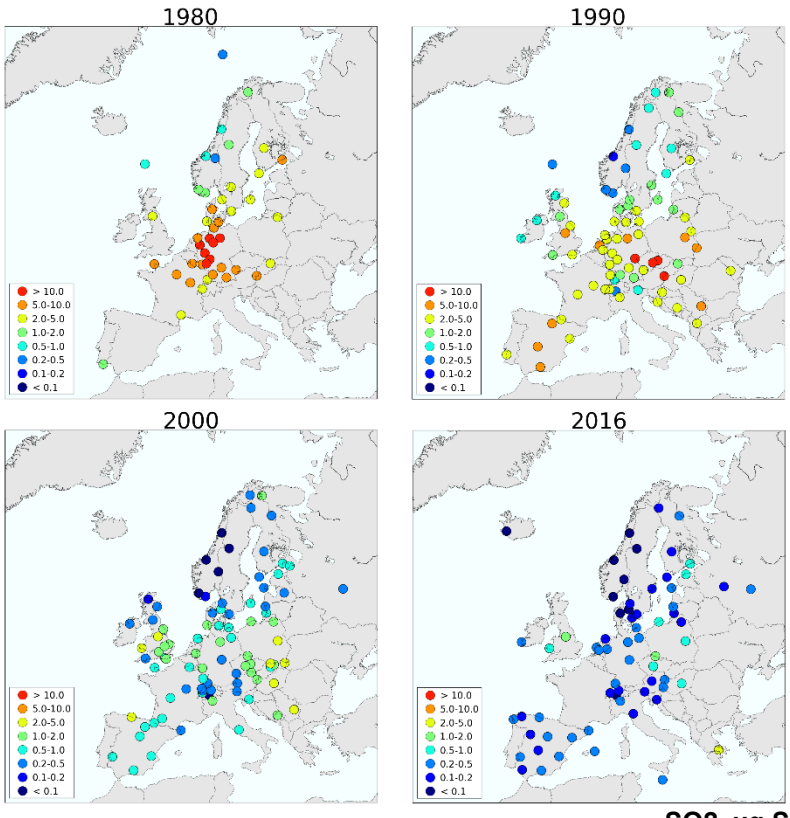
EMEP/CCC-Report 1/2020

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

Data Report 2018

Particulate matter, carbonaceous and inorganic compounds

Anne-Gunn Hjellbrekke



SO2, µg S/m³

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Chemical Co-ordinator Centre of EMEP (CCC)

NILU : EMEP/CCC-Report 1/2020
REFERENCE : O-7726
DATE : August 2020
ISBN : 978-82-425-3012-7 (electronic)
ISSN : 2464-3920

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1. Introduction

Measurements of air quality in Europe have been carried out under the "Co-operative programme for monitoring and evaluation of the long-range transmission of air pollutants in Europe" (EMEP) since 1 October 1977. From the start, priority was given to sulphur dioxide and sulphate in air, and pH and sulphate in precipitation, gradually increasing to 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 2018 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. All data are available online at http://ebas.nilu.no.

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 89 stations and air data from 120 stations are presented in this report. The total number of measurement sites in this report is 133.

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 2018.

Country	Station codes	Station name	Location		Height above sea (m)
			Lat.	Long.	
Armenia	AM0001R	Amberd	40°23'04"N	44°15'38"E	2080
Austria	AT0002R	Illmitz	47°46'00"N	16°46'00"E	117
	AT0005R	Vorhegg	46°40'40"N	12°58'20"E	1020
	AT0034G	Sonnblick	47°03'15"N	12°57'29"E	3106
	AT0048R	Zoebelboden	47°50'19"N	14°26'29"E	899
Belarus	BY0004R	Vysokoe	52°20'00"N	23°26'00"E	163
Belgium	BE0001R	Offagne	49°52'40"N	05°12'13"E	430
	BE0011R	Moerkerke	51°15'16"N	03°21'45"E	3
	BE0013R	Houtem	51°00'59"N	02°34'56"E	2
	BE0014R	Koksijde	51°07'15"N	02°39'31"E	4
	BE0032R	Eupen	50°37'46"N	06°00'04"E	295
	BE0035R	Vezin	50°30'12"N	04°59'22"E	160
Croatia	HR0002R	Puntijarka	45°54'00"N	15°58'00"E	988
	HR0004R	Zavizan	44°49'00"N	14°59'00"E	1594
Cyprus	CY0002R	Agia Marina Xyliatou	35°02'21"N	33°03'29"E	532
Czech Rep.	CZ0003R	Košetice (NOAK)	49°35'00"N	15°05'00"E	534
	CZ0005R	Churanov	49°04'00"N	13°36'00"E	1118
Denmark	DK0003R	Tange	56°21'00"N	09°36'00"E	13
	DK0005R	Keldsnor	54°44'00"N	10°44'00"E	10
	DK0008R	Anholt	56°43'00"N	11°31'00"E	40
	DK0010G	Villum Research Station, Station Nord	81°36'00"N	16°40'12"W	20
	DK0012R	Risoe	55°41'37"N	12°05'09"E	3
	DK0022R	Sepstrup Sande	55°05'00"N	09°36'00"E	60
	DK0031R	Ulborg	56°17'26"N	08°25'39"E	10
Estonia	EE0009R	Lahemaa	59°30'00"N	25°54'00"E	32
	EE0011R	Vilsandi	58°23'00"N	21°49'00"E	6
Finland	FI0009R	Utö	59°46'45"N	21°22'38"E	7
	FI0018R	Virolahti III	60°31'48"N	27°40'03"E	4
	FI0022R	Oulanka	66°19'13"N	29°24'06"E	310
	FI0036R	Pallas (Matorova)	68°00'00"N	24°14'23"E	340
	FI0050R	Hyytiälä	61°51'00"N	24°17'00"E	181
	FI0096G	Pallas (Sammaltunturi)	67°58'24"N	24°06'58"E	565
France	FR0008R	Donon	48°30'00"N	07°08'00"E	775
	FR0009R	Revin	49°54'00"N	04°38'00"E	390
	FR0010R	Morvan	47°16'00"N	04°05'00"E	620
	FR0013R	Peyrusse Vieille	43°37'00"N	00°11'00"E	200
	FR0014R	Montandon	47°18'00"N	06°50'00"E	836
	FR0015R	La Tardière	46°39'00"N	00°45'00"W	133
	FR0016R	Le Casset	45°00'00"N	06°28'00"E	1750
	FR0017R	Montfranc	45°48'00"N	02°04'00"E	810
	FR0018R	La Coulonche	48°38'00"N	00°27'00"W	309
	FR0019R	Pic du Midi	42°56'12"N	00°08'31"E	2877
	FR0020R	SIRTA Atmospheric Research Observatory	48°42'31"N	02°09'32"E	162
	FR0023R	Saint-Nazaire-le-Desert	44°34'18"N	05°16'44"E	605
	FR0024R	Guipry	47°49'55"N	01°58'11"W	29
	FR0025R	Verneuil	46°48'53"N	02°36'36"E	182
	FR0030R	Puy de Dôme	45°46'00"N	02°57'00"E	1465
Georgia	GE0001R	Abastumani	41°45'18"N	42°49'31"E	1650
Germany	DE0001R	Westerland	54°55'32"N	08°18'35"E	12
	DE0002R	Waldhof	52°48'08"N	10°45'34"E	74
	DE0003R	Schauinsland	47°54'53"N	07°54'31"E	1205
	DE0007R	Neuglobsow	53°10'00"N	13°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
	DE0044R	Melpitz	51°31'48"N	012°55'48"E	86
Greece	GR0001R	Aliartos	38°22'00"N	023°05'00"E	110
Hungary	HU0002R	K-puszta	46°58'00"N	019°35'00"E	125
	HU0003R	Farkasfa	46°54'36"N	016°19'12"E	312
Iceland	IS0002R	Irafoss	64°05'00"N	21°01'00"W	66
	IS0091R	Storhofdi	63°24'00"N	20°17'00"W	118
Ireland	IE0001R	Valentia Observatory	51°56'23"N	10°14'40"W	11
	IE0005R	Oak Park	52°52'07"N	06°55'29"W	59
	IE0006R	Malin Head	55°22'30"N	07°20'34"W	20
	IE0008R	Carnsore Point	52°11'06"N	06°22'06"W	9
	IE0009R	Johnstown Castle	52°17'56"N	06°30'39"W	62

Table 1, cont.

Country	Station codes	Station name	Location		Height above sea (m)
			Lat.	Long.	
Italy	IT0004R	Ispra	45°48'00"N	08°38'00"E	209
	IT0009R	Mt Cimone	44°11'00"N	10°42'00"E	2165
	IT0019R	Monte Martano	42°48'20"N	12°33'56"E	1090
Latvia	LV0010R	Rucava	56°09'43"N	21°10'23"E	18
Lithuania	LT0015R	Preila	55°21'00"N	21°04'00"E	5
Macedonia	MK0007R	Lazaropole	41°32'10"N	20°41'38"E	1332
Malta	MT0001R	Giordan Lighthouse	36°04'20"N	14°13'06"E	167
Moldova	MD0013R	Leova II	46°29'18"N	28°17'01"E	166
Montenegro	ME0008R	Zabljak	43°09'00"N	19°08'00"E	1450
The Netherlands	NL0007R	Eibergen	52°05'00"N	06°34'00"E	20
	NL0008R	Bilthoven	52°07'00"N	05°12'00"E	5
	NL0009R	Kollumerwaard	53°20'02"N	06°16'38"E	1
	NL0010R	Vredepeel	51°32'28"N	05°51'13"E	28
	NL0091R	De Zilk	52°18'00"N	04°30'00"E	4
	NL0644R	Cabauw Wielsekade	51°58'28"N	04°55'25"E	1
Norway	NO0001R	Birkenes	58°23'00"N	08°15'00"E	190
	NO0002R	Birkenes II	58°23'19"N	08°15'07"E	219
	NO0015R	Tustervatn	65°50'00"N	13°55'00"E	439
	NO0039R	Kårvatn	62°47'00"N	08°53'00"E	210
	NO0042G	Zeppelin mountain (Ny-Ålesund)	78°54'24"N	11°53'18"E	474
	NO0056R	Hurdal	60°22'21"N	11°04'41"E	300
Poland	PL0002R	Jarczew	51°49'00"N	21°59'00"E	180
	PL0003R	Sniezka	50°44'00"N	15°44'00"E	1603
	PL0004R	Leba	54°45'00"N	17°32'00"E	2
	PL0005R	Diabla Gora	54°09'00"N	22°04'00"E	157
	PL0009R	Zielonka	53°39'44"N	17°56'02"E	121
Russian Federation	RU0001R	Janiskoski	68°56'00"N	28°51'00"E	118
	RU0013R	Pinega	64°42'00"N	43°24'00"E	28
	RU0018R	Danki	54°54'00"N	37°48'00"E	150
	RU0020R	Lesnoy	56°31'48"N	32°56'24"E	340
Serbia	RS0005R	Kamenicki vis	43°24'00"N	21°57'00"E	813
Slovakia	SK0002R	Chopok	48°56'00"N	19°35'00"E	2008
	SK0004R	Stará Lesná	49°09'00"N	20°17'00"E	808
	SK0006R	Starina	49°03'00"N	22°16'00"E	345
	SK0007R	Topolniky	47°57'36"N	17°51'38"E	113
Slovenia	SI0008R	Iskrba	45°34'00"N	14°52'00"E	520
	SI0032R	Krvavec	46°17'58"N	14°32'19"E	1740
Spain	ES0001R	San Pablo de los Montes	39°32'52"N	04°20'55"W	917
	ES0005R	Noia	42°43'41"N	08°55'25"W	683
	ES0006R	Mahón	39°52'00"N	04°19'00"E	78
	ES0007R	Víznar	37°14'00"N	03°32'00"W	1265
	ES0008R	Niembro	43°26'32"N	04°51'01"W	134
	ES0009R	Campisábalos	41°16'52"N	03°08'34"W	1360
	ES0010R	Cabo de Creus	42°19'10"N	03°19'01"E	23
	ES0011R	Barcarrota	38°28'33"N	06°55'22"W	393
	ES0012R	Zarra	39°05'10"N	01°06'07"W	885
	ES0013R	Penausende	41°17'00"N	05°52'00"W	985
	ES0014R	Els Torms	41°24'00"N	00°43'00"E	470
	ES0016R	O Saviñao	43°13'52"N	07°41'59"W	506
	ES0017R	Doñana	37°01'50"N	06°19'55"W	5
	ES1778R	Montseny	41°46'00"N	02°21'00"E	700
Sweden	SE0005R	Bredkälen	63°51'00"N	15°20'00"E	404
	SE0014R	Råö	57°23'38"N	11°54'50"E	5
	SE0020R	Hallahus	56°02'34"N	13°08'53"E	190
	SE0022R	Norunda Stenen	60°05'09"N	17°30'19"E	45
Switzerland	CH0001G	Jungfraujoch	46°32'51"N	07°59'06"E	3578
	CH0002R	Payerne	46°48'47"N	06°56'41"E	489
	CH0003R	Tänikon	47°28'47"N	08°54'17"E	539
	CH0004R	Chaumont	47°02'59"N	06°58'46"E	1137
	CH0005R	Rigi	47°04'03"N	08°27'50"E	1031
	CH0053R	Beromünster	47°11'23"N	08°10'32"E	797
United Kingdom	GB0002R	Eskdalemuir	55°18'47"N	03°12'15"W	243
	GB0006R	Lough Navar	54°26'35"N	07°52'12"W	126
	GB0013R	Yarner Wood	50°35'47"N	03°42'47"W	119

Table 1, cont.

Country	Station codes	Station name	Location		Height above sea (m)
			Lat.	Long.	
United Kingdom (cont.)	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
	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
	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
	GB1055R	Chilbolton Observatory	51°08'59"N	001°26'18"W	78

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.

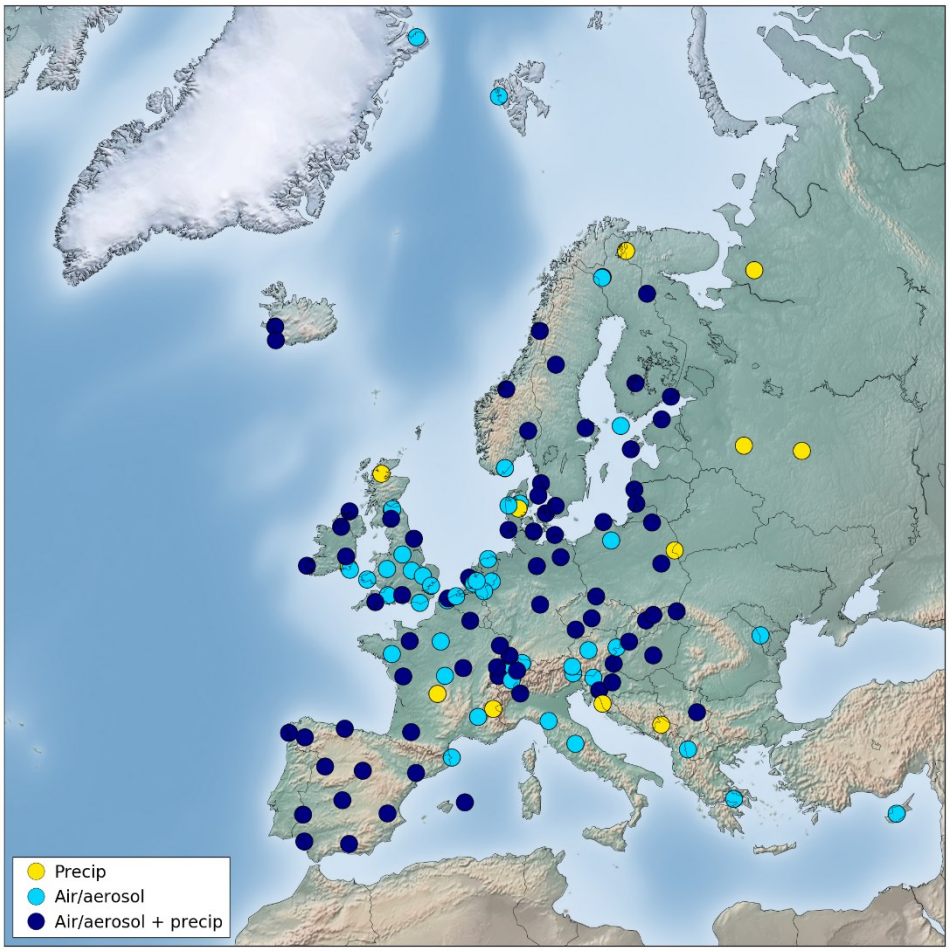

Figure 3-1: Location of the EMEP monitoring stations in operation in 2018. Sites with ozone/heavy metals/VOC measurements only are not included.

4. The measurement programme during 2018

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 discussion of this is found in the Status Report (Fagerli et al., 2020). In this report, inorganic data in air and precipitation, aerosol mass, inorganic and carbonaceous matter in air are presented. Ozone (Hjellbrekke and Solberg, 2020), heavy metals and POPs (Aas and Nizzetto, 2020) and VOC (Solberg et al. 2020) are reported separately.

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

Table 2: EMEP's measurement programme 2018.

	Components	Measurement period	Measurement frequency
Gas	SO_2, NO_2	24 hours	daily
	O_3	hourly means stored	continuously
	Light hydrocarbons C_2-C_7	10-15 mins	twice weekly
	Ketones and aldehydes (VOC)	8 hours	twice weekly
	Hg	24 hours	weekly
Particles	SO_4^{2-}, NH_4^+, NO_3^-, Ca^{2+}, Mg^{2+}, Na^+, K^+, Cl^-	24 hours	daily
	Cd, Pb (first priority), Cu, Zn, As, Cr, Ni (second priority)	weekly	weekly
	PM mass (PM_{10} + $PM_{2.5}$)	24 hours	daily
	EC, OC and mineral dust in PM_{10}	daily/weekly	daily/weekly
Gas + particles	HNO_3(g)+NO_3^-(p), NH_3(g)+NH_4^-(p)	24 hours	daily
	POPs (PAH, PCB, HCB, chlordane, lindane, α-HCH, DDT/DDE)	daily/weekly	once weekly
Precipitation	Amount, SO_4^{2-}, NO_3^-, Cl^-, pH, NH_4^+, Na^+, Mg^{2+}, Ca^{2+}, K^+, conductivity	24 hours/weekly	daily/weekly
	Hg, Cd, Pb (first priority), Cu, Zn, As, Cr, Ni (second priority)	weekly	weekly
	POPs (PAH, PCB, HCB, chlordane, lindane, α-HCH, DDT/DDE)	weekly	weekly

Measurements of VOC, heavy metals and POPs are made at a small number of sites only.

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) in addition to guidelines and standard operation procedures developped in co-operating networks and instititions. A list of these is found at the data submission web page: https://ebas-submit.nilu.no/Standard-Operating-Procedures. 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 36th laboratory intercomparison is representative for the 2018 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 SO_2, NO_2 SO_4^{--}, OC, EC, PM_{10} and $PM_{2.5}$ in air and pH, NH_4^+, NO_3^-, Ca and excess SO_4^{--} in precipitation are shown in Annex 1.

8.2 Annual summaries in tables

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

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

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

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

For air components the statistical summaries in Annex 3 contain:

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

A description of the calculation procedures is given in Annex 6. The units used for the results in this report are given in Table 3 and Table 4.

Table 3: Units used for precipitation components.

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

Table 4: Units used for air components.

Air components	Units for arithmetic and geometric mean values, arithmetic standard deviations, Min., Max, percentiles.
SO_2	µg S/m^3
NO_2, NO	µg N/m^3
CO	ppb
HNO_3	µg N/m^3
NH_3	µg N/m^3
SO_4^{2-}	µg S/m^3
NO_3^-	µg N/m^3
NH_4^+	µg N/m^3
H^+	Ne H^+/m^3
SPM, PM	µg/m^3
$HNO_3 + NO_3^-$	µg N/m^3
$NH_3 + NH_4^+$	µg N/m^3
Ca^{++}	µg/m^3
Cl^-	µg/m^3
Mg^{++}	µg/m^3
K+	µg/m3
Na+	µg/m3
OC	µg C/m^3
EC	µg C/m^3

9. Update

The data compiled in this report represent the best data available at present. If further errors are detected, the data will be corrected in the database. It is important that users make sure that they have access to the most recent version of the database. For the data presented here the latest alteration was in August 2020.

Scientific use of the EMEP data should be based on fresh copies of the data. Copies can be requested from the CCC (e-mail: ebas@nilu.no) or downloaded from the internet at http://ebas.nilu.no. 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 Monitoring and Information Center
Austria	Umweltbundesamt
Belarus	Institute Nature Management
Belgium	Belgian Interregional Environment Agency (IRCEL - CELINE)
	Flanders Environment Agency
Commission of the European Communities	Joint Research Center, EC-JRC
Croatia	Croation Meteorological and Hydrological Service
Cyprus	Ministry of Labour, Welfare and Social Insurance
Czech Republic	Czech Hydrometeorological Institute
Denmark	Department of Environmental Science, Aarhus Universityf
Estonia	Estonian Environmental Research Centre
Finland	Finnish Meteorological Institute (FMI)
France	Mines Douai
Georgia	National Environmental Agency
Germany	Umweltbundesamt Leibniz Institute for Tropospheric Research
Greece	Hellenic Ministry of the Environment and Energy University of Crete
Hungary	Hungarian Meteorological Service
Iceland	Vedurstofa Islands
Ireland	Met Eireann
Italy	CNR–ISAC Arpa Umbria
Latvia	Latvian Environment, Geology and Meteorology Agency
Lithuania	SRI Center for Physical Sciences and Technology
Macedonia	Ministry of Environment and Physical Planning
Malta	Department of Geoscience, University of Malta
Moldova	Environmental Agency
Montenegro	Institute of Hydrometeorology and Seismology
The Netherlands	National Institute for Public Health and the Environment (RIVM)
Norway	Norwegian Institute for Air Research (NILU)
Poland	Institute of Meteorology and Water Management Institute of Environmental Protection
Russian Federation	Institute of Global Climate and Ecology
Serbia	Environmental Protection Agency
Slovakia	Slovak Hydrometeorological Institute
Slovenia	Slovenian Environment Agency
Spain	Ministerio para la Transicion Ecologica, Agencia Estatal de Meteorologica
Sweden	Swedish Environmental Research Institute (IVL)
Switzerland	Swiss Federal Laboratories for Materials Science and Technology (EMPA)
United Kingdom	Ricardo-AEA

Annex 1

Maps over Europe

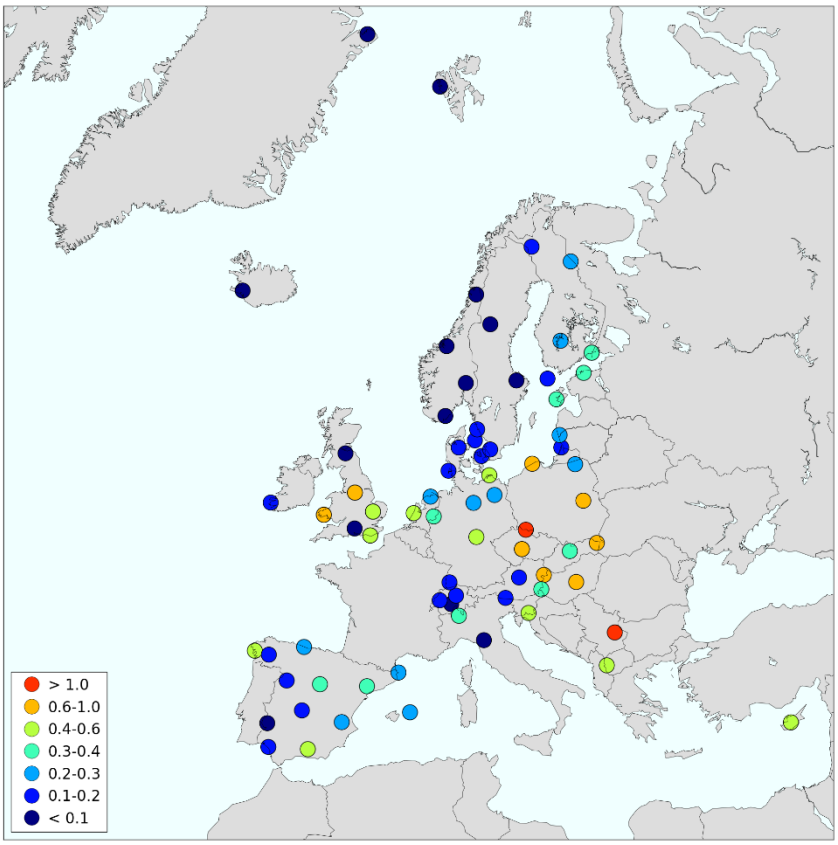

Figure 1.1: Geographical distribution of sulphur dioxide 2018. Unit: μg S/m³.

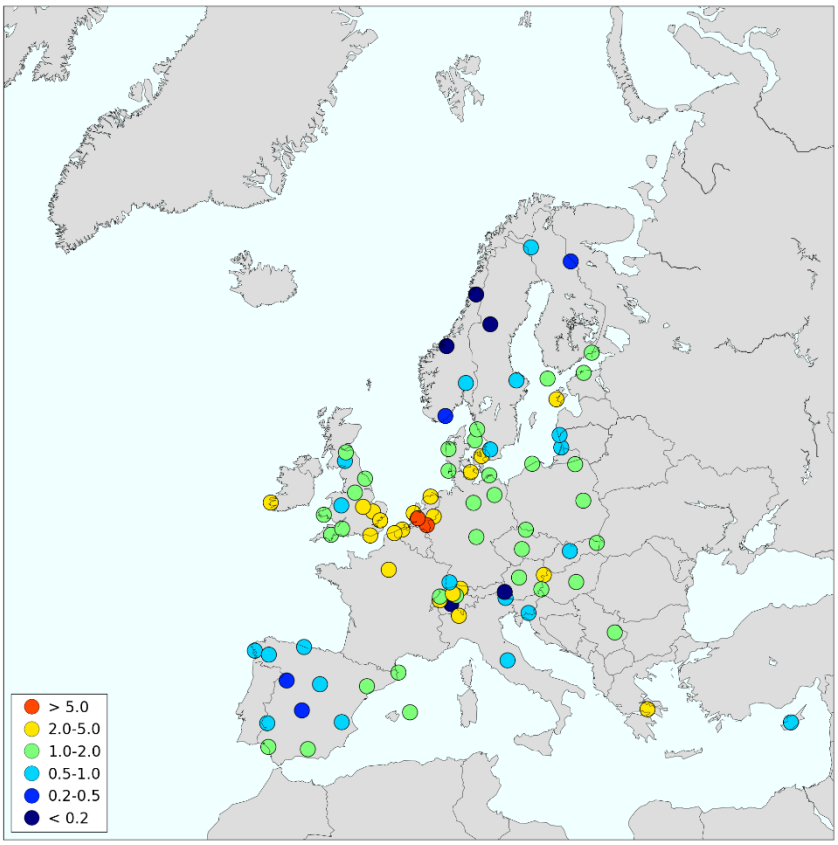

Figure 1.2: Geographical distribution of nitrogen dioxide 2018. Unit: μg N/m³.

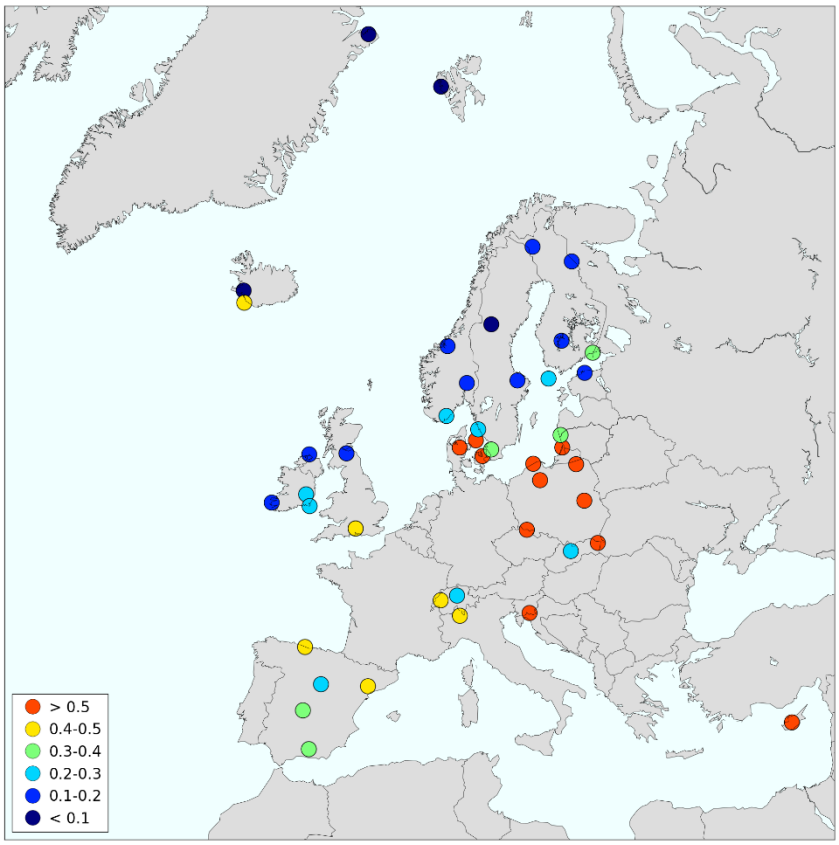

Figure 1.3: Geographical distribution of sulphate in aerosols 2018. Unit: µg S/m^3.

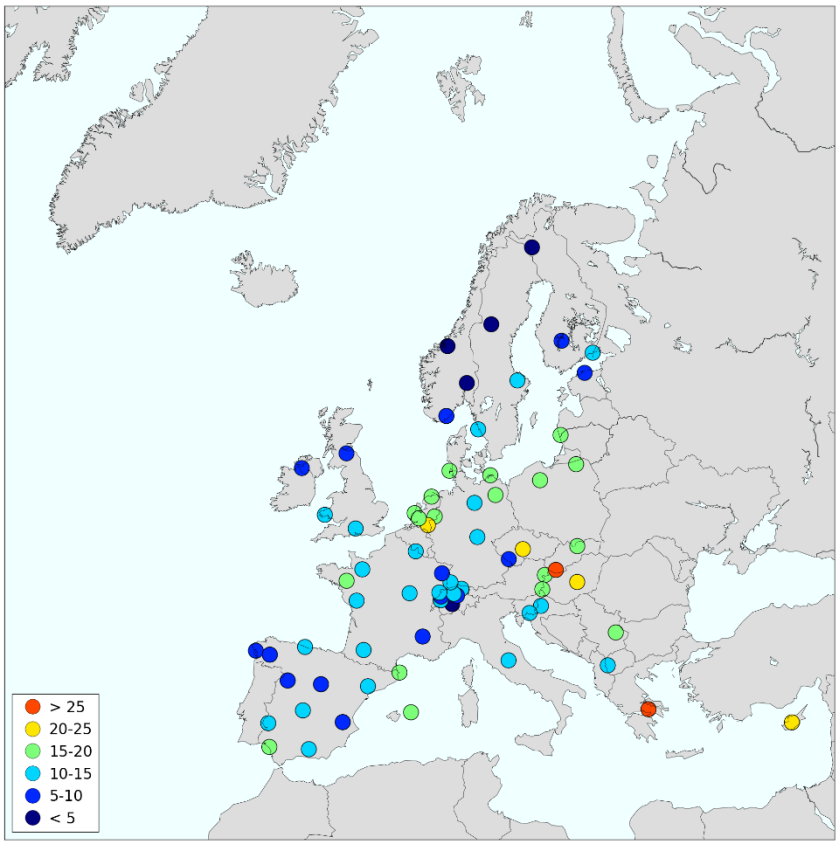

Figure 1.4: Geographical distribution of PM_{10} 2018. Unit: µg/m^3.

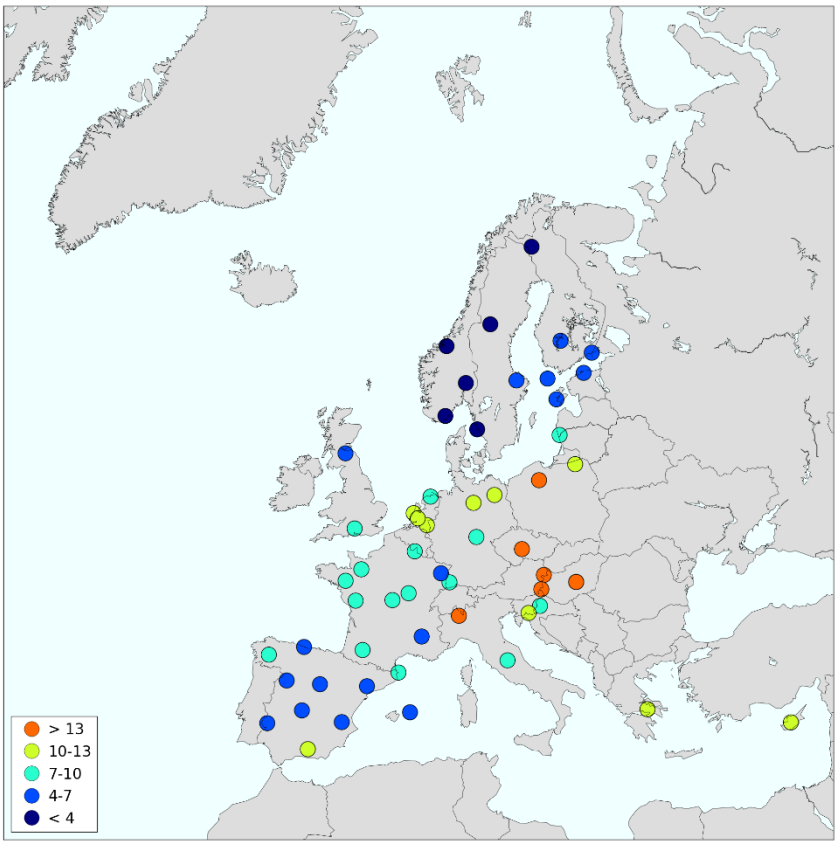

Figure 1.5: Geographical distribution of $PM_{2.5}$ 2018. Unit: $\mu g/m^3$.

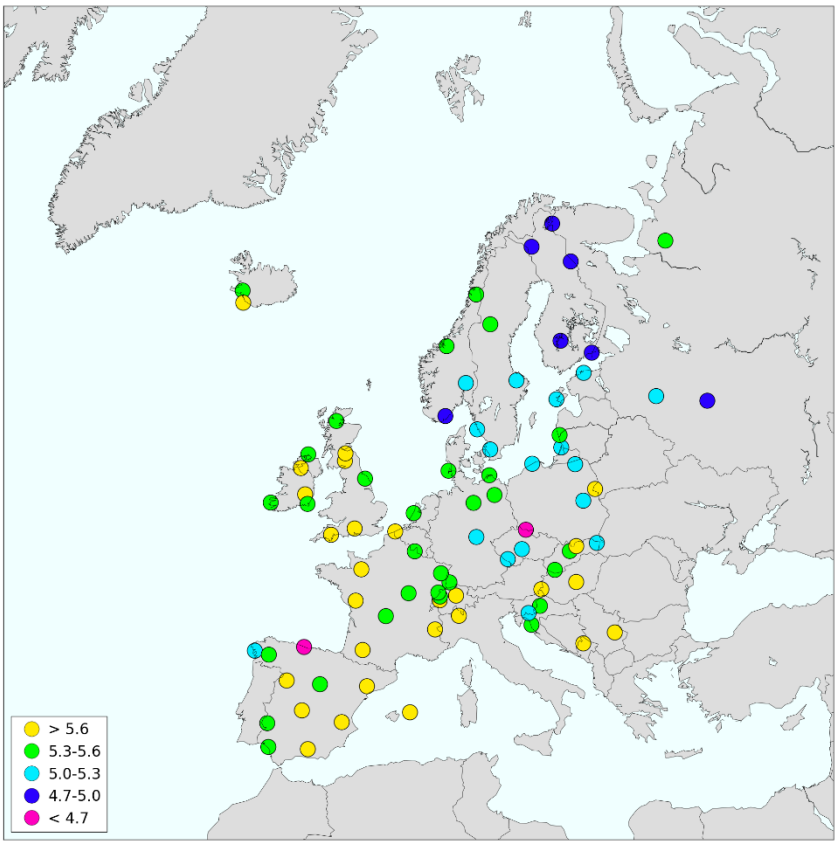

Figure 1.6: Geographical distribution of pH in precipitation 2018. Unit: pH units.

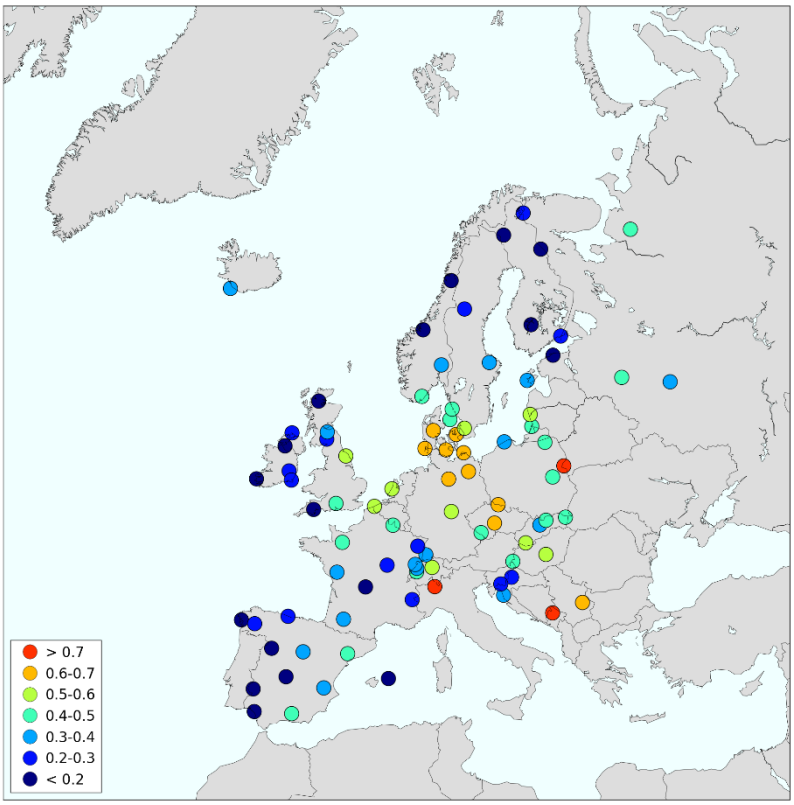

Figure 1.7: Geographical distribution of ammonium in precipitation 2018. Unit: mg N/l.

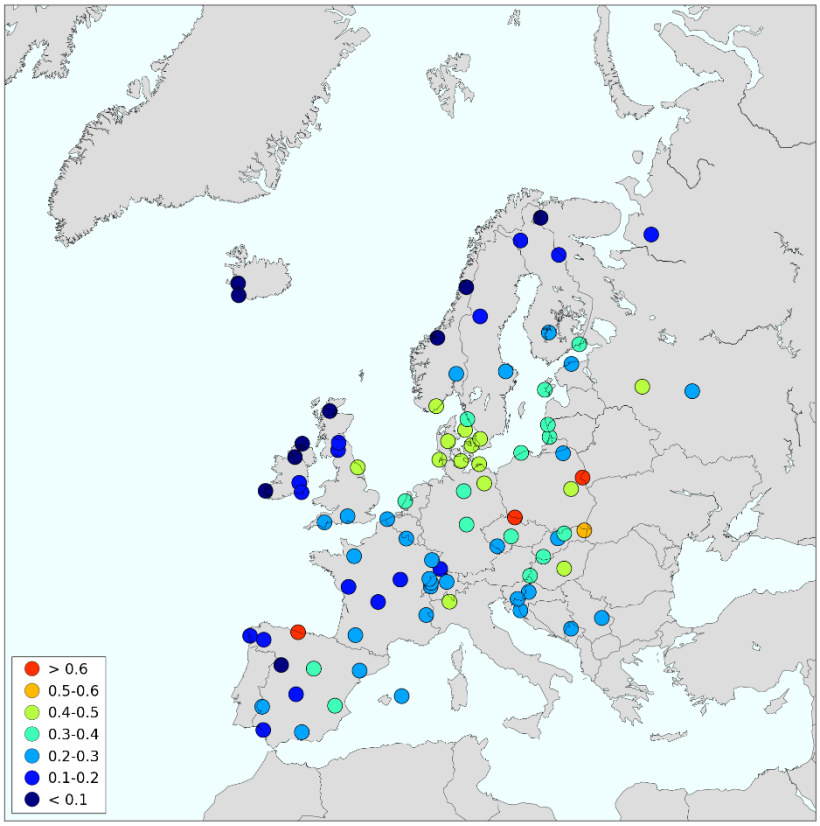

Figure 1.8: Geographical distribution of nitrate in precipitation 2018. Unit: mg N/l.

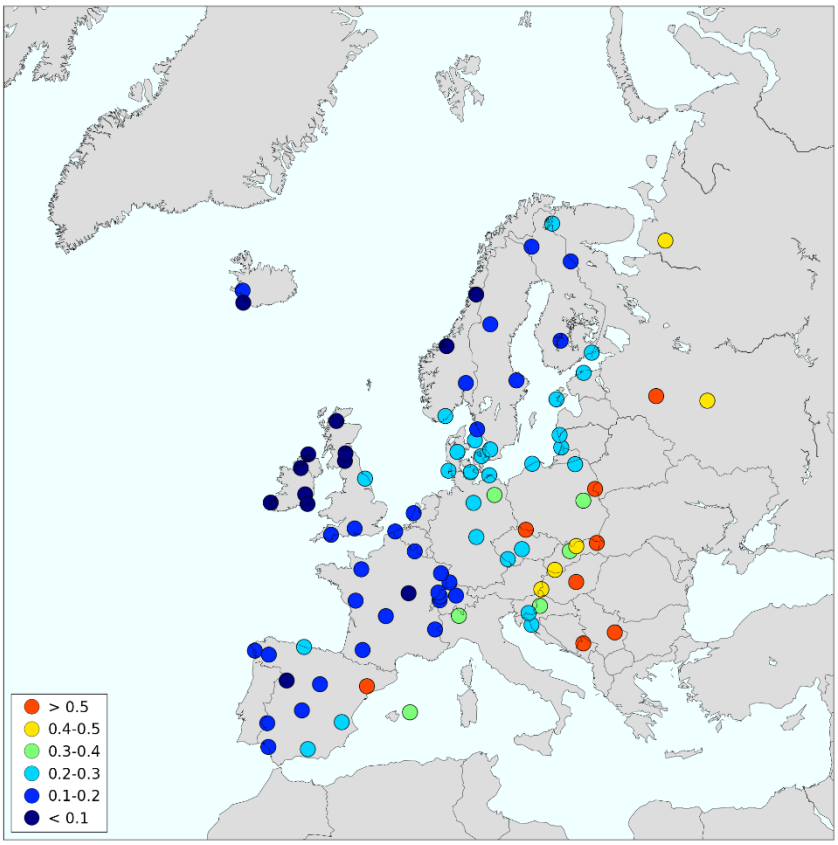

Figure 1.9: Geographical distribution of excess sulphate in precipitation 2018. Unit: mg S/l.

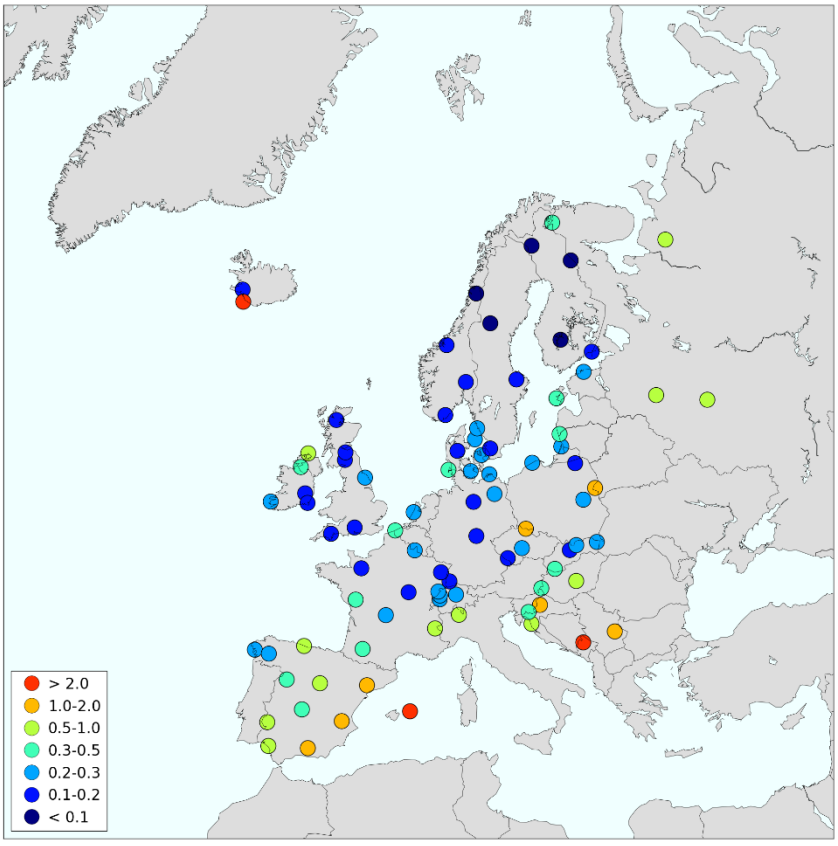

Figure 1.10: Geographical distribution of calcium in precipitation 2018. Unit: mg/l.

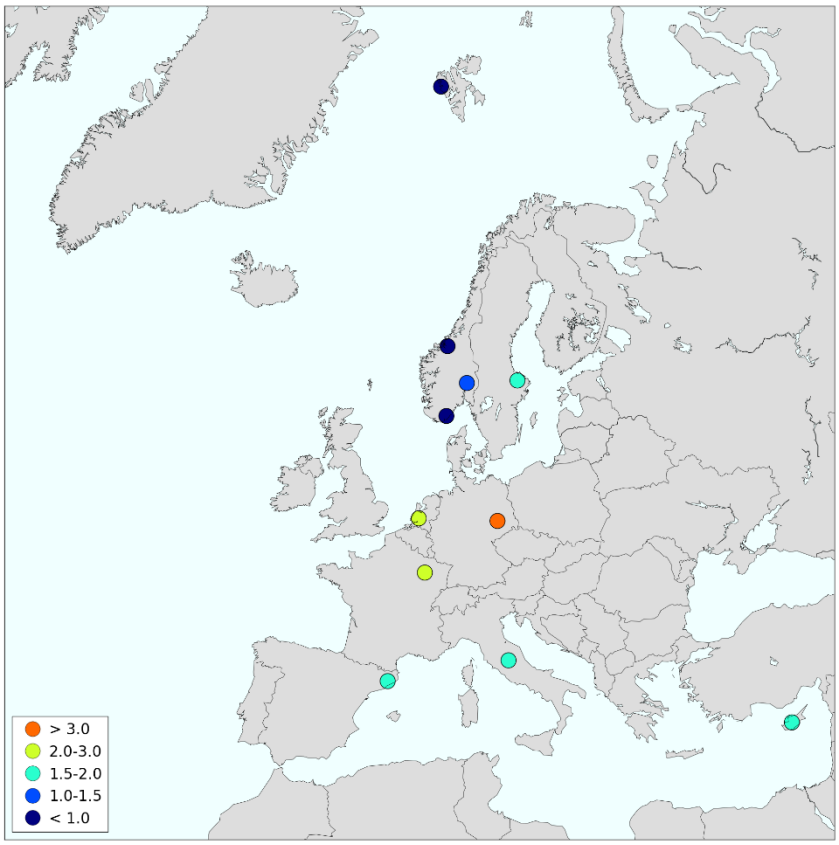

Figure 1.11: Geographical distribution of OC in PM_{10} 2018. Unit: µg C/m³.

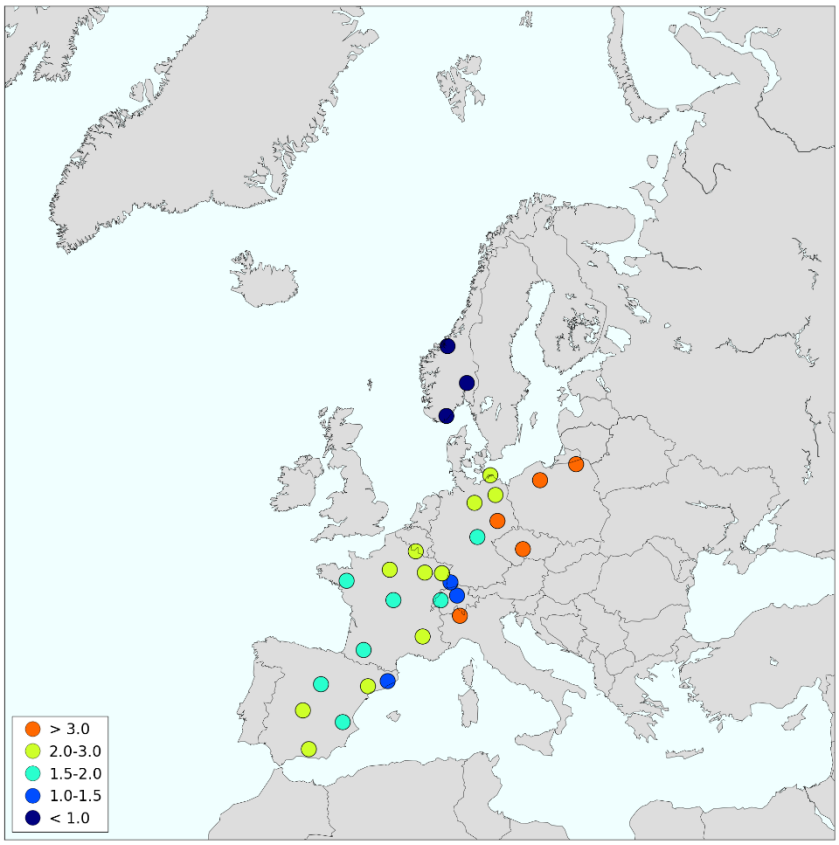

Figure 1.12: Geographical distribution of OC in $PM_{2.5}$ 2018. Unit: µg C/m³.

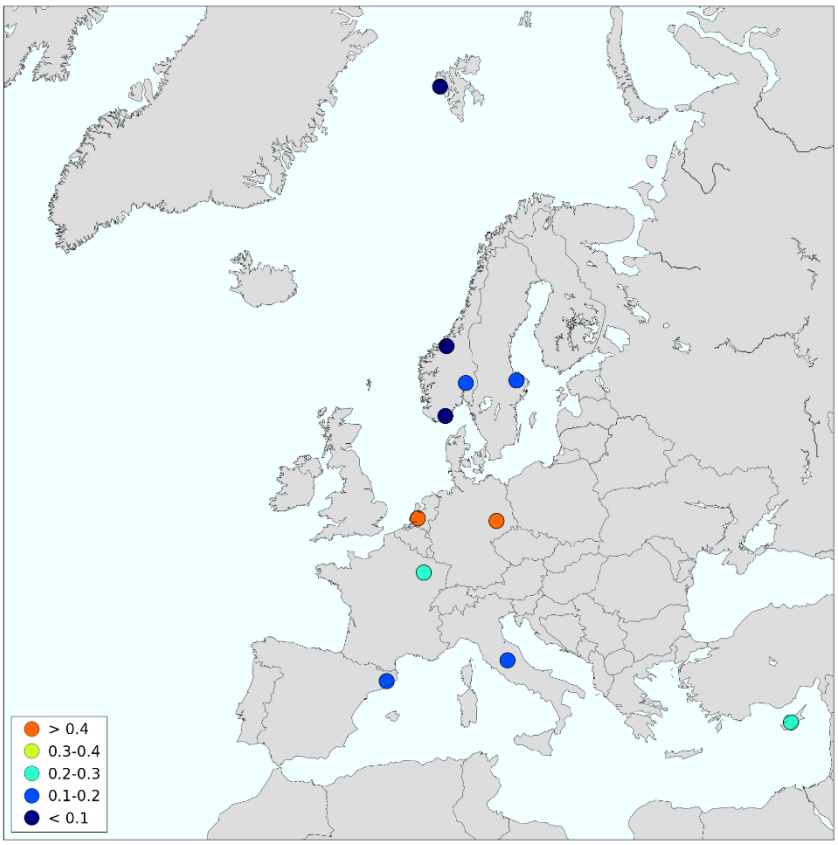

Figure 1.13: Geographical distribution of EC in PM_{10} 2018. Unit: µg C/m^3.

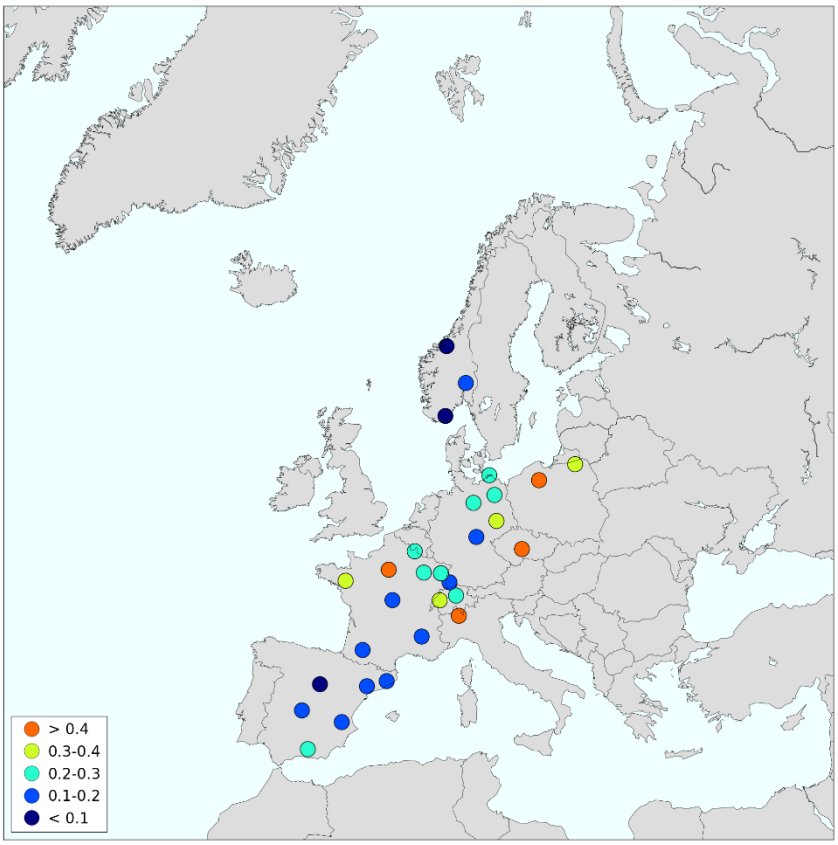

Figure 1.14: Geographical distribution of EC in $PM_{2.5}$ 2018. Unit: µg C/m^3.

Annex 2

Annual statistics on precipitation data

AM0001R Amberd
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	2.65	0.21	9.83	966.5	98.2	0	55
Cl-	precip	0.58	0.12	4.15	212.7	100.0	0	57
K+	precip	0.37	0.05	3.24	135.3	100.0	0	57
Mg++	precip	0.18	0.02	0.81	65.8	100.0	0	57
NH4+	precip	0.74	0.01	1.93	270.9	95.9	0	53
NO3-	precip	0.53	0.05	3.48	194.4	100.0	0	57
Na+	precip	0.32	0.05	3.22	115.5	100.0	0	57
Precip off	precip	-	0.00	20.30	364.9	76.4	0	113
SO4--	precip	0.85	0.04	7.62	308.5	100.0	0	57
SO4-- corr	precip	0.82	-0.01	7.53	300.2	100.0	0	57
cond	precip	26.77	7.90	148.90	9769.2	100.0	0	57
pH	precip	6.04	5.10	7.58	331.9	100.0	0	57

BE0014R Koksijde
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.37	0.16	3.06	259.3	100.0	0	25
Cl-	precip	6.86	0.54	72.72	4749.1	100.0	0	25
K+	precip	0.10	0.03	0.54	70.6	100.0	0	25
Mg++	precip	0.24	0.06	1.11	165.1	100.0	0	25
NH4+	precip	0.55	0.18	2.42	379.3	100.0	0	25
NO3-	precip	0.25	0.07	2.38	173.8	95.0	0	24
Na+	precip	3.71	0.31	38.46	2568.9	100.0	0	25
Precip	precip	-	0.00	64.06	692.1	100.0	0	27
Precip off	precip	-	0.00	68.00	699.3	100.0	0	27
SO4--	precip	0.34	0.15	1.77	234.1	95.0	0	24
SO4-- corr	precip	0.18	0.06	1.25	124.9	95.0	0	24
cond	precip	27.89	13.00	86.00	19301.0	99.9	0	24
pH	precip	6.31	5.50	8.40	339.6	99.9	0	24

BY0004R Vysokoe
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	1.92	0.33	4.86	1103.9	71.8	0	53
Cl-	precip	1.21	0.68	2.94	693.1	43.1	0	18
K+	precip	0.38	0.11	2.59	218.4	75.1	0	53
Mg++	precip	0.42	0.09	1.74	239.6	75.1	0	53
NH4+	precip	0.85	0.08	2.80	490.0	73.2	0	50
NO3-	precip	1.70	0.32	6.07	972.9	78.8	0	60
Na+	precip	0.83	0.20	4.28	478.4	75.1	0	53
Precip	precip	-	0.00	35.70	573.6	100.0	0	366
SO4--	precip	1.52	0.00	8.01	873.3	75.6	0	53
SO4-- corr	precip	1.46	-0.34	5.32	837.3	70.2	0	45
cond	precip	26.60	11.00	58.00	15257.7	79.9	0	63
pH	precip	6.28	5.70	7.00	299.5	81.0	0	65

CH0002R Payerne
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.28	0.01	3.53	236.1	99.9	0	43
Cl-	precip	0.14	0.02	0.86	118.9	99.9	0	43
K+	precip	0.05	0.00	0.56	40.9	99.9	0	43
Mg++	precip	0.02	0.00	0.27	20.6	99.9	0	43
NH4+	precip	0.47	0.11	2.42	405.4	99.9	0	43
NO3-	precip	0.21	0.07	1.59	175.9	99.9	0	43
Na+	precip	0.08	0.01	0.50	67.8	99.9	0	43
Precip	precip	-	0.00	103.40	857.5	100.0	0	53
SO4--	precip	0.13	0.02	1.01	109.5	99.9	0	43
SO4-- corr	precip	0.12	0.02	0.99	103.9	99.9	0	43
cond	precip	6.90	2.29	42.35	5918.2	99.9	0	43
pH	precip	5.81	5.24	7.16	1330.2	99.9	0	43

CH0004R Chaumont
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.26	0.02	2.91	302.1	100.0	0	48
Cl-	precip	0.17	0.02	1.62	199.5	100.0	0	48
K+	precip	0.05	0.01	1.38	62.1	100.0	0	48
Mg++	precip	0.03	0.00	0.35	30.2	100.0	0	48
NH4+	precip	0.35	0.01	2.90	403.5	100.0	0	48
NO3-	precip	0.20	0.03	1.34	230.2	100.0	0	48
Na+	precip	0.12	0.00	0.99	135.1	100.0	0	48
Precip	precip	-	0.00	92.80	1148.4	100.0	0	53
SO4--	precip	0.12	0.01	1.11	140.5	100.0	0	48
SO4-- corr	precip	0.11	0.01	1.09	130.5	100.0	0	48
cond	precip	6.66	1.88	43.05	7646.5	100.0	0	48
pH	precip	5.53	4.85	6.98	3402.9	100.0	0	48

CH0005R Rigi
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.23	0.01	2.80	224.6	99.8	0	44
Cl-	precip	0.09	0.02	0.52	87.0	99.8	0	44
K+	precip	0.05	0.01	0.61	53.2	99.8	0	44
Mg++	precip	0.02	0.00	0.18	17.4	99.8	0	44
NH4+	precip	0.57	0.06	2.32	572.0	99.8	0	44
NO3-	precip	0.29	0.05	1.53	285.7	99.8	0	44
Na+	precip	0.06	0.00	0.29	57.9	99.8	0	44
Precip	precip	-	0.00	76.30	996.4	98.1	0	52
SO4--	precip	0.15	0.02	0.61	145.2	99.8	0	44
SO4-- corr	precip	0.14	0.02	0.59	140.6	99.8	0	44
cond	precip	7.99	2.02	29.67	7963.5	99.8	0	44
pH	precip	5.67	4.90	7.15	2142.7	99.8	0	44

CZ0003R Kosetice (NOAK)
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.29	0.03	4.02	160.3	86.2	0	59
Cl-	precip	0.13	0.03	1.28	72.8	86.2	0	59
K+	precip	0.06	0.01	0.24	32.4	86.2	0	59
Mg++	precip	0.03	0.00	0.10	16.6	86.2	0	59
NH4+	precip	0.67	0.06	1.92	372.8	86.2	0	59
NO3-	precip	0.33	0.08	1.13	185.1	86.2	0	59
Na+	precip	0.08	0.01	0.75	44.1	86.2	0	59
Precip	precip	-	0.00	44.90	556.5	100.0	0	366
SO4--	precip	0.26	0.04	0.79	147.3	86.2	0	59
SO4-- corr	precip	0.26	0.03	0.77	143.5	86.2	0	59
cond	precip	13.51	2.48	63.60	7518.4	86.2	0	59
pH	precip	5.23	4.48	7.00	3313.2	86.2	0	59

CZ0005R Churanov
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.15	0.01	1.25	157.5	98.2	1	41
Cl-	precip	0.16	0.04	1.14	171.5	98.2	0	41
K+	precip	0.06	0.01	0.84	67.2	98.2	0	41
Mg++	precip	0.02	0.01	0.12	24.8	98.2	0	41
NH4+	precip	0.48	0.07	2.32	505.4	98.2	0	41
NO3-	precip	0.29	0.09	1.74	300.1	98.2	0	41
Na+	precip	0.09	0.00	0.78	89.4	98.2	1	41
Precip	precip	-	0.00	87.40	1051.5	100.0	0	53
SO4--	precip	0.23	0.04	1.19	236.9	98.2	0	41
SO4-- corr	precip	0.22	0.03	1.16	229.0	98.2	0	41
cond	precip	10.02	4.19	41.80	10533.7	98.2	0	41
pH	precip	5.27	4.47	6.38	5661.4	98.2	0	41

DE0001R Westerland
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.33	0.06	2.55	184.7	99.5	0	41
Cl-	precip	9.79	0.38	71.01	5489.8	99.5	0	41
K+	precip	0.24	0.06	1.38	132.6	99.5	0	41
Mg++	precip	0.62	0.03	4.52	347.9	99.5	0	41
NH4+	precip	0.65	0.13	2.65	365.1	99.5	0	41
NO3-	precip	0.45	0.12	1.80	253.0	99.5	0	41
Na+	precip	5.19	0.20	38.17	2906.7	99.5	0	41
Precip	precip	-	0.00	81.60	560.5	99.7	0	53
SO4--	precip	0.67	0.21	3.42	376.8	99.5	0	41
SO4-- corr	precip	0.24	0.03	1.74	133.5	99.5	0	41
cond	precip	44.56	10.60	262.90	24977.9	99.5	0	41
pH	precip	5.51	4.46	6.72	1749.7	99.5	0	41

DE0002R Waldhof
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.15	0.03	1.36	53.1	95.8	0	83
Cl-	precip	0.84	0.05	10.13	290.3	96.7	0	85
K+	precip	0.09	0.02	0.58	29.9	96.7	0	85
Mg++	precip	0.07	0.00	0.67	24.5	96.7	0	85
NH4+	precip	0.70	0.05	5.12	241.8	96.7	0	85
NO3-	precip	0.38	0.05	3.59	130.6	96.7	0	85
Na+	precip	0.47	0.02	5.67	162.6	96.7	0	85
Precip	precip	-	0.00	21.20	346.1	100.0	0	366
SO4--	precip	0.26	0.05	1.63	90.9	96.7	0	85
SO4-- corr	precip	0.22	0.03	1.61	77.2	96.7	0	85
cond	precip	13.09	4.60	54.20	4531.3	96.7	0	85
pH	precip	5.40	4.11	6.86	1377.7	96.7	0	85

DE0003R Schauinsland
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.15	0.03	1.79	179.6	93.1	0	127
Cl-	precip	0.23	0.02	2.87	276.0	93.1	0	127
K+	precip	0.05	0.00	0.64	59.4	93.1	0	127
Mg++	precip	0.03	0.00	0.19	34.4	93.1	0	127
NH4+	precip	0.30	0.01	2.88	363.4	93.1	0	127
NO3-	precip	0.20	0.02	2.17	240.9	93.1	0	127
Na+	precip	0.13	0.00	1.64	158.5	93.1	0	127
Precip	precip	-	0.00	41.20	1208.2	99.9	0	365
SO4--	precip	0.12	0.01	1.03	149.8	93.1	0	127
SO4-- corr	precip	0.11	0.01	0.99	136.3	93.1	0	127
cond	precip	6.49	2.20	38.00	7836.1	92.8	0	126
pH	precip	5.45	4.60	6.70	4259.2	92.8	0	126

DE0007R Neuglobsow
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.29	0.04	2.17	114.1	97.3	0	87
Cl-	precip	0.58	0.04	6.33	225.7	97.3	0	87
K+	precip	0.10	0.02	0.74	38.2	97.3	0	87
Mg++	precip	0.06	0.02	0.45	23.5	97.3	0	87
NH4+	precip	0.66	0.09	3.52	256.8	97.3	0	87
NO3-	precip	0.44	0.07	1.76	169.0	97.3	0	87
Na+	precip	0.33	0.02	3.69	128.7	97.3	0	87
Precip	precip	-	0.00	22.70	388.3	100.0	0	366
SO4--	precip	0.34	0.07	1.49	130.3	97.3	0	87
SO4-- corr	precip	0.31	0.04	1.48	119.4	97.3	0	87
cond	precip	13.37	4.20	42.60	5191.2	97.3	0	87
pH	precip	5.32	4.44	6.85	1858.9	97.3	0	87

DE0008R Schmücke
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.17	0.04	1.23	158.1	99.3	0	44
Cl-	precip	0.39	0.06	1.74	355.7	99.3	0	44
K+	precip	0.07	0.02	0.38	65.9	97.9	0	43
Mg++	precip	0.04	0.02	0.16	38.9	99.3	0	44
NH4+	precip	0.54	0.08	1.98	489.5	99.3	0	44
NO3-	precip	0.38	0.12	1.35	345.0	99.3	0	44
Na+	precip	0.24	0.02	1.40	217.3	99.3	0	44
Precip	precip	-	0.00	67.30	911.8	100.0	0	53
SO4--	precip	0.26	0.05	0.80	233.9	99.3	0	44
SO4-- corr	precip	0.24	0.05	0.79	215.8	99.3	0	44
cond	precip	11.08	4.70	31.00	10104.8	99.3	0	44
pH	precip	5.23	4.50	6.54	5400.2	99.3	0	44

DE0009R Zingst
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.26	0.09	1.15	106.5	99.6	0	44
Cl-	precip	1.58	0.15	12.64	645.9	99.6	0	44
K+	precip	0.13	0.03	1.35	54.1	99.6	0	44
Mg++	precip	0.12	0.03	0.77	50.2	99.6	0	44
NH4+	precip	0.62	0.12	4.24	255.0	99.6	0	44
NO3-	precip	0.43	0.18	1.27	177.6	99.6	0	44
Na+	precip	0.89	0.08	6.78	362.9	99.6	0	44
Precip	precip	-	0.00	34.20	410.0	100.0	0	53
SO4--	precip	0.31	0.10	1.04	126.1	99.6	0	44
SO4-- corr	precip	0.23	0.06	0.94	95.8	99.6	0	44
cond	precip	16.76	6.10	58.40	6870.2	99.6	0	44
pH	precip	5.31	4.48	7.12	2007.8	99.6	0	44

DK0005R Keldsnor
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.24	0.09	0.57	2759.0	80.1	0	15
Cl-	precip	2.75	0.71	8.67	31102.8	85.6	0	16
K+	precip	0.16	0.06	0.41	1771.0	85.6	0	16
Mg++	precip	0.19	0.05	0.56	2163.9	85.6	0	16
NH4+	precip	0.68	0.28	1.94	7652.9	81.4	0	15
NO3-	precip	0.50	0.19	1.95	5600.5	85.6	0	16
Precip	precip	-	0.00	1876.00	11312.8	99.9	0	24
SO4--	precip	0.35	0.18	0.98	4007.1	85.6	0	16
SO4-- corr	precip	0.23	0.11	0.79	2556.5	85.6	0	16

DK0008R Anholt
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.21	0.06	0.70	1866.8	90.7	1	18
Cl-	precip	4.18	0.43	17.96	37800.9	90.7	0	18
K+	precip	0.11	0.03	0.45	1037.1	100.0	1	19
Mg++	precip	0.26	0.06	1.10	2354.8	90.7	0	18
NH4+	precip	0.50	0.16	2.05	4519.6	100.0	0	19
NO3-	precip	0.44	0.14	1.13	3972.7	100.0	0	19
Precip	precip	-	0.00	1313.00	9053.0	99.9	0	24
SO4--	precip	0.35	0.08	0.96	3187.2	85.9	0	17
SO4-- corr	precip	0.21	0.04	0.69	1859.9	85.9	0	17

DK0012R Risoe
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.23	0.06	1.11	2810.8	100.0	1	23
Cl-	precip	1.46	0.30	12.03	17935.4	100.0	0	23
K+	precip	0.10	0.03	0.45	1294.3	91.0	2	18
Mg++	precip	0.10	0.03	0.69	1272.9	100.0	1	23
NH4+	precip	0.69	0.17	1.72	8538.5	92.7	0	21
NO3-	precip	0.42	0.24	1.38	5166.8	100.0	0	23
Precip	precip	-	0.00	1986.00	12325.0	99.9	0	24
SO4--	precip	0.28	0.17	0.84	3395.2	100.0	0	23
SO4-- corr	precip	0.21	0.09	0.72	2555.2	100.0	0	23

DK0022R Sepstrup Sande
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.13	0.05	0.26	1893.7	91.2	4	17
Cl-	precip	1.83	0.15	7.91	27633.9	90.5	2	17
K+	precip	0.07	0.03	0.17	1068.9	100.0	3	18
Mg++	precip	0.15	0.03	0.49	2313.7	100.0	3	18
NH4+	precip	0.62	0.17	1.46	9348.8	100.0	0	18
NO3-	precip	0.42	0.18	0.82	6399.2	100.0	0	18
Precip	precip	-	0.00	1900.00	15092.8	99.9	0	24
SO4--	precip	0.29	0.13	0.51	4421.0	100.0	0	18
SO4-- corr	precip	0.22	0.06	0.35	3273.9	100.0	0	18

EE0009R Lahemaa
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.27	0.02	4.50	155.8	100.0	5	127
Cl-	precip	0.45	0.05	6.50	260.0	100.0	9	127
K+	precip	0.08	0.01	1.10	43.8	100.0	32	127
Mg++	precip	0.05	0.01	0.87	28.4	100.0	36	127
NH4+	precip	0.18	0.01	3.40	105.5	100.0	26	127
NO3-	precip	0.21	0.01	1.50	118.7	100.0	11	127
Na+	precip	0.28	0.01	5.00	163.7	100.0	4	127
Precip	precip	-	0.00	27.71	575.5	100.0	0	366
SO4--	precip	0.23	0.01	1.70	131.5	100.0	4	127
SO4-- corr	precip	0.21	0.01	1.69	118.4	100.0	4	127
cond	precip	10.14	2.40	47.80	5837.4	100.0	0	127
pH	precip	5.09	4.05	7.35	4682.4	100.0	0	127

EE0011R Vilsandi
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.32	0.10	1.60	191.1	100.0	0	21
Cl-	precip	1.29	0.23	4.10	780.9	100.0	0	21
K+	precip	0.21	0.06	0.60	125.8	100.0	0	21
Mg++	precip	0.13	0.04	0.45	79.5	100.0	0	21
NH4+	precip	0.33	0.01	0.98	201.1	100.0	1	21
NO3-	precip	0.31	0.01	0.89	190.0	100.0	1	21
Na+	precip	0.74	0.17	2.20	446.9	100.0	0	21
Precip	precip	-	0.00	75.00	604.2	99.8	1	53
SO4--	precip	0.31	0.12	0.87	186.5	100.0	0	21
SO4-- corr	precip	0.25	0.04	0.84	150.0	100.0	0	21
cond	precip	15.01	5.00	28.00	9068.3	100.0	0	21
pH	precip	5.13	4.52	6.69	4526.5	100.0	0	21

ES0001R San Pablo de los Montes
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.45	0.02	4.10	389.9	98.8	3	93
Cl-	precip	0.61	0.16	4.91	520.0	99.7	42	103
K+	precip	0.07	0.03	0.27	64.0	98.8	21	93
Mg++	precip	0.07	0.01	0.37	59.5	98.8	1	93
NH4+	precip	0.18	0.02	2.40	154.4	99.3	19	98
NO3-	precip	0.14	0.04	1.32	117.0	99.7	29	103
Na+	precip	0.37	0.06	2.90	320.9	98.8	19	93
Precip	precip	-	0.00	35.40	858.1	100.0	0	366
SO4--	precip	0.14	0.04	0.91	124.0	99.7	30	103
SO4-- corr	precip	0.11	0.00	0.87	95.7	99.7	30	103
cond	precip	8.01	1.90	148.40	6872.3	100.0	0	110
pH	precip	5.61	4.95	7.25	2084.2	100.0	0	110

ES0005R Noia
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.28	0.02	9.50	656.9	99.7	7	167
Cl-	precip	4.56	0.16	40.42	10687.4	100.0	5	175
K+	precip	0.17	0.03	1.40	408.0	99.7	15	167
Mg++	precip	0.35	0.02	2.80	823.1	99.7	0	167
NH4+	precip	0.11	0.02	4.24	264.5	99.8	46	169
NO3-	precip	0.11	0.04	4.02	258.2	100.0	51	175
Na+	precip	2.69	0.12	22.00	6289.3	99.7	0	167
Precip	precip	-	0.00	49.00	2341.5	100.0	0	366
SO4--	precip	0.38	0.04	6.01	898.3	100.0	1	175
SO4-- corr	precip	0.16	-0.06	5.63	372.5	100.0	1	175
cond	precip	24.23	3.60	160.30	56736.5	100.0	0	177
pH	precip	5.13	3.97	6.98	17241.5	100.0	0	177

ES0006R Mahón
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	3.41	1.59	23.00	2292.1	98.8	0	74
Cl-	precip	19.21	3.93	238.36	12913.3	100.0	0	83
K+	precip	0.57	0.17	5.20	380.4	98.8	0	74
Mg++	precip	1.63	0.46	13.00	1097.4	98.8	0	74
NH4+	precip	0.10	0.02	1.48	64.8	99.8	33	81
NO3-	precip	0.27	0.04	1.70	180.9	100.0	4	83
Na+	precip	10.44	2.30	115.00	7020.5	98.8	0	74
Precip	precip	-	0.00	63.00	672.2	100.0	0	366
SO4--	precip	1.24	0.41	11.40	834.7	100.0	0	83
SO4-- corr	precip	0.34	-1.47	4.69	228.2	100.0	0	83
cond	precip	93.82	26.40	870.80	63062.8	100.0	0	84
pH	precip	6.70	5.45	7.63	133.4	100.0	0	84

ES0007R Víznar
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	1.08	0.21	13.40	913.9	99.0	0	76
Cl-	precip	0.65	0.16	5.81	549.9	99.7	17	83
K+	precip	0.14	0.03	2.70	117.0	99.0	5	76
Mg++	precip	0.19	0.07	1.70	158.7	99.0	0	76
NH4+	precip	0.41	0.02	4.07	350.5	99.4	1	80
NO3-	precip	0.22	0.04	3.58	189.8	99.7	6	83
Na+	precip	0.38	0.06	3.10	324.0	99.0	6	76
Precip	precip	-	0.00	50.88	849.2	100.0	0	366
SO4--	precip	0.28	0.04	3.93	241.3	99.7	6	83
SO4-- corr	precip	0.25	0.02	3.79	213.3	99.7	6	83
cond	precip	13.91	3.80	139.20	11815.3	100.0	0	90
pH	precip	6.21	5.14	7.72	520.4	100.0	0	90

ES0008R Niembro
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.64	0.02	8.60	821.7	100.0	1	156
Cl-	precip	5.32	0.16	20.78	6871.1	100.0	2	156
K+	precip	0.16	0.03	1.10	211.0	100.0	7	156
Mg++	precip	0.43	0.04	1.90	556.4	100.0	0	156
NH4+	precip	0.27	0.02	9.68	349.3	100.0	8	156
NO3-	precip	0.73	0.04	41.08	946.9	99.8	5	155
Na+	precip	3.07	0.10	11.50	3959.7	100.0	0	156
Precip	precip	-	0.00	54.20	1291.1	100.0	0	366
SO4--	precip	0.51	0.04	5.54	656.1	100.0	2	156
SO4-- corr	precip	0.25	0.02	4.64	324.6	100.0	2	156
cond	precip	41.49	4.00	1220.00	53559.9	100.0	0	156
pH	precip	4.47	2.54	7.64	43911.1	99.8	0	155

ES0009R Campisabalos
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.86	0.10	12.00	421.8	99.7	0	105
Cl-	precip	0.45	0.16	10.29	218.9	99.9	41	109
K+	precip	0.10	0.03	3.30	49.7	99.7	19	105
Mg++	precip	0.09	0.02	0.70	43.4	99.7	0	105
NH4+	precip	0.38	0.04	2.90	187.4	98.5	0	106
NO3-	precip	0.31	0.04	12.23	151.3	99.9	7	109
Na+	precip	0.27	0.06	3.40	133.9	99.7	17	105
Precip	precip	-	0.00	28.84	490.1	100.0	0	366
SO4--	precip	0.21	0.04	2.38	104.7	99.9	26	109
SO4-- corr	precip	0.19	0.00	2.25	92.3	99.9	26	109
cond	precip	11.41	2.90	315.10	5593.1	100.0	0	110
pH	precip	5.56	3.40	7.72	1338.0	100.0	0	110

ES0011R Barcarrota
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.58	0.11	6.40	460.5	100.0	0	78
Cl-	precip	1.43	0.16	14.82	1140.3	100.0	7	78
K+	precip	0.13	0.03	0.43	100.1	100.0	4	78
Mg++	precip	0.15	0.03	1.00	122.5	100.0	0	78
NH4+	precip	0.18	0.02	1.20	140.1	100.0	14	78
NO3-	precip	0.20	0.04	2.42	161.9	100.0	23	78
Na+	precip	0.85	0.06	8.00	679.5	100.0	4	78
Precip	precip	-	0.00	41.58	798.6	100.0	0	366
SO4--	precip	0.24	0.04	1.03	188.9	100.0	5	78
SO4-- corr	precip	0.17	0.00	0.90	131.8	100.0	5	78
cond	precip	12.12	3.00	66.60	9679.7	100.0	0	78
pH	precip	5.59	4.16	7.39	2070.6	100.0	0	78

ES0012R Zarra
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	1.18	0.23	12.50	537.9	98.0	0	66
Cl-	precip	0.53	0.16	8.40	240.8	99.5	16	83
K+	precip	0.07	0.03	0.88	29.7	98.0	12	66
Mg++	precip	0.11	0.04	0.70	50.7	98.0	0	66
NH4+	precip	0.40	0.02	1.55	181.3	99.3	1	80
NO3-	precip	0.33	0.04	3.36	150.7	99.5	3	83
Na+	precip	0.32	0.06	1.90	145.5	98.0	6	66
Precip	precip	-	0.00	61.90	454.1	100.0	0	366
SO4--	precip	0.32	0.04	2.94	145.5	99.5	13	83
SO4-- corr	precip	0.29	0.01	2.82	132.5	99.5	13	83
cond	precip	13.89	3.30	229.40	6309.0	99.9	0	92
pH	precip	6.14	4.53	7.68	331.8	99.9	0	92

ES0013R Penausende
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.36	0.02	4.10	227.8	99.5	4	100
Cl-	precip	0.58	0.16	6.77	365.6	100.0	26	108
K+	precip	0.08	0.03	1.50	50.9	99.5	24	100
Mg++	precip	0.08	0.02	0.46	51.2	99.5	0	100
NH4+	precip	0.15	0.02	1.13	97.5	99.8	10	104
NO3-	precip	0.09	0.04	0.74	56.4	100.0	58	108
Na+	precip	0.36	0.06	4.00	230.6	99.5	8	100
Precip	precip	-	0.00	29.49	632.8	100.0	0	366
SO4--	precip	0.13	0.04	1.58	83.3	100.0	35	108
SO4-- corr	precip	0.10	-0.03	1.45	63.2	100.0	35	108
cond	precip	7.71	2.20	38.60	4879.9	100.0	0	109
pH	precip	5.64	5.23	7.48	1435.9	100.0	0	109

ES0014R Els Torms
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	1.96	0.18	20.40	1016.6	99.8	0	66
Cl-	precip	0.55	0.16	4.32	283.8	100.0	12	68
K+	precip	0.11	0.03	0.73	55.9	99.8	8	66
Mg++	precip	0.12	0.03	0.70	62.9	99.8	0	66
NH4+	precip	0.42	0.07	2.56	220.1	100.0	0	68
NO3-	precip	0.27	0.07	1.68	139.4	100.0	0	68
Na+	precip	0.35	0.06	2.40	184.0	99.8	5	66
Precip	precip	-	0.00	66.79	519.5	100.0	0	366
SO4--	precip	0.55	0.04	3.86	284.2	100.0	4	68
SO4-- corr	precip	0.52	0.02	3.72	268.2	100.0	4	68
cond	precip	17.26	3.60	93.20	8966.4	100.0	0	68
pH	precip	6.20	5.62	7.94	331.5	100.0	0	68

ES0016R O Saviñao
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.26	0.13	3.51	604.7	99.0	0	141
Cl-	precip	1.40	0.16	8.90	3281.6	99.9	14	155
K+	precip	0.17	0.03	4.40	390.6	99.0	23	141
Mg++	precip	0.12	0.02	0.70	290.5	99.0	0	141
NH4+	precip	0.25	0.02	5.11	577.9	99.7	16	150
NO3-	precip	0.14	0.04	2.17	327.5	99.9	42	155
Na+	precip	0.79	0.06	5.40	1849.3	99.0	7	141
Precip	precip	-	0.00	79.20	2344.8	100.0	0	366
SO4--	precip	0.19	0.04	2.13	451.4	99.9	16	155
SO4-- corr	precip	0.12	-0.01	1.99	293.1	99.9	16	155
cond	precip	10.72	2.50	177.00	25131.7	100.0	0	164
pH	precip	5.55	4.56	7.49	6665.3	100.0	0	164

ES0017R Doñana
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.89	0.12	26.90	588.6	98.4	0	70
Cl-	precip	2.82	0.16	17.50	1863.8	99.8	3	80
K+	precip	0.12	0.03	0.86	78.9	98.4	12	70
Mg++	precip	0.24	0.04	1.10	160.7	98.4	0	70
NH4+	precip	0.11	0.02	2.03	74.0	99.2	17	76
NO3-	precip	0.15	0.04	2.51	98.6	99.8	25	80
Na+	precip	1.64	0.06	5.20	1080.5	98.4	2	70
Precip	precip	-	0.00	38.50	660.8	100.0	0	366
SO4--	precip	0.33	0.04	2.83	217.2	99.8	3	80
SO4-- corr	precip	0.19	-0.03	2.41	125.5	99.8	3	80
cond	precip	19.08	2.50	136.80	12606.2	100.0	0	83
pH	precip	5.42	4.70	7.97	2530.8	100.0	0	83

FI0018R Virolahti III
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.16	0.03	2.28	92.7	99.6	0	45
Cl-	precip	0.49	0.03	2.12	282.2	99.6	0	45
K+	precip	0.07	0.02	1.33	38.9	99.6	0	45
Mg++	precip	0.05	0.01	0.26	29.9	99.6	0	45
NH4+	precip	0.27	0.04	2.12	159.4	99.6	0	45
NO3-	precip	0.31	0.06	2.40	178.1	99.6	0	45
Na+	precip	0.28	0.02	1.32	161.9	99.6	0	45
Precip	precip	-	0.00	54.00	581.3	100.0	0	54
SO4--	precip	0.32	0.09	2.82	185.6	99.6	0	45
SO4-- corr	precip	0.30	0.03	2.77	172.0	99.6	0	45
cond	precip	13.33	4.67	93.60	7750.5	99.6	0	45
pH	precip	4.75	3.82	5.93	10233.7	99.6	0	45

FI0022R Oulanka
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.05	0.01	0.57	21.3	100.0	0	52
Cl-	precip	0.13	0.03	1.51	52.1	100.0	0	52
K+	precip	0.03	0.00	0.25	12.9	100.0	1	52
Mg++	precip	0.01	0.00	0.21	6.1	100.0	2	52
NH4+	precip	0.09	0.01	1.27	38.5	100.0	0	52
NO3-	precip	0.13	0.02	0.93	53.5	100.0	0	52
Na+	precip	0.08	0.02	1.10	32.4	100.0	0	52
Precip	precip	-	0.00	37.10	415.1	99.7	0	54
SO4--	precip	0.14	0.04	1.32	58.5	100.0	0	52
SO4-- corr	precip	0.13	0.03	1.31	55.7	100.0	0	52
cond	precip	7.83	3.70	40.40	3249.7	100.0	0	52
pH	precip	4.83	4.16	5.59	6200.5	100.0	0	52

FI0036R Pallas (Matorova)
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.05	0.01	0.48	23.3	100.0	0	51
Cl-	precip	0.11	0.02	2.35	55.5	100.0	0	51
K+	precip	0.03	0.01	0.28	14.3	100.0	0	51
Mg++	precip	0.01	0.00	0.14	5.9	100.0	5	51
NH4+	precip	0.08	0.00	0.41	38.4	100.0	2	51
NO3-	precip	0.12	0.02	0.55	58.2	100.0	0	51
Na+	precip	0.07	0.01	1.35	34.0	100.0	0	51
Precip	precip	-	0.00	41.00	485.7	99.9	0	53
SO4--	precip	0.11	0.01	0.50	52.3	100.0	1	51
SO4-- corr	precip	0.10	0.01	0.47	49.5	100.0	1	51
cond	precip	6.66	2.96	23.00	3234.7	100.0	0	51
pH	precip	4.91	4.37	5.54	5918.0	100.0	0	51

FI0050R Hyytiälä
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.07	0.02	0.75	33.8	99.8	0	44
Cl-	precip	0.18	0.02	7.21	83.9	99.8	0	44
K+	precip	0.03	0.01	0.32	15.8	99.8	0	44
Mg++	precip	0.02	0.00	0.54	9.3	99.8	0	44
NH4+	precip	0.17	0.02	1.19	82.7	99.8	0	44
NO3-	precip	0.22	0.06	1.43	105.3	99.8	0	44
Na+	precip	0.11	0.01	4.32	50.7	99.8	0	44
Precip	precip	-	0.00	42.80	476.3	99.8	0	53
SO4--	precip	0.17	0.04	1.12	79.4	99.8	0	44
SO4-- corr	precip	0.16	0.04	1.01	75.1	99.8	0	43
cond	precip	9.15	3.18	54.50	4359.7	99.8	0	44
pH	precip	4.85	4.15	5.94	6765.2	99.8	0	44

FR0008R Donon
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.18	0.01	9.15	214.9	88.9	5	153
Cl-	precip	0.38	0.03	3.23	460.3	88.9	14	153
K+	precip	0.04	0.01	2.98	50.9	88.9	28	153
Mg++	precip	0.03	0.01	0.37	42.1	88.9	57	153
NH4+	precip	0.28	0.01	3.64	334.6	88.9	9	153
NO3-	precip	0.21	0.03	2.53	255.0	88.9	0	153
Na+	precip	0.24	0.01	1.73	293.0	88.9	7	153
Precip	precip	-	0.00	51.00	1213.9	100.0	2	366
SO4--	precip	0.13	0.01	2.01	160.1	88.9	4	153
pH	precip	5.46	4.51	6.95	4165.1	89.2	0	161

FR0009R Revin
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.28	0.02	3.76	279.7	88.2	0	134
Cl-	precip	0.68	0.03	12.60	677.0	88.2	3	134
K+	precip	0.06	0.01	1.53	57.7	88.2	13	134
Mg++	precip	0.06	0.01	0.83	57.2	88.2	22	134
NH4+	precip	0.42	0.05	5.07	425.6	88.2	0	134
NO3-	precip	0.28	0.05	4.80	282.7	88.2	0	134
Na+	precip	0.42	0.01	7.10	421.3	88.2	1	134
Precip	precip	-	0.00	31.60	1002.0	100.0	2	366
SO4--	precip	0.18	0.02	2.16	181.9	88.2	0	134
pH	precip	5.51	4.12	7.05	3086.1	89.5	0	144

FR0010R Morvan
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.17	0.01	4.49	201.4	87.4	3	144
Cl-	precip	0.44	0.03	5.35	530.8	87.4	7	144
K+	precip	0.05	0.01	1.29	54.9	87.4	36	144
Mg++	precip	0.04	0.01	0.33	46.0	87.4	51	144
NH4+	precip	0.25	0.01	3.60	297.0	87.4	8	144
NO3-	precip	0.17	0.01	1.71	200.4	87.4	2	144
Na+	precip	0.27	0.01	3.09	322.4	87.4	6	144
Precip	precip	-	0.00	34.40	1200.8	99.5	5	364
SO4--	precip	0.12	0.01	1.55	140.9	87.4	5	144
pH	precip	5.49	4.60	6.86	3854.0	90.4	0	160

FR0013R Peyrusse Vieille
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.40	0.03	5.34	341.4	85.7	0	144
Cl-	precip	1.33	0.05	21.20	1125.6	85.7	0	143
K+	precip	0.15	0.01	3.38	124.5	85.7	3	143
Mg++	precip	0.11	0.01	1.51	91.5	85.7	10	143
NH4+	precip	0.39	0.01	6.10	333.2	85.7	3	143
NO3-	precip	0.23	0.03	2.37	196.6	85.7	0	143
Na+	precip	0.77	0.03	12.60	656.7	85.7	0	143
Precip	precip	-	0.00	46.00	848.8	100.0	8	366
SO4--	precip	0.25	0.04	1.84	214.2	85.7	0	143
pH	precip	5.76	4.60	7.20	1471.6	87.3	0	163

FR0014R Montandon
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.25	0.01	3.35	263.1	89.7	4	134
Cl-	precip	0.32	0.03	5.35	337.2	89.7	11	134
K+	precip	0.04	0.01	2.17	45.2	89.7	29	134
Mg++	precip	0.03	0.01	0.36	31.3	90.1	47	135
NH4+	precip	0.34	0.01	3.47	360.0	89.7	3	134
NO3-	precip	0.22	0.02	4.82	236.3	89.7	0	134
Na+	precip	0.21	0.01	3.24	219.5	89.7	4	134
Precip	precip	-	0.00	33.40	1070.6	100.0	20	366
SO4--	precip	0.14	0.01	2.54	149.9	89.7	6	134
pH	precip	5.58	4.35	7.31	2833.0	90.1	0	150

FR0015R La Tardière
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.35	0.02	8.66	383.6	87.6	0	152
Cl-	precip	2.29	0.03	42.77	2541.3	87.6	1	152
K+	precip	0.09	0.01	1.15	98.3	87.6	6	152
Mg++	precip	0.18	0.01	2.88	201.3	87.6	7	152
NH4+	precip	0.35	0.01	2.83	383.4	87.6	1	152
NO3-	precip	0.17	0.01	3.37	187.6	87.6	1	152
Na+	precip	1.36	0.01	23.63	1506.4	87.6	1	152
Precip	precip	-	0.00	75.20	1109.5	100.0	11	366
SO4--	precip	0.23	0.03	2.15	258.7	87.6	0	152
pH	precip	5.76	5.00	7.14	1946.5	90.3	0	168

FR0016R Le Casset
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.59	0.02	13.38	642.3	85.7	0	124
Cl-	precip	0.16	0.03	2.79	172.8	85.7	28	124
K+	precip	0.08	0.01	4.18	90.7	85.7	26	124
Mg++	precip	0.04	0.01	0.75	42.3	85.7	54	124
NH4+	precip	0.25	0.01	7.19	272.6	85.7	22	124
NO3-	precip	0.21	0.01	2.01	229.5	85.7	1	124
Na+	precip	0.10	0.01	2.32	111.7	85.7	25	124
Precip	precip	-	0.00	60.60	1088.9	100.0	8	366
SO4--	precip	0.15	0.01	3.93	159.5	85.7	17	124
pH	precip	5.62	4.81	6.94	2639.1	85.8	0	131

FR0017R Montfranc
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.28	0.01	11.96	395.1	97.3	3	156
Cl-	precip	0.68	0.03	10.75	953.6	97.3	10	156
K+	precip	0.04	0.01	0.80	59.4	97.3	40	156
Mg++	precip	0.06	0.01	0.77	83.0	97.3	44	156
NH4+	precip	0.20	0.01	2.61	275.7	97.3	13	156
NO3-	precip	0.14	0.01	1.56	201.6	97.3	1	156
Na+	precip	0.42	0.01	6.52	582.6	97.3	6	156
Precip	precip	-	0.00	67.40	1392.4	100.0	3	366
SO4--	precip	0.14	0.01	1.19	189.2	97.3	7	156
pH	precip	5.59	4.62	6.94	3604.9	97.6	0	164

FR0018R La Coulonche
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.20	0.03	3.51	188.1	93.8	0	148
Cl-	precip	2.13	0.06	75.15	2045.6	93.8	0	148
K+	precip	0.08	0.01	1.61	73.9	93.8	13	148
Mg++	precip	0.15	0.01	5.15	145.9	93.8	13	148
NH4+	precip	0.44	0.10	3.29	423.8	93.8	0	148
NO3-	precip	0.22	0.03	3.25	208.5	93.8	0	148
Na+	precip	1.26	0.02	43.07	1206.3	93.8	0	148
Precip	precip	-	0.00	83.00	961.1	100.0	2	366
SO4--	precip	0.25	0.01	3.85	243.7	93.8	1	148
pH	precip	5.78	4.28	7.00	1592.3	94.4	0	158

GB0002R Eskdalemuir
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.12	0.05	0.27	176.2	80.0	0	20
Cl-	precip	2.39	0.40	5.33	3378.6	80.0	0	20
K+	precip	0.10	0.04	0.27	136.9	80.0	0	20
Mg++	precip	0.14	0.03	0.30	199.0	80.0	0	20
NH4+	precip	0.26	0.05	1.36	368.8	80.0	0	20
NO3-	precip	0.14	0.07	0.60	203.5	80.0	0	20
Na+	precip	1.33	0.21	3.04	1874.2	80.0	0	20
Precip	precip	-	0.00	157.48	1411.3	100.0	0	27
SO4--	precip	0.18	0.09	0.42	260.4	80.0	0	20
SO4-- corr	precip	0.07	0.01	0.28	103.8	80.0	0	20
cond	precip	13.17	5.36	29.20	18592.0	80.0	0	20
pH	precip	5.86	4.80	7.36	1961.0	80.0	0	20

GB0006R Lough Navar
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.37	0.09	2.98	463.1	100.0	0	24
Cl-	precip	5.09	0.19	11.70	6337.2	100.0	0	24
K+	precip	0.16	0.05	0.37	197.2	100.0	0	24
Mg++	precip	0.33	0.04	0.73	416.0	100.0	0	24
NH4+	precip	0.09	0.00	1.34	112.6	100.0	6	24
NO3-	precip	0.07	0.00	1.33	91.4	100.0	2	24
Na+	precip	2.87	0.09	6.53	3569.5	100.0	0	24
Precip	precip	-	0.00	121.81	1245.9	100.0	0	25
SO4--	precip	0.30	0.05	0.86	372.3	100.0	0	24
SO4-- corr	precip	0.06	-0.03	0.56	73.5	100.0	0	24
cond	precip	23.90	4.94	45.80	29772.1	100.0	0	24
pH	precip	5.61	4.70	7.02	3041.9	100.0	0	24

GB0013R Yarner Wood
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.19	0.08	5.33	240.1	99.7	0	25
Cl-	precip	4.80	0.41	16.30	6026.1	99.7	0	25
K+	precip	0.17	0.08	3.72	212.5	99.7	0	25
Mg++	precip	0.29	0.05	1.30	365.7	99.7	0	25
NH4+	precip	0.17	0.01	2.08	218.3	99.7	0	25
NO3-	precip	0.20	0.02	2.30	253.1	99.7	0	25
Na+	precip	2.72	0.15	8.61	3411.8	99.7	0	25
Precip	precip	-	0.00	133.54	1256.0	100.0	0	27
SO4--	precip	0.34	0.16	1.44	420.8	99.7	0	25
SO4-- corr	precip	0.11	0.01	0.72	135.0	99.7	0	25
cond	precip	23.73	7.84	49.40	29812.2	99.6	0	22
pH	precip	5.78	4.67	7.13	2077.4	99.7	0	25

GB0014R High Muffles
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.30	0.01	2.45	218.0	100.0	1	26
Cl-	precip	3.66	0.29	14.00	2686.4	100.0	0	26
K+	precip	0.12	0.04	0.41	84.7	100.0	0	26
Mg++	precip	0.23	0.04	0.81	168.5	100.0	0	26
NH4+	precip	0.56	0.08	1.60	407.1	100.0	0	26
NO3-	precip	0.45	0.14	1.17	330.5	100.0	0	26
Na+	precip	2.04	0.09	7.38	1493.3	100.0	0	26
Precip	precip	-	0.00	69.47	733.1	100.0	0	27
SO4--	precip	0.40	0.13	1.14	294.0	100.0	0	26
SO4-- corr	precip	0.23	0.02	0.66	168.9	100.0	0	26
cond	precip	24.33	6.40	70.80	17840.3	97.8	0	24
pH	precip	5.60	4.69	7.77	1855.3	100.0	0	26

GB0015R Strath Vaich Dam
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.14	0.05	0.20	121.5	99.4	0	19
Cl-	precip	4.09	0.21	9.03	3521.9	99.4	0	19
K+	precip	0.11	0.03	0.24	93.2	99.4	0	19
Mg++	precip	0.24	0.03	0.55	204.8	99.4	0	19
NH4+	precip	0.03	0.00	0.24	21.8	99.4	11	19
NO3-	precip	0.06	0.00	0.27	48.9	99.4	2	19
Na+	precip	2.21	0.09	5.23	1904.3	99.4	0	19
Precip	precip	-	0.00	122.08	861.1	100.0	0	21
SO4--	precip	0.22	0.05	0.41	187.1	99.4	0	19
SO4-- corr	precip	0.03	-0.03	0.19	27.7	99.4	0	19
cond	precip	17.40	3.83	39.00	14984.1	99.4	0	19
pH	precip	5.58	4.52	6.95	2254.2	99.4	0	19

GB0048R Auchencorth Moss
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.14	0.01	1.86	79.3	100.0	2	190
Cl-	precip	1.75	0.04	33.60	994.7	100.0	0	190
K+	precip	0.09	0.01	0.97	53.9	100.0	4	190
Mg++	precip	0.11	0.00	2.19	61.9	100.0	4	190
NH4+	precip	0.31	0.01	2.76	175.0	100.0	0	190
NO3-	precip	0.18	0.01	3.26	100.3	100.0	0	190
Na+	precip	0.99	0.02	18.10	563.9	100.0	0	190
Precip	precip	-	0.00	16.02	568.2	100.0	0	365
SO4--	precip	0.17	0.00	3.81	94.2	100.0	1	190
SO4-- corr	precip	0.08	-0.29	2.29	47.5	100.0	1	190
cond	precip	10.77	1.45	58.20	6121.0	97.8	0	152
pH	precip	5.81	4.76	7.78	873.9	100.0	0	190

GB1055R Chilbolton Observatory
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.16	0.03	4.25	98.5	99.6	0	154
Cl-	precip	1.90	0.07	89.20	1174.4	99.6	0	154
K+	precip	0.09	0.01	2.69	54.7	99.6	2	154
Mg++	precip	0.12	0.01	6.47	74.4	99.6	0	154
NH4+	precip	0.41	0.00	7.24	253.5	99.6	1	154
NO3-	precip	0.23	0.02	5.76	140.3	99.6	0	154
Na+	precip	1.06	0.00	49.00	655.0	99.6	1	154
Precip	precip	-	0.00	34.94	619.0	100.0	0	365
SO4--	precip	0.20	0.02	4.52	123.5	99.6	0	154
SO4-- corr	precip	0.11	-0.00	1.75	69.1	99.6	0	154
cond	precip	12.68	2.39	79.80	7847.7	98.3	0	122
pH	precip	5.88	4.43	8.03	814.9	99.6	0	154

HR0002R Puntijarka
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	1.21	0.17	7.25	1527.9	94.8	0	105
Cl-	precip	0.34	0.04	3.20	424.6	94.8	0	105
K+	precip	0.21	0.03	5.78	263.7	94.8	0	105
Mg++	precip	0.06	0.02	0.51	78.1	94.8	0	105
NH4+	precip	0.30	0.01	2.96	376.7	94.8	0	105
NO3-	precip	0.27	0.01	1.85	337.5	94.8	0	105
Na+	precip	0.25	0.04	2.42	317.4	94.8	0	105
Precip off	precip	-	0.10	97.90	1259.2	42.2	0	154
SO4--	precip	0.35	0.02	2.14	434.9	94.8	0	105
SO4-- corr	precip	0.33	0.02	2.07	410.0	94.8	0	105
cond	precip	11.00	2.70	91.90	13847.3	96.7	0	129
pH	precip	5.39	4.28	7.47	5145.0	96.7	0	129

HR0004R Zavizan
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.98	0.10	23.84	1662.1	99.1	0	128
Cl-	precip	0.74	0.06	6.05	1254.2	99.1	0	128
K+	precip	0.20	0.03	6.74	338.6	99.1	0	128
Mg++	precip	0.10	0.02	1.00	172.0	99.1	0	128
NH4+	precip	0.30	0.01	11.98	515.2	99.1	0	128
NO3-	precip	0.28	0.01	2.51	465.8	99.1	0	128
Na+	precip	0.45	0.03	3.65	757.0	99.1	0	128
Precip off	precip	-	0.00	60.10	1693.6	100.0	0	365
SO4--	precip	0.31	0.03	3.13	532.1	99.1	0	128
SO4-- corr	precip	0.28	-0.04	2.87	468.5	99.1	0	128
cond	precip	14.36	2.90	147.40	24325.1	99.2	0	129
pH	precip	5.47	4.46	7.95	5685.6	99.2	0	129

HU0002R K-puszta
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.61	0.01	2.47	316.9	97.2	1	76
Cl-	precip	1.11	0.03	5.75	581.5	97.2	1	76
K+	precip	0.18	0.02	1.18	94.1	97.2	1	76
Mg++	precip	0.12	0.00	0.49	62.6	97.2	1	76
NH4+	precip	0.58	0.01	2.18	303.4	97.0	1	75
NO3-	precip	0.43	0.01	1.75	226.1	97.2	1	76
Na+	precip	1.34	0.03	4.15	700.9	97.2	1	76
Precip	precip	-	0.00	29.40	523.2	100.0	0	366
Precip off	precip	-	0.00	30.90	519.7	100.0	0	366
SO4--	precip	0.65	0.01	1.83	341.5	97.2	1	76
SO4-- corr	precip	0.58	0.01	1.65	301.0	97.2	1	76
cond	precip	17.98	8.00	52.00	9407.2	97.2	0	75
pH	precip	5.94	5.39	7.01	599.9	97.2	0	75

HU0003R Farkasfa
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.41	0.01	7.40	342.1	97.5	3	98
Cl-	precip	1.06	0.56	6.45	876.7	97.5	0	98
K+	precip	0.19	0.06	1.43	154.4	97.5	0	98
Mg++	precip	0.09	0.02	0.92	73.1	97.5	0	98
NH4+	precip	0.44	0.04	4.29	361.4	97.5	0	98
NO3-	precip	0.39	0.06	3.20	324.7	97.5	0	98
Na+	precip	1.32	0.82	5.85	1087.9	97.5	0	98
Precip	precip	-	0.00	38.10	826.5	100.0	0	366
Precip off	precip	-	0.00	37.60	705.4	100.0	0	366
SO4--	precip	0.47	0.10	3.77	386.6	97.5	0	98
SO4-- corr	precip	0.41	0.08	3.28	336.7	97.5	0	98
cond	precip	15.46	7.60	88.60	12774.3	97.5	0	98
pH	precip	5.84	4.96	6.91	1192.2	97.5	0	98

IE0001R Valentia Observatory
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.23	0.03	3.07	426.9	99.4	15	194
Cl-	precip	10.08	0.11	116.87	18779.5	99.4	0	194
K+	precip	0.24	0.03	3.14	452.1	99.4	18	194
Mg++	precip	0.70	0.03	9.88	1311.6	99.4	6	194
NH4+	precip	0.08	0.02	5.43	143.5	99.4	85	194
NO3-	precip	0.06	0.01	1.37	111.5	99.4	4	194
Na+	precip	5.71	0.05	78.75	10625.2	99.4	0	194
Precip	precip	-	0.00	34.70	1862.4	93.7	0	343
Precip off	precip	-	0.00	51.90	1759.6	100.0	0	366
SO4--	precip	0.54	0.03	6.74	1003.7	99.4	0	194
SO4-- corr	precip	0.06	-0.08	1.04	115.1	99.4	0	194
cond	precip	42.85	2.30	524.00	79803.9	99.4	0	194
pH	precip	5.37	4.58	6.92	7979.6	99.4	0	194

IE0005R Oak Park
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.15	0.03	2.38	75.4	98.6	20	113
Cl-	precip	1.97	0.10	15.73	1023.2	98.6	0	113
K+	precip	0.08	0.03	0.73	39.8	98.6	26	113
Mg++	precip	0.15	0.03	1.25	78.6	98.6	11	113
NH4+	precip	0.28	0.02	2.76	144.3	98.6	6	113
NO3-	precip	0.10	0.01	2.48	53.7	98.6	8	113
Na+	precip	1.11	0.03	8.96	574.3	98.6	1	113
Precip	precip	-	0.00	22.00	519.0	79.7	0	291
Precip off	precip	-	0.00	31.20	817.7	99.5	0	363
SO4--	precip	0.16	0.02	1.67	84.3	98.6	0	113
SO4-- corr	precip	0.07	-0.04	0.94	35.9	98.6	0	113
cond	precip	12.68	2.10	97.70	6579.0	98.6	0	113
pH	precip	5.91	5.47	6.90	633.2	98.6	0	113

IE0006R Malin Head
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.56	0.03	13.43	588.8	98.3	1	196
Cl-	precip	23.82	1.29	1356.95	25166.3	98.3	0	196
K+	precip	0.57	0.03	39.99	605.1	98.3	1	196
Mg++	precip	1.75	0.12	130.71	1853.6	98.3	0	196
NH4+	precip	0.22	0.02	6.04	230.9	98.3	38	196
NO3-	precip	0.08	0.01	2.19	86.4	98.3	32	196
Na+	precip	13.99	1.00	818.54	14776.2	98.3	0	196
Precip	precip	-	0.00	35.70	1056.3	99.5	0	364
Precip off	precip	-	0.00	34.60	1101.7	100.0	0	366
SO4--	precip	1.25	0.12	64.35	1323.0	98.3	0	196
SO4-- corr	precip	0.08	-5.64	1.51	87.5	98.3	0	196
cond	precip	100.14	8.80	5724.60	105784.9	98.3	0	196
pH	precip	5.53	4.50	7.23	3094.9	98.1	0	195

IE0009R Johnstown Castle
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.15	0.03	3.33	73.0	99.3	19	90
Cl-	precip	4.86	0.27	41.04	2393.5	99.3	0	90
K+	precip	0.11	0.03	1.12	55.6	99.3	15	90
Mg++	precip	0.33	0.03	3.03	163.4	99.3	5	90
NH4+	precip	0.21	0.02	2.19	103.9	99.3	4	90
NO3-	precip	0.11	0.01	1.70	53.3	99.2	2	89
Na+	precip	2.76	0.13	23.67	1358.2	99.3	0	90
Precip	precip	-	0.00	21.50	492.4	69.3	0	253
Precip off	precip	-	0.00	30.20	1147.2	100.0	0	365
SO4--	precip	0.32	0.03	2.75	155.9	99.3	0	90
SO4-- corr	precip	0.09	0.00	0.95	42.3	99.3	0	90
cond	precip	23.31	3.80	181.00	11478.7	99.3	0	90
pH	precip	5.59	4.25	6.91	1271.0	99.3	0	93

IS0002R Irafoss
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.18	0.00	1.90	370.3	99.4	1	189
Cl-	precip	5.73	0.35	58.00	11985.0	99.4	22	189
K+	precip	0.22	0.02	2.40	467.4	99.4	6	188
Mg++	precip	0.36	0.00	3.90	758.6	99.4	1	189
NO3-	precip	0.05	0.00	0.88	96.0	98.6	3	187
Na+	precip	2.72	0.01	29.70	5691.8	99.4	1	189
Precip	precip	-	0.00	74.40	2090.6	99.9	0	365
SO4--	precip	0.36	0.01	3.00	750.1	99.4	1	189
SO4-- corr	precip	0.13	-0.03	2.54	263.0	99.4	1	189
cond	precip	27.05	2.80	230.00	56546.0	97.7	0	161
pH	precip	5.51	3.90	7.20	6533.7	97.9	0	163

IS0091R Storhofdi
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	2.19	0.30	7.17	3180.2	100.0	0	12
Cl-	precip	98.15	8.79	321.64	142849.1	100.0	0	12
K+	precip	2.08	0.46	6.61	3026.2	100.0	0	12
Mg++	precip	6.52	0.61	21.15	9484.2	100.0	0	12
NH4+	precip	0.32	0.01	0.65	466.5	100.0	1	12
NO3-	precip	0.07	0.02	0.24	105.5	100.0	0	12
Na+	precip	54.71	4.60	168.23	79628.1	100.0	0	12
Precip	precip	-	48.90	209.10	1455.4	100.0	0	12
Precip off	precip	-	86.80	234.00	1938.4	100.0	0	12
SO4--	precip	4.57	0.57	15.03	6655.7	100.0	0	12
SO4-- corr	precip	-0.01	-0.93	0.95	-10.9	100.0	0	12
cond	precip	348.25	39.80	1000.00	506831.7	100.0	0	12
pH	precip	5.64	5.24	6.39	3297.3	100.0	0	12

IT0004R Ispra
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.62	0.09	9.98	656.2	99.0	0	117
Cl-	precip	0.57	0.05	8.12	597.3	99.0	0	117
K+	precip	0.06	0.00	0.83	61.8	99.0	11	117
Mg++	precip	0.07	0.01	0.59	77.6	99.0	2	117
NH4+	precip	0.81	0.05	6.57	857.5	94.1	0	114
NO3-	precip	0.46	0.07	5.44	485.0	99.0	0	117
Na+	precip	0.34	0.02	4.90	357.0	99.0	0	117
Precip off	precip	-	0.00	115.53	1054.0	99.7	0	365
SO4--	precip	0.34	0.03	5.53	361.8	99.0	0	117
SO4-- corr	precip	0.32	0.02	5.38	332.2	99.0	0	117
cond	precip	13.67	2.73	86.40	14408.6	98.3	0	96
pH	precip	5.75	4.06	7.28	1886.2	98.4	0	99

LT0015R Preila
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.28	0.02	1.62	134.1	99.4	0	88
Cl-	precip	3.60	0.11	61.74	1722.6	99.4	0	88
K+	precip	0.10	0.01	1.13	47.0	99.4	0	88
Mg++	precip	0.25	0.01	3.32	117.8	99.4	0	88
NH4+	precip	0.40	0.02	3.42	192.7	99.4	0	88
NO3-	precip	0.35	0.06	2.54	169.6	99.4	0	88
Na+	precip	1.65	0.06	25.41	789.4	99.4	0	88
Precip	precip	-	0.00	43.92	478.0	100.0	0	366
SO4--	precip	0.40	0.05	3.24	189.4	99.4	0	88
SO4-- corr	precip	0.24	-0.97	3.12	116.9	99.4	0	88
cond	precip	22.54	3.15	180.40	10773.7	99.4	0	88
pH	precip	5.09	4.03	6.66	3877.9	99.4	0	88

LV0010R Rucava
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.41	0.02	2.10	130.6	80.8	7	44
Cl-	precip	0.43	0.02	3.88	137.8	76.1	8	36
K+	precip	0.06	0.02	0.29	20.8	79.4	2	43
Mg++	precip	0.09	0.02	0.30	28.1	80.8	26	44
NH4+	precip	0.55	0.05	3.35	175.7	87.8	7	65
NO3-	precip	0.35	0.09	1.43	111.7	76.1	0	36
Na+	precip	0.26	0.04	2.80	84.4	80.8	31	44
Precip off	precip	-	0.00	19.10	320.4	69.4	0	254
SO4--	precip	0.30	0.08	1.04	95.6	76.1	0	36
SO4-- corr	precip	0.28	0.08	1.01	89.5	76.1	0	36
cond	precip	14.75	3.80	62.10	4726.0	85.1	0	63
pH	precip	5.31	4.23	7.28	1576.8	87.8	0	65

ME0008R Zabljak
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	2.01	0.18	8.52	2863.0	79.4	0	58
Cl-	precip	1.37	0.00	53.84	1949.7	93.8	0	101
K+	precip	3.92	0.07	69.48	5566.1	99.5	0	129
Mg++	precip	0.30	0.01	2.01	423.6	78.9	0	57
NH4+	precip	0.71	0.05	4.37	1007.8	100.0	0	132
NO3-	precip	0.23	0.00	7.30	327.9	100.0	0	132
Na+	precip	1.34	0.20	14.47	1903.4	99.7	0	130
Precip	precip	-	0.00	133.00	1421.7	100.0	0	365
SO4--	precip	1.56	0.00	19.95	2220.9	100.0	0	132
SO4-- corr	precip	1.46	-0.04	18.74	2077.2	99.8	0	131
cond	precip	33.43	4.60	592.00	47527.7	100.0	0	132
pH	precip	6.09	5.05	8.61	1164.2	100.0	0	132

NL0091R De Zilk
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.25	0.03	2.44	139.9	91.0	0	81
Cl-	precip	5.70	0.21	132.90	3137.8	94.3	0	104
H+	precip	-11.15	-197.40	43.60	-6139.1	91.0	0	116
K+	precip	0.14	0.02	0.78	74.4	91.0	0	81
Mg++	precip	0.36	0.02	2.38	198.8	91.0	0	81
NH4+	precip	0.58	0.04	2.61	321.0	92.8	0	91
NO3-	precip	0.32	0.05	3.58	174.2	94.3	0	104
Na+	precip	2.93	0.09	19.56	1615.1	91.0	0	81
Precip	precip	-	0.00	22.28	550.4	100.0	144	366
SO4--	precip	0.46	0.08	6.54	254.8	94.3	0	104
SO4-- corr	precip	0.19	0.00	1.86	106.3	94.3	0	104
cond	precip	28.53	6.00	127.00	15703.2	87.4	0	68
pH	precip	5.50	4.48	7.30	1728.9	95.3	0	118

NO0001R Birkenes
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.14	0.01	2.30	216.5	99.7	0	165
Cl-	precip	2.60	0.08	39.98	3946.6	99.7	0	165
K+	precip	0.09	0.01	0.99	137.4	99.7	2	165
Mg++	precip	0.18	0.01	2.56	271.0	99.7	0	165
NH4+	precip	0.44	0.01	2.72	672.6	99.7	6	165
NO3-	precip	0.43	0.01	2.14	654.9	99.7	6	165
Na+	precip	1.49	0.04	22.52	2264.6	99.7	0	165
Precip	precip	-	0.00	85.99	1515.2	100.0	0	366
SO4--	precip	0.33	0.01	2.09	499.0	99.7	0	165
SO4-- corr	precip	0.20	0.00	1.63	309.6	99.7	0	165
cond	precip	20.27	3.00	158.00	30711.3	99.4	0	157
pH	precip	4.95	4.09	6.43	17123.6	99.4	0	157

NO0015R Tustervatn
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.09	0.01	4.67	105.9	98.1	0	173
Cl-	precip	1.54	0.01	30.50	1834.6	98.1	1	173
K+	precip	0.09	0.01	0.98	106.6	98.1	4	173
Mg++	precip	0.10	0.01	1.98	121.3	98.1	16	173
NH4+	precip	0.09	0.01	2.53	107.4	98.1	8	173
NO3-	precip	0.07	0.01	5.50	80.9	98.1	21	173
Na+	precip	0.87	0.01	17.78	1037.4	98.1	1	173
Precip	precip	-	0.00	35.00	1192.3	99.7	0	365
SO4--	precip	0.12	0.01	1.46	144.7	98.1	2	173
SO4-- corr	precip	0.05	-0.06	0.73	58.4	98.1	2	173
cond	precip	9.02	2.00	55.00	10754.6	97.3	0	151
pH	precip	5.36	4.52	6.18	5213.9	97.3	0	151

NO0039R Kårvatn
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.11	0.02	2.94	131.6	99.9	0	117
Cl-	precip	2.24	0.07	19.49	2682.8	99.9	0	117
K+	precip	0.11	0.01	2.36	125.7	99.9	0	117
Mg++	precip	0.16	0.01	1.89	185.9	99.9	2	117
NH4+	precip	0.09	0.01	5.13	111.0	99.9	7	117
NO3-	precip	0.08	0.01	4.47	96.3	99.9	9	117
Na+	precip	1.29	0.04	13.66	1544.5	99.9	0	117
Precip	precip	-	0.00	54.70	1196.2	100.0	0	366
SO4--	precip	0.16	0.02	3.52	194.4	99.9	0	117
SO4-- corr	precip	0.05	-0.04	2.38	65.6	99.9	0	117
cond	precip	12.27	2.00	67.00	14679.2	99.9	0	115
pH	precip	5.34	3.93	6.05	5431.6	99.9	0	115

NO0056R Hurdal
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.14	0.02	1.18	125.5	100.0	0	98
Cl-	precip	0.81	0.06	7.50	726.4	100.0	0	98
K+	precip	0.10	0.02	0.77	91.2	100.0	0	98
Mg++	precip	0.06	0.01	0.52	57.4	100.0	2	98
NH4+	precip	0.31	0.01	3.69	278.3	100.0	1	98
NO3-	precip	0.30	0.03	3.03	269.6	100.0	0	98
Na+	precip	0.49	0.03	4.25	438.4	100.0	0	98
Precip	precip	-	0.00	59.10	901.4	100.0	0	366
SO4--	precip	0.21	0.02	1.96	193.7	100.0	0	98
SO4-- corr	precip	0.17	0.00	1.81	156.0	100.0	0	98
cond	precip	11.33	3.00	65.00	10215.6	99.9	0	96
pH	precip	5.04	4.09	6.23	8260.5	99.9	0	96

PL0002R Jarczew
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.27	0.03	2.31	122.6	99.5	0	96
Cl-	precip	0.33	0.06	5.74	151.6	99.5	0	96
K+	precip	0.12	0.02	1.04	57.5	99.5	0	96
Mg++	precip	0.05	0.01	0.49	22.6	99.5	0	96
NH4+	precip	0.49	0.12	7.21	226.8	99.5	0	96
NO3-	precip	0.40	0.10	4.30	186.6	99.5	0	96
Na+	precip	0.17	0.02	3.37	79.2	99.5	0	96
Precip	precip	-	0.00	30.30	461.5	95.0	0	347
Precip off	precip	-	0.00	31.10	481.9	95.0	0	347
SO4--	precip	0.38	0.10	3.99	177.1	99.5	0	96
SO4-- corr	precip	0.37	-0.04	3.84	170.3	99.5	0	96
cond	precip	11.86	4.00	97.00	5473.5	99.5	0	96
pH	precip	5.23	4.22	7.01	2713.6	99.5	0	96

PL0003R Sniezka
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	1.23	0.08	7.67	711.1	99.7	0	138
Cl-	precip	0.79	0.11	4.06	454.8	99.7	0	138
K+	precip	0.58	0.02	2.42	334.9	99.7	0	138
Mg++	precip	0.16	0.03	1.45	94.1	99.7	0	138
NH4+	precip	0.64	0.05	2.52	367.1	99.7	0	138
NO3-	precip	1.42	0.21	7.58	818.7	99.7	0	138
Na+	precip	0.93	0.07	5.04	533.8	99.7	0	138
Precip	precip	-	0.00	22.80	576.0	100.0	0	366
Precip off	precip	-	0.00	35.60	942.7	100.0	0	366
SO4--	precip	1.31	0.33	3.94	755.6	99.7	0	138
SO4-- corr	precip	1.25	0.32	3.64	719.0	99.7	0	138
cond	precip	36.93	12.00	110.00	21269.3	99.7	0	138
pH	precip	4.52	4.18	4.79	17323.7	99.7	0	138

PL0004R Leba
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.23	0.04	5.38	119.3	99.4	0	132
Cl-	precip	1.83	0.21	21.41	961.7	99.4	0	132
K+	precip	0.14	0.03	1.77	72.9	99.4	0	132
Mg++	precip	0.13	0.01	1.29	69.1	99.4	0	132
NH4+	precip	0.39	0.06	3.40	204.0	99.4	0	132
NO3-	precip	0.39	0.09	2.69	206.2	99.4	0	132
Na+	precip	1.10	0.11	12.17	574.1	99.4	0	132
Precip	precip	-	0.00	40.90	524.2	97.8	0	358
Precip off	precip	-	0.00	41.80	512.5	97.8	0	358
SO4--	precip	0.31	0.07	4.05	162.7	99.4	0	132
SO4-- corr	precip	0.22	0.03	3.86	114.4	99.4	0	132
cond	precip	16.65	6.00	113.00	8727.1	99.4	0	132
pH	precip	5.13	4.12	7.34	3885.8	99.4	0	132

PL0005R Diabla Gora
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.18	0.01	1.50	95.1	97.3	0	84
Cl-	precip	0.39	0.05	2.27	202.4	100.0	1	101
K+	precip	0.07	0.01	0.50	36.1	97.3	2	84
Mg++	precip	0.04	0.00	0.23	23.4	97.3	0	84
NH4+	precip	0.45	0.05	2.51	235.6	99.8	0	99
NO3-	precip	0.30	0.04	1.84	155.7	100.0	0	101
Na+	precip	0.16	0.00	0.98	85.7	97.3	1	84
Precip	precip	-	0.00	42.30	525.2	100.0	0	366
Precip off	precip	-	0.00	44.20	602.1	100.0	0	366
SO4--	precip	0.24	0.03	1.23	125.3	100.0	0	101
SO4-- corr	precip	0.22	0.03	1.19	116.7	100.0	0	101
cond	precip	10.15	2.60	54.30	5332.3	97.3	0	84
pH	precip	5.14	4.18	6.86	3784.2	100.0	0	101

RS0005R Kamenicki vis
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	1.68	0.23	13.26	1151.0	100.0	0	90
Cl-	precip	0.11	0.02	0.83	78.2	100.0	0	90
K+	precip	0.33	0.03	3.37	224.4	100.0	0	90
Mg++	precip	0.15	0.03	2.81	100.2	100.0	0	90
NH4+	precip	0.64	0.04	4.18	440.6	100.0	0	90
NO3-	precip	0.23	0.03	1.45	154.2	100.0	0	90
Na+	precip	0.28	0.03	1.92	192.0	100.0	0	90
Precip off	precip	-	0.00	34.60	683.8	100.0	0	365
SO4--	precip	0.84	0.03	6.58	574.9	100.0	0	90
SO4-- corr	precip	0.82	0.02	6.51	558.6	100.0	0	90
cond	precip	35.22	8.58	390.90	24085.5	100.0	0	90
pH	precip	5.66	4.43	7.90	1505.4	100.0	0	90

RU0001R Janiskoski
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.46	0.01	48.00	245.5	100.0	2	137
Cl-	precip	1.55	0.15	9.35	828.3	94.8	0	127
K+	precip	0.45	0.05	3.40	242.1	100.0	0	137
Mg++	precip	0.20	0.00	1.36	107.8	100.0	5	137
NH4+	precip	0.28	0.01	4.14	148.2	100.0	33	137
NO3-	precip	0.07	0.01	1.19	35.7	100.0	60	137
Na+	precip	1.19	0.12	12.80	638.2	100.0	0	137
Precip	precip	-	0.00	31.10	535.8	100.0	0	366
SO4--	precip	0.35	0.01	7.40	186.8	100.0	23	137
SO4-- corr	precip	0.27	-0.25	7.17	144.5	100.0	23	137
cond	precip	12.28	3.50	68.50	6581.2	98.4	0	129
pH	precip	4.97	3.87	6.98	5763.8	91.4	0	105

RU0013R Pinega
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.65	0.06	9.13	366.6	99.8	0	156
Cl-	precip	1.84	0.01	27.69	1041.1	95.4	1	153
K+	precip	0.73	0.06	5.35	414.4	99.8	0	156
Mg++	precip	0.26	0.00	1.88	148.8	99.8	1	156
NH4+	precip	0.40	0.01	9.29	228.4	99.8	13	156
NO3-	precip	0.18	0.00	2.26	103.5	99.8	22	156
Na+	precip	0.96	0.04	17.76	540.1	99.8	0	156
Precip	precip	-	0.00	23.50	564.5	100.0	0	366
SO4--	precip	0.54	0.01	6.00	304.9	100.0	4	157
SO4-- corr	precip	0.45	-0.05	5.81	254.5	100.0	4	157
cond	precip	14.02	3.50	96.40	7912.1	90.6	0	138
pH	precip	5.35	3.91	6.98	2502.6	94.8	0	123

RU0018R Danki
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.53	0.02	3.27	312.9	99.9	1	142
Cl-	precip	1.42	0.12	7.97	843.3	100.0	0	143
K+	precip	0.50	0.07	8.80	294.1	99.9	0	142
Mg++	precip	0.23	0.01	1.25	137.4	99.9	0	142
NH4+	precip	0.36	0.01	10.31	214.9	99.9	13	142
NO3-	precip	0.28	0.01	2.73	163.9	100.0	9	143
Na+	precip	0.70	0.06	19.31	412.6	99.9	0	142
Precip	precip	-	0.00	28.60	592.8	100.0	0	366
SO4--	precip	0.48	0.07	7.86	285.5	100.0	0	143
SO4-- corr	precip	0.41	0.02	7.68	241.1	100.0	0	143
cond	precip	12.17	5.40	80.00	7213.3	99.3	0	140
pH	precip	4.84	3.85	7.39	8509.1	98.2	0	128

RU0020R Lesnoy
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.58	0.01	5.92	342.9	100.0	2	181
Cl-	precip	0.78	0.00	20.55	466.9	100.0	8	182
K+	precip	0.45	0.01	3.22	265.5	100.0	1	181
Mg++	precip	0.09	0.00	1.30	54.1	100.0	5	181
NH4+	precip	0.42	0.01	4.26	251.8	100.0	5	181
NO3-	precip	0.41	0.00	2.82	242.4	100.0	1	182
Na+	precip	0.71	0.01	22.72	422.1	100.0	0	181
Precip	precip	-	0.00	29.60	595.8	100.0	0	366
SO4--	precip	0.59	0.01	12.14	351.4	100.0	9	182
SO4-- corr	precip	0.55	-0.02	11.18	328.1	100.0	9	182
cond	precip	15.98	2.70	97.10	9519.4	94.9	0	159
pH	precip	5.15	4.38	6.85	4197.4	95.5	0	163

SE0005R Bredkälen
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.09	0.01	0.68	37.7	99.2	31	116
Cl-	precip	0.13	0.01	1.35	54.9	99.2	10	116
K+	precip	0.03	0.01	0.59	14.8	99.2	71	116
Mg++	precip	0.02	0.01	0.14	7.3	99.2	83	116
NH4+	precip	0.24	0.01	3.02	101.2	99.2	3	116
NO3-	precip	0.14	0.01	0.90	60.3	99.2	0	116
Na+	precip	0.07	0.01	0.72	30.2	99.2	44	116
Precip	precip	-	0.00	21.00	429.8	100.0	0	366
SO4--	precip	0.12	0.01	0.90	52.2	99.2	5	116
SO4-- corr	precip	0.12	0.01	0.89	49.4	99.2	5	116
cond	precip	5.84	1.00	30.00	2508.8	99.6	0	123
pH	precip	5.37	4.31	6.84	1846.9	99.6	0	123

SE0014R Råö
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.23	0.01	2.40	88.5	98.6	4	112
Cl-	precip	4.41	0.12	65.00	1666.1	98.6	0	112
K+	precip	0.12	0.01	1.18	46.8	98.6	29	112
Mg++	precip	0.30	0.01	3.79	114.9	98.6	5	112
NH4+	precip	0.48	0.02	11.50	179.6	98.6	0	112
NO3-	precip	0.36	0.01	2.48	137.6	98.6	0	112
Na+	precip	2.28	0.07	35.12	861.4	98.6	0	112
Precip	precip	-	0.00	14.20	377.6	100.0	0	366
SO4--	precip	0.39	0.03	3.06	147.5	98.6	0	112
SO4-- corr	precip	0.20	0.02	1.23	75.2	98.6	0	112
cond	precip	27.58	4.00	397.00	10414.3	99.3	0	123
pH	precip	5.09	4.35	6.71	3052.9	99.3	0	123

SE0020R Hallahus
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.14	0.08	0.36	75.0	99.7	0	12
Cl-	precip	1.92	0.42	4.41	1036.6	99.7	0	12
K+	precip	0.07	0.01	0.15	36.3	99.7	3	12
Mg++	precip	0.14	0.04	0.29	74.1	99.7	0	12
NH4+	precip	0.54	0.25	1.00	291.3	99.7	0	12
NO3-	precip	0.41	0.18	0.63	220.4	99.7	0	12
Na+	precip	1.01	0.23	2.18	543.9	99.7	0	12
Precip	precip	-	7.60	86.00	540.2	100.0	0	13
SO4--	precip	0.29	0.21	0.38	156.0	99.7	0	12
SO4-- corr	precip	0.20	0.11	0.32	109.9	99.7	0	12
cond	precip	17.50	11.00	23.00	9452.4	99.7	0	12
pH	precip	5.21	4.73	6.47	3329.3	99.7	0	12

SE0022R Norunda Stenen
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.16	0.07	0.80	62.8	100.0	0	12
Cl-	precip	0.34	0.07	0.75	132.6	100.0	0	12
K+	precip	0.05	0.01	0.14	17.7	100.0	4	12
Mg++	precip	0.03	0.01	0.11	11.7	100.0	3	12
NH4+	precip	0.32	0.06	0.71	124.0	100.0	0	12
NO3-	precip	0.26	0.08	0.72	101.8	100.0	0	12
Na+	precip	0.19	0.01	0.54	76.2	100.0	1	12
Precip	precip	-	8.60	64.50	392.8	98.1	0	12
SO4--	precip	0.18	0.09	0.93	70.3	100.0	0	12
SO4-- corr	precip	0.16	0.07	0.88	64.4	100.0	0	12
cond	precip	8.56	5.00	23.00	3362.4	100.0	0	12
pH	precip	5.26	4.72	6.42	2159.5	100.0	0	12

SI0008R Iskrba
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.50	0.03	25.34	543.6	99.8	0	134
Cl-	precip	0.38	0.01	18.44	408.8	99.8	0	134
K+	precip	0.08	0.01	2.00	82.3	99.8	1	134
Mg++	precip	0.06	0.01	1.20	61.2	99.8	1	134
NH4+	precip	0.25	0.01	4.05	275.3	99.8	0	134
NO3-	precip	0.23	0.01	2.05	249.3	99.8	0	134
Na+	precip	0.23	0.01	10.86	245.5	99.8	0	134
Precip	precip	-	0.00	44.80	1089.6	99.7	0	365
Precip off	precip	-	0.00	54.90	1270.3	100.0	0	366
SO4--	precip	0.28	0.01	4.95	307.6	99.8	0	134
SO4-- corr	precip	0.26	0.01	4.68	286.8	99.8	0	134
cond	precip	9.87	2.00	158.00	10753.9	96.1	0	94
pH	precip	5.21	4.30	7.74	6775.7	96.1	0	94

SK0002R Chopok
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.16	0.01	3.30	220.8	95.1	0	128
Cl-	precip	0.17	0.03	1.25	244.1	95.1	0	128
K+	precip	0.04	0.00	0.82	56.6	95.1	0	128
Mg++	precip	0.02	0.00	0.25	28.3	95.1	0	128
NH4+	precip	0.35	0.01	1.81	492.2	94.3	0	125
NO3-	precip	0.23	0.03	1.24	324.2	95.1	0	128
Na+	precip	0.37	0.04	7.73	530.7	95.1	0	128
Precip	precip	-	0.00	72.70	1415.6	100.0	0	366
SO4--	precip	0.38	0.09	2.82	540.0	95.1	0	128
SO4-- corr	precip	0.37	0.09	2.73	520.5	95.1	0	128
cond	precip	11.22	3.56	59.20	15889.6	86.8	0	95
pH	precip	5.55	4.50	6.67	4012.8	86.8	0	95

SK0004R Stará Lesná
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.29	0.03	2.22	168.6	90.7	0	35
Cl-	precip	0.26	0.07	1.13	151.0	90.7	0	35
K+	precip	0.06	0.01	0.74	36.9	90.7	0	35
Mg++	precip	0.04	0.01	0.17	23.5	90.7	0	35
NH4+	precip	0.42	0.04	2.40	249.2	90.7	0	35
NO3-	precip	0.32	0.13	1.36	191.5	90.7	0	35
Na+	precip	0.47	0.07	3.52	278.5	90.7	0	35
Precip	precip	-	0.00	50.90	590.5	86.4	0	46
SO4--	precip	0.45	0.14	1.60	265.6	90.7	0	35
SO4-- corr	precip	0.43	0.13	1.50	251.7	90.7	0	35
cond	precip	12.84	4.66	32.17	7579.1	85.5	0	27
pH	precip	5.65	4.78	6.66	1333.0	84.6	0	26

SK0006R Starina
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.26	0.03	2.36	120.4	88.0	0	67
Cl-	precip	0.37	0.04	1.53	170.3	88.0	0	67
K+	precip	0.14	0.00	1.04	66.0	88.0	0	67
Mg++	precip	0.04	0.00	0.20	18.0	88.0	0	67
NH4+	precip	0.44	0.00	1.46	200.4	82.0	0	59
NO3-	precip	0.52	0.08	1.73	238.0	88.0	0	67
Na+	precip	0.86	0.05	5.69	396.1	88.0	0	67
Precip	precip	-	0.00	40.00	459.8	100.0	0	366
SO4--	precip	0.59	0.15	1.76	272.6	88.0	0	67
SO4-- corr	precip	0.57	0.14	1.73	261.0	88.0	0	67
cond	precip	13.65	6.44	31.00	6278.6	55.0	0	38
pH	precip	5.26	4.48	6.14	2521.2	55.0	0	38

SK0007R Topolniky
January 2018 - December 2018

Component	matrix	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl
Ca++	precip	0.42	0.02	5.39	214.0	82.6	0	29
Cl-	precip	0.18	0.04	0.84	90.6	82.6	0	29
K+	precip	0.04	0.01	0.32	23.0	82.6	0	29
Mg++	precip	0.04	0.01	0.35	22.0	82.6	0	29
NH4+	precip	0.52	0.10	1.02	267.4	80.7	0	28
NO3-	precip	0.34	0.14	0.76	175.0	82.6	0	29
Na+	precip	0.20	0.02	1.10	104.1	82.6	0	29
Precip	precip	-	0.00	75.80	513.3	78.3	0	41
SO4--	precip	0.42	0.09	1.76	214.1	82.2	0	28
SO4-- corr	precip	0.40	0.08	1.70	206.9	82.2	0	28
cond	precip	14.27	5.41	51.23	7324.6	96.5	0	31
pH	precip	5.54	4.58	6.29	1470.9	96.5	0	31

Annex 3

Annual statistics on particulate mass and inorganics in air and aerosols

AM0001R Amberd
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.46	0.54	0.23	3.83	0.00	0.02	0.27	1.76	3.23	76	0	280
Cl-	aerosol	0.07	0.12	0.03	3.88	0.00	0.00	0.03	0.29	0.99	72	0	263
K+	aerosol	0.08	0.07	0.06	2.83	0.00	0.01	0.07	0.23	0.36	71	0	262
Mg++	aerosol	0.03	0.04	0.02	2.96	0.00	0.00	0.02	0.10	0.27	77	0	282
NH4+	aerosol	0.71	0.48	0.57	2.06	0.03	0.18	0.57	1.59	3.29	77	0	284
NO3-	aerosol	0.26	0.23	0.18	2.54	0.00	0.04	0.20	0.73	1.40	76	0	278
Na+	aerosol	0.06	0.07	0.04	3.14	0.00	0.00	0.04	0.21	0.40	74	0	272
SO4--	aerosol	0.58	0.42	0.42	2.39	0.01	0.11	0.45	1.34	2.04	77	0	284
SO4-- corr	aerosol	0.57	0.42	0.42	2.41	0.01	0.11	0.45	1.33	2.01	77	0	284

AT0002R Illmitz
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	2.51	1.31	2.24	1.59	0.85	1.19	2.04	5.14	9.03	93	0	341
PM1 mass	pm1	11.40	7.80	9.29	1.94	0.90	3.10	9.90	27.97	51.30	31	0	116
PM10 mass	pm10	19.49	11.20	16.63	1.79	1.90	6.10	17.10	43.62	74.30	99	0	364
PM25 mass	pm25	14.53	10.17	11.79	1.92	1.20	4.16	11.70	36.94	66.90	95	0	350
SO2	air	0.66	1.03	0.36	2.84	0.01	0.08	0.31	2.46	14.89	91	0	7997

AT0005R Vorhegg
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	0.75	0.51	0.65	1.65	0.24	0.33	0.58	1.83	3.89	95	0	349
PM10 mass	pm10	7.67	5.48	6.16	1.98	0.90	1.78	6.10	18.04	39.00	31	0	115
SO2	air	0.15	0.13	0.12	1.96	0.00	0.04	0.11	0.38	1.96	90	0	7941

AT0034G Sonnblick
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	0.06	0.05	0.05	1.60	0.01	0.03	0.05	0.11	1.22	85	0	7461
NO2	air	0.18	0.33	0.12	2.13	0.00	0.04	0.11	0.47	8.23	85	0	7450
SPM	aerosol	4.58	4.95	3.00	2.68	-2.80	0.50	2.82	13.89	61.63	93	0	8208

AT0048R Zoebelboden
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	1.11	0.80	0.94	1.69	0.33	0.46	0.88	2.81	7.51	97	0	355
PM10 mass	pm10	8.35	6.76	5.80	2.60	0.20	0.86	7.15	21.31	37.50	30	0	112
SO2	air	0.15	0.13	0.12	1.96	0.00	0.04	0.11	0.38	1.96	90	0	7941

BE0011R Moerkerke
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	1.01	2.91	0.91	3.12	-0.50	0.00	0.00	4.70	52.50	96	0	8495
NO2	air	4.39	3.17	3.35	2.17	0.00	0.90	3.50	10.70	20.10	96	0	8495

BE0013R Houtem
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	0.69	2.14	0.82	2.98	-0.50	0.00	0.00	3.30	25.70	84	0	7364
NO2	air	3.42	2.87	2.41	2.45	0.00	0.50	2.60	9.30	23.40	84	0	7371

BE0014R Koksijde
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NH3	air	2.22	0.86	2.01	1.51	1.03	1.03	2.10	3.55	3.55	100	0	14

CH0001G Jungfraujoch
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
CO	air	108.78	20.71	107.03	1.19	63.39	81.85	106.23	142.57	275.97	87	0	7640
NO	air	0.01	0.03	0.01	3.14	-0.00	0.00	0.01	0.04	0.82	86	0	7608
NO2	air	0.06	0.11	0.04	2.33	0.00	0.01	0.04	0.17	2.03	85	0	7510
PM10 mass	pm10	2.59	3.03	1.76	2.31	0.20	0.60	1.60	7.58	31.30	99	0	363
SO2	air	0.01	0.03	0.01	1.76	-0.03	-0.01	0.01	0.03	0.62	97	0	8509
SO4--	aerosol	0.08	0.08	0.05	2.84	0.00	0.01	0.04	0.24	0.49	99	0	363

CH0002R Payerne
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.36	0.29	0.25	2.56	0.00	0.04	0.27	0.93	1.45	99	0	362
HNO3	air	0.22	0.09	0.20	1.49	0.11	0.11	0.21	0.38	0.39	96	0	26
HNO3+NO3-	air+aerosol	0.84	0.75	0.58	2.41	0.04	0.12	0.56	2.40	4.19	99	0	363
K+	aerosol	0.15	0.12	0.11	2.32	-0.01	0.01	0.12	0.39	0.81	99	0	362
Mg++	aerosol	0.03	0.02	0.02	2.34	-0.00	0.01	0.02	0.07	0.11	99	0	362
NH3	air	2.45	1.09	2.10	1.74	0.64	0.71	2.55	4.37	4.82	100	0	27
NH3+NH4+	air+aerosol	3.52	1.59	3.07	1.83	0.31	0.68	3.41	6.21	8.58	99	0	362
NH4+	aerosol	0.94	0.51	0.82	1.67	0.40	0.40	0.81	2.16	2.22	96	0	26
NO	air	0.71	1.92	0.14	5.40	0.01	0.02	0.10	3.69	25.77	94	0	8263
NO2	air	3.32	2.48	2.49	2.23	0.15	0.59	2.62	8.37	15.57	72	0	6339
NO3-	aerosol	0.67	0.38	0.57	1.85	0.24	0.24	0.61	1.41	1.49	92	0	25
Na+	aerosol	0.12	0.13	0.08	2.56	-0.03	0.01	0.08	0.38	0.94	99	0	362
PM10 mass	pm10	13.12	7.67	11.03	1.87	1.10	3.23	11.70	27.57	46.90	100	0	365
PM25 mass	pm25	10.16	7.40	7.58	2.31	0.60	1.75	8.10	27.32	33.80	36	0	134
SO2	air	0.17	0.17	0.13	2.46	-0.08	0.00	0.13	0.49	1.85	92	0	8144
SO4--	aerosol	0.43	0.35	0.33	2.18	0.03	0.07	0.35	1.12	2.26	99	0	364
SO4-- corr	aerosol	0.41	0.34	0.30	2.38	0.01	0.05	0.33	1.09	2.25	99	0	363

CH0003R Tänikon
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	3.64	2.33	3.00	1.89	0.21	1.07	2.98	8.48	15.54	94	0	8277
PM10 mass	pm10	13.02	8.01	10.89	1.87	1.30	3.13	11.50	28.50	54.40	100	0	365

CH0004R Chaumont
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	1.76	1.23	1.44	1.88	0.16	0.52	1.41	4.28	14.24	95	0	8330
PM10 mass	pm10	7.48	5.45	5.59	2.35	-0.20	1.20	6.50	16.97	36.20	100	0	365

CH0005R Rigi
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.33	0.66	0.15	3.90	-0.02	0.00	0.14	1.00	8.81	99	0	363
HNO3	air	0.16	0.08	0.14	1.73	0.04	0.05	0.16	0.31	0.32	100	0	27
HNO3+NO3-	air+aerosol	0.66	0.59	0.45	2.63	0.00	0.06	0.49	2.01	2.98	99	0	363
K+	aerosol	0.07	0.06	0.06	2.13	-0.01	0.01	0.06	0.19	0.53	99	0	363
Mg++	aerosol	0.03	0.03	0.03	2.17	-0.01	0.00	0.02	0.08	0.15	99	0	363
NH3	air	1.23	0.74	0.87	2.62	0.07	0.10	1.21	2.49	2.49	100	0	27
NH3+NH4+	air+aerosol	2.11	1.22	1.63	2.30	0.12	0.28	2.16	4.20	5.31	99	0	363
NH4+	aerosol	0.71	0.41	0.58	1.90	0.11	0.12	0.58	1.71	1.75	100	0	27
NO	air	0.14	0.38	0.04	4.42	-0.00	0.01	0.02	0.67	10.00	94	0	8306
NO2	air	1.17	1.34	0.75	2.47	0.03	0.19	0.67	3.86	11.32	93	0	8154
NO3-	aerosol	0.49	0.28	0.41	1.80	0.12	0.12	0.41	1.08	1.13	100	0	27
Na+	aerosol	0.09	0.11	0.07	2.51	-0.03	-0.01	0.06	0.34	0.79	99	0	363
PM10 mass	pm10	8.47	6.06	6.34	2.33	0.00	1.13	7.40	20.60	30.90	100	0	365
PM25 mass	pm25	6.08	4.27	4.79	2.06	0.80	1.52	5.55	13.34	22.50	22	0	82
SO2	air	0.13	0.10	0.10	1.95	-0.01	0.03	0.10	0.30	1.60	94	0	8320
SO4--	aerosol	0.31	0.27	0.21	2.61	0.01	0.03	0.24	0.92	1.55	93	0	342
SO4-- corr	aerosol	0.29	0.26	0.19	2.78	0.01	0.02	0.23	0.91	1.54	93	0	342

CH0053R Beromünster
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3	air	0.25	0.11	0.22	1.70	0.07	0.07	0.26	0.42	0.43	100	0	27
NH3	air	4.87	2.68	4.17	1.75	0.72	1.37	4.26	12.24	14.27	100	0	27
NH4+	aerosol	1.00	0.48	0.90	1.52	0.51	0.52	0.79	2.25	2.26	96	0	26
NO	air	0.31	0.68	0.16	3.02	-0.10	0.01	0.14	1.14	13.53	95	0	8322
NO2	air	2.92	1.79	2.52	1.68	0.64	1.23	2.32	6.60	15.69	95	0	8322
NO3-	aerosol	0.69	0.35	0.61	1.61	0.27	0.29	0.54	1.49	1.57	100	0	27
PM10 mass	pm10	11.39	7.24	9.24	2.02	0.50	2.13	10.10	25.90	45.70	100	0	365

CY0002R Agia Marina Xyliatou / Cyprus Atmosph...
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm10	0.21	0.50	0.10	2.74	0.00	0.04	0.07	0.70	5.47	84	0	310
Cl-	pm10	0.05	0.10	0.03	1.99	0.00	0.02	0.02	0.17	1.00	84	0	310
K+	pm10	0.11	0.06	0.10	1.83	0.00	0.03	0.10	0.22	0.31	84	0	310
Mg++	pm10	0.03	0.03	0.02	2.18	0.01	0.01	0.02	0.08	0.16	84	0	310
NH4+	pm10	0.98	0.58	0.84	2.10	0.00	0.02	0.78	2.11	2.39	84	0	310
NO2	air	0.62	0.48	0.46	2.29	-0.17	0.11	0.48	1.54	5.24	89	0	7878
NO3-	pm10	0.06	0.06	0.04	2.44	0.00	0.01	0.04	0.20	0.39	84	0	310
Na+	pm10	0.17	0.14	0.13	2.41	0.00	0.02	0.13	0.45	0.70	84	0	310
PM10 mass	pm10	23.80	23.06	19.01	1.84	3.70	7.93	18.08	62.48	214.40	93	0	340
PM25 mass	pm25	11.42	6.82	9.66	1.86	0.51	3.44	10.41	21.18	61.18	91	0	335
SO2	air	0.55	0.58	0.39	2.28	0.01	0.11	0.37	1.69	8.02	90	0	7884
SO4--	pm10	1.27	0.71	1.08	1.88	0.00	0.33	1.34	2.67	3.34	84	0	310
SO4-- corr	pm10	1.26	0.71	1.06	1.90	-0.02	0.31	1.31	2.64	3.30	84	0	310

CZ0003R Kosetice (NOAK)
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm25	0.05	0.02	0.04	1.75	0.01	0.02	0.04	0.10	0.12	99	1	52
HNO3+NO3-	air+aerosol	0.78	0.49	0.64	1.92	0.07	0.19	0.69	1.66	3.91	97	0	358
K+	pm25	0.10	0.07	0.08	1.95	0.01	0.03	0.08	0.28	0.37	99	1	52
Mg++	pm25	0.02	0.01	0.02	1.87	0.01	0.01	0.02	0.05	0.05	99	10	52
NH3+NH4+	air+aerosol	2.72	1.11	2.46	1.61	0.36	0.95	2.71	4.46	6.86	98	0	362
NO	air	0.12	0.23	0.07	3.67	-0.16	-0.02	0.04	0.50	2.82	69	3589	6089
NO2	air	1.41	0.90	1.14	1.97	0.10	0.33	1.26	3.17	6.77	69	5	6089
Na+	pm25	0.34	0.06	0.34	1.20	0.24	0.25	0.33	0.46	0.54	99	0	52
PM10 mass	pm10	18.67	8.60	16.59	1.67	2.30	5.75	17.80	35.69	56.30	49	0	181
PM10 mass	pm10	22.60	15.81	17.39	2.21	1.00	4.00	19.00	52.00	180.00	98	71	8629
PM25 mass	pm25	14.56	10.78	11.12	2.17	1.00	3.00	12.00	35.00	92.00	97	97	8535
PM25 mass	pm25	14.99	7.28	13.21	1.69	2.20	4.16	14.40	30.55	45.90	49	0	182
SO2	air	0.67	0.63	0.49	2.35	0.04	0.12	0.51	1.85	11.73	94	280	8284
SO2	air	0.83	0.75	0.63	2.24	0.08	0.08	0.69	1.84	10.46	97	0	356
SO4--	aerosol	0.69	0.52	0.51	2.37	0.02	0.10	0.56	1.73	3.01	98	0	362

CZ0005R Churanov
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.47	0.46	0.33	2.38	0.07	0.07	0.38	1.42	2.67	16	0	60
NH3+NH4+	air+aerosol	1.31	0.70	1.14	1.73	0.36	0.40	1.27	2.63	4.18	16	0	61
PM10 mass	pm10	9.93	7.07	7.11	2.55	0.80	0.80	9.00	22.00	41.00	99	0	365
SO2	air	0.56	0.55	0.39	2.34	0.08	0.08	0.38	2.19	2.65	16	0	60
SO4--	aerosol	0.46	0.37	0.31	2.71	0.04	0.05	0.41	1.32	1.84	16	0	60

DE0001R Westerland
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm25	0.02	0.01	0.02	1.76	0.01	0.01	0.02	0.05	0.06	16	0	61
Cl-	pm25	0.35	0.50	0.17	3.53	0.00	0.02	0.20	1.62	2.73	16	0	61
K+	pm25	0.06	0.08	0.03	3.47	0.01	0.01	0.04	0.22	0.40	16	0	61
Mg++	pm25	0.02	0.03	0.01	5.42	0.00	0.00	0.01	0.12	0.14	16	0	61
NH3	air	1.56	1.24	1.19	2.08	0.21	0.33	1.18	4.88	5.20	98	0	52
NH4+	pm25	1.12	1.69	0.43	5.02	0.01	0.01	0.60	3.71	8.81	16	0	61
NO	air	0.28	0.90	0.11	3.20	0.01	0.02	0.07	1.05	30.24	88	0	7710
NO2	air	1.66	2.07	0.76	4.62	-0.01	0.02	0.96	5.95	22.76	88	0	7711
NO3-	pm25	0.69	1.32	0.21	4.81	0.02	0.02	0.11	2.18	7.86	16	0	61
Na+	pm25	0.24	0.33	0.10	4.36	0.01	0.01	0.11	1.07	1.37	16	0	61
PM10 mass	pm10	17.13	9.98	14.82	1.72	2.36	6.11	14.90	34.70	82.92	98	0	360
SO2	air	0.16	0.08	0.15	1.50	0.01	0.07	0.16	0.26	1.55	95	0	8357
SO4--	pm25	0.44	0.54	0.28	2.80	0.00	0.06	0.31	1.66	3.62	16	0	61
SO4-- corr	pm25	0.42	0.55	0.26	2.90	-0.11	0.03	0.31	1.65	3.61	16	0	61

DE0002R Waldhof
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm25	0.02	0.02	0.01	2.83	0.00	0.00	0.02	0.05	0.08	16	0	61
Cl-	aerosol	0.36	0.64	0.12	4.31	0.02	0.02	0.11	1.97	5.15	99	0	365
Cl-	pm25	0.09	0.12	0.04	4.32	0.00	0.00	0.04	0.40	0.47	16	0	61
HNO3	air	0.21	0.18	0.15	2.31	0.02	0.04	0.14	0.57	1.51	99	0	365
K+	pm25	0.06	0.07	0.04	2.87	0.00	0.00	0.04	0.21	0.25	16	0	61
Mg++	pm25	0.01	0.01	0.00	3.90	0.00	0.00	0.00	0.04	0.07	16	0	61
NH3	air	1.47	0.96	1.08	2.40	0.15	0.17	1.53	3.18	4.11	98	0	52
NH3	air	1.85	1.32	1.38	2.37	0.01	0.33	1.56	4.50	6.68	99	0	364
NH4+	pm25	0.94	1.16	0.60	2.50	0.07	0.14	0.56	2.66	7.19	16	0	61
NO2	air	1.98	1.55	1.47	2.24	0.09	0.35	1.54	4.99	12.73	92	0	8130
NO3-	aerosol	0.53	0.55	0.35	2.53	0.01	0.08	0.33	1.65	4.49	99	0	365
NO3-	pm25	0.45	0.77	0.19	3.44	0.03	0.03	0.14	1.80	4.97	16	0	61
Na+	pm25	0.08	0.11	0.04	3.32	0.01	0.01	0.04	0.34	0.60	16	0	61
PM1 mass	pm1	7.43	4.65	6.13	1.90	1.00	2.11	6.46	16.21	33.73	99	0	363
PM10 mass	pm10	14.67	8.64	12.57	1.75	2.97	4.94	13.08	29.89	65.32	99	0	363
PM25 mass	pm25	11.40	8.19	9.13	1.95	1.55	3.06	9.24	25.96	61.97	99	0	363
SO2	air	0.27	0.29	0.19	2.31	0.01	0.05	0.18	0.71	3.10	99	0	365
SO4--	aerosol	0.57	0.40	0.46	1.95	0.00	0.17	0.47	1.30	3.00	99	0	365
SO4--	pm25	0.50	0.41	0.37	2.16	0.11	0.12	0.38	1.32	2.10	16	0	61
SO4-- corr	pm25	0.49	0.42	0.36	2.23	0.07	0.12	0.38	1.31	2.09	16	0	61

DE0003R Schauinsland
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm25	0.01	0.01	0.01	4.67	0.00	0.00	0.01	0.04	0.06	16	0	61
Cl-	aerosol	0.07	0.12	0.04	2.35	0.02	0.02	0.03	0.31	0.93	93	0	340
HNO3	air	0.24	0.19	0.18	2.42	0.00	0.04	0.19	0.59	1.10	96	0	354
K+	pm25	0.03	0.03	0.02	2.58	0.00	0.00	0.02	0.11	0.17	16	0	61
Mg++	pm25	0.00	0.00	0.00	2.20	0.00	0.00	0.00	0.01	0.01	16	0	61
NH3	air	0.87	0.77	0.50	3.62	0.01	0.02	0.68	2.30	4.09	96	0	351
NH3	air	1.02	1.07	0.64	2.71	0.12	0.13	0.66	3.85	5.13	90	0	48
NH4+	pm25	0.42	0.42	0.24	3.51	0.01	0.01	0.32	1.42	1.96	16	0	61
NO2	air	0.66	0.77	0.45	2.25	-0.09	0.14	0.42	2.00	12.65	95	0	8393
NO3-	aerosol	0.26	0.32	0.15	3.06	0.01	0.02	0.16	0.84	2.86	93	0	340
NO3-	pm25	0.15	0.17	0.10	2.39	0.01	0.02	0.10	0.61	0.94	16	0	61
Na+	pm25	0.02	0.02	0.01	2.67	0.00	0.00	0.02	0.08	0.10	16	0	61
PM10 mass	pm10	11.55	8.78	8.51	2.36	0.56	1.64	10.36	27.22	59.73	96	0	353
PM25 mass	pm25	9.53	8.00	7.00	2.28	0.69	1.62	8.43	21.79	54.45	94	0	345
SO2	air	0.18	0.18	0.13	2.29	0.01	0.04	0.14	0.46	1.83	96	0	354
SO4--	aerosol	0.37	0.33	0.24	2.99	0.01	0.03	0.28	1.07	2.04	93	0	340
SO4--	pm25	0.29	0.25	0.18	3.23	0.00	0.02	0.22	0.79	1.24	16	0	61
SO4-- corr	pm25	0.28	0.25	0.18	3.30	0.00	0.02	0.22	0.78	1.24	16	0	61

DE0007R Neuglobsow
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm25	0.02	0.02	0.01	3.21	0.00	0.00	0.01	0.06	0.12	16	0	61
Cl-	aerosol	0.34	0.60	0.12	4.13	0.02	0.02	0.11	1.65	3.49	93	0	340
Cl-	pm25	0.09	0.15	0.03	4.46	0.00	0.00	0.03	0.47	0.68	16	0	61
HNO3	air	0.17	0.14	0.12	2.27	0.00	0.03	0.12	0.43	0.81	97	0	357
K+	pm25	0.07	0.07	0.04	2.56	0.00	0.01	0.04	0.23	0.28	16	0	61
Mg++	pm25	0.01	0.01	0.00	4.04	0.00	0.00	0.00	0.04	0.05	16	0	61
NH3	air	0.74	0.56	0.42	3.99	0.00	0.06	0.73	1.73	2.00	100	0	53
NH3	air	0.98	0.81	0.66	2.62	0.01	0.15	0.72	2.58	4.13	96	0	354
NH4+	pm25	0.86	0.96	0.51	2.89	0.06	0.06	0.45	3.58	3.90	16	0	61
NO2	air	1.36	1.17	0.96	2.39	0.07	0.20	1.01	3.79	8.61	92	0	8124
NO3-	aerosol	0.42	0.44	0.28	2.46	0.01	0.07	0.26	1.24	3.49	92	0	339
NO3-	pm25	0.40	0.62	0.15	3.99	0.02	0.02	0.13	2.12	2.79	16	0	61
Na+	pm25	0.09	0.10	0.06	2.46	0.01	0.01	0.06	0.32	0.47	16	0	61
PM10 mass	pm10	15.13	9.58	12.92	1.74	3.08	5.51	12.72	30.91	79.98	99	0	365
PM25 mass	pm25	11.76	8.75	9.43	1.93	2.05	3.51	9.35	27.92	60.97	99	0	365
SO2	air	0.23	0.24	0.15	2.50	0.01	0.04	0.15	0.75	1.87	97	0	357
SO4--	aerosol	0.55	0.40	0.44	1.94	0.06	0.15	0.43	1.33	2.47	93	0	340
SO4--	pm25	0.57	0.45	0.42	2.27	0.07	0.10	0.42	1.71	1.80	16	0	61
SO4-- corr	pm25	0.56	0.45	0.40	2.36	0.05	0.09	0.42	1.70	1.79	16	0	61

DE0008R Schmücke
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm25	0.02	0.03	0.01	4.29	0.00	0.00	0.01	0.05	0.18	16	0	61
Cl-	pm25	0.03	0.04	0.01	3.33	0.00	0.00	0.01	0.12	0.26	16	0	61
K+	pm25	0.04	0.03	0.03	2.48	0.01	0.01	0.03	0.12	0.16	16	0	61
Mg++	pm25	0.00	0.01	0.00	3.21	0.00	0.00	0.00	0.02	0.02	16	0	61
NH3	air	0.64	0.87	0.36	2.90	0.05	0.06	0.44	1.84	5.77	98	0	52
NH4+	pm25	0.65	0.59	0.39	3.34	0.02	0.02	0.55	1.89	3.12	16	0	61
NO2	air	1.23	1.11	0.90	2.17	0.06	0.27	0.88	3.46	9.86	94	0	8266
NO3-	pm25	0.30	0.43	0.14	3.60	0.00	0.02	0.14	1.60	1.90	16	0	61
Na+	pm25	0.04	0.04	0.03	2.15	0.01	0.01	0.01	0.13	0.18	16	0	61
PM10 mass	pm10	12.88	8.39	9.94	2.24	0.82	2.03	11.96	27.56	55.35	98	0	359
PM25 mass	pm25	9.33	6.88	6.93	2.34	0.45	1.18	8.40	22.43	49.87	99	0	365
SO2	air	0.49	0.57	0.35	2.13	0.07	0.13	0.32	1.41	17.16	94	0	8314
SO4--	pm25	0.43	0.33	0.27	3.59	0.01	0.01	0.40	0.90	1.71	16	0	61
SO4-- corr	pm25	0.43	0.33	0.26	3.65	0.01	0.01	0.39	0.90	1.71	16	0	61

DE0009R Zingst
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm25	0.02	0.02	0.01	2.31	0.00	0.00	0.01	0.06	0.13	16	0	60
Cl-	pm25	0.13	0.19	0.06	4.09	0.00	0.00	0.07	0.55	1.14	16	0	61
K+	pm25	0.06	0.06	0.05	2.09	0.01	0.02	0.04	0.26	0.29	16	0	61
Mg++	pm25	0.01	0.02	0.00	4.23	0.00	0.00	0.01	0.04	0.11	16	0	61
NH3	air	0.68	0.50	0.50	2.24	0.10	0.11	0.50	1.77	1.91	98	0	52
NH4+	pm25	0.89	0.99	0.48	3.34	0.01	0.05	0.49	3.27	4.43	16	0	61
NO	air	0.19	0.40	0.09	2.85	0.02	0.03	0.07	0.70	8.53	94	0	8296
NO2	air	1.51	1.41	1.08	2.31	0.07	0.27	1.13	4.14	15.65	94	0	8297
NO3-	pm25	0.48	0.68	0.18	4.35	0.01	0.02	0.13	1.97	3.20	16	0	61
Na+	pm25	0.11	0.13	0.08	2.31	0.01	0.02	0.06	0.31	0.88	16	0	61
PM10 mass	pm10	15.92	11.22	13.24	1.81	2.61	5.13	12.61	36.94	82.92	99	0	365
SO2	air	0.45	0.41	0.38	1.71	0.09	0.18	0.35	1.10	10.63	94	0	8303
SO4--	pm25	0.53	0.46	0.38	2.25	0.07	0.10	0.39	1.72	2.06	16	0	61
SO4-- corr	pm25	0.52	0.46	0.37	2.38	0.06	0.07	0.38	1.71	2.06	16	0	61

DK0003R Tange
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.14	0.14	0.10	2.39	0.01	0.03	0.09	0.45	0.87	92	55	337
Cl-	aerosol	1.36	1.41	0.80	3.00	0.04	0.12	0.75	4.42	7.05	92	1	339
HNO3+NO3-	air+aerosol	0.72	0.73	0.49	2.41	0.05	0.11	0.51	2.06	5.36	92	0	339
K+	aerosol	0.11	0.06	0.10	1.62	0.02	0.05	0.10	0.23	0.44	92	0	337
NH3	air	1.33	1.22	0.78	3.44	0.00	0.10	0.99	3.67	7.45	92	3	339
NH4+	aerosol	0.88	0.98	0.56	2.60	0.03	0.10	0.55	2.92	7.52	93	0	341
Na+	aerosol	0.87	0.84	0.55	2.79	0.03	0.10	0.53	2.68	4.36	92	1	337
SO2	air	0.11	0.13	0.07	2.98	0.00	0.01	0.07	0.39	0.96	92	16	339
SO4--	aerosol	0.60	0.45	0.49	1.84	0.09	0.20	0.49	1.39	3.60	92	0	339
SO4-- corr	aerosol	0.53	0.47	0.39	2.26	0.04	0.09	0.42	1.36	3.60	92	0	339

DK0005R Keldsnor
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	0.22	0.36	0.15	2.85	-0.33	-0.05	0.15	0.60	7.27	92	3963	8124
NO2	air	2.61	2.66	1.67	2.78	-0.25	0.29	1.79	7.73	26.47	87	173	7639

DK0008R Anholt
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.17	0.16	0.12	2.52	0.01	0.02	0.12	0.50	1.09	90	55	332
Cl-	aerosol	2.33	2.46	1.25	3.50	0.03	0.13	1.48	8.07	12.36	88	1	324
HNO3+NO3-	air+aerosol	0.67	0.63	0.45	2.61	0.00	0.09	0.49	1.92	4.34	91	1	335
K+	aerosol	0.11	0.07	0.09	1.75	0.02	0.03	0.09	0.22	0.85	90	0	332
NH3	air	0.33	0.36	0.11	6.70	0.00	0.00	0.20	1.02	2.61	90	53	331
NH4+	aerosol	0.69	0.82	0.40	2.94	0.01	0.06	0.42	2.32	5.78	90	2	331
NO2	air	1.52	1.57	0.98	2.64	-0.15	0.21	0.94	4.72	30.35	92	183	8121
Na+	aerosol	1.54	1.36	1.02	2.64	0.04	0.18	1.18	4.56	7.07	90	0	332
SO2	air	0.11	0.11	0.07	2.67	0.00	0.01	0.08	0.32	0.96	90	11	332
SO4--	aerosol	0.65	0.42	0.55	1.86	0.00	0.21	0.56	1.40	3.97	91	1	334
SO4-- corr	aerosol	0.53	0.45	0.40	2.18	0.06	0.09	0.42	1.39	3.91	91	1	334

DK0010G Villum Research Station, Station Nord
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Cl-	aerosol	0.19	0.44	0.05	5.92	0.00	0.00	0.03	1.52	1.85	55	16	30
HNO3	air	0.01	0.01	0.01	2.36	0.00	0.00	0.01	0.03	0.04	84	27	45
NH3	air	0.14	0.19	0.05	5.39	0.00	0.00	0.08	0.55	0.95	84	12	45
NO3-	aerosol	0.01	0.01	0.01	2.26	0.00	0.00	0.01	0.03	0.03	55	1	30
Na+	aerosol	0.14	0.21	0.05	5.62	0.00	0.00	0.09	0.66	0.95	84	15	45
SO2	air	0.05	0.11	0.01	5.72	0.00	0.00	0.01	0.40	0.46	84	22	45
SO4--	aerosol	0.10	0.09	0.06	3.35	0.00	0.00	0.07	0.28	0.32	55	1	30
SO4-- corr	aerosol	0.09	0.08	0.05	3.64	0.00	0.00	0.06	0.27	0.31	55	1	30

DK0012R Risoe
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.18	0.18	0.12	2.48	0.02	0.03	0.11	0.58	1.02	94	38	347
Cl-	aerosol	0.98	1.08	0.57	3.00	0.03	0.09	0.58	3.26	6.10	97	2	358
HNO3+NO3-	air+aerosol	0.89	0.79	0.65	2.27	0.07	0.16	0.66	2.64	5.17	98	0	360
K+	aerosol	0.11	0.13	0.09	1.75	0.02	0.04	0.09	0.22	2.07	93	0	341
NH3	air	0.98	0.95	0.50	4.57	0.00	0.01	0.74	2.60	7.14	95	13	351
NH4+	aerosol	1.02	0.99	0.70	2.42	0.04	0.16	0.67	3.03	7.16	96	0	355
NO	air	0.26	0.87	0.15	3.64	-0.35	-0.11	0.10	0.93	25.85	92	4820	8129
NO2	air	2.31	2.22	1.55	2.54	-0.07	0.34	1.56	6.73	18.42	92	58	8106
Na+	aerosol	0.72	0.66	0.48	2.60	0.03	0.11	0.50	2.09	3.48	94	1	346
SO2	air	0.12	0.21	0.07	2.56	0.00	0.02	0.07	0.32	1.67	96	343	354
SO4--	aerosol	0.69	0.59	0.55	1.88	0.12	0.21	0.53	1.75	5.06	98	0	360
SO4-- corr	aerosol	0.64	0.61	0.47	2.19	0.06	0.12	0.48	1.74	5.06	98	0	360

DK0031R Ulborg
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	0.10	0.16	0.10	2.80	-0.32	-0.10	0.08	0.34	2.28	91	5472	8001
NO2	air	1.35	1.25	0.93	2.51	-0.15	0.21	0.92	3.93	10.48	91	245	7999

EE0009R Lahemaa
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
CO	air	147.31	36.82	143.20	1.26	91.05	103.94	138.30	221.62	345.32	99	0	8730
Ca++	aerosol	0.07	0.07	0.06	1.80	0.04	0.04	0.04	0.20	0.75	100	190	366
Cl-	aerosol	0.17	0.19	0.12	2.00	0.05	0.07	0.10	0.47	2.00	100	169	366
K+	aerosol	0.05	0.07	0.03	2.09	0.02	0.02	0.02	0.18	0.65	100	214	366
Mg++	aerosol	0.02	0.00	0.02	1.21	0.01	0.02	0.02	0.03	0.03	100	261	366
NH4+	aerosol	0.87	0.43	0.69	2.59	0.02	0.02	0.83	1.70	2.60	99	20	365
NO2	air	1.82	1.60	1.45	1.96	0.03	0.58	1.40	4.50	19.21	99	1	363
NO3-	aerosol	0.20	0.17	0.16	1.82	0.05	0.10	0.10	0.48	2.05	100	210	366
Na+	aerosol	0.08	0.15	0.04	2.63	0.02	0.02	0.02	0.33	1.83	100	185	366
PM10 mass	pm10	7.16	3.44	6.36	1.62	2.26	2.67	5.82	14.49	17.13	99	0	53
PM25 mass	pm25	6.75	4.54	5.47	1.94	1.00	1.80	5.52	16.29	28.20	98	4	361
SO2	air	0.36	0.65	0.19	2.86	0.04	0.04	0.18	1.18	7.80	99	28	363
SO4--	aerosol	0.12	0.06	0.12	1.34	0.05	0.10	0.10	0.28	0.78	100	243	366
SO4-- corr	aerosol	0.12	0.06	0.11	1.36	0.04	0.08	0.10	0.27	0.77	100	243	366

EE0011R Vilsandi
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	2.13	1.56	1.63	2.13	0.14	0.45	1.67	5.50	8.04	99	0	363
PM25 mass	pm25	5.23	4.98	3.48	2.50	1.00	1.00	3.69	16.27	24.51	94	57	344
SO2	air	0.30	0.43	0.17	2.85	0.04	0.04	0.15	1.03	3.28	99	48	363

ES0001R San Pablo de los Montes
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm10	0.27	0.33	0.16	2.76	0.01	0.04	0.15	0.94	2.91	99	8	364
Ca++	pm25	0.11	0.14	0.06	3.16	0.01	0.01	0.07	0.31	0.93	16	9	60
Cl-	pm10	0.22	0.40	0.09	3.17	0.04	0.04	0.04	1.46	1.96	16	36	60
Cl-	pm25	0.06	0.06	0.05	1.69	0.04	0.04	0.04	0.23	0.36	16	50	60
HNO3+NO3-	air+aerosol	0.29	0.16	0.24	1.94	0.03	0.03	0.26	0.56	1.06	100	20	366
K+	pm10	0.10	0.11	0.07	2.19	0.01	0.02	0.07	0.23	1.59	99	10	364
K+	pm25	0.07	0.10	0.04	2.64	0.01	0.01	0.05	0.33	0.54	16	8	60
Mg++	pm10	0.05	0.03	0.03	2.89	0.00	0.00	0.04	0.11	0.23	99	22	364
Mg++	pm25	0.01	0.02	0.02	1.65	0.00	0.00	0.00	0.02	0.11	16	31	60
NH3	air	1.69	0.95	1.39	1.91	0.26	0.42	1.58	3.69	4.29	85	0	53
NH3+NH4+	air+aerosol	1.50	0.87	1.23	2.01	0.03	0.37	1.30	3.13	4.76	99	0	365
NH4+	pm10	0.30	0.21	0.24	1.95	0.05	0.08	0.24	0.90	1.02	16	0	60
NH4+	pm25	0.18	0.15	0.14	2.01	0.04	0.05	0.12	0.60	0.74	16	0	60
NO	air	0.07	0.14	0.06	1.92	0.00	0.02	0.05	0.18	8.81	98	0	8635
NO2	air	0.35	0.51	0.24	2.26	0.02	0.07	0.22	0.99	14.44	98	0	8635
NO3-	pm10	0.16	0.12	0.12	2.01	0.01	0.04	0.12	0.42	0.82	99	3	364
NO3-	pm25	0.11	0.06	0.10	1.85	0.02	0.03	0.12	0.21	0.38	16	0	60
Na+	pm10	0.25	0.24	0.14	3.56	0.02	0.02	0.20	0.74	1.68	99	96	364
Na+	pm25	0.10	0.17	0.05	2.99	0.02	0.02	0.03	0.57	0.78	16	30	60
PM10 mass	pm10	11.93	10.85	9.00	2.07	1.00	3.00	9.00	30.00	93.00	98	0	362
PM25 mass	pm25	5.89	4.34	4.43	2.21	1.00	1.00	5.00	13.00	30.00	90	0	331
SO2	air	0.11	0.13	0.08	2.04	0.02	0.04	0.06	0.34	4.08	98	0	8654
SO4--	pm10	0.34	0.24	0.26	2.15	0.01	0.07	0.27	0.79	1.43	99	1	364
SO4--	pm25	0.29	0.20	0.23	2.08	0.05	0.06	0.27	0.64	0.99	16	0	60
SO4-- corr	pm10	0.31	0.23	0.23	2.34	-0.01	0.05	0.25	0.72	1.35	99	1	364
SO4-- corr	pm25	0.29	0.19	0.23	2.11	0.05	0.06	0.26	0.64	0.97	16	0	60

ES0005R Noia
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.23	0.17	0.17	2.39	0.03	0.03	0.19	0.58	1.14	100	58	366
NH3+NH4+	air+aerosol	0.62	0.53	0.40	2.83	0.03	0.05	0.47	1.70	3.05	99	0	363
NO	air	0.12	0.16	0.10	1.69	0.04	0.06	0.09	0.28	3.06	99	0	8673
NO2	air	0.92	0.63	0.78	1.75	0.11	0.32	0.76	2.01	9.84	99	0	8673
NO3-	pm10	0.16	0.16	0.10	3.03	0.01	0.01	0.13	0.45	1.23	89	27	328
PM10 mass	pm10	8.18	6.97	5.79	2.37	1.00	1.00	6.00	22.00	49.00	79	0	291
SO2	air	0.58	0.78	0.44	1.87	0.10	0.21	0.38	1.44	29.08	99	0	8706
SO4--	pm10	0.43	0.36	0.30	2.46	0.01	0.06	0.32	1.20	1.96	89	4	328

ES0006R Mahón
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.44	0.22	0.39	1.64	0.03	0.19	0.39	0.81	2.00	92	2	340
NH3+NH4+	air+aerosol	1.37	0.69	1.19	1.73	0.08	0.49	1.23	2.69	3.80	93	0	344
NO	air	0.15	0.61	0.07	2.23	0.02	0.04	0.06	0.43	19.53	95	0	8365
NO2	air	1.09	1.71	0.62	2.61	0.01	0.16	0.55	4.40	19.51	95	0	8365
NO3-	pm10	0.41	0.18	0.37	1.64	0.06	0.14	0.39	0.72	1.12	86	0	317
PM10 mass	pm10	15.87	5.47	15.06	1.38	6.00	9.00	15.00	25.00	46.00	86	0	317
PM25 mass	pm25	5.77	2.33	5.34	1.51	1.00	3.00	5.00	10.00	19.00	93	0	342
SO2	air	0.23	0.17	0.20	1.58	0.01	0.10	0.20	0.42	5.56	95	0	8346
SO4--	pm10	0.78	0.42	0.70	1.59	0.29	0.34	0.67	1.71	3.67	86	0	317

ES0007R Víznar
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm10	0.47	0.50	0.27	3.11	0.01	0.05	0.29	1.66	2.62	94	6	347
Ca++	pm25	0.30	0.33	0.15	3.74	0.01	0.01	0.13	1.04	1.11	16	4	60
Cl-	pm10	0.13	0.28	0.07	2.58	0.04	0.04	0.04	0.43	2.03	16	44	60
Cl-	pm25	0.06	0.04	0.05	1.54	0.04	0.04	0.04	0.12	0.27	16	46	60
HNO3+NO3-	air+aerosol	0.45	0.25	0.39	1.78	0.03	0.17	0.40	1.01	1.56	95	5	349
K+	pm10	0.13	0.08	0.11	2.07	0.01	0.03	0.13	0.27	0.47	94	3	347
K+	pm25	0.17	0.11	0.13	2.47	0.01	0.01	0.15	0.42	0.47	16	3	60
Mg++	pm10	0.06	0.05	0.04	2.71	0.00	0.01	0.05	0.17	0.29	94	12	347
Mg++	pm25	0.02	0.03	0.03	1.88	0.00	0.00	0.02	0.08	0.10	16	20	60
NH3	air	1.14	0.71	0.90	2.14	0.11	0.17	0.96	2.78	3.02	92	0	26
NH3+NH4+	air+aerosol	1.49	0.93	1.13	2.43	0.03	0.15	1.42	3.19	5.21	96	0	353
NH4+	pm10	0.42	0.33	0.31	2.12	0.10	0.10	0.32	1.24	1.62	16	0	60
NH4+	pm25	0.19	0.16	0.16	1.87	0.04	0.07	0.15	0.53	0.90	16	0	60
NO	air	0.35	1.11	0.10	4.16	0.00	0.01	0.10	1.38	25.23	98	0	8631
NO2	air	1.21	1.88	0.58	3.33	0.03	0.09	0.54	4.55	33.42	98	0	8631
NO3-	pm10	0.21	0.15	0.16	2.26	0.01	0.04	0.18	0.50	0.94	94	7	347
NO3-	pm25	0.13	0.10	0.10	1.99	0.01	0.03	0.12	0.31	0.62	16	1	60
Na+	pm10	0.25	0.23	0.14	3.28	0.02	0.02	0.20	0.67	1.82	94	77	347
Na+	pm25	0.14	0.21	0.07	3.14	0.02	0.02	0.07	0.80	1.02	16	21	60
PM10 mass	pm10	14.71	11.74	10.84	2.25	1.00	3.00	12.00	37.65	75.00	94	0	346
PM25 mass	pm25	10.93	8.96	7.77	2.41	1.00	2.00	8.00	28.70	59.00	88	0	322
SO2	air	0.41	0.39	0.30	2.21	0.01	0.07	0.32	1.01	7.39	98	0	8642
SO4--	pm10	0.39	0.25	0.31	2.03	0.06	0.09	0.33	0.80	1.49	94	0	347
SO4--	pm25	0.40	0.29	0.30	2.30	0.03	0.06	0.34	0.93	1.34	16	0	60
SO4-- corr	pm10	0.35	0.24	0.27	2.16	0.02	0.08	0.28	0.77	1.40	94	0	347
SO4-- corr	pm25	0.39	0.29	0.29	2.29	0.03	0.06	0.33	0.93	1.34	16	0	60

ES0008R Niembro
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm10	0.28	0.24	0.22	2.02	0.01	0.08	0.20	0.78	2.00	99	1	364
Ca++	pm25	0.12	0.15	0.08	2.44	0.01	0.02	0.08	0.38	1.05	16	1	60
Cl-	pm10	1.38	1.58	0.55	5.17	0.04	0.04	0.78	4.77	6.78	16	12	60
Cl-	pm25	0.16	0.21	0.09	2.76	0.04	0.04	0.04	0.72	1.03	16	33	60
HNO3+NO3-	air+aerosol	0.47	0.36	0.36	2.22	0.03	0.14	0.36	1.23	2.34	100	16	366
K+	pm10	0.13	0.07	0.11	1.76	0.01	0.04	0.13	0.25	0.48	99	1	364
K+	pm25	0.06	0.04	0.05	2.35	0.01	0.01	0.05	0.15	0.17	16	4	60
Mg++	pm10	0.18	0.14	0.14	1.93	0.02	0.05	0.14	0.46	1.42	99	0	364
Mg++	pm25	0.03	0.02	0.03	1.72	0.00	0.00	0.02	0.07	0.07	16	11	60
NH3	air	1.15	1.31	0.70	2.89	0.01	0.16	0.68	4.36	7.37	85	0	53
NH3+NH4+	air+aerosol	1.54	1.15	1.04	2.94	0.03	0.07	1.35	3.95	5.21	100	0	366
NH4+	pm10	0.34	0.38	0.23	2.35	0.07	0.09	0.17	1.06	1.98	16	0	60
NH4+	pm25	0.16	0.19	0.11	2.21	0.03	0.04	0.09	0.70	0.92	16	0	60
NO	air	0.24	0.33	0.18	1.87	0.01	0.09	0.15	0.67	8.24	97	0	8562
NO2	air	0.75	0.73	0.54	2.23	0.04	0.16	0.52	2.11	7.83	97	0	8562
NO3-	pm10	0.25	0.21	0.18	2.43	0.01	0.04	0.18	0.72	1.27	99	4	364
NO3-	pm25	0.10	0.12	0.07	2.43	0.01	0.01	0.07	0.35	0.81	16	3	60
Na+	pm10	1.44	1.30	1.06	2.27	0.02	0.32	1.02	3.98	12.08	99	3	364
Na+	pm25	0.24	0.24	0.13	3.48	0.02	0.02	0.16	0.61	1.10	16	14	60
PM10 mass	pm10	14.47	8.24	12.44	1.75	3.00	5.00	13.00	29.00	56.00	99	0	364
PM25 mass	pm25	6.52	4.95	5.13	2.01	1.00	2.00	5.00	15.00	38.00	98	0	362
SO2	air	0.22	0.22	0.18	1.76	0.04	0.09	0.16	0.51	8.86	98	0	8612
SO4--	pm10	0.61	0.38	0.51	1.84	0.09	0.19	0.54	1.34	2.18	99	0	364
SO4--	pm25	0.47	0.34	0.36	2.16	0.08	0.10	0.39	1.13	1.30	16	0	60
SO4-- corr	pm10	0.49	0.38	0.37	2.22	-0.13	0.09	0.40	1.24	2.08	99	0	364
SO4-- corr	pm25	0.45	0.34	0.33	2.36	0.05	0.07	0.39	1.12	1.29	16	0	60

ES0009R Campisabalos
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm10	0.25	0.26	0.15	3.04	0.01	0.01	0.15	0.75	1.62	95	19	351
Ca++	pm25	0.09	0.08	0.06	2.64	0.01	0.01	0.07	0.25	0.38	16	7	60
Cl-	pm10	0.13	0.26	0.07	2.59	0.04	0.04	0.04	0.60	1.79	16	46	60
Cl-	pm25	0.07	0.07	0.06	1.84	0.04	0.04	0.04	0.21	0.41	16	44	60
HNO3+NO3-	air+aerosol	0.26	0.13	0.23	1.86	0.03	0.03	0.24	0.51	0.76	90	18	332
K+	pm10	0.04	0.03	0.03	2.12	0.01	0.01	0.03	0.09	0.12	95	49	351
K+	pm25	0.02	0.02	0.02	1.97	0.01	0.01	0.02	0.07	0.08	16	19	60
Mg++	pm10	0.03	0.02	0.02	2.89	0.00	0.00	0.03	0.07	0.13	95	29	351
Mg++	pm25	0.01	0.01	0.01	1.52	0.00	0.00	0.00	0.03	0.03	16	34	60
NH3	air	0.75	0.45	0.58	2.17	0.10	0.13	0.68	1.40	1.53	83	0	52
NH3+NH4+	air+aerosol	0.83	0.65	0.48	3.66	0.03	0.04	0.74	1.95	3.56	90	0	331
NH4+	pm10	0.24	0.16	0.20	1.84	0.06	0.07	0.18	0.56	0.97	16	0	60
NH4+	pm25	0.14	0.08	0.12	1.76	0.04	0.05	0.10	0.29	0.35	16	0	60
NO	air	0.11	0.12	0.09	1.71	0.01	0.03	0.09	0.19	5.15	96	0	8437
NO2	air	0.52	0.56	0.41	1.93	0.02	0.14	0.41	1.10	13.31	96	0	8437
NO3-	pm10	0.11	0.07	0.08	2.13	0.01	0.01	0.09	0.25	0.44	95	20	351
NO3-	pm25	0.08	0.05	0.06	2.20	0.01	0.01	0.07	0.18	0.28	16	6	60
Na+	pm10	0.15	0.14	0.09	3.30	0.02	0.02	0.13	0.43	0.95	95	131	351
Na+	pm25	0.11	0.18	0.05	2.99	0.02	0.02	0.04	0.70	0.94	16	28	60
PM10 mass	pm10	8.34	8.20	5.73	2.38	1.00	2.00	5.00	26.55	71.00	95	0	348
PM10 mass	pm10	11.69	13.05	8.15	2.24	0.56	2.55	7.36	35.62	218.90	87	0	7674
PM25 mass	pm25	4.58	3.57	3.46	2.14	1.00	1.00	3.00	11.00	23.00	91	0	335
SO2	air	0.32	0.15	0.29	1.63	0.02	0.13	0.32	0.52	2.78	92	0	8095
SO4--	pm10	0.28	0.21	0.19	2.69	0.01	0.04	0.24	0.65	1.02	95	13	351
SO4--	pm25	0.27	0.21	0.19	2.52	0.01	0.04	0.23	0.66	0.93	16	1	60
SO4-- corr	pm10	0.26	0.20	0.18	2.54	-0.01	0.02	0.21	0.61	0.97	95	13	351
SO4-- corr	pm25	0.26	0.21	0.18	2.59	0.01	0.04	0.23	0.66	0.93	16	1	60

ES0010R Cabo de Creus
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.50	0.37	0.41	1.92	0.03	0.16	0.40	1.04	4.02	90	6	330
NH3+NH4+	air+aerosol	1.37	0.64	1.20	1.77	0.03	0.49	1.34	2.53	3.46	88	0	322
NO	air	0.17	0.28	0.11	2.46	0.00	0.03	0.09	0.54	9.88	96	0	8424
NO2	air	1.09	0.77	0.88	1.98	0.02	0.28	0.88	2.55	7.36	96	0	8424
NO3-	pm10	0.37	0.25	0.30	1.92	0.02	0.08	0.29	0.83	2.04	94	0	345
PM10 mass	pm10	16.13	7.43	14.92	1.47	5.00	8.00	15.00	28.00	85.00	93	0	341
PM25 mass	pm25	8.88	4.33	8.01	1.57	2.00	4.00	8.00	17.00	35.00	84	0	311
SO2	air	0.22	0.04	0.21	1.23	0.04	0.16	0.21	0.29	0.88	95	0	8381
SO4--	pm10	0.57	0.33	0.49	1.76	0.12	0.20	0.46	1.27	1.76	94	0	345

ES0011R Barcarrota
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.30	0.16	0.25	1.89	0.03	0.11	0.26	0.60	0.99	96	17	355
NH3+NH4+	air+aerosol	1.29	0.78	0.93	2.80	0.03	0.07	1.27	2.64	3.43	99	0	363
NO	air	0.13	0.32	0.07	2.68	0.00	0.01	0.07	0.37	14.36	97	0	8554
NO2	air	0.71	0.78	0.49	2.27	0.03	0.13	0.50	2.03	10.50	97	0	8554
NO3-	pm10	0.21	0.11	0.18	1.77	0.04	0.06	0.18	0.44	0.68	93	0	342
PM10 mass	pm10	14.13	11.08	11.75	1.78	2.00	5.00	11.00	30.90	114.00	92	0	340
PM25 mass	pm25	6.60	5.07	5.16	2.04	1.00	2.00	6.00	14.05	43.00	86	0	318
SO2	air	0.10	0.05	0.08	1.70	0.00	0.04	0.08	0.20	0.44	96	0	8484
SO4--	pm10	0.41	0.28	0.33	1.94	0.06	0.11	0.34	0.92	1.74	93	0	342

ES0012R Zarra
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.42	0.27	0.36	1.70	0.03	0.16	0.38	0.87	3.57	99	1	365
NH3+NH4+	air+aerosol	1.39	0.65	1.23	1.69	0.07	0.57	1.28	2.72	4.28	99	0	365
NO	air	0.05	0.06	0.04	2.22	0.00	0.01	0.03	0.15	0.91	97	0	8514
NO2	air	0.70	0.40	0.61	1.67	0.10	0.27	0.59	1.46	7.01	97	0	8514
NO3-	pm10	0.28	0.15	0.24	1.79	0.03	0.08	0.26	0.56	0.97	97	0	358
PM10 mass	pm10	9.73	6.05	7.92	1.94	1.00	3.00	8.00	21.00	33.00	97	0	358
PM10 mass	pm10	12.55	9.02	10.07	1.94	0.82	3.57	9.83	30.04	94.48	93	0	8196
PM25 mass	pm25	4.80	2.69	4.00	1.89	1.00	1.00	4.00	10.00	13.00	98	0	361
SO2	air	0.25	0.09	0.24	1.39	0.06	0.14	0.24	0.40	0.93	97	0	8527
SO4--	pm10	0.46	0.32	0.35	2.10	0.07	0.11	0.36	1.07	1.52	97	0	358

ES0013R Penausende
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.30	0.16	0.26	1.78	0.03	0.13	0.26	0.61	1.32	99	12	364
NH3+NH4+	air+aerosol	1.04	0.66	0.81	2.14	0.03	0.23	0.89	2.38	3.17	99	0	364
NO	air	0.05	0.07	0.04	2.37	0.00	0.01	0.04	0.14	1.44	95	0	8389
NO2	air	0.36	0.34	0.25	2.45	0.01	0.05	0.26	1.00	4.61	95	0	8389
NO3-	pm10	0.17	0.13	0.13	2.12	0.01	0.04	0.14	0.40	0.92	90	4	333
PM10 mass	pm10	8.07	7.63	6.03	2.13	1.00	2.00	6.00	18.40	66.00	88	0	325
PM10 mass	pm10	12.20	12.13	9.31	2.02	0.85	3.05	9.25	28.83	182.66	98	0	8619
PM25 mass	pm25	4.27	3.43	3.22	2.13	1.00	1.00	3.00	10.00	23.00	99	0	363
SO2	air	0.13	0.10	0.11	1.71	0.03	0.05	0.10	0.27	3.36	96	0	8419
SO4--	pm10	0.27	0.18	0.21	2.09	0.04	0.06	0.24	0.60	0.87	90	0	333

ES0014R Els Torms
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm10	0.28	0.24	0.19	2.70	0.01	0.03	0.20	0.68	1.73	96	6	355
Ca++	pm25	0.14	0.09	0.10	2.46	0.01	0.01	0.12	0.34	0.36	16	2	60
Cl-	pm10	0.14	0.27	0.08	2.26	0.04	0.04	0.08	0.31	1.96	16	23	60
Cl-	pm25	0.08	0.10	0.06	1.91	0.04	0.04	0.04	0.20	0.69	16	43	60
HNO3+NO3-	air+aerosol	0.41	0.25	0.35	1.80	0.03	0.16	0.37	0.83	2.10	98	7	362
K+	pm10	0.10	0.07	0.09	1.73	0.01	0.04	0.08	0.22	0.59	96	0	355
K+	pm25	0.08	0.05	0.06	1.97	0.01	0.02	0.06	0.18	0.28	16	2	60
Mg++	pm10	0.04	0.04	0.03	3.44	0.00	0.00	0.03	0.12	0.28	96	33	355
Mg++	pm25	0.01	0.01	0.02	1.44	0.00	0.00	0.01	0.03	0.04	16	28	60
NH3	air	3.49	1.36	3.26	1.45	1.42	1.82	3.35	6.81	6.90	85	0	53
NH3+NH4+	air+aerosol	3.31	1.21	2.88	2.02	0.04	1.22	3.54	4.92	5.21	99	0	364
NH4+	pm10	0.42	0.32	0.32	2.15	0.07	0.08	0.34	1.07	1.80	16	0	60
NH4+	pm25	0.33	0.27	0.23	2.34	0.03	0.06	0.26	0.89	1.34	16	0	60
NO	air	0.07	0.12	0.04	2.38	0.00	0.01	0.03	0.20	4.78	98	0	8662
NO2	air	1.04	0.57	0.91	1.66	0.17	0.39	0.92	2.04	7.17	98	0	8662
NO3-	pm10	0.21	0.16	0.17	1.83	0.03	0.06	0.17	0.47	1.44	96	0	355
NO3-	pm25	0.14	0.11	0.12	1.84	0.01	0.05	0.11	0.37	0.80	16	1	60
Na+	pm10	0.26	0.30	0.16	2.86	0.02	0.02	0.18	0.81	2.46	96	35	355
Na+	pm25	0.12	0.20	0.05	3.32	0.02	0.02	0.02	0.77	0.78	16	34	60
PM10 mass	pm10	11.62	6.70	9.87	1.80	2.00	3.00	11.00	22.25	48.00	96	0	354
PM25 mass	pm25	6.71	3.87	5.58	1.89	1.00	2.00	6.00	14.00	23.00	89	0	326
SO2	air	0.34	0.19	0.31	1.43	0.12	0.20	0.30	0.61	4.58	99	0	8696
SO4--	pm10	0.46	0.32	0.36	2.06	0.06	0.11	0.39	1.08	1.86	96	0	355
SO4--	pm25	0.45	0.30	0.35	2.13	0.04	0.10	0.40	1.02	1.47	16	0	60
SO4-- corr	pm10	0.43	0.31	0.33	2.12	0.06	0.09	0.35	1.02	1.81	96	0	355
SO4-- corr	pm25	0.44	0.30	0.34	2.16	0.04	0.07	0.39	1.01	1.47	16	0	60

ES0016R O Saviñao
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.20	0.13	0.16	2.17	0.03	0.03	0.18	0.48	0.85	99	51	363
NH3+NH4+	air+aerosol	1.47	0.97	1.11	2.35	0.03	0.28	1.23	3.14	5.04	99	0	363
NO	air	0.11	0.10	0.08	2.21	0.00	0.01	0.09	0.25	1.74	96	0	8437
NO2	air	0.74	0.37	0.66	1.62	0.06	0.31	0.66	1.41	5.79	96	0	8437
NO3-	pm10	0.17	0.11	0.13	2.07	0.02	0.03	0.15	0.38	0.59	85	0	311
PM10 mass	pm10	9.19	6.66	7.69	1.79	0.84	2.97	7.70	19.18	131.44	92	0	8086
PM10 mass	pm10	9.72	6.35	8.11	1.83	1.00	3.00	8.00	22.00	41.00	85	0	311
PM25 mass	pm25	7.90	5.45	6.31	1.99	1.00	2.00	7.00	18.90	32.00	82	0	301
SO2	air	0.16	0.14	0.13	1.84	0.00	0.05	0.14	0.34	2.89	97	0	8531
SO4--	pm10	0.44	0.33	0.33	2.14	0.05	0.10	0.35	1.11	1.46	85	0	311

ES0017R Doñana
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3+NO3-	air+aerosol	0.50	0.39	0.41	1.91	0.03	0.17	0.42	1.10	5.29	95	5	351
NH3+NH4+	air+aerosol	1.39	0.67	1.21	1.84	0.02	0.46	1.29	2.71	3.48	94	0	345
NO	air	0.15	0.62	0.05	3.76	0.00	0.00	0.04	0.56	29.05	97	0	8581
NO2	air	1.03	1.02	0.69	2.48	0.03	0.16	0.69	2.98	10.88	97	0	8581
NO3-	pm10	0.37	0.20	0.32	1.76	0.06	0.11	0.33	0.75	1.19	91	0	334
PM10 mass	pm10	15.28	7.76	13.41	1.69	3.00	5.00	14.00	31.00	44.00	91	0	334
SO2	air	0.20	0.23	0.15	1.88	0.04	0.07	0.14	0.53	5.70	97	0	8540
SO4--	pm10	0.74	0.55	0.58	2.00	0.11	0.19	0.55	1.87	3.38	91	0	334

FI0009R Utö
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.09	0.15	0.05	2.96	0.00	0.01	0.04	0.36	1.01	98	1	361
Cl-	aerosol	0.55	1.53	0.11	9.14	0.00	0.00	0.19	1.87	24.16	98	47	361
HNO3	air	0.12	0.11	0.07	3.16	0.00	0.01	0.08	0.34	0.73	98	5	362
HNO3+NO3-	air+aerosol	0.31	0.27	0.22	2.39	0.02	0.05	0.23	0.78	1.89	98	0	360
K+	aerosol	0.06	0.06	0.04	2.28	0.00	0.01	0.04	0.15	0.70	98	3	361
Mg++	aerosol	0.07	0.12	0.04	2.57	0.00	0.01	0.04	0.18	2.02	98	0	361
NH3	air	0.11	0.11	0.06	3.65	0.00	0.00	0.07	0.38	0.76	98	36	362
NH3+NH4+	air+aerosol	0.37	0.37	0.24	2.58	0.01	0.05	0.25	1.06	2.67	98	0	360
NH4+	aerosol	0.26	0.33	0.14	3.37	0.01	0.01	0.15	0.85	2.39	98	0	360
NO	air	0.16	0.33	0.08	2.77	-0.01	0.03	0.05	0.64	8.99	99	0	8694
NO2	air	1.21	0.95	0.97	1.90	-0.14	0.37	0.91	3.14	11.65	99	0	8694
NO3-	aerosol	0.19	0.22	0.12	2.73	0.01	0.02	0.12	0.60	1.65	98	0	361
Na+	aerosol	0.51	1.00	0.30	2.81	0.01	0.05	0.30	1.51	16.56	98	0	361
PM25 mass	pm25	5.58	4.86	4.08	2.31	-0.49	1.15	3.88	15.40	39.67	97	0	8575
SO2	air	0.15	0.17	0.09	2.89	0.01	0.02	0.09	0.51	1.37	98	11	362
SO4--	aerosol	0.34	0.30	0.25	2.28	0.02	0.06	0.26	0.93	2.23	98	0	361
SO4-- corr	aerosol	0.30	0.28	0.19	2.83	0.01	0.03	0.21	0.89	1.65	98	0	360

FI0018R Virolahti III
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.09	0.13	0.05	2.94	0.00	0.01	0.05	0.35	1.00	98	2	363
Cl-	aerosol	0.11	0.19	0.03	6.39	0.00	0.00	0.03	0.48	1.50	98	81	363
HNO3	air	0.08	0.07	0.05	2.55	0.00	0.01	0.06	0.20	0.46	99	1	364
HNO3+NO3-	air+aerosol	0.19	0.16	0.14	2.25	0.02	0.04	0.14	0.54	1.00	98	0	362
K+	aerosol	0.06	0.05	0.04	2.02	0.01	0.01	0.04	0.13	0.38	98	5	363
Mg++	aerosol	0.03	0.02	0.02	2.43	0.00	0.00	0.02	0.09	0.13	98	3	363
NH3	air	0.11	0.12	0.05	3.86	0.00	0.00	0.07	0.37	0.73	99	41	365
NH3+NH4+	air+aerosol	0.36	0.33	0.25	2.41	0.02	0.05	0.26	0.91	2.18	98	0	363
NH4+	aerosol	0.25	0.31	0.14	3.06	0.01	0.02	0.14	0.83	2.12	98	0	363
NO	air	0.15	0.66	0.07	2.36	-0.01	0.03	0.05	0.42	18.13	99	0	8717
NO2	air	1.30	1.31	0.97	2.04	0.11	0.34	0.92	3.51	14.43	99	0	8717
NO3-	aerosol	0.11	0.12	0.07	2.76	0.00	0.01	0.07	0.36	0.74	98	1	363
Na+	aerosol	0.18	0.19	0.11	2.72	0.00	0.02	0.12	0.60	1.01	98	3	363
PM10 mass	pm10	13.79	14.57	9.52	2.52	-2.32	1.90	9.91	37.98	410.54	96	0	8416
PM25 mass	pm25	6.47	5.05	4.84	2.22	-0.77	1.29	4.93	16.93	33.42	98	0	8619
SO2	air	0.26	0.29	0.15	2.88	0.01	0.03	0.14	0.94	1.58	99	2	364
SO2	air	0.35	0.52	0.17	3.26	-0.02	0.03	0.14	1.38	7.02	99	0	8695
SO4--	aerosol	0.35	0.32	0.24	2.35	0.02	0.05	0.24	0.98	2.00	98	0	363
SO4-- corr	aerosol	0.33	0.32	0.22	2.57	0.02	0.04	0.22	0.97	2.00	98	0	362

FI0022R Oulanka
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.02	0.02	0.01	2.32	0.00	0.00	0.01	0.09	0.10	99	0	54
Cl-	aerosol	0.05	0.08	0.02	4.85	0.00	0.00	0.01	0.22	0.44	99	13	54
HNO3	air	0.04	0.03	0.03	2.16	0.00	0.01	0.03	0.09	0.16	99	0	54
HNO3+NO3-	air+aerosol	0.05	0.03	0.04	1.83	0.01	0.01	0.04	0.10	0.22	99	1	54
K+	aerosol	0.02	0.01	0.02	2.08	0.00	0.00	0.02	0.04	0.06	99	0	54
Mg++	aerosol	0.02	0.01	0.01	2.08	0.00	0.00	0.01	0.04	0.05	99	1	54
NH3	air	0.03	0.04	0.01	4.30	0.00	0.00	0.01	0.11	0.15	99	4	54
NH3+NH4+	air+aerosol	0.12	0.09	0.09	2.08	0.02	0.02	0.10	0.29	0.56	99	0	54
NH4+	aerosol	0.09	0.09	0.06	2.76	0.00	0.01	0.06	0.27	0.53	99	0	54
NO	air	0.05	0.04	0.05	1.31	0.02	0.03	0.04	0.07	2.30	99	0	8727
NO2	air	0.35	0.21	0.30	1.69	-0.25	0.14	0.29	0.74	2.08	99	0	8727
NO3-	aerosol	0.01	0.01	0.01	3.06	0.00	0.00	0.01	0.05	0.07	99	2	54
Na+	aerosol	0.11	0.08	0.08	2.08	0.02	0.02	0.09	0.29	0.36	99	0	54
SO2	air	0.24	0.30	0.12	3.38	0.01	0.01	0.13	0.88	1.68	99	0	54
SO4--	aerosol	0.20	0.14	0.15	2.41	0.01	0.03	0.16	0.45	0.73	99	0	54
SO4-- corr	aerosol	0.19	0.14	0.14	2.52	0.01	0.02	0.16	0.45	0.72	98	0	53

FI0036R Pallas (Matorova)
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.01	0.02	0.01	2.90	0.00	0.00	0.01	0.03	0.22	89	48	338
Cl-	aerosol	0.12	0.20	0.03	7.54	0.00	0.00	0.03	0.54	1.38	89	102	338
HNO3	air	0.02	0.02	0.01	3.07	0.00	0.00	0.01	0.06	0.13	89	76	338
HNO3+NO3-	air+aerosol	0.03	0.03	0.02	2.35	0.00	0.00	0.03	0.09	0.31	89	79	338
K+	aerosol	0.01	0.01	0.01	2.73	0.00	0.00	0.01	0.03	0.07	89	51	338
Mg++	aerosol	0.01	0.02	0.01	3.03	0.00	0.00	0.01	0.04	0.10	89	27	338
NH3	air	0.02	0.03	0.01	2.99	0.00	0.00	0.01	0.10	0.24	88	165	337
NH3+NH4+	air+aerosol	0.08	0.09	0.05	2.98	0.00	0.01	0.04	0.27	0.56	88	0	337
NH4+	aerosol	0.06	0.08	0.03	3.58	0.00	0.00	0.03	0.24	0.55	89	9	338
NO3-	aerosol	0.02	0.02	0.01	2.86	0.00	0.00	0.01	0.04	0.21	89	79	338
Na+	aerosol	0.11	0.12	0.06	3.55	0.00	0.00	0.07	0.35	0.83	89	11	338
PM25 mass	pm25	2.03	2.95	1.15	7.22	0.00	0.00	1.03	7.31	36.52	99	0	8744
SO2	air	0.11	0.27	0.03	4.44	0.01	0.01	0.02	0.56	2.67	89	103	338
SO4--	aerosol	0.14	0.15	0.08	3.02	0.00	0.01	0.08	0.46	1.24	89	7	338
SO4-- corr	aerosol	0.13	0.16	0.07	3.46	0.00	0.01	0.07	0.45	1.23	89	7	337

FI0050R Hyytiälä
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.04	0.04	0.03	2.23	0.01	0.01	0.03	0.13	0.21	94	0	52
Cl-	aerosol	0.06	0.10	0.02	5.59	0.00	0.00	0.02	0.33	0.51	94	7	52
HNO3	air	0.05	0.05	0.03	2.87	0.00	0.00	0.03	0.17	0.26	94	0	52
HNO3+NO3-	air+aerosol	0.18	0.19	0.11	2.55	0.01	0.02	0.12	0.57	1.07	94	0	52
K+	aerosol	0.07	0.04	0.05	2.05	0.01	0.01	0.06	0.15	0.17	94	0	52
Mg++	aerosol	0.02	0.01	0.02	1.63	0.01	0.01	0.02	0.04	0.08	94	0	52
NH3	air	0.08	0.07	0.04	3.85	0.00	0.00	0.07	0.22	0.27	94	1	52
NH3+NH4+	air+aerosol	0.11	0.13	0.07	2.52	0.01	0.01	0.06	0.42	0.65	94	0	52
NH4+	aerosol	0.26	0.19	0.20	2.21	0.02	0.03	0.21	0.59	1.09	94	0	52
NO3-	aerosol	0.12	0.07	0.10	1.86	0.02	0.04	0.10	0.26	0.43	94	0	52
Na+	aerosol	0.05	0.03	0.05	1.72	0.01	0.02	0.05	0.12	0.14	94	0	52
PM1 mass	pm1	3.91	4.34	2.48	2.68	0.00	0.73	2.63	9.05	45.01	95	0	136
PM10 mass	pm10	5.25	3.77	4.05	2.05	0.14	1.32	3.87	12.73	23.00	95	0	136
PM25 mass	pm25	4.57	3.79	3.45	1.94	-0.05	1.23	3.46	10.37	34.29	95	0	136
SO2	air	0.28	0.21	0.22	1.99	0.05	0.06	0.22	0.68	1.22	94	0	52
SO4--	aerosol	0.13	0.10	0.10	1.95	0.02	0.03	0.11	0.31	0.59	94	0	52
SO4-- corr	aerosol	0.12	0.10	0.10	2.08	0.02	0.02	0.11	0.30	0.59	94	0	51

FI0096G Pallas (Sammaltunturi)
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	0.07	0.03	0.07	1.32	0.01	0.05	0.06	0.11	0.84	98	0	8667
NO2	air	0.87	0.58	0.74	1.71	0.19	0.34	0.69	2.05	7.79	98	0	8667
PM10 mass	pm10	3.08	4.51	2.47	4.46	-0.00	0.00	1.53	11.51	120.59	99	0	8706

FR0008R Donon
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm25	0.01	0.01	0.00	3.21	0.00	0.00	0.00	0.02	0.02	3	4	14
Ca++	pm25	0.02	0.02	0.01	3.35	0.00	0.00	0.01	0.06	0.14	14	4	54
Cl-	pm25	0.01	0.01	0.01	1.95	0.00	0.00	0.00	0.03	0.03	3	10	14
Cl-	pm25	0.01	0.03	0.00	2.57	0.00	0.00	0.00	0.05	0.18	14	39	54
K+	pm25	0.03	0.04	0.02	2.35	0.00	0.00	0.02	0.14	0.18	14	2	54
K+	pm25	0.05	0.05	0.03	2.69	0.00	0.00	0.03	0.18	0.18	3	1	14
Mg++	pm25	0.00	0.00	0.00	2.50	0.00	0.00	0.00	0.01	0.01	3	4	14
Mg++	pm25	0.01	0.01	0.00	2.32	0.00	0.00	0.00	0.02	0.02	14	7	54
NH4+	pm25	0.64	1.12	0.24	4.05	0.04	0.04	0.14	4.20	4.20	3	0	14
NH4+	pm25	0.67	0.73	0.42	3.07	0.00	0.05	0.46	2.42	4.36	14	0	54
NO3-	pm25	0.67	1.51	0.18	4.29	0.02	0.03	0.14	5.65	7.20	14	0	54
NO3-	pm25	1.08	2.04	0.20	7.41	0.01	0.01	0.10	7.45	7.45	3	0	14
Na+	pm25	0.02	0.02	0.02	2.51	0.00	0.00	0.02	0.05	0.05	3	3	14
Na+	pm25	0.04	0.04	0.02	2.68	0.00	0.00	0.03	0.13	0.19	14	1	54
PM10 mass	pm10	9.27	7.23	6.94	2.30	0.00	1.00	8.00	22.00	156.00	86	0	7558
PM25 mass	pm25	6.54	5.92	4.89	2.27	0.00	1.00	5.00	18.00	45.00	86	0	7558
SO4--	pm25	0.88	1.41	0.46	2.89	0.10	0.10	0.34	5.58	5.58	3	0	14
SO4--	pm25	1.10	0.69	0.83	2.54	0.02	0.17	1.02	2.56	3.11	14	0	54
SO4-- corr	pm25	0.88	1.41	0.46	2.90	0.10	0.10	0.34	5.58	5.58	3	0	14
SO4-- corr	pm25	1.09	0.69	0.83	2.55	0.02	0.17	1.02	2.56	3.11	14	0	54

FR0009R Revin
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm25	0.03	0.02	0.02	2.56	0.00	0.00	0.02	0.08	0.10	15	0	56
Cl-	pm25	0.06	0.11	0.02	3.29	0.00	0.00	0.01	0.20	0.71	15	25	56
K+	pm25	0.04	0.03	0.04	1.78	0.01	0.01	0.04	0.11	0.17	15	0	56
Mg++	pm25	0.01	0.01	0.01	2.23	0.00	0.00	0.01	0.03	0.06	15	1	56
NH4+	pm25	0.82	0.88	0.53	2.83	0.02	0.11	0.59	2.27	5.69	15	0	56
NO3-	pm25	1.42	2.38	0.64	3.59	0.07	0.10	0.64	4.79	16.09	15	0	56
Na+	pm25	0.10	0.11	0.06	2.55	0.01	0.02	0.05	0.34	0.63	15	17	56
PM10 mass	pm10	11.71	8.05	9.67	1.98	-3.00	2.00	10.00	26.00	68.00	92	0	8130
PM25 mass	pm25	7.16	6.10	5.76	2.12	-3.00	1.00	6.00	19.00	54.00	90	0	7971
SO4--	pm25	1.16	0.81	0.91	2.08	0.14	0.25	0.93	2.91	3.11	15	0	56
SO4-- corr	pm25	1.16	0.81	0.90	2.12	0.12	0.24	0.93	2.90	3.10	15	0	56

FR0010R Morvan
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
PM10 mass	pm10	11.21	6.99	9.33	1.93	-3.00	3.00	10.00	25.00	89.00	96	0	8433
PM25 mass	pm25	7.69	5.35	6.42	1.91	-3.00	2.00	7.00	18.00	50.00	96	0	8441

FR0013R Peyrusse Vieille
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm25	0.01	0.01	0.01	2.35	0.00	0.00	0.01	0.02	0.03	14	4	54
Cl-	pm25	0.03	0.06	0.01	3.75	0.00	0.00	0.01	0.23	0.29	14	22	54
K+	pm25	0.04	0.03	0.03	2.15	0.00	0.01	0.03	0.11	0.21	14	1	54
Mg++	pm25	0.01	0.01	0.00	2.63	0.00	0.00	0.01	0.02	0.03	14	6	54
NH4+	pm25	0.45	0.53	0.27	2.80	0.03	0.05	0.27	1.52	2.99	14	0	54
NO3-	pm25	0.38	1.17	0.13	3.38	0.01	0.02	0.12	1.50	7.58	14	0	54
Na+	pm25	0.06	0.06	0.04	2.63	0.00	0.00	0.03	0.19	0.29	14	2	54
PM10 mass	pm10	10.39	6.38	8.58	1.92	0.00	3.00	9.00	23.00	44.00	91	0	7979
PM25 mass	pm25	7.00	5.05	5.58	2.01	0.00	2.00	6.00	16.00	42.00	97	0	8505
SO4--	pm25	0.91	0.73	0.66	2.31	0.11	0.19	0.62	2.54	2.88	14	0	54
SO4-- corr	pm25	0.91	0.73	0.65	2.33	0.11	0.18	0.61	2.54	2.88	14	0	54

FR0014R Montandon
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
PM10 mass	pm10	13.50	8.84	11.09	1.96	-2.00	3.00	12.00	30.00	71.00	97	0	8563

FR0015R La Tardière
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
PM10 mass	pm10	12.72	7.71	10.76	1.89	-2.00	3.00	11.00	27.00	72.00	95	0	8326
PM25 mass	pm25	8.50	6.45	6.83	1.99	-2.00	2.00	7.00	21.00	66.00	94	0	8267

FR0018R La Coulonche
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
PM10 mass	pm10	12.67	8.27	10.11	2.08	0.00	2.00	11.00	28.00	70.00	92	0	8108
PM25 mass	pm25	7.96	7.51	5.56	2.43	-3.00	1.00	6.00	24.00	65.00	94	0	8266

FR0020R SIRTA Atmospheric Research Observatory
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	1.22	3.70	0.20	7.93	-0.60	-0.03	0.10	6.57	80.63	83	2592	7341
NO2	air	3.82	3.96	2.21	3.16	-0.16	0.30	2.42	11.86	36.56	83	88	7341

FR0023R Saint-Nazaire-le-Désert
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm25	0.05	0.10	0.02	3.14	0.00	0.00	0.02	0.24	0.73	16	0	59
Cl-	pm25	0.02	0.03	0.01	3.17	0.00	0.00	0.00	0.08	0.15	16	30	59
K+	pm25	0.07	0.11	0.04	2.66	0.01	0.01	0.03	0.31	0.62	16	0	59
Mg++	pm25	0.01	0.01	0.01	2.59	0.00	0.00	0.01	0.03	0.06	16	7	59
NH4+	pm25	0.48	0.60	0.27	3.07	0.02	0.04	0.35	1.28	3.33	16	0	59
NO3-	pm25	0.49	1.33	0.11	4.96	0.01	0.01	0.07	2.43	7.60	16	0	59
Na+	pm25	0.04	0.04	0.02	3.14	0.00	0.00	0.02	0.14	0.26	16	3	59
PM10 mass	pm10	9.24	7.40	6.73	2.34	0.00	1.00	7.00	23.00	65.00	96	0	8484
PM25 mass	pm25	5.73	5.46	3.96	2.47	0.00	1.00	4.00	16.00	44.00	93	0	8162
SO4--	pm25	0.93	0.83	0.62	2.61	0.07	0.12	0.71	2.95	3.76	16	0	59
SO4-- corr	pm25	0.93	0.83	0.62	2.62	0.07	0.12	0.71	2.95	3.75	16	0	59

FR0024R Guipry
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm25	0.01	0.01	0.01	2.64	0.00	0.00	0.01	0.04	0.09	15	4	58
Cl-	pm25	0.19	0.23	0.08	4.75	0.00	0.00	0.14	0.66	1.36	15	3	58
K+	pm25	0.04	0.03	0.03	2.25	0.00	0.01	0.03	0.13	0.15	15	2	58
Mg++	pm25	0.02	0.01	0.01	3.00	0.00	0.00	0.01	0.04	0.08	15	4	58
NH4+	pm25	0.69	0.93	0.39	2.99	0.03	0.06	0.41	2.54	5.88	15	0	58
NO3-	pm25	1.30	2.49	0.55	3.48	0.03	0.08	0.45	5.66	16.45	15	0	58
Na+	pm25	0.14	0.16	0.08	3.42	0.00	0.01	0.08	0.44	0.86	15	1	58
PM10 mass	pm10	16.29	10.25	13.50	1.98	-4.00	3.00	14.00	35.00	101.00	90	0	7922
PM25 mass	pm25	8.04	7.60	6.01	2.33	-3.00	1.00	6.00	23.00	87.00	98	0	8641
SO4--	pm25	0.90	0.75	0.67	2.16	0.14	0.19	0.59	2.47	3.87	15	0	58
SO4-- corr	pm25	0.89	0.76	0.66	2.20	0.14	0.19	0.59	2.46	3.86	15	0	58

FR0025R Verneuil
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm25	0.02	0.02	0.02	2.15	0.00	0.00	0.02	0.05	0.11	15	0	58
Cl-	pm25	0.03	0.10	0.01	4.26	0.00	0.00	0.00	0.18	0.69	15	39	58
K+	pm25	0.04	0.03	0.03	2.10	0.00	0.01	0.03	0.12	0.18	15	1	58
Mg++	pm25	0.01	0.01	0.00	2.93	0.00	0.00	0.01	0.02	0.06	15	6	58
NH4+	pm25	0.56	0.82	0.26	4.28	0.00	0.04	0.24	2.04	5.31	15	1	58
NO3-	pm25	0.80	1.76	0.19	5.16	0.02	0.02	0.14	4.22	11.12	15	0	58
Na+	pm25	0.06	0.09	0.03	2.89	0.00	0.01	0.03	0.22	0.55	15	2	58
PM25 mass	pm25	7.04	6.45	5.59	2.12	-3.00	1.00	5.00	19.00	74.00	97	0	8574
SO4--	pm25	0.84	0.75	0.60	2.32	0.12	0.14	0.54	2.96	3.33	15	0	58
SO4-- corr	pm25	0.84	0.75	0.59	2.35	0.12	0.13	0.53	2.95	3.32	15	0	58

GB0002R Eskdalemuir
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	0.24	0.10	0.22	1.39	0.03	0.13	0.22	0.38	2.34	97	8494	8529
NO2	air	0.57	0.64	0.39	2.52	-0.14	0.07	0.38	1.77	6.95	97	6585	8529

GB0006R Lough Navar
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
PM10 mass	pm10	7.57	5.95	5.87	2.24	-3.80	1.00	6.30	18.68	55.83	92	2804	8098

GB0013R Yarner Wood
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	0.27	0.48	0.19	1.95	-0.03	0.08	0.18	0.65	11.18	97	8182	8562
NO2	air	1.32	1.32	0.90	2.40	-0.00	0.22	0.88	3.88	12.51	97	3420	8562

GB0014R High Muffles
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	0.28	0.26	0.23	1.84	0.00	0.09	0.21	0.69	4.06	94	7902	8306
NO2	air	1.50	1.59	0.95	2.64	-0.05	0.21	0.89	4.61	16.86	94	3411	8306

GB0031R Aston Hill
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	0.18	0.20	0.14	2.00	-0.05	0.04	0.14	0.41	4.28	97	8361	8504
NO2	air	0.99	1.16	0.61	2.78	-0.10	0.11	0.60	3.20	12.08	97	4719	8503

GB0033R Bush
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	0.50	0.89	0.37	1.88	-0.03	0.17	0.32	1.18	23.97	99	7518	8678
NO2	air	1.62	1.82	1.00	2.93	-0.13	0.16	1.03	5.21	17.84	99	3111	8678

GB0037R Ladybower Res.
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	0.39	0.51	0.31	1.79	0.02	0.14	0.29	0.88	22.65	91	7379	8049
NO2	air	1.73	1.64	1.20	2.51	-0.09	0.24	1.26	4.81	13.97	91	2024	8049
SO2	air	0.91	0.53	0.77	1.83	-1.06	0.26	0.82	1.88	5.86	90	7644	7962
SO2	air	0.91	0.58	0.78	1.90	-1.32	0.14	0.80	1.93	12.53	89	30130	31455

GB0038R Lullington Heath
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	0.32	0.55	0.23	2.01	-0.06	0.09	0.20	0.87	19.00	98	8029	8669
NO2	air	2.30	1.96	1.71	2.22	-0.10	0.46	1.74	6.01	23.32	98	1071	8669
SO2	air	0.52	0.46	0.40	2.12	0.00	0.10	0.42	1.21	8.29	99	8559	8679
SO2	air	0.52	0.48	0.43	1.97	0.00	0.13	0.41	1.23	9.70	97	33609	34098

GB0043R Narberth
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	0.26	0.25	0.22	1.70	-0.09	0.10	0.22	0.56	7.44	98	8361	8635
NO2	air	1.11	1.15	0.72	2.70	-0.10	0.14	0.72	3.45	11.73	98	4186	8635
PM10 mass	pm10	11.92	7.70	9.59	2.05	-2.60	2.50	10.30	26.80	95.80	97	1088	8571
SO2	air	0.65	0.48	0.53	1.95	-0.28	0.16	0.54	1.49	10.85	83	7193	7336
SO2	air	0.65	0.50	0.55	1.92	-0.67	0.13	0.56	1.52	19.97	82	28169	28748

GB0045R Wicken Fen
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	0.36	0.84	0.18	2.81	-0.05	0.04	0.14	1.25	18.52	98	7687	8615
NO2	air	2.43	1.98	1.80	2.25	0.02	0.45	1.89	6.40	17.30	98	1094	8615
SO2	air	0.50	0.30	0.43	1.81	-0.47	0.15	0.44	1.04	4.65	91	7995	8028
SO2	air	0.50	0.33	0.44	1.79	-0.70	0.13	0.41	1.07	5.66	89	31277	31442

GB0048R Auchencorth Moss
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm10	0.04	0.04	0.02	2.98	0.00	0.00	0.03	0.09	0.50	72	591	6371
Ca++	pm25	0.02	0.02	0.01	3.42	0.00	0.00	0.01	0.04	0.26	73	1131	6454
Cl-	pm10	0.86	1.00	0.45	3.40	0.01	0.05	0.50	2.86	10.74	78	0	6865
Cl-	pm25	0.46	0.52	0.26	3.19	0.00	0.04	0.28	1.50	4.55	80	13	7044
HNO3	air	0.02	0.02	0.01	2.29	0.00	0.00	0.01	0.06	0.28	82	43	7198
K+	pm10	0.04	0.03	0.03	2.03	0.00	0.01	0.04	0.10	0.41	72	146	6315
K+	pm25	0.03	0.02	0.02	2.72	0.00	0.00	0.02	0.07	0.26	72	594	6393
Mg++	pm10	0.05	0.05	0.03	3.00	0.00	0.00	0.04	0.15	0.35	72	258	6371
Mg++	pm25	0.03	0.03	0.01	4.73	0.00	0.00	0.02	0.08	0.20	73	894	6454
NH3	air	1.27	1.73	0.86	2.35	0.08	0.22	0.85	3.52	58.82	76	0	6686
NH4+	pm10	0.39	0.53	0.21	3.04	0.01	0.04	0.20	1.40	5.77	71	38	6264
NH4+	pm25	0.35	0.47	0.20	3.08	0.00	0.04	0.20	1.21	4.99	72	36	6357
NO3-	pm10	0.22	0.36	0.11	3.35	0.00	0.02	0.10	0.84	5.15	78	6	6865
NO3-	pm25	0.18	0.31	0.09	3.36	0.00	0.01	0.08	0.69	4.45	80	10	7044
Na+	pm10	0.45	0.46	0.26	3.24	0.01	0.03	0.30	1.37	3.81	71	0	6268
Na+	pm25	0.26	0.25	0.16	2.93	0.00	0.02	0.18	0.77	1.89	72	2	6369
PM10 mass	pm10	6.95	5.74	5.23	2.33	-3.70	0.88	5.50	18.70	44.40	95	3338	8359
PM25 mass	pm25	4.98	4.84	3.43	2.62	-4.00	0.40	3.50	14.70	38.80	91	4820	8026
SO2	air	0.04	0.07	0.03	2.35	0.00	0.01	0.02	0.13	1.22	82	9	7198
SO4--	pm10	0.24	0.22	0.18	2.20	0.01	0.05	0.18	0.64	2.42	78	0	6865
SO4--	pm25	0.21	0.20	0.16	2.21	0.01	0.04	0.16	0.55	2.27	80	0	7044
SO4-- corr	pm10	0.20	0.22	0.13	2.55	0.01	0.03	0.13	0.60	2.29	78	0	6865
SO4-- corr	pm25	0.19	0.20	0.13	2.52	0.01	0.03	0.13	0.54	2.21	80	0	7044

GB0050R St. Osyth
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	0.76	1.45	0.43	3.02	-0.07	0.04	0.44	2.30	35.27	98	4043	8618
NO2	air	3.86	2.53	3.24	1.79	0.48	1.33	3.11	8.91	24.32	98	0	8607

GB0051R Market Harborough
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	0.41	1.31	0.20	2.77	-0.02	0.06	0.17	1.33	53.24	95	6608	8353
NO2	air	2.37	2.13	1.73	2.21	0.06	0.48	1.74	6.63	22.96	95	276	8352

GB0053R Charlton Mackrell
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	0.49	0.66	0.37	1.94	-0.03	0.14	0.35	1.08	15.86	99	7553	8708
NO2	air	1.80	1.52	1.36	2.15	0.01	0.40	1.33	4.90	13.42	99	1511	8708

GB1055R Chilbolton Observatory
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm10	0.66	0.40	0.54	1.99	0.02	0.17	0.58	1.31	3.28	8	5	726
Ca++	pm25	0.33	0.17	0.27	2.09	0.01	0.06	0.33	0.60	0.95	7	17	678
Cl-	pm10	1.57	2.04	0.63	4.95	0.01	0.03	0.87	5.24	19.52	70	606	6171
Cl-	pm25	0.69	0.96	0.25	5.42	0.01	0.02	0.36	2.38	9.19	71	1212	6289
HNO3	air	0.05	0.04	0.03	2.45	0.00	0.01	0.04	0.11	0.77	76	341	6682
K+	pm10	0.06	0.06	0.04	2.32	0.01	0.02	0.02	0.16	0.50	10	513	889
K+	pm25	0.03	0.03	0.03	1.63	0.02	0.02	0.02	0.10	0.30	9	732	853
Mg++	pm10	0.71	0.64	0.43	3.18	0.01	0.05	0.51	2.11	3.08	10	14	886
Mg++	pm25	0.37	0.40	0.19	3.99	0.00	0.01	0.23	1.19	2.11	9	75	851
NH3	air	4.49	4.96	3.12	2.32	0.26	0.79	3.14	12.53	67.25	76	0	6715
NH4+	pm10	1.02	1.13	0.59	3.05	0.01	0.07	0.63	3.33	9.16	70	244	6176
NH4+	pm25	1.08	1.18	0.60	3.46	0.01	0.07	0.66	3.57	9.03	64	176	5682
NO3-	pm10	0.74	0.85	0.42	3.09	0.00	0.07	0.44	2.42	8.03	71	6	6223
NO3-	pm25	0.62	0.81	0.32	3.27	0.00	0.05	0.31	2.28	7.75	72	9	6374
Na+	pm10	0.88	1.03	0.41	4.61	0.01	0.01	0.53	2.75	9.29	71	483	6259
Na+	pm25	0.39	0.49	0.16	4.90	0.01	0.01	0.23	1.27	4.40	72	1050	6386
PM10 mass	pm10	12.25	8.37	9.74	2.09	-3.00	2.59	10.20	28.61	73.95	92	1032	8124
PM25 mass	pm25	8.61	7.66	6.17	2.37	-2.10	1.32	6.10	24.60	65.00	89	2527	7859
SO2	air	0.07	0.06	0.05	2.17	0.00	0.01	0.05	0.17	0.72	76	73	6673
SO4--	pm10	0.53	0.36	0.42	2.02	0.00	0.14	0.43	1.27	4.57	71	5	6220
SO4--	pm25	0.46	0.35	0.35	2.16	0.00	0.11	0.36	1.21	4.28	72	5	6371
SO4-- corr	pm10	0.46	0.38	0.33	2.28	-0.07	0.09	0.35	1.23	4.52	71	5	6220
SO4-- corr	pm25	0.43	0.36	0.31	2.36	-0.06	0.07	0.33	1.19	4.26	72	5	6371

GR0001R Aliartos
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	0.92	1.71	0.62	1.91	0.47	0.47	0.47	2.81	37.43	86	0	7599
NO2	air	2.75	2.49	1.86	2.52	0.31	0.31	1.83	7.94	18.63	86	0	7598
PM10 mass	pm10	25.39	22.09	20.18	1.98	1.00	7.00	21.00	54.50	273.00	52	0	4609
PM25 mass	pm25	12.22	8.94	10.04	1.95	0.00	3.00	10.00	29.00	87.00	52	0	4607
SO2	air	3.90	3.24	3.04	2.04	1.00	1.00	4.00	9.01	30.53	32	0	2839

HR0002R Puntijarka
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
PM10 mass	pm10	13.42	11.82	10.60	1.99	1.22	3.22	11.19	29.53	157.07	87	0	319
PM25 mass	pm25	7.35	9.17	5.58	2.08	0.00	1.45	5.89	16.76	151.40	92	0	339

HU0002R K-puszta
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3	air	0.20	0.12	0.16	2.09	0.01	0.04	0.20	0.41	0.75	99	3	364
NH3	air	1.83	1.04	1.40	2.45	0.01	0.23	1.81	3.62	5.51	99	6	365
NH4+	aerosol	0.70	0.79	0.32	4.75	0.00	0.01	0.43	2.32	4.96	99	18	365
NO2	air	1.16	0.65	0.99	1.89	0.01	0.49	0.99	2.51	4.05	99	0	365
NO3-	aerosol	0.48	0.50	0.29	2.88	0.01	0.06	0.28	1.47	2.82	99	1	365
PM10 mass	pm10	20.39	10.82	17.91	1.67	3.88	7.17	18.24	40.95	72.95	99	0	363
PM25 mass	pm25	11.84	9.50	9.08	2.09	0.40	3.09	8.60	32.27	72.58	68	0	250
PM25 mass	pm25	15.49	9.54	13.09	1.81	1.60	5.06	13.13	35.77	71.80	99	0	363
SO2	air	0.65	0.63	0.45	2.44	0.01	0.12	0.41	2.16	3.58	99	1	365
SO4--	aerosol	0.94	0.62	0.74	2.07	0.01	0.21	0.79	2.13	3.51	99	1	365

HU0003R Farkasfa
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
HNO3	air	0.20	0.14	0.16	2.08	0.01	0.04	0.17	0.52	1.18	100	1	366
NH3	air	0.77	0.48	0.61	2.17	0.05	0.14	0.70	1.56	2.74	100	14	366
NH4+	aerosol	0.59	0.65	0.29	4.07	0.01	0.01	0.32	2.01	3.35	100	16	366
NO2	air	1.14	0.54	1.02	1.62	0.24	0.42	1.05	2.16	3.19	100	0	366
NO3-	aerosol	0.26	0.29	0.15	2.86	0.01	0.03	0.14	0.90	2.20	100	2	366
PM10 mass	pm10	18.15	12.59	13.91	2.21	1.00	3.03	15.18	42.16	156.64	75	0	6650
PM25 mass	pm25	15.37	11.74	11.37	2.29	1.00	2.41	12.15	38.23	140.26	75	0	6638
SO2	air	0.36	0.63	0.17	3.15	0.02	0.03	0.16	1.58	6.81	100	17	366
SO4--	aerosol	0.79	0.72	0.56	2.37	0.02	0.14	0.59	2.30	4.80	100	0	366

IE0001R Valentia Observatory
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.24	0.65	0.14	2.38	0.03	0.03	0.15	0.47	9.09	83	24	306
Cl-	aerosol	9.22	29.66	4.81	2.50	0.49	1.18	4.84	17.69	432.26	83	0	306
HNO3+NO3-	air+aerosol	0.29	0.36	0.18	2.63	0.02	0.04	0.16	1.08	2.49	83	0	306
K+	aerosol	0.20	0.60	0.10	2.58	0.03	0.03	0.10	0.40	8.41	83	55	306
Mg++	aerosol	0.55	2.11	0.22	3.16	0.03	0.03	0.23	1.10	30.24	83	29	306
NH3+NH4+	air+aerosol	0.96	0.79	0.75	1.97	0.16	0.26	0.68	2.72	4.41	83	0	306
NO2	air	2.25	2.24	1.45	2.71	0.05	0.20	1.40	7.40	12.80	98	2	359
Na+	aerosol	4.98	16.60	2.34	2.87	0.08	0.40	2.48	9.68	235.86	83	7	306
SO2	air	0.16	0.16	0.10	3.09	0.01	0.01	0.12	0.49	1.19	83	34	305
SO4--	aerosol	0.61	1.38	0.42	2.10	0.01	0.17	0.41	1.07	20.04	83	2	307
SO4-- corr	aerosol	0.20	0.22	0.13	2.86	-0.50	0.00	0.12	0.69	1.23	83	2	307

IE0005R Oak Park
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.08	0.06	0.06	2.07	0.01	0.02	0.06	0.20	0.36	94	25	346
Cl-	aerosol	1.42	1.11	1.07	2.17	0.18	0.30	1.12	3.59	8.16	94	0	346
K+	aerosol	0.06	0.03	0.05	1.63	0.01	0.02	0.05	0.10	0.16	94	3	346
Mg++	aerosol	0.08	0.07	0.06	2.17	0.01	0.02	0.06	0.20	0.51	94	37	346
NH4+	aerosol	0.55	0.63	0.40	2.06	0.12	0.17	0.34	1.80	5.80	94	0	346
NO3-	aerosol	0.29	0.43	0.15	3.04	0.01	0.03	0.14	1.16	3.59	94	0	346
Na+	aerosol	0.77	0.62	0.54	2.52	0.03	0.11	0.62	1.94	4.41	94	0	346
SO4--	aerosol	0.27	0.18	0.23	1.83	0.04	0.09	0.21	0.66	1.05	94	0	346
SO4-- corr	aerosol	0.21	0.19	0.14	2.51	0.01	0.03	0.14	0.64	1.00	94	0	346

IE0006R Malin Head
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.09	0.05	0.07	1.75	0.02	0.03	0.08	0.18	0.37	99	6	363
Cl-	aerosol	3.09	2.18	2.46	2.02	0.21	0.70	2.62	7.28	18.55	99	0	363
K+	aerosol	0.08	0.04	0.07	1.66	0.01	0.03	0.07	0.16	0.38	99	1	363
Mg++	aerosol	0.19	0.15	0.15	2.17	0.01	0.03	0.15	0.48	1.22	99	4	363
NH4+	aerosol	0.38	0.40	0.25	2.53	0.02	0.04	0.24	1.30	2.38	99	7	363
NO3-	aerosol	0.18	0.29	0.08	3.72	0.00	0.01	0.06	0.78	2.23	99	0	363
Na+	aerosol	1.73	1.19	1.38	2.05	0.05	0.38	1.45	4.05	9.53	99	0	363
SO4--	aerosol	0.33	0.18	0.30	1.58	0.10	0.16	0.27	0.67	1.70	99	0	363
SO4-- corr	aerosol	0.19	0.20	0.12	2.82	-0.02	0.01	0.12	0.57	1.58	99	0	363

IE0008R Carnsore Point
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.14	0.10	0.12	1.91	0.02	0.04	0.12	0.35	0.62	82	2	300
Cl-	aerosol	5.01	4.44	3.37	2.58	0.28	0.62	3.59	14.40	23.70	82	0	300
K+	aerosol	0.13	0.10	0.10	2.03	0.02	0.03	0.10	0.34	0.72	82	2	300
Mg++	aerosol	0.34	0.32	0.23	2.67	0.01	0.04	0.24	1.04	1.99	82	1	300
NH4+	aerosol	0.51	0.55	0.32	2.66	0.02	0.09	0.29	1.85	2.85	82	6	300
NO3-	aerosol	0.34	0.47	0.17	3.30	0.01	0.02	0.16	1.27	2.91	82	0	300
Na+	aerosol	2.90	2.52	2.00	2.50	0.13	0.39	2.10	8.42	14.76	82	0	300
SO4--	aerosol	0.48	0.26	0.41	1.72	0.08	0.17	0.43	0.96	2.02	82	0	300
SO4-- corr	aerosol	0.23	0.23	0.14	2.86	-0.01	0.03	0.15	0.71	1.28	82	0	300

IS0002R Irafoss
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.12	0.19	0.07	2.53	0.01	0.02	0.06	0.39	2.02	89	165	328
Cl-	aerosol	1.61	1.86	0.84	3.31	0.05	0.15	0.82	5.64	9.76	89	95	328
K+	aerosol	0.11	0.19	0.04	3.82	0.01	0.01	0.04	0.57	1.86	89	158	328
Mg++	aerosol	0.14	0.14	0.08	3.18	0.00	0.01	0.09	0.42	0.65	89	14	328
Na+	aerosol	0.82	0.92	0.43	3.67	0.01	0.05	0.48	2.75	4.91	89	4	328
SO2	air	0.07	0.12	0.04	3.04	0.01	0.01	0.03	0.26	1.03	89	70	329
SO4--	aerosol	0.17	0.14	0.11	2.71	0.00	0.02	0.13	0.43	0.98	89	5	327
SO4-- corr	aerosol	0.10	0.11	0.06	2.68	-0.01	0.01	0.06	0.30	0.65	89	5	327

IS0091R Storhofdi
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Cl-	aerosol	11.01	7.55	8.89	2.04	1.04	1.39	9.57	35.52	37.70	80	0	21
NO3-	aerosol	0.05	0.05	0.02	5.13	0.00	0.00	0.03	0.19	0.20	80	2	21
SO4--	aerosol	0.65	0.44	0.52	2.15	0.05	0.07	0.54	1.97	2.06	80	0	21
SO4-- corr	aerosol	0.44	0.39	0.38	2.05	-0.06	-0.05	0.40	1.67	1.75	80	0	21

IT0004R Ispra
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
CO	air	0.00	0.00	-	-	0.00	0.00	0.00	0.00	0.00	0	0	24
CO	air	253.70	171.37	216.79	1.68	92.00	121.00	182.00	645.00	1551.00	95	0	8350
Ca++	pm25	0.02	0.03	0.02	2.68	-0.01	-0.00	0.02	0.06	0.24	95	306	348
Cl-	pm25	0.04	0.06	0.02	3.64	-0.01	0.00	0.03	0.16	0.57	94	272	347
K+	pm25	0.17	0.24	0.08	3.61	-0.14	0.01	0.07	0.66	2.17	95	149	348
Mg++	pm25	0.02	0.17	0.00	2.69	-0.00	0.00	0.00	0.02	2.81	95	339	348
NH4+	pm25	0.94	1.04	0.58	2.92	-0.10	0.07	0.56	3.30	6.76	95	115	348
NO2	air	4.69	3.36	3.77	1.93	0.51	1.38	3.60	11.67	31.04	95	0	8355
NO3-	pm25	0.57	0.92	0.17	5.23	0.00	0.01	0.12	2.73	5.41	95	142	348
Na+	pm25	0.10	0.54	0.04	2.77	-0.00	0.01	0.04	0.15	8.71	95	89	348
PM25 mass	pm25	14.39	11.38	11.12	2.05	1.40	3.40	10.40	39.30	56.90	94	16	345
SO2	air	0.33	0.28	0.25	2.09	0.00	0.07	0.23	0.86	4.11	99	0	8678
SO4--	pm25	0.43	0.32	0.33	2.31	0.00	0.06	0.35	1.08	1.66	95	19	348
SO4-- corr	pm25	0.43	0.33	0.32	2.32	-0.73	0.06	0.35	1.07	1.66	95	19	348

IT0009R Mt Cimone
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
SO2	air	0.10	0.21	0.07	3.14	-0.09	-0.03	0.03	0.39	3.23	91	0	8004

IT0019R Monte Martano
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm10	0.27	0.12	0.26	1.25	0.25	0.25	0.25	0.25	1.25	39	0	144
Cl-	pm10	0.12	0.13	0.11	1.38	0.10	0.10	0.10	0.10	1.39	39	0	144
K+	pm10	0.02	0.02	0.02	1.71	0.01	0.01	0.01	0.06	0.11	39	0	144
Mg++	pm10	0.03	0.01	0.03	1.17	0.03	0.03	0.03	0.03	0.11	39	0	144
NH4+	pm10	0.22	0.26	0.13	2.72	0.04	0.04	0.12	0.76	1.54	39	0	144
NO	air	0.27	0.25	0.26	1.24	0.25	0.25	0.25	0.25	4.14	90	0	7932
NO2	air	0.74	0.61	0.55	2.23	0.16	0.16	0.61	1.88	6.04	90	0	7951
NO3-	pm10	0.05	0.05	0.04	1.75	0.03	0.03	0.03	0.17	0.34	39	0	144
Na+	pm10	0.07	0.06	0.06	1.66	0.05	0.05	0.05	0.23	0.39	33	0	123
PM10 mass	pm10	11.29	7.64	9.32	1.90	0.50	3.17	9.55	22.91	69.70	74	0	272
PM25 mass	pm25	7.41	5.06	5.90	2.05	0.50	1.60	6.30	16.09	45.90	73	0	270
SO4--	pm10	0.27	0.34	0.15	3.01	0.05	0.05	0.13	0.93	1.80	39	0	144
SO4-- corr	pm10	0.27	0.34	0.14	3.19	0.02	0.03	0.13	0.92	1.79	39	0	144

LT0015R Preila
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.21	0.21	0.13	2.77	0.02	0.02	0.12	0.64	1.31	96	0	354
Cl-	aerosol	1.90	2.50	0.95	3.32	0.03	0.15	0.78	7.50	15.51	96	0	354
HNO3+NO3-	air+aerosol	0.62	0.49	0.47	2.13	0.05	0.14	0.48	1.57	3.70	91	0	335
K+	aerosol	0.21	0.15	0.17	1.93	0.02	0.07	0.16	0.52	0.94	96	0	354
NH3+NH4+	air+aerosol	0.98	0.82	0.69	2.45	0.04	0.13	0.79	2.64	4.90	91	0	334
NH4+	aerosol	0.73	0.77	0.40	3.54	0.03	0.03	0.52	2.12	4.77	96	0	354
NO2	air	0.88	0.58	0.74	1.86	0.07	0.25	0.77	1.85	4.12	99	0	365
NO3-	aerosol	0.56	0.48	0.41	2.31	0.02	0.10	0.41	1.49	3.69	96	0	354
Na+	aerosol	1.15	1.43	0.59	3.34	0.02	0.09	0.55	3.96	9.79	96	0	354
SO2	air	0.19	0.20	0.13	2.30	0.02	0.03	0.13	0.58	1.84	91	0	334
SO4--	aerosol	0.61	0.48	0.49	1.90	0.08	0.19	0.48	1.69	3.66	91	0	335
SO4-- corr	aerosol	0.53	0.50	0.37	2.50	-0.06	0.06	0.37	1.67	3.61	91	0	335

LV0010R Rucava
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm25	0.05	0.07	0.02	3.46	0.01	0.01	0.02	0.26	0.29	90	28	47
Cl-	pm25	0.02	0.03	0.01	3.82	0.00	0.00	0.00	0.09	0.11	90	34	47
HNO3	air	0.40	0.36	0.27	2.60	0.00	0.05	0.30	1.15	1.98	100	6	366
HNO3+NO3-	air+aerosol	0.48	0.37	0.37	2.04	0.06	0.11	0.37	1.23	2.18	99	0	363
K+	pm25	0.09	0.09	0.05	3.09	0.00	0.00	0.06	0.30	0.39	90	10	47
Mg++	pm25	0.01	0.01	0.01	2.31	0.00	0.00	0.01	0.02	0.03	90	25	47
NH3	air	0.38	0.35	0.21	3.52	0.02	0.02	0.27	1.06	1.60	83	81	304
NH3+NH4+	air+aerosol	1.08	0.63	0.89	1.96	0.10	0.24	1.00	2.25	3.47	82	0	302
NH4+	aerosol	0.71	0.50	0.57	1.94	0.06	0.17	0.59	1.82	3.16	85	1	314
NH4+	pm25	0.40	0.40	0.28	2.27	0.06	0.08	0.25	1.37	1.99	90	0	47
NO2	air	0.74	0.42	0.61	2.08	0.01	0.22	0.69	1.42	3.06	100	7	366
NO3-	aerosol	0.06	0.05	0.04	2.33	0.00	0.00	0.03	0.16	0.37	99	253	363
NO3-	pm25	0.10	0.14	0.04	3.82	0.00	0.01	0.04	0.48	0.55	90	0	47
Na+	pm25	0.07	0.06	0.05	2.38	0.01	0.01	0.05	0.20	0.22	90	7	47
PM10 mass	pm10	15.03	9.82	11.56	2.29	0.10	2.54	12.55	35.27	47.00	95	0	348
PM25 mass	pm25	9.93	7.70	6.64	2.94	0.25	0.47	8.10	25.53	41.60	85	12	313
SO2	air	0.22	0.25	0.13	2.81	0.01	0.03	0.14	0.74	1.57	99	65	364
SO4--	aerosol	0.38	0.36	0.25	2.67	0.01	0.05	0.27	1.07	2.13	100	12	366
SO4--	pm25	0.38	0.33	0.29	2.10	0.08	0.10	0.30	1.24	1.79	90	0	47
SO4-- corr	pm25	0.38	0.33	0.28	2.13	0.07	0.09	0.30	1.23	1.79	90	0	47

MD0013R Leova II
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.49	0.31	0.41	1.93	0.11	0.12	0.46	1.12	1.70	20	0	74
Cl-	aerosol	0.24	0.11	0.22	1.56	0.08	0.12	0.21	0.44	0.65	20	0	74
HNO3	air	0.19	0.17	0.15	1.95	0.01	0.09	0.14	0.69	0.96	19	1	73
HNO3+NO3-	air+aerosol	0.58	0.73	0.32	2.84	0.04	0.10	0.22	2.60	2.77	15	0	56
K+	aerosol	0.15	0.14	0.10	2.46	0.01	0.03	0.07	0.44	0.56	20	1	74
Mg++	aerosol	0.06	0.05	0.04	3.13	0.01	0.01	0.06	0.17	0.25	20	19	74
NH3	air	0.37	0.31	0.29	2.13	0.02	0.12	0.26	1.07	1.27	20	0	74
NH3+NH4+	air+aerosol	0.86	1.04	0.48	3.02	0.02	0.13	0.38	3.91	4.44	19	0	70
NH4+	aerosol	0.81	1.06	0.23	7.25	0.01	0.01	0.34	3.67	3.76	11	4	44
NO3-	aerosol	1.13	1.69	0.24	8.11	0.01	0.01	0.29	4.94	7.05	16	5	62
Na+	aerosol	0.14	0.11	0.11	2.18	0.01	0.03	0.11	0.43	0.48	20	1	74
SO2	air	0.24	0.15	0.21	1.82	0.01	0.09	0.21	0.47	1.10	20	0	74
SO4--	aerosol	0.22	0.31	0.11	3.61	0.01	0.01	0.10	1.18	1.44	20	7	74
SO4-- corr	aerosol	0.21	0.31	0.11	3.74	-0.01	0.01	0.09	1.14	1.41	20	7	74

MK0007R Lazaropole
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	0.46	0.20	0.42	1.49	0.17	0.23	0.42	0.81	1.80	27	0	2416
PM10 mass	pm10	12.49	12.98	6.94	3.95	0.01	0.53	8.63	34.64	190.40	89	0	7874
SO2	air	0.47	1.09	0.24	2.52	0.03	0.09	0.20	1.77	28.86	60	0	5259

NL0007R Eibergen
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	0.97	2.48	0.43	4.15	-0.44	-0.14	0.28	4.51	27.93	88	0	7718
NO2	air	4.22	2.71	3.44	1.94	0.00	1.12	3.58	9.61	19.94	88	0	7713
PM10 mass	pm10	18.60	13.15	15.40	2.15	-19.89	1.87	15.95	42.83	119.63	97	0	8573
SO2	air	0.39	0.63	0.22	3.01	-0.08	0.02	0.20	1.31	9.37	62	0	5484

NL0008R Bilthoven
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm10	0.21	0.11	0.18	1.69	0.06	0.07	0.17	0.44	0.65	49	0	182
Mg++	pm10	0.12	0.10	0.09	2.17	0.01	0.02	0.09	0.32	0.63	49	1	182
Na+	pm10	0.78	0.80	0.49	2.73	0.06	0.11	0.49	2.36	5.04	49	0	182

NL0009R Kollumerwaard
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO	air	0.53	1.32	0.26	3.53	-0.53	-0.08	0.19	2.12	19.76	61	0	5386
NO2	air	2.53	2.14	1.78	2.43	-0.35	0.38	1.94	6.99	14.48	61	0	5387
PM10 mass	pm10	17.79	14.88	14.48	2.29	-19.89	-0.69	14.67	45.39	190.03	99	0	8685
PM25 mass	pm25	9.83	10.45	6.52	2.86	-4.72	0.22	6.48	30.43	128.26	98	0	8671
SO2	air	0.25	0.31	0.17	2.81	-0.13	-0.02	0.16	0.83	3.50	61	0	5373

NL0010R Vredepeel
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Cl-	pm10	0.70	0.95	0.39	2.86	0.06	0.10	0.35	2.65	7.94	49	9	181
NH4+	pm10	1.34	1.22	0.86	2.81	0.03	0.14	1.04	3.81	5.81	49	0	181
NO	air	1.65	3.68	0.59	3.96	-0.26	0.03	0.47	8.31	63.60	98	0	8643
NO2	air	5.24	3.58	4.09	2.11	-0.07	1.21	4.40	12.33	27.52	98	0	8643
NO3-	pm10	1.27	0.99	0.98	2.09	0.19	0.30	1.00	3.14	6.36	49	0	181
PM10 mass	pm10	21.27	16.38	17.15	2.28	-18.61	0.59	18.51	49.23	275.79	99	0	8718
PM25 mass	pm25	12.16	10.19	9.04	2.49	-4.91	0.99	9.39	31.67	83.68	94	0	8316
SO4--	pm10	0.78	0.48	0.66	1.78	0.13	0.26	0.68	1.69	3.78	49	0	181
SO4-- corr	pm10	0.78	0.48	0.65	1.81	0.13	0.24	0.67	1.69	3.73	49	0	181

NL0091R De Zilk
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Cl-	pm10	1.18	1.58	0.57	3.50	0.07	0.09	0.51	4.42	9.80	49	12	180
NH4+	pm10	0.92	1.23	0.40	3.99	0.02	0.04	0.40	3.68	7.28	49	1	180
NO	air	1.29	3.54	0.39	4.94	-0.48	-0.08	0.24	6.40	48.99	96	0	8459
NO2	air	4.80	3.75	3.41	2.45	0.17	0.67	3.90	12.33	26.38	96	0	8459
NO3-	pm10	0.98	1.00	0.66	2.40	0.09	0.16	0.62	3.26	6.79	49	0	180
PM10 mass	pm10	16.52	12.99	13.78	2.27	-30.13	-0.69	14.67	38.99	100.43	97	0	8517
PM25 mass	pm25	10.33	9.97	7.46	2.62	-4.96	0.18	7.57	29.57	80.68	96	0	8464
SO2	air	0.52	0.75	0.31	2.88	-0.15	0.04	0.32	1.71	33.90	97	0	8504
SO4--	pm10	0.60	0.36	0.52	1.65	0.18	0.25	0.51	1.35	2.84	49	0	180
SO4-- corr	pm10	0.59	0.37	0.50	1.75	0.07	0.20	0.49	1.30	2.84	49	0	180

NL0644R Cabauw Wielsekade
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
CO	air	191.16	73.84	179.32	1.42	38.75	102.27	177.71	328.84	827.58	97	0	8499
Ca++	pm25	0.06	0.03	0.05	1.68	0.01	0.02	0.06	0.10	0.12	18	26	69
Mg++	pm25	0.03	0.03	0.02	2.13	0.00	0.01	0.02	0.09	0.17	18	37	69
NO	air	1.58	3.61	0.55	3.93	-0.16	0.05	0.45	7.86	51.35	99	0	8724
NO2	air	5.24	3.46	4.21	1.98	0.39	1.34	4.34	12.23	26.36	99	0	8724
Na+	pm25	0.21	0.24	0.14	2.33	0.04	0.05	0.10	0.73	1.44	18	3	69
PM10 mass	pm10	17.32	13.48	14.07	2.32	-18.61	0.59	14.67	41.55	100.43	99	0	8691
PM25 mass	pm25	10.91	10.19	8.10	2.72	-4.95	-0.64	8.45	30.40	94.80	94	0	8304
SO2	air	0.34	0.36	0.23	2.52	-0.04	0.04	0.23	0.97	2.64	9	0	790

NO0002R Birkenes II
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
CO	air	130.93	34.34	126.99	1.27	77.39	89.35	123.60	198.54	356.07	88	0	7791
Ca++	aerosol	0.05	0.08	0.03	3.12	0.01	0.01	0.03	0.18	0.71	99	58	364
Cl-	aerosol	0.54	0.87	0.16	5.87	0.01	0.01	0.16	2.41	5.94	99	56	363
HNO3	air	0.05	0.08	0.02	3.09	0.01	0.01	0.01	0.19	0.48	99	205	363
HNO3+NO3-	air+aerosol	0.24	0.35	0.12	3.11	0.01	0.02	0.13	0.88	3.60	98	0	362
K+	aerosol	0.06	0.07	0.04	2.46	0.01	0.01	0.04	0.15	0.92	99	28	363
Mg++	aerosol	0.06	0.07	0.03	3.13	0.01	0.01	0.03	0.20	0.47	99	52	364
NH3	air	0.21	0.28	0.11	3.21	0.01	0.02	0.10	0.87	1.99	99	87	364
NH3+NH4+	air+aerosol	0.47	0.58	0.26	3.04	0.02	0.03	0.25	1.53	5.20	99	0	364
NH4+	aerosol	0.25	0.43	0.09	5.24	0.01	0.01	0.12	0.87	4.61	99	57	364
NO2	air	0.32	0.21	0.27	1.81	0.04	0.10	0.27	0.76	1.71	99	0	365
NO3-	aerosol	0.19	0.33	0.08	4.07	0.01	0.01	0.09	0.78	3.59	98	38	362
Na+	aerosol	0.45	0.58	0.22	4.01	0.01	0.02	0.26	1.60	4.08	99	11	364
PM10 mass	pm10	5.43	5.21	4.08	2.70	-7.64	-0.60	4.13	15.35	41.86	97	0	8543
PM10 mass	pm10	5.44	3.41	4.49	1.87	1.04	1.22	4.54	12.11	17.53	100	0	53
PM10-PM25	pm10_pm25	2.49	1.92	1.91	2.07	0.46	0.51	1.94	7.77	9.08	98	0	52
PM25 mass	pm25	2.98	2.17	2.36	2.06	-0.01	0.54	2.33	7.91	9.06	98	0	52
SO2	air	0.10	0.13	0.04	3.84	0.01	0.01	0.04	0.37	0.74	99	151	364
SO4--	aerosol	0.26	0.23	0.17	2.71	0.01	0.03	0.20	0.63	1.38	99	4	363
SO4-- corr	aerosol	0.22	0.23	0.14	3.04	0.00	0.02	0.16	0.61	1.37	99	4	363

NO0015R Tustervatn
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.02	0.03	0.01	2.62	0.00	0.01	0.01	0.08	0.32	98	152	361
Cl-	aerosol	0.37	0.68	0.09	5.98	0.00	0.01	0.09	1.82	4.63	98	97	361
HNO3	air	0.01	0.01	0.01	1.50	0.00	0.01	0.01	0.03	0.15	98	338	361
HNO3+NO3-	air+aerosol	0.04	0.06	0.03	1.92	0.00	0.02	0.03	0.10	0.75	98	0	361
K+	aerosol	0.04	0.06	0.02	2.73	0.00	0.01	0.03	0.08	0.74	98	77	359
Mg++	aerosol	0.03	0.05	0.02	3.15	0.00	0.01	0.01	0.12	0.34	98	141	361
NH3	air	0.28	0.27	0.16	3.29	0.01	0.03	0.19	0.89	1.38	98	67	360
NH3+NH4+	air+aerosol	0.35	0.30	0.24	2.51	0.02	0.04	0.26	0.98	2.31	98	0	360
NH4+	aerosol	0.06	0.10	0.02	4.22	0.01	0.01	0.02	0.28	0.93	98	137	360
NO2	air	0.11	0.09	0.08	2.35	0.01	0.01	0.08	0.31	0.51	89	43	328
NO3-	aerosol	0.03	0.05	0.01	3.02	0.00	0.01	0.01	0.08	0.70	98	167	361
Na+	aerosol	0.25	0.39	0.09	4.76	0.00	0.01	0.11	1.06	2.69	98	39	361
SO2	air	0.04	0.09	0.02	2.50	0.00	0.01	0.01	0.14	1.15	98	250	361
SO4--	aerosol	0.13	0.12	0.08	3.21	0.01	0.01	0.09	0.39	0.76	98	29	361

NO0039R Kårvatn
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.04	0.08	0.01	3.51	0.01	0.01	0.01	0.19	0.78	98	183	362
Cl-	aerosol	0.18	0.36	0.05	4.52	0.01	0.01	0.05	0.88	2.80	98	118	362
HNO3	air	0.02	0.03	0.01	1.75	0.01	0.01	0.01	0.06	0.27	98	321	362
HNO3+NO3-	air+aerosol	0.05	0.06	0.04	2.19	0.01	0.02	0.03	0.18	0.41	98	0	361
K+	aerosol	0.03	0.05	0.02	2.80	0.01	0.01	0.02	0.09	0.59	98	110	359
Mg++	aerosol	0.02	0.03	0.01	2.77	0.01	0.01	0.01	0.07	0.20	98	193	362
NH3	air	0.54	0.49	0.34	2.87	0.02	0.05	0.39	1.43	2.65	98	17	362
NH3+NH4+	air+aerosol	0.60	0.53	0.39	2.76	0.03	0.06	0.45	1.58	2.73	98	0	362
NH4+	aerosol	0.06	0.10	0.02	4.63	0.01	0.01	0.01	0.30	0.54	98	194	362
NO2	air	0.18	0.19	0.14	2.21	0.01	0.04	0.14	0.46	2.15	100	14	366
NO3-	aerosol	0.04	0.05	0.02	3.45	0.01	0.01	0.01	0.14	0.39	98	167	362
Na+	aerosol	0.15	0.24	0.06	4.64	0.01	0.01	0.07	0.58	1.59	98	62	362
PM10 mass	pm10	3.20	2.80	2.33	2.20	0.00	0.61	2.31	8.44	15.07	98	0	53
PM10-PM25	pm10_pm25	1.05	0.97	0.62	3.39	-0.07	0.04	0.84	3.44	4.62	96	6	52
PM25 mass	pm25	2.26	2.35	1.47	2.43	0.23	0.39	1.36	7.26	12.10	98	0	53
SO2	air	0.03	0.05	0.02	2.18	0.01	0.01	0.01	0.10	0.53	98	265	362
SO4--	aerosol	0.12	0.14	0.05	4.13	0.01	0.01	0.06	0.43	0.73	98	60	362
SO4-- corr	aerosol	0.11	0.13	0.05	3.96	-0.01	0.00	0.05	0.41	0.73	98	60	362

NO0042G Zeppelin mountain (Ny-Ålesund)
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.02	0.07	0.01	2.53	0.01	0.01	0.01	0.05	1.18	97	139	357
Cl-	aerosol	0.35	0.54	0.17	3.65	0.01	0.01	0.17	1.27	4.75	97	22	357
HNO3	air	0.02	0.01	0.01	1.37	0.01	0.01	0.01	0.01	0.15	97	347	357
HNO3+NO3-	air+aerosol	0.03	0.02	0.02	1.48	0.01	0.02	0.02	0.05	0.25	97	0	357
K+	aerosol	0.03	0.06	0.02	2.41	0.01	0.01	0.02	0.07	0.88	96	63	354
Mg++	aerosol	0.03	0.05	0.02	2.88	0.01	0.01	0.02	0.09	0.80	97	133	356
NH3	air	0.09	0.07	0.06	2.15	0.02	0.03	0.07	0.21	0.71	97	123	357
NH3+NH4+	air+aerosol	0.11	0.09	0.08	2.09	0.02	0.03	0.09	0.25	0.81	97	0	357
NH4+	aerosol	0.02	0.03	0.01	2.76	0.01	0.01	0.01	0.09	0.44	97	219	357
NO3-	aerosol	0.01	0.02	0.01	2.08	0.01	0.01	0.01	0.04	0.20	97	226	357
Na+	aerosol	0.23	0.33	0.11	3.65	0.01	0.01	0.14	0.69	3.35	97	21	357
SO2	air	0.04	0.07	0.02	2.28	0.01	0.01	0.01	0.11	0.83	97	254	357
SO4--	aerosol	0.10	0.12	0.06	3.00	0.01	0.01	0.07	0.26	1.76	97	38	356
SO4-- corr	aerosol	0.08	0.11	0.05	2.76	-0.01	0.00	0.06	0.25	1.48	97	38	356

NO0056R Hurdal
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.04	0.05	0.02	2.99	0.01	0.01	0.02	0.11	0.47	97	94	357
Cl-	aerosol	0.14	0.24	0.05	4.24	0.01	0.01	0.04	0.60	1.78	97	117	358
HNO3	air	0.03	0.05	0.02	2.55	0.01	0.01	0.01	0.11	0.62	97	244	356
HNO3+NO3-	air+aerosol	0.13	0.17	0.07	2.89	0.01	0.02	0.08	0.38	1.76	97	0	356
K+	aerosol	0.05	0.04	0.03	2.63	0.01	0.01	0.03	0.12	0.27	95	40	351
Mg++	aerosol	0.02	0.03	0.01	2.69	0.01	0.01	0.01	0.07	0.16	97	183	357
NH3	air	0.15	0.18	0.09	2.74	0.02	0.02	0.10	0.45	2.04	97	83	357
NH3+NH4+	air+aerosol	0.29	0.29	0.19	2.48	0.03	0.04	0.20	0.74	2.25	97	0	356
NH4+	aerosol	0.13	0.20	0.05	5.11	0.01	0.01	0.07	0.54	1.48	97	90	356
NO2	air	0.60	0.79	0.40	2.26	0.05	0.10	0.39	1.60	7.89	99	0	365
NO3-	aerosol	0.09	0.15	0.04	4.23	0.01	0.01	0.05	0.33	1.75	97	90	358
Na+	aerosol	0.16	0.21	0.07	3.90	0.01	0.01	0.08	0.61	1.28	97	31	357
PM10 mass	pm10	4.93	2.95	3.86	2.40	0.03	1.17	4.17	10.48	16.38	100	0	54
PM10-PM25	pm10_pm25	1.81	1.41	1.11	3.26	0.05	0.05	1.56	4.33	7.09	98	3	53
PM25 mass	pm25	3.23	2.13	2.64	1.84	0.83	0.88	2.46	8.50	10.92	98	0	53
SO2	air	0.04	0.12	0.02	2.70	0.01	0.01	0.01	0.13	1.98	96	223	355
SO4--	aerosol	0.18	0.20	0.11	3.05	0.01	0.01	0.12	0.50	1.70	97	11	358
SO4-- corr	aerosol	0.17	0.20	0.10	3.07	-0.01	0.01	0.11	0.49	1.69	97	11	358

PL0002R Jarczew
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Cl-	aerosol	0.75	0.49	0.61	1.98	0.05	0.20	0.66	1.63	4.23	99	4	363
HNO3+NO3-	air+aerosol	0.62	0.48	0.47	2.12	0.03	0.15	0.48	1.69	3.23	99	0	363
NH3+NH4+	air+aerosol	2.78	1.60	2.41	1.74	0.15	0.93	2.55	5.15	13.04	99	0	363
NH4+	aerosol	0.98	0.64	0.81	1.89	0.12	0.26	0.80	2.21	4.34	99	0	363
NO2	air	1.99	0.95	1.78	1.67	0.10	0.90	1.80	3.58	9.10	99	2	363
NO3-	aerosol	0.51	0.46	0.37	2.28	0.02	0.10	0.36	1.57	3.12	99	0	363
SO2	air	0.77	0.51	0.62	1.96	0.10	0.20	0.70	1.68	3.50	99	4	363
SO4--	aerosol	1.03	0.46	0.91	1.75	0.10	0.30	0.97	1.83	2.67	99	6	363
SO4-- corr	aerosol	1.02	0.46	0.90	1.77	0.04	0.30	0.97	1.83	2.67	99	6	363

PL0003R Sniezka
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Cl-	aerosol	0.54	0.28	0.46	1.95	0.05	0.14	0.54	1.02	1.67	100	14	366
HNO3+NO3-	air+aerosol	0.69	0.25	0.65	1.44	0.17	0.35	0.68	1.10	1.80	100	0	366
NH3+NH4+	air+aerosol	0.88	0.40	0.80	1.60	0.21	0.33	0.83	1.67	2.20	100	0	366
NH4+	aerosol	0.63	0.29	0.56	1.65	0.08	0.21	0.61	1.16	1.61	100	0	366
NO2	air	1.21	0.40	1.15	1.37	0.40	0.70	1.10	2.00	3.40	100	0	366
NO3-	aerosol	0.55	0.20	0.51	1.45	0.14	0.26	0.53	0.90	1.45	100	0	366
SO2	air	1.25	0.44	1.19	1.40	0.40	0.70	1.20	2.00	3.60	100	0	366
SO4--	aerosol	0.95	0.38	0.87	1.56	0.10	0.40	0.91	1.64	2.46	100	2	366
SO4-- corr	aerosol	0.95	0.38	0.87	1.57	0.10	0.39	0.91	1.64	2.46	100	2	366

PL0004R Leba
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Cl-	aerosol	0.75	0.47	0.61	1.92	0.05	0.20	0.66	1.71	2.72	99	2	364
HNO3+NO3-	air+aerosol	0.57	0.56	0.39	2.35	0.04	0.10	0.37	1.98	2.88	99	0	364
NH3+NH4+	air+aerosol	1.39	0.90	1.12	1.96	0.14	0.35	1.20	3.33	5.03	99	0	364
NH4+	aerosol	0.74	0.61	0.56	2.17	0.07	0.14	0.55	2.00	3.71	99	0	364
NO2	air	1.58	1.12	1.28	1.91	0.10	0.50	1.30	4.08	6.50	98	1	362
NO3-	aerosol	0.44	0.49	0.27	2.62	0.02	0.06	0.25	1.67	2.66	99	0	364
SO2	air	0.62	0.49	0.48	2.10	0.10	0.10	0.50	1.68	3.80	99	23	364
SO4--	aerosol	0.92	0.44	0.80	1.78	0.10	0.24	0.84	1.72	3.23	99	6	364
SO4-- corr	aerosol	0.91	0.44	0.79	1.78	0.10	0.23	0.84	1.72	3.23	99	6	364

PL0005R Diabla Gora
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm25	0.08	0.05	0.07	1.67	0.02	0.03	0.07	0.17	0.31	85	0	52
Cl-	pm25	0.09	0.09	0.05	4.03	0.00	0.00	0.04	0.29	0.38	85	0	52
HNO3	air	0.16	0.10	0.14	1.87	0.01	0.04	0.14	0.35	0.64	98	0	362
HNO3+NO3-	air+aerosol	0.60	0.47	0.47	2.01	0.04	0.16	0.46	1.53	2.86	98	0	362
K+	pm25	0.10	0.08	0.07	2.25	0.02	0.02	0.09	0.26	0.36	85	0	52
Mg++	pm25	0.01	0.01	0.01	2.10	0.00	0.00	0.01	0.04	0.07	85	0	52
NH3	air	1.37	0.87	1.12	2.00	0.09	0.27	1.23	3.05	7.00	99	0	364
NH3+NH4+	air+aerosol	2.04	1.20	1.73	1.81	0.20	0.61	1.77	4.54	7.77	97	0	357
NH4+	aerosol	0.66	0.78	0.36	3.44	0.00	0.03	0.39	2.22	5.99	97	0	357
NH4+	pm25	0.81	0.68	0.57	2.43	0.07	0.14	0.56	2.38	2.71	85	0	52
NO	air	0.12	0.46	0.06	2.83	0.00	0.01	0.06	0.31	14.99	95	0	8406
NO2	air	1.30	1.04	0.98	2.25	0.00	0.29	1.02	3.19	9.40	96	0	8411
NO3-	aerosol	0.42	0.44	0.27	2.70	0.01	0.05	0.26	1.34	2.63	98	0	362
NO3-	pm25	1.45	1.31	0.88	3.06	0.03	0.20	1.29	4.24	4.91	85	0	52
Na+	pm25	0.19	0.13	0.15	2.10	0.04	0.04	0.17	0.50	0.56	85	0	52
PM10 mass	pm10	16.80	10.06	14.13	1.83	2.26	4.53	14.44	37.23	61.31	98	0	360
PM25 mass	pm25	12.05	8.72	9.40	2.07	1.09	2.56	9.40	30.97	54.75	98	0	360
SO2	air	0.26	0.47	0.11	3.85	0.00	0.01	0.10	1.05	10.15	98	0	8641
SO4--	aerosol	0.56	0.50	0.41	2.26	0.02	0.10	0.40	1.62	4.43	99	0	364
SO4--	pm25	1.67	1.00	1.45	1.69	0.49	0.71	1.29	4.10	4.99	85	0	52
SO4-- corr	pm25	1.66	1.00	1.44	1.69	0.49	0.70	1.28	4.09	4.98	85	0	52

PL0009R Zielonka
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm25	0.16	0.12	0.13	2.14	0.01	0.03	0.14	0.32	0.81	85	0	52
Cl-	pm25	0.14	0.11	0.09	3.15	0.01	0.01	0.11	0.39	0.40	85	0	52
K+	pm25	0.09	0.07	0.07	2.09	0.02	0.02	0.06	0.23	0.26	85	0	52
Mg++	pm25	0.01	0.01	0.01	2.13	0.00	0.00	0.01	0.02	0.03	85	0	52
NH4+	pm25	0.98	0.74	0.76	2.07	0.12	0.20	0.69	2.80	3.33	78	0	48
NO3-	pm25	1.58	1.44	0.98	2.85	0.16	0.20	1.01	4.66	5.65	85	0	52
Na+	pm25	0.08	0.04	0.07	1.78	0.01	0.02	0.07	0.17	0.19	85	0	52
PM10 mass	pm10	19.83	12.68	16.46	1.86	2.24	5.41	15.98	46.13	77.32	98	0	359
PM25 mass	pm25	13.95	9.48	11.24	2.00	0.60	3.72	11.10	32.26	62.50	99	0	363
SO4--	pm25	1.81	1.01	1.57	1.71	0.49	0.55	1.44	4.25	4.80	85	0	52
SO4-- corr	pm25	1.80	1.01	1.56	1.72	0.49	0.55	1.44	4.24	4.79	85	0	52

RS0005R Kamenicki vis
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
NO2	air	1.72	2.29	0.96	2.84	0.30	0.30	0.88	6.06	16.32	89	111	327
PM10 mass	pm10	18.18	9.31	15.54	1.84	1.60	4.40	17.50	35.85	50.90	93	0	344
SO2	air	4.45	4.78	2.41	3.14	0.75	0.75	2.35	15.81	20.20	83	134	306

SE0005R Bredkälen
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.02	0.03	0.02	1.74	0.01	0.01	0.01	0.08	0.27	94	297	346
Cl-	aerosol	0.12	0.23	0.04	4.52	0.01	0.01	0.02	0.58	2.41	95	168	348
HNO3	air	0.02	0.02	0.02	1.49	0.01	0.01	0.01	0.05	0.17	94	309	345
HNO3+NO3-	air+aerosol	0.05	0.03	0.04	1.64	0.01	0.02	0.04	0.09	0.25	95	16	349
K+	aerosol	0.02	0.01	0.02	1.33	0.01	0.01	0.01	0.03	0.07	94	315	345
Mg++	aerosol	0.02	0.02	0.01	2.32	0.01	0.01	0.01	0.05	0.17	94	156	347
NH3	air	0.07	0.12	0.03	3.90	0.00	0.01	0.04	0.22	1.52	95	96	348
NH3+NH4+	air+aerosol	0.13	0.15	0.07	3.45	0.01	0.01	0.08	0.40	1.56	95	37	349
NH4+	aerosol	0.06	0.08	0.04	3.00	0.00	0.00	0.03	0.23	0.40	95	33	350
NO2	air	0.14	0.10	0.12	1.77	0.05	0.05	0.10	0.34	0.74	98	0	362
NO3-	aerosol	0.02	0.02	0.01	3.23	0.00	0.00	0.01	0.06	0.16	95	46	349
Na+	aerosol	0.11	0.13	0.06	3.40	0.01	0.01	0.06	0.37	1.24	95	88	348
PM10 mass	pm10	3.84	4.26	2.36	2.82	0.00	0.40	2.40	12.80	51.70	92	0	8068
PM25 mass	pm25	1.50	1.18	1.15	2.12	0.10	0.30	1.10	4.00	8.40	97	0	357
SO2	air	0.04	0.07	0.02	3.12	0.01	0.01	0.02	0.17	0.59	95	74	349
SO4--	aerosol	0.09	0.10	0.05	3.36	0.01	0.01	0.05	0.32	0.55	95	33	349
SO4-- corr	aerosol	0.09	0.10	0.05	3.42	-0.01	0.00	0.04	0.31	0.55	95	33	349

SE0014R Råö
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.12	0.11	0.08	2.97	0.01	0.01	0.10	0.33	0.80	97	94	356
Cl-	aerosol	1.99	2.74	0.50	7.87	0.01	0.01	0.62	8.62	14.32	98	38	361
HNO3	air	0.14	0.14	0.08	3.19	0.01	0.01	0.10	0.45	0.95	98	96	361
HNO3+NO3-	air+aerosol	0.52	0.51	0.34	2.57	0.03	0.06	0.35	1.45	3.71	99	0	365
K+	aerosol	0.11	0.09	0.08	2.55	0.01	0.01	0.10	0.29	0.52	98	70	361
Mg++	aerosol	0.18	0.19	0.09	3.79	0.01	0.01	0.11	0.60	0.97	98	21	360
NH3	air	0.41	0.36	0.27	2.66	0.03	0.05	0.29	1.15	1.75	99	0	363
NH3+NH4+	air+aerosol	0.78	0.74	0.53	2.47	0.06	0.11	0.58	2.34	6.05	99	0	365
NH4+	aerosol	0.38	0.64	0.16	3.63	0.00	0.02	0.16	1.90	5.99	100	2	366
NO2	air	1.08	0.69	0.89	1.84	0.17	0.32	0.88	2.54	3.83	96	0	353
NO3-	aerosol	0.37	0.46	0.21	3.21	0.00	0.02	0.22	1.25	3.55	100	1	366
Na+	aerosol	1.39	1.63	0.62	4.33	0.01	0.05	0.72	5.06	8.52	99	7	365
PM10 mass	pm10	12.56	9.15	9.72	2.13	0.20	2.50	10.70	30.70	119.20	92	0	8130
PM25 mass	pm25	3.75	3.43	2.81	2.08	0.20	0.91	2.70	10.39	27.20	98	0	361
SO2	air	0.16	0.17	0.11	2.36	0.01	0.03	0.11	0.42	1.54	99	1	365
SO4--	aerosol	0.39	0.31	0.29	2.31	0.01	0.06	0.32	0.98	2.88	100	1	366
SO4-- corr	aerosol	0.27	0.32	0.17	2.86	-0.03	0.02	0.17	0.93	2.82	100	1	366

SE0020R Hallahus
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.12	0.13	0.06	3.23	0.01	0.01	0.08	0.43	0.73	98	123	362
Cl-	aerosol	0.49	0.90	0.12	6.02	0.01	0.01	0.09	2.31	6.67	98	76	362
HNO3	air	0.14	0.13	0.09	3.15	0.01	0.01	0.10	0.41	0.82	99	78	363
HNO3	air	0.15	0.04	0.14	1.32	0.08	0.08	0.14	0.19	0.19	99	0	12
HNO3+NO3-	air+aerosol	0.51	0.50	0.35	2.39	0.03	0.08	0.38	1.43	3.71	99	0	364
HNO3+NO3-	air+aerosol	0.56	0.20	0.52	1.51	0.20	0.20	0.52	0.85	0.85	92	0	11
K+	aerosol	0.07	0.06	0.05	2.54	0.01	0.01	0.06	0.17	0.35	98	130	362
Mg++	aerosol	0.07	0.07	0.04	2.83	0.01	0.01	0.05	0.20	0.50	99	30	363
NH3	air	0.59	0.61	0.30	3.93	0.01	0.03	0.34	1.83	4.06	99	11	363
NH3	air	0.60	0.46	0.38	2.88	0.09	0.09	0.60	1.29	1.29	92	0	11
NH3+NH4+	air+aerosol	1.01	0.90	0.70	2.48	0.01	0.16	0.79	2.69	6.06	98	0	361
NH3+NH4+	air+aerosol	1.08	0.41	0.98	1.55	0.42	0.42	1.05	1.89	1.89	92	0	11
NH4+	aerosol	0.43	0.65	0.19	3.86	0.00	0.02	0.18	1.70	5.80	99	2	364
NH4+	aerosol	0.47	0.26	0.40	1.91	0.13	0.13	0.42	0.86	0.86	92	0	11
NO2	air	0.94	0.61	0.79	1.78	0.18	0.32	0.78	1.93	6.44	99	0	365
NO3-	aerosol	0.37	0.44	0.21	2.95	0.00	0.04	0.22	1.25	3.40	99	1	365
NO3-	aerosol	0.41	0.20	0.36	1.76	0.11	0.11	0.34	0.71	0.71	92	0	11
Na+	aerosol	0.47	0.55	0.25	3.36	0.01	0.04	0.25	1.57	3.95	99	15	363
SO2	air	0.18	0.21	0.11	3.05	0.01	0.02	0.12	0.64	1.56	99	12	365
SO4--	aerosol	0.34	0.34	0.24	2.41	0.01	0.05	0.24	1.08	2.90	99	2	365
SO4-- corr	aerosol	0.30	0.35	0.18	2.85	0.00	0.02	0.19	1.06	2.87	99	2	365

SE0022R Norunda Stenen
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.04	0.06	0.02	2.39	0.01	0.01	0.01	0.14	0.63	97	260	355
Cl-	aerosol	0.14	0.33	0.04	4.82	0.01	0.01	0.01	0.65	3.07	96	191	352
HNO3	air	0.06	0.06	0.04	2.74	0.01	0.01	0.01	0.18	0.50	97	190	355
HNO3+NO3-	air+aerosol	0.14	0.11	0.11	1.99	0.03	0.04	0.10	0.37	0.68	96	0	354
K+	aerosol	0.03	0.04	0.02	2.15	0.01	0.01	0.01	0.11	0.25	96	256	353
Mg++	aerosol	0.03	0.03	0.02	2.58	0.01	0.01	0.02	0.09	0.25	97	90	355
NH3	air	0.17	0.20	0.08	4.35	0.01	0.01	0.10	0.53	1.66	96	54	353
NH3+NH4+	air+aerosol	0.32	0.29	0.21	2.66	0.01	0.04	0.23	0.94	2.00	96	0	352
NH4+	aerosol	0.15	0.19	0.08	3.40	0.00	0.01	0.08	0.61	1.09	97	12	355
NO2	air	0.50	0.31	0.43	1.75	0.09	0.17	0.41	1.08	2.29	98	0	358
NO3-	aerosol	0.07	0.07	0.05	2.81	0.00	0.01	0.05	0.24	0.36	97	5	355
Na+	aerosol	0.19	0.23	0.10	3.32	0.01	0.01	0.12	0.62	2.06	96	46	354
PM10 mass	pm10	10.66	7.75	8.84	2.23	-3.00	0.00	9.70	24.80	100.00	83	0	7275
PM25 mass	pm25	5.02	3.71	3.88	2.15	0.00	1.10	3.80	11.77	23.70	88	0	322
SO2	air	0.09	0.10	0.06	2.87	0.01	0.01	0.06	0.29	0.76	97	17	355
SO4--	aerosol	0.19	0.20	0.11	3.14	0.01	0.02	0.12	0.71	0.99	97	6	355
SO4-- corr	aerosol	0.18	0.20	0.10	3.42	-0.01	0.01	0.10	0.70	0.98	97	6	355

SI0008R Iskrba
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	pm25	0.03	0.05	0.02	2.15	0.01	0.01	0.01	0.10	0.47	98	293	359
Cl-	pm25	0.02	0.02	0.01	1.99	0.01	0.01	0.01	0.05	0.26	98	282	359
K+	pm25	0.13	0.13	0.09	2.17	0.00	0.03	0.09	0.40	0.88	98	3	359
Mg++	pm25	0.01	0.01	0.00	3.48	0.00	0.00	0.01	0.02	0.18	98	156	359
NH4+	pm25	0.69	0.60	0.48	2.58	0.00	0.09	0.53	1.84	4.26	98	1	359
NO2	air	0.72	0.49	0.60	1.81	-0.19	0.25	0.56	1.62	5.19	94	0	8291
NO3-	pm25	0.02	0.08	0.01	2.96	0.00	0.00	0.01	0.07	0.99	98	162	359
Na+	pm25	0.04	0.05	0.02	3.01	0.00	0.00	0.02	0.11	0.32	98	49	359
PM10 mass	pm10	14.09	7.95	12.28	1.70	3.40	4.60	13.00	29.00	63.00	86	0	315
PM25 mass	pm25	11.38	7.44	9.70	1.74	2.00	4.20	9.30	25.00	65.00	87	0	318
SO2	air	0.51	0.70	0.32	2.88	-0.56	0.01	0.33	1.40	15.03	72	607	6373
SO4--	pm25	0.77	0.73	0.56	2.23	0.04	0.15	0.57	1.94	7.01	87	0	319
SO4-- corr	pm25	0.69	0.73	0.37	4.07	0.00	0.02	0.50	1.86	7.01	98	5	359

SI0032R Krvavec
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
CO	air	140.84	34.41	137.35	1.24	77.60	103.40	133.60	215.50	349.10	93	0	8174

SK0002R Chopok
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Cl-	aerosol	0.08	0.08	0.05	3.67	0.00	0.00	0.07	0.20	0.69	98	0	360
HNO3	air	0.05	0.05	0.03	2.28	0.00	0.01	0.04	0.12	0.52	99	0	363
NO2	air	0.84	0.32	0.78	1.50	0.22	0.36	0.86	1.42	2.71	99	0	365
NO3-	aerosol	0.12	0.11	0.07	2.95	0.00	0.01	0.08	0.36	0.55	98	0	362
SO2	air	0.31	0.45	0.20	2.53	0.01	0.04	0.21	0.96	6.57	98	0	362
SO4--	aerosol	0.22	0.23	0.13	3.74	0.00	0.00	0.14	0.67	1.46	99	0	363
SO4-- corr	aerosol	0.22	0.24	0.14	3.36	-0.34	-0.00	0.14	0.67	1.46	99	0	363

SK0004R Stará Lesná
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
PM10 mass	pm10	15.44	9.10	13.08	1.84	0.13	4.65	13.78	31.60	85.93	99	0	8683

SK0006R Starina
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
Ca++	aerosol	0.22	0.22	0.14	3.24	0.00	0.01	0.16	0.63	2.51	98	0	362
Cl-	aerosol	1.48	1.51	1.04	2.31	0.11	0.26	1.03	4.44	14.16	99	0	364
HNO3	air	0.09	0.18	0.06	2.31	0.01	0.02	0.05	0.24	2.19	99	0	363
K+	aerosol	0.03	0.05	0.02	2.58	0.00	0.00	0.02	0.07	0.64	96	0	355
Mg++	aerosol	0.12	0.12	0.08	2.62	0.00	0.01	0.08	0.34	0.76	98	0	360
NH3	air	0.86	0.58	0.68	2.08	0.04	0.19	0.70	2.07	3.29	98	0	360
NH4+	aerosol	0.26	0.18	0.21	1.96	0.00	0.07	0.21	0.59	1.14	98	0	359
NO2	air	1.50	1.63	1.33	1.48	0.39	0.81	1.27	2.53	28.21	95	0	351
NO3-	aerosol	0.38	0.37	0.27	2.38	0.01	0.06	0.28	0.98	3.27	99	0	363
Na+	aerosol	0.17	0.12	0.13	2.25	0.00	0.03	0.14	0.41	0.68	98	0	360
SO2	air	0.79	1.22	0.45	2.76	0.02	0.09	0.43	3.04	13.31	99	0	363
SO4--	aerosol	0.86	0.65	0.64	2.31	0.03	0.14	0.66	2.26	3.81	99	0	363
SO4-- corr	aerosol	0.82	0.65	0.58	2.60	0.00	0.10	0.63	2.21	3.79	99	0	363

SK0007R Topolniky
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
PM10 mass	pm10	25.82	15.06	22.13	1.75	2.57	8.96	21.84	55.73	163.56	95	0	8407

Annex 4

Annual statistics on carbonaceous compounds

CH0002R Payerne
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
EC	pm25	0.36	0.19	0.32	1.67	0.10	0.14	0.31	0.72	1.01	10	0	40
OC	pm25	1.87	1.03	1.48	2.35	0.08	0.13	1.74	3.93	4.35	10	0	40
TC	pm25	2.23	1.16	1.87	1.98	0.25	0.33	2.12	4.81	4.89	10	0	40

CH0005R Rigi
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
EC	pm25	0.23	0.15	0.20	1.81	0.06	0.06	0.19	0.65	0.82	7	0	28
OC	pm25	1.34	0.88	1.08	2.02	0.15	0.26	1.09	3.58	4.12	7	0	28
TC	pm25	1.57	0.96	1.33	1.79	0.36	0.40	1.30	4.09	4.94	7	0	28

CY0002R Agia Marina Xyliatou / Cyprus Atmospheric Observatory
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
EC	pm10	0.22	0.18	0.18	1.76	0.00	0.08	0.17	0.53	1.33	84	0	310
OC	pm10	1.70	0.81	1.56	1.59	0.00	0.66	1.87	3.00	4.68	84	0	310
TC	pm10	1.70	0.82	1.55	1.59	0.00	0.70	1.97	3.00	4.68	84	0	310

CZ0003R Kosetice (NOAK) - Online measurements
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
EC	pm25	0.64	0.60	0.43	2.93	-0.52	0.11	0.45	1.68	4.75	60	75	1457
OC	pm25	3.42	2.08	2.91	1.77	0.06	1.21	2.94	7.35	14.75	60	1	1457
OC,Fraction=OC1	pm25	0.90	0.78	0.67	2.17	-0.91	0.17	0.68	2.54	5.58	60	18	1457
OC,Fraction=OC2	pm25	0.95	0.50	0.83	1.74	-1.53	0.29	0.86	1.82	3.35	60	4	1457
OC,Fraction=OC3	pm25	0.98	0.46	0.89	1.57	0.17	0.40	0.89	1.78	4.80	60	0	1457
OC,Fraction=OC4	pm25	1.95	1.53	1.53	1.97	0.19	0.52	1.49	4.95	11.35	60	0	1457
OC,Fraction=OCPyr	pm25	0.56	0.95	0.26	4.47	-0.77	0.01	0.30	1.82	13.77	60	213	1457
TC	pm25	4.08	2.61	3.42	1.80	0.56	1.34	3.39	8.92	18.84	60	0	1457

CZ0003R Kosetice (NOAK) - Offline measurements
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
EC	pm25	0.37	0.29	0.26	2.45	0.05	0.05	0.28	0.88	1.40	15	7	57
OC	pm25	2.46	1.27	2.15	1.73	0.47	0.72	2.32	5.41	6.47	15	0	57
OC,Artifact=pos	pm25	0.25	0.13	0.22	1.73	0.05	0.07	0.23	0.54	0.65	15	0	57
OC,Fraction=OC1	pm25	0.41	0.23	0.35	1.80	0.07	0.08	0.37	0.98	1.25	15	0	57
OC,Fraction=OC2	pm25	0.47	0.20	0.42	1.65	0.10	0.12	0.45	0.83	0.94	15	0	57
OC,Fraction=OC3	pm25	0.53	0.21	0.49	1.59	0.12	0.18	0.51	1.01	1.09	15	0	57
OC,Fraction=OC4	pm25	0.49	0.29	0.43	1.68	0.12	0.16	0.41	1.09	1.81	15	0	57
OC,Fraction=OCPyr	pm25	0.56	0.68	0.36	2.87	-0.07	-0.00	0.37	2.58	3.37	15	0	57
TC	pm25	3.01	1.48	2.69	1.62	0.58	1.29	2.59	6.63	7.26	13	0	50

DE0002R Waldhof
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
EC	pm25	0.25	0.18	0.21	1.88	0.04	0.08	0.18	0.66	0.88	16	0	61
OC	pm25	2.30	1.65	1.80	2.06	0.32	0.53	2.04	6.59	7.43	16	0	61
TC	pm25	2.55	1.79	2.04	1.99	0.40	0.70	2.28	7.19	8.05	16	0	61

DE0003R Schauinsland
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
EC	pm25	0.12	0.08	0.10	1.98	0.01	0.02	0.11	0.34	0.45	16	0	61
OC	pm25	1.42	1.06	1.06	2.26	0.20	0.23	1.23	4.17	4.51	16	0	61
TC	pm25	1.54	1.13	1.17	2.22	0.22	0.27	1.30	4.46	4.73	16	0	61

DE0007R Neuglobsow
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
EC	pm25	0.29	0.26	0.21	2.08	0.06	0.06	0.19	0.92	1.26	16	0	61
OC	pm25	2.89	2.68	2.09	2.23	0.34	0.56	2.07	11.50	12.31	16	0	61
TC	pm25	3.18	2.91	2.33	2.18	0.41	0.70	2.26	12.52	13.24	16	0	61

DE0008R Schmücke
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
EC	pm25	0.18	0.11	0.15	1.76	0.03	0.05	0.16	0.40	0.67	16	0	62
OC	pm25	1.72	1.12	1.37	2.06	0.24	0.33	1.42	3.91	5.70	16	0	62
TC	pm25	1.89	1.17	1.55	1.96	0.28	0.36	1.56	4.28	6.32	16	0	62

DE0009R Zingst
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
EC	pm25	0.23	0.25	0.16	2.26	0.03	0.05	0.14	0.83	1.18	17	0	63
OC	pm25	2.48	3.13	1.55	2.51	0.30	0.39	1.36	9.66	16.99	17	0	63
TC	pm25	2.71	3.37	1.72	2.46	0.33	0.45	1.47	10.46	18.12	17	0	63

DE0044R Melpitz
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
EC	pm10	0.43	0.30	0.34	2.00	0.05	0.11	0.34	1.05	1.77	100	0	365
EC	pm25	0.38	0.29	0.29	2.04	0.05	0.09	0.29	1.01	1.80	98	0	360
OC	pm10	4.56	2.81	3.74	1.94	0.70	1.10	4.05	9.59	15.62	100	0	365
OC	pm25	3.92	2.36	3.22	1.94	0.43	0.88	3.56	8.01	13.69	98	0	360
OC,Fraction=OC1	pm10	0.67	0.34	0.58	1.76	0.12	0.20	0.62	1.26	1.83	100	0	365
OC,Fraction=OC1	pm25	0.65	0.33	0.56	1.77	0.12	0.20	0.61	1.29	1.98	98	0	360
OC,Fraction=OC2	pm10	0.77	0.43	0.64	1.86	0.13	0.20	0.68	1.58	2.39	100	0	365
OC,Fraction=OC2	pm25	0.67	0.36	0.57	1.84	0.09	0.18	0.62	1.32	1.87	98	0	360
OC,Fraction=OC3	pm10	0.79	0.67	0.62	1.94	0.13	0.19	0.61	1.74	5.42	100	0	365
OC,Fraction=OC3	pm25	0.60	0.46	0.47	1.97	0.07	0.15	0.48	1.28	3.16	98	0	360
OC,Fraction=OC4	pm10	0.41	0.22	0.37	1.60	0.13	0.17	0.37	0.81	1.76	100	0	365
OC,Fraction=OC4	pm25	0.34	0.18	0.30	1.62	0.07	0.13	0.31	0.66	1.32	98	0	360
OC,Fraction=OCPyr	pm10	1.93	1.59	1.38	2.41	0.11	0.26	1.62	5.17	9.93	100	0	365
OC,Fraction=OCPyr	pm25	1.67	1.35	1.20	2.39	0.07	0.23	1.40	4.23	8.40	98	0	360
TC	pm10	5.00	3.02	4.13	1.90	0.76	1.25	4.48	10.78	17.13	100	0	365
TC	pm25	4.30	2.54	3.57	1.90	0.51	1.07	3.86	8.87	15.12	98	0	360

ES0001R San Pablo de los Montes
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
EC	pm25	0.14	0.12	0.12	2.14	0.00	0.01	0.12	0.31	0.84	16	0	61
OC	pm25	2.00	1.10	1.73	1.76	0.41	0.64	1.85	4.47	5.74	16	0	61

ES0007R Víznar
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
EC	pm25	0.28	0.13	0.25	1.61	0.06	0.12	0.24	0.55	0.66	16	0	62
OC	pm25	2.56	1.29	2.24	1.73	0.57	0.85	2.63	5.08	6.04	16	0	62

ES0009R Campisabalos
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
EC	pm25	0.09	0.05	0.08	1.81	0.00	0.00	0.09	0.20	0.26	16	0	62
OC	pm25	1.54	0.95	1.29	1.81	0.34	0.56	1.20	3.59	4.18	16	0	62

ES0012R Zarra
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
EC	pm25	0.13	0.06	0.12	1.63	0.04	0.04	0.12	0.25	0.31	16	0	61
OC	pm25	2.00	1.10	1.74	1.69	0.68	0.79	1.77	3.72	6.50	16	0	61

ES0014R Els Torms
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
EC	pm25	0.15	0.10	0.13	1.76	0.00	0.04	0.13	0.33	0.53	16	0	61
OC	pm25	2.19	0.87	2.04	1.48	0.82	1.01	2.12	3.56	6.13	16	0	61

ES1778R Montseny
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
EC	pm10	0.19	0.07	0.18	1.42	0.08	0.10	0.18	0.32	0.52	23	1	87
OC	pm10	1.54	0.89	1.30	1.84	0.28	0.43	1.37	3.40	4.38	23	0	87
OC,Fraction=OC1	pm10	0.20	0.16	0.15	2.10	0.02	0.04	0.16	0.50	0.88	23	0	87
OC,Fraction=OC2	pm10	0.28	0.19	0.23	1.93	0.04	0.07	0.24	0.70	0.97	23	0	87
OC,Fraction=OC3	pm10	0.38	0.22	0.33	1.83	0.08	0.10	0.33	0.83	1.06	23	0	87
OC,Fraction=OC4	pm10	0.25	0.09	0.24	1.43	0.10	0.11	0.25	0.40	0.53	23	0	87
OC,Fraction=OCPyr	pm10	0.42	0.30	0.31	2.47	0.02	0.06	0.37	1.06	1.31	23	0	87
TC	pm10	1.74	0.93	1.50	1.74	0.39	0.55	1.60	3.66	4.63	23	0	87
EC	pm25	0.17	0.07	0.16	1.43	0.06	0.09	0.16	0.29	0.50	23	0	85
OC	pm25	1.41	0.93	1.13	2.01	0.17	0.33	1.21	3.21	4.44	23	0	85
OC,Fraction=OC1	pm25	0.22	0.19	0.16	2.50	-0.01	0.02	0.16	0.60	0.95	23	0	85
OC,Fraction=OC2	pm25	0.29	0.22	0.22	2.16	0.03	0.07	0.22	0.72	1.07	23	0	85
OC,Fraction=OC3	pm25	0.25	0.17	0.21	1.92	0.04	0.05	0.20	0.63	0.85	23	0	85
OC,Fraction=OC4	pm25	0.19	0.07	0.18	1.46	0.07	0.09	0.19	0.31	0.34	23	0	85
OC,Fraction=OCPyr	pm25	0.45	0.34	0.32	2.57	0.03	0.05	0.40	1.19	1.45	23	0	85
TC	pm25	1.58	0.96	1.31	1.88	0.28	0.43	1.41	3.63	4.63	23	0	85
EC	pm1	0.16	0.07	0.15	1.55	0.02	0.08	0.15	0.28	0.52	19	0	71
OC	pm1	1.31	0.77	1.10	1.83	0.32	0.39	1.14	2.85	4.14	19	0	71
OC,Fraction=OC1	pm1	0.27	0.18	0.22	2.03	0.03	0.06	0.22	0.61	1.01	19	0	71
OC,Fraction=OC2	pm1	0.29	0.19	0.23	1.95	0.07	0.08	0.23	0.65	1.01	19	0	71
OC,Fraction=OC3	pm1	0.19	0.13	0.16	1.95	0.03	0.05	0.17	0.44	0.66	19	0	71
OC,Fraction=OC4	pm1	0.17	0.06	0.16	1.48	0.06	0.07	0.17	0.29	0.33	19	0	71
OC,Fraction=OCPyr	pm1	0.39	0.27	0.28	2.76	0.00	0.05	0.36	1.00	1.16	19	0	71
TC	pm1	1.48	0.81	1.27	1.75	0.41	0.49	1.37	3.11	4.32	19	0	71

FR0008R Donon
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
EC	pm25	0.15	0.10	0.13	1.80	0.02	0.04	0.13	0.37	0.59	14	2	54
EC	pm25	0.21	0.15	0.17	1.95	0.06	0.06	0.16	0.58	0.58	3	0	14
OC	pm25	1.91	1.14	1.67	1.65	0.92	0.92	1.51	4.26	4.26	3	0	14
OC	pm25	2.27	1.07	2.04	1.61	0.68	0.85	2.11	4.38	5.69	14	0	54
OC,Fraction=OC1	pm25	0.39	0.18	0.35	1.64	0.12	0.13	0.36	0.75	0.78	14	0	54
OC,Fraction=OC1	pm25	0.48	0.21	0.44	1.53	0.21	0.21	0.42	0.89	0.89	3	0	14
OC,Fraction=OC2	pm25	0.35	0.22	0.31	1.65	0.19	0.19	0.27	0.86	0.86	3	0	14
OC,Fraction=OC2	pm25	0.56	0.24	0.51	1.57	0.20	0.23	0.51	1.00	1.12	14	0	54
OC,Fraction=OC3	pm25	0.32	0.15	0.30	1.50	0.19	0.19	0.25	0.68	0.68	3	0	14
OC,Fraction=OC3	pm25	0.40	0.17	0.37	1.52	0.11	0.18	0.36	0.73	0.93	14	0	54
OC,Fraction=OC4	pm25	0.54	0.22	0.50	1.55	0.13	0.23	0.53	1.04	1.14	14	0	54
OC,Fraction=OC4	pm25	0.56	0.46	0.44	1.93	0.19	0.19	0.36	1.57	1.57	3	0	14
OC,Fraction=OCPyr	pm25	0.17	0.18	0.10	2.86	0.04	0.04	0.07	0.56	0.56	3	7	14
OC,Fraction=OCPyr	pm25	0.39	0.44	0.25	2.69	0.02	0.02	0.32	1.42	2.44	14	3	54
TC	pm25	2.12	1.28	1.85	1.67	1.01	1.01	1.65	4.71	4.71	3	0	14
TC	pm25	2.43	1.15	2.18	1.60	0.71	0.92	2.23	4.70	6.17	14	0	54

FR0009R Revin
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
EC	pm25	0.21	0.10	0.18	1.82	0.02	0.08	0.19	0.40	0.57	15	2	56
OC	pm25	2.07	1.00	1.83	1.68	0.44	0.70	1.88	3.88	4.60	15	0	56
OC,Fraction=OC1	pm25	0.41	0.21	0.35	1.76	0.08	0.10	0.38	0.86	0.89	15	0	56
OC,Fraction=OC2	pm25	0.46	0.26	0.40	1.73	0.13	0.18	0.40	1.00	1.04	15	0	56
OC,Fraction=OC3	pm25	0.38	0.19	0.34	1.62	0.10	0.15	0.36	0.80	1.09	15	0	56
OC,Fraction=OC4	pm25	0.54	0.27	0.46	1.77	0.09	0.14	0.54	0.97	1.47	15	0	56
OC,Fraction=OCPyr	pm25	0.30	0.26	0.18	2.96	0.02	0.02	0.20	0.86	1.08	15	11	56
TC	pm25	2.28	1.05	2.03	1.66	0.47	0.79	2.12	4.09	4.98	15	0	56

FR0013R Peyrusse Vieille
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
EC	pm25	0.15	0.08	0.13	1.77	0.02	0.05	0.14	0.28	0.39	14	1	54
OC	pm25	1.72	0.84	1.54	1.62	0.45	0.59	1.53	3.63	4.50	14	0	54
OC,Fraction=OC1	pm25	0.25	0.15	0.21	2.04	0.01	0.07	0.22	0.55	0.81	14	1	54
OC,Fraction=OC2	pm25	0.42	0.22	0.36	1.96	0.01	0.15	0.37	0.92	1.07	14	1	54
OC,Fraction=OC3	pm25	0.34	0.13	0.32	1.62	0.04	0.12	0.35	0.58	0.71	14	1	54
OC,Fraction=OC4	pm25	0.39	0.19	0.34	1.99	0.01	0.12	0.36	0.70	1.10	14	1	54
OC,Fraction=OCPyr	pm25	0.29	0.27	0.20	2.51	0.02	0.04	0.23	1.01	1.41	14	6	54
TC	pm25	1.87	0.90	1.68	1.61	0.50	0.67	1.67	3.94	4.88	14	0	54

FR0019R Pic du Midi
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
EC	aerosol	0.04	0.04	0.03	2.00	0.01	0.01	0.03	0.17	0.21	88	15	48
OC	aerosol	0.69	0.73	0.51	2.00	0.10	0.26	0.43	3.07	3.61	90	0	49
OC,Fraction=OC1	aerosol	0.19	0.22	0.14	2.11	0.01	0.05	0.12	0.80	1.17	90	0	49
OC,Fraction=OC2	aerosol	0.13	0.10	0.11	1.76	0.02	0.06	0.10	0.44	0.51	90	0	49
OC,Fraction=OC3	aerosol	0.14	0.16	0.11	1.93	0.05	0.05	0.09	0.61	0.90	90	0	49
OC,Fraction=OC4	aerosol	0.16	0.13	0.12	2.08	0.02	0.05	0.10	0.54	0.57	90	0	49
OC,Fraction=OCPyr	aerosol	0.06	0.15	0.02	6.17	0.00	0.00	0.01	0.53	0.77	90	0	49
TC	aerosol	0.74	0.77	0.55	1.99	0.10	0.28	0.46	3.23	3.82	90	0	49

FR0020R SIRTA Atmospheric Research Observatory
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
EC	pm25	0.49	0.34	0.36	2.38	-0.02	0.06	0.42	1.11	1.55	57	0	209
OC	pm25	2.28	1.64	1.78	2.05	0.41	0.55	1.85	5.75	7.80	57	0	209
OC,Fraction=OC1	pm25	0.16	0.16	0.12	2.10	0.03	0.04	0.11	0.54	1.05	57	0	209
OC,Fraction=OC2	pm25	0.46	0.32	0.36	1.99	0.09	0.12	0.36	1.11	1.61	57	0	209
OC,Fraction=OC3	pm25	0.63	0.36	0.54	1.77	0.15	0.20	0.57	1.32	2.22	57	0	209
OC,Fraction=OC4	pm25	0.85	0.69	0.63	2.26	0.07	0.17	0.67	2.31	3.33	57	0	209
OC,Fraction=OCPyr	pm25	0.18	0.30	0.19	3.11	-0.67	-0.16	0.08	0.81	1.26	57	0	209
TC	pm25	2.77	1.94	2.16	2.07	0.40	0.60	2.30	6.81	9.23	57	0	209
EC,Fraction=EC1	pm25	0.04	0.07	0.05	2.61	-0.07	-0.02	0.02	0.20	0.35	57	0	209
EC,Fraction=EC2	pm25	0.15	0.16	0.10	3.03	-0.02	0.00	0.10	0.53	0.76	57	0	209
EC,Fraction=EC3	pm25	0.34	0.27	0.23	2.75	0.01	0.03	0.25	0.88	1.12	57	0	209
EC,Fraction=EC4	pm25	0.13	0.11	0.10	2.77	0.00	0.00	0.11	0.34	0.49	57	0	209

FR0022R Observatoire Perenne de l'Environnement
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
EC	pm10	0.24	0.12	0.21	1.64	0.07	0.08	0.22	0.49	0.66	15	0	57
OC	pm10	2.49	1.22	2.19	1.71	0.66	0.80	2.29	5.01	5.21	15	0	57
OC,Fraction=OC1	pm10	0.25	0.12	0.22	1.65	0.08	0.10	0.22	0.52	0.56	15	0	57
OC,Fraction=OC2	pm10	0.51	0.25	0.45	1.68	0.15	0.17	0.45	1.02	1.16	15	0	57
OC,Fraction=OC3	pm10	0.69	0.34	0.62	1.63	0.20	0.24	0.66	1.31	1.95	15	0	57
OC,Fraction=OC4	pm10	0.86	0.44	0.75	1.73	0.21	0.27	0.75	1.65	1.97	15	0	57
OC,Fraction=OCPyr	pm10	0.35	0.27	0.25	2.54	0.02	0.05	0.29	0.91	1.03	15	0	57
TC	pm10	2.73	1.31	2.41	1.69	0.73	0.89	2.56	5.53	5.67	15	0	57
OC,Fraction=EC1	pm10	0.08	0.07	0.06	2.31	0.01	0.01	0.06	0.24	0.36	15	0	57
OC,Fraction=EC2	pm10	0.18	0.13	0.14	1.95	0.03	0.04	0.15	0.52	0.65	15	0	57
OC,Fraction=EC3	pm10	0.24	0.14	0.20	1.92	0.05	0.05	0.20	0.47	0.64	15	0	57
OC,Fraction=EC4	pm10	0.09	0.06	0.07	2.24	0.01	0.02	0.08	0.21	0.23	15	0	57
EC	pm25	0.24	0.20	0.19	1.91	0.04	0.06	0.18	0.56	1.42	19	1	71
OC	pm25	2.22	1.57	1.73	2.10	0.21	0.46	1.75	5.83	7.57	19	0	71
OC,Fraction=OC1	pm25	0.22	0.15	0.18	1.97	0.02	0.06	0.18	0.56	0.72	19	0	71
OC,Fraction=OC2	pm25	0.46	0.26	0.38	1.88	0.07	0.12	0.40	1.04	1.12	19	0	71
OC,Fraction=OC3	pm25	0.55	0.44	0.45	1.84	0.11	0.16	0.42	1.58	2.51	19	0	71
OC,Fraction=OC4	pm25	0.72	0.57	0.55	2.11	0.08	0.17	0.55	2.00	3.05	19	0	71
OC,Fraction=OCPyr	pm25	0.44	0.35	0.29	2.89	0.01	0.03	0.36	1.22	1.71	19	0	71
TC	pm25	2.46	1.73	1.94	2.06	0.25	0.54	1.95	6.40	8.99	19	0	71
OC,Fraction=EC1	pm25	0.07	0.11	0.04	3.17	-0.01	0.00	0.04	0.21	0.80	19	0	71
OC,Fraction=EC2	pm25	0.19	0.23	0.13	2.44	0.00	0.02	0.13	0.50	1.71	19	0	71
OC,Fraction=EC3	pm25	0.29	0.17	0.23	2.11	0.02	0.04	0.26	0.62	0.91	19	0	71

FR0023R Saint-Nazaire-le-Désert
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
EC	pm25	0.18	0.10	0.15	1.73	0.02	0.06	0.16	0.46	0.53	16	1	59
OC	pm25	2.08	1.08	1.86	1.58	0.79	0.93	1.80	4.23	6.20	16	0	59
OC,Fraction=OC1	pm25	0.34	0.20	0.30	1.68	0.11	0.14	0.25	0.77	1.00	16	0	59
OC,Fraction=OC2	pm25	0.51	0.30	0.45	1.63	0.16	0.20	0.41	1.21	1.90	16	0	59
OC,Fraction=OC3	pm25	0.42	0.20	0.39	1.49	0.17	0.23	0.37	0.84	1.38	16	0	59
OC,Fraction=OC4	pm25	0.49	0.28	0.44	1.64	0.16	0.21	0.44	1.14	1.66	16	0	59
OC,Fraction=OCPyr	pm25	0.30	0.29	0.22	2.24	0.02	0.04	0.25	0.84	1.73	16	4	59
TC	pm25	2.26	1.16	2.03	1.58	0.85	1.03	1.93	4.46	6.54	16	0	59

FR0024R Guipry
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
EC	pm25	0.32	0.15	0.29	1.57	0.10	0.13	0.29	0.69	0.72	15	0	58
OC	pm25	1.78	1.02	1.55	1.70	0.52	0.68	1.40	3.86	5.09	15	0	58
OC,Fraction=OC1	pm25	0.24	0.16	0.19	2.12	0.01	0.05	0.20	0.57	0.85	15	1	58
OC,Fraction=OC2	pm25	0.39	0.20	0.33	1.92	0.01	0.15	0.31	0.82	1.00	15	1	58
OC,Fraction=OC3	pm25	0.36	0.20	0.32	1.75	0.04	0.13	0.32	0.84	1.14	15	1	58
OC,Fraction=OC4	pm25	0.52	0.34	0.42	2.12	0.01	0.19	0.41	1.32	1.92	15	1	58
OC,Fraction=OCPyr	pm25	0.24	0.28	0.15	2.85	0.02	0.02	0.17	0.80	1.80	15	12	58
TC	pm25	2.10	1.15	1.84	1.67	0.63	0.81	1.67	4.47	5.80	15	0	58

FR0025R Verneuil
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
EC	pm25	0.16	0.10	0.14	1.81	0.02	0.05	0.15	0.35	0.58	15	2	58
OC	pm25	1.85	1.16	1.63	1.64	0.44	0.72	1.67	3.63	8.44	15	0	58
OC,Fraction=OC1	pm25	0.26	0.15	0.24	1.59	0.08	0.12	0.22	0.52	1.02	15	0	58
OC,Fraction=OC2	pm25	0.42	0.24	0.37	1.60	0.13	0.21	0.34	0.72	1.72	15	0	58
OC,Fraction=OC3	pm25	0.38	0.17	0.35	1.52	0.10	0.16	0.36	0.67	1.20	15	0	58
OC,Fraction=OC4	pm25	0.47	0.26	0.41	1.68	0.09	0.14	0.43	1.14	1.32	15	0	58
OC,Fraction=OCPyr	pm25	0.31	0.47	0.19	2.70	0.02	0.02	0.20	0.76	3.53	15	8	58
TC	pm25	2.02	1.24	1.78	1.64	0.48	0.76	1.82	3.93	9.02	15	0	58

IT0004R Ispra
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
EC	pm25	0.77	0.68	0.55	2.24	0.10	0.16	0.50	2.34	3.77	89	0	326
OC	pm25	3.74	3.70	2.44	2.66	-0.18	0.46	2.37	12.12	20.92	89	43	326
OC,Artifact=neg	pm25	0.20	0.19	0.13	2.58	-0.03	0.02	0.13	0.64	1.11	99	0	362
OC,Artifact=pos	pm25	0.17	0.17	0.12	2.56	-0.02	0.02	0.11	0.56	0.98	99	0	362
OC,Fraction=OCPyr	pm25	0.55	0.50	0.36	2.78	-0.07	0.04	0.37	1.65	2.74	89	14	326
TC	pm25	4.51	4.35	3.01	2.55	-0.01	0.66	2.91	14.28	24.69	89	27	326

IT0019R Monte Martano
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
EC	pm10	0.20	0.10	0.17	1.75	0.00	0.06	0.18	0.40	0.62	46	4	170
OC	pm10	1.65	0.77	1.46	1.71	0.21	0.56	1.56	3.12	3.81	46	3	170
OC,Fraction=OC1	pm10	0.06	0.25	0.03	2.02	0.00	0.01	0.03	0.06	2.87	46	0	169
OC,Fraction=OC2	pm10	0.39	0.19	0.35	1.62	0.00	0.14	0.36	0.82	1.12	46	0	169
OC,Fraction=OC3	pm10	0.34	0.16	0.30	1.63	0.00	0.13	0.31	0.66	0.85	46	0	169
OC,Fraction=OC4	pm10	0.27	0.13	0.25	1.58	0.00	0.10	0.26	0.46	1.04	46	0	169
OC,Fraction=OCPyr	pm10	0.62	0.37	0.50	2.16	0.00	0.12	0.57	1.30	1.64	46	0	169
TC	pm10	1.85	0.83	1.64	1.69	0.24	0.64	1.76	3.34	3.98	46	2	170

NL0644R Cabauw Wielsekade
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
EC	pm10	0.41	0.27	0.37	1.66	0.00	0.14	0.38	0.92	1.97	21	1	77
OC	pm10	2.51	1.50	2.18	1.68	0.61	0.89	2.03	5.00	8.87	21	0	77
OC,Fraction=OC1	pm10	0.62	0.22	0.58	1.41	0.23	0.32	0.61	1.06	1.42	21	0	77
OC,Fraction=OC2	pm10	0.46	0.27	0.40	1.65	0.09	0.20	0.40	0.90	2.02	21	0	77
OC,Fraction=OC3	pm10	0.39	0.23	0.33	1.72	0.05	0.13	0.33	0.91	1.50	21	0	77
OC,Fraction=OC4	pm10	0.50	0.31	0.43	1.81	0.04	0.18	0.43	1.12	1.91	21	0	77
OC,Fraction=OCPyr	pm10	0.54	0.67	0.30	3.28	0.00	0.02	0.29	1.97	4.23	21	0	77
TC	pm10	2.92	1.72	2.55	1.67	0.61	1.01	2.49	5.65	10.84	21	0	77

NO0002R Birkenes II
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
EC	pm10	0.08	0.06	0.06	2.15	0.01	0.02	0.06	0.22	0.27	100	1	53
EC	pm25	0.07	0.05	0.06	1.90	0.01	0.02	0.06	0.20	0.23	100	0	53
OC	pm10	0.96	0.68	0.75	2.08	0.05	0.26	0.74	2.55	3.33	100	0	53
OC	pm10_pm25	0.26	0.20	0.18	2.55	0.02	0.03	0.19	0.67	0.83	90	0	48
OC	pm25	0.73	0.52	0.58	1.93	0.18	0.21	0.57	1.94	2.49	100	0	53
OC,Fraction=OC1	pm10	0.05	0.04	0.03	2.42	0.00	0.01	0.03	0.17	0.18	63	0	34
OC,Fraction=OC1	pm25	0.04	0.04	0.03	2.50	0.00	0.01	0.02	0.16	0.18	63	0	34
OC,Fraction=OC2	pm10	0.28	0.25	0.20	2.25	0.06	0.06	0.18	0.91	1.17	90	0	48
OC,Fraction=OC2	pm25	0.23	0.20	0.17	2.30	0.02	0.05	0.16	0.73	0.92	90	0	48
OC,Fraction=OC3	pm10	0.26	0.19	0.20	1.98	0.06	0.08	0.18	0.65	0.90	90	0	48
OC,Fraction=OC3	pm25	0.15	0.11	0.12	1.89	0.02	0.05	0.11	0.37	0.57	90	0	48
OC,Fraction=OC4	pm10	0.14	0.05	0.13	1.39	0.07	0.07	0.12	0.25	0.31	90	0	48
OC,Fraction=OC4	pm25	0.10	0.04	0.09	1.57	0.01	0.05	0.10	0.20	0.22	90	0	48
OC,Fraction=OCPyr	pm10	0.28	0.22	0.19	2.54	0.03	0.03	0.23	0.75	0.94	86	0	46
OC,Fraction=OCPyr	pm25	0.21	0.20	0.12	3.28	0.00	0.01	0.14	0.66	0.75	86	1	46
TC	pm10	1.03	0.71	0.81	2.07	0.05	0.28	0.79	2.71	3.47	100	0	53
TC	pm10_pm25	0.26	0.21	0.18	2.68	0.01	0.03	0.20	0.68	0.83	90	0	48
TC	pm25	0.80	0.55	0.65	1.89	0.20	0.24	0.64	2.04	2.63	100	0	53

NO0039R Kårvatn
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
EC	pm10	0.05	0.04	0.03	2.38	0.01	0.01	0.03	0.14	0.16	98	3	53
EC	pm25	0.05	0.04	0.04	2.11	0.01	0.01	0.04	0.15	0.17	98	1	53
OC	pm10	0.85	0.76	0.60	2.23	0.12	0.18	0.55	3.00	3.22	98	0	53
OC	pm10_pm25	0.22	0.38	0.07	5.32	0.01	0.01	0.08	0.86	2.43	98	8	52
OC	pm25	0.65	0.60	0.47	2.11	0.10	0.16	0.45	2.07	3.10	98	0	53
OC,Fraction=OC1	pm10	0.03	0.03	0.02	2.45	0.00	0.00	0.02	0.10	0.17	98	9	53
OC,Fraction=OC1	pm25	0.03	0.03	0.02	2.45	0.00	0.00	0.02	0.10	0.17	98	9	53
OC,Fraction=OC2	pm10	0.18	0.18	0.13	2.13	0.02	0.05	0.12	0.62	0.88	98	0	53
OC,Fraction=OC2	pm25	0.18	0.18	0.13	2.13	0.02	0.05	0.12	0.62	0.88	98	0	53
OC,Fraction=OC3	pm10	0.18	0.17	0.13	2.09	0.04	0.05	0.12	0.60	0.95	98	0	53
OC,Fraction=OC3	pm25	0.18	0.17	0.13	2.09	0.04	0.05	0.12	0.60	0.95	98	0	53
OC,Fraction=OC4	pm10	0.10	0.06	0.09	1.65	0.02	0.04	0.09	0.26	0.37	98	0	53
OC,Fraction=OC4	pm25	0.10	0.06	0.09	1.65	0.02	0.04	0.09	0.26	0.37	98	0	53
OC,Fraction=OCPyr	pm10	0.15	0.18	0.08	3.29	0.01	0.01	0.10	0.61	0.77	98	0	53
OC,Fraction=OCPyr	pm25	0.15	0.18	0.08	3.29	0.01	0.01	0.10	0.61	0.77	98	0	53
TC	pm10	0.89	0.77	0.64	2.16	0.12	0.21	0.61	3.04	3.24	98	0	53
TC	pm10_pm25	0.21	0.36	0.07	5.28	0.00	0.01	0.07	0.86	2.27	98	8	52
TC	pm25	0.69	0.63	0.51	2.07	0.10	0.18	0.48	2.23	3.26	98	0	53

NO0042G Zeppelin mountain (Ny-Ålesund)
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
EC	pm10	0.01	0.01	0.00	2.32	0.00	0.00	0.00	0.02	0.02	81	12	36
OC	pm10	0.09	0.06	0.07	2.10	0.01	0.01	0.08	0.25	0.26	81	0	36
OC,Artifact=pos	pm10	0.02	0.01	0.02	2.36	0.00	0.00	0.02	0.05	0.05	49	1	23
TC	pm10	0.10	0.06	0.08	2.13	0.01	0.01	0.08	0.26	0.27	81	0	36

NO0056R Hurdal
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
EC	pm10	0.12	0.07	0.10	1.79	0.02	0.04	0.10	0.26	0.37	98	0	53
EC	pm25	0.11	0.06	0.09	1.77	0.03	0.04	0.09	0.24	0.30	100	0	54
OC	pm10	1.27	0.73	1.07	1.76	0.32	0.45	0.97	2.93	2.96	98	0	53
OC	pm10_pm25	0.41	0.40	0.16	5.44	0.01	0.01	0.22	1.19	1.81	94	6	51
OC	pm25	0.88	0.51	0.75	1.71	0.30	0.33	0.67	2.08	2.14	100	0	54
OC,Fraction=OC1	pm10	0.05	0.04	0.03	3.06	0.01	0.01	0.04	0.14	0.16	98	10	53
OC,Fraction=OC1	pm25	0.05	0.04	0.03	2.95	0.01	0.01	0.04	0.13	0.14	100	10	54
OC,Fraction=OC2	pm10	0.34	0.24	0.27	1.89	0.08	0.11	0.22	0.88	0.97	98	0	53
OC,Fraction=OC2	pm25	0.27	0.19	0.22	1.85	0.08	0.10	0.18	0.71	0.81	100	0	54
OC,Fraction=OC3	pm10	0.38	0.26	0.29	2.04	0.09	0.10	0.25	0.91	1.12	98	0	53
OC,Fraction=OC3	pm25	0.18	0.10	0.16	1.60	0.08	0.08	0.14	0.41	0.53	100	0	54
OC,Fraction=OC4	pm10	0.15	0.06	0.14	1.45	0.07	0.08	0.12	0.28	0.40	98	0	53
OC,Fraction=OC4	pm25	0.11	0.03	0.10	1.31	0.05	0.07	0.10	0.17	0.20	100	0	54
OC,Fraction=OCPyr	pm10	0.36	0.24	0.30	1.83	0.07	0.10	0.28	1.00	1.30	98	0	53
OC,Fraction=OCPyr	pm25	0.26	0.21	0.20	2.15	0.04	0.05	0.20	0.79	1.04	100	0	54
TC	pm10	1.39	0.75	1.19	1.69	0.39	0.51	1.09	3.06	3.33	98	0	53
TC	pm10_pm25	0.41	0.41	0.17	5.55	0.01	0.01	0.22	1.23	1.84	94	6	51
TC	pm25	0.99	0.54	0.85	1.67	0.34	0.37	0.78	2.22	2.38	100	0	54

PL0005R Diabla Gora
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
EC	pm25	0.38	0.29	0.29	2.19	0.03	0.07	0.30	0.94	1.84	99	0	362
OC	pm25	3.32	2.23	2.71	1.93	0.32	0.85	2.73	8.22	17.51	99	0	362
TC	pm25	3.71	2.49	3.03	1.92	0.36	1.00	2.97	9.06	19.36	99	0	362

PL0009R Zielonka
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
EC	pm25	0.42	0.32	0.31	2.23	0.01	0.10	0.30	1.10	1.97	49	1	182
OC	pm25	4.98	3.09	4.28	1.71	1.41	1.88	4.25	10.77	23.19	49	0	182
TC	pm25	5.39	3.35	4.62	1.72	1.41	2.01	4.53	11.72	24.44	49	0	182

SE0022R Norunda Stenen
January 2018 - December 2018

Component	matrix	Arit mean	Arit sd	Geom mean	Geom sd	Min	5%	50%	95%	Max	% anal	Num bel	Num sampl
EC	pm10	0.12	0.09	0.09	2.06	0.01	0.02	0.09	0.30	0.47	79	0	97
OC	pm10	1.69	0.96	1.41	1.86	0.39	0.47	1.54	3.59	4.72	79	0	97
OC,Artifact=neg	pm10	0.35	0.35	0.26	2.16	0.00	0.06	0.30	0.71	3.21	79	0	97
OC,Artifact=pos	pm10	0.05	0.03	0.04	1.87	0.01	0.01	0.05	0.11	0.14	79	0	97
OC,Fraction=OC1	pm10	0.23	0.19	0.16	2.43	0.03	0.04	0.16	0.65	0.77	79	0	97
OC,Fraction=OC2	pm10	0.29	0.19	0.24	1.94	0.06	0.08	0.23	0.67	0.95	79	0	97
OC,Fraction=OC3	pm10	0.50	0.40	0.36	2.25	0.07	0.10	0.33	1.42	1.81	79	0	97
OC,Fraction=OC4	pm10	0.28	0.15	0.23	1.86	0.06	0.06	0.26	0.59	0.75	79	0	97
OC,Fraction=OCPyr	pm10	0.36	0.32	0.24	2.70	0.01	0.04	0.24	1.08	1.38	79	0	97
TC	pm10	1.80	1.00	1.53	1.82	0.44	0.54	1.68	3.98	5.03	79	0	97

Annex 5

Overview of sampling and analytical methods 2018

Country: Armenia		Main components- EMEP	Year: 2018	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
Precipitation amount				
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
Air				
Sulphur dioxide	AM0001R	KOH-impregnated Whatman 40 filter 20–25 m^3/day (Filterpack)	Daily	Ion chromatography
Nitrogen dioxide	AM0001R	NaI-impregnated glass sinters, 0.6 m^3/day	Daily	Spectrophotometric, Griess method
Nitric acid	AM0001R	KOH-impregnated Whatman 40 filter 20–25 m^3/day (Filterpack)	Daily	Ion chromatography
Ammonia	AM0001R	Oxalic acid-impregnated Whatman 40 filter, 20–25 m^3/day (Filterpack)	Daily	Spectrophotometric, Nessler method
Ozone	AM0001R			
Sulphate	AM0001R	Teflon filter, Pall Zefluor 2 µm, 47 mm diameter, 20–25 m^3/day (Filterpack)	Daily	Ion chromatography
Nitrate	AM0001R	Teflon filter, Pall Zefluor 2 µm, 47 mm diameter, 20–25 m^3/day (Filterpack)	Daily	Ion chromatography
Ammonium	AM0001R	Teflon filter, Pall Zefluor 2 µm, 47 mm diameter, 20–25 m^3/day (Filterpack)	Daily	Spectrophotometric, Nessler method
Sodium	AM0001R	Teflon filter, Pall Zefluor 2 µm, 47 mm diameter, 20–25 m^3/day (Filterpack)	Daily	ICP-MS
Calcium	AM0001R	Teflon filter, Pall Zefluor 2 µm, 47 mm diameter, 20–25 m^3/day (Filterpack)	Daily	ICP-MS
Magnesium	AM0001R	Teflon filter, Pall Zefluor 2 µm, 47 mm diameter, 20–25 m^3/day (Filterpack)	Daily	ICP-MS
Potassium	AM0001R	Teflon filter, Pall Zefluor 2 µm, 47 mm diameter, 20–25 m^3/day (Filterpack)	Daily	ICP-MS
Chloride	AM0001R	Teflon filter, Pall Zefluor 2 µm, 47 mm diameter, 20–25 m^3/day (Filterpack)	Daily	Ion chromatography
PM_{10}				
$PM_{2.5}$				
PM_1				
Sum of nitric acid and nitrate	AM0001R	KOH-impregnated Whatman 40 filter + Teflon filter, 20–25 m^3/day	Daily	Ion chromatography
Sum of ammonia and ammonium	AM0001R	Oxalic acid-impregnated Whatman 40 filter +Teflon filter, 20–25 m^3/day	Daily	Spectrophotometric, Nessler method

Country: Austria		Main components and ozone - EMEP	Year: 2018	
	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	All	Instrumental: UV-fluorescence	Hourly	UV-fluorescence
Sulphur dioxide				
Nitrogen dioxide	All	Instrumental: Chemiluminescence	Hourly	Chemiluminescence
Nitric acid				
Ammonia				
Ozone	All	UV-monitor	Hourly	UV-absorption
Sulphate				
Nitrate				
Ammonium				
Sodium				
Calcium				
Magnesium				
Potassium				
Chloride				
PM_{10}	AT02 AT05, AT48	High Volume Sampler, glass fibre filters with organic binder, 720 m^3/day, EN 12341 High Volume Sampler, glass fibre filters with organic binder, 720 m^3/day, EN 12341	Daily Every 3rd day	Micro balance
$PM_{2.5}$	AT02	High Volume Sampler, glass fibre filters with organic binder, 720 m^3/day, EN 14907	Daily	Micro balance
PM_1	AT02	High Volume Sampler, glass fibre filters with organic binder, 720 m^3/day, weighing acc. EN 12341	Every 3rd day	Micro balance
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				

Country: Belarus		Main components and ozone - EMEP	Year: 2018	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
Precipitation amount		Bulk		
Precipitation amount, official gauge				
Sulphate		Bulk	Daily	Turbidimetry
Nitrate		Bulk	Daily	Photometry
Ammonium		Bulk	Daily	Photometry with Nessler reactive
Magnesium		Bulk	Daily	AAS
Sodium		Bulk	Daily	AAS
Chloride		Bulk	Daily	Mercurimetric
Calcium		Bulk	Daily	AAS
Potassium		Bulk	Daily	AAS
Conductivity		Bulk	Daily	Conductivity meter
pH		Bulk	Daily	pH meter
Air				
Sulphur dioxide				
Sulphur dioxide				
Nitrogen dioxide				
Nitric acid				
Ammonia				
Ozone				
Sulphate				
Nitrate				
Ammonium				
Sodium				
Calcium				
Magnesium				
Potassium				
Chloride				
PM_{10}				
$PM_{2.5}$				
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				

Country: Belgium		Main components and ozone - EMEP	Year: 2018	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
Precipitation amount	BE0014R	Wet-only sampler	2 weeks	
Precipitation amount, official gauge	BE0014R	precipitation gauge		
Sulphate	BE0014R	Wet-only sampler	2 weeks	ion chromatography
Nitrate	BE0014R	Wet-only sampler	2 weeks	ion chromatography
Ammonium	BE0014R	Wet-only sampler	2 weeks	ion chromatography
Magnesium	BE0014R	Wet-only sampler	2 weeks	ICP-AES
Sodium	BE0014R	Wet-only sampler	2 weeks	ICP-AES
Chloride	BE0014R	Wet-only sampler	2 weeks	ion chromatography
Calcium	BE0014R	Wet-only sampler	2 weeks	ICP-AES
Potassium	BE0014R	Wet-only sampler	2 weeks	ICP-AES
Conductivity	BE0014R	Wet-only sampler	2 weeks	Conductivity probe
pH	BE0014R	Wet-only sampler	2 weeks	Combined glass electrode
Acidity				
Air				
Sulphur dioxide		Instrumental: UV-fluorescence	Half hourly	UV-fluorescence
Nitrogen dioxide	BE0013R, BE0011R	Instrumental: Chemiluminescence	Half hourly	Chemiluminescence
Nitric acid				
Ammonia	BE0014R	Passive sampler	4 weeks	ion chromatography
Ozone		Instrumental: UV monitor	Half hourly	UV absorption
Sulphate				
Nitrate				
Ammonium				
Sodium				
Calcium				
Magnesium				
Potassium				
Chloride				
PM_{10}				
$PM_{2.5}$				
PM_1				
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				

Country: Croatia		Main components and ozone - EMEP	Year: 2018	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
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
Air				
Sulphur dioxide				
Nitrogen dioxide				
Nitric acid				
Ammonia				
Ozone				
Sulphate				
Nitrate				
Ammonium				
Sodium				
Calcium				
Magnesium				
Potassium				
Chloride				
PM_{10}				
$PM_{2.5}$				
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				

Country: Cyprus		Main components and ozone - EMEP	Year: 2018	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
Precipitation amount				
Precipitation amount, official gauge				
Sulphate				
Nitrate				
Ammonium				
Magnesium				
Sodium				
Chloride				
Calcium				
Potassium				
Conductivity				
pH				
Air				
Sulphur dioxide	CY02	Instrumental: UV-fluorescence	Hourly	UV-fluorescence
Nitrogen dioxide	CY02	Instrumental: Chemiluminescence	Hourly	Chemiluminescence
Nitric acid				
Ammonia				
Carbon Monoxide	CY02	Non – Dispercive Infrared Sprectoscopy (NDIR)	Hourly	NDIR
Ozone	CY02	Instrumental: Ultra Violet (UV) photometry	Hourly	UV absorption
Sulphate $PM_{2.5}$	CY02	Low volume sampler	Daily	Ion Chromatography
Nitrate $PM_{2.5}$	CY02	Low volume sampler	Daily	Ion Chromatography
Ammonium $PM_{2.5}$	CY02	Low volume sampler	Daily	Ion Chromatography
Sodium $PM_{2.5}$	CY02	Low volume sampler	Daily	Ion Chromatography
Calcium $PM_{2.5}$	CY02	Low volume sampler	Daily	Ion Chromatography
Magnesium $PM_{2.5}$	CY02	Low volume sampler	Daily	Ion Chromatography
Potassium $PM_{2.5}$	CY02	Low volume sampler	Daily	Ion Chromatography
Chloride $PM_{2.5}$	CY02	Low volume sampler	Daily	Ion Chromatography
PM_{10}	CY02	High volume sampler	Daily	Gravimetric
$PM_{2.5}$	CY02	Low volume sampler	Daily	Gravimetric
PM_{1}				
OC/EC in PM2,5	CY02	Low volume sampler	Daily	OC EC Lab Instrument, Model 5 Sunset Laboratory Inc. EUSAAR 2 temperature program

THE LABORATORY PERFORMING THE ANALYSES ON PM2,5 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: **2018**	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
Precipitation amount, official gauge	All	Meteorological Station	Daily	Automatically gauge
Fluoride	All	Wet-only (daily) at CZ03, (weekly) at CZ05	Daily, weekly	Ion Chromatography
Sulphate	All	Wet-only (daily) at CZ03, (weekly) at CZ05	Daily, weekly	Ion chromatography
Nitrate	All	Wet-only (daily) at CZ03, (weekly) at CZ05	Daily, weekly	Ion chromatography
Ammonium	All	Wet-only (daily) at CZ03, (weekly) at CZ05	Daily, weekly	Spectrophotometric, Indophenol method, FIA-Berth
Magnesium	All	Wet-only (daily) at CZ03, (weekly) at CZ05	Daily, weekly	F-AAS
Sodium	All	Wet-only (daily) at CZ03, (weekly) at CZ05	Daily, weekly	F-AAS
Chloride	All	Wet-only (daily) at CZ03, (weekly) at CZ05	Daily, weekly	Ion chromatography
Calcium	All	Wet-only (daily) at CZ03, (weekly) at CZ05	Daily, weekly	F-AAS
Potassium	All	Wet-only (daily) at CZ03, (weekly) at CZ05	Daily, weekly	F-AAS
Conductivity	All	Wet-only (daily) at CZ03, (weekly) at CZ05	Daily, weekly	Conductivity electrode
pH	All	Wet-only (daily) at CZ03, (weekly) at CZ05	Daily, weekly	pH electrode
Air				
Sulphur dioxide	CZ3,CZ5	KOH-impregnated Whatman 40 filter 47 mm, 20 m^3/day	Daily, CZ5 indicative(6days)	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^3/day	Daily, CZ5 indicative(6days)	Ion Chromatography
Sum of ammonia and ammonium	CZ3,CZ5	Whatman filter + Citric acid impregnated Whatman 40 filter 47 mm, 20 m^3/day	Daily, CZ5 indicative(6days)	Spectrophotometric, Indophenol method, FIA-Berth
Ozone	All	UV-monitor	Hourly	UV-absorption
Sulphate	CZ3,CZ5	Whatman 40, filter 47 mm, 20 m^3/day	Daily, CZ5 indicative(6days)	Ion chromatography
Sodium	CZ3	Filter 47 mm, 55 m^3/day	Weekly	Ion chromatography
Calcium	CZ3	Filter 47 mm, 55 m^3/day	Weekly	Ion chromatography
Magnesium	CZ3	Filter 47 mm, 55 m^3/day	Weekly	Ion chromatography
Potassium	CZ3	Filter 47 mm, 55 m^3/day	Weekly	Ion chromatography
PM_{10}	CZ3,CZ5	Filter 47 mm, 55 m^3/day	Every 2nd day	Gravimetry
PM_{10}	CZ3	Beta absorption - monitor	Hourly	Radiometry – beta absorption
$PM_{2.5}$	CZ3	Beta absorption - monitor	Hourly	Radiometry – beta absorption
$PM_{2.5}$	CZ3	Filter 47 mm, 55 m^3/day	Every 2nd day	Gravimetry
OC, EC in $PM_{2.5}$	CZ3	Filter 47 mm, 24 m^3/day	Every 6th day	HD-FID (Thermal-optical method)

Country: Denmark		Main components and ozone - EMEP	Year: 2018	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
Precipitation amount	DK05, DK08, DK12, DK22	Wet-only	Two-weekly	
Precipitation amount, official gauge				
Sulphate	DK05, DK08, DK12, DK22	Wet-only	Two-weekly	Ion chromatography
Nitrate	DK05, DK08, DK12, DK22	Wet-only	Two-weekly	Ion chromatography
Ammonium	DK05, DK08, DK12, DK22	Wet-only	Two-weekly	ISO 11732 CFA (continuously flow analysis) and spectrophotometric detection
Magnesium	DK05, DK08, DK12, DK22	Wet-only	Two-weekly	Ion chromatography
Sodium	DK05, DK08, DK12, DK22	Wet-only	Two-weekly	Ion chromatography
Chloride	DK05, DK08, DK12, DK22	Wet-only	Two-weekly	Ion chromatography
Calcium	DK05, DK08, DK12, DK22	Wet-only	Two-weekly	Ion chromatography
Potassium	DK05, DK08, DK12, DK22	Wet-only	Two-weekly	Ion chromatography
Conductivity				
pH	DK05, DK08, DK12, DK22	Wet-only	Two-weekly	pH meter
Air				
Sulphur dioxide	DK03, DK08, DK12, DK31	KOH-impregnated Whatman 41 filters, 58 m3/day	Daily	Ion chromatography
Nitrogen dioxide	DK05, DK08, DK12, DK31	Monitor	Hourly	Chemiluminescence
Nitrogen oxide	DK05, DK08, DK12, DK31	Monitor	Hourly	Chemiluminescence
Nitric acid				
Ammonia	DK03, DK08, DK12, DK31	Oxalic acid impregnated Whatman 41, 58 m3/day	Daily	ISO 11732 CFA (continuously flow analysis) and spectrophotometric detection
Ozone	DK05, DK12, DK31	UV-monitor	Hourly	UV-absorption
Sulphate	DK03, DK05, DK08, DK31	Millipore RAWP 1.2 □m, 58 m3/day	Daily	Ion chromatography
Nitrate				
Ammonium	DK03, DK08, DK12, DK31	Millipore RAWP 1.2 □m, 58 m3/day	Daily	ISO 11732 CFA (continuously flow analysis) and spectrophotometric detection
Sodium	DK03, DK08, DK12, DK31	Millipore RAWP 1.2 □m, 58 m3/day	Daily	Ion chromatography
Calcium	DK03, DK08, DK12, DK31	Millipore RAWP 1.2 □m, 58 m3/day	Daily	Ion chromatography
Magnesium	DK03, DK08, DK12, DK31	Millipore RAWP 1.2 □m, 58 m3/day	Daily	Ion chromatography
Potassium	DK03, DK08, DK12, DK31	Millipore RAWP 1.2 □m, 58 m3/day	Daily	Ion chromatography
Chloride	DK03, DK08, DK12, DK31	Millipore RAWP 1.2 □m, 58 m3/day	Daily	Ion chromatography
PM10	DK05, DK12	Low volume sampling	Daily	Gravimetric
PM2.5	DK12	Low volume sampling	Daily	Gravimetric
Sum of nitric acid and nitrate	DK03, DK08, DK12, DK31	Aerosol filter as for sulphate + KOH-impregnated Whatman 41, 58 m3/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: 2018	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
Precipitation amount	All	Bulk	Weekly	
Precipitation amount, official gauge				
Sulphate	All	Bulk	Weekly	Ion chromatography
Nitrate	All	Bulk	Weekly	Ion chromatography
Ammonium	All	Bulk	Weekly	Ion chromatography
Magnesium	All	Bulk	Weekly	Ion chromatography
Sodium	All	Bulk	Weekly	Ion chromatography
Chloride	All	Bulk	Weekly	Ion chromatography
Calcium	All	Bulk	Weekly	Ion chromatography
Potassium	All	Bulk	Weekly	Ion chromatography
Conductivity	All	Bulk	Weekly	Conductivity meter
pH	All	Bulk	Weekly	pH meter
Air				
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	UV absorption
Sulphate	EE09	Filter pack	Daily	
Nitrate	EE09	Filter pack	Daily	
Ammonium	EE09	Filter pack	Daily	
Sodium	EE09	Filter pack	Daily	
Calcium	EE09	Filter pack	Daily	
Magnesium	EE09	Filter pack	Daily	
Potassium	EE09	Filter pack	Daily	
Chloride	EE09	Filter pack	Daily	
PM_{10}	EE09	High Volume Sampler	Weekly	Gravimetric
$PM_{2.5}$	All		Daily	β-ray absorption
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				

Country: Finland		Main components and ozone - EMEP	Year: 2018	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
Precipitation amount	All	NILU bulk sampler	Weekly	
Precipitation amount, official gauge				
Sulphate	All	NILU bulk sampler	Weekly	Ion chromatography
Nitrate	All	NILU bulk sampler	Weekly	Ion chromatography
Ammonium	All	NILU bulk sampler	Weekly	Ion chromatography
Magnesium	All	NILU bulk sampler	Weekly	Ion chromatography
Sodium	All	NILU bulk sampler	Weekly	Ion chromatography
Chloride	All	NILU bulk sampler	Weekly	Ion chromatography
Calcium	All	NILU bulk sampler	Weekly	Ion chromatography
Potassium	All	NILU bulk sampler	Weekly	Ion chromatography
Conductivity	All	NILU bulk sampler	Weekly	Conductivity meter
pH	All	NILU bulk sampler	Weekly	pH meter
Air				
Sulphur dioxide	All	NaOH-impregnated Whatman 40 filters, 24 m^3/day	Daily/Weekly[1)]	Ion chromatography
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^3/day	Daily/Weekly[1)]	Ion chromatography
Ammonia	All	Oxalic acid-impregnated Whatman 40 filters, 24 m^3/day	Daily/Weekly[1)]	Ion chromatography
Ozone	All	UV-monitor	Hourly	UV-absorption
Sulphate	All	Teflon filter, Millipore Fluoropore 3 µm, 24 m^3/day	Daily/Weekly[1)]	Ion chromatography
Nitrate	All	Teflon filter, Millipore Fluoropore 3 µm, 24 m^3/day	Daily/Weekly[1)]	Ion chromatography
Ammonium	All	Teflon filter, Millipore Fluoropore 3 µm, 24 m^3/day	Daily/Weekly[1)]	Ion chromatography
Sodium	All	Teflon filter, Millipore Fluoropore 3 µm, 24 m^3/day	Daily/Weekly[1)]	Ion chromatography
Calcium	All	Teflon filter, Millipore Fluoropore 3 µm, 24 m^3/day	Daily/Weekly[1)]	Ion chromatography
Magnesium	All	Teflon filter, Millipore Fluoropore 3 µm, 24 m^3/day	Daily/Weekly[1)]	Ion chromatography
Potassium	All	Teflon filter, Millipore Fluoropore 3 µm, 24 m^3/day	Daily/Weekly[1)]	Ion chromatography
Chloride	All	Teflon filter, Millipore Fluoropore 3 µm, 24 m^3/day	Daily/Weekly[1)]	Ion chromatography
PM_{10}	All	Instrumental: beta-ray attenuation	Hourly	Beta-ray attenuation monitor
$PM_{2.5}$	All	Instrumental: beta-ray attenuation	Hourly	Beta-ray attenuation monitor
Sum of nitric acid and nitrate	All	Aerosol filter as for sulphate + NaOH impregnated Whatman 40 filter, 24 m^3/day	Daily/Weekly[1)]	Ion chromatography
Sum of ammonia and ammonium	All	Aerosol filter as for sulphate + oxalic acid impregnated Whatman 40 filter, 24 m^3/day	Daily/Weekly[1)]	Ion chromatography

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

Country: France		Main components and ozone - EMEP	Year: 2018	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
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
Air				
Nitrogen dioxide NO_2/NO/NO_x	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_{10}	FR09, FR10, FR13, FR14, FR15, FR18, FR23, FR24	TEOM FDMS, MP101M	Hourly	TEOM FDMS
$PM_{2.5}$	FR09, FR13, FR15, FR18, FR23, FR24, FR25	TEOM FDMS, MP101M	Hourly	TEOM FDMS
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: 2018	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
Precipitation amount				
Precipitation amount, official gauge				
Sulphate				
Nitrate				
Ammonium				
Magnesium				
Sodium				
Chloride				
Calcium				
Potassium				
Conductivity				
pH				
Air				
Sulphur dioxide	GE01		24h every 3 days	
Nitrogen dioxide				
Nitric acid				
Ammonia	GE01		24h every 3 days	
Ozone				
Sulphate	GE01		24h every 3 days	IC
Nitrate	GE01		24h every 3 days	IC
Ammonium	GE01		24h every 3 days	Spectrophotometry
Sodium				
Calcium				
Magnesium				
Potassium				
Chloride	GE01		24h every 3 days	IC
PM_{10}				
$PM_{2.5}$				
PM_1				
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: 2018	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
Precipitation amount	DE01, DE02, DE03, DE07, DE08, DE09	Daily wet only at DE02, DE03 and DE07, weekly wet-only at the other sites	Daily / weekly	Gravimetric by weight
Precipitation amount, official gauge				
Sulphate	DE01, DE02, DE03, 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, 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, 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, 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, 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, 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, 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, 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, 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, DE07, DE08, DE09	Daily wet only at DE02, DE03 and DE07, weekly wet-only at the other sites	Daily / weekly	pH meter
Air				
Sulphur dioxide	DE01, DE02, DE03, DE07, DE08, DE09	Monitor (trace level instrument)	Half hourly	UV fluorescence
Nitrogen dioxide	DE01, DE02, DE03, DE07, DE08, DE09	Monitor	Daily	chemiluminescence_ photolytic
Nitric acid	DE02, DE03, DE07	KOH-impregnated Whatman 40 filter, 22 m^3/day (Filterpack)	Daily	Ion chromatography
Ammonia	DE02, DE03, DE07	Oxalic acid-impregnated Whatman 40 filter, 22 m^3/day (Filterpack)	Daily	Ion chromatography
Ammonia	DE01, DE02, DE03, DE07, DE08, DE09	Low volume denuder	Weekly	Spectrophotometry/FIA
Ozone	DE01, DE02, DE03, DE07, DE08, DE09	UV-monitor	Half hourly	UV-absorption
Sulphate	DE02, DE03, DE07	Teflon filter, 22 m^3/day (Filterpack)	Daily	Ion chromatography
Nitrate	DE02, DE03, DE07	Teflon filter, 22 m^3/day (Filterpack)	Daily	Ion chromatography
Ammonium	DE02, DE03, DE07	Teflon filter, 22 m^3/day (Filterpack)	Daily	Ion chromatography
Sodium	DE02, DE03, DE07	Teflon filter, 22 m^3/day (Filterpack)	Daily	Ion chromatography
Calcium	DE02, DE03, DE07	Teflon filter, 22 m^3/day (Filterpack)	Daily	Ion chromatography
Magnesium	DE02, DE03, DE07	Teflon filter, 22 m^3/day (Filterpack)	Daily	Ion chromatography
Potassium	DE02, DE03, DE07	Teflon filter, 22 m^3/day (Filterpack)	Daily	Ion chromatography
Chloride	DE02, DE03, DE07	Teflon filter, 22 m^3/day (Filterpack)	Daily	Ion chromatography
PM_{10}	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
$PM_{2.5}$	DE02, DE03, DE07, DE08	Digitel High Volume Sampler DHA 80, glass fibre filters ø15 cm, Machery Nagel MN 85/90	Daily	Gravimetric by weight

Country: Germany		Main components and ozone - EMEP	Year: 2018	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
PM_1	DE02	Digitel High Volume Sampler DHA 80, glass fibre filters ø15 cm, Machery Nagel MN 85/90	Daily	Gravimetric by weight
Sum of nitric acid and nitrate	DE02, DE03, DE07	Filter pack method	Daily	Ion chromatography
Sum of ammonia and ammonium	DE02, DE03, DE07	Filter pack method	Daily	Ion chromatography
Sulphate in $PM_{2.5}$	DE01, DE02, DE03, DE07, DE08, DE09	Leckel Low Volume Sampler, 2.3 m^3/day	Every 6th day	Ion chromatography
Nitrate in $PM_{2.5}$	DE01, DE02, DE03, DE07, DE08, DE09	Leckel Low Volume Sampler, 2.3 m^3/day	Every 6th day	Ion chromatography
Ammonium in $PM_{2.5}$	DE01, DE02, DE03, DE07, DE08, DE09	Leckel Low Volume Sampler, 2.3 m^3/day	Every 6th day	Ion chromatography
Sodium in $PM_{2.5}$	DE01, DE02, DE03, DE07, DE08, DE09	Leckel Low Volume Sampler, 2.3 m^3/day	Every 6th day	Ion chromatography
Calcium in $PM_{2.5}$	DE01, DE02, DE03, DE07, DE08, DE09	Leckel Low Volume Sampler, 2.3 m^3/day	Every 6th day	Ion chromatography
Magnesium in $PM_{2.5}$	DE01, DE02, DE03, DE07, DE08, DE09	Leckel Low Volume Sampler, 2.3 m^3/day	Every 6th day	Ion chromatography
Potassium in $PM_{2.5}$	DE01, DE02, DE03, DE07, DE08, DE09	Leckel Low Volume Sampler, 2.3 m^3/day	Every 6th day	Ion chromatography
Chloride in $PM_{2.5}$	DE01, DE02, DE03, DE07, DE08, DE09	Leckel Low Volume Sampler, 2.3 m^3/day	Every 6th day	Ion chromatography

Country: Greece		Main components and ozone - EMEP	Year: 2018	
	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	Instrumental: UV-monitor	Hourly	UV-absorption
Sulphate				
Nitrate				
Ammonium				
Sodium				
Calcium				
Magnesium				
Potassium				
Chloride				
PM_{10}	GR01	Instrumental: beta gauge	Hourly	Beta radiation attenuation
$PM_{2.5}$	GR01	Instrumental: beta gauge	Hourly	Beta radiation attenuation
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				

Country: **Hungary**		Main components and ozone - EMEP	Year: **2018**	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
Precipitation amount	HU02	Wet-only	Daily	
Precipitation amount, official gauge	HU02	Wet-only	Daily	
Sulphate	HU02	Wet-only	Daily	Ion chromatography
Nitrate	HU02	Wet-only	Daily	Ion chromatography
Ammonium	HU02	Wet-only	Daily	Spectrophotometric, Indophenol method
Magnesium	HU02	Wet-only	Daily	Atomic absorption method (flame)
Sodium	HU02	Wet-only	Daily	Atomic absorption method (flame)
Chloride	HU02	Wet-only	Daily	Ion chromatography
Calcium	HU02	Wet-only	Daily	Atomic absorption method (flame)
Potassium	HU02	Wet-only	Daily	Atomic absorption method (flame)
Conductivity	HU02	Wet-only	Daily	Conductivity meter
pH	HU02	Wet-only	Daily	pH meter
Air				
Sulphur dioxide	HU02	KOH-impregnated Whatman 40 filter, ~21 m^3/day	Daily	Ion chromatography
Nitrogen dioxide	HU02	Iodide method (impregnated glass sinter), ~0.8 m^3/day	Daily	Spectrophotometric, Griess method
Nitric acid	HU02	KOH-impregnated Whatman 40 filter, ~21 m^3/day	Daily	Ion chromatography
Ammonia	HU02	Citric-acid impregnated Whatman 40 filter, ~21 m^3/day	Daily	Spectrophotometric, Indophenol method
Ozone	HU02	UV-monitor	Hourly	UV-absorption
Sulphate	HU02	Teflon filter, Millipore Fluoropore, 1 μm, ~21 m^3/day	Daily	Ion chromatography
Nitrate	HU02	Teflon filter, Millipore Fluoropore, 1 μm, ~21 m^3/day	Daily	Ion chromatography
Ammonium	HU02	Teflon filter, Millipore Fluoropore, 1 μm, ~21 m^3/day	Daily	Spectrophotometric, Indophenol method
Sodium	HU02	Teflon filter, Millipore Fluoropore, 1 μm, ~21 m^3/day	Daily	Atomic absorption method (flame)
Calcium	HU02	Teflon filter, Millipore Fluoropore, 1 μm, ~21 m^3/day	Daily	Atomic absorption method (flame)
Magnesium	HU02	Teflon filter, Millipore Fluoropore, 1 μm, ~21 m^3/day	Daily	Atomic absorption method (flame)
Potassium	HU02	Teflon filter, Millipore Fluoropore, 1 μm, ~21 m^3/day	Daily	Atomic absorption method (flame)
Chloride				
PM_{10} mass	HU02	PM_{10}-monitor	Hourly	Beta-ray-absorption
$PM_{2.5}$ mass	HU02	DHA-80 high volume sampler	Daily	Gravimetry
PM_1				
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				

Country: Iceland		Main components and ozone - EMEP	Year: 2018	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
Precipitation amount	IS02	NILU bulk sampler	Daily	By volume
Precipitation amount, official gauge				
Sulphate	IS02	NILU bulk sampler	Daily	ICP-OES
Nitrate	IS02	NILU bulk sampler	Daily	Spectrophotometry by FIA
Ammonium				
Magnesium	IS02	NILU bulk sampler	Daily	ICP-OES
Sodium	IS02	NILU bulk sampler	Daily	ICP-OES
Chloride	IS02	NILU bulk sampler	Daily	ICP-OES
Calcium	IS02	NILU bulk sampler	Daily	ICP-OES
Potassium	IS02	NILU bulk sampler	Daily	ICP-OES
Conductivity	IS02	NILU bulk sampler	Daily	Conductivity meter
pH	IS02	NILU bulk sampler	Daily	pH meter
Air				
Sulphur dioxide	IS02	KOH impregnated Whatman 40 filter, 30 m^3/day	Daily	ICP-OES
Nitrogen dioxide				
Nitric acid				
Ammonia				
Ozone				
Sulphate	IS02	Whatman 40 filter, 30 m^3/day, prefilter for aerosol	Daily	ICP-OES
Nitrate				
Ammonium				
Sodium	IS02	Whatman 40 filter, 30 m^3/day, prefilter for aerosol	Daily	ICP-OES
Calcium	IS02	Whatman 40 filter, 30 m^3/day, prefilter for aerosol	Daily	ICP-OES
Magnesium	IS02	Whatman 40 filter, 30 m^3/day, prefilter for aerosol	Daily	ICP-OES
Potassium	IS02	Whatman 40 filter, 30 m^3/day, prefilter for aerosol	Daily	ICP-OES
Chloride	IS02	Whatman 40 filter, 30 m^3/day, prefilter for aerosol	Daily	ICP-OES
PM_{10}				
$PM_{2.5}$				
PM_1				
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				

Country: Ireland: IE01 (lab.: Met Éireann)		Main components and ozone - EMEP	Year: 2018	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
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
Air				
Sulphur dioxide	IE01	KOH-impregnated Whatman 40 filter, 20-25 m^3/day	Daily	Ion chromatography
Nitrogen dioxide	IE01	NaI method (glass sinter) 0.7 m^3/day	Daily	Spectrophotometric, EMEP Manual 4.11
Nitric acid				
Ammonia				
Ozone				
Sulphate	IE01	Whatman 40 filter, 47 mm diameter, 20-25 m^3/day	Daily	Ion chromatography
Nitrate				
Ammonium				
Sodium	IE01	Whatman 40 filter, 47 mm diameter, 20-25 m^3/day	Daily	Ion chromatography
Calcium	IE01	Whatman 40 filter, 47 mm diameter, 20-25 m^3/day	Daily	Ion chromatography
Magnesium	IE01	Whatman 40 filter, 47 mm diameter, 20-25 m^3/day	Daily	Ion chromatography
Potassium	IE01	Whatman 40 filter, 47 mm diameter, 20-25 m^3/day	Daily	Ion chromatography
Chloride				
PM_{10}				
$PM_{2.5}$				
Sum of nitric acid and nitrate	IE01	Aerosol filter as for sulphate + KOH impregnated filter as for SO_2, 20-25 m^3/day	Daily	Ion chromatography
Sum of ammonia and ammonium	IE01	Aerosol filter as for sulphate + citric acid impregnated filter, 20-25 m^3/day	Daily	Ion chromatography

Country: Italy, IT04 (lab.: JRC)		Main components and ozone - EMEP	Year: 2018	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
Precipitation amount	IT04	Wet-only	Daily	Sampler gauge
Precipitation amount, official gauge				
Sulphate	IT04	Wet-only	Daily	Ion chromatography
Nitrate	IT04	Wet-only	Daily	Ion chromatography
Ammonium	IT04	Wet-only	Daily	Ion chromatography
Magnesium	IT04	Wet-only	Daily	Ion chromatography
Sodium	IT04	Wet-only	Daily	Ion chromatography
Chloride	IT04	Wet-only	Daily	Ion chromatography
Calcium	IT04	Wet-only	Daily	Ion chromatography
Potassium	IT04	Wet-only	Daily	Ion chromatography
Conductivity	IT04	Wet-only	Daily	Conductivity meter
pH	IT04	Wet-only	Daily	pH meter
Air				
Sulphur dioxide	IT04	Instrumental: UV-fluorescence	Daily	UV-fluorescence
Nitrogen dioxide	IT04	Instrumental: Chemiluminescence	Daily	Chemiluminescence
Nitric acid				
Ammonia				
Ozone	IT04	UV-monitor	Hourly	UV-absorption
Sulphate	IT04	PALL Life Sciences QFF (type TISSUEQUARTZ 2500QAT-UP), 24 m^3/day	Daily	Ion chromatography
Nitrate	IT04	PALL Life Sciences QFF (type TISSUEQUARTZ 2500QAT-UP), 24 m^3/day	Daily	Ion chromatography
Ammonium	IT04	PALL Life Sciences QFF (type TISSUEQUARTZ 2500QAT-UP), 24 m^3/day	Daily	Ion chromatography
Sodium	IT04	PALL Life Sciences QFF (type TISSUEQUARTZ 2500QAT-UP), 24 m^3/day	Daily	Ion chromatography
Calcium	IT04	PALL Life Sciences QFF (type TISSUEQUARTZ 2500QAT-UP), 24 m^3/day	Daily	Ion chromatography
Magnesium	IT04	PALL Life Sciences QFF (type TISSUEQUARTZ 2500QAT-UP), 24 m^3/day	Daily	Ion chromatography
Potassium	IT04	PALL Life Sciences QFF (type TISSUEQUARTZ 2500QAT-UP), 24 m^3/day	Daily	Ion chromatography
Chloride	IT04	PALL Life Sciences QFF (type TISSUEQUARTZ 2500QAT-UP), 24 m^3/day	Daily	Ion chromatography
PM_{10}				
$PM_{2.5}$	IT04	PALL Life Sciences QFF (type TISSUEQUARTZ 2500QAT-UP), 24 m^3/day	Daily	Weighing at 20% RH
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				
EC/OC	IT04	AirMonitors Denuder, PALL Life Sciences QFF (type TISSUEQUARTZ 2500QAT-UP), 24 m^3/day	Daily	Thermo optical, EUSAAR 2 protocol

Country: Italy, IT09/IT14 (lab: National Research Council of Italy, CNR, Institute for Atmospheric Science and Climate)		Main components and ozone - EMEP	Year: 2018	
	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	IT0009R	Instrumental: UV-fluorescence	Hourly	UV-fluorescence
Nitrogen dioxide				
Nitric acid				
Ammonia				
Ozone	all	UV-monitor	Hourly	UV-absorption
Sulphate				
Nitrate				
Ammonium				
Sodium				
Calcium				
Magnesium				
Potassium				
Chloride				
PM_{10}				
$PM_{2.5}$				
PM_{1}				
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				

Country: Italy, IT19 (lab: Arpa Umbria)		Main components and ozone - EMEP	Year: 2018	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
Precipitation amount				
Precipitation amount, official gauge				
Sulphate				
Nitrate				
Ammonium				
Magnesium				
Sodium				
Chloride				
Calcium				
Potassium				
Conductivity				
pH				
Acidity				
Air				
Sulphur dioxide				
Nitrogen dioxide	IT0019R	Instrumental: Chemiluminescence	Hourly	Chemiluminescence
Nitric acid				
Ammonia				
Ozone	IT0019R	Instrumental: UV-monitor	Hourly	UV-absorption
Sulphate	IT0019R	Low volume sampler Quartz Filter	Daily	Ion chromatography
Nitrate	IT0019R	Low volume sampler Quartz Filter	Daily	Ion chromatography
Ammonium	IT0019R	Low volume sampler Quartz Filter	Daily	Ion chromatography
Sodium	IT0019R	Low volume sampler Quartz Filter	Daily	Ion chromatography
Calcium	IT0019R	Low volume sampler Quartz Filter	Daily	Ion chromatography
Magnesium	IT0019R	Low volume sampler Quartz Filter	Daily	Ion chromatography
Potassium	IT0019R	Low volume sampler Quartz Filter	Daily	Ion chromatography
Chloride	IT0019R	Low volume sampler Quartz Filter	Daily	Ion chromatography
PM_{10}	IT0019R	Low volume sampler Quartz Filter	Daily	Beta radiation attenuation
$PM_{2.5}$	IT0019R	Low volume sampler Quartz Filter	Daily	Beta radiation attenuation
PM_1				
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				
EC/OC PM_{10}	IT0019R	Low volume sampler Quartz Filter	Daily	Thermal-optical, EUSAAR 2 protocol

Country: Kazakhstan		Main components and ozone - EMEP	Year: 2018	
	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				
Nitrogen dioxide				
Nitric acid				
Ammonia				
Ozone				
Sulphate PM_{10}	KZ01		Daily	IC
Nitrate PM_{10}	KZ01		Daily	IC
Ammonium				
Sodium				
Calcium				
Magnesium				
Potassium				
Chloride PM_{10}	KZ01		Daily	IC
PM_{10}				
$PM_{2.5}$				
PM_1				
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				

Country: Latvia		Main components and ozone - EMEP	Year: 2018	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
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
Air				
Sulphur dioxide	LV10	KOH-impregnated Whatman 47 filter, 16-23 m^3/day	Daily	Ion chromatography
Nitrogen dioxide	LV10	NaI-impregnated glass sinters, 03-0.7 m^3/day	Daily	Spectrophotometric, Griess method
Nitric acid	LV10	KOH-impregnated Whatman 47 filter, 16-23 m^3/day	Daily	Ion chromatography
Ammonia	LV10	Oxalic acid impregnated filter, 16-23 m^3/day	Daily	Spectrophotometric, Indophenol method
Sulphate	LV10	Whatman 47 filter, 16-23 m^3/day	Daily	Ion chromatography
Nitrate	LV10	Whatman 47 filter, 16-23 m^3/day	Daily	Ion chromatography
Ammonium	LV10	Whatman 47 filter, 16-23 m^3/day	Daily	Spectrophotometric, Indophenol method
Sulphate $PM_{2.5}$	LV10	Teflon filter, 386.4 m^3/weekly	Weekly	Ion chromatography
Nitrate $PM_{2.5}$	LV10	Teflon filter, 386.4 m^3/weekly	Weekly	Ion chromatography
Ammonium $PM_{2.5}$	LV10	Teflon filter, 386.4 m^3/weekly	Weekly	Ion chromatography
Sodium $PM_{2.5}$	LV10	Teflon filter, 386.4 m^3/weekly	Weekly	Ion chromatography
Calcium $PM_{2.5}$	LV10	Teflon filter, 386.4 m^3/weekly	Weekly	Ion chromatography
Magnesium $PM_{2.5}$	LV10	Teflon filter, 386.4 m^3/weekly	Weekly	Ion chromatography
Potassium $PM_{2.5}$	LV10	Teflon filter, 386.4 m^3/weekly	Weekly	Ion chromatography
Chloride $PM_{2.5}$	LV10	Teflon filter, 386.4 m^3/weekly	Weekly	Ion chromatography
PM_{10}	LV10	Low volume sampler, 2.3 m^3/h, Teflon filter, 47 mm	Daily	Beta absorption
$PM_{2.5}$	LV10	Low volume sampler, 2.3 m^3/h, Teflon filter, 47 mm	Daily	Beta absorption
PM_1				
Sum of nitric acid and nitrate	LV10	KOH-impregnated Whatman 47 filter + Whatman 47 filter, 16-23 m^3/day	Daily	Ion chromatography
Sum of ammonia and ammonium	LV10	Oxalic acid impregnated filter + Whatman 47 filter, 16-23 m^3/day	Daily	Spectrophotometric, Indophenol method

Country: Lithuania		Main components and ozone - EMEP	Year: 2018	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
Precipitation amount	LT15	Wet-only	Daily	By weight
Precipitation amount, official gauge				
Sulphate	LT15	Wet-only	Daily	Ion chromatography
Nitrate	LT15	Wet-only	Daily	Ion chromatography
Ammonium	LT15	Wet-only	Daily	Spectrophotometric, Indophenol method
Magnesium				
Sodium	LT15	Wet-only	Daily	Atomic emission method
Chloride	LT15	Wet-only	Daily	Ion chromatography
Calcium	LT15	Wet-only	Daily	Atomic absorption method
Potassium	LT15	Wet-only	Daily	Atomic emission method
Conductivity	LT15	Wet-only	Daily	Conductivity meter
pH	LT15	Wet-only	Daily	pH meter
Air				
Sulphur dioxide	LT15	KOH-impregnated Whatman 40 filter, 20 m^3/day	Daily	Ion chromatography
Nitrogen dioxide	LT15	NaI-impregnated glass sinters, 0.7 m^3/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^3/day (Filterpack)	Daily	Ion chromatography
Nitrate				
Ammonium				
Sodium				
Calcium				
Magnesium				
Potassium				
Chloride				
PM_{10}				
$PM_{2.5}$				
PM_1				
Sum of nitric acid and nitrate	LT15	Aerosol filter as for sulphate + KOH impregnated Whatman 40 filter as for SO_2, 20 m^3/day	Daily	Ion chromatography
Sum of ammonia and ammonium	LT15	Aerosol filter as for sulphate + oxalic acid impregnated Whatman 40 filter, 20 m^3/day	Daily	Spectrophotometric, Indophenol method

Country: Macedonia		Main components and ozone - EMEP	Year: 2018	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
Precipitation amount				
Precipitation amount, official gauge				
Sulphate				
Nitrate				
Ammonium				
Magnesium				
Sodium				
Chloride				
Calcium				
Potassium				
Conductivity				
pH				
Air				
Sulphur dioxide	MK07	Instrumental: UV-fluorescence	Hourly	UV-fluorescence
Nitrogen dioxide	MK07	Instrumental: Chemiluminescence	Hourly	Chemiluminescence
Nitric acid				
Ammonia				
Ozone	MK07	Instrumental: UV-Monitor	Hourly	UV-absorption
Sulphate				
Nitrate				
Ammonium				
Sodium				
Calcium				
Magnesium				
Potassium				
Chloride				
PM_{10}	MK07	Instrumental: beta absorption	Hourly	Beta absorption
$PM_{2.5}$				
PM_1				
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				

Country: Malta		Main components and ozone - EMEP	Year: 2018	
	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	MT0001R	Instrumental: UV-fluorescence monitor	Hourly	UV-fluorescence
Nitrogen dioxide	MT0001R	Instrumental: Chemiluminescence monitor	Hourly	Chemilumiescence (molybdenum converter)
Nitrogen monoxide	MT0001R	Instrumental: Chemiluminescence monitor	Hourly	Chemilumiescence (molybdenum converter)
Nitric acid				
Ammonia				
Ozone				
Sulphate				
Nitrate				
Ammonium				
Sodium				
Calcium				
Magnesium				
Potassium				
Chloride				
PM_{10}				
$PM_{2.5}$				
PM_{1}				
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				

Country: Moldova		Main components and ozone - EMEP	Year: 2018	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
Precipitation amount	MD13	NILU bulk sampler	Daily	By volume
Precipitation amount, official gauge				
Sulphate	MD13	NILU bulk sampler	Daily	Ion chromatography
Nitrate	MD13	NILU bulk sampler	Daily	Ion chromatography
Ammonium	MD13	NILU bulk sampler	Daily	Ion chromatography
Magnesium	MD13	NILU bulk sampler	Daily	Ion chromatography
Sodium	MD13	NILU bulk sampler	Daily	Ion chromatography
Chloride	MD13	NILU bulk sampler	Daily	Ion chromatography
Calcium	MD13	NILU bulk sampler	Daily	Ion chromatography
Potassium	MD13	NILU bulk sampler	Daily	Ion chromatography
Conductivity	MD13	NILU bulk sampler	Daily	Conductivity meter
pH	MD13	NILU bulk sampler	Daily	pH meter; potentiometric, glass electrode
Air				
Sulphur dioxide	MD13	KOH-impregnated Whatman 40 filter 25 m^3/day	Daily	Ion chromatography
Nitrogen dioxide				
Nitric acid				
Ammonia				
Ozone				
Sulphate	MD13	Teflon filter, Gelman Zefluor 2 µm, 25 m^3/day	Daily	Ion chromatography
Nitrate	MD13	Teflon filter, Gelman Zefluor 2 µm, 25 m^3/day	Daily	Ion chromatography
Ammonium	MD13	Teflon filter, Gelman Zefluor 2 µm, 25 m^3/day	Daily	Ion chromatography
Sodium	MD13	Teflon filter, Gelman Zefluor 2 µm, 25 m^3/day	Daily	Ion chromatography
Calcium	MD13	Teflon filter, Gelman Zefluor 2 µm, 25 m^3/day	Daily	Ion chromatography
Magnesium	MD13	Teflon filter, Gelman Zefluor 2 µm, 25 m^3/day	Daily	Ion chromatography
Potassium	MD13	Teflon filter, Gelman Zefluor 2 µm, 25 m^3/day	Daily	Ion chromatography
Chloride	MD13	Teflon filter, Gelman Zefluor 2 µm, 25 m^3/day	Daily	Ion chromatography
PM_{10}	MD13	Teflon filter, Gelman Zefluor 2 µm, 25 m^3/day	Daily	Ion chromatography
$PM_{2.5}$				
PM_1				
Sum of nitric acid and nitrate	MD13	Aerosol filter as for sulphate + KOH impregnated filter as for SO_2, 25 m^3/day	Daily	Ion chromatography
Sum of ammonia and ammonium	MD13	Aerosol filter as for sulphate + oxalic acid impregnated filter, 25 m^3/day	Daily	Spectrophotometric, Indophenol method and IC
EC/OC				

Country: Montenegro		Main components and ozone - EMEP	Year: 2018	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
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
Air				
Sulphur dioxide	ME08	Absorbing solution	Daily	Spectrophotometry
Nitrogen dioxide	ME08	Absorbing solution	Daily	Spectrophotometry
Nitric acid				
Ammonia				
Ozone				
Sulphate				
Nitrate				
Ammonium				
Sodium				
Calcium				
Magnesium				
Potassium				
Chloride				
PM_{10}				
$PM_{2.5}$				
PM_{1}				
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				

Country: The Netherlands		Main components and ozone - EMEP	Year: 2018	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
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
Air				
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	miniDOAS: open path UV differential absorption, fingerprint 205-230 nm	Hourly	DOAS
Ozone	NL07,NL09,NL10, NL91,NL644R	UV-monitor	Hourly	UV-absorption
Sulphate	NL10,NL91	Whatman QMA filter 47 mm, 55.2 m^3/day	Daily	Ion chromatography
Nitrate	NL10,NL91	Whatman QMA filter 47 mm, 55.2 m^3/day	Daily	Ion chromatography
Ammonium	NL10,NL91	Whatman QMA filter 47 mm, 55.2 m^3/day	Daily	CFA[2]
Chloride	NL10,NL91	Whatman QMA filter 47 mm, 55.2 m^3/day	Daily	Ion chromatography
Sodium	NL08, NL644R	Teflon filter, Pall Zefluor 2 µm, 47 mm diameter, 55.2 m^3/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^3/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^3/day	NL08L(Every other day), NL644R(every 4th day)	HR-ICP/MS
Potassium	NL091	Wet-only	Daily/4-weekly	HR-ICP/MS
PM_{10}	NL07,NL09,NL10,NL91,NL644R	Instrumental: beta absorption	Hourly	Beta absorption
$PM_{2.5}$	NL09,NL10,,NL91.NL644R	Instrumental: beta absorption	Hourly	Beta absorption
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				

Country: Norway		Main components and ozone - EMEP	Year: 2018	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
Precipitation amount	All	NILU bulk sampler	Daily	By volume
Precipitation amount, official gauge				
Sulphate	All	NILU bulk sampler	Daily	Ion chromatography
Nitrate	All	NILU bulk sampler	Daily	Ion chromatography
Ammonium	All	NILU bulk sampler	Daily	Ion chromatography
Magnesium	All	NILU bulk sampler	Daily	Ion chromatography
Sodium	All	NILU bulk sampler	Daily	Ion chromatography
Chloride	All	NILU bulk sampler	Daily	Ion chromatography
Calcium	All	NILU bulk sampler	Daily	Ion chromatography
Potassium	All	NILU bulk sampler	Daily	Ion chromatography
Conductivity	All	NILU bulk sampler	Daily	Conductivity meter
pH	All	NILU bulk sampler	Daily	pH meter; potentiometric, glass electrode
Air				
Sulphur dioxide	All	KOH-impregnated Whatman 40 filter 25 m^3/day	Daily	Ion chromatography
Nitrogen dioxide	All	NaI-impregnated glass sinters, 0.7 m^3/day	Daily	Spectrophotometric, Griess method
Nitric acid				
Ammonia				
Ozone	All	UV-monitor	Hourly	UV-absorption
Sulphate	All	Teflon filter, Gelman Zefluor 2 µm, 25 m^3/day	Daily	Ion chromatography
Nitrate	All	Teflon filter, Gelman Zefluor 2 µm, 25 m^3/day	Daily	Ion chromatography
Ammonium	All	Teflon filter, Gelman Zefluor 2 µm, 25 m^3/day	Daily	Ion chromatography
Sodium	All	Teflon filter, Gelman Zefluor 2 µm, 25 m^3/day	Daily	Ion chromatography
Calcium	All	Teflon filter, Gelman Zefluor 2 µm, 25 m^3/day	Daily	Ion chromatography
Magnesium	All	Teflon filter, Gelman Zefluor 2 µm, 25 m^3/day	Daily	Ion chromatography
Potassium	All	Teflon filter, Gelman Zefluor 2 µm, 25 m^3/day	Daily	Ion chromatography
Chloride	All	Teflon filter, Gelman Zefluor 2 µm, 25 m^3/day	Daily	Ion chromatography
PM_{10}	NO01	Kleinfiltergerät Whatman QM-A 47 mm	6+1	by weight, RH 50%
$PM_{2.5}$	NO01	Kleinfiltergerät Whatman QM-A 47 mm	6+1	by weight, RH 50%
PM_1	NO01	Kleinfiltergerät Whatman QM-A 47 mm	6+1	by weight, RH 50%
Sum of nitric acid and nitrate	All	Aerosol filter as for sulphate + KOH impregnated filter as for SO_2, 25 m^3/day	Daily	Ion chromatography
Sum of ammonia and ammonium	All	Aerosol filter as for sulphate + oxalic acid impregnated filter, 25 m^3/day	Daily	Spectrophotometric, Indophenol method and IC
EC/OC	NO01	Kleinfiltergerät Whatman QM-A 47 mm, 55 m^3/day	6+1	Thermal optical transmission

Country: Poland: PL02, PL03, PL04 (lab. IMWM-NRI)		Main components and ozone - EMEP	Year: 2018	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
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
Air				
Sulphur dioxide	All	KOH-impregnated Whatman 40 filter, 3.5-4.2 m^3/day	Daily	Spectrophotometric,Thorin
Nitrogen dioxide	All	Absorbing solution TGS, 0.7 m^3/day	Daily	Spectrophotometric, Griess method
Nitric acid				
Ammonia				
Ozone	All	UV-monitor	Hourly	UV-absorption
Sulphate	All	Whatman 40 filter, 3.5-4.2 m^3/day	Daily	Spectrophotometric,Thorin
Nitrate	All	Whatman 40 filter, 3.5-4.2 m^3/day	Daily	Spectrophotometric, Griess after hydrazine reduction
Ammonium	All	Whatman 40 filter, 3.5-4.2 m^3/day	Daily	Spectrophotometric, Chloramin T
Sodium				
Calcium				
Magnesium				
Potassium				
Chloride				
PM_{10}				
$PM_{2.5}$				
Sum of nitric acid and nitrate	All	NaF impregnated Whatman 40 filter, 3.5-4.2 m^3/day	Daily	Spectrophotometric, Griess after hydrazine reduction
Sum of ammonia and ammonium	All	Oxalic acid impregnated Whatman 40 filter, 3.5-4.2 m^3/day	Daily	Spectrophotometric, Chloramin T

Country: Poland: PL05 (lab. IEP-NRI)		Main components and ozone - EMEP	Year: 2018	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
Precipitation amount	PL05	Wet-only	Daily	By weight
Precipitation amount, official gauge	PL05	Total	Daily	Standard rain gauge
Sulphate	PL05	Wet-only	Daily	Ion chromatography
Nitrate	PL05	Wet-only	Daily	Ion chromatography
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	Ion chromatography
Calcium	PL05	Wet-only	Daily	Plasma emission spectrometry
Potassium	PL05	Wet-only	Daily	Plasma emission spectrometry
Conductivity	PL05	Wet-only	Daily	Conductivity meter
pH	PL05	Wet-only	Daily	pH meter
Air				
Sulphur dioxide	PL05	Instrumental: UV-fluorescence	Hourly	UV-fluorescence
Nitrogen dioxide	PL05	Instrumental: Chemiluminescence	Hourly	Chemiluminescence
Nitric acid				
Ammonia				
Ozone	PL05	UV-monitor	Hourly	UV-absorption
Sulphate	PL05	Teflon filter Millipore Fluoropore 3 µm, 16 m^3/day	Daily	Capillary Electrophoresis
Sulphate	PL05	QMA Whatman filter, 750 m^3/day (PM2,5)	Daily/Weekly (anal.)	Ion chromatography
Nitrate	PL05	QMA Whatman filter, 750 m^3/day (PM2,5)	Daily/Weekly (anal.)	Ion chromatography
Ammonium	PL05	QMA Whatman filter, 750 m^3/day (PM2,5)	Daily/Weekly (anal.)	Ion chromatography
Sodium	PL05	QMA Whatman filter, 750 m^3/day (PM2,5)	Daily/Weekly (anal.)	Plasma emission spectrometry
Calcium	PL05	QMA Whatman filter, 750 m^3/day (PM2,5)	Daily/Weekly (anal.)	Plasma emission spectrometry
Magnesium	PL05	QMA Whatman filter, 750 m^3/day (PM2,5)	Daily/Weekly (anal.)	Plasma emission spectrometry
Potassium	PL05	QMA Whatman filter, 750 m^3/day (PM2,5)	Daily/Weekly (anal.)	Plasma emission spectrometry
Chloride	PL05	QMA Whatman filter, 750 m^3/day (PM2,5)	Daily/Weekly (anal.)	Ion chromatography
EC/OC	PL05	QMA Whatman filter, 750 m^3/day (PM2,5)	Daily	Thermo optical
PM_{10}	PL05	High Volume Sampler (750 m^3/day)	Daily	By weight
$PM_{2.5}$	PL05	High Volume Sampler (750 m^3/day)	Daily	By weight
Sum of nitric acid and nitrate	PL05	Aerosol Teflon filter Millipore Fluoropore 3 µm+ KOH impregnated Whatman 40 filter, 16 m^3/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^3/day	Daily	Spectrophotometric, Indophenol method

Country: Russian Federation		Main components and ozone - EMEP	Year: 2018	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
Precipitation amount	All	Bulk	Daily	
Precipitation amount, official gauge				
Sulphate	All	Bulk	Daily	Ion chromatography
Nitrate	All	Bulk	Daily	Ion chromatography
Ammonium	All	Bulk	Daily	Ion chromatography
Magnesium	All	Bulk	Daily	Ion chromatography
Sodium	All	Bulk	Daily	Ion chromatography
Chloride	All	Bulk	Daily	Ion chromatography
Calcium	All	Bulk	Daily	Ion chromatography
Potassium	All	Bulk	Daily	Ion chromatography
Conductivity	All	Bulk	Daily	Conductivity meter
pH	All	Bulk	Daily	pH meter
Air				
Sulphur dioxide	RU18	NaOH-impregnated Whatman 40 filter, 20-25 m^3/day	Daily	Ion chromatography
Sulphur dioxide	RU20	NaOH-impregnated Whatman 40 filter, 20-25 m^3/day	Weekly	Ion chromatography
Nitrogen dioxide				
Nitric acid				
Ammonia				
Ozone				
Sulphate	RU18	Whatman 40 filter, 20-25 m^3/day	Daily	Ion chromatography
Sulphate	RU20	Whatman 40 filter, 20-25 m^3/day	Weekly	Ion chromatography
Nitrate	RU18	Whatman 40 filter, 20-25 m^3/day	Daily	Ion chromatography
Nitrate	RU20	Whatman 40 filter, 20-25 m^3/day	Weekly	Ion chromatography
Ammonium	RU18	Whatman 40 filter, 20-25 m^3/day	Daily	Ion chromatography
Ammonium	RU20	Whatman 40 filter, 20-25 m^3/day	Weekly	Ion chromatography
Sodium				
Calcium				
Magnesium				
Potassium				
Chloride				
PM_{10}				
$PM_{2.5}$				
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				

Country: Serbia		Main components and ozone - EMEP	Year: 2018	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
Precipitation amount				
Precipitation amount, official gauge	RS05	Meteorological rain gauge	Daily	
Sulphate	RS05	Bulk	Daily	Ion chromatography
Nitrate	RS05	Bulk	Daily	Ion chromatography
Ammonium	RS05	Bulk	Daily	Ion chromatography
Magnesium	RS05	Bulk	Daily	Ion chromatography
Sodium	RS05	Bulk	Daily	Ion chromatography
Chloride	RS05	Bulk	Daily	Ion chromatography
Calcium	RS05	Bulk	Daily	Ion chromatography
Potassium	RS05	Bulk	Daily	Ion chromatography
Conductivity	RS05	Bulk	Daily	Conductivity meter
pH	RS05	Bulk	Daily	pH meter
Air				
Sulphur dioxide	RS05	Absorbing solution H_2O_2, 1.5-2.5 m^3/day	Daily	Thorin Spectrophotometric method
Nitrogen dioxide	RS05	Absorbing solution NaOH, 1.5-2.5 m^3/day	Daily	Modified Griess Saltzman method
Nitric acid				
Ammonia				
Ozone	RS05	UV monitor	Hourly	UV-absorption
Sulphate				
Nitrate				
Ammonium				
Sodium				
Calcium				
Magnesium				
Potassium				
Chloride				
PM_{10}	RS05	Low Volume Sampler, 2.3 m^3/day	Daily	Gravimetric method
$PM_{2.5}$				
Sum of nitric acid and nitrate				
Sum of ammonia and ammonium				

Country: Slovakia		Main components and ozone – EMEP	Year: 2018	
	Station	Sampling	Sampling frequency	Analysis method
Precipitation				
Precipitation amount	All	Bulk: SK02: Wet-only: SK04, SK06, SK07	Daily SK02, SK06 Weekly SK04, SK 07	
Precipitation amount, official gauge	All	Reported from professional meteorological rain-gauges	Daily	
Sulphate	All	Bulk: SK02 Wet-only: SK04, SK06, SK07	Daily: SK02, SK06 Weekly: SK04, SK07	Ion chromatography – Dionex
Nitrate	All	Bulk: SK02 Wet-only: SK04, SK06, SK07	Daily: SK02, SK06 Weekly: SK04, SK07	Ion chromatography – Dionex
Ammonium	All	Bulk: SK02 Wet-only: SK04, SK06, SK07	Daily: SK02, SK06 Weekly: SK04, SK07	Ion chromatography – Dionex
Magnesium	All	Bulk: SK02 Wet-only: SK04, SK06, SK07	Daily: SK02, SK06 Weekly: SK4,SK07	Ion chromatography – Dionex
Sodium	All	Bulk: SK02 Wet-only: SK04, SK06, SK07	Daily: SK02, SK06 Weekly: SK04, SK07	Ion chromatography – Dionex
Chloride	All	Bulk: SK02 Wet-only: SK04, SK06, SK07	Daily: SK02, SK06 Weekly: SK04,SK07	Ion chromatography – Dionex
Calcium	All	Bulk: SK02 Wet-only: SK04, SK06, SK07	Daily: SK02, SK06 Weekly SK04,SK07	Ion chromatography – Dionex
Potassium	All	Bulk: SK02 Wet-only: SK04, SK06, SK07	Daily: SK02, SK06 Weekly: SK04, SK07	Ion chromatography – Dionex
Conductivity	All	Bulk: SK02 Wet-only: SK04, SK06, SK07	Daily: SK02, SK06 Weekly: SK04,SK07	Conductivity meter
pH	All	Bulk: SK02 Wet-only: SK04, SK06, SK07	Daily: SK02, SK06 Weekly: SK04,SK07	pH meter
Heavy metals (As, Cd, Cr, Cu, Ni, Pb, Zn)	All	Bulk: SK02 Wet-only: SK04, SK06, SK07	Weekly: SK 06 Monthly: SK02, SK04,SK07	ICP-MS
Air				
Sulphur dioxide	SK02,SK06	KOH-impregnated Whatman 40 filter, 26-30 m^3/day	Daily	Ion chromatography – Dionex
Nitrogen dioxide	SK02,SK06	Absorbing solution NaOH and guajacol, 0.5-0.6 m^3/day	Daily	Spectrophotometric, Modified Salzman method
Nitric acid	SK02,SK06	KOH-impregnated Whatman 40 filter, 26-30 m^3/day	Daily	Ion chromatography – Dionex
Ammonia	SK06	Citric acid-impregnated Whatman 40 filter, 26-30 m^3/day	Daily	Ion chromatography – Dionex
Ozone	All	UV-monitor	Hourly	UV-absorption
Sulphate	SK02,SK06	Whatman 40 filter, 26-30 m^3/day	Daily	Ion chromatography – Dionex
Nitrate	SK02,SK06	Whatman 40 filter, 26-30 m^3/day	Daily	Ion chromatography – Dionex I
Ammonium	SK06	Whatman 40 filter, 26-30 m^3/day	Daily	Ion chromatography – Dionex
Sodium	SK06	Whatman 40 filter, 26-30 m^3/day	Daily	Ion chromatography – Dionex
Calcium	SK06	Whatman 40 filter, 26-30 m^3/day	Daily	Ion chromatography – Dionex
Magnesium	SK06	Whatman 40 filter, 26-30 m^3/day	Daily	Ion chromatography – Dionex
Potassium	SK06	Whatman 40 filter, 26-30 m^3/day	Daily	Ion chromatography – Dionex
Chloride	SK02,SK06	Whatman 40 filter, 26-30 m^3/day	Daily	Ion chromatography – Dionex
PM_{10}	SK04, SK06, SK07	Low volume sampler (MicroPNS), Sartorius nitrocellulose filter, 24 m^3/day	Weekly	Gravimetric method

Country: Slovenia		Main components and ozone - EMEP	Year: 2018	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
Precipitation amount	SI08	Wet-only	Daily	By weight
Precipitation amount, official gauge	SI08	Bulk	Daily	
Sulphate	SI08	Wet-only	Daily	Ion chromatography
Nitrate	SI08	Wet-only	Daily	Ion chromatography
Ammonium	SI08	Wet-only	Daily	Ion chromatography
Magnesium	SI08	Wet-only	Daily	Ion chromatography
Sodium	SI08	Wet-only	Daily	Ion chromatography
Chloride	SI08	Wet-only	Daily	Ion chromatography
Calcium	SI08	Wet-only	Daily	Ion chromatography
Potassium	SI08	Wet-only	Daily	Ion chromatography
Conductivity	SI08	Wet-only	Daily	Conductivity meter
pH	SI08	Wet-only	Daily	pH meter
Air				
Nitrogen dioxide	SI08	Continuous measurements: Teledyne API Model T500U CAPS Analyser	Hourly	Cavity-Attenuated Phase-Shift spectroscopy
PM10	SI08	Low volume sampler, 2.3 m3/h, Quartz filter, 47 mm	Daily	Gravimetric method
PM2.5	SI08	Low volume sampler, 2.3 m3/h, Quartz filter, 47 mm	Daily	Gravimetric method
Ozone	SI08	Instrumental: Ultra Violet (UV) photometry	Hourly	UV absorption
Sulphate $PM_{2.5}$	SI08	Leckel - Low volume sampler	Daily	Ion chromatography
Nitrate $PM_{2.5}$	SI08	Leckel - Low volume sampler	Daily	Ion chromatography
Ammonium $PM_{2.5}$	SI08	Leckel - Low volume sampler	Daily	Ion chromatography
Sodium $PM_{2.5}$	SI08	Leckel - Low volume sampler	Daily	Ion chromatography
Calcium $PM_{2.5}$	SI08	Leckel - Low volume sampler	Daily	Ion chromatography
Magnesium $PM_{2.5}$	SI08	Leckel - Low volume sampler	Daily	Ion chromatography

Country: Spain		Main components and ozone - EMEP	Year: 2018	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
Precipitation amount	All (except ES10)	Wet-only	Daily	
Sulphate	All (except ES10)	Wet-only	Daily	Ion chromatography
Nitrate	All (except ES10)	Wet-only	Daily	Ion chromatography
Ammonium	All (except ES10)	Wet-only	Daily	Visible spectrophotometry, Indophenol method
Magnesium	All (except ES10)	Wet-only	Daily	ICP-AES
Sodium	All (except ES10)	Wet-only	Daily	ICP-AES
Chloride	All (except ES10)	Wet-only	Daily	Ion chromatography
Calcium	All (except ES10)	Wet-only	Daily	ICP-AES
Potassium	All (except ES10)	Wet-only	Daily	ICP-AES
Conductivity	All (except ES10)	Wet-only	Daily	Conductivity meter
pH	All (except ES10)	Wet-only	Daily	pH meter
Air				
Sulphur dioxide	All	Instrumental: UV-fluorescence	Hourly	Pulsed UV-Fluorescence
Nitrogen dioxide/NO/NOx	All	Instrumental: Chemiluminescence	Hourly	Chemiluminiscence
Ozone	All	UV-monitor	Hourly	UV-absorption
PM_{10}	ES09, ES12, ES13, ES16	Monitor de partículas en suspensión TEOM	Hourly	Tapered Element Oscillating Microbalance
Ammonia	ES01, ES07, ES08, ES09, ES14	Passive sampler	Weekly ES07 (Biweekly)	Visible spectrophotometry, Indophenol method
PM_{10}	All	High volume sampler	Daily	Gravimetric method
$PM_{2.5}$	ES01, ES06 (started in 2012), ES07, ES08, ES09, ES10, ES11, ES12, ES13, ES14, ES16	High volume sampler	Daily	Gravimetric method
Sulphate PM_{10}	All	Whatman GF/A filter, 720 m^3/day (ES07, ES08, ES10, ES11, ES12, S13, ES14, ES16) / 1632 m^3/day (ES01, ES05, ES06, ES09, ES17)	Daily	Ion chromatography
Nitrate PM_{10}	All	Whatman GF/A filter, 720 m^3/day (ES07, ES08, ES10, ES11, ES12, S13, ES14, ES16) / 1632 m^3/day (ES01, ES05, ES06, ES09, ES17)	Daily	Ion chromatography
Sum of nitric acid and nitrate	All	NaOH impregnated Whatman 40 filter, 35 m^3/day	Daily	Ion chromatography
Sum of ammonia and ammonium	All	Oxalic acid impregnated Whatman 40 filter, 35 m^3/day	Daily	Visible spectrophotometry, Indophenol method
Ammonium PM_{10}	ES01, ES07, ES08, ES09, ES14	High volume sampler	24 hour, once a week	Visible spectrophotometry, Indophenol method
Sodium PM_{10}	ES01, ES07, ES08, ES09, ES14	High volume sampler	Daily	ICP-AES
Calcium PM_{10}	ES01, ES07, ES08, ES09, ES14	High volume sampler	Daily	ICP-AES
Magnesium PM_{10}	ES01, ES07, ES08, ES09, ES14	High volume sampler	Daily	ICP-AES
Potassium PM_{10}	ES01, ES07, ES08, ES09, ES14	High volume sampler	Daily	ICP-AES
Chloride PM_{10}	ES01, ES07, ES08, ES09, ES14	High volume sampler	24 hour, once a week	Ion chromatography
Sulphate $PM_{2.5}$	ES01, ES07, ES08, ES09, ES14	High volume sampler	24 hour, once a week	Ion chromatography
Nitrate $PM_{2.5}$	ES01, ES07, ES08, ES09, ES14	High volume sampler	24 hour, once a week	Ion chromatography

Country: Spain		**Main components and ozone - EMEP**	**Year: 2018**	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Sodium $PM_{2.5}$	ES01, ES07, ES08, ES09, ES14	High volume sampler	24 hour, once a week	ICP-AES
Calcium $PM_{2.5}$	ES01, ES07, ES08, ES09, ES14	High volume sampler	24 hour, once a week	ICP-AES
Magnesium $PM_{2.5}$	ES01, ES07, ES08, ES09, ES14	High volume sampler	24 hour, once a week	ICP-AES
Potassium $PM_{2.5}$	ES01, ES07, ES08, ES09, ES14	High volume sampler	24 hour, once a week	ICP-AES
Ammonium $PM_{2.5}$	ES01, ES07, ES08, ES09, ES14	High volume sampler	24 hour, once a week	Visible spectrophotometry, Indophenol method
Chloride $PM_{2.5}$	ES01, ES07, ES08, ES09, ES14	High volume sampler	24 hour, once a week	Ion chromatography
EC/OC $PM_{2.5}$	ES01, ES07, ES09, ES12, ES14	PM2.5 low volume sampler (55 m^3/day)	24 hour, once every 6 days (60 samples per year)	Thermal optical

Country: Sweden		Main components and ozone - EMEP	Year: 2018	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
Precipitation amount	SE05, SE11, SE12, SE14	Wet-only	Daily: SE05, SE14; monthly: SE11, SE12	
Precipitation amount, official gauge				
Sulphate	SE05, SE11, SE12, SE14	Wet-only	Daily: SE05, SE14; monthly: SE11, SE12	Ion chromatography
Nitrate	SE05, SE11, SE12, SE14	Wet-only	Daily: SE05, SE14; monthly: SE11, SE12	Ion chromatography
Ammonium	SE05, SE11, SE12, SE14	Wet-only	Daily: SE05, SE14; monthly: SE11, SE12	Spectrophotometric, Flow injection analysis
Magnesium	SE05, SE11, SE12, SE14	Wet-only	Daily: SE05, SE14; monthly: SE11, SE12	Ion chromatography
Sodium	SE05, SE11, SE12, SE14	Wet-only	Daily: SE05, SE14; monthly: SE11, SE12	Ion chromatography
Chloride	SE05, SE11, SE12, SE14	Wet-only	Daily: SE05, SE14; monthly: SE11, SE12	Ion chromatography
Calcium	SE05, SE11, SE12, SE14	Wet-only	Daily: SE05, SE14; monthly: SE11, SE12	Ion chromatography
Potassium	SE05, SE11, SE12, SE14	Wet-only	Daily: SE05, SE14; monthly: SE11, SE12	Ion chromatography
Conductivity	SE05, SE11, SE12, SE14	Wet-only	Daily: SE05, SE14; monthly: SE11, SE12	Conductivity meter
pH	SE05, SE11, SE12, SE14	Wet-only	Daily: SE05, SE14; monthly: SE11, SE12	pH meter
Air				
Sulphur dioxide	SE05, SE11, SE12, SE14	KOH-impregnated Whatman 40 filter, 20 m^3/day	Daily	Ion chromatography
Nitrogen dioxide	SE05, SE11, SE12, SE14	NaI-impregnated glass sinters, ~0.7 m^3/day	Daily	Spectrophotometric, Flow Injection Analysis
Nitric acid				
Ammonia				
Ozone	SE05, SE11, SE12, SE13, SE14, SE32, SE35, SE39	UV-monitor	Hourly	UV-absorption
Sulphate	SE05, SE11, SE12, SE14	Teflon filter, Mitex membrane, 20 m^3/day	Daily	Ion chromatography
Nitrate				
Ammonium				
Sodium	SE05, SE11, SE12, SE14	Teflon filter, Mitex membrane, 20 m^3/day	Daily	Ion chromatography
Calcium	SE05, SE11, SE12, SE14	Teflon filter, Mitex membrane, 20 m^3/day	Daily	Ion chromatography
Magnesium	SE05, SE11, SE12, SE14	Teflon filter, Mitex membrane, 20 m^3/day	Daily	Ion chromatography
Potassium	SE05, SE11, SE12, SE14	Teflon filter, Mitex membrane, 20 m^3/day	Daily	Ion chromatography
Chloride	SE05, SE11, SE12, SE14	Teflon filter, Mitex membrane, 20 m^3/day	Daily	Ion chromatography
PM_{10}	SE11, SE12	TEOM (Tapered Element Oscillating Microbalance	Hourly	TEOM
$PM_{2.5}$	SE11, SE12	TEOM (Tapered Element Oscillating Microbalance	Hourly	TEOM
PM_{10}	SE05, SE14	IVL Sampler PModel S10	Daily	Gravimetric
$PM_{2.5}$	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^3/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^3/day	Daily	Spectrophotometric, Flow injection analysis

Country: Switzerland		Main components and ozone - EMEP	Year: 2018	
	Station	Sampling	Sampling frequency	Analysis method
Precipitation				
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
Air				
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^3/day	Biweekly	Ion chromatography
Ammonia	CH02, CH05	Citric acid impregnated Mini-Denuder / modified CEH DELTA-System, 0.5 m^3/day	Biweekly	Ion chromatography
Ozone	All	Instrumental: UV-monitor	Hourly	UV-absorption
Sulphate	CH02, CH05	High Volume Samplers, Pallflex XP56 Tissuequartz 2500 QAT-UP, 720 m^3/day	Daily	Ion chromatography
Sulphate	CH01	High Volume Samplers, Pallflex XP56 Tissuequartz 2500 QAT-UP, 1075 m^3/day	Daily	Ion chromatography
Nitrate	CH02, CH05	KOH impregnated Whatman 1 filter, Delrin filterholder / modified CEH DELTA-System, 0.5 m^3/day	Biweekly	Ion chromatography
Ammonium	CH02, CH05	Citric acid impregnated Sartorius 11306 filter, Delrin filterholder / modified CEH DELTA-System, 0.5 m^3/day	Biweekly	Ion chromatography
Sodium	CH02, CH05	Citric acid impregnated Whatman 40 filter / NILU filterholder, 18 m^3/day		
Calcium	CH02, CH05	Citric acid impregnated Whatman 40 filter / NILU filterholder, 18 m^3/day		
Magnesium	CH02, CH05	Citric acid impregnated Whatman 40 filter / NILU filterholder, 18 m^3/day		
Potassium	CH02, CH05	Citric acid impregnated Whatman 40 filter / NILU filterholder, 18 m^3/day		
Chloride				
PM_{10}	CH01	High Volume Samplers, Pallflex XP56 Tissuequartz 2500 QAT-UP, 1075 m^3/day	Daily	Gravimetry
PM_{10}	CH02, CH03, CH04, CH05	High Volume Samplers, Pallflex XP56 Tissuequartz 2500 QAT-UP, 720 m^3/day	Daily	Gravimetry
$PM_{2.5}$	CH02, CH05	High Volume Samplers, Pallflex XP56 Tissuequartz 2500 QAT-UP, 720 m^3/day	Daily	Gravimetry
Sum of nitric acid and nitrate	CH02, CH05	NaOH impregnated Whatman 40 filter / NILU filterholder, 18 m^3/day	Daily	Ion chromatography
Sum of ammonia and ammonium	CH02, CH05	Citric acid impregnated Whatman 40 filter / NILU filterholder, 18 m^3/day	Daily	Ion chromatography

Country: United Kingdom		Main components and ozone - EMEP	Year: 2018	
	Station	**Sampling**	**Sampling frequency**	**Analysis method**
Precipitation				
Precipitation amount	GB02, GB06, GB13, GB14, GB15	Bulk collector	Fortnightly	Mass of water collected
Precipitation amount, official gauge				
Sulphate	GB02, GB06, GB13, GB14, GB15	Bulk collector	Fortnightly	Ion chromatography
Nitrate	GB02, GB06, GB13, GB14, GB15	Bulk collector	Fortnightly	Ion chromatography
Ammonium	GB02, GB06, GB13, GB14, GB15	Bulk collector	Fortnightly	Ion chromatography
Magnesium	GB02, GB06, GB13, GB14, GB15	Bulk collector	Fortnightly	Ion chromatography
Sodium	GB02, GB06, GB13, GB14, GB15	Bulk collector	Fortnightly	Ion chromatography
Chloride	GB02, GB06, GB13, GB14, GB15	Bulk collector	Fortnightly	Ion chromatography
Calcium	GB02, GB06, GB13, GB14, GB15	Bulk collector	Fortnightly	Ion chromatography
Potassium	GB02, GB06, GB13, GB14, GB15	Bulk collector	Fortnightly	Ion chromatography
Conductivity	GB02, GB06, GB13, GB14, GB15	Bulk collector	Fortnightly	Conductivity meter
pH	GB02, GB06, GB13, GB14, GB15	Bulk collector	Fortnightly	pH meter
Precipitation amount	GB048, GB1055	Wet only collector	Daily	Mass of water collected
Sulphate	GB048, GB1055	Wet only collector	Daily	Ion chromatography
Nitrate	GB048, GB1055	Wet only collector	Daily	Ion chromatography
Ammonium	GB048, GB1055	Wet only collector	Daily	Ion chromatography
Magnesium	GB048, GB1055	Wet only collector	Daily	Ion chromatography
Sodium	GB048, GB1055	Wet only collector	Daily	Ion chromatography
Chloride	GB048, GB1055	Wet only collector	Daily	Ion chromatography
Calcium	GB048, GB1055	Wet only collector	Daily	Ion chromatography
Potassium	GB048, GB1055	Wet only collector	Daily	Ion chromatography
Conductivity	GB048, GB1055	Wet only collector	Daily	Conductivity meter
pH	GB048, GB1055	Wet only collector	Daily	pH meter
Air				
Sulphur dioxide	GB37, GB38, GB43, GB45	Instrumental	Hourly, 15 minute	UV fluorescence
Sulphur dioxide	GB48. GB1055	Instrumental	Hourly	Online IC
Nitrogen dioxide	12 sites	Instrumental	Hourly	Chemiluminescence
Nitrogen monoxide	12 sites	Instrumental	Hourly	Chemiluminescence
Nitric Acid	GB48	Instrumental	Hourly	Online IC
Ammonia	GB48	Instrumental	Hourly	Online IC
Ozone	19 sites	UV-monitor	Hourly	UV-absorption
PM_{10}	GB06, GB43, GB48, GB1055	FDMS	Hourly	
$PM_{2.5}$	GB48, GB1055	FDMS	Hourly	
Ammonium PM_{10}, $PM_{2.5}$	GB48, GB1055	Instrumental	Hourly	Online IC
Calcium PM_{10}, $PM_{2.5}$	GB48, GB1055	Instrumental	Hourly	Online IC
Chloride PM_{10}, $PM_{2.5}$	GB48, GB1055	Instrumental	Hourly	Online IC
Magnesium PM_{10}, $PM_{2.5}$	GB48, GB1055	Instrumental	Hourly	Online IC
Nitratae PM_{10}, $PM_{2.5}$	GB48, GB1055	Instrumental	Hourly	Online IC
Potassium PM_{10}, $PM_{2.5}$	GB48, GB1055	Instrumental	Hourly	Online IC
Sodium PM_{10}, $PM_{2.5}$	GB48, GB1055	Instrumental	Hourly	Online IC
Sulphate PM_{10}, $PM_{2.5}$	GB48, GB1055	Instrumental	Hourly	Online IC

Annex 5

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Annex 6

Description of statistical calculation procedures

The geometric standard deviation is a dimensionless factor. If the data come from a random sample of independent data in a normal distribution, about 95% of the data will lie between

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

and between

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

if the data come from a lognormal distribution.

In the computations of mean values and other statistics, the concentrations below the detection limit have been set equal to one half of the actual limit. An overview of the statistics and definitions is given below.

W.mean $\hat{c}$ is the precipitation weighted arithmetic mean concentration used for precipitation components:

$$\hat{c} = \frac{1}{\sum_i p_i} \cdot \sum_i c_i \cdot p_i$$

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

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

$$\overline{c_a} = \frac{1}{N} \sum_i c_i$$

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

$$sd_a = \left(\frac{\sum_i \left(c_i - \overline{c_a} \right)^2}{N - 1} \right)^{\frac{1}{2}}$$

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

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

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

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

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

$$sd_g = exp\left(sdlnc \right)$$

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

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

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

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

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

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

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

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

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

Annex 7

EMEP Data Quality Objectives (DQO)

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

Measurement parameter	Detection limits	Precision	
		Overall	Laboratory
pH (pH units)		± 0.1 pH unit at pH > 5 ± 0.03 pH unit at pH < 5	± 0.04 pH unit at pH > 5 ± 0.02 pH unit at pH < 5
SO_4^{2-} (mg S L^{-1})	0.02	0.02	0.01
NO_3^- (mg N L^{-1})	0.02	0.01	0.01
Cl^- (mg L^{-1})	0.04	0.02	0.02
NH_4^+ (mg N L^{-1})	0.02	0.02	0.01
Ca^{++} (mg L^{-1})	0.02	0.02	0.01
Mg^{++} (mg L^{-1})	0.01	0.01	0.01
Na^+ (mg L^{-1})	0.02	0.01	0.01
K^+ (mg L^{-1})	0.02	0.01	0.01
Standard Gauge Precipitation Depth (mm)	0.02	0.2 daily 0.3 weekly	n/a n/a
Sample Depth (mm)	0.2	0.1 daily 0.3 weekly	n/a n/a

n/a: Not applicable

The targets for the wet analysis of components extracted from air filters are the same as for precipitation. For SO_2 the limit above for sulphate is valid for the medium volume method with impregnated filter. For NO_2 determined as NO_2^- in solution the accuracy for the lowest concentrations is 0.01 mg N/l.