

# Data Report 2015

## Particulate matter, carbonaceous and inorganic compounds

**Anne-Gunn Hjellbrekke**

0.07	0.41	0.06	0.05	0.06	0.12	0.10	0.15	0.11	0.12	0.30	0.20
1.71	1.38	0.77	0.34	0.32	0.36	0.22	0.22	0.61	0.88	1.26	0.74
0.44	1.13	0.38	0.30	0.26	0.07	0.10	0.10	0.14	0.32	0.87	0.34
1.02	0.57	1.00	0.55	0.60	0.18	0.40	0.54	0.93	0.64	0.68	0.43
0.86	3.24	0.66	0.68	0.55	0.48	0.42	0.24	0.57	0.59	1.17	0.44
0.91	0.83	1.07	0.38	0.61	0.51	0.41	0.20	1.20	1.03	0.78	0.62
0.66	0.52	0.64	0.44	0.52	0.26	0.25	1.37	0.75	0.36	0.44	0.18
0.93	0.61	0.95	0.77	0.77	0.59	-	0.45	1.22	0.68	0.80	0.91
0.83	0.41	0.92	0.90	0.67	0.43	0.70	0.60	1.02	0.49	0.66	0.39
2.11	2.06	2.23	1.11	0.34	0.65	0.27	0.27	0.33	0.28	0.57	1.36
1.06	0.75	1.18	0.34	0.37	0.33	0.29	0.23	0.22	0.20	1.24	0.93
0.48	0.02	1.63	0.25	0.42	2.77	0.92	0.46	0.40	0.56	0.70	2.31
0.70	1.76	1.64	0.27	0.38	1.17	0.50	0.42	1.06	1.02	0.78	2.04
0.38	1.03	0.79	0.75	0.60	4.15	1.89	0.90	1.02	0.43	1.14	1.91
0.27	1.02	0.43	0.38	0.43	0.82	0.39	0.71	0.52	0.41	1.30	1.51
1.12	1.20	2.15	0.51	0.61	1.24	0.94	0.91	0.51	0.96	1.85	3.77
0.68	0.08	0.68	0.79	0.58	1.54	0.67	0.50	1.28	0.82	1.76	1.76
0.27	0.04	2.08	0.28	0.55	0.66	1.28	0.58	1.10	0.69	2.93	1.68
0.38	0.40	0.28	0.28	0.72	0.76	1.54	0.60	0.45	0.77	2.44	1.85
0.27	0.21	0.71	0.25	0.27	0.30	0.52	1.71	0.35	0.54	1.40	1.13
0.27	0.06	0.98	0.36	0.49	0.45	0.34	0.31	0.37	0.34	0.51	0.57
1.12	0.20	1.92	0.70	0.48	0.55	0.37	0.25	0.45	0.39	0.91	0.91
0.68	0.05	0.73	0.39	0.40	0.13	0.09	0.08	0.17	0.09	0.44	0.90
0.27	0.05	1.16	0.28	0.15	0.13	0.09	0.12	0.21	0.19	0.27	0.51
0.38	0.38	0.35	0.38	0.29	1.18	0.47	0.80	0.64	0.65	0.84	0.84
0.27	0.15	0.70	1.07	0.94	1.16	0.82	0.84	0.03	1.01	0.88	0.88
0.36	1.07	0.33	0.30	0.50	0.28	0.45	0.36	0.57	0.41	1.15	0.64
0.89	0.05	0.74	0.81	0.66	0.55	0.65	0.74	0.84	1.04	1.42	1.42
0.74	2.51	0.54	0.88	0.42	0.73	0.39	0.39	0.38	0.56	1.31	0.83
0.86	2.07	1.74	0.87	0.82	0.87	0.82	0.55	0.84	0.68	0.59	0.37
0.41	0.99	0.49	0.59	0.52	0.51	0.52	0.66	0.64	0.69	0.54	0.97
0.34	0.55	0.29	0.41	0.52	0.51	0.53	0.38	0.40	0.31	0.91	0.60
0.43	0.40	0.44	0.68	0.48	0.52	0.53	0.62	0.64	0.42	0.51	0.43
1.39	2.68	0.84	1.26	1.10	1.06	1.26	1.26	1.13	1.32	1.48	1.24
0.31	0.20	0.27	0.31	0.31	0.27	0.23	0.34	0.20	0.37	0.23	0.20
0.75	1.18	1.07	0.76	0.64	0.84	1.08	1.92	0.68	0.95	0.95	1.18
0.54	0.47	0.43	0.54	0.61	0.62	0.59	0.51	0.50	0.73	0.97	0.34
0.36	0.50	0.31	0.42	0.32	0.77	0.82	0.84	1.87	1.08	1.52	2.27
0.23	0.24	0.28	0.49	0.35	0.43	0.39	0.53	0.45	0.27	0.30	0.24
0.35	0.24	0.53	0.49	0.49	0.31	0.30	0.43	0.62	0.28	0.34	0.28
0.54	0.53	0.92	1.43	0.54	0.47	0.27	0.64	0.22	0.91	0.94	0.89

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

**Data Report 2015  
Particulate matter, carbonaceous and  
inorganic compounds**

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# Data Report 2015

## Particulate matter, carbonaceous and inorganic compounds

### 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 include all main components in precipitation and ozone and nitrogen compounds in air. Furthermore, VOC, POPs, heavy metals and particulate matter are included in the monitoring programme (ECE/EB.AIR/GE.1/2009/15).

The EMEP data from 2015 for particulate matter, organic and elemental carbon, acidifying and eutrophying components in air and precipitation are presented in this report, which aims to give a short overview of the measurement data available. A complete set of data, including raw data, annual statistics and monthly means, can be downloaded from the web at <http://ebas.nilu.no> and <http://www.nilu.no/projects/ccc/>.

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

### 2. The measurement network

The locations of the measurement sites are given in Table 1 and Figure 3.1. In addition to the network presented here, there are additional EMEP sites with other types of measurements.

In total, precipitation data from 85 stations and air data from 112 stations are presented in this report. The total number of measurement sites in this report is 125.

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 2015.*

Country	Station codes	Station name	Location		Height above sea (m)
			Lat.	Long.	
<b>Armenia</b>	AM0001R	Amberd	40°23'04"N	044°15'38"E	2080
<b>Austria</b>	AT0002R	Iilmitz	47°46'00"N	016°46'00"E	117
	AT0005R	Vorhegg	46°40'40"N	012°58'20"E	1020
	AT0048R	Zoebelboden	47°50'19"N	014°26'29"E	899
<b>Belarus</b>	BY0004R	Vysokoe	52°20'00"N	023°26'00"E	163
<b>Belgium</b>	BE0001R	Offagne	49°52'40"N	005°12'13"E	430
	BE0032R	Eupen	50°37'46"N	006°00'04"E	295
	BE0035R	Vezin	50°30'12"N	004°59'22"E	160
<b>Croatia</b>	HR0002R	Puntjarka	45°54'00"N	015°58'00"E	988
	HR0004R	Zavizan	44°49'00"N	014°59'00"E	1594
<b>Cyprus</b>	CY0002R	Ayia Marina	35°02'21"N	033°03'29"E	532
<b>Czech Rep.</b>	CZ0001R	Svratouch	49°44'00"N	016°03'00"E	737
	CZ0003R	Košetice (NOAK)	49°35'00"N	015°05'00"E	534
	CZ0005R	Churanov	49°04'00"N	013°36'00"E	1118
<b>Denmark</b>	DK0003R	Tange	56°21'00"N	009°36'00"E	13
	DK0005R	Keldsnor	54°44'00"N	010°44'00"E	10
	DK0008R	Anholt	56°43'00"N	011°31'00"E	40
	DK0010G	Nord, Greenland	81°36'00"N	016°40'12"W	20
	DK0012R	Risoe	55°41'37"N	012°05'09"E	3
	DK0022R	Sepstrup Sande	55°05'00"N	009°36'00"E	60
	DK0031R	Ulborg	56°17'00"N	008°26'00"E	10
<b>Estonia</b>	EE0009R	Lahemaa	59°30'00"N	025°54'00"E	32
	EE0011R	Vilsandi	58°23'00"N	021°49'00"E	6
<b>Finland</b>	FI0004R	Ähtäri	62°32'00"N	024°13'18"E	162
	FI0009R	Utö	59°46'45"N	021°22'38"E	7
	FI0018R	Virolahti III	60°31'48"N	027°40'03"E	4
	FI0022R	Oulanka	66°19'13"N	029°24'06"E	310
	FI0036R	Pallas (Matorova)	68°00'00"N	024°14'23"E	340
	FI0037R	Ähtäri II	62°35'00"N	024°11'00"E	180
<b>France</b>	FR0008R	Donon	48°30'00"N	007°08'00"E	775
	FR0009R	Revin	49°54'00"N	004°38'00"E	390
	FR0010R	Morvan	47°16'00"N	004°05'00"E	620
	FR0013R	Peyrusse Vieille	43°37'00"N	000°11'00"E	200
	FR0014R	Montandon	47°18'00"N	006°50'00"E	836
	FR0015R	La Tardière	46°39'00"N	000°45'00"W	133
	FR0016R	Le Casset	45°00'00"N	006°28'00"E	1750
	FR0017R	Montfranc	45°48'00"N	002°04'00"E	810
	FR0018R	La Coulonche	48°38'00"N	000°27'00"W	309
	FR0019R	Pic du Midi	42°56'12"N	000°08'31"E	2877
	FR0023R	Saint-Nazaire-le-Desert	44°34'18"N	005°16'44"E	605
	FR0024R	Guipry	47°49'55"N	001°58'11"W	29
	FR0025R	Verneuil	46°48'53"N	002°36'36"E	182
	FR0030R	Puy de Dôme	45°46'00"N	002°57'00"E	1465
<b>Georgia</b>	GE0001R	Abastumani	41°45'18"N	042°49'31"E	1650
<b>Germany</b>	DE0001R	Westerland	54°55'32"N	008°18'35"E	12
	DE0002R	Waldhof	52°48'08"N	010°45'34"E	74
	DE0003R	Schauinsland	47°54'53"N	007°54'31"E	1205
	DE0007R	Neuglobsow	53°10'00"N	013°02'00"E	62
	DE0008R	Schmücke	50°39'00"N	010°46'00"E	937
	DE0009R	Zingst	54°26'00"N	012°44'00"E	1
	DE0043G	Hohenpeissenberg	47°48'05"N	011°00'35"E	985
	DE0044R	Melpitz	51°31'48"N	012°55'48"E	86
<b>Greece</b>	GR0001R	Aliartos	38°22'00"N	023°05'00"E	110
<b>Hungary</b>	HU0002R	K-puszta	46°58'00"N	019°35'00"E	125
<b>Iceland</b>	IS0002R	Irafoss	64°05'00"N	021°01'00"W	66
	IS0091R	Storhofdi	63°24'00"N	020°17'00"W	118
<b>Ireland</b>	IE0001R	Valentia Observatory	51°56'23"N	010°14'40"W	11
	IE0005R	Oak Park	52°52'07"N	006°55'29"W	59
	IE0006R	Malin Head	55°22'30"N	007°20'34"W	20
	IE0008R	Carnsore Point	52°11'06"N	006°22'06"W	9
	IE0009R	Johnstown Castle	52°17'56"N	006°30'39"W	62
<b>Italy</b>	IT0001R	Montelibretti	42°06'00"N	012°38'00"E	48
	IT0004R	Ispra	45°48'00"N	008°38'00"E	209
<b>Latvia</b>	LV0010R	Rucava	56°09'43"N	021°10'23"E	18
<b>Lithuania</b>	LT0015R	Preila	55°21'00"N	021°04'00"E	5
<b>Macedonia</b>	MK0007R	Lazaropole	41°32'10"N	020°41'38"E	1332

Table 1, cont.

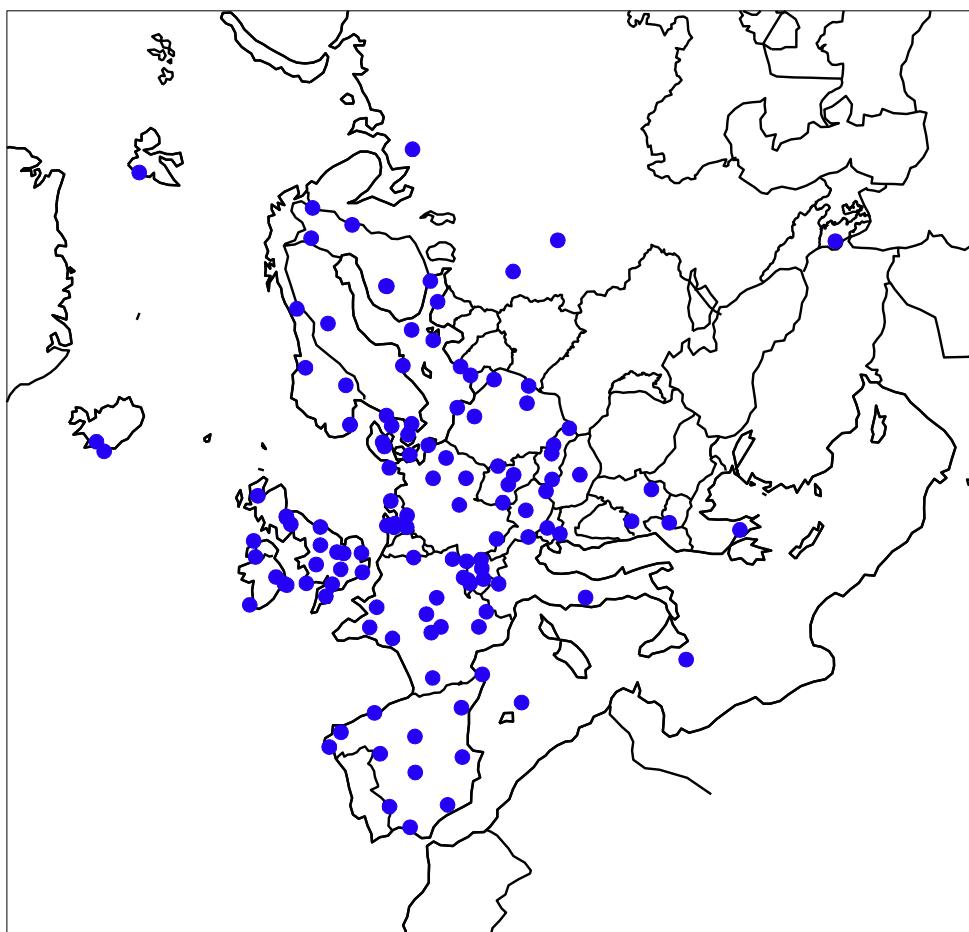
Country	Station codes	Station name	Location		Height above sea (m)
			Lat.	Long.	
<b>Malta</b>	MT0001R	Giordan Lighthouse	36°04'20"N	014°13'06"E	167
<b>Moldova</b>	MD0013R	Leova II	46°29'18"N	028°17'01"E	166
<b>Montenegro</b>	ME0008R	Zabljak	43°09'00"N	019°08'00"E	1450
<b>The Netherlands</b>	NL0007R	Eibergen	52°05'00"N	006°34'00"E	20
	NL0008R	Bilthoven	52°07'00"N	005°12'00"E	5
	NL0009R	Kollumerwaard	53°20'02"N	006°16'38"E	1
	NL0010R	Vredepeel	51°32'28"N	005°51'13"E	28
	NL0091R	De Zilk	52°18'00"N	004°30'00"E	4
	NL0644R	Cabauw Wielsekade	51°58'28"N	004°55'25"E	1
<b>Norway</b>	NO0001R	Birkenes	58°23'00"N	008°15'00"E	190
	NO0002R	Birkenes II	58°23'19"N	008°15'07"E	219
	NO0015R	Tustervatn	65°50'00"N	013°55'00"E	439
	NO0039R	Kårvatn	62°47'00"N	008°53'00"E	210
	NO0042G	Zeppelin mountain (Ny-Ålesund)	78°54'24"N	011°53'18"E	474
	NO0056R	Hurdal	60°22'21"N	011°04'41"E	300
<b>Poland</b>	PL0002R	Jarczew	51°49'00"N	021°59'00"E	180
	PL0003R	Sniezka	50°44'00"N	015°44'00"E	1603
	PL0004R	Leba	54°45'00"N	017°32'00"E	2
	PL0005R	Diabla Gora	54°09'00"N	022°04'00"E	157
	PL0009R	Zielonka	53°39'44"N	017°56'02"E	121
<b>Romania</b>	RO0003R	Semenic	45°07'00"N	025°58'00"E	1432
	RO0008R	Poiana Stampei	47°19'29"N	025°08'05"E	908
<b>Russian Federation</b>	RU0001R	Janiskoski	68°56'00"N	028°51'00"E	118
	RU0013R	Pinega	64°42'00"N	043°24'00"E	28
	RU0018R	Danki	54°54'00"N	037°48'00"E	150
	RU0020R	Lesnoy	56°31'48"N	032°56'24"E	340
<b>Serbia</b>	RS0005R	Kamenicki vis	43°24'00"N	021°57'00"E	813
<b>Slovakia</b>	SK0002R	Chopok	48°56'00"N	019°35'00"E	2008
	SK0004R	Stará Lesná	49°09'00"N	020°17'00"E	808
	SK0006R	Starina	49°03'00"N	022°16'00"E	345
	SK0007R	Topolníky	47°57'36"N	017°51'38"E	113
<b>Slovenia</b>	SI0008R	Iskrba	45°34'00"N	014°52'00"E	520
<b>Spain</b>	ES0001R	San Pablo de los Montes	39°32'52"N	004°20'55"W	917
	ES0005R	Noya	42°43'41"N	008°55'25"W	683
	ES0006R	Mahón	39°52'00"N	004°19'00"E	78
	ES0007R	Víznar	37°14'00"N	003°32'00"W	1265
	ES0008R	Niembro	43°26'32"N	004°51'01"W	134
	ES0009R	Campisábalos	41°16'52"N	003°08'34"W	1360
	ES0010R	Cabo de Creus	42°19'10"N	003°19'01"E	23
	ES0011R	Barcarrota	38°28'33"N	006°55'22"W	393
	ES0012R	Zarra	39°05'10"N	001°06'07"W	885
	ES0013R	Penausende	41°17'00"N	005°52'00"W	985
	ES0014R	Els Torms	41°24'00"N	000°43'00"E	470
	ES0016R	O Saviñao	43°13'52"N	007°41'59"W	506
	ES0017R	Doñana	37°01'50"N	006°19'55"W	5
	ES1778R	Montserrat	41°46'00"N	002°21'00"E	700
<b>Sweden</b>	SE0005R	Bredkälen	63°51'00"N	015°20'00"E	404
	SE0011R	Vavihill	56°01'00"N	013°09'00"E	175
	SE0012R	Aspvreten	58°48'00"N	017°23'00"E	20
	SE0014R	Råö	57°23'38"N	011°54'50"E	5
<b>Switzerland</b>	CH0001G	Jungfraujoch	46°32'51"N	007°59'06"E	3578
	CH0002R	Payerne	46°48'47"N	006°56'41"E	489
	CH0003R	Tänikon	47°28'47"N	008°54'17"E	539
	CH0004R	Chaumont	47°02'59"N	006°58'46"E	1137
	CH0005R	Rigi	47°04'03"N	008°27'50"E	1031
<b>United Kingdom</b>	GB0002R	Eskdalemuir	55°18'47"N	003°12'15"W	243
	GB0006R	Lough Navar	54°26'35"N	007°52'12"W	126
	GB0013R	Yarner Wood	50°35'47"N	003°42'47"W	119
	GB0014R	High Muffles	54°20'04"N	000°48'27"W	267
	GB0015R	Strath Vaich Dam	57°44'04"N	004°46'28"W	270
	GB0031R	Aston Hill	52°30'14"N	003°01'59"W	370
	GB0033R	Bush	55°51'31"N	003°12'18"W	180
	GB0036R	Harwell	51°34'23"N	001°19'00"W	137
	GB0037R	Ladybower Res.	53°23'56"N	001°45'12"W	420
	GB0038R	Lullington Heath	50°47'34"N	000°10'46"E	120
	GB0043R	Narberth	51°14'00"N	004°42'00"W	160
	GB0045R	Wicken Fen	52°17'54"N	000°17'34"W	5
	GB0048R	Auchencorth Moss	55°47'32"N	003°14'34"W	260

*Table 1, cont.*

Country	Station codes	Station name	Location		Height above sea
<b>United Kingdom</b> (cont.)	GB0050R	St. Osyth	51°46'41"N	001°04'56"E	8
	GB0051R	Market Harborough	52°33'16"N	000°46'20"W	145
	GB0053R	Charlton Mackrell	51°03'23"N	002°41'00"W	54

### 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 3.1: Location of the EMEP monitoring stations in operation in 2015.  
Sites with ozone/VOC measurements only are not included.*

#### 4. The measurement programme during 2015

The monitoring obligations in EMEP are presented in table 2 and described in more detail in the Monitoring Strategy for 2010-2019 (UNECE, 2009). The compliance with the monitoring strategy varies between Parties and further discussions of this is found in the Status Report (Fagerli et al, 2017). In this report, inorganic data in air and precipitation, aerosol mass and inorganic and carbonaceous matter in air are presented, ozone (Hjellbrekke and Solberg, 2017); heavy metals and POPs (Aas, Nizzetto and Pfaffhuber, 2017) are reported separately.

*Table 2: EMEP's measurement programme 2015.*

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

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

## 5. Sampling and analytical methods

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

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

## 6. Laboratory intercomparison

The 32<sup>th</sup> laboratory intercomparison is representative for the 2015 data. Results are presented at <http://www.nilu.no/projects/ccc/intercomparison/>.

## 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 OC, EC, SO<sub>2</sub>, NO<sub>2</sub>, SO<sub>4</sub><sup>2-</sup>, PM<sub>10</sub> and PM<sub>2.5</sub> in air and pH, NH<sub>4</sub><sup>+</sup>, NO<sub>3</sub><sup>-</sup>, Ca and excess SO<sub>4</sub><sup>2-</sup> in precipitation are shown in Annex 1.

### 8.2 Annual summaries in tables

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

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

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

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

For air components the statistical summaries in Annex 3 contain:

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

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

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

*Table 3: Annual averages of main components with data capture > 50% in precipitation 2015.*

Code	mm	mm off	pH	SO <sub>4</sub>	XSO <sub>4</sub>	NH <sub>4</sub>	NO <sub>3</sub>	Na	Mg	Cl	Ca	K	cond
AM0001R	-	333	6.34	0.6	0.54	0.61	0.3	0.56	0.271	1	3.45	0.57	29
BY0004R	486.2	-	6.12	1.25	1.09	0.9	0.47	1.58	0.417	-	1.9	0.71	38
CH0002R	699.6	-	5.72	0.13	0.12	0.37	0.22	0.08	0.02	0.15	0.22	0.03	7
CH0004R	945.4	-	5.42	0.11	0.11	0.23	0.16	0.06	0.015	0.11	0.15	0.02	5
CH0005R	1266	-	5.58	0.14	0.14	0.45	0.27	0.05	0.012	0.08	0.15	0.03	7
CZ0001R	570	-	5.29	0.34	0.33	0.51	0.38	0.12	0.027	0.2	1	0.07	16
CZ0003R	581.8	-	5.32	0.32	0.31	0.5	0.33	0.15	0.028	0.19	0.33	0.08	14
CZ0005R	743.3	-	5.32	0.28	0.27	0.72	0.37	0.13	0.033	0.23	0.26	0.11	13
DE0001R	852.9	-	5.23	0.79	0.22	0.62	0.43	6.82	0.825	12.25	0.35	0.27	57
DE0002R	703.2	-	5.25	0.27	0.24	0.57	0.33	0.34	0.045	0.66	0.1	0.05	12
DE0003R	1350	-	5.23	0.14	0.13	0.26	0.19	0.18	0.015	0.25	0.06	0.03	7
DE0007R	577.4	-	5.09	0.27	0.24	0.63	0.39	0.36	0.048	0.66	0.12	0.09	12
DE0008R	1015.1	-	4.97	0.2	0.17	0.47	0.34	0.43	0.012	0.72	0.03	0.04	11
DE0009R	550.3	-	5.32	0.42	0.29	0.99	0.44	1.58	0.2	2.79	0.24	0.18	24
DK0005R	577.6	-	-	0.41	0.23	0.59	0.41	-	0.274	3.8	0.23	0.2	-
DK0008R	468.5	-	-	0.49	0.23	0.43	0.37	-	0.378	6.49	0.2	0.13	-
DK0012R	562.9	-	-	0.3	0.2	0.51	0.34	-	0.175	2.43	0.2	0.15	-
DK0022R	577.6	-	-	0.37	0.22	0.45	0.38	-	0.222	3.24	0.15	0.11	-
EE0009R	544.4	-	4.91	0.22	0.19	0.2	0.24	0.45	0.091	0.56	0.59	0.08	9
EE0011R	523.3	-	5.13	0.27	0.19	0.28	0.39	1.35	0.226	1.4	0.76	0.11	14
ES0001R	397.4	-	5.71	0.29	0.27	0.33	0.22	0.24	0.068	0.37	1.04	0.08	16
ES0005R	1987.3	-	5.2	0.34	0.18	0.09	0.12	2.02	0.237	3.03	0.21	0.11	18
ES0006R	522.7	-	5.75	1.66	0.14	0.2	0.39	18.15	2.238	27.89	1.68	0.76	116
ES0007R	440.6	-	6.31	0.41	0.38	0.53	0.33	0.31	0.218	0.82	1.62	0.22	19
ES0008R	1108.4	-	4.76	0.61	0.23	0.32	0.52	4.52	0.541	6.71	0.49	0.18	41
ES0009R	340.6	-	6.05	0.25	0.23	0.44	0.33	0.18	0.074	0.37	0.9	0.06	12
ES0011R	380.3	-	5.72	0.23	0.18	0.29	0.14	0.59	0.135	0.95	0.52	0.36	12
ES0012R	344.7	-	6.04	0.47	0.43	0.4	0.34	0.39	0.123	0.72	1.68	0.08	17
ES0013R	352.2	-	6.01	0.3	0.27	0.62	0.25	0.29	0.1	0.55	0.72	0.17	13
ES0014R	256.1	-	6.29	0.52	0.48	0.72	0.41	0.4	0.185	0.76	2.22	0.41	23
ES0016R	1269.9	-	5.54	0.26	0.19	0.34	0.18	0.84	0.128	1.43	0.35	0.19	13
ES0017R	345.4	-	5.39	0.36	0.21	0.12	0.13	1.86	0.228	2.72	0.51	0.09	18
FI0004R	679	-	4.85	0.15	0.14	0.13	0.2	0.12	0.027	0.2	0.06	0.08	9
FI0018R	524.2	-	4.7	0.39	0.37	0.36	0.38	0.34	0.068	0.57	0.2	0.1	16
FI0036R	706.6	-	4.88	0.13	0.12	0.06	0.1	0.07	0.011	0.12	0.03	0.02	7
FR0008R	1293.6	-	5.43	0.14	0.12	0.22	0.18	0.18	0.026	0.3	0.1	0.03	-
FR0009R	1045.5	-	5.53	0.23	0.19	0.41	0.3	0.56	0.067	0.91	0.21	0.06	-
FR0010R	828.6	-	5.51	0.16	0.13	0.47	0.18	0.44	0.057	0.71	0.14	0.15	-
FR0013R	581.4	-	5.63	0.27	0.2	0.32	0.25	0.8	0.112	1.39	0.37	0.15	-
FR0014R	998	-	5.54	0.13	0.12	0.24	0.2	0.11	0.019	0.19	0.14	0.03	-
FR0015R	786	-	5.68	0.28	0.18	0.34	0.19	1.16	0.144	1.98	0.21	0.08	-
FR0016R	637.8	-	5.66	0.18	0.17	0.23	0.19	0.09	0.033	0.16	0.46	0.07	-
FR0017R	947.1	-	5.6	0.16	0.13	0.2	0.16	0.36	0.05	0.6	0.23	0.03	-
FR0018R	876.7	-	5.8	0.22	0.14	0.37	0.17	0.91	0.116	1.59	0.15	0.05	-
GB0002R	1462.4	-	5.49	0.34	0.14	0.57	0.12	2.4	0.242	4.19	0.12	0.21	23
GB0006R	1719.7	-	5.57	0.43	0.06	0.1	0.05	4.43	0.494	7.81	0.27	0.18	33
GB0013R	796.3	-	5.36	0.34	0.15	0.27	0.21	2.27	0.241	3.92	0.19	0.12	20
GB0014R	757.5	-	5.41	0.42	0.28	0.51	0.32	1.64	0.173	2.86	0.25	0.1	19
GB0015R	1353.6	-	5.34	0.51	0.04	0.06	0.05	5.59	0.6	10.19	0.24	0.19	40
GB0036R	420.2	-	5.58	0.26	0.16	0.37	0.23	1.17	0.115	2.02	0.18	0.08	13
GB0048R	1008.4	-	5.5	0.19	0.09	0.21	0.1	1.18	0.119	2.06	0.12	0.06	11
HU0002R	371.7	513.9	5.99	0.73	0.66	0.57	0.43	1.19	0.118	1.01	0.64	0.17	18
IE0001R	2294.6	1727.3	5.31	0.68	0.07	0.05	0.29	7.33	0.933	13.21	0.29	0.28	55
IE0005R	570.1	928.9	5.8	0.17	0.07	0.22	0.09	1.21	0.159	2.2	0.15	0.07	13
IE0006R	1205.6	1464.8	5.37	1.38	0.14	0.11	0.07	14.86	1.933	26.36	0.68	0.65	108
IE0009R	931	1063.3	5.43	0.39	0.11	0.16	0.11	3.29	0.407	6.13	0.17	0.13	28
IS0002R	1889.9	-	5.5	0.34	0.02	-	0.03	3.78	0.457	7.02	0.2	0.28	28
IT0001R	521	-	5.8	0.46	0.29	0.25	0.73	2.09	0.506	3.62	4.11	0.25	40
IT0004R	1189.8	-	5.08	0.44	0.42	0.82	0.54	0.41	0.06	0.3	0.52	0.07	16
LT0015R	445.7	-	4.87	0.46	0.31	0.48	0.43	1.83	0.275	3.1	0.36	0.15	25
LV0010R	-	744.4	5.05	0.32	0.27	0.34	0.37	0.54	0.101	1.17	0.21	0.07	15
ME0008R	1277.7	-	6.26	0.99	0.92	0.92	0.25	0.86	0.261	1.39	1.49	0.56	28

Table 3, cont.

Code	mm	mm off	pH	SO <sub>4</sub>	XSO <sub>4</sub>	NH <sub>4</sub>	NO <sub>3</sub>	Na	Mg	Cl	Ca	K	cond
NL0091R	792.4	-	5.21	0.51	0.2	0.42	0.29	3.66	0.439	6.44	0.28	0.17	34
NO0001R	2172.6	-	4.91	0.29	0.18	0.28	0.29	1.29	0.161	2.27	0.15	0.1	18
NO0015R	1443.7	-	5.26	0.2	0.05	0.09	0.07	1.96	0.243	3.51	0.17	0.15	17
NO0039R	1343.5	-	5.2	0.18	0.06	0.09	0.08	1.49	0.179	2.57	0.15	0.14	14
NO0056R	1058.6	-	4.98	0.17	0.14	0.24	0.25	0.35	0.051	0.58	0.1	0.13	10
PL0002R	439.4	448	4.91	0.62	0.6	0.65	0.5	0.25	0.06	0.55	0.36	0.18	18
PL0003R	414.3	727.8	4.5	1.04	0.98	0.38	0.82	0.79	0.254	0.72	0.56	0.42	30
PL0004R	540.5	477.6	4.97	0.35	0.23	0.39	0.41	1.34	0.161	2.32	0.19	0.13	19
PL0005R	561.4	637.6	5.04	0.34	0.32	0.52	0.37	0.29	0.053	0.57	0.15	0.07	13
RS0005R	703	-	4.95	1.02	0.99	1.01	0.48	0.3	0.185	0.51	1.93	1.49	30
RU0001R	489.4	-	5.51	0.28	0.2	0.45	0.1	1.04	0.05	2.78	0.4	1.64	19
RU0013R	525.3	-	5.96	0.38	0.33	0.42	0.24	0.51	0.147	0.82	0.72	0.47	12
RU0018R	500.2	-	5.65	0.41	0.39	0.45	0.31	0.2	0.07	0.3	0.68	0.21	11
RU0020R	620	-	5.5	0.34	0.32	0.44	0.28	0.34	0.061	0.43	0.51	0.23	10
SE0005R	664.8	-	5.22	0.08	0.07	0.12	0.1	0.1	0.018	0.17	0.04	0.04	5
SE0011R	558	-	5.3	0.33	0.24	0.6	0.56	1.03	0.133	1.74	0.43	0.12	19
SE0012R	799.4	-	5.21	0.22	0.2	0.31	0.23	0.24	0.03	0.42	0.1	0.03	9
SE0014R	740.3	-	5.1	0.62	0.14	0.44	0.36	5.67	0.656	9.94	0.27	0.22	46
SI0008R	1212.2	1366.2	5.12	0.24	0.23	0.2	0.22	0.11	0.031	0.24	0.26	0.03	8
SK0002R	992.3	-	5.07	0.43	0.42	0.38	0.27	0.13	0.04	0.19	0.25	0.06	12
SK0004R	640.9	-	5.55	0.43	0.42	0.52	0.32	0.16	0.048	0.15	0.32	0.15	12
SK0006R	449.5	-	4.94	0.62	0.61	0.45	0.43	0.18	0.052	0.22	0.29	0.17	16
SK0007R	346.8	-	5.24	0.47	0.47	0.56	0.32	0.08	0.044	0.14	0.33	0.08	13

*Table 4: Annual averages of main components in air 2015.*

Code	Matrix	SO <sub>2</sub>	NO <sub>2</sub>	SO <sub>4</sub>	XSO <sub>4</sub>	SNO <sub>3</sub>	NO <sub>3</sub>	HNO <sub>3</sub>	SNH <sub>4</sub>	NH <sub>4</sub>	NH <sub>3</sub>
AM0001R	air/aerosol	0.21	0.19	0.45	0.45	-	0.32	0.11	-	0.5	0.81
AT0002R	air/aerosol	0.65	-	-	-	-	-	-	-	-	-
AT0005R	air/aerosol	0.16	0.83	-	-	-	-	-	-	-	-
AT0048R	air/aerosol	0.18	-	-	-	-	-	-	-	-	-
CH0001G	air/aerosol	0.03	0.08	0.09	-	-	-	-	-	-	-
CH0002R	air/aerosol	0.18	3.38	0.41	0.39	0.91	0.72	0.24	3.49	1	2.24
CH0003R	air/aerosol	-	3.93	-	-	-	-	-	-	-	-
CH0004R	air/aerosol	-	1.69	-	-	-	-	-	-	-	-
CH0005R	air/aerosol	0.18	1.06	0.3	0.28	0.64	0.49	0.18	1.87	0.79	1.22
CY0002R	air/aerosol	0.49	0.42	-	-	-	-	-	-	-	-
CY0002R	pm10	-	-	1.16	1.15	-	0.04	-	-	0.86	-
CZ0003R	air/aerosol	0.79	-	0.6	-	0.8	-	-	3.04	-	-
CZ0005R	air/aerosol	0.58	-	0.27	-	0.44	-	-	1.24	-	-
DE0001R	air/aerosol	-	2.07	-	-	-	-	-	-	-	1.93
DE0001R	pm25	-	-	0.42	0.39	-	0.46	-	-	0.75	-
DE0002R	air/aerosol	0.33	2.66	0.58	0.57	0.85	0.64	0.21	-	-	1.54
DE0002R	pm25	-	-	0.57	0.56	-	0.59	-	-	1.03	-
DE0003R	air/aerosol	0.23	-	0.38	0.37	0.57	0.31	0.27	-	-	0.9
DE0003R	pm25	-	-	0.3	0.3	-	0.23	-	-	0.52	-
DE0007R	air/aerosol	0.4	1.88	0.54	0.53	0.69	0.53	0.17	-	-	0.83
DE0007R	pm25	-	-	0.57	0.56	-	0.45	-	-	0.87	-
DE0008R	air/aerosol	0.39	1.83	-	-	-	-	-	-	-	0.7
DE0008R	pm25	-	-	0.35	0.34	-	0.31	-	-	0.62	-
DE0009R	air/aerosol	0.3	1.97	-	-	-	-	-	-	-	0.95
DE0009R	pm25	-	-	0.46	0.45	-	0.49	-	-	0.85	-
DE0044R	air/aerosol	-	3	-	-	-	-	-	-	-	-
DE0044R	pm10	-	-	0.75	0.72	-	0.74	-	-	1.14	-
DE0044R	pm25	-	-	0.67	0.66	-	0.57	-	-	1.01	-
DK0003R	air/aerosol	0.09	-	0.62	0.52	0.62	-	-	-	0.77	0.83
DK0005R	air/aerosol	-	7.43	-	-	-	-	-	-	-	-
DK0008R	air/aerosol	0.12	4.4	0.69	0.61	0.6	-	-	-	0.64	0.18
DK0012R	air/aerosol	0.16	7.6	0.72	0.64	0.84	-	-	-	0.94	0.71
EE0009R	air/aerosol	0.75	2.27	0.03	0.01	-	0.04	-	-	1.12	-
EE0011R	air/aerosol	0.41	2.14	-	-	-	-	-	-	-	-
ES0001R	air/aerosol	0.23	0.86	-	-	0.36	-	-	2.14	-	1.36
ES0001R	pm10	-	-	0.36	0.33	-	0.19	-	-	0.4	-
ES0001R	pm25	-	-	0.33	0.32	-	0.07	-	-	0.24	-
ES0005R	air/aerosol	0.3	0.73	-	-	0.22	-	-	1.16	-	-
ES0005R	pm10	-	-	0.36	-	-	0.15	-	-	-	-
ES0006R	air/aerosol	0.15	1.52	-	-	0.56	-	-	1.39	-	-
ES0006R	pm10	-	-	0.87	-	-	0.46	-	-	-	-
ES0007R	air/aerosol	0.54	1.75	-	-	0.56	-	-	1.68	-	1.2
ES0007R	pm10	-	-	0.49	0.45	-	0.26	-	-	0.6	-
ES0007R	pm25	-	-	0.41	0.4	-	0.08	-	-	0.25	-
ES0008R	air/aerosol	0.51	1.53	-	-	0.53	-	-	1.4	-	0.56
ES0008R	pm10	-	-	0.71	0.56	-	0.29	-	-	0.44	-
ES0008R	pm25	-	-	0.51	0.48	-	0.02	-	-	0.17	-
ES0009R	air/aerosol	0.22	0.75	-	-	0.13	-	-	1.01	-	0.75
ES0009R	pm10	-	-	0.3	0.28	-	0.12	-	-	0.28	-
ES0009R	pm25	-	-	0.24	0.24	-	0.04	-	-	0.17	-
ES0010R	air/aerosol	0.25	1.31	-	-	0.68	-	-	1.4	-	-
ES0010R	pm10	-	-	0.65	-	-	0.46	-	-	-	-
ES0011R	air/aerosol	0.21	0.7	-	-	0.25	-	-	0.84	-	-
ES0011R	pm10	-	-	0.44	-	-	0.25	-	-	-	-
ES0012R	air/aerosol	0.26	0.69	-	-	0.44	-	-	1.37	-	-
ES0012R	pm10	-	-	0.49	-	-	0.33	-	-	-	-
ES0013R	air/aerosol	0.18	0.94	-	-	0.32	-	-	1.24	-	-
ES0013R	pm10	-	-	0.3	-	-	0.23	-	-	-	-
ES0014R	air/aerosol	0.36	1.09	-	-	0.44	-	-	2.88	-	2.98
ES0014R	pm10	-	-	0.52	0.48	-	0.27	-	-	0.65	-
ES0014R	pm25	-	-	0.49	0.48	-	0.13	-	-	0.48	-
ES0016R	air/aerosol	0.28	0.9	-	-	0.32	-	-	1.59	-	-
ES0016R	pm10	-	-	0.43	-	-	0.19	-	-	-	-
ES0017R	air/aerosol	0.17	0.55	-	-	0.59	-	-	1.8	-	-
ES0017R	pm10	-	-	0.75	-	-	0.45	-	-	-	-

Table 4 cont.

Code	Matrix	SO <sub>2</sub>	NO <sub>2</sub>	SO <sub>4</sub>	XSO <sub>4</sub>	SNO <sub>3</sub>	NO <sub>3</sub>	HNO <sub>3</sub>	SNH <sub>4</sub>	NH <sub>4</sub>	NH <sub>3</sub>
FI0009R	air/aerosol	0.11	0.9	0.28	0.22	0.31	0.21	0.1	0.29	0.21	0.08
FI0018R	air/aerosol	0.22	1.11	0.27	0.25	0.2	0.12	0.08	0.29	0.19	0.1
FI0022R	air/aerosol	0.2	-	0.2	0.19	0.04	0.01	0.03	0.1	0.08	0.02
FI0036R	air/aerosol	0.18	-	0.18	0.16	0.04	0.02	0.02	0.08	0.07	0.02
FI0037R	air/aerosol	0.09	0.49	0.2	0.19	0.1	0.05	0.05	0.18	0.12	0.07
FR0013R	pm25	-	-	0.44	0.44	-	0.08	-	-	0.12	-
FR0023R	pm25	-	-	0.37	0.37	-	0.13	-	-	0.12	-
FR0024R	pm25	-	-	0.36	0.34	-	0.33	-	-	0.19	-
FR0025R	pm25	-	-	0.36	0.36	-	0.27	-	-	0.16	-
FR0030R	air/aerosol	0.32	0.43	-	-	-	-	-	-	-	-
GB0002R	air/aerosol	-	0.67	-	-	-	-	-	-	-	-
GB0013R	air/aerosol	-	1.19	-	-	-	-	-	-	-	-
GB0014R	air/aerosol	-	1.62	-	-	-	-	-	-	-	-
GB0031R	air/aerosol	-	1.01	-	-	-	-	-	-	-	-
GB0033R	air/aerosol	-	1.85	-	-	-	-	-	-	-	-
GB0036R	air/aerosol	0.07	-	-	-	-	-	0.03	-	-	1.69
GB0036R	pm10	-	-	0.5	0.42	-	0.62	-	-	0.78	-
GB0036R	pm25	-	-	0.44	0.4	-	0.53	-	-	0.73	-
GB0037R	air/aerosol	0.83	1.49	-	-	-	-	-	-	-	-
GB0038R	air/aerosol	0.59	2.13	-	-	-	-	-	-	-	-
GB0043R	air/aerosol	0.45	0.83	-	-	-	-	-	-	-	-
GB0045R	air/aerosol	1.43	2.23	-	-	-	-	-	-	-	-
GB0048R	air/aerosol	0.09	-	-	-	-	-	0.02	-	-	0.76
GB0048R	pm10	-	-	0.3	0.25	-	0.28	-	-	0.43	-
GB0048R	pm25	-	-	0.24	0.21	-	0.2	-	-	0.36	-
GB0050R	air/aerosol	-	2.86	-	-	-	-	-	-	-	-
GB0051R	air/aerosol	-	2.75	-	-	-	-	-	-	-	-
GB0053R	air/aerosol	-	1.84	-	-	-	-	-	-	-	-
GR0001R	air/aerosol	2.61	3.69	-	-	-	-	-	-	-	-
HU0002R	air/aerosol	0.68	1.3	0.99	-	0.66	0.49	0.17	2.39	0.89	1.51
IE0001R	air/aerosol	0.14	1.9	0.26	0.09	0.36	-	-	0.69	-	-
IE0005R	air/aerosol	-	-	0.36	-	-	0.35	-	-	0.69	-
IE0006R	air/aerosol	-	-	0.38	-	-	0.22	-	-	0.48	-
IE0008R	air/aerosol	-	-	0.16	-0.13	-	0.31	-	-	0.58	-
IS0002R	air/aerosol	0.29	-	0.24	0.17	-	-	-	-	-	-
IS0091R	air/aerosol	-	-	0.38	-	-	0.02	-	-	-	-
IT0001R	air/aerosol	0.16	5.25	0.55	-	-	0.37	0.22	-	0.84	1.7
IT0001R	pm10_pm25	-	-	0.05	-	-	0.16	-	-	-	-
IT0001R	pm25	-	-	0.5	-	-	0.21	-	-	-	-
IT0004R	air/aerosol	0.37	6.1	-	-	-	-	-	-	-	-
IT0004R	pm25	-	-	0.59	0.59	-	0.71	-	-	1.17	-
LT0015R	air/aerosol	0.16	0.96	0.54	-	0.61	-	-	0.96	-	-
LV0010R	air/aerosol	0.22	0.72	0.31	-	0.44	0.06	0.39	0.83	0.66	0.22
LV0010R	pm25	-	-	0.47	0.46	-	0.14	-	-	0.46	-
ME0008R	air/aerosol	3.12	2.82	-	-	-	-	-	-	-	-
MK0007R	air/aerosol	1.21	-	-	-	-	-	-	-	-	-
MT0001R	air/aerosol	-	0.77	-	-	-	-	-	-	-	-
NL0007R	air/aerosol	0.44	3.88	-	-	-	-	-	-	-	-
NL0009R	air/aerosol	0.21	2.59	-	-	-	-	-	-	-	-
NL0010R	air/aerosol	-	4.94	-	-	-	-	-	-	-	-
NL0091R	air/aerosol	0.57	4.55	-	-	-	-	-	-	-	1.74
NL0091R	pm10	-	-	0.58	-	-	0.8	-	-	0.82	-
NL0644R	air/aerosol	0.41	5.16	-	-	-	-	-	-	-	-
NO0002R	air/aerosol	0.07	0.3	0.29	0.24	0.32	0.27	0.05	0.44	0.27	0.17
NO0015R	air/aerosol	0.02	0.08	0.08	0.06	0.14	0.12	0.02	0.61	0.11	0.5
NO0039R	air/aerosol	0.03	0.11	0.09	0.08	0.14	0.12	0.02	0.51	0.13	0.38
NO0042G	air/aerosol	0.06	-	0.11	0.09	0.12	0.09	0.02	0.22	0.09	0.12
NO0056R	air/aerosol	0.05	0.64	0.14	0.13	0.27	0.24	0.04	0.42	0.24	0.17
PL0002R	air/aerosol	1.19	2.17	1.15	1.14	0.7	0.52	-	2.88	1.04	-
PL0003R	air/aerosol	1.1	1.09	0.84	0.83	0.53	0.4	-	0.77	0.55	-
PL0004R	air/aerosol	0.66	1.41	0.93	0.92	0.53	0.45	-	1.43	0.76	-
PL0005R	air/aerosol	0.27	1.17	0.53	-	0.67	0.22	2.02	0.45	0.73	1.27
PL0005R	pm25	-	-	1.65	1.64	-	1.67	-	-	1.02	-
RS0005R	air/aerosol	6.39	0.56	-	-	-	-	-	-	-	-

Table 4 cont.

Code	Matrix	SO <sub>2</sub>	NO <sub>2</sub>	SO <sub>4</sub>	XSO <sub>4</sub>	SNO <sub>3</sub>	NO <sub>3</sub>	HNO <sub>3</sub>	SNH <sub>4</sub>	NH <sub>4</sub>	NH <sub>3</sub>
RU0018R	air/aerosol	0.22	-	0.47	-	-	0.29	-	-	0.4	-
RU0020R	air/aerosol	0.11	-	0.4	-	-	0.15	-	-	0.17	-
SE0005R	air/aerosol	0.06	0.09	0.08	0.07	0.03	-	-	0.1	-	-
SE0011R	air/aerosol	0.15	1.07	0.33	0.27	0.46	-	-	0.76	-	-
SE0012R	air/aerosol	0.13	0.37	0.23	0.19	0.22	-	-	0.3	-	-
SE0014R	air/aerosol	0.19	0.94	0.39	0.2	0.44	-	-	0.55	-	-
SI0008R	air/aerosol	0.23	0.49	0.63	0.62	0.22	0.15	0.08	0.74	0.53	0.22
SI0008R	pm25	-	-	0.69	0.68	-	0.08	-	-	0.64	-
SK0002R	air/aerosol	0.46	0.92	0.33	-	-	0.21	0.05	-	-	-
SK0006R	air/aerosol	0.75	1.16	0.7	0.69	-	0.31	0.06	-	0.65	0.63

*Table 5: Annual averages and data capture of base cations and chloride in aerosols in 2015.*

Code	Matrix	Na	capture	Ca	capture	Mg	capture	K	capture	Cl	capture
AM0001R	aerosol	0.07	72	0.44	75	0.03	75	0.11	71	0.06	67
CH0002R	aerosol	0.17	100	0.39	100	0.04	100	0.19	100	-	-
CH0005R	aerosol	0.12	96	0.26	96	0.03	96	0.07	96	-	-
CY0002R	pm10	0.15	82	0.18	82	0.03	82	0.09	82	0.04	82
CZ0003R	pm10	0.09	71	0.13	71	0.04	71	0.08	71	-	-
DE0001R	pm25	0.35	17	0.04	17	0.04	17	0.06	17	0.51	17
DE0002R	aerosol	-	-	-	-	-	-	-	-	0.47	100
DE0002R	pm25	0.12	17	0.03	17	0.01	17	0.06	17	0.11	17
DE0003R	aerosol	-	-	-	-	-	-	-	-	0.1	96
DE0003R	pm25	0.03	16	0.02	16	0	16	0.04	16	0.03	16
DE0007R	aerosol	-	-	-	-	-	-	-	-	0.44	98
DE0007R	pm25	0.11	17	0.02	17	0.01	17	0.06	17	0.08	17
DE0008R	pm25	0.04	17	0.02	17	0	17	0.03	17	0.02	17
DE0009R	pm25	0.15	17	0.03	17	0.01	17	0.06	17	0.17	17
DE0044R	pm10	0.28	99	0.15	99	0.04	99	0.13	99	0.28	99
DE0044R	pm25	0.09	98	0.08	98	0.01	97	0.1	98	0.11	98
DK0003R	aerosol	1.29	95	0.14	96	-	-	0.12	97	2.07	98
DK0008R	aerosol	2.11	96	0.17	97	-	-	0.12	97	2.15	91
DK0012R	aerosol	1.08	98	0.17	99	-	-	0.12	98	1.57	99
EE0009R	aerosol	0.46	99	0.59	99	0.08	99	0.13	100	0.31	99
ES0001R	pm10	0.21	100	0.26	100	0.04	100	0.11	100	-	-
ES0001R	pm25	0.08	16	0.07	16	0.01	16	0.09	16	0.08	16
ES0007R	pm10	0.25	99	0.46	99	0.06	99	0.2	99	0.12	16
ES0007R	pm25	0.1	16	0.19	16	0.03	16	0.16	16	0.06	16
ES0008R	pm10	1.68	99	0.25	99	0.22	99	0.16	99	1.79	16
ES0008R	pm25	0.34	16	0.09	16	0.04	16	0.08	16	0.2	16
ES0009R	pm10	0.15	99	0.27	99	0.03	99	0.04	99	0.15	16
ES0009R	pm25	0.06	16	0.11	16	0.01	16	0.04	16	0.13	16
ES0014R	pm10	0.43	95	0.41	95	0.05	95	0.14	95	0.13	16
ES0014R	pm25	0.09	16	0.11	16	0.02	16	0.1	16	0.09	16
FI0009R	aerosol	0.71	98	0.08	98	0.09	98	0.05	98	0.75	98
FI0018R	aerosol	0.23	98	0.08	98	0.03	98	0.05	98	0.15	98
FI0022R	aerosol	0.11	96	0.02	96	0.01	96	0.02	96	0.05	96
FI0036R	aerosol	0.15	96	0.01	95	0.02	96	0.02	96	0.16	96
FI0037R	aerosol	0.15	97	0.03	97	0.02	97	0.04	97	0.08	97
FR0013R	pm25	0.07	5	0.04	5	0.01	5	0.11	5	0.05	5
FR0023R	pm25	0.04	16	0.05	16	0	16	0.04	16	0.04	16
FR0024R	pm25	0.15	16	0.03	16	0.01	16	0.04	16	0.17	16
FR0025R	pm25	0.09	17	0.06	17	0.01	17	0.05	17	0.07	17
GB0036R	pm10	0.98	69	0.11	67	0.13	69	0.09	69	1.52	69
GB0036R	pm25	0.56	70	0.04	68	0.08	70	0.06	69	0.8	69
GB0048R	pm10	0.6	56	0.04	56	0.07	56	0.04	56	1.19	65
GB0048R	pm25	0.34	53	0.02	53	0.04	53	0.02	53	0.63	61
IE0001R	aerosol	2.09	72	0.11	72	0.25	72	0.1	72	3.75	72
IE0005R	aerosol	0.9	68	0.08	68	0.1	68	0.07	68	1.68	68
IE0006R	aerosol	2	99	0.09	99	0.23	99	0.09	99	3.73	99
IE0008R	aerosol	3.53	100	0.16	100	0.43	100	0.16	100	6.34	100
IS0002R	aerosol	0.49	97	0.18	97	0.2	97	0.06	97	1.26	97
IS0091R	aerosol	-	-	-	-	-	-	-	-	7.17	87
IT0004R	pm25	0.12	91	0.03	92	0.01	91	0.25	92	0.08	92
LV0010R	pm25	0.22	82	0.2	82	0.02	82	0.14	82	0.15	82
NL0008R	pm10	0.96	46	0.2	46	0.14	46	-	-	-	-
NL0091R	pm10	-	-	-	-	-	-	-	-	1.76	50
NL0644R	pm25	0.28	24	0.06	24	0.04	24	-	-	-	-
NO0002R	aerosol	0.61	99	0.07	99	0.08	99	0.06	99	0.81	99
NO0015R	aerosol	0.25	98	0.03	98	0.03	98	0.04	98	0.37	98
NO0039R	aerosol	0.16	99	0.03	99	0.02	99	0.03	99	0.21	100
NO0042G	aerosol	0.26	95	0.04	95	0.04	95	0.03	95	0.39	96
NO0056R	aerosol	0.16	96	0.05	96	0.02	96	0.05	96	0.14	96

*Table 5 cont.*

Code	Matrix	Na	capture	Ca	capture	Mg	capture	K	capture	Cl	capture
PL0002R	aerosol	-	-	-	-	-	-	-	-	0.76	99
PL0003R	aerosol	-	-	-	-	-	-	-	-	0.47	100
PL0004R	aerosol	-	-	-	-	-	-	-	-	1.03	99
PL0005R	pm25	0.15	81	0.08	81	0.02	81	0.11	81	0.06	81
SE0005R	aerosol	0.15	100	0.02	99	0.02	99	0.01	100	0.19	99
SE0011R	aerosol	0.71	96	0.1	95	0.09	95	0.1	96	0.7	96
SE0012R	aerosol	0.42	99	0.07	98	0.06	99	0.05	97	0.34	99
SE0014R	aerosol	2.29	99	0.14	99	0.28	99	0.12	99	3.42	99
SI0008R	aerosol	0.1	91	0.15	91	0.04	91	0.14	91	0.07	91
SI0008R	pm25	0.04	50	0.03	50	0.01	50	0.13	50	0.05	50
SK0002R	aerosol	-	-	-	-	-	-	-	-	0.12	69
SK0006R	aerosol	0.07	67	0.04	67	0.01	68	0.09	68	0.18	77

*Table 6: Annual averages and data capture of particulate matter in 2015.*

Code	PM10	capture	PM2.5	capture	PM1	capture
AT0002R	19.63	98	14.7	98	10.22	31
AT0005R	6.6	32	-	-	-	-
AT0048R	7.71	33	-	-	-	-
CH0001G	2.33	99	-	-	-	-
CH0002R	13.25	100	9.75	25	-	-
CH0003R	13.19	100	-	-	-	-
CH0004R	7.71	100	-	-	-	-
CH0005R	7.59	100	5.77	23	-	-
CY0002R	22.51	97	9.88	96	-	-
CZ0001R	17.32	48	-	-	-	-
CZ0003R	17.43	93	14.52	50	-	-
CZ0005R	9.02	95	-	-	-	-
DE0001R	19.34	96	-	-	-	-
DE0002R	16.35	98	12.05	100	7.29	100
DE0003R	10.14	98	7.98	92	-	-
DE0007R	14.79	100	10.27	100	-	-
DE0008R	11.29	100	8.11	99	-	-
DE0009R	14.9	98	-	-	-	-
DE0043G	10.15	97	-	-	-	-
DE0044R	19.36	95	14.73	96	-	-
EE0009R	6.54	100	5.21	99	-	-
EE0011R	-	-	4.2	93	-	-
ES0001R	13.51	99	6.62	97	-	-
ES0005R	6.4	81	-	-	-	-
ES0006R	17.99	92	7.03	86	-	-
ES0007R	17.7	98	10.35	92	-	-
ES0008R	16.34	99	7.05	96	-	-
ES0009R	9.1	99	4.82	94	-	-
ES0010R	17.4	94	8.49	90	-	-
ES0011R	15.27	95	8.46	95	-	-
ES0012R	15.11	84	5.96	98	-	-
ES0013R	9.23	94	5.79	90	-	-
ES0014R	14.28	95	8.34	96	-	-
ES0016R	9.84	98	8.31	83	-	-
ES0017R	16.96	97	-	-	-	-
FI0009R	-	-	4.97	99	-	-
FI0018R	9.17	98	5.29	98	-	-
FI0036R	-	-	3.43	97	-	-
FR0009R	-	-	14.91	81	-	-
FR0010R	-	-	9.68	88	-	-
FR0013R	15.83	54	8.72	30	-	-
FR0014R	14.27	90	-	-	-	-
FR0015R	15.43	95	10.55	88	-	-
FR0018R	15.29	97	8.19	93	-	-
FR0023R	8.87	96	6.18	96	-	-
FR0024R	13.88	96	9.03	96	-	-
FR0025R	-	-	11.65	96	-	-
GB0006R	0.81	95	-	-	-	-
GB0036R	4.06	89	2.49	96	-	-
GB0043R	2.62	86	-	-	-	-
GB0048R	1.57	72	0.42	95	-	-
GR0001R	31.86	63	-	-	-	-
HU0002R	-	-	17.35	98	-	-
IT0001R	27.05	96	-	-	-	-
IT0004R	-	-	17.5	91	-	-
LV0010R	15.53	81	10.47	74	-	-
MK0007R	13.08	34	-	-	-	-
NL0007R	17.66	99	-	-	-	-
NL0009R	15.35	99	10.83	36	-	-
NL0010R	19.5	95	12.28	46	-	-

*Table 6 cont.*

Code	PM10	capture	PM2.5	capture	PM1	capture
NL0091R	16.75	99	9.51	96	-	-
NL0644R	16.93	100	11.31	65	-	-
NO0002R	5.39	96	2.7	90	-	-
NO0039R	2.31	96	1.51	100	-	-
NO0056R	4.15	100	2.75	98	-	-
PL0005R	17.32	96	12.49	96	-	-
PL0009R	17.52	98	-	-	-	-
RS0005R	17.87	79	-	-	-	-
SE0005R	3.46	96	2.26	93	-	-
SE0011R	10.91	52	5.38	34	-	-
SE0012R	7.95	76	5.69	87	-	-
SE0014R	15.15	99	5.02	91	-	-
SI0008R	12.51	98	10.02	100	-	-

*Table 7: Annual averages and data capture for carbonaceous compounds in 2015.*

Code	Matrix	OC	capture	EC	capture	TC	capture
CH0002R	pm25	2.08	8	0.42	8	-	-
CH0005R	pm25	1.19	8	0.29	8	-	-
CY0002R	pm10	1.48	82	0.17	82	-	-
CZ0003R	pm25	2.36	4	0.44	4	2.79	4
DE0002R	pm25	2.87	17	0.3	17	3.17	17
DE0003R	pm25	1.57	17	0.11	17	1.68	17
DE0007R	pm25	2.81	17	0.33	17	3.14	17
DE0008R	pm25	1.84	17	0.21	17	2.04	17
DE0044R	pm25	2.77	98	0.36	98	3.13	98
ES0001R	pm25	1.99	14	0.14	14	-	-
ES0009R	pm25	1.82	14	0.13	14	-	-
FR0009R	pm25	1.78	16	0.22	16	1.99	16
FR0013R	pm25	2.39	5	0.24	5	2.64	5
FR0023R	pm25	2.37	16	0.19	16	2.56	16
FR0024R	pm25	2.03	16	0.34	16	2.37	16
FR0025R	pm25	2.35	17	0.22	17	2.56	17
HU0002R	pm10	-	-	-	-	7.17	5
IT0004R	pm25	5.58	81	1.2	81	6.78	81
NL0644R	pm25	2.28	25	0.29	25	2.57	25
NO0002R	pm10	0.72	98	0.09	98	0.81	98
NO0002R	pm25	0.52	88	0.08	88	0.6	88
NO0039R	pm10	0.64	98	0.04	98	0.68	98
NO0039R	pm25	0.47	100	0.05	100	0.52	100
NO0056R	pm10	0.99	100	0.14	100	1.14	100
NO0056R	pm25	0.73	100	0.13	100	0.86	100
PL0005R	pm25	3.5	94	0.48	94	-	-
SE0011R	pm10	1.29	99	0.23	99	1.51	99
SI0008R	pm25	3.23	50	0.29	50	-	-

*Table 8: Units used for precipitation components.*

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

*Table 9: Units used for air components.*

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

## 9. Update

The data compiled in this report represent the best data available at present. If further errors are detected, the data will be corrected in the database. It is important that users make sure that they have access to the most recent version of the database. For the data presented here the latest alteration was 29 June, 2017.

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

## 10. References

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## 11. Acknowledgements

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

Closer at home the secretarial work, and far beyond, has been performed by Berit Modalen. Rita Larsen Våler, Ann Mari Fjæraa and Mona Waagsbø have been very helpful with data flow and database maintenance.

## 12. List of participating institutions

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

## **Annex 1**

### **Maps over Europe**



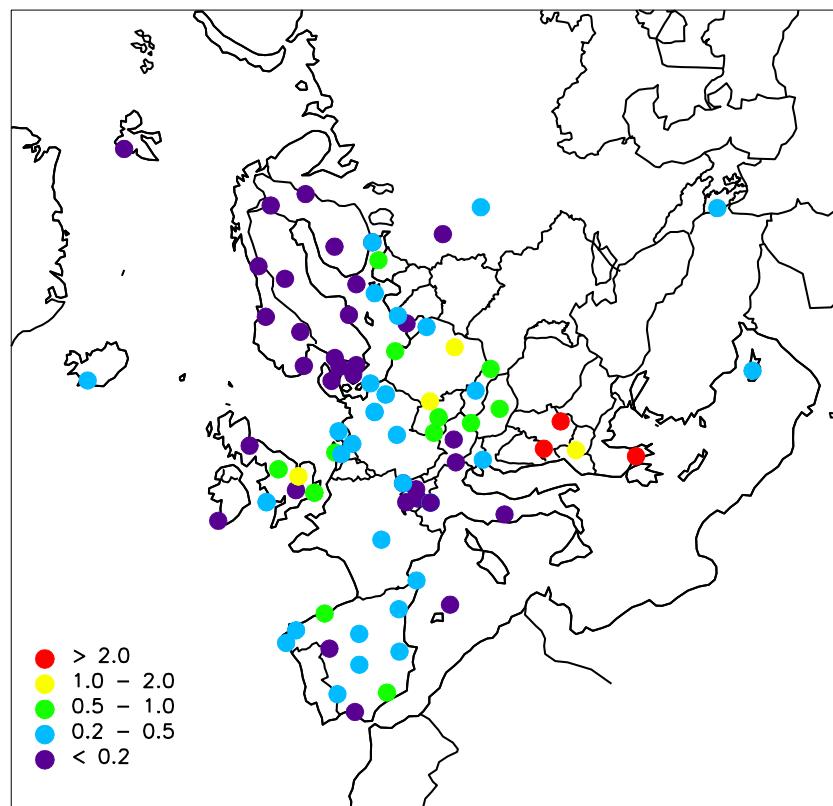


Figure 1.1: Geographical distribution of sulphur dioxide 2015. Unit:  $\mu\text{g S}/\text{m}^3$ .

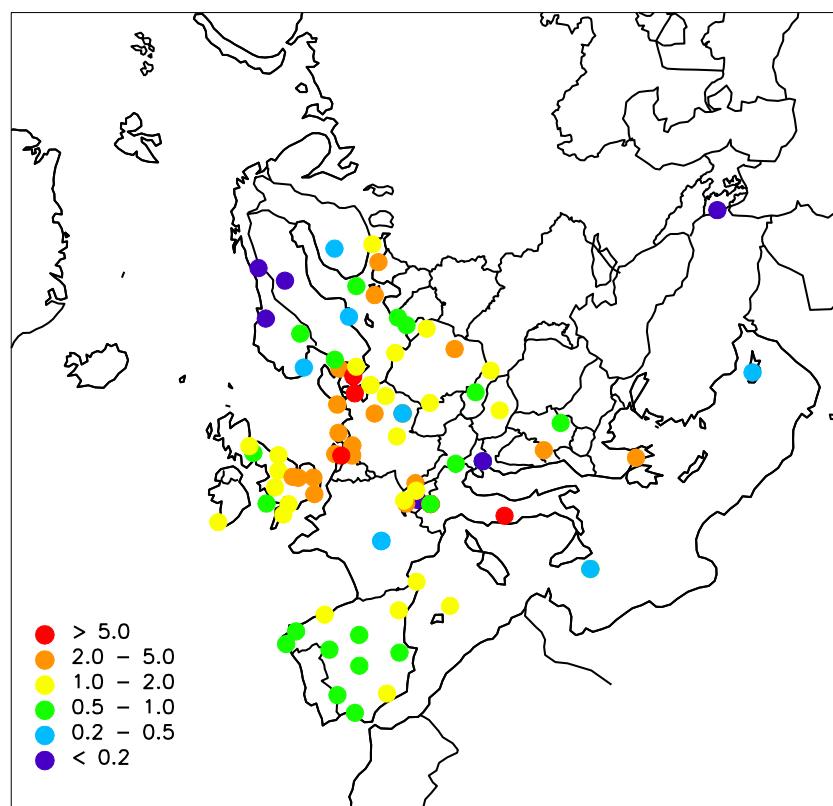


Figure 1.2: Geographical distribution of nitrogen dioxide 2015. Unit:  $\mu\text{g N}/\text{m}^3$ .

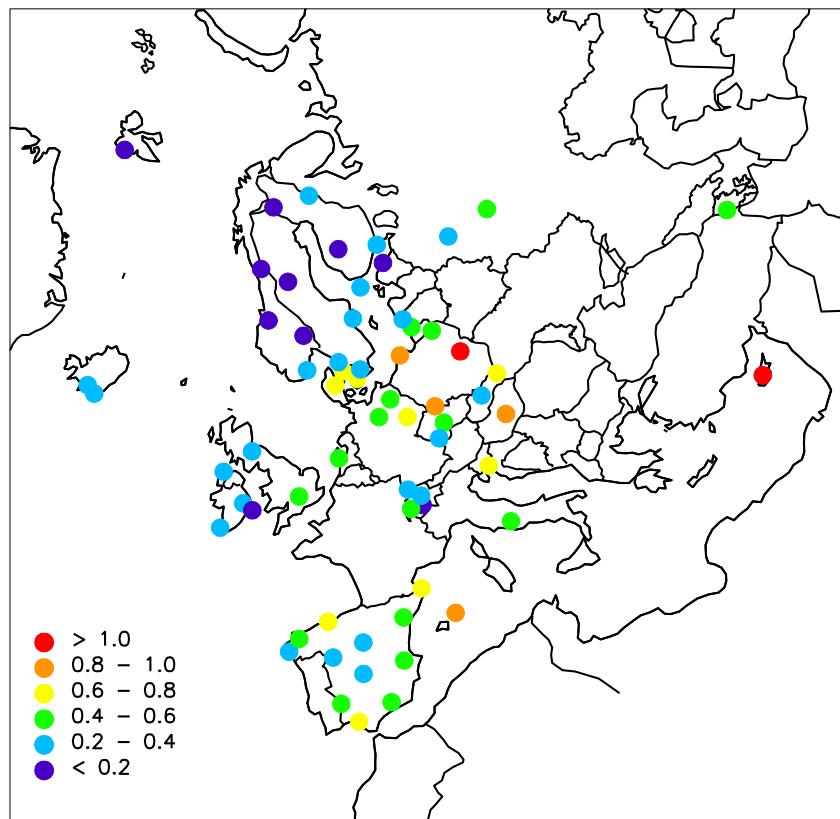


Figure 1.3: Geographical distribution of sulphate in aerosols 2015. Unit:  $\mu\text{g S/m}^3$ .

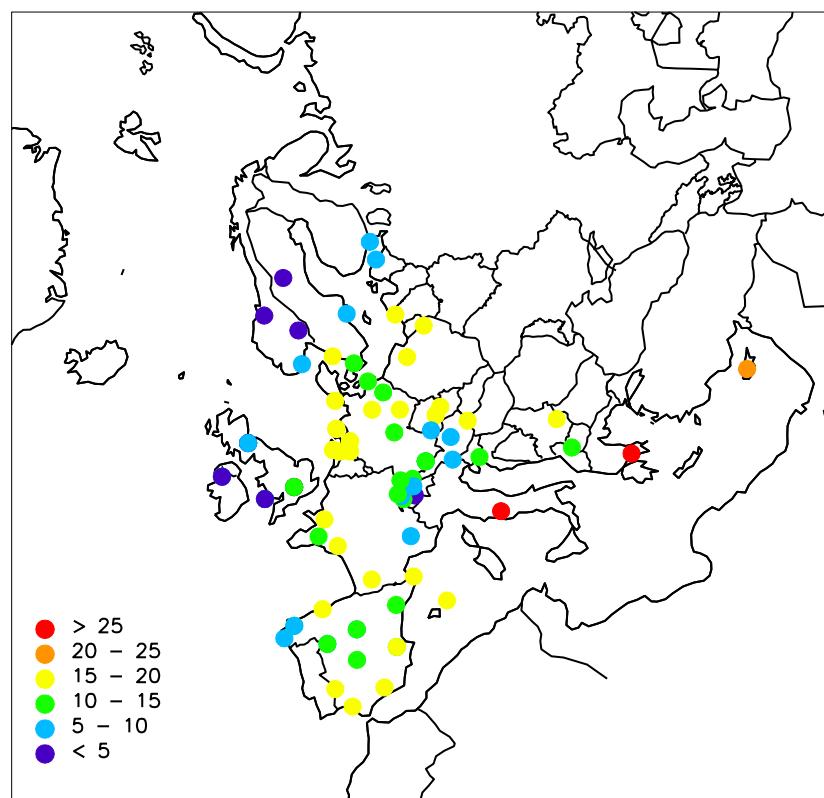


Figure 1.4: Geographical distribution of PM<sub>10</sub> 2015. Unit:  $\mu\text{g/m}^3$ .

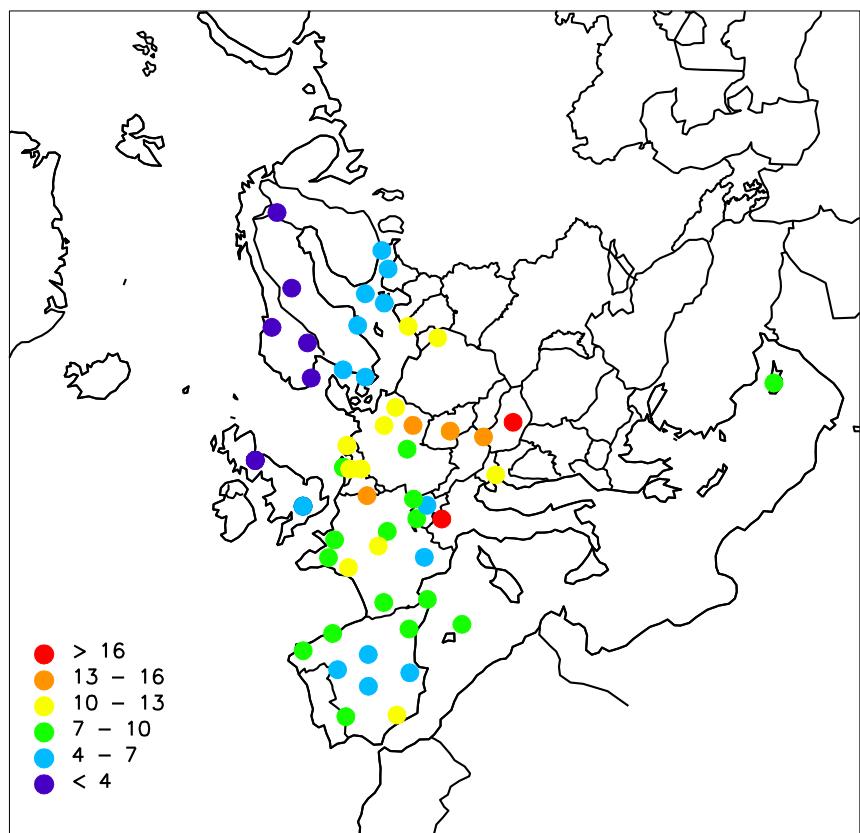


Figure 1.5: Geographical distribution of  $\text{PM}_{2.5}$  2015. Unit:  $\mu\text{g}/\text{m}^3$ .

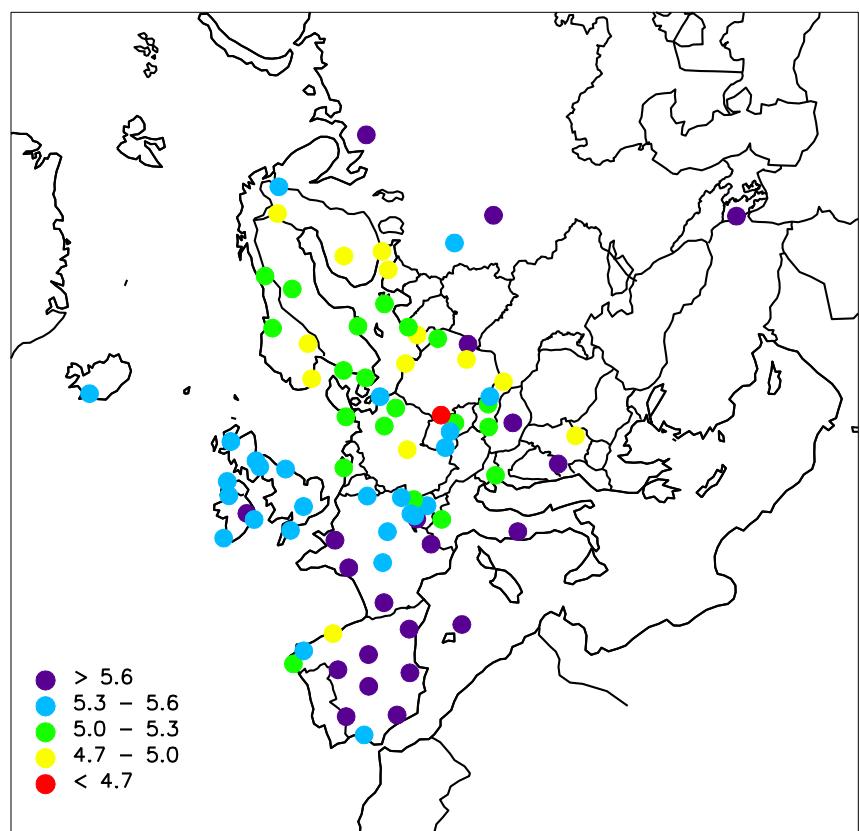


Figure 1.6: Geographical distribution of pH in precipitation 2015. Unit: pH units.

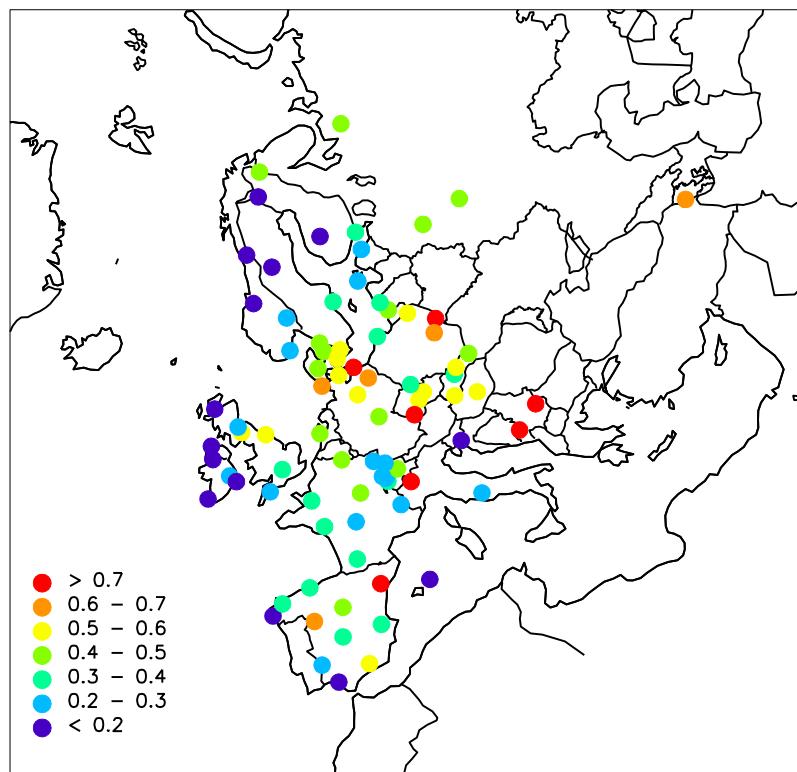


Figure 1.7: Geographical distribution of ammonium in precipitation 2015.  
Unit: mg N/l.

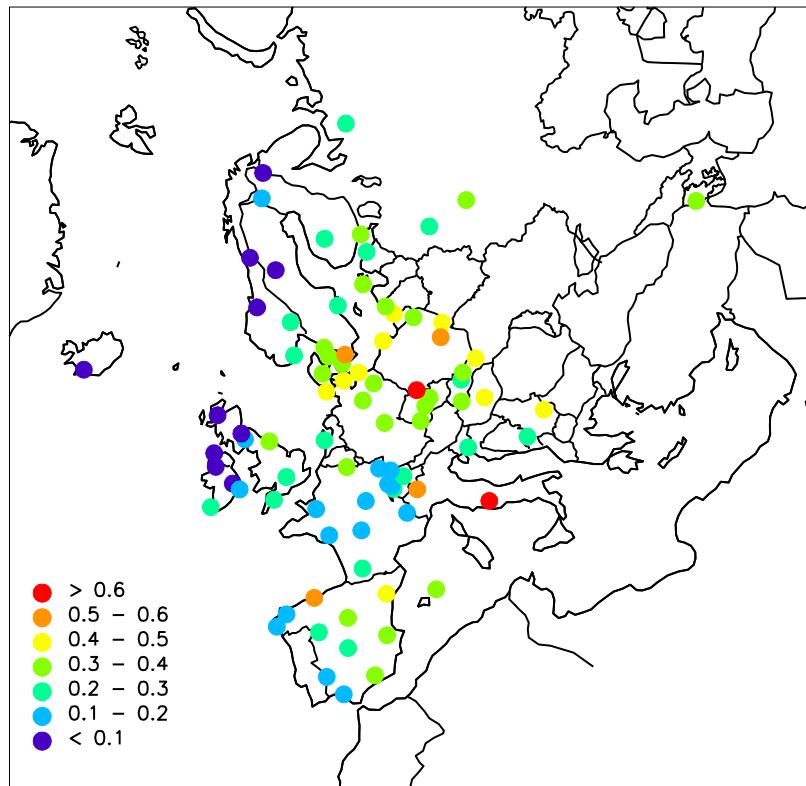
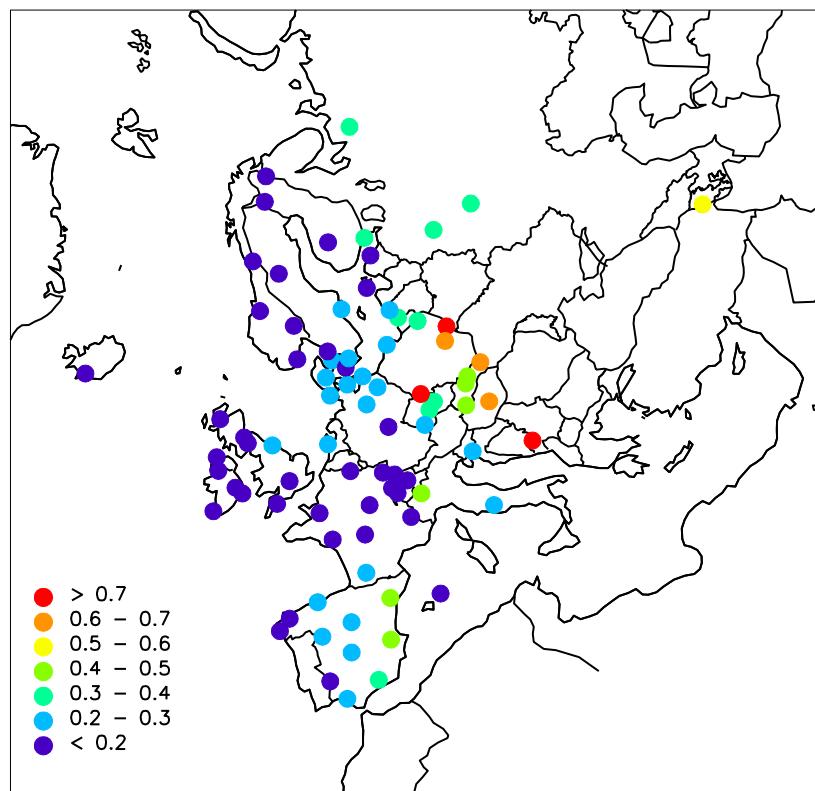
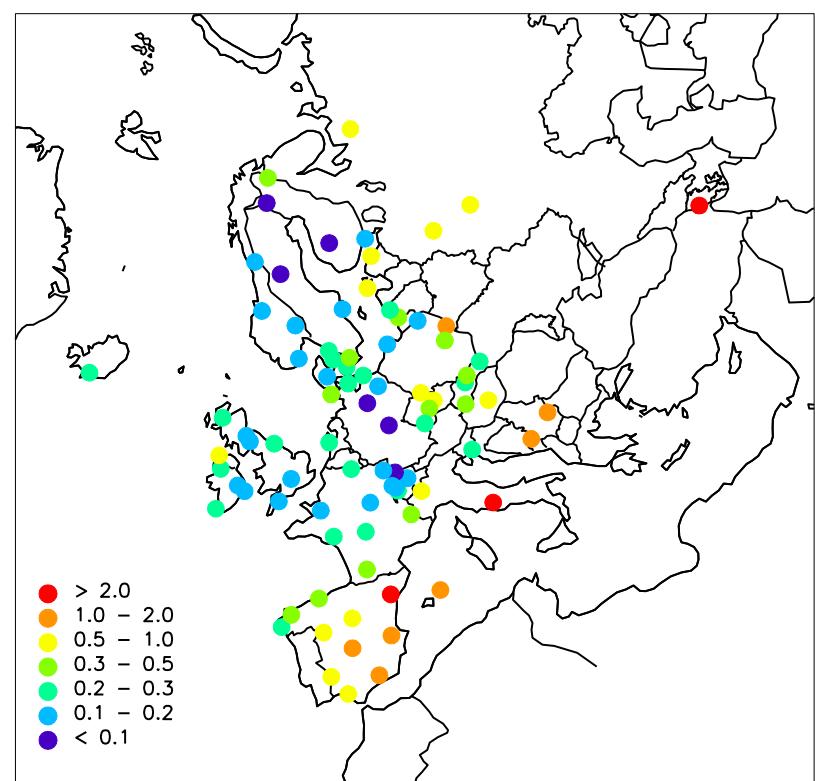


Figure 1.8: Geographical distribution of nitrate in precipitation 2015.  
Unit: mg N/l.



*Figure 1.9: Geographical distribution of sulphate in precipitation 2015 (corrected for sea spray). Unit: mg S/l.*



*Figure 1.10: Geographical distribution of calcium in precipitation 2015. Unit: mg/l.*

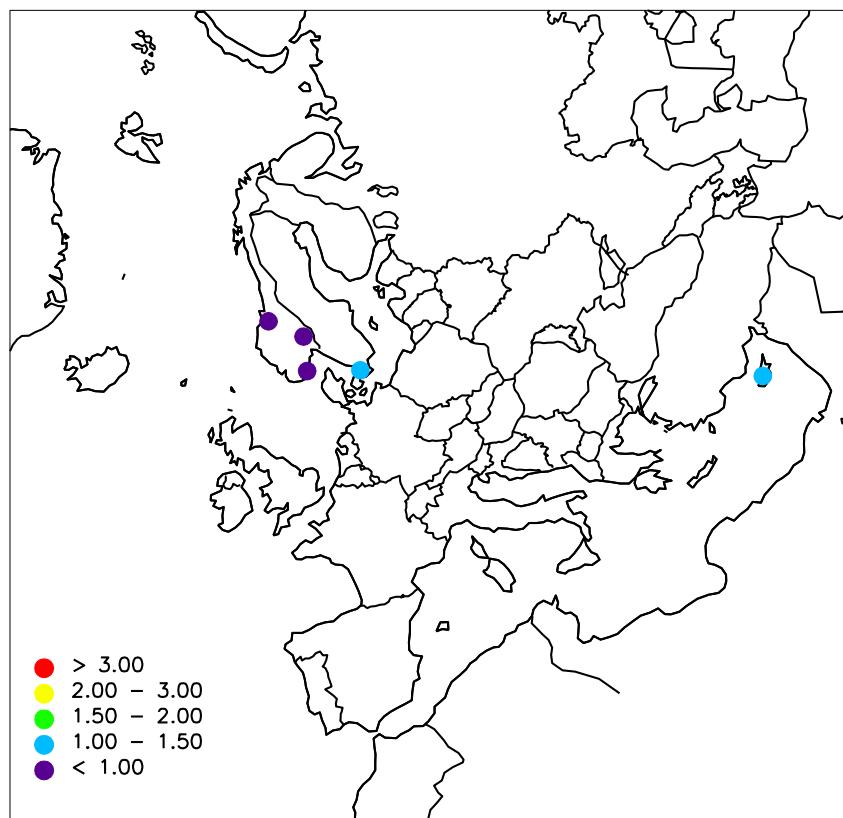


Figure 1.11: Geographical distribution of OC in  $\text{PM}_{10}$  2015. Unit:  $\mu\text{g}/\text{m}^3$ .

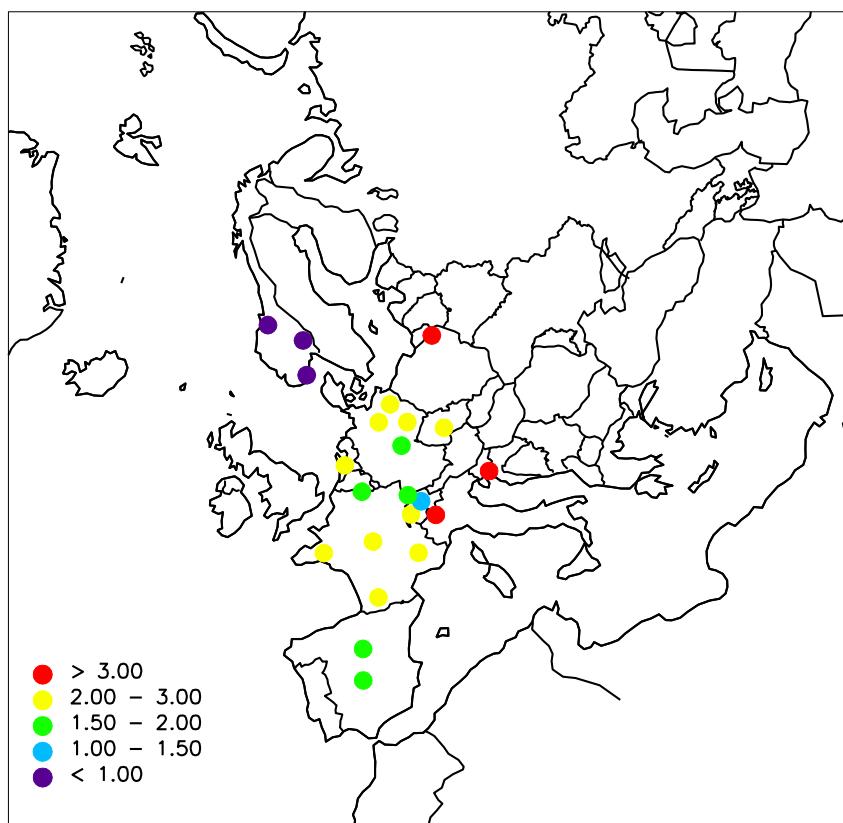


Figure 1.12: Geographical distribution of OC in  $\text{PM}_{2.5}$  2015. Unit:  $\mu\text{g}/\text{m}^3$ .

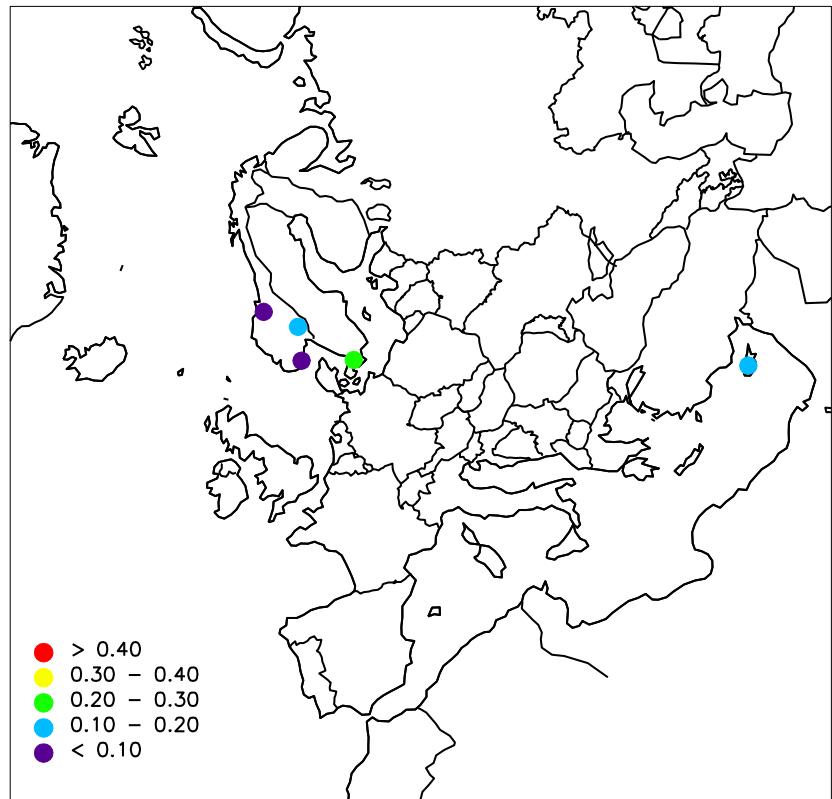


Figure 1.13: Geographical distribution of EC in  $PM_{10}$  2015. Unit:  $\mu g/m^3$ .

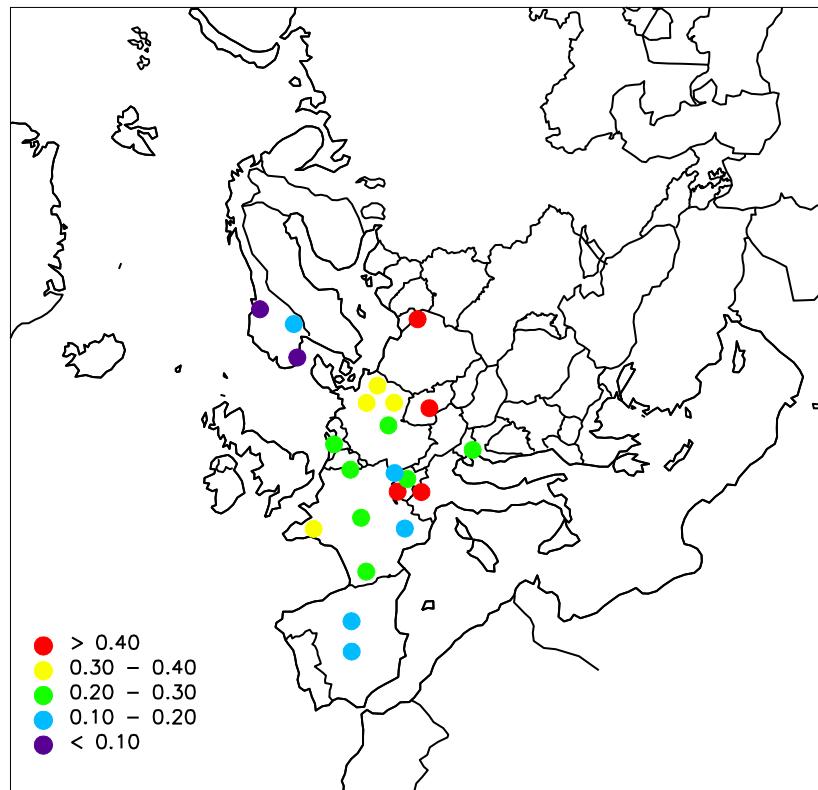


Figure 1.14: Geographical distribution of EC in  $PM_{2.5}$  2015. Unit:  $\mu g/m^3$ .



## **Annex 2**

### **Annual statistics on precipitation data**



**AM0001R Amberg**  
**January 2015 - December 2015**

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	3.45	0.19	24.70	1148.1	100.0	0	67
Cl-	precip	1.00	0.06	8.14	333.9	100.0	0	67
K+	precip	0.57	0.03	2.97	189.9	92.9	0	60
Mg++	precip	0.27	0.01	4.29	90.4	100.0	0	67
NH4+	precip	0.61	0.06	1.81	202.0	100.0	0	67
NO3-	precip	0.30	0.01	1.82	100.5	100.0	0	67
Na+	precip	0.56	0.01	3.87	187.7	93.0	0	61
Precip off	precip	-	0.00	17.60	333.0	70.9	0	126
SO4--	precip	0.60	0.02	4.83	199.3	100.0	0	67
SO4-- corr	precip	0.54	-0.14	4.80	180.0	100.0	0	67
cond	precip	29.24	2.60	154.00	9736.6	100.0	0	67
pH	precip	6.34	5.15	7.93	152.6	100.0	0	67

**BY0004R Vysokoe**  
**January 2015 - December 2015**

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	1.90	0.13	14.15	924.6	78.5	0	77
Cl-	precip	1.31	0.23	5.27	635.0	39.9	0	36
K+	precip	0.71	0.04	10.38	344.7	78.5	0	77
Mg++	precip	0.42	0.03	2.94	202.7	78.1	0	76
NH4+	precip	0.90	0.10	6.32	437.3	79.8	0	79
NO3-	precip	0.47	0.14	1.76	230.0	72.5	0	68
Na+	precip	1.58	0.17	12.15	770.3	78.5	0	77
Precip	precip	-	0.00	28.60	486.2	100.0	0	366
SO4--	precip	1.25	0.24	6.76	606.3	69.5	0	68
SO4-- corr	precip	1.09	0.18	6.21	529.5	69.1	0	67
cond	precip	38.22	15.00	62.00	18583.8	80.6	0	81
pH	precip	6.12	5.00	7.10	372.0	80.6	0	81

**CH0002R Payerne**  
**January 2015 - December 2015**

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.22	0.03	2.88	155.2	99.8	0	45
Cl-	precip	0.15	0.02	0.84	107.0	99.8	0	45
K+	precip	0.03	0.00	0.55	23.2	99.8	0	45
Mg++	precip	0.02	0.00	0.20	13.7	99.8	0	45
NH4+	precip	0.37	0.10	2.98	256.8	99.8	0	45
NO3-	precip	0.22	0.06	2.85	155.9	99.8	0	45
Na+	precip	0.08	0.01	0.60	59.4	99.8	0	45
Precip	precip	-	0.00	102.60	699.6	100.0	0	53
SO4--	precip	0.13	0.03	0.98	89.9	99.8	0	45
SO4-- corr	precip	0.12	0.03	0.93	84.9	99.8	0	45
cond	precip	6.57	2.47	48.57	4593.7	100.0	0	47
pH	precip	5.72	4.49	6.98	1319.9	100.0	0	47

**CH0004R Chaumont**  
**January 2015 - December 2015**

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.15	0.02	1.55	142.0	99.9	0	46
Cl-	precip	0.11	0.01	1.32	104.8	99.9	0	46
K+	precip	0.02	0.00	1.02	22.1	99.9	0	46
Mg++	precip	0.01	0.00	0.10	13.7	99.9	0	46
NH4+	precip	0.23	0.03	2.54	221.5	99.9	0	46
NO3-	precip	0.16	0.03	1.67	151.1	99.9	0	46
Na+	precip	0.06	0.01	0.73	60.5	99.9	0	46
Precip	precip	-	0.00	139.40	945.4	100.0	0	53
SO4--	precip	0.11	0.02	0.69	106.2	99.9	0	46
SO4-- corr	precip	0.11	0.02	0.68	101.1	99.9	0	46
cond	precip	5.47	1.88	40.78	5168.0	99.9	0	46
pH	precip	5.42	4.30	6.93	3590.0	99.9	0	46

**CH0005R Rigi**  
**January 2015 - December 2015**

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.15	0.03	1.14	185.3	100.0	0	46
Cl-	precip	0.08	0.01	0.36	102.5	100.0	0	46
K+	precip	0.03	0.01	0.15	35.2	100.0	0	46
Mg++	precip	0.01	0.00	0.07	15.7	100.0	0	46
NH4+	precip	0.45	0.07	1.83	569.6	100.0	0	46
NO3-	precip	0.27	0.05	1.53	348.0	100.0	0	46
Na+	precip	0.05	0.01	0.27	64.8	100.0	0	46
Precip	precip	-	0.00	150.00	1266.0	100.0	0	53
SO4--	precip	0.14	0.01	0.48	182.7	100.0	0	46
SO4-- corr	precip	0.14	0.01	0.47	177.1	100.0	0	46
cond	precip	7.10	1.83	26.77	8991.7	100.0	0	46
pH	precip	5.58	4.76	6.66	3337.2	100.0	0	46

**CZ0001R Svatouch**  
**January 2015 - December 2015**

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	1.00	0.04	12.99	567.3	96.0	0	36
Cl-	precip	0.20	0.03	0.59	114.1	96.0	0	36
K+	precip	0.07	0.01	0.38	38.0	96.0	0	36
Mg++	precip	0.03	0.00	0.14	15.4	96.0	0	36
NH4+	precip	0.51	0.01	2.75	293.2	96.0	2	36
NO3-	precip	0.38	0.02	2.17	215.7	96.0	0	36
Na+	precip	0.12	0.01	0.46	66.5	96.0	0	36
Precip	precip	-	0.00	51.30	570.0	99.9	0	53
SO4--	precip	0.34	0.03	1.33	196.3	96.0	0	36
SO4-- corr	precip	0.33	0.03	1.30	190.5	96.0	0	36
cond	precip	15.61	2.15	56.30	8899.2	96.0	0	36
pH	precip	5.29	4.69	7.00	2890.6	96.0	0	36

**CZ0003R Kosetice (NOAK)**  
**January 2015 - December 2015**

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.33	0.01	1.92	194.3	86.0	1	72
Cl-	precip	0.19	0.02	6.42	110.9	86.0	0	72
K+	precip	0.08	0.00	1.25	46.7	86.0	3	72
Mg++	precip	0.03	0.00	0.28	16.3	86.0	0	72
NH4+	precip	0.50	0.04	5.69	293.2	86.0	0	72
NO3-	precip	0.33	0.05	3.06	191.5	86.0	0	72
Na+	precip	0.15	0.01	15.70	88.0	86.0	0	72
Precip	precip	-	0.00	30.20	581.8	100.0	0	366
SO4--	precip	0.32	0.01	3.05	186.8	86.0	1	72
SO4-- corr	precip	0.31	0.00	2.85	181.8	86.0	1	72
cond	precip	14.48	2.27	96.30	8422.8	86.0	0	72
pH	precip	5.32	4.18	6.98	2815.9	86.0	0	72

**CZ0005R Churanov**  
**January 2015 - December 2015**

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.26	0.01	1.75	192.2	98.3	1	43
Cl-	precip	0.23	0.00	0.96	168.8	98.3	1	43
K+	precip	0.11	0.01	1.30	83.7	98.3	0	43
Mg++	precip	0.03	0.01	0.15	24.5	98.3	0	43
NH4+	precip	0.72	0.06	12.59	533.2	97.9	0	42
NO3-	precip	0.37	0.12	5.65	275.5	98.3	0	43
Na+	precip	0.13	0.02	0.62	93.9	98.3	0	43
Precip	precip	-	0.00	66.90	743.3	99.9	0	53
SO4--	precip	0.28	0.04	3.77	211.1	98.3	0	43
SO4-- corr	precip	0.27	0.04	3.75	202.9	98.3	0	43
cond	precip	13.07	5.17	51.10	9711.5	98.3	0	43
pH	precip	5.32	4.46	6.81	3534.5	98.3	0	43

**DE0001R Westerland**  
**January 2015 - December 2015**

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.35	0.01	3.72	302.1	98.1	1	44
Cl-	precip	12.25	0.39	99.23	10450.1	98.1	0	44
K+	precip	0.27	0.03	2.01	233.1	98.1	0	44
Mg++	precip	0.83	0.01	6.48	703.7	98.1	1	44
NH4+	precip	0.62	0.15	2.94	532.6	98.1	0	44
NO3-	precip	0.43	0.08	1.33	369.9	98.1	0	44
Na+	precip	6.82	0.19	54.17	5816.3	98.1	0	44
Precip	precip	-	0.00	68.63	852.9	97.3	0	51
SO4--	precip	0.79	0.14	5.00	673.9	98.1	0	44
SO4-- corr	precip	0.22	0.03	0.89	187.1	98.1	0	44
cond	precip	56.73	8.53	388.30	48383.5	96.9	0	43
pH	precip	5.23	4.63	6.42	5055.2	98.1	0	44

**DE0002R Waldhof**  
**January 2015 - December 2015**

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.10	0.01	1.14	66.8	97.8	31	123
Cl-	precip	0.66	0.01	11.28	465.9	92.0	3	118
K+	precip	0.05	0.00	0.70	34.9	97.8	12	123
Mg++	precip	0.05	0.00	0.72	32.0	97.8	28	123
NH4+	precip	0.57	0.00	2.95	398.3	97.8	1	123
NO3-	precip	0.33	0.05	1.76	229.3	94.7	0	119
Na+	precip	0.34	0.00	5.89	241.4	97.8	12	123
Precip	precip	-	0.00	37.50	703.2	100.0	0	366
SO4--	precip	0.27	0.03	0.92	190.3	94.7	0	119
SO4-- corr	precip	0.24	0.03	0.92	169.7	94.7	0	119
cond	precip	11.78	2.38	51.20	8280.7	95.7	0	121
pH	precip	5.25	4.21	6.58	3959.4	97.8	0	123

**DE0003R Schauinsland**  
**January 2015 - December 2015**

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.06	0.01	4.38	81.7	94.5	59	121
Cl-	precip	0.25	0.04	4.58	341.8	94.5	0	121
K+	precip	0.03	0.01	0.44	38.6	94.5	21	121
Mg++	precip	0.01	0.01	0.34	19.7	94.5	68	121
NH4+	precip	0.26	0.00	3.13	356.8	94.5	2	121
NO3-	precip	0.19	0.03	2.23	260.9	94.5	0	121
Na+	precip	0.18	0.01	2.93	238.8	94.5	0	121
Precip	precip	-	0.00	110.00	1350.0	100.0	0	366
SO4--	precip	0.14	0.02	1.07	189.4	94.5	0	121
SO4-- corr	precip	0.13	0.02	1.04	171.8	94.5	0	121
cond	precip	7.20	2.40	56.18	9715.0	94.5	0	121
pH	precip	5.23	4.25	6.82	7969.4	94.5	0	121

**DE0007R Neuglobosw**  
**January 2015 - December 2015**

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.12	0.01	0.86	70.0	97.3	11	115
Cl-	precip	0.66	0.02	23.93	381.1	97.3	0	115
K+	precip	0.09	0.01	1.21	51.3	97.3	0	115
Mg++	precip	0.05	0.00	1.57	27.6	97.3	19	115
NH4+	precip	0.63	0.00	4.28	362.9	97.3	1	115
NO3-	precip	0.39	0.07	2.20	224.2	97.3	0	115
Na+	precip	0.36	0.00	13.48	210.4	97.3	4	115
Precip	precip	-	0.00	24.70	577.4	100.0	0	366
SO4--	precip	0.27	0.03	1.55	155.3	97.3	0	115
SO4-- corr	precip	0.24	0.03	1.01	138.2	97.3	0	115
cond	precip	12.37	2.84	102.30	7142.7	97.3	0	115
pH	precip	5.09	4.09	6.61	4730.4	97.3	0	115

**DE0008R Schmücke**  
**January 2015 - December 2015**

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.03	0.01	1.12	31.4	99.9	31	45
Cl-	precip	0.72	0.05	22.26	728.1	99.9	0	45
K+	precip	0.04	0.01	0.49	37.7	99.9	0	45
Mg++	precip	0.01	0.01	1.43	12.0	99.9	34	45
NH4+	precip	0.47	0.14	2.73	476.2	99.9	0	45
NO3-	precip	0.34	0.17	1.57	344.7	99.9	0	45
Na+	precip	0.43	0.02	11.54	440.6	99.9	0	45
Precip	precip	-	0.00	94.90	1015.1	99.3	0	52
SO4--	precip	0.20	0.07	1.76	205.9	99.9	0	45
SO4-- corr	precip	0.17	0.01	0.79	169.2	99.9	0	45
cond	precip	10.59	4.99	101.70	10747.0	99.9	0	45
pH	precip	4.97	4.17	6.40	10864.5	99.9	0	45

**DE0009R Zingst**  
**January 2015 - December 2015**

Component	matrix	W.	Min	Max	Dep	%	Num	Num
		mean				anal	bel	samp1
Ca++	precip	0.24	0.01	1.33	134.2	99.8	2	44
Cl-	precip	2.79	0.15	20.34	1537.0	99.8	0	44
K+	precip	0.18	0.02	1.02	97.8	99.8	0	44
Mg++	precip	0.20	0.01	1.34	109.9	99.8	1	44
NH4+	precip	0.99	0.10	7.35	546.1	99.8	0	44
NO3-	precip	0.44	0.16	3.30	243.1	99.8	0	44
Na+	precip	1.58	0.06	11.42	871.1	99.8	0	44
Precip	precip	-	0.00	39.68	550.3	99.3	0	52
SO4--	precip	0.42	0.13	2.30	230.6	99.8	0	44
SO4-- corr	precip	0.29	0.05	2.28	157.6	99.8	0	44
cond	precip	23.89	9.05	89.40	13147.4	99.8	0	44
pH	precip	5.32	4.69	7.31	2648.8	99.8	0	44

**DK0005R Keldsnor**  
**January 2015 - December 2015**

Component	matrix	W.	Min	Max	Dep	%	Num	Num
		mean				anal	bel	samp1
Ca++	precip	0.23	0.04	0.77	134.5	93.5	2	20
Cl-	precip	3.80	0.41	20.40	2192.6	98.0	0	21
K+	precip	0.20	0.01	0.55	114.6	98.0	4	21
Mg++	precip	0.27	0.03	1.37	158.2	98.0	3	21
NH4+	precip	0.59	0.18	1.25	338.5	98.0	0	21
NO3-	precip	0.41	0.21	1.19	237.0	98.0	0	21
Precip	precip	-	0.14	65.85	577.6	91.2	0	22
SO4--	precip	0.41	0.10	1.27	236.8	98.0	0	21
SO4-- corr	precip	0.23	0.07	0.89	132.3	98.0	0	21

**DK0008R Anholt**  
**January 2015 - December 2015**

Component	matrix	W.	Min	Max	Dep	%	Num	Num
		mean				anal	bel	samp1
Ca++	precip	0.20	0.08	0.58	93.9	99.8	0	18
Cl-	precip	6.49	0.55	26.41	3039.8	96.4	0	18
K+	precip	0.13	0.01	0.53	61.2	99.8	3	18
Mg++	precip	0.38	0.04	1.68	177.3	99.8	1	18
NH4+	precip	0.43	0.12	1.30	201.5	96.4	0	18
NO3-	precip	0.37	0.07	1.26	174.3	96.4	1	17
Precip	precip	-	0.40	60.59	468.5	83.0	0	20
SO4--	precip	0.49	0.22	1.36	230.1	96.4	0	18
SO4-- corr	precip	0.23	0.11	0.62	106.9	96.4	0	18

**DK0021R - Risoe**  
**January 2015 - December 2015**

Component	matrix	W.	Min	Max	Dep	%	Num	Num
		mean				anal	bel	samp1
Ca++	precip	0.20	0.04	0.86	113.8	88.6	1	18
Cl-	precip	2.43	0.66	17.23	1369.8	83.0	0	18
K+	precip	0.15	0.00	0.62	84.8	85.8	4	17
Mg++	precip	0.17	0.02	1.08	98.3	86.4	1	18
NH4+	precip	0.51	0.15	1.49	285.2	84.6	0	17
NO3-	precip	0.34	0.13	0.89	192.8	85.0	0	19
Precip	precip	-	1.31	66.72	562.9	91.2	0	22
SO4--	precip	0.30	0.13	0.90	170.9	90.9	0	20
SO4-- corr	precip	0.20	0.03	0.59	110.9	90.9	0	20

**DK0022R - Sepstrup Sande**  
**January 2015 - December 2015**

Component	matrix	W.	Min	Max	Dep	%	Num	Num
		mean				anal	bel	samp1
Ca++	precip	0.15	0.05	0.43	88.9	76.0	2	18
Cl-	precip	3.24	0.67	9.45	1873.4	76.0	0	18
K+	precip	0.11	0.01	0.28	65.9	76.0	2	18
Mg++	precip	0.22	0.05	0.63	128.3	76.0	0	18
NH4+	precip	0.45	0.11	1.30	260.6	76.0	0	18
NO3-	precip	0.38	0.17	0.94	216.6	73.0	0	17
Precip	precip	-	0.14	65.85	577.6	91.2	0	22
SO4--	precip	0.37	0.14	0.99	212.5	76.0	0	18
SO4-- corr	precip	0.22	0.06	0.85	127.7	76.0	0	18

**EE0009R Lahemaa**  
**January 2015 - December 2015**

Component	matrix	W.	Min	Max	Dep	%	Num	Num
		mean				anal	bel	sampl
Ca++	precip	0.59	0.02	5.40	321.9	100.0	18	133
Cl-	precip	0.56	0.05	26.00	306.2	100.0	17	133
K+	precip	0.08	0.01	9.70	41.1	100.0	37	133
Mg++	precip	0.09	0.01	0.71	49.8	100.0	26	133
NH4+	precip	0.20	0.01	2.80	110.2	100.0	31	133
NO3-	precip	0.24	0.01	3.50	128.2	99.9	17	132
Na+	precip	0.45	0.01	13.00	247.5	100.0	13	133
Precip	precip	-	0.00	17.52	544.4	100.0	232	366
SO4--	precip	0.22	0.03	2.87	121.2	100.0	0	133
SO4-- corr	precip	0.19	-0.05	2.48	104.2	100.0	0	133
cond	precip	9.09	2.40	51.70	4949.8	99.2	0	126
pH	precip	4.91	3.98	7.00	6774.4	99.2	0	126

**EE0011R Vilsandi**  
**January 2015 - December 2015**

Component	matrix	W.	Min	Max	Dep	%	Num	Num
		mean				anal	bel	sampl
Ca++	precip	0.76	0.00	2.60	399.8	100.0	3	23
Cl-	precip	1.40	0.30	19.00	731.4	100.0	0	23
K+	precip	0.11	0.01	3.10	59.9	100.0	3	23
Mg++	precip	0.23	0.01	1.50	118.1	100.0	3	23
NH4+	precip	0.28	0.01	6.40	146.3	100.0	4	23
NO3-	precip	0.39	0.06	1.80	204.6	100.0	0	23
Na+	precip	1.35	0.02	9.30	708.0	100.0	0	23
Precip	precip	-	0.00	49.40	523.3	45.3	0	24
SO4--	precip	0.27	0.14	1.37	140.0	100.0	0	23
SO4-- corr	precip	0.19	-0.04	0.75	96.9	100.0	0	23
cond	precip	14.23	6.00	81.00	7445.2	100.0	0	23
pH	precip	5.13	4.71	7.62	3868.6	100.0	0	23

**ES0001R San Pablo de los Montes**  
**January 2015 - December 2015**

Component	matrix	W.	Min	Max	Dep	%	Num	Num
		mean				anal	bel	sampl
Ca++	precip	1.04	0.05	7.40	415.0	97.9	3	46
Cl-	precip	0.37	0.15	2.25	146.0	99.2	19	52
K+	precip	0.08	0.03	0.39	33.2	97.9	13	46
Mg++	precip	0.07	0.01	0.28	26.9	97.9	1	46
NH4+	precip	0.33	0.02	1.54	132.1	99.0	4	51
NO3-	precip	0.22	0.04	1.57	87.6	99.2	6	52
Na+	precip	0.24	0.05	1.43	95.0	97.9	7	46
Precip	precip	-	0.00	25.48	397.4	100.0	0	366
SO4--	precip	0.29	0.05	1.35	116.6	99.2	9	52
SO4-- corr	precip	0.27	0.04	1.31	108.4	99.2	9	52
cond	precip	16.16	3.30	1307.00	6420.6	100.0	0	59
pH	precip	5.71	4.34	6.98	778.4	100.0	0	59

**ES0005R Noya**  
**January 2015 - December 2015**

Component	matrix	W.	Min	Max	Dep	%	Num	Num
		mean				anal	bel	sampl
Ca++	precip	0.21	0.05	1.88	408.3	99.7	16	132
Cl-	precip	3.03	0.15	25.89	6021.3	100.0	1	138
K+	precip	0.11	0.03	0.58	211.1	99.7	22	132
Mg++	precip	0.24	0.03	2.50	471.7	99.7	0	132
NH4+	precip	0.09	0.02	1.24	179.7	99.9	39	137
NO3-	precip	0.12	0.04	1.53	232.6	100.0	51	138
Na+	precip	2.02	0.17	19.10	4016.0	99.7	0	132
Precip	precip	-	0.00	64.00	1987.3	100.0	0	366
SO4--	precip	0.34	0.05	1.58	684.8	100.0	2	138
SO4-- corr	precip	0.18	-0.38	1.39	356.4	100.0	2	138
cond	precip	17.89	4.20	106.00	35558.0	100.0	0	140
pH	precip	5.20	4.01	6.33	12652.1	100.0	0	140

**ES0006R Mahon**  
**January 2015 - December 2015**

Component	matrix	W.	Min	Max	Dep	%	Num	Num
		mean				anal	bel	sampl
Ca++	precip	1.68	0.29	13.30	876.9	99.0	0	42
Cl-	precip	27.89	5.07	509.87	14578.8	99.5	0	45
K+	precip	0.76	0.16	9.10	398.1	99.0	0	42
Mg++	precip	2.24	0.37	23.50	1169.6	99.0	0	42
NH4+	precip	0.20	0.02	3.58	104.3	99.4	7	44
NO3-	precip	0.39	0.04	3.76	204.4	99.5	2	45
Na+	precip	18.15	3.70	294.00	9487.8	99.0	0	42
Precip	precip	-	0.00	102.00	522.7	99.9	0	365
SO4--	precip	1.66	0.36	24.15	870.0	99.5	0	45
SO4-- corr	precip	0.14	-4.63	4.11	74.5	99.5	0	45
cond	precip	115.88	24.70	1615.00	60572.8	99.5	0	45
pH	precip	5.75	4.71	6.94	930.2	99.5	0	45

**ES0007R Viznar**  
**January 2015 - December 2015**

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	1.62	0.43	11.40	713.6	98.3	0	50
Cl-	precip	0.82	0.15	5.29	359.9	99.8	6	58
K+	precip	0.22	0.05	2.00	98.0	98.3	0	50
Mg++	precip	0.22	0.07	1.50	96.1	98.3	0	50
NH4+	precip	0.53	0.07	2.88	235.6	99.3	0	55
NO3-	precip	0.33	0.04	2.16	143.8	99.8	1	58
Na+	precip	0.31	0.05	2.00	138.7	98.3	6	50
Precip	precip	-	0.00	70.40	440.6	100.0	0	366
SO4--	precip	0.41	0.05	2.10	179.7	99.8	4	58
SO4-- corr	precip	0.38	0.04	2.05	167.0	99.8	4	58
cond	precip	18.51	5.30	82.60	8156.8	100.0	0	60
pH	precip	6.31	5.80	7.54	215.0	100.0	0	60

**ES0008R Niembro**  
**January 2015 - December 2015**

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.49	0.05	3.61	537.9	99.8	1	132
Cl-	precip	6.71	0.35	47.05	7442.7	100.0	0	137
K+	precip	0.18	0.03	1.00	198.6	99.8	12	132
Mg++	precip	0.54	0.04	3.50	599.7	99.8	0	132
NH4+	precip	0.32	0.02	4.84	353.4	99.9	1	134
NO3-	precip	0.52	0.04	8.91	572.7	99.9	8	136
Na+	precip	4.52	0.21	31.00	5008.6	99.8	0	132
Precip	precip	-	0.00	50.19	1108.4	100.0	0	366
SO4--	precip	0.61	0.11	2.72	674.8	100.0	0	137
SO4-- corr	precip	0.23	-0.90	1.73	259.1	100.0	0	137
cond	precip	41.15	4.80	271.90	45615.0	99.9	0	136
pH	precip	4.76	3.24	6.66	19074.6	99.9	0	136

**ES0009R Campisabalo**  
**January 2015 - December 2015**

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.90	0.10	9.60	305.9	99.2	0	70
Cl-	precip	0.37	0.15	2.46	126.3	99.9	22	75
K+	precip	0.06	0.03	0.53	20.3	99.2	26	70
Mg++	precip	0.07	0.01	0.41	25.4	99.2	2	70
NH4+	precip	0.44	0.02	2.29	148.8	99.8	1	74
NO3-	precip	0.33	0.04	2.28	110.8	99.9	3	75
Na+	precip	0.18	0.05	1.11	61.8	99.2	12	70
Precip	precip	-	0.00	29.67	340.6	100.0	0	366
SO4--	precip	0.25	0.05	2.52	83.5	99.9	9	75
SO4-- corr	precip	0.23	0.04	2.42	77.5	99.9	9	75
cond	precip	12.18	2.70	78.80	4149.7	100.0	0	76
pH	precip	6.05	5.61	7.48	306.3	100.0	0	76

**ES0011R Barcarrota**  
**January 2015 - December 2015**

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.52	0.14	2.37	199.0	100.0	0	46
Cl-	precip	0.95	0.15	5.23	361.3	100.0	2	46
K+	precip	0.36	0.03	2.80	137.7	100.0	2	46
Mg++	precip	0.13	0.04	0.80	51.2	100.0	0	46
NH4+	precip	0.29	0.02	3.87	109.6	100.0	3	46
NO3-	precip	0.14	0.04	0.77	54.8	100.0	5	46
Na+	precip	0.59	0.11	4.00	223.6	100.0	0	46
Precip	precip	-	0.00	46.51	380.3	100.0	0	366
SO4--	precip	0.23	0.05	0.80	88.3	100.0	1	46
SO4-- corr	precip	0.18	0.04	0.73	69.1	100.0	1	46
cond	precip	11.85	4.60	45.60	4505.0	100.0	0	46
pH	precip	5.72	5.28	7.00	731.8	100.0	0	46

**ES0012R Zarra**  
**January 2015 - December 2015**

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	1.68	0.23	19.50	580.7	98.7	0	51
Cl-	precip	0.72	0.15	4.21	247.6	99.7	7	60
K+	precip	0.08	0.03	0.64	27.6	98.7	14	51
Mg++	precip	0.12	0.03	1.20	42.4	98.7	0	51
NH4+	precip	0.40	0.09	2.45	136.9	99.7	0	59
NO3-	precip	0.34	0.04	2.34	117.6	99.7	2	60
Na+	precip	0.39	0.05	3.50	134.5	98.7	6	51
Precip	precip	-	0.00	26.81	344.7	100.0	0	366
SO4--	precip	0.47	0.05	6.32	162.3	99.7	4	60
SO4-- corr	precip	0.43	0.04	6.03	148.9	99.7	4	60
cond	precip	16.90	3.90	132.70	5825.4	100.0	0	64
pH	precip	6.04	5.13	7.51	312.2	100.0	0	64

**ES0013R Penausende**  
**January 2015 - December 2015**

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.72	0.15	3.80	252.5	99.4	0	65
Cl-	precip	0.55	0.15	6.09	194.3	99.9	10	69
K+	precip	0.17	0.03	2.70	61.6	99.4	7	65
Mg++	precip	0.10	0.03	0.80	35.2	99.4	0	65
NH4+	precip	0.62	0.02	3.12	218.0	99.7	2	67
NO3-	precip	0.25	0.04	1.38	88.0	99.9	9	69
Na+	precip	0.29	0.05	1.69	103.2	99.4	4	65
Precip	precip	-	0.00	30.70	352.2	100.0	0	366
SO4--	precip	0.30	0.05	1.73	104.8	99.9	6	69
SO4-- corr	precip	0.27	-0.01	1.66	95.1	99.9	6	69
cond	precip	13.35	3.30	49.50	4702.4	100.0	0	71
pH	precip	6.01	5.26	6.81	347.2	100.0	0	71

**ES0014R Els Torms**  
**January 2015 - December 2015**

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	2.22	0.37	12.80	568.0	100.0	0	35
Cl-	precip	0.76	0.15	2.75	194.4	100.0	5	35
K+	precip	0.41	0.03	7.00	106.0	100.0	2	35
Mg++	precip	0.18	0.04	1.20	47.3	100.0	0	35
NH4+	precip	0.72	0.17	5.96	184.6	100.0	0	35
NO3-	precip	0.41	0.04	2.51	104.1	100.0	1	35
Na+	precip	0.40	0.05	1.64	103.1	100.0	1	35
Precip	precip	-	0.00	44.19	256.1	100.0	0	366
SO4--	precip	0.52	0.15	1.79	132.7	100.0	0	35
SO4-- corr	precip	0.48	0.14	1.71	123.6	100.0	0	35
cond	precip	22.96	7.30	80.60	5880.6	100.0	0	35
pH	precip	6.29	6.06	7.30	130.3	100.0	0	35

**ES0016R O Saviñao**  
**January 2015 - December 2015**

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.35	0.05	8.90	444.9	98.9	3	97
Cl-	precip	1.43	0.15	9.80	1819.9	99.6	3	107
K+	precip	0.19	0.03	5.30	246.4	98.9	17	97
Mg++	precip	0.13	0.02	1.40	162.9	98.9	0	97
NH4+	precip	0.34	0.02	6.93	431.0	99.4	1	104
NO3-	precip	0.18	0.04	3.44	234.8	99.6	24	107
Na+	precip	0.84	0.05	6.90	1070.2	98.9	2	97
Precip	precip	-	0.00	112.80	1269.9	100.0	0	366
SO4--	precip	0.26	0.05	4.20	331.4	99.6	7	107
SO4-- corr	precip	0.19	0.00	3.77	246.4	99.6	7	107
cond	precip	12.83	3.80	164.20	16287.1	100.0	0	117
pH	precip	5.54	4.91	7.04	3681.0	100.0	0	117

**ES0017R Doñana**  
**January 2015 - December 2015**

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.51	0.05	22.40	174.5	97.6	1	35
Cl-	precip	2.72	0.15	8.87	941.1	98.9	1	40
K+	precip	0.09	0.03	0.51	30.0	97.6	9	35
Mg++	precip	0.23	0.05	0.90	78.8	97.6	0	35
NH4+	precip	0.12	0.02	0.86	39.9	98.6	9	38
NO3-	precip	0.13	0.04	0.92	44.5	98.9	10	40
Na+	precip	1.86	0.05	6.20	643.4	97.6	1	35
Precip	precip	-	0.00	29.00	345.4	100.0	0	366
SO4--	precip	0.36	0.11	2.43	123.5	98.9	0	40
SO4-- corr	precip	0.21	0.06	2.32	72.7	98.9	0	40
cond	precip	18.20	4.20	100.40	6286.6	100.0	0	49
pH	precip	5.39	4.75	7.85	1417.5	100.0	0	49

**FI0004R Ähtäri**  
**January 2015 - December 2015**

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.06	0.01	0.62	39.4	100.0	0	47
Cl-	precip	0.20	0.04	2.17	136.4	100.0	0	47
K+	precip	0.08	0.00	0.68	54.3	95.4	0	44
Mg++	precip	0.03	0.01	0.16	18.2	100.0	0	47
NH4+	precip	0.13	0.00	1.20	90.9	100.0	0	47
NO3-	precip	0.20	0.01	0.97	135.9	100.0	0	47
Na+	precip	0.12	0.03	1.51	83.9	100.0	0	47
Precip	precip	-	0.00	44.70	679.0	98.9	0	52
SO4--	precip	0.15	0.05	0.69	103.0	100.0	0	47
SO4-- corr	precip	0.14	0.04	0.68	95.9	100.0	0	47
cond	precip	8.57	3.84	35.20	5821.6	100.0	0	47
pH	precip	4.85	4.25	5.63	9645.7	95.4	0	44

**FI0018R Virolahti III**  
**January 2015 - December 2015**

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.20	0.04	1.42	104.9	99.9	0	45
Cl-	precip	0.57	0.06	5.02	296.7	99.9	0	45
K+	precip	0.10	0.02	0.51	52.7	96.0	0	43
Mg++	precip	0.07	0.01	0.42	35.8	99.9	0	45
NH4+	precip	0.36	0.02	3.93	186.5	99.9	0	45
NO3-	precip	0.38	0.08	3.40	200.2	99.9	0	45
Na+	precip	0.34	0.03	3.09	179.0	99.9	0	45
Precip	precip	-	0.00	36.30	524.2	97.8	0	51
SO4--	precip	0.39	0.10	4.47	206.6	99.9	0	45
SO4-- corr	precip	0.37	0.09	4.28	191.6	99.9	0	45
cond	precip	16.13	5.27	122.10	8454.1	99.9	0	45
pH	precip	4.70	3.83	5.96	10460.0	96.0	0	43

**FI0036R Pallas (Matorova)**  
**January 2015 - December 2015**

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.03	0.01	0.22	17.6	99.8	0	45
Cl-	precip	0.12	0.01	1.44	84.4	99.8	0	45
K+	precip	0.02	0.00	0.21	17.6	99.4	0	44
Mg++	precip	0.01	0.00	0.10	7.9	99.8	0	45
NH4+	precip	0.06	0.00	0.59	45.2	99.8	0	45
NO3-	precip	0.10	0.02	0.52	73.5	99.8	0	45
Na+	precip	0.07	0.01	1.02	52.0	99.8	0	45
Precip	precip	-	0.00	63.50	706.6	93.1	0	49
SO4--	precip	0.13	0.03	0.46	91.5	99.8	0	45
SO4-- corr	precip	0.12	0.02	0.45	87.3	99.8	0	45
cond	precip	6.91	2.74	18.90	4882.9	99.8	0	45
pH	precip	4.88	4.55	5.34	9353.1	99.4	0	44

**FR0008R Donon**  
**January 2015 - December 2015**

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.10	0.01	3.46	129.5	96.5	19	147
Cl-	precip	0.30	0.03	6.81	388.9	96.5	23	147
K+	precip	0.03	0.01	0.57	39.4	96.5	46	147
Mg++	precip	0.03	0.01	0.47	33.4	96.5	79	147
NH4+	precip	0.22	0.01	2.67	285.9	96.5	5	147
NO3-	precip	0.18	0.01	2.17	227.0	96.5	1	147
Na+	precip	0.18	0.01	4.04	236.0	96.5	15	147
Precip	precip	-	0.00	44.60	1293.6	100.0	14	366
SO4--	precip	0.14	0.01	1.24	177.0	96.5	4	147
SO4-- corr	precip	0.12	0.01	1.10	156.8	96.5	4	147
pH	precip	5.43	4.15	6.70	4764.3	96.6	0	152

**FR0009R Revin**  
**January 2015 - December 2015**

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.21	0.01	7.50	224.8	88.1	2	144
Cl-	precip	0.91	0.03	11.79	952.4	88.1	5	144
K+	precip	0.06	0.01	1.78	63.7	88.1	17	144
Mg++	precip	0.07	0.01	0.86	69.9	88.1	36	144
NH4+	precip	0.41	0.01	2.40	432.8	88.1	1	144
NO3-	precip	0.30	0.03	3.35	315.6	88.1	0	144
Na+	precip	0.56	0.01	7.99	580.9	88.1	4	144
Precip	precip	-	0.00	35.80	1045.5	100.0	6	366
SO4--	precip	0.23	0.03	2.06	245.6	88.1	0	144
SO4-- corr	precip	0.19	0.03	1.39	197.7	88.1	0	144
pH	precip	5.53	3.85	6.68	3089.3	88.4	0	148

**FR0010R Morvan**  
**January 2015 - December 2015**

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.14	0.01	5.45	119.5	84.8	4	126
Cl-	precip	0.71	0.03	7.86	590.6	84.8	5	126
K+	precip	0.15	0.01	2.37	125.3	84.8	10	126
Mg++	precip	0.06	0.01	0.59	47.0	84.8	31	126
NH4+	precip	0.47	0.01	11.41	391.9	84.8	2	126
NO3-	precip	0.18	0.01	3.29	147.8	84.8	1	126
Na+	precip	0.44	0.01	5.05	363.3	84.8	5	126
Precip	precip	-	0.00	41.20	828.6	100.0	10	366
SO4--	precip	0.16	0.01	2.12	136.2	84.8	1	126
SO4-- corr	precip	0.13	-0.32	2.09	105.7	84.8	1	126
pH	precip	5.51	4.35	7.43	2541.8	85.2	0	128

**FR0013R Peyrusse Vieille**  
**January 2015 - December 2015**

Component	matrix	W.	Min	Max	Dep	%	Num	Num
		mean				anal	bel	sampl
Ca++	precip	0.37	0.01	3.70	212.5	87.1	2	115
Cl-	precip	1.39	0.07	17.98	809.0	87.1	0	115
K+	precip	0.15	0.01	1.70	86.6	87.1	9	115
Mg++	precip	0.11	0.01	1.17	64.9	87.1	13	115
NH4+	precip	0.32	0.01	13.25	183.2	87.1	6	115
NO3-	precip	0.25	0.01	11.62	146.0	87.1	2	115
Na+	precip	0.80	0.03	9.95	466.2	87.1	0	115
Precip	precip	-	0.00	38.20	581.4	100.0	45	366
SO4--	precip	0.27	0.03	6.47	158.0	87.1	0	115
SO4-- corr	precip	0.20	0.01	6.28	118.7	87.1	0	115
pH	precip	5.63	4.39	6.76	1355.8	87.5	0	122

**FR0014R Montandon**  
**January 2015 - December 2015**

Component	matrix	W.	Min	Max	Dep	%	Num	Num
		mean				anal	bel	sampl
Ca++	precip	0.14	0.01	1.90	138.1	96.0	3	124
Cl-	precip	0.19	0.03	6.72	191.4	96.0	21	124
K+	precip	0.03	0.01	1.07	34.4	96.0	48	124
Mg++	precip	0.02	0.01	0.32	18.6	96.0	66	124
NH4+	precip	0.24	0.01	2.17	244.0	96.0	2	124
NO3-	precip	0.20	0.02	1.77	196.0	96.0	0	124
Na+	precip	0.11	0.01	3.51	112.4	96.0	14	124
Precip	precip	-	0.00	49.20	998.0	100.0	24	366
SO4--	precip	0.13	0.01	0.79	126.7	96.0	4	124
SO4-- corr	precip	0.12	0.01	0.77	118.3	96.0	4	124
pH	precip	5.54	4.12	6.55	2872.2	97.2	0	126

**FR0015R La Tardi re**  
**January 2015 - December 2015**

Component	matrix	W.	Min	Max	Dep	%	Num	Num
		mean				anal	bel	sampl
Ca++	precip	0.21	0.01	4.69	168.4	95.8	1	127
Cl-	precip	1.98	0.03	117.93	1556.8	95.8	2	127
K+	precip	0.08	0.01	2.63	65.9	95.8	9	127
Mg++	precip	0.14	0.01	8.02	113.3	95.8	13	127
NH4+	precip	0.34	0.01	2.41	264.8	95.8	3	127
NO3-	precip	0.19	0.01	3.01	149.1	95.8	2	127
Na+	precip	1.16	0.01	67.69	913.9	95.8	3	127
Precip	precip	-	0.00	48.80	786.0	100.0	33	366
SO4--	precip	0.28	0.04	5.55	219.0	95.8	0	127
SO4-- corr	precip	0.18	-0.12	1.39	142.2	95.8	0	127
pH	precip	5.68	4.29	7.00	1629.7	96.2	0	135

**FR0016R Le Casset**  
**January 2015 - December 2015**

Component	matrix	W.	Min	Max	Dep	%	Num	Num
		mean				anal	bel	sampl
Ca++	precip	0.46	0.02	19.83	294.9	98.6	0	99
Cl-	precip	0.16	0.03	8.10	101.8	98.6	21	99
K+	precip	0.07	0.01	1.61	44.4	98.6	20	99
Mg++	precip	0.03	0.01	1.06	21.1	98.6	39	99
NH4+	precip	0.23	0.01	3.63	146.5	98.6	19	99
NO3-	precip	0.19	0.01	4.85	121.3	98.6	2	99
Na+	precip	0.09	0.01	3.62	59.1	98.6	20	99
Precip	precip	-	0.00	28.80	637.8	100.0	16	366
SO4--	precip	0.18	0.01	4.04	113.9	98.6	8	99
SO4-- corr	precip	0.17	0.01	3.74	109.3	98.6	8	99
pH	precip	5.66	5.01	6.83	1381.4	98.7	0	102

**FR0017R Montfranc**  
**January 2015 - December 2015**

Component	matrix	W.	Min	Max	Dep	%	Num	Num
		mean				anal	bel	sampl
Ca++	precip	0.23	0.01	7.60	214.5	88.6	6	120
Cl-	precip	0.60	0.03	13.10	564.4	88.6	10	120
K+	precip	0.03	0.01	0.48	32.1	88.6	34	120
Mg++	precip	0.05	0.01	0.86	47.7	88.6	34	120
NH4+	precip	0.20	0.01	1.14	191.7	88.6	8	120
NO3-	precip	0.16	0.01	1.52	151.3	88.6	1	120
Na+	precip	0.36	0.01	7.47	340.3	88.6	6	120
Precip	precip	-	0.00	45.60	947.1	99.5	15	364
SO4--	precip	0.16	0.01	1.57	154.1	88.6	2	120
SO4-- corr	precip	0.13	0.01	1.41	126.0	88.6	2	120
pH	precip	5.60	4.58	6.75	2395.9	88.7	0	121

**FR0018R La Coulonche**  
**January 2015 - December 2015**

Component	matrix	W.	Min	Max	Dep	%	Num bel	Num sampl
		mean				anal		
Ca++	precip	0.15	0.01	1.98	127.7	93.7	1	147
Cl-	precip	1.59	0.03	25.19	1398.3	93.7	4	147
K+	precip	0.05	0.01	0.60	45.7	93.7	25	147
Mg++	precip	0.12	0.01	1.61	101.8	93.7	18	147
NH4+	precip	0.37	0.06	2.43	323.5	93.7	0	147
NO3-	precip	0.17	0.03	3.38	149.8	93.7	0	147
Na+	precip	0.91	0.01	13.95	801.9	93.7	4	147
Precip	precip	-	0.00	24.00	876.7	100.0	10	366
SO4--	precip	0.22	0.02	1.95	192.7	93.7	0	147
SO4-- corr	precip	0.14	0.01	1.29	125.9	93.7	0	147
pH	precip	5.80	4.08	6.91	1382.4	94.1	0	153

**GB0002R Eskdalemuir**  
**January 2015 - December 2015**

Component	matrix	W.	Min	Max	Dep	%	Num bel	Num sampl
		mean				anal		
Ca++	precip	0.12	0.03	1.59	182.6	100.0	0	21
Cl-	precip	4.19	0.69	29.00	6122.9	100.0	0	21
K+	precip	0.21	0.01	8.16	311.8	100.0	2	21
Mg++	precip	0.24	0.03	1.40	354.6	100.0	0	21
NH4+	precip	0.57	0.05	26.50	839.9	100.0	0	21
NO3-	precip	0.12	0.05	0.80	181.2	100.0	0	21
Na+	precip	2.40	0.40	17.20	3503.0	100.0	0	21
Precip	precip	-	2.25	183.00	1462.4	77.0	0	21
SO4--	precip	0.34	0.13	5.38	501.6	100.0	0	21
SO4-- corr	precip	0.14	0.02	4.84	209.2	100.0	0	21
cond	precip	22.62	6.88	281.00	33072.6	100.0	0	21
pH	precip	5.49	5.09	7.27	4783.5	100.0	0	21

**GB0006R Lough Navar**  
**January 2015 - December 2015**

Component	matrix	W.	Min	Max	Dep	%	Num bel	Num sampl
		mean				anal		
Ca++	precip	0.27	0.03	1.14	457.6	100.0	0	25
Cl-	precip	7.81	0.69	43.70	13436.7	100.0	0	25
K+	precip	0.18	0.01	0.90	309.6	100.0	4	25
Mg++	precip	0.49	0.03	2.51	849.0	100.0	0	25
NH4+	precip	0.10	0.00	0.68	166.4	100.0	5	25
NO3-	precip	0.05	0.00	0.45	87.0	100.0	2	25
Na+	precip	4.43	0.38	24.00	7619.9	100.0	0	25
Precip	precip	-	8.64	163.00	1719.7	100.0	0	25
SO4--	precip	0.43	0.07	2.23	734.4	100.0	0	25
SO4-- corr	precip	0.06	-0.03	0.22	96.6	100.0	0	25
cond	precip	32.51	5.01	170.00	55899.9	100.0	0	25
pH	precip	5.57	4.99	6.31	4615.4	100.0	0	25

**GB0013R Yarner Wood**  
**January 2015 - December 2015**

Component	matrix	W.	Min	Max	Dep	%	Num bel	Num sampl
		mean				anal		
Ca++	precip	0.19	0.07	3.14	154.7	100.0	0	23
Cl-	precip	3.92	0.18	14.10	3121.4	100.0	0	23
K+	precip	0.12	0.01	0.69	92.2	100.0	1	23
Mg++	precip	0.24	0.00	0.91	191.6	100.0	1	23
NH4+	precip	0.27	0.05	1.22	217.6	100.0	0	23
NO3-	precip	0.21	0.04	0.80	169.7	100.0	0	23
Na+	precip	2.27	0.10	8.10	1807.4	100.0	0	23
Precip	precip	-	0.00	183.00	796.3	96.2	0	26
SO4--	precip	0.34	0.15	0.71	272.8	100.0	0	23
SO4-- corr	precip	0.15	0.03	0.40	121.5	100.0	0	23
cond	precip	20.33	5.92	59.90	16186.7	99.1	0	21
pH	precip	5.36	5.01	6.14	3476.0	100.0	0	23

**GB0014R High Muffles**  
**January 2015 - December 2015**

Component	matrix	W.	Min	Max	Dep	%	Num bel	Num sampl
		mean				anal		
Ca++	precip	0.25	0.02	2.32	192.3	100.0	0	26
Cl-	precip	2.86	0.26	17.80	2163.1	100.0	0	26
K+	precip	0.10	0.01	1.30	79.2	100.0	2	26
Mg++	precip	0.17	0.01	0.90	131.3	100.0	0	26
NH4+	precip	0.51	0.11	2.88	389.4	100.0	0	26
NO3-	precip	0.32	0.09	1.49	238.7	100.0	0	26
Na+	precip	1.64	0.18	11.20	1238.6	100.0	0	26
Precip	precip	-	3.81	103.00	757.5	96.2	0	26
SO4--	precip	0.42	0.16	1.72	318.0	100.0	0	26
SO4-- corr	precip	0.28	0.08	1.35	214.6	100.0	0	26
cond	precip	18.57	6.10	99.10	14068.9	100.0	0	26
pH	precip	5.41	4.84	6.44	2932.0	100.0	0	26

**GB0015R Strath Vaich Dam**  
**January 2015 - December 2015**

Component	matrix	W.	Min	Max	Dep	% anal	Num bel	Num samp1
	mean							
Ca++	precip	0.24	0.03	0.85	329.6	100.0	1	25
Cl-	precip	10.19	0.37	43.10	13787.3	100.0	1	25
K+	precip	0.19	0.01	0.76	262.5	100.0	2	25
Mg++	precip	0.60	0.02	2.36	812.4	100.0	1	25
NH4+	precip	0.06	0.00	0.36	83.7	100.0	4	25
NO3-	precip	0.05	0.00	0.54	63.8	100.0	3	25
Na+	precip	5.59	0.23	22.80	7562.7	100.0	1	25
Precip	precip	-	3.58	152.00	1353.6	100.0	1	25
SO4--	precip	0.51	0.06	1.97	692.8	100.0	1	25
SO4-- corr	precip	0.04	-0.04	0.19	60.5	100.0	1	25
cond	precip	39.72	3.23	153.00	53765.1	100.0	1	25
pH	precip	5.34	4.76	6.34	6162.9	100.0	0	25

**GB0036R Harwell**  
**January 2015 - December 2015**

Component	matrix	W.	Min	Max	Dep	% anal	Num bel	Num samp1
	mean							
Ca++	precip	0.18	0.01	4.12	77.2	100.0	3	145
Cl-	precip	2.02	0.06	33.20	849.8	100.0	0	145
K+	precip	0.08	0.01	1.78	31.8	100.0	13	145
Mg++	precip	0.12	0.00	2.37	48.4	100.0	4	145
NH4+	precip	0.37	0.00	4.11	154.3	100.0	1	145
NO3-	precip	0.23	0.02	3.30	95.0	100.0	0	145
Na+	precip	1.17	0.03	20.00	491.9	100.0	0	145
Precip	precip	-	0.00	14.90	420.2	100.0	0	365
SO4--	precip	0.26	0.03	2.12	108.5	100.0	0	145
SO4-- corr	precip	0.16	-0.02	1.83	67.8	100.0	0	145
cond	precip	12.76	2.82	143.00	5361.9	98.0	0	114
pH	precip	5.58	4.60	7.00	1106.2	100.0	0	145

**GB0048R Auchencorth Moss**  
**January 2015 - December 2015**

Component	matrix	W.	Min	Max	Dep	% anal	Num bel	Num samp1
	mean							
Ca++	precip	0.12	0.01	11.40	118.6	97.0	19	229
Cl-	precip	2.06	0.05	175.00	2081.5	97.0	3	229
K+	precip	0.06	0.01	3.48	57.2	97.0	62	229
Mg++	precip	0.12	0.00	6.24	119.6	97.0	19	229
NH4+	precip	0.21	0.02	31.80	214.2	97.0	3	229
NO3-	precip	0.10	0.00	5.44	98.4	97.0	6	229
Na+	precip	1.18	0.00	98.30	1185.3	97.0	4	229
Precip	precip	-	0.00	35.50	1008.4	100.0	0	365
SO4--	precip	0.19	0.00	14.90	187.1	97.0	4	229
SO4-- corr	precip	0.09	-0.61	6.67	87.9	97.0	4	229
cond	precip	11.22	1.99	140.00	11317.6	95.9	3	188
pH	precip	5.50	4.49	8.75	3160.9	97.0	0	229

**HU0002R K-puszta**  
**January 2015 - December 2015**

Component	matrix	W.	Min	Max	Dep	% anal	Num bel	Num samp1
	mean							
Ca++	precip	0.64	0.14	11.45	236.6	99.6	0	84
Cl-	precip	1.01	0.51	6.60	374.6	99.8	0	92
K+	precip	0.17	0.03	3.59	63.7	99.6	0	84
Mg++	precip	0.12	0.04	1.74	43.7	99.6	0	84
NH4+	precip	0.57	0.00	3.97	210.9	99.0	1	79
NO3-	precip	0.43	0.11	4.69	160.9	99.8	0	92
Na+	precip	1.19	0.60	7.04	442.7	99.6	0	84
Precip	precip	-	0.00	20.80	371.7	99.9	0	365
Precip off	precip	-	0.00	29.90	513.9	99.9	0	365
SO4--	precip	0.73	0.19	9.72	271.5	99.8	0	92
SO4-- corr	precip	0.66	0.17	9.41	245.0	99.8	0	92
cond	precip	17.62	7.00	122.00	6550.5	98.9	0	76
pH	precip	5.99	5.47	7.29	381.7	98.9	0	76

**IE0001R Valentia Observatory**  
**January 2015 - December 2015**

Component	matrix	W.	Min	Max	Dep	%	Num anal	Num bel	Num sampl
Ca++	precip	0.29	0.03	5.05	661.0	99.5	19	230	
Cl-	precip	13.21	0.15	161.96	30301.4	99.5	0	230	
K+	precip	0.28	0.03	5.24	652.1	99.5	32	230	
Mg++	precip	0.93	0.03	15.18	2140.9	99.5	9	230	
NH4+	precip	0.05	0.02	2.31	107.3	99.5	130	230	
NO3-	precip	0.29	0.03	5.05	661.0	99.5	19	230	
Na+	precip	7.33	0.05	130.48	16828.3	99.5	0	230	
Precip	precip	-	0.00	40.70	2294.6	99.6	0	364	
Precip off	precip	-	0.00	39.80	1727.3	99.9	0	365	
SO4--	precip	0.68	0.02	10.56	1571.2	99.5	0	230	
SO4-- corr	precip	0.07	-0.36	1.29	161.1	99.5	0	230	
cond	precip	54.52	3.30	853.00	125097.9	99.5	0	229	
pH	precip	5.31	4.54	6.40	11147.7	99.5	0	229	

**IE0005R Oak Park**  
**January 2015 - December 2015**

Component	matrix	W.	Min	Max	Dep	%	Num anal	Num bel	Num sampl
Ca++	precip	0.15	0.03	3.10	85.9	98.0	8	121	
Cl-	precip	2.20	0.03	105.82	1253.3	98.0	1	121	
K+	precip	0.07	0.03	2.46	39.4	98.0	58	121	
Mg++	precip	0.16	0.03	7.34	90.8	98.0	24	121	
NH4+	precip	0.22	0.02	7.06	124.1	98.0	13	121	
NO3-	precip	0.09	0.01	1.13	48.5	98.0	2	121	
Na+	precip	1.21	0.03	56.26	689.3	98.0	3	121	
Precip	precip	-	0.00	22.10	570.1	86.3	0	315	
Precip off	precip	-	0.00	35.20	928.9	100.0	0	365	
SO4--	precip	0.17	0.01	6.20	99.5	98.0	2	121	
SO4-- corr	precip	0.07	-0.04	1.49	42.1	98.0	2	121	
cond	precip	12.68	2.20	399.00	7226.5	98.0	0	121	
pH	precip	5.80	5.26	7.70	910.4	98.0	0	121	

**IE0006R Malin Head**  
**January 2015 - December 2015**

Component	matrix	W.	Min	Max	Dep	%	Num anal	Num bel	Num sampl
Ca++	precip	0.68	0.03	9.78	814.3	98.9	6	215	
Cl-	precip	26.36	0.59	413.93	31774.5	98.9	0	215	
K+	precip	0.65	0.03	50.50	779.3	98.9	16	215	
Mg++	precip	1.93	0.03	31.11	2330.9	98.9	1	215	
NH4+	precip	0.11	0.02	4.40	131.6	98.9	104	215	
NO3-	precip	0.07	0.01	1.28	86.1	98.9	44	215	
Na+	precip	14.86	0.30	235.50	17912.9	98.9	0	215	
Precip	precip	-	0.00	59.30	1205.6	98.5	0	360	
Precip off	precip	-	0.00	63.20	1464.8	99.3	0	363	
SO4--	precip	1.38	0.04	20.40	1667.3	98.9	0	215	
SO4-- corr	precip	0.14	-0.14	2.42	166.4	98.9	0	215	
cond	precip	107.86	5.50	1603.00	130027.6	98.9	0	215	
pH	precip	5.37	4.53	6.75	5143.1	98.9	0	215	

**IE0009R Johnstown Castle**  
**January 2015 - December 2015**

Component	matrix	W.	Min	Max	Dep	%	Num anal	Num bel	Num sampl
Ca++	precip	0.17	0.03	1.82	158.9	99.1	14	161	
Cl-	precip	6.13	0.16	90.88	5703.8	99.1	0	161	
K+	precip	0.13	0.03	2.11	121.7	99.1	41	161	
Mg++	precip	0.41	0.03	5.68	379.2	99.1	6	161	
NH4+	precip	0.16	0.02	2.89	149.5	98.8	24	159	
NO3-	precip	0.11	0.01	2.73	102.6	99.1	11	161	
Na+	precip	3.29	0.09	46.81	3059.3	99.1	0	161	
Precip	precip	-	0.00	22.70	931.0	97.0	0	354	
Precip off	precip	-	0.00	36.60	1063.3	100.0	0	365	
SO4--	precip	0.39	0.03	4.40	359.8	99.1	0	161	
SO4-- corr	precip	0.11	-0.01	1.29	103.1	99.1	0	161	
cond	precip	27.81	3.10	327.00	25891.9	99.1	0	161	
pH	precip	5.43	4.39	6.99	3422.0	99.1	0	161	

**IS0002R Irafoss**  
**January 2015 - December 2015**

Component	matrix	W.	Min	Max	Dep	%	Num anal	Num bel	Num sampl
Ca++	precip	0.20	0.02	1.67	379.6	96.7	0	167	
Cl-	precip	7.02	0.03	69.10	13263.5	96.7	9	167	
K+	precip	0.28	0.01	3.69	519.9	96.7	6	167	
Mg++	precip	0.46	0.01	3.83	864.1	96.7	0	167	
NO3-	precip	0.03	0.00	1.27	51.1	96.7	4	167	
Na+	precip	3.78	0.05	31.48	7141.5	96.7	0	167	
Precip	precip	-	0.00	70.00	1889.9	99.9	0	365	
SO4--	precip	0.34	0.00	3.26	644.6	96.7	14	167	
SO4-- corr	precip	0.02	-0.32	0.69	42.8	96.7	14	167	
cond	precip	27.65	1.80	179.30	52264.8	93.8	0	135	
pH	precip	5.50	4.48	6.76	5954.2	95.3	0	148	

**IT0001R Montelibretti**  
**January 2015 - December 2015**

Component	matrix	W.	Min	Max	Dep	%	Num anal	Num bel	Num sampl
Ca++	precip	4.11	1.77	21.25	2140.7	100.0	0	38	
Cl-	precip	3.62	0.18	38.16	1885.2	100.0	0	38	
K+	precip	0.25	0.07	2.48	128.4	100.0	0	38	
Mg++	precip	0.51	0.12	2.54	263.7	100.0	0	38	
NH4+	precip	0.25	0.01	5.01	129.2	100.0	0	38	
NO3-	precip	0.73	0.15	11.74	380.6	100.0	0	38	
Na+	precip	2.09	0.09	20.62	1090.7	100.0	0	38	
Precip	precip	-	0.00	32.00	521.0	100.0	0	360	
SO4--	precip	0.46	0.10	4.72	242.1	100.0	0	38	
SO4-- corr	precip	0.29	-0.03	4.23	150.3	100.0	0	38	
cond	precip	39.57	10.60	230.40	20614.7	100.0	0	38	
pH	precip	5.80	4.40	7.30	817.0	100.0	0	38	

**IT0004R Ispra**  
**January 2015 - December 2015**

Component	matrix	W.	Min	Max	Dep	%	Num anal	Num bel	Num sampl
Ca++	precip	0.52	0.06	5.42	616.9	99.8	0	84	
Cl-	precip	0.30	0.04	15.13	351.9	99.8	0	84	
K+	precip	0.07	0.01	0.82	83.4	99.8	7	84	
Mg++	precip	0.06	0.01	1.19	71.6	99.8	0	84	
NH4+	precip	0.82	0.00	7.63	973.5	99.8	1	84	
NO3-	precip	0.54	0.00	7.52	646.4	99.8	2	84	
Na+	precip	0.41	0.03	13.52	486.0	99.8	0	84	
Precip	precip	-	0.00	102.48	1189.8	99.9	0	366	
SO4--	precip	0.44	0.01	3.83	522.9	99.8	1	84	
SO4-- corr	precip	0.42	-0.13	3.67	496.3	99.8	1	84	
cond	precip	15.81	4.65	91.00	18814.4	99.0	0	70	
pH	precip	5.08	3.94	7.18	9797.3	99.3	0	73	

**LT0015R Preila**  
**January 2015 - December 2015**

Component	matrix	W.	Min	Max	Dep	%	Num anal	Num bel	Num sampl
Ca++	precip	0.36	0.06	2.33	161.6	98.5	0	97	
Cl-	precip	3.10	0.14	39.20	1382.3	98.5	0	97	
K+	precip	0.15	0.03	1.03	66.0	98.5	0	97	
Mg++	precip	0.28	0.02	2.94	122.6	98.5	0	97	
NH4+	precip	0.48	0.04	4.11	212.0	98.5	0	97	
NO3-	precip	0.43	0.09	3.30	191.6	98.5	0	97	
Na+	precip	1.83	0.08	22.00	814.7	98.5	0	97	
Precip	precip	-	0.00	18.90	445.7	100.0	0	366	
SO4--	precip	0.46	0.06	2.58	206.1	98.5	0	97	
SO4-- corr	precip	0.31	-1.78	2.38	138.0	98.5	0	97	
cond	precip	25.08	5.00	150.00	11177.8	98.5	0	97	
pH	precip	4.87	3.95	6.58	5963.7	98.5	0	97	

**LV0010R Rucava**  
**January 2015 - December 2015**

Component	matrix	W.	Min	Max	Dep	%	Num anal	Num bel	Num sampl
Ca++	precip	0.21	0.02	2.20	159.8	93.9	32	104	
Cl-	precip	1.17	0.07	14.10	874.5	88.5	4	86	
K+	precip	0.07	0.01	0.70	51.2	93.9	25	104	
Mg++	precip	0.10	0.02	0.80	75.4	93.9	61	104	
NH4+	precip	0.34	0.01	2.49	253.6	98.2	31	130	
NO3-	precip	0.37	0.07	1.28	272.3	88.5	0	86	
Na+	precip	0.54	0.04	6.00	404.9	94.7	49	105	
Precip off	precip	-	0.00	27.30	744.4	99.9	0	365	
SO4--	precip	0.32	0.04	1.46	238.5	88.5	0	86	
SO4-- corr	precip	0.27	0.00	1.44	201.8	88.5	0	86	
cond	precip	14.99	3.90	73.30	11162.2	97.0	0	132	
pH	precip	5.05	3.80	6.99	6691.1	99.3	0	135	

**ME0008R Zabljak**  
**January 2015 - December 2015**

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	1.49	0.54	7.60	1909.3	85.1	0	54
Cl-	precip	1.39	0.49	11.79	1780.0	98.2	0	100
K+	precip	0.56	0.06	15.32	717.1	99.0	0	110
Mg++	precip	0.26	0.01	1.48	333.3	79.3	0	49
NH4+	precip	0.92	0.00	4.90	1173.0	99.9	0	113
NO3-	precip	0.25	0.00	15.99	316.3	99.9	0	113
Na+	precip	0.86	0.21	11.89	1097.0	99.0	0	110
Precip	precip	-	0.00	126.20	1277.7	100.0	0	365
SO4--	precip	0.99	0.00	10.15	1259.1	99.9	0	113
SO4-- corr	precip	0.92	-0.06	9.71	1169.8	99.6	0	111
cond	precip	28.20	4.00	503.00	36033.2	99.9	0	113
pH	precip	6.26	5.45	8.15	700.6	99.9	0	113

**NL0091R De Zilk**  
**January 2015 - December 2015**

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.28	0.04	2.06	220.0	95.5	5	121
Cl-	precip	6.44	0.16	67.89	5107.2	98.9	3	153
K+	precip	0.17	0.02	3.57	136.2	95.5	14	121
Mg++	precip	0.44	0.01	4.54	347.6	95.5	3	121
NH4+	precip	0.42	0.04	8.31	329.1	98.0	1	141
NO3-	precip	0.29	0.06	4.57	231.7	98.9	0	153
Na+	precip	3.66	0.06	37.92	2899.1	95.5	0	121
Precip	precip	-	0.00	22.28	792.4	99.7	174	365
SO4--	precip	0.51	0.13	3.16	404.0	98.9	0	153
SO4-- corr	precip	0.20	-0.01	2.56	160.3	98.9	0	153
cond	precip	34.49	6.00	274.00	27331.3	92.8	0	107
pH	precip	5.21	4.37	6.56	4934.7	99.6	0	166

**NO0001R Birkenes**  
**January 2015 - December 2015**

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.15	0.03	1.34	334.0	99.6	0	186
Cl-	precip	2.27	0.01	59.95	4939.9	99.6	1	186
K+	precip	0.10	0.01	3.42	215.1	99.6	0	186
Mg++	precip	0.16	0.01	3.99	350.3	99.6	4	186
NH4+	precip	0.28	0.01	5.88	614.5	99.6	10	186
NO3-	precip	0.29	0.01	3.51	633.5	99.6	2	186
Na+	precip	1.29	0.02	33.38	2812.0	99.6	0	186
Precip	precip	-	0.00	95.50	2172.6	100.0	0	366
SO4--	precip	0.29	0.03	6.61	622.4	99.6	0	186
SO4-- corr	precip	0.18	-0.12	5.95	387.1	99.6	0	186
cond	precip	17.56	3.00	234.00	38157.4	99.1	0	166
pH	precip	4.91	3.76	6.01	26960.5	99.1	0	166

**NO0015R Tustervatn**  
**January 2015 - December 2015**

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.17	0.02	1.90	241.8	97.9	0	187
Cl-	precip	3.51	0.02	84.35	5069.5	98.0	0	188
K+	precip	0.15	0.02	1.83	215.2	97.4	0	186
Mg++	precip	0.24	0.01	5.73	351.5	97.9	5	187
NH4+	precip	0.09	0.01	2.42	134.3	97.4	14	186
NO3-	precip	0.07	0.01	2.05	105.8	98.0	3	188
Na+	precip	1.96	0.02	47.74	2831.5	98.0	0	188
Precip	precip	-	0.00	78.70	1443.7	96.7	0	354
SO4--	precip	0.20	0.01	3.85	289.2	97.5	0	187
SO4-- corr	precip	0.05	-0.15	2.13	65.4	98.0	0	188
cond	precip	17.46	2.00	325.00	25207.6	97.3	0	171
pH	precip	5.26	4.32	6.25	7859.0	96.7	0	168

**NO039R Kårvatn**  
**January 2015 - December 2015**

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.15	0.02	1.63	198.9	99.6	0	174
Cl-	precip	2.57	0.05	28.79	3449.0	99.8	0	176
K+	precip	0.14	0.03	2.97	189.3	99.5	0	173
Mg++	precip	0.18	0.01	1.95	241.1	99.8	4	176
NH4+	precip	0.09	0.01	5.18	117.8	99.5	9	173
NO3-	precip	0.08	0.01	5.30	111.1	99.8	3	176
Na+	precip	1.49	0.04	16.43	1995.2	99.8	0	176
Precip	precip	-	0.00	54.40	1343.5	99.2	0	363
SO4--	precip	0.18	0.01	1.72	245.8	99.8	0	176
SO4-- corr	precip	0.06	-0.11	0.67	79.2	99.8	0	176
cond	precip	13.97	2.00	173.00	18773.8	99.0	0	156
pH	precip	5.20	4.22	6.36	8480.2	98.7	0	153

**NO0056R Hurdal**  
**January 2015 - December 2015**

Component	matrix	W.	Min	Max	Dep	%	Num	Num
		mean				anal	bel	sampl
Ca++	precip	0.10	0.02	0.94	107.6	99.9	0	140
Cl-	precip	0.58	0.01	4.73	615.7	99.9	2	140
K+	precip	0.13	0.01	1.18	138.5	99.8	0	139
Mg++	precip	0.05	0.01	0.33	54.3	99.9	13	140
NH4+	precip	0.24	0.01	4.09	255.4	99.8	12	139
NO3-	precip	0.25	0.01	3.03	267.5	99.9	1	140
Na+	precip	0.35	0.03	2.78	375.3	99.9	0	140
Precip	precip	-	0.00	38.70	1058.6	98.6	0	361
SO4--	precip	0.17	0.02	2.39	180.1	99.9	0	140
SO4-- corr	precip	0.14	0.00	2.33	148.5	99.9	0	140
cond	precip	10.21	3.00	84.00	10811.5	99.5	0	133
pH	precip	4.98	4.13	6.06	11064.7	99.3	0	131

**PL0002R Jarczew**  
**January 2015 - December 2015**

Component	matrix	W.	Min	Max	Dep	%	Num	Num
		mean				anal	bel	sampl
Ca++	precip	0.36	0.05	5.01	156.8	99.8	0	100
Cl-	precip	0.55	0.12	6.21	241.3	99.8	0	100
K+	precip	0.18	0.02	1.68	77.6	99.8	0	100
Mg++	precip	0.06	0.00	0.62	26.5	99.8	0	100
NH4+	precip	0.65	0.16	9.13	283.4	99.8	0	100
NO3-	precip	0.50	0.13	6.10	220.2	99.8	0	100
Na+	precip	0.25	0.04	3.81	110.7	99.8	0	100
Precip	precip	-	0.00	42.60	439.4	91.0	0	333
Precip off	precip	-	0.00	44.70	448.0	91.0	0	333
SO4--	precip	0.62	0.18	10.70	274.6	99.8	0	100
SO4-- corr	precip	0.60	0.16	10.38	264.4	99.8	0	100
cond	precip	17.65	6.00	165.00	7755.1	99.8	0	100
pH	precip	4.91	3.63	6.78	5449.0	99.8	0	100

**PL0003R Sniezka**  
**January 2015 - December 2015**

Component	matrix	W.	Min	Max	Dep	%	Num	Num
		mean				anal	bel	sampl
Ca++	precip	0.56	0.18	1.84	233.6	96.1	0	106
Cl-	precip	0.72	0.31	2.46	299.9	99.5	0	123
K+	precip	0.42	0.01	1.63	173.4	97.4	0	108
Mg++	precip	0.25	0.06	0.77	105.2	97.4	0	108
NH4+	precip	0.38	0.11	1.00	158.2	99.5	0	123
NO3-	precip	0.82	0.41	2.31	341.7	99.5	0	123
Na+	precip	0.79	0.02	2.32	326.4	96.1	0	106
Precip	precip	-	0.00	20.80	414.3	85.8	0	314
Precip off	precip	-	0.00	34.90	727.8	85.8	0	314
SO4--	precip	1.04	0.31	1.89	431.4	99.5	0	123
SO4-- corr	precip	0.98	0.30	1.78	404.2	99.5	0	123
cond	precip	29.61	13.00	58.00	12269.1	100.0	0	127
pH	precip	4.50	4.17	4.77	12977.1	100.0	0	127

**PL0004R Leba**  
**January 2015 - December 2015**

Component	matrix	W.	Min	Max	Dep	%	Num	Num
		mean				anal	bel	sampl
Ca++	precip	0.19	0.02	3.34	100.4	99.4	0	145
Cl-	precip	2.32	0.11	64.21	1255.9	99.4	0	145
K+	precip	0.13	0.02	2.33	72.4	99.4	0	145
Mg++	precip	0.16	0.01	4.28	86.9	99.4	0	145
NH4+	precip	0.39	0.04	3.03	212.2	99.4	0	145
NO3-	precip	0.41	0.08	3.64	221.2	99.4	0	145
Na+	precip	1.34	0.04	35.57	725.2	99.4	0	145
Precip	precip	-	0.00	25.30	540.5	97.0	0	355
Precip off	precip	-	0.00	24.60	477.6	97.0	0	355
SO4--	precip	0.35	0.06	3.26	187.6	99.4	0	145
SO4-- corr	precip	0.23	0.03	2.51	126.5	99.4	0	145
cond	precip	19.18	4.00	245.00	10367.5	99.4	0	145
pH	precip	4.97	4.07	7.37	5749.7	99.4	0	145

**PL0005R Diabla Gora**  
**January 2015 - December 2015**

Component	matrix	W.	Min	Max	Dep	%	Num bel	Num sampl
		mean				anal		
Ca++	precip	0.15	0.01	1.45	85.1	94.0	0	99
Cl-	precip	0.57	0.02	7.71	321.6	99.4	0	131
K+	precip	0.07	0.00	0.87	37.6	93.8	0	98
Mg++	precip	0.05	0.01	0.75	29.8	94.0	0	99
NH4+	precip	0.52	0.03	3.04	294.0	98.3	3	126
NO3-	precip	0.37	0.02	2.83	210.2	99.7	0	132
Na+	precip	0.29	0.01	3.73	160.8	94.0	0	99
Precip	precip	-	0.00	26.80	561.1	99.9	0	365
Precip off	precip	-	0.00	28.10	637.6	99.9	0	365
SO4--	precip	0.34	0.04	2.61	192.8	99.7	0	132
SO4-- corr	precip	0.32	0.00	2.59	178.3	99.4	0	131
cond	precip	12.62	3.30	45.00	7081.6	93.9	0	98
pH	precip	5.04	3.83	6.82	5162.5	99.7	0	134

**RS0005R Kamenicki vis**  
**January 2015 - December 2015**

Component	matrix	W.	Min	Max	Dep	%	Num bel	Num sampl
		mean				anal		
Ca++	precip	1.93	0.11	20.60	1353.3	100.0	0	83
Cl-	precip	0.51	0.04	6.21	356.2	100.0	0	83
K+	precip	1.49	0.00	22.99	1045.5	100.0	0	83
Mg++	precip	0.18	0.03	11.13	130.0	100.0	0	83
NH4+	precip	1.01	0.00	7.90	707.8	100.0	0	83
NO3-	precip	0.48	0.03	7.89	335.5	100.0	0	83
Na+	precip	0.30	0.01	4.27	208.9	100.0	0	83
Precip	precip	-	0.00	58.00	703.0	99.7	0	364
SO4--	precip	1.02	0.21	10.73	715.4	100.0	0	83
SO4-- corr	precip	0.99	0.21	10.71	693.5	100.0	0	83
cond	precip	30.45	12.00	134.30	21403.0	100.0	0	83
pH	precip	4.95	4.32	6.18	7942.2	100.0	0	83

**RU0001R Janiskoski**  
**January 2015 - December 2015**

Component	matrix	W.	Min	Max	Dep	%	Num bel	Num sampl
		mean				anal		
Ca++	precip	0.40	0.07	3.26	196.6	100.0	0	141
Cl-	precip	2.78	0.09	55.11	1362.7	100.0	0	141
K+	precip	1.64	0.04	32.49	802.0	100.0	0	141
Mg++	precip	0.05	0.00	1.14	24.3	100.0	0	141
NH4+	precip	0.45	0.01	3.60	217.9	100.0	0	141
NO3-	precip	0.10	0.01	1.32	48.2	100.0	0	141
Na+	precip	1.04	0.05	9.71	511.1	100.0	0	141
Precip	precip	-	0.00	24.80	489.4	99.7	0	365
SO4--	precip	0.28	0.01	4.04	138.8	100.0	0	141
SO4-- corr	precip	0.20	-0.64	3.26	96.4	100.0	0	141
cond	precip	19.21	2.40	216.60	9403.1	97.8	0	118
pH	precip	5.51	4.37	7.39	1526.1	98.0	0	120

**RU0013R Pinega**  
**January 2015 - December 2015**

Component	matrix	W.	Min	Max	Dep	%	Num bel	Num sampl
		mean				anal		
Ca++	precip	0.72	0.14	8.72	379.7	100.0	0	170
Cl-	precip	0.82	0.05	31.62	428.9	100.0	0	170
K+	precip	0.47	0.02	14.23	248.1	100.0	0	170
Mg++	precip	0.15	0.02	2.23	77.2	100.0	0	170
NH4+	precip	0.42	0.02	3.47	222.8	100.0	0	170
NO3-	precip	0.24	0.02	2.41	124.8	100.0	0	170
Na+	precip	0.51	0.03	16.46	269.2	100.0	0	170
Precip	precip	-	0.00	48.20	525.3	100.0	0	366
SO4--	precip	0.38	0.04	3.21	197.1	100.0	0	170
SO4-- corr	precip	0.33	0.02	2.94	175.3	100.0	0	170
cond	precip	11.55	3.50	115.90	6065.0	96.2	0	133
pH	precip	5.96	5.09	6.82	582.2	97.6	0	146

**RU0018R Danki**  
**Janu**

Component	matrix	W.	Min	Max	Dep	%	Num bel	Num sampl
		mean				anal		
Ca++	precip	0.68	0.17	6.25	341.1	100.0	0	128
Cl-	precip	0.30	0.04	4.99	149.9	100.0	0	128
K+	precip	0.21	0.03	4.26	107.2	100.0	0	128
Mg++	precip	0.07	0.02	0.53	34.9	100.0	0	128
NH4+	precip	0.45	0.01	5.03	222.6	100.0	0	128
NO3-	precip	0.31	0.08	2.71	155.0	100.0	0	128
Na+	precip	0.20	0.04	2.26	101.0	100.0	0	128
Precip	precip	-	0.00	33.60	500.2	100.0	0	366
SO4--	precip	0.41	0.06	4.00	203.9	100.0	0	128
SO4-- corr	precip	0.39	0.06	3.85	195.2	100.0	0	128
cond	precip	10.54	3.70	56.50	5274.1	98.1	0	111
pH	precip	5.65	4.64	7.12	1119.8	99.4	0	122

**RU0020R Lesnoy**  
**January 2015 - December 2015**

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.51	0.11	3.46	317.2	100.0	0	164
Cl-	precip	0.43	0.03	9.74	263.6	100.0	0	164
K+	precip	0.23	0.02	6.99	141.9	100.0	0	164
Mg++	precip	0.06	0.01	0.69	38.0	100.0	0	164
NH4+	precip	0.44	0.01	3.07	275.2	100.0	0	164
NO3-	precip	0.28	0.01	3.21	173.1	100.0	0	164
Na+	precip	0.34	0.02	5.65	212.8	100.0	0	164
Precip	precip	-	0.00	29.10	620.0	100.0	0	366
SO4--	precip	0.34	0.04	5.06	210.6	100.0	0	164
SO4-- corr	precip	0.32	0.03	5.00	198.1	100.0	0	164
cond	precip	10.15	2.00	67.60	6289.6	96.6	0	134
pH	precip	5.50	4.72	6.61	1963.4	98.7	0	150

**SE0005R Bredkälen**  
**January 2015 - December 2015**

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.04	0.01	0.99	27.5	97.8	53	152
Cl-	precip	0.17	0.01	9.19	112.8	98.8	13	153
K+	precip	0.04	0.03	0.67	24.0	95.0	116	150
Mg++	precip	0.02	0.01	0.54	12.2	84.4	101	143
NH4+	precip	0.12	0.01	5.47	82.5	98.6	15	149
NO3-	precip	0.10	0.00	4.00	65.3	98.8	8	152
Na+	precip	0.10	0.01	5.08	63.3	98.8	55	153
Precip	precip	-	0.00	21.00	664.8	99.9	0	366
SO4--	precip	0.08	0.01	1.50	53.8	98.8	12	153
SO4-- corr	precip	0.07	0.00	1.38	48.5	98.8	12	153
cond	precip	5.13	2.00	85.00	3408.8	99.2	0	165
pH	precip	5.22	4.38	6.85	4008.2	99.2	0	165

**SE0011R Vavihill**  
**January 2015 - December 2015**

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.43	0.08	3.11	242.5	82.0	0	11
Cl-	precip	1.74	0.51	3.09	973.7	82.0	0	11
K+	precip	0.12	0.03	0.23	69.0	82.0	3	11
Mg++	precip	0.13	0.04	0.24	74.4	82.0	0	11
NH4+	precip	0.60	0.09	1.20	334.1	82.0	0	11
NO3-	precip	0.56	0.32	2.98	314.0	82.0	0	11
Na+	precip	1.03	0.27	1.80	573.2	82.0	0	11
Precip	precip	-	7.00	110.00	558.0	97.5	0	12
SO4--	precip	0.33	0.24	0.43	182.4	82.0	0	11
SO4-- corr	precip	0.24	0.20	0.40	133.9	82.0	0	11
cond	precip	18.50	11.00	46.00	10323.3	82.0	0	11
pH	precip	5.30	4.52	6.53	2823.3	82.0	0	11

**SE0012R Aspvreten**  
**January 2015 - December 2015**

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.10	0.01	0.26	80.7	87.3	3	11
Cl-	precip	0.42	0.09	1.10	331.9	87.3	0	11
K+	precip	0.03	0.03	0.24	26.6	87.3	8	11
Mg++	precip	0.03	0.01	0.08	24.3	87.3	5	11
NH4+	precip	0.31	0.10	1.13	247.5	87.3	0	11
NO3-	precip	0.23	0.08	0.69	181.2	87.3	0	11
Na+	precip	0.24	0.01	0.61	189.9	87.3	1	11
Precip	precip	-	3.80	110.00	799.4	98.2	0	12
SO4--	precip	0.22	0.10	0.50	178.3	87.3	0	11
SO4-- corr	precip	0.20	0.08	0.47	160.5	87.3	0	11
cond	precip	8.87	4.00	21.00	7092.4	87.3	0	11
pH	precip	5.21	4.68	6.27	4937.7	87.3	0	11

**SE0014R Råö**  
**January 2015 - December 2015**

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.27	0.01	14.65	199.7	99.5	7	150
Cl-	precip	9.94	0.09	745.85	7356.7	99.5	0	151
K+	precip	0.22	0.03	14.77	162.2	99.5	45	150
Mg++	precip	0.66	0.01	45.23	485.4	99.5	3	150
NH4+	precip	0.44	0.01	5.64	326.1	99.4	1	148
NO3-	precip	0.36	0.03	4.55	264.4	99.5	0	151
Na+	precip	5.67	0.07	409.89	4196.9	99.5	0	150
Precip	precip	-	0.00	20.00	740.3	100.0	0	366
SO4--	precip	0.62	0.07	33.65	457.6	99.5	0	151
SO4-- corr	precip	0.14	-0.66	1.71	106.3	99.5	0	151
cond	precip	46.44	6.00	1929.00	34381.9	97.5	0	161
pH	precip	5.10	4.48	7.11	5936.9	97.5	0	161

**SI0008R Iskrba**  
**January 2015 - December 2015**

Component	matrix	W.	Min	Max	Dep	%	Num anal	Num bel	Num sampl
Ca++	precip	0.26	0.02	5.53	318.5	99.8	8	109	
Cl-	precip	0.24	0.04	6.02	289.9	99.7	0	108	
K+	precip	0.03	0.01	0.95	40.5	99.8	53	109	
Mg++	precip	0.03	0.01	0.55	37.4	99.8	45	109	
NH4+	precip	0.20	0.01	3.56	239.3	99.8	15	109	
NO3-	precip	0.22	0.02	3.24	263.8	99.7	0	108	
Na+	precip	0.11	0.01	3.49	137.3	99.8	42	109	
Precip	precip	-	0.00	44.60	1212.2	100.0	0	366	
Precip off	precip	-	0.00	85.30	1366.2	99.9	0	365	
SO4--	precip	0.24	0.03	2.04	295.0	99.7	0	108	
SO4-- corr	precip	0.23	0.03	1.75	283.8	99.7	0	108	
cond	precip	7.87	2.00	50.00	9538.9	97.7	0	82	
pH	precip	5.12	4.10	7.17	9095.7	97.7	0	82	

**SK0002R Chopok**  
**January 2015 - December 2015**

Component	matrix	W.	Min	Max	Dep	%	Num anal	Num bel	Num sampl
Ca++	precip	0.25	0.01	1.94	244.4	90.7	0	116	
Cl-	precip	0.19	0.03	1.15	191.4	90.2	0	116	
K+	precip	0.06	0.01	1.03	57.3	90.8	0	117	
Mg++	precip	0.04	0.00	0.45	39.7	90.7	0	116	
NH4+	precip	0.38	0.01	2.42	379.9	90.3	0	116	
NO3-	precip	0.27	0.05	2.26	272.7	90.8	0	117	
Na+	precip	0.13	0.01	1.44	133.3	90.8	0	117	
Precip	precip	-	0.00	57.40	992.3	48.6	0	178	
SO4--	precip	0.43	0.06	4.52	428.5	90.8	0	117	
SO4-- corr	precip	0.42	0.06	4.50	418.1	90.8	0	117	
cond	precip	11.60	3.36	42.60	11511.2	77.7	0	76	
pH	precip	5.07	4.35	6.14	8455.4	77.7	0	76	

**SK0004R Stará Lesná**  
**January 2015 - December 2015**

Component	matrix	W.	Min	Max	Dep	%	Num anal	Num bel	Num sampl
Ca++	precip	0.32	0.03	1.45	205.7	94.9	0	33	
Cl-	precip	0.15	0.02	1.37	96.5	94.9	0	33	
K+	precip	0.15	0.00	0.96	93.4	94.9	0	33	
Mg++	precip	0.05	0.01	0.16	30.5	94.9	0	33	
NH4+	precip	0.52	0.01	1.17	335.6	87.3	0	29	
NO3-	precip	0.32	0.06	1.44	205.0	94.9	0	33	
Na+	precip	0.16	0.01	1.36	101.1	94.9	0	33	
Precip	precip	-	0.00	59.00	640.9	77.3	0	40	
SO4--	precip	0.43	0.05	1.03	275.0	94.9	0	33	
SO4-- corr	precip	0.42	0.05	1.00	266.8	94.9	0	33	
cond	precip	11.79	4.50	28.40	7558.2	88.4	0	26	
pH	precip	5.55	4.68	6.32	1804.3	88.4	0	26	

**SK0006R Starina**  
**January 2015 - December 2015**

Component	matrix	W.	Min	Max	Dep	%	Num anal	Num bel	Num sampl
Ca++	precip	0.29	0.04	1.61	132.5	78.0	0	42	
Cl-	precip	0.22	0.06	0.84	100.8	77.1	0	41	
K+	precip	0.17	0.00	0.78	78.6	81.2	0	43	
Mg++	precip	0.05	0.01	0.22	23.3	81.2	0	43	
NH4+	precip	0.45	0.04	1.54	201.3	73.7	0	40	
NO3-	precip	0.43	0.13	1.44	194.2	76.2	0	42	
Na+	precip	0.18	0.03	0.76	83.0	82.6	0	44	
Precip	precip	-	0.10	43.30	449.5	25.5	0	93	
SO4--	precip	0.62	0.16	2.34	280.7	82.6	0	44	
SO4-- corr	precip	0.61	0.15	2.32	273.5	82.6	0	44	
cond	precip	16.16	6.67	32.50	7262.1	77.0	0	30	
pH	precip	4.94	4.29	5.84	5204.7	79.4	0	32	

**SK0007R Topolnoky**  
**January 2015 - December 2015**

<b>Component</b>	<b>matrix</b>	<b>W.</b>	<b>Min</b>	<b>Max</b>	<b>Dep</b>	<b>% anal</b>	<b>Num bel</b>	<b>Num sampl</b>
		<b>mean</b>						
Ca++	precip	0.33	0.03	3.81	115.3	96.9	0	27
Cl-	precip	0.14	0.04	0.96	48.4	96.9	0	27
K+	precip	0.08	0.01	0.91	28.0	96.9	0	27
Mg++	precip	0.04	0.01	0.17	15.3	96.9	0	27
NH4+	precip	0.56	0.14	1.54	195.3	96.9	0	27
NO3-	precip	0.32	0.17	1.14	110.8	96.9	0	27
Na+	precip	0.08	0.01	0.59	28.8	96.9	0	27
Precip	precip	-	0.80	51.70	346.8	67.1	0	35
SO4--	precip	0.47	0.09	1.34	164.7	96.9	0	27
SO4-- corr	precip	0.47	0.08	1.29	162.6	96.9	0	27
cond	precip	12.74	7.86	31.80	4417.9	89.5	0	20
pH	precip	5.24	4.54	6.13	1978.8	89.5	0	20



## Annex 3

### **Annual statistics on gases and aerosol data**



**AM0001R Amberg**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
Ca++	aerosol	0.44	0.49	0.19	5.10	0.00	0.01	0.26	1.49	2.48	75.3	0	275	
Cl-	aerosol	0.06	0.07	0.03	3.41	0.00	0.00	0.03	0.21	0.55	66.8	0	244	
HNO3	air	0.11	0.09	0.07	2.44	0.00	0.02	0.08	0.32	0.47	74.5	0	272	
K+	aerosol	0.11	0.12	0.06	3.23	0.00	0.01	0.07	0.41	0.49	71.2	0	260	
Mg++	aerosol	0.03	0.04	0.02	3.55	0.00	0.00	0.02	0.10	0.35	75.1	0	274	
NH3	air	0.81	0.47	0.69	1.78	0.05	0.24	0.73	1.82	3.36	75.1	0	274	
NH4+	aerosol	0.50	0.33	0.38	2.34	0.01	0.07	0.45	1.07	2.22	72.9	0	266	
NO2	air	0.19	0.15	0.13	2.62	0.00	0.02	0.14	0.52	0.68	65.8	0	240	
NO3-	aerosol	0.32	0.46	0.17	3.32	0.00	0.02	0.20	0.93	4.68	72.3	0	264	
Na+	aerosol	0.07	0.09	0.03	3.68	0.00	0.00	0.04	0.32	0.49	71.8	0	262	
SO2	air	0.21	0.19	0.13	2.96	0.00	0.02	0.16	0.60	1.17	73.7	0	269	
SO4--	aerosol	0.45	0.54	0.30	2.66	0.01	0.05	0.35	1.10	5.67	74.2	0	271	
SO4-- corr	aerosol	0.45	0.54	0.29	2.77	-0.30	0.05	0.35	1.10	5.67	74.2	0	271	

**AT0002R Illmitz**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
PM1 mass	pm1	10.22	6.53	8.40	1.91	1.00	3.08	8.25	24.73	34.70	31.2	0	114	
PM10 mass	pm10	19.63	12.11	16.51	1.82	2.80	5.70	16.95	44.15	92.40	98.1	0	358	
PM25 mass	pm25	14.70	10.17	11.91	1.94	1.80	4.00	12.10	35.10	81.20	98.4	0	359	
SO2	air	0.65	0.82	0.43	2.32	0.02	0.14	0.38	2.12	10.48	94.0	0	8233	

**AT0005R Vorhegg**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
NO2	air	0.83	0.41	0.76	1.50	0.30	0.45	0.70	1.71	3.25	95.9	0	350	
PM10 mass	pm10	6.60	5.06	5.09	2.06	1.20	1.60	4.95	16.79	28.20	31.8	0	116	
SO2	air	0.16	0.17	0.11	2.29	0.00	0.03	0.12	0.42	2.10	93.2	0	8168	

**AT0048R Zoebelboden**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
PM10 mass	pm10	7.71	5.49	5.85	2.21	0.80	1.30	6.20	18.20	31.50	32.6	0	119	
SO2	air	0.18	0.21	0.13	2.10	0.01	0.05	0.12	0.55	4.01	95.0	0	8318	

**CH0001G Jungfraujoch**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
CO	air	110.53	19.39	109.02	1.18	62.97	84.54	108.46	140.36	234.81	89.7	0	7860	
NO	air	0.01	0.04	0.01	3.88	-0.00	-0.00	0.00	0.05	0.85	74.2	0	6504	
NO2	air	0.08	0.20	0.04	2.80	0.00	0.01	0.04	0.24	4.48	72.8	0	6380	
PM10 mass	pm10	2.33	3.64	1.29	3.07	-1.30	0.10	1.20	9.15	29.00	98.9	0	361	
SO2	air	0.03	0.12	0.02	2.22	-0.04	-0.01	0.02	0.07	3.26	97.4	0	8529	
SO4--	aerosol	0.09	0.12	0.05	2.77	0.00	0.01	0.05	0.32	0.84	98.9	0	361	

**CH0002R Payerne**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
Ca++	aerosol	0.39	0.39	0.24	2.79	0.01	0.04	0.26	1.27	2.84	100.0	0	365	
EC	pm25	0.42	0.23	0.37	1.68	0.15	0.16	0.41	1.02	1.03	8.5	0	31	
HNO3	air	0.24	0.09	0.22	1.44	0.12	0.12	0.21	0.45	0.49	100.0	0	27	
HNO3+NO3-	air+aerosol	0.91	0.87	0.64	2.34	0.06	0.15	0.61	2.60	4.99	99.7	0	364	
K+	aerosol	0.19	0.15	0.15	2.08	0.01	0.05	0.14	0.47	1.24	100.0	0	365	
Mg++	aerosol	0.04	0.03	0.03	2.34	0.00	0.01	0.03	0.09	0.28	100.0	0	365	
NH3	air	2.24	1.03	1.95	1.73	0.45	0.57	2.05	4.43	4.84	100.0	0	27	
NH3+NH4+	air+aerosol	3.49	1.91	3.00	1.80	0.33	0.98	3.37	6.38	12.98	100.0	0	365	
NH4+	aerosol	1.00	0.70	0.84	1.77	0.40	0.40	0.79	2.97	3.33	100.0	0	27	
NO2	air	3.38	2.79	2.37	2.45	0.12	0.46	2.55	9.34	17.68	96.5	0	8452	
NO3-	aerosol	0.72	0.55	0.58	1.86	0.27	0.27	0.53	2.24	2.50	100.0	0	27	
Na+	aerosol	0.17	0.21	0.10	2.86	-0.03	0.02	0.10	0.56	1.92	100.0	0	365	
OC	pm25	2.08	1.54	1.41	2.99	0.03	0.16	1.64	5.35	5.81	8.5	0	31	
PM10 mass	pm10	13.25	8.14	11.16	1.82	0.90	4.00	11.10	30.22	47.00	100.0	0	365	
PM25 mass	pm25	9.75	7.91	7.44	2.09	1.70	1.96	7.10	28.68	40.60	24.7	0	90	
SO2	air	0.18	0.22	0.12	2.77	-0.11	-0.01	0.12	0.55	6.18	95.3	0	8350	
SO4--	aerosol	0.41	0.27	0.34	1.89	0.04	0.10	0.36	0.92	1.98	99.7	0	364	
SO4-- corr	aerosol	0.39	0.27	0.31	2.01	0.03	0.08	0.34	0.86	1.97	99.7	0	364	

**CH0003R Tänikon**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
NO2	air	3.93	3.10	3.02	2.07	0.18	0.94	2.92	10.08	21.08	95.3	0	8351	
PM10 mass	pm10	13.19	8.04	11.08	1.84	1.50	3.63	11.00	30.04	42.90	100.0	0	365	

**CH0004R Chaumont**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
NO2	air	1.69	1.26	1.36	1.90	0.19	0.53	1.29	4.41	11.93	95.4	0	8361	
PM10 mass	pm10	7.71	5.94	5.92	2.16	0.20	1.50	6.30	18.81	42.40	100.0	0	365	

**CH0005R Rigi**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
Ca++	aerosol	0.26	0.30	0.15	3.31	-0.03	0.01	0.15	0.95	1.69	95.9	0	350	
EC	pm25	0.29	0.16	0.25	1.69	0.06	0.08	0.27	0.69	0.87	8.2	0	30	
HNO3	air	0.18	0.08	0.16	1.52	0.08	0.08	0.15	0.40	0.42	100.0	0	27	
HNO3+NO3-	air+aerosol	0.64	0.64	0.44	2.44	0.04	0.09	0.48	1.74	4.26	95.9	0	350	
K+	aerosol	0.07	0.06	0.06	1.90	-0.01	0.02	0.06	0.16	0.69	95.9	0	350	
Mg++	aerosol	0.03	0.02	0.02	2.09	0.00	0.00	0.02	0.08	0.13	95.9	0	350	
NH3	air	1.22	0.85	0.80	2.96	0.07	0.07	1.17	2.65	2.72	95.9	0	26	
NH3+NH4+	air+aerosol	1.87	1.51	1.36	2.36	0.09	0.28	1.72	4.04	11.35	95.9	0	350	
NH4+	aerosol	0.79	0.54	0.65	1.86	0.25	0.25	0.63	2.24	2.36	100.0	0	27	
NO2	air	1.06	1.44	0.62	2.74	0.01	0.13	0.58	3.58	18.60	97.8	0	8563	
NO3-	aerosol	0.49	0.35	0.39	1.89	0.13	0.13	0.39	1.48	1.56	100.0	0	27	
Na+	aerosol	0.12	0.15	0.07	3.04	-0.01	0.01	0.07	0.39	1.03	95.9	0	350	
OC	pm25	1.19	1.11	0.69	3.47	0.02	0.04	0.89	4.07	4.29	8.2	0	30	
PM10 mass	pm10	7.59	6.06	5.69	2.27	-0.80	1.40	6.40	19.71	37.70	100.0	0	365	
PM25 mass	pm25	5.77	5.28	4.28	2.18	0.50	1.20	4.70	14.24	32.20	22.7	0	83	
SO2	air	0.18	0.12	0.15	1.79	0.00	0.06	0.14	0.40	1.97	94.7	0	8297	
SO4--	aerosol	0.30	0.23	0.23	2.22	0.01	0.05	0.25	0.77	1.72	97.3	0	355	
SO4-- corr	aerosol	0.28	0.23	0.21	2.24	0.00	0.05	0.23	0.71	1.71	97.3	0	355	

**CY0002R Ayia Marina**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
Ca++	pm10	0.18	0.48	0.08	2.95	0.02	0.02	0.08	0.65	5.96	81.9	0	299	
Cl-	pm10	0.04	0.06	0.03	1.75	0.02	0.02	0.02	0.14	0.57	81.9	0	299	
EC	pm10	0.17	0.13	0.14	1.80	0.02	0.06	0.14	0.43	0.98	81.9	0	299	
K+	pm10	0.09	0.06	0.07	2.19	0.01	0.01	0.07	0.20	0.34	81.9	0	299	
Mg++	pm10	0.03	0.02	0.02	2.02	0.00	0.01	0.03	0.06	0.15	81.9	0	299	
NH4+	pm10	0.86	0.53	0.65	2.49	0.03	0.09	0.83	1.83	2.53	81.9	0	299	
NO2	air	0.42	0.42	0.28	2.80	0.00	0.03	0.31	1.22	8.91	95.5	0	8369	
NO3-	pm10	0.04	0.04	0.02	2.43	0.01	0.01	0.02	0.12	0.19	81.9	0	299	
Na+	pm10	0.15	0.10	0.11	2.15	0.01	0.03	0.12	0.33	0.52	81.9	0	299	
OC	pm10	1.48	0.79	1.29	1.73	0.33	0.40	1.40	2.68	5.78	81.9	0	299	
PM10 mass	pm10	22.51	30.00	17.92	1.80	2.60	7.26	17.30	49.34	478.00	97.3	0	355	
PM25 mass	pm25	9.88	6.52	8.42	1.83	0.20	3.40	8.90	18.19	84.70	95.9	0	350	
SO2	air	0.49	0.60	0.32	2.45	0.00	0.07	0.32	1.41	8.77	96.0	0	8407	
SO4--	pm10	1.16	0.67	0.95	1.97	0.14	0.25	1.07	2.40	3.18	81.9	0	299	
SO4-- corr	pm10	1.15	0.67	0.94	1.99	0.13	0.24	1.06	2.39	3.17	81.9	0	299	

**CZ0001R Svatouch**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
PM10 mass	pm10	17.32	9.20	14.91	1.83	1.00	5.35	15.80	33.89	67.10	48.3	2	177	

**CZ0003R Kosetice (NOAK)**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
CO	air	94.16	28.24	89.19	1.43	22.10	50.68	93.56	140.71	245.68	93.7	220	8205	
Ca++	pm10	0.13	0.15	0.08	2.62	0.01	0.02	0.09	0.49	0.81	71.0	1	37	
EC	pm25	0.44	0.28	0.34	2.22	0.10	0.10	0.54	0.96	0.96	4.1	0	15	
HNO3+NO3-	air+aerosol	0.80	0.55	0.65	1.94	0.07	0.22	0.63	1.85	3.86	100.0	0	366	
K+	pm10	0.08	0.05	0.06	1.76	0.03	0.03	0.06	0.20	0.22	71.0	0	37	
Mg++	pm10	0.04	0.04	0.03	2.76	0.01	0.01	0.03	0.17	0.19	71.0	9	37	
NH3+NH4+	air+aerosol	3.04	1.84	2.62	1.73	0.12	1.04	2.79	5.56	15.28	100.0	0	366	
Na+	pm10	0.09	0.10	0.06	2.59	0.03	0.03	0.03	0.35	0.40	71.0	21	37	
OC	pm25	2.36	1.61	1.89	2.02	0.58	0.58	2.43	6.42	6.42	4.1	0	15	
PM10 mass	pm10	16.26	9.24	13.51	1.97	1.00	4.29	14.60	33.12	58.00	48.6	3	178	
PM10 mass	pm10	17.43	11.42	13.81	2.10	1.00	4.00	15.00	40.00	90.00	93.3	133	8172	
PM25 mass	pm25	11.62	8.52	8.58	2.36	1.00	1.00	9.00	28.00	77.00	96.4	548	8444	
PM25 mass	pm25	14.52	7.14	12.83	1.68	4.92	13.25	26.75	50.00	49.9	0	182		
SO2	air	0.64	0.73	0.39	2.65	0.12	0.12	0.40	1.85	11.06	95.2	2703	8340	
SO2	air	0.79	0.62	0.64	1.91	0.08	0.25	0.59	1.85	4.53	100.0	0	366	
SO4--	aerosol	0.60	0.55	0.37	3.02	0.02	0.02	0.41	1.66	3.67	100.0	0	366	
TC	pm25	2.79	1.88	2.24	2.04	0.68	0.68	2.99	7.38	7.38	4.1	0	15	

**CZ0005R Churanov**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.44	0.36	0.35	1.93	0.07	0.12	0.33	1.12	2.24	16.7	0	61	
NH3+NH4+	air+aerosol	1.24	0.59	1.10	1.67	0.23	0.47	1.15	2.22	2.96	16.7	0	61	
PM10 mass	pm10	9.02	6.29	6.82	2.26	1.00	1.00	8.00	22.60	33.00	95.0	20	347	
SO2	air	0.58	0.57	0.42	2.13	0.08	0.15	0.38	1.81	3.68	16.7	0	61	
SO4--	aerosol	0.27	0.20	0.20	2.21	0.04	0.05	0.21	0.78	0.81	16.7	0	61	

**DE0001R Westerland**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
Ca++	pm25	0.04	0.02	0.03	1.96	0.00	0.01	0.03	0.07	0.10	16.7	1	61	
Cl-	pm25	0.51	0.64	0.25	3.73	0.01	0.01	0.25	2.09	3.09	16.7	4	61	
K+	pm25	0.06	0.07	0.03	2.54	0.01	0.01	0.03	0.16	0.50	16.7	13	61	
Mg++	pm25	0.04	0.05	0.02	4.60	0.00	0.00	0.02	0.14	0.24	16.7	7	61	
NH3	air	1.93	1.52	1.49	2.02	0.39	0.55	1.44	5.94	6.56	99.3	0	52	
NH4+	pm25	0.75	1.16	0.32	3.70	0.04	0.04	0.27	3.67	6.18	16.7	0	61	
NO	air	0.29	0.94	0.09	3.35	0.01	0.03	0.06	1.15	17.40	94.8	5150	8304	
NO2	air	1.65	2.18	0.67	4.48	-0.09	0.06	0.79	6.52	17.81	94.8	1174	8301	
NO2	air	2.07	1.75	1.57	2.07	0.46	0.55	1.60	5.89	12.41	96.2	0	351	
NO3-	pm25	0.46	0.80	0.19	3.59	0.03	0.03	0.15	2.74	4.21	16.7	0	61	
Na+	pm25	0.35	0.39	0.19	3.36	0.01	0.01	0.26	1.26	2.05	16.7	4	61	
PM10 mass	pm10	19.34	10.80	16.92	1.67	4.12	7.68	17.19	44.39	65.26	96.4	0	352	
SO4--	pm25	0.42	0.42	0.30	2.23	0.05	0.09	0.26	1.44	2.27	16.7	0	61	
SO4-- corr	pm25	0.39	0.43	0.25	2.51	0.04	0.05	0.22	1.43	2.27	16.7	0	61	

**DE0002R Waldhof**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
Ca++	pm25	0.03	0.05	0.02	3.74	0.00	0.00	0.02	0.06	0.40	16.7	6	61	
Cl-	aerosol	0.47	0.72	0.19	3.99	0.00	0.02	0.16	1.98	5.32	99.7	91	364	
Cl-	pm25	0.11	0.14	0.05	3.53	0.01	0.01	0.05	0.41	0.74	16.7	28	61	
EC	pm25	0.30	0.20	0.26	1.77	0.10	0.11	0.25	0.77	0.96	17.0	0	62	
HNO3	air	0.21	0.19	0.15	2.42	0.00	0.04	0.16	0.56	1.73	99.4	3	363	
HNO3+NO3-	air+aerosol	0.85	0.72	0.65	2.05	0.11	0.21	0.61	2.53	4.91	99.7	0	364	
K+	pm25	0.06	0.05	0.04	2.48	0.01	0.01	0.03	0.18	0.25	16.7	11	61	
Mg++	pm25	0.01	0.01	0.01	3.77	0.00	0.00	0.01	0.04	0.07	16.7	15	61	
NH3	air	1.24	0.91	0.89	2.19	0.17	0.21	0.87	3.52	4.00	97.3	0	50	
NH3	air	1.54	0.98	1.23	2.07	-0.03	0.35	1.33	3.39	5.71	98.6	1	360	
NH4+	pm25	1.03	1.08	0.66	2.57	0.12	0.17	0.69	3.74	4.81	16.7	0	61	
NO2	air	2.66	1.44	2.36	1.62	0.78	1.18	2.25	5.67	9.00	98.4	0	359	
NO3-	aerosol	0.64	0.70	0.40	2.63	0.03	0.09	0.39	2.33	4.83	99.7	0	364	
NO3-	pm25	0.59	0.81	0.24	4.16	0.02	0.03	0.24	2.34	4.00	16.7	0	61	
Na+	pm25	0.12	0.11	0.08	2.69	0.01	0.01	0.08	0.38	0.52	16.7	7	61	
OC	pm25	2.87	1.86	2.41	1.80	0.74	0.82	2.09	7.56	8.49	17.0	0	62	
PM1 mass	pm1	7.29	5.20	5.79	2.02	0.38	1.78	5.78	17.76	31.59	100.0	0	365	
PM10 mass	pm10	16.35	10.81	13.86	1.75	2.27	6.05	13.27	37.88	76.40	98.3	0	359	
PM25 mass	pm25	12.05	9.93	9.38	1.99	1.79	3.48	9.02	31.66	76.40	100.0	0	365	
SO2	air	0.26	0.29	0.17	2.73	-0.02	0.02	0.18	0.76	3.33	98.9	13	361	
SO2	air	0.33	0.30	0.26	1.99	0.05	0.10	0.25	0.89	2.60	99.5	0	364	
SO4--	aerosol	0.58	0.42	0.48	1.82	0.08	0.18	0.49	1.31	3.35	99.7	0	364	
SO4--	pm25	0.57	0.42	0.46	1.94	0.09	0.14	0.47	1.74	1.94	16.7	0	61	
SO4-- corr	aerosol	0.57	0.42	0.47	1.84	0.08	0.16	0.49	1.29	3.35	99.7	0	364	
SO4-- corr	pm25	0.56	0.42	0.45	1.96	0.09	0.14	0.45	1.74	1.94	16.7	0	61	
TC	pm25	3.17	2.01	2.69	1.77	0.86	0.93	2.35	8.40	9.45	17.0	0	62	

**DE0003R Schauinsland**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
Ca++	pm25	0.02	0.03	0.01	5.73	0.00	0.00	0.01	0.09	0.14	16.4	18	60	
Cl-	aerosol	0.10	0.24	0.09	3.17	-0.00	0.00	0.03	0.48	2.13	95.6	192	349	
Cl-	pm25	0.03	0.03	0.02	1.89	0.01	0.01	0.01	0.12	0.16	16.4	48	60	
EC	pm25	0.11	0.07	0.09	2.04	0.01	0.02	0.11	0.23	0.39	16.7	0	61	
HNO3	air	0.27	0.28	0.19	2.36	-0.00	0.04	0.18	0.73	2.18	94.8	7	346	
HNO3+NO3-	air+aerosol	0.57	0.52	0.42	2.25	-0.00	0.09	0.43	1.49	3.46	95.3	3	348	
K+	pm25	0.04	0.03	0.03	2.32	0.01	0.01	0.02	0.13	0.15	16.4	21	60	
Mg++	pm25	0.00	0.01	0.00	3.09	0.00	0.00	0.00	0.02	0.03	16.4	37	60	
NH3	air	0.61	0.38	0.50	1.99	0.12	0.17	0.57	1.39	1.61	97.8	0	50	
NH3	air	0.90	0.76	0.65	2.36	0.06	0.16	0.69	2.30	5.44	94.2	0	344	
NH4+	pm25	0.52	0.80	0.29	2.82	0.04	0.05	0.28	1.36	4.59	16.4	0	60	
NO3-	aerosol	0.31	0.44	0.17	3.12	0.00	0.02	0.17	1.01	3.33	95.6	10	349	
NO3-	pm25	0.23	0.60	0.07	3.64	0.01	0.02	0.06	0.85	3.40	16.4	0	60	
Na+	pm25	0.03	0.05	0.02	2.23	0.01	0.01	0.01	0.13	0.27	16.4	40	60	
OC	pm25	1.57	1.09	1.25	2.00	0.26	0.39	1.30	4.19	5.11	16.7	0	61	
PM10 mass	pm10	10.14	7.78	7.59	2.25	0.47	1.85	8.64	24.63	53.35	97.5	0	356	
PM25 mass	pm25	7.98	6.34	6.02	2.19	0.64	1.44	6.38	20.75	42.85	92.0	0	336	
SO2	air	0.20	0.23	0.13	2.77	-0.01	0.01	0.13	0.54	2.12	94.8	20	346	
SO2	air	0.23	0.16	0.19	1.68	0.10	0.10	0.20	0.45	1.45	99.5	0	364	
SO4--	aerosol	0.38	0.29	0.29	2.29	0.00	0.05	0.32	0.91	1.76	95.6	7	349	
SO4--	pm25	0.30	0.29	0.20	2.53	0.03	0.05	0.19	1.00	1.33	16.4	0	60	
SO4-- corr	aerosol	0.37	0.30	0.30	2.22	-0.41	0.03	0.32	0.91	1.76	95.6	7	349	
SO4-- corr	pm25	0.30	0.29	0.20	2.55	0.02	0.04	0.19	1.00	1.33	16.4	0	60	
TC	pm25	1.68	1.14	1.35	1.99	0.28	0.40	1.39	4.38	5.30	16.7	0	61	

**DE0007R Neuglobsow**  
**January 2015 - December 2015**

<b>Component</b>	<b>matrix</b>	<b>Arit</b>	<b>Arit</b>	<b>Geom</b>	<b>Geom</b>	<b>Min</b>	<b>5%</b>	<b>50%</b>	<b>95%</b>	<b>Max</b>	<b>%</b>	<b>Num</b>	<b>Num</b>
		<b>mean</b>	<b>sd</b>	<b>mean</b>	<b>sd</b>					<b>anal</b>	<b>bel</b>	<b>sampl</b>	
Ca++	pm25	0.02	0.01	0.02	2.86	0.00	0.00	0.02	0.05	0.07	16.7	4	61
Cl-	aerosol	0.44	0.70	0.21	3.58	0.00	0.00	0.17	1.96	5.30	97.5	71	356
Cl-	pm25	0.08	0.11	0.04	3.03	0.01	0.01	0.03	0.25	0.65	16.7	30	61
EC	pm25	0.33	0.24	0.27	1.83	0.09	0.10	0.25	0.93	1.35	17.0	0	62
HNO3	air	0.17	0.15	0.12	2.68	-0.01	0.02	0.12	0.45	1.14	97.2	12	355
HNO3+NO3-	air+aerosol	0.69	0.60	0.52	2.11	0.06	0.16	0.49	1.86	4.32	97.2	0	355
K+	pm25	0.06	0.05	0.04	2.32	0.01	0.01	0.04	0.16	0.21	16.7	8	61
Mg++	pm25	0.01	0.01	0.00	4.19	0.00	0.00	0.01	0.03	0.07	16.7	21	61
NH3	air	0.70	0.58	0.48	2.46	0.05	0.13	0.49	2.02	2.19	99.3	1	52
NH3	air	0.83	0.70	0.60	2.30	0.04	0.14	0.61	2.35	3.66	97.2	0	355
NH4+	pm25	0.87	0.88	0.57	2.54	0.12	0.12	0.57	3.28	3.98	16.7	0	61
NO2	air	1.88	0.99	1.67	1.59	0.65	0.84	1.58	4.05	5.79	97.8	0	357
NO3-	aerosol	0.53	0.59	0.33	2.67	0.01	0.08	0.30	1.67	4.17	97.5	1	356
NO3-	pm25	0.45	0.66	0.17	4.28	0.01	0.02	0.12	2.02	3.47	16.7	0	61
Na+	pm25	0.11	0.10	0.07	2.52	0.01	0.02	0.07	0.31	0.53	16.7	2	61
OC	pm25	2.81	2.10	2.29	1.87	0.60	0.72	2.01	8.42	10.75	17.0	0	62
PM10 mass	pm10	14.79	9.24	12.68	1.71	3.90	5.59	11.89	33.35	66.08	100.0	0	365
PM25 mass	pm25	10.27	8.48	7.98	1.98	2.22	3.05	7.37	27.75	60.44	100.0	0	365
SO2	air	0.25	0.34	0.15	2.75	-0.01	0.03	0.14	0.88	4.05	96.4	10	352
SO2	air	0.40	0.36	0.33	1.81	0.10	0.15	0.30	1.00	4.05	94.2	0	345
SO4--	aerosol	0.54	0.46	0.41	2.19	0.00	0.11	0.42	1.40	3.18	97.5	1	356
SO4--	pm25	0.57	0.41	0.46	1.92	0.11	0.13	0.46	1.58	2.12	16.7	0	61
SO4-- corr	aerosol	0.53	0.46	0.40	2.21	0.00	0.10	0.40	1.40	3.18	97.5	1	356
SO4-- corr	pm25	0.56	0.41	0.45	1.96	0.10	0.12	0.46	1.58	2.11	16.7	0	61
TC	pm25	3.14	2.31	2.58	1.84	0.74	0.82	2.22	9.33	12.10	17.0	0	62

**DE0008R Schmücke**  
**January 2015 - December 2015**

<b>Component</b>	<b>matrix</b>	<b>Arit</b>	<b>Arit</b>	<b>Geom</b>	<b>Geom</b>	<b>Min</b>	<b>5%</b>	<b>50%</b>	<b>95%</b>	<b>Max</b>	<b>%</b>	<b>Num</b>	<b>Num</b>
		<b>mean</b>	<b>sd</b>	<b>mean</b>	<b>sd</b>					<b>anal</b>	<b>bel</b>	<b>sampl</b>	
Ca++	pm25	0.02	0.03	0.01	6.31	0.00	0.00	0.01	0.08	0.12	16.7	22	61
Cl-	pm25	0.02	0.02	0.02	1.75	0.01	0.01	0.01	0.09	0.09	16.7	50	61
EC	pm25	0.21	0.15	0.16	2.09	0.01	0.03	0.16	0.61	0.85	16.7	0	61
K+	pm25	0.03	0.03	0.02	2.28	0.01	0.01	0.03	0.09	0.17	16.7	24	61
Mg++	pm25	0.00	0.00	0.00	3.46	0.00	0.00	0.00	0.01	0.02	16.7	35	61
NH3	air	0.70	0.52	0.50	2.44	0.04	0.11	0.59	1.76	2.20	99.3	2	52
NH4+	pm25	0.62	0.67	0.33	3.75	0.01	0.02	0.40	2.01	3.73	16.7	0	61
NO2	air	1.83	1.08	1.61	1.61	0.47	0.87	1.45	4.07	7.30	98.3	0	359
NO3-	pm25	0.31	0.52	0.11	4.64	0.01	0.01	0.10	1.68	2.90	16.7	0	61
Na+	pm25	0.04	0.04	0.03	2.28	0.01	0.01	0.01	0.12	0.18	16.7	35	61
OC	pm25	1.84	1.35	1.44	2.06	0.17	0.33	1.37	5.01	6.20	16.7	0	61
PM10 mass	pm10	11.29	7.97	8.76	2.12	0.82	2.16	9.43	26.99	51.28	100.0	0	365
PM25 mass	pm25	8.11	6.18	6.15	2.17	0.42	1.60	6.73	19.97	38.85	99.4	0	363
SO2	air	0.39	0.30	0.32	1.89	0.05	0.15	0.30	1.05	2.65	98.9	0	362
SO4--	pm25	0.35	0.33	0.16	5.18	0.00	0.00	0.24	1.02	1.48	16.7	3	61
SO4-- corr	pm25	0.34	0.33	0.17	5.22	-0.00	0.00	0.24	1.02	1.48	16.7	3	61
TC	pm25	2.04	1.46	1.63	2.02	0.18	0.36	1.55	5.76	6.82	16.7	0	61

**DE0009R Zingst**  
**January 2015 - December 2015**

<b>Component</b>	<b>matrix</b>	<b>Arit</b>	<b>Arit</b>	<b>Geom</b>	<b>Geom</b>	<b>Min</b>	<b>5%</b>	<b>50%</b>	<b>95%</b>	<b>Max</b>	<b>%</b>	<b>Num</b>	<b>Num</b>
		<b>mean</b>	<b>sd</b>	<b>mean</b>	<b>sd</b>					<b>anal</b>	<b>bel</b>	<b>sampl</b>	
Ca++	pm25	0.03	0.04	0.02	2.69	0.00	0.00	0.03	0.05	0.33	16.7	2	61
Cl-	pm25	0.17	0.21	0.08	3.78	0.01	0.01	0.10	0.68	1.05	16.7	18	61
K+	pm25	0.06	0.06	0.05	2.10	0.01	0.01	0.05	0.20	0.31	16.7	5	61
Mg++	pm25	0.01	0.01	0.01	4.56	0.00	0.00	0.01	0.04	0.05	16.7	16	61
NH3	air	0.95	0.69	0.76	1.96	0.20	0.25	0.73	2.57	3.55	99.3	0	49
NH4+	pm25	0.85	0.91	0.51	2.84	0.05	0.08	0.50	3.10	4.23	16.7	0	61
NO	air	0.20	0.54	0.08	3.27	0.00	0.01	0.06	0.68	11.26	93.8	4860	8216
NO2	air	1.53	1.27	1.14	2.19	0.06	0.30	1.16	4.02	10.63	93.8	12	8214
NO2	air	1.97	0.98	1.77	1.57	0.47	0.89	1.71	4.12	5.98	98.1	0	358
NO3-	pm25	0.49	0.68	0.21	3.92	0.02	0.02	0.19	2.30	3.41	16.7	0	61
Na+	pm25	0.15	0.12	0.10	2.60	0.01	0.01	0.12	0.40	0.58	16.7	6	61
PM10 mass	pm10	14.90	9.61	12.71	1.73	2.11	5.36	11.96	36.88	75.86	97.5	0	356
SO2	air	0.30	0.31	0.23	2.17	-0.05	0.00	0.20	0.95	2.05	97.0	20	355
SO4--	pm25	0.46	0.33	0.37	2.04	0.05	0.08	0.37	1.11	1.68	16.7	0	61
SO4-- corr	pm25	0.45	0.33	0.35	2.10	0.05	0.07	0.37	1.10	1.67	16.7	0	61

**DE0043G Hohenpeissenberg**  
**January 2015 - December 2015**

<b>Component</b>	<b>matrix</b>	<b>Arit</b>	<b>Arit</b>	<b>Geom</b>	<b>Geom</b>	<b>Min</b>	<b>5%</b>	<b>50%</b>	<b>95%</b>	<b>Max</b>	<b>%</b>	<b>Num</b>	<b>Num</b>
		<b>mean</b>	<b>sd</b>	<b>mean</b>	<b>sd</b>					<b>anal</b>	<b>bel</b>	<b>sampl</b>	
PM10 mass	pm10	10.15	6.53	8.25	1.99	1.09	2.18	8.78	23.00	64.33	97.0	0	8501

**DE0044R Melpitz**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
Ca++	pm10	0.15	0.13	0.12	1.95	0.01	0.04	0.12	0.35	1.80	98.9	0	362	
Ca++	pm25	0.08	0.09	0.06	2.21	0.00	0.02	0.06	0.16	1.22	97.5	0	357	
Cl-	pm10	0.28	0.48	0.12	3.99	0.00	0.01	0.12	1.18	4.84	98.9	0	362	
Cl-	pm25	0.11	0.24	0.05	3.67	0.00	0.00	0.04	0.34	2.42	98.1	0	359	
EC	pm25	0.36	0.27	0.29	1.95	0.05	0.10	0.27	0.89	1.63	98.1	0	358	
K+	pm10	0.13	0.16	0.10	1.98	-0.00	0.03	0.09	0.30	2.58	98.9	0	362	
K+	pm25	0.10	0.16	0.06	2.45	0.00	0.02	0.06	0.28	2.41	98.1	0	359	
Mg++	pm10	0.04	0.04	0.03	1.99	0.00	0.01	0.03	0.10	0.42	98.9	0	362	
Mg++	pm25	0.01	0.02	0.01	2.12	0.00	0.00	0.01	0.03	0.37	96.7	0	354	
NH4+	pm10	1.14	1.10	0.79	2.37	0.07	0.20	0.77	3.53	6.56	98.9	0	362	
NH4+	pm25	1.01	0.99	0.70	2.41	0.04	0.17	0.66	3.17	6.24	97.8	0	358	
NO	air	0.59	1.40	0.30	3.48	-0.91	-0.07	0.26	2.31	25.20	99.8	0	8743	
NO2	air	3.00	1.86	2.48	1.89	0.25	0.80	2.62	6.63	12.41	99.8	0	8743	
NO3-	pm10	0.74	0.78	0.45	2.79	0.00	0.10	0.41	2.29	4.79	98.9	0	362	
NO3-	pm25	0.57	0.72	0.27	3.56	0.02	0.04	0.26	1.85	4.13	97.5	0	357	
Na+	pm10	0.28	0.32	0.16	3.18	0.00	0.02	0.16	0.90	2.56	98.9	0	362	
Na+	pm25	0.09	0.16	0.05	2.79	-0.00	0.01	0.05	0.26	2.08	98.1	0	359	
OC	pm25	2.77	2.00	2.21	1.98	0.35	0.68	2.27	6.07	18.38	98.1	0	358	
PM10 mass	pm10	19.36	9.60	17.33	1.60	4.86	7.61	17.15	37.11	71.64	95.3	0	349	
PM25 mass	pm25	14.73	8.34	12.81	1.70	1.59	5.42	12.79	30.46	62.33	96.2	0	352	
SO4--	pm10	0.75	0.53	0.62	1.83	0.14	0.22	0.61	1.94	4.14	98.9	0	362	
SO4--	pm25	0.67	0.49	0.55	1.88	0.13	0.18	0.54	1.67	4.37	97.8	0	358	
SO4-- corr	pm10	0.72	0.53	0.59	1.90	0.13	0.20	0.57	1.92	4.12	98.9	0	362	
SO4-- corr	pm25	0.66	0.49	0.54	1.90	0.13	0.18	0.53	1.66	4.35	97.8	0	358	
TC	pm25	3.13	2.19	2.54	1.93	0.44	0.80	2.62	6.81	20.02	98.1	0	358	

**DK0003R Tange**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
Ca++	aerosol	0.14	0.13	0.11	2.09	0.00	0.04	0.11	0.35	1.20	96.4	83	353	
Cl-	aerosol	2.07	1.98	1.29	2.85	0.10	0.21	1.45	5.67	16.64	97.8	14	358	
HNO3+NO3-	air+aerosol	0.62	0.59	0.43	2.35	0.03	0.11	0.42	2.02	3.75	97.5	13	357	
K+	aerosol	0.12	0.06	0.10	1.72	0.02	0.04	0.10	0.23	0.40	97.1	18	355	
NH3	air	0.83	0.75	0.59	2.55	-0.01	0.13	0.64	2.26	6.67	97.0	14	355	
NH4+	aerosol	0.77	0.83	0.51	2.47	0.02	0.13	0.49	2.45	6.48	97.0	11	355	
Na+	aerosol	1.29	1.10	0.85	2.86	0.00	0.12	1.00	3.37	7.67	94.8	3	347	
SO2	air	0.09	0.13	0.05	2.80	0.00	0.01	0.05	0.33	0.89	97.3	350	356	
SO4--	aerosol	0.62	0.50	0.52	1.80	0.11	0.19	0.50	1.39	5.13	97.3	0	356	
SO4-- corr	aerosol	0.52	0.52	0.38	2.16	0.05	0.11	0.39	1.38	5.10	97.3	0	356	

**DK0005R Keldsnor**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
NO	air	0.75	1.57	0.40	2.74	-0.31	0.10	0.33	2.63	57.44	82.5	3419	7227	
NO2	air	7.43	6.93	4.79	2.74	-0.60	0.85	5.25	21.81	57.81	82.5	2309	7227	

**DK0008R Anholt**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
Ca++	aerosol	0.17	0.13	0.14	1.99	-0.01	0.04	0.13	0.43	0.93	97.3	51	356	
Cl-	aerosol	2.15	2.15	1.18	3.57	0.00	0.13	1.31	6.56	12.05	91.0	34	333	
HNO3+NO3-	air+aerosol	0.60	0.55	0.43	2.31	0.03	0.10	0.42	1.89	3.17	98.1	14	359	
K+	aerosol	0.12	0.07	0.10	1.72	0.03	0.04	0.10	0.24	0.48	97.1	17	355	
NH3	air	0.18	0.20	0.10	3.74	-0.01	0.00	0.13	0.58	1.26	97.0	150	355	
NH4+	aerosol	0.64	0.69	0.41	2.56	0.02	0.10	0.41	2.21	3.84	97.3	23	356	
NO	air	0.33	0.79	0.17	2.77	-0.03	0.04	0.15	1.17	15.88	75.3	5051	6598	
NO2	air	4.40	4.65	2.94	2.42	0.29	0.77	2.78	13.13	42.21	75.3	3414	6598	
Na+	aerosol	2.11	1.56	1.55	2.42	0.01	0.32	1.81	5.12	8.69	96.4	1	353	
SO2	air	0.12	0.15	0.07	2.51	0.00	0.02	0.08	0.36	1.61	97.0	346	355	
SO4--	aerosol	0.69	0.43	0.60	1.68	0.07	0.27	0.59	1.50	3.43	98.1	1	359	
SO4-- corr	aerosol	0.61	0.43	0.50	1.93	0.05	0.14	0.53	1.39	3.35	98.1	1	359	

**DK0012R Risoe**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
Ca++	aerosol	0.17	0.18	0.12	2.26	0.01	0.03	0.12	0.49	1.52	99.2	69	363	
Cl-	aerosol	1.57	1.58	0.98	2.79	0.03	0.20	1.01	4.89	9.99	99.2	19	363	
HNO3+NO3-	air+aerosol	0.84	0.71	0.61	2.23	0.06	0.16	0.60	2.36	4.22	98.9	6	362	
K+	aerosol	0.12	0.09	0.10	1.78	0.01	0.05	0.10	0.27	0.83	97.9	10	358	
NH3	air	0.71	0.76	0.43	3.35	-0.00	0.04	0.51	2.27	5.25	99.5	33	364	
NH4+	aerosol	0.94	0.88	0.65	2.36	0.05	0.16	0.63	2.75	6.10	99.2	5	363	
NO	air	0.82	2.27	0.39	2.83	-0.20	0.07	0.34	2.39	62.82	92.2	3518	8075	
NO2	air	7.60	7.91	4.93	2.59	0.07	1.04	5.04	23.14	72.43	92.2	2394	8075	
Na+	aerosol	1.08	0.97	0.74	2.61	0.01	0.14	0.77	3.12	5.51	98.4	2	360	
SO2	air	0.16	0.20	0.10	2.52	0.00	0.03	0.09	0.55	1.63	98.6	347	361	
SO4--	aerosol	0.72	0.56	0.59	1.83	0.08	0.26	0.54	1.80	4.03	98.6	2	361	
SO4-- corr	aerosol	0.64	0.58	0.48	2.14	0.03	0.15	0.48	1.79	4.01	98.6	2	361	

**EE0009R Lahemaa**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
CO	air	161.67	44.92	156.39	1.28	90.00	120.00	150.00	250.00	580.00	99.9	0	8749
Ca++	aerosol	0.59	0.53	0.42	2.29	0.08	0.13	0.33	1.64	3.51	98.9	0	362
Cl-	aerosol	0.31	0.24	0.24	1.91	0.10	0.10	0.25	0.73	2.25	98.9	2	362
K+	aerosol	0.13	0.17	0.08	2.38	0.02	0.02	0.08	0.40	1.55	99.7	2	365
Mg++	aerosol	0.08	0.11	0.05	2.50	0.02	0.02	0.05	0.25	0.78	98.9	25	362
NH4+	aerosol	1.12	0.46	1.04	1.47	0.16	0.57	1.03	2.02	3.68	98.9	0	362
NO2	air	2.27	1.74	1.87	1.83	0.30	0.72	1.88	5.16	19.25	98.9	1	361
NO3-	aerosol	0.04	0.05	0.03	2.04	0.02	0.02	0.02	0.15	0.32	98.9	36	362
Na+	aerosol	0.46	0.32	0.40	1.64	0.08	0.18	0.40	0.93	4.46	98.9	0	362
PM10 mass	pm10	6.54	3.37	5.78	1.65	1.65	2.21	5.64	13.30	19.19	100.0	0	53
PM25 mass	pm25	5.21	4.32	4.03	2.04	1.00	1.06	4.00	14.57	35.38	98.9	16	361
SO2	air	0.75	0.69	0.59	1.87	0.30	0.30	0.53	1.93	5.95	100.0	75	365
SO4--	aerosol	0.03	0.01	0.03	1.20	0.03	0.03	0.03	0.03	0.14	98.9	2	362
SO4-- corr	aerosol	0.01	0.02	0.02	1.57	-0.10	-0.03	0.01	0.02	0.12	98.8	1	361

**EE0011R Vilsandi**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	2.14	1.79	1.62	2.10	0.30	0.51	1.58	5.78	11.73	95.3	4	348
PM25 mass	pm25	4.20	4.73	2.70	2.46	1.00	1.00	2.40	12.79	33.45	93.4	82	341
SO2	air	0.41	0.29	0.37	1.49	0.30	0.30	0.92	3.71	96.7	231	353	

**ES0001R San Pablo de los Montes**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm10	0.26	0.29	0.15	3.15	0.02	0.02	0.15	0.98	1.68	99.6	46	364
Ca++	pm25	0.07	0.06	0.05	2.28	0.01	0.01	0.06	0.19	0.31	16.4	1	60
Cl-	pm25	0.08	0.05	0.07	1.61	0.04	0.05	0.05	0.21	0.24	16.4	41	60
EC	pm25	0.14	0.09	0.11	2.27	0.01	0.02	0.12	0.30	0.47	14.2	0	52
HNO3+NO3-	air+aerosol	0.36	0.24	0.29	1.91	0.04	0.13	0.28	0.87	1.80	100.0	11	366
K+	pm10	0.11	0.08	0.08	1.95	0.01	0.03	0.08	0.27	0.55	99.6	1	364
K+	pm25	0.09	0.07	0.07	2.22	0.01	0.01	0.07	0.23	0.36	16.4	1	60
Mg++	pm10	0.04	0.04	0.03	2.33	0.01	0.01	0.03	0.12	0.25	99.6	13	364
Mg++	pm25	0.01	0.01	0.01	1.47	0.01	0.01	0.03	0.03	0.03	16.4	12	60
NH3	air	1.36	0.53	1.25	1.53	0.41	0.53	1.31	2.43	2.80	85.8	0	53
NH3+NH4+	air+aerosol	2.14	0.75	1.99	1.47	0.47	0.98	2.09	3.46	4.34	99.7	0	365
NH4+	pm10	0.40	0.25	0.33	1.86	0.10	0.12	0.34	0.90	1.17	16.4	0	60
NH4+	pm25	0.24	0.17	0.19	1.97	0.05	0.07	0.20	0.54	0.87	16.4	0	60
NO	air	0.05	0.09	0.03	2.49	0.00	0.01	0.02	0.17	2.30	98.9	0	8662
NO2	air	0.86	0.70	0.68	2.04	0.00	0.21	0.69	1.98	11.67	98.9	0	8662
NO3-	pm10	0.19	0.15	0.15	1.98	0.01	0.06	0.15	0.46	1.32	99.6	2	364
NO3-	pm25	0.07	0.08	0.04	2.56	0.01	0.01	0.04	0.25	0.40	16.4	7	60
Na+	pm10	0.21	0.23	0.13	2.62	0.05	0.05	0.12	0.70	1.27	99.6	146	364
Na+	pm25	0.08	0.05	0.07	1.98	0.02	0.02	0.08	0.21	0.26	16.4	10	60
OC	pm25	1.99	0.84	1.81	1.56	0.67	0.77	1.93	3.68	4.07	14.2	0	52
PM10 mass	pm10	13.51	9.73	11.04	1.89	1.00	4.00	12.00	33.00	88.00	99.4	0	363
PM25 mass	pm25	6.62	3.47	5.79	1.69	2.00	2.00	6.00	13.00	27.00	97.5	0	356
SO2	air	0.23	0.23	0.18	1.90	0.02	0.06	0.19	0.50	5.90	98.8	0	8658
SO4--	pm10	0.36	0.21	0.30	1.83	0.07	0.11	0.31	0.74	1.39	99.6	0	364
SO4--	pm25	0.33	0.19	0.28	1.85	0.06	0.10	0.30	0.64	1.05	16.4	0	60
SO4-- corr	pm10	0.33	0.20	0.28	1.88	0.03	0.09	0.29	0.73	1.32	99.6	0	364
SO4-- corr	pm25	0.32	0.19	0.27	1.87	0.06	0.09	0.29	0.63	1.04	16.4	0	60

**ES0005R Noya**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.22	0.16	0.18	1.98	0.04	0.04	0.18	0.48	1.31	96.1	42	351
NH3+NH4+	air+aerosol	1.16	0.53	1.06	1.54	0.31	0.55	1.02	2.19	3.67	98.4	0	360
NO	air	0.07	0.15	0.04	2.25	0.00	0.02	0.04	0.19	6.08	90.0	0	7882
NO2	air	0.73	0.57	0.58	1.95	0.01	0.19	0.59	1.67	9.60	90.0	0	7882
NO3-	pm10	0.15	0.15	0.09	3.24	0.01	0.01	0.11	0.42	1.06	83.6	44	305
PM10 mass	pm10	6.40	5.96	4.55	2.34	1.00	1.00	5.00	16.00	56.00	80.5	0	294
SO2	air	0.30	0.52	0.16	2.82	0.01	0.03	0.15	0.99	8.89	83.0	0	7272
SO4--	pm10	0.36	0.25	0.27	2.30	0.02	0.07	0.32	0.84	1.35	83.6	6	305

## ES0006R Mahón

January 2015 - December 2015

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.56	0.26	0.50	1.63	0.04	0.24	0.52	1.07	1.63	93.3	2	341
NH3+NH4+	air+aerosol	1.39	0.56	1.28	1.54	0.37	0.58	1.32	2.37	3.04	97.2	0	355
NO	air	0.11	0.58	0.03	2.89	0.00	0.01	0.02	0.26	18.41	93.2	0	8167
NO2	air	1.52	2.28	0.84	2.98	0.02	0.12	0.89	5.18	30.36	93.2	0	8167
NO3-	pm10	0.46	0.22	0.41	1.72	0.01	0.17	0.43	0.90	1.43	94.4	1	345
PM10 mass	pm10	17.99	7.72	16.57	1.50	6.00	9.00	16.00	33.00	49.00	92.2	0	337
PM25 mass	pm25	7.03	3.79	6.39	1.52	2.00	3.00	6.00	12.30	36.00	85.7	0	313
SO2	air	0.15	0.20	0.11	2.09	0.01	0.04	0.12	0.34	5.01	97.8	0	8566
SO4--	pm10	0.87	0.40	0.79	1.59	0.02	0.41	0.79	1.68	2.58	94.4	1	345

**ES0007R Viznar**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
Ca++	pm10	0.46	0.39	0.32	2.62	0.02	0.05	0.37	1.16	3.06	98.6	10	360	
Ca++	pm25	0.19	0.16	0.14	2.37	0.02	0.03	0.14	0.54	0.60	16.4	0	60	
Cl-	pm10	0.12	0.10	0.09	1.89	0.06	0.06	0.06	0.38	0.50	16.4	38	60	
Cl-	pm25	0.06	0.04	0.05	1.59	0.04	0.04	0.04	0.12	0.22	16.4	40	60	
HNO3+NO3-	air+aerosol	0.56	0.26	0.50	1.61	0.12	0.22	0.53	1.01	1.99	98.3	0	359	
K+	pm10	0.20	0.16	0.16	2.02	0.01	0.05	0.16	0.57	0.97	98.6	0	360	
K+	pm25	0.16	0.11	0.13	1.95	0.01	0.05	0.12	0.38	0.59	16.4	0	60	
Mg++	pm10	0.06	0.04	0.04	2.08	0.01	0.01	0.05	0.14	0.20	98.6	4	360	
Mg++	pm25	0.03	0.02	0.02	1.91	0.01	0.01	0.02	0.07	0.08	16.4	1	60	
NH3	air	1.20	0.55	1.07	1.65	0.26	0.34	1.20	2.55	2.72	87.7	0	25	
NH3+NH4+	air+aerosol	1.68	0.69	1.52	1.60	0.30	0.59	1.67	2.88	4.52	98.6	0	360	
NH4+	pm10	0.60	0.39	0.49	2.01	0.06	0.13	0.49	1.48	1.90	16.4	0	60	
NH4+	pm25	0.25	0.16	0.21	1.84	0.04	0.06	0.18	0.56	0.95	16.4	0	60	
NO	air	0.25	0.75	0.08	3.63	0.00	0.01	0.07	1.01	21.93	96.8	0	8478	
NO2	air	1.75	1.89	1.15	2.62	0.01	0.24	1.19	5.19	28.16	96.8	0	8478	
NO3-	pm10	0.26	0.17	0.22	1.92	0.01	0.07	0.23	0.56	1.44	98.6	1	360	
NO3-	pm25	0.08	0.12	0.05	2.31	0.01	0.02	0.05	0.32	0.78	16.4	2	60	
Na+	pm10	0.25	0.23	0.16	2.57	0.05	0.05	0.16	0.70	1.61	98.6	105	360	
Na+	pm25	0.10	0.05	0.09	1.80	0.02	0.02	0.09	0.21	0.24	16.4	4	60	
PM10 mass	pm10	17.70	14.91	14.25	1.91	2.00	5.00	14.00	42.05	200.00	98.0	0	358	
PM25 mass	pm25	10.35	5.76	8.94	1.75	2.00	3.00	10.00	21.00	56.00	92.2	0	337	
SO2	air	0.54	0.62	0.35	2.61	0.00	0.06	0.39	1.50	14.62	96.9	0	8490	
SO4--	pm10	0.49	0.27	0.42	1.77	0.06	0.15	0.43	0.97	1.55	98.6	0	360	
SO4--	pm25	0.41	0.25	0.35	1.90	0.05	0.10	0.36	0.83	1.57	16.4	0	60	
SO4-- corr	pm10	0.45	0.25	0.38	1.80	0.06	0.13	0.39	0.91	1.47	98.6	0	360	
SO4-- corr	pm25	0.40	0.25	0.34	1.92	0.04	0.10	0.35	0.82	1.56	16.4	0	60	

**ES0008R Niembro**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
Ca++	pm10	0.25	0.25	0.18	2.18	0.02	0.04	0.19	0.58	2.67	99.5	7	364	
Ca++	pm25	0.09	0.09	0.06	2.14	0.02	0.02	0.06	0.36	0.45	16.4	0	60	
Cl-	pm10	1.79	2.16	0.87	3.83	0.06	0.06	1.09	6.87	10.77	16.4	5	60	
Cl-	pm25	0.20	0.26	0.12	2.47	0.05	0.05	0.12	0.73	1.65	16.4	24	60	
HNO3+NO3-	air+aerosol	0.53	0.39	0.42	1.99	0.04	0.16	0.44	1.11	3.25	99.5	8	364	
K+	pm10	0.16	0.11	0.13	1.78	0.02	0.05	0.13	0.35	1.22	99.5	0	364	
K+	pm25	0.08	0.07	0.06	2.34	0.01	0.01	0.07	0.23	0.40	16.4	0	60	
Mg++	pm10	0.22	0.16	0.18	2.02	0.01	0.05	0.17	0.55	1.34	99.5	0	364	
Mg++	pm25	0.04	0.03	0.03	2.03	0.01	0.01	0.03	0.14	0.16	16.4	1	60	
NH3	air	0.56	0.27	0.48	1.93	0.02	0.18	0.54	1.11	1.32	85.8	0	53	
NH3+NH4+	air+aerosol	1.40	0.59	1.28	1.54	0.39	0.58	1.31	2.48	3.77	95.1	0	348	
NH4+	pm10	0.44	0.49	0.29	2.39	0.04	0.08	0.29	1.86	2.43	16.4	0	60	
NH4+	pm25	0.17	0.19	0.12	2.20	0.03	0.03	0.10	0.54	1.08	16.4	0	60	
NO	air	0.23	0.30	0.15	2.34	0.00	0.05	0.13	0.73	5.46	96.6	0	8466	
NO2	air	1.53	1.44	1.11	2.21	0.02	0.30	1.12	4.13	18.40	96.6	0	8466	
NO3-	pm10	0.29	0.22	0.21	2.39	0.01	0.04	0.23	0.70	1.22	99.5	8	364	
NO3-	pm25	0.02	0.03	0.01	2.95	0.00	0.00	0.01	0.05	0.26	16.4	13	60	
Na+	pm10	1.68	1.14	1.32	2.12	0.05	0.33	1.34	3.74	7.33	99.5	3	364	
Na+	pm25	0.34	0.25	0.28	1.87	0.05	0.11	0.26	0.90	1.40	16.4	0	60	
PM10 mass	pm10	16.34	7.58	14.82	1.56	3.00	7.00	15.00	29.00	66.00	99.5	0	364	
PM25 mass	pm25	7.05	4.17	6.08	1.73	1.00	3.00	6.00	14.45	34.00	95.8	0	350	
SO2	air	0.51	0.65	0.35	2.16	0.01	0.16	0.28	1.62	9.34	97.6	0	8551	
SO4--	pm10	0.71	0.48	0.59	1.82	0.04	0.24	0.56	1.64	4.00	99.5	0	364	
SO4--	pm25	0.51	0.45	0.38	2.17	0.02	0.12	0.40	1.75	2.65	16.4	1	60	
SO4-- corr	pm10	0.56	0.49	0.41	2.30	-0.06	0.10	0.41	1.50	3.92	99.5	0	364	
SO4-- corr	pm25	0.48	0.46	0.38	2.08	0.00	0.06	0.36	1.74	2.64	16.4	1	60	

**ES0009R Campisabulos**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
Ca++	pm10	0.27	0.37	0.13	3.40	0.02	0.02	0.14	1.10	2.15	98.9	54	362	
Ca++	pm25	0.11	0.10	0.08	2.33	0.01	0.02	0.08	0.33	0.53	16.4	0	60	
Cl-	pm10	0.15	0.13	0.11	2.06	0.06	0.06	0.06	0.38	0.76	16.4	32	60	
Cl-	pm25	0.13	0.16	0.09	2.09	0.04	0.04	0.10	0.27	1.21	16.4	27	60	
EC	pm25	0.13	0.08	0.11	1.90	0.00	0.02	0.12	0.30	0.41	13.7	0	50	
HNO3+NO3-	air+aerosol	0.13	0.11	0.10	2.03	0.03	0.03	0.10	0.34	0.69	90.7	55	332	
K+	pm10	0.04	0.04	0.03	2.15	0.01	0.01	0.04	0.12	0.30	98.9	4	362	
K+	pm25	0.04	0.03	0.03	2.04	0.01	0.01	0.03	0.09	0.20	16.4	1	60	
Mg++	pm10	0.03	0.02	0.02	2.00	0.00	0.01	0.02	0.07	0.19	98.9	63	362	
Mg++	pm25	0.01	0.01	0.01	1.50	0.01	0.01	0.01	0.04	0.04	16.4	16	60	
NH3	air	0.75	0.41	0.65	1.75	0.13	0.21	0.67	1.60	2.46	84.1	0	52	
NH3+NH4+	air+aerosol	1.01	0.39	0.93	1.50	0.24	0.45	0.98	1.73	2.33	96.7	0	354	
NH4+	pm10	0.28	0.17	0.23	1.87	0.04	0.10	0.24	0.66	0.73	16.4	0	60	
NH4+	pm25	0.17	0.11	0.14	1.90	0.03	0.03	0.13	0.40	0.51	16.4	0	60	
NO	air	0.06	0.06	0.05	1.72	0.00	0.03	0.05	0.15	1.30	96.3	0	8440	
NO2	air	0.75	0.43	0.66	1.69	0.04	0.29	0.66	1.46	7.33	96.3	0	8440	
NO3-	pm10	0.12	0.08	0.09	2.29	0.01	0.01	0.10	0.28	0.51	98.9	26	362	
NO3-	pm25	0.04	0.02	0.03	1.88	0.01	0.01	0.03	0.07	0.14	16.4	8	60	
Na+	pm10	0.15	0.16	0.10	2.33	0.05	0.05	0.05	0.46	1.19	98.9	196	362	
Na+	pm25	0.06	0.05	0.05	2.03	0.02	0.02	0.06	0.19	0.29	16.4	18	60	
OC	pm25	1.82	0.93	1.63	1.58	0.78	0.80	1.53	3.63	5.21	13.7	0	50	
PM10 mass	pm10	9.10	7.64	6.86	2.13	1.00	2.00	7.00	26.00	60.00	98.6	0	361	
PM10 mass	pm10	11.77	10.58	8.90	2.07	0.76	2.88	8.61	32.18	123.01	94.2	0	8252	
PM25 mass	pm25	4.82	3.22	3.86	1.99	1.00	1.00	4.00	11.70	20.00	94.2	0	345	
SO2	air	0.22	0.14	0.19	1.71	0.02	0.08	0.20	0.46	2.93	97.4	0	8535	
SO4--	pm10	0.30	0.17	0.										

**ES0010R Cabo de Creus**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.68	0.51	0.55	1.89	0.04	0.21	0.52	1.71	3.70	94.0	1	344	
NH3+NH4+	air+aerosol	1.40	0.63	1.27	1.58	0.37	0.56	1.31	2.56	3.64	94.0	0	344	
NO	air	0.16	0.29	0.08	3.35	0.00	0.01	0.08	0.53	7.00	96.0	0	8408	
NO2	air	1.31	1.10	0.97	2.28	0.01	0.24	1.02	3.33	15.98	96.0	0	8408	
NO3-	pm10	0.46	0.30	0.37	1.92	0.04	0.13	0.38	1.06	1.74	94.8	0	347	
PM10 mass	pm10	17.40	6.81	16.34	1.41	6.00	10.00	16.00	32.40	65.00	94.2	0	345	
PM25 mass	pm25	8.49	5.00	7.46	1.63	2.00	4.00	7.00	19.55	34.00	89.6	0	328	
SO2	air	0.25	0.10	0.23	1.44	0.08	0.13	0.24	0.42	1.08	97.6	0	8549	
SO4--	pm10	0.65	0.42	0.55	1.75	0.13	0.24	0.54	1.59	2.56	94.8	0	347	

**ES0011R Barcarrota**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.25	0.15	0.21	1.81	0.03	0.09	0.21	0.57	1.13	96.4	9	353	
NH3+NH4+	air+aerosol	0.84	0.38	0.76	1.54	0.17	0.40	0.76	1.71	2.32	96.4	0	353	
NO	air	0.07	0.16	0.04	2.19	0.00	0.02	0.03	0.21	5.89	95.1	0	8327	
NO2	air	0.70	0.45	0.60	1.69	0.05	0.27	0.58	1.42	5.29	95.1	0	8327	
NO3-	pm10	0.25	0.13	0.22	1.68	0.04	0.10	0.22	0.51	0.91	95.1	0	348	
PM10 mass	pm10	15.27	9.29	13.19	1.70	2.00	6.00	14.00	33.00	68.00	94.5	0	346	
PM25 mass	pm25	8.46	5.12	7.29	1.73	1.00	3.00	8.00	17.00	53.00	94.8	0	347	
SO2	air	0.21	0.12	0.19	1.56	0.03	0.10	0.19	0.42	2.32	97.3	0	8524	
SO4--	pm10	0.44	0.30	0.37	1.81	0.04	0.16	0.34	1.04	2.39	95.1	0	348	

**ES0012R Zarra**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.44	0.25	0.36	1.96	0.03	0.10	0.41	0.91	1.51	99.4	3	363	
NH3+NH4+	air+aerosol	1.37	0.68	1.18	1.80	0.22	0.38	1.37	2.53	3.28	99.4	0	363	
NO	air	0.05	0.07	0.03	2.50	0.00	0.01	0.03	0.16	1.24	98.3	0	8607	
NO2	air	0.69	0.43	0.57	1.98	0.01	0.17	0.61	1.52	5.35	98.3	0	8607	
NO3-	pm10	0.33	0.19	0.28	1.81	0.04	0.09	0.29	0.73	1.14	98.9	0	362	
PM10 mass	pm10	11.77	9.59	9.50	1.91	1.00	3.00	10.00	27.00	123.00	98.6	0	361	
PM10 mass	pm10	15.11	13.94	11.69	2.02	0.81	3.69	11.78	38.25	274.18	84.1	0	7363	
PM25 mass	pm25	5.96	3.04	5.18	1.75	1.00	2.00	6.00	11.10	22.00	97.5	0	357	
SO2	air	0.26	0.18	0.21	1.98	0.02	0.06	0.24	0.57	2.34	97.6	0	8554	
SO4--	pm10	0.49	0.30	0.40	1.88	0.10	0.13	0.42	1.08	1.60	98.9	0	362	

**ES0013R Penausende**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.32	0.20	0.27	1.87	0.03	0.12	0.27	0.76	1.28	95.8	11	350	
NH3+NH4+	air+aerosol	1.24	0.61	1.10	1.69	0.21	0.42	1.18	2.41	3.23	97.2	0	355	
NO	air	0.09	0.17	0.05	2.44	0.00	0.01	0.05	0.24	4.64	93.4	0	8186	
NO2	air	0.94	0.80	0.66	2.59	0.00	0.09	0.74	2.30	10.07	93.4	0	8186	
NO3-	pm10	0.23	0.17	0.18	1.99	0.02	0.06	0.18	0.61	0.99	94.5	0	346	
PM10 mass	pm10	9.23	6.96	7.43	1.92	1.00	3.00	8.00	21.70	52.00	94.2	0	345	
PM10 mass	pm10	11.92	10.04	8.97	2.20	0.00	2.53	9.15	31.43	86.33	97.0	0	8500	
PM25 mass	pm25	5.79	3.62	4.79	1.90	1.00	2.00	5.00	12.00	25.00	89.9	0	329	
SO2	air	0.18	0.18	0.14	2.13	0.02	0.04	0.13	0.47	2.78	96.9	0	8489	
SO4--	pm10	0.30	0.17	0.26	1.70	0.05	0.11	0.26	0.64	1.07	94.5	0	346	

**ES0014R Els Torms**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
Ca++	pm10	0.41	0.32	0.32	1.96	0.04	0.12	0.32	1.04	2.43	95.3	0	349	
Ca++	pm25	0.11	0.07	0.08	2.36	0.01	0.01	0.09	0.24	0.33	16.4	3	60	
Cl-	pm10	0.13	0.11	0.10	1.93	0.04	0.04	0.10	0.32	0.78	16.4	13	60	
Cl-	pm25	0.09	0.06	0.08	1.76	0.05	0.05	0.05	0.21	0.23	16.4	34	60	
HNO3+NO3-	air+aerosol	0.44	0.35	0.35	1.93	0.04	0.14	0.34	1.14	2.80	96.7	5	354	
K+	pm10	0.14	0.15	0.10	2.11	0.02	0.04	0.09	0.45	1.27	95.3	0	349	
K+	pm25	0.10	0.11	0.07	2.37	0.02	0.02	0.06	0.26	0.75	16.4	0	60	
Mg++	pm10	0.05	0.04	0.04	2.04	0.01	0.01	0.04	0.14	0.27	95.3	5	349	
Mg++	pm25	0.02	0.01	0.01	1.57	0.01	0.01	0.01	0.04	0.05	16.4	11	60	
NH3	air	2.98	1.52	2.60	1.73	0.53	0.83	2.77	6.43	7.72	85.8	0	53	
NH3+NH4+	air+aerosol	2.88	0.85	2.75	1.38	0.74	1.48	2.85	4.36	5.56	98.9	0	362	
NH4+	pm10	0.65	0.41	0.52	2.05	0.05	0.18	0.55	1.52	2.11	16.4	0	60	
NH4+	pm25	0.48	0.32	0.37	2.21	0.03	0.07	0.38	1.19	1.40	16.4	0	60	
NO	air	0.08	0.18	0.04	2.68	0.00	0.01	0.03	0.25	3.03	97.9	0	8574	
NO2	air	1.09	0.81	0.87	1.95	0.03	0.31	0.84	2.66	7.78	97.9	0	8574	
NO3-	pm10	0.27	0.33	0.18	2.25	0.03	0.06	0.16	0.88	2.88	95.6	0	350	
NO3-	pm25	0.13	0.20	0.06	3.51	0.01	0.01	0.05	0.58	1.07	16.4	10	60	
Na+	pm10	0.43	0.30	0.35	1.86	0.08	0.14	0.35	0.99	2.16	95.3	0	349	
Na+	pm25	0.09	0.06	0.07	1.94	0.02	0.02	0.08	0.18	0.38	16.4	8	60	
PM10 mass	pm10	14.28	7.39	12.62	1.65	3.00	5.00	13.00	31.00	43.00	95.3	0	349	
PM25 mass	pm25	8.34	4.44	7.31	1.67	2.00	3.00	7.00	16.30	32.00	96.4	0	353	
SO2	air	0.36	0.30	0.29	1.92	0.00	0.11	0.28	0.84	6.09	98.2	0	8600	
SO4--	pm10	0.52	0.29	0.44	1.79	0.06	0.17	0.46	1.05	1.56	95.6	0	350	
SO4--	pm25	0.49	0.25	0.42	1.83	0.05	0.16	0.42	0.99	1.12	16.4	0	60	
SO4-- corr	pm10	0.48	0.28	0.40	1.87	0.05	0.15	0.41	1.00	1.50	95.6	0	350	
SO4-- corr	pm25	0.48	0.25	0.41	1.84	0.05	0.15	0.41	0.98	1.11	16.4	0	60	

**ES0016R O Saviñao**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.32	0.20	0.27	1.83	0.04	0.12	0.28	0.67	1.74	97.8	12	358	
NH3+NH4+	air+aerosol	1.59	0.68	1.45	1.57	0.44	0.62	1.52	2.94	3.91	98.4	0	360	
NO	air	0.14	0.12	0.11	1.82	0.00	0.05	0.11	0.32	2.54	94.8	0	8302	
NO2	air	0.90	0.58	0.73	1.97	0.01	0.22	0.79	2.01	5.62	94.8	0	8302	
NO3-	pm10	0.19	0.13	0.15	2.14	0.01	0.03	0.16	0.45	0.81	98.6	3	361	
PM10 mass	pm10	9.84	7.06	8.18	1.82	0.78	3.04	8.32	21.58	131.78	97.7	0	8555	
PM10 mass	pm10	10.02	5.95	8.63	1.75	1.00	3.00	9.00	19.00	46.00	96.7	0	354	
PM25 mass	pm25	8.31	5.22	6.84	1.94	1.00	2.00	7.00	17.00	36.00	82.7	0	303	
SO2	air	0.28	0.30	0.22	1.83	0.04	0.09	0.22	0.65	7.83	98.6	0	8640	
SO4--	pm10	0.43	0.27	0.36	1.83	0.06	0.13	0.37	0.94	1.70	98.6	0	361	

**ES0017R Doñana**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.59	0.38	0.51	1.72	0.15	0.21	0.51	1.16	4.83	99.5	0	364	
NH3+NH4+	air+aerosol	1.80	0.73	1.64	1.54	0.49	0.75	1.66	3.13	3.83	97.8	0	358	
NO	air	0.13	0.16	0.09	2.31	0.00	0.02	0.08	0.35	3.36	98.1	0	8590	
NO2	air	0.55	0.56	0.35	2.74	0.01	0.05	0.37	1.60	7.24	98.1	0	8590	
NO3-	pm10	0.45	0.25	0.38	1.88	0.01	0.13	0.42	0.90	1.68	97.8	1	358	
PM10 mass	pm10	16.96	9.09	14.91	1.69	1.00	7.00	15.50	32.00	79.00	96.7	0	354	
SO2	air	0.17	0.18	0.13	1.76	0.00	0.06	0.13	0.38	3.89	96.9	0	8488	
SO4--	pm10	0.75	0.46	0.63	1.79	0.09	0.26	0.62	1.68	2.54	97.8	0	358	

**FI0009R Utó**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
Ca++	aerosol	0.08	0.11	0.05	2.29	0.00	0.01	0.05	0.22	1.10	98.4	0	361	
Cl-	aerosol	0.75	0.81	0.32	5.07	0.00	0.02	0.44	2.31	4.44	98.4	0	361	
HNO3	air	0.10	0.09	0.06	2.72	0.00	0.01	0.07	0.27	0.73	99.3	0	364	
HNO3+NO3-	air+aerosol	0.31	0.26	0.22	2.33	0.01	0.05	0.23	0.88	1.72	98.4	0	361	
K+	aerosol	0.05	0.04	0.04	2.08	0.00	0.01	0.04	0.12	0.27	98.2	0	360	
Mg++	aerosol	0.09	0.06	0.07	2.31	0.01	0.01	0.07	0.20	0.33	98.4	0	361	
NH3	air	0.08	0.08	0.05	2.92	0.00	0.00	0.07	0.22	0.82	99.0	0	363	
NH3+NH4+	air+aerosol	0.29	0.29	0.20	2.30	0.02	0.05	0.20	0.99	1.81	97.3	0	357	
NH4+	aerosol	0.21	0.27	0.12	2.83	0.00	0.02	0.13	0.70	1.73	97.6	0	358	
NO2	air	0.90	0.79	0.68	2.09	-0.63	0.22	0.66	2.41	8.54	98.6	0	8635	
NO3-	aerosol	0.21	0.22	0.14	2.60	0.01	0.03	0.15	0.68	1.57	98.4	0	361	
Na+	aerosol	0.71	0.55	0.50	2.49	0.04	0.10	0.55	1.70	2.90	98.4	0	361	
PM25 mass	pm25	4.97	5.18	3.45	2.84	-0.46	-0.04	3.76	14.27	55.16	98.9	0	8662	
SO2	air	0.11	0.10	0.07	2.47	0.01	0.02	0.08	0.34	0.53	99.3	0	364	
SO4--	aerosol	0.28	0.20	0.22	2.04	0.01	0.06	0.25	0.57	1.58	98.4	0	361	
SO4-- corr	aerosol	0.22	0.20	0.15	2.69	0.00	0.02	0.17	0.53	1.51	98.4	0	361	

**FI0018R Virolahti III**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
Ca++	aerosol	0.08	0.10	0.04	3.05	0.00	0.01	0.04	0.31	0.63	97.8	0	357	
Cl-	aerosol	0.15	0.24	0.04	6.22	0.00	0.00	0.05	0.62	1.50	97.8	0	357	
HNO3	air	0.08	0.06	0.06	2.39	0.00	0.01	0.06	0.20	0.45	99.7	0	364	
HNO3+NO3-	air+aerosol	0.20	0.18	0.14	2.31	0.01	0.03	0.15	0.50	1.79	97.8	0	357	
K+	aerosol	0.05	0.04	0.04	2.10	0.00	0.01	0.04	0.14	0.33	97.8	0	357	
Mg++	aerosol	0.03	0.03	0.02	2.59	0.00	0.00	0.02	0.09	0.15	97.8	0	357	
NH3	air	0.10	0.09	0.06	3.38	0.00	0.00	0.08	0.26	0.45	99.4	0	363	
NH3+NH4+	air+aerosol	0.29	0.24	0.21	2.20	0.02	0.06	0.23	0.78	2.07	97.2	0	355	
NH4+	aerosol	0.19	0.22	0.12	2.82	0.00	0.03	0.13	0.68	2.00	97.5	0	356	
NO2	air	1.11	0.99	0.83	2.10	-0.04	0.25	0.81	2.89	12.56	98.2	0	8600	
NO3-	aerosol	0.12	0.15	0.07	3.14	0.00	0.01	0.08	0.36	1.60	97.8	0	357	
Na+	aerosol	0.23	0.23	0.14	3.03	0.00	0.02	0.15	0.71	1.31	97.8	0	357	
PM10 mass	pm10	9.17	8.34	7.01	2.13	-0.28	1.91	7.29	22.31	182.09	98.5	0	8626	
PM25 mass	pm25	5.29	4.16	4.19	1.99	-0.46	1.45	4.11	12.78	44.41	98.3	0	8609	
SO2	air	0.20	0.21	0.13	2.66	0.01	0.02	0.13	0.67	1.39	99.7	0	364	
SO2	air	0.22	0.37	0.11	3.26	-0.04	0.02	0.09	0.86	4.47	98.9	0	8666	
SO4--	aerosol	0.27	0.20	0.21	2.12	0.00	0.07	0.22	0.73	1.59	97.8	0	357	
SO4-- corr	aerosol	0.25	0.20	0.19	2.31	0.00	0.05	0.20	0.73	1.57	97.8	0	357	

**FI0022R Oulanka**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
Ca++	aerosol	0.02	0.02	0.01	2.07	0.00	0.00	0.01	0.06	0.09	95.7	0	51	
Cl-	aerosol	0.05	0.11	0.01	18.19	0.00	0.00	0.01	0.29	0.62	95.7	0	51	
HNO3	air	0.03	0.02	0.02	2.76	0.00	0.01	0.02	0.07	0.08	97.6	0	52	
HNO3+NO3-	air+aerosol	0.04	0.03	0.03	1.86	0.01	0.02	0.03	0.12	0.20	95.7	0	51	
K+	aerosol	0.02	0.01	0.02	1.85	0.00	0.01	0.02	0.05	0.06	95.7	0	51	
Mg++	aerosol	0.01	0.01	0.01	1.87	0.00	0.00	0.01	0.04	0.06	95.7	0	51	
NH3	air	0.02	0.02	0.01	3.98	0.00	0.00	0.02	0.07	0.10	97.6	0	52	
NH3+NH4+	air+aerosol	0.10	0.06	0.08	2.08	0.01	0.02	0.09	0.23	0.30	95.7	0	51	
NH4+	aerosol	0.08	0.05	0.06	2.13	0.01	0.01	0.07	0.18	0.28	95.7	0	51	
NO3-	aerosol	0.01	0.02	0.01	4.60	0.00	0.00	0.01	0.07	0.13	95.7	0	51	
Na+	aerosol	0.11	0.09	0.08	2.16	0.02	0.02	0.09	0.29	0.47	95.7	0	51	
SO2	air	0.20	0.23	0.10	3.53	0.00	0.02	0.10	0.85	1.05	97.6	0	52	
SO4--	aerosol	0.20	0.11	0.17	1.92	0.03	0.05	0.20	0.41	0.43	95.7	0	51	
SO4-- corr	aerosol	0.19	0.11	0.16	2.04	0.03	0.04	0.19	0.40	0.42	95.7	0	51	

**FI0036R Pallas (Matorova)**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
Ca++	aerosol	0.01	0.02	0.01	2.87	0.00	0.00	0.01	0.04	0.18	95.4	0	356	
Cl-	aerosol	0.16	0.29	0.03	8.78	0.00	0.00	0.04	0.75	2.42	95.6	0	357	
HNO3	air	0.02	0.03	0.01	2.86	0.00	0.00	0.01	0.06	0.26	97.3	0	363	
HNO3+NO3-	air+aerosol	0.04	0.04	0.03	2.24	0.00	0.01	0.03	0.10	0.30	95.1	0	355	
K+	aerosol	0.02	0.02	0.01	2.60	0.00	0.00	0.01	0.04	0.17	95.6	0	357	
Mg++	aerosol	0.02	0.02	0.01	3.31	0.00	0.00	0.01	0.06	0.17	95.6	0	357	
NH3	air	0.02	0.02	0.01	2.69	0.00	0.00	0.01	0.06	0.24	97.0	0	362	
NH3+NH4+	air+aerosol	0.08	0.08	0.06	2.47	0.01	0.01	0.06	0.21	0.61	94.6	0	353	
NH4+	aerosol	0.07	0.07	0.04	3.38	0.00	0.00	0.05	0.19	0.58	95.4	0	356	
NO3-	aerosol	0.02	0.02	0.01	3.06	0.00	0.00	0.01	0.05	0.23	95.6	0	357	
Na+	aerosol	0.15	0.19	0.07	4.56	0.00	0.00	0.07	0.52	1.43	95.6	0	357	
PM25 mass	pm25	3.43	1.71	3.15	1.48	-1.39	1.99	2.85	6.92	21.75	97.3	0	8527	
SO2	air	0.18	0.59	0.03	4.91	0.01	0.01	0.03	0.87	6.57	97.3	0	363	
SO4--	aerosol	0.18	0.21	0.10	3.10	0.00	0.01	0.10	0.60	1.83	95.6	0	357	
SO4-- corr	aerosol	0.16	0.21	0.08	3.80	0.00	0.01	0.10	0.59	1.83	95.6	0	357	

**FI0037R Ähtäri II**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
Ca++	aerosol	0.03	0.03	0.02	2.19	0.00	0.00	0.02	0.11	0.13	97.0	0	51	
Cl-	aerosol	0.08	0.13	0.02	6.68	0.00	0.00	0.03	0.41	0.60	97.0	0	51	
HNO3	air	0.05	0.03	0.03	3.99	0.00	0.00	0.04	0.10	0.15	97.0	0	51	
HNO3+NO3-	air+aerosol	0.10	0.07	0.08	2.00	0.01	0.02	0.08	0.20	0.49	95.1	0	50	
K+	aerosol	0.04	0.02	0.03	1.76	0.00	0.01	0.04	0.07	0.09	97.0	0	51	
Mg++	aerosol	0.02	0.01	0.02	1.82	0.00	0.01	0.02	0.05	0.06	97.0	0	51	
NH3	air	0.07	0.05	0.04	3.18	0.00	0.00	0.06	0.16	0.21	98.9	0	52	
NH3+NH4+	air+aerosol	0.18	0.10	0.16	1.80	0.04	0.05	0.18	0.30	0.64	95.1	0	50	
NH4+	aerosol	0.12	0.10	0.09	2.19	0.02	0.02	0.08	0.27	0.61	95.1	0	50	
NO2	air	0.49	0.33	0.42	1.76	0.10	0.18	0.40	1.10	5.04	98.9	0	8665	
NO3-	aerosol	0.05	0.06	0.03	2.82	0.00	0.00	0.03	0.12	0.39	97.0	0	51	
Na+	aerosol	0.15	0.11	0.12	2.05	0.02	0.04	0.12	0.44	0.48	97.0	0	51	
SO2	air	0.09	0.09	0.06	2.71	0.00	0.01	0.06	0.29	0.47	97.0	0	51	
SO4--	aerosol	0.20	0.11	0.17	1.83	0.03	0.06	0.19	0.44	0.51	97.0	0	51	
SO4-- corr	aerosol	0.19	0.11	0.16	1.92	0.03	0.05	0.18	0.42	0.48	97.0	0	51	

**FR0009R Revin**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
EC	pm25	0.22	0.12	0.19	1.67	0.07	0.08	0.19	0.46	0.65	16.2	0	59	
OC	pm25	1.78	1.00	1.57	1.64	0.60	0.70	1.47	4.23	5.31	16.2	0	59	
PM25 mass	pm25	14.91	10.78	12.19	1.94	0.00	4.00	13.00	33.00	124.00	81.2	0	7110	
TC	pm25	1.99	1.09	1.76	1.61	0.71	0.90	1.64	4.58	5.96	16.2	0	59	

**FR0010R Morvan**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
PM25 mass	pm25	9.68	7.14	8.03	1.85	0.00	3.00	8.00	20.00	81.00	87.7	0	7682	

**FR0013R Peyrusse Vieille**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm25	0.04	0.02	0.03	1.41	0.03	0.03	0.03	0.11	0.11	5.2	17	19
Cl-	pm25	0.05	0.03	0.04	1.43	0.04	0.04	0.04	0.13	0.13	5.2	17	19
EC	pm25	0.24	0.12	0.21	1.89	0.05	0.05	0.26	0.47	0.47	4.9	0	18
K+	pm25	0.11	0.18	0.05	3.33	0.01	0.01	0.05	0.68	0.68	5.2	2	19
Mg++	pm25	0.01	0.01	0.01	2.62	0.00	0.00	0.01	0.04	0.04	5.2	1	19
NH4+	pm25	0.12	0.10	0.08	2.79	0.01	0.01	0.10	0.45	0.45	5.2	0	19
NO3-	pm25	0.08	0.05	0.07	2.02	0.03	0.03	0.08	0.18	0.18	5.2	9	19
Na+	pm25	0.07	0.06	0.05	2.39	0.01	0.01	0.06	0.21	0.21	5.2	0	19
OC	pm25	2.39	1.00	2.19	1.58	0.63	0.63	2.16	4.72	4.72	4.9	0	18
PM10 mass	pm10	15.83	9.22	13.60	1.79	0.00	5.00	14.00	30.00	117.00	53.7	0	4707
PM25 mass	pm25	8.72	5.01	7.33	1.91	0.00	2.00	8.00	18.00	33.00	30.1	0	2641
SO4--	pm25	0.44	0.38	0.32	2.37	0.06	0.06	0.40	1.68	1.68	5.2	0	19
SO4-- corr	pm25	0.44	0.38	0.31	2.44	0.04	0.04	0.39	1.67	1.67	5.2	0	19
TC	pm25	2.64	1.11	2.41	1.59	0.68	0.68	2.39	5.20	5.20	4.9	0	18

**FR0014R Montandon**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
PM10 mass	pm10	14.27	9.11	12.03	1.83	0.00	4.00	12.00	30.00	85.00	89.8	0	7865

**FR0015R La Tardière**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
PM10 mass	pm10	15.43	9.98	13.00	1.83	0.00	5.00	13.00	34.00	115.00	94.6	0	8286
PM25 mass	pm25	10.55	9.84	7.74	2.20	1.00	2.00	8.00	29.00	109.00	88.1	0	7721

**FR0018R La Coulonche**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
PM10 mass	pm10	15.29	10.37	12.30	2.01	0.00	3.00	13.00	35.00	101.00	96.6	0	8461
PM25 mass	pm25	8.19	8.35	6.04	2.32	-1.00	1.00	6.00	24.00	70.00	92.8	0	6125

**FR0023R Saint-Nazaire-le-Désert**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm25	0.05	0.04	0.04	1.70	0.03	0.03	0.03	0.15	0.19	16.2	44	59
Cl-	pm25	0.04	0.01	0.04	1.16	0.04	0.04	0.04	0.04	0.09	16.2	57	59
EC	pm25	0.19	0.13	0.16	1.85	0.03	0.06	0.16	0.53	0.63	16.2	0	59
K+	pm25	0.04	0.05	0.02	2.88	0.01	0.01	0.02	0.16	0.20	16.2	17	59
Mg++	pm25	0.00	0.00	0.00	2.73	0.00	0.00	0.00	0.01	0.02	16.2	8	59
NH4+	pm25	0.12	0.16	0.07	2.58	0.01	0.01	0.07	0.61	0.82	16.2	0	59
NO3-	pm25	0.13	0.36	0.05	2.67	0.03	0.03	0.03	1.24	2.17	16.2	51	59
Na+	pm25	0.04	0.05	0.02	3.14	0.00	0.00	0.03	0.17	0.28	16.2	8	59
OC	pm25	2.37	1.49	2.02	1.76	0.54	0.69	2.03	4.80	9.68	16.2	0	59
PM10 mass	pm10	8.87	6.61	6.81	2.16	0.00	2.00	7.00	21.00	123.00	95.9	0	8400
PM25 mass	pm25	6.18	5.02	4.58	2.24	0.00	1.00	5.00	16.00	38.00	96.0	0	8409
SO4--	pm25	0.37	0.33	0.26	2.33	0.03	0.05	0.26	1.05	1.79	16.2	0	59
SO4-- corr	pm25	0.37	0.33	0.26	2.36	0.03	0.05	0.25	1.05	1.79	16.2	0	59
TC	pm25	2.56	1.60	2.19	1.75	0.57	0.77	2.25	5.33	10.32	16.2	0	59

**FR0024R Guipry**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm25	0.03	0.01	0.03	1.17	0.03	0.03	0.03	0.03	0.08	16.2	57	59
Cl-	pm25	0.17	0.19	0.10	2.64	0.04	0.04	0.09	0.69	0.84	16.2	25	59
EC	pm25	0.34	0.23	0.29	1.76	0.07	0.11	0.28	0.82	1.28	16.2	0	59
K+	pm25	0.04	0.04	0.03	2.74	0.01	0.01	0.03	0.15	0.17	16.2	16	59
Mg++	pm25	0.01	0.01	0.01	2.86	0.00	0.00	0.01	0.04	0.06	16.2	3	59
NH4+	pm25	0.19	0.25	0.10	3.46	0.00	0.02	0.10	0.53	1.71	16.2	1	59
NO3-	pm25	0.33	0.62	0.13	3.73	0.03	0.03	0.12	1.59	4.04	16.2	21	59
Na+	pm25	0.15	0.14	0.10	3.02	0.00	0.01	0.11	0.47	0.67	16.2	1	59
OC	pm25	2.03	1.30	1.68	1.88	0.41	0.56	1.60	4.82	5.73	16.2	0	59
PM10 mass	pm10	13.88	8.41	11.78	1.80	0.00	4.00	12.00	30.00	83.00	96.5	0	8452
PM25 mass	pm25	9.03	8.73	6.64	2.37	0.00	1.00	6.50	25.00	73.00	95.6	0	8376
SO4--	pm25	0.36	0.33	0.26	2.53	0.00	0.09	0.26	0.84	2.18	16.2	1	59
SO4-- corr	pm25	0.34	0.33	0.24	2.67	0.00	0.07	0.25	0.84	2.17	16.2	1	59
TC	pm25	2.37	1.49	1.98	1.85	0.50	0.67	1.85	5.93	6.90	16.2	0	59

**FR0025R Verneuil**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
Ca++	pm25	0.06	0.09	0.04	1.89	0.03	0.03	0.03	0.28	0.55	16.7	52	61	
Cl-	pm25	0.07	0.08	0.05	1.83	0.04	0.04	0.04	0.20	0.53	16.7	52	61	
EC	pm25	0.22	0.13	0.17	2.58	0.00	0.06	0.18	0.51	0.66	16.7	1	61	
K+	pm25	0.05	0.04	0.04	2.50	0.01	0.01	0.04	0.17	0.19	16.7	8	61	
Mg++	pm25	0.01	0.01	0.01	2.85	0.00	0.00	0.01	0.03	0.04	16.7	6	61	
NH4+	pm25	0.16	0.27	0.08	2.84	0.01	0.01	0.08	0.88	1.46	16.7	0	61	
NO3-	pm25	0.27	0.71	0.07	3.54	0.03	0.03	0.03	2.45	3.61	16.7	35	61	
Na+	pm25	0.09	0.09	0.05	3.20	0.00	0.00	0.06	0.26	0.49	16.7	3	61	
OC	pm25	2.35	1.49	2.01	1.71	0.77	0.93	2.00	6.16	7.71	16.7	0	61	
PM25 mass	pm25	11.65	10.01	9.28	1.96	0.00	3.00	9.00	26.00	109.00	96.0	0	8411	
SO4--	pm25	0.36	0.29	0.28	2.05	0.07	0.08	0.28	0.95	1.63	16.7	0	61	
SO4-- corr	pm25	0.36	0.29	0.27	2.11	0.07	0.08	0.28	0.95	1.63	16.7	0	61	
TC	pm25	2.56	1.60	2.20	1.71	0.82	0.98	2.13	6.66	8.37	16.7	0	61	

**FR0030R Puy de Dôme**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
NO	air	0.12	0.23	0.09	1.98	0.01	0.03	0.08	0.29	7.00	95.7	0	8379	
NO2	air	0.43	0.50	0.31	2.12	0.02	0.10	0.30	1.16	11.91	95.7	0	8379	
SO2	air	0.32	0.21	0.27	1.84	0.02	0.10	0.27	0.69	2.06	71.2	0	6234	

**GB0002R Eskdalemuir**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
NO	air	0.18	0.18	0.16	1.56	0.01	0.09	0.16	0.34	5.15	98.1	8507	8594	
NO2	air	0.67	0.86	0.45	2.33	-0.04	0.13	0.42	2.02	11.45	98.1	6313	8594	

**GB0006R Lough Navar**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
PM10 mass	pm10	6.59	6.48	5.00	2.51	-4.00	-0.20	5.10	17.90	134.00	94.8	4084	8302	

**GB0013R Yarner Wood**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
NO	air	0.21	0.32	0.17	1.86	-0.03	0.07	0.16	0.49	12.09	98.6	8409	8636	
NO2	air	1.19	1.20	0.78	2.60	-0.08	0.16	0.74	3.57	12.29	98.6	4114	8636	

**GB0014R High Muffles**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
NO	air	0.56	0.71	0.47	1.60	0.03	0.26	0.44	1.05	21.06	92.0	7136	8063	
NO2	air	1.62	2.00	0.98	2.69	-0.06	0.23	0.90	5.27	17.13	92.0	3292	8062	

**GB0031R Aston Hill**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
NO	air	0.20	0.20	0.16	1.73	0.00	0.08	0.15	0.50	4.65	98.0	8333	8583	
NO2	air	1.01	1.29	0.51	3.40	-0.05	0.07	0.45	3.46	12.65	98.0	5316	8582	

**GB0033R Bush**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
NO	air	0.49	0.85	0.34	2.04	0.01	0.14	0.30	1.37	20.99	99.2	7615	8694	
NO2	air	1.85	2.20	1.09	2.88	-0.12	0.20	1.04	6.33	23.96	99.2	2990	8693	

**GB0036R Harwell**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num	Num
											anal	bel	sampl
Ca++	pm10	0.11	0.16	0.04	7.31	0.00	0.00	0.07	0.37	4.41	66.8	1473	5856
Ca++	pm25	0.04	0.06	0.01	3.96	0.00	0.00	0.00	0.12	0.75	67.5	3072	5915
Cl-	pm10	1.52	1.69	0.51	6.91	0.02	0.02	0.91	5.02	12.16	68.7	1035	6014
Cl-	pm25	0.80	1.00	0.25	6.69	0.02	0.02	0.43	2.81	8.31	69.3	1602	6073
HNO3	air	0.03	0.03	0.02	3.21	0.00	0.00	0.02	0.09	0.32	68.4	785	5989
K+	pm10	0.09	0.07	0.06	2.93	0.00	0.01	0.09	0.21	1.73	68.7	1480	6020
K+	pm25	0.06	0.06	0.03	3.40	0.01	0.01	0.04	0.17	0.55	69.4	2829	6076
Mg++	pm10	0.13	0.13	0.06	4.41	0.00	0.00	0.09	0.40	0.80	68.9	962	6038
Mg++	pm25	0.08	0.08	0.03	4.63	0.00	0.00	0.05	0.24	0.60	69.6	1561	6096
NH3	air	1.69	1.44	1.30	2.01	0.20	0.44	1.24	4.59	12.03	69.7	0	6109
NH4+	pm10	0.78	1.20	0.32	5.08	0.00	0.00	0.38	3.03	10.73	68.7	314	6019
NH4+	pm25	0.73	1.14	0.32	4.37	0.00	0.04	0.35	2.83	10.27	69.3	211	6072
NO3-	pm10	0.62	0.97	0.30	3.35	0.00	0.04	0.29	2.30	9.30	68.7	18	6018
NO3-	pm25	0.53	0.89	0.24	3.56	0.00	0.03	0.23	2.09	8.59	69.3	28	6075
Na+	pm10	0.98	0.92	0.54	3.69	0.01	0.05	0.71	2.88	6.21	68.9	170	6038
Na+	pm25	0.56	0.56	0.28	4.11	0.01	0.01	0.38	1.71	4.25	69.6	429	6094
PM10 mass	pm10	11.63	7.46	10.11	1.65	3.13	5.00	9.50	26.33	54.83	97.8	0	357
PM10 mass	pm10	15.06	9.31	12.88	1.79	-3.10	4.90	13.10	31.80	104.30	89.2	430	7818
PM25 mass	pm25	6.91	6.55	5.31	1.96	0.54	2.04	4.92	19.65	54.29	97.8	17	357
PM25 mass	pm25	8.55	7.85	6.44	2.17	-3.50	1.80	6.20	23.80	70.60	96.1	3057	8414
SO2	air	0.07	0.05	0.07	1.62	0.02	0.04	0.06	0.17	0.73	69.7	1	6110
SO4--	pm10	0.50	0.37	0.41	1.89	0.03	0.14	0.41	1.15	4.65	68.7	0	6018
SO4--	pm25	0.44	0.35	0.35	1.94	0.00	0.12	0.35	1.07	4.43	69.3	1	6074
SO4-- corr	pm10	0.42	0.37	0.31	2.17	0.03	0.09	0.31	1.09	4.64	68.7	0	6017
SO4-- corr	pm25	0.40	0.35	0.29	2.17	0.00	0.08	0.30	1.04	4.42	69.3	1	6073

**GB0037R Ladybower Res.**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num	Num
											anal	bel	sampl
NO	air	0.97	0.14	0.97	1.14	0.65	0.79	0.96	1.20	1.84	4.4	2	384
NO2	air	1.49	1.58	1.00	3.12	-0.29	-0.11	0.91	4.33	8.84	4.4	166	384
SO2	air	0.83	0.42	0.75	1.58	0.21	0.32	0.80	1.43	3.83	4.4	377	383
SO2	air	0.83	0.45	0.73	1.74	0.00	0.28	0.77	1.54	4.76	4.3	1474	1501

**GB0038R Lullington Heath**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num	Num
											anal	bel	sampl
NO	air	0.33	0.44	0.23	2.21	-0.04	0.07	0.21	0.97	6.88	66.9	5353	5860
NO2	air	2.13	1.94	1.46	2.61	-0.20	0.26	1.60	5.64	16.83	66.9	1249	5860
SO2	air	0.59	0.41	0.48	2.03	-0.14	0.13	0.52	1.30	6.33	95.2	8236	8336
SO2	air	0.59	0.43	0.50	1.93	-0.14	0.13	0.52	1.33	7.41	94.932800	33255	

**GB0043R Narberth**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num	Num
											anal	bel	sampl
NO	air	0.35	0.33	0.30	1.59	-0.15	0.16	0.29	0.65	8.65	98.9	8289	8662
NO2	air	0.83	1.07	0.50	2.84	-0.13	0.08	0.48	2.81	13.59	98.9	5590	8662
PM10 mass	pm10	11.56	8.74	8.99	2.20	-3.80	2.10	9.80	27.30	115.90	86.3	1505	7563
SO2	air	0.45	0.41	0.34	2.15	0.00	0.09	0.34	1.12	5.62	96.8	8378	8477
SO2	air	0.45	0.42	0.37	1.99	0.00	0.00	0.37	1.14	6.29	95.833142	33561	

**GB0045R Wicken Fen**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num	Num
											anal	bel	sampl
NO	air	0.54	1.09	0.33	2.31	-0.02	0.11	0.29	1.62	21.04	96.6	7201	8465
NO2	air	2.23	2.01	1.53	2.63	-0.23	0.25	1.67	6.30	18.48	96.5	1568	8453
SO2	air	1.42	1.49	0.87	2.81	0.00	0.16	0.93	4.72	11.98	49.4	3373	4325
SO2	air	1.43	1.51	0.92	2.71	0.00	0.13	0.95	4.75	12.47	48.513220	16981	

**GB0048R Auchencorth Moss**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
Ca++	pm10	0.04	0.04	0.03	2.66	0.00	0.00	0.03	0.10	0.68	56.3	220	4928	
Ca++	pm25	0.02	0.03	0.01	2.92	0.00	0.00	0.01	0.05	0.70	53.2	543	4663	
Cl-	pm10	1.19	1.27	0.60	3.90	0.00	0.05	0.73	3.75	8.39	65.3	25	5719	
Cl-	pm25	0.63	0.71	0.32	3.83	0.01	0.03	0.38	2.07	5.20	61.5	48	5387	
HNO3	air	0.02	0.02	0.01	2.25	0.00	0.00	0.01	0.06	0.23	65.5	22	5738	
K+	pm10	0.04	0.03	0.03	2.35	0.00	0.00	0.04	0.09	0.72	56.3	234	4928	
K+	pm25	0.02	0.02	0.01	2.80	0.00	0.00	0.02	0.06	0.28	53.2	715	4662	
Mg++	pm10	0.07	0.07	0.04	3.29	0.00	0.00	0.04	0.20	0.42	56.3	139	4928	
Mg++	pm25	0.04	0.04	0.02	3.70	0.00	0.00	0.02	0.12	0.30	53.2	331	4663	
NH3	air	0.76	0.77	0.54	2.23	0.04	0.17	0.50	2.19	11.83	64.7	0	5669	
NH4+	pm10	0.43	0.79	0.18	3.77	0.00	0.03	0.17	1.95	7.86	54.6	54	4781	
NH4+	pm25	0.36	0.66	0.16	3.42	0.00	0.03	0.15	1.46	5.51	52.9	27	4633	
NO3-	pm10	0.28	0.57	0.09	4.15	0.00	0.01	0.08	1.42	4.98	65.5	2	5738	
NO3-	pm25	0.20	0.47	0.07	3.98	0.00	0.01	0.06	1.00	4.73	61.7	8	5407	
Na+	pm10	0.60	0.59	0.32	3.78	0.00	0.03	0.40	1.78	3.79	55.6	60	4870	
Na+	pm25	0.34	0.36	0.18	3.57	0.00	0.02	0.21	1.06	2.65	53.2	63	4663	
PM10 mass	pm10	6.06	4.85	4.94	1.88	-0.88	1.79	4.88	15.69	44.17	97.3	24	355	
PM10 mass	pm10	7.45	6.79	5.62	2.41	-4.00	0.45	5.80	20.40	78.20	72.1	2665	6317	
PM25 mass	pm25	2.96	5.15	2.46	3.19	-4.00	-1.90	1.70	13.10	44.70	95.4	6708	8357	
PM25 mass	pm25	3.39	3.90	2.38	2.43	-0.88	0.31	2.38	11.56	28.75	95.9	148	350	
SO2	air	0.09	0.24	0.04	2.55	0.00	0.02	0.04	0.33	6.29	65.4	1	5727	
SO4--	pm10	0.30	0.31	0.21	2.34	0.00	0.05	0.21	0.86	4.12	65.4	1	5727	
SO4--	pm25	0.24	0.22	0.17	2.31	0.01	0.04	0.17	0.70	1.91	61.6	0	5395	
SO4-- corr	pm10	0.25	0.31	0.15	2.73	0.00	0.03	0.15	0.82	4.10	65.4	1	5727	
SO4-- corr	pm25	0.21	0.23	0.13	2.61	0.01	0.03	0.14	0.69	1.90	61.6	0	5395	

**GB0050R St. Osyth**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
NO	air	1.18	1.51	0.67	3.09	-0.03	0.09	0.72	3.61	25.14	94.2	2609	8251	
NO2	air	2.86	2.39	2.16	2.15	0.06	0.61	2.20	7.41	22.72	94.2	151	8248	

**GB0051R Market Harborough**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
NO	air	0.35	1.10	0.16	3.23	-0.06	0.00	0.12	1.22	31.08	94.2	6599	8249	
NO2	air	2.75	2.28	2.13	2.01	0.27	0.70	2.07	7.30	19.27	94.1	27	8247	

**GB0053R Charlton Mackrell**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
NO	air	0.48	0.69	0.35	2.05	-0.02	0.13	0.32	1.27	16.96	98.8	7356	8652	
NO2	air	1.84	1.58	1.36	2.27	-0.27	0.35	1.41	4.85	17.75	98.8	1693	8652	

**GR0001R Aliartos**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
NO	air	1.80	4.19	0.83	2.55	0.50	0.50	0.50	8.00	47.30	78.2	0	6848	
NO2	air	3.69	3.45	2.40	2.60	0.30	0.60	2.40	11.00	22.60	78.2	0	6849	
PM10 mass	pm10	31.86	18.53	27.50	1.74	1.00	11.00	28.00	66.00	194.00	63.4	0	5555	
SO2	air	2.61	3.78	1.95	1.91	1.00	1.00	2.00	5.50	109.60	77.9	0	6821	

**HU0002R K-puszta**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
EC	pm10	-	-	-	-	-	-	-	-	-	0.0	0	0	
HNO3	air	0.17	0.12	0.13	2.15	0.01	0.03	0.14	0.41	0.74	78.6	2	287	
HNO3+NO3-	air+aerosol	0.66	0.55	0.50	2.11	0.01	0.17	0.48	1.67	4.74	78.3	1	286	
NH3	air	1.51	0.91	1.23	1.97	0.09	0.38	1.34	3.24	4.76	78.6	0	287	
NH3+NH4+	air+aerosol	2.39	1.19	2.09	1.74	0.11	0.84	2.22	4.55	6.58	78.6	0	287	
NH4+	aerosol	0.89	0.88	0.45	4.60	0.00	0.02	0.63	2.66	5.07	78.6	9	287	
NO2	air	1.30	0.72	1.11	1.94	0.01	0.50	1.13	2.88	4.32	99.9	2	365	
NO3-	aerosol	0.49	0.55	0.28	2.93	0.01	0.06	0.28	1.50	4.53	78.6	0	287	
OC	pm10	-	-	-	-	-	-	-	-	-	0.0	0	0	
PM25 mass	pm25	17.35	10.60	14.74	1.78	2.98	5.83	14.73	38.37	92.87	98.0	0	358	
SO2	air	0.68	0.81	0.40	2.99	0.01	0.06	0.39	2.41	6.68	78.8	2	288	
SO4--	aerosol	0.99	0.76	0.74	2.23	0.03	0.21	0.76	2.48	4.49	78.6	0	287	
TC	pm10	7.17	4.54	6.28	1.65	2.70	2.72	6.60	23.24	23.83	5.5	0	20	

**IE0001R Valentia Observatory**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
Ca++	aerosol	0.11	0.09	0.09	2.06	0.03	0.03	0.10	0.27	0.91	71.8	44	263	
Cl-	aerosol	3.75	3.21	2.71	2.40	0.10	0.64	2.96	9.15	32.50	71.5	0	262	
HNO3+NO3-	air+aerosol	0.36	1.17	0.21	2.15	0.04	0.06	0.19	0.94	16.65	68.9	0	252	
K+	aerosol	0.10	0.07	0.08	2.04	0.03	0.03	0.08	0.21	0.69	72.3	60	265	
Mg++	aerosol	0.25	0.21	0.19	2.35	0.03	0.03	0.20	0.62	2.28	72.1	18	264	
NH3+NH4+	air+aerosol	0.69	1.25	0.53	1.73	0.14	0.27	0.49	1.39	17.46	68.6	0	251	
NO2	air	1.90	2.34	1.07	2.91	0.05	0.20	1.00	6.91	14.00	97.5	2	357	
Na+	aerosol	2.09	1.74	1.53	2.43	0.03	0.39	1.76	5.01	18.38	71.8	1	263	
SO2	air	0.14	0.16	0.09	2.80	0.01	0.01	0.09	0.45	1.15	72.1	19	264	
SO4--	aerosol	0.26	0.17	0.20	2.26	0.01	0.05	0.24	0.54	1.53	71.5	6	262	
SO4-- corr	aerosol	0.09	0.12	0.06	2.64	-0.07	-0.03	0.06	0.28	0.97	71.5	6	262	

**IE0005R Oak Park**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
Ca++	aerosol	0.08	0.07	0.06	2.03	0.01	0.02	0.06	0.18	0.48	68.3	9	250	
Cl-	aerosol	1.68	1.29	1.27	2.16	0.09	0.36	1.24	4.32	7.37	68.3	0	250	
K+	aerosol	0.07	0.04	0.06	1.67	0.02	0.03	0.06	0.14	0.23	68.3	4	250	
Mg++	aerosol	0.10	0.09	0.07	2.26	0.01	0.02	0.07	0.27	0.57	68.3	6	250	
NH4+	aerosol	0.69	0.80	0.45	2.31	0.09	0.19	0.34	2.38	4.35	68.3	0	250	
NO3-	aerosol	0.35	0.50	0.16	3.29	0.01	0.03	0.14	1.46	3.21	68.3	0	250	
Na+	aerosol	0.90	0.72	0.64	2.44	0.03	0.13	0.69	2.32	4.29	68.3	2	250	
SO4--	aerosol	0.36	0.28	0.29	1.96	0.01	0.12	0.27	0.94	1.86	68.3	2	250	

**IE0006R Malin Head**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
Ca++	aerosol	0.09	0.06	0.07	1.87	0.01	0.03	0.07	0.21	0.38	99.5	2	363	
Cl-	aerosol	3.73	2.55	2.95	2.03	0.46	0.89	3.11	9.11	13.01	99.5	0	363	
K+	aerosol	0.09	0.05	0.08	1.75	0.02	0.03	0.08	0.21	0.33	99.5	0	363	
Mg++	aerosol	0.23	0.18	0.16	2.32	0.02	0.04	0.18	0.63	0.93	99.5	1	363	
NH4+	aerosol	0.48	0.66	0.30	2.26	0.10	0.13	0.23	2.22	5.19	99.5	0	363	
NO3-	aerosol	0.22	0.41	0.07	4.43	0.00	0.01	0.05	1.21	2.39	99.5	4	363	
Na+	aerosol	2.00	1.43	1.55	2.11	0.17	0.42	1.63	5.11	7.32	99.5	0	363	
SO4--	aerosol	0.38	0.23	0.33	1.63	0.11	0.17	0.32	0.87	1.83	99.5	0	363	

**IE0008R Carnsore Point**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
Ca++	aerosol	0.16	0.12	0.12	2.19	0.01	0.03	0.12	0.39	0.76	100.0	2	365	
Cl-	aerosol	6.34	5.23	4.31	2.62	0.06	0.72	4.69	17.21	32.97	100.0	0	365	
K+	aerosol	0.16	0.11	0.13	2.01	0.02	0.04	0.13	0.39	0.73	100.0	1	365	
Mg++	aerosol	0.43	0.36	0.28	2.82	0.01	0.04	0.31	1.13	2.18	100.0	2	365	
NH4+	aerosol	0.58	0.72	0.38	2.24	0.07	0.17	0.28	2.23	4.80	99.7	0	364	
NO3-	aerosol	0.31	0.43	0.15	3.30	0.01	0.02	0.12	1.25	2.40	99.7	0	364	
Na+	aerosol	3.53	2.78	2.43	2.65	0.03	0.41	2.67	8.93	16.82	100.0	1	365	
SO4--	aerosol	0.16	0.12	0.12	2.19	0.01	0.03	0.12	0.39	0.76	100.0	2	365	
SO4-- corr	aerosol	-0.13	0.13	0.03	2.98	-0.65	-0.37	-0.11	0.02	0.42	100.0	2	365	

**IS0002R Irafoss**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
Ca++	aerosol	0.18	0.15	0.12	2.74	0.00	0.02	0.14	0.47	1.08	97.0	14	354	
Cl-	aerosol	1.26	1.61	0.61	3.99	0.01	0.04	0.68	4.73	13.84	97.0	16	354	
K+	aerosol	0.06	0.06	0.04	2.58	0.00	0.01	0.04	0.18	0.35	97.0	96	354	
Mg++	aerosol	0.20	0.22	0.12	2.97	0.01	0.01	0.12	0.57	1.72	97.0	7	354	
Na+	aerosol	0.49	0.95	0.16	4.33	0.01	0.02	0.13	2.81	8.11	97.0	74	354	
SO2	air	0.29	1.28	0.06	3.79	0.00	0.01	0.05	0.50	12.20	98.9	87	361	
SO4--	aerosol	0.24	0.55	0.05	6.85	0.00	0.00	0.06	1.15	4.88	97.0	43	354	
SO4-- corr	aerosol	0.17	0.52	0.07	5.67	-0.44	-0.19	0.04	1.07	4.56	97.0	43	354	

**IS0091R Storhofdi**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
Cl-	aerosol	7.17	3.27	6.72	1.54	3.50	3.52	6.80	15.50	15.90	87.0	0	23	
NO3-	aerosol	0.02	0.02	0.01	3.49	0.00	0.00	0.01	0.07	0.08	87.0	0	23	
SO4--	aerosol	0.38	0.15	0.36	1.45	0.18	0.19	0.38	0.78	0.81	87.0	0	23	

**IT0001R Montelibretti**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
HNO3	air	0.22	0.15	0.17	2.14	0.03	0.04	0.20	0.54	0.63	14.2	0	52	
NH3	air	1.70	0.51	1.61	1.43	0.41	0.70	1.62	2.61	2.74	14.2	0	52	
NH4+	aerosol	0.84	0.41	0.73	1.74	0.14	0.22	0.80	1.47	2.31	14.2	0	52	
NO2	air	5.25	2.52	4.71	1.60	0.81	2.37	4.50	9.94	16.37	96.2	0	351	
NO3-	aerosol	0.37	0.23	0.29	2.20	0.02	0.06	0.30	0.75	0.82	14.2	0	52	
NO3-	pm10_pm25	0.16	0.13	0.12	2.44	0.00	0.01	0.13	0.42	0.61	14.2	0	52	
NO3-	pm25	0.21	0.19	0.14	2.71	0.02	0.02	0.14	0.60	0.65	14.2	0	52	
PM10 mass	pm10	27.05	12.58	23.94	1.70	3.10	9.65	25.50	50.47	73.10	96.4	0	352	
SO2	air	0.16	0.12	0.12	2.21	0.02	0.03	0.12	0.40	0.57	14.2	0	52	
SO4--	aerosol	0.55	0.37	0.45	1.91	0.09	0.12	0.46	1.35	1.90	14.2	0	52	
SO4--	pm10_pm25	0.05	0.05	0.04	2.13	0.00	0.01	0.04	0.17	0.23	14.2	0	52	
SO4--	pm25	0.50	0.36	0.40	2.00	0.09	0.10	0.39	1.26	1.87	14.2	0	52	

**IT0004R Ispra**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
CO	air	328.77	225.57	275.50	1.75	110.00	144.00	224.00	812.30	1563.00	90.3	0	7906	
Ca++	pm25	0.03	0.04	0.03	2.18	-0.02	-0.01	0.02	0.09	0.39	91.7	201	335	
Cl-	pm25	0.08	0.12	0.05	3.41	-0.01	-0.01	0.02	0.34	0.83	91.7	160	335	
EC	pm25	1.20	1.15	0.79	2.60	0.00	0.22	0.65	3.67	5.20	81.0	3	296	
K+	pm25	0.25	0.31	0.13	3.54	-0.02	0.01	0.12	0.97	1.74	91.7	95	335	
Mg++	pm25	0.01	0.01	0.01	1.61	0.00	0.00	0.00	0.02	0.14	91.4	150	334	
NH4+	pm25	1.17	1.13	0.76	2.71	0.03	0.12	0.84	3.54	6.26	92.0	3	336	
NO	air	2.12	5.07	0.38	7.46	-0.05	0.00	0.28	12.05	66.86	82.7	0	43468	
NO2	air	5.78	3.92	4.71	1.90	0.46	1.69	4.61	13.95	27.03	78.3	0	6855	
NO2	air	6.10	4.28	4.87	1.97	0.39	1.62	4.79	15.02	33.05	82.7	0	43466	
NO3-	pm25	0.71	1.05	0.22	6.31	0.00	0.00	0.26	3.27	6.26	92.0	114	336	
Na+	pm25	0.12	1.11	0.04	2.56	0.00	0.00	0.04	0.18	20.17	91.1	103	333	
OC	pm25	5.58	5.40	3.63	2.68	-0.13	0.69	3.48	16.85	27.50	81.0	5	296	
PM25 mass	pm25	17.50	14.73	12.13	2.59	0.07	2.34	12.46	47.13	73.76	90.6	19	331	
SO2	air	0.37	0.41	0.26	2.82	-0.24	-0.03	0.26	1.16	5.20	91.0	0	7975	
SO4--	pm25	0.59	0.45	0.45	2.28	0.00	0.10	0.48	1.51	2.23	92.0	5	336	
SO4-- corr	pm25	0.59	0.45	0.44	2.29	0.00	0.10	0.47	1.51	2.23	92.0	5	336	
TC	pm25	6.78	6.47	4.50	2.58	-0.13	1.00	4.19	20.08	32.04	81.0	1	296	

**LT0015R Preila**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.61	0.53	0.44	2.40	0.01	0.11	0.48	1.57	3.61	83.0	0	304	
NH3+NH4+	air+aerosol	0.96	0.95	0.60	2.95	0.01	0.08	0.68	2.63	7.76	83.0	0	304	
NO2	air	0.96	0.71	0.76	2.02	0.05	0.22	0.79	2.31	6.31	96.7	0	354	
SO2	air	0.16	0.16	0.12	2.30	0.01	0.03	0.11	0.46	1.27	83.0	0	304	
SO4--	aerosol	0.54	0.32	0.45	1.99	0.02	0.12	0.48	1.29	1.89	83.0	0	304	

**LV0010R Rucava**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
Ca++	pm25	0.20	0.25	0.08	4.72	0.00	0.01	0.11	0.79	0.96	82.5	8	44	
Cl-	pm25	0.15	0.48	0.03	4.81	0.00	0.00	0.02	0.81	3.08	82.5	19	44	
HNO3	air	0.39	0.37	0.25	2.64	0.01	0.05	0.27	1.22	2.35	98.9	3	362	
HNO3+NO3-	air+aerosol	0.44	0.39	0.31	2.33	0.03	0.07	0.31	1.29	2.42	98.5	0	360	
K+	pm25	0.14	0.12	0.11	2.07	0.02	0.04	0.10	0.46	0.54	82.5	0	44	
Mg++	pm25	0.02	0.01	0.02	2.18	0.00	0.00	0.02	0.06	0.06	82.5	1	44	
NH3	air	0.22	0.28	0.10	3.70	0.00	0.02	0.10	0.82	1.71	99.2	166	363	
NH3+NH4+	air+aerosol	0.83	0.71	0.56	2.61	0.03	0.09	0.66	2.32	4.01	99.2	176	363	
NH4+	aerosol	0.66	0.61	0.44	2.66	0.02	0.09	0.48	1.82	3.92	99.5	17	364	
NH4+	pm25	0.46	0.29	0.38	1.82	0.06	0.18	0.32	1.13	1.29	82.5	0	44	
NO2	air	0.72	0.53	0.57	2.14	0.01	0.21	0.56	1.64	3.83	97.5	6	357	
NO3-	aerosol	0.06	0.07	0.03	3.24	0.00	0.00	0.04	0.16	0.51	99.4	116	363	
NO3-	pm25	0.14	0.17	0.08	2.98	0.01	0.01	0.08	0.60	0.70	80.5	0	43	
Na+	pm25	0.22	0.30	0.15	2.26	0.03	0.04	0.17	0.73	1.94	82.5	0	44	
PM10 mass	pm10	15.53	11.03	12.32	2.00	1.40	4.00	12.00	41.30	53.60	80.5	0	294	
PM25 mass	pm25	10.47	8.01	8.03	2.11	0.40	2.35	7.70	26.93	44.10	74.0	0	270	
SO2	air	0.22	0.23	0.15	2.42	0.01	0.04	0.14	0.63	1.55	99.7	8	365	
SO4--	aerosol	0.31	0.28	0.22	2.36	0.01	0.05	0.23	0.87	2.41	99.7	8	365	
SO4--	pm25	0.47	0.22	0.43	1.51	0.19	0.25	0.42	0.97	1.07	82.5	0	44	
SO4-- corr	pm25	0.46	0.22	0.42	1.54	0.17	0.23	0.40	0.97	1.07	82.5	0	44	

**ME0008R Zabljak**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
NO2	air	2.82	1.46	2.47	1.73	0.76	0.76	2.75	5.50	12.22	99.7	0	364	
SO2	air	3.12	1.38	2.81	1.61	1.25	1.25	3.50	4.50	15.02	97.5	0	356	

**MK0007R Lazaropole**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	-	-	-	-	-	-	-	-	-	0.0	0	0
PM10 mass	pm10	13.08	13.00	8.92	2.85	0.01	1.94	10.06	31.98	212.40	34.4	0	3010
SO2	air	1.21	1.00	0.94	2.14	0.03	0.24	1.06	2.79	20.93	78.5	0	6876

**MT0001R Giordan Lighthouse**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	0.13	0.12	0.10	2.00	0.00	0.05	0.09	0.30	2.32	95.4	0	8360
NO2	air	0.77	0.74	0.55	2.43	0.00	0.10	0.59	2.13	12.43	95.2	0	8342

**NL0007R Eibergen**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	0.87	2.31	0.34	3.60	-0.72	-0.01	0.28	3.67	30.89	98.3	0	8612
NO2	air	3.88	2.63	3.10	2.01	0.01	0.93	3.18	9.37	17.48	98.2	0	8605
PM10 mass	pm10	17.61	14.14	14.27	2.27	-19.89	0.59	14.67	42.83	120.91	99.2	0	8687
PM10 mass	pm10	17.66	10.16	15.63	1.61	1.55	7.84	15.04	39.51	73.76	98.9	0	361
SO2	air	0.44	0.92	0.54	2.92	-1.50	-0.77	0.33	1.84	10.39	96.4	0	8441

**NL0008R Bilthoven**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm10	0.20	0.14	0.17	1.80	0.04	0.06	0.17	0.42	1.33	46.0	2	168
Mg++	pm10	0.14	0.10	0.10	2.26	0.01	0.02	0.11	0.35	0.49	46.0	5	168
Na+	pm10	0.96	0.81	0.63	2.80	0.04	0.09	0.77	2.72	4.02	46.0	0	168

**NL0009R Kollumerwaard**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	0.45	1.38	0.22	3.73	-0.72	-0.12	0.14	1.84	25.51	99.1	0	8677
NO2	air	2.59	2.32	1.84	2.37	-1.07	0.44	1.87	7.53	16.69	99.0	0	8675
PM10 mass	pm10	15.33	12.69	12.35	2.27	-18.61	0.59	13.39	38.99	150.35	98.6	0	8633
PM10 mass	pm10	15.35	8.98	13.58	1.60	3.26	6.46	13.02	35.70	70.12	98.9	0	361
PM25 mass	pm25	10.82	13.04	6.37	3.19	-4.37	-0.15	5.58	40.34	104.60	35.8	0	3139
PM25 mass	pm25	10.83	11.46	6.84	2.72	-0.58	1.12	6.09	37.42	57.76	35.9	0	131
SO2	air	0.21	0.54	0.33	2.85	-1.45	-0.61	0.17	1.12	3.97	98.9	0	8667

**NL0010R Vredenpeel**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	1.49	3.36	0.53	3.91	-0.29	0.04	0.44	6.99	43.82	97.6	0	8551
NO2	air	4.94	3.41	3.90	2.04	-0.11	1.20	3.92	11.90	25.82	97.6	0	8550
PM10 mass	pm10	19.46	11.23	17.06	1.65	5.12	7.82	16.14	40.32	76.64	93.7	0	342
PM10 mass	pm10	19.50	14.83	15.63	2.17	-18.61	1.87	17.23	46.67	174.67	94.8	0	8307
PM25 mass	pm25	12.26	11.94	8.31	2.70	-4.53	0.92	8.07	37.77	81.85	46.3	0	4054
PM25 mass	pm25	12.28	10.21	9.16	2.15	1.49	2.78	8.37	38.74	50.94	46.3	0	169

**NL0091R De Zilk**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Cl-	pm10	1.76	1.89	0.90	3.61	0.07	0.09	1.07	5.79	8.49	49.9	11	182
NH3	air	1.74	2.08	1.04	2.79	-0.11	0.21	0.98	6.37	17.94	90.2	0	7898
NH4+	pm10	0.82	1.15	0.35	3.92	0.02	0.04	0.33	3.79	6.97	49.9	2	182
NO	air	1.38	4.02	0.35	5.17	-0.33	-0.06	0.21	7.39	58.01	98.6	0	8633
NO2	air	4.55	4.04	2.99	2.69	-1.09	0.53	3.27	13.09	29.00	98.0	0	8583
NO3-	pm10	0.80	0.80	0.57	2.19	0.07	0.19	0.53	2.59	4.45	49.9	0	182
PM10 mass	pm10	16.72	8.62	15.05	1.57	4.64	7.28	14.51	31.82	70.67	100.0	0	365
PM10 mass	pm10	16.75	13.84	13.77	2.32	-25.01	-0.69	14.67	38.99	344.91	99.3	0	8701
PM25 mass	pm25	9.51	8.64	6.83	2.35	-0.32	1.65	7.08	27.60	63.94	96.7	0	353
PM25 mass	pm25	9.51	10.63	6.61	2.85	-4.95	-0.59	6.67	29.07	219.35	96.3	0	8437
SO2	air	0.57	0.89	0.48	2.66	-0.96	-0.26	0.43	1.87	47.60	99.7	0	8738
SO4--	pm10	0.58	0.35	0.51	1.65	0.15	0.23	0.49	1.26	2.74	49.9	0	182

**NL0644R Cabauw Wielsekade**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
CO	air	176.13	69.03	165.08	1.43	0.74	98.57	159.95	308.58	658.82	99.0	0	8672	
Ca++	pm25	0.06	0.03	0.06	1.53	0.02	0.03	0.06	0.12	0.17	24.1	23	88	
EC	pm25	0.29	0.14	0.25	1.62	0.09	0.12	0.24	0.59	0.73	25.2	0	92	
Mg++	pm25	0.04	0.04	0.03	2.18	0.00	0.01	0.03	0.13	0.19	24.1	28	88	
NO	air	1.57	3.80	0.54	4.31	-0.78	-0.19	0.38	8.41	47.68	95.9	0	8399	
NO2	air	5.16	3.64	4.01	2.10	-1.26	1.14	4.11	12.76	23.55	95.5	0	8367	
Na+	pm25	0.28	0.28	0.19	2.40	0.03	0.04	0.19	1.03	1.54	24.1	2	88	
OC	pm25	2.28	1.17	2.04	1.58	1.03	1.11	1.86	4.96	5.53	25.2	0	92	
PM10 mass	pm10	16.92	13.55	13.87	2.25	-19.89	-0.69	14.67	41.55	137.55	99.6	0	8726	
PM10 mass	pm10	16.93	9.65	14.98	1.61	4.32	7.37	14.19	36.27	70.56	100.0	0	365	
PM25 mass	pm25	11.24	11.79	7.71	2.98	-5.00	-0.84	7.73	35.07	98.23	64.9	0	5685	
PM25 mass	pm25	11.31	10.00	8.08	2.37	-0.55	1.91	7.85	33.72	59.62	65.5	0	239	
SO2	air	0.41	0.78	0.40	3.07	-1.27	-0.48	0.27	1.73	11.87	99.1	0	8685	
TC	pm25	2.57	1.26	2.32	1.55	1.22	1.28	2.12	5.55	6.15	25.2	0	92	

**NO0002R Birkenes II**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
Ca++	aerosol	0.07	0.08	0.04	2.43	0.01	0.01	0.05	0.18	0.78	99.2	12	363	
Cl-	aerosol	0.81	1.10	0.27	6.04	0.01	0.01	0.39	3.07	6.67	99.2	37	363	
EC	pm10	0.09	0.07	0.07	1.92	0.02	0.03	0.07	0.24	0.35	98.1	0	52	
EC	pm25	0.08	0.07	0.06	1.90	0.02	0.02	0.05	0.25	0.34	87.9	0	47	
HNO3	air	0.05	0.07	0.03	2.93	0.01	0.01	0.03	0.17	0.62	93.7	159	343	
HNO3+NO3-	air+aerosol	0.32	0.41	0.19	2.78	0.01	0.04	0.18	0.97	4.11	93.7	0	343	
K+	aerosol	0.06	0.06	0.05	2.20	0.01	0.01	0.05	0.15	0.47	99.2	12	363	
Mg++	aerosol	0.08	0.08	0.04	3.12	0.01	0.01	0.05	0.25	0.52	99.2	34	363	
NH3	air	0.17	0.14	0.13	2.08	0.02	0.05	0.14	0.40	1.32	95.6	12	350	
NH3+NH4+	air+aerosol	0.44	0.52	0.29	2.51	0.03	0.06	0.28	1.27	4.48	95.6	0	350	
NH4+	aerosol	0.27	0.48	0.10	4.35	0.01	0.01	0.12	0.89	4.41	95.6	24	350	
NO2	air	0.30	0.38	0.20	2.54	0.01	0.04	0.21	0.74	3.74	99.7	17	365	
NO3-	aerosol	0.27	0.37	0.15	2.92	0.01	0.03	0.15	0.88	4.02	95.6	2	350	
Na+	aerosol	0.61	0.68	0.31	3.87	0.01	0.02	0.41	2.01	4.35	99.2	2	363	
OC	pm10	0.72	0.49	0.59	1.89	0.18	0.25	0.61	1.89	2.38	98.1	0	52	
OC	pm25	0.52	0.35	0.44	1.81	0.13	0.20	0.39	1.38	1.69	87.9	0	47	
PM10 mass	pm10	5.39	2.94	4.76	1.69	1.31	1.87	4.99	11.73	16.64	96.2	0	51	
PM10-PM25	pm10_pm25	2.56	1.49	2.15	1.87	0.49	0.67	2.25	5.45	7.77	86.8	0	46	
PM25 mass	pm25	2.70	1.84	2.32	1.76	0.63	0.89	2.36	7.59	9.56	90.4	0	48	
SO2	air	0.07	0.23	0.03	3.23	0.01	0.01	0.02	0.21	3.79	99.2	180	363	
SO4--	aerosol	0.29	0.43	0.17	3.00	0.01	0.02	0.19	0.80	4.77	99.2	9	363	
SO4-- corr	aerosol	0.24	0.43	0.12	3.23	-0.02	0.01	0.12	0.75	4.74	99.2	9	363	
TC	pm10	0.81	0.55	0.67	1.87	0.20	0.28	0.67	2.23	2.54	98.1	0	52	
TC	pm25	0.60	0.42	0.50	1.81	0.16	0.23	0.46	1.66	2.00	87.9	0	47	

**NO0015R Tustervatn**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
Ca++	aerosol	0.03	0.05	0.02	2.37	0.01	0.01	0.02	0.09	0.65	97.8	46	358	
Cl-	aerosol	0.37	0.69	0.09	6.47	0.01	0.01	0.09	1.68	5.72	97.8	112	358	
HNO3	air	0.02	0.03	0.01	1.97	0.01	0.01	0.06	0.45	94.0	265	344		
HNO3+NO3-	air+aerosol	0.14	0.22	0.07	2.76	0.01	0.02	0.07	0.66	1.66	94.0	0	344	
K+	aerosol	0.04	0.19	0.02	2.49	0.01	0.01	0.02	0.07	3.11	97.8	56	358	
Mg++	aerosol	0.03	0.05	0.02	3.00	0.01	0.01	0.02	0.12	0.37	97.8	112	358	
NH3	air	0.50	0.55	0.32	2.65	0.01	0.07	0.31	1.78	3.51	94.0	8	344	
NH3+NH4+	air+aerosol	0.61	0.61	0.41	2.45	0.02	0.09	0.41	1.91	3.76	94.0	0	344	
NH4+	aerosol	0.11	0.20	0.04	4.51	0.01	0.01	0.04	0.54	1.54	94.0	69	344	
NO2	air	0.08	0.05	0.06	2.30	0.01	0.01	0.07	0.17	0.31	100.0	78	366	
NO3-	aerosol	0.12	0.21	0.05	3.51	0.01	0.01	0.05	0.59	1.64	94.0	31	344	
Na+	aerosol	0.25	0.40	0.10	4.49	0.01	0.01	0.11	0.97	3.15	97.8	30	358	
SO2	air	0.02	0.07	0.01	2.15	0.01	0.01	0.01	0.07	1.18	97.8	283	358	
SO4--	aerosol	0.08	0.09	0.05	3.40	0.01	0.01	0.06	0.27	0.45	97.8	48	358	
SO4-- corr	aerosol	0.06	0.08	0.04	3.30	-0.02	0.00	0.03	0.25	0.44	97.8	48	358	

**NO0039R Kårvatn**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
Ca++	aerosol	0.03	0.04	0.02	2.29	0.01	0.01	0.02	0.08	0.42	99.5	39	364	
Cl-	aerosol	0.21	0.46	0.06	5.02	0.01	0.01	0.05	0.91	4.92	99.7	131	365	
EC	pm10	0.04	0.03	0.04	1.92	0.01	0.01	0.04	0.11	0.14	98.1	0	52	
EC	pm25	0.05	0.03	0.04	1.85	0.01	0.01	0.04	0.11	0.14	100.0	0	53	
HNO3	air	0.02	0.02	0.01	1.97	0.01	0.01	0.01	0.07	0.16	95.6	278	350	
HNO3+NO3-	air+aerosol	0.14	0.25	0.07	2.72	0.01	0.02	0.06	0.61	1.84	95.6	0	350	
K+	aerosol	0.03	0.04	0.02	2.13	0.01	0.01	0.03	0.08	0.56	99.5	30	364	
Mg++	aerosol	0.02	0.03	0.01	2.55	0.01	0.01	0.01	0.07	0.34	99.5	121	364	
NH3	air	0.38	0.41	0.25	2.59	0.02	0.03	0.26	1.18	2.65	95.3	18	349	
NH3+NH4+	air+aerosol	0.51	0.50	0.34	2.47	0.02	0.08	0.34	1.56	3.65	95.3	0	349	
NH4+	aerosol	0.13	0.24	0.04	4.70	0.01	0.01	0.04	0.62	1.72	95.3	74	349	
NO2	air	0.11	0.13	0.08	2.38	0.01	0.01	0.09	0.26	1.91	100.0	55	366	
NO3-	aerosol	0.12	0.25	0.05	3.31	0.00	0.01	0.04	0.59	1.77	95.6	15	350	
Na+	aerosol	0.16	0.27	0.06	4.06	0.01	0.01	0.07	0.59	2.95	99.5	33	364	
OC	pm10	0.64	0.44	0.51	1.94	0.15	0.19	0.50	1.72	2.18	98.1	0	52	
OC	pm25	0.47	0.30	0.40	1.74	0.15	0.16	0.39	1.35	1.49	100.0	0	53	
PM10 mass	pm10	2.31	1.42	1.93	1.84	0.48	0.51	1.92	6.18	6.34	96.2	0	51	
PM10-PM25	pm10_pm25	0.90	0.72	0.71	2.03	0.08	0.21	0.78	1.90	4.81	93.1	0	49	
PM25 mass	pm25	1.51	1.04	1.17	2.17	0.18	0.24	1.30	4.02	4.54	100.0	0	53	
SO2	air	0.03	0.19	0.01	2.14	0.01	0.01	0.01	0.08	3.43	99.7	314	365	
SO4--	aerosol	0.09	0.12	0.04	3.72	0.00	0.01	0.06	0.29	1.06	99.7	60	365	
SO4-- corr	aerosol	0.08	0.12	0.04	3.40	-0.01	0.00	0.04	0.26	1.06	99.7	60	365	
TC	pm10	0.68	0.46	0.56	1.90	0.16	0.20	0.55	1.82	2.26	98.1	0	52	
TC	pm25	0.52	0.32	0.45	1.72	0.16	0.19	0.42	1.43	1.58	100.0	0	53	

**NO0042G Zeppelin mountain (Ny-Ålesund)**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
Ca++	aerosol	0.04	0.05	0.03	2.41	0.01	0.01	0.03	0.09	0.72	95.1	46	348	
Cl-	aerosol	0.39	0.78	0.10	5.95	0.01	0.01	0.12	1.76	7.94	95.6	94	350	
HNO3	air	0.02	0.06	0.02	2.02	0.01	0.01	0.01	0.07	0.76	94.5	294	346	
HNO3+NO3-	air+aerosol	0.12	0.27	0.06	2.73	0.01	0.02	0.05	0.57	2.84	94.2	0	345	
K+	aerosol	0.03	0.03	0.02	2.42	0.01	0.01	0.02	0.09	0.21	95.1	54	348	
Mg++	aerosol	0.04	0.06	0.02	3.08	0.01	0.01	0.02	0.16	0.60	95.1	86	348	
NH3	air	0.12	0.11	0.08	2.46	0.01	0.03	0.09	0.33	0.75	86.7	89	317	
NH3+NH4+	air+aerosol	0.22	0.29	0.13	2.62	0.02	0.03	0.12	0.66	2.94	86.7	0	317	
NH4+	aerosol	0.09	0.24	0.03	4.46	0.01	0.01	0.03	0.38	2.85	94.2	111	345	
NO3-	aerosol	0.09	0.25	0.03	3.62	0.00	0.01	0.03	0.46	2.81	94.8	50	347	
Na+	aerosol	0.26	0.39	0.09	5.22	0.01	0.01	0.12	1.01	3.16	95.1	52	348	
SO2	air	0.06	0.21	0.02	2.79	0.01	0.01	0.01	0.23	2.53	95.3	283	349	
SO4--	aerosol	0.11	0.13	0.05	4.19	0.01	0.01	0.06	0.43	0.83	95.1	63	348	
SO4-- corr	aerosol	0.09	0.12	0.04	4.02	-0.02	0.00	0.04	0.38	0.79	95.1	63	348	

**NO0056R Hurdal**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
Ca++	aerosol	0.05	0.08	0.03	2.61	0.01	0.01	0.03	0.13	0.84	96.2	39	352	
Cl-	aerosol	0.14	0.27	0.05	4.40	0.01	0.01	0.04	0.73	2.03	96.2	128	352	
EC	pm10	0.14	0.07	0.13	1.59	0.05	0.06	0.13	0.28	0.43	100.0	0	53	
EC	pm25	0.13	0.07	0.12	1.62	0.03	0.05	0.12	0.28	0.42	100.0	0	53	
HNO3	air	0.04	0.05	0.02	2.53	0.01	0.01	0.02	0.12	0.50	89.9	158	329	
HNO3+NO3-	air+aerosol	0.27	0.39	0.15	2.92	0.01	0.03	0.13	0.90	3.19	89.9	0	329	
K+	aerosol	0.05	0.05	0.04	2.24	0.01	0.01	0.04	0.13	0.56	96.2	16	352	
Mg++	aerosol	0.02	0.03	0.01	2.61	0.00	0.01	0.02	0.07	0.21	96.2	121	352	
NH3	air	0.17	0.13	0.13	2.27	0.02	0.02	0.14	0.43	0.83	92.4	34	338	
NH3+NH4+	air+aerosol	0.42	0.46	0.27	2.55	0.02	0.04	0.27	1.29	3.73	92.4	0	338	
NH4+	aerosol	0.24	0.42	0.09	4.47	0.01	0.01	0.10	0.95	3.58	92.4	25	338	
NO2	air	0.64	0.96	0.37	2.81	0.01	0.09	0.38	2.31	7.60	99.7	5	365	
NO3-	aerosol	0.24	0.38	0.11	3.42	0.01	0.02	0.10	0.95	3.09	92.4	4	338	
Na+	aerosol	0.16	0.23	0.07	3.89	0.01	0.01	0.08	0.58	1.76	96.0	26	351	
OC	pm10	0.99	0.48	0.89	1.67	0.30	0.33	0.96	1.89	2.50	100.0	0	53	
OC	pm25	0.73	0.35	0.67	1.55	0.25	0.33	0.66	1.56	1.92	100.0	0	53	
PM10 mass	pm10	4.15	1.83	3.81	1.56	1.01	1.58	3.89	8.74	9.51	100.0	0	53	
PM10-PM25	pm10_pm25	1.50	0.77	1.28	1.86	0.17	0.29	1.38	3.09	3.66	95.0	0	50	
PM25 mass	pm25	2.75	1.37	2.48	1.65	0.71	1.09	2.48	5.96	6.27	98.1	0	52	
SO2	air	0.05	0.23	0.02	2.71	0.01	0.01	0.01	0.17	3.82	93.8	260	343	
SO4--	aerosol	0.14	0.18	0.07	3.70	0.01	0.01	0.10	0.47	2.04	96.2	35	352	
SO4-- corr	aerosol	0.13	0.18	0.07	3.48	-0.09	0.00	0.08	0.46	2.03	96.2	35	352	
TC	pm10	1.14	0.51	1.03	1.60	0.37	0.41	1.07	2.21	2.70	100.0	0	53	
TC	pm25	0.86	0.40	0.79	1.53	0.32	0.38	0.78	1.85	2.13	100.0	0	53	

**PL0002R Jarczew**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
Cl-	aerosol	0.76	0.45	0.64	1.81	0.13	0.21	0.66	1.70	2.78	98.6	0	361	
HNO3+NO3-	air+aerosol	0.70	0.59	0.53	2.07	0.11	0.19	0.48	2.04	3.15	98.9	0	362	
NH3+NH4+	air+aerosol	2.88	2.08	2.38	1.82	0.42	0.96	2.25	6.65	16.36	99.2	0	363	
NH4+	aerosol	1.04	0.87	0.78	2.19	0.08	0.19	0.77	3.37	4.25	98.6	0	361	
NO2	air	2.17	1.04	1.96	1.57	0.70	1.00	1.90	4.10	6.60	97.8	0	358	
NO3-	aerosol	0.52	0.49	0.38	2.24	0.04	0.11	0.35	1.79	2.43	98.6	0	361	
SO2	air	1.19	0.88	0.89	2.24	0.10	0.20	1.00	3.00	5.20	98.6	4	361	
SO4--	aerosol	1.15	0.66	0.97	1.88	0.10	0.31	1.03	2.38	4.24	98.6	5	361	
SO4-- corr	aerosol	1.14	0.66	0.96	1.89	0.10	0.31	1.02	2.38	4.24	98.6	5	361	

**PL0003R Sniezka**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Cl-	aerosol	0.47	0.26	0.39	1.98	0.05	0.09	0.41	0.89	1.47	100.0	18	366
HNO3+NO3-	air+aerosol	0.53	0.24	0.47	1.63	0.09	0.19	0.50	1.00	1.43	100.0	0	366
NH3+NH4+	air+aerosol	0.77	0.38	0.67	1.77	0.08	0.20	0.71	1.40	2.23	100.0	0	366
NH4+	aerosol	0.55	0.28	0.47	1.92	0.03	0.12	0.54	1.03	1.65	100.0	3	366
NO2	air	1.09	0.45	1.00	1.52	0.30	0.50	1.00	1.90	2.60	100.0	0	366
NO3-	aerosol	0.40	0.18	0.36	1.64	0.05	0.15	0.39	0.74	1.00	100.0	0	366
SO2	air	1.10	0.46	1.00	1.53	0.40	0.50	1.00	2.00	2.60	100.0	0	366
SO4--	aerosol	0.84	0.41	0.71	1.86	0.10	0.21	0.81	1.57	2.25	100.0	11	366
SO4-- corr	aerosol	0.83	0.41	0.71	1.87	0.10	0.20	0.81	1.57	2.25	100.0	11	366

**PL0004R Leba**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Cl-	aerosol	1.03	0.64	0.86	1.88	0.05	0.30	0.90	2.42	4.23	98.9	1	362
HNO3+NO3-	air+aerosol	0.53	0.53	0.37	2.32	0.01	0.09	0.35	1.73	3.35	99.5	1	364
NH3+NH4+	air+aerosol	1.43	0.95	1.19	1.82	0.25	0.45	1.17	3.37	6.41	99.5	0	364
NH4+	aerosol	0.76	0.72	0.55	2.24	0.03	0.16	0.52	2.41	4.29	98.9	2	362
NO2	air	1.41	0.94	1.17	1.86	0.20	0.40	1.20	3.40	7.50	99.7	0	365
NO3-	aerosol	0.45	0.51	0.28	2.72	0.01	0.05	0.28	1.62	3.32	98.9	3	362
SO2	air	0.66	0.45	0.52	2.04	0.10	0.20	0.50	1.40	3.20	98.9	13	362
SO4--	aerosol	0.93	0.54	0.78	1.91	0.10	0.22	0.85	1.82	4.72	98.9	9	362
SO4-- corr	aerosol	0.92	0.54	0.77	1.91	-0.04	0.22	0.85	1.80	4.72	98.9	9	362

**PL0005R Diabla Gora**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm25	0.08	0.04	0.07	1.54	0.03	0.04	0.07	0.16	0.30	80.8	0	50
Cl-	pm25	0.06	0.07	0.02	4.32	0.00	0.00	0.02	0.24	0.30	80.8	0	50
EC	pm25	0.48	0.37	0.37	2.13	0.06	0.10	0.39	1.24	2.51	94.0	0	343
HNO3	air	2.02	1.31	1.68	1.86	0.15	0.61	1.68	4.37	9.27	96.2	0	352
HNO3+NO3-	air+aerosol	0.67	0.66	0.47	2.32	0.05	0.13	0.41	2.06	5.19	98.6	0	361
K+	pm25	0.11	0.18	0.07	2.26	0.02	0.02	0.07	0.22	1.32	80.8	0	50
Mg++	pm25	0.02	0.01	0.01	1.53	0.01	0.01	0.02	0.03	0.04	80.8	0	50
NH3	air	1.27	0.89	1.03	1.92	0.10	0.38	1.03	3.18	6.31	97.0	0	355
NH3+NH4+	air+aerosol	0.45	0.55	0.26	2.87	0.01	0.05	0.22	1.55	4.90	98.9	0	362
NH4+	aerosol	0.73	0.85	0.37	3.67	0.00	0.03	0.37	2.62	6.37	97.5	0	357
NH4+	pm25	1.02	0.92	0.71	2.31	0.16	0.24	0.58	3.17	3.49	80.8	0	50
NO2	air	1.17	0.79	0.95	1.92	0.12	0.35	0.92	2.87	4.64	90.1	0	329
NO3-	aerosol	0.22	0.20	0.17	2.12	0.01	0.06	0.15	0.65	1.37	98.9	0	362
NO3-	pm25	1.67	1.98	0.79	3.70	0.10	0.13	0.82	6.47	8.10	80.8	0	50
Na+	pm25	0.15	0.09	0.12	2.04	0.03	0.04	0.14	0.32	0.44	80.8	0	50
OC	pm25	3.50	2.90	2.75	1.96	0.61	0.95	2.50	9.30	25.53	94.0	0	343
PM10 mass	pm10	17.32	12.38	14.15	1.86	3.29	5.68	13.41	42.83	95.78	96.4	0	352
PM25 mass	pm25	12.49	10.42	9.49	2.07	1.82	3.31	8.62	34.05	72.42	95.9	0	350
SO2	air	0.27	0.28	0.18	2.35	0.03	0.06	0.16	0.97	1.48	97.0	0	355
SO4--	aerosol	0.53	0.48	0.38	2.34	0.01	0.10	0.35	1.58	2.78	98.4	0	360
SO4--	pm25	1.65	1.01	1.43	1.67	0.63	0.73	1.28	4.24	4.69	80.8	0	50
SO4-- corr	pm25	1.64	1.01	1.42	1.67	0.63	0.73	1.27	4.22	4.68	80.8	0	50

**PL0009R Zielonka**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
PM10 mass	pm10	17.52	11.87	14.37	1.88	2.80	5.41	14.11	43.93	64.36	98.1	0	358

**RS0005R Kamenicki vis**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	0.56	0.34	0.48	1.71	0.30	0.30	0.30	1.19	2.28	84.1	165	307
PM10 mass	pm10	17.87	8.76	15.28	1.87	1.83	4.21	17.57	33.22	45.39	78.6	0	287
SO2	air	6.39	4.45	4.49	2.63	0.75	0.75	6.15	14.62	22.60	96.7	59	353

**RU0018R Danki**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NH4+	aerosol	0.40	0.25	0.32	2.20	0.01	0.10	0.34	0.93	1.43	100.0	0	366
NO3-	aerosol	0.29	0.33	0.19	2.46	0.01	0.05	0.19	0.92	2.37	100.0	0	366
SO2	air	0.22	0.27	0.12	3.13	0.01	0.01	0.12	0.76	2.91	99.9	0	365
SO4--	aerosol	0.47	0.42	0.35	2.20	0.01	0.12	0.35	1.33	3.64	100.0	0	366

**SE0005R Bredkälen**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
Ca++	aerosol	0.02	0.07	0.01	2.54	0.01	0.01	0.01	0.06	0.97	99.5	304	364	
Cl-	aerosol	0.19	0.37	0.04	6.64	0.01	0.01	0.05	0.79	3.51	99.5	137	364	
HNO3+NO3-	air+aerosol	0.03	0.04	0.02	2.50	0.01	0.01	0.02	0.10	0.39	99.7	49	365	
K+	aerosol	0.01	0.02	0.01	2.34	0.01	0.01	0.01	0.05	0.13	99.7	292	365	
Mg++	aerosol	0.02	0.03	0.01	2.64	0.01	0.01	0.01	0.06	0.24	99.5	220	364	
NH3+NH4+	air+aerosol	0.10	0.11	0.07	2.43	0.02	0.02	0.07	0.29	0.85	99.5	0	364	
NO2	air	0.09	0.09	0.07	1.85	0.04	0.05	0.05	0.28	0.69	99.5	275	364	
Na+	aerosol	0.15	0.22	0.06	4.63	0.01	0.01	0.07	0.51	2.03	99.7	79	365	
PM10 mass	pm10	3.46	2.53	2.80	1.90	0.40	0.90	2.80	8.18	18.90	95.9	0	351	
PM25 mass	pm25	2.26	1.65	1.84	1.88	0.30	0.60	1.80	5.50	13.90	93.1	0	340	
SO2	air	0.06	0.09	0.03	3.19	0.01	0.01	0.03	0.18	0.94	99.7	69	365	
SO4--	aerosol	0.08	0.09	0.04	3.34	0.01	0.01	0.04	0.27	0.68	99.7	50	365	
SO4-- corr	aerosol	0.07	0.09	0.04	3.25	0.00	0.00	0.03	0.27	0.67	99.7	50	365	
SPM	aerosol	0.54	0.33	0.48	1.52	0.38	0.38	0.38	0.75	2.80	99.0	342	362	

**SE0011R Vavihill**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
Ca++	aerosol	0.10	0.13	0.05	3.29	0.01	0.01	0.07	0.28	1.05	95.3	56	349	
Cl-	aerosol	0.70	1.05	0.17	7.74	0.01	0.01	0.24	3.43	4.97	95.6	54	350	
EC	pm10	0.23	0.24	0.18	1.99	0.00	0.04	0.17	0.74	1.63	98.6	0	120	
HNO3+NO3-	air+aerosol	0.46	0.48	0.32	2.45	0.01	0.08	0.33	1.56	3.84	95.3	3	348	
K+	aerosol	0.10	0.12	0.07	2.32	0.01	0.01	0.08	0.23	1.48	95.6	19	350	
Mg++	aerosol	0.09	0.08	0.06	3.08	0.01	0.01	0.07	0.27	0.35	95.3	41	349	
NH3+NH4+	air+aerosol	0.76	0.75	0.51	2.52	0.02	0.11	0.54	2.40	5.62	95.6	0	350	
NO2	air	1.07	0.81	0.87	1.86	0.05	0.37	0.77	2.80	5.72	99.2	1	363	
Na+	aerosol	0.71	0.67	0.42	3.25	0.01	0.06	0.48	2.24	3.04	95.6	5	350	
OC	pm10	1.29	1.06	1.02	1.98	0.10	0.36	1.01	3.10	6.90	98.6	0	120	
PM10 mass	pm10	10.91	10.25	7.73	2.60	-3.00	0.80	8.30	30.80	160.40	52.4	0	4588	
PM25 mass	pm25	5.38	6.48	3.57	2.36	0.30	1.02	3.45	21.70	40.70	33.9	0	124	
SO2	air	0.15	0.21	0.10	2.47	0.01	0.02	0.10	0.45	2.51	95.9	6	351	
SO4--	aerosol	0.33	0.31	0.24	2.40	0.01	0.05	0.26	0.96	2.16	95.6	3	350	
SO4-- corr	aerosol	0.27	0.32	0.16	2.92	0.01	0.02	0.17	0.94	2.08	95.6	3	350	
SPM	aerosol	0.88	1.29	0.58	2.11	0.38	0.38	0.38	3.22	15.22	96.7	299	354	
TC	pm10	1.51	1.27	1.19	2.01	0.10	0.42	1.21	3.83	8.54	98.6	0	120	

**SE0012R Aspvreten**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
Ca++	aerosol	0.07	0.13	0.03	4.15	0.01	0.01	0.04	0.26	1.14	97.8	132	358	
Cl-	aerosol	0.34	0.53	0.09	7.25	0.01	0.01	0.12	1.35	3.70	98.9	89	362	
HNO3+NO3-	air+aerosol	0.22	0.20	0.16	2.34	0.01	0.04	0.17	0.62	1.57	98.9	1	362	
K+	aerosol	0.05	0.13	0.02	3.59	0.01	0.01	0.04	0.14	1.92	97.0	144	355	
Mg++	aerosol	0.06	0.05	0.03	3.24	0.01	0.01	0.04	0.15	0.28	98.6	80	361	
NH3+NH4+	air+aerosol	0.30	0.32	0.21	2.36	0.03	0.05	0.22	0.84	2.71	98.6	0	361	
NO2	air	0.37	0.31	0.26	2.55	0.05	0.05	0.30	0.99	2.58	95.1	68	348	
Na+	aerosol	0.42	0.40	0.25	3.18	0.01	0.04	0.28	1.16	2.37	98.9	13	362	
PM10 mass	pm10	7.95	5.62	6.51	2.00	-3.30	1.70	6.70	18.50	52.10	75.7	0	6628	
PM25 mass	pm25	5.69	4.52	4.42	2.06	0.40	1.29	4.70	13.45	34.30	86.6	0	317	
SO2	air	0.13	0.13	0.09	2.50	0.01	0.02	0.09	0.34	1.13	98.9	6	362	
SO4--	aerosol	0.23	0.21	0.16	2.56	0.01	0.03	0.18	0.56	1.72	98.9	3	362	
SO4-- corr	aerosol	0.19	0.21	0.12	2.89	0.01	0.02	0.14	0.53	1.71	98.9	3	362	

**SE0014R Råö**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
Ca++	aerosol	0.14	0.13	0.09	3.19	0.01	0.01	0.11	0.36	0.91	98.9	37	362	
Cl-	aerosol	3.42	3.83	1.04	8.90	0.01	0.01	2.26	10.48	27.46	98.9	28	362	
HNO3+NO3-	air+aerosol	0.44	0.43	0.31	2.34	0.03	0.07	0.31	1.38	2.84	98.9	0	362	
K+	aerosol	0.12	0.09	0.08	2.80	0.01	0.01	0.10	0.30	0.55	98.9	30	362	
Mg++	aerosol	0.28	0.25	0.15	3.72	0.01	0.01	0.21	0.73	1.76	98.9	20	362	
NH3+NH4+	air+aerosol	0.55	0.55	0.39	2.26	0.03	0.10	0.38	1.58	4.14	98.4	0	360	
NO2	air	0.94	0.63	0.76	1.98	0.05	0.28	0.77	2.16	3.73	99.2	5	363	
Na+	aerosol	2.29	2.19	1.11	4.81	0.01	0.05	1.77	6.17	15.37	98.9	11	362	
PM10 mass	pm10	15.15	8.06	13.06	1.76	2.40	4.53	13.70	31.30	51.00	98.9	0	362	
PM25 mass	pm25	5.02	2.96	4.31	1.74	0.90	1.80	4.25	10.88	19.70	91.2	0	334	
SO2	air	0.19	0.21	0.14	2.04	0.02	0.04	0.14	0.48	1.98	99.2	0	363	
SO4--	aerosol	0.39	0.30	0.29	2.41	0.01	0.05	0.34	0.84	2.26	98.9	3	362	
SO4-- corr	aerosol	0.20	0.27	0.12	3.14	-0.02	0.01	0.13	0.66	2.17	98.9	3	362	

**SI0008R Iskrba**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
Ca++	aerosol	0.15	0.16	0.09	2.65	0.00	0.02	0.09	0.40	1.55	90.7	26	332	
Ca++	pm25	0.03	0.03	0.02	1.94	0.01	0.01	0.01	0.08	0.27	49.7	150	182	
Cl-	aerosol	0.07	0.08	0.05	1.94	0.00	0.02	0.05	0.23	0.73	90.7	23	332	
Cl-	pm25	0.05	0.06	0.04	2.37	0.01	0.01	0.05	0.08	0.84	49.7	38	182	
EC	pm25	0.29	0.22	0.21	2.64	0.01	0.01	0.22	0.74	1.11	49.7	11	182	
HNO3	air	0.08	0.06	0.06	2.23	0.01	0.02	0.07	0.18	0.45	90.7	0	332	
HNO3+NO3-	air+aerosol	0.22	0.17	0.17	2.23	0.02	0.04	0.18	0.62	0.91	90.7	0	332	
K+	aerosol	0.14	0.08	0.12	1.83	0.00	0.04	0.12	0.30	0.56	90.7	2	332	
K+	pm25	0.13	0.08	0.11	1.96	0.00	0.04	0.11	0.29	0.41	49.7	1	182	
Mg++	aerosol	0.04	0.04	0.03	2.14	0.00	0.00	0.03	0.11	0.27	90.7	28	332	
Mg++	pm25	0.01	0.01	0.00	4.61	0.00	0.00	0.03	0.05	0.05	49.7	102	182	
NH3	air	0.22	0.19	0.15	2.60	0.00	0.03	0.16	0.61	1.08	90.7	1	332	
NH3+NH4+	air+aerosol	0.74	0.53	0.58	2.14	0.05	0.14	0.63	1.67	3.23	90.7	1	332	
NH4+	aerosol	0.53	0.45	0.37	2.53	0.00	0.05	0.41	1.31	3.03	90.7	1	332	
NH4+	pm25	0.64	0.51	0.48	2.22	0.04	0.11	0.48	1.58	3.34	49.7	0	182	
NO2	air	0.49	0.48	0.32	2.68	-0.10	0.06	0.44	1.31	6.44	91.8	7216	8039	
NO3-	aerosol	0.15	0.14	0.09	2.75	0.01	0.02	0.10	0.46	0.86	90.7	0	332	
NO3-	pm25	0.08	0.12	0.03	4.62	0.00	0.00	0.03	0.30	0.72	49.7	50	182	
Na+	aerosol	0.10	0.13	0.06	2.90	0.00	0.00	0.05	0.36	0.76	90.7	70	332	
Na+	pm25	0.04	0.04	0.03	2.83	0.00	0.00	0.03	0.12	0.26	49.7	19	182	
OC	pm25	3.23	1.30	3.01	1.47	1.22	1.71	2.93	6.05	7.64	49.7	0	182	
PM10 mass	pm10	12.51	6.40	10.96	1.71	1.50	4.09	11.30	24.45	37.70	97.7	0	357	
PM25 mass	pm25	10.02	5.45	8.70	1.73	1.50	3.13	8.80	19.64	37.60	99.9	0	365	
SO2	air	0.23	0.47	0.11	3.43	0.00	0.00	0.07	1.18	4.98	90.7	41	332	
SO4--	aerosol	0.63	0.53	0.45	2.40	0.04	0.10	0.49	1.57	3.52	90.7	0	332	
SO4--	pm25	0.69	0.55	0.52	2.20	0.04	0.13	0.52	1.81	3.90	49.7	0	182	
SO4-- corr	aerosol	0.62	0.53	0.44	2.41	0.04	0.09	0.48	1.56	3.52	90.7	0	332	
SO4-- corr	pm25	0.68	0.55	0.51	2.21	0.04	0.13	0.51	1.81	3.90	49.6	0	181	

**SI0032R Krvavec**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
CO	air	143.14	28.73	140.59	1.20	86.21	107.76	137.93	202.59	318.97	93.6	0	8195	

**SK0002R Chopok**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
Cl-	aerosol	0.12	0.08	0.09	2.39	0.00	0.02	0.11	0.25	0.69	68.8	0	251	
HNO3	air	0.05	0.05	0.04	2.43	0.00	0.01	0.04	0.15	0.29	70.4	0	257	
NO2	air	0.92	0.59	0.73	2.21	0.01	0.21	0.86	2.00	4.00	88.4	0	323	
NO3-	aerosol	0.21	0.23	0.12	3.29	0.01	0.02	0.15	0.55	1.73	70.1	0	256	
SO2	air	0.46	0.45	0.32	2.48	0.01	0.08	0.30	1.60	2.62	70.5	0	258	
SO4--	aerosol	0.33	0.39	0.18	3.52	0.01	0.02	0.23	1.00	3.97	70.1	0	256	

**SK0006R Starina**  
**January 2015 - December 2015**

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	%	Num anal	Num bel	Num sampl
Ca++	aerosol	0.04	0.04	0.03	2.26	0.00	0.01	0.03	0.09	0.37	67.5	0	247	
Cl-	aerosol	0.18	0.20	0.15	1.97	0.01	0.05	0.16	0.32	3.00	77.1	0	282	
HNO3	air	0.06	0.05	0.05	1.96	0.01	0.01	0.05	0.15	0.57	76.0	0	278	
K+	aerosol	0.09	0.09	0.06	2.50	0.00	0.01	0.07	0.23	0.55	68.0	0	249	
Mg++	aerosol	0.01	0.01	0.01	2.14	0.00	0.00	0.01	0.02	0.04	67.8	0	248	
NH3	air	0.63	0.48	0.44	2.81	0.00	0.05	0.54	1.55	3.30	68.0	0	249	
NH4+	aerosol	0.65	0.46	0.54	1.82	0.10	0.21	0.55	1.46	3.36	68.0	0	249	
NO2	air	1.16	0.56	1.05	1.56	0.24	0.52	1.04	2.27	4.60	77.6	0	284	
NO3-	aerosol	0.31	0.30	0.23	2.12	0.01	0.07	0.23	0.67	2.82	75.7	0	277	
Na+	aerosol	0.07	0.05	0.05	2.69	0.00	0.01	0.06	0.16	0.42	67.5	0	247	
SO2	air	0.75	1.11	0.43	2.72	0.03	0.09	0.43	2.44	11.60	76.3	0	279	
SO4--	aerosol	0.70	0.50	0.52	2.40	0.00	0.10	0.58	1.63	3.21	75.7	0	277	
SO4-- corr	aerosol	0.69	0.50	0.52	2.39	-0.00	0.09	0.57	1.63	3.21	75.6	0	276	

## **Annex 4**

### **Overview of sampling and analytical methods 2015**



<b>Country: Armenia</b>		<b>Main components- EMEP</b>	<b>Year: 2015</b>	
	<b>Station</b>	<b>Sampling</b>	<b>Sampling frequency</b>	<b>Analysis method</b>
<b>Precipitation</b>				
Precipitation amount	AM0001R			
Precipitation amount, official gauge	AM0001R	Meteorological station	every event	By volume
Sulphate	AM0001R	Wet-only	every event	Ion chromatography
Nitrate	AM0001R	Wet-only	every event	Ion chromatography
Ammonium	AM0001R	Wet-only	every event	Spectrophotometric, by Nessler reagent
Magnesium	AM0001R	Wet-only	every event	ICP-MS
Sodium	AM0001R	Wet-only	every event	ICP-MS
Chloride	AM0001R	Wet-only	every event	Ion chromatography
Calcium	AM0001R	Wet-only	every event	ICP-MS
Potassium	AM0001R	Wet-only	every event	ICP-MS
Conductivity	AM0001R	Wet-only	every event	Conductivity meter
pH	AM0001R	Wet-only	every event	pH meter
Acidity				
<b>Air</b>				
Sulphur dioxide	AM0001R	KOH-impregnated Whatman 40 filter 20–25 m <sup>3</sup> /day (Filterpack)	Daily	Ion chromatography
Nitrogen dioxide	AM0001R	Nal-impregnated glass sinters, 0.6 m <sup>3</sup> /day	Daily	Spectrophotometric, Griess method
Nitric acid	AM0001R	KOH-impregnated Whatman 40 filter 20–25 m <sup>3</sup> /day (Filterpack)	Daily	Ion chromatography
Ammonia	AM0001R	Oxalic acid-impregnated Whatman 40 filter, 20–25 m <sup>3</sup> /day (Filterpack)	Daily	Spectrophotometric, Nessler method
Ozone	AM0001R			
Sulphate	AM0001R	Teflon filter, Pall Zefluor 2 µm, 47 mm diameter, 20–25 m <sup>3</sup> /day (Filterpack)	Daily	Ion chromatography
Nitrate	AM0001R	Teflon filter, Pall Zefluor 2 µm, 47 mm diameter, 20–25 m <sup>3</sup> /day (Filterpack)	Daily	Ion chromatography
Ammonium	AM0001R	Teflon filter, Pall Zefluor 2 µm, 47 mm diameter, 20–25 m <sup>3</sup> /day (Filterpack)	Daily	Spectrophotometric, Nessler method
Sodium	AM0001R	Teflon filter, Pall Zefluor 2 µm, 47 mm diameter, 20–25 m <sup>3</sup> /day (Filterpack)	Daily	ICP-MS
Calcium	AM0001R	Teflon filter, Pall Zefluor 2 µm, 47 mm diameter, 20–25 m <sup>3</sup> /day (Filterpack)	Daily	ICP-MS
Magnesium	AM0001R	Teflon filter, Pall Zefluor 2 µm, 47 mm diameter, 20–25 m <sup>3</sup> /day (Filterpack)	Daily	ICP-MS
Potassium	AM0001R	Teflon filter, Pall Zefluor 2 µm, 47 mm diameter, 20–25 m <sup>3</sup> /day (Filterpack)	Daily	ICP-MS
Chloride	AM0001R	Teflon filter, Pall Zefluor 2 µm, 47 mm diameter, 20–25 m <sup>3</sup> /day (Filterpack)	Daily	Ion chromatography
PM <sub>10</sub>				
PM <sub>2.5</sub>				
PM <sub>1</sub>				
Suspended particulate matter				
Sum of nitric acid and nitrate		KOH-impregnated Whatman 40 filter + Teflon filter, 20–25 m <sup>3</sup> /day	Daily	Ion chromatography
Sum of ammonia and ammonium		Oxalic acid-impregnated Whatman 40 filter +Teflon filter, 20–25 m <sup>3</sup> /day	Daily	Spectrophotometric, Nessler method
Acidity				

Country: Austria			Main components and ozone - EMEP		Year: 2015
	Station	Sampling		Sampling frequency	Analysis method
<b>Precipitation</b>					
Precipitation amount					
Precipitation amount, official gauge					
Sulphate					
Nitrate					
Ammonium					
Magnesium					
Sodium					
Chloride					
Calcium					
Potassium					
Conductivity					
pH					
<b>Air</b>					
Sulphur dioxide	All	Instrumental: UV-fluorescence		Hourly	UV-fluorescence
Sulphur dioxide					
Nitrogen dioxide	All	Instrumental: Chemiluminescence		Daily	
Nitric acid					
Ammonia					
Ozone	All	UV-monitor		Hourly	UV-absorption
Sulphate					
Nitrate					
Ammonium					
Sodium					
Calcium					
Magnesium					
Potassium					
Chloride					
PM <sub>10</sub>	AT02 AT05, AT48	High Volume Sampler, glass fibre filters with organic binder, 720 m <sup>3</sup> /day, EN 12341 High Volume Sampler, glass fibre filters with organic binder, 720 m <sup>3</sup> /day, EN 12341		Daily Every 3 <sup>rd</sup> day	Micro balance
PM <sub>2.5</sub>	AT02	High Volume Sampler, glass fibre filters with organic binder, 720 m <sup>3</sup> /day, EN 14907		Daily	Micro balance
PM <sub>1</sub>	AT02	High Volume Sampler, glass fibre filters with organic binder, 720 m <sup>3</sup> /day, weighing acc. EN 12341		Every 3 <sup>rd</sup> day	Micro balance
Suspended particulate matter					
Sum of nitric acid and nitrate					
Sum of ammonia and ammonium					

Country: Belarus		Main components and ozone - EMEP	Year: 2015	
	Station	Sampling	Sampling frequency	Analysis method
<b>Precipitation</b>				
Precipitation amount		Bulk		
Precipitation amount, official gauge				
Sulphate		Bulk	Daily	Turbidimetry
Nitrate		Bulk	Daily	Photometry
Ammonium		Bulk	Daily	Photometry with Nessler reactive
Magnesium		Bulk	Daily	AAS
Sodium		Bulk	Daily	AAS
Chloride		Bulk	Daily	Mercurimetric
Calcium		Bulk	Daily	AAS
Potassium		Bulk	Daily	AAS
Conductivity		Bulk	Daily	Conductivity meter
pH		Bulk	Daily	pH meter
<b>Air</b>				
Sulphur dioxide				
Nitrogen dioxide				
Nitric acid				
Ammonia				
Ozone				
Sulphate				
Nitrate				
Ammonium				
Sodium				
Calcium				
Magnesium				
Potassium				
Chloride				
PM <sub>10</sub>				
PM <sub>2,5</sub>				
Suspended particulate matter				
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				
Acidity				

Country: Belgium	Station	Main components and ozone - EMEP	Year: 2015
		Sampling	Sampling frequency
<b>Precipitation</b>			
Precipitation amount			
Precipitation amount, official gauge			
Sulphate			
Nitrate			
Ammonium			
Magnesium			
Sodium			
Chloride			
Calcium			
Potassium			
Conductivity			
pH			
<b>Air</b>			
Sulphur dioxide		Instrumental: UV-fluorescence	Half hourly
Sulphur dioxide			UV-fluorescence
Nitrogen dioxide		Instrumental: Chemiluminescence	Half hourly
Nitric acid			Chemiluminescence
Ammonia			
Ozone		Instrumental: UV monitor	Half hourly
Sulphate			UV absorption
Nitrate			
Ammonium			
Sodium			
Calcium			
Magnesium			
Potassium			
Chloride			
PM <sub>10</sub>		Instrumental: Beta absorption	Two-hourly
PM <sub>2.5</sub>			Beta absorption
Suspended particulate matter			
Sum of nitric acid and nitrate			
Sum of ammonia and ammonium			

Country: Croatia	Main components and ozone - EMEP		Year: 2015	
	Station	Sampling	Sampling frequency	Analysis method
<b>Precipitation</b>				
Precipitation amount	All			
Precipitation amount, official gauge		Rain gauge	Daily	
Sulphate	All	Bulk	Daily	Ion chromatography
Nitrate	All	Bulk	Daily	Ion chromatography
Ammonium	All	Bulk	Daily	Ion chromatography
Magnesium	All	Bulk	Daily	Ion chromatography
Sodium	All	Bulk	Daily	Ion chromatography
Chloride	All	Bulk	Daily	Ion chromatography
Calcium	All	Bulk	Daily	Ion chromatography
Potassium	All	Bulk	Daily	Ion chromatography
Conductivity	All	Bulk	Daily	Conductivity meter
pH	All	Bulk	Daily	pH meter
<b>Air</b>				
Sulphur dioxide				
Nitrogen dioxide				
Nitric acid				
Ammonia				
Ozone				
Sulphate				
Nitrate				
Ammonium				
Sodium				
Calcium				
Magnesium				
Potassium				
Chloride				
PM <sub>10</sub>				
PM <sub>2.5</sub>				
Suspended particulate matter				
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				

Country: Cyprus		Main components and ozone - EMEP	Year: 2015	
	Station	Sampling	Sampling frequency	Analysis method
<b>Precipitation</b>				
Precipitation amount	CY2	WET ONLY EIGENBRODT SAMPLER	DAILY EVENT	SAMPLE VOLUME MEASUREMENT
Precipitation amount, official gauge	CY2	MET ONE TIPPING BUCKET-RECORDED	DAILY EVENT	Mm RECOREDED IN DATA LOGGER
Sulphate				
Nitrate				
Ammonium				
Magnesium				
Sodium				
Chloride				
Calcium				
Potassium				
Conductivity				
pH				
<b>Air</b>				
Sulphur dioxide	CY02	Instrumental: UV-fluorescence	Hourly	UV-fluorescence
Nitrogen dioxide	CY02	Instrumental: Chemiluminescence	Hourly	Chemiluminescence
Nitric acid				
Ammonia				
Carbon Monoxide	CY02	Non – Dispersive Infrared Spectroscopy (NDIR)	Hourly	NDIR
Ozone	CY02	Instrumental: Ultra Violet (UV) photometry	Hourly	UV absorption
Sulphate PM <sub>2.5</sub>	CY02	Low volume sampler	Daily	Ion Chromatography
Nitrate PM <sub>2.5</sub>	CY02	Low volume sampler	Daily	Ion Chromatography
Ammonium PM <sub>2.5</sub>	CY02	Low volume sampler	Daily	Ion Chromatography
Sodium PM <sub>2.5</sub>	CY02	Low volume sampler	Daily	Ion Chromatography
Calcium PM <sub>2.5</sub>	CY02	Low volume sampler	Daily	Ion Chromatography
Magnesium PM <sub>2.5</sub>	CY02	Low volume sampler	Daily	Ion Chromatography
Potassium PM <sub>2.5</sub>	CY02	Low volume sampler	Daily	Ion Chromatography
Chloride PM <sub>2.5</sub>	CY02	Low volume sampler	Daily	Ion Chromatography
PM <sub>10</sub>	CY02	High volume sampler	Daily	Gravimetric
PM <sub>2.5</sub>	CY02	Low volume sampler	Daily	Gravimetric
PM <sub>1</sub>				
EC in PM <sub>2.5</sub>	CY02	Low volume sampler	Daily	Sunset Laboratory OC/EC Analyzer
OC in MP <sub>2.5</sub>	CY02	Low volume sampler	Daily	

THE LABORATORY PERFORMING THE ANALYSES ON PM<sub>2.5</sub> IS:

Facility for Chemical Analyses (FCA)

Energy, Environment and Water Research Center (EEWRC)

The Cyprus Institute

Country: Czech Republic		Main components and ozone - EMEP		Year: 2015-2016	
	Station	Sampling		Sampling frequency	Analysis method
<b>Precipitation</b>					
Precipitation amount, official gauge	All	Meteorological Station		Daily	Automatically gauge
Fluoride	All	Wet-only (daily) at CZ03, (weekly) at CZ01,CZ05		Daily, weekly	Ion Chromatography
Sulphate	All	Wet-only (daily) at CZ03, (weekly) at CZ01,CZ05		Daily, weekly	Ion chromatography
Nitrate	All	Wet-only (daily) at CZ03, (weekly) at CZ01,CZ05		Daily, weekly	Ion chromatography
Ammonium	All	Wet-only (daily) at CZ03, (weekly) at CZ01,CZ05		Daily, weekly	Spectrophotometric, Indophenol method, SFA, FIA
Magnesium	All	Wet-only (daily) at CZ03, (weekly) at CZ01,CZ05		Daily, weekly	F-AAS
Sodium	All	Wet-only (daily) at CZ03, (weekly) at CZ01,CZ05		Daily, weekly	F-AAS
Chloride	All	Wet-only (daily) at CZ03, (weekly) at CZ01,CZ05		Daily, weekly	Ion chromatography
Calcium	All	Wet-only (daily) at CZ03, (weekly) at CZ01,CZ05		Daily, weekly	F-AAS
Potassium	All	Wet-only (daily) at CZ03, (weekly) at CZ01,CZ05		Daily, weekly	F-AAS
Conductivity	All	Wet-only (daily) at CZ03, (weekly) at CZ01,CZ05		Daily, weekly	Conductivity electrode
pH	All	Wet-only (daily) at CZ03, (weekly) at CZ01,CZ05		Daily, weekly	pH electrode
<b>Air</b>					
Sulphur dioxide	CZ3,CZ5	KOH-impregnated Whatman 40 filter 47 mm, 20 m <sup>3</sup> /day		Daily	Ion chromatography
Sulphur dioxide	CZ3	UV-fluorescence - monitor		Hourly	UV-fluorescence
Carbon monoxide	CZ3	IR corel. absorption spectrometry		Hourly	IRABS, corel. absorption spectrometry
Nitrogen dioxide	CZ3	Chemiluminescence - monitor		Hourly	Chemiluminescence
Nitrogen monoxide	CZ3	Chemiluminescence - monitor		Hourly	Chemiluminescence
Sum of nitric acid and nitrate	CZ3,CZ5	Whatman filter + KOH-impregnated Whatman 40 filter 47 mm, 20 m <sup>3</sup> /day		Daily	Ion Chromatography
Sum of ammonia and ammonium	All	Whatman filter + Citric acid impregnated Whatman 40 filter 47 mm, 20 m <sup>3</sup> /day		Daily	Spectrophotometric, Indophenol method, SFA
Ozone	All	UV-monitor		Hourly	UV-absorption
Sulphate	All	Whatman 40, filter 47 mm, 20 m <sup>3</sup> /day		Daily	Ion chromatography
Sodium	CZ3	Filter 47 mm, 55 m <sup>3</sup> /day		Weekly	Ion chromatography
Calcium	CZ3	Filter 47 mm, 55 m <sup>3</sup> /day		Weekly	Ion chromatography
Magnesium	CZ3	Filter 47 mm, 55 m <sup>3</sup> /day		Weekly	Ion chromatography
Potassium	CZ3	Filter 47 mm, 55 m <sup>3</sup> /day		Weekly	Ion chromatography
PM <sub>10</sub>	All	Filter 47 mm, 55 m <sup>3</sup> /day		Every 2 <sup>nd</sup> day	Gravimetry
PM <sub>10</sub>	CZ3	Beta absorption - monitor		Hourly	Radiometry – beta absorption
PM <sub>2.5</sub>	CZ3	Beta absorption - monitor		Hourly	Radiometry – beta absorption
PM <sub>2.5</sub>	CZ3	Filter 47 mm, 55 m <sup>3</sup> /day		Every 2 <sup>nd</sup> day	Gravimetry
OC, EC in PM <sub>2.5</sub>	CZ3	Filter 47 mm, 55 m <sup>3</sup> /day		Every 6 <sup>th</sup> day	HD-FID (Thermal-optical method)

Country: Denmark	Main components and ozone - EMEP		Year: 2015	
	Station	Sampling	Sampling frequency	Analysis method
<b>Precipitation</b>				
Precipitation amount	DK05, DK08, DK22, DK31	Wet-only	Two-weekly	
Precipitation amount, official gauge				
Sulphate	DK05, DK08, DK22, DK31	Wet-only	Two-weekly	Ion chromatography
Nitrate	DK05, DK08, DK22, DK31	Wet-only	Two-weekly	Ion chromatography
Ammonium	DK05, DK08, DK22, DK31	Wet-only	Two-weekly	ISO 11732 CFA (continuously flow analysis) and spectrophotometric detection
Magnesium	DK05, DK08, DK22, DK31	Wet-only	Two-weekly	Atomic absorption method
Sodium	DK05, DK08, DK22, DK31	Wet-only	Two-weekly	Atomic emission method
Chloride	DK05, DK08, DK22, DK31	Wet-only	Two-weekly	Ion chromatography
Calcium	DK05, DK08, DK22, DK31	Wet-only	Two-weekly	Atomic absorption method
Potassium	DK05, DK08, DK22, DK31	Wet-only	Two-weekly	Atomic emission method
Conductivity	DK05, DK08, DK22, DK31	Wet-only	Two-weekly	Conductivity meter
pH	DK05, DK08, DK22, DK31	Wet-only	Two-weekly	pH meter
<b>Air</b>				
Sulphur dioxide	DK05, DK08, DK22, DK31	KOH-impregnated Whatman 41 filters, 58 m <sup>3</sup> /day	Daily	Ion chromatography
Nitrogen dioxide	DK05	Monitor	Hourly	Chemiluminescence
Nitrogen oxide	DK08	Monitor	Hourly	Chemiluminescence
Nitric acid				
Ammonia	DK03, DK05, DK08, DK31	Oxalic acid impregnated Whatman 41, 58 m <sup>3</sup> /day	Daily	ISO 11732 CFA (continuously flow analysis) and spectrophotometric detection
Ozone	DK05, DK31, DK41	UV-monitor	Hourly	UV-absorption
Sulphate	DK03, DK05, DK08, DK31	Millipore RAWP 1.2 µm, 58 m <sup>3</sup> /day	Daily	Ion chromatography
Nitrate				
Ammonium	DK03, DK05, DK08, DK31	Millipore RAWP 1.2 µm, 58 m <sup>3</sup> /day	Daily	ISO 11732 CFA (continuously flow analysis) and spectrophotometric detection
Sodium	DK03, DK05, DK08, DK31	Millipore RAWP 1.2 µm, 58 m <sup>3</sup> /day	Daily	Atomic absorption method
Calcium				
Magnesium				
Potassium				
Chloride	DK03, DK05, DK08, DK31	Millipore RAWP 1.2 µm, 58 m <sup>3</sup> /day		Atomic absorption method
PM <sub>10</sub>	DK05	SM200	Daily	Beta absorption
PM <sub>2.5</sub>				
Suspended particulate matter				
Sum of nitric acid and nitrate	DK03, DK05, DK08, DK31	Aerosol filter as for sulphate + KOH-impregnated Whatman 41, 58 m <sup>3</sup> /day	Daily	Ion chromatography
Sum of ammonia and ammonium				Replaced by separate measurements of ammonia and ammonium

Country: Estonia		Main components and ozone - EMEP	Year: 2015	
	Station	Sampling	Sampling frequency	Analysis method
<b>Precipitation</b>				
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
<b>Air</b>				
Sulphur dioxide	All	Instrumental: UV fluorescence	Daily/Hourly	UV fluorescence
Nitrogen dioxide	All	Instrumental: Chemiluminescence	Daily/Hourly	Chemiluminescence
Nitric acid				
Ammonia				
Ozone	All	UV monitor	Daily/Hourly	UV absorption
Sulphate				
Nitrate				
Ammonium				
Sodium				
Calcium				
Magnesium				
Potassium				
Chloride				
PM <sub>10</sub>	EE09	High Volume Sampler	Weekly	Gravimetric
PM <sub>2.5</sub>				
Suspended particulate matter				
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				

Country: Finland		Main components and ozone - EMEP	Year: 2015	
	Station	Sampling	Sampling frequency	Analysis method
<b>Precipitation</b>				
Precipitation amount	All	NILU bulk sampler	Weekly	
Precipitation amount, official gauge				
Sulphate	All	NILU bulk sampler	Weekly	Ion chromatography
Nitrate	All	NILU bulk sampler	Weekly	Ion chromatography
Ammonium	All	NILU bulk sampler	Weekly	Ion chromatography
Magnesium	All	NILU bulk sampler	Weekly	Ion chromatography
Sodium	All	NILU bulk sampler	Weekly	Ion chromatography
Chloride	All	NILU bulk sampler	Weekly	Ion chromatography
Calcium	All	NILU bulk sampler	Weekly	Ion chromatography
Potassium	All	NILU bulk sampler	Weekly	Ion chromatography
Conductivity	All	NILU bulk sampler	Weekly	Conductivity meter
pH	All	NILU bulk sampler	Weekly	pH meter
<b>Air</b>				
Sulphur dioxide	All	NaOH-impregnated Whatman 40 filters, 24 m <sup>3</sup> /day	Daily/Weekly <sup>1)</sup>	Ion chromatography
Sulphur dioxide	FI18	UV-fluorescence - monitor	Hourly	UV-fluorescence
Nitrogen dioxide	All	Instrumental: Chemiluminescence	Hourly	Chemiluminescence
Nitric acid	All	NaOH-impregnated Whatman 40 filters, 24 m <sup>3</sup> /day	Daily/Weekly <sup>1)</sup>	Ion chromatography
Ammonia	All	Oxalic acid-impregnated Whatman 40 filters, 24 m <sup>3</sup> /day	Daily/Weekly <sup>1)</sup>	Ion chromatography
Ozone	All	UV-monitor	Hourly	UV-absorption
Sulphate	All	Teflon filter, Millipore Fluoropore 3 µm, 24 m <sup>3</sup> /day	Daily/Weekly <sup>1)</sup>	Ion chromatography
Nitrate	All	Teflon filter, Millipore Fluoropore 3 µm, 24 m <sup>3</sup> /day	Daily/Weekly <sup>1)</sup>	Ion chromatography
Ammonium	All	Teflon filter, Millipore Fluoropore 3 µm, 24 m <sup>3</sup> /day	Daily/Weekly <sup>1)</sup>	Ion chromatography
Sodium	All	Teflon filter, Millipore Fluoropore 3 µm, 24 m <sup>3</sup> /day	Daily/Weekly <sup>1)</sup>	Ion chromatography
Calcium	All	Teflon filter, Millipore Fluoropore 3 µm, 24 m <sup>3</sup> /day	Daily/Weekly <sup>1)</sup>	Ion chromatography
Magnesium	All	Teflon filter, Millipore Fluoropore 3 µm, 24 m <sup>3</sup> /day	Daily/Weekly <sup>1)</sup>	Ion chromatography
Potassium	All	Teflon filter, Millipore Fluoropore 3 µm, 24 m <sup>3</sup> /day	Daily/Weekly <sup>1)</sup>	Ion chromatography
Chloride	All	Teflon filter, Millipore Fluoropore 3 µm, 24 m <sup>3</sup> /day	Daily/Weekly <sup>1)</sup>	Ion chromatography
PM <sub>10</sub>	All	Instrumental: beta-ray attenuation	Hourly	Beta-ray attenuation monitor
PM <sub>2.5</sub>	All	Instrumental: beta-ray attenuation	Hourly	Beta-ray attenuation monitor
Suspended particulate matter				
Sum of nitric acid and nitrate	All	Aerosol filter as for sulphate + NaOH impregnated Whatman 40 filter, 24 m <sup>3</sup> /day	Daily/Weekly <sup>1)</sup>	Ion chromatography
Sum of ammonia and ammonium	All	Aerosol filter as for sulphate + oxalic acid impregnated Whatman 40 filter, 24 m <sup>3</sup> /day	Daily/Weekly <sup>1)</sup>	Ion chromatography

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

<b>Country: France</b>		<b>Main components and ozone - EMEP</b>	<b>Year: 2015</b>	
	<b>Station</b>	<b>Sampling</b>	<b>Sampling frequency</b>	<b>Analysis method</b>
<b>Precipitation</b>				
Precipitation amount	FR08, FR09, FR10, FR13, FR14, FR15, FR16, FR17, FR18	Wet-only	Daily	
Precipitation amount, official gauge	FR08, FR09, FR10, FR13, FR14, FR15, FR16, FR17, FR18	Tipping bucket rain gauge	Daily	
Sulphate	FR08, FR09, FR10, FR13, FR14, FR15, FR16, FR17, FR18	Wet-only	Daily	Ion chromatography
Nitrate	FR08, FR09, FR10, FR13, FR14, FR15, FR16, FR17, FR18	Wet-only	Daily	Ion chromatography
Ammonium	FR08, FR09, FR10, FR13, FR14, FR15, FR16, FR17, FR18	Wet-only	Daily	Ion chromatography
Magnesium	FR08, FR09, FR10, FR13, FR14, FR15, FR16, FR17, FR18	Wet-only	Daily	Ion chromatography
Sodium	FR08, FR09, FR10, FR13, FR14, FR15, FR16, FR17, FR18	Wet-only	Daily	Ion chromatography
Chloride	FR08, FR09, FR10, FR13, FR14, FR15, FR16, FR17, FR18	Wet-only	Daily	Ion chromatography
Calcium	FR08, FR09, FR10, FR13, FR14, FR15, FR16, FR17, FR18	Wet-only	Daily	Ion chromatography
Potassium	FR08, FR09, FR10, FR13, FR14, FR15, FR16, FR17, FR18	Wet-only	Daily	Ion chromatography
Conductivity	FR08, FR09, FR10, FR13, FR14, FR15, FR16, FR17, FR18	Wet-only	Daily	Conductivity meter
pH	FR08, FR09, FR10, FR13, FR14, FR15, FR16, FR17, FR18	Wet-only	Daily	pH meter
<b>Air</b>				
Nitrogen dioxide NO <sub>2</sub> /NO/NO <sub>x</sub>	FR09, FR13, FR15, FR30	Instrumental: Chemiluminescence, trace level	Hourly	Chemiluminescence
Ozone	FR08, FR09, FR10, FR13, FR14, FR15, FR16, FR17, FR18, FR19, FR30, FR23, FR25	UV-monitor	Hourly	UV-absorption
Sulphate	FR09 FR13, FR23, FR24, FR25	TISSUQUARTZ 2500QAT-UP, PM2.5, 720m3/day	24h Every 6 days	Ion chromatography
Nitrate	FR09 FR13, FR23, FR24, FR25	TISSUQUARTZ 2500QAT-UP, PM2.5, 720m3/day	24h Every 6 days	Ion chromatography
Ammonium	FR09 FR13, FR23, FR24, FR25	TISSUQUARTZ 2500QAT-UP, PM2.5, 720m3/day	24h Every 6 days	Ion chromatography
Sodium	FR09, FR13, FR23, FR24, FR25	TISSUQUARTZ 2500QAT-UP, PM2.5, 720m3/day	24h Every 6 days	Ion chromatography
Calcium	FR09, FR13, FR23, FR24, FR25	TISSUQUARTZ 2500QAT-UP, PM2.5, 720m3/day	24h Every 6 days	Ion chromatography
Magnesium	FR09, FR13, FR23, FR24, FR25	TISSUQUARTZ 2500QAT-UP, PM2.5, 720m3/day	24h Every 6 days	Ion chromatography
Potassium	FR09, FR13, FR23, FR24, FR25	TISSUQUARTZ 2500QAT-UP, PM2.5, 720m3/day	24h Every 6 days	Ion chromatography
Chloride	FR09, FR13, FR23, FR24, FR25	TISSUQUARTZ 2500QAT-UP, PM2.5, 720m3/day	24h Every 6 days	Ion chromatography
PM <sub>10</sub>	FR09, FR10, FR13, FR14, FR15, FR18, FR23, FR24	TEOM FDMS, MP101M	Hourly	TEOM FDMS

<b>Country: France</b>		<b>Main components and ozone - EMEP</b>	<b>Year: 2015</b>	
	<b>Station</b>	<b>Sampling</b>	<b>Sampling frequency</b>	<b>Analysis method</b>
PM <sub>2.5</sub>	FR09, FR13, FR15, FR18, FR23, FR24, FR25	TEOM FDMS, MP101M	Hourly	TEOM FDMS
Suspended particulate matter				
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				
EC/OC	FR09, FR13, FR23, FR24, FR25	TISSUQUARTZ 2500QAT-UP, PM2.5, 720m3/day	24h every 6 days	Thermo optical, EUSAAR 2 protocol

Country: Georgia		Main components and ozone - EMEP	Year: 2015	
	Station	Sampling	Sampling frequency	Analysis method
<b>Precipitation</b>				
Precipitation amount				
Precipitation amount, official gauge				
Sulphate				
Nitrate				
Ammonium				
Magnesium				
Sodium				
Chloride				
Calcium				
Potassium				
Conductivity				
pH				
<b>Air</b>				
Sulphur dioxide	GE01		24h every 3 days	
Nitrogen dioxide				
Nitric acid				
Ammonia	GE01		24h every 3 days	
Ozone				
Sulphate	GE01		24h every 3 days	IC
Nitrate	GE01		24h every 3 days	IC
Ammonium	GE01		24h every 3 days	Spectrophotometry
Sodium				
Calcium				
Magnesium				
Potassium				
Chloride	GE01		24h every 3 days	IC
PM <sub>10</sub>				
PM <sub>2,5</sub>				
PM <sub>1</sub>				
Suspended particulate matter				
Sum of nitric acid and nitrate	GE01		24h every 3 days	
Sum of ammonia and ammonium	GE01		24h every 3 days	

Country: Germany		Main components and ozone - EMEP	Year: 2015	
	Station	Sampling	Sampling frequency	Analysis method
<b>Precipitation</b>				
Precipitation amount	DE01, DE02, DE03, DE04, DE05, DE07, DE08, DE09	Daily wet only at DE02, DE03 and DE07, weekly wet-only at the other sites	Daily / weekly	By volume
Precipitation amount, official gauge				
Sulphate	DE01, DE02, DE03, DE04, DE05, DE07, DE08, DE09	Daily wet only at DE02, DE03 and DE07, weekly wet-only at the other sites	Daily / weekly	Ion chromatography
Nitrate	DE01, DE02, DE03, DE04, DE05, DE07, DE08, DE09	Daily wet only at DE02, DE03 and DE07, weekly wet-only at the other sites	Daily / weekly	Ion chromatography
Ammonium	DE01, DE02, DE03, DE04, DE05, DE07, DE08, DE09	Daily wet only at DE02, DE03 and DE07, weekly wet-only at the other sites	Daily / weekly	Ion chromatography
Magnesium	DE01, DE02, DE03, DE04, DE05, DE07, DE08, DE09	Daily wet only at DE02, DE03 and DE07, weekly wet-only at the other sites	Daily / weekly	Ion chromatography
Sodium	DE01, DE02, DE03, DE04, DE05, DE07, DE08, DE09	Daily wet only at DE02, DE03 and DE07, weekly wet-only at the other sites	Daily / weekly	Ion chromatography
Chloride	DE01, DE02, DE03, DE04, DE05, DE07, DE08, DE09	Daily wet only at DE02, DE03 and DE07, weekly wet-only at the other sites	Daily / weekly	Ion chromatography
Calcium	DE01, DE02, DE03, DE04, DE05, DE07, DE08, DE09	Daily wet only at DE02, DE03 and DE07, weekly wet-only at the other sites	Daily / weekly	Ion chromatography
Potassium	DE01, DE02, DE03, DE04, DE05, DE07, DE08, DE09	Daily wet only at DE02, DE03 and DE07, weekly wet-only at the other sites	Daily / weekly	Ion chromatography
Conductivity	DE01, DE02, DE03, DE04, DE05, DE07, DE08, DE09	Daily wet only at DE02, DE03 and DE07, weekly wet-only at the other sites	Daily / weekly	Conductivity meter
pH	DE01, DE02, DE03, DE04, DE05, DE07, DE08, DE09	Daily wet only at DE02, DE03 and DE07, weekly wet-only at the other sites	Daily / weekly	pH meter
<b>Air</b>				
Sulphur dioxide	DE01, DE02, DE03, DE07, DE08, DE09	Monitor (trace level instrument)	Half hourly	UV fluorescence
Nitrogen dioxide	DE01, DE02, DE03, DE07, DE08, DE09	NaJ-impregnated glass sinters, 0.7 m <sup>3</sup> /day	Daily	Flow injection analysis
Nitric acid	DE02, DE07	KOH-impregnated Whatman 40 filter, 22 m <sup>3</sup> /day (Filterpack)	Daily	Ion chromatography
Ammonia	DE02, DE07	Oxalic acid-impregnated Whatman 40 filter, 22 m <sup>3</sup> /day (Filterpack)	Daily	Ion chromatography
Ozone	DE01, DE02, DE03, DE07, DE08, DE09	UV-monitor	Half hourly	UV-absorption
Sulphate	DE02, DE07	Teflon filter, 22 m <sup>3</sup> /day (Filterpack)	Daily	Ion chromatography
Nitrate	DE02, DE07	Teflon filter, 22 m <sup>3</sup> /day (Filterpack)	Daily	Ion chromatography
Ammonium	DE02, DE07	Teflon filter, 22 m <sup>3</sup> /day (Filterpack)	Daily	Ion chromatography
Sodium	DE02, DE07	Teflon filter, 22 m <sup>3</sup> /day (Filterpack)	Daily	Ion chromatography
Calcium	DE02, DE07	Teflon filter, 22 m <sup>3</sup> /day (Filterpack)	Daily	Ion chromatography
Magnesium	DE02, DE07	Teflon filter, 22 m <sup>3</sup> /day (Filterpack)	Daily	Ion chromatography
Potassium	DE02, DE07	Teflon filter, 22 m <sup>3</sup> /day (Filterpack)	Daily	Ion chromatography
Chloride	DE02, DE07	Teflon filter, 22 m <sup>3</sup> /day (Filterpack)	Daily	Ion chromatography
PM <sub>10</sub>	DE01, DE02, DE03, DE07, DE08, DE09	Digitel High Volume Sampler DHA 80, glass fibre filters ø15 cm, Machery Nagel MN 85/90	Daily	Gravimetric by weight
PM <sub>2.5</sub>	DE02, DE03, DE07, DE08	Digitel High Volume Sampler DHA 80, glass fibre filters ø15 cm, Machery Nagel MN 85/90	Daily	Gravimetric by weight
PM <sub>1</sub>	DE02	Digitel High Volume Sampler DHA 80, glass fibre filters ø15 cm, Machery Nagel MN 85/90	Daily	Gravimetric by weight
Suspended particulate matter				
Sum of nitric acid and nitrate	DE02, DE07	Filter pack method	Daily	Ion chromatography
Sum of ammonia and ammonium	DE02, DE07	Filter pack method	Daily	Ion chromatography
Sulphate in PM <sub>2.5</sub>	DE01, DE02, DE03, DE07, DE08, DE09	Leckel Low Volume Sampler, 2.3 m <sup>3</sup> /day	Every 3 <sup>rd</sup> day	Ion chromatography
Nitrate in PM <sub>2.5</sub>	DE01, DE02, DE03, DE07, DE08, DE09	Leckel Low Volume Sampler, 2.3 m <sup>3</sup> /day	Every 3 <sup>rd</sup> day	Ion chromatography
Ammonium in PM <sub>2.5</sub>	DE01, DE02, DE03, DE07, DE08, DE09	Leckel Low Volume Sampler, 2.3 m <sup>3</sup> /day	Every 3 <sup>rd</sup> day	Ion chromatography
Sodium in PM <sub>2.5</sub>	DE01, DE02, DE03, DE07, DE08, DE09	Leckel Low Volume Sampler, 2.3 m <sup>3</sup> /day	Every 3 <sup>rd</sup> day	Ion chromatography
Calcium in PM <sub>2.5</sub>	DE01, DE02, DE03, DE07, DE08, DE09	Leckel Low Volume Sampler, 2.3 m <sup>3</sup> /day	Every 3 <sup>rd</sup> day	Ion chromatography
Magnesium in PM <sub>2.5</sub>	DE01, DE02, DE03, DE07, DE08, DE09	Leckel Low Volume Sampler, 2.3 m <sup>3</sup> /day	Every 3 <sup>rd</sup> day	Ion chromatography
Potassium in PM <sub>2.5</sub>	DE01, DE02, DE03, DE07, DE08, DE09	Leckel Low Volume Sampler, 2.3 m <sup>3</sup> /day	Every 3 <sup>rd</sup> day	Ion chromatography
Chloride in PM <sub>2.5</sub>	DE01, DE02, DE03, DE07, DE08, DE09	Leckel Low Volume Sampler, 2.3 m <sup>3</sup> /day	Every 3 <sup>rd</sup> day	Ion chromatography
Acidity				

Country: Greece		Main components and ozone - EMEP		Year: 2015	
	Station	Sampling		Sampling frequency	Analysis method
Precipitation					
Precipitation amount					
Precipitation amount, official gauge					
Sulphate					
Nitrate					
Ammonium					
Magnesium					
Sodium					
Chloride					
Calcium					
Potassium					
Conductivity					
pH					
Air					
Sulphur dioxide	GR01	Instrumental UV-fluorescence	Hourly	UV-fluorescence	
Nitrogen dioxide	GR01	Instrumental Chemiluminescence	Hourly	Chemiluminescence	
Nitric acid					
Ammonia					
Ozone	GR01	UV-monitor	Hourly	UV-absorption	
Sulphate					
Nitrate					
Ammonium					
Sodium					
Calcium					
Magnesium					
Potassium					
Chloride					
PM <sub>10</sub>					
PM <sub>2.5</sub>					
Suspended particulate matter					
Sum of nitric acid and nitrate					
Sum of ammonia and ammonium					

Country: Hungary		Main components and ozone - EMEP		Year: 2015
	Station	Sampling	Sampling frequency	Analysis method
<b>Precipitation</b>				
Precipitation amount	HU02	Wet-only	Daily	
Precipitation amount, official gauge	HU02	Wet-only	Daily	
Sulphate	HU02	Wet-only	Daily	Ion chromatography
Nitrate	HU02	Wet-only	Daily	Ion chromatography
Ammonium	HU02	Wet-only	Daily	Spectrophotometric, Indophenol method
Magnesium	HU02	Wet-only	Daily	Atomic absorption method (flame)
Sodium	HU02	Wet-only	Daily	Atomic absorption method (flame)
Chloride	HU02	Wet-only	Daily	Ion chromatography
Calcium	HU02	Wet-only	Daily	Atomic absorption method (flame)
Potassium	HU02	Wet-only	Daily	Atomic absorption method (flame)
Conductivity	HU02	Wet-only	Daily	Conductivity meter
pH	HU02	Wet-only	Daily	pH meter
Acidity				
Lead	HU02	Wet-only	weekly	Atomic absorption method (furnace)
Cadmium	HU02	Wet-only	weekly	Atomic absorption method (furnace)
<b>Air</b>				
Sulphur dioxide	HU02	KOH-impregnated Whatman 40 filter, ~21 m <sup>3</sup> /day	Daily	Ion chromatography
Nitrogen dioxide	HU02	Iodide method (impregnated glass sinter), ~0.8 m <sup>3</sup> /day	Daily	Spectrophotometric, Griess method
Nitric acid	HU02	KOH-impregnated Whatman 40 filter, ~21 m <sup>3</sup> /day	Daily	Ion chromatography
Ammonia	HU02	Citric-acid impregnated Whatman 40 filter, ~21 m <sup>3</sup> /day	Daily	Spectrophotometric, Indophenol method
Ozone	HU02	UV-monitor	Hourly	UV-absorption
Sulphate	HU02	Teflon filter, Millipore Fluoropore, 1 µm, ~21 m <sup>3</sup> /day	Daily	Ion chromatography
Nitrate	HU02	Teflon filter, Millipore Fluoropore, 1 µm, ~21 m <sup>3</sup> /day	Daily	Ion chromatography
Ammonium	HU02	Teflon filter, Millipore Fluoropore, 1 µm, ~21 m <sup>3</sup> /day	Daily	Spectrophotometric, Indophenol method
Sodium	HU02	Teflon filter, Millipore Fluoropore, 1 µm, ~21 m <sup>3</sup> /day	Daily	Atomic absorption method (flame)
Calcium	HU02	Teflon filter, Millipore Fluoropore, 1 µm, ~21 m <sup>3</sup> /day	Daily	Atomic absorption method (flame)
Magnesium	HU02	Teflon filter, Millipore Fluoropore, 1 µm, ~21 m <sup>3</sup> /day	Daily	Atomic absorption method (flame)
Potassium	HU02	Teflon filter, Millipore Fluoropore, 1 µm, ~21 m <sup>3</sup> /day	Daily	Atomic absorption method (flame)
Chloride				
PM <sub>10</sub> mass	HU02	PM <sub>10</sub> -monitor	Hourly	Beta-ray-absorption
PM <sub>2.5</sub> mass	HU02	DHA-80 high volume sampler	Daily	Gravimetry
PM <sub>1</sub>				
Suspended particulate matter				
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				

Country: Iceland		Main components and ozone - EMEP		Year: 2015	
	Station	Sampling		Sampling frequency	Analysis method
<b>Precipitation</b>					
Precipitation amount	IS02	NILU bulk sampler	Daily	By volume	
Precipitation amount, official gauge					
Sulphate	IS02	NILU bulk sampler	Daily	Spectrophotometry by FIA	
Nitrate	IS02	NILU bulk sampler	Daily	Spectrophotometry by FIA	
Ammonium					
Magnesium	IS02	NILU bulk sampler	Daily	ICP-AES	
Sodium	IS02	NILU bulk sampler	Daily	ICP-AES	
Chloride	IS02	NILU bulk sampler	Daily	ICP-AES	
Calcium	IS02	NILU bulk sampler	Daily	ICP-AES	
Potassium	IS02	NILU bulk sampler	Daily	ICP-AES	
Conductivity	IS02	NILU bulk sampler	Daily	Conductivity meter	
pH	IS02	NILU bulk sampler	Daily	pH meter	
Acidity					
<b>Air</b>					
Sulphur dioxide	IS02	KOH impregnated Whatman 40 filter, 30 m <sup>3</sup> /day	Daily	ICP-AES	
Nitrogen dioxide					
Nitric acid					
Ammonia					
Ozone					
Sulphate	IS02	Whatman 40 filter, 30 m <sup>3</sup> /day, prefilter for aerosol	Daily	ICP-AES	
Nitrate					
Ammonium					
Sodium	IS02	Whatman 40 filter, 30 m <sup>3</sup> /day, prefilter for aerosol	Daily	ICP-AES	
Calcium	IS02	Whatman 40 filter, 30 m <sup>3</sup> /day, prefilter for aerosol	Daily	ICP-AES	
Magnesium	IS02	Whatman 40 filter, 30 m <sup>3</sup> /day, prefilter for aerosol	Daily	ICP-AES	
Potassium	IS02	Whatman 40 filter, 30 m <sup>3</sup> /day, prefilter for aerosol	Daily	ICP-AES	
Chloride	IS02	Whatman 40 filter, 30 m <sup>3</sup> /day, prefilter for aerosol	Daily	ICP-AES	
PM <sub>10</sub>					
PM <sub>2.5</sub>					
PM <sub>1</sub>					
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: 2015	
	Station	Sampling		Sampling frequency	Analysis method
<b>Precipitation</b>					
Precipitation amount	IE01	Wet-only		Daily	
Precipitation amount, official gauge	IE01	Rain gauge		Daily	
Sulphate	IE01	Wet-only		Daily	Ion chromatography
Nitrate	IE01	Wet-only		Daily	Ion chromatography
Ammonium	IE01	Wet-only		Daily	Ion chromatography
Magnesium	IE01	Wet-only		Daily	Ion chromatography
Sodium	IE01	Wet-only		Daily	Ion chromatography
Chloride	IE01	Wet-only		Daily	Ion chromatography
Calcium	IE01	Wet-only		Daily	Ion chromatography
Potassium	IE01	Wet-only		Daily	Ion chromatography
Conductivity	IE01	Wet-only		Daily	Conductivity meter
pH	IE01	Wet-only		Daily	pH meter
<b>Air</b>					
Sulphur dioxide	IE01	KOH-impregnated Whatman 40 filter, 20-25 m <sup>3</sup> /day		Daily	Ion chromatography
Nitrogen dioxide	IE01	Nal method (glass sinter) 0.7 m <sup>3</sup> /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 <sup>3</sup> /day		Daily	Ion chromatography
Nitrate					
Ammonium					
Sodium	IE01	Teflon filter, PALL Zefluor 2 µm, 47 mm diameter, 20-25 m <sup>3</sup> /day		Daily	Ion chromatography
Calcium	IE01	Teflon filter, PALL Zefluor 2 µm, 47 mm diameter, 20-25 m <sup>3</sup> /day		Daily	Ion chromatography
Magnesium	IE01	Teflon filter, PALL Zefluor 2 µm, 47 mm diameter, 20-25 m <sup>3</sup> /day		Daily	Ion chromatography
Potassium	IE01	Teflon filter, PALL Zefluor 2 µm, 47 mm diameter, 20-25 m <sup>3</sup> /day		Daily	Ion chromatography
Chloride					
PM <sub>10</sub>					
PM <sub>2.5</sub>					
Suspended particulate matter					
Sum of nitric acid and nitrate	IE01	Aerosol filter as for sulphate + KOH impregnated filter as for SO <sub>2</sub> , 20-25 m <sup>3</sup> /day		Daily	Ion chromatography
Sum of ammonia and ammonium	IE01	Aerosol filter as for sulphate + citric acid impregnated filter, 20-25 m <sup>3</sup> /day		Daily	Ion chromatography

Country: Italy: IT01 (lab.: CNR)		Main components and ozone - EMEP		Year: 2015	
	Station	Sampling		Sampling frequency	Analysis method
<b>Precipitation</b>					
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
<b>Air</b>					
Sulphur dioxide	IT01	Diffusion tubes NaCl and Na <sub>2</sub> CO <sub>3</sub> + glycerine, 17 m <sup>3</sup> /day		Once a week	Ion chromatography
Nitrogen dioxide	IT01	Instrumental: Chemiluminescence		Daily	Chemiluminescence
Nitric acid	IT01	Diffusion tubes NaCl, 17 m <sup>3</sup> /day		Once a week	Ion chromatography
Ammonia	IT01	Diffusion tubes H <sub>3</sub> PO <sub>3</sub> , 17 m <sup>3</sup> /day		Once a week	Ion chromatography
Ozone	IT01	UV-monitor		Hourly	UV-absorption
Sulphate	IT01	Nylasorb filter, 17 m <sup>3</sup> /day		Once a week	Ion chromatography
Nitrate	IT01	Nylasorb filter, 17 m <sup>3</sup> /day		Once a week	Ion chromatography
Ammonium	IT01	Phosphorous acid impregnated filter, 17 m <sup>3</sup> /day		Once a week	Ion chromatography
Sodium					
Calcium					
Magnesium					
Potassium					
Chloride					
PM <sub>10</sub>	IT01	Beta gauge monitor 24 m <sup>3</sup> /day		Daily	Beta gauge monitor
PM <sub>2.5</sub>					
Suspended particulate matter					
Sum of nitric acid and nitrate					
Sum of ammonia and ammonium					

Country: Italy, IT04 (lab.: JRC)			Main components and ozone - EMEP		Year: 2015
	Station	Sampling	Sampling frequency	Analysis method	
<b>Precipitation</b>					
Precipitation amount	IT04	Wet-only	Daily	Sampler gauge	
Precipitation amount, official gauge					
Sulphate	IT04	Wet-only	Daily	Ion chromatography	
Nitrate	IT04	Wet-only	Daily	Ion chromatography	
Ammonium	IT04	Wet-only	Daily	Ion chromatography	
Magnesium	IT04	Wet-only	Daily	Ion chromatography	
Sodium	IT04	Wet-only	Daily	Ion chromatography	
Chloride	IT04	Wet-only	Daily	Ion chromatography	
Calcium	IT04	Wet-only	Daily	Ion chromatography	
Potassium	IT04	Wet-only	Daily	Ion chromatography	
Conductivity	IT04	Wet-only	Daily	Conductivity meter	
pH	IT04	Wet-only	Daily	pH meter	
<b>Air</b>					
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 <sup>3</sup> /day	Daily	Ion chromatography	
Nitrate	IT04	PALL Life Sciences QFF (type TISSUEQUARTZ 2500QAT-UP), 24 m <sup>3</sup> /day	Daily	Ion chromatography	
Ammonium	IT04	PALL Life Sciences QFF (type TISSUEQUARTZ 2500QAT-UP), 24 m <sup>3</sup> /day	Daily	Ion chromatography	
Sodium	IT04	PALL Life Sciences QFF (type TISSUEQUARTZ 2500QAT-UP), 24 m <sup>3</sup> /day	Daily	Ion chromatography	
Calcium	IT04	PALL Life Sciences QFF (type TISSUEQUARTZ 2500QAT-UP), 24 m <sup>3</sup> /day	Daily	Ion chromatography	
Magnesium	IT04	PALL Life Sciences QFF (type TISSUEQUARTZ 2500QAT-UP), 24 m <sup>3</sup> /day	Daily	Ion chromatography	
Potassium	IT04	PALL Life Sciences QFF (type TISSUEQUARTZ 2500QAT-UP), 24 m <sup>3</sup> /day	Daily	Ion chromatography	
Chloride	IT04	PALL Life Sciences QFF (type TISSUEQUARTZ 2500QAT-UP), 24 m <sup>3</sup> /day	Daily	Ion chromatography	
PM <sub>10</sub>					
PM <sub>2.5</sub>	IT04	PALL Life Sciences QFF (type TISSUEQUARTZ 2500QAT-UP), 24 m <sup>3</sup> /day	Daily	Weighing at 20% RH	
Suspended particulate matter					
Sum of nitric acid and nitrate					
Sum of ammonia and ammonium					
EC/OC	IT04	AirMonitors Denuder, PALL Life Sciences QFF (type TISSUEQUARTZ 2500QAT-UP), 24 m <sup>3</sup> /day	Daily	Thermo optical, EUSAAR 2 protocol	

Country: Kazakhstan		Main components and ozone - EMEP	Year: 2015	
	Station	Sampling	Sampling frequency	Analysis method
<b>Precipitation</b>				
Precipitation amount				
Precipitation amount, official gauge				
Sulphate				
Nitrate				
Ammonium				
Magnesium				
Sodium				
Chloride				
Calcium				
Potassium				
Conductivity				
pH				
Acidity				
<b>Air</b>				
Sulphur dioxide				
Nitrogen dioxide				
Nitric acid				
Ammonia				
Ozone				
Sulphate PM <sub>10</sub>	KZ01		Daily	IC
Nitrate PM <sub>10</sub>	KZ01		Daily	IC
Ammonium				
Sodium				
Calcium				
Magnesium				
Potassium				
Chloride PM <sub>10</sub>	KZ01		Daily	IC
PM <sub>10</sub>				
PM <sub>2.5</sub>				
PM <sub>1</sub>				
Suspended particulate matter				
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				
Acidity				

<b>Country: Latvia</b>		<b>Main components and ozone - EMEP</b>		<b>Year: 2015</b>	
	<b>Station</b>	<b>Sampling</b>		<b>Sampling frequency</b>	<b>Analysis method</b>
<b>Precipitation</b>					
Precipitation amount	LV10	Wet-only		Daily	Gravimetric
Precipitation amount, official gauge	LV10	Meteorological station		Daily	Gauge, Tretjakov type
Sulphate	LV10	Wet-only		Daily	Ion chromatography
Nitrate	LV10	Wet-only		Daily	Ion chromatography
Ammonium	LV10	Wet-only		Daily	Spectrophotometric, Indophenol method
Magnesium	LV10	Wet-only		Daily	ICP-AES
Sodium	LV10	Wet-only		Daily	ICP-AES
Chloride	LV10	Wet-only		Daily	Ion chromatography
Calcium	LV10	Wet-only		Daily	ICP-AES
Potassium	LV10	Wet-only		Daily	ICP-AES
Conductivity	LV10	Wet-only		Daily	Conductivity meter
pH	LV10	Wet-only		Daily	pH meter
Acidity					
<b>Air</b>					
Sulphur dioxide	LV10	KOH-impregnated Whatman 47 filter, 16-23 m <sup>3</sup> /day		Daily	Ion chromatography
Nitrogen dioxide	LV10	Nal-impregnated glass sinters, 03-0.7 m <sup>3</sup> /day		Daily	Spectrophotometric, Griess method
Nitric acid	LV10	KOH-impregnated Whatman 47 filter, 16-23 m <sup>3</sup> /day		Daily	Ion chromatography
Ammonia	LV10	Oxalic acid impregnated filter, 16-23 m <sup>3</sup> /day		Daily	Spectrophotometric, Indophenol method
Sulphate	LV10	Whatman 47 filter, 16-23 m <sup>3</sup> /day		Daily	Ion chromatography
Nitrate	LV10	Whatman 47 filter, 16-23 m <sup>3</sup> /day		Daily	Ion chromatography
Ammonium	LV10	Whatman 47 filter, 16-23 m <sup>3</sup> /day		Daily	Spectrophotometric, Indophenol method
Sulphate PM <sub>2.5</sub>	LV10	Teflon filter, 386.4 m <sup>3</sup> /weekly		Weekly	Ion chromatography
Nitrate PM <sub>2.5</sub>	LV10	Teflon filter, 386.4 m <sup>3</sup> /weekly		Weekly	Ion chromatography
Ammonium PM <sub>2.5</sub>	LV10	Teflon filter, 386.4 m <sup>3</sup> /weekly		Weekly	Ion chromatography
Sodium PM <sub>2.5</sub>	LV10	Teflon filter, 386.4 m <sup>3</sup> /weekly		Weekly	Ion chromatography
Calcium PM <sub>2.5</sub>	LV10	Teflon filter, 386.4 m <sup>3</sup> /weekly		Weekly	Ion chromatography
Magnesium PM <sub>2.5</sub>	LV10	Teflon filter, 386.4 m <sup>3</sup> /weekly		Weekly	Ion chromatography
Potassium PM <sub>2.5</sub>	LV10	Teflon filter, 386.4 m <sup>3</sup> /weekly		Weekly	Ion chromatography
Chloride PM <sub>2.5</sub>	LV10	Teflon filter, 386.4 m <sup>3</sup> /weekly		Weekly	Ion chromatography
PM <sub>10</sub>	LV10	Low volume sampler, 2.3 m <sup>3</sup> /h, Teflon filter, 47 mm		Daily	Beta absorption
PM <sub>2.5</sub>	LV10	Low volume sampler, 2.3 m <sup>3</sup> /h, Teflon filter, 47 mm		Daily	Beta absorption
PM <sub>1</sub>					
Suspended particulate matter					
Sum of nitric acid and nitrate	LV10	KOH-impregnated Whatman 47 filter + Whatman 47 filter, 16-23 m <sup>3</sup> /day		Daily	Ion chromatography
Sum of ammonia and ammonium	LV10	Oxalic acid impregnated filter + Whatman 47 filter, 16-23 m <sup>3</sup> /day		Daily	Spectrophotometric, Indophenol method
Acidity					

Country: Lithuania		Main components and ozone - EMEP	Year: 2015	
	Station	Sampling	Sampling frequency	Analysis method
<b>Precipitation</b>				
Precipitation amount	LT15	Wet-only	Daily	By weight
Precipitation amount, official gauge				
Sulphate	LT15	Wet-only	Daily	Ion chromatography
Nitrate	LT15	Wet-only	Daily	Ion chromatography
Ammonium	LT15	Wet-only	Daily	Spectrophotometric, Indophenol method
Magnesium				
Sodium	LT15	Wet-only	Daily	Atomic emission method
Chloride	LT15	Wet-only	Daily	Ion chromatography
Calcium	LT15	Wet-only	Daily	Atomic absorption method
Potassium	LT15	Wet-only	Daily	Atomic emission method
Conductivity	LT15	Wet-only	Daily	Conductivity meter
pH	LT15	Wet-only	Daily	pH meter
Acidity				
<b>Air</b>				
Sulphur dioxide	LT15	KOH-impregnated Whatman 40 filter, 20 m <sup>3</sup> /day	Daily	Ion chromatography
Nitrogen dioxide	LT15	Nal-impregnated glass sinters, 0.7 m <sup>3</sup> /day	Daily	Spectrophotometric, Griess method
Nitric acid				
Ammonia				
Ozone	LT15	UV-monitor	Hourly	UV-absorption
Sulphate	LT15	Teflon filter, Pall Zefluor 2 µm, 47 mm diameter, 20m <sup>3</sup> /day (Filterpack)	Daily	Ion chromatography
Nitrate				
Ammonium				
Sodium				
Calcium				
Magnesium				
Potassium				
Chloride				
PM <sub>10</sub>				
PM <sub>2.5</sub>				
PM <sub>1</sub>				
Suspended particulate matter				
Sum of nitric acid and nitrate	LT15	Aerosol filter as for sulphate + KOH impregnated Whatman 40 filter as for SO <sub>2</sub> , 20 m <sup>3</sup> /day	Daily	Ion chromatography
Sum of ammonia and ammonium	LT15	Aerosol filter as for sulphate + oxalic acid impregnated Whatman 40 filter, 20 m <sup>3</sup> /day	Daily	Spectrophotometric, Indophenol method
Acidity				

Country: Macedonia		Main components and ozone - EMEP	Year: 2015	
	Station	Sampling	Sampling frequency	Analysis method
<b>Precipitation</b>				
Precipitation amount				
Precipitation amount, official gauge				
Sulphate				
Nitrate				
Ammonium				
Magnesium				
Sodium				
Chloride				
Calcium				
Potassium				
Conductivity				
pH				
<b>Air</b>				
Sulphur dioxide	MK07	Instrumental: UV-fluorescence	Hourly	UV-fluorescence
Nitrogen dioxide	MK07	Instrumental: Chemiluminescence	Hourly	Chemiluminescence
Nitric acid				
Ammonia				
Ozone	MK07	Instrumental: UV-Monitor	Hourly	UV-absorption
Sulphate				
Nitrate				
Ammonium				
Sodium				
Calcium				
Magnesium				
Potassium				
Chloride				
PM <sub>10</sub>	MK07	Instrumental: beta absorption	Hourly	Beta absorption
PM <sub>2.5</sub>				
PM <sub>1</sub>				
Suspended particulate matter				
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				

Country: Moldova		Main components and ozone - EMEP		Year: 2015	
	Station	Sampling		Sampling frequency	Analysis method
<b>Precipitation</b>					
Precipitation amount	MD13	NILU bulk sampler		Daily	By volume
Precipitation amount, official gauge					
Sulphate	MD13	NILU bulk sampler		Daily	Ion chromatography
Nitrate	MD13	NILU bulk sampler		Daily	Ion chromatography
Ammonium	MD13	NILU bulk sampler		Daily	Ion chromatography
Magnesium	MD13	NILU bulk sampler		Daily	Ion chromatography
Sodium	MD13	NILU bulk sampler		Daily	Ion chromatography
Chloride	MD13	NILU bulk sampler		Daily	Ion chromatography
Calcium	MD13	NILU bulk sampler		Daily	Ion chromatography
Potassium	MD13	NILU bulk sampler		Daily	Ion chromatography
Conductivity	MD13	NILU bulk sampler		Daily	Conductivity meter
pH	MD13	NILU bulk sampler		Daily	pH meter; potentiometric, glass electrode
<b>Air</b>					
Sulphur dioxide	MD13	KOH-impregnated Whatman 40 filter 25 m <sup>3</sup> /day		Daily	Ion chromatography
Nitrogen dioxide					
Nitric acid					
Ammonia					
Ozone					
Sulphate	MD13	Teflon filter, Gelman Zefluor 2 µm, 25 m <sup>3</sup> /day		Daily	Ion chromatography
Nitrate	MD13	Teflon filter, Gelman Zefluor 2 µm, 25 m <sup>3</sup> /day		Daily	Ion chromatography
Ammonium	MD13	Teflon filter, Gelman Zefluor 2 µm, 25 m <sup>3</sup> /day		Daily	Ion chromatography
Sodium	MD13	Teflon filter, Gelman Zefluor 2 µm, 25 m <sup>3</sup> /day		Daily	Ion chromatography
Calcium	MD13	Teflon filter, Gelman Zefluor 2 µm, 25 m <sup>3</sup> /day		Daily	Ion chromatography
Magnesium	MD13	Teflon filter, Gelman Zefluor 2 µm, 25 m <sup>3</sup> /day		Daily	Ion chromatography
Potassium	MD13	Teflon filter, Gelman Zefluor 2 µm, 25 m <sup>3</sup> /day		Daily	Ion chromatography
Chloride	MD13	Teflon filter, Gelman Zefluor 2 µm, 25 m <sup>3</sup> /day		Daily	Ion chromatography
PM <sub>10</sub>	MD13	Teflon filter, Gelman Zefluor 2 µm, 25 m <sup>3</sup> /day		Daily	Ion chromatography
PM <sub>2.5</sub>					
PM <sub>1</sub>					
Suspended particulate matter					
Sum of nitric acid and nitrate	MD13	Aerosol filter as for sulphate + KOH impregnated filter as for SO <sub>2</sub> , 25 m <sup>3</sup> /day		Daily	Ion chromatography
Sum of ammonia and ammonium	MD13	Aerosol filter as for sulphate + oxalic acid impregnated filter, 25 m <sup>3</sup> /day		Daily	Spectrophotometric, Indophenol method and IC
EC/OC					

Country: Montenegro		Main components and ozone - EMEP	Year: 2015	
	Station	Sampling	Sampling frequency	Analysis method
<b>Precipitation</b>				
Precipitation amount	ME08	Wet-only	daily	
Precipitation amount, official gauge	ME08	Meteorological station	daily	
Sulphate	ME08	Wet-only	daily	Spectrophotometry
Nitrate	ME08	Wet-only	daily	Spectrophotometry
Ammonium	ME08	Wet-only	daily	Spectrophotometry
Magnesium	ME08	Wet-only	daily	By calculation
Sodium	ME08	Wet-only	daily	Flame photometry
Chloride	ME08	Wet-only	daily	Titrimetric method
Calcium	ME08	Wet-only	daily	Titrimetric method
Potassium	ME08	Wet-only	daily	Flame photometry
Conductivity	ME08	Wet-only	daily	Conductivity meter
pH	ME08	Wet-only	daily	pH meter, glass electrode
Acidity	ME08	Wet-only	daily	Titrimetric method
<b>Air</b>				
Sulphur dioxide	ME08	Absorbing solution	Daily	Spectrophotometry
Nitrogen dioxide	ME08	Absorbing solution	Daily	Spectrophotometry
Nitric acid				
Ammonia				
Ozone				
Sulphate				
Nitrate				
Ammonium				
Sodium				
Calcium				
Magnesium				
Potassium				
Chloride				
PM <sub>10</sub>				
PM <sub>2.5</sub>				
PM <sub>1</sub>				
Suspended particulate matter				
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				
Acidity				

Country: The Netherlands		Main components and ozone - EMEP	Year: 2015	
	Station	Sampling	Sampling frequency	Analysis method
<b>Precipitation</b>				
Precipitation amount	NL091	Wet-only	Daily/4-weekly	
Precipitation amount, official gauge				
Sulphate	NL091	Wet-only	Daily/4-weekly	Ion chromatography
Nitrate	NL091	Wet-only	Daily/4-weekly	Ion chromatography
Ammonium	NL091	Wet-only	Daily/4-weekly	CFA
Magnesium	NL091	Wet-only	Daily/4-weekly	HR-ICP/MS
Sodium	NL091	Wet-only	Daily/4-weekly	HR-ICP/MS
Chloride	NL091	Wet-only	Daily/4-weekly	Ion chromatography
Calcium	NL091	Wet-only	Daily/4-weekly	HR-ICP/MS
Potassium	NL091	Wet-only	Daily/4-weekly	HR-ICP/MS
Conductivity	NL091	Wet-only	Daily/4-weekly	Conductivity meter
pH	NL091	Wet-only	Daily/4-weekly	pH meter
Acidity	NL091	Wet-only	Daily/4-weekly	Titration
<b>Air</b>				
Sulphur dioxide	NL07,NL09,,NL91,NL644R	Instrumental: UV-fluorescence	Hourly	UV-fluorescence
Nitrogen dioxide	NL07,NL09,NL10,NL91,NL644R	Instrumental: Chemiluminescence	Hourly	Chemiluminescence
Nitric acid				
Ammonia	NL91	Absorption in NaHSO <sub>4</sub> , membrane separation, conductivity measurement	Hourly	Conductivity
Ozone	NL07,NL09,NL10, NL91,NL644R	UV-monitor	Hourly	UV-absorption
Sulphate	NL10,NL91	Whatman QMA filter 47 mm, 55.2 m <sup>3</sup> /day	Daily	Ion chromatography
Nitrate	NL10,NL91	Whatman QMA filter 47 mm, 55.2 m <sup>3</sup> /day	Daily	Ion chromatography
Ammonium	NL10,NL91	Whatman QMA filter 47 mm, 55.2 m <sup>3</sup> /day	Daily	CFA <sup>2</sup>
Chloride	NL10,NL91	Whatman QMA filter 47 mm, 55.2 m <sup>3</sup> /day	Daily	Ion chromatography
Sodium	NL08, NL644R	Teflon filter, Pall Zefluor 2 µm, 47 mm diameter, 55.2 m <sup>3</sup> /day	NL08L(Every other day), NL644R( every 4 day)	HR-ICP/MS
Calcium	NL08, NL644R	Teflon filter, Pall Zefluor 2 µm, 47 mm diameter, 55.2 m <sup>3</sup> /day	NL08L(Every other day), NL644R( every 4th day)	HR-ICP/MS
Magnesium	NL08, NL644R	Teflon filter, Pall Zefluor 2 µm, 47 mm diameter, 55.2 m <sup>3</sup> /day	NL08L(Every other day), NL644R( every 4th day)	HR-ICP/MS
Potassium	NL091			
PM <sub>10</sub>	NL07,NL09,NL10,NL91,NL644R	Instrumental: beta absorption	Hourly	Beta absorption
PM <sub>2,5</sub>	NL09,NL10,,NL91.NL644R	Instrumental: beta absorption	Hourly	Beta absorption
Suspended particulate matter				
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				
Acidity				

Country: Norway		Main components and ozone - EMEP		Year: 2015	
	Station	Sampling		Sampling frequency	Analysis method
<b>Precipitation</b>					
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
<b>Air</b>					
Sulphur dioxide	All	KOH-impregnated Whatman 40 filter 25 m <sup>3</sup> /day		Daily	Ion chromatography
Nitrogen dioxide	All	Nal-impregnated glass sinters, 0.7 m <sup>3</sup> /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 <sup>3</sup> /day		Daily	Ion chromatography
Nitrate	All	Teflon filter, Gelman Zefluor 2 µm, 25 m <sup>3</sup> /day		Daily	Ion chromatography
Ammonium	All	Teflon filter, Gelman Zefluor 2 µm, 25 m <sup>3</sup> /day		Daily	Ion chromatography
Sodium	All	Teflon filter, Gelman Zefluor 2 µm, 25 m <sup>3</sup> /day		Daily	Ion chromatography
Calcium	All	Teflon filter, Gelman Zefluor 2 µm, 25 m <sup>3</sup> /day		Daily	Ion chromatography
Magnesium	All	Teflon filter, Gelman Zefluor 2 µm, 25 m <sup>3</sup> /day		Daily	Ion chromatography
Potassium	All	Teflon filter, Gelman Zefluor 2 µm, 25 m <sup>3</sup> /day		Daily	Ion chromatography
Chloride	All	Teflon filter, Gelman Zefluor 2 µm, 25 m <sup>3</sup> /day		Daily	Ion chromatography
PM <sub>10</sub>	NO01	KleinfILTERgerät Whatman QM-A 47 mm		6+1	by weight, RH 50%
PM <sub>2.5</sub>	NO01	KleinfILTERgerät Whatman QM-A 47 mm		6+1	by weight, RH 50%
PM <sub>1</sub>	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 <sub>2</sub> , 25 m <sup>3</sup> /day		Daily	Ion chromatography
Sum of ammonia and ammonium	All	Aerosol filter as for sulphate + oxalic acid impregnated filter, 25 m <sup>3</sup> /day		Daily	Spectrophotometric, Indophenol method and IC
EC/OC	NO01	KleinfILTERgerät Whatman QM-A 47 mm, 55 m <sup>3</sup> /day		6+1	Thermal optical transmission

Country: Poland: PL02, PL03, PL04 (lab. IMWM-NRI)		Main components and ozone - EMEP		Year: 2015	
	Station	Sampling		Sampling frequency	Analysis method
<b>Precipitation</b>					
Precipitation amount	All	Bulk		Daily	By_weight
Precipitation amount, official gauge	All	Total		Daily	PL02,PL03 Hellman, standard gauge PL04 SEBA_Hydrometrie, automatic 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
<b>Air</b>					
Sulphur dioxide	All	KOH-impregnated Whatman 40 filter, 3.5-4.2 m <sup>3</sup> /day		Daily	Spectrophotometric,Thorin
Nitrogen dioxide	All	Absorbing solution TGS, 0.7 m <sup>3</sup> /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 <sup>3</sup> /day		Daily	Spectrophotometric,Thorin
Nitrate	All	Whatman 40 filter, 3.5-4.2 m <sup>3</sup> /day		Daily	Spectrophotometric, Griess after hydrazine reduction
Ammonium	All	Whatman 40 filter, 3.5-4.2 m <sup>3</sup> /day		Daily	Spectrophotometric, Chloramin T
Sodium					
Calcium					
Magnesium					
Potassium					
Chloride					
PM <sub>10</sub>					
PM <sub>2.5</sub>					
Suspended particulate matter					
Sum of nitric acid and nitrate	All	NaF impregnated Whatman 40 filter, 3.5-4.2 m <sup>3</sup> /day		Daily	Spectrophotometric, Griess after hydrazine reduction
Sum of ammonia and ammonium	All	Oxalic acid impregnated Whatman 40 filter, 3.5-4.2 m <sup>3</sup> /day		Daily	Spectrophotometric, Chloramin T

Country: Poland: PL05 (lab. IEP-NRI)		Main components and ozone - EMEP		Year: 2015
	Station	Sampling	Sampling frequency	Analysis method
<b>Precipitation</b>				
Precipitation amount	PL05	Wet-only	Daily	By weight
Precipitation amount, official gauge	PL05	Total	Daily	Standard rain gauge
Sulphate	PL05	Wet-only	Daily	Capillary Electrophoresis
Nitrate	PL05	Wet-only	Daily	Capillary Electrophoresis
Ammonium	PL05	Wet-only	Daily	Spectrophotometric, Indophenol method
Magnesium	PL05	Wet-only	Daily	Plasma emission spectrometry
Sodium	PL05	Wet-only	Daily	Plasma emission spectrometry
Chloride	PL05	Wet-only	Daily	Capillary Electrophoresis
Calcium	PL05	Wet-only	Daily	Plasma emission spectrometry
Potassium	PL05	Wet-only	Daily	Plasma emission spectrometry
Conductivity	PL05	Wet-only	Daily	Conductivity meter
pH	PL05	Wet-only	Daily	pH meter
<b>Air</b>				
Sulphur dioxide	PL05	KOH-impregnated Whatman 40 filter, 16 m <sup>3</sup> /day	Daily	Capillary Electrophoresis
Nitrogen dioxide	PL05	Iodide method (impregnated glass sinter), 0.7 m <sup>3</sup> /day	Daily	Spectrophotometric, Griess method
Nitric acid				
Ammonia				
Ozone	PL05	UV-monitor	Hourly	UV-absorption
Sulphate	PL05	Teflon filter Millipore Fluoropore 3 µm, 16 m <sup>3</sup> /day	Daily	Capillary Electrophoresis
Sulphate	PL05	QMA Whatman filter, 750 m <sup>3</sup> /day (PM2,5)	Daily/Weekly (anal.)	Ion chromatography
Nitrate	PL05	QMA Whatman filter, 750 m <sup>3</sup> /day (PM2,5)	Daily/Weekly (anal.)	Ion chromatography
Ammonium	PL05	QMA Whatman filter, 750 m <sup>3</sup> /day (PM2,5)	Daily/Weekly (anal.)	Ion chromatography
Sodium	PL05	QMA Whatman filter, 750 m <sup>3</sup> /day (PM2,5)	Daily/Weekly (anal.)	Plasma emission spectrometry
Calcium	PL05	QMA Whatman filter, 750 m <sup>3</sup> /day (PM2,5)	Daily/Weekly (anal.)	Plasma emission spectrometry
Magnesium	PL05	QMA Whatman filter, 750 m <sup>3</sup> /day (PM2,5)	Daily/Weekly (anal.)	Plasma emission spectrometry
Potassium	PL05	QMA Whatman filter, 750 m <sup>3</sup> /day (PM2,5)	Daily/Weekly (anal.)	Plasma emission spectrometry
Chloride	PL05	QMA Whatman filter, 750 m <sup>3</sup> /day (PM2,5)	Daily/Weekly (anal.)	Ion chromatography
EC/OC	PL05	QMA Whatman filter, 750 m <sup>3</sup> /day (PM2,5)	Daily	Thermo optical
PM <sub>10</sub>	PL05	High Volume Sampler (750 m <sup>3</sup> /day)	Daily	By weight
PM <sub>2,5</sub>	PL05	High Volume Sampler (750 m <sup>3</sup> /day)	Daily	By weight
Suspended particulate matter				
Sum of nitric acid and nitrate	PL05	Aerosol Teflon filter Millipore Fluoropore 3 µm+ KOH impregnated Whatman 40 filter, 16 m <sup>3</sup> /day	Daily	Capillary Electrophoresis
Sum of ammonia and ammonium	PL05	Aerosol Teflon filter Millipore Fluoropore 3 µm + Oxalic acid impregnated Whatman 40 filter, 16 m <sup>3</sup> /day	Daily	Spectrophotometric, Indophenol method

Country: Romania		Main components and ozone - EMEP	Year: 2015	
	Station	Sampling	Sampling frequency	Analysis method
Precipitation				
Precipitation amount				
Precipitation amount, official gauge				
Sulphate				
Nitrate				
Ammonium				
Magnesium				
Sodium				
Chloride				
Calcium				
Potassium				
Conductivity				
pH				
Acidity				
Air				
Sulphur dioxide	EM-3 RO0008R	Instrumental: UV-fluorescence monitor	Hourly	UV-fluorescence
Nitrogen dioxide	EM-3 RO0008R	Instrumental: Chemiluminescence monitor	Hourly	Chemiluminescence
Nitric acid				
Ammonia				
Ozone	EM-3 RO0008R	Instrumental:UV-monitor	Hourly	UV-absorption
Sulphate				
Nitrate				
Ammonium				
Sodium				
Calcium				
Magnesium				
Potassium				
Chloride				
PM <sub>10</sub>	EM-3 RO0008R	Low volume sampler 2,3m <sup>3</sup> /hour	Daily	Gravimetric
PM <sub>2,5</sub>				
PM <sub>1</sub>				
Suspended particulate matter				
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				
Acidity				

<b>Country: Russian Federation</b>		<b>Main components and ozone - EMEP</b>	<b>Year: 2015</b>	
	<b>Station</b>	<b>Sampling</b>	<b>Sampling frequency</b>	<b>Analysis method</b>
<b>Precipitation</b>				
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
<b>Air</b>				
Sulphur dioxide	RU01	NaOH-impregnated Whatman 40 filter, 10-15 m <sup>3</sup> /day	Daily	UV-fluorescence
Sulphur dioxide	RU16, RU18	NaOH-impregnated Whatman 40 filter, 10-15 m <sup>3</sup> /day	Daily	Ion chromatography
Nitrogen dioxide				
Nitric acid				
Ammonia				
Ozone				
Sulphate	All	Whatman 40 filter, 10-15 m <sup>3</sup> /day	Daily	Ion chromatography
Nitrate	All	Whatman 40 filter, 10-15 m <sup>3</sup> /day	Daily	Ion chromatography
Ammonium	All	Whatman 40 filter, 10-15 m <sup>3</sup> /day	Daily	Ion chromatography
Sodium				
Calcium				
Magnesium				
Potassium				
Chloride				
PM <sub>10</sub>				
PM <sub>2.5</sub>				
Suspended particulate matter				
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				

Country: Serbia		Main components and ozone - EMEP		Year: 2015	
	Station	Sampling		Sampling frequency	Analysis method
<b>Precipitation</b>					
Precipitation amount					
Precipitation amount, official gauge	RS05	Meteorological rain gauge	Daily		
Sulphate	RS05	Bulk	Daily	Ion chromatography	
Nitrate	RS05	Bulk	Daily	Ion chromatography	
Ammonium	RS05	Bulk	Daily	Ion chromatography	
Magnesium	RS05	Bulk	Daily	Ion chromatography	
Sodium	RS05	Bulk	Daily	Ion chromatography	
Chloride	RS05	Bulk	Daily	Ion chromatography	
Calcium	RS05	Bulk	Daily	Ion chromatography	
Potassium	RS05	Bulk	Daily	Ion chromatography	
Conductivity	RS05	Bulk	Daily	Conductivity meter	
pH	RS05	Bulk	Daily	pH meter	
<b>Air</b>					
Sulphur dioxide	RS05	Absorbing solution H <sub>2</sub> O <sub>2</sub> , 1.5-2.5 m <sup>3</sup> /day	Daily	Thorin Spectrophotometric method	
Nitrogen dioxide	RS05	Absorbing solution NaOH, 1.5-2.5 m <sup>3</sup> /day	Daily	Modified Griess Saltzman method	
Nitric acid					
Ammonia					
Ozone					
Sulphate					
Nitrate					
Ammonium					
Sodium					
Calcium					
Magnesium					
Potassium					
Chloride					
PM <sub>10</sub>					
PM <sub>2.5</sub>					
Suspended particulate matter					
Sum of nitric acid and nitrate					
Sum of ammonia and ammonium					

<b>Country: Slovakia</b>		<b>Main components and ozone - EMEP</b>		<b>Year: 2015</b>
	<b>Station</b>	<b>Sampling</b>	<b>Sampling frequency</b>	<b>Analysis method</b>
<b>Precipitation</b>				
Precipitation amount	SK02,SK04, SK06, SK07	Bulk: SK02: Wet-only: SK04, SK06, SK07	Daily SK02, SK06 Weekly SK04, SK 07	
Precipitation amount, official gauge	SK02,SK04, SK06, SK07	Reported from professional meteorological rain-gauges	Daily	
Sulphate	SK02,SK04, SK06, SK07	Bulk: SK02 Wet-only: SK04, SK06, SK07	Daily: SK02, SK06 Weekly: SK04, SK07	Ion chromatography – Dionex
Nitrate	SK02,SK04, SK06, SK07	Bulk: SK02 Wet-only: SK04, SK06, SK07	Daily: SK02, SK06 Weekly: SK04, SK07	Ion chromatography – Dionex
Ammonium	SK02,SK04, SK06, SK07	Bulk: SK02 Wet-only: SK04, SK06, SK07	Daily: SK02, SK06 Weekly: SK04, SK07	Ion chromatography – Dionex
Magnesium	SK02,SK04, SK06, SK07	Bulk: SK02 Wet-only: SK04, SK06, SK07	Daily: SK02, SK06 Weekly: SK04,SK07	Ion chromatography – Dionex
Sodium	SK02,SK04, SK06, SK07	Bulk: SK02 Wet-only: SK04, SK06, SK07	Daily: SK02, SK06 Weekly: SK04,SK07	Ion chromatography – Dionex
Chloride	SK02,SK04, SK06, SK07	Bulk: SK02 Wet-only: SK04, SK06, SK07	Daily: SK02, SK06 Weekly: SK04,SK07	Ion chromatography – Dionex
Calcium	SK02,SK04, SK06, SK07	Bulk: SK02 Wet-only: SK04, SK06, SK07	Daily: SK02, SK06 Weekly SK04,SK07	Ion chromatography – Dionex
Potassium	SK02,SK04, SK06, SK07	Bulk: SK02 Wet-only: SK04, SK06, SK07	Daily: SK02, SK06 Weekly: SK04, SK07	Ion chromatography - Dionex
Conductivity	SK02,SK04, SK06, SK07	Bulk: SK02 Wet-only: SK04, SK06, SK07	Daily: SK02, SK06 Weekly: SK04,SK07	Conductivity meter
pH	SK02,SK04, SK06, SK07	Bulk: SK02 Wet-only: SK04, SK06, SK07	Daily: SK02, SK06 Weekly: SK04,SK07	pH meter
<b>Air</b>				
Sulphur dioxide	SK02,SK06	KOH-impregnated Whatman 40 filter, 26-30 m <sup>3</sup> /day	Daily	Ion chromatography - Dionex
Nitrogen dioxide	SK02,SK06	Absorbing solution NaOH and guajacol, 0.5-0.6 m <sup>3</sup> /day	Daily	Spectrophotometric, Modified Salzman method
Nitric acid	SK02,SK06	KOH-impregnated Whatman 40 filter, 26-30 m <sup>3</sup> /day	Daily	Ion chromatography - Dionex
Ammonia	SK06	Citric acid-impregnated Whatman 40 filter, 26-30 m <sup>3</sup> /day	Daily	Ion chromatography - Dionex
Ozone	SK02,SK04,SK06, SK07	UV-monitor	Hourly	UV-absorption
Sulphate	SK02,SK06	Whatman 40 filter, 26-30 m <sup>3</sup> /day	Daily	Ion chromatography - Dionex
Nitrate	SK02,SK06	Whatman 40 filter, 26-30 m <sup>3</sup> /day	Daily	Ion chromatography - Dionex I
Ammonium	SK06	Whatman 40 filter, 26-30 m <sup>3</sup> /day	Daily	Ion chromatography - Dionex
Sodium	SK06	Whatman 40 filter, 26-30 m <sup>3</sup> /day	Daily	Ion chromatography - Dionex
Calcium	SK06	Whatman 40 filter, 26-30 m <sup>3</sup> /day	Daily	Ion chromatography - Dionex
Magnesium	SK06	Whatman 40 filter, 26-30 m <sup>3</sup> /day	Daily	Ion chromatography - Dionex
Potassium	SK06	Whatman 40 filter, 26-30 m <sup>3</sup> /day	Daily	Ion chromatography - Dionex
Chloride	SK02,SK06	Whatman 40 filter, 26-30 m <sup>3</sup> /day	Daily	Ion chromatography - Dionex
PM <sub>10</sub>	SK04, SK06, SK07	Partisol R&P, Sartorius nitrocellulose filter, 24 m <sup>3</sup> /day	Weekly	Gravimetric method
PM <sub>2.5</sub>				
Suspended particulate matter	SK02	Sartorius nitrocellulose filter, 35-40 m <sup>3</sup> /day	Weekly	Gravimetric method
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				

Country: Slovenia			Main components and ozone - EMEP		Year: 2015
	Station	Sampling		Sampling frequency	Analysis method
<b>Precipitation</b>					
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
<b>Air</b>					
Sulphur dioxide	SI08	KOH-impregnated Whatman 40 filter, 17-23 m <sup>3</sup> /day		Daily	Ion chromatography
Nitrogen dioxide	SI08	Continuous measurements: Teledyne API Model T500U CAPS Analyser		Hourly	Cavity-Attenuated Phase-Shift spectroscopy
Nitric acid	SI08	KOH-impregnated Whatman 40 filter, 17-23 m <sup>3</sup> /day		Daily	Ion chromatography
Ammonia	SI08	Oxalic acid impregnated Whatman 40 filter, 17-23 m <sup>3</sup> /day		Daily	Ion chromatography
Carbon monoxide	SI32	Trace level analyzer		Hourly	ndir
Sulphate	SI08	Teflon filter, Pall Zefluor 2 µm, 17-23 m <sup>3</sup> /day		Daily	Ion chromatography
Nitrate	SI08	Teflon filter, Pall Zefluor 2 µm, 17-23 m <sup>3</sup> /day		Daily	Ion chromatography
Ammonium	SI08	Teflon filter, Pall Zefluor 2 µm, 17-23 m <sup>3</sup> /day		Daily	Ion chromatography
Sodium	SI08	Teflon filter, Pall Zefluor 2 µm, 17-23 m <sup>3</sup> /day		Daily	Ion chromatography
Calcium	SI08	Teflon filter, Pall Zefluor 2 µm, 17-23 m <sup>3</sup> /day		Daily	Ion chromatography
Magnesium	SI08	Teflon filter, Pall Zefluor 2 µm, 17-23 m <sup>3</sup> /day		Daily	Ion chromatography
Potassium	SI08	Teflon filter, Pall Zefluor 2 µm, 17-23 m <sup>3</sup> /day		Daily	Ion chromatography
Chloride	SI08	Teflon filter, Pall Zefluor 2 µm, 17-23 m <sup>3</sup> /day		Daily	Ion chromatography
PM10	SI08	Low volume sampler, 2.3 m <sup>3</sup> /h, Quartz filter, 47 mm		Daily	Gravimetric method
PM2.5	SI08	Low volume sampler, 2.3 m <sup>3</sup> /h, Quartz filter, 47 mm		Daily	Gravimetric method
Sum of nitric acid and nitrate	SI08	Teflon filter, Pall Zefluor 2 µm + KOH impregnated Whatman 40 filter, 17-23 m <sup>3</sup> /day		Daily	Ion chromatography
Sum of ammonia and ammonium	SI08	Teflon filter, Pall Zefluor 2 µm + oxalic acid impregnated Whatman 40 filter, 17-23 m <sup>3</sup> /day		Daily	Ion chromatography

Country: Spain	Station	Main components and ozone - EMEP	Year: 2015	
		Sampling	Sampling frequency	Analysis method
<b>Precipitation</b>	All (except ES10)			
Precipitation amount	All	Wet-only	Daily	
Sulphate	All	Wet-only	Daily	Ion chromatography
Nitrate	All	Wet-only	Daily	Ion chromatography
Ammonium	All	Wet-only	Daily	Visible spectrophotometry, Indophenol method
Magnesium	All	Wet-only	Daily	Atomic absorption spectroscopy
Sodium	All	Wet-only	Daily	Atomic absorption spectroscopy
Chloride	All	Wet-only	Daily	Ion chromatography
Calcium	All	Wet-only	Daily	Atomic absorption spectroscopy
Potassium	All	Wet-only	Daily	Atomic absorption spectroscopy
Conductivity	All	Wet-only	Daily	Conductivity meter
pH	All	Wet-only	Daily	pH meter
<b>Air</b>				
Sulphur dioxide	All	Instrumental: UV-fluorescence	Hourly	Pulsed UV-Fluorescence
Nitrogen dioxide/NO/NOx	All	Instrumental: Chemiluminescence	Hourly	Chemiluminescence
Ozone	All	UV-monitor	Hourly	UV-absorption
Ammonia	ES01, ES07 , ES08, ES09, ES14	Passive sampler	Weekly ES07 (Biweekly)	Visible spectrophotometry, Indophenol method
PM <sub>10</sub>	All	High volume sampler	Daily	Gravimetric method
PM <sub>2.5</sub>	ES01, ES06, ES07, ES08, ES09, ES10, ES11, ES12, ES13, ES14, ES16	High volume sampler	Daily	Gravimetric method
Sulphate PM <sub>10</sub>	All	Whatman GF/A filter, 720 m <sup>3</sup> /day (ES07, ES08, ES10, ES11, ES12, S13, ES14, ES16) / 1632 m <sup>3</sup> /day (ES01, ES05, ES06, ES09, ES17)	Daily	Ion chromatography
Nitrate PM <sub>10</sub>	All	Whatman GF/A filter, 720 m <sup>3</sup> /day (ES07, ES08, ES10, ES11, ES12, S13, ES14, ES16) / 1632 m <sup>3</sup> /day (ES01, ES05, ES06, ES09, ES17)	Daily	Ion chromatography
Sum of nitric acid and nitrate	All	NaOH impregnated Whatman 40 filter, 35 m <sup>3</sup> /day	Daily	Ion chromatography
Sum of ammonia and ammonium	All	Oxalic acid impregnated Whatman 40 filter, 35 m <sup>3</sup> /day	Daily	Visible spectrophotometry, Indophenol method
Ammonium PM <sub>10</sub>	ES09, ES01, ES07, ES08, ES14	High volume sampler	24 hour, once a week	Visible spectrophotometry, Indophenol method
Sodium PM <sub>10</sub>	ES09, ES01, ES07, ES08, ES14	High volume sampler	Daily	Atomic absorption spectroscopy
Calcium PM <sub>10</sub>	ES09, ES01, ES07, ES08, ES14	High volume sampler	Daily	Atomic absorption spectroscopy
Magnesium PM <sub>10</sub>	ES09, ES01, ES07, ES08, ES14	High volume sampler	Daily	Atomic absorption spectroscopy
Potassium PM <sub>10</sub>	ES09, ES01, ES07, ES08, ES14	High volume sampler	Daily	Atomic absorption spectroscopy
Chloride PM <sub>10</sub>	ES09, ES01, ES07, ES08, ES14	High volume sampler	24 hour, once a week	Ion chromatography
Sulphate PM <sub>2.5</sub>	ES09, ES01, ES07, ES08, ES14	High volume sampler	24 hour, once a week	Ion chromatography

Country: Spain		Main components and ozone - EMEP	Year: 2015	
	Station	Sampling	Sampling frequency	Analysis method
Nitrate PM <sub>2.5</sub>	ES09, ES01, ES07, ES08, ES14	High volume sampler	24 hour, once a week	Ion chromatography
Sodium PM <sub>2.5</sub>	ES09, ES01, ES07, ES08, ES14	High volume sampler	24 hour, once a week	Atomic absorption spectroscopy
Calcium PM <sub>2.5</sub>	ES09, ES01, ES07, ES08, ES14	High volume sampler	24 hour, once a week	Atomic absorption spectroscopy
Magnesium PM <sub>2.5</sub>	ES09, ES01, ES07, ES08, ES14	High volume sampler	24 hour, once a week	Atomic absorption spectroscopy

Country: Sweden	Main components and ozone - EMEP		Year: 2015	
	Station	Sampling	Sampling frequency	Analysis method
<b>Precipitation</b>				
Precipitation amount	SE05, SE11, SE12, SE14	Wet-only	Daily: SE05, SE14; monthly: SE11, SE12	
Precipitation amount, official gauge				
Sulphate	SE05, SE11, SE12, SE14	Wet-only	Daily: SE05, SE14; monthly: SE11, SE12	Ion chromatography
Nitrate	SE05, SE11, SE12, SE14	Wet-only	Daily: SE05, SE14; monthly: SE11, SE12	Ion chromatography
Ammonium	SE05, SE11, SE12, SE14	Wet-only	Daily: SE05, SE14; monthly: SE11, SE12	Spectrophotometric, Flow injection analysis
Magnesium	SE05, SE11, SE12, SE14	Wet-only	Daily: SE05, SE14; monthly: SE11, SE12	Ion chromatography
Sodium	SE05, SE11, SE12, SE14	Wet-only	Daily: SE05, SE14; monthly: SE11, SE12	Ion chromatography
Chloride	SE05, SE11, SE12, SE14	Wet-only	Daily: SE05, SE14; monthly: SE11, SE12	Ion chromatography
Calcium	SE05, SE11, SE12, SE14	Wet-only	Daily: SE05, SE14; monthly: SE11, SE12	Ion chromatography
Potassium	SE05, SE11, SE12, SE14	Wet-only	Daily: SE05, SE14; monthly: SE11, SE12	Ion chromatography
Conductivity	SE05, SE11, SE12, SE14	Wet-only	Daily: SE05, SE14; monthly: SE11, SE12	Conductivity meter
pH	SE05, SE11, SE12, SE14	Wet-only	Daily: SE05, SE14; monthly: SE11, SE12	pH meter
<b>Air</b>				
Sulphur dioxide	SE05, SE11, SE12, SE14	KOH-impregnated Whatman 40 filter, 20 m <sup>3</sup> /day	Daily	Ion chromatography
Nitrogen dioxide	SE05, SE11, SE12, SE14	Nal-impregnated glass sinters, ~0.7 m <sup>3</sup> /day	Daily	Spectrophotometric, Flow Injection Analysis
Nitric acid				
Ammonia				
Ozone	SE05, SE11, SE12, SE13, SE14, SE32, SE35, SE39	UV-monitor	Hourly	UV-absorption
Sulphate	SE05, SE11, SE12, SE14	Teflon filter, Mitex membrane, 20 m <sup>3</sup> /day	Daily	Ion chromatography
Nitrate				
Ammonium				
Sodium	SE05, SE11, SE12, SE14	Teflon filter, Mitex membrane, 20 m <sup>3</sup> /day	Daily	Ion chromatography
Calcium	SE05, SE11, SE12, SE14	Teflon filter, Mitex membrane, 20 m <sup>3</sup> /day	Daily	Ion chromatography
Magnesium	SE05, SE11, SE12, SE14	Teflon filter, Mitex membrane, 20 m <sup>3</sup> /day	Daily	Ion chromatography
Potassium	SE05, SE11, SE12, SE14	Teflon filter, Mitex membrane, 20 m <sup>3</sup> /day	Daily	Ion chromatography
Chloride	SE05, SE11, SE12, SE14	Teflon filter, Mitex membrane, 20 m <sup>3</sup> /day	Daily	Ion chromatography
PM <sub>10</sub>	SE11, SE12	TEOM (Tapered Element Oscillating Microbalance)	Hourly	TEOM
PM <sub>2.5</sub>	SE11, SE12	TEOM (Tapered Element Oscillating Microbalance)	Hourly	TEOM
PM <sub>10</sub>	SE05, SE14	IVL Sampler PModel S10	Daily	Gravimetric
PM <sub>2.5</sub>	SE05, SE14	IVL Sampler PModel S10	Daily	Gravimetric
Sum of nitric acid and nitrate	SE05, SE11, SE12, SE14	Aerosol filter as for sulphate + KOH-impregnated Whatman 40 filter, 20 m <sup>3</sup> /day	Daily	Ion chromatography
Sum of ammonia and ammonium	SE05, SE11, SE12, SE14	Aerosol filter as for sulphate + Oxalic acid impregnated Whatman 40 filter, 20 m <sup>3</sup> /day	Daily	Spectrophotometric, Flow injection analysis

<b>Country: Switzerland</b>		<b>Main components and ozone - EMEP</b>	<b>Year: 2015</b>	
	<b>Station</b>	<b>Sampling</b>	<b>Sampling frequency</b>	<b>Analysis method</b>
<b>Precipitation</b>				
Precipitation amount	CH02, CH04, CH05	Wet-only	Weekly	
Precipitation amount, official gauge				
Sulphate	CH02, CH04, CH05	Wet-only	Weekly	Ion chromatography
Nitrate	CH02, CH04, CH05	Wet-only	Weekly	Ion chromatography
Ammonium	CH02, CH04, CH05	Wet-only	Weekly	Ion chromatography
Magnesium	CH02, CH04, CH05	Wet-only	Weekly	Ion chromatography
Sodium	CH02, CH04, CH05	Wet-only	Weekly	Ion chromatography
Chloride	CH02, CH04, CH05	Wet-only	Weekly	Ion chromatography
Calcium	CH02, CH04, CH05	Wet-only	Weekly	Ion chromatography
Potassium	CH02, CH04, CH05	Wet-only	Weekly	Ion chromatography
Conductivity	CH02, CH04, CH05	Wet-only	Weekly	Conductivity meter
pH	CH02, CH04, CH05	Wet-only	Weekly	pH meter
<b>Air</b>				
Sulphur dioxide	CH01, CH02, CH05	Instrumental: UV-fluorescence	Daily	UV-fluorescence
Nitrogen dioxide	CH01, CH02, CH05	Instrumental: Chemiluminescence-monitor	Daily	Chemiluminescence (photolytic converter)
Nitrogen dioxide	CH03, CH04	Instrumental: Chemiluminescence-monitor	Daily	Chemiluminescence (molybdenum converter)
Nitric acid	CH02, CH05	KOH impregnated Mini-Denuder / modified CEH DELTA-System, 0.5 m <sup>3</sup> /day	Biweekly	Ion chromatography
Ammonia	CH02, CH05	Citric acid impregnated Mini-Denuder / modified CEH DELTA-System, 0.5 m <sup>3</sup> /day	Biweekly	Ion chromatography
Ozone	All	Instrumental: UV-monitor	Hourly	UV-absorption
Sulphate	CH02, CH05	High Volume Samplers, Pallflex XP56 Tissuequartz 2500 QAT-UP, 720 m <sup>3</sup> /day	Daily	Ion chromatography
Sulphate	CH01	High Volume Samplers, Pallflex XP56 Tissuequartz 2500 QAT-UP, 1075 m <sup>3</sup> /day	Daily	Ion chromatography
Nitrate	CH02, CH05	KOH impregnated Whatman 1 filter, Delrin filterholder / modified CEH DELTA-System, 0.5 m <sup>3</sup> /day	Biweekly	Ion chromatography
Ammonium	CH02, CH05	Citric acid impregnated Sartorius 11306 filter, Delrin filterholder / modified CEH DELTA-System, 0.5 m <sup>3</sup> /day	Biweekly	Ion chromatography
Sodium	CH02, CH05	Citric acid impregnated Whatman 40 filter / NILU filterholder, 18 m <sup>3</sup> /day		
Calcium	CH02, CH05	Citric acid impregnated Whatman 40 filter / NILU filterholder, 18 m <sup>3</sup> /day		
Magnesium	CH02, CH05	Citric acid impregnated Whatman 40 filter / NILU filterholder, 18 m <sup>3</sup> /day		
Potassium	CH02, CH05	Citric acid impregnated Whatman 40 filter / NILU filterholder, 18 m <sup>3</sup> /day		
Chloride				
PM <sub>10</sub>	CH01	High Volume Samplers, Pallflex XP56 Tissuequartz 2500 QAT-UP, 1075 m <sup>3</sup> /day	Daily	Gravimetry
PM <sub>10</sub>	CH02, CH03, CH04, CH05	High Volume Samplers, Pallflex XP56 Tissuequartz 2500 QAT-UP, 720 m <sup>3</sup> /day	Daily	Gravimetry
PM <sub>2.5</sub>	CH02, CH05	High Volume Samplers, Pallflex XP56 Tissuequartz 2500 QAT-UP, 720 m <sup>3</sup> /day	Daily	Gravimetry
Suspended particulate matter				
Sum of nitric acid and nitrate	CH02, CH05	NaOH impregnated Whatman 40 filter / NILU filterholder, 18 m <sup>3</sup> /day	Daily	Ion chromatography
Sum of ammonia and ammonium	CH02, CH05	Citric acid impregnated Whatman 40 filter / NILU filterholder, 18 m <sup>3</sup> /day	Daily	Ion chromatography

Country: United Kingdom		Main components and ozone - EMEP	Year: 2015	
	Station	Sampling	Sampling frequency	Analysis method
<b>Precipitation</b>				
Precipitation amount	GB02, GB06, GB13, GB14, GB15	Bulk collector	Fortnightly	Mass of water collected
Precipitation amount, official gauge				
Sulphate	GB02, GB06, GB13, GB14, GB15	Bulk collector	Fortnightly	Ion chromatography
Nitrate	GB02, GB06, GB13, GB14, GB15	Bulk collector	Fortnightly	Ion chromatography
Ammonium	GB02, GB06, GB13, GB14, GB15	Bulk collector	Fortnightly	Ion chromatography
Magnesium	GB02, GB06, GB13, GB14, GB15	Bulk collector	Fortnightly	Ion chromatography
Sodium	GB02, GB06, GB13, GB14, GB15	Bulk collector	Fortnightly	Ion chromatography
Chloride	GB02, GB06, GB13, GB14, GB15	Bulk collector	Fortnightly	Ion chromatography
Calcium	GB02, GB06, GB13, GB14, GB15	Bulk collector	Fortnightly	Ion chromatography
Potassium	GB02, GB06, GB13, GB14, GB15	Bulk collector	Fortnightly	Ion chromatography
Conductivity	GB02, GB06, GB13, GB14, GB15	Bulk collector	Fortnightly	Conductivity meter
pH	GB02, GB06, GB13, GB14, GB15	Bulk collector	Fortnightly	pH meter
<b>Air</b>				
Sulphur dioxide	GB36, GB37, GB38, GB43, GB45	Instrumental	Hourly	UV fluorescence
Sulphur dioxide	GB48	Instrumental	Hourly	Online IC
Nitrogen dioxide	14 sites	Instrumental	Hourly	Chemiluminescence
Nitrogen monoxide	14 sites	Instrumental	Hourly	Chemiluminescence
Nitric acid	GB06, GB13, GB14, GB54	Delta sampler (low volume denuder and filter pack)	Monthly	Ion chromatography
Nitric Acid	GB48	Instrumental	Hourly	Online IC
Ammonia	GB06, GB13, GB14, GB54	Delta sampler (low volume denuder and filter pack)	Monthly	Florria
Ammonia	GB48	Instrumental	Hourly	Online IC
Ozone	20 sites	UV-monitor	Hourly	UV-absorption
Sulphate	GB06, GB13, GB14, GB54	Delta sampler (low volume denuder and filter pack)	Monthly	Ion chromatography
Nitrate	GB06, GB13, GB14, GB54	Delta sampler (low volume denuder and filter pack)	Monthly	Ion chromatography
Ammonium	GB06, GB13, GB14, GB54	Delta sampler (low volume denuder and filter pack)	Monthly	
Sodium	GB06, GB13, GB14, GB54	Delta sampler (low volume denuder and filter pack)	Monthly	
Calcium	GB06, GB13, GB14, GB54	Delta sampler (low volume denuder and filter pack)	Monthly	
Magnesium	GB06, GB13, GB14, GB54	Delta sampler (low volume denuder and filter pack)	Monthly	
Potassium	GB06, GB13, GB14, GB54	Delta sampler (low volume denuder and filter pack)	Monthly	
Chloride	GB06, GB13, GB14, GB54	Delta sampler (low volume denuder and filter pack)	Monthly	
PM <sub>10</sub>	GB06, GB36, GB43, GB48	FDMS, Partisol and volatile correction model to TEOM data	Daily/hourly	
PM <sub>2.5</sub>	GB36, GB48	FDMS and Partisol	Daily/hourly	
Ammonium PM <sub>10</sub> , PM <sub>2.5</sub>	GB36, GB48	Instrumental	Hourly	Online IC
Calcium PM <sub>10</sub> , PM <sub>2.5</sub>	GB36, GB48	Instrumental	Hourly	Online IC
Chloride PM <sub>10</sub> , PM <sub>2.5</sub>	GB36, GB48	Instrumental	Hourly	Online IC
Magnesium PM <sub>10</sub> , PM <sub>2.5</sub>	GB36, GB48	Instrumental	Hourly	Online IC
Nitratea PM <sub>10</sub> , PM <sub>2.5</sub>	GB36, GB48	Instrumental	Hourly	Online IC
Potassium PM <sub>10</sub> , PM <sub>2.5</sub>	GB36, GB48	Instrumental	Hourly	Online IC
Sodium PM <sub>10</sub> , PM <sub>2.5</sub>	GB36, GB48	Instrumental	Hourly	Online IC
Sulphate PM <sub>10</sub> , PM <sub>2.5</sub>	GB36, GB48	Instrumental	Hourly	Online IC
Suspended particulate matter				
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				

## **Annex 5**

### **List of data reports**



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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

$$\bar{c}_a - 2sd_a \text{ and } \bar{c}_a + 2sd_a$$

and between

$$\frac{\bar{c}_g}{sd_g^2} \text{ and } \bar{c}_g \cdot sd_g^2$$

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:

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

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

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

$$\bar{c}_a = \frac{I}{N} \sum_i c_i$$

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

$$sd_a = \sqrt{\frac{\sum_i (c_i - \bar{c}_a)^2}{N - I}}$$

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

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

$$\bar{c}_g = \exp(\bar{\ln c})$$

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

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

$$sd_g = \exp(sdlnc)$$

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

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

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

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

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

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

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

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

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

## **Annex 7**

### **EMEP Data Quality Objectives (DQO)**



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

Measurement parameter	Detection limits	Precision	
		Overall	Laboratory
pH (pH units)		± 0.1 pH unit at pH > 5 ± 0.03 pH unit at pH < 5	± 0.04 pH unit at pH > 5 ± 0.02 pH unit at pH < 5
SO <sub>4</sub> <sup>2-</sup> (mg S L <sup>-1</sup> )	0.02	0.02	0.01
NO <sub>3</sub> <sup>-</sup> (mg N L <sup>-1</sup> )	0.02	0.01	0.01
Cl <sup>-</sup> (mg L <sup>-1</sup> )	0.04	0.02	0.02
NH <sub>4</sub> <sup>+</sup> (mg N L <sup>-1</sup> )	0.02	0.02	0.01
Ca <sup>++</sup> (mg L <sup>-1</sup> )	0.02	0.02	0.01
Mg <sup>++</sup> (mg L <sup>-1</sup> )	0.01	0.01	0.01
Na <sup>+</sup> (mg L <sup>-1</sup> )	0.02	0.01	0.01
K <sup>+</sup> (mg L <sup>-1</sup> )	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<sub>2</sub> the limit above for sulphate is valid for the medium volume method with impregnated filter. For NO<sub>2</sub> determined as NO<sub>2</sub><sup>-</sup> in solution the accuracy for the lowest concentrations is 0.01 mg N/l.