445.5	5.58	0.67	0.60	0.26	0.52	1.41	0.104	0.75	0.46	0.17	16
IE0001R	1760.7	1756.0	5.13	0.67	0.13	0.10	0.08	6.43	0.853	11.71	0.30	0.40	48
IE0005R	812.0	-	5.46	0.29	0.18	0.24	0.13	1.42	0.176	2.41	0.21	0.07	15
IE0007R	913.7	-	5.17	0.41	0.10	0.10	0.08	3.69	0.470	6.59	0.19	0.15	30
IE0009R	756.0	-	5.06	0.56	0.28	0.32	0.22	3.71	0.433	6.34	0.21	0.16	33
IS0002R	2250.4	-	5.41	0.43	0.10	-	0.05	3.92	0.458	6.92	0.21	0.24	31
IS0090R	883.1	877.7	5.47	1.05	0.20	0.38	0.09	10.24	1.274	18.14	0.68	0.43	70
IS0091R	2488.9	1671.9	5.56	16.27	1.03	1.16	0.71	175.30	23.504	344.83	753.55	6.73	774
IT0001R	408.9	-	5.20	0.81	0.69	0.58	0.47	1.24	0.205	2.32	1.21	0.38	34
IT0004R	1166.3	-	5.04	0.50	0.48	0.83	0.58	0.16	0.045	0.31	0.41	0.05	17
LT0015R	448.8	-	4.85	0.44	0.33	0.64	0.50	1.34	-	2.34	0.18	0.14	24

Table 3, cont.

Code	mm	mm off	pH	SO_4	XSO_4	NH4	NO_3	Na	Mg	Cl	Ca	K	cond
LV0010R	629.9	-	4.82	0.38	0.34	0.41	0.44	0.52	0.089	0.90	0.23	0.07	17
LV0016R	453.7	-	5.28	0.32	0.30	0.55	0.35	0.31	0.114	0.38	0.44	0.12	16
NO0001R	1838.3	-	4.70	0.42	0.32	0.34	0.42	1.19	0.153	2.13	0.10	0.08	22
NO0015R	1211.8	-	5.30	0.21	0.08	0.13	0.10	1.60	0.202	2.74	0.12	0.11	16
NO0039R	1218.0	-	5.29	0.16	0.08	0.14	0.08	0.94	0.131	1.68	0.09	0.08	11
NO0055R	351.2	-	5.14	0.26	0.22	0.21	0.17	0.46	0.051	0.71	0.12	0.28	9
PL0002R	534.2	-	4.71	0.58	0.56	0.56	0.39	0.14	0.032	0.42	0.21	0.09	17
PL0003R	1072.3	-	4.47	0.97	0.91	0.46	0.93	0.67	0.174	0.83	0.64	0.32	31
PL0004R	579.3	-	4.73	0.46	0.40	0.48	0.45	0.68	0.091	1.32	0.22	0.07	20
PL0005R	504.9	557.3	4.79	0.61	0.65	0.49	0.42	0.23	0.055	0.65	0.24	0.09	15
PT0001R	-	830.5	5.78	0.28	0.24	0.44	0.14	0.38	0.056	0.76	0.53	0.12	13
PT0003R	-	1344.3	5.25	0.49	0.16	0.06	0.07	3.94	0.497	6.88	0.40	0.13	31
PT0004R	-	903.3	4.99	0.49	0.20	0.11	0.10	3.51	0.437	5.73	0.52	0.24	29
RU0001R	351.6	-	4.85	0.33	0.28	0.08	0.09	0.78	0.093	0.65	0.38	0.29	12
RU0013R	422.2	-	5.42	0.44	0.37	0.28	0.14	0.89	0.220	0.94	1.00	0.61	17
RU0016R	640.0	-	4.70	0.47	0.44	0.35	0.30	0.34	0.131	0.31	0.69	0.34	13
RU0020R	678.5	-	5.08	0.37	0.33	0.29	0.26	0.44	0.068	0.52	0.48	0.58	13
SE0005R	291.7	-	5.06	0.15	0.15	0.11	0.13	0.06	0.014	0.11	0.08	0.05	6
SE0011R	813.6	-	4.87	0.45	0.39	0.61	0.53	0.70	0.092	1.34	0.33	0.07	20
SE0014R	751.7	-	4.76	0.51	0.29	0.53	0.44	2.69	0.345	4.55	0.24	0.32	32
SI0008R	1252.2	-	4.87	0.36	0.34	0.29	0.29	0.24	0.047	0.37	0.19	0.04	12
SK0002R	908.0	-	4.75	0.48	0.48	0.48	0.32	0.08	0.018	0.14	0.10	0.06	13
SK0004R	609.3	-	4.63	0.52	0.50	0.42	0.35	0.24	0.045	0.31	0.21	0.07	15
SK0005R	669.4	-	4.59	0.58	0.56	0.45	0.40	0.14	0.054	0.23	0.23	0.08	18
SK0006R	787.6	-	4.52	0.49	0.47	0.39	0.40	0.14	0.051	0.17	0.20	0.12	17
SK0007R	477.5	-	5.04	0.47	0.45	0.53	0.39	0.13	0.058	0.18	0.25	0.07	14
TR0001R	1272.0	-	5.29	0.82	-	0.41	0.33	0.46	0.125	0.41	1.42	0.17	18

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	1.26	3.27	1.19	1.18	-	0.50	0.94	-	1.14	1.63
AT0005R	0.30	0.92	-	-	-	-	-	-	-	-
AT0048R	0.43	1.53	-	-	-	-	-	-	-	-
BE0001R	-	3.69	-	-	-	-	-	-	-	-
BE0032R	-	4.96	-	-	-	-	-	-	-	-
BE0035R	-	5.35	-	-	-	-	-	-	-	-
CH0001G	0.07	0.08	0.11	-	-	-	-	-	-	-
CH0002R	0.40	4.27	0.80	-	1.27	-	-	4.61	-	-
CH0003R	-	4.73	-	-	-	-	-	-	-	-
CH0004R	0.45	2.03	-	-	-	-	-	-	-	-
CH0005R	0.28	1.25	0.52	-	0.82	-	-	2.04	-	-
CS0005R	6.14	1.01	-	-	-	-	-	-	-	-
CZ0001R	1.48	4.00	1.04	-	0.97	-	-	2.67	-	-
CZ0003R	-	4.14	-	-	0.95	-	-	2.32	-	-
DE0001R	0.56	2.31	0.94	0.80	1.00	0.81	0.19	2.12	0.96	1.16
DE0002R	0.63	2.69	1.14	1.10	1.06	0.76	0.28	2.53	1.15	1.36
DE0003R	0.36	0.92	0.61	0.60	0.54	0.25	0.30	1.09	0.35	0.75
DE0007R	0.74	1.98	1.08	1.04	0.88	0.63	0.24	1.77	1.03	0.73
DE0008R	0.69	1.94	-	-	-	-	-	-	-	-
DE0009R	0.85	2.24	1.07	1.02	1.09	0.80	0.28	2.14	1.07	1.05
DE0044R	-	-	1.05	-	-	0.69	-	-	1.59	-
DK0003R	0.29	-	0.80	0.72	0.83	-	-	1.29	-	1.00
DK0005R	0.67	3.07	1.00	0.90	1.10	-	-	1.60	-	0.49
DK0008R	0.55	1.46	0.94	0.81	0.84	-	-	1.14	-	0.17
DK0031R	0.25	-	0.86	0.39	0.78	-	-	1.22	-	0.94
EE0009R	2.60	3.40	-	-	-	-	-	-	-	-
EE0011R	1.19	3.03	-	-	-	-	-	-	-	-
ES0007R	0.27	2.23	0.69	-	0.64	0.45	-	1.98	-	-
ES0008R	2.55	2.00	1.27	-	0.73	0.44	-	1.99	-	1.33
ES0009R	0.43	1.06	0.44	-	0.43	0.09	-	1.44	1.27	1.07
ES0010R	0.28	1.50	1.06	-	0.74	0.54	-	1.51	-	-
ES0011R	0.56	1.06	0.69	-	0.53	0.29	-	2.02	-	-
ES0012R	0.37	1.36	0.80	-	0.64	0.42	-	1.86	-	-
ES0013R	0.73	1.61	0.58	-	0.69	0.30	-	1.60	-	-
ES0014R	0.53	1.73	0.95	-	0.72	0.53	-	4.89	-	-
ES0015R	0.47	1.22	0.51	-	0.55	0.31	-	1.51	-	-
ES0016R	1.39	1.82	0.94	-	0.57	0.27	-	1.34	-	-
ES0017R	-	-	1.08	-	-	0.26	-	-	0.79	-
FI0009R	0.47	2.30	0.54	-	0.40	-	-	0.36	-	-
FI0017R	0.84	1.89	0.68	-	0.37	-	-	0.68	-	-
FI0022R	0.48	0.35	0.39	-	0.07	-	-	0.16	-	-
FI0037R	0.35	0.84	0.42	-	0.16	-	-	0.38	-	-
FI0096G	-	0.28	-	-	-	-	-	-	-	-
FR0008R	0.53	-	0.65	-	-	-	-	-	-	-
FR0009R	0.64	-	1.07	-	0.96	-	-	1.99	-	-
FR0010R	0.40	-	0.63	-	-	-	-	-	-	-
FR0012R	0.45	-	0.53	-	-	-	-	-	-	-
FR0013R	0.39	-	0.86	-	0.71	-	-	2.03	-	-
FR0014R	0.25	-	0.50	-	-	-	-	-	-	-
FR0015R	0.47	-	0.74	-	-	-	-	-	-	-
FR0016R	0.24	-	0.40	-	-	-	-	-	-	-
FR0017R	0.28	-	0.61	-	-	-	-	-	-	-

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	-	-	0.43	-	-	-	-	-	-	-
GB0006R	-	-	0.42	-	-	0.21	0.05	-	0.43	0.47
GB0007R	-	-	0.77	-	-	-	-	-	-	-
GB0013R	-	-	0.57	-	-	0.45	0.18	-	0.82	0.41
GB0014R	-	2.26	-	-	-	0.46	0.18	-	0.59	0.59
GB0016R	-	-	-	-	-	0.23	0.14	-	0.48	0.30
GR0001R	1.69	3.83	-	-	-	-	-	-	-	-
HU0002R	0.91	1.80	1.27	-	-	0.72	0.19	-	1.33	1.20
IE0001R	0.30	0.85	0.46	0.28	0.26	-	-	0.90	-	-
IE0005R	-	-	0.52	0.44	-	0.34	-	-	0.67	-
IE0006R	-	-	0.59	0.38	-	0.28	-	-	0.62	-
IE0008R	-	-	0.81	0.50	-	0.38	-	-	0.70	-
IS0002R	0.07	-	0.19	0.10	-	-	-	-	-	-
IS0091R	-	-	0.50	0.10	-	0.05	-	-	-	-
IT0001R	0.45	4.98	1.01	-	-	0.46	0.15	-	1.30	1.71
IT0004R	0.56	6.53	0.98	-	-	1.26	-	-	2.13	-
LT0015R	0.47	1.30	0.39	-	0.69	-	-	1.72	-	-
LV0010R	0.85	0.89	0.35	0.33	0.45	0.14	-	1.36	0.64	-
LV0016R	0.56	0.49	0.41	-	0.27	0.06	-	1.15	0.77	-
NL0007R	0.79	6.46	-	-	-	-	-	-	-	9.76
NL0008R	1.36	-	0.84	-	-	-	-	-	-	-
NL0009R	0.59	3.07	0.70	-	-	0.76	-	-	1.26	-
NL0010R	0.98	6.43	0.71	-	-	0.79	-	-	1.34	13.62
NO0001R	0.18	0.47	0.53	0.49	0.40	0.30	0.09	0.77	-	0.45
NO0015R	0.09	0.15	0.23	0.20	0.13	0.10	0.03	1.10	0.11	0.98
NO0039R	0.06	0.24	0.24	0.23	0.14	0.11	0.04	0.88	0.12	0.75
NO0042G	0.10	-	0.13	0.10	0.11	0.07	0.03	0.42	0.03	0.39
NO0055R	0.29	0.14	0.27	0.26	0.16	0.13	0.04	-	0.12	-
PL0002R	2.31	3.14	1.81	-	1.00	0.86	-	3.45	2.05	-
PL0003R	1.01	0.94	0.80	-	0.32	0.24	-	0.75	0.58	-
PL0004R	1.34	1.88	1.35	-	0.75	0.57	-	1.60	1.17	-
PL0005R	0.92	0.60	0.80	-	0.70	-	-	1.51	-	-
RU0001R	1.83	-	0.66	-	-	0.07	-	-	1.01	-
RU0016R	0.25	-	0.26	-	-	0.09	-	-	0.43	-
SE0005R	0.11	0.14	0.25	-	0.08	-	-	0.23	-	-
SE0008R	0.72	1.19	0.72	-	-	-	-	-	-	-
SE0011R	0.50	1.59	0.74	-	0.63	-	-	1.38	-	-
SE0014R	0.52	1.67	0.82	-	0.65	-	-	0.95	-	-
SI0008R	0.69	-	0.98	0.96	0.51	-	-	1.43	-	-
SK0002R	0.26	0.59	0.33	-	-	0.09	0.01	-	-	-
SK0004R	0.77	1.52	1.01	1.00	-	0.34	0.05	-	1.05	0.36
SK0005R	2.00	1.94	1.22	-	-	0.57	0.06	-	-	-
SK0006R	1.36	1.24	1.23	-	-	0.38	0.05	-	-	-
SK0007R	1.34	2.80	1.37	-	-	0.97	0.04	-	-	-
TR0001R	1.33	1.28	0.59	-	0.35	0.24	0.10	0.77	0.44	0.40

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

Code	Na	Ca	Mg	K	Cl
AT0002R	0.10	0.17	0.04	0.22	-
DE0001R	1.56	0.16	0.21	0.17	-
DE0002R	0.39	0.15	0.08	0.21	-
DE0003R	0.14	0.20	0.07	0.34	-
DE0007R	0.38	0.16	0.11	0.20	-
DE0009R	0.58	0.14	0.12	0.21	-
DK0003R	0.98	0.15	-	0.21	1.45
DK0005R	1.11	0.15	-	0.16	1.45
DK0008R	1.53	0.12	-	0.14	2.07
DK0031R	5.61	0.11	-	0.14	1.92
IE0001R	2.08	0.16	0.25	0.10	-
IE0005R	1.01	0.11	0.10	0.06	-
IE0006R	2.44	0.12	0.29	0.11	-
IE0008R	3.67	0.18	0.46	0.16	-
IS0002R	1.01	0.19	0.13	0.06	1.75
IS0091R	-	-	-	-	8.56
LV0010R	0.23	0.15	0.03	0.05	0.38
NL0008R	-	0.12	-	-	0.64
NL0009R	-	0.09	-	-	0.71
NL0010R	-	-	-	-	0.41
NO0001R	0.44	0.13	0.09	0.05	0.44
NO0015R	0.25	0.07	0.04	0.02	0.33
NO0039R	0.16	0.08	0.04	0.06	0.16
NO0042G	0.25	0.07	0.05	0.02	0.34
NO0055R	0.23	0.07	0.04	0.02	0.30
SI0008R	0.14	0.20	0.04	0.14	0.05
SK0004R	0.20	0.15	0.02	0.17	-

Table 6: Annual averages of particulate matter.

Code	PM_{10}	PM_{10}-$PM_{2.5}$	$PM_{2.5}$	PM_1	SPM
AT0002R	25.64	-	20.84	14.65	-
AT0005R	9.99	-	-	-	-
AT0048R	9.97	-	-	-	-
CH0001G	3.26	-	-	-	-
CH0002R	23.12	-	17.05	11.91	-
CH0003R	22.14	-	-	-	-
CH0004R	10.81	-	8.16	6.25	-
CH0005R	11.25	-	-	-	-
CY0002R	33.77	-	-	-	-
CZ0001R	23.61	-	-	-	-
CZ0003R	19.71	-	17.47	-	-
DE0001R	19.63	-	-	-	-
DE0002R	20.73	-	16.40	8.79	-
DE0003R	8.33	-	5.63	-	-
DE0007R	15.63	-	-	-	-
DE0008R	10.54	-	-	-	-
DE0009R	18.44	-	-	-	-
DE0044R	23.60	-	18.66	-	-
DK0005R	21.42	-	-	-	-
ES0007R	20.18	-	10.12	-	-
ES0008R	18.36	-	9.01	-	-
ES0009R	11.91	-	7.63	-	-
ES0010R	18.96	-	10.14	-	-
ES0011R	15.53	-	8.55	-	-
ES0012R	14.07	-	8.37	-	-
ES0013R	11.14	-	6.94	-	-
ES0014R	16.86	-	10.37	-	-
ES0015R	13.46	-	8.71	-	-
ES0016R	13.16	-	8.69	-	-
GB0006R	11.48	-	-	-	-
GB0036R	21.73	-	12.30	-	-
GB0043R	17.56	-	-	-	-
GR0001R	31.74	-	-	-	-
GR0002R	25.88	-	-	-	-
IE0031R	-	-	8.84	-	-
IT0001R	29.18	-	17.33	-	-
IT0004R	-	-	28.47	-	-
NL0007R	27.02	-	-	-	-
NL0009R	26.84	-	-	-	-
NL0010R	26.47	-	-	-	-
NO0001R	8.06	-	4.95	3.71	-
PL0005R	20.59	-	-	-	-
SE0005R	-	-	-	-	-
SE0008R	-	-	-	-	-
SE0011R	17.28	-	12.99	-	-
SE0012R	11.57	-	8.19	-	-
SE0014R	-	-	-	-	-
SE0035R	8.58	-	-	-	-
SI0008R	15.91	-	13.12	-	-
SK0002R	-	-	-	-	7.15
SK0004R	14.98	-	-	-	-
SK0005R	21.91	-	-	-	-
SK0006R	18.76	-	-	-	-
SK0007R	-	-	-	-	25.14

Table 7: Annual averages of elementary and organic carbon.

Code		EC	OC	TC
DE0044R	$PM_{2.5}$	1.92	2.08	-
DE0044R	PM_{10}	2.27	3.12	-
IT0004R	$PM_{2.5}$	2.47	8.81	-
NO0001R	$PM_{2.5}$	0.13	0.88	1.00
NO0001R	PM_{10}	0.13	1.16	1.29

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, 2008.

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://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 and Montenegro	Federal Hydrometeorological Institute
Slovakia	Slovak Hydrometeorological Institute
Slovenia	Hydrometeorological Institute 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

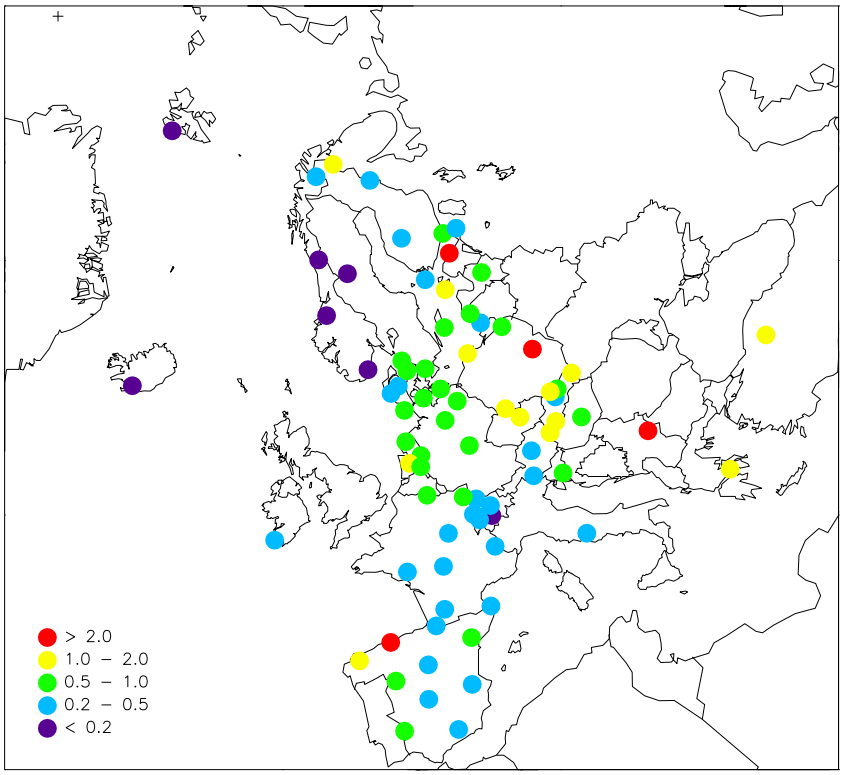

Figure 1.1: Geographical distribution of sulphur dioxide 2006. Unit: μg S/m^3.

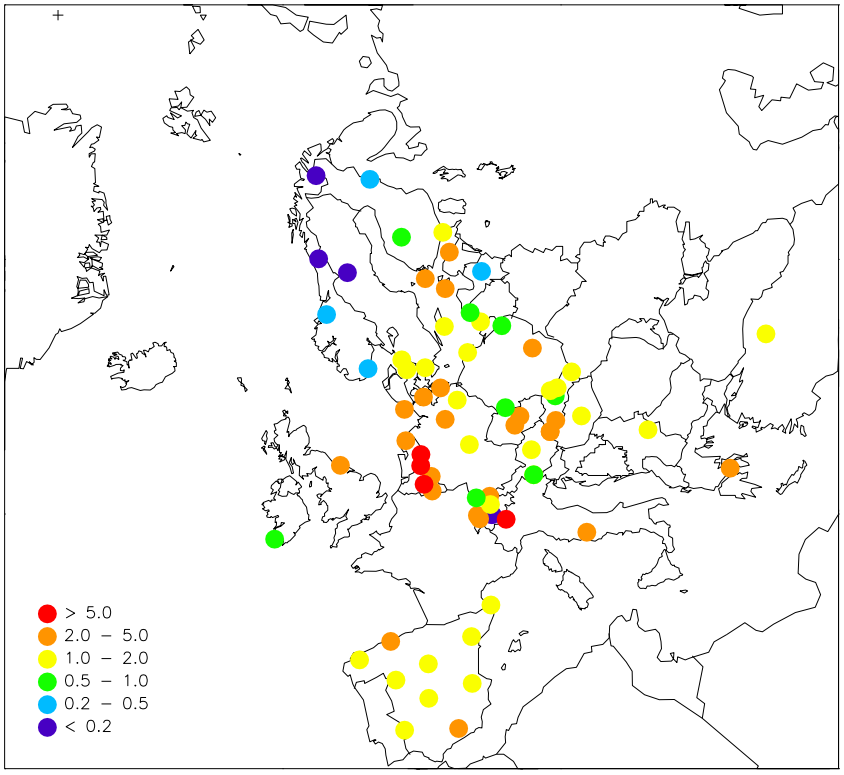

Figure 1.2: Geographical distribution of nitrogen dioxide 2006. Unit: μg N/m^3.

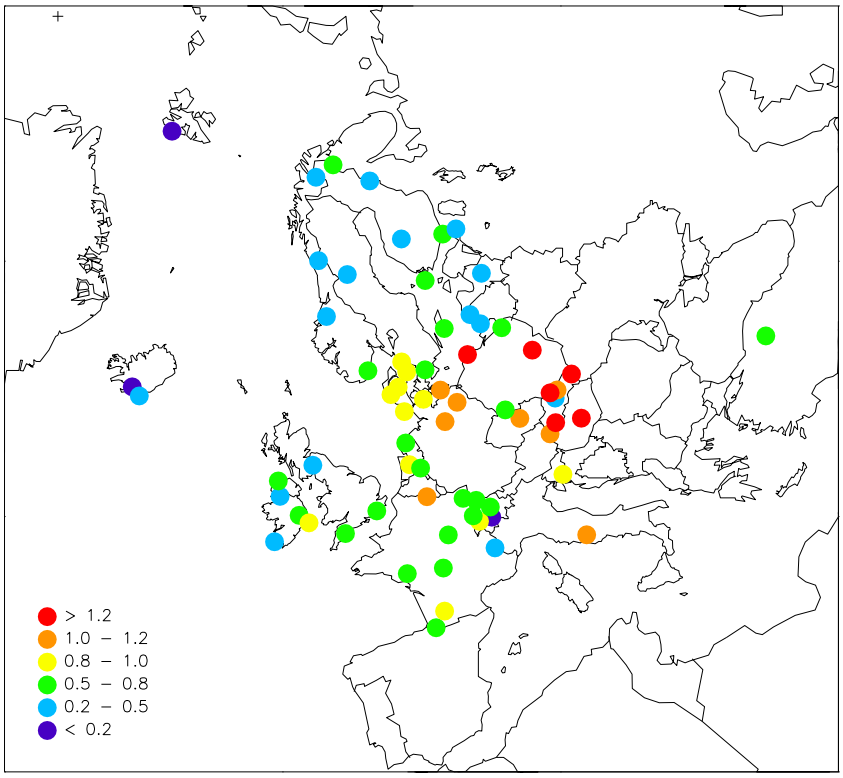

Figure 1.3: Geographical distribution of sulphate in aerosols 2006. Unit: μg S/m^3.

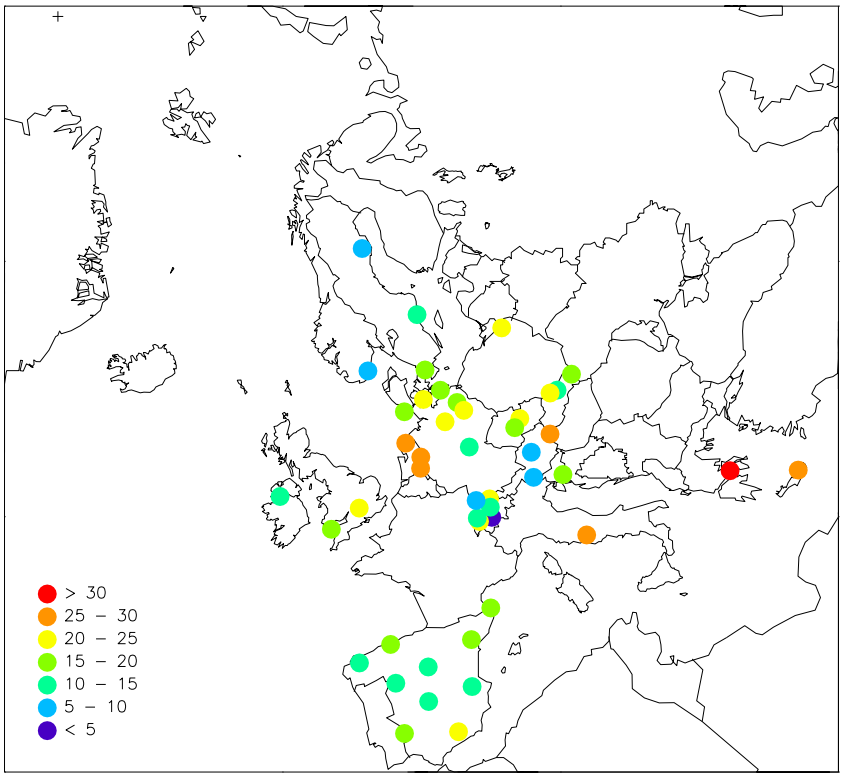

Figure 1.4: Geographical distribution of PM_{10} in aerosols 2006. Unit: μg S/m^3.

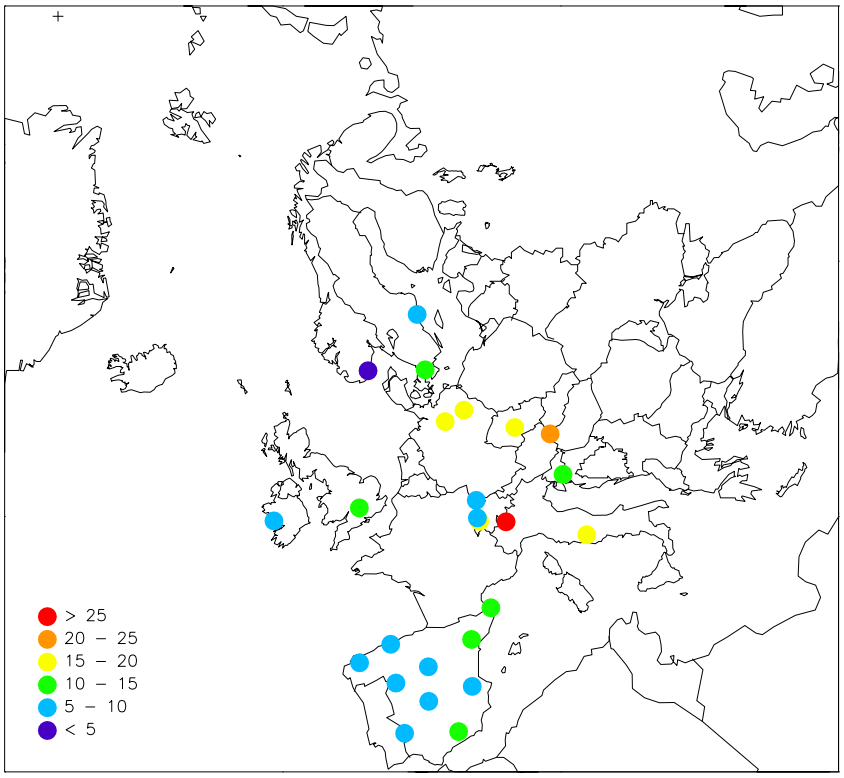

Figure 1.5: Geographical distribution of $PM_{2.5}$ in aerosols 2006. Unit: $\mu g\ S/m^3$.

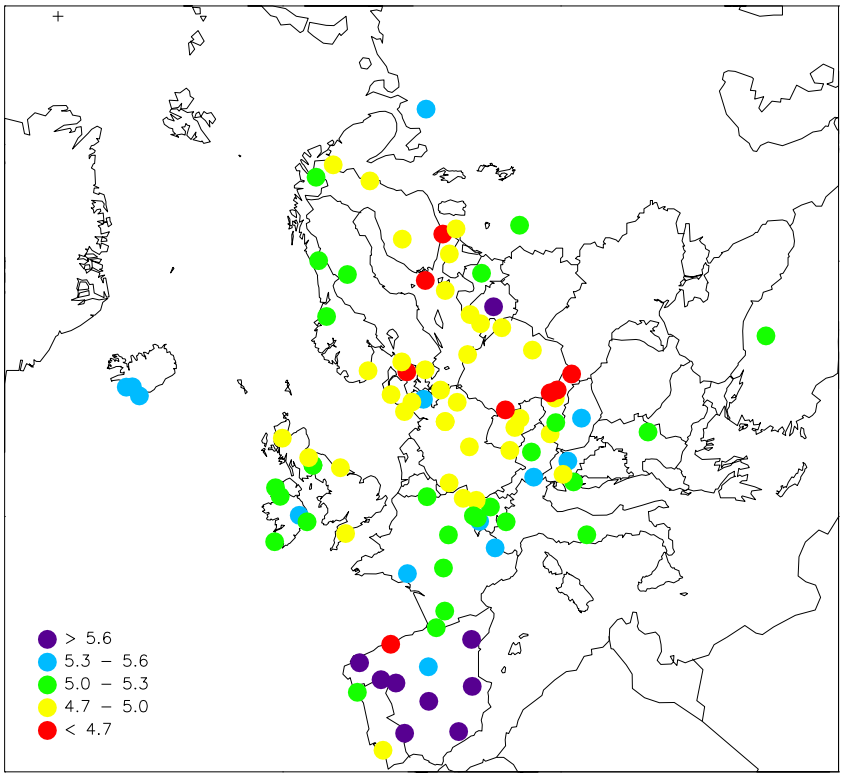

Figure 1.6: Geographical distribution of pH in precipitation 2006. Unit: pH units.

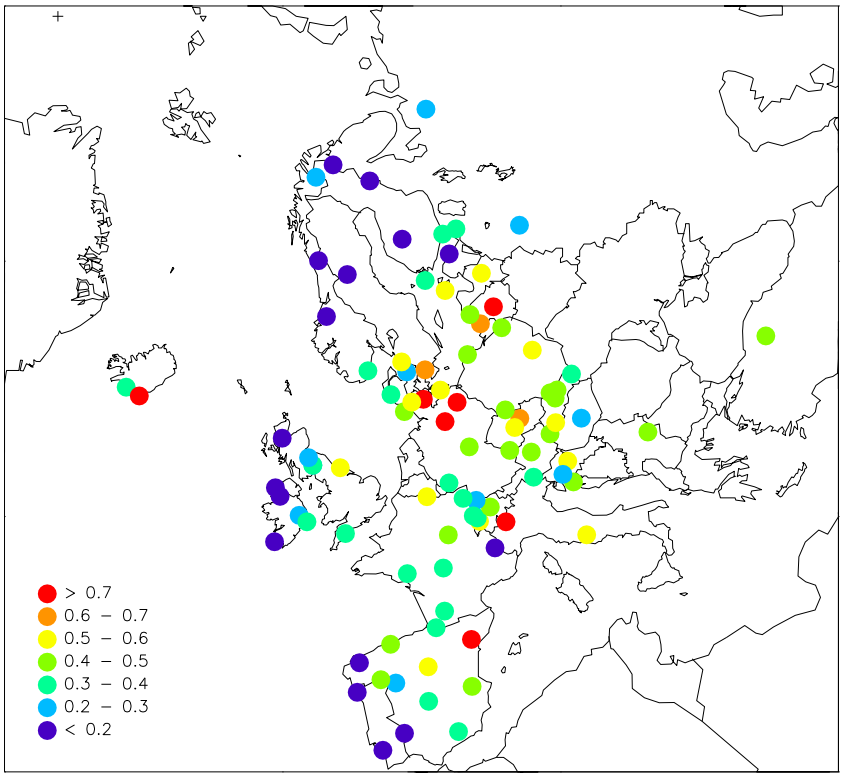

Figure 1.7: Geographical distribution of ammonium in precipitation 2006. Unit: mg N/l.

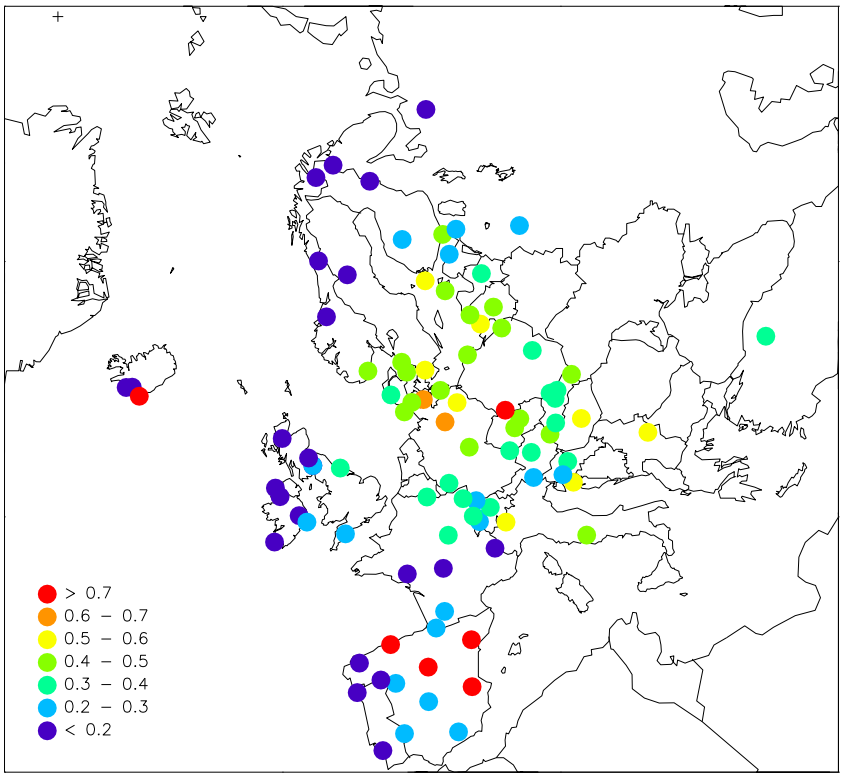

Figure 1.8: Geographical distribution of nitrate in precipitation 2006. Unit: mg N/l.

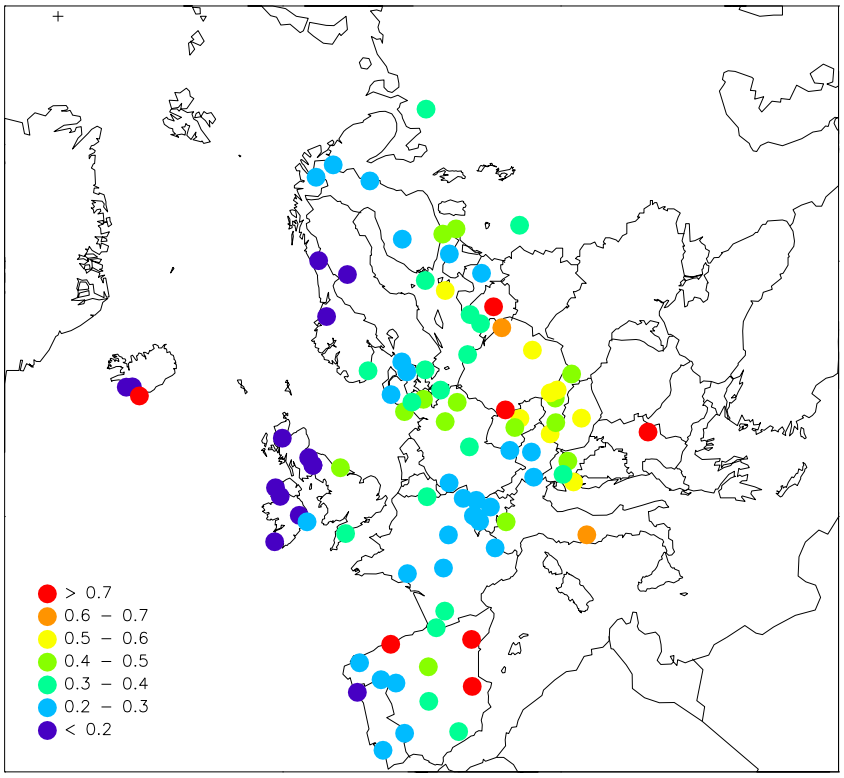

Figure 1.9: Geographical distribution of sulphate in precipitation 2006 (corrected for sea spray). Unit: mg S/l.

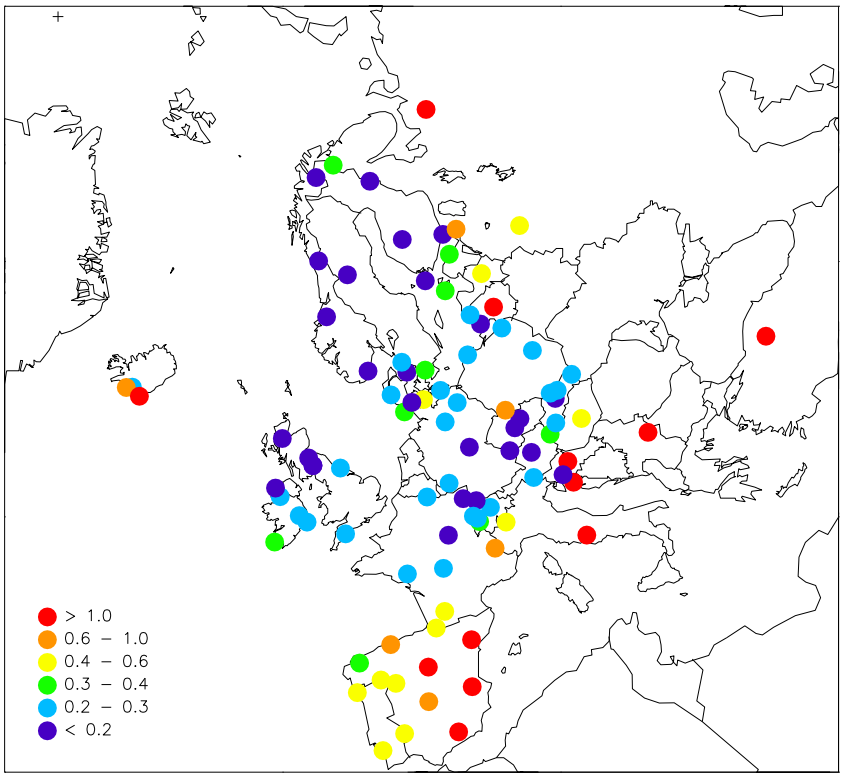

Figure 1.10: Geographical distribution of calcium in precipitation 2006. Unit: mg/l.

Annex 2

Annual statistics on precipitation data

AT0002R Illmitz

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.32	0.00	5.00	121.4	99.9	0	79
Cl-	0.15	0.00	1.70	58.8	99.9	8	79
K+	0.07	0.01	1.46	28.9	99.8	14	78
Mg++	0.069	0.005	1.240	26.8	99.9	1	79
NH4+	0.49	0.01	6.37	189.9	99.8	1	78
NO3-	0.42	0.05	5.61	161.1	99.9	0	79
Na+	0.13	0.01	1.72	51.2	99.9	3	79
Precip	-	0.0	25.5	384.9	100.0	286	365
SO4--	0.54	0.04	8.67	208.9	99.9	0	79
SO4-- corr	0.52	0.03	8.61	201.1	99.9	0	79
cond	15.00	2.00	157.00	5775.0	99.9	0	79
pH	4.92	3.95	6.98	4637.5	99.8	0	78

AT0005R Vorhegg

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.25	0.00	4.90	215.6	99.9	0	106
Cl-	0.12	0.00	8.90	103.1	98.9	26	105
K+	0.06	0.01	2.32	53.1	99.9	34	106
Mg++	0.042	0.005	0.579	36.1	99.9	11	106
NH4+	0.36	0.02	5.46	307.9	99.9	0	105
NO3-	0.29	0.01	4.80	251.2	99.9	0	106
Na+	0.10	0.01	4.21	84.1	98.9	0	105
Precip	-	0.0	34.2	850.1	100.0	258	365
SO4--	0.27	0.01	4.96	229.4	99.9	0	106
SO4-- corr	0.26	-0.03	4.94	217.3	99.9	0	106
cond	8.53	2.00	95.00	7249.4	99.9	0	106
pH	5.53	4.39	6.87	2499.6	99.9	0	106

AT0048R Zoebelboden

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.14	0.00	2.90	195.6	100.0	3	158
Cl-	0.09	0.00	3.80	122.3	98.5	29	157
K+	0.03	0.01	0.77	37.7	100.0	54	158
Mg++	0.023	0.005	0.275	32.6	100.0	38	158
NH4+	0.49	0.03	9.92	683.8	100.0	0	158
NO3-	0.36	0.04	4.04	499.1	99.8	0	157
Na+	0.07	0.01	1.38	97.9	100.0	18	158
Precip	-	0.0	33.6	1395.6	100.0	207	365
SO4--	0.29	0.02	3.34	407.1	99.8	0	157
SO4-- corr	0.28	0.02	3.29	391.3	99.8	0	157
cond	10.35	2.00	96.00	14443.2	100.0	0	158
pH	5.13	3.87	7.17	10357.1	100.0	0	158

BY0004R Vysokoe

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	1.55	0.00	5.40	922.5	81.7	0	50
Cl-	1.39	0.40	6.60	827.9	45.4	0	20
K+	1.03	0.00	5.84	611.8	82.5	0	49
Mg++	0.382	0.000	1.880	226.8	82.6	0	51
NH4+	0.71	0.09	4.40	423.5	71.8	0	54
NO3-	0.41	0.01	3.81	242.7	88.5	0	62
Na+	0.97	0.00	6.25	575.1	85.5	0	56
Precip	-	0.0	55.6	594.5	99.5	269	363
SO4--	1.02	0.14	7.18	608.6	87.7	0	61
SO4-- corr	0.77	0.04	4.06	455.8	82.3	0	47
cond	41.49	7.00	123.00	24668.3	83.1	0	48
pH	6.02	5.25	9.01	563.5	95.3	0	83

CH0002R Payerne

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.32	0.03	7.17	300.9	97.9	16	101
Cl-	0.13	0.02	2.03	123.6	97.9	0	101
K+	0.08	0.01	1.60	71.2	97.9	19	101
Mg++	0.033	0.001	0.491	31.1	97.9	1	101
NH4+	0.53	0.09	4.77	494.5	97.9	0	101
NO3-	0.26	0.06	1.49	237.6	97.9	0	101
Na+	0.08	0.01	1.10	75.3	97.9	2	101
Precip	-	0.0	43.1	932.7	99.7	215	364
SO4--	0.25	0.03	1.50	231.5	97.9	0	101
SO4-- corr	0.24	0.03	1.48	224.7	97.9	0	101
cond	9.38	2.21	226.50	8753.3	99.5	0	126
pH	5.48	4.60	7.93	3113.1	99.5	0	126

CH0004R Chaumont

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.20	0.03	1.70	279.1	100.0	10	45
Cl-	0.11	0.02	0.56	147.6	100.0	0	45
K+	0.05	0.01	0.49	69.5	100.0	4	45
Mg++	0.021	0.002	0.127	29.0	100.0	0	45
NH4+	0.31	0.04	3.38	435.6	100.0	0	45
NO3-	0.22	0.06	1.79	303.4	100.0	0	45
Na+	0.07	0.01	0.31	92.4	100.0	0	45
Precip	-	0.0	120.6	1389.0	100.0	7	53
SO4--	0.22	0.02	0.81	299.4	100.0	0	45
SO4-- corr	0.21	0.02	0.80	291.3	100.0	0	45
cond	8.03	2.71	218.20	11158.7	100.0	0	46
pH	5.17	4.18	7.68	9334.0	100.0	0	46

CH0005R Rigi

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.24	0.03	12.66	301.8	98.8	24	131
Cl-	0.10	0.01	4.31	124.4	98.8	0	131
K+	0.04	0.01	0.68	55.9	98.8	13	131
Mg++	0.022	0.001	0.604	28.2	98.8	4	131
NH4+	0.45	0.02	6.70	568.5	98.8	0	131
NO3-	0.33	0.04	6.26	413.8	98.8	0	131
Na+	0.07	0.01	2.56	86.4	98.8	6	131
Precip	-	0.0	60.5	1271.2	99.2	198	362
SO4--	0.27	0.03	3.33	346.1	98.8	0	131
SO4-- corr	0.27	0.02	3.19	338.5	98.8	0	131
cond	10.19	1.96	109.60	12958.9	99.8	0	148
pH	5.11	4.05	7.73	9872.1	99.8	0	148

CS0005R Kamenicki vis

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	1.53	0.19	11.65	913.2	99.3	0	99
Cl-	0.70	0.04	12.07	418.8	99.9	0	108
K+	0.26	0.01	7.80	157.6	99.6	0	105
Mg++	0.205	0.010	3.460	122.6	100.0	0	109
NH4+	0.48	0.01	8.79	289.9	99.6	0	105
NO3-	0.54	0.07	7.66	325.2	100.0	0	108
Na+	0.74	0.05	7.50	443.9	99.9	0	108
Precip	-	0.0	31.6	597.8	99.7	255	364
SO4--	1.15	0.18	8.22	688.3	99.8	0	105
SO4-- corr	1.09	0.12	8.14	649.4	99.8	0	105
cond	21.94	7.00	159.00	13113.7	99.2	0	100
pH	5.02	3.68	8.13	5741.4	99.8	0	105

CZ0001R Svratouch

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.13	0.02	1.37	126.5	97.1	3	41
Cl-	0.19	0.03	0.94	185.6	97.5	0	43
K+	0.08	0.01	1.50	80.6	97.1	0	41
Mg++	0.024	0.001	0.194	22.8	97.1	0	41
NH4+	0.61	0.18	3.72	590.1	97.7	0	45
NO3-	0.46	0.15	2.49	441.1	97.5	0	43
Na+	0.11	0.02	0.75	106.9	97.1	0	41
Precip	-	0.0	184.0	961.5	100.0	4	53
SO4--	0.54	0.21	2.63	518.6	97.5	0	43
SO4-- corr	0.53	0.20	2.58	509.2	97.5	0	43
cond	17.47	8.34	65.30	16798.9	97.3	0	42
pH	4.80	4.08	6.93	15212.0	97.5	0	43

CZ0003R Kosetice

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.14	0.02	1.08	89.5	85.1	6	83
Cl-	0.18	0.00	1.75	119.4	92.7	1	109
K+	0.07	0.00	0.69	47.4	85.3	1	84
Mg++	0.027	0.004	0.162	17.8	85.3	0	84
NH4+	0.60	0.02	5.61	388.7	95.9	0	130
NO3-	0.43	0.00	2.54	276.8	92.7	1	109
Na+	0.10	0.01	0.67	65.2	85.3	0	84
Precip	-	0.0	50.1	648.5	100.0	192	365
SO4--	0.44	0.00	2.88	287.0	92.7	1	109
SO4-- corr	0.43	-0.00	2.85	280.6	92.7	1	109
cond	17.23	3.37	91.10	11171.6	94.8	0	119
pH	4.79	4.08	7.01	10550.2	95.7	0	122

DE0001R Westerland

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.32	0.08	1.20	235.0	100.0	0	39
Cl-	8.84	0.53	48.23	6552.8	100.0	0	39
K+	0.19	0.03	1.08	141.2	100.0	0	39
Mg++	0.643	0.040	3.600	476.9	100.0	0	39
NH4+	0.49	0.06	2.85	365.5	99.8	0	38
NO3-	0.47	0.12	1.98	351.3	100.0	0	39
Na+	5.28	0.22	31.14	3911.4	100.0	0	39
Precip	-	0.0	63.0	741.5	84.7	6	45
SO4--	0.84	0.19	2.77	625.2	100.0	0	39
SO4-- corr	0.41	0.13	1.48	302.3	100.0	0	39
cond	41.67	9.10	181.60	30903.5	100.0	0	39
pH	4.86	4.33	6.21	10347.0	100.0	0	39

DE0002R Langenbrügge

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Precip	-	0.0	19.8	467.6	100.0	202	365
cond	17.33	2.00	113.00	8102.4	94.4	1	124
pH	4.90	4.07	6.79	5923.6	97.9	0	121

DE0002R Langenbrügge

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.22	0.00	3.50	117.5	95.2	1	39
Cl-	0.81	0.10	4.00	437.2	98.5	0	42
K+	0.06	0.01	0.66	33.4	98.1	18	41
Mg++	0.084	0.005	0.407	45.3	98.1	4	41
NH4+	0.82	0.13	13.19	439.6	98.1	0	41
NO3-	0.60	0.19	3.26	325.1	98.5	0	42
Na+	0.49	0.01	2.51	261.8	98.5	2	42
Precip	-	0.0	36.6	538.7	100.0	3	53
SO4--	0.47	0.10	2.55	255.1	98.5	0	42
SO4-- corr	0.43	0.10	2.53	232.8	98.5	0	42
cond	17.29	7.00	59.00	9313.0	98.4	0	41
pH	4.93	4.28	6.23	6306.7	95.6	0	40

DE0003R Schauinsland

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.16	0.00	2.20	305.0	99.4	6	47
Cl-	0.24	0.00	3.20	454.5	100.0	3	48
K+	0.03	0.01	0.49	59.3	99.4	30	47
Mg++	0.023	0.005	0.280	45.0	99.4	22	47
NH4+	0.27	0.06	2.61	520.7	100.0	0	48
NO3-	0.28	0.09	1.96	544.1	100.0	0	48
Na+	0.14	0.00	2.07	271.9	99.4	10	47
Precip	-	0.0	123.0	1917.5	100.0	5	53
SO4--	0.26	0.10	1.40	497.4	100.0	0	48
SO4-- corr	0.25	0.08	1.34	473.8	100.0	0	48
cond	9.33	5.00	49.00	17898.5	100.0	0	48
pH	4.92	4.01	6.37	23236.6	100.0	0	48

DE0004R Deuselbach

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.21	0.00	2.50	161.2	99.3	2	41
Cl-	0.40	0.10	11.20	299.6	99.5	0	42
K+	0.02	0.01	0.26	17.6	99.3	26	41
Mg++	0.044	0.005	0.740	33.0	99.3	9	41
NH4+	0.38	0.09	2.14	288.0	99.3	0	41
NO3-	0.32	0.11	1.61	237.8	99.5	0	42
Na+	0.23	0.01	6.57	171.8	99.3	3	41
Precip	-	0.0	55.0	752.8	100.0	7	53
SO4--	0.32	0.08	1.66	238.1	99.5	0	42
SO4-- corr	0.29	0.08	1.60	222.2	99.5	0	42
cond	10.28	6.00	49.00	7736.4	99.5	0	42
pH	4.98	4.42	6.33	7937.6	99.5	0	42

DE0005R Brotjacklriegel

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.16	0.00	1.60	216.6	99.5	7	43
Cl-	0.17	0.00	0.80	220.6	99.9	3	44
K+	0.04	0.01	0.31	52.3	99.5	25	43
Mg++	0.019	0.005	0.120	25.3	99.5	23	43
NH4+	0.44	0.16	4.10	592.4	99.5	0	43
NO3-	0.38	0.13	2.03	501.3	99.9	0	44
Na+	0.09	0.01	0.50	121.8	99.5	11	43
Precip	-	0.0	109.2	1337.8	100.0	8	53
SO4--	0.30	0.08	1.10	404.2	99.9	0	44
SO4-- corr	0.29	0.07	1.07	392.6	99.9	0	44
cond	10.61	5.00	43.00	14187.1	99.9	0	44
pH	4.92	4.50	6.46	16127.8	99.9	0	44

DE0007R Neuglobsow

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.24	0.00	1.50	113.4	99.1	1	40
Cl-	0.57	0.10	2.40	267.2	99.9	0	41
K+	0.07	0.01	1.34	33.8	99.1	14	40
Mg++	0.062	0.005	0.340	29.0	99.1	7	40
NH4+	0.70	0.30	7.12	328.7	99.1	0	40
NO3-	0.55	0.25	3.19	257.0	99.9	0	41
Na+	0.34	0.01	1.58	157.0	99.1	1	40
Precip	-	0.0	43.4	466.2	100.0	10	53
SO4--	0.47	0.21	2.98	216.9	99.9	0	41
SO4-- corr	0.43	0.15	2.92	202.9	99.9	0	41
cond	14.98	7.00	66.00	6982.2	99.9	0	41
pH	4.91	4.20	6.89	5782.7	99.9	0	41

DE0008R Schmücke

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.15	0.00	1.20	183.2	99.4	2	47
Cl-	0.34	0.10	4.30	397.6	99.7	0	48
K+	0.05	0.01	0.51	60.1	99.4	19	47
Mg++	0.037	0.005	0.320	43.6	99.4	10	47
NH4+	0.49	0.13	5.27	575.1	99.4	0	47
NO3-	0.45	0.17	2.89	530.9	99.7	0	48
Na+	0.22	0.01	2.32	257.0	99.4	5	47
Precip	-	0.0	84.9	1181.0	100.0	1	53
SO4--	0.40	0.17	3.08	473.2	99.7	0	48
SO4-- corr	0.38	0.15	3.04	451.4	99.7	0	48
cond	11.97	6.00	109.00	14140.3	99.7	0	48
pH	4.85	4.15	6.18	16740.7	99.7	0	48

DE0009R Zingst

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.28	0.06	2.01	170.9	100.0	0	40
Cl-	1.58	0.10	13.40	964.4	100.0	0	40
K+	0.10	0.01	0.42	63.7	100.0	1	40
Mg++	0.145	0.020	1.050	88.1	100.0	0	40
NH4+	0.53	0.13	4.36	324.4	100.0	0	40
NO3-	0.46	0.16	2.81	281.2	100.0	0	40
Na+	0.94	0.06	8.16	570.3	100.0	0	40
Precip	-	0.0	61.4	609.1	94.2	10	50
SO4--	0.47	0.11	2.01	289.2	100.0	0	40
SO4-- corr	0.39	0.08	1.89	240.1	100.0	0	40
cond	16.34	5.10	55.10	9954.8	100.0	0	40
pH	4.93	4.16	6.43	7207.2	100.0	0	40

DK0005R Keldsnor

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.54	0.12	3.00	252.1	100.0	0	23
Cl-	4.24	1.43	13.92	1997.4	100.0	0	23
K+	0.55	0.07	5.00	259.2	100.0	0	23
Mg++	0.557	0.137	2.698	262.5	100.0	0	23
NH4+	0.94	0.14	3.19	444.8	100.0	0	23
NO3-	0.65	0.36	1.88	305.5	100.0	0	23
Na+	1.87	0.25	6.19	883.1	100.0	0	23
Precip	-	0.1	58.8	471.2	99.7	0	24
SO4--	0.65	0.38	1.33	305.8	100.0	0	23
SO4-- corr	0.42	-0.37	1.23	200.4	100.0	0	23
pH	5.33	4.40	6.70	2183.7	100.0	0	23

DK0008R Anholt

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.14	0.04	0.68	99.1	100.0	0	24
Cl-	3.16	0.45	19.50	2171.4	100.0	0	24
K+	0.10	0.03	0.71	70.1	100.0	0	24
Mg++	0.207	0.028	1.465	142.5	100.0	0	24
NH4+	0.28	0.00	1.56	190.5	100.0	0	24
NO3-	0.42	0.00	1.77	291.2	100.0	0	24
Na+	1.91	0.15	12.88	1308.5	100.0	0	24
Precip	-	0.8	138.0	687.0	99.7	0	24
SO4--	0.44	0.18	2.29	304.0	100.0	0	24
SO4-- corr	0.29	0.12	1.27	196.6	100.0	0	24
pH	4.67	4.08	6.03	14690.3	100.0	0	24

DK0022R Sepstrup Sande

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.13	0.03	0.41	117.5	100.0	0	24
Cl-	2.71	0.28	7.54	2385.9	100.0	0	24
K+	0.09	0.02	0.83	81.9	100.0	0	24
Mg++	0.160	0.025	0.451	140.5	100.0	0	24
NH4+	0.52	0.23	3.14	455.0	100.0	0	24
NO3-	0.49	0.26	0.96	434.9	100.0	0	24
Na+	1.52	0.18	4.39	1338.0	100.0	0	24
Precip	-	3.5	144.1	880.4	99.7	0	24
SO4--	0.47	0.18	1.13	412.1	100.0	0	24
SO4-- corr	0.34	0.15	1.03	303.5	100.0	0	24
pH	4.97	4.43	6.94	9335.5	100.0	0	24

DK0031R Ulborg

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.29	0.05	1.43	283.8	100.0	0	24
Cl-	4.13	0.45	14.59	4021.7	100.0	0	24
K+	0.15	0.02	0.41	144.3	100.0	0	24
Mg++	0.257	0.035	0.946	250.1	100.0	0	24
NH4+	0.35	0.08	1.29	338.3	100.0	0	24
NO3-	0.38	0.22	1.06	366.6	100.0	0	24
Na+	2.39	0.34	7.73	2327.2	100.0	0	24
Precip	-	2.9	121.0	973.6	99.7	0	24
SO4--	0.46	0.26	0.84	444.7	100.0	0	24
SO4-- corr	0.26	0.16	0.68	251.2	100.0	0	24
pH	4.85	4.51	6.08	13857.8	100.0	0	24

EE0009R Lahemaa

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.34	0.10	2.50	152.7	99.8	0	126
Cl-	0.44	0.05	3.50	195.0	99.8	7	126
K+	0.09	0.01	1.84	41.4	99.8	32	126
Mg++	0.055	0.010	0.324	24.4	99.8	39	126
NH4+	0.17	0.01	1.45	77.1	99.8	34	126
NO3-	0.25	0.01	2.13	111.7	99.8	14	126
Na+	0.30	0.01	2.31	131.8	99.8	7	126
Precip	-	0.0	25.5	444.5	100.0	238	365
SO4--	0.29	0.01	1.68	130.8	99.8	1	126
SO4-- corr	0.27	0.00	1.57	119.6	99.8	1	126
cond	10.30	3.00	97.00	4579.3	91.5	0	80
pH	4.85	3.73	6.06	6310.1	87.1	0	79

EE0011R Vilsandy

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.38	0.06	1.24	199.6	100.0	0	23
Cl-	1.36	0.51	3.61	726.7	100.0	0	23
K+	0.26	0.01	1.72	136.7	100.0	3	23
Mg++	0.128	0.005	0.300	68.4	100.0	4	23
NH4+	0.55	0.02	4.52	290.8	100.0	0	23
NO3-	0.40	0.02	1.15	213.6	100.0	0	23
Na+	0.87	0.10	2.10	463.5	100.0	0	23
Precip	-	0.0	58.0	532.5	100.0	30	53
SO4--	0.61	0.22	1.40	323.4	100.0	0	23
SO4-- corr	0.53	0.15	1.28	284.5	100.0	0	23
cond	19.28	8.00	47.00	10268.3	100.0	0	23
pH	4.76	4.35	7.99	9329.6	100.0	0	23

ES0007R Víznar

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	1.56	0.28	17.80	763.8	77.3	0	52
Cl-	0.43	0.15	4.45	213.6	77.8	20	56
K+	0.12	0.06	0.54	60.0	77.3	0	52
Mg++	0.218	0.060	1.800	107.1	77.3	0	52
NH4+	0.38	0.02	1.47	187.2	77.8	2	54
NO3-	0.27	0.04	3.82	133.5	77.8	2	56
Na+	0.38	0.12	4.40	185.3	77.3	0	52
Precip	-	0.0	32.6	491.2	100.0	281	365
SO4--	0.39	0.04	3.56	192.2	77.8	1	56
SO4-- corr	0.36	0.03	3.38	176.5	77.8	1	56
cond	17.56	2.50	200.00	8623.3	79.9	2	61
pH	6.52	5.82	7.50	147.4	79.9	0	61

ES0008R Niembro

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.61	0.11	14.80	225.9	87.0	0	92
Cl-	5.43	0.34	30.76	2024.2	88.2	0	107
K+	0.25	0.06	1.90	92.7	87.0	0	92
Mg++	0.414	0.040	2.800	154.3	87.0	0	92
NH4+	0.41	0.02	5.36	153.2	87.7	2	100
NO3-	0.78	0.09	7.22	289.0	80.2	0	84
Na+	4.23	0.35	20.90	1577.4	87.0	0	92
Precip	-	0.0	21.0	372.6	100.0	245	365
SO4--	1.16	0.22	11.44	431.2	88.2	0	107
SO4-- corr	0.86	0.11	10.68	320.4	88.2	0	107
cond	46.98	13.90	200.00	17505.8	80.5	0	86
pH	4.69	4.03	6.43	7671.6	80.5	0	86

ES0009R Campisabalos

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	1.36	0.11	14.50	676.8	91.4	0	79
Cl-	0.38	0.15	4.49	188.5	91.9	32	85
K+	0.14	0.05	2.10	68.4	91.4	0	79
Mg++	0.151	0.020	1.400	75.0	91.4	0	79
NH4+	0.50	0.02	3.65	248.7	91.5	1	81
NO3-	0.84	0.11	3.88	418.9	71.0	0	65
Na+	0.44	0.14	4.00	218.3	91.4	0	79
Precip	-	0.0	23.8	496.6	100.0	254	365
SO4--	0.46	0.04	3.12	229.4	91.9	3	85
SO4-- corr	0.42	0.01	3.05	211.1	91.9	3	85
cond	16.84	2.50	58.20	8361.1	72.2	4	70
pH	5.36	4.55	6.84	2157.0	72.2	0	70

ES0011R Barcarrola

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.60	0.11	12.80	306.2	97.0	0	60
Cl-	1.63	0.15	28.45	838.2	97.1	5	62
K+	0.21	0.03	1.80	109.3	97.0	1	60
Mg++	0.148	0.020	1.500	76.0	97.0	0	60
NH4+	0.15	0.02	3.24	77.8	97.1	14	62
NO3-	0.21	0.04	2.45	106.4	97.1	15	62
Na+	1.06	0.05	16.20	542.4	97.0	1	60
Precip	-	0.0	52.8	513.6	100.0	292	365
SO4--	0.34	0.08	3.09	175.1	97.1	0	62
SO4-- corr	0.25	0.05	2.96	129.2	97.1	0	62
cond	13.35	2.50	112.90	6854.0	97.1	4	62
pH	5.77	4.87	7.21	866.7	97.1	0	62

ES0012R Zarra

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	4.63	0.25	36.30	1753.6	74.7	0	52
Cl-	0.98	0.15	16.43	372.8	75.1	9	55
K+	0.21	0.07	3.50	80.6	74.7	0	52
Mg++	0.346	0.040	2.300	131.0	74.7	0	52
NH4+	0.41	0.02	2.30	154.5	75.1	5	55
NO3-	0.82	0.04	11.57	312.1	75.1	2	55
Na+	0.83	0.12	9.00	315.0	74.7	0	52
Precip	-	0.0	50.4	378.4	100.0	294	365
SO4--	0.82	0.04	9.14	312.1	75.1	1	55
SO4-- corr	0.75	-0.06	8.39	284.7	75.1	1	55
cond	34.28	6.60	200.00	12972.3	75.1	0	57
pH	6.33	5.35	8.10	175.2	75.1	0	57

ES0013R Penausende

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.45	0.08	7.30	157.6	85.5	0	83
Cl-	0.54	0.15	3.67	189.1	93.1	25	93
K+	0.16	0.03	3.20	56.6	85.5	1	83
Mg++	0.065	0.010	0.700	22.9	85.5	1	83
NH4+	0.23	0.02	2.79	81.8	93.1	12	87
NO3-	0.24	0.04	3.31	82.9	93.1	14	93
Na+	0.42	0.05	2.04	148.0	85.5	1	83
Precip	-	0.0	20.8	349.2	100.0	254	365
SO4--	0.33	0.08	5.12	116.4	93.1	0	93
SO4-- corr	0.30	0.06	5.05	104.2	93.1	0	93
cond	10.05	2.50	88.60	3510.6	95.6	11	101
pH	5.87	4.97	7.05	468.9	95.6	0	101

ES0014R Els Torms

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	3.07	0.33	26.10	721.7	92.8	0	28
Cl-	1.17	0.15	8.57	274.9	92.8	2	30
K+	0.35	0.10	3.20	81.3	92.8	0	28
Mg++	0.302	0.030	1.300	70.9	92.8	0	28
NH4+	0.78	0.14	4.23	183.2	92.8	0	28
NO3-	0.85	0.20	10.45	200.6	92.8	0	30
Na+	0.57	0.16	2.70	135.2	92.8	0	28
Precip	-	0.0	55.2	235.0	100.0	314	365
SO4--	0.98	0.19	9.71	230.1	92.8	0	30
SO4-- corr	0.88	0.17	9.54	207.0	92.8	0	30
cond	32.27	11.80	195.90	7583.7	92.8	0	31
pH	6.22	5.22	7.35	141.2	92.8	0	31

ES0015R Risco Llamo

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.78	0.16	15.90	556.0	87.3	0	61
Cl-	0.62	0.15	11.54	440.0	89.3	14	68
K+	0.13	0.06	0.88	94.7	87.3	0	61
Mg++	0.089	0.020	0.800	63.3	87.3	0	61
NH4+	0.33	0.02	4.62	233.8	88.0	2	63
NO3-	0.29	0.04	3.60	204.9	89.3	6	68
Na+	0.42	0.05	3.50	296.2	87.3	1	61
Precip	-	0.0	77.6	711.8	100.0	264	365
SO4--	0.42	0.04	3.39	296.5	89.3	1	68
SO4-- corr	0.38	0.02	3.10	268.4	89.3	1	68
cond	12.62	2.50	107.20	8979.2	91.1	7	73
pH	6.01	4.76	7.30	688.2	91.1	0	73

ES0016R O Saviñao

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.30	0.06	7.10	298.1	92.0	0	108
Cl-	1.65	0.15	12.74	1634.1	93.2	7	118
K+	0.12	0.03	2.10	115.1	92.0	8	108
Mg++	0.126	0.010	0.900	124.6	92.0	1	108
NH4+	0.19	0.02	8.76	184.6	92.3	11	114
NO3-	0.14	0.04	5.54	136.2	93.2	37	118
Na+	1.18	0.05	7.90	1162.7	92.0	1	108
Precip	-	0.0	55.4	989.2	100.0	224	365
SO4--	0.31	0.04	11.49	303.8	93.2	3	118
SO4-- corr	0.23	0.01	11.24	222.5	93.2	3	118
cond	13.25	2.50	171.60	13105.3	93.5	6	124
pH	5.62	4.55	6.97	2347.7	93.5	0	124

FI0004R Ähtari

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.07	0.02	1.09	38.2	100.0	0	46
Cl-	0.21	0.03	2.87	106.7	100.0	0	46
K+	0.08	0.01	0.59	40.4	100.0	0	46
Mg++	0.024	0.006	0.281	12.4	100.0	0	46
NH4+	0.16	0.01	1.01	81.7	100.0	0	46
NO3-	0.26	0.08	1.54	132.8	100.0	0	46
Na+	0.12	0.02	1.79	62.6	100.0	0	46
Precip	-	0.0	51.8	511.9	100.0	7	53
SO4--	0.26	0.07	1.34	132.5	100.0	0	46
SO4-- corr	0.25	0.06	1.32	127.0	100.0	0	46
cond	12.36	5.00	49.00	6325.2	100.0	0	46
pH	4.72	4.11	5.32	9850.0	100.0	0	46

FI0009R Utö

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.16	0.04	2.84	50.7	99.8	0	35
Cl-	1.79	0.30	12.10	565.1	99.8	0	35
K+	0.09	0.03	1.02	27.4	99.8	0	35
Mg++	0.143	0.022	1.061	45.1	99.8	0	35
NH4+	0.35	0.05	1.87	110.2	99.8	0	35
NO3-	0.53	0.14	1.92	166.2	99.8	0	35
Na+	1.12	0.18	8.34	354.8	99.8	0	35
Precip	-	0.0	38.7	315.9	100.0	14	53
Precip off	-	0.00	23.10	513.0	100.0	218	365
SO4--	0.46	0.11	1.73	144.6	99.8	0	35
SO4-- corr	0.36	0.10	1.60	115.0	99.8	0	35
cond	24.27	8.00	76.00	7666.6	99.8	0	35
pH	4.59	4.12	7.04	8025.8	99.8	0	35

FI0017R Virolahti II

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.14	0.03	1.22	65.3	97.0	0	39
Cl-	0.56	0.08	6.61	267.4	97.0	0	39
K+	0.10	0.02	0.79	48.7	97.0	0	39
Mg++	0.053	0.009	0.490	25.3	97.0	0	39
NH4+	0.36	0.04	2.22	170.3	97.0	0	39
NO3-	0.42	0.14	3.42	200.2	97.0	0	39
Na+	0.33	0.04	3.90	157.2	97.0	0	39
Precip	-	0.0	75.8	474.3	100.0	10	53
SO4--	0.51	0.12	2.54	242.3	97.0	0	39
SO4-- corr	0.48	0.10	2.38	228.5	97.0	0	39
cond	20.23	7.00	121.00	9596.5	97.0	0	39
pH	4.58	3.75	6.25	12599.9	97.0	0	39

FI0022R Oulanka

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.05	0.00	0.43	23.5	100.0	1	49
Cl-	0.17	0.03	1.08	76.8	100.0	0	49
K+	0.05	0.01	1.33	24.7	100.0	0	49
Mg++	0.017	0.003	0.141	7.7	100.0	0	49
NH4+	0.11	0.01	0.78	49.3	100.0	0	49
NO3-	0.17	0.05	0.88	76.0	100.0	0	49
Na+	0.10	0.01	0.65	47.6	100.0	0	49
Precip	-	0.0	43.4	461.7	100.0	3	53
SO4--	0.22	0.06	0.83	101.0	100.0	0	49
SO4-- corr	0.21	0.03	0.82	96.9	100.0	0	49
cond	10.13	5.00	30.00	4679.1	100.0	0	49
pH	4.78	4.27	5.56	7750.9	100.0	0	49

FR0008R Donon

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.18	0.01	1.88	287.8	99.1	8	184
Cl-	0.31	0.03	6.07	490.4	99.1	10	184
K+	0.02	0.01	0.25	34.5	99.1	94	184
Mg++	0.023	0.010	0.430	36.2	99.1	99	184
NH4+	0.36	0.01	3.57	569.4	99.1	2	184
NO3-	0.31	0.05	3.19	488.9	99.1	0	184
Na+	0.19	0.01	3.63	296.3	99.1	23	184
Precip	-	0.0	50.2	1587.2	100.0	153	365
SO4--	0.31	0.04	3.40	491.9	99.1	0	184
SO4-- corr	0.29	0.04	3.33	466.3	99.1	0	184
cond	10.84	2.60	107.90	17207.3	99.1	0	185
pH	4.98	3.82	7.04	16617.8	99.1	0	185

FR0009R Revin

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.24	0.01	2.99	291.5	98.7	5	162
Cl-	0.75	0.03	15.55	924.0	98.7	2	162
K+	0.04	0.01	1.64	49.6	98.7	55	162
Mg++	0.052	0.010	0.990	64.2	98.7	41	162
NH4+	0.56	0.01	6.43	693.1	98.7	1	162
NO3-	0.37	0.08	3.99	459.4	98.7	0	162
Na+	0.46	0.01	8.29	562.2	98.7	7	162
Precip	-	0.0	34.0	1228.8	100.0	167	365
SO4--	0.41	0.08	3.56	497.6	98.7	0	162
SO4-- corr	0.37	0.07	3.17	451.2	98.7	0	162
cond	13.65	3.80	86.90	16769.8	98.7	0	163
pH	5.12	4.01	6.89	9372.1	98.7	0	163

FR0010R Morvan

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.20	0.01	3.00	212.4	87.9	3	142
Cl-	0.53	0.03	5.08	558.8	87.9	1	142
K+	0.08	0.01	0.97	85.6	87.9	31	142
Mg++	0.035	0.010	0.350	37.4	87.9	64	142
NH4+	0.41	0.01	3.05	434.0	87.9	2	142
NO3-	0.30	0.04	2.59	321.7	87.9	0	142
Na+	0.34	0.01	3.77	365.8	87.9	5	142
Precip	-	0.0	35.6	1062.5	100.0	187	365
SO4--	0.31	0.05	1.75	329.9	87.9	0	142
SO4-- corr	0.28	0.04	1.67	300.0	87.9	0	142
cond	11.01	2.70	60.90	11699.4	88.6	0	145
pH	5.17	4.14	6.71	7131.3	88.6	0	145

FR0012R Iraty

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.47	0.01	17.79	493.3	95.5	2	133
Cl-	0.55	0.03	5.57	584.5	95.5	2	133
K+	0.03	0.01	0.26	31.6	95.5	58	133
Mg++	0.052	0.010	0.460	55.3	95.5	35	133
NH4+	0.32	0.01	3.43	334.7	95.5	10	133
NO3-	0.21	0.01	2.40	219.7	95.5	1	133
Na+	0.35	0.01	3.08	373.1	95.5	5	133
Precip	-	0.0	63.4	1059.2	100.0	197	365
SO4--	0.36	0.01	2.81	382.8	95.5	1	133
SO4-- corr	0.33	0.00	2.77	352.2	95.5	1	133
cond	10.75	1.80	113.70	11384.7	95.6	0	137
pH	5.26	4.12	7.52	5862.0	95.6	0	137

FR0013R Peyrusse Vieille

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.50	0.01	20.80	350.0	95.6	1	104
Cl-	1.23	0.07	9.04	858.6	95.6	0	104
K+	0.05	0.01	0.47	32.6	95.6	30	104
Mg++	0.098	0.010	0.680	68.9	95.6	20	104
NH4+	0.39	0.01	2.46	273.4	95.6	3	104
NO3-	0.27	0.01	1.91	185.5	95.6	1	104
Na+	0.72	0.01	4.98	503.9	95.6	1	104
Precip	-	0.0	43.8	701.0	100.0	224	365
SO4--	0.41	0.04	3.54	288.1	95.6	0	104
SO4-- corr	0.35	0.02	3.43	246.8	95.6	0	104
cond	14.30	2.50	101.30	10022.0	95.7	0	106
pH	5.25	4.05	7.54	3986.8	95.7	0	106

FR0014R Montandon

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.30	0.01	6.85	428.4	98.5	9	156
Cl-	0.23	0.03	3.59	328.1	98.5	12	156
K+	0.05	0.01	1.37	65.5	98.5	89	156
Mg++	0.025	0.010	0.320	36.4	98.5	89	156
NH4+	0.37	0.03	4.09	530.3	98.5	0	156
NO3-	0.30	0.04	3.27	430.6	98.5	0	156
Na+	0.13	0.01	2.29	188.2	98.5	23	156
Precip	-	0.0	93.6	1428.6	100.0	182	365
SO4--	0.29	0.04	1.88	418.3	98.5	0	156
SO4-- corr	0.28	0.04	1.85	401.0	98.5	0	156
cond	10.07	2.40	62.50	14385.9	98.6	0	157
pH	5.07	4.14	7.11	12150.5	98.6	0	157

FR0015R La Tardière

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.22	0.01	2.00	216.0	97.7	1	123
Cl-	3.66	0.03	69.91	3644.4	97.7	3	123
K+	0.08	0.01	1.42	81.8	97.7	29	123
Mg++	0.251	0.010	4.770	249.8	97.7	14	123
NH4+	0.37	0.01	4.32	367.4	97.7	2	123
NO3-	0.19	0.01	2.13	193.0	97.7	2	123
Na+	2.11	0.01	39.02	2097.5	97.7	2	123
Precip	-	0.0	41.8	995.8	100.0	207	365
SO4--	0.46	0.09	3.46	455.3	97.7	0	123
SO4-- corr	0.28	-0.02	1.99	281.8	97.7	0	123
cond	21.47	3.20	261.00	21376.7	98.4	0	127
pH	5.32	4.45	7.59	4718.6	98.4	0	127

FR0016R Le Casset

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.62	0.02	20.58	481.9	94.1	0	101
Cl-	0.18	0.03	2.82	137.2	94.1	16	101
K+	0.06	0.01	0.81	44.9	94.1	39	101
Mg++	0.035	0.010	0.820	26.9	94.1	52	101
NH4+	0.19	0.01	2.08	150.4	94.1	12	101
NO3-	0.19	0.01	1.91	145.3	94.1	1	101
Na+	0.10	0.01	1.73	77.4	94.1	25	101
Precip	-	0.0	47.5	775.0	100.0	251	365
SO4--	0.23	0.04	2.83	175.1	94.1	0	101
SO4-- corr	0.22	0.03	2.74	167.8	94.1	0	101
cond	7.76	1.90	109.80	6012.4	94.1	0	101
pH	5.43	4.60	7.63	2875.7	94.1	0	101

FR0017R Montfranc

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.29	0.01	3.71	360.3	89.1	3	136
Cl-	0.55	0.03	6.34	665.8	89.1	7	136
K+	0.07	0.01	2.34	79.1	89.1	66	136
Mg++	0.050	0.010	0.420	60.8	89.1	58	136
NH4+	0.36	0.01	7.65	445.1	89.1	9	136
NO3-	0.20	0.01	3.22	241.7	89.1	3	136
Na+	0.33	0.01	3.76	406.7	89.1	6	136
Precip	-	0.0	45.0	1221.8	100.0	184	365
SO4--	0.29	0.03	2.45	350.1	89.1	0	136
SO4-- corr	0.26	0.03	2.34	315.3	89.1	0	136
cond	10.14	1.90	80.30	12386.4	89.1	0	137
pH	5.25	3.97	7.34	6835.1	89.1	0	137

GB0002R Eskdalemuir

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.14	0.05	0.48	208.5	100.0	0	26
Cl-	2.72	0.40	6.10	4104.8	100.0	0	26
K+	0.11	0.02	0.37	163.1	77.4	0	20
Mg++	0.176	0.034	0.400	266.4	100.0	0	26
NH4+	0.38	0.12	11.46	570.4	100.0	0	26
NO3-	0.20	0.05	0.96	308.8	100.0	0	26
Na+	1.68	0.13	3.65	2532.2	100.0	0	26
Precip	-	5.8	184.0	1509.5	100.0	1	27
SO4--	0.34	0.13	2.02	505.9	100.0	0	26
SO4-- corr	0.20	0.05	1.89	298.9	100.0	0	26
cond	14.60	5.00	38.00	22037.1	77.4	0	20
pH	5.02	4.41	5.92	14471.8	77.4	0	20

GB0002R Eskdalemuir

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.15	0.01	2.04	253.6	100.0	6	220
Cl-	2.40	0.10	24.00	4053.3	100.0	0	220
K+	0.13	0.01	1.12	221.1	94.4	3	206
Mg++	0.158	0.005	1.618	266.3	100.0	3	220
NH4+	0.26	0.01	6.78	444.6	94.4	8	206
NO3-	0.19	0.00	4.75	314.8	100.0	0	220
Na+	1.50	0.07	15.22	2530.0	100.0	0	220
Precip	-	0.0	42.7	1686.2	100.0	145	365
SO4--	0.32	0.03	4.61	532.4	100.0	0	220
SO4-- corr	0.20	-0.16	3.90	331.5	100.0	0	220
cond	14.56	3.00	154.00	24549.9	93.9	0	191
pH	5.02	3.89	6.58	16127.0	94.4	0	206

GB0006R Lough Navar

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.25	0.01	2.50	347.1	96.6	1	23
Cl-	4.28	0.70	15.20	5850.3	96.6	0	23
K+	0.13	0.01	0.42	175.1	96.4	0	22
Mg++	0.275	0.005	0.755	375.7	96.6	1	23
NH4+	0.17	0.01	0.98	226.7	96.4	1	22
NO3-	0.10	0.02	0.69	129.6	96.6	0	23
Na+	2.63	0.01	9.41	3604.4	96.6	1	23
Precip	-	0.0	132.8	1367.8	97.7	2	26
SO4--	0.32	0.16	0.78	431.2	96.6	0	23
SO4-- corr	0.10	-0.01	0.57	135.7	96.6	0	23
cond	20.18	7.00	64.00	27601.5	96.4	0	22
pH	5.24	4.59	6.75	7923.9	96.4	0	22

GB0013R Yarner Wood

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.26	0.01	0.91	276.4	100.0	1	25
Cl-	5.46	0.60	16.50	5772.6	100.0	0	25
K+	0.16	0.04	0.35	171.5	92.2	0	22
Mg++	0.369	0.005	1.096	390.7	100.0	1	25
NH4+	0.38	0.02	1.12	399.2	92.2	1	22
NO3-	0.29	0.04	0.90	304.2	100.0	0	25
Na+	3.33	0.01	10.28	3522.8	100.0	1	25
Precip	-	0.0	183.7	1057.4	100.0	1	26
SO4--	0.59	0.11	1.95	620.8	100.0	0	25
SO4-- corr	0.31	0.02	1.54	330.0	100.0	0	25
cond	30.49	7.00	71.00	32238.9	90.7	0	19
pH	4.84	4.24	5.31	15301.9	92.2	0	22

GB0014R High Muffles

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.28	0.07	1.22	233.0	100.0	0	23
Cl-	2.42	0.30	8.40	2040.0	100.0	0	23
K+	0.13	0.05	0.32	111.0	96.1	0	22
Mg++	0.187	0.030	0.580	157.3	100.0	0	23
NH4+	0.52	0.07	1.65	437.6	96.1	0	22
NO3-	0.39	0.07	1.04	331.6	100.0	0	23
Na+	1.50	0.19	5.18	1260.8	100.0	0	23
Precip	-	0.0	89.6	841.7	97.2	2	25
SO4--	0.58	0.18	1.30	485.6	100.0	0	23
SO4-- corr	0.45	0.16	1.19	380.4	100.0	0	23
cond	21.46	7.00	46.00	18062.0	96.1	0	22
pH	4.77	4.25	6.48	14437.5	96.1	0	22

GB0015R Strath Vaich Dam

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.16	0.01	0.75	208.6	99.9	1	25
Cl-	4.34	0.40	12.40	5672.4	99.9	0	25
K+	0.16	0.01	0.85	212.9	93.7	2	22
Mg++	0.255	0.020	0.824	333.0	99.9	0	25
NH4+	0.12	0.01	1.70	154.9	99.9	0	25
NO3-	0.12	0.04	1.17	156.5	99.9	0	25
Na+	3.56	0.25	36.50	4650.0	99.9	0	25
Precip	-	1.4	260.0	1305.5	98.6	0	26
SO4--	0.30	0.12	1.15	397.0	99.9	0	25
SO4-- corr	0.09	-0.03	1.02	110.4	99.9	0	25
cond	20.51	5.00	50.00	26775.9	99.9	0	25
pH	4.99	4.55	5.60	13265.7	96.3	0	23

GB0048R Auchencorth Moss

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.11	0.01	0.92	43.3	95.9	2	105
Cl-	1.67	0.10	14.20	676.9	95.9	0	105
K+	0.08	0.01	0.78	34.0	94.8	5	100
Mg++	0.108	0.005	0.831	43.7	95.9	6	105
NH4+	0.30	0.01	2.80	121.2	94.8	0	100
NO3-	0.19	0.02	2.08	75.6	95.9	0	105
Na+	1.04	0.01	8.52	420.0	95.9	1	105
Precip	-	0.0	18.7	404.5	55.9	85	204
SO4--	0.28	0.03	2.69	114.7	95.9	0	105
SO4-- corr	0.20	-0.00	2.65	79.8	95.9	0	105
cond	13.02	3.00	51.00	5265.7	93.9	0	90
pH	4.88	3.96	6.29	5355.4	94.8	0	100

HR0002R Puntijarka

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	1.98	0.55	13.99	2333.7	97.6	0	98
Cl-	0.37	0.04	2.23	433.7	96.6	0	94
K+	0.42	0.02	9.24	501.2	97.6	0	98
Mg++	0.415	0.034	1.886	490.6	97.8	0	99
NH4+	0.52	0.00	3.41	615.7	94.9	0	94
NO3-	0.32	0.00	2.94	373.4	97.6	0	98
Na+	0.23	0.00	1.26	276.9	96.5	0	93
Precip off	-	0.10	47.60	1181.5	36.2	0	132
SO4--	0.48	0.06	2.98	567.7	97.6	0	98
SO4-- corr	0.46	0.04	2.83	541.8	97.6	0	98
cond	15.10	3.00	201.00	17844.6	98.5	0	115
pH	5.34	4.06	8.22	5438.7	98.5	0	115

HR0004R Zavizan

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	2.12	0.15	19.15	3313.5	99.1	0	106
Cl-	0.80	0.10	6.70	1240.0	98.6	0	103
K+	0.16	0.02	1.83	248.3	99.1	0	106
Mg++	0.536	0.000	3.569	836.3	99.1	0	106
NH4+	0.43	0.00	1.66	677.6	98.5	0	101
NO3-	0.57	0.05	6.30	883.1	99.1	0	106
Na+	0.45	0.00	2.86	695.1	96.9	0	102
Precip off	-	0.10	109.70	1559.3	35.6	0	130
SO4--	0.56	0.06	5.71	881.2	99.1	0	106
SO4-- corr	0.53	0.04	5.67	818.0	99.1	0	106
cond	15.21	4.00	93.00	23713.3	99.2	0	108
pH	5.18	4.25	7.21	10387.1	99.2	0	108

HU0002R K-puszta

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.46	0.11	2.42	133.6	99.6	0	61
Cl-	0.75	0.05	3.71	219.7	99.6	2	61
K+	0.17	0.06	0.63	50.8	99.6	0	61
Mg++	0.104	0.025	0.610	30.4	99.6	8	61
NH4+	0.26	0.00	1.85	76.1	99.4	15	60
NO3-	0.52	0.01	1.96	151.7	99.6	4	61
Na+	1.41	0.85	5.49	411.6	99.4	0	60
Precip	-	0.0	24.3	291.6	100.0	301	365
Precip off	-	0.50	26.50	445.5	100.0	301	365
SO4--	0.67	0.01	3.61	194.0	99.6	1	61
SO4-- corr	0.60	-0.01	3.36	174.5	99.6	1	61
cond	16.34	7.20	64.30	4763.4	99.6	0	61
pH	5.58	4.58	6.71	765.8	99.6	0	61

IE0001R Valentia Observatory

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.30	0.03	7.61	537.4	97.6	17	189
Cl-	11.71	0.26	346.66	20617.9	97.5	0	187
K+	0.40	0.03	8.23	695.5	97.5	11	187
Mg++	0.853	0.025	27.682	1502.2	97.6	16	190
NH4+	0.10	0.02	4.79	176.6	97.6	66	190
NO3-	0.08	0.01	2.59	141.4	97.6	18	189
Na+	6.43	0.21	188.28	11320.8	97.6	0	190
Precip	-	0.0	47.4	1760.7	100.0	126	365
Precip off	-	0.00	49.00	1756.0	100.0	118	365
SO4--	0.67	0.05	15.46	1172.6	97.6	0	190
SO4-- corr	0.13	-0.30	3.64	226.7	97.6	0	190
cond	47.98	3.60	1242.00	84478.6	97.6	0	190
pH	5.13	3.74	6.43	12983.7	97.6	0	190

IE0005R Oak Park

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.21	0.03	9.81	174.1	91.1	4	147
Cl-	2.41	0.07	40.54	1955.6	91.1	0	147
K+	0.07	0.03	0.44	52.8	91.1	53	147
Mg++	0.176	0.025	1.695	142.7	91.1	36	147
NH4+	0.24	0.00	7.87	198.7	91.1	2	147
NO3-	0.13	0.01	5.32	102.4	91.1	10	147
Na+	1.42	0.03	101.38	1151.0	91.1	2	147
Precip	-	0.0	23.4	812.0	99.7	178	364
SO4--	0.29	0.01	11.40	232.0	91.1	3	147
SO4-- corr	0.18	-0.06	11.29	143.7	91.1	3	147
cond	15.05	2.20	500.00	12224.0	91.1	0	147
pH	5.46	3.67	8.10	2834.0	91.1	0	147

IE0007R Glen Veagh

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.19	0.03	1.53	175.0	96.6	22	159
Cl-	6.59	0.19	59.62	6021.6	96.6	0	159
K+	0.15	0.03	1.35	139.2	96.6	33	159
Mg++	0.470	0.025	4.803	429.6	97.5	22	160
NH4+	0.10	0.02	2.09	95.2	96.6	70	159
NO3-	0.08	0.01	1.60	76.1	96.6	28	159
Na+	3.69	0.12	34.24	3373.5	96.6	0	159
Precip	-	0.0	28.6	913.7	83.8	116	306
SO4--	0.41	0.02	3.64	371.9	96.6	0	159
SO4-- corr	0.10	-0.73	1.18	91.8	96.6	0	159
cond	29.94	3.90	286.00	27358.2	96.6	0	159
pH	5.17	3.78	6.82	6128.7	96.6	0	159

IE0009R Johnstown Castle

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.21	0.03	2.57	160.3	88.2	8	106
Cl-	6.34	0.30	98.76	4795.9	88.2	0	106
K+	0.16	0.03	2.08	122.3	88.2	6	106
Mg++	0.433	0.025	6.850	327.2	88.2	11	106
NH4+	0.32	0.02	9.03	238.1	88.2	18	106
NO3-	0.22	0.01	3.72	168.6	88.2	17	106
Na+	3.71	0.23	59.30	2806.5	88.2	0	106
Precip	-	0.0	22.0	756.0	78.1	148	285
SO4--	0.56	0.09	4.91	426.7	88.2	0	106
SO4-- corr	0.28	-0.06	3.07	208.8	88.2	0	106
cond	33.04	6.00	354.00	24981.5	88.2	0	106
pH	5.06	3.87	7.13	6527.2	88.2	0	106

IS0002R Irafoss

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.21	0.05	8.10	470.5	100.0	21	177
Cl-	6.92	0.10	392.30	15574.4	100.0	0	177
K+	0.24	0.05	9.00	537.9	100.0	42	177
Mg++	0.458	0.050	25.200	1030.9	100.0	26	177
NO3-	0.05	0.01	2.32	117.5	100.0	57	177
Na+	3.92	0.10	211.90	8825.7	100.0	0	177
Precip	-	0.0	89.7	2250.4	100.0	188	365
SO4--	0.43	0.10	18.50	964.1	100.0	0	177
SO4-- corr	0.10	-0.67	3.72	234.2	100.0	0	177
cond	31.03	3.00	1360.00	69832.8	99.7	0	165
pH	5.41	4.50	6.80	8737.7	99.9	0	173

IS0090R Reykjavik

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.68	0.06	5.68	604.5	99.9	0	47
Cl-	18.14	0.94	140.00	16015.1	99.9	0	47
K+	0.43	0.01	2.90	379.1	99.9	3	47
Mg++	1.274	0.090	9.650	1125.1	99.9	0	47
NH4+	0.38	0.02	6.22	331.9	99.9	0	47
NO3-	0.09	0.01	0.49	82.3	99.9	4	47
Na+	10.24	0.53	80.68	9041.6	99.9	0	47
Precip	-	0.0	84.1	883.1	100.0	10	61
Precip off	-	0.00	70.10	877.7	100.0	4	61
SO4--	1.05	0.09	6.73	925.6	99.9	0	47
SO4-- corr	0.20	-0.22	1.65	175.6	99.9	0	47
cond	70.06	8.70	460.50	61867.9	94.3	0	43
pH	5.47	4.74	6.89	2994.9	99.8	0	44

IS0091R Storhofdi

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	753.55	0.14	34000.00	1875481.1	100.0	0	55
Cl-	344.83	6.05	14100.00	858243.8	100.0	0	55
K+	6.73	0.13	284.00	16757.1	100.0	0	55
Mg++	23.504	0.430	1000.000	58498.9	100.0	0	55
NH4+	1.16	0.01	21.51	2887.5	100.0	18	55
NO3-	0.71	0.01	104.29	1772.5	100.0	3	55
Na+	175.30	0.01	7800.00	436301.6	100.0	1	55
Precip	-	0.0	95.7	2488.9	100.0	4	61
Precip off	-	0.00	91.10	1723.9	100.0	3	61
SO4--	16.27	0.37	597.00	40507.2	100.0	0	55
SO4-- corr	1.03	-55.86	91.34	2555.2	100.0	0	55
cond	774.31	27.90	5000.00	1927164.0	100.0	0	54
pH	5.56	4.81	7.52	6910.3	100.0	0	54

IT0001R Montelibretti

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	1.21	0.13	8.83	493.3	100.0	0	36
Cl-	2.32	0.33	12.05	948.0	100.0	0	36
K+	0.38	0.04	5.74	156.6	100.0	0	36
Mg++	0.205	0.060	0.870	83.6	100.0	0	36
NH4+	0.58	0.01	6.17	237.5	100.0	0	36
NO3-	0.47	0.10	2.29	191.2	100.0	0	36
Na+	1.24	0.14	6.45	506.3	100.0	0	36
Precip	-	0.0	44.1	408.9	100.0	329	365
SO4--	0.81	0.32	3.38	331.6	100.0	0	36
SO4-- corr	0.69	0.22	2.92	280.3	100.0	0	36
cond	34.11	10.28	89.30	13946.2	100.0	0	36
pH	5.20	4.62	6.80	2557.2	100.0	0	36

IT0004R Ispra

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.41	0.03	15.64	473.2	100.0	0	84
Cl-	0.31	0.05	6.14	356.6	100.0	0	84
K+	0.05	0.00	2.73	57.6	100.0	0	84
Mg++	0.045	0.007	1.465	51.9	100.0	0	84
NH4+	0.83	0.12	19.68	973.1	100.0	0	84
NO3-	0.58	0.07	24.96	672.0	100.0	0	84
Na+	0.16	0.01	3.16	191.6	100.0	0	84
Precip	-	0.0	122.6	1166.3	99.7	284	364
SO4--	0.50	0.06	11.56	579.8	100.0	0	84
SO4-- corr	0.48	0.06	11.44	561.5	100.0	0	84
cond	16.77	5.72	75.30	19555.3	98.3	0	61
pH	5.04	4.13	7.35	10537.0	99.1	0	67

LT0015R Preila

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.18	0.05	1.98	81.0	99.5	0	87
Cl-	2.34	0.07	20.48	1050.2	99.5	0	87
K+	0.14	0.04	1.34	63.7	99.5	0	87
NH4+	0.64	0.20	7.86	286.8	99.5	0	87
NO3-	0.50	0.07	4.08	224.9	99.5	0	87
Na+	1.34	0.05	12.30	601.2	99.5	0	87
Precip	-	0.0	35.0	448.8	100.0	270	365
SO4--	0.44	0.13	4.63	196.7	99.5	0	87
SO4-- corr	0.33	-0.01	4.52	146.4	99.5	0	87
cond	23.77	6.20	113.00	10667.9	99.5	0	87
pH	4.85	3.95	6.80	6358.7	99.5	0	87

LV0010R Rucava

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.23	0.04	1.74	144.4	95.8	1	97
Cl-	0.90	0.06	6.38	567.0	94.3	0	90
K+	0.07	0.01	0.43	44.1	95.8	21	97
Mg++	0.089	0.020	0.420	56.1	95.8	3	97
NH4+	0.41	0.02	3.33	260.3	97.0	3	105
NO3-	0.44	0.05	3.15	277.6	94.3	0	90
Na+	0.52	0.04	3.65	329.5	95.8	0	97
Precip	-	0.0	36.7	629.9	100.0	242	365
SO4--	0.38	0.09	2.02	242.1	94.3	0	90
SO4-- corr	0.34	0.04	1.89	214.3	94.3	0	90
cond	17.13	5.40	73.20	10792.2	97.8	0	109
pH	4.82	3.98	6.65	9469.2	97.8	0	109

LV0016R Zoseni

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.44	0.04	4.73	197.8	80.7	4	73
Cl-	0.38	0.03	2.98	172.9	74.7	1	61
K+	0.12	0.02	0.75	53.5	79.9	9	73
Mg++	0.114	0.010	0.490	51.9	81.5	5	74
NH4+	0.55	0.06	4.80	250.6	93.7	0	108
NO3-	0.35	0.03	2.19	157.6	74.7	0	61
Na+	0.31	0.01	2.02	139.1	81.5	1	74
Precip	-	0.0	17.8	453.7	99.2	200	362
SO4--	0.32	0.02	2.01	146.1	74.7	0	61
SO4-- corr	0.30	0.02	1.91	134.6	74.7	0	61
cond	16.33	2.20	126.70	7408.8	95.0	0	112
pH	5.28	4.46	7.96	2363.1	95.0	0	112

NO0001R Birkenes

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.10	0.01	5.52	180.9	98.6	9	174
Cl-	2.13	0.01	33.72	3913.4	98.6	1	174
K+	0.08	0.01	0.83	140.1	98.6	14	174
Mg++	0.153	0.005	1.980	281.2	98.6	16	174
NH4+	0.34	0.01	4.08	624.1	98.6	2	174
NO3-	0.42	0.01	5.75	775.5	98.6	2	174
Na+	1.19	0.01	17.37	2194.1	98.6	1	174
Precip	-	0.0	54.1	1838.3	100.0	155	365
SO4--	0.42	0.01	3.45	764.9	98.6	2	174
SO4-- corr	0.32	-0.06	2.94	582.5	98.6	2	174
cond	21.66	2.20	178.70	39816.7	97.6	0	146
pH	4.70	3.65	5.96	36379.4	97.6	0	146

NO0015R Tustervatn

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.12	0.01	1.23	147.6	97.4	12	170
Cl-	2.74	0.04	30.83	3323.4	98.0	0	173
K+	0.11	0.01	0.64	128.3	95.6	2	160
Mg++	0.202	0.005	2.019	245.3	98.0	19	173
NH4+	0.13	0.01	1.65	153.1	96.2	1	162
NO3-	0.10	0.01	1.46	118.9	97.9	7	172
Na+	1.60	0.01	16.20	1941.9	98.0	0	173
Precip	-	0.0	37.4	1211.8	100.0	139	365
SO4--	0.21	0.01	1.84	257.2	98.0	5	173
SO4-- corr	0.08	-0.30	1.78	96.9	98.0	5	173
cond	15.51	2.60	114.40	18790.4	96.8	0	152
pH	5.30	4.54	6.38	6121.2	94.5	0	141

NO0039R Kårvatn

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.09	0.01	0.82	105.8	99.4	3	153
Cl-	1.68	0.03	16.23	2051.2	99.9	0	154
K+	0.08	0.01	0.65	98.5	98.9	2	151
Mg++	0.131	0.005	1.064	159.2	99.9	9	154
NH4+	0.14	0.02	1.52	167.4	98.4	0	150
NO3-	0.08	0.01	1.08	93.1	99.9	7	154
Na+	0.94	0.03	9.10	1150.7	99.9	0	154
Precip	-	0.0	87.7	1218.0	100.0	207	365
SO4--	0.16	0.01	1.58	191.4	99.9	10	154
SO4-- corr	0.08	-0.04	1.51	95.8	99.9	10	154
cond	10.57	2.50	89.60	12873.1	98.2	0	137
pH	5.29	4.26	7.03	6194.4	96.7	0	134

NO0055R Karasjok

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.12	0.01	0.76	40.7	97.8	6	108
Cl-	0.71	0.07	11.77	249.1	96.6	0	107
K+	0.28	0.05	3.53	97.9	96.2	0	106
Mg++	0.051	0.005	0.635	17.7	97.8	9	108
NH4+	0.21	0.03	1.80	73.8	97.4	0	107
NO3-	0.17	0.03	1.18	59.4	97.8	0	108
Na+	0.46	0.06	6.84	160.9	96.6	0	107
Precip	-	0.0	19.7	351.2	100.0	219	365
SO4--	0.26	0.01	2.15	89.7	97.8	2	108
SO4-- corr	0.22	-0.14	2.10	76.5	97.8	2	108
cond	9.12	3.90	50.10	3202.9	89.2	0	74
pH	5.14	3.99	6.61	2530.8	87.9	0	73

PL0002R Jarczew

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.21	0.00	4.00	113.1	98.5	0	123
Cl-	0.42	0.10	7.50	222.9	98.5	0	123
K+	0.09	0.02	1.25	46.8	98.5	0	123
Mg++	0.032	0.005	1.472	17.2	98.5	0	123
NH4+	0.56	0.09	6.94	301.1	98.5	0	123
NO3-	0.39	0.05	4.88	207.8	98.5	0	123
Na+	0.14	0.02	4.17	74.2	98.5	0	123
Precip	-	0.0	67.5	534.2	100.0	216	365
SO4--	0.58	0.07	5.48	308.7	98.5	0	123
SO4-- corr	0.56	0.06	5.40	300.9	98.5	0	123
cond	17.39	4.00	189.00	9291.9	98.5	0	123
pH	4.71	3.60	7.10	10294.7	98.5	0	123

PL0003R Sniezka

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.64	0.10	2.90	687.7	99.5	0	197
Cl-	0.83	0.10	2.90	891.6	99.5	0	197
K+	0.32	0.02	2.27	344.3	99.5	0	197
Mg++	0.174	0.013	0.776	186.2	99.5	0	197
NH4+	0.46	0.06	1.82	495.0	99.5	0	197
NO3-	0.93	0.16	3.52	991.5	99.5	0	197
Na+	0.67	0.05	2.41	722.0	99.5	0	197
Precip	-	0.0	82.5	1072.3	100.0	140	365
SO4--	0.97	0.27	3.76	1039.4	99.5	0	197
SO4-- corr	0.91	0.26	3.62	979.2	99.5	0	197
cond	30.52	10.00	101.00	32728.6	99.5	0	197
pH	4.47	3.97	5.12	36696.3	99.5	0	197

PL0004R Leba

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.22	0.00	3.10	125.7	97.6	0	132
Cl-	1.32	0.10	20.00	764.3	97.6	0	132
K+	0.07	0.02	0.61	37.6	97.6	0	132
Mg++	0.091	0.009	0.607	52.7	97.6	0	132
NH4+	0.48	0.08	5.43	278.0	97.6	0	132
NO3-	0.45	0.08	3.96	259.3	97.6	0	132
Na+	0.68	0.04	12.00	394.7	97.6	0	132
Precip	-	0.0	27.2	579.3	100.0	202	365
SO4--	0.46	0.06	3.49	266.4	97.6	0	132
SO4-- corr	0.40	0.04	3.48	231.9	97.6	0	132
cond	19.72	7.00	88.00	11425.1	97.6	0	132
pH	4.73	3.93	6.84	10837.3	97.6	0	132

PL0005R Diabla Gora

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.24	0.00	8.50	120.0	98.3	0	109
Cl-	0.65	0.05	14.60	328.9	99.5	6	129
K+	0.09	0.00	3.74	44.7	97.5	0	106
Mg++	0.055	0.002	2.080	27.6	98.3	0	109
NH4+	0.49	0.01	5.25	245.2	99.3	1	128
NO3-	0.42	0.05	4.77	213.6	99.5	4	129
Na+	0.23	0.00	8.69	114.9	98.3	3	109
Precip	-	0.0	28.0	504.9	100.0	234	365
Precip off	-	0.00	27.30	557.3	100.0	234	365
SO4--	0.61	0.10	8.00	308.0	99.5	0	129
SO4-- corr	0.65	0.09	7.68	362.2	99.6	0	129
cond	15.46	4.00	98.00	7807.0	91.9	0	81
pH	4.79	3.76	7.66	8292.0	100.0	0	131

PT0001R Braganca

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.53	0.05	4.20	440.5	81.9	4	39
Cl-	0.76	0.20	3.20	630.8	81.9	0	39
K+	0.12	0.04	1.01	95.9	81.9	29	39
Mg++	0.056	0.015	0.250	46.1	81.9	19	39
NH4+	0.44	0.01	3.35	366.1	81.9	4	39
NO3-	0.14	0.01	0.70	113.3	81.9	7	39
Na+	0.38	0.01	2.43	312.1	81.9	7	39
Precip off	-	0.00	70.80	830.5	100.0	250	365
SO4--	0.28	0.10	1.29	230.6	81.9	0	39
SO4-- corr	0.24	0.08	1.12	202.4	81.9	0	39
cond	12.60	3.00	58.00	10460.2	81.9	0	39
pH	5.78	5.32	6.78	1374.6	81.9	0	39

PT0003R Viana do Castelo

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.40	0.05	4.80	542.8	90.9	11	62
Cl-	6.88	0.60	35.30	9254.2	90.9	0	62
K+	0.13	0.04	1.17	174.5	90.9	26	62
Mg++	0.497	0.030	3.000	668.5	90.9	0	62
NH4+	0.06	0.01	1.38	85.3	90.9	34	62
NO3-	0.07	0.01	0.93	92.3	90.9	37	62
Na+	3.94	0.28	24.46	5294.1	90.9	0	62
Precip off	-	0.00	99.10	1344.3	100.0	236	365
SO4--	0.49	0.11	1.96	655.1	90.9	0	62
SO4-- corr	0.16	-0.28	1.53	219.0	90.9	0	62
cond	31.11	7.00	138.00	41818.6	90.9	0	62
pH	5.25	4.62	6.55	7577.9	90.9	0	62

PT0004R Monte Velho

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.52	0.05	5.20	466.6	96.6	2	43
Cl-	5.73	0.90	27.20	5178.2	96.6	0	43
K+	0.24	0.04	4.83	216.6	96.6	18	43
Mg++	0.437	0.050	2.290	395.2	96.6	0	43
NH4+	0.11	0.01	2.32	96.6	96.6	20	43
NO3-	0.10	0.01	1.59	92.6	96.6	25	43
Na+	3.51	0.28	20.58	3168.7	96.6	0	43
Precip off	-	0.00	75.60	903.3	100.0	311	365
SO4--	0.49	0.20	1.48	446.5	96.6	0	43
SO4-- corr	0.20	-0.18	0.96	185.0	96.6	0	43
cond	28.64	8.00	109.00	25869.4	96.6	0	43
pH	4.99	4.25	6.68	9267.6	96.6	0	43

RU0001R Janiskoski

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.38	0.06	2.51	132.0	100.0	0	72
Cl-	0.65	0.09	4.19	229.3	100.0	0	72
K+	0.29	0.05	1.74	100.9	100.0	0	72
Mg++	0.093	0.001	0.670	32.8	100.0	0	72
NH4+	0.08	0.01	0.48	28.0	100.0	0	72
NO3-	0.09	0.01	0.72	31.7	100.0	0	72
Na+	0.78	0.05	5.20	272.8	100.0	0	72
Precip	-	0.0	18.2	351.6	82.2	228	300
SO4--	0.33	0.01	2.07	115.3	100.0	0	72
SO4-- corr	0.28	0.00	1.94	98.0	100.0	0	72
cond	11.91	3.20	50.50	4188.6	100.0	0	72
pH	4.85	4.08	6.14	4939.6	99.3	0	71

RU0013R Pinega

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	1.00	0.13	10.25	422.7	100.0	0	134
Cl-	0.94	0.08	12.89	397.6	100.0	0	134
K+	0.61	0.07	11.65	257.0	100.0	0	134
Mg++	0.220	0.001	2.261	92.8	100.0	0	134
NH4+	0.28	0.01	6.14	116.1	100.0	0	134
NO3-	0.14	0.01	1.03	57.5	100.0	0	134
Na+	0.89	0.14	18.30	376.5	100.0	0	134
Precip	-	0.0	16.0	422.2	100.0	231	365
SO4--	0.44	0.01	3.00	185.2	100.0	0	134
SO4-- corr	0.37	-0.01	2.75	155.2	100.0	0	134
cond	16.77	4.00	121.10	7079.1	99.8	0	132
pH	5.42	4.09	7.54	1615.8	97.1	0	112

RU0016R Shepeljovo

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.69	0.17	8.26	442.2	100.0	0	139
Cl-	0.31	0.04	3.96	198.7	100.0	0	139
K+	0.34	0.09	4.10	215.3	100.0	0	139
Mg++	0.131	0.001	1.341	83.8	100.0	0	139
NH4+	0.35	0.01	3.00	221.3	100.0	0	139
NO3-	0.30	0.01	2.38	191.5	100.0	0	139
Na+	0.34	0.04	4.12	219.4	100.0	0	139
Precip	-	0.0	46.8	640.0	100.0	226	365
SO4--	0.47	0.07	3.55	301.0	100.0	0	139
SO4-- corr	0.44	0.02	3.21	283.6	100.0	0	139
cond	13.32	4.70	109.00	8525.6	100.0	0	139
pH	4.70	3.34	7.77	12679.2	98.4	0	116

RU0020R Lesnoy

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.48	0.06	4.59	323.5	100.0	0	138
Cl-	0.52	0.05	12.05	351.4	100.0	0	138
K+	0.58	0.08	27.49	396.0	100.0	0	138
Mg++	0.068	0.001	1.302	46.3	100.0	0	138
NH4+	0.29	0.01	3.67	199.2	100.0	0	138
NO3-	0.26	0.01	2.82	177.2	100.0	0	138
Na+	0.44	0.09	11.90	296.8	100.0	0	138
Precip	-	0.0	52.6	678.5	100.0	227	365
SO4--	0.37	0.03	4.60	248.7	100.0	0	138
SO4-- corr	0.33	-0.06	4.29	226.7	100.0	0	138
cond	12.78	4.10	143.40	8668.3	100.0	0	138
pH	5.08	4.02	7.03	5674.9	98.9	0	120

SE0005R Bredkälen

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.08	0.01	0.44	22.2	97.2	10	50
Cl-	0.11	0.01	8.94	32.4	97.4	6	52
K+	0.05	0.02	1.92	14.2	95.1	36	49
Mg++	0.014	0.005	0.250	4.2	97.2	19	50
NH4+	0.11	0.01	0.98	31.5	97.2	5	50
NO3-	0.13	0.01	1.56	39.0	97.4	0	52
Na+	0.06	0.03	2.79	16.1	97.2	28	50
Precip	-	0.0	61.3	291.7	100.3	8	65
SO4--	0.15	0.02	0.77	44.9	97.4	0	52
SO4-- corr	0.15	0.01	0.75	43.2	97.4	0	52
cond	6.29	2.00	27.00	1834.9	95.7	0	40
pH	5.06	4.02	6.08	2545.0	97.6	0	56

SE0011R Vavihill

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.33	0.01	2.05	265.1	100.0	4	49
Cl-	1.34	0.13	7.52	1090.9	100.0	0	49
K+	0.07	0.02	0.75	53.0	100.0	28	49
Mg++	0.092	0.005	0.510	75.2	100.0	1	49
NH4+	0.61	0.16	2.99	500.5	100.0	0	49
NO3-	0.53	0.10	2.22	434.1	100.0	0	49
Na+	0.70	0.03	4.23	569.2	100.0	5	49
Precip	-	0.0	54.1	813.6	99.9	14	63
SO4--	0.45	0.22	2.07	369.1	100.0	0	49
SO4-- corr	0.39	0.09	2.04	319.9	100.0	0	49
cond	19.76	8.00	76.00	16076.0	100.0	0	49
pH	4.87	3.93	6.65	11055.8	100.0	0	49

SE0014R Råö

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.24	0.01	11.18	177.3	99.1	3	130
Cl-	4.55	0.10	47.45	3420.5	99.2	0	131
K+	0.32	0.02	6.25	238.9	99.1	60	130
Mg++	0.345	0.005	3.610	259.3	99.1	2	130
NH4+	0.53	0.01	10.98	394.9	99.0	1	127
NO3-	0.44	0.02	6.65	328.1	99.2	0	131
Na+	2.69	0.03	26.45	2022.4	99.1	6	130
Precip	-	0.0	24.9	751.7	100.0	213	365
SO4--	0.51	0.10	5.79	385.7	99.2	0	131
SO4-- corr	0.29	0.04	5.68	217.3	99.2	0	131
cond	32.21	5.00	192.00	24210.3	98.2	0	116
pH	4.76	3.94	7.56	13171.4	99.9	0	148

SI0008R Iskrba

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.19	0.01	3.13	235.8	99.0	8	106
Cl-	0.37	0.01	8.14	458.4	99.3	2	109
K+	0.04	0.00	0.79	46.3	99.0	30	106
Mg++	0.047	0.003	0.956	59.2	99.0	11	106
NH4+	0.29	0.02	2.12	362.0	99.0	0	106
NO3-	0.29	0.04	2.86	362.0	99.3	0	109
Na+	0.24	0.01	4.82	297.5	99.0	6	106
Precip	-	0.0	49.7	1252.2	100.0	239	365
SO4--	0.36	0.03	3.29	451.7	99.3	0	109
SO4-- corr	0.34	0.03	3.27	427.0	99.3	0	109
cond	11.53	2.00	97.00	14435.1	97.1	0	85
pH	4.87	3.77	6.81	16787.6	97.1	0	85

SK0002R Chopok

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.10	0.00	0.90	86.2	87.5	0	113
Cl-	0.14	0.01	1.60	122.6	91.9	0	135
K+	0.06	0.01	0.67	54.6	86.8	0	112
Mg++	0.018	0.000	0.171	16.5	87.5	0	113
NH4+	0.48	0.11	2.55	439.7	86.1	0	112
NO3-	0.32	0.04	2.22	286.0	92.6	0	136
Na+	0.08	0.01	0.67	73.5	87.5	0	113
Precip	-	0.0	56.0	908.0	100.0	161	365
SO4--	0.48	0.06	2.52	440.3	92.6	0	136
SO4-- corr	0.48	0.06	2.51	434.2	92.6	0	136
cond	12.86	4.12	53.13	11675.3	64.4	0	65
pH	4.75	4.00	5.68	16273.5	64.4	0	65

SK0004R Stará Lesná

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.21	0.01	1.54	130.8	88.1	0	79
Cl-	0.31	0.03	1.80	188.4	90.7	0	92
K+	0.07	0.00	0.49	42.5	87.1	0	78
Mg++	0.045	0.004	0.176	27.3	87.9	0	78
NH4+	0.42	0.00	2.21	253.9	87.9	2	78
NO3-	0.35	0.04	1.43	212.7	90.5	0	91
Na+	0.24	0.03	1.55	147.0	88.1	0	79
Precip	-	0.0	30.1	609.3	100.0	207	365
SO4--	0.52	0.07	2.25	319.0	91.2	0	93
SO4-- corr	0.50	0.07	2.21	306.8	91.2	0	93
cond	15.27	4.11	57.83	9300.8	72.7	0	45
pH	4.63	3.97	5.47	14240.7	72.7	0	45

SK0005R Liesek

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.23	0.02	1.67	150.8	94.7	0	35
Cl-	0.23	0.06	1.05	157.2	94.6	0	36
K+	0.08	0.01	0.76	54.7	94.7	2	35
Mg++	0.054	0.004	0.346	35.9	94.7	2	35
NH4+	0.45	0.07	2.28	298.6	94.1	0	34
NO3-	0.40	0.10	1.77	264.3	94.6	0	36
Na+	0.14	0.03	0.57	93.9	94.7	0	35
Precip	-	0.3	78.4	669.4	95.9	0	51
SO4--	0.58	0.19	2.62	385.7	94.6	0	36
SO4-- corr	0.56	0.17	2.58	377.3	94.6	0	36
cond	18.25	9.79	59.10	12218.2	86.2	0	27
pH	4.59	3.98	5.67	17241.5	86.2	0	27

SK0006R Starina

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.20	0.03	0.94	160.9	88.6	0	91
Cl-	0.17	0.02	1.29	130.1	89.0	0	94
K+	0.12	0.00	0.65	91.9	88.6	1	91
Mg++	0.051	0.005	0.222	39.8	89.9	1	92
NH4+	0.39	0.01	1.65	309.1	89.9	1	92
NO3-	0.40	0.01	2.37	317.9	90.8	0	96
Na+	0.14	0.03	0.80	113.9	87.5	0	89
Precip	-	0.0	38.5	787.6	100.0	212	365
SO4--	0.49	0.05	1.87	384.4	90.5	0	95
SO4-- corr	0.47	0.05	1.85	374.3	90.5	0	95
cond	17.34	5.75	57.13	13657.0	70.8	0	51
pH	4.52	4.02	5.28	23679.4	70.8	0	51

SK0007R Topolniky

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	0.25	0.02	1.16	120.2	99.0	0	33
Cl-	0.18	0.04	1.21	87.2	99.2	0	34
K+	0.07	0.01	0.55	33.6	92.4	0	30
Mg++	0.058	0.012	0.316	27.6	99.0	0	33
NH4+	0.53	0.12	1.82	252.2	97.0	0	31
NO3-	0.39	0.12	1.52	185.6	99.2	0	34
Na+	0.13	0.03	0.59	61.5	98.4	0	32
Precip	-	0.0	66.2	477.5	100.0	15	53
SO4--	0.47	0.17	1.50	222.6	99.0	0	33
SO4-- corr	0.45	0.15	1.48	216.6	99.0	0	33
cond	14.26	6.37	44.90	6808.9	92.2	0	24
pH	5.04	4.20	6.23	4337.6	90.3	0	22

TR0001R Cubuk II

January 2006 - December 2006

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	1.42	0.23	9.34	1802.6	17.3	0	49
Cl-	0.41	0.07	4.18	525.3	19.3	0	66
H+	5.16	0.00	115.88	6561.9	20.9	0	51
K+	0.17	0.06	1.14	221.5	17.2	0	48
Mg++	0.125	0.012	0.712	159.3	17.8	0	48
NH4+	0.41	0.01	1.96	517.5	14.7	0	50
NO3-	0.33	0.04	3.98	423.4	19.6	0	67
Na+	0.46	0.05	7.29	580.4	18.4	0	49
Precip	-	0.0	999.9	1272.0	100.0	297	365
SO4--	0.82	0.05	5.89	1043.3	19.6	0	67
cond	18.17	7.85	83.90	23107.6	20.9	0	51
pH	5.29	3.94	7.24	6563.6	20.9	0	51

Annex 3

Annual statistics on gases and aerosol data

AT0002R Illmitz

January 2006 - December 2006

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	0.94	0.56	0.80	1.79	0.15	0.29	0.84	2.02	4.53	98.6	0	360
K+	aerosol	0.22	0.22	0.15	2.48	0.01	0.03	0.15	0.63	1.31	98.9	0	361
Mg++	aerosol	0.040	0.040	0.027	2.475	0.003	0.006	0.027	0.121	0.296	98.9	12	361
NH3	air	1.63	0.82	1.41	1.82	0.06	0.46	1.53	3.05	6.20	98.6	0	360
NH4+	aerosol	1.14	1.14	0.77	2.45	0.04	0.18	0.76	3.67	7.12	98.9	0	361
NO2	air	3.01	2.41	2.41	1.90	0.54	0.89	2.27	7.34	17.77	97.3	0	355
NO3-	aerosol	0.50	0.81	0.25	2.89	0.03	0.06	0.20	1.98	5.38	98.9	0	361
Na+	aerosol	0.10	0.08	0.08	2.00	0.01	0.03	0.08	0.28	0.63	98.9	0	361
PM1 mass	pm1	14.65	10.77	11.59	2.02	1.63	3.22	12.29	34.19	81.28	99.2	0	362
PM10 mass	pm10	25.64	18.24	20.53	1.97	3.05	6.38	22.00	61.79	122.18	99.5	0	363
PM25 mass	pm25	20.84	16.73	15.91	2.11	2.12	4.33	16.26	54.32	114.95	97.8	0	357
SO2 (monitor)	air	1.37	2.38	0.63	3.27	0.01	0.12	0.56	5.69	35.08	94.9	0	8309
SO2 (filter)	air	1.26	1.82	0.72	2.79	0.06	0.14	0.71	4.69	18.65	98.9	0	361
SO4--	aerosol	1.19	1.04	0.83	2.43	0.00	0.15	0.85	3.21	7.05	98.9	0	361
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 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	1.30	0.85	1.09	1.89	0.00	0.43	1.10	2.99	6.59	89.9	0	328
PM10 mass	pm10	9.99	7.50	7.56	2.18	0.65	2.25	8.18	24.42	42.80	94.5	0	345
SO2	air	0.30	0.36	0.21	2.19	0.02	0.07	0.18	0.98	6.83	93.9	0	8226

AT0048R Zoebelboden

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	1.53	1.09	1.31	1.68	0.31	0.62	1.21	3.44	10.46	95.1	0	347
PM10 mass	pm10	9.97	7.85	7.36	2.25	0.76	1.83	7.56	24.99	39.76	98.9	0	361
SO2	air	0.43	0.63	0.24	3.18	-0.02	0.01	0.26	1.52	8.26	94.3	0	8257

BE0001R Offagne

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	3.69	3.47	2.44	2.66	0.00	0.31	2.75	11.29	20.74	27.2	0	2380

BE0032R Eupen

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	4.96	3.66	3.92	2.00	0.31	1.22	3.97	12.51	27.76	92.9	0	8135

BE0035R Vezin

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	5.35	4.23	3.90	2.36	0.00	0.92	4.27	14.03	27.15	91.9	0	8053

CH0001G Jungfraujoch

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	0.08	0.19	0.04	3.24	-0.01	0.00	0.04	0.26	4.35	68.2	0	5975
PM10 mass	pm10	3.26	6.09	1.62	2.97	0.50	0.50	1.60	10.91	62.30	95.3	123	348
SO2	air	0.07	0.11	0.05	2.20	0.01	0.01	0.04	0.18	1.16	100.0	25	365
SO4--	aerosol	0.11	0.13	0.06	3.02	0.01	0.01	0.06	0.39	0.86	100.0	40	365

CH0002R Payerne

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	1.27	1.58	0.74	2.74	0.09	0.15	0.64	4.79	10.55	100.0	0	365
NH3+NH4+	air+aerosol	4.61	2.86	3.86	1.84	0.65	1.21	4.03	10.84	18.14	98.9	0	361
NO2	air	4.27	3.01	3.46	1.89	0.74	1.28	3.29	10.49	20.19	99.2	0	362
PM1 mass	pm1	11.91	9.41	9.30	2.01	1.00	2.80	8.70	34.33	63.40	97.0	0	354
PM10 mass	pm10	23.12	20.07	17.87	2.00	3.50	5.75	16.88	67.11	149.85	99.2	0	362
PM25 mass	pm25	17.05	16.10	12.55	2.12	1.10	4.26	11.20	55.34	112.80	96.4	0	352
SO2	air	0.40	0.32	0.30	2.08	0.05	0.09	0.31	1.06	2.19	99.5	0	363
SO4--	aerosol	0.80	0.79	0.57	2.26	0.07	0.14	0.56	2.69	5.36	99.2	0	362

CH0003R Tänikon

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	4.73	3.49	3.85	1.85	0.91	1.46	3.56	12.49	22.86	99.5	0	363
PM10 mass	pm10	22.14	18.54	16.98	2.04	3.36	5.08	16.00	60.19	123.26	99.5	0	363

CH0004R Chaumont

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	2.03	1.36	1.71	1.77	0.44	0.68	1.64	4.90	9.50	99.2	0	362
PM1 mass	pm1	6.25	4.37	4.99	2.03	-0.60	1.50	5.10	15.07	31.50	100.0	0	365
PM10 mass	pm10	10.81	7.81	8.45	2.07	1.00	2.35	8.68	25.85	51.17	100.0	0	365
PM25 mass	pm25	8.16	6.19	6.53	1.96	-1.00	2.03	6.50	18.41	48.60	96.4	0	352
SO2	air	0.45	0.39	0.30	2.80	-0.05	0.02	0.37	1.25	2.45	100.0	0	365

CH0005R Rigi

January 2006 - December 2006

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	0.97	0.50	2.81	0.02	0.07	0.53	2.79	6.42	87.1	0	318
NH3+NH4+	air+aerosol	2.04	1.60	1.48	2.38	0.14	0.26	1.57	5.53	8.67	87.9	0	321
NO2	air	1.25	1.56	0.87	2.20	0.15	0.28	0.78	3.56	16.50	89.9	0	328
PM10 mass	pm10	11.25	10.05	8.07	2.32	0.50	1.90	8.43	29.39	74.17	99.5	2	363
SO2	air	0.28	0.21	0.22	2.10	-0.06	0.06	0.23	0.68	1.54	100.0	0	365
SO4--	aerosol	0.52	0.45	0.37	2.42	0.01	0.07	0.41	1.33	3.03	90.1	2	329

CS0005R Kamenicki vis

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	1.01	1.30	0.59	2.56	0.30	0.30	0.30	3.91	7.20	92.3	0	337
SO2	air	6.14	7.67	4.40	2.04	2.50	2.50	3.00	17.25	67.50	90.1	0	329

CY0002R Ayia Marina

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
PM10 mass	pm10	33.77	103.47	23.12	2.02	3.00	7.90	22.70	66.57	3540.10	95.0	0	8325

CZ0001R Svratouch

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.97	0.68	0.77	2.07	0.05	0.19	0.81	2.10	7.28	96.7	0	353
NH3+NH4+	air+aerosol	2.67	2.04	2.14	1.94	0.15	0.76	2.15	6.52	14.83	95.1	0	347
NO2	air	4.00	2.71	3.12	2.12	0.76	0.76	3.50	9.39	18.21	99.7	52	364
PM10 mass	pm10	23.61	10.99	21.13	1.62	5.00	10.00	22.00	43.00	52.00	38.1	0	139
SO2	air	1.48	1.46	0.99	2.49	0.08	0.23	0.99	4.89	9.24	96.4	0	352
SO4--	aerosol	1.04	0.90	0.74	2.45	0.02	0.12	0.79	2.72	6.61	97.3	0	355

CZ0003R Kosetice

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.95	0.71	0.74	2.10	0.03	0.22	0.75	2.31	5.18	90.4	0	330
NH3+NH4+	air+aerosol	2.32	1.28	1.99	1.79	0.15	0.78	2.08	4.61	9.03	90.7	0	331
NO2	air	4.14	2.56	3.34	2.04	0.76	0.76	3.71	9.04	17.51	99.7	45	364
PM10 mass	pm10	19.71	11.16	17.08	1.71	6.00	7.00	17.00	40.05	80.00	54.2	0	198
PM25 mass	pm25	17.47	10.26	15.05	1.72	5.00	6.00	15.00	36.00	78.00	53.4	0	195

DE0001R Westerland

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.16	0.14	0.11	2.80	0.01	0.01	0.12	0.45	1.10	95.6	18	349
HNO3	air	0.19	0.18	0.13	2.36	0.01	0.04	0.13	0.55	1.22	91.8	3	335
HNO3+NO3-	air+aerosol	1.00	0.75	0.72	2.57	0.00	0.08	0.83	2.50	4.10	91.2	23	333
K+	aerosol	0.17	0.10	0.13	2.38	0.01	0.02	0.15	0.36	0.60	94.5	15	345
Mg++	aerosol	0.213	0.158	0.149	2.680	0.005	0.035	0.180	0.525	0.720	95.6	11	349
NH3	air	1.16	1.06	0.78	2.69	0.01	0.20	0.75	3.67	6.15	91.2	3	333
NH3+NH4+	air+aerosol	2.12	1.65	1.46	2.83	0.01	0.18	1.63	5.41	9.32	89.9	22	328
NH4+	aerosol	0.96	1.07	0.33	7.59	0.01	0.01	0.62	3.26	5.44	94.5	50	345
NO2	air	2.31	2.17	1.58	2.45	0.05	0.38	1.68	7.31	12.62	81.4	0	297
NO3-	aerosol	0.81	0.70	0.51	3.37	0.01	0.05	0.60	2.37	3.82	95.3	11	348
Na+	aerosol	1.56	1.44	0.80	4.49	0.01	0.05	1.24	4.58	6.98	95.6	11	349
PM10 mass	pm10	19.63	9.97	17.30	1.68	2.70	6.60	17.50	41.37	63.20	92.6	0	338
SO2	air	0.56	0.46	0.43	2.11	0.00	0.11	0.40	1.53	3.14	91.5	3	334
SO4--	aerosol	0.94	0.59	0.74	2.31	0.01	0.28	0.78	2.25	3.65	95.6	4	349
SO4-- corr	aerosol	0.80	0.64	0.54	2.96	0.00	0.10	0.66	2.20	3.63	95.3	4	348

DE0002R Langenbrügge

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.15	0.17	0.06	5.43	0.01	0.01	0.11	0.54	0.90	99.5	100	363
HNO3	air	0.28	0.23	0.21	2.14	0.03	0.06	0.21	0.70	1.29	94.0	0	343
HNO3+NO3-	air+aerosol	1.06	0.70	0.87	1.88	0.10	0.33	0.86	2.57	3.90	93.4	4	341
K+	aerosol	0.21	0.15	0.14	3.26	0.01	0.01	0.18	0.47	1.08	98.9	35	361
Mg++	aerosol	0.077	0.070	0.039	4.072	0.005	0.005	0.060	0.200	0.390	99.7	106	364
NH3	air	1.36	0.85	1.08	2.09	0.10	0.27	1.25	3.03	4.33	94.0	0	343
NH3+NH4+	air+aerosol	2.53	1.52	2.16	1.77	0.42	0.77	2.19	5.34	9.91	93.4	0	341
NH4+	aerosol	1.15	1.34	0.47	5.92	0.01	0.01	0.65	3.93	8.18	98.1	33	358
NO2	air	2.69	1.93	2.21	1.85	0.41	0.90	2.17	7.05	12.70	70.1	0	256
NO3-	aerosol	0.76	0.72	0.47	3.03	0.01	0.09	0.51	2.41	3.56	98.1	6	358
Na+	aerosol	0.39	0.45	0.20	3.92	0.01	0.01	0.23	1.27	3.14	99.7	21	364
PM1 mass	pm1	8.79	7.41	6.57	2.19	0.40	1.63	6.75	24.03	45.30	99.2	0	362
PM10 mass	pm10	20.73	12.87	17.99	1.66	6.30	8.49	17.30	47.64	88.80	97.8	0	357
PM25 mass	pm25	16.40	12.19	13.44	1.84	2.90	5.25	12.75	40.85	82.90	99.7	0	364
SO2	air	0.63	0.69	0.42	2.42	0.01	0.11	0.42	2.02	5.01	93.4	0	341
SO4--	aerosol	1.14	0.80	0.93	1.90	0.10	0.34	0.92	2.74	5.22	98.1	0	358
SO4-- corr	aerosol	1.10	0.81	0.88	2.00	0.10	0.28	0.89	2.69	5.19	98.1	0	358

DE0003R Schauinsland

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.20	0.32	0.06	5.97	0.01	0.01	0.09	0.79	2.75	98.9	101	361
HNO3	air	0.30	0.22	0.22	2.26	0.01	0.06	0.24	0.75	1.30	98.6	1	360
HNO3+NO3-	air+aerosol	0.54	0.39	0.41	2.21	0.10	0.10	0.46	1.38	2.44	98.6	57	360
K+	aerosol	0.34	0.99	0.08	7.05	0.01	0.01	0.18	1.04	10.84	95.3	105	348
Mg++	aerosol	0.070	0.077	0.027	4.875	0.005	0.005	0.040	0.210	0.560	98.9	162	361
NH3	air	0.75	0.60	0.52	2.68	0.01	0.10	0.61	1.99	5.14	97.8	3	357
NH3+NH4+	air+aerosol	1.09	0.86	0.78	2.39	0.20	0.20	0.90	2.78	6.11	97.8	75	357
NH4+	aerosol	0.35	0.51	0.09	8.06	0.01	0.01	0.16	1.47	3.29	98.9	110	361
NO2	air	0.92	0.79	0.68	2.27	0.01	0.19	0.68	2.40	4.89	94.2	1	344
NO3-	aerosol	0.25	0.29	0.14	3.65	0.01	0.01	0.16	0.94	1.79	98.9	27	361
Na+	aerosol	0.14	0.17	0.06	4.54	0.01	0.01	0.08	0.53	0.97	98.9	76	361
PM10 mass	pm10	8.33	6.81	5.84	2.55	0.10	1.25	6.20	22.70	42.30	95.6	3	349
PM25 mass	pm25	5.63	4.19	4.13	2.42	0.05	1.00	4.30	13.85	23.80	97.0	4	354
SO2	air	0.36	0.25	0.29	1.97	0.05	0.10	0.30	0.84	1.95	94.0	0	343
SO4--	aerosol	0.61	0.47	0.45	2.37	0.01	0.10	0.47	1.53	3.27	98.6	2	360
SO4-- corr	aerosol	0.60	0.47	0.43	2.54	0.00	0.09	0.46	1.51	3.26	98.6	2	360

DE0007R Neuglobsow

January 2006 - December 2006

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	0.09	3.38	0.01	0.01	0.12	0.45	0.86	98.4	35	359
HNO3	air	0.24	0.17	0.18	2.19	0.01	0.05	0.19	0.56	1.21	94.8	4	346
HNO3+NO3-	air+aerosol	0.88	0.63	0.70	2.01	0.10	0.24	0.69	2.19	3.33	94.0	10	343
K+	aerosol	0.20	0.15	0.11	3.98	0.01	0.01	0.17	0.50	0.96	96.4	50	352
Mg++	aerosol	0.109	0.071	0.065	3.811	0.005	0.005	0.110	0.210	0.420	98.9	72	361
NH3	air	0.73	0.57	0.40	4.47	0.01	0.01	0.65	1.71	3.16	94.5	22	345
NH3+NH4+	air+aerosol	1.77	1.10	1.46	1.94	0.20	0.46	1.54	4.08	6.32	93.7	11	342
NH4+	aerosol	1.03	1.12	0.50	4.92	0.01	0.01	0.68	3.62	6.22	98.1	25	358
NO2	air	1.98	1.73	1.56	1.90	0.35	0.65	1.51	5.19	14.59	96.7	0	353
NO3-	aerosol	0.63	0.63	0.38	3.08	0.01	0.07	0.39	1.97	3.25	98.4	6	359
Na+	aerosol	0.38	0.36	0.25	2.75	0.01	0.05	0.25	1.15	3.22	98.4	7	359
PM10 mass	pm10	15.63	12.66	12.61	1.87	2.00	5.30	12.00	38.92	88.10	100.0	0	365
SO2	air	0.74	1.37	0.34	3.15	0.00	0.06	0.29	2.80	13.42	94.5	2	345
SO4--	aerosol	1.08	0.80	0.85	2.00	0.07	0.27	0.88	2.84	4.62	97.5	0	356
SO4-- corr	aerosol	1.04	0.81	0.80	2.12	0.05	0.22	0.85	2.83	4.60	97.3	0	355

DE0008R Schmücke

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	1.94	1.57	1.54	1.92	0.39	0.63	1.45	4.78	11.95	88.2	0	322
PM10 mass	pm10	10.54	7.38	7.89	2.42	0.05	1.70	9.30	24.27	51.40	99.7	2	364
SO2	air	0.69	0.75	0.45	2.59	0.03	0.10	0.45	1.89	5.45	100.0	7	365

DE0009R Zingst

January 2006 - December 2006

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	0.06	4.61	0.01	0.01	0.09	0.49	0.80	99.5	79	363
HNO3	air	0.28	0.20	0.22	1.99	0.04	0.07	0.21	0.71	1.20	95.3	0	348
HNO3+NO3-	air+aerosol	1.09	0.66	0.92	1.81	0.06	0.35	0.92	2.50	3.97	95.3	2	348
K+	aerosol	0.21	0.13	0.17	2.19	0.01	0.09	0.18	0.50	0.83	98.4	11	359
Mg++	aerosol	0.122	0.085	0.086	2.757	0.005	0.005	0.110	0.270	0.590	99.7	24	364
NH3	air	1.05	0.90	0.64	3.46	0.01	0.07	0.85	2.86	4.76	95.6	6	349
NH3+NH4+	air+aerosol	2.14	1.41	1.69	2.13	0.09	0.52	1.80	4.96	8.31	95.6	8	349
NH4+	aerosol	1.07	1.15	0.43	6.45	0.01	0.01	0.70	3.54	6.48	99.7	40	364
NO2	air	2.24	1.56	1.87	1.79	0.40	0.78	1.75	5.67	11.33	94.8	0	346
NO3-	aerosol	0.80	0.67	0.56	2.61	0.01	0.14	0.57	2.33	3.59	99.7	4	364
Na+	aerosol	0.58	0.68	0.29	4.24	0.01	0.01	0.37	1.90	5.47	99.7	21	364
PM10 mass	pm10	18.44	11.28	16.05	1.66	3.60	7.56	14.90	40.42	80.70	100.0	0	365
SO2	air	0.85	1.22	0.58	2.13	0.07	0.21	0.52	2.65	12.08	95.3	0	348
SO4--	aerosol	1.07	0.73	0.87	1.94	0.07	0.28	0.91	2.65	4.51	99.7	0	364
SO4-- corr	aerosol	1.02	0.75	0.79	2.16	0.06	0.21	0.87	2.63	4.50	99.7	0	364

DE0044R Melpitz

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm10	0.16	0.11	0.13	1.88	0.00	0.05	0.13	0.38	0.70	99.5	0	363
Ca++	pm25	0.08	0.05	0.07	1.90	0.00	0.02	0.07	0.18	0.28	98.6	0	360
Cl-	pm10	0.25	0.35	0.10	3.99	0.00	0.01	0.10	1.05	2.40	99.5	0	363
Cl-	pm25	0.13	0.16	0.07	3.44	0.00	0.01	0.07	0.43	1.09	98.1	0	358
EC	pm10	2.27	2.09	1.77	1.96	0.29	0.59	1.67	5.77	21.60	99.5	0	363
EC	pm25	1.92	2.08	1.31	2.35	0.07	0.35	1.34	5.30	15.06	98.1	0	358
K+	pm10	0.19	0.31	0.14	1.92	0.03	0.06	0.13	0.46	5.31	99.5	0	363
K+	pm25	0.15	0.13	0.11	2.03	0.03	0.04	0.11	0.40	1.06	98.6	0	360
Mg++	pm10	0.046	0.034	0.037	2.030	0.000	0.010	0.037	0.116	0.258	99.5	0	363
Mg++	pm25	0.019	0.016	0.015	2.032	0.000	0.004	0.016	0.048	0.165	98.6	0	360
NH4+	pm10	1.66	1.46	1.20	2.24	0.17	0.36	1.16	4.98	8.61	99.5	0	363
NH4+	pm25	1.59	1.37	1.17	2.17	0.10	0.38	1.10	4.72	8.61	98.6	0	360
NO3-	pm10	0.83	0.82	0.50	2.87	0.03	0.10	0.52	2.49	4.75	99.5	0	363
NO3-	pm25	0.69	0.76	0.33	3.85	0.01	0.04	0.39	2.26	4.53	98.6	0	360
Na+	pm10	0.26	0.27	0.17	2.71	0.00	0.03	0.17	0.83	1.85	99.5	0	363
Na+	pm25	0.10	0.09	0.08	2.37	0.00	0.01	0.08	0.29	0.51	98.6	0	360
OC	pm10	3.12	2.52	2.51	1.91	0.00	0.93	2.52	7.31	24.59	99.5	0	363
OC	pm25	2.08	1.89	1.45	2.44	0.00	0.31	1.57	5.71	12.43	98.1	0	358
PM10 mass	pm10	23.60	12.44	20.86	1.65	5.18	9.13	21.25	45.35	96.04	99.5	0	363
PM25 mass	pm25	18.66	11.63	15.84	1.77	4.33	6.25	15.94	39.03	88.33	98.6	0	360
SO4--	pm10	1.13	0.80	0.92	1.90	0.19	0.33	0.87	2.81	4.78	99.5	0	363
SO4--	pm25	1.05	0.75	0.84	1.94	0.11	0.28	0.80	2.68	4.22	98.6	0	360

DK0003R Tange

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.15	0.19	0.10	2.32	0.00	0.03	0.09	0.47	1.93	97.8	1	357
Cl-	aerosol	1.45	1.47	0.86	2.97	0.05	0.12	0.83	4.74	7.29	99.5	0	363
HNO3+NO3-	air+aerosol	0.83	0.71	0.61	2.26	0.07	0.16	0.61	2.12	4.35	99.2	0	362
K+	aerosol	0.21	0.32	0.16	1.94	0.00	0.08	0.15	0.50	4.06	97.8	1	357
NH3	air	1.00	0.89	0.64	3.20	0.00	0.07	0.81	2.49	5.97	100.0	15	365
NH3+NH4+	air+aerosol	1.29	1.06	0.93	2.34	0.11	0.21	0.97	3.70	5.73	99.7	0	364
Na+	aerosol	0.98	0.90	0.64	2.66	0.03	0.13	0.66	2.95	5.11	100.0	1	365
SO2	air	0.29	0.35	0.17	2.64	0.03	0.04	0.16	1.05	2.42	99.7	0	364
SO4--	aerosol	0.80	0.58	0.64	1.99	0.04	0.21	0.65	1.89	3.80	99.5	0	363
SO4-- corr	aerosol	0.72	0.61	0.50	2.49	0.01	0.10	0.54	1.84	3.78	99.5	0	363

DK0005R Keldsnor

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.15	0.14	0.12	2.11	-0.01	0.04	0.11	0.40	0.96	94.2	1	344
Cl-	aerosol	1.45	1.25	0.93	2.91	0.02	0.12	1.11	3.96	7.99	94.8	4	346
HNO3+NO3-	air+aerosol	1.10	0.81	0.87	2.06	0.07	0.25	0.94	2.70	5.25	94.5	0	345
K+	aerosol	0.16	0.15	0.13	1.73	-0.00	0.06	0.12	0.37	1.94	94.2	1	344
NH3	air	0.49	0.48	0.20	6.64	0.00	0.00	0.39	1.40	2.61	95.9	64	350
NH3+NH4+	air+aerosol	1.60	1.13	1.25	2.12	0.16	0.32	1.39	4.07	6.33	96.2	0	351
NO2	air	3.07	2.66	2.14	2.46	-0.19	0.43	2.26	8.37	25.48	94.1	95	8239
Na+	aerosol	1.11	0.73	0.88	2.03	0.10	0.27	0.96	2.58	4.69	96.2	0	351
PM10 mass	pm10	21.42	11.21	19.40	1.65	0.00	7.54	19.57	44.68	61.68	92.6	0	338
SO2	air	0.67	0.67	0.40	3.18	0.00	0.04	0.47	1.82	4.76	95.9	1	350
SO4--	aerosol	1.00	0.64	0.81	2.08	0.01	0.26	0.87	2.14	4.66	94.8	0	346
SO4-- corr	aerosol	0.90	0.66	0.70	2.18	-0.02	0.16	0.75	2.06	4.63	94.8	0	346

DK0008R Anholt

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.12	0.11	0.09	2.21	0.00	0.03	0.10	0.33	0.75	99.7	1	364
Cl-	aerosol	2.07	2.14	1.01	4.13	0.00	0.08	1.26	6.83	10.11	99.5	5	363
HNO3+NO3-	air+aerosol	0.84	0.68	0.63	2.17	0.05	0.17	0.66	2.26	4.54	99.2	0	362
K+	aerosol	0.14	0.08	0.12	1.61	0.01	0.06	0.12	0.28	0.76	99.7	0	364
NH3	air	0.17	0.20	0.07	5.15	0.00	0.00	0.09	0.57	1.49	99.5	109	363
NH3+NH4+	air+aerosol	1.14	0.97	0.81	2.39	0.07	0.17	0.87	3.16	5.60	99.5	0	363
NO2	air	1.46	1.21	1.09	2.22	0.07	0.35	1.07	3.70	7.50	59.2	0	216
Na+	aerosol	1.53	1.17	1.10	2.39	0.08	0.24	1.16	3.86	5.59	98.1	0	358
SO2	air	0.55	0.55	0.36	2.56	0.01	0.07	0.38	1.59	4.48	99.5	1	363
SO4--	aerosol	0.94	0.61	0.79	1.81	0.17	0.31	0.76	2.04	3.72	99.5	0	363
SO4-- corr	aerosol	0.81	0.65	0.59	2.37	0.04	0.11	0.60	2.00	3.67	99.5	0	363

DK0031R Ulborg

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.11	0.14	0.08	2.22	-0.01	0.02	0.08	0.32	1.17	99.5	1	363
Cl-	aerosol	1.92	1.96	1.03	3.42	0.03	0.14	1.14	5.96	8.63	97.0	4	354
HNO3+NO3-	air+aerosol	0.78	0.71	0.55	2.38	0.03	0.12	0.59	1.98	4.52	97.0	0	354
K+	aerosol	0.14	0.10	0.12	1.70	-0.00	0.06	0.11	0.34	0.81	99.5	1	363
NH3	air	0.94	8.78	0.18	5.33	0.00	0.01	0.22	1.99	165.47	97.3	55	355
NH3+NH4+	air+aerosol	1.22	1.13	0.80	2.68	0.06	0.13	0.88	3.45	6.27	97.5	0	356
Na+	aerosol	5.61	80.88	0.83	3.16	0.04	0.12	0.95	3.73	1522.83	97.0	1	354
SO2	air	0.25	0.30	0.15	2.84	0.01	0.03	0.14	0.92	2.01	97.3	9	355
SO4--	aerosol	0.86	0.62	0.69	1.91	0.11	0.25	0.68	2.09	4.00	97.3	0	355
SO4-- corr	aerosol	0.39	6.82	0.51	2.63	-127.19	0.07	0.56	2.05	3.98	97.3	0	355

EE0009R Lahemaa

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	3.40	2.31	2.80	1.93	0.03	1.09	2.72	8.12	15.31	100.0	1	365
SO2	air	2.60	4.08	1.18	3.59	0.08	0.15	1.11	9.34	42.14	100.0	3	365

EE0011R Vilsandy

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	3.03	2.11	2.31	2.39	0.03	0.72	2.50	6.67	13.94	100.0	6	365
SO2	air	1.19	1.61	0.70	2.76	0.04	0.14	0.70	4.20	14.95	100.0	6	365

ES0007R Víznar

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.64	0.30	0.58	1.56	0.15	0.27	0.58	1.17	2.19	98.4	0	359
NH3+NH4+	air+aerosol	1.98	1.11	1.65	1.94	0.11	0.47	1.87	4.08	7.13	98.6	0	360
NO2	air	2.23	2.27	1.53	2.35	0.04	0.40	1.44	6.80	28.04	97.3	0	8521
NO3-	pm10	0.45	0.26	0.39	1.76	0.05	0.15	0.40	0.90	1.78	94.8	0	346
PM10 mass	pm10	20.18	15.19	15.83	2.05	2.00	4.00	17.00	50.60	107.00	94.0	0	343
PM25 mass	pm25	10.12	5.63	8.55	1.84	2.00	3.00	9.00	20.00	35.00	92.9	0	339
SO2	air	0.27	0.22	0.22	1.74	0.08	0.11	0.20	0.64	3.24	98.4	0	8621
SO4--	pm10	0.69	0.41	0.59	1.75	0.07	0.25	0.57	1.46	2.69	94.8	0	346

ES0008R Niembro

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.73	0.47	0.61	1.82	0.17	0.24	0.57	1.67	2.48	98.4	0	359
NH3	air	1.33	0.82	0.91	3.30	0.01	0.04	1.14	3.22	3.32	94.2	1	50
NH3+NH4+	air+aerosol	1.99	1.21	1.49	2.54	0.01	0.20	1.89	4.04	5.86	98.1	1	358
NO2	air	2.00	1.77	1.46	2.22	0.06	0.42	1.45	5.62	16.99	96.2	0	8430
NO3-	pm10	0.44	0.32	0.35	1.93	0.04	0.14	0.33	1.05	2.07	89.6	0	327
PM10 mass	pm10	18.36	8.95	16.30	1.65	4.00	7.00	16.00	37.00	47.00	88.2	0	322
PM25 mass	pm25	9.01	6.02	7.32	1.91	2.00	3.00	7.00	22.00	32.00	92.3	0	337
SO2	air	2.55	3.54	1.32	3.14	0.09	0.22	1.28	9.63	46.88	98.5	0	8628
SO4--	pm10	1.27	1.03	0.99	2.01	0.23	0.34	0.91	3.51	6.63	89.6	0	327

ES0009R Campisabalos

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm10	0.46	0.46	0.30	2.57	0.02	0.07	0.29	1.39	3.12	94.2	0	344
Ca++	pm25	0.14	0.11	0.10	2.21	0.02	0.03	0.09	0.39	0.48	14.0	0	51
Cl-	pm10	0.34	0.14	0.32	1.36	0.18	0.19	0.32	0.74	1.02	14.0	0	51
Cl-	pm25	0.29	0.06	0.29	1.23	0.19	0.20	0.27	0.42	0.45	9.6	0	35
HNO3+NO3-	air+aerosol	0.43	0.21	0.40	1.52	0.15	0.21	0.39	0.84	1.87	97.5	0	356
K+	pm10	0.07	0.06	0.05	2.31	0.01	0.01	0.05	0.17	0.45	94.2	7	344
K+	pm25	0.04	0.03	0.03	2.04	0.01	0.01	0.03	0.14	0.14	11.0	0	40
Mg++	pm10	0.035	0.029	0.024	2.904	0.001	0.002	0.028	0.088	0.198	94.2	10	344
Mg++	pm25	0.015	0.011	0.011	2.180	0.002	0.002	0.010	0.033	0.060	11.5	0	42
NH3	air	1.07	0.91	0.59	4.29	0.01	0.01	0.89	3.11	4.30	86.6	2	46
NH3+NH4+	air+aerosol	1.44	0.87	1.15	2.09	0.04	0.33	1.28	2.96	4.24	96.2	0	351
NH4+	pm10	1.12	0.61	0.97	1.71	0.26	0.39	0.94	2.32	3.25	14.0	0	51
NH4+	pm25	1.27	0.54	1.16	1.55	0.45	0.49	1.19	2.49	2.56	6.0	0	22
NO2	air	1.06	0.80	0.86	1.90	0.04	0.30	0.89	2.40	14.18	95.3	0	8344
NO3-	pm10	0.16	0.15	0.13	2.00	0.01	0.04	0.13	0.35	1.64	87.4	1	319
NO3-	pm25	0.09	0.06	0.07	2.01	0.02	0.02	0.08	0.20	0.27	12.3	0	45
Na+	pm10	0.23	0.21	0.14	2.87	0.02	0.02	0.16	0.69	1.15	94.2	45	344
Na+	pm25	0.15	0.17	0.10	2.45	0.04	0.04	0.07	0.58	0.58	7.9	0	29
PM10 mass	pm10	11.91	8.16	9.67	1.93	2.00	3.00	10.00	28.00	54.00	86.3	0	315
PM25 mass	pm25	7.63	4.49	6.36	1.89	1.00	2.00	7.00	16.00	27.00	86.8	0	317
SO2	air	0.43	0.91	0.28	2.16	0.08	0.11	0.25	1.23	39.12	96.8	0	8480
SO4--	pm10	0.48	0.27	0.41	1.77	0.04	0.17	0.39	1.03	1.65	87.4	0	319
SO4--	pm25	0.44	0.24	0.37	1.81	0.09	0.12	0.36	0.89	1.07	11.8	0	43

ES0010R Cabo de Creus

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.74	0.49	0.62	1.79	0.12	0.21	0.66	1.57	5.14	94.5	0	345
NH3+NH4+	air+aerosol	1.51	0.76	1.29	1.86	0.13	0.36	1.47	2.83	4.99	94.2	0	344
NO2	air	1.50	1.30	1.15	2.04	0.08	0.37	1.13	4.01	16.94	95.5	0	8363
NO3-	pm10	0.54	0.41	0.44	1.92	0.02	0.17	0.45	1.19	4.38	93.4	0	341
PM10 mass	pm10	18.96	7.44	17.72	1.44	8.00	10.00	18.00	32.00	65.00	92.3	0	337
PM25 mass	pm25	10.14	5.58	8.94	1.65	3.00	4.00	9.00	21.00	51.00	91.2	0	333
SO2	air	0.28	0.27	0.23	1.81	0.08	0.10	0.20	0.68	5.01	95.6	0	8377
SO4--	pm10	1.06	0.60	0.91	1.75	0.27	0.36	0.88	2.27	3.37	93.4	0	341

ES0011R Barcarrola

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.53	0.28	0.47	1.57	0.15	0.24	0.45	1.01	2.61	98.6	0	360
NH3+NH4+	air+aerosol	2.02	1.10	1.62	2.22	0.04	0.33	2.03	3.91	5.16	99.7	0	364
NO2	air	1.06	1.16	0.72	2.43	0.03	0.16	0.74	2.97	13.31	94.1	0	8241
NO3-	pm10	0.29	0.16	0.26	1.59	0.04	0.12	0.26	0.55	1.79	95.6	0	349
PM10 mass	pm10	15.53	10.03	13.08	1.78	3.00	5.00	12.00	34.00	92.00	95.3	0	348
PM25 mass	pm25	8.55	5.75	6.97	1.93	0.50	2.00	7.00	19.00	49.00	93.2	1	340
SO2	air	0.56	0.83	0.35	2.46	0.08	0.11	0.29	1.90	21.84	98.6	0	8641
SO4--	pm10	0.69	0.45	0.58	1.77	0.16	0.26	0.53	1.61	3.01	95.6	0	349

ES0012R Zarra

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.64	0.40	0.56	1.64	0.17	0.25	0.59	1.20	5.34	97.3	0	355
NH3+NH4+	air+aerosol	1.86	0.87	1.59	1.99	0.01	0.59	1.79	3.36	4.14	98.6	2	360
NO2	air	1.36	0.85	1.15	1.79	0.06	0.46	1.13	3.05	11.38	96.6	0	8465
NO3-	pm10	0.42	0.23	0.37	1.71	0.06	0.14	0.38	0.88	1.60	96.7	0	353
PM10 mass	pm10	14.07	8.36	11.78	1.86	2.00	3.65	13.00	31.35	50.00	96.4	0	352
PM25 mass	pm25	8.37	4.30	7.21	1.79	1.00	2.00	8.00	16.65	25.00	94.8	0	346
SO2	air	0.37	0.32	0.30	1.86	0.08	0.12	0.28	0.94	5.06	98.7	0	8648
SO4--	pm10	0.80	0.47	0.67	1.83	0.09	0.25	0.68	1.73	2.40	96.7	0	353

ES0013R Penausende

January 2006 - December 2006

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	1.43	0.48	1.96	0.13	0.21	0.42	1.49	18.95	97.0	0	354
NH3+NH4+	air+aerosol	1.60	1.78	1.14	2.54	0.01	0.21	1.23	3.30	21.18	97.0	4	354
NO2	air	1.61	1.70	1.20	2.07	0.17	0.40	1.14	4.11	23.70	97.8	0	8563
NO3-	pm10	0.30	0.23	0.25	1.92	0.01	0.10	0.23	0.76	2.02	95.3	1	348
PM10 mass	pm10	11.14	7.44	9.08	1.92	2.00	3.00	9.00	27.00	49.00	95.1	0	347
PM25 mass	pm25	6.94	4.33	5.63	1.98	1.00	2.00	6.00	15.00	22.00	91.0	0	332
SO2	air	0.73	1.21	0.46	2.26	0.08	0.17	0.39	2.30	24.00	97.7	0	8558
SO4--	pm10	0.58	0.36	0.49	1.78	0.09	0.20	0.48	1.24	2.57	95.3	0	348

ES0014R Els Torms

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.72	0.45	0.62	1.68	0.19	0.29	0.59	1.70	3.22	94.2	0	344
NH3+NH4+	air+aerosol	4.89	3.35	3.43	3.17	0.01	0.25	4.28	10.00	22.56	94.8	6	346
NO2	air	1.73	1.07	1.49	1.71	0.09	0.68	1.45	3.69	11.58	96.9	0	8486
NO3-	pm10	0.53	0.41	0.43	1.86	0.08	0.18	0.38	1.34	2.89	95.1	0	347
PM10 mass	pm10	16.86	9.11	14.63	1.73	2.00	5.00	16.00	34.00	70.00	93.4	0	341
PM25 mass	pm25	10.37	5.82	8.75	1.85	1.00	3.00	9.00	21.00	35.00	90.1	0	329
SO2	air	0.53	0.89	0.39	2.00	0.08	0.14	0.37	1.39	46.68	96.3	0	8438
SO4--	pm10	0.95	0.51	0.82	1.75	0.15	0.29	0.84	1.94	2.83	95.1	0	347

ES0015R Risco Llamo

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.55	0.29	0.49	1.59	0.16	0.22	0.51	0.97	2.69	97.0	0	354
NH3+NH4+	air+aerosol	1.51	0.90	1.19	2.23	0.06	0.24	1.39	3.13	4.00	96.7	0	353
NO2	air	1.22	1.01	0.97	1.92	0.08	0.36	0.95	3.07	12.61	67.8	0	5939
NO3-	pm10	0.31	0.23	0.25	2.02	0.02	0.06	0.29	0.65	1.95	94.5	0	345
PM10 mass	pm10	13.46	11.16	9.91	2.29	1.00	2.00	10.00	34.95	91.00	93.2	0	340
PM25 mass	pm25	8.71	5.65	6.95	2.06	1.00	2.00	7.00	19.00	41.00	89.0	0	325
SO2	air	0.47	0.58	0.34	2.11	0.08	0.12	0.32	1.36	13.18	67.8	0	5939
SO4--	pm10	0.51	0.30	0.44	1.76	0.11	0.17	0.45	1.13	2.15	94.5	0	345

ES0016R O Saviñao

January 2006 - December 2006

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	0.34	0.50	1.66	0.14	0.24	0.50	1.29	2.57	96.2	0	351
NH3+NH4+	air+aerosol	1.34	0.89	0.99	2.45	0.01	0.16	1.16	3.12	4.50	97.0	1	354
NO2	air	1.82	1.59	1.38	2.10	0.06	0.40	1.35	4.77	15.66	96.4	0	8446
NO3-	pm10	0.27	0.25	0.20	2.17	0.01	0.04	0.21	0.72	2.16	93.2	1	340
PM10 mass	pm10	13.16	8.81	10.77	1.90	2.00	3.00	11.00	31.00	55.00	92.3	0	337
PM25 mass	pm25	8.69	6.51	6.57	2.19	0.50	2.00	7.00	20.90	39.00	87.9	1	321
SO2	air	1.39	3.34	0.61	3.08	0.08	0.15	0.50	5.38	80.80	97.8	0	8563
SO4--	pm10	0.94	0.83	0.69	2.20	0.16	0.21	0.67	2.64	4.66	93.2	0	340

ES0017R Montseny

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm10	0.46	0.37	0.33	2.44	0.01	0.05	0.34	1.29	1.65	25.8	0	94
Ca++	pm25	0.11	0.13	0.06	2.80	0.01	0.01	0.06	0.51	0.61	12.3	0	45
Cl-	pm10	0.07	0.15	0.02	3.66	0.01	0.01	0.01	0.46	0.80	25.5	2	93
Cl-	pm25	0.02	0.03	0.02	2.28	0.01	0.01	0.01	0.12	0.13	12.1	2	44
K+	pm10	0.17	0.14	0.14	1.98	0.01	0.05	0.12	0.51	0.63	25.8	0	94
K+	pm25	0.10	0.07	0.08	1.80	0.03	0.03	0.07	0.30	0.32	12.3	0	45
Mg++	pm10	0.129	0.125	0.092	2.282	0.010	0.020	0.095	0.515	0.600	25.8	0	94
Mg++	pm25	0.039	0.044	0.027	2.257	0.010	0.010	0.020	0.177	0.210	12.3	0	45
NH4+	pm10	0.52	0.42	0.40	2.19	0.03	0.11	0.45	1.43	2.75	25.8	0	94
NH4+	pm25	0.79	0.56	0.63	2.04	0.13	0.14	0.69	1.99	3.26	12.3	0	45
NO3-	pm10	0.33	0.43	0.21	2.60	0.01	0.05	0.18	1.23	3.08	25.5	0	93
NO3-	pm25	0.26	0.61	0.07	4.72	0.00	0.00	0.04	1.77	3.35	12.1	0	44
Na+	pm10	0.36	0.30	0.27	2.33	0.01	0.05	0.29	1.00	1.57	25.8	0	94
Na+	pm25	0.10	0.04	0.09	1.60	0.03	0.03	0.09	0.16	0.21	12.3	0	45
SO4--	pm10	0.94	0.49	0.80	1.84	0.18	0.24	0.92	1.80	1.94	25.8	0	94
SO4--	pm25	1.08	0.53	0.94	1.75	0.26	0.34	1.02	2.03	2.07	12.3	0	45

FI0009R Utö

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.40	0.29	0.29	2.38	0.02	0.06	0.33	0.99	1.53	93.4	0	341
NH3+NH4+	air+aerosol	0.36	0.32	0.24	2.65	0.02	0.04	0.26	1.12	1.52	98.4	0	359
NO2	air	2.30	1.89	1.62	2.41	-0.03	0.37	1.65	5.87	21.13	93.4	0	8182
SO2	air	0.47	0.51	0.31	2.50	0.01	0.08	0.29	1.57	3.31	94.2	2	344
SO4--	aerosol	0.54	0.44	0.39	2.33	0.01	0.10	0.44	1.35	2.81	93.4	0	341

FI0017R Virolahti II

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.37	0.28	0.27	2.30	0.02	0.06	0.30	0.96	1.55	98.1	0	358
NH3+NH4+	air+aerosol	0.68	0.65	0.47	2.47	0.04	0.10	0.48	1.84	4.69	100.0	0	365
NO2	air	1.89	2.09	1.29	2.46	-0.16	0.27	1.35	5.09	28.90	98.6	0	8639
SO2	air	0.84	1.13	0.48	2.91	0.01	0.09	0.49	2.92	8.47	96.2	0	351
SO4--	aerosol	0.68	0.51	0.51	2.24	0.04	0.12	0.58	1.77	3.23	98.1	0	358

FI0022R Oulanka

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.07	0.06	0.06	2.06	0.02	0.02	0.06	0.18	0.26	100.0	0	53
NH3+NH4+	air+aerosol	0.16	0.14	0.12	2.20	0.03	0.03	0.12	0.48	0.79	100.0	0	53
NO2	air	0.35	0.45	0.23	2.54	-0.17	0.04	0.24	1.11	10.18	98.3	0	8608
SO2	air	0.48	0.63	0.23	3.50	0.02	0.03	0.19	1.78	3.36	100.0	0	53
SO4--	aerosol	0.39	0.21	0.33	1.89	0.07	0.09	0.37	0.80	0.84	100.0	0	53

FI0037R Ahtari II

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.16	0.09	0.13	1.82	0.03	0.05	0.12	0.32	0.37	100.0	0	53
NH3+NH4+	air+aerosol	0.38	0.24	0.32	1.86	0.07	0.09	0.34	0.87	1.47	99.7	0	52
NO2	air	0.84	0.69	0.66	2.05	0.01	0.20	0.67	2.14	7.43	91.3	0	8000
SO2	air	0.35	0.46	0.19	2.93	0.03	0.04	0.15	1.55	1.77	98.1	0	52
SO4--	aerosol	0.42	0.24	0.36	1.83	0.09	0.12	0.36	0.85	1.19	100.0	0	53

FI0096G Pallas/Särkijärvi

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	0.28	0.26	0.21	2.17	-0.02	0.06	0.20	0.71	4.01	99.2	0	8689

FR0008R Donon

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
SO2	air	0.53	0.67	0.36	2.20	0.17	0.18	0.21	1.82	5.38	95.9	193	350
SO4--	aerosol	0.65	0.40	0.56	1.77	0.12	0.19	0.56	1.42	3.46	96.2	0	351

FR0009R Revin

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.96	0.75	0.74	2.12	0.08	0.21	0.82	2.93	3.50	26.8	0	98
NH3+NH4+	air+aerosol	1.99	1.44	1.58	2.00	0.37	0.47	1.55	4.96	8.58	26.8	0	98
SO2	air	0.64	0.81	0.35	3.10	0.01	0.06	0.29	2.40	4.49	26.8	1	98
SO4--	aerosol	1.07	0.77	0.86	1.93	0.21	0.30	0.84	2.71	5.19	26.8	0	98

FR0010R Morvan

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
SO2	air	0.40	0.38	0.31	1.85	0.16	0.17	0.22	1.05	4.34	95.6	214	349
SO4--	aerosol	0.63	0.47	0.50	1.97	0.04	0.15	0.49	1.50	4.47	95.3	2	348

FR0012R Iraty

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
SO2	air	0.45	0.52	0.33	2.02	0.15	0.17	0.21	1.17	4.69	92.1	199	336
SO4--	aerosol	0.53	0.32	0.44	1.87	0.05	0.16	0.46	1.11	1.90	91.5	1	334

FR0013R Peyrusse Vieille

January 2006 - December 2006

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	0.52	0.55	2.06	0.09	0.17	0.57	1.80	2.72	26.6	0	97
NH3+NH4+	air+aerosol	2.03	1.12	1.69	1.92	0.26	0.42	1.87	4.07	5.58	26.6	0	97
SO2	air	0.39	0.41	0.24	2.84	0.01	0.04	0.24	1.32	2.25	26.6	1	97
SO4--	aerosol	0.86	0.65	0.66	2.12	0.05	0.21	0.65	2.15	3.74	26.6	0	97

FR0014R Montandon

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
SO2	air	0.25	0.18	0.22	1.63	0.14	0.15	0.17	0.61	1.64	98.9	256	361
SO4--	aerosol	0.50	0.37	0.41	1.88	0.04	0.15	0.40	1.35	2.41	98.4	1	359

FR0015R La Tardière

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
SO2	air	0.47	0.40	0.37	1.96	0.14	0.17	0.38	1.18	4.45	93.2	150	340
SO4--	aerosol	0.74	0.48	0.62	1.78	0.04	0.28	0.59	1.71	3.00	91.0	1	332

FR0016R Le Casset

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
SO2	air	0.24	0.15	0.22	1.44	0.12	0.16	0.20	0.50	1.56	96.2	326	351
SO4--	aerosol	0.40	0.30	0.32	1.85	0.08	0.14	0.29	0.96	2.66	95.9	0	350

FR0017R Montfranc

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
SO2	air	0.28	0.20	0.24	1.65	0.12	0.17	0.18	0.64	1.65	91.0	244	332
SO4--	aerosol	0.61	0.42	0.51	1.84	0.12	0.18	0.52	1.28	3.57	90.1	0	329

GB0002R Eskdalemuir

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
SO4--	aerosol	0.43	0.40	0.31	2.16	0.03	0.11	0.26	1.30	2.78	96.7	0	353

GB0006R Lough Navar

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3	air	0.05	0.03	0.05	1.84	0.01	0.01	0.05	0.09	0.09	99.9	0	12
NH3	air	0.47	0.20	0.42	1.67	0.16	0.16	0.46	0.77	0.77	99.9	0	12
NH4+	aerosol	0.43	0.24	0.36	2.00	0.10	0.10	0.43	0.85	0.85	99.9	0	12
NO3-	aerosol	0.21	0.14	0.16	2.62	0.02	0.02	0.21	0.53	0.53	99.9	0	12
PM10 mass	pm10	11.48	6.90	9.77	1.83	-4.00	4.00	10.00	23.00	65.00	98.6	0	8639
SO4--	aerosol	0.42	0.38	0.32	2.09	0.05	0.11	0.28	1.18	2.41	78.6	0	287

GB0007R Barcombe Mills

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
SO4--	aerosol	0.77	0.61	0.61	2.01	0.02	0.23	0.59	1.87	3.97	84.1	0	307

GB0013R Yarner Wood

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3	air	0.18	0.11	0.16	1.70	0.07	0.07	0.15	0.46	0.46	99.9	0	12
NH3	air	0.41	0.20	0.36	1.75	0.14	0.14	0.44	0.73	0.73	99.9	0	12
NH4+	aerosol	0.82	0.40	0.74	1.68	0.28	0.28	0.75	1.68	1.68	99.9	0	12
NO3-	aerosol	0.45	0.17	0.42	1.50	0.20	0.20	0.42	0.73	0.73	99.9	0	12
SO4--	aerosol	0.57	0.52	0.41	2.28	0.03	0.11	0.37	1.67	2.76	74.8	0	273

GB0014R High Muffles

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3	air	0.18	0.07	0.16	1.65	0.05	0.05	0.18	0.33	0.33	99.9	0	12
NH3	air	0.59	0.33	0.51	1.69	0.26	0.26	0.47	1.32	1.32	99.9	0	12
NH4+	aerosol	0.59	0.33	0.51	1.69	0.26	0.26	0.47	1.32	1.32	99.9	0	12
NO2	air	2.26	2.11	1.54	2.46	0.10	0.30	1.60	6.90	14.40	87.1	0	318
NO3-	aerosol	0.46	0.12	0.45	1.35	0.23	0.23	0.50	0.61	0.61	99.9	0	12

GB0016R Glen Dye

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3	air	0.14	0.11	0.12	1.93	0.04	0.04	0.14	0.43	0.43	91.4	0	11
NH3	air	0.30	0.15	0.27	1.59	0.16	0.16	0.23	0.60	0.60	99.9	0	12
NH4+	aerosol	0.48	0.26	0.41	1.84	0.16	0.16	0.54	1.02	1.02	91.4	0	11
NO3-	aerosol	0.23	0.12	0.20	1.74	0.08	0.08	0.23	0.41	0.41	91.4	0	11

GB0036R Harwell

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
PM10 mass	pm10	21.73	10.30	19.58	1.61	-5.00	9.00	20.00	42.00	126.00	98.0	0	8582
PM25 mass	pm25	12.30	5.99	11.16	1.54	-1.00	6.00	11.00	24.00	47.00	97.9	0	8577

GB0043R Narberth

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
PM10 mass	pm10	17.56	8.38	15.93	1.56	0.00	8.00	17.00	31.00	181.00	90.3	0	7908

GR0001R Aliartos

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	3.83	2.87	3.00	2.03	0.30	1.20	3.00	9.70	24.10	90.1	0	7895
PM10 mass	pm10	31.74	17.33	27.50	1.73	7.00	11.00	28.00	65.55	83.00	95.1	0	86
SO2	air	1.69	2.24	1.35	1.68	1.00	1.00	1.00	4.50	38.50	74.9	0	6563

GR0002R Finokalia

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
PM10 mass	pm10	25.88	75.27	18.06	2.02	0.00	6.00	18.73	45.352717.00		73.3	0	6423

HU0002R K-puszta

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3	air	0.19	0.17	0.14	2.21	0.01	0.04	0.15	0.39	1.72	88.8	5	324
NH3	air	1.20	0.86	0.86	2.61	0.02	0.17	0.97	2.88	3.79	88.8	4	324
NH4+	aerosol	1.33	1.46	0.59	4.78	0.01	0.01	0.79	4.63	7.07	88.8	16	324
NO2	air	1.80	1.06	1.52	1.88	0.01	0.58	1.50	4.03	6.05	91.8	1	335
NO3-	aerosol	0.72	0.82	0.33	4.94	0.01	0.01	0.45	2.38	4.76	88.8	24	324
SO2	air	0.91	1.03	0.47	3.72	0.01	0.06	0.52	2.86	6.76	88.5	10	323
SO4--	aerosol	1.27	1.15	0.82	2.98	0.01	0.10	0.95	3.60	6.19	88.8	5	324

IE0001R Valentia Observatory

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.16	0.12	0.12	2.29	0.03	0.03	0.14	0.39	0.68	100.0	52	365
HNO3+NO3-	air+aerosol	0.26	0.42	0.15	2.73	0.01	0.03	0.11	1.03	5.42	100.0	4	365
K+	aerosol	0.10	0.07	0.08	2.06	0.03	0.03	0.09	0.22	0.37	100.0	80	365
Mg++	aerosol	0.251	0.246	0.143	3.190	0.025	0.025	0.170	0.717	1.230	100.0	79	365
NH3+NH4+	air+aerosol	0.90	0.62	0.69	2.23	0.04	0.08	0.73	2.18	3.75	100.0	3	365
NO2	air	0.85	0.87	0.56	2.65	0.00	0.10	0.60	2.70	5.60	95.9	11	350
Na+	aerosol	2.08	1.76	1.37	2.96	0.03	0.20	1.55	5.67	9.46	100.0	9	365
SO2	air	0.30	0.36	0.19	2.55	0.01	0.04	0.18	1.00	2.99	100.0	5	365
SO4--	aerosol	0.46	0.64	0.28	2.89	0.01	0.05	0.30	1.34	9.56	100.0	12	365
SO4-- corr	aerosol	0.28	0.65	0.12	4.87	-0.23	-0.03	0.10	1.26	9.34	100.0	12	365

IE0005R Oak Park

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.11	0.08	0.08	2.22	-0.02	0.01	0.09	0.28	0.52	100.0	13	365
K+	aerosol	0.06	0.03	0.06	1.56	0.00	0.02	0.06	0.12	0.19	100.0	3	365
Mg++	aerosol	0.100	0.089	0.074	2.475	-0.020	0.000	0.080	0.287	0.590	100.0	37	365
NH4+	aerosol	0.67	0.79	0.44	2.52	0.00	0.06	0.37	2.06	6.63	100.0	12	365
NO3-	aerosol	0.34	0.39	0.20	2.85	0.00	0.04	0.17	1.21	2.11	100.0	5	365
Na+	aerosol	1.01	0.75	0.75	2.29	0.03	0.18	0.80	2.62	4.96	100.0	0	365
SO4--	aerosol	0.52	0.48	0.39	2.22	0.00	0.12	0.36	1.42	3.95	100.0	3	365
SO4-- corr	aerosol	0.44	0.49	0.28	2.77	-0.09	0.05	0.26	1.34	3.91	100.0	3	365

IE0006R Malin Head

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.12	0.07	0.11	1.87	0.00	0.03	0.11	0.28	0.41	94.5	3	345
K+	aerosol	0.11	0.07	0.10	1.73	0.00	0.04	0.09	0.24	0.47	94.5	1	345
Mg++	aerosol	0.288	0.225	0.209	2.454	-0.010	0.030	0.230	0.754	1.280	94.5	4	345
NH4+	aerosol	0.62	1.09	0.34	2.88	-0.02	0.05	0.30	2.23	11.25	94.5	3	345
NO3-	aerosol	0.28	0.40	0.12	3.89	0.00	0.01	0.10	1.25	2.29	94.5	1	345
Na+	aerosol	2.44	1.71	1.89	2.13	0.14	0.42	2.03	5.87	9.67	94.5	0	345
SO4--	aerosol	0.59	0.45	0.48	1.87	0.00	0.20	0.45	1.50	3.35	94.5	15	345
SO4-- corr	aerosol	0.38	0.48	0.21	3.06	-0.08	0.04	0.18	1.44	3.26	94.5	15	345

IE0008R Carnsore Point

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.18	0.12	0.15	1.87	-0.01	0.05	0.14	0.42	0.72	89.6	1	327
K+	aerosol	0.16	0.11	0.13	1.90	0.00	0.05	0.13	0.38	0.60	89.6	1	327
Mg++	aerosol	0.457	0.380	0.323	2.453	-0.010	0.060	0.320	1.218	2.070	89.6	2	327
NH4+	aerosol	0.70	0.89	0.45	2.53	0.00	0.10	0.38	2.11	9.49	89.6	1	327
NO3-	aerosol	0.38	0.39	0.24	2.72	0.00	0.05	0.21	1.25	2.02	89.6	1	327
Na+	aerosol	3.67	2.92	2.65	2.39	0.02	0.67	2.66	9.78	15.92	89.6	0	327
SO4--	aerosol	0.81	0.56	0.68	1.79	0.00	0.24	0.66	1.84	4.38	89.6	2	327
SO4-- corr	aerosol	0.50	0.59	0.29	3.04	-0.20	0.04	0.28	1.65	4.23	89.6	2	327

IE0031R Mace Head

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
PM25 mass	pm25	8.84	5.96	6.98	2.14	0.00	1.80	7.80	20.00	49.90	69.3	0	6071

IS0002R Irafoss

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.19	0.09	0.17	1.82	0.00	0.09	0.18	0.34	0.73	79.7	2	291
Cl-	aerosol	1.75	2.35	0.97	2.82	0.13	0.24	0.77	6.90	20.04	79.7	0	291
K+	aerosol	0.06	0.04	0.05	1.91	0.01	0.02	0.04	0.16	0.34	79.7	1	291
Mg++	aerosol	0.134	0.139	0.085	2.739	0.000	0.016	0.090	0.434	1.130	79.7	7	291
Na+	aerosol	1.01	1.15	0.61	2.84	0.00	0.15	0.57	3.57	9.30	79.7	1	291
SO2	air	0.07	0.08	0.04	3.10	0.01	0.01	0.05	0.24	0.57	79.5	26	290
SO4--	aerosol	0.19	0.12	0.15	1.89	0.00	0.05	0.16	0.42	0.87	79.7	1	291
SO4-- corr	aerosol	0.10	0.09	0.08	2.13	-0.03	0.03	0.07	0.26	0.61	79.7	1	291

IS0091R Storhofdi

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Cl-	aerosol	8.56	3.86	7.81	1.57	3.40	3.42	7.75	16.98	17.20	99.8	0	24
NO3-	aerosol	0.05	0.05	0.04	2.11	0.01	0.01	0.04	0.23	0.27	99.8	0	24
SO4--	aerosol	0.50	0.15	0.48	1.34	0.29	0.29	0.47	0.81	0.82	99.8	0	24
SO4-- corr	aerosol	0.10	0.09	0.08	2.65	-0.05	-0.04	0.08	0.33	0.35	99.8	0	24

IT0001R Montelibretti

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3	air	0.15	0.14	0.17	1.76	0.00	0.00	0.10	0.40	0.60	94.5	0	345
NH3	air	1.71	0.91	1.45	1.91	0.00	0.40	1.60	3.37	4.80	94.8	0	346
NH4+	aerosol	1.30	0.71	1.08	1.94	0.10	0.30	1.20	2.70	3.50	94.2	0	344
NO2	air	4.98	2.07	4.59	1.51	0.00	2.40	4.40	8.77	13.20	95.3	0	348
NO3-	aerosol	0.64	0.47	0.52	2.08	0.00	0.10	0.50	1.60	2.80	94.8	0	346
NO3-	pm10_pm25	0.21	0.17	0.20	1.85	0.00	0.00	0.20	0.50	0.90	94.8	0	346
NO3-	pm25	0.46	0.48	0.35	2.46	0.00	0.00	0.30	1.50	2.70	94.5	0	345
PM10 mass	pm10	29.18	13.07	26.54	1.55	8.00	11.39	27.00	51.64	90.30	92.3	0	337
PM25 mass	pm25	17.33	9.79	14.96	1.73	3.70	5.51	15.20	38.88	54.80	82.7	0	302
SO2	air	0.45	0.33	0.36	2.01	-0.60	0.10	0.40	1.07	2.00	94.5	0	345
SO4--	aerosol	1.09	0.74	0.86	2.10	0.00	0.20	0.90	2.70	3.90	94.8	0	346
SO4--	pm10_pm25	0.07	0.09	0.12	1.40	0.00	0.00	0.10	0.20	1.00	94.5	0	345
SO4--	pm25	1.01	0.73	0.78	2.24	0.00	0.10	0.85	2.60	3.80	94.8	0	346

IT0004R Ispra

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
EC	pm25	2.47	2.24	1.68	2.46	0.08	0.45	1.50	7.28	11.60	89.3	0	326
NH4+	pm25	2.13	2.30	1.31	2.84	0.03	0.20	1.37	8.28	12.94	91.2	0	333
NO2	air	6.53	3.79	5.57	1.76	1.49	2.38	5.36	14.59	17.60	92.9	0	339
NO3-	pm25	1.26	1.83	0.48	4.71	0.00	0.03	0.57	5.82	11.07	90.7	0	331
OC	pm25	8.81	9.11	5.95	2.45	0.50	1.42	5.49	24.77	94.37	89.3	0	326
PM25 mass	pm25	28.47	26.21	20.20	2.31	1.11	5.60	19.57	87.54	137.56	91.0	0	332
SO2	air	0.56	0.47	0.42	2.17	0.04	0.13	0.38	1.63	2.84	97.0	0	354
SO4--	pm25	0.98	0.75	0.72	2.32	0.05	0.15	0.74	2.43	4.41	91.5	0	334

LT0015R Preila

January 2006 - December 2006

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	0.53	0.54	2.11	0.01	0.16	0.56	1.81	3.27	99.7	0	364
NH3+NH4+	air+aerosol	1.72	1.06	1.41	1.94	0.23	0.47	1.42	3.96	5.06	99.7	0	364
NO2	air	1.30	0.80	1.12	1.71	0.23	0.47	1.12	2.86	5.53	98.4	0	359
SO2	air	0.47	0.87	0.21	3.34	0.01	0.03	0.17	1.83	7.59	99.7	0	364
SO4--	aerosol	0.39	0.30	0.30	2.00	0.02	0.10	0.30	1.07	2.00	99.5	0	363

LV0010R Rucava

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.15	0.23	0.08	2.97	0.03	0.03	0.06	0.79	0.79	100.0	2	12
Cl-	aerosol	0.38	0.44	0.21	3.28	0.00	0.04	0.22	1.32	2.44	97.0	76	354
HNO3+NO3-	air+aerosol	0.45	0.40	0.33	2.27	0.03	0.08	0.31	1.36	2.33	98.9	0	361
K+	aerosol	0.05	0.04	0.04	2.90	0.00	0.00	0.04	0.15	0.15	91.5	4	11
Mg++	aerosol	0.025	0.019	0.019	2.308	0.004	0.004	0.020	0.060	0.060	100.0	2	12
NH3+NH4+	air+aerosol	1.36	0.89	1.09	2.02	0.10	0.31	1.16	3.33	4.81	99.7	0	364
NH4+	aerosol	0.64	0.56	0.46	2.40	0.01	0.10	0.48	1.69	4.51	99.7	7	364
NO2	air	0.89	0.66	0.70	2.09	0.01	0.26	0.71	2.29	4.19	98.6	5	360
NO3-	aerosol	0.14	0.17	0.08	2.96	0.01	0.01	0.08	0.52	1.05	96.2	3	351
Na+	aerosol	0.23	0.18	0.17	2.21	0.04	0.04	0.14	0.66	0.66	100.0	1	12
SO2	air	0.85	0.97	0.51	2.79	0.03	0.08	0.49	2.51	6.27	98.1	0	358
SO4--	aerosol	0.35	0.45	0.19	3.08	0.01	0.03	0.20	1.22	3.43	99.2	15	362
SO4-- corr	aerosol	0.33	0.45	0.17	3.33	-0.14	0.02	0.18	1.19	3.42	99.2	15	362

LV0016R Zoseni

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.27	0.26	0.19	2.29	0.02	0.05	0.17	0.90	1.59	96.7	3	353
NH3+NH4+	air+aerosol	1.15	0.73	0.94	1.97	0.04	0.31	1.01	2.63	3.93	97.3	0	355
NH4+	aerosol	0.77	0.59	0.58	2.24	0.03	0.14	0.63	2.04	3.54	98.1	10	358
NO2	air	0.49	0.45	0.34	2.47	0.01	0.05	0.38	1.24	4.90	98.1	37	358
NO3-	aerosol	0.06	0.05	0.04	2.08	0.01	0.01	0.04	0.14	0.46	94.2	5	344
SO2	air	0.56	0.56	0.39	2.36	0.02	0.11	0.40	1.50	3.96	96.4	4	352
SO4--	aerosol	0.41	0.38	0.29	2.45	0.01	0.07	0.28	1.26	2.41	97.5	5	356

NL0007R Eibergen

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NH3	air	9.76	6.08	8.26	1.78	1.93	3.34	8.24	21.04	63.58	90.0	0	7888
NO2	air	6.46	3.75	5.26	2.02	0.51	1.22	5.80	13.74	19.10	11.0	0	965
PM10 mass	pm10	27.02	15.87	22.40	1.99	-1.92	6.47	24.10	56.15	117.45	89.8	0	7870
SO2	air	0.79	1.27	0.60	3.12	-0.96	-0.31	0.47	3.19	14.80	96.4	0	8445

NL0008R Bilthoven

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.12	0.07	0.10	1.88	0.01	0.03	0.09	0.27	0.40	46.8	0	171
Cl-	aerosol	0.64	0.79	0.50	2.69	-0.16	-0.04	0.40	2.27	4.96	95.1	0	347
SO2	air	1.36	1.66	0.92	3.13	-1.32	-0.19	0.87	4.59	14.93	92.2	0	8081
SO4--	aerosol	0.84	0.67	0.68	2.15	-0.06	0.03	0.67	2.23	4.36	95.1	0	347

NL0009R Kollumerwaard

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.09	0.06	0.07	1.85	0.02	0.03	0.07	0.22	0.34	42.5	0	155
Cl-	aerosol	0.71	0.96	0.44	3.81	-0.23	-0.14	0.43	2.67	5.54	98.9	0	361
NH4+	aerosol	1.26	0.94	0.96	2.17	0.00	0.25	0.99	3.17	4.99	99.2	0	362
NO2	air	3.07	2.78	2.05	2.67	-0.35	0.40	2.20	9.03	17.81	99.1	0	8678
NO3-	aerosol	0.76	0.59	0.59	2.20	0.00	0.11	0.62	1.90	3.36	99.2	0	362
PM10 mass	pm10	26.84	16.60	22.58	1.89	-1.71	7.36	23.18	57.14	228.67	90.8	0	7958
SO2	air	0.59	0.75	0.49	2.76	-1.02	-0.29	0.44	1.96	10.04	92.2	0	8074
SO4--	aerosol	0.70	0.61	0.56	2.19	-0.06	0.01	0.55	2.07	4.50	99.2	0	362

NL0010R Vredepeel

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Cl-	aerosol	0.41	0.50	0.28	3.28	-0.47	-0.11	0.28	1.29	2.85	86.8	0	317
NH3	air	13.62	10.41	10.93	1.91	1.59	4.12	10.51	35.26	88.55	86.6	0	7589
NH4+	aerosol	1.34	1.03	1.01	2.25	0.06	0.23	1.06	3.33	6.93	86.8	0	317
NO2	air	6.43	4.10	5.19	1.99	0.10	1.50	5.46	14.57	32.33	89.7	0	7858
NO3-	aerosol	0.79	0.61	0.62	2.12	-0.01	0.11	0.62	1.97	4.31	86.8	0	317
PM10 mass	pm10	26.47	32.99	23.13	2.17	-293.17	3.57	25.08	64.41	211.76	89.7	0	7860
SO2	air	0.98	1.39	0.66	3.14	-1.45	-0.22	0.62	3.58	25.74	97.0	0	8501
SO4--	aerosol	0.71	0.71	0.54	2.46	-0.06	-0.00	0.51	2.07	6.15	86.8	0	317

NO0001R Birkenes

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.13	0.15	0.06	4.09	0.01	0.01	0.06	0.50	0.85	77.0	37	281
Cl-	aerosol	0.44	0.83	0.11	5.77	0.01	0.01	0.11	2.04	6.15	99.7	72	364
EC	pm10	0.13	0.12	0.11	2.08	0.02	0.03	0.11	0.44	0.60	99.7	0	127
EC	pm25	0.13	0.10	0.09	2.12	0.02	0.03	0.10	0.37	0.54	98.3	0	123
HNO3	air	0.09	0.12	0.04	3.50	0.01	0.01	0.04	0.34	0.77	98.9	134	361
HNO3+NO3-	air+aerosol	0.40	0.46	0.22	3.12	0.02	0.03	0.25	1.45	2.74	98.9	0	361
K+	aerosol	0.05	0.04	0.03	2.71	0.01	0.01	0.04	0.13	0.30	99.7	46	364
Mg++	aerosol	0.085	0.080	0.051	3.171	0.005	0.005	0.060	0.240	0.500	77.0	32	281
NH3	air	0.45	0.31	0.36	1.88	0.07	0.14	0.34	1.12	2.05	99.2	0	362
NH3+NH4+	air+aerosol	0.77	0.70	0.56	2.15	0.12	0.19	0.52	2.34	4.19	99.2	0	362
NO2	air	0.47	0.52	0.34	2.15	0.01	0.11	0.34	1.24	4.30	95.6	2	349
NO3-	aerosol	0.30	0.39	0.15	3.74	0.01	0.02	0.17	1.21	2.65	99.2	13	362
Na+	aerosol	0.44	0.58	0.23	3.17	0.01	0.03	0.23	1.64	4.27	99.7	0	364
OC	pm10	1.16	0.89	1.07	1.95	0.28	0.32	1.15	3.43	4.17	99.7	0	127
OC	pm25	0.88	0.75	0.86	2.06	0.16	0.25	0.90	2.70	3.25	98.3	0	123
PM1 mass	pm1	3.71	2.94	3.17	2.24	0.14	0.83	3.55	9.78	15.02	97.4	1	125
PM10 mass	pm10	8.06	6.18	6.55	2.20	0.18	1.56	6.65	22.99	28.79	99.7	1	127
PM25 mass	pm25	4.95	4.42	3.98	2.23	0.58	1.09	3.88	14.61	24.50	98.1	0	126
SO2	air	0.18	0.24	0.09	3.19	0.01	0.01	0.08	0.67	1.87	99.5	39	363
SO4--	aerosol	0.53	0.53	0.32	3.08	0.01	0.04	0.35	1.68	2.95	99.5	3	363
SO4-- corr	aerosol	0.49	0.53	0.27	3.58	0.00	0.03	0.29	1.66	2.94	99.5	3	363
TC	pm10	1.29	0.97	1.20	1.92	0.31	0.38	1.27	3.83	4.44	99.7	0	127
TC	pm25	1.00	0.81	0.97	2.00	0.20	0.31	1.06	3.06	3.71	98.3	0	123

NO0015R Tustervatn

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.07	0.15	0.03	3.75	0.01	0.01	0.03	0.27	1.51	76.2	69	278
Cl-	aerosol	0.33	0.61	0.09	5.82	0.01	0.01	0.10	1.45	4.90	99.7	99	364
HNO3	air	0.03	0.06	0.02	2.42	0.01	0.01	0.01	0.13	0.74	99.5	279	363
HNO3+NO3-	air+aerosol	0.13	0.21	0.07	2.78	0.02	0.02	0.06	0.52	1.66	99.5	0	363
K+	aerosol	0.02	0.03	0.01	2.54	0.01	0.01	0.01	0.07	0.27	99.7	116	364
Mg++	aerosol	0.045	0.059	0.023	3.248	0.005	0.005	0.020	0.151	0.420	76.2	73	278
NH3	air	0.98	0.99	0.68	2.35	0.10	0.16	0.70	3.13	6.73	98.1	0	358
NH3+NH4+	air+aerosol	1.10	1.04	0.79	2.21	0.11	0.23	0.80	3.28	6.80	98.1	0	358
NH4+	aerosol	0.11	0.25	0.03	5.29	0.01	0.01	0.02	0.50	1.93	99.7	136	364
NO2	air	0.15	0.11	0.12	2.08	0.01	0.03	0.13	0.34	1.11	88.5	17	323
NO3-	aerosol	0.10	0.17	0.04	3.68	0.01	0.01	0.04	0.40	1.30	99.7	39	364
Na+	aerosol	0.25	0.35	0.11	3.91	0.01	0.01	0.12	0.90	2.73	99.7	18	364
SO2	air	0.09	0.26	0.03	3.37	0.01	0.01	0.03	0.40	3.22	99.5	149	363
SO4--	aerosol	0.23	0.31	0.12	3.41	0.01	0.01	0.12	0.85	2.11	99.7	13	364
SO4-- corr	aerosol	0.20	0.31	0.09	4.30	-0.01	0.00	0.09	0.84	2.08	99.7	13	364

NO0039R Kårvatn

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.08	0.15	0.03	4.54	0.01	0.01	0.03	0.32	1.52	72.6	89	265
Cl-	aerosol	0.16	0.34	0.04	4.66	0.01	0.01	0.03	0.92	2.59	96.4	141	352
HNO3	air	0.04	0.06	0.02	2.59	0.01	0.01	0.01	0.16	0.42	96.2	233	351
HNO3+NO3-	air+aerosol	0.14	0.26	0.08	2.84	0.01	0.02	0.07	0.43	3.68	96.2	0	351
K+	aerosol	0.06	0.12	0.02	3.60	0.01	0.01	0.02	0.27	1.27	96.4	109	352
Mg++	aerosol	0.037	0.048	0.018	3.423	0.005	0.005	0.020	0.150	0.350	72.6	104	265
NH3	air	0.75	0.52	0.60	2.03	0.03	0.17	0.62	1.71	3.52	96.4	1	352
NH3+NH4+	air+aerosol	0.88	0.66	0.70	1.97	0.10	0.23	0.68	2.22	4.73	96.2	0	351
NH4+	aerosol	0.12	0.26	0.03	5.47	0.01	0.01	0.03	0.68	2.74	96.2	121	351
NO2	air	0.24	0.16	0.20	1.96	0.01	0.07	0.21	0.57	1.60	99.5	7	363
NO3-	aerosol	0.11	0.22	0.05	3.80	0.01	0.01	0.05	0.34	3.26	96.2	43	351
Na+	aerosol	0.16	0.23	0.08	3.73	0.01	0.01	0.08	0.72	1.53	96.4	29	352
SO2	air	0.06	0.10	0.03	2.53	0.01	0.01	0.04	0.18	1.15	96.4	107	352
SO4--	aerosol	0.24	0.29	0.12	3.85	0.01	0.01	0.14	0.95	1.63	96.4	21	352
SO4-- corr	aerosol	0.23	0.29	0.10	4.74	-0.00	0.00	0.12	0.95	1.63	96.4	21	352

NO0042G Spitsbergen, Zeppelinfjell

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.07	0.09	0.04	3.34	0.01	0.01	0.04	0.28	0.48	77.0	40	281
Cl-	aerosol	0.34	0.53	0.13	4.67	0.01	0.01	0.18	1.24	5.07	95.1	57	347
HNO3	air	0.03	0.06	0.02	2.46	0.01	0.01	0.01	0.17	0.39	94.8	249	346
HNO3+NO3-	air+aerosol	0.11	0.14	0.06	2.62	0.01	0.02	0.05	0.41	1.03	94.8	0	346
K+	aerosol	0.02	0.03	0.01	2.51	0.01	0.01	0.01	0.06	0.26	94.0	193	343
Mg++	aerosol	0.051	0.047	0.034	2.662	0.005	0.005	0.040	0.139	0.340	77.0	32	281
NH3	air	0.39	0.22	0.32	1.99	0.03	0.12	0.35	0.84	1.19	94.8	7	346
NH3+NH4+	air+aerosol	0.42	0.23	0.35	1.88	0.03	0.13	0.39	0.91	1.46	93.7	0	342
NH4+	aerosol	0.03	0.09	0.01	3.14	0.01	0.01	0.01	0.11	1.07	93.7	148	342
NO3-	aerosol	0.07	0.10	0.04	3.38	0.01	0.01	0.04	0.27	0.75	94.8	48	346
Na+	aerosol	0.25	0.31	0.14	3.08	0.01	0.02	0.16	0.79	2.89	94.0	7	343
SO2	air	0.10	0.20	0.05	2.89	0.01	0.01	0.05	0.35	1.67	95.1	70	347
SO4--	aerosol	0.13	0.14	0.07	3.15	0.01	0.01	0.08	0.40	1.29	95.1	19	347
SO4-- corr	aerosol	0.10	0.14	0.05	4.39	-0.04	0.00	0.06	0.37	1.21	95.1	19	347

NO0055R Karasjok

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.07	0.10	0.03	3.66	0.01	0.01	0.04	0.26	0.59	71.2	52	260
Cl-	aerosol	0.30	0.52	0.09	5.40	0.01	0.01	0.08	1.41	3.50	100.0	95	365
HNO3	air	0.04	0.06	0.02	2.77	0.01	0.01	0.01	0.17	0.36	96.2	224	351
HNO3+NO3-	air+aerosol	0.16	0.24	0.08	2.95	0.01	0.02	0.06	0.62	1.75	96.2	0	351
K+	aerosol	0.02	0.03	0.01	2.52	0.01	0.01	0.01	0.07	0.21	100.0	119	365
Mg++	aerosol	0.045	0.049	0.025	3.202	0.005	0.005	0.030	0.160	0.260	71.8	65	262
NH4+	aerosol	0.12	0.20	0.04	5.25	0.01	0.01	0.04	0.51	1.39	100.0	98	365
NO2	air	0.14	0.11	0.10	2.43	0.01	0.01	0.12	0.37	0.68	98.9	36	361
NO3-	aerosol	0.13	0.27	0.05	4.03	0.01	0.01	0.04	0.55	2.96	100.0	39	365
Na+	aerosol	0.23	0.30	0.12	3.19	0.01	0.02	0.12	0.81	1.94	100.0	10	365
SO2	air	0.29	0.78	0.07	4.68	0.01	0.01	0.05	1.53	8.71	96.2	72	351
SO4--	aerosol	0.27	0.31	0.15	3.27	0.01	0.02	0.16	0.87	1.91	100.0	6	365
SO4-- corr	aerosol	0.26	0.32	0.12	3.98	-0.01	0.01	0.12	0.86	1.90	100.0	6	365

PL0002R Jarczew

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	1.00	0.59	0.84	1.82	0.15	0.30	0.88	2.21	3.86	96.2	0	351
NH3+NH4+	air+aerosol	3.45	1.95	3.05	1.63	0.71	1.33	3.10	6.92	17.41	96.2	0	351
NH4+	aerosol	2.05	1.23	1.74	1.79	0.22	0.66	1.80	4.18	8.39	96.2	0	351
NO2	air	3.14	1.43	2.87	1.53	0.70	1.50	2.90	5.90	11.40	95.6	0	349
NO3-	aerosol	0.86	0.58	0.68	2.08	0.01	0.19	0.74	1.96	3.77	96.2	1	351
SO2	air	2.31	2.11	1.58	2.52	0.10	0.30	1.60	7.06	11.80	96.2	7	351
SO4--	aerosol	1.81	0.97	1.58	1.74	0.10	0.61	1.60	3.77	7.77	96.2	2	351

PL0003R Sniezka

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.32	0.18	0.27	1.85	0.04	0.09	0.29	0.68	1.04	100.0	0	365
NH3+NH4+	air+aerosol	0.75	0.41	0.64	1.84	0.07	0.24	0.70	1.55	2.81	100.0	0	365
NH4+	aerosol	0.58	0.33	0.48	1.94	0.03	0.15	0.53	1.19	2.20	100.0	4	365
NO2	air	0.94	0.53	0.80	1.81	0.20	0.30	0.90	2.00	2.80	100.0	0	365
NO3-	aerosol	0.24	0.14	0.20	1.87	0.03	0.07	0.22	0.51	0.87	100.0	0	365
SO2	air	1.01	0.55	0.87	1.76	0.20	0.30	0.90	2.00	3.30	100.0	0	365
SO4--	aerosol	0.80	0.45	0.67	1.90	0.10	0.22	0.72	1.66	3.27	100.0	15	365

PL0004R Leba

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.75	0.54	0.59	2.04	0.03	0.18	0.60	1.82	3.18	99.2	0	362
NH3+NH4+	air+aerosol	1.60	0.99	1.34	1.86	0.13	0.49	1.36	3.62	5.84	99.2	0	362
NH4+	aerosol	1.17	0.87	0.91	2.13	0.03	0.26	0.92	2.79	5.33	99.2	1	362
NO2	air	1.88	1.19	1.60	1.77	0.30	0.60	1.60	4.12	8.20	97.5	0	356
NO3-	aerosol	0.57	0.48	0.42	2.29	0.03	0.11	0.44	1.51	2.87	99.2	0	362
SO2	air	1.34	1.90	0.79	2.66	0.10	0.20	0.80	5.37	13.10	99.2	15	362
SO4--	aerosol	1.35	0.76	1.15	1.81	0.10	0.35	1.21	2.61	6.06	99.2	2	362

PL0005R Diabla Gora

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.70	0.56	0.55	1.99	0.09	0.20	0.53	1.82	4.45	98.1	0	358
NH3+NH4+	air+aerosol	1.51	0.79	1.34	1.62	0.23	0.68	1.22	3.10	4.43	98.1	0	358
NO2	air	0.60	0.11	0.58	1.21	0.19	0.44	0.58	0.80	1.03	99.5	0	363
PM10 mass	pm10	20.59	13.34	17.35	1.79	3.10	6.58	17.23	43.75	96.40	98.1	0	358
SO2	air	0.92	1.83	0.47	2.82	0.07	0.10	0.41	2.82	20.29	97.8	0	357
SO4--	aerosol	0.80	0.64	0.58	2.32	0.03	0.14	0.64	2.06	3.89	98.1	0	358

RU0001R Janiskoski

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NH4+	aerosol	1.01	2.54	0.41	3.95	0.01	0.03	0.45	3.72	25.38	59.7	0	218
NO3-	aerosol	0.07	0.17	0.03	3.71	0.00	0.00	0.03	0.26	1.69	59.5	0	217
SO2	air	1.83	3.90	0.35	7.09	0.01	0.01	0.31	9.62	32.97	59.7	0	218
SO4--	aerosol	0.66	1.13	0.27	4.19	0.00	0.02	0.32	3.17	9.69	59.7	0	218

RU0016R Shepeljovo

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NH4+	aerosol	0.43	0.44	0.25	3.28	0.01	0.02	0.29	1.33	2.83	77.3	0	282
NO3-	aerosol	0.09	0.10	0.06	2.79	0.00	0.01	0.06	0.28	0.62	77.3	0	282
SO2	air	0.25	0.44	0.12	3.26	0.01	0.01	0.12	0.78	3.70	77.0	0	281
SO4--	aerosol	0.26	0.26	0.17	2.63	0.00	0.04	0.17	0.81	1.86	77.3	0	282

SE0005R Bredkälen

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.08	0.11	0.05	2.53	0.00	0.01	0.05	0.23	0.90	97.3	8	355
NH3+NH4+	air+aerosol	0.23	0.30	0.10	3.95	0.01	0.01	0.11	0.91	1.99	97.3	93	355
NO2	air	0.14	0.16	0.09	2.41	0.05	0.05	0.05	0.48	1.06	99.2	257	362
SO2	air	0.11	0.28	0.03	4.12	0.01	0.01	0.01	0.52	3.50	97.3	198	355
SO4--	aerosol	0.25	0.32	0.13	3.49	0.00	0.01	0.10	0.92	1.93	97.5	11	356

SE0008R Hoburgen

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	1.19	0.89	0.94	2.01	0.05	0.34	0.90	3.07	5.76	99.2	2	362
SO2	air	0.72	0.75	0.48	2.64	0.01	0.10	0.51	1.99	6.71	99.2	4	362
SO4--	aerosol	0.72	0.71	0.50	2.41	0.00	0.10	0.55	1.83	5.51	99.2	1	362

SE0011R Vavihill

January 2006 - December 2006

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	0.50	0.49	2.07	0.05	0.13	0.50	1.68	3.15	100.0	0	365
NH3+NH4+	air+aerosol	1.38	1.07	1.05	2.12	0.10	0.28	1.04	3.57	6.43	100.0	0	365
NO2	air	1.59	1.17	1.30	1.83	0.41	0.55	1.18	3.81	8.49	99.5	0	363
PM10 mass	pm10	17.28	10.19	14.31	1.99	0.75	4.80	15.40	37.20	116.40	75.1	133	6578
PM25 mass	pm25	12.99	10.54	9.13	2.60	0.75	0.75	10.30	36.30	79.10	31.0	209	2719
SO2	air	0.50	0.78	0.29	2.73	0.01	0.08	0.26	1.89	6.31	100.0	5	365
SO4--	aerosol	0.74	0.55	0.57	2.12	0.03	0.14	0.58	1.86	3.45	100.0	0	365

SE0012R Aspvreten

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
PM10 mass	pm10	11.57	9.40	7.94	2.73	0.75	0.75	9.40	30.40	88.30	97.5	904	8544
PM25 mass	pm25	8.19	7.54	5.11	2.99	0.75	0.75	6.30	23.96	73.30	48.7	839	4266

SE0014R Råö

January 2006 - December 2006

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	0.50	0.48	2.30	0.01	0.12	0.55	1.69	3.00	99.7	0	364
NH3+NH4+	air+aerosol	0.95	0.74	0.70	2.33	0.01	0.17	0.69	2.58	3.72	99.7	2	364
NO2	air	1.67	1.27	1.36	1.83	0.37	0.58	1.34	3.71	10.25	99.7	0	364
SO2	air	0.52	0.47	0.38	2.38	0.01	0.09	0.41	1.42	3.44	99.7	4	364
SO4--	aerosol	0.82	0.55	0.68	1.94	0.00	0.18	0.70	1.88	3.50	100.0	4	365

SE0035R Vindeln

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
PM10 mass	pm10	8.58	6.84	6.36	2.36	0.75	0.75	6.80	21.70	80.20	98.4	773	8617

SI0008R Iskrba

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.20	0.27	0.11	3.12	0.00	0.02	0.10	0.64	2.07	98.9	11	361
Cl-	aerosol	0.05	0.08	0.02	3.55	0.00	0.00	0.02	0.20	0.64	98.9	83	361
HNO3+NO3-	air+aerosol	0.51	0.53	0.33	2.64	0.01	0.07	0.36	1.58	3.13	98.9	0	361
K+	aerosol	0.14	0.14	0.11	2.07	0.00	0.04	0.11	0.30	1.64	98.9	3	361
Mg++	aerosol	0.041	0.046	0.024	3.192	0.002	0.002	0.026	0.135	0.417	98.9	27	361
NH3+NH4+	air+aerosol	1.43	0.98	1.13	2.07	0.08	0.32	1.18	3.32	6.08	98.9	0	361
Na+	aerosol	0.14	0.22	0.06	3.46	0.00	0.01	0.06	0.54	1.81	98.9	17	361
PM10 mass	pm10	15.91	10.16	13.64	1.75	2.20	4.90	14.30	28.90	100.60	92.9	0	339
PM25 mass	pm25	13.12	9.85	10.67	1.93	1.50	3.12	11.50	26.86	96.80	96.2	0	351
SO2	air	0.69	1.10	0.30	3.79	0.00	0.04	0.28	2.52	10.05	98.9	3	361
SO4--	aerosol	0.98	0.83	0.70	2.49	0.00	0.14	0.79	2.46	6.92	98.9	1	361
SO4-- corr	aerosol	0.96	0.83	0.68	2.58	0.00	0.14	0.77	2.45	6.91	98.9	1	361

SK0002R Chopok

January 2006 - December 2006

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	1.89	0.00	0.01	0.01	0.04	0.12	99.5	23	363
NO2	air	0.59	0.34	0.49	2.00	0.03	0.13	0.56	1.11	2.99	99.2	42	362
NO3-	aerosol	0.09	0.09	0.04	3.73	0.01	0.01	0.06	0.26	0.46	99.5	103	363
SO2	air	0.26	0.30	0.18	2.13	0.03	0.07	0.15	0.79	2.46	99.2	0	362
SO4--	aerosol	0.33	0.30	0.22	2.54	0.02	0.05	0.22	0.96	1.55	99.5	0	363
SPM	aerosol	7.12	6.64	4.18	3.04	0.28	0.36	4.23	22.94	30.78	84.7	0	50

SK0004R Stará Lesná

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.15	0.14	0.11	2.39	0.00	0.03	0.11	0.41	1.24	97.5	26	356
HNO3	air	0.05	0.06	0.03	2.26	0.01	0.01	0.03	0.15	0.50	97.8	0	357
K+	aerosol	0.17	0.12	0.14	1.79	0.03	0.06	0.14	0.43	1.10	97.5	0	356
Mg++	aerosol	0.019	0.017	0.014	2.230	0.001	0.004	0.014	0.051	0.127	97.8	174	357
NH3	air	0.36	0.34	0.24	2.66	0.04	0.05	0.28	0.97	2.19	97.8	0	357
NH4+	aerosol	1.05	0.63	0.87	1.95	0.10	0.23	0.92	2.29	3.80	97.8	0	357
NO2	air	1.52	0.65	1.36	1.70	0.10	0.51	1.47	2.65	4.68	99.2	10	362
NO3-	aerosol	0.34	0.20	0.29	1.81	0.04	0.10	0.30	0.77	1.39	98.4	0	359
Na+	aerosol	0.20	0.10	0.18	1.53	0.06	0.10	0.17	0.34	1.23	97.8	0	357
PM10 mass	pm10	14.98	5.54	13.78	1.50	4.80	6.43	14.18	25.36	28.48	86.0	0	52
SO2	air	0.77	0.89	0.46	2.72	0.05	0.11	0.43	2.67	6.42	97.8	0	357
SO4--	aerosol	1.01	0.64	0.83	1.95	0.09	0.26	0.84	2.22	4.10	98.4	0	359
SO4-- corr	aerosol	1.00	0.64	0.81	1.98	0.07	0.25	0.82	2.21	4.08	97.0	0	354

SK0005R Liesek

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3	air	0.06	0.10	0.03	2.62	0.01	0.01	0.03	0.25	0.78	98.9	0	361
NO2	air	1.94	1.49	1.58	1.90	0.05	0.69	1.50	4.91	12.61	98.4	2	359
NO3-	aerosol	0.57	0.32	0.49	1.75	0.10	0.17	0.50	1.14	1.99	99.2	0	362
PM10 mass	pm10	21.91	12.42	21.29	1.60	9.90	10.18	20.95	49.91	65.80	85.0	0	42
SO2	air	2.00	2.74	1.02	3.13	0.09	0.20	0.92	7.23	19.59	99.5	0	363
SO4--	aerosol	1.22	0.76	1.02	1.84	0.13	0.40	1.03	2.72	4.58	99.5	0	363

SK0006R Starina

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3	air	0.05	0.05	0.03	2.32	0.01	0.01	0.03	0.16	0.30	97.5	0	356
NO2	air	1.24	0.56	1.14	1.54	0.04	0.63	1.11	2.33	4.49	99.5	2	363
NO3-	aerosol	0.38	0.29	0.29	2.13	0.01	0.09	0.28	1.06	1.84	98.4	2	359
PM10 mass	pm10	18.76	7.46	17.50	1.54	4.80	6.84	19.33	32.86	43.20	87.4	0	47
SO2	air	1.36	1.79	0.73	2.95	0.06	0.16	0.61	5.40	12.67	98.4	0	359
SO4--	aerosol	1.23	0.78	1.00	1.97	0.10	0.30	1.10	2.91	3.90	98.1	0	358

SK0007R Topolniky

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3	air	0.04	0.03	0.03	1.84	0.01	0.01	0.03	0.09	0.23	98.9	0	361
NO2	air	2.80	1.70	2.37	1.79	0.17	0.98	2.34	6.21	11.66	100.0	1	365
NO3-	aerosol	0.97	0.78	0.70	2.49	0.00	0.18	0.77	2.51	4.51	100.0	2	365
SO2	air	1.34	1.59	0.83	2.60	0.08	0.19	0.73	4.37	13.16	100.0	0	365
SO4--	aerosol	1.37	1.02	1.03	2.39	0.00	0.30	1.12	3.34	6.01	100.0	1	365
SPM	aerosol	23.05	10.97	22.27	1.57	9.29	9.58	22.92	46.18	46.18	62.5	0	31

TR0001R Cubuk II

January 2006 - December 2006

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3	air	0.10	0.17	0.04	3.83	0.00	0.00	0.05	0.40	1.35	27.9	3	102
HNO3+NO3-	air+aerosol	0.35	0.36	0.25	2.24	0.02	0.07	0.28	1.07	2.46	27.4	1	100
NH3	air	0.40	0.31	0.27	3.08	-0.11	0.02	0.34	0.95	2.00	89.6	17	327
NH3+NH4+	air+aerosol	0.77	0.33	0.68	1.76	0.08	0.20	0.80	1.30	1.56	38.1	0	139
NH4+	aerosol	0.44	0.30	0.31	2.86	0.00	0.04	0.42	0.94	1.52	39.5	0	144
NO2	air	1.28	1.61	0.70	3.22	0.01	0.09	0.70	4.34	11.14	93.2	26	340
NO3-	aerosol	0.24	0.29	0.14	3.15	0.01	0.02	0.19	0.73	2.20	38.4	0	140
SO2	air	1.33	2.57	0.49	4.76	0.00	0.03	0.60	4.98	18.82	39.5	0	144
SO4--	aerosol	0.59	0.64	0.33	3.78	0.00	0.03	0.50	1.42	8.35	92.3	9	337

Annex 4

Overview of sampling and analytical methods 2006

Country: **Austria**		Main components and ozone - EMEP	Year: 2006	
	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	AT02	Teflon filter, PALL Zefluor 2 µm, 47 mm diameter, 21.6 m^3/day	Daily	Ion chromatography
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 12341	Daily	Micro balance
PM_1	AT02	High Volume Sampler, glass fibre filters with organic binder, 720 m^3/day, 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: 2006	
	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: 2006	
	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: **Croatia**		Main components and ozone - EMEP	Year: 2006	
	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: 2006	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
Precipitation amount, official gauge	All	Meteorological Station	Daily	Automatically gauge
Fluoride	All	Wet-only (weekly), bulk (daily) at CZ03	Weekly, daily at CZ03	Ion Chromatography
Sulphate	All	Wet-only (weekly), bulk (daily) at CZ03	Weekly, daily at CZ03	Ion chromatography
Nitrate	All	Wet-only (weekly), bulk (daily) at CZ03	Weekly, daily at CZ03	Ion chromatography
Ammonium	All	Wet-only (weekly), bulk (daily) at CZ03	Weekly, daily at CZ03	Spectrophotometric, Indophenol method, SFA, FIA
Magnesium	All	Wet-only (weekly), bulk (daily) at CZ03	Weekly, daily at CZ03	F-AAS
Sodium	All	Wet-only (weekly), bulk (daily) at CZ03	Weekly, daily at CZ03	F-AAS
Chloride	All	Wet-only (weekly), bulk (daily) at CZ03	Weekly, daily at CZ03	Ion chromatography
Calcium	All	Wet-only (weekly), bulk (daily) at CZ03	Weekly, daily at CZ03	F-AAS
Potassium	All	Wet-only (weekly), bulk (daily) at CZ03	Weekly, daily at CZ03	F-AAS
Conductivity	All	Wet-only (weekly), bulk (daily) at CZ03	Weekly, daily at CZ03	Conductivity electrode
pH	All	Wet-only (weekly), bulk (daily) at CZ03	Weekly, daily at CZ03	pH electrode
Air				
Sulphur dioxide	All	KOH-impregnated Whatman 40 filter, 20 m^3/day	Daily	Ion chromatography
Nitrogen dioxide	All	Absorbing solution NaOH and guajacol, 0.72 m^3/day	Daily	Spectrophotometric, modified Jacobs - Hochheiser method
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
$PM_{2.5}$	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: 2006	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
Precipitation amount	DK05, DK08, DK22	Wet-only	Two-weekly	
Precipitation amount, official gauge				
Sulphate	DK05, DK08, DK22	Wet-only	Two-weekly	Ion chromatography
Nitrate	DK05, DK08, DK22	Wet-only	Two-weekly	Ion chromatography
Ammonium	DK05, DK08, DK22	Wet-only	Two-weekly	ISO 11732 CFA (continuously flow analysis) and spectrophotometric detection
Magnesium	DK05, DK08, DK22	Wet-only	Two-weekly	Atomic absorption method
Sodium	DK05, DK08, DK22	Wet-only	Two-weekly	Atomic emission method
Chloride	DK05, DK08, DK22	Wet-only	Two-weekly	Ion chromatography
Calcium	DK05, DK08, DK22	Wet-only	Two-weekly	Atomic absorption method
Potassium	DK05, DK08, DK22	Wet-only	Two-weekly	Atomic emission method
Conductivity	DK05, DK08, DK22	Wet-only	Two-weekly	Conductivity meter
pH	DK05, DK08, DK22	Wet-only	Two-weekly	pH meter
Acidity				
Air				
Sulphur dioxide	DK03, DK05, DK08	KOH-impregnated Whatman 41 filters, 58 m^3/day	Daily	Ion chromatography
Nitrogen dioxide	DK05	Monitor	Hourly	Chemiluminescence
Nitrogen dioxide	DK08	KI-method (glass sinter), 0.7 m^3/day	Daily	Spectrophotometric, EMEP manual (4.11)
Nitric acid				
Ammonia				
Ozone	DK05, DK31, DK41	UV-monitor	Hourly	UV-absorption
Sulphate	DK03, DK05, DK08	Millipore RAWP 1.2 μm, 58 m^3/day	Daily	Ion chromatography
Nitrate				
Ammonium				
Sodium	DK03, DK05, DK08	Millipore RAWP 1.2 μm, 58 m^3/day	Daily	Atomic absorption method
Calcium				
Magnesium				
Potassium				
Chloride				
PM_{10}	DK05	SM200	Daily	Gravimetric
$PM_{2.5}$				
Suspended particulate matter				
Sum of nitric acid and nitrate	DK03, DK05, DK08	Aerosol filter as for sulphate + KOH-impregnated Whatman 41, 58 m^3/day	Daily	Ion chromatography
Sum of ammonia and ammonium	DK03, DK05, DK08	Aerosol filter as for sulphate + Oxalic acid impregnated Whatman 41, 58 m^3/day	Daily	ISO 11732 CFA (continuously flow analysis) and spectrophotometric detection
Acidity				

Country: **Estonia**		Main components and ozone - EMEP	Year: 2006	
	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	EE09	Instrumental: UV fluorescence	Daily/Hourly	UV fluorescence
Sulphur dioxide	EE11	Instrumental: UV fluorescence	Daily/Hourly	UV fluorescence
Nitrogen dioxide	EE09	Instrumental: Chemiluminescence	Daily/Hourly	Chemiluminescence
Nitrogen dioxide	EE11	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: 2006	
	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: 2006	
	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: 2006	
	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				
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: 2006	
	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: 2006	
	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, ~21 m^3/day	Daily	Ion chromatography
Nitrogen dioxide	All	Iodide method (impregnated glass sinter), ~0.8 m^3/day	Daily	Spectrophotometric, Griess method
Nitric acid	All	Teflon filter, Millipore Fluoropore, 1 μm, ~21 m^3/day	Daily	Ion chromatography
Ammonia	All	Alkaline impregnated Whatman 40 filter, ~21 m^3/day	Daily	Spectrophotometric, Indophenol method
Ozone	All	UV-monitor	Hourly	UV-absorption
Sulphate	All	Teflon filter, Millipore Fluoropore, 1 μm, ~21 m^3/day	Daily	Ion chromatography
Nitrate	All	Teflon filter, Millipore Fluoropore, 1 μm, ~21 m^3/day	Daily	Ion chromatography
Ammonium	All	Teflon filter, Millipore Fluoropore, 1 μm, ~21 m^3/day	Daily	Spectrophotometric, Indophenol method
Sodium				
Calcium				
Magnesium				
Potassium				
Chloride				
PM_{10}				
$PM_{2.5}$				
Suspended particulate matter				
Sum of nitric acid and nitrate	All	Teflon filter, Millipore Fluoropore, 1 μm, ~21 m^3/day	Daily	Ion chromatography
Sum of ammonia and ammonium	All	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: 2006	
	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	Jan-Feb: ICP-OES; Mar-Dec: Ion chromatography
Nitrate	IS02	NILU bulk sampler	Daily	Jan-Feb: Spectrophotometry by FIA; Mar-Dec: 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: 2006	
	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: 2006	
	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: 2006	
	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: 2006	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
Precipitation amount	IT04	Wet-only	Daily	
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				
Sodium				
Chloride				
Calcium				
Potassium				
Conductivity				
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	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}	IT04	Whatman quartz fibre filter QFF, 55 m^3/day	Daily	Weighing at 50% RH
$PM_{2.5}$	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	IT04	Whatman quartz fibre filter QFF, 55 m^3/day	Daily	pH meter
EC/OC	IT04	Whatman quartz fibre filter QFF, 55 m^3/day		Thermo optical

Country: **Latvia**		Main components and ozone - EMEP	Year: 2006	
	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	LV16: Bulk, LV10: Wet-only	Daily	Ion chromatography
Nitrate	All	LV16: Bulk, LV10: Wet-only	Daily	Ion chromatography
Ammonium	All	LV16: Bulk, LV10: Wet-only	Daily	Spectrophotometric, Indophenol method
Magnesium	All	LV16: Bulk, LV10: Wet-only	Daily	Atomic absorption method
Sodium	All	LV16: Bulk, LV10: Wet-only	Daily	Atomic emission method
Chloride	All	LV16: Bulk, LV10: Wet-only	Daily	Ion chromatography
Calcium	All	LV16: Bulk, LV10: Wet-only	Daily	Atomic absorption method
Potassium	All	LV16: Bulk, LV10: Wet-only	Daily	Atomic emission method
Conductivity	All	LV16: Bulk, LV10: Wet-only	Daily	Conductivity meter
pH	All	LV16: Bulk, LV10: Wet-only	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				
Calcium				
Magnesium				
Potassium				
Chloride				
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: 2006	
	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: 2006	
	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	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

Country: **Norway**		Main components and ozone - EMEP	Year: 2006	
	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: 2006	
	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: 2006	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
Precipitation amount	PL05	Wet-only	Daily	
Precipitation amount, official gauge	PL05	Wet-only	Daily	
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 Gelman 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 (as for sulphate) + NaOH impregnated Whatman 40 filter, 16 m^3/day	Daily	Capillary Electrophoresis
Sum of ammonia and ammonium	PL05	Aerosol Teflon filter (as for sulphate) + Oxalic acid impregnated Whatman 40 filter, 16 m^3/day	Daily	Spectrophotometric, Indophenol method
Acidity				

Country: **Portugal**		Main components and ozone - EMEP	Year: 2006	
	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: 2006	
	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 and Montenegro**		Main components and ozone - EMEP	Year: 2006	
	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 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: 2006	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
Precipitation amount	All	SK02: Bulk, SK04, SK05, SK06, SK07: Wet-only	Daily	
Precipitation amount, official gauge	All	Reported from professional meteorological rain-gauges	Daily	
Sulphate	All	SK02: Bulk, SK04, SK05, SK06, SK07: Wet-only	Daily; weekly: SK05, SK07	Ion chromatography
Nitrate	All	SK02: Bulk, SK04, SK05, SK06, SK07: Wet-only	Daily; weekly: SK05, SK07	Ion chromatography
Ammonium	All	SK02: Bulk, SK04, SK05, SK06, SK07: Wet-only	Daily; weekly: SK05, SK07	Ion chromatography
Magnesium	All	SK02: Bulk, SK04, SK05, SK06, SK07: Wet-only	Daily; weekly: SK05, SK07	Ion chromatography
Sodium	All	SK02: Bulk, SK04, SK05, SK06, SK07: Wet-only	Daily; weekly: SK05, SK07	Ion chromatography
Chloride	All	SK02: Bulk, SK04, SK05, SK06, SK07: Wet-only	Daily; weekly: SK05, SK07	Ion chromatography
Calcium	All	SK02: Bulk, SK04, SK05, SK06, SK07: Wet-only	Daily; weekly: SK05, SK07	Ion chromatography
Potassium	All	SK02: Bulk, SK04, SK05, SK06, SK07: Wet-only	Daily; weekly: SK05, SK07	Ion chromatography
Conductivity	All	SK02: Bulk, SK04, SK05, SK06, SK07: Wet-only	Daily; weekly: SK05, SK07	Conductivity meter
pH	All	SK02: Bulk, SK04, SK05, SK06, SK07: Wet-only	Daily; weekly: SK05, SK07	pH meter
Acidity				
Air				
Sulphur dioxide	All	KOH-impregnated Whatman 40 filter, 26-30 m^3/day	Daily	Ion chromatography
Nitrogen dioxide	All	Absorbing solution NaOH and guajacol, 0.5-0.6 m^3/day	Daily	Spectrophotometric, Modified Salzman method
Nitric acid	All	KOH-impregnated Whatman 40 filter, 26-30 m^3/day	Daily	Ion chromatography
Ammonia				
Ozone	All	UV-monitor	Hourly	UV-absorption
Sulphate	All	Whatman 40 filter, 26-30 m^3/day	Daily	Capillary electrophoresis
Nitrate	All	Whatman 40 filter, 26-30 m^3/day	Daily	Capillary electrophoresis
Ammonium				
Sodium				
Calcium				
Magnesium				
Potassium				
Chloride				
PM_{10}	SK04, SK05, SK06	Partisol R&P, Sartorius nitrocellulose filter, 24 m^3/day	Weekly	Gravimetric method
$PM_{2.5}$				
Suspended particulate matter	SK02, SK07	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: 2006	
	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
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
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: 2006	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation	**All (except ES10)**			
Precipitation amount	All	Wet-only	Daily	
Precipitation amount, official gauge				
Sulphate	All	Wet-only	Daily	Ion chromatography
Nitrate	All	Wet-only	Daily	Ion chromatography
Ammonium	All	Wet-only	Daily	Visible spectrophotometry, Indophenol method
Magnesium	All	Wet-only	Daily	Atomic absorption spectroscopy
Sodium	All	Wet-only	Daily	Atomic absorption spectroscopy
Chloride	All	Wet-only	Daily	Ion chromatography
Calcium	All	Wet-only	Daily	Atomic absorption spectroscopy
Potassium	All	Wet-only	Daily	Atomic absorption spectroscopy
Conductivity	All	Wet-only	Daily	Conductivity meter
pH	All	Wet-only	Daily	pH meter
Air				
Sulphur dioxide	All	Instrumental: UV-fluorescence	Hourly	
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	Flame atomic absorption spectroscopy
Calcium $PM_{2.5}$	ES09	High volume sampler	24 hour, once a week	Flame atomic absorption spectroscopy
Magnesium $PM_{2.5}$	ES09	High volume sampler	24 hour, once a week	Flame atomic absorption spectroscopy
Potassium $PM_{2.5}$	ES09	High volume sampler	24 hour, once a week	Flame atomic absorption spectroscopy
Ammonium $PM_{2.5}$	ES09	High volume sampler	24 hour, once a week	Visible spectrophotometry, Indophenol method
Chloride $PM_{2.5}$	ES09	High volume sampler	24 hour, once a week	Ion chromatography

Country: **Sweden**	Main components and ozone - EMEP	Year: 2006

	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: 2006

	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	Absorbing solution H_2O_2, 4.1 m^3/day	Daily	Ion chromatography
Sulphur dioxide	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				
Ammonia				
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				
Ammonium				
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, CH04	High Volume Samplers, Whatman QMA 1851-150, 720 m^3/day	Daily	Gravimetry
PM_1	CH02, CH04	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 Schleicher & Schüll 589/4 filter, 18 m^3/day; from October 06, Whatman 40 filter / NILU filterholder	Daily	Ion chromatography
Sum of ammonia and ammonium	CH02, CH05	Citric acid impregnated Schleicher & Schüll 589/4 filter, 18 m^3/day; from October 06, Whatman 40 filter / NILU filterholder	Daily	Ion chromatography
Acidity				

Country: **Turkey**		Main components and ozone - EMEP	Year: 2006	
	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: 2006	
	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				

Annex 5

List of data reports

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EMEP/CCC-Report 5/86 by J. Schaug, A. Harstad, T. Krognes, J.E. Skjelmoen.
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EMEP/CCC-Report 1/87 by J. Schaug, J. Pacyna, A. Harstad, T. Krognes, J.E. Skjelmoen.
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Lillestrøm, Norwegian Institute for Air Research, 1987.

European Precipitation Chemistry Atlas.
An Atlas of monthly and seasonal maps of precipitation amount, non-marine sulphate, nitrate, ammonium and hydrogen ion concentrations and depositions based on the EMEP precipitation network: October 1977 to September 1982.
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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.