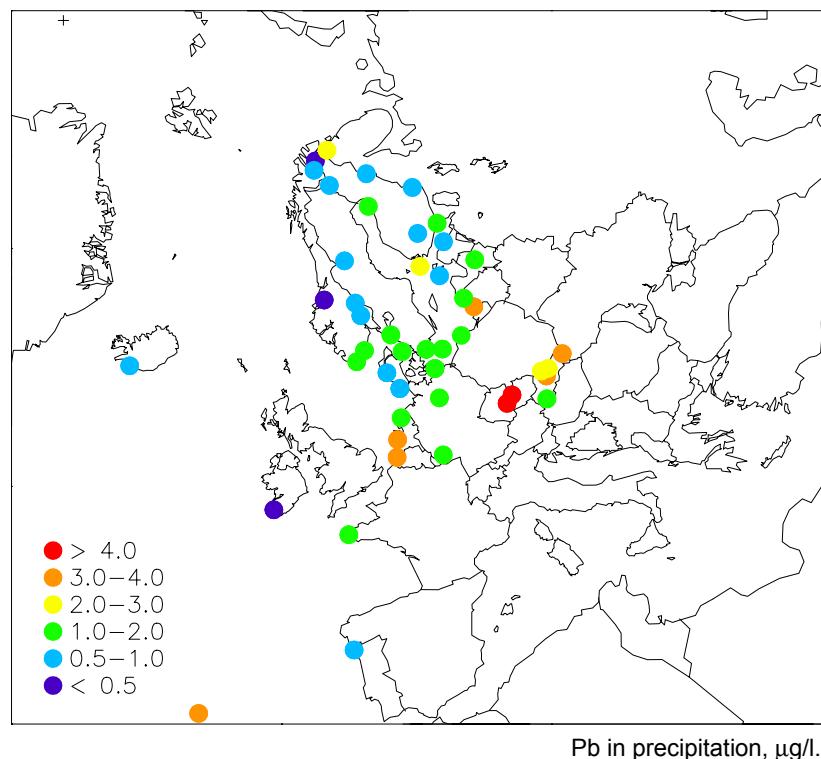


## Heavy metals and POP measurements, 2001

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

**Heavy metals and POP measurements,  
2001**

**Wenche Aas and Anne-Gunn Hjellbrekke**



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# Heavy metals and POP measurements, 2001

## 1. Introduction

Heavy metals and persistent organic pollutants (POPs) were included in EMEP's monitoring program in 1999. However, earlier data has been available and collected, and the EMEP database thus also includes older data, even back to 1988 for a few sites. A number of countries have been reporting heavy metals and POPs within the EMEP area in connection with different national and international programmers such as HELCOM, AMAP and OSPARCOM.

During the seventh phase of EMEP (EB.AIR/GE.1/1998/8) it was recommended that the future works under the Convention should concentrate on eight priority elements: lead (Pb), mercury (Hg), cadmium (Cd), chromium (Cr), nickel (Ni), zinc (Zn), copper (Cu) and arsenic (As). Particular attention should be paid to the first three elements.

The strategic long-term plans on POPs (EB.AIR/GE.1/1997/8) recommended to take a stepwise approach, and the following compounds or groups of compounds should be included in the first step: polycyclic aromatic hydrocarbons (PAHs), polychlorobiphenyls (PCBs), HCB, chlordane, lindane, alpha-HCH, DDT/DDE.

These recommendations for heavy metals and POPs are implemented in the new EMEP monitoring strategy and measurement program for 2004–2009 (to be discussed at the Steering Body in September, 2003)

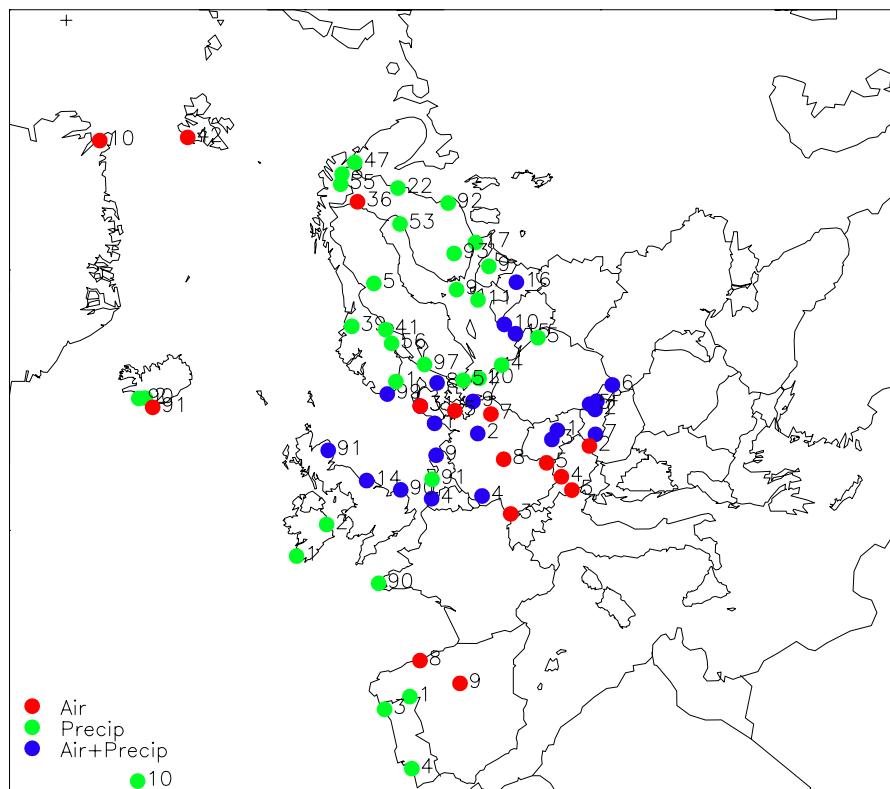
So far, six reports have been published (EMEP/CCC-Reports 8/96, 9/97, 7/98, 7/99, 2/2000, 9/2001, 9/2002) which present data on heavy metals and POPs from national and international measurement programmes for the period 1987 to 2000. The majority of the data are included in the priority lists for heavy metals and POPs. In this report data from 2001 are presented.

## 2. Measurement programme

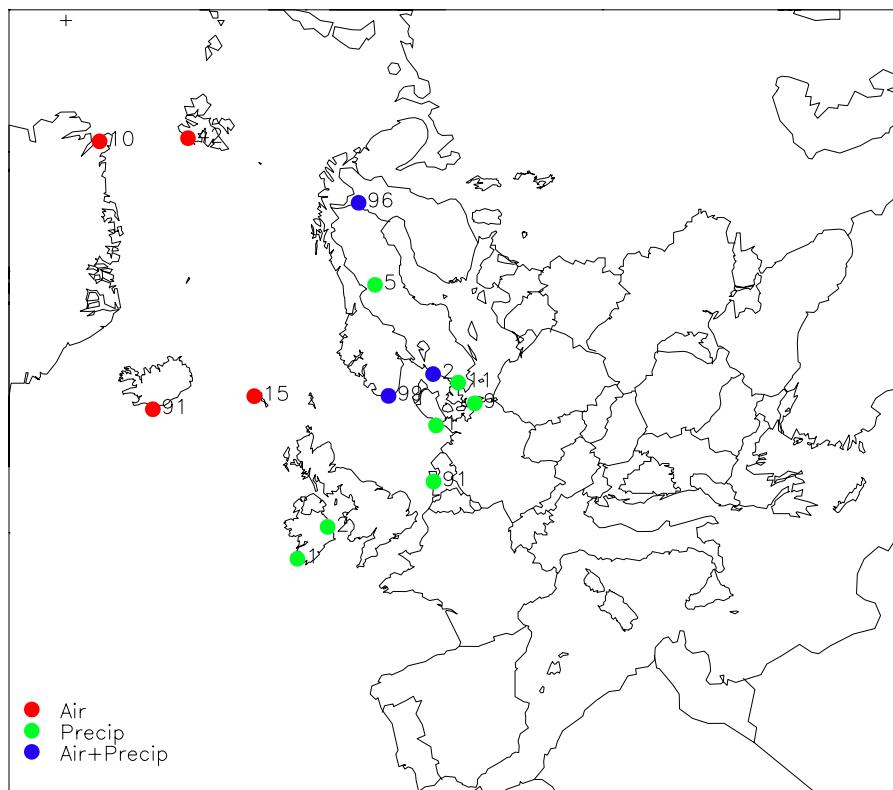
The site codes used in this report are the codes used for data submission and storage in the EMEP database, or codes used in the AMAP, OSPARCOM or HELCOM programmes. The codes consist of the two-letter ISO code for the countries, a four-digit number and a letter indicating the type of station, regional (R) or global (G).

### 2.1 Monitoring sites for heavy metals

The locations of the measurement sites, which have delivered data on heavy metals for 2001, are found in Figure 1 and Table 1. The sites are divided in those measuring both concentrations in air and in precipitation, and those measuring only one of them. In 2001 it was 22 sites measuring heavy metals in both compartments, and altogether it was 69 measurement sites. Mercury was measured at 15 sites.



*Figure 1: Measurement network of heavy metals, 2001.*



*Figure 2: Measurement network of mercury, 2001.*

*Table 1: Monitoring stations and the sampling program of heavy metals, 2001.*

Country	Code	Station name	Latitude				Longitude				masl	Metals in air	Metals in precipitation
<b>Austria</b>	AT0002R	Illmitz	47	46	0	N	16	46	0	E	117	Cd, Pb	
	AT0004R	St. Koloman	47	39	0	N	13	12	0	E	851	Cd, Pb	
	AT0005R	Vorhegg	46	40	40	N	12	58	20	E	1020	Cd, Pb	
<b>Belgium</b>	BE0004R	Knokke	51	21	36	N	3	20	0	E	0	Cd, Cu, Pb, Ni, Zn	As, Cd, Cr, Cu, Pb, Hg, Ni, Zn
<b>Czech Republic</b>	CZ0001R	Svratouch	49	44	0	N	16	2	0	E	737	Cd, Pb	Cd, Pb, Ni
	CZ0003R	Kosetice	49	35	0	N	15	5	0	E	534	Cd, Pb	Cd, Pb, Ni
<b>Germany</b>	DE0001R	Westerland	54	55	32	N	8	18	35	E	12	As, Cd, Cu, Pb, Mn, Ni	As, Cd, Cr, Co, Cu, Fe, Pb, Mn, Hg, Ni, V, Zn
	DE0002R	Langenbrügge	52	48	8	N	10	45	34	E	74	As, Cd, Cu, Fe, Pb, Mn, Ni	As, Cd, Cr, Co, Cu, Fe, Pb, Mn, Ni, V, Zn
	DE0003R	Schauinsland	47	54	53	N	7	54	31	E	1205	Cd, Cu, Pb, Mn, Ni	
	DE0004R	Deuselbach	49	45	53	N	7	3	7	E	480	Cd, Cu, Fe, Pb, Mn, Ni	As, Cd, Cr, Co, Cu, Fe, Pb, Mn, Ni, V, Zn
	DE0005R	Brotjacklriegel	48	49	10	N	13	13	9	E	1016	Cd, Cu, Pb, Mn, Ni	
	DE0007R	Neuglobsow	53	10	0	N	13	2	0	E	65	As, Cd, Cu, Pb, Mn, Ni	
	DE0008R	Schmücke	50	39	0	N	10	46	0	E	937	Cd, Cu, Pb, Mn, Ni	
	DE0009R	Zingst	54	26	0	N	12	44	0	E	1	As, Cd, Cu, Pb, Mn, Ni	As, Cd, Cr, Co, Cu, Fe, Pb, Mn, Hg, Ni, V, Zn
	DK0003R	Tange	56	21	0	N	9	36	0	E	13	As, Cd, Cr, Cu, Fe, Pb, Mn, Ni, Zn	
<b>Denmark</b>	DK0005R	Keldsnor	54	44	0	N	10	44	0	E	10	As, Cd, Cr, Cu, Fe, Pb, Mn, Ni, Zn	
	DK0008R	Anholt	56	43	0	N	11	31	0	E	40	As, Cd, Cr, Cu, Fe, Pb, Mn, Ni, Zn	As, Cd, Cr, Cu, Fe, Pb, Ni, Zn
	DK0010G	Nord, Greenland	81	36	0	N	16	40	12	W	20	As, Cr, Cu, Pb, Mn, Ni, Zn, Hg	
	DK0011G	Nuuk	64	10	48	N	51	39	0	W	340	As, Cr, Cu, Pb, Mn, Ni, Zn, Hg	
	DK0015G	Thorshavn	62	0	57	N	6	45	36	W	35	Hg	
	DK0020R	Pedersker	55	1	1	N	14	56	45	E	5		As, Cd, Cr, Cu, Fe, Pb, Ni, Zn
	DK0031R	Ulborg	56	17	0	N	8	26	0	E	10	As, Cd, Cr, Cu, Fe, Pb, Mn, Ni, Zn	As, Cd, Cr, Cu, Fe, Pb, Ni, Zn
	EE0009R	Lahemaa	59	30	0	N	25	54	0	E	32		As, Cd, Cu, Pb, Zn
<b>Estonia</b>	EE0011R	Vilsandy	58	23	0	N	21	49	0	E	6		As, Cd, Cu, Pb, Zn
<b>Spain</b>	ES0008R	Niembro	43	26	32	N	4	51	1	W	134	Pb, Cd, Cu	
	ES0009R	Campisábalos	41	16	52	N	3	8	34	W	1360	Pb, Cd, Cu	

Table 1, cont.

Country	Code	Station name	Latitude			Longitude			masl	Metals in air	Metals in precipitation
<b>Finland</b>	FI0008R	Kevo	69	45	0 N	27	0	0 E	80		As, Cd, Cr, Cu, Fe, Pb, Mn, Ni, V, Zn
	FI0009R	Utö	59	46	45 N	21	22	38 E	7		As, Cd, Cr, Cu, Fe, Pb, Mn, Ni, V, Zn
	FI0017R	Virolahti II	60	31	36 N	27	41	10 E	8		As, Cd, Cr, Cu, Fe, Pb, Mn, Ni, V, Zn
	FI0022R	Oulanka	66	19	13 N	29	24	6 E	310		As, Cd, Cr, Cu, Fe, Pb, Mn, Ni, V, Zn
	FI0036R	Matarova	68	0	0 N	24	14	23 E	340	As, Cd, Cr, Cu, Fe, Pb, Mn, Ni, V, Zn	As, Cd, Cr, Cu, Fe, Pb, Mn, Ni, V, Zn
	FI0053R	Hailuoto II	65	0	0 N	24	41	39 E	4		As, Cd, Cr, Cu, Fe, Pb, Mn, Ni, V, Zn
	FI0092R	Hietajarvi	63	10	0 N	30	43	0 E	173		As, Cd, Cr, Cu, Fe, Pb, Mn, Ni, V, Zn
	FI0093R	Kotinen	61	13	48 N	25	4	0 E	158		As, Cd, Cr, Cu, Fe, Pb, Mn, Ni, V, Zn
	FI0096R	Pallas	67	58	0 N	24	7	0 E	566	Hg	As, Cd, Cr, Cu, Fe, Pb, Mn, Ni, V, Zn
<b>France</b>	FR0090R	Porspoder	48	31	0 N	4	45	0 W	50		As, Cd, Cr, Cu, Pb, Ni, Zn
<b>Great Britain</b>	GB0014R	High Muffles	54	20	4 N	0	48	27 W	267	As, Cd, Cr, Cu, Pb, Ni, Ti, Zn	As, Cd, Cr, Cu, Pb, Ni, Ti, Zn
	GB0090R	East Ruston	52	48	0 N	1	28	0 E	5	As, Cd, Cr, Cu, Pb, Ni, Ti, Zn	As, Cd, Cr, Cu, Pb, Ni, Ti, Zn
	GB0091R	Banchory	57	5	0 N	2	32	0 W	120	As, Cd, Cr, Cu, Pb, Ni, Ti, Zn	As, Cd, Cr, Cu, Pb, Ni, Ti, Zn
<b>Ireland</b>	IE0001R	Valentina Obs.	51	56	23 N	10	14	40 W	11		Al, As, Cd, Cr, Cu, Pb, Mn, Hg, Ni, V, Zn
	IE0002R	Turlough Hill	53	2	12 N	6	24	0 W	420		Al, As, Cd, Cr, Cu, Pb, Mn, Hg, Ni, V, Zn
<b>Iceland</b>	IS0002R	Irafoss	64	5	0 N	21	1	0 W	66		Al, As, Cd, Cr, Cu, Fe, Pb, Mn, Ni, V, Zn
	IS0090R	Reykjavik	64	8	0 N	21	54	0 W	52		Al, As, Cd, Cr, Cu, Fe, Pb, Mn, Ni, V, Zn
	IS0091R	Storhofdi	63	24	0 N	20	17	0 W	118	Al, As, Cd, Cr, Cu, Fe, Pb, Mn, Hg, Ni, V, Zn	Al, As, Cd, Cr, Cu, Fe, Pb, Mn, Ni, V, Zn
<b>Lithuania</b>	LT0015R	Preila	55	21	0 N	21	4	0 E	5	Cd, Cu, Pb, Zn	Cd, Cu, Pb, Zn
<b>Latvia</b>	LV0010R	Rucava	56	13	0 N	21	13	0 E	5	Cd, Cu, Pb, Ni, Zn	Cd, Cu, Pb, Zn
	LV0016R	Zoseni	57	7	59 N	25	55	0 E	183	Cd, Cu, Pb, Ni, Zn	Cd, Cu, Pb, Zn
<b>Netherlands</b>	NL0009R	Kollumerwaard	53	20	2 N	6	16	38 E	1	As, Cd, Pb, Zn	As, Cd, Cr, Co, Cu, Fe, Pb, Ni, V, Zn
	NL0091R	De Zilk	52	18	0 N	4	30	0 E	4		As, Cd, Cr, Cu, Pb, Hg, Ni, Zn

Table 1, cont.

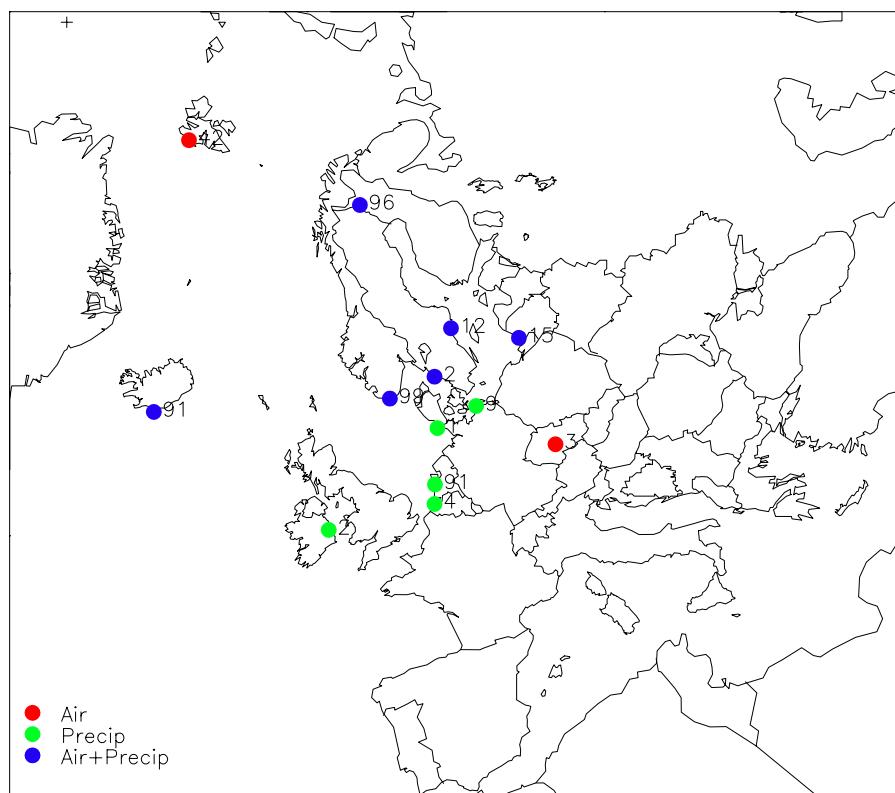
Country	Code	Station name	Latitude			Longitude			hosl	Metals in air	Metals in precipitation	
Norway	NO0001R	Birkenes	58	23	0	N	8	15	0	E	190	Cd, Pb, Zn
	NO0039R	Kårvatn	62	47	0	N	8	53	0	E	210	Cd, Pb, Zn
	NO0041R	Osen	61	15	0	N	11	47	0	E	440	Cd, Pb, Zn
	NO0042G	Zeppelin	78	54	0	N	11	53	0	E	474	As, Cd, Cr, Co, Cu, Pb, Mn, Hg, Ni, V, Zn
	NO0047R	Svanvik	69	27	0	N	30	1	59	E	30	As, Cd, Cr, Co, Cu, Pb, Ni, Zn
	NO0055R	Karasjok	69	28	0	N	25	13	0	E	333	Cd, Pb, Zn
	NO0056R	Hurdal	60	22	0	N	11	4	0	E	300	Cd, Pb, Zn
	NO0099R	Lista	58	6	0	N	6	34	0	E	13	As, Cd, Cr, Co, Cu, Pb, Hg, Ni, V, Zn
Portugal	PT0001R	Braganca	41	48	0	N	6	43	58	W	690	Cd, Cu, Pb, Mn, Ni, Zn
	PT0003R	Viana do Castelo	41	42	0	N	8	48	0	W	16	Cd, Cu, Pb, Mn, Ni, Zn
	PT0004R	Monte Velho	38	5	0	N	8	48	0	W	43	Cd, Cu, Pb, Mn, Ni, Zn
	PT0010R	Angra do Heroismo	38	40	0	N	27	13	0	W	74	Cd, Cu, Pb, Mn, Ni, Zn
Poland	PL0004R	Leba	54	45	0	N	17	32	0	E	2	Cd, Cr, Cu, Pb, Ni, Zn
	PL0005R	Diabla Gora	54	9	0	N	22	4	0	E	157	Cd, Cr, Cu, Pb, Ni, Zn
Sweden	SE0002R	Rörvik	57	25	0	N	11	56	0	E	10	Hg
	SE0005R	Bredkälen	63	51	0	N	15	19	59	E	404	Cd, Cr, Cu, Pb, Mn, Hg, Ni, V, Zn
	SE0011R	Vavihill	56	1	0	N	13	9	0	E	175	Hg
	SE0051R	Arup	55	45	0	N	13	40	0	E	157	As, Cd, Cr, Cu, Pb, Ni, V, Zn
	SE0097R	Gårdsjön	58	3	0	N	12	1	0	E	126	As, Cd, Cr, Co, Cu, Pb, Mn, Ni, V, Zn
Slovakia	SK0002R	Chopok	48	56	0	N	19	35	0	E	2008	Cd, Cr, Cu, Pb, Mn, Ni, Zn
	SK0004R	Stará Lesná	49	9	0	N	20	17	0	E	808	Cd, Cr, Cu, Pb, Mn, Ni, Zn
	SK0005R	Liesek	49	22	0	N	19	40	59	E	892	Cd, Cr, Cu, Pb, Mn, Ni, Zn
	SK0006R	Starina	49	3	0	N	22	16	0	E	345	Cd, Cr, Cu, Pb, Mn, Ni, Zn
	SK0007R	Topolníky	47	57	36	N	17	51	38	E	113	Cd, Cr, Cu, Pb, Mn, Ni, Zn

It is quite evident from Figure 1-2 that the spatial distribution of monitoring sites in Europe is unsatisfactory.

There are hardly any sites that measure heavy metals in neither south nor east of Europe. In the new EMEP monitoring strategy for 2004-2009 new monitoring requirements are given where heavy metals shall be a compulsory part of the monitoring program for all EMEP parties, this will hopefully improve the distribution network. The sites will now be differentiated into three levels, "Core sites level 1" is the basic group of EMEP sites and these shall include measurements of heavy metal in precipitation, about 80 sites in Europe. At "Core sites level 2" (supersites), heavy metals in both air and precipitation should be measured simultaneously at around 20 stations evenly distributed over the domain. Level three sites should be established to carry out more specialized measurements, which are voluntary under the EMEP program. At these sites there could be organized measurement campaign and more detailed studies on e.g. size distribution and chemical speciation of the different mercury compounds.

## 2.2 Monitoring sites for POPs

The locations of the measurement sites, which have delivered POPs for 2001, are shown in Figure 3 and Table 2. In 2001 it was 6 sites measuring POPs in both air and precipitation, and altogether it was 13 measurement sites.



*Figure 3: Monitoring network of POPs in EMEP, 2001.*

*Table 2: Monitoring stations and their sampling program of POP, 2001.*

Country	Code	Name	Latitude	Longitude	masl	POPs in air and aerosol	POPs in precipitation
<b>Belgium</b>	BE0004R	Knokke	51 21 36 N	3 20 0 E	0		Pesticides, HCHs
<b>Czech rep.</b>	CZ0003R	Kosetice	49 35 0 N	15 5 0 E	534	PAHs, PCBs, pesticides, HCHs	
<b>Germany</b>	DE0001R	Westerland	54 55 32 N	8 18 35 E	12		PAHs, PCBs, pesticides, HCB, HCHs
	DE0009R	Zingst	54 26 0 N	12 44 0 E	1		PAHs, PCBs, pesticides, HCB, HCHs
<b>Finland</b>	FI0096R	Pallas	67 58 0 N	24 7 0 E	566	PAHs, PCBs	PAHs, PCBs
<b>Ireland</b>	IE0002R	Turlough Hill	53 2 12 N	6 24 0 W	420		PCBs, pesticides, HCHs
<b>Island</b>	IS0091R	Storhofdi	63 24 0 N	20 17 0 W	118	PCBs, pesticides, HCB, HCHs	PCBs, pesticides, HCB, HCHs
<b>Lithuania</b>	LT0015R	Preila	55 21 0 N	21 4 0 E	5	Benz(a)pyrene	Benz(a)pyrene
<b>Netherlands</b>	NL0091R	De Zilk	52 18 0 N	4 30 0 E	4		$\gamma$ HCH
<b>Norway</b>	NO0042G	Spitsbergen	78 54 0 N	11 53 0 E	474	PAHs, pesticides, HCHs, HCB, PCBs	
	NO0099R	Lista	58 6 0 N	6 34 0 E	13	HCB, HCHs	HCB, HCHs
<b>Sweden</b>	SE0002R	Rörvik	57 25 0 N	11 56 0 E	10	PAHs, PCBs	PAHs, PCBs
	SE0012R	Aspvreten	58 48 0 N	17 23 0 E	20	PAHs, PCBs	PAHs, PCBs

As for heavy metal measurements, the distribution and number of sites measuring POPs are insufficient. Since POP measurements are very demanding, such measurements are not expected to be monitored at the Core site level 1 as they are defined in the new monitoring strategy (see chapter 2.1). But at “Core sites level 2” (supersites), POPs in both air and precipitation should be measured at around 20 stations distributed over the domain. The following are considered to be priority compounds: PAHs, PCBs HCB, chlordane, HCHs and DDTs. “Level 3” sites are for more specialized measurements and these are voluntary under the EMEP program. These may be used for campaign studies and more detailed studies on e.g. congener specific measurements of compounds such as PCDDs and PCDFs.

### 2.3 Sampling and analytical techniques

A brief summary of the sampling and analytical techniques used for the 2001-data are given in Table 3 and Table 4 for heavy metals and POPs respectively.

Table 3: Measurement methods for heavy metals, 2001.

Country	Precipitation		Air and aerosols		Laboratory method	Participated in EMEP lab. Intercomp. <sup>1</sup>
	Field method	Frequency	Field method	Frequency		
Austria			High-vol, PM <sub>10</sub>	24h a week	ICP-MS	yes
Belgium	Bulk/Wet-only	Monthly	Filter-1pack		AAS	no
Hg	Wet-only	Monthly			CV-AAS	
Czech Republic	Bulk	Weekly	Filter-1pack	24h a week	Cr, As: ICP-MS Ni, Cd, Cu, Pb: GF-AAS, Zn: F-AAS	yes
Germany	DE1,9: Wet-only	Weekly	High Vol., PM <sub>10</sub>	10 days	ICP-MS	yes
Hg	DE2,4:Bulk	Daily at DE2, weekly at DE4			CV-AFS	
Hg	Wet-only	Weekly				
Denmark	Bulk	Monthly	Filter-3pack	Daily at DK5,8,31 and weekly at DK10,11	Precip: ICP-MS Aerosols: PIXE	no
Hg	Bulk (Hg)	Monthly	Hg-monitor (Tekran)	Hourly		
Estonia	Bulk	Monthly			GF-AAS, Zn: F-AAS	yes
Spain			High-vol, PM <sub>10</sub>	24h a week	GF-AAS	yes
Finland	Bulk	Monthly	Teflon, Millipore, Fluoropore, 3 µm, 50 l/min, cut off 15 µm		ICP-MS	yes
Hg	Bulk (Hg)	Monthly	Hg: gold traps		CV-AFS	
France	Bulk	Monthly			GF-AAS	yes
Great Britain	Bulk	Monthly	Filter-1pack	Monthly	ICP-MS	yes
Ireland	Bulk	Monthly			ICP-MS	no
Hg	Bulk	Monthly			ICP-MS	
Iceland	Bulk	Weekly	High vol.	Biweekly	ICP-MS CV-AAS	(yes) <sup>2</sup>
Hg						
Lithuania	Bulk	Weekly	Filter-1pack	Weekly	GF-AAS	yes
Latvia	Bulk	Monthly	Filter-1pack	Weekly	GF-AAS, Zn: F-AAS	yes
Netherlands	Wet-only	Monthly	Filter-1pack	24h every 2 days	ICP-MS	yes
Hg	Wet-only	Weekly			CV-AAS	
Norway	Bulk	Weekly	NO42: High Vol, 20 l/h, W40 NO99: Filter-2-pack (PM <sub>10</sub> & PM <sub>2,5</sub> ), 10 l/min, Zefluor teflon	48h a week Weekly	ICP-MS	yes
Hg	Bulk (Hg)	Monthly	NO42: Tekran monitor NO99: gold traps	5-30 min 24h a week	CV-AFS	
Poland	Wet-only	Biweekly			GF-AAS, Zn: F-AAS	yes

Table 3, cont.

Country	Precipitation		Air and aerosols		Laboratory method	Participated in EMEP lab. Intercomp. <sup>1</sup>
	Field method	Frequency	Field method	Frequency		
Portugal	PT10: Wet-only, PT1,3,4: Bulk	Weekly Bulk			GF-AAS, Zn: F-AAS	no
Sweden	Bulk Hg	Monthly Monthly	Gold traps	2 X 24 h a week	ICP-MS CV-AFS	(yes) <sup>2</sup>
Slovakia	Wet-only	Monthly	Filter-1pack, Nitrocellulose filters Sartorius 47mm, 5-25 m <sup>3</sup> /day	Weekly	GF-AAS, Zn: F-AAS	yes

<sup>1</sup> Countries participated in the intercomparison in 2002 (Uggerud et. al, 2003)<sup>2</sup> Samples shipped to NILU, Norway, for analysis

AAS: Atomic Absorption Spectroscopy

GF-AAS: Graphic Furnace Atomic Absorption Spectroscopy

F-AAS: Furnace Atomic Absorption Spectroscopy

ICP-MS: Inductively Coupled Plasma - Mass Spectrometry

CV-AFS: Cold Vapour Atomic Fluorescence spectroscopy

Table 4: Measurement methods for POPs, 2001.

Country	Precipitation		Air and aerosols		Laboratory method
	Sampling method	frequency	Sampling method	frequency	
Belgium	Wet-only	Monthly			HPLC, GC-ECD
Czech rep.	Wet-only	Daily	HV-GRASEBY, PUR-foam 300 m <sup>3</sup> /day	1d a week	HPLC, GC-MS
Germany	Wet-only	Monthly			HPLC, GC-ECD
Finland	Bulk +dry dep	1 w a month	High vol.	1 w a month	HPLC, GC-MS
Ireland	Bulk	Monthly			GC-MS
Iceland	Bulk (Steel funnel 1 m <sup>2</sup> /PUR foam)	Biweekly	PUF-foam 1000m <sup>3</sup> /15days	Biweekly	GC-ECD
Lithuania	Bulk	Monthly		Monthly	TLC
Netherlands	Bulk	Monthly			
Norway	Bulk, funnel and bottle of glass	Weekly	High Vol.Gelman AE filter + 2 PUR foams. 20m3/h	NO99: 24h a week NO42: 48h a week	GC-MS
Sweden	Bulk	1 w a month	High vol.	SE2: weekly, SE12: 1 w a month	HPLC, GC-MS

HPLC: High Performance Liquid Chromatography

GC -MS: Gas chromatograph with Mass Spectrometry

GC - ECD: Gas chromatograph with Electron Capture Detector

TLC: Thin Layer Chromatography

### 3. Presentation of the measurement data

#### 3.1 Maps of heavy metal concentrations over Europe

Annual averages of Pb, Cd and Hg from the 2001 precipitation and air data are presented in (Figure 4–Figure 9). The yearly mean concentrations in precipitation have been calculated from daily, weekly or monthly reported values as precipitation-weighted averages. When discussing the regional distribution of the concentration fields, it should be noticed that few countries in Southern and Eastern Europe have reported data for heavy metals in precipitation or in air.

For heavy metal measurements there are two major problems with the data, firstly the detection limit for the method is not always adequate for the respective sampling site, and the data coverage is also in general much poorer than e.g. for main components. In the EMEP data quality objectives (EMEP, 1996) it says that the data completeness should be 90%; in addition, 75% of the data should be above the detection limit. As seen in appendix 1 and 2, these two criteria are often not met. However, several countries analyze heavy metals in air on one or two samples weekly from daily PM<sub>10</sub> aerosol samples. This will give poor data completeness, but the seasonal distribution and data coverage is anyhow satisfactory, and the annual average is probably a good estimate even though there are no measurements on the majority of the days.

In the data plots some of the most uncertain data are omitted. E.g. Belgium aerosol data are excluded because of inconsistency with the measurements from other countries; however, the data are shown in the annexes. In addition, Belgium reports two dataset from precipitation using either wet-only or bulk sampler. These data are very dissimilar and this is not due to dry deposition because the concentration is much higher in the wet only sampler. In the maps, data from the bulk sampler is included since these are more comparable to neighbouring sites.

Portugal has quite poor data capture as well as high detection limit for some elements. For this reason, the Portuguese precipitation measurements of cadmium at all sites and lead at two sites are excluded from the plots.

Because of high detection limit for mercury in precipitation for Ireland and Belgium, these data are also excluded from the data plots below.

Precipitation data from UK is only found in the appendixes and not in the data plots, because only deposition data are reported.

Data that only covers a few months of the year are not included in the maps, they are, however, shown in the annexes, i.e. precipitation data from PL05.

##### 3.1.1 Lead in precipitation

The lowest concentrations of Pb during 2001 are found in northern Scandinavia, Iceland, Ireland and Portugal, where the annual averages are below 1 µg Pb/l (Figure 4). An exception is Svanvik (NO47), which is located close to the large heavy metal emission sources at the Kola Peninsula in Russia. The highest concentrations are seen in The Czech republic, Slovakia and Lithuania with annual concentration means between 3.5 and 4.5 µg Pb/l.

### **3.1.2 Cadmium in precipitation**

In Scandinavia the annual mean values of Cd are below 0.05 µg Cd/l (Figure 5), with Svanvik (NO42) as an exception (0.16 µg Cd/l) due to emissions in Russia. An increasing gradient can be seen southeast. The highest concentrations of Cd are reported from Slovakia and The Czech republic, with about 0.4 µg Cd/l at the Slovakian station Chopok (SK02).

### **3.1.3 Mercury in precipitation**

Only a few stations are measuring mercury in precipitation in Europe, and most of them are related to the OSPARCOM programme. The concentrations are quite similar, (with the exception of the Belgium and Irish stations which are not included), and in the range 5-10 ng Hg/l for all the stations (Figure 6).

### **3.1.4 Lead in aerosols**

Figure 7 presents the annual averages of Pb in air in 2001. The lowest concentrations (below 1 ng Pb/m<sup>3</sup>) can be seen at Svalbard, Iceland and Greenland. Concentration maxima are seen in Slovakia with concentrations between 10 and 16 ng Pb/m<sup>3</sup>.

### **3.1.5 Cadmium in aerosols**

Cadmium in aerosols is presented in Figure 8. The lowest concentrations (below 0.10 ng Cd/m<sup>3</sup>) are reported from the Nordic and the Scottish stations. An increasing gradient can be seen southeastward, with the concentration maxima at the Czech republic, with concentrations between 0.3 and 0.5 ng Cd/m<sup>3</sup> stations. In different from the other elements and previous years the cadmium concentrations in air in Slovakia in 2001 were relatively low, about 0.1 ng Cd/m<sup>3</sup>.

### **3.1.6 Mercury in air**

Concentrations of mercury in air are in the range 1.3–1.7 ng/m<sup>3</sup> for all the stations (Figure 9). As for mercury in precipitation, there are only a few stations delivering data on mercury in air, and they are mainly related to the AMAP and the OSPARCOM programme.

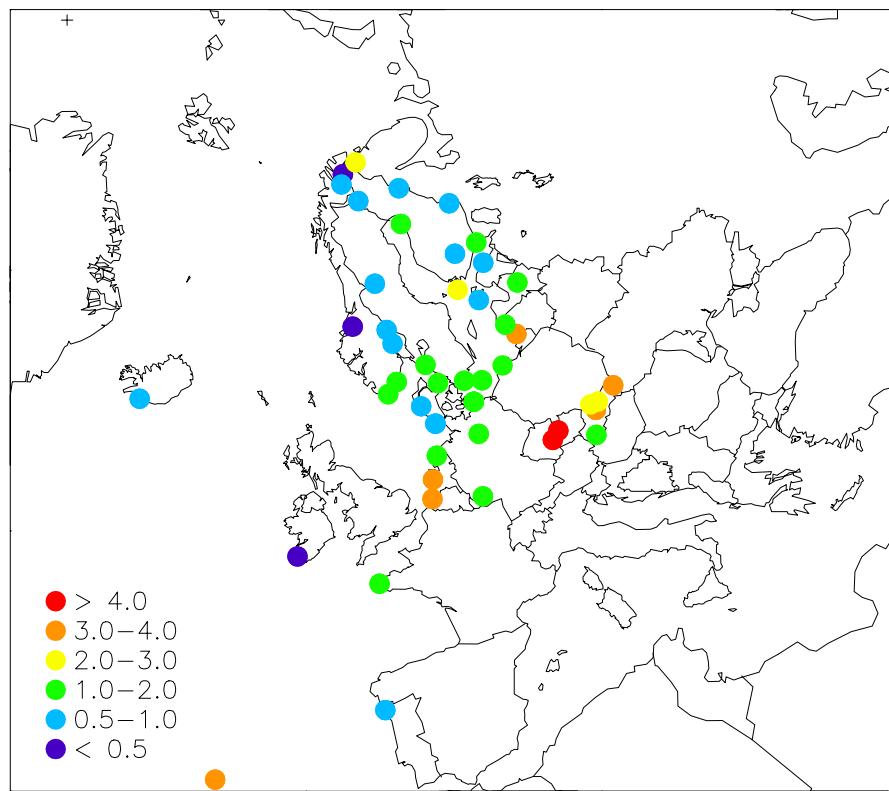


Figure 4: Lead in precipitation, 2001 ( $\mu\text{g/l}$ ).

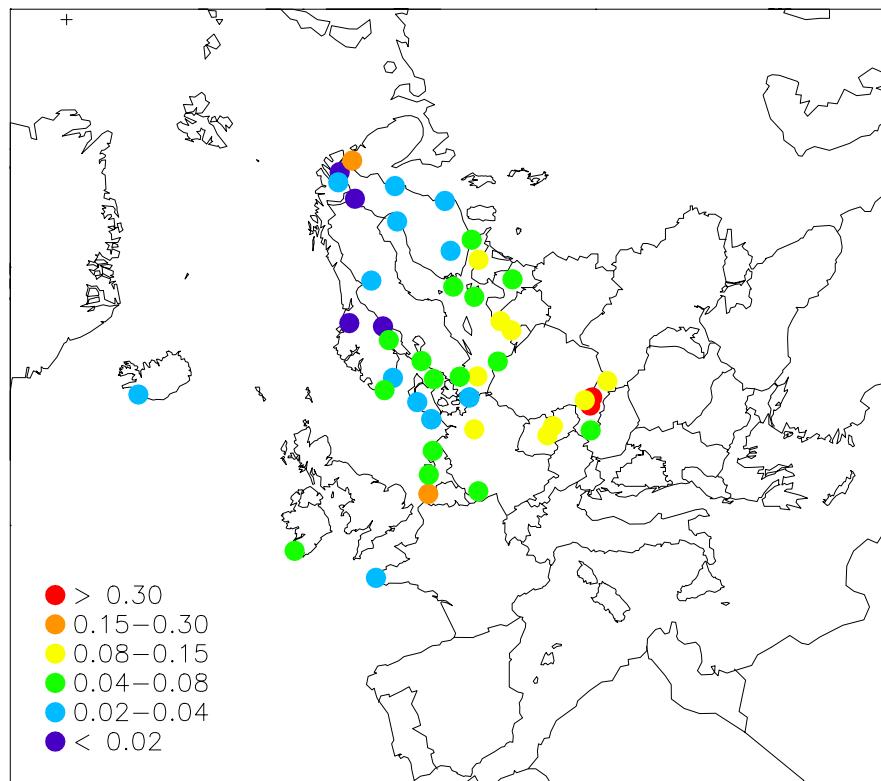


Figure 5: Cadmium in precipitation, 2001 ( $\mu\text{g/l}$ ).

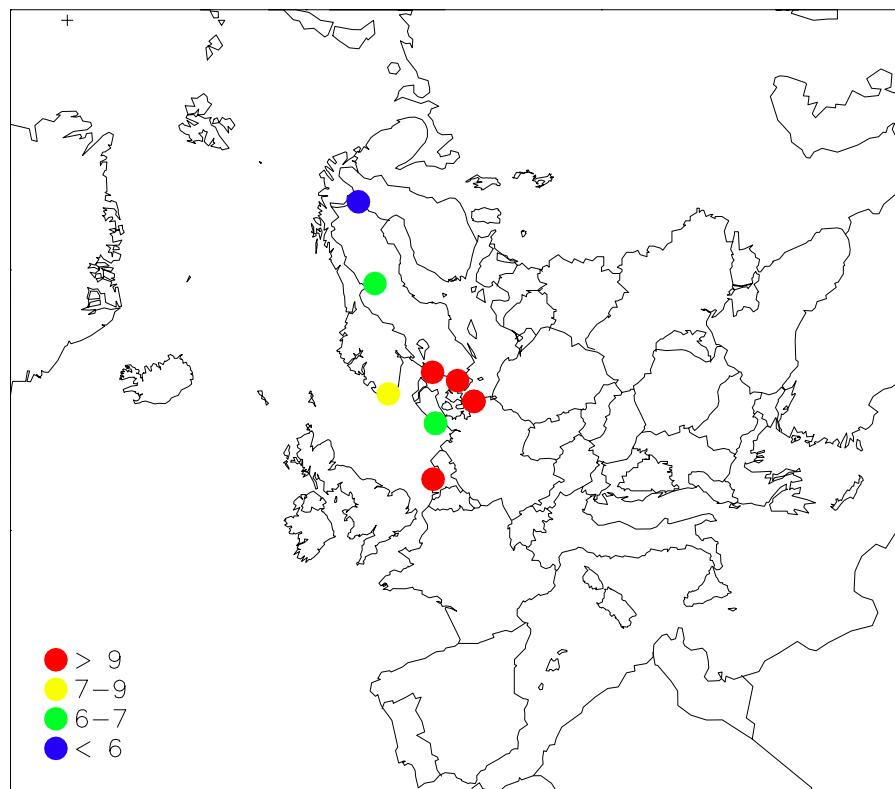


Figure 6: Mercury in precipitation, 2001 (ng/l).

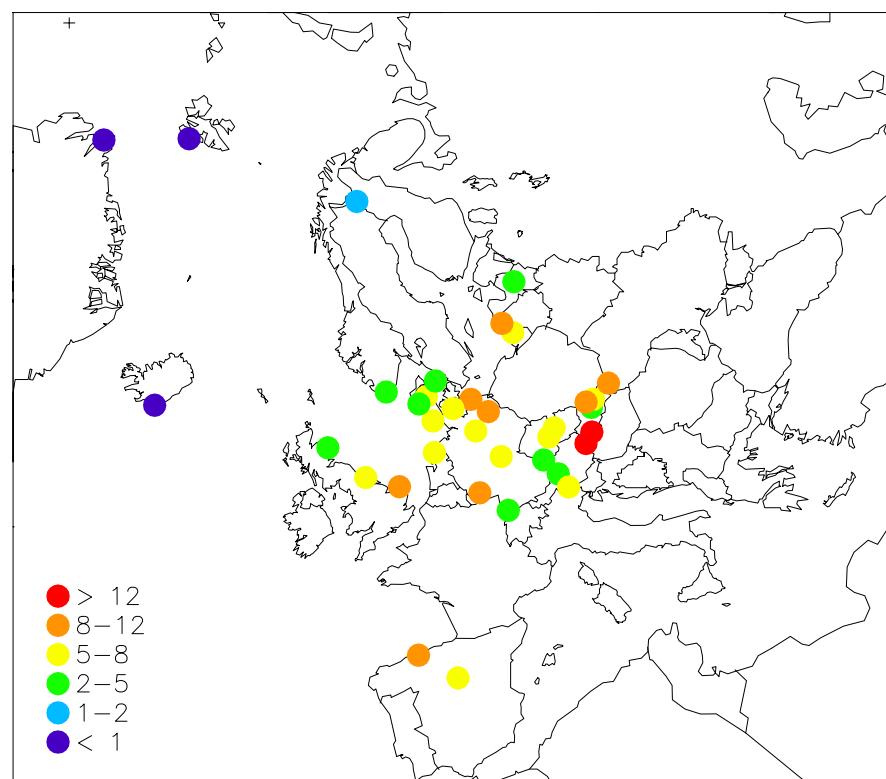


Figure 7: Lead in aerosols, 2001 (ng/m³).

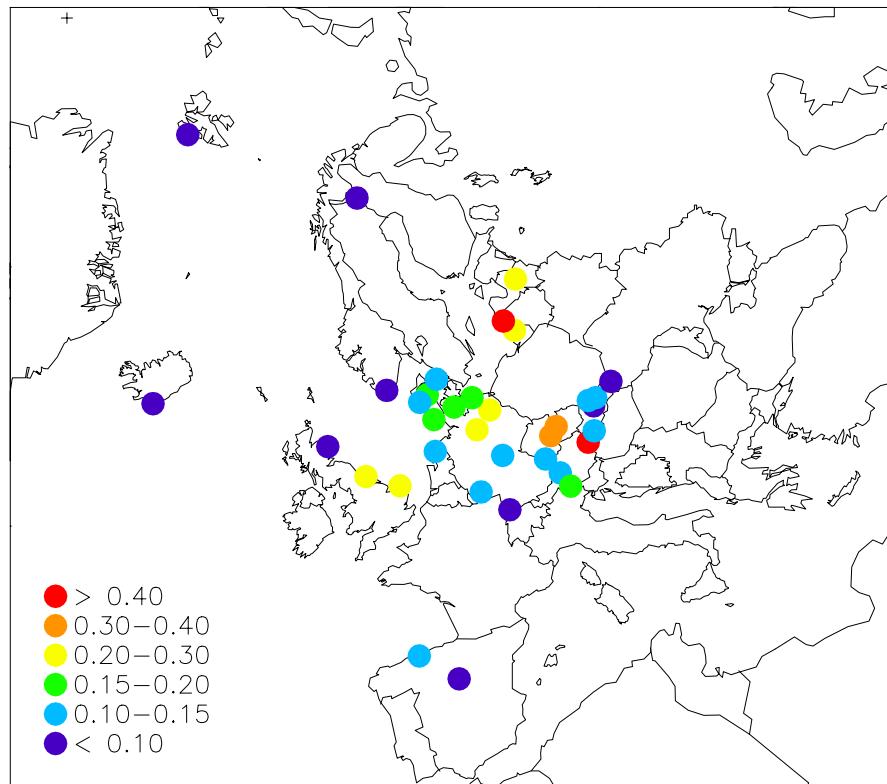


Figure 8: Cadmium in aerosols, 2001 (ng/m<sup>3</sup>).

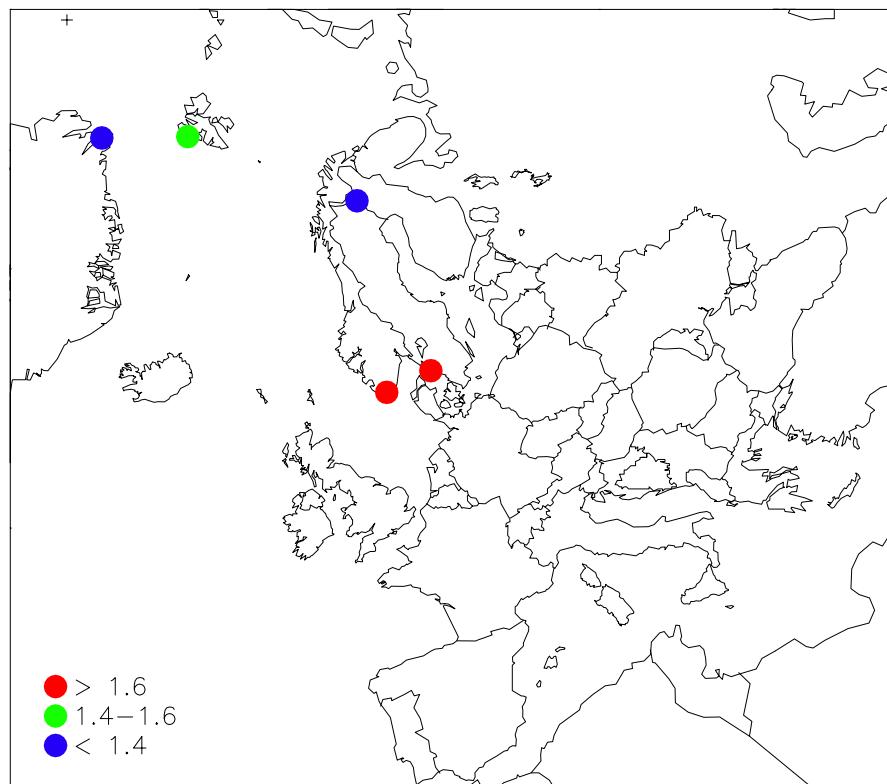


Figure 9: Mercury in air, 2001 (ng/m<sup>3</sup>).

### 3.2 Concentrations of POPs

It is generally difficult to give full credit to the information content in the POP data. Different sampling and analysis techniques make it difficult to compare data. SE2, SE12 and FI96 have the same type of precipitation sampler with 1 m<sup>2</sup> collection area. The results are given as deposition rates, ng/m<sup>2</sup> day. The rationale is that this includes both wet deposition and some dry deposition on the exposed collector surface. The deposition rates of PCBs at these stations show a decreasing trend from the southernmost station SE2 to the northernmost FI96. The Icelandic station has generally lower concentrations than the high Arctic (NO42), which is reasonable, considering the geographical location in relation to known source areas, but the differences are also due to different data handling and analysis techniques. Iceland subtracts blanks, whereas Norway does not. A number of data from Ireland and Belgium, and to some extent Iceland, has extremely high detection limits and one can only say something about the upper concentration limits at these sites.

#### 3.2.1 Concentrations of benzo(a)pyrene

Benzo(a)pyrene (and other PAHs) are rapidly destroyed by UV. In the absence of local sources, therefore, a pronounced seasonal trend is to be expected, which is seen at several stations (Figure 10). The emission sources, however, also have seasonal variations, with lowest emissions during the summer.

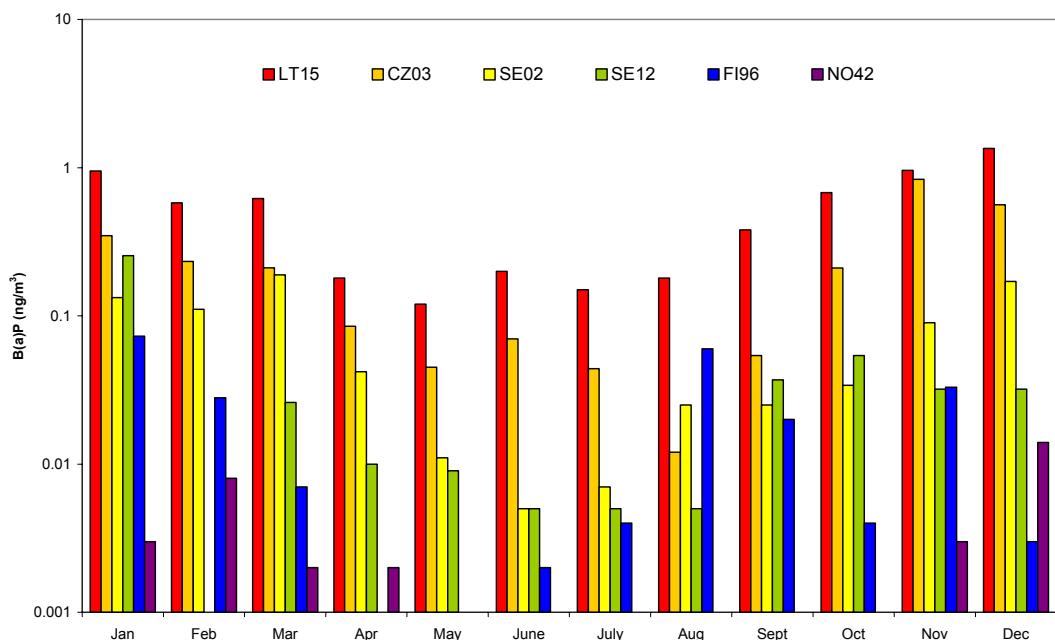


Figure 10: Concentrations of benzo(a)pyrene in air+aerosol at EMEP-stations, 2001.

### 3.3 Trends for heavy metals

Figure 11 shows temporal trends for Cd and Pb in atmospheric aerosols at a few selected stations with longer time series. The emissions of Cd and Pb have decreased in Europe in recent years and the concentration levels of both elements

show a significant reduction in air concentrations at sites in Germany, Slovakia and UK, Figure 11. In Norway, there is no significant trend for these two elements in air after 1990. A Mann Kendall test has been run to calculate the Sen's slope estimate for the time period 1989–2001, Table 5 (Gilbert, 1987; FMI, 2002). The annual average changes in air concentrations of Pb and Cd are calculated and as seen in Table 5 the highest reductions in absolute quantities for both elements are seen at the Slovakian site, but the percentage decrease in concentrations are relatively similar, 63–67% for cadmium and 64–76% for lead. Similar reductions in the concentrations in precipitation are also seen at those sites with long measurement program for precipitation.

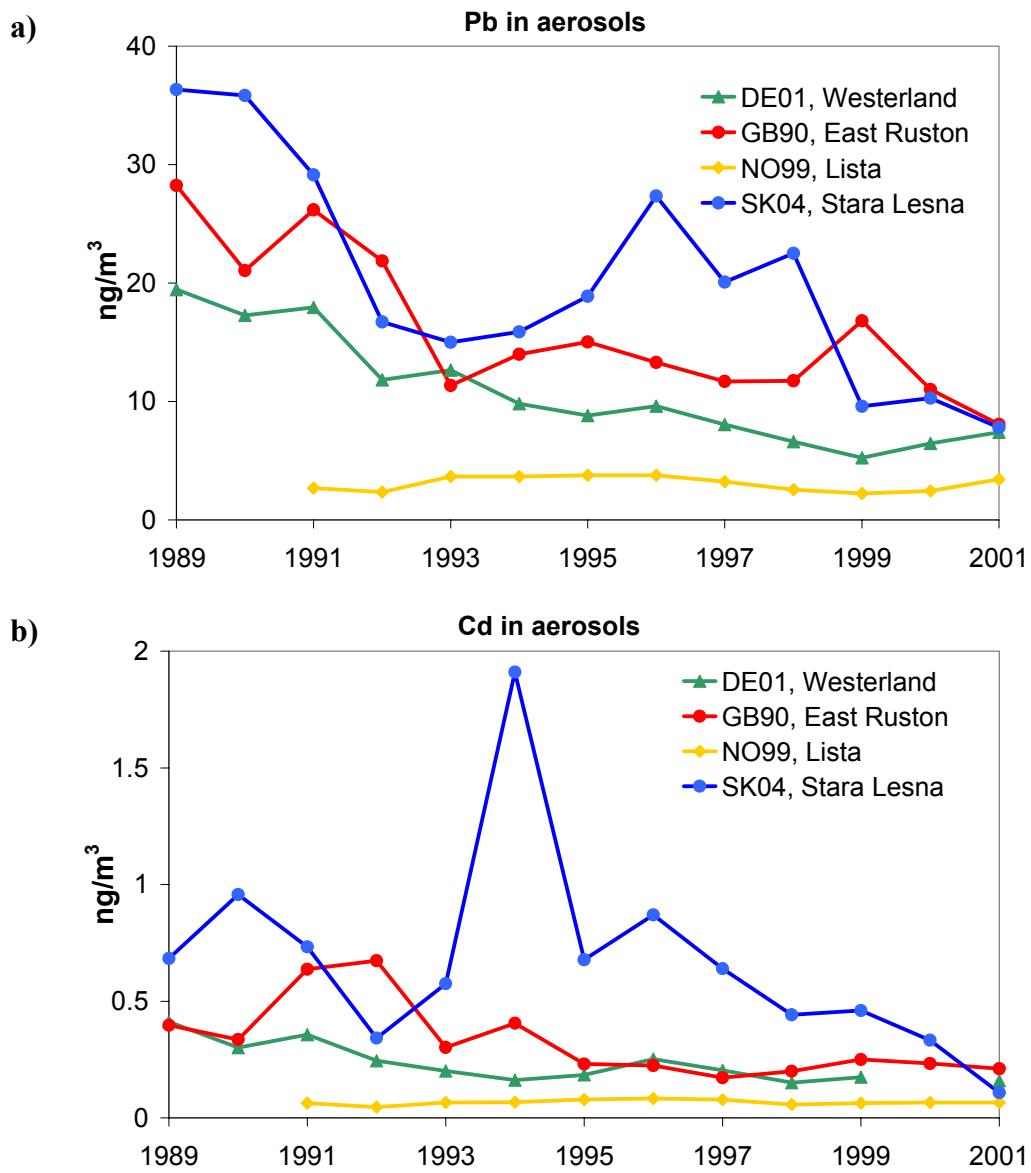


Figure 11: Annual average concentrations of Pb (a) and Cd (b) in aerosols at four selected EMEP sites, 1989–2001.

*Table 5: Annual changes in air concentration and total percentage change for lead and cadmium in aerosols at three selected EMEP sites, 1989–2001 using the Sen's slope estimate.*

Site	Pb		Cd	
	ng/m <sup>3</sup> /year	change	ng/m <sup>3</sup> /year	change
DE01	-1.068	76 %	-0.019	67 %
GB90	-1.193	64 %	-0.021	63 %
SK04	-1.788	72 %	-0.047	65 %

### 3.4 Trends POPs

The main source of  $\gamma$ -HCH is use of the pesticide lindane, which consists of at least 99% of the  $\gamma$ -HCH isomer. The trend in atmospheric  $\gamma$ -HCH levels is decreasing (Figure 12a). In 1994 a maximum was observed at the sites NO99 and SE02, in the south of respectively Norway and Sweden. Also the level of the isomer  $\alpha$ -HCH is decreasing (Figure 12b). The main source of  $\alpha$ -HCH is use of technical HCH as a pesticide. Technical HCH contains 60-70%  $\alpha$ -HCH, 5-12%  $\beta$ -HCH, 10-12%  $\gamma$ -HCH (which is the active pesticide component) and other minor components. Technical HCH is banned in most countries and replaced by lindane.

The general trend in atmospheric HCB levels is also decreasing. The important sources for HCB are production and use of chlorinated solvents and other chlorinated chemicals and various combustion reactions

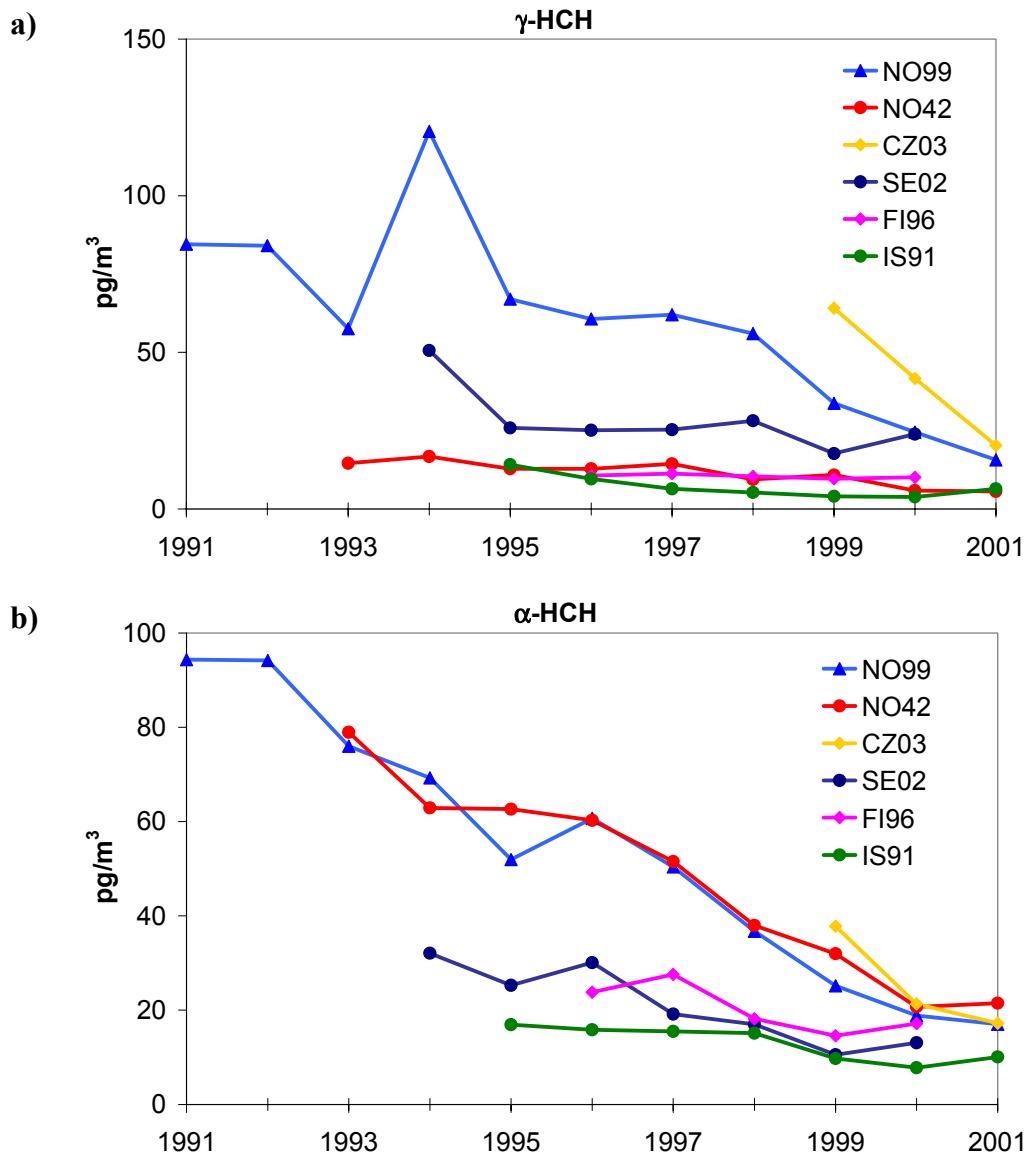


Figure 12: Trend in annual average of  $\gamma\text{-HCH}$  (a) +  $\alpha\text{-HCH}$  (b) concentration in air and aerosols.

### 3.5 Annual summaries

Annual summaries of heavy metals in precipitation and air are given in Annex 1 and Annex 2, respectively. Annual summaries for POP data are seen in Annex 3 and Annex 4. The precipitation component summaries contain:

- the precipitation weighted arithmetic mean value,
- the minimum and maximum daily concentrations,
- the number of data below the detection limit,
- the number of samples for a specified component

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.

For air components the arithmetic mean and the geometric mean have been computed together with their standard deviations. The definitions are given on the next three pages. The geometric standard deviation is a dimensionless factor. As a measure of the completeness of the dataset, the number of samples analysed in the period has been printed.

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

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

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

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

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

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

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

$$sd_a = \sqrt{\frac{\sum_i (c_i - \overline{c_a})^2}{N - I}}$$

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

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

$$\overline{c_g} = \exp(\overline{\ln c})$$

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

$$sd_g = \exp(sdlnc)$$

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

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

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

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

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

Num samples      is the number of samples for a specific component.

The units used for the results in this report are given in Table 6.

*Table 6: Units used for the measured components.*

Components	Units for W. mean, Min Max	Units for depositions
Amount precipitation	mm	mm
Heavy metals in precipitation	$\mu\text{g/l}$	$\mu\text{g}/\text{m}^2$
Mercury in precipitation	$\text{ng/l}$	$\text{ng}/\text{m}^2$
Heavy metals in air	$\text{ng}/\text{m}^3$	
Mercury in air	$\text{ng}/\text{m}^3$	
POPs in precipitation	$\text{ng/l}$	$\text{ng}/\text{m}^2$
PAHs in air	$\text{ng}/\text{m}^3$	
Pesticides, HCB and PCBs in air	$\text{pg}/\text{m}^3$	

### 3.6 Monthly summaries

Monthly averages of heavy metals are given in Annexes 5-8. The monthly mean values of precipitation data are precipitation weighted arithmetic averages. Average air concentrations are arithmetic averages of the reported values.

Data which do not have monthly resolution, but have parts of the sample in one month and parts in the following have estimated monthly means. The precipitation

data have been treated like this: If e.g. a weekly sample has 5 days in one month and 2 days in the next, 5/7 parts of the precipitation will be assigned to the first month and 2/7 parts to the next month, while the concentrations are assumed to be equal. The precipitation weighted monthly averages are then calculated as the estimated monthly deposition divided by the monthly precipitation amount.

For air samples starting and ending in different months weighted averages are calculated in a similar way. All values are multiplied with the number of days within a given month. The average is obtained by dividing the sum of these values with the number of days with measurements in that month.

### 3.7 Update

**The data compiled in this report represent the best data available at present. If any further errors are detected, the data will be corrected in the database.** It is important that the users make certain that they have access to the most recent version of the database. For the data presented here the latest alteration is 1. August 2003. Scientific use of the EMEP data should be based on fresh copies of the data. Copies can be requested from the CCC (e-mail: [wenche.aas@nilu.no](mailto:wenche.aas@nilu.no) or [annehj@nilu.no](mailto:annehj@nilu.no)). The newest updates will be downloadable from EMEP's hompeage as well, <http://www.nilu.no/projects/ccc/emepdata.html>. Information about the EMEP measurement network can be found at CCC's internet pages at <http://www.nilu.no/projects/ccc/index.html>.

## 4. Conclusions and recommendations

The lowest concentrations of Pb and Cd are generally observed in northern Scandinavia, Greenland, Iceland, and the westernmost part of Europe. Increasing gradients can be seen south and eastward. Several countries in Europe have reduced their emissions of Cd which can be seen in the decreasing level in the Cd concentrations at several stations. However, no clear trends can be noticed for other stations.

The concentration level of  $\alpha$ -HCH at both the Norwegian, the Icelandic, the Finish and one of the Swedish (SE2) stations are decreasing. The concentration level of  $\gamma$ -HCH at the Norwegian and the Icelandic stations are decreasing. For the other stations no clear trends can be noticed for the relatively short period of monitoring.

There is a general need for more measurement sites with high quality data. Few stations in central parts of Europe, the Mediterranean region and the most eastern part of Europe have reported data for heavy metals in precipitation. The site density is also low for heavy metals in air in Scandinavia, the Mediterranean region and eastern Europe. Data for POPs have been reported only from countries around the North and Baltic Seas, in the Arctic and from the Czech Republic.

It is important that all the countries deliver data on schedule every year so they can be included in the data report. Data delivered after the deadline will be included in the database only, which reduce the availability of the data. CCC appreciate receiving old data for the database. These data will be quality checked

and transferred to the database in the same way as newer data. It is important that the participants give information on sampling, analytical methods and quality control.

## 5. Acknowledgements

A large number of anonymous co-workers in participating countries have been involved in this work. A list of participating institutes, which have provided data for 2001, can be seen below. The staff at CCC wishes to express their gratitude and appreciation for continued good co-operation and efforts.

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Belgium	Flemish Environmental Agency	Jasmine Dumollin, <a href="mailto:jasmine.dumollin@vmm.be">jasmine.dumollin@vmm.be</a>
Czech Republic	Czech Hydrometeorological Institute	Jaroslav Pekarek, <a href="mailto:pekarek@chmi.cz">pekarek@chmi.cz</a>
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## **Annex 1**

### **Annual statistics for heavy metals in precipitation**



BE0004R Knokke Belgium bulk sampler

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
As	0.24	0.24	0.24	222.0	9	9
Cd	0.22	0.03	1.47	204.1	1	9
Cu	2.28	2.26	2.29	2109.2	9	9
Pb	3.31	1.66	8.54	3059.7	0	9
Precip	-	48.5	167.7	925.0	0	9
Zn	16.45	2.21	37.92	15214.5	2	9

BE0004R Knokke Belgium wet only sampler

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
As	0.24	0.24	0.25	182.4	13	13
Cd	0.57	0.09	1.63	425.1	0	13
Cr	0.95	0.80	2.18	715.1	0	13
Cu	2.57	2.06	7.31	1925.8	11	13
Hg	44.0	5	118	33079	5	13
Ni	1.40	0.88	2.90	1051.2	0	13
Pb	27.91	4.08	87.52	20927.4	0	13
Precip	-	13.7	134.2	749.8	0	13
Zn	34.48	16.57	88.14	25857.9	0	13

CZ0001R Svatouch Czech Republic

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
Cd	0.15	0.02	1.38	127.9	0	47
Ni	3.10	0.40	23.30	2635.3	0	48
Pb	4.29	0.40	17.30	3648.4	0	48
Precip	-	0.1	72.2	850.5	0	52

CZ0003R Kosetice Czech Republic

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
Cd	0.15	0.02	2.51	107.9	0	49
Ni	3.68	0.40	19.10	2677.1	0	49
Pb	4.60	0.40	11.70	3348.4	0	49
Precip	-	0.0	50.6	728.1	2	52

DE0001R Westerland Germany

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
As	0.12	0.07	0.42	76.2	0	40
Cd	0.03	0.01	0.10	18.0	3	40
Co	0.03	0.01	0.14	16.2	0	40
Cr	0.15	0.08	0.44	98.3	0	39
Cu	1.45	0.66	13.06	949.9	0	40
Fe	25.10	5.90	114.70	16481.0	0	40
Hg	6.34	1.40	23.30	4391.8	0	46
Mn	1.45	0.38	11.03	948.6	0	40
Ni	0.28	0.06	1.27	182.1	0	40
Pb	1.00	0.45	6.87	654.6	0	40
Precip	-	13.4	108.8	692.3	8	52
V	0.49	0.25	1.43	324.5	0	40
Zn	6.64	2.90	71.80	4355.9	0	40

DE0002R Langenbrugge Germany

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
As	0.16	0.02	1.00	104.5	0	148
Cd	0.13	0.02	1.95	84.5	0	148
Co	0.04	0.01	0.46	30.0	0	148
Cr	0.21	0.02	1.49	138.9	0	146
Cu	2.48	0.38	11.39	1659.6	0	146
Fe	46.70	7.00	408.00	31270.6	0	148
Mn	3.33	0.24	47.85	2226.5	0	147
Ni	0.75	0.09	7.42	504.8	0	144
Pb	1.63	0.40	15.66	1090.7	0	147
Precip	-	0.0	37.5	669.6	169	365
V	0.49	0.11	3.95	327.7	0	148
Zn	22.57	1.00	165.00	15113.8	0	148

DE0004R Deuselbach Germany

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
As	0.08	0.04	0.39	67.6	0	45
Cd	0.07	0.02	0.23	53.9	0	45
Co	0.04	0.01	0.50	36.6	0	45
Cr	0.18	0.05	0.85	144.7	0	45
Cu	3.24	0.75	11.65	2663.4	0	45
Fe	41.14	11.20	456.90	33859.7	0	45
Mn	3.42	0.70	37.10	2810.7	0	45
Ni	0.63	0.16	3.39	521.6	0	45
Pb	1.68	0.76	5.88	1381.8	0	45
Precip	-	0.0	55.8	823.0	5	53
V	0.35	0.13	1.84	291.0	0	45
Zn	15.98	7.10	146.00	13152.4	0	45

DE0009R Zingst Germany

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
As	0.12	0.07	0.79	80.7	0	38
Cd	0.04	0.02	0.16	22.9	0	38
Co	0.03	0.00	0.14	16.1	0	38
Cr	0.06	0.01	0.27	39.0	0	38
Cu	4.16	1.61	32.80	2726.6	0	38
Fe	20.27	2.60	137.30	13275.6	0	38
Hg	9.37	5.30	43.30	6133.0	0	42
Mn	2.12	0.30	20.90	1387.3	0	38
Ni	0.25	0.12	1.86	161.6	0	38
Pb	1.06	0.62	5.06	697.5	0	38
Precip	-	12.8	131.0	654.9	7	52
V	0.42	0.20	1.74	278.0	0	38
Zn	8.04	4.00	54.70	5254.2	0	38

DK0008R Anholt Denmark

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
As	0.31	0.15	0.55	177.6	0	10
Cd	0.06	0.02	0.13	31.8	0	11
Cr	0.23	0.17	0.32	133.8	0	11
Cu	0.95	0.52	1.28	540.4	0	11
Fe	55.20	28.38	101.88	31424.0	0	11
Ni	0.30	0.19	0.44	172.5	0	11
Pb	1.41	0.78	2.77	799.7	0	9
Precip	-	28.3	84.7	569.3	0	11
Zn	8.57	3.93	18.02	4878.0	0	11

DK0020R Pedersker, Bornholm Denmark

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
As	0.20	0.08	0.61	110.3	0	10
Cd	0.09	0.04	0.14	49.5	0	11
Cr	0.14	0.03	0.34	79.8	0	11
Cu	1.24	0.81	1.99	679.4	0	11
Fe	40.92	7.62	132.34	22510.8	0	10
Ni	0.28	0.10	0.58	153.9	0	10
Pb	1.32	0.57	4.18	725.8	0	10
Precip	-	25.9	125.6	550.0	0	11
Zn	12.46	7.59	27.77	6855.0	0	11

DK0031R      Ulborg      Denmark

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
As	0.12	0.05	0.20	122.6	0	12
Cd	0.03	0.01	0.05	29.2	0	12
Cr	0.10	0.05	0.20	97.4	0	12
Cu	0.63	0.31	0.95	643.8	0	12
Fe	20.91	7.72	51.12	21273.4	0	12
Ni	0.23	0.16	0.41	228.9	0	10
Pb	0.69	0.29	1.24	703.9	0	12
Precip	-	39.1	169.6	1017.2	0	12
Zn	8.42	3.35	21.45	8563.8	0	12

EE0009R      Lahemaa      Estonia

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
As	0.23	0.10	0.70	153.8	6	12
Cd	0.10	0.01	0.30	68.0	1	12
Cu	3.56	0.05	15.00	2349.5	2	12
Pb	0.82	0.05	4.10	543.9	7	12
Precip	-	3.4	181.8	660.3	0	12
Zn	5.97	5.00	13.00	3944.1	9	12

EE0011R      Vilsandi      Estonia

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
As	0.16	0.10	0.80	87.4	6	10
Cd	0.05	0.01	0.20	26.2	2	10
Cu	7.29	2.80	26.30	4025.6	0	10
Pb	0.67	0.50	1.90	371.6	8	10
Precip	-	5.0	155.1	551.9	0	12
Zn	9.79	5.00	30.00	5402.4	6	10

FI0008R      Kevo      Finland

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
As	0.10	0.05	0.24	36.8	0	12
Cd	0.02	0.01	0.06	6.2	0	12
Cr	0.04	0.00	0.26	13.8	0	12
Cu	1.00	0.36	4.12	383.0	0	12
Fe	12.06	0.00	51.02	4596.7	0	12
Mn	1.06	0.19	3.72	403.5	0	12
Ni	0.28	0.08	0.72	108.6	0	12
Pb	0.48	0.26	2.18	181.8	0	12
Precip	-	5.8	130.4	381.2	0	12
V	0.12	0.06	0.46	47.8	0	12
Zn	1.22	0.74	2.80	466.2	0	12

	FI0009R	Uto	Finland			
	January 2001 - December 2001					
Component	W. mean	Min	Max	Dep	Num bel	Num sampl
As	0.23	0.04	3.51	81.5	0	12
Cd	0.07	0.02	1.14	24.3	0	12
Cr	0.10	0.00	2.04	36.5	0	12
Cu	1.45	0.49	14.45	524.4	0	12
Fe	29.82	5.55	354.43	10822.6	0	12
Mn	2.23	0.96	13.53	809.8	0	12
Ni	0.30	0.13	5.82	107.5	0	12
Pb	2.45	0.82	32.48	890.6	0	12
Precip	-	1.4	120.6	362.9	0	12
V	0.70	0.24	18.42	255.3	0	12
Zn	6.33	2.41	115.91	2295.4	0	12

	FI0017R	Virolahti II	Finland			
	January 2001 - December 2001					
Component	W. mean	Min	Max	Dep	Num bel	Num sampl
As	0.16	0.01	0.56	93.9	0	12
Cd	0.07	0.01	0.29	42.5	0	12
Cr	0.08	0.00	0.60	48.2	0	12
Cu	0.82	0.42	2.40	476.9	0	12
Fe	35.80	7.45	102.59	20841.8	0	12
Mn	2.21	1.24	4.58	1287.5	0	12
Ni	0.20	0.09	0.64	114.2	0	12
Pb	1.48	0.34	3.75	859.6	0	12
Precip	-	12.5	128.9	582.2	0	12
V	0.51	0.18	1.52	295.8	0	12
Zn	4.15	1.60	9.27	2416.0	0	12

	FI0022R	Oulanka	Finland			
	January 2001 - December 2001					
Component	W. mean	Min	Max	Dep	Num bel	Num sampl
As	0.12	0.02	0.42	50.5	0	12
Cd	0.02	0.01	0.08	10.1	0	12
Cr	0.06	-0.02	0.34	26.7	0	12
Cu	0.84	0.44	2.19	354.9	0	12
Fe	11.31	4.62	31.81	4759.8	0	12
Mn	1.83	0.41	4.79	771.5	0	12
Ni	0.15	0.06	0.48	62.2	0	12
Pb	0.59	0.24	2.19	248.4	0	12
Precip	-	12.0	74.6	420.8	0	12
V	0.24	0.10	0.65	101.5	0	12
Zn	2.12	1.13	4.07	894.2	0	12

FI0036R

Matorova

Finland

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
As	0.07	0.01	0.20	36.4	0	12
Cd	0.02	0.01	0.06	9.9	0	12
Cr	0.02	0.00	0.28	12.0	0	12
Cu	0.66	0.37	1.36	340.9	0	12
Fe	11.33	4.62	31.81	5823.0	0	12
Mn	1.46	0.38	6.72	749.4	0	12
Ni	0.12	0.04	0.27	59.2	0	12
Pb	0.51	0.18	1.77	263.6	0	12
Precip	-	7.7	108.5	514.1	0	12
V	0.16	0.08	0.47	83.6	0	12
Zn	2.22	0.67	4.41	1139.3	0	12

FI0053R

Hailuoto

Finland

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
As	0.11	0.01	0.49	40.3	0	12
Cd	0.04	0.01	0.13	14.1	0	12
Cr	0.04	0.00	0.61	16.1	0	12
Cu	0.90	0.42	5.81	327.8	0	12
Fe	30.08	10.46	310.25	10954.8	0	12
Mn	2.37	0.78	9.45	862.4	0	12
Ni	0.17	0.06	1.04	61.1	0	12
Pb	1.22	0.32	4.24	444.6	0	12
Precip	-	4.5	58.6	364.2	0	12
V	0.41	0.20	2.21	148.8	0	12
Zn	3.50	1.60	12.97	1274.2	0	12

FI0092R

Hietajarvi

Finland

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
As	0.10	0.03	0.56	48.6	0	12
Cd	0.04	0.01	0.25	19.6	0	12
Cr	0.04	0.00	0.25	19.2	0	12
Cu	0.54	0.27	1.87	275.0	0	12
Fe	15.33	0.00	92.94	7830.8	0	12
Mn	1.69	0.38	8.34	860.9	0	12
Ni	0.13	0.08	0.32	68.6	0	12
Pb	0.94	0.21	6.18	478.8	0	12
Precip	-	15.5	93.2	510.9	0	12
V	0.30	0.13	1.36	151.5	0	12
Zn	2.24	1.11	10.55	1145.7	0	12

FI0093R		Kotinen		Finland		
January 2001 - December 2001						
Component	W. mean	Min	Max	Dep	Num bel	Num sampl
As	0.09	0.00	0.46	60.2	0	12
Cd	0.04	0.01	0.14	23.8	0	12
Cr	0.05	0.00	0.32	35.9	0	12
Cu	0.61	0.30	1.52	402.9	0	12
Fe	13.73	5.47	63.65	9098.0	0	12
Mn	2.88	0.82	9.57	1905.5	0	12
Ni	0.13	0.08	0.32	86.8	0	12
Pb	0.90	0.32	4.66	598.8	0	12
Precip	-	22.6	117.3	662.4	0	12
V	0.30	0.14	0.68	198.8	0	12
Zn	2.91	1.38	8.69	1928.7	0	12

FI0096R		Pallas		Finland		
January 2001 - December 2001						
Component	W. mean	Min	Max	Dep	Num bel	Num sampl
Hg	5.24	2.10	9.60	1440.8	0	11
Precip	-	2.4	74.7	275.0	1	11

FR0090R		Porsspoder		France		
January 2001 - December 2001						
Component	W. mean	Min	Max	Dep	Num bel	Num sampl
As	0.10	0.05	0.25	112.1	0	12
Cd	0.03	0.01	0.06	38.4	0	12
Cr	0.06	0.02	0.20	73.7	0	12
Cu	0.92	0.32	1.96	1073.3	0	12
Ni	0.54	0.30	1.40	631.8	0	12
Pb	1.07	0.30	3.90	1248.9	0	12
Precip	-	40.0	205.0	1168.0	0	12
Zn	1.72	0.90	4.00	2005.0	0	12

GB0014R		High Muffles		United Kingdom		Wet deposition (ug/m <sup>2</sup> )
January 2001 - December 2001						
Component	Mean dep Month	Min month	Max month	Dep	Num bel	Num sampl
As	22.40	5.00	86.00	273.0	0	12
Cd	3.53	1.00	7.00	42.0	0	12
Cr	15.44	4.00	58.00	178.0	0	12
Cu	175.73	26.00	347.00	2144.0	0	12
Ni	24.19	6.00	50.00	290.0	0	12
Pb	151.25	27.00	295.00	1825.0	0	12
Ti	53.93	20.00	123.00	654.0	0	12
Zn	448.37	84.00	1258.00	5472.0	0	12

GB0090R      East Ruston      United Kingdom      Wet deposition  
(ug/m<sup>2</sup>)

January 2001 - December 2001

Component	Mean dep Month	Min month	Max month	Dep	Num bel	Num samp1
As	18.01	6.00	50.00	209.0	0	12
Cd	5.85	1.00	41.00	66.0	0	12
Cr	27.26	5.00	193.00	327.0	0	12
Cu	192.24	14.00	434.00	2251.0	0	12
Ni	39.73	11.00	147.00	471.0	0	12
Pb	109.42	36.00	186.00	1286.0	0	12
Ti	59.47	19.00	125.00	714.0	0	12
Zn	752.77	97.00	3149.00	8596.0	0	12

GB0091R      Banchory      United Kingdom      wet deposition  
(ug/m<sup>2</sup>)

January 2001 - December 2001

Component	Mean dep Month	Min month	Max month	Dep	Num bel	Num samp1
As	9.63	4.00	27.00	114.0	0	12
Cd	12.54	0.00	82.00	142.0	0	12
Cr	8.24	1.00	20.00	98.0	0	12
Cu	651.91	2.00	5778.00	7527.0	0	12
Ni	21.95	3.00	51.00	260.0	0	12
Pb	63.86	10.00	169.00	758.0	0	12
Ti	41.09	14.00	76.00	493.0	0	12
Zn	828.51	2.00	5432.00	9474.0	0	12

IE0001R      Valentia Obs.      Ireland

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num samp1
Al	31.11	14.80	50.00	39223.3	6	12
As	0.50	0.50	0.50	630.4	12	12
Cd	0.05	0.05	0.05	63.0	12	12
Cr	0.50	0.50	0.50	630.4	12	12
Cu	0.86	0.50	4.40	1081.0	9	12
Hg	50.00	50.00	50.00	63035.0	12	12
Mn	4.90	2.00	14.00	6183.0	0	12
Ni	0.50	0.50	0.50	630.4	12	12
Pb	0.50	0.50	0.50	630.4	12	12
Precip	-	33.9	196.7	1260.7	0	12
V	0.55	0.50	1.00	695.4	11	12
Zn	37.94	24.10	65.50	47826.6	0	12

## IE0002R Turlough Hill Ireland

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
Al	38.61	18.70	112.00	55373.9	4	8
As	0.50	0.50	0.50	717.1	8	8
Cd	0.07	0.05	0.16	104.7	6	8
Cr	0.50	0.50	0.50	717.1	8	8
Cu	9.54	0.50	30.40	13682.7	2	8
Hg	50.00	50.00	50.00	71715.0	8	8
Mn	3.02	1.10	5.60	4325.5	0	8
Ni	0.50	0.50	0.50	717.1	8	8
Pb	1.01	0.50	2.70	1449.1	5	8
Precip	-	39.9	243.0	1434.3	0	12
V	0.50	0.50	0.50	717.1	8	8
Zn	8.89	4.40	13.30	12756.2	0	8

## IS0002R Irafoss Iceland

January 2001 - May 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
Al	63.29	13.10	234.10	43120.4	0	16
As	0.11	0.03	0.50	75.2	7	16
Cd	0.01	0.01	0.05	5.3	12	16
Cr	0.05	0.05	0.05	34.1	16	16
Cu	0.90	0.05	3.23	612.6	1	16
Fe	13.08	5.00	106.90	8909.1	12	16
Mn	1.01	0.20	4.10	688.9	0	16
Ni	0.08	0.05	0.60	54.6	11	16
Pb	0.47	0.07	1.71	317.0	0	16
Precip	-	0.0	87.5	681.3	2	24
V	1.24	0.20	4.48	843.0	0	16
Zn	10.29	3.50	19.40	7010.9	0	16

## IS0090R Reykjavik Iceland

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
Al	220.10	14.90	8863.00	184062.7	0	51
As	0.17	0.03	1.28	144.8	9	51
Cd	0.02	0.01	0.09	18.2	11	51
Cr	0.22	0.05	6.10	186.7	16	51
Cu	2.71	0.43	77.27	2269.9	0	51
Fe	156.26	5.00	5514.00	130675.2	5	51
Mn	3.04	0.30	84.60	2544.5	0	51
Ni	0.60	0.05	10.12	501.3	9	51
Pb	0.55	0.11	3.98	459.0	0	51
Precip	-	0.0	66.1	836.3	3	59
V	1.75	0.15	13.86	1465.1	0	51
Zn	6.57	0.70	75.00	5496.6	0	51

LT0015R Preila Lithuania

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
Cd	0.11	0.01	1.16	77.2	0	48
Cu	1.55	0.37	12.30	1123.8	0	48
Pb	3.70	0.01	24.84	2683.4	0	48
Precip	-	0.3	62.0	725.2	5	48
Zn	22.36	2.00	208.90	16217.5	0	48

LV0010R Rucava Latvia

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
Cd	0.09	0.01	0.42	78.9	0	12
Cu	1.33	0.30	14.20	1170.8	0	12
Pb	1.38	0.10	4.50	1213.5	1	12
Precip	-	23.5	193.2	879.5	0	12
Zn	12.72	2.60	31.40	11186.0	0	12

LV0016R Zoseni Latvia

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
Cd	0.08	0.01	0.20	59.2	3	12
Cu	1.60	0.30	8.00	1250.1	0	12
Pb	1.42	0.10	3.60	1110.2	1	12
Precip	-	25.0	126.2	783.0	0	12
Zn	20.47	7.70	35.50	16028.2	0	12

NL0009R Kollumerwaard Netherlands

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
As	0.24	0.10	0.31	192.0	2	7
Cd	0.07	0.03	0.12	52.0	1	7
Co	0.07	0.00	0.13	59.6	6	7
Cr	0.26	0.17	0.43	202.2	7	7
Cu	2.91	0.92	9.05	2308.0	0	7
Fe	99.20	7.26	161.39	78640.4	1	7
Ni	0.32	0.14	0.36	255.3	7	7
Pb	1.66	1.04	4.35	1311.6	0	7
Precip	-	33.7	195.5	792.7	0	11
V	0.68	0.44	0.80	535.1	0	7
Zn	8.21	6.80	10.20	6508.1	0	7

NL0091R De Zilk Netherlands

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
As	0.08	0.07	0.16	76.2	11	13
Cd	0.06	0.02	0.10	53.4	2	13
Cr	0.26	0.26	0.26	241.0	13	13
Cu	2.00	0.99	7.11	1852.9	0	13
Hg	9.41	3.00	65.00	7503.2	0	47
Ni	0.31	0.20	0.80	283.3	7	13
Pb	3.17	1.69	6.54	2940.8	0	13
Precip	-	25.7	202.2	926.9	2	52
Zn	6.63	1.95	15.10	6032.6	2	13

NO0001R Birkenes Norway

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
Cd	0.03	0.01	0.13	51.0	9	51
Pb	1.25	0.10	6.93	1982.0	0	51
Precip	-	0.0	146.1	1579.8	4	63
Zn	4.67	0.47	46.08	7382.4	0	51

NO0039R Kaarvatn Norway

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
Cd	0.01	0.00	0.05	14.8	18	53
Pb	0.13	0.02	1.10	206.0	0	53
Precip	-	0.0	123.9	1544.8	3	63
Zn	1.35	0.05	44.70	2087.0	1	53

NO0041R Osen Norway

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
Cd	0.02	0.00	0.11	14.5	4	51
Pb	0.59	0.06	2.22	446.8	0	51
Precip	-	0.0	46.6	753.0	7	63
Zn	3.34	0.58	16.82	2517.7	0	51

NO0047R Svanvik Norway

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
As	2.31	0.05	13.46	824.0	2	43
Cd	0.16	0.00	1.68	58.5	1	43
Co	0.65	0.01	3.64	232.9	1	43
Cr	0.39	0.10	2.69	138.0	19	43
Cu	20.23	0.19	112.90	7207.7	0	43
Ni	20.71	0.22	93.66	7377.5	0	43
Pb	2.56	0.09	10.81	910.7	0	43
Precip	-	0.0	32.8	356.2	8	60
Zn	8.54	0.96	38.81	3043.4	0	42

NO0055R Karasjok Norway

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
Cd	0.03	0.00	0.14	12.0	4	49
Pb	0.67	0.12	5.99	262.5	0	49
Precip	-	0.0	51.0	389.7	6	62
Zn	4.79	0.68	62.01	1867.1	0	49

NO0056R Hurdal Norway

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
Cd	0.04	0.00	0.58	42.1	5	48
Pb	0.93	0.09	5.81	934.0	0	49
Precip	-	0.0	66.9	1006.1	9	63
Zn	4.76	1.17	37.46	4788.9	0	48

NO0099R Lista Norway

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
As	0.18	0.05	1.68	213.4	7	52
Cd	0.06	0.01	1.91	68.5	8	52
Co	0.02	0.01	0.28	29.5	7	52
Cr	0.31	0.10	4.90	374.8	15	52
Cu	1.28	0.23	24.84	1544.2	0	52
Hg	7.30	4.10	14.60	8829.5	0	12
Ni	0.37	0.10	6.21	448.7	10	52
Pb	1.51	0.28	14.37	1833.9	0	52
Precip	-	22.0	231.0	1210.3	4	63
V	1.02	0.34	12.46	1236.4	0	52
Zn	7.44	0.82	78.38	9004.6	0	52

PL0004R Leba

Poland

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl	QA flag	Samp flag
Cd	0.05	0.03	0.16	42.9	100.0	0	12		
Cr	0.22	0.05	0.39	172.3	92.8	0	11		
Cu	1.68	0.47	4.75	1321.4	100.0	0	12		
Pb	1.66	0.56	3.39	1306.4	100.0	0	12		
Ni	0.36	0.12	0.74	279.9	100.0	0	12		
Precip	-	23.7	178.9	786.6	100.0	0	12		
Zn	5.39	3.17	10.26	4243.1	100.0	0	12		

PL0005R Diabla Gora

Poland

May 2001 - October 2001

Component	W. mean	Min	Max	Dep	% anal	Num bel	Num sampl	QA flag	Samp flag
Cd	0.32	0.05	3.60	161.8	95.7	12	73		
Cr	0.20	0.15	0.80	103.7	95.7	56	73		
Cu	1.59	0.15	35.70	806.6	95.7	2	73		
Pb	1.90	1.00	12.00	964.8	95.7	47	73		
Ni	0.41	0.15	2.30	209.0	95.7	30	73		
Precip	-	0.0	52.7	507.9	50.4	99	184		
Precip off	-	0.0	57.6	516.8	50.4	99	184		
Zn	20.22	0.15	479.00	10271.9	95.7	2	73		

PT0001R Braganca

Portugal

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
Cd	0.48	0.42	2.33	432.2	20	21
Cu	0.98	0.33	5.19	878.3	16	21
Mn	4.78	1.07	18.38	4297.3	12	21
Ni	0.78	0.78	0.78	696.3	21	21
Pb	0.65	0.65	0.65	579.5	21	21
Precip off	-	0.00	64.10	898.5	255	365
Zn	79.17	2.00	1196.00	71134.1	0	21

PT0003R V. Do Castelo

Portugal

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
Cd	0.42	0.42	0.42	786.2	42	42
Cu	1.24	0.33	16.89	2290.7	25	42
Mn	3.26	1.07	61.22	6029.3	21	42
Ni	0.80	0.78	2.23	1470.7	40	42
Pb	0.68	0.65	2.01	1249.1	39	42
Precip off	-	0.00	119.50	1849.9	214	365
Zn	18.57	2.00	148.00	34352.4	0	42

PT0004R Monte Velho Portugal

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
Cd	0.42	0.42	0.42	213.0	18	18
Cu	0.39	0.33	1.13	195.5	16	18
Mn	3.94	1.07	18.03	1976.4	11	18
Ni	0.90	0.78	5.48	449.6	17	18
Pb	0.65	0.65	0.65	323.2	18	18
Precip off	-	0.00	49.90	501.1	302	365
Zn	8.08	1.00	25.00	4050.1	0	18

PT0010R Angro do Heroismo Portugal

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
Cd	0.42	0.42	0.42	521.1	29	29
Cu	0.41	0.33	2.72	503.3	25	29
Mn	6.29	1.07	28.54	7711.5	12	29
Ni	6.31	0.78	38.22	7732.7	11	29
Pb	3.39	0.65	31.19	4152.5	6	29
Precip off	-	0.00	153.30	1226.0	3	52
Zn	22.86	2.00	90.00	28025.3	0	29

SE0002R Rorvik Sweden

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
Hg	9.31	4.50	17.60	5392.8	0	12
Precip	-	27.1	75.5	579.0	0	12

SE0005R Bredkalen Sweden

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
As	0.07	0.03	0.28	49.1	9	13
Cd	0.02	0.01	0.09	15.3	1	12
Cr	0.20	0.03	1.03	142.2	4	13
Cu	0.57	0.24	2.72	405.6	0	12
Hg	6.50	3.20	19.60	3573.6	0	12
Mn	1.98	1.10	4.20	1397.7	0	12
Ni	0.20	0.01	0.94	140.1	1	13
Pb	0.56	0.18	1.87	394.6	0	13
Precip	-	15.0	117.0	705.7	0	13
V	0.23	0.08	0.52	163.3	0	13
Zn	7.71	1.34	39.68	5443.5	0	12

SE0011R		Vavihill		Sweden			
January 2001 - December 2001							
Component		W. mean	Min	Max	Dep	Num bel	Num sampl
Hg		9.38	2.80	19.90	4687.7	0	12
Precip		-	9.3	102.9	499.6	0	12
SE0051R		Arup		Sweden			
January 2001 - December 2001							
Component		W. mean	Min	Max	Dep	Num bel	Num sampl
As		0.19	0.03	0.63	143.5	2	12
Cd		0.04	0.01	0.17	33.8	0	12
Cr		0.29	0.03	1.56	223.7	5	12
Cu		1.21	0.34	2.96	916.8	0	12
Ni		0.26	0.01	0.67	193.8	2	12
Pb		1.90	0.84	5.92	1443.1	0	12
Precip		-	19.0	211.0	761.0	0	12
V		0.79	0.09	1.31	599.9	0	12
Zn		12.14	3.86	31.36	9235.2	0	12
SE0097R		Gårdsjon		Sweden			
January 2001 - December 2001							
Component		W. mean	Min	Max	Dep	Num bel	Num sampl
As		0.14	0.03	0.32	94.7	3	12
Cd		0.04	0.01	0.08	28.9	0	12
Co		0.01	0.00	0.04	7.4	3	12
Cr		0.13	0.03	0.31	88.2	5	12
Cu		1.02	0.43	2.77	691.3	0	12
Mn		2.48	1.10	14.20	1676.8	0	12
Ni		0.26	0.01	0.64	175.3	1	12
Pb		1.36	0.50	2.27	920.7	0	12
Precip		-	29.0	111.0	676.0	0	12
V		0.89	0.43	2.80	598.8	0	12
Zn		11.54	3.74	25.79	7798.7	0	12
SK0002R		Chopok		Slovakia			
January 2001 - December 2001							
Component		W. mean	Min	Max	Dep	Num bel	Num sampl
Al		22.14	9.00	43.00	29068.8	0	12
Cd		0.39	0.19	1.12	507.0	0	9
Fe		37.24	13.00	65.00	48885.7	0	8
Mn		4.44	2.20	9.60	5825.2	0	12
Pb		3.94	1.60	9.00	5166.1	0	12
Precip		-	24.3	259.5	1312.7	0	12
Zn		46.48	18.00	130.00	61017.7	0	9

SK0004R      Stara Lesna      Slovakia

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
Al	100.70	15.00	178.00	90825.1	0	11
Cd	0.35	0.12	1.63	312.8	0	11
Fe	40.84	13.00	103.00	36831.3	0	9
Mn	4.00	2.00	10.50	3608.2	0	11
Pb	2.20	1.30	5.80	1988.2	0	11
Precip	-	16.2	254.5	901.9	0	12
Zn	12.17	4.00	38.00	10977.8	0	11

SK0005R      Liesek      Slovakia

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
Al	19.65	11.00	41.00	19262.5	0	12
Cd	0.13	0.08	0.27	126.9	0	12
Fe	31.87	8.00	58.00	31232.2	0	9
Mn	4.52	2.10	8.80	4433.0	0	12
Pb	2.31	1.20	4.20	2268.7	0	12
Precip	-	18.8	279.2	980.1	0	12
Zn	19.27	9.00	85.00	18889.1	0	12

SK0006R      Starina      Slovakia

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
Al	21.82	8.00	68.00	20729.3	0	12
Cd	0.14	0.01	0.40	134.3	0	12
Fe	25.64	7.00	66.00	24364.9	0	9
Mn	3.03	1.70	8.40	2875.5	0	12
Pb	3.07	1.20	10.80	2917.4	0	12
Precip	-	25.9	226.9	950.1	0	12
Zn	15.82	5.00	83.00	15031.0	0	12

SK0007R      Topoliniky      Slovakia

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
Al	19.99	7.00	51.00	10018.2	0	12
Cd	0.04	0.01	0.19	22.1	0	12
Fe	42.14	7.00	109.00	21116.5	0	11
Mn	3.85	0.90	10.20	1930.5	0	12
Pb	1.25	0.40	3.80	623.6	0	12
Precip	-	10.7	111.0	501.1	0	12
Zn	15.60	4.00	129.00	7817.5	0	12

## **Annex 2**

### **Annual statistics for heavy metals in air**



AT0002R	Illmitz				Austria							
January 2001 - December 2001												
Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	%	Num anal	Num bel	Num sampl	
Cd	0.42	0.37	0.33	1.86	0.20	0.30	2.20	16.7	0	61		
Pb	14.55	12.65	10.43	2.38	1.00	9.85	60.30	16.7	2	61		
AT0004R	St. Koloman				Austria							
January 2001 - December 2001												
Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	%	Num anal	Num bel	Num sampl	
Cd	0.13	0.09	0.12	1.47	0.10	0.10	0.70	16.7	51	61		
Pb	3.18	2.82	2.25	2.28	1.00	1.90	11.20	15.3	24	56		
AT0005R	Vorhegg				Austria							
January 2001 - December 2001												
Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	%	Num anal	Num bel	Num sampl	
Cd	0.15	0.12	0.13	1.63	0.10	0.10	0.70	16.7	46	61		
Pb	5.76	5.18	3.89	2.58	1.00	5.20	31.10	16.7	15	61		
BE0004R	Knokke				Belgium							
January 2001 - December 2001												
Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	%	Num anal	Num bel	Num sampl	
Cd	2.00	0.00	2.00	1.00	2.00	2.00	2.00	100.0	12	12		
Cu	35.10	2.64	35.00	1.07	33.00	34.00	41.00	100.0	4	12		
Ni	11.94	1.93	11.78	1.17	10.00	11.00	15.00	100.0	4	12		
Pb	24.61	6.19	24.05	1.23	20.00	22.00	43.00	100.0	1	12		
Zn	42.12	14.80	40.06	1.36	28.00	37.00	80.00	100.0	0	12		
CZ0001R	Svratouch				Czech Republic							
January 2001 - December 2001												
Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	%	Num anal	Num bel	Num sampl	
Cd	0.30	0.27	0.21	2.41	0.02	0.20	1.26	15.9	0	58		
Pb	7.59	7.42	5.42	2.29	0.64	5.52	48.88	15.9	0	58		
CZ0003R	Kosetice				Czech Republic							
January 2001 - December 2001												
Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	%	Num anal	Num bel	Num sampl	
Cd	0.31	0.30	0.21	2.66	0.01	0.23	1.76	16.4	0	60		
Pb	5.71	5.63	3.63	2.87	0.10	3.92	29.97	16.4	0	60		

DE0001R Westerland Germany

January 2001 - December 2001

Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	%	Num anal	Num bel	Num sampl
As	0.87	0.55	0.66	2.25	0.19	0.76	1.82	84.9	0	34	
Cd	0.16	0.15	0.10	2.57	0.02	0.11	0.67	87.7	0	35	
Cu	2.27	2.20	1.45	2.67	0.31	1.33	8.91	87.7	0	35	
Mn	2.78	2.35	1.75	2.83	0.33	2.16	8.06	87.7	0	35	
Ni	1.50	0.85	1.22	2.00	0.43	1.59	3.04	84.9	0	34	
Pb	7.40	5.58	5.09	2.62	0.84	6.06	22.27	84.9	0	34	

DE0002R Langenbrugge Germany

January 2001 - December 2001

Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	%	Num anal	Num bel	Num sampl
As	0.89	0.81	0.62	2.31	0.15	0.61	3.47	87.7	0	35	
Cd	0.21	0.20	0.15	2.24	0.03	0.14	0.98	87.7	0	35	
Cu	3.17	1.91	2.56	2.04	0.39	2.68	8.01	90.1	0	36	
Fe	100.31	47.63	87.31	1.78	15.00	91.50	200.00	87.7	0	35	
Mn	2.23	1.70	1.47	2.83	0.22	1.74	5.71	90.1	0	36	
Ni	1.21	0.81	0.97	1.97	0.41	0.95	2.78	90.1	0	36	
Pb	7.76	6.73	5.78	2.17	0.78	5.13	30.74	87.7	0	35	

DE0003R Schauinsland Germany

January 2001 - December 2001

Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	%	Num anal	Num bel	Num sampl
Cd	0.10	0.07	0.07	2.04	0.03	0.07	0.30	87.7	0	35	
Cu	1.51	1.58	0.74	3.88	0.10	1.04	5.34	65.5	0	26	
Mn	2.20	2.62	0.64	6.42	0.06	0.60	7.67	87.7	0	35	
Ni	0.69	0.51	0.51	2.25	0.15	0.56	2.00	85.8	0	34	
Pb	3.62	3.96	1.41	5.06	0.16	2.13	13.06	87.7	0	35	

DE0004R Deuselbach Germany

January 2001 - December 2001

Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	%	Num anal	Num bel	Num sampl
Cd	0.14	0.06	0.12	1.81	0.03	0.14	0.24	90.1	0	36	
Cu	3.15	1.00	2.91	1.52	0.88	3.12	4.49	87.4	0	35	
Fe	71.17	58.08	39.63	3.69	4.00	53.00	194.00	90.1	0	36	
Mn	5.01	2.08	4.20	2.06	0.32	4.85	8.75	90.1	0	36	
Ni	0.81	0.40	0.71	1.72	0.18	0.74	1.98	87.4	0	35	
Pb	9.78	3.77	8.85	1.59	3.09	9.56	18.14	90.1	0	36	

DE0005R Brotjacklriegel Germany

January 2001 - December 2001

Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	%	Num anal	Num bel	Num sampl
Cd	0.11	0.07	0.09	2.05	0.03	0.08	0.33	90.1	0	36	
Cu	1.43	0.79	1.18	1.93	0.31	1.12	3.01	87.7	0	35	
Mn	2.26	1.42	1.54	3.08	0.08	2.23	5.74	87.7	0	35	
Ni	0.66	0.66	0.32	4.03	0.05	0.31	2.42	90.1	0	36	
Pb	4.66	2.40	3.95	1.85	0.90	4.22	8.89	87.7	0	35	

	DE0007R		Neuglobsow		Germany						
	January 2001 - December 2001										
Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	% anal	Num bel	Num sampl	
As	1.40	0.82	1.04	2.51	0.12	1.44	2.87	85.2	0	34	
Cd	0.23	0.20	0.18	2.09	0.04	0.17	0.91	87.7	0	35	
Cu	1.82	1.10	1.38	2.35	0.21	1.52	4.11	87.7	0	35	
Mn	2.58	1.65	1.91	2.42	0.31	2.29	6.51	87.7	0	35	
Ni	1.06	0.57	0.85	2.07	0.19	1.03	2.35	87.7	0	35	
Pb	9.71	7.78	7.07	2.29	0.82	7.88	30.36	87.7	0	35	

	DE0008R		Schmucke		Germany						
	January 2001 - December 2001										
Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	% anal	Num bel	Num sampl	
Cd	0.14	0.11	0.10	2.37	0.03	0.12	0.44	90.1	0	36	
Cu	1.44	1.14	1.01	2.38	0.31	0.93	4.34	87.7	0	35	
Mn	2.77	2.36	1.60	3.53	0.11	2.19	10.84	90.1	0	36	
Ni	1.02	0.55	0.86	1.83	0.23	0.93	1.95	87.4	0	35	
Pb	6.49	5.07	4.68	2.37	0.32	4.25	20.16	90.1	0	36	

	DE0009R		Zingst		Germany						
	January 2001 - December 2001										
Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	% anal	Num bel	Num sampl	
As	0.75	0.70	0.46	2.97	0.08	0.61	3.07	87.7	0	35	
Cd	0.16	0.14	0.11	2.39	0.03	0.10	0.55	84.9	0	34	
Cu	2.00	1.50	1.48	2.33	0.23	1.84	6.88	87.7	0	35	
Mn	3.73	1.90	3.12	1.94	0.40	3.50	8.19	87.4	0	35	
Ni	1.75	0.91	1.46	1.93	0.17	1.61	3.57	90.1	0	36	
Pb	8.30	8.47	5.14	2.80	0.78	4.63	34.77	87.4	0	35	

	DK0003R		Tange		Denmark						
	January 2001 - December 2001										
Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	% anal	Num bel	Num sampl	
As	0.61	0.74	0.28	4.74	0.00	0.36	5.45	96.2	19	351	
Cd	0.16	0.30	0.13	4.37	0.00	0.08	1.76	96.2	298	351	
Cr	0.26	1.05	0.26	4.17	0.00	0.08	15.00	96.2	263	351	
Cu	1.36	1.86	0.71	3.96	0.00	1.01	26.74	96.2	11	351	
Fe	74.82	101.37	37.70	3.73	0.00	42.21	918.70	96.2	4	351	
Mn	3.02	3.40	1.75	3.30	0.00	2.04	31.31	96.2	5	351	
Ni	0.98	1.04	0.54	3.97	0.00	0.75	11.83	95.9	31	350	
Pb	5.02	7.38	2.12	4.67	0.00	2.79	56.56	96.2	3	351	
Zn	12.33	13.49	6.39	4.08	0.00	8.59	100.63	96.2	4	351	

DK0005R Keldsnor Denmark

January 2001 - December 2001

Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	%	Num anal	Num bel	Num sampl
As	0.64	1.15	0.34	2.94	0.00	0.29	9.23	93.7	29	342	
Cd	0.17	0.33	0.19	2.74	0.00	0.12	1.92	93.7	295	342	
Cr	0.45	0.69	0.43	2.75	0.00	0.31	5.22	93.7	208	342	
Cu	1.63	1.91	0.98	2.93	0.00	1.02	14.63	93.7	19	342	
Fe	70.01	79.15	44.73	2.63	0.00	44.72	749.12	93.7	3	342	
Mn	2.30	2.02	1.65	2.32	0.00	1.79	12.30	93.7	10	342	
Ni	1.86	1.67	1.31	2.53	0.00	1.41	11.37	93.7	15	342	
Pb	6.71	10.40	3.47	3.18	0.00	3.53	95.04	93.7	1	342	
Zn	13.84	15.43	8.52	2.92	0.00	8.91	105.29	93.7	6	342	

DK0008R Anholt Denmark

January 2001 - December 2001

Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	%	Num anal	Num bel	Num sampl
As	0.42	0.54	0.26	2.75	0.00	0.27	4.15	95.9	35	350	
Cd	0.15	0.27	0.20	2.57	0.00	0.13	1.31	95.9	304	350	
Cr	0.21	0.51	0.30	3.14	0.00	0.17	2.44	95.9	262	350	
Cu	1.02	1.11	0.63	2.87	0.00	0.65	7.79	95.9	27	350	
Fe	46.68	41.45	31.38	2.61	0.44	32.89	251.57	95.9	3	350	
Mn	1.90	1.30	1.47	2.16	0.04	1.57	7.16	95.9	11	350	
Ni	1.58	1.35	1.12	2.54	0.00	1.30	11.18	95.9	22	350	
Pb	4.48	6.38	2.17	3.59	0.00	2.12	55.53	95.9	6	350	
Zn	10.09	10.12	6.36	2.82	0.08	6.62	57.86	95.9	5	350	

DK0010G Nord, Greenland Denmark

January 2001 - December 2001

Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	%	Num anal	Num bel	Num sampl
As	0.08	0.11	0.04	3.66	0.00	0.04	0.55	85.8	6	53	
Cr	0.06	0.11	0.07	2.74	0.00	0.03	0.54	85.8	34	53	
Cu	0.11	0.15	0.08	2.96	0.00	0.06	0.67	85.8	20	53	
Hg	1.35	0.49	1.19	1.86	0.02	1.51	2.33	45.7	104	4003	
Mn	0.52	0.52	0.35	2.57	0.03	0.40	3.32	85.8	0	53	
Ni	0.08	0.08	0.06	2.53	0.00	0.06	0.35	84.1	11	52	
Pb	0.56	0.94	0.20	5.19	0.00	0.20	5.51	85.8	7	53	
Zn	0.69	0.93	0.41	3.51	0.00	0.40	4.81	85.8	14	53	

DK0011G Nuuk, Greenland Denmark

May 2001 - October 2001

Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	%	Num anal	Num bel	Num sampl
As	0.00	0.04	0.01	2.30	0.00	0.01	0.06	31.0	10	19	
Cr	0.07	0.11	0.06	2.81	0.00	0.05	0.37	29.9	12	18	
Cu	0.77	14.79	0.21	5.65	0.00	0.11	61.68	29.9	1	18	
Hg	1.39	0.15	1.38	1.11	0.97	1.37	2.73	18.9	0	1655	
Mn	0.60	0.80	0.44	2.55	0.08	0.43	3.49	31.0	0	19	
Ni	0.32	6.24	0.10	5.88	0.00	0.06	26.00	29.9	5	18	
Pb	0.40	0.58	0.27	2.75	0.00	0.22	2.41	31.0	1	19	
Zn	3.82	52.28	1.58	4.72	0.00	1.06	218.96	29.9	2	18	

DK0015G Thorshavn Faroe Island Denmark

January 2001 - December 2001

Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	% anal	Num bel	Num sampl
Hg	1.66	0.95	1.58	1.28	1.12	1.53	18.59	13.6	0	1194

DK0031R Ulborg Denmark

January 2001 - December 2001

Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	% anal	Num bel	Num sampl
As	0.34	0.46	0.21	2.90	0.00	0.21	3.29	100.0	58	365
Cd	0.13	0.28	0.15	2.86	0.00	0.11	2.23	100.0	338	365
Cr	0.19	0.64	0.30	3.68	0.00	0.08	5.13	99.7	276	364
Cu	0.89	1.29	0.48	3.57	0.00	0.46	17.05	100.0	70	365
Fe	46.57	56.17	24.80	3.45	0.19	25.95	347.54	100.0	11	365
Mn	1.80	1.77	1.22	2.58	0.00	1.17	12.11	99.7	32	364
Ni	1.05	1.50	0.64	3.13	0.00	0.74	20.78	100.0	52	365
Pb	4.16	6.54	1.86	4.14	0.00	2.17	54.32	100.0	20	365
Zn	9.25	11.16	5.23	3.23	0.00	5.78	72.40	100.0	19	365

ES0008R Niemboro Spain

March 2001 - December 2001

Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	% anal	Num bel	Num sampl
Cd	0.14	0.12	0.10	2.79	0.01	0.11	0.46	10.1	3	37
Cu	37.84	48.17	20.39	3.71	0.20	23.95	209.10	9.0	0	33
Pb	8.45	7.36	6.03	2.33	1.30	5.86	28.52	10.1	0	37

ES0009R Campisabalos Spain

March 2001 - December 2001

Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	% anal	Num bel	Num sampl
Cd	0.07	0.06	0.05	3.10	0.01	0.07	0.23	10.1	5	37
Cu	33.59	42.40	18.95	4.21	0.09	26.80	252.00	9.0	1	33
Pb	5.08	2.91	3.73	2.62	0.40	6.11	10.06	10.1	0	37

FI0036R Matorova Finland

January 2001 - December 2001

Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	% anal	Num bel	Num sampl
As	0.32	0.83	0.13	4.19	0.01	0.13	5.01	98.3	2	56
Cd	0.05	0.10	0.03	3.48	0.00	0.03	0.52	98.3	0	56
Cr	0.13	0.13	0.07	4.90	0.00	0.13	0.66	98.3	9	56
Cu	0.52	1.20	0.27	3.34	0.02	0.25	6.80	98.3	0	56
Fe	25.28	17.08	21.49	2.08	3.39	23.41	69.16	98.3	0	56
Mn	0.74	0.69	0.56	2.52	0.07	0.61	3.66	98.3	0	56
Ni	0.52	1.21	0.22	4.75	0.00	0.25	6.73	98.3	3	56
Pb	1.39	2.98	0.76	3.35	0.04	0.78	18.56	98.3	0	56
V	0.53	1.19	0.29	3.37	0.03	0.28	7.35	98.3	0	56
Zn	2.46	3.73	1.62	2.77	0.20	1.60	21.48	98.3	0	56

FI0096R Pallas Finland

January 2001 - December 2001

Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	% anal	Num bel	Num sampl
Hg	1.32	0.19	1.31	1.16	0.90	1.30	1.80	26.0	0	93

GB0014R High Muffles United Kingdom

January 2001 - December 2001

Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	% anal	Num bel	Num sampl
As	0.34	0.11	0.33	1.41	0.20	0.30	0.50	99.7	0	12
Cd	0.21	0.25	0.16	2.00	0.00	0.10	1.00	100.4	0	13
Cr	1.10	0.37	1.06	1.36	0.68	0.93	1.93	99.7	0	12
Cu	1.99	1.69	1.72	1.71	1.10	1.30	7.20	99.7	0	12
Ni	1.15	0.34	1.11	1.37	0.58	1.10	1.75	99.7	0	12
Pb	5.49	2.24	5.13	1.47	3.10	5.30	10.50	99.7	0	12
Ti	3.47	1.67	3.13	1.64	1.30	3.20	6.60	99.7	0	12
Zn	34.28	19.30	27.48	2.48	2.20	33.00	71.70	99.7	0	12

GB0090R East Ruston United Kingdom

January 2001 - December 2001

Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	% anal	Num bel	Num sampl
As	0.62	0.40	0.57	1.73	0.30	0.50	1.50	91.0	0	11
Cd	0.21	0.16	0.21	1.85	0.00	0.20	0.50	91.0	0	11
Cr	0.95	0.82	0.87	1.67	0.51	0.70	3.42	91.0	0	11
Cu	2.22	1.07	2.14	1.51	1.20	2.00	4.70	91.0	0	11
Ni	2.26	1.12	2.15	1.58	1.14	2.08	4.73	91.0	0	11
Pb	8.06	5.33	7.35	1.77	3.60	6.15	19.20	91.0	0	11
Ti	4.95	5.04	4.20	1.94	1.90	3.25	19.70	91.0	0	11
Zn	38.01	41.38	23.75	3.29	3.80	21.80	122.50	91.0	0	11

GB0091R Banchory United Kingdom

January 2001 - December 2001

Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	% anal	Num bel	Num sampl
As	0.38	0.30	0.30	1.97	0.10	0.20	1.10	100.0	0	12
Cd	0.07	0.09	0.12	1.57	0.00	0.00	0.30	100.0	0	12
Cr	0.47	0.38	0.38	1.95	0.17	0.27	1.35	100.0	0	12
Cu	0.76	0.24	0.73	1.35	0.50	0.70	1.30	100.0	0	12
Ni	0.47	0.11	0.46	1.28	0.30	0.47	0.62	100.0	0	12
Pb	2.36	1.12	2.11	1.62	1.00	1.70	4.40	100.0	0	12
Ti	3.45	2.63	2.75	2.05	1.10	2.10	9.20	100.0	0	12
Zn	13.24	14.54	5.96	4.75	0.50	4.30	42.70	85.5	0	10

## IS0091R Storhofdi Iceland

January 2001 - December 2001

Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	% anal	Num bel	Num sampl
Al	309.38	393.28	181.75	3.37	26.50	177.25	1433.40	100.0	0	25
As	0.05	0.04	0.03	3.78	0.00	0.04	0.21	100.0	2	25
Cd	0.04	0.07	0.02	3.00	0.00	0.01	0.33	100.0	0	25
Cr	6.46	4.72	4.61	2.61	0.29	4.35	15.10	100.0	0	25
Cu	0.52	0.42	0.45	1.95	0.11	0.39	1.69	100.0	0	25
Fe	311.68	493.68	212.09	2.84	46.90	145.60	2135.00	100.0	0	25
Hg	4.78	2.26	4.21	1.61	1.46	3.85	11.40	100.0	0	25
Mn	5.42	6.38	3.83	2.61	0.85	2.71	22.00	100.0	0	25
Ni	3.70	2.54	2.83	2.31	0.30	2.71	8.73	100.0	0	25
Pb	0.36	0.25	0.30	2.03	0.07	0.27	0.90	100.0	0	25
V	1.14	1.01	0.84	2.25	0.28	0.63	4.07	99.3	0	24
Zn	2.71	1.62	2.34	1.76	1.04	2.08	6.45	99.3	0	24

## LT0015R Preila Lithuania

January 2001 - December 2001

Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	% anal	Num bel	Num sampl
Cd	0.21	0.12	0.17	2.02	0.02	0.18	0.53	99.7	0	52
Cu	1.84	0.70	1.72	1.45	0.86	1.77	4.11	99.7	0	52
Pb	6.50	3.36	5.66	1.73	1.90	6.50	14.50	99.7	0	52
Zn	25.41	10.80	23.23	1.55	6.60	23.70	52.60	99.7	0	52

## LV0010R Rucava Latvia

January 2001 - December 2001

Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	% anal	Num bel	Num sampl
Cd	0.48	0.33	0.40	1.96	0.08	0.43	1.63	100.3	0	53
Cu	2.17	1.54	1.75	1.96	0.41	1.63	7.66	100.3	0	53
Ni	2.12	2.23	1.37	2.57	0.18	1.13	10.70	91.8	1	48
Pb	8.16	6.19	6.53	2.11	0.89	7.09	31.40	100.3	0	53
Zn	46.86	40.10	35.32	2.14	8.28	32.85	191.00	100.3	0	53

## LV0016R Zoseni Latvia

January 2001 - December 2001

Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	% anal	Num bel	Num sampl
Cd	0.21	0.15	0.18	1.89	0.06	0.15	0.58	94.2	0	50
Cu	1.32	1.72	0.83	2.55	0.05	0.83	9.52	94.2	4	50
Ni	1.79	2.83	0.80	3.59	0.05	0.81	11.50	86.3	6	45
Pb	2.87	2.06	2.37	1.89	0.74	2.08	9.94	94.2	0	50
Zn	11.78	7.78	10.41	1.59	3.29	10.60	55.50	94.2	0	50

## NL0009R Kollumerwaard Netherlands

January 2001 - December 2001

Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	% anal	Num bel	Num sampl
As	0.53	0.58	0.40	2.28	0.00	0.40	5.20	49.6	41	181
Cd	0.14	0.17	0.17	1.81	0.00	0.10	1.60	49.6	38	181
Pb	7.15	7.08	4.67	2.80	0.00	5.20	63.20	49.6	0	181
Zn	21.96	19.50	16.18	2.20	1.70	15.60	134.40	49.6	69	181

NO0042G Zeppelin, Spitsbergen Norway

January 2001 - December 2001

Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	%	Num anal	Num bel	Num sampl
As	0.40	0.27	0.31	2.16	0.05	0.32	1.22	27.2	0	52	
Cd	0.02	0.02	0.01	4.08	0.00	0.01	0.06	27.2	12	52	
Co	0.01	0.01	0.01	2.50	0.00	0.01	0.03	27.2	26	52	
Cr	0.04	0.04	0.03	2.43	0.01	0.02	0.16	27.2	27	52	
Cu	0.31	0.21	0.23	2.78	0.01	0.32	1.13	27.2	1	52	
Mn	0.23	0.23	0.15	2.80	0.04	0.15	0.94	27.2	17	52	
Ni	0.08	0.07	0.05	2.63	0.00	0.05	0.29	27.2	3	52	
Pb	0.50	0.61	0.22	4.34	0.01	0.21	2.54	27.2	0	52	
V	0.12	0.13	0.07	2.67	0.02	0.07	0.57	27.2	19	52	
Zn	1.28	1.14	0.92	2.78	0.03	1.04	5.67	27.2	2	52	
Hg (g)	1.56	0.26	1.53	1.26	0.15	1.61	2.46	90.2	0	7901	
Hg (RGM)	5.99	7.08	2.21	3.22	0.40	1.80	24.70	3.8	0	13	

NO0099R Lista Norway

January 2001 - December 2001

Fine fraction, PM2.5:

Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	%	Num anal	Num bel	Num sampl
As	0.49	0.12	0.49	1.22	0.23	0.47	1.05	96.1	51	51	
Cd	0.06	0.05	0.05	2.33	0.00	0.04	0.18	96.1	1	51	
Co	0.02	0.03	0.02	2.10	0.00	0.01	0.16	96.1	10	51	
Cr	0.37	0.78	0.22	2.13	0.08	0.16	4.50	96.1	41	51	
Cu	0.32	0.54	0.22	2.93	0.02	0.24	3.06	96.1	1	51	
Ni	0.62	0.51	0.44	2.36	0.08	0.47	2.59	96.1	0	51	
Pb	1.98	6.75	1.34	3.10	0.15	1.64	48.28	96.1	0	51	
V	6.40	6.07	5.85	1.57	2.50	5.03	42.00	96.1	46	51	
Zn	5.36	5.26	3.65	2.82	0.38	3.83	25.36	96.1	0	51	

Course fraction, PM10-PM25:

Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	%	Num anal	Num bel	Num sampl
As	0.17	0.16	0.15	1.67	0.06	0.12	0.87	94.2	45	50	
Cd	0.01	0.01	0.01	1.57	0.00	0.01	0.04	94.2	3	50	
Co	0.01	0.01	0.02	1.67	0.00	0.01	0.08	94.2	6	50	
Cr	0.64	0.67	0.48	2.09	0.16	0.32	3.08	94.2	38	50	
Cu	0.32	0.26	0.27	1.93	0.08	0.26	1.36	94.2	0	50	
Ni	0.13	0.07	0.10	2.36	0.01	0.13	0.25	94.2	4	50	
Pb	0.44	1.53	0.32	2.80	0.03	0.31	10.95	94.2	0	50	
V	1.69	1.49	1.45	1.62	0.61	1.23	8.28	94.2	46	50	
Zn	1.60	1.23	1.26	2.06	0.22	1.27	7.01	94.2	0	50	
Hg (g)	1.65	0.26	1.63	1.17	1.21	1.64	2.18	5.5	0	20	

SE0002R Rorvik Sweden

January 2001 - December 2001

Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	%	Num anal	Num bel	Num sampl
Hg	1.66	0.33	1.63	1.19	1.10	1.60	3.30	28.8	0	105	

SK0002R      Chopok

Slovakia

January 2001 - December 2001

Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	%	Num anal	Num bel	Num sampl
Cd	0.01	0.01	0.01	2.07	0.01	0.01	0.05	73.2	0	45	
Cr	1.10	1.70	0.38	5.18	0.02	0.35	7.72	71.5	0	44	
Cu	0.92	0.68	0.72	2.34	0.06	0.84	3.10	73.2	0	45	
Mn	1.41	1.25	0.87	2.86	0.10	0.85	5.56	73.2	0	45	
Ni	0.61	0.79	0.29	3.80	0.04	0.31	3.79	71.5	0	44	
Pb	2.86	2.77	1.94	2.81	0.03	1.95	15.94	73.2	0	45	
Zn	5.00	5.54	2.81	2.90	0.74	2.24	30.47	73.2	0	45	

SK0004R      Stara Lesna

Slovakia

January 2001 - December 2001

Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	%	Num anal	Num bel	Num sampl
Cd	0.11	0.17	0.04	4.38	0.01	0.03	0.80	80.8	0	48	
Cr	0.68	0.80	0.40	3.00	0.02	0.44	4.69	80.8	0	48	
Cu	2.61	1.97	2.27	1.66	0.98	2.08	12.93	80.8	0	48	
Mn	4.16	1.90	3.73	1.60	1.20	3.63	8.37	80.8	0	48	
Ni	0.65	0.54	0.49	2.03	0.16	0.45	2.64	80.8	0	48	
Pb	7.80	4.11	6.96	1.55	3.19	6.55	24.92	80.8	0	48	
Zn	22.72	13.65	16.20	2.82	0.91	21.24	56.43	80.0	0	47	

SK0005R      Liesek

Slovakia

January 2001 - December 2001

Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	%	Num anal	Num bel	Num sampl
Cd	0.15	0.22	0.04	5.99	0.01	0.04	0.98	81.6	0	50	
Cr	1.64	2.04	0.96	3.01	0.02	0.95	11.84	80.0	0	49	
Cu	15.25	17.80	8.77	2.82	1.94	7.48	83.02	81.6	0	50	
Mn	20.17	13.92	15.94	2.05	4.35	15.69	63.69	81.6	0	50	
Ni	1.07	1.71	0.58	2.99	0.04	0.51	10.75	81.6	0	50	
Pb	10.46	5.33	9.42	1.57	3.24	9.45	31.62	81.6	0	50	
Zn	21.73	12.49	18.04	2.02	0.91	18.30	66.79	81.6	0	50	

SK0006R      Starina

Slovakia

January 2001 - December 2001

Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	%	Num anal	Num bel	Num sampl
Cd	0.08	0.29	0.02	6.64	0.01	0.01	1.53	74.2	0	50	
Cr	1.56	1.14	1.30	1.71	0.31	1.26	8.10	72.6	0	49	
Cu	3.60	3.77	3.19	1.70	1.29	3.02	25.53	74.2	0	50	
Mn	4.63	2.58	3.83	1.87	0.60	3.54	12.38	74.2	0	50	
Ni	1.20	0.69	0.85	2.80	0.04	1.12	3.40	72.6	0	49	
Pb	11.88	9.22	9.91	2.13	1.16	10.67	50.11	74.2	0	50	
Zn	16.42	10.79	10.68	2.95	0.91	14.40	55.43	74.2	0	50	

SK0007R Topoliniky Slovakia

January 2001 - December 2001

Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	%	Num anal	Num bel	Num sampler
Cd	0.12	0.46	0.03	7.25	0.01	0.02	2.36	81.6	0	55	
Cr	3.57	2.68	3.09	1.80	0.69	2.99	17.76	80.0	0	54	
Cu	4.34	2.01	4.15	1.48	2.14	3.85	10.89	81.6	0	55	
Mn	7.73	4.12	6.72	1.71	2.62	7.24	19.94	80.0	0	54	
Ni	3.13	2.65	2.53	2.23	0.04	2.40	14.05	78.4	0	53	
Pb	16.53	16.79	13.91	2.00	3.42	12.30	76.64	81.6	0	55	
Zn	27.15	18.19	22.79	2.13	0.91	26.83	96.21	76.7	0	52	

## **Annex 3**

### **Annual statistics for POPs in precipitation**



	BE0004R	Knokke	Belgium						
Component				W. mean	Min	Max	Dep	Num bel	Num sampl
Precip		-	13.7	134.2	749.8	0	13		
alpha_HCH		0.50	0.50	0.50	374.9	12	12		
dieldrin		0.96	0.50	1.00	718.8	12	12		
endrin		1.46	1.00	1.50	1093.8	12	12		
gamma_HCH		12.63	0.50	130.00	9472.8	5	12		
heptachlor		1.00	1.00	1.00	749.8	12	12		
pp_DDD		0.50	0.50	0.50	374.9	12	12		
pp_DDE		1.00	1.00	1.00	749.8	12	12		
pp_DDT		0.50	0.50	0.50	374.9	12	12		
DE0001R		Westerland	Germany						
Component				W. mean	Min	Max	Dep	Num bel	Num sampl
HCB		0.26	0.08	0.50	175.2	1	12		
PCB_101		0.859	0.050	2.970	582.5	0	12		
PCB_118		0.448	0.090	1.370	304.1	0	12		
PCB_138		1.598	0.270	4.620	1083.8	0	12		
PCB_153		1.034	0.230	2.700	701.5	0	12		
PCB_180		0.600	0.020	1.830	406.7	1	12		
PCB_28		1.327	0.260	5.320	899.8	0	12		
PCB_52		0.736	0.060	2.970	499.3	0	12		
Precip		-	12.8	115.4	678.2	0	12		
alpha_HCH		0.53	0.30	0.64	357.1	0	12		
anthracene		11.32	4.10	24.70	7676.5	0	12		
benz_a_anthracene		2.52	0.35	16.80	1708.9	1	12		
benzo_a_pyrene		1.859	0.300	3.400	1260.7	1	12		
benzo_ghi_perlylene		3.00	0.60	9.80	2038.2	1	12		
dibenz_o_ah_anthracene		0.27	0.05	1.03	180.4	7	12		
dieldrin		0.08	0.03	0.24	53.8	2	12		
endrin		0.01	0.01	0.08	10.3	11	12		
fluoranthene		13.88	6.70	43.80	9410.2	0	11		
gamma_HCH		3.24	1.68	11.92	2194.7	0	12		
heptachlor		0.00	0.00	0.01	2.6	12	12		
inden_123cd_pyrene		3.16	0.60	12.50	2142.3	1	12		
op_DDD		0.01	0.01	0.04	6.5	12	12		
op_DDE		0.01	0.00	0.12	5.9	11	12		
op_DDT		0.14	0.01	1.31	94.8	7	12		
phenanthrene		37.01	13.60	151.30	25102.1	0	12		
pp_DDD		0.08	0.01	0.42	51.4	10	12		
pp_DDE		0.37	0.00	1.52	248.5	3	12		
pp_DDT		0.50	0.04	2.12	341.9	1	12		
pyrene		13.58	5.70	35.20	9211.0	0	11		

DE0009R Zingst Germany

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
HCB	0.57	0.28	1.66	362.9	0	12
PCB_101	1.074	0.210	4.630	687.7	0	12
PCB_138	0.734	0.180	2.570	469.8	0	12
PCB_153	0.666	0.180	2.210	426.7	0	12
PCB_180	0.314	0.020	1.810	201.4	3	12
PCB_28	1.156	0.590	3.300	740.0	0	12
PCB_52	1.135	0.360	3.350	726.6	0	12
Precip	-	13.2	110.8	640.4	0	12
alpha_HCH	0.52	0.27	0.74	333.5	0	12
anthracene	17.73	4.20	73.50	11352.6	0	12
benz_a_anthracene	4.07	0.05	27.30	2604.4	2	12
benzo_a_pyrene	3.327	0.050	26.500	2130.7	3	12
benzo_ghi_perlylene	5.04	0.15	48.50	3229.8	2	12
dibenzo_ah_anthracene	0.39	0.05	4.40	250.4	8	12
dieldrin	0.12	0.03	0.32	74.1	2	12
endrin	0.01	0.00	0.04	6.0	12	12
fluoranthene	21.48	3.90	96.20	13759.2	0	12
gamma_HCH	16.35	4.80	58.20	10470.2	0	12
heptachlor	0.00	0.00	0.01	2.4	12	12
inden_123cd_pyrene	5.29	0.20	47.00	3391.1	3	12
op_DDD	0.05	0.01	0.30	31.5	9	12
op_DDE	0.10	0.00	0.53	67.3	5	12
op_DDT	0.83	0.21	2.96	533.7	0	12
phenanthrene	68.06	18.40	217.30	43589.0	0	12
pp_DDD	0.11	0.01	0.44	73.2	7	12
pp_DDE	1.13	0.24	4.55	724.5	0	12
pp_DDT	1.94	0.56	5.11	1241.9	0	12
pyrene	23.03	4.60	93.20	14745.8	0	12

FI0096R Pallas Finland (precipitation + dry deposition)

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
(ng/m <sup>2</sup> day)						
PCB_101	0.032	0.005	0.050	2.3	1	10
PCB_118	0.018	0.005	0.040	1.3	1	10
PCB_138	0.036	0.010	0.080	2.6	0	10
PCB_153	0.033	0.010	0.050	2.4	0	10
PCB_180	0.022	0.010	0.040	1.6	0	10
PCB_28	0.049	0.030	0.100	3.5	0	10
PCB_52	0.099	0.030	0.210	7.2	0	10
anthracene	0.67	0.50	1.00	58.5	8	12
benz_a_anthracene	10.46	0.50	35.00	920.5	1	12
benzo_a_pyrene	5.409	0.500	17.000	476.0	2	12
benzo_ghi_perlylene	2.44	0.50	9.00	214.5	6	12
chrysene_triphenylene	10.35	0.50	28.00	910.5	1	12
fluoranthene	9.04	1.00	31.00	796.0	0	12
inden_123cd_pyrene	3.79	1.00	15.00	334.0	7	12
phenanthrene	11.98	2.00	38.00	1054.0	0	12
pyrene	6.40	1.00	21.00	563.0	0	12

IE0002R Turlough Hill Ireland

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
PCB_101	0.955	0.600	2.250	1370.0	8	8
PCB_118	0.933	0.600	2.250	1338.3	8	8
PCB_138	0.933	0.600	2.250	1338.3	8	8
PCB_153	0.933	0.600	2.250	1338.3	8	8
PCB_180	1.305	0.700	4.500	1872.2	8	8
PCB_52	1.036	0.600	2.250	1486.2	8	8
Precip	-	39.9	243.0	1434.3	0	12
alpha_HCH	0.93	0.60	2.25	1338.3	8	8
dieldrin	0.93	0.60	2.25	1338.3	8	8
endrin	0.93	0.60	2.25	1338.3	8	8
gamma_HCH	1.12	0.60	4.50	1606.5	8	8
heptachlor	0.93	0.60	2.25	1338.3	8	8
op_DDD	0.90	0.70	1.25	1287.2	5	5
op_DDT	0.90	0.70	1.25	1287.2	5	5
pp_DDD	0.90	0.70	1.25	1287.2	5	5
pp_DDE	0.90	0.70	1.25	1287.2	5	5
pp_DDT	0.93	0.60	2.25	1338.3	8	8

IS0091R Storhofdi Iceland

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
HCB	0.01	0.00	0.07	9.6	1	25
PCB_101	0.014	0.001	0.133	10.4	16	25
PCB_105	0.01	0.00	0.03	6.6	13	25
PCB_118	0.008	0.002	0.050	5.7	24	25
PCB_138	0.015	0.001	0.055	10.8	9	25
PCB_153	0.011	0.001	0.050	8.0	17	25
PCB_156	0.01	0.00	0.03	3.3	23	25
PCB_180	0.005	0.001	0.034	3.5	22	25
PCB_28	0.125	0.015	0.525	89.9	17	25
PCB_31	0.101	0.014	0.467	72.3	18	25
PCB_52	0.039	0.006	0.167	27.9	17	25
Precip	-	3.0	86.0	717.0	0	25
alpha_HCH	0.22	0.11	0.47	155.7	0	25
beta_HCH	0.01	0.00	0.06	6.1	12	25
cis_CD	0.01	0.00	0.03	4.7	10	25
dieldrin	0.05	0.01	0.18	33.1	3	25
gamma_HCH	0.21	0.06	1.40	152.1	0	25
op_DDT	0.01	0.00	0.05	6.2	12	25
pp_DDD	0.01	0.00	0.07	3.5	25	25
pp_DDE	0.00	0.00	0.03	3.0	20	25
pp_DDT	0.01	0.00	0.03	4.4	15	25
trans_CD	0.00	0.00	0.03	2.9	14	25
trans_NO	0.00	0.00	0.02	2.0	19	25

LT0015R Preila Lithuania (wet deposition)

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
(ng/m <sup>2</sup> month)						
benzo_a_pyrene	45.059	29.700	75.200	540.7	0	11

NL0091R De Zilk Netherlands

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
Precip	-	27.8	167.5	916.4	0	13
gamma_HCH	6.07	5.00	20.00	5564.4	11	13

NO0099R Lista Norway

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
HCB	0.50	0.00	766.59	654.5	0	56
Precip	-	1.8	82.0	1303.3	0	56
alpha_HCH	0.60	0.28	341.00	783.8	1	56
gamma_HCH	2.50	0.30	515.80	3263.5	1	56

SE0002R Rorvik Sweden (precipitation + dry deposition)

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
(ng/m <sup>2</sup> day)						
PCB_101	0.061	0.030	0.180	20.2	0	12
PCB_118	0.038	0.020	0.070	12.7	0	12
PCB_138	0.117	0.060	0.220	38.9	0	12
PCB_153	0.106	0.050	0.220	35.2	0	12
PCB_180	0.079	0.050	0.200	26.3	0	12
PCB_28	0.037	0.000	0.140	12.2	1	12
PCB_52	0.060	0.030	0.150	20.0	0	12
anthracene	1.07	0.50	5.00	357.0	6	12
benz_a_anthracene	4.54	1.00	28.00	1507.0	0	12
benzo_a_pyrene	5.130	1.000	25.000	1703.0	0	12
benzo_ghi_perylene	5.70	1.00	41.00	1892.0	0	12
chrysene_triphelylene	13.65	2.00	85.00	4533.0	0	12
fluoranthene	18.55	3.00	142.00	6160.0	0	12
inden_123cd_pyrene	8.41	0.50	46.00	2793.0	1	12
phenanthrene	15.70	3.00	99.00	5212.0	0	12
pyrene	12.73	3.00	86.00	4227.0	0	12

SE0012R Aspvreten Sweden (precipitation + dry deposition)

January 2001 - December 2001

Component	W. mean	Min	Max	Dep	Num bel	Num sampl
(ng/m <sup>2</sup> day)						
PCB_101	0.081	0.010	0.200	6.3	1	11
PCB_118	0.061	0.010	0.220	4.8	1	11
PCB_138	0.116	0.015	0.380	9.0	1	11
PCB_153	0.122	0.015	0.340	9.5	1	11
PCB_180	0.078	0.010	0.280	6.1	1	11
PCB_28	0.049	0.005	0.130	3.8	5	11
PCB_52	0.026	0.005	0.060	2.0	8	11
anthracene	3.05	0.00	26.00	238.0	0	11
benz_a_anthracene	2.88	0.00	19.00	225.0	0	11
benzo_a_pyrene	15.256	0.000	149.000	1190.0	3	11
benzo_ghi_perylene	20.19	0.00	198.00	1575.0	0	11
fluoranthene	44.63	2.00	410.00	3481.0	0	11
inden_123cd_pyrene	31.05	0.00	314.00	2422.0	0	11
phenanthrene	29.28	2.00	281.00	2284.0	0	11
pyrene	33.99	2.00	306.00	2651.0	0	11

## **Annex 4**

### **Annual statistics for POPs in air**



Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	%	Num anal	Num bel	Num sampl
PCB_101	38.390	16.336	35.633	1.478	9.000	33.000	117.000	13.7	0	50	
PCB_118	6.130	2.488	5.692	1.484	2.000	6.000	17.000	13.7	0	50	
PCB_138	13.105	5.753	12.028	1.539	2.000	12.000	34.000	13.7	0	50	
PCB_180	4.736	3.722	3.784	1.991	0.500	4.000	22.000	14.2	2	52	
PCB_28	26.070	9.376	24.418	1.481	4.000	25.000	67.000	13.7	0	50	
PCB_52	42.410	16.346	39.645	1.464	9.000	38.000	118.000	13.7	0	50	
acenaphptene	0.20	0.23	0.12	2.77	0.02	0.09	1.19	14.2	0	52	
alpha_HCH	17.21	11.46	12.57	2.69	0.50	14.00	60.00	14.2	2	52	
anthracene	0.16	0.17	0.10	2.61	0.02	0.10	0.77	14.2	0	52	
benz_a_anthracene	0.23	0.38	0.07	5.53	0.00	0.05	2.28	14.2	4	52	
benzo_a_pyrene	0.220	0.359	0.092	4.221	0.001	0.072	2.329	14.2	1	52	
fluoranthene	1.74	1.69	1.05	2.88	0.18	1.09	6.35	14.2	0	52	
fluorene	2.46	2.44	1.53	2.71	0.30	1.40	11.20	14.2	0	52	
gamma_HCH	20.28	12.46	16.84	1.91	2.00	17.00	53.00	13.7	0	50	
inden_123cd_pyrene	0.28	0.46	0.10	5.61	0.00	0.08	2.87	14.2	3	52	
naphtalene	1.02	1.34	0.56	2.96	0.11	0.51	7.70	14.2	0	52	
phenanthrene	5.24	4.46	3.79	2.25	0.96	3.37	21.12	14.2	0	52	
pp_DDD	2.45	2.61	1.75	2.21	0.50	2.00	16.00	13.7	7	50	
pp_DDE	18.43	10.92	15.36	1.93	1.50	15.00	48.00	13.7	1	50	
pp_DDT	5.68	4.67	4.70	1.78	2.00	5.00	32.00	13.7	0	50	
pyrene	1.03	1.05	0.59	3.08	0.09	0.55	4.63	14.2	0	52	

Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	%	Num anal	Num bel	Num sampl
PCB_101	0.856	0.430	0.754	1.650	0.428	0.574	1.527	24.1	0	12	
PCB_118	0.253	0.122	0.226	1.612	0.131	0.200	0.435	24.1	0	12	
PCB_138	0.280	0.129	0.254	1.583	0.143	0.247	0.479	24.1	0	12	
PCB_153	0.314	0.156	0.280	1.638	0.159	0.226	0.557	24.1	0	12	
PCB_180	0.074	0.043	0.063	1.852	0.025	0.073	0.159	24.1	0	12	
PCB_28	1.756	1.012	1.503	1.742	0.748	1.312	3.964	24.1	0	12	
PCB_52	1.895	1.150	1.593	1.789	0.840	1.217	4.399	24.1	0	12	
anthracene	0.00	0.00	0.00	2.01	0.00	0.00	0.01	24.1	0	12	
benz_a_anthracene	0.03	0.04	0.01	4.69	0.00	0.00	0.14	24.1	0	12	
benzo_a_pyrene	0.020	0.025	0.007	4.692	0.001	0.004	0.073	24.1	0	12	
benzo_ghi_perlylene	0.01	0.02	0.01	3.38	0.00	0.00	0.06	24.1	0	12	
chrysene_triphenylene	0.04	0.04	0.02	3.19	0.00	0.02	0.14	24.1	0	12	
fluoranthene	0.11	0.12	0.08	2.33	0.03	0.06	0.39	24.1	0	12	
inden_123cd_pyrene	0.02	0.03	0.01	4.41	0.00	0.00	0.09	24.1	4	12	
phenanthrene	0.27	0.17	0.24	1.68	0.11	0.21	0.64	24.1	0	12	
pyrene	0.06	0.07	0.04	2.43	0.01	0.03	0.22	24.1	0	12	

Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	%	Num anal	Num bel	Num sampl
HCB	6.71	3.12	6.29	1.50	2.96	5.57	16.44	100.0	0	25	
PCB_101	0.766	0.753	0.432	3.328	0.050	0.445	2.650	100.0	11	25	
PCB_105	0.23	0.14	0.19	1.75	0.04	0.20	0.73	100.0	22	25	
PCB_118	0.358	0.220	0.303	1.699	0.085	0.308	1.220	100.0	21	25	
PCB_138	0.276	0.328	0.202	1.887	0.085	0.163	1.740	100.0	21	25	
PCB_153	0.360	0.302	0.278	1.959	0.085	0.308	1.620	100.0	21	25	
PCB_156	0.16	0.05	0.15	1.38	0.09	0.15	0.28	100.0	25	25	
PCB_180	0.182	0.108	0.160	1.536	0.085	0.155	0.630	100.0	24	25	
PCB_28	3.701	2.361	3.033	1.807	0.765	3.240	12.530	100.0	21	25	
PCB_31	3.273	2.004	2.717	1.771	0.680	2.882	10.790	100.0	21	25	
PCB_52	1.497	1.355	1.146	1.879	0.340	0.950	6.790	100.0	19	25	
alpha_HCH	10.07	3.73	9.36	1.44	4.76	8.90	20.37	100.0	0	25	
beta_HCH	0.07	0.02	0.06	1.28	0.04	0.06	0.10	100.0	25	25	
cis_CD	0.99	0.25	0.95	1.28	0.62	0.91	1.58	100.0	0	25	
dieldrin	1.24	0.51	1.08	1.72	0.21	1.18	2.11	100.0	0	25	
gamma_HCH	6.47	4.21	5.40	1.69	2.39	4.46	18.62	100.0	0	25	
op_DDT	0.14	0.21	0.10	2.01	0.04	0.09	1.13	100.0	24	25	
pp_DDD	0.13	0.03	0.12	1.29	0.09	0.12	0.20	100.0	25	25	
pp_DDE	0.21	0.19	0.16	2.23	0.05	0.17	0.95	100.0	11	25	
pp_DDT	0.28	0.43	0.14	2.79	0.04	0.10	1.70	100.0	12	25	
trans_CD	0.42	0.11	0.41	1.30	0.22	0.41	0.59	100.0	0	25	
trans_NO	0.53	0.16	0.51	1.34	0.31	0.47	0.87	100.0	0	25	

LT0015R Preila Lithuania

January 2001 - December 2001

Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	% anal	Num bel	Num sampl
benzo_a_pyrene	0.530	0.400	0.392	2.318	0.120	0.380	1.350	100.0	0	12

NO0042G Zeppelin, Spitsbergen Norway

January 2001 - December 2001

Component	Arit mean	Arit sd	Geom mean	Geom sd	Min	50%	Max	% anal	Num bel	Num sampl
HCB	54.94	9.29	53.92	1.17	36.21	52.64	86.62	28.1	0	52
N1methylphenanthrene	0.01	0.01	0.01	1.97	0.00	0.00	0.02	28.2	0	52
N2methylanthracene	0.00	0.00	0.00	1.34	0.00	0.00	0.00	28.2	34	52
N2methylphenanthrene	0.01	0.02	0.01	2.17	0.00	0.01	0.08	28.2	0	52
PCB_101	0.559	0.251	0.504	1.599	0.130	0.560	1.620	28.1	0	52
PCB_105	0.07	0.09	0.06	1.87	0.02	0.05	0.66	28.1	1	52
PCB_114	0.01	0.01	0.01	1.46	0.01	0.01	0.06	28.1	24	52
PCB_118	0.254	0.328	0.195	1.908	0.040	0.210	2.470	28.1	0	52
PCB_122	0.01	0.02	0.01	1.64	0.01	0.01	0.12	28.1	39	52
PCB_123	0.01	0.01	0.01	1.47	0.01	0.01	0.04	28.1	30	52
PCB_128	0.05	0.09	0.04	2.00	0.01	0.03	0.66	28.1	3	52
PCB_138	0.277	0.545	0.182	2.103	0.030	0.160	4.050	28.1	0	52
PCB_141	0.04	0.02	0.03	1.67	0.01	0.03	0.09	28.1	2	52
PCB_149	0.240	0.115	0.216	1.600	0.060	0.220	0.670	28.1	0	52
PCB_153	0.420	0.845	0.273	2.124	0.060	0.280	6.260	28.1	0	52
PCB_156	0.03	0.05	0.02	2.03	0.01	0.02	0.37	28.1	9	52
PCB_157	0.01	0.01	0.01	1.52	0.01	0.01	0.04	28.1	44	52
PCB_167	0.02	0.03	0.01	1.69	0.01	0.01	0.19	28.1	21	52
PCB_170	0.04	0.08	0.03	2.21	0.01	0.02	0.56	28.1	5	52
PCB_18	6.302	4.666	5.165	1.833	1.720	5.030	28.350	28.1	0	52
PCB_180	0.100	0.236	0.059	2.112	0.020	0.050	1.730	28.1	1	52
PCB_183	0.03	0.05	0.02	1.87	0.01	0.02	0.38	28.1	3	52
PCB_187	0.07	0.12	0.05	1.95	0.01	0.05	0.90	28.1	0	52
PCB_189	0.02	0.01	0.01	1.84	0.01	0.01	0.07	28.1	49	52
PCB_194	0.03	0.03	0.02	2.23	0.01	0.01	0.14	28.1	37	52
PCB_206	0.20	1.25	0.02	3.46	0.01	0.01	9.00	28.1	44	52
PCB_209	0.02	0.01	0.01	1.87	0.01	0.01	0.06	28.1	40	52
PCB_28	3.558	2.591	2.957	1.766	1.060	2.670	15.720	28.1	0	52
PCB_31	3.291	2.462	2.718	1.783	0.950	2.450	15.200	28.1	0	52
PCB_33	2.84	2.14	2.32	1.82	0.73	2.18	12.65	28.1	0	52
PCB_37	0.35	0.30	0.27	2.07	0.01	0.26	1.72	28.1	0	52
PCB_47	0.86	0.44	0.77	1.55	0.23	0.75	2.67	28.1	0	52
PCB_52	1.382	0.612	1.272	1.465	0.460	1.210	3.970	28.1	0	52
PCB_60	0.09	0.06	0.07	1.83	0.02	0.07	0.37	28.1	0	52
PCB_66	0.53	0.29	0.47	1.60	0.13	0.43	1.50	28.1	0	52
PCB_74	0.26	0.13	0.23	1.55	0.07	0.22	0.75	28.1	0	52
PCB_99	0.24	0.17	0.20	1.85	0.05	0.21	1.15	28.1	0	52
acenaphthene	0.01	0.04	0.01	2.98	0.00	0.00	0.25	28.2	0	52
acenaphthylene	0.01	0.01	0.00	2.31	0.00	0.00	0.04	28.2	0	52
alpha_HCH	21.48	7.40	20.22	1.39	11.42	20.19	49.65	28.1	0	52
anthanthrene	0.00	0.00	0.00	1.43	0.00	0.00	0.00	28.2	43	52
anthracene	0.00	0.01	0.00	2.49	0.00	0.00	0.04	28.2	4	52
benz_a_anthracene	0.00	0.01	0.00	2.62	0.00	0.00	0.04	28.2	18	52
benzo_a_pyrene	0.003	0.006	0.002	2.402	0.001	0.001	0.032	28.2	26	52
benzo_e_pyrene	0.01	0.01	0.00	3.27	0.00	0.00	0.06	28.2	16	52
benzo_ghi_perlylene	0.01	0.01	0.00	3.04	0.00	0.00	0.04	28.2	18	52
biphenyl	538.54	878.02	1.66	139.98	0.01	0.14	3819.00	28.2	0	52
chrysene_triphenylene	0.01	0.02	0.00	3.92	0.00	0.00	0.11	28.2	3	52
cis_CD	0.84	0.29	0.79	1.38	0.36	0.78	2.00	28.1	0	52
cis_NO	0.08	0.06	0.06	2.21	0.01	0.07	0.36	28.1	2	52
coronene	0.00	0.01	0.00	2.40	0.00	0.00	0.03	28.2	20	52
dibenzo_ac_ah_anthracenes	0.00	0.00	0.00	1.60	0.00	0.00	0.01	28.2	30	52
dibenzofuran	650.60	976.19	3.43	111.43	0.03	0.32	3157.00	28.2	0	52
dibenzothiophene	0.01	0.01	0.01	2.89	0.00	0.01	0.07	28.2	0	52
fluoranthene	0.04	0.06	0.02	3.28	0.00	0.01	0.27	28.2	0	52
fluorene	68.50	275.94	0.16	14.02	0.01	0.07	1197.00	28.2	0	52
gamma_HCH	5.65	2.54	5.18	1.49	2.27	5.08	16.64	28.1	0	52
inden_123cd_pyrene	0.01	0.01	0.00	3.12	0.00	0.00	0.05	28.2	22	52
naphthalene	759.201446.98	2.29	90.65	0.04	0.19	5897.00	28.2	0	52	
op_DDD	0.03	0.04	0.02	2.63	0.01	0.01	0.14	28.1	33	52
op_DDE	0.12	0.10	0.06	4.03	0.01	0.10	0.34	28.1	18	52
op_DDT	0.27	0.24	0.19	2.51	0.01	0.20	1.60	28.1	3	52
perylene	0.00	0.00	0.00	1.49	0.00	0.00	0.01	28.2	37	52
phenanthrene	20.13	143.10	0.08	4.93	0.02	0.05	1032.00	28.2	0	52
pp_DDD	0.04	0.05	0.02	2.87	0.01	0.01	0.20	28.1	30	52
pp_DDE	0.86	1.02	0.49	3.03	0.10	0.50	5.60	28.1	0	52
pp_DDT	0.14	0.12	0.11	2.10	0.01	0.10	0.90	28.1	3	52
pyrene	0.02	0.04	0.01	2.99	0.00	0.01	0.17	28.2	0	52
trans_CD	0.34	0.19	0.29	1.77	0.08	0.28	0.93	28.1	0	52
trans_NO	0.71	0.28	0.66	1.47	0.26	0.61	1.59	28.1	0	52

NO0099R		Lista		Norway													
				January 2001 - December 2001													
Component		Arit	Arit	Geom	Geom	Min	50%	Max	%	Num	Num						
		mean	sd	mean	sd				anal	bel	sampl						
HCB		50.94	10.89	49.96	1.21	29.30	48.10	91.40	13.5	0	49						
alpha_HCH		17.02	7.37	15.64	1.50	8.55	13.60	43.40	13.5	0	49						
gamma_HCH		15.70	12.15	11.70	2.16	2.88	10.95	47.60	13.5	0	49						
SE0002R		Rorvik		Sweden													
				January 2001 - December 2001													
Component		Arit	Arit	Geom	Geom	Min	50%	Max	%	Num	Num						
		mean	sd	mean	sd				anal	bel	sampl						
PCB_101		1.788	0.932	1.583	1.630	0.661	1.589	5.104	92.3	0	48						
PCB_118		0.597	0.376	0.512	1.696	0.203	0.481	1.865	92.3	0	48						
PCB_138		1.201	0.550	1.089	1.556	0.356	1.079	2.999	92.3	0	48						
PCB_153		1.341	0.606	1.217	1.552	0.452	1.234	3.396	92.3	0	48						
PCB_180		0.472	0.198	0.428	1.581	0.093	0.481	1.154	92.3	0	48						
PCB_28		1.385	0.792	1.208	1.668	0.533	1.150	3.610	92.3	0	48						
PCB_52		2.071	0.951	1.876	1.554	0.929	1.853	4.787	92.3	0	48						
anthracene		0.03	0.04	0.01	3.93	0.00	0.02	0.25	92.3	0	48						
benz_a_anthracene		0.07	0.09	0.04	2.63	0.01	0.04	0.38	92.3	0	48						
benzo_a_pyrene		0.065	0.087	0.031	3.623	0.003	0.026	0.400	92.3	0	48						
benzo_ghi_perylene		0.07	0.10	0.03	3.96	0.00	0.03	0.43	92.3	0	48						
chrysene_triphenylene		0.13	0.15	0.08	3.01	0.01	0.08	0.61	92.3	0	48						
fluoranthene		0.47	0.50	0.28	2.86	0.05	0.24	1.99	92.3	0	48						
inden_123cd_pyrene		0.08	0.12	0.03	4.24	0.00	0.03	0.52	92.3	4	48						
phenanthrene		1.11	1.04	0.78	2.36	0.17	0.74	5.09	92.3	0	48						
pyrene		0.30	0.33	0.17	3.14	0.03	0.13	1.26	92.3	0	48						
SE0012R		Aspvreten		Sweden													
				January 2001 - December 2001													
Component		Arit	Arit	Geom	Geom	Min	50%	Max	%	Num	Num						
		mean	sd	mean	sd				anal	bel	sampl						
PCB_101		1.146	0.553	1.042	1.587	0.520	0.970	2.450	23.3	0	12						
PCB_118		0.412	0.215	0.372	1.602	0.180	0.340	0.970	23.3	0	12						
PCB_138		0.570	0.257	0.525	1.532	0.260	0.490	1.180	23.3	0	12						
PCB_153		0.731	0.335	0.671	1.557	0.320	0.620	1.500	23.3	0	12						
PCB_180		0.214	0.064	0.206	1.340	0.130	0.190	0.330	23.3	0	12						
PCB_28		2.091	1.085	1.888	1.588	0.920	1.870	4.920	23.3	0	12						
PCB_52		1.682	0.817	1.537	1.556	0.820	1.380	3.620	23.3	0	12						
anthracene		0.01	0.03	0.01	3.95	0.00	0.00	0.09	23.3	0	12						
benz_a_anthracene		0.02	0.06	0.01	3.93	0.00	0.01	0.20	23.3	0	12						
benzo_a_pyrene		0.039	0.070	0.019	3.448	0.000	0.010	0.255	23.3	1	12						
benzo_ghi_perylene		0.04	0.04	0.02	3.88	0.00	0.01	0.11	23.3	0	12						
fluoranthene		0.42	0.43	0.30	2.25	0.10	0.23	1.45	23.3	0	12						
inden_123cd_pyrene		0.05	0.05	0.02	3.90	0.01	0.01	0.16	23.3	0	12						
phenanthrene		0.55	0.31	0.48	1.61	0.30	0.36	1.36	23.3	0	12						
pyrene		0.21	0.28	0.11	3.11	0.02	0.10	1.00	23.3	0	12						



## **Annex 5**

### **Monthly and annual mean values for heavy metals in precipitation**



				jan	feb	mar	apr	may	june	jul	aug	sept	oct	nov	des	year	
IE0001R	aluminium		precip	25	50	50	50	25	25	25	14.8	27.8	25	25	18.8	31.112	
IE0002R	aluminium		precip	25	25	112	-9999.99	-9999.99	-9999.99	-9999.99	40.4	20.1	25	25	18.7	38.607	
IS0002R	aluminium		precip	80.71	20.107	18	97.681	78.003	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	63.294	
IS0090R	aluminium		precip	152.459	878.636	1315.236	646.036	209.78	187.188	86.479	54.316	43.241	101.384	105.659	161.534	220.097	
SK0002R	aluminium		precip	35	43	26	18	37	15	16	15	9	23	40	32	22.144	
SK0004R	aluminium		precip	43	56	-9999.99	15	103	148	178	29	63	26	59	20	100.704	
SK0005R	aluminium		precip	23	41	28	17	12	15	18	29	11	13	24	36	19.654	
SK0006R	aluminium		precip	11	68	22	39	33	11	8	25	20	41	30	40	21.818	
SK0007R	aluminium		precip	20	34	22	49	48	31	7	18	10	22	14	51	19.992	
BE0004R	arsenic	wet only	precip	0.243	0.243	0.243	0.242	0.243	0.243	0.243	0.243	0.243	0.243	0.245	0.244	0.243	
BE0004R	arsenic	bulk	precip	0.24	0.24	0.24	0.24	0.24	0.24	-9999.99	0.24	0.24	-9999.99	-9999.99	0.24	0.24	0.24
DE0001R	arsenic		precip	0.106	0.109	0.13	0.149	0.138	0.102	0.121	0.087	0.074	0.158	0.156	0.131	0.116	
DE0002R	arsenic		precip	0.102	0.312	0.491	0.217	0.23	0.126	0.137	0.134	0.085	0.159	0.156	0.127	0.156	
DE0004R	arsenic		precip	0.053	0.079	0.064	0.098	0.119	0.106	0.115	0.085	0.075	0.063	0.074	0.057	0.082	
DE0009R	arsenic		precip	0.23	0.169	0.093	0.243	0.104	0.111	0.09	0.063	0.117	0.139	0.138	0.1	0.123	
DK0008R	arsenic		precip	0.466	0.216	0.269	0.347	0.338	0.185	0.164	0.325	0.396	0.387	0.196	0.547	0.312	
DK0020R	arsenic		precip	0.592	0.283	0.19	0.458	0.184	0.184	0.082	0.107	0.101	0.171	0.296	-9999.99	0.2	
DK0031R	arsenic		precip	0.118	0.103	0.184	0.133	0.186	0.054	0.118	0.163	0.092	0.152	0.066	0.162	0.121	
EE0009R	arsenic		precip	0.4	0.1	0.1	0.6	0.1	0.1	0.2	0.1	0.4	0.2	0.1	0.7	0.233	
EE0011R	arsenic		precip	0.3	0.1	0.1	0.2	0.8	0.1	-9999.99	0.1	0.1	-9999.99	0.5	0.1	0.158	
FI0008R	arsenic		precip	0.093	0.133	0.137	0.243	0.158	0.119	0.073	0.1	0.092	0.105	0.047	0.049	0.096	
FI0009R	arsenic		precip	0.732	1.564	1.13	0.29	0.139	0.042	0.092	0.095	0.124	0.64	0.61	3.508	0.225	
FI0017R	arsenic		precip	0.42	0.328	0.526	0.115	0.087	0.007	0.082	0.057	0.142	0.172	0.563	0.338	0.161	
FI0022R	arsenic		precip	0.097	0.201	0.33	0.417	0.018	0.077	0.074	0.164	0.129	0.079	0.087	0.11	0.12	
FI0036R	arsenic		precip	0.072	0.151	0.165	0.205	0.006	0.093	0.037	0.028	0.077	0.066	0.088	0.124	0.071	
FI0053R	arsenic		precip	0.09	0.121	0.486	0.354	0.015	0.048	0.064	0.033	0.069	0.105	0.24	0.21	0.111	
FI0092R	arsenic		precip	0.101	0.099	0.118	0.558	0.069	0.084	0.061	0.026	0.125	0.076	0.079	0.096	0.095	
FI0093R	arsenic		precip	0.142	0.13	0.082	0.455	0.075	-0.006	0.095	0.082	0.08	0.089	0.126	0.104	0.091	
FR0090R	arsenic		precip	0.05	0.12	0.07	0.2	0.1	0.05	0.25	0.15	0.1	0.05	0.15	0.07	0.096	
GB0014R	arsenic	ug/m2	wetdep	79.806	22	22	14.9	5.258	7	7	11	29	21.258	33	16.2	22.404	
GB0090R	arsenic	ug/m2	wetdep	10	6.929	16	11	8.097	16.4	19.71	17.387	33.667	14.839	50	12.258	18.008	
GB0091R	arsenic	ug/m2	wetdep	9.806	8	14.548	8.333	4	5.133	8.871	5.032	7.4	25.581	5.267	13	9.627	
IE0001R	arsenic		precip	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
IE0002R	arsenic		precip	0.5	0.5	0.5	-9999.99	-9999.99	-9999.99	-9999.99	0.5	0.5	0.5	0.5	0.5	0.5	
IS0002R	arsenic		precip	0.173	0.172	0.09	0.055	0.042	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	0.11	
IS0090R	arsenic		precip	0.064	0.209	0.387	0.115	0.128	0.106	0.048	0.05	0.052	0.353	0.735	0.314	0.173	
NL0009R	arsenic		precip	0.112	0.165	0.129	0.105	-9999.99	-9999.99	-9999.99	0.307	0.307	0.18	0.213	0.285	0.242	
NL0091R	arsenic		precip	0.075	0.075	0.075	0.075	0.075	0.075	0.155	0.075	0.078	0.123	0.075	0.075	0.082	
NO0047R	arsenic		precip	1.694	4.694	0.987	2.79	8.162	5.426	2.31	0.628	1.611	1.718	0.583	0.708	2.313	
NO0099R	arsenic		precip	0.243	0.24	0.297	0.157	0.185	0.133	0.182	0.094	0.128	0.176	0.305	0.121	0.176	
SE0005R	arsenic		precip	0.026	0.033	0.17	0.277	0.073	0.19	0.028	0.025	0.025	0.025	0.025	0.088	0.07	
SE0051R	arsenic		precip	0.63	0.18	0.22	0.2	0.11	0.11	0.16	0.025	0.025	0.36	0.23	0.31	0.189	
SE0097R	arsenic		precip	0.18	0.093	0.164	0.036	0.224	0.09	0.042	0.118	0.049	0.222	0.317	0.31	0.14	

				jan	feb	mar	apr	may	june	jul	aug	sept	oct	nov	des	year
BE0004R	cadmium	wet only	precip	0.438	0.621	0.521	0.487	0.65	0.378	0.32	0.242	0.27	1.068	1.454	0.706	0.567
BE0004R	cadmium	bulk	precip	0.03	0.256	0.222	0.115	0.256	1.441	-9999.99	0.11	0.08	-9999.99	-9999.99	0.05	0.221
CZ0001R	cadmium		precip	0.512	0.456	0.092	0.062	0.06	0.111	0.116	0.061	0.165	0.173	0.024	0.221	0.15
CZ0003R	cadmium		precip	0.44	0.773	0.085	0.137	0.157	0.101	0.085	0.163	0.09	0.089	0.097	0.097	0.148
DE0001R	cadmium		precip	0.05	0.059	0.06	0.059	0.028	0.023	0.024	0.021	0.013	0.035	0.025	0.014	0.027
DE0002R	cadmium		precip	0.042	0.095	0.11	0.141	0.112	0.096	0.072	0.115	0.126	0.659	0.159	0.075	0.126
DE0004R	cadmium		precip	0.058	0.098	0.056	0.113	0.112	0.084	0.051	0.049	0.057	0.038	0.04	0.068	0.065
DE0009R	cadmium		precip	0.067	0.076	0.051	0.037	0.03	0.035	0.024	0.021	0.032	0.055	0.045	0.026	0.035
DK0008R	cadmium		precip	0.127	0.031	0.091	0.067	0.065	0.026	0.023	0.031	0.045	0.048	0.025	0.115	0.056
DK0020R	cadmium		precip	0.116	0.051	0.045	0.063	0.096	0.059	0.043	0.12	0.091	0.132	0.118	-9999.99	0.09
DK0031R	cadmium		precip	0.032	0.036	0.034	0.04	0.048	0.021	0.025	0.023	0.024	0.033	0.013	0.033	0.029
EE0009R	cadmium		precip	0.3	0.07	0.19	0.2	0.02	0.1	0.07	0.02	0.03	0.03	0.08	0.01	0.103
EE0011R	cadmium		precip	0.03	0.03	0.04	0.2	0.1	0.09	-9999.99	0.05	0.03	-9999.99	0.01	0.01	0.047
FI0008R	cadmium		precip	0.021	0.012	0.022	0.062	0.015	0.04	0.011	0.007	0.025	0.007	0.017	0.009	0.016
FI0009R	cadmium		precip	0.243	0.321	0.397	0.104	0.098	0.031	0.021	0.053	0.03	0.094	0.081	1.143	0.067
FI0017R	cadmium		precip	0.295	0.07	0.092	0.157	0.065	0.015	0.033	0.016	0.052	0.069	0.096	0.064	0.073
FI0022R	cadmium		precip	0.025	0.027	0.039	0.079	0.007	0.03	0.009	0.016	0.042	0.013	0.019	0.031	0.024
FI0036R	cadmium		precip	0.019	0.02	0.034	0.057	0.005	0.027	0.008	0.005	0.062	0.011	0.016	0.032	0.019
FI0053R	cadmium		precip	0.03	0.025	0.126	0.124	0.014	0.024	0.019	0.008	0.036	0.031	0.049	0.077	0.039
FI0092R	cadmium		precip	0.056	0.026	0.057	0.254	0.043	0.031	0.027	0.013	0.048	0.025	0.026	0.024	0.038
FI0093R	cadmium		precip	0.059	0.041	0.021	0.137	0.038	0.012	0.048	0.024	0.036	0.025	0.047	0.027	0.036
FR0090R	cadmium		precip	0.05	0.05	0.04	0.04	0.06	0.02	0.03	0.03	0.01	0.01	0.01	0.01	0.033
GB0014R	cadmium	ug/m2	wetdep	4.097	5.214	7	4.033	1.871	1	1	3	7	3.097	4	1.2	3.53
GB0090R	cadmium	ug/m2	wetdep	3	1.357	3	2	2.968	3	3	3	2.167	3.774	41	2.29	5.849
GB0091R	cadmium	ug/m2	wetdep	9.742	82	11.839	2.833	1	2.967	2.484	16.484	1.467	7.484	0.567	17	12.542
IE0001R	cadmium		precip	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
IE0002R	cadmium		precip	0.16	0.05	0.11	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	0.008
IS0002R	cadmium		precip	0.01	0.005	0.023	0.005	0.008	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99
IS0090R	cadmium		precip	0.009	0.008	0.036	0.039	0.017	0.028	0.042	0.015	0.019	0.027	0.021	0.02	0.022
LT0015R	cadmium		precip	0.146	0.117	0.131	0.31	0.211	0.095	0.105	0.045	0.102	0.066	0.093	0.038	0.106
LV0010R	cadmium		precip	0.05	0.01	0.12	0.42	0.12	0.03	0.11	0.1	0.07	0.09	0.11	0.08	0.09
LV0016R	cadmium		precip	0.01	0.01	0.11	0.2	0.02	0.03	0.05	0.12	0.09	0.03	0.05	0.08	0.076
NL0009R	cadmium		precip	0.088	0.114	0.12	0.124	-9999.99	-9999.99	-9999.99	0.03	0.03	0.073	0.078	0.09	0.066
NL0091R	cadmium		precip	0.033	0.062	0.074	0.073	0.076	0.066	0.084	0.021	0.051	0.095	0.086	0.076	0.058
NO0001R	cadmium		precip	0.039	0.006	0.06	0.021	0.016	0.013	0.04	0.023	0.051	0.031	0.034	0.031	0.032
NO0039R	cadmium		precip	0.034	0.012	0.015	0.022	0.006	0.008	0.006	0.004	0.007	0.011	0.004	0.012	0.01
NO0041R	cadmium		precip	0.015	0.008	0.027	0.025	0.019	0.019	0.022	0.012	0.023	0.015	0.021	0.021	0.019
NO0047R	cadmium		precip	0.123	0.222	0.069	0.578	0.395	0.26	0.148	0.041	0.064	0.074	0.011	0.276	0.164
NO0055R	cadmium		precip	0.062	0.026	0.011	0.072	0.061	0.027	0.025	0.021	0.041	0.015	0.018	0.029	0.031
NO0056R	cadmium		precip	0.052	0.019	0.027	0.03	0.017	0.026	0.049	0.022	0.044	0.061	0.082	0.087	0.042
NO0099R	cadmium		precip	0.088	0.04	0.536	0.04	0.019	0.03	0.032	0.026	0.027	0.023	0.009	0.023	0.057
PL0004R	cadmium		precip	0.090	0.050	0.050	0.110	0.160	0.050	0.040	0.060	0.030	0.070	0.050	0.040	0.050
PL0005R	cadmium		precip	-999.000	-999.000	-999.000	-999.000	0.186	0.317	0.339	0.285	0.397	0.284	-999.000	-999.000	-999.000
PT0001R	cadmium		precip	0.425	-9999.99	-9999.99	-9999.99	0.425	0.708	-9999.99	0.425	-9999.99	0.425	0.425	-9999.99	0.481
PT0003R	cadmium		precip	0.425	-9999.99	-9999.99	-9999.99	0.425	0.425	0.425	0.425	0.425	0.425	0.425	-9999.99	0.425
PT0004R	cadmium		precip	-9999.99	-9999.99	-9999.99	-9999.99	0.425	0.425	-9999.99	-9999.99	0.425	0.425	-9999.99	0.425	0.425
PT0010R	cadmium		precip	0.425	-9999.99	-9999.99	0.425	0.425	0.425	0.425	0.425	0.425	0.425	0.425	0.425	0.425
SE0005R	cadmium		precip	0.08	0.021	0.03	0.049	0.023	-9999.99	0.01	0.02	0.02	0.006	0.01	0.054	0.022

				jan	feb	mar	apr	may	june	jul	aug	sept	oct	nov	des	year
SE0051R	cadmium	precip		0.17	0.03	0.08	0.05	0.02	0.01	0.03	0.04	0.03	0.06	0.02	0.1	0.044
SE0097R	cadmium	precip		0.07	0.051	0.075	0.024	0.055	0.03	0.015	0.02	0.035	0.049	0.018	0.08	0.043
SK0002R	cadmium	precip		0.32	0.54	0.25	0.19	-9999.99	-9999.99	-9999.99	0.88	0.21	1.12	0.34	0.3	0.386
SK0004R	cadmium	precip		0.33	1.63	-9999.99	0.4	0.23	0.12	0.21	0.14	0.26	0.64	1.59	0.43	0.347
SK0005R	cadmium	precip		0.11	0.19	0.08	0.17	0.1	0.1	0.1	0.16	0.14	0.16	0.27	0.14	0.129
SK0006R	cadmium	precip		0.4	0.29	0.11	0.22	0.17	0.01	0.09	0.12	0.1	0.27	0.15	0.31	0.141
SK0007R	cadmium	precip		0.19	0.01	0.01	0.13	0.11	0.01	0.01	0.1	0.01	0.16	0.01	0.13	0.044
BE0004R	chromium	wet only	precip	2.027	0.805	0.806	0.801	0.805	0.805	0.806	0.806	0.855	0.923	0.812	0.809	0.954
DE0001R	chromium	precip		0.29	0.295	0.399	0.216	0.13	0.156	0.191	0.126	0.081	0.111	0.115	0.089	0.15
DE0002R	chromium	precip		0.244	0.178	0.18	0.375	0.621	0.205	0.194	0.291	0.101	0.183	0.192	0.153	0.207
DE0004R	chromium	precip		0.222	0.228	0.146	0.223	0.329	0.176	0.188	0.197	0.144	0.151	0.106	0.141	0.176
DE0009R	chromium	precip		0.091	0.082	0.071	0.036	0.014	0.018	0.112	0.067	0.051	0.087	0.078	0.085	0.06
DK0008R	chromium	precip		0.211	0.236	0.202	0.241	0.237	0.174	0.298	0.296	0.251	0.315	0.205	0.171	0.235
DK0020R	chromium	precip		0.332	0.205	0.2	0.196	0.264	0.131	0.16	0.133	0.039	0.282	0.068	-9999.99	0.145
DK0031R	chromium	precip		0.078	0.154	0.191	0.1	0.161	0.076	0.112	0.092	0.076	0.109	0.051	0.067	0.096
FI0008R	chromium	precip		0.14	0.04	0.26	0.06	0.07	0.06	-0.02	-0.02	-0.02	0.16	0.26	0.25	0.036
FI0009R	chromium	precip		0.33	1.11	0.91	0.06	0.25	0.03	0.12	0.05	-0.02	0.22	0.36	2.04	0.101
FI0017R	chromium	precip		0.33	0.08	0.6	0.03	0.05	-0.02	-0.02	0.12	0.04	0.06	0.31	0.45	0.083
FI0022R	chromium	precip		0.11	0.19	0.34	0.22	-0.02	0.02	0.02	0.05	-0.02	-0.02	0.16	0.25	0.064
FI0036R	chromium	precip		0.14	-0.02	0.28	-0.02	-0.02	0.03	-0.02	-0.02	0.02	0.06	0.12	0.23	0.023
FI0053R	chromium	precip		0.06	0.04	0.61	0.07	-0.02	-0.02	-0.02	0.07	0.03	0.02	0.52	0.56	0.044
FI0092R	chromium	precip		0.18	0.03	0.25	0.16	0.02	0.02	-0.02	-0.02	-0.02	-0.02	0.09	0.23	0.038
FI0093R	chromium	precip		0.2	0.16	0.21	0.09	-0.02	-0.02	0.03	-0.02	-0.02	-0.02	0.11	0.32	0.054
FR0090R	chromium	precip		0.05	0.05	0.04	0.02	0.2	0.11	0.15	0.12	0.09	0.03	0.03	0.03	0.063
GB0014R	chromium	ug/m2	wetdep	8.548	21.5	9	8.9	7.161	15	4.355	9	13	11.032	58	21.6	15.437
GB0090R	chromium	ug/m2	wetdep	12	9.536	12	9	10.935	18.467	23.516	14.419	6.333	7	13	187.194	27.26
GB0091R	chromium	ug/m2	wetdep	3.871	12	8.258	5.5	15	19.633	8.839	4.032	4.933	3.806	1.367	12	8.244
IE0001R	chromium	precip		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
IE0002R	chromium	precip		0.5	0.5	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	0.5	0.5	0.5	0.5	0.5	0.5
IS0002R	chromium	precip		0.05	0.05	0.05	0.05	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	0.05
IS0090R	chromium	precip		0.05	0.342	1.114	0.527	0.332	0.375	0.305	0.062	0.074	0.164	0.182	0.254	0.223
NL0009R	chromium	precip		0.286	0.192	0.23	0.255	-9999.99	-9999.99	-9999.99	0.218	0.218	0.192	0.267	0.432	0.255
NL0091R	chromium	precip		0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26
NO0047R	chromium	precip		0.257	0.844	0.133	0.844	0.902	1.064	0.287	0.246	0.209	0.1	0.1	0.408	0.387
NO0099R	chromium	precip		0.188	0.941	0.584	0.332	0.528	0.59	0.146	0.124	0.259	0.363	0.194	0.257	0.31
PL0004R	chromium	precip		0.160	0.320	0.150	0.300	0.250	0.110	0.080	0.050	0.390	0.250	0.130	0.990	0.220
PL0005R	chromium	precip		-999.000	-999.000	-999.000	-999.000	0.228	0.150	0.259	0.209	0.162	0.178	-999.000	-999.000	-999.000
SE0005R	chromium	precip		0.655	0.402	0.26	0.746	0.875	0.15	0.03	0.15	0.036	0.025	0.025	0.258	0.202
SE0051R	chromium	precip		0.38	0.43	0.67	0.45	0.99	0.98	1.56	0.025	0.025	0.025	0.025	0.025	0.294
SE0097R	chromium	precip		0.23	0.201	0.241	0.148	0.29	0.21	0.181	0.028	0.025	0.025	0.025	0.025	0.13
DE0001R	cobalt	precip		0.033	0.034	0.03	0.034	0.052	0.034	0.035	0.029	0.016	0.018	0.015	0.009	0.025
DE0002R	cobalt	precip		0.032	0.04	0.042	0.095	0.127	0.053	0.038	0.069	0.021	0.05	0.037	0.024	0.045
DE0004R	cobalt	precip		0.031	0.048	0.023	0.043	0.063	0.05	0.093	0.055	0.033	0.045	0.037	0.022	0.045
DE0009R	cobalt	precip		0.079	0.027	0.023	0.018	0.037	0.034	0.035	0.026	0.008	0.036	0.023	0.022	0.025
NL0009R	cobalt	precip		-0.018	0.029	0.033	0.035	-9999.99	-9999.99	-9999.99	0.088	0.088	0.13	0.104	0.047	0.075
NO0047R	cobalt	precip		0.382	1.853	0.359	1.087	1.152	1.674	0.602	0.403	0.486	0.22	0.079	0.327	0.654

				jan	feb	mar	apr	may	june	jul	aug	sept	oct	nov	des	year
NO0099R	cobalt		precip	0.009	0.056	0.064	0.036	0.084	0.032	0.038	0.036	0.011	0.026	0.021	0.005	0.024
NO0099R	cobalt		precip	0.009	0.056	0.064	0.036	0.084	0.032	0.038	0.036	0.011	0.026	0.021	0.005	0.024
SE0097R	cobalt		precip	0.01	0	0.016	0.011	0.037	0.01	0.01	0	0	0.026	0.037	0.01	0.011
BE0004R	copper	wet only	precip	2.077	2.076	2.081	2.538	3.124	2.078	5.394	3.405	2.079	2.079	2.094	2.088	2.568
BE0004R	copper	bulk	precip	2.26	2.278	2.29	2.28	2.28	2.29	-9999.99	2.29	2.29	-9999.99	-9999.99	2.27	2.28
DE0001R	copper		precip	2.951	6.338	3.665	3.753	1.045	0.921	0.901	1.058	0.656	1.003	0.881	0.673	1.447
DE0002R	copper		precip	1.083	2.042	2.548	2.863	3.935	2.367	2.331	2.563	1.771	3.694	3.912	3.308	2.479
DE0004R	copper		precip	2.421	2.615	1.78	3.353	10.865	3.062	4.248	3.014	3.114	6.176	3.623	3.012	3.236
DE0009R	copper		precip	6.881	3.491	3.803	5.696	1.802	5.043	4.375	2.086	4.579	1.948	3.391	6.063	4.163
DK0008R	copper		precip	1.27	0.963	1.118	1.24	1.222	0.935	1.159	0.942	0.522	0.87	0.706	0.914	0.949
DK0020R	copper		precip	1.706	1.677	1.042	1.125	1.894	1.015	0.99	1.49	0.943	1.669	0.809	-9999.99	1.235
DK0031R	copper		precip	0.379	0.868	0.451	0.455	0.81	0.343	0.59	0.598	0.879	0.932	0.318	0.865	0.633
EE0009R	copper		precip	6.4	2.1	2.1	0.05	0.05	2.9	6.3	3.2	2.1	4.4	3.2	1.5	3.558
EE0011R	copper		precip	10.8	16.1	26.3	7	3	8.7	-9999.99	4.6	5.1	-9999.99	3.1	2.8	7.294
FI0008R	copper		precip	4.12	0.68	1.72	2.01	1.51	2.47	0.41	0.36	0.66	3.87	1.01	1.58	1.005
FI0009R	copper		precip	2.38	10.75	6.92	1.81	3.32	1.66	0.49	1.38	0.61	2.09	2.37	14.45	1.445
FI0017R	copper		precip	1.16	0.79	2.4	0.52	1.08	0.42	0.81	0.51	0.56	0.75	2.24	2.12	0.819
FI0022R	copper		precip	0.46	0.97	2.19	1.55	0.44	0.93	0.61	1.15	0.57	0.76	1.04	1.08	0.843
FI0036R	copper		precip	0.88	0.58	1.36	1.04	0.49	0.89	0.38	0.37	0.77	1.08	0.77	1.03	0.663
FI0053R	copper		precip	0.59	0.62	4.52	1.25	0.91	0.47	0.84	0.56	0.42	0.64	5.5	5.81	0.9
FI0092R	copper		precip	0.27	0.33	0.93	1.87	0.79	0.54	0.54	0.36	0.36	0.59	1	0.538	
FI0093R	copper		precip	0.63	0.37	0.68	1.32	0.57	0.3	0.69	0.6	0.36	0.5	1.52	1.43	0.608
FR0090R	copper		precip	1.96	1.35	0.58	0.35	1.7	0.65	0.95	0.65	0.6	0.4	0.32	0.35	0.919
GB0014R	copper	ug/m2	wetdep	291.903	343.25	312	255.767	211.968	151	142.29	42	51	49.484	26	243.467	175.734
GB0090R	copper	ug/m2	wetdep	434	296.571	312	235	273.71	330.067	100.065	54.968	48.667	28.839	142	60.71	192.244
GB0091R	copper	ug/m2	wetdep	333.355	402	245.774	222.5	236	182.633	28.129	60.065	4.333	35.516	206.133	5778	651.907
IE0001R	copper		precip	0.5	0.5	0.5	1.4	0.5	0.5	4.4	0.5	1.5	0.5	0.5	0.5	0.857
IE0002R	copper		precip	30.1	6.8	5.4	-9999.99	-9999.99	-9999.99	-9999.99	30.4	1.5	0.5	2	0.5	9.54
IS0002R	copper		precip	1.234	0.438	0.39	1.253	0.962	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	0.899
IS0090R	copper		precip	1.445	2.387	5.89	3.919	2.117	2.489	1.343	8.688	1.14	1.486	1.806	2.319	2.714
LT0015R	copper		precip	1.19	1.035	1.329	2.304	2.286	1.36	1.537	1.075	1.869	1.533	1.79	1.145	1.55
LV0010R	copper		precip	0.5	0.5	0.5	14.2	1.8	0.5	3.1	0.4	0.3	0.4	0.4	4.3	1.331
LV0016R	copper		precip	0.6	0.4	8	1.2	1.5	0.3	1.4	2	1	1.1	0.5	7.2	1.597
NL0009R	copper		precip	2.917	3.171	3.079	3.018	-9999.99	-9999.99	-9999.99	0.921	0.921	1.614	3.949	9.049	2.911
NL0091R	copper		precip	1.164	2.156	2.486	2.184	3.14	3.693	3.665	1.244	1.366	4.949	1.264	1.51	1.999
NO0047R	copper		precip	15.676	66.417	14.603	30.064	42.432	49.248	12.754	12.182	17.923	9.32	3.88	10.495	20.234
NO0099R	copper		precip	1.35	2.252	6.573	1.5	4.267	1.327	1.188	0.76	0.763	0.813	0.866	0.448	1.276
PL0004R	copper		precip	1.380	1.250	3.150	4.130	4.750	1.800	2.280	2.340	0.970	1.100	0.470	0.840	0.280
PL0005R	copper		precip	-999.000	-999.000	-999.000	-999.000	1.492	2.184	1.279	1.933	1.480	1.578	-999.000	-999.000	-999.000
PT0001R	copper		precip	4.5	-9999.99	-9999.99	0.325	0.325	-9999.99	0.768	-9999.99	3.497	0.325	-9999.99	0.325	0.977
PT0003R	copper		precip	0.325	-9999.99	-9999.99	2.249	0.516	6.5	3.33	3.717	7.28	0.592	-9999.99	0.325	1.238
PT0004R	copper		precip	-9999.99	-9999.99	-9999.99	-9999.99	0.325	1.09	-9999.99	-9999.99	0.325	0.388	-9999.99	0.325	0.39
PT0010R	copper		precip	0.325	-9999.99	-9999.99	0.325	0.325	0.419	0.956	0.384	0.325	1.224	0.325	0.325	0.411
SE0005R	copper		precip	2.134	0.281	0.96	1.038	1.093	-9999.99	0.417	0.25	0.396	0.674	0.35	0.32	0.575
SE0051R	copper		precip	2.18	0.76	2.57	1.6	1.42	1.47	2.96	0.68	0.34	2.25	0.87	1.19	1.205
SE0097R	copper		precip	0.79	0.51	1.098	1.025	1.496	0.99	1.18	1.073	0.713	0.45	2.535	1.07	1.023

			jan	feb	mar	apr	may	june	jul	aug	sept	oct	nov	des	year	
DE0001R	iron	precip	11.038	10.932	7.131	21.594	38.972	36.426	63.59	36.577	13.316	16.789	11.635	10.983	25.1	
DE0002R	iron	precip	14.681	21.358	31.854	78.162	174.337	55.186	35.857	83.158	22.827	40.794	49.538	38.653	46.7	
DE0004R	iron	precip	40.405	41.665	33.394	44.397	51.288	34.786	71.909	54.107	30.909	38.169	32.161	21.824	41.142	
DE0009R	iron	precip	47.556	17.79	19.272	17.278	14.877	28.99	44.449	25.295	8.357	22.498	12.763	16.165	20.271	
DK0008R	iron	precip	28.714	46.961	53.421	93.412	90.195	38.677	64.875	63.837	33.521	99.816	53.305	38.159	55.197	
DK0020R	iron	precip	73.229	49.069	62.606	61.271	122.685	34.422	62.502	-9999.99	7.616	31.971	16.795	-9999.99	40.925	
DK0031R	iron	precip	8.828	24.518	49.076	24.596	45.06	19.946	31.001	18.751	10.311	31.344	9.94	7.725	20.913	
FI0008R	iron	precip	17.48	2.88	11.5	51.02	13.85	14.19	15.13	-1.5	8.23	15.23	13.53	21.96	12.059	
FI0009R	iron	precip	85.89	94.25	141.53	66.62	135.56	27.89	37.7	5.55	5.56	30.05	61.72	354.43	29.822	
FI0017R	iron	precip	48.12	30.36	75.87	36.37	82.93	10.6	41.1	7.45	18.81	26.65	102.59	60.59	35.798	
FI0022R	iron	precip	5.21	12.68	18.44	31.81	4.62	13.97	12.53	4.68	8.7	6.21	14.29	19.13	11.311	
FI0036R	iron	precip	5.21	12.68	18.44	31.81	4.62	13.97	12.53	4.68	8.7	6.21	14.29	19.13	11.327	
FI0053R	iron	precip	10.52	10.46	75.04	60.25	43.54	16.91	20.92	15.9	11.63	22.51	310.25	63.19	30.079	
FI0092R	iron	precip	15.46	1.76	13.55	92.94	25.3	12.37	21.88	-1.5	13.57	9.15	17.94	24.19	15.327	
FI0093R	iron	precip	18.02	12.76	16.43	63.65	20.83	5.47	11.32	7.26	5.65	13.96	31.51	15.6	13.735	
IS0002R	iron	precip	5	5	5	17.81	24.212	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	13.077	
IS0090R	iron	precip	115.385	447.754	867.449	485.916	184.821	242.984	74.905	35.526	28.076	85.156	121.049	181.748	156.258	
NL0009R	iron	precip	22.896	7.26	17.406	24.013	-9999.99	-9999.99	-9999.99	161.392	161.392	57.52	66.99	87.677	99.203	
SK0002R	iron	precip	-9999.99	24	39	13	-9999.99	-9999.99	-9999.99	30	65	21	46	23	37.241	
SK0004R	iron	precip	33	18	-9999.99	13	103	-9999.99	-9999.99	29	63	26	59	20	40.837	
SK0005R	iron	precip	10	23	38	10	-9999.99	-9999.99	-9999.99	48	58	8	24	34	31.866	
SK0006R	iron	precip	7	26	8	17	-9999.99	-9999.99	-9999.99	37	66	17	11	28	25.645	
SK0007R	iron	precip	25	21	7	17	109	16	-9999.99	37	69	16	20	13	42.14	
BE0004R	lead	wet only	precip	37.358	23.773	11.146	7.303	12.11	29.177	73.61	49.857	41.968	20.726	4.633	4.823	27.909
BE0004R	lead	bulk	precip	2.35	3.625	4.309	2.835	8.047	7.681	-9999.99	2.57	1.67	-9999.99	-9999.99	1.66	3.308
CZ0001R	lead	precip	8.249	5.691	6.537	5.491	9.292	2.223	2.575	2.313	2.533	3.356	1.85	2.946	4.29	
CZ0003R	lead	precip	5.636	5.591	6.585	5.223	9.316	1.994	6.16	4.064	3.362	1.807	0.819	1.611	4.599	
DE0001R	lead	precip	1.285	1.716	0.672	2.344	1.24	0.828	0.913	0.84	0.451	1.538	1.284	0.566	0.997	
DE0002R	lead	precip	0.742	1.776	3.24	2.44	2.777	1.845	2.316	1.807	0.869	1.263	1.336	1.4	1.629	
DE0004R	lead	precip	1.401	2.196	1.423	2.204	1.678	1.967	1.855	1.387	1.552	0.989	1.492	1.871	1.679	
DE0009R	lead	precip	1.726	1.996	1.078	1.409	0.893	1.054	1.01	0.685	0.88	1.772	1.607	0.656	1.065	
DK0008R	lead	precip	1.994	1.995	2.026	-9999.99	0.974	0.978	1.289	1.392	1.215	1.143	0.832	2.765	1.405	
DK0020R	lead	precip	4.071	1.87	1.693	2.322	1.759	1.126	1.126	-9999.99	0.572	0.965	0.597	-9999.99	1.32	
DK0031R	lead	precip	1.058	0.634	0.714	0.775	1.192	0.472	0.647	0.68	0.697	0.772	0.29	0.399	0.692	
EE0009R	lead	precip	1.25	1.3	1.1	4.1	0.05	0.05	0.05	0.05	0.05	0.05	0.05	1.4	0.824	
EE0011R	lead	precip	0.5	0.5	0.5	0.5	1.8	0.5	-9999.99	0.5	0.5	-9999.99	0.5	1.9	0.673	
FI0008R	lead	precip	0.34	0.36	0.67	2.18	0.42	0.51	0.4	0.26	0.61	0.27	0.6	0.32	0.477	
FI0009R	lead	precip	7.48	7.38	11.82	4.53	2.18	0.82	0.85	2.23	1.51	2.6	3.09	32.48	2.454	
FI0017R	lead	precip	3.75	2.49	3.29	1.45	0.9	0.34	1.21	0.44	1.42	1.97	2.24	2.1	1.476	
FI0022R	lead	precip	0.7	0.76	1.05	2.19	0.24	0.64	0.37	0.3	0.64	0.35	0.43	0.78	0.59	
FI0036R	lead	precip	0.63	0.79	1.1	1.77	0.24	0.74	0.3	0.18	0.56	0.39	0.34	0.91	0.513	
FI0053R	lead	precip	0.9	0.81	3.86	4.24	0.34	0.73	0.73	0.32	0.53	1.26	2.06	2.53	1.221	
FI0092R	lead	precip	0.99	0.82	0.88	6.18	1.2	0.75	0.86	0.21	1.2	0.63	0.54	0.64	0.937	
FI0093R	lead	precip	1.42	0.98	0.71	4.66	0.75	0.32	0.89	0.78	0.78	0.75	1.08	0.84	0.904	
FR0090R	lead	precip	1.43	1.21	0.76	0.91	3.9	1.2	1.95	1.5	0.45	0.4	0.45	0.3	1.069	
GB0014R	lead	ug/m2	wetdep	183.903	287.286	223	178.8	74.677	86	28.903	114	291	168.387	116	75.867	151.245
GB0090R	lead	ug/m2	wetdep	101	90.893	163	118	100.581	180.267	126.387	115.645	127.5	57.871	93	39.774	109.425

				jan	feb	mar	apr	may	june	jul	aug	sept	oct	nov	des	year
GB0091R	lead	ug/m2	wetdep	67.29	42	144.903	77.833	40	56.733	48.935	46.419	38.333	158.742	10.667	30	63.858
IE0001R	lead		precip	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
IE0002R	lead		precip	1.5	0.5	2.7	-9999.99	-9999.99	-9999.99	-9999.99	1	0.5	0.5	0.5	0.5	1.01
IS0002R	lead		precip	0.575	0.346	0.789	0.339	0.495	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	0.465
IS0090R	lead		precip	0.509	1.607	1.105	0.76	0.571	0.744	0.261	0.369	0.29	0.371	0.514	0.652	0.549
LT0015R	lead		precip	4.62	3.176	2.208	4.811	6.791	6.902	2.426	1.693	4.115	3.909	2.204	1.016	3.7
LV0010R	lead		precip	0.9	0.1	4.1	4.5	2	0.3	3.1	0.9	0.4	2	1.3	2.2	1.38
LV0016R	lead		precip	0.4	0.1	3.6	3.1	1.1	0.3	1.9	2.9	0.7	0.7	0.5	1.4	1.418
NL0009R	lead		precip	1.585	4.347	3.386	2.76	-9999.99	-9999.99	-9999.99	1.394	1.394	1.189	1.181	1.162	1.655
NL0091R	lead		precip	1.938	2.758	3.502	3.929	3.889	3.86	3.298	1.941	2.681	4.422	5.832	4.43	3.173
NO0001R	lead		precip	2	0.747	1.978	1.055	0.992	0.755	1.403	0.697	1.41	1.163	0.687	1.195	1.255
NO0039R	lead		precip	0.127	0.161	0.185	0.174	0.216	0.159	0.111	0.142	0.071	0.063	0.054	0.255	0.133
NO0041R	lead		precip	1.138	0.343	0.674	0.897	0.502	0.668	0.374	0.498	0.482	0.509	0.559	0.467	0.593
NO0047R	lead		precip	1.354	4.676	1.691	2.44	6.45	5.234	3.097	0.765	1.708	1.879	0.725	2.042	2.557
NO0055R	lead		precip	0.877	0.841	0.579	2.335	0.666	0.8	0.513	0.272	1.032	0.478	0.376	0.418	0.674
NO0056R	lead		precip	1.338	0.5	0.862	0.891	0.555	0.782	0.642	0.562	0.548	1.401	2.545	0.881	0.928
NO0099R	lead		precip	2.234	1.714	4.186	2.252	2.539	2.289	1.289	1.053	1.024	1.209	0.828	0.806	1.515
PL0004R	lead		precip	1.810	1.550	1.880	2.000	2.850	3.390	0.960	1.340	1.230	1.270	1.110	0.560	1.680
PL0005R	lead		precip	-999.000	-999.000	-999.000	-999.000	2.302	1.333	1.997	1.947	1.945	1.602	-999.000	-999.000	-999.000
PT0001R	lead		precip	0.645	-9999.99	-9999.99	0.645	0.645	-9999.99	0.645	-9999.99	0.645	0.645	-9999.99	0.645	0.645
PT0003R	lead		precip	0.645	-9999.99	-9999.99	0.761	0.683	0.645	0.824	0.645	0.645	0.645	-9999.99	0.645	0.675
PT0004R	lead		precip	-9999.99	-9999.99	-9999.99	-9999.99	0.645	0.645	-9999.99	-9999.99	0.645	0.645	-9999.99	0.645	0.645
PT0010R	lead		precip	0.645	-9999.99	-9999.99	0.645	1.782	4.671	25.433	8.046	1.479	8.124	12.554	1.257	3.387
SE0005R	lead		precip	0.914	0.269	0.92	1.844	0.734	0.64	0.393	0.28	0.535	0.264	0.18	0.616	0.559
SE0051R	lead		precip	5.92	1.3	2.24	1.88	1.18	1.25	1.79	1.01	1.12	0.84	2.3	1.71	1.896
SE0097R	lead		precip	2.19	1.091	1.714	1.078	2.125	1.01	0.9	1.242	1.109	0.963	0.68	2.21	1.362
SK0002R	lead		precip	4.3	9	5.7	4.3	3	3.9	2.6	1.6	2.5	3.8	3.5	6.9	3.936
SK0004R	lead		precip	3.2	5.8	-9999.99	2.8	2.4	1.9	1.3	2.5	1.6	2.2	4.7	2.5	2.204
SK0005R	lead		precip	3.1	4.2	2.1	2.3	1.2	3.1	1.8	2.9	1.5	1.5	2.4	3.4	2.315
SK0006R	lead		precip	1.6	10.8	5.3	5.9	4.7	1.8	1.2	2.9	2.6	3.6	2.8	3.2	3.071
SK0007R	lead		precip	3.8	2	1.7	3.1	2	1.8	0.6	1.3	0.5	2.6	0.4	2.1	1.245
DE0001R	manganese		precip	0.817	1.744	1.05	2.031	4.111	2.169	2.112	1.791	0.89	1.208	0.813	0.456	1.445
DE0002R	manganese		precip	1.081	1.672	2.063	6.248	18.476	3.693	2.981	6.07	1.118	2.685	2.328	1.529	3.325
DE0004R	manganese		precip	1.505	2.53	1.87	2.907	8.602	4.483	7.34	5.047	2.573	3.148	2.59	1.716	3.415
DE0009R	manganese		precip	9.889	2.493	1.807	1.67	4.7	3.173	2.854	1.742	0.897	1.921	1.404	0.897	2.118
FI0008R	manganese		precip	0.41	0.19	0.45	3.72	0.99	3.66	0.64	0.46	2.5	0.66	0.29	1.43	1.058
FI0009R	manganese		precip	3.79	4.96	8.23	5.86	6.63	2.51	1.6	1.2	0.96	3.81	3.11	13.53	2.232
FI0017R	manganese		precip	2.5	1.61	2.98	2.87	4.58	1.25	2.84	1.24	1.4	1.79	2.77	2.37	2.212
FI0022R	manganese		precip	0.73	1.14	1.23	3.41	0.59	4.79	1.13	1.33	3.72	0.69	0.59	0.41	1.833
FI0036R	manganese		precip	0.38	0.39	0.78	2.73	0.5	6.72	1.13	0.86	1.11	0.5	0.42	0.51	1.458
FI0053R	manganese		precip	0.78	1.18	5.86	3.99	1.26	3.21	1.69	1.67	1.43	2.68	9.45	5.15	2.368
FI0092R	manganese		precip	0.54	0.41	0.87	8.34	2.43	5.98	1.68	0.8	1.87	1.1	0.49	0.38	1.685
FI0093R	manganese		precip	1.1	9.57	1.03	7.6	2.72	1.65	2.98	3.09	1.11	1.97	9.38	0.82	2.877
IE0001R	manganese		precip	2	3	4.1	3.9	11.9	4.5	14	4.6	10.5	2.9	4.2	7	4.904
IE0002R	manganese		precip	2.3	4.7	3.3	-9999.99	-9999.99	-9999.99	-9999.99	5.6	4.4	1.5	1.1	1.5	3.016
IS0002R	manganese		precip	1.047	0.454	0.4	2.009	1.12	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	1.011
IS0090R	manganese		precip	2.325	6.731	13.766	8.609	3.5	5.014	2.003	1.301	1.056	1.968	2.358	3.704	3.043

			jan	feb	mar	apr	may	june	jul	aug	sept	oct	nov	des	year	
PT0001R	manganese	precip	8.21	-9999.99	-9999.99	8.7	7.248	-9999.99	1.075	-9999.99	16.446	2.362	-9999.99	1.075	4.783	
PT0003R	manganese	precip	1.075	-9999.99	-9999.99	8.796	1.772	1.075	4.661	6.5	13.88	1.624	-9999.99	9.263	3.259	
PT0004R	manganese	precip	-9999.99	-9999.99	-9999.99	-9999.99	1.075	1.075	-9999.99	-9999.99	2.977	4.398	-9999.99	6.251	3.944	
PT0010R	manganese	precip	1.075	-9999.99	-9999.99	16.08	12.784	1.186	4.898	4.646	3.18	1.092	3.064	6.344	6.29	
SE0005R	manganese	precip	2.887	3.032	1.9	4.137	2.778	-9999.99	1.59	1.1	1.282	1.52	2	2.074	1.981	
SE0097R	manganese	precip	1.3	2.168	1.708	1.507	3.71	2.4	1.523	1.592	1.228	4.785	12.67	1.2	2.48	
SK0002R	manganese	precip	4.1	4.7	3.7	4.2	9.6	3.5	3.3	6.2	2.2	6.1	8.4	5.8	4.438	
SK0004R	manganese	precip	2.3	3.9	-9999.99	4.4	6.9	3.8	3.4	4.7	2	6.3	10.5	3	4.001	
SK0005R	manganese	precip	5.6	8.5	6.4	3	5.7	4.3	3	7.8	2.1	8.8	6.7	6.5	4.523	
SK0006R	manganese	precip	2.6	3.3	2.1	5.2	8.4	2.9	2	4.9	1.7	3.4	4	6.1	3.027	
SK0007R	manganese	precip	3.6	3.9	2.7	4.8	10.2	5.6	2.7	4.3	0.9	4	7.2	7.7	3.853	
BE0004R	mercury	precip	6	39	147	15	30	31	31	33	33	46	66	50	44	
DE0001R	mercury	precip	7.655	9.571	11.128	9.992	9.569	11.338	6.853	7.771	4.444	2.15	1.283	5.306	6.344	
DE0009R	mercury	precip	11.58	15.654	18.234	12.187	8.405	8.562	16.231	10.072	5.665	7.239	6.553	5.565	9.365	
FI0096R	mercury	precip	2.1	4.9	6.3	4.1	4	9.6	6.3	4.4	3.7	2.4	6.8	-9999.99	5.239	
IE0001R	mercury	precip	50	50	50	50	50	50	50	50	50	50	50	50	50	
IE0002R	mercury	precip	50	50	50	-9999.99	-9999.99	-9999.99	-9999.99	50	50	50	50	50	50	
NL0091R	mercury	precip	5.47	6.119	9.867	9.192	14.193	18.608	16.628	12.088	8.819	11.191	5.496	4.237	9.413	
NO0099R	mercury	precip	5.9	8.6	14.6	13.5	11.7	14.5	8.2	6.2	6	6.9	4.8	4.1	7.297	
SE0002R	mercury	precip	8.3	9.9	12.6	8.8	8.8	17.6	12.6	6.6	7	12.2	5.7	4.5	9.314	
SE0005R	mercury	precip	8.6	5.8	10.8	6.2	5.1	19.6	7.3	3.8	4.5	4	3.2	8.3	6.502	
SE0011R	mercury	precip	12.5	6.5	14.7	6.1	19.9	6.3	10	8.7	2.8	13.4	7	9.4	9.383	
BE0004R	nickel	wet only	precip	1.196	1.832	1.388	1.245	1.773	1.69	1.721	1.156	1.035	1.807	1.167	1.262	1.402
CZ0001R	nickel	precip	2.18	3.671	9.686	2.391	6.288	3.293	1.498	2.146	2.315	1.911	1.004	1.424	3.099	
CZ0003R	nickel	precip	2.645	3.335	6.272	2.504	8.745	2.487	5.938	1.572	2.549	2.824	0.788	1.191	3.677	
DE0001R	nickel	precip	0.628	0.54	0.544	0.475	0.44	0.339	0.236	0.28	0.19	0.218	0.185	0.101	0.277	
DE0002R	nickel	precip	0.369	0.426	0.287	1.764	1.432	0.941	0.958	0.969	0.339	0.776	1.01	0.71	0.754	
DE0004R	nickel	precip	0.701	0.562	0.45	0.845	1.353	1.072	0.402	0.54	0.604	0.653	0.284	0.748	0.634	
DE0009R	nickel	precip	0.47	0.524	0.242	0.184	0.211	0.305	0.378	0.272	0.122	0.276	0.28	0.209	0.247	
DK0008R	nickel	precip	0.412	0.339	0.371	0.381	0.374	0.265	0.432	0.274	0.195	0.29	0.212	0.278	0.303	
DK0020R	nickel	precip	0.465	0.465	0.451	0.342	0.397	0.274	0.422	0.222	0.11	0.52	0.223	-9999.99	0.28	
DK0031R	nickel	precip	-9999.99	0.248	0.252	0.299	0.401	0.191	0.204	0.188	0.162	0.272	0.182	0.226	0.225	
FI0008R	nickel	precip	0.44	0.14	0.33	0.72	0.42	0.58	0.39	0.08	0.11	0.25	0.14	0.08	0.285	
FI0009R	nickel	precip	0.95	1.52	1.51	0.35	0.36	0.24	0.17	0.13	0.13	0.51	0.87	5.82	0.296	
FI0017R	nickel	precip	0.64	0.2	0.53	0.15	0.16	0.09	0.15	0.13	0.13	0.22	0.36	0.46	0.196	
FI0022R	nickel	precip	0.19	0.13	0.48	0.24	0.06	0.23	0.13	0.07	0.11	0.15	0.11	0.16	0.148	
FI0036R	nickel	precip	0.14	0.06	0.25	0.25	0.04	0.27	0.07	0.07	0.07	0.15	0.1	0.16	0.115	
FI0053R	nickel	precip	0.14	0.09	1.04	0.26	0.08	0.15	0.16	0.06	0.09	0.18	0.47	0.77	0.168	
FI0092R	nickel	precip	0.24	0.08	0.14	0.32	0.13	0.09	0.13	0.1	0.08	0.11	0.22	0.23	0.134	
FI0093R	nickel	precip	0.24	0.08	0.14	0.32	0.13	0.09	0.13	0.1	0.08	0.11	0.22	0.23	0.131	
FR0090R	nickel	precip	0.56	0.43	0.38	0.33	1.4	0.8	1	0.75	0.65	0.35	0.5	0.3	0.541	
GB0014R	nickel	ug/m2	wetdep	27.419	48.393	35	27.733	14.419	24	6.581	18	36	23.516	19	12.467	24.187
GB0090R	nickel	ug/m2	wetdep	44	28.786	32	29	27.065	52.2	26.903	28.355	21.5	13.839	28	143.161	39.732
GB0091R	nickel	ug/m2	wetdep	30.226	51	36.032	22.5	15	22.4	33.258	10.871	8.267	24.516	3.167	8	21.953
IE0001R	nickel	precip	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
IE0002R	nickel	precip	0.5	0.5	0.5	-9999.99	-9999.99	-9999.99	-9999.99	0.5	0.5	0.5	0.5	0.5	0.5	

				jan	feb	mar	apr	may	june	jul	aug	sept	oct	nov	des	year
IS0002R	nickel		precip	0.09	0.05	0.05	0.088	0.098	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	0.08
IS0090R	nickel		precip	0.249	0.941	2.039	1.254	0.746	0.579	0.857	0.448	0.242	0.452	0.387	0.561	0.599
NL0009R	nickel		precip	0.141	0.311	0.283	0.264	-9999.99	-9999.99	-9999.99	0.358	0.358	0.305	0.314	0.335	0.322
NL0091R	nickel		precip	0.205	0.35	0.526	0.465	0.286	0.659	0.574	0.205	0.215	0.38	0.205	0.205	0.306
NO0047R	nickel		precip	10.26	60.478	10.74	34.636	36.908	51.263	18.94	12.552	16.665	8.745	3.757	7.086	20.711
NO0099R	nickel		precip	0.281	1.142	1.444	0.532	0.987	0.447	0.414	0.285	0.196	0.289	0.144	0.129	0.371
PL0004R	nickel		precip	0.420	0.390	0.410	0.590	0.480	0.740	0.320	0.250	0.190	0.250	0.120	0.290	1.660
PL0005R	nickel		precip	-999.000	-999.000	-999.000	-999.000	0.341	0.237	0.507	0.539	0.333	0.395	-999.000	-999.000	-999.000
PT0001R	nickel		precip	0.775	-9999.99	-9999.99	0.775	0.775	-9999.99	0.775	-9999.99	0.775	0.775	-9999.99	0.775	0.775
PT0003R	nickel		precip	0.775	-9999.99	-9999.99	0.899	0.775	0.775	0.775	0.904	0.775	0.775	-9999.99	0.775	0.795
PT0004R	nickel		precip	-9999.99	-9999.99	-9999.99	-9999.99	0.775	0.775	-9999.99	-9999.99	0.775	0.775	-9999.99	0.775	0.897
PT0010R	nickel		precip	0.775	-9999.99	-9999.99	38.11	14.917	1.459	4.612	2.077	0.886	0.944	1.507	5.398	6.307
SE0005R	nickel		precip	0.8	0.104	0.17	0.287	0.275	0.65	0.12	0.08	0.226	0.229	0.015	0.07	0.199
SE0051R	nickel		precip	0.53	0.4	0.67	0.27	0.5	0.35	0.39	0.025	0.015	0.43	0.13	0.48	0.255
SE0097R	nickel		precip	0.32	0.301	0.423	0.217	0.589	0.3	0.3	0.231	0.193	0.066	0.028	0.14	0.259
GB0014R	titanium	ug/m2	wetdep	30.194	57.536	37	42.033	22.71	41	32.29	45	123	65.581	99	55.133	53.934
GB0090R	titanium	ug/m2	wetdep	21	19.929	37	43	57.516	87.867	71.935	94.387	69.667	36.774	125	48.548	59.468
GB0091R	titanium	ug/m2	wetdep	15.065	25	28.742	47.333	42	70	41.258	48.194	27.467	72.258	19.233	55	41.093
DE0001R	vanadium		precip	0.346	0.645	0.451	0.591	0.663	0.579	0.509	0.615	0.32	0.556	0.467	0.39	0.494
DE0002R	vanadium		precip	0.216	0.498	0.519	0.796	1.553	0.471	0.412	0.693	0.271	0.361	0.585	0.422	0.489
DE0004R	vanadium		precip	0.191	0.366	0.228	0.368	0.55	0.577	0.42	0.336	0.355	0.32	0.349	0.267	0.354
DE0009R	vanadium		precip	0.588	1.019	0.42	0.344	0.496	0.418	0.427	0.39	0.289	0.583	0.599	0.364	0.424
FI0008R	vanadium		precip	0.15	0.13	0.15	0.46	0.13	0.21	0.11	0.08	0.13	0.1	0.06	0.08	0.125
FI0009R	vanadium		precip	2.06	3.08	3.67	0.81	0.75	0.44	0.4	0.24	0.38	1.18	2.14	18.42	0.703
FI0017R	vanadium		precip	1.52	0.87	1.33	0.4	0.37	0.18	0.27	0.3	0.33	0.71	1.04	1.35	0.508
FI0022R	vanadium		precip	0.36	0.32	0.65	0.47	0.1	0.25	0.22	0.1	0.21	0.17	0.26	0.34	0.241
FI0036R	vanadium		precip	0.28	0.19	0.32	0.47	0.09	0.22	0.08	0.1	0.16	0.13	0.15	0.31	0.163
FI0053R	vanadium		precip	0.47	0.46	2.21	0.57	0.26	0.25	0.33	0.21	0.2	0.52	1.64	1.61	0.409
FI0092R	vanadium		precip	0.53	0.31	0.39	1.36	0.33	0.17	0.24	0.13	0.17	0.25	0.28	0.34	0.297
FI0093R	vanadium		precip	0.58	0.37	0.34	0.68	0.29	0.14	0.25	0.22	0.2	0.32	0.46	0.47	0.3
IE0001R	vanadium		precip	0.5	0.5	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.552
IE0002R	vanadium		precip	0.5	0.5	0.5	-9999.99	-9999.99	-9999.99	-9999.99	0.5	0.5	0.5	0.5	0.5	0.5
IS0002R	vanadium		precip	1.807	1.854	1.19	0.641	0.59	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	1.237
IS0090R	vanadium		precip	1.054	2.106	4.969	1.706	1.352	1.292	0.645	0.493	0.738	3.028	6.353	2.814	1.752
NL0009R	vanadium		precip	0.438	0.749	0.632	0.555	-9999.99	-9999.99	-9999.99	0.703	0.703	0.586	0.651	0.795	0.675
NO0099R	vanadium		precip	0.916	1.67	1.364	0.839	1.109	0.85	0.919	0.603	0.666	1.438	2.202	0.649	1.022
SE0005R	vanadium		precip	0.28	0.177	0.3	0.475	0.155	0.23	0.083	0.08	0.089	0.186	0.52	0.468	0.231
SE0051R	vanadium		precip	0.91	0.8	1	0.53	0.5	0.51	0.61	0.26	0.09	1.06	1.31	1.25	0.788
SE0097R	vanadium		precip	0.66	0.785	0.872	0.462	0.828	0.64	0.501	0.646	0.494	1.344	2.665	1.82	0.886
BE0004R	zinc	wet only	precip	40.105	34.619	41.821	43.841	28.552	24.869	31.126	28.392	32.061	29.764	27.632	53.157	34.485
BE0004R	zinc	bulk	precip	2.21	11.189	14.017	15.699	31.487	37.802	-9999.99	19.22	28.94	-9999.99	-9999.99	2.22	16.448
DE0001R	zinc		precip	10.582	11.497	17.729	15.952	7.343	6.192	5.727	6.796	3.94	6.711	4.061	3.158	6.634
DE0002R	zinc		precip	11.363	17.607	16.846	45.182	27.478	27.888	19.354	17.266	23.731	40.455	21.388	12.375	22.571
DE0004R	zinc		precip	16.749	21.481	11.187	20.708	72.794	20.47	13.945	12.928	12.316	10.686	14.548	11.224	15.981
DE0009R	zinc		precip	13.583	17.526	8.163	7.323	8.585	10.15	11.171	6.92	5.653	11.972	7.862	4.078	8.023

			jan	feb	mar	apr	may	june	jul	aug	sept	oct	nov	des	year
DK0008R	zinc	precip	10.124	17.773	11.938	9.953	9.723	6.082	10.659	6.606	3.989	8.082	6.958	12.606	8.568
DK0020R	zinc	precip	15.576	9.313	12.421	10.305	15.936	13.273	13.965	10.796	7.743	25.087	17.387	-9999.99	12.462
DK0031R	zinc	precip	5.667	20.977	7.497	6.83	9.396	3.708	13.299	7.859	6.495	8.885	4.701	18.489	8.419
EE0009R	zinc	precip	5	5	5	5	10	5	5	5	5	5	5	13	5.973
EE0011R	zinc	precip	20	30	30	5	5	5	-9999.99	5	5	-9999.99	5	10	9.789
FI0008R	zinc	precip	1.43	0.84	2.59	2.8	1.3	2.52	0.77	0.74	2.15	1.32	0.98	1.87	1.223
FI0009R	zinc	precip	16.88	28.88	36.05	8.01	12.67	7.38	2.41	4.6	2.61	9.02	10.67	115.91	6.325
FI0017R	zinc	precip	8.32	5.17	9.27	3.46	3.6	1.6	2.58	2.72	4.06	5.78	7.2	6.83	4.15
FI0022R	zinc	precip	1.52	2.11	2.91	4.07	1.13	2.42	2.39	1.71	1.97	2.44	1.55	2.33	2.125
FI0036R	zinc	precip	1.94	1.96	3.67	3.8	0.67	3.61	2.03	1.01	2.05	4.41	1.34	2.85	2.216
FI0053R	zinc	precip	2.23	2.28	12.97	7.46	1.6	3.81	2.25	1.68	1.86	3.81	9.95	10.91	3.499
FI0092R	zinc	precip	2.49	1.7	2	10.55	3.28	2.68	2.06	1.11	2.24	1.68	1.77	1.52	2.242
FI0093R	zinc	precip	3.55	3.85	2.03	8.69	2.7	1.38	2.48	2.61	2.61	3.55	5.53	2.61	2.912
FR0090R	zinc	precip	1.38	1.72	1.49	1.2	4	2.8	2.5	3.7	1.2	1.1	1.7	0.9	1.717
GB0014R	zinc	wetdep	403.806	792.607	781	638.233	1121.355	199	100.29	195	440	418.645	210	92.4	448.365
GB0090R	zinc	wetdep	1115	473.893	667	1044	322.065	683.467	315.387	407.129	329.5	375.194	3149	195.452	752.773
GB0091R	zinc	wetdep	922.194	5432	1169	463.333	348	452.667	166.839	568	178.333	564.226	3.533	48	828.51
IE0001R	zinc	precip	24.1	32.9	33.4	44.6	37.8	31	65.5	44.8	38.2	40.2	26.9	46.8	37.937
IE0002R	zinc	precip	13.3	7.5	13	-9999.99	-9999.99	-9999.99	-9999.99	11.9	10.6	5.3	4.4	4.7	8.894
IS0002R	zinc	precip	10.979	14.053	7.5	7.331	8.296	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	10.291
IS0090R	zinc	precip	2.081	5.204	14.96	16.739	6.359	7.86	5.721	10.395	6.921	6.996	2.82	3.617	6.573
LT0015R	zinc	precip	6.506	6.885	15.243	12.214	59.457	24.655	23.613	18.435	21.01	35.042	27.944	21.418	22.364
LV0010R	zinc	precip	16	26.2	24.9	31.4	16.8	15.4	14.1	2.6	4.3	9.9	8	27.1	12.719
LV0016R	zinc	precip	14.5	9.2	28.5	30.6	17.8	35.5	20.5	7.7	20.6	15.5	12.8	14.7	20.47
NL0009R	zinc	precip	7.847	9.809	10.046	10.201	-9999.99	-9999.99	-9999.99	8.37	8.37	6.801	7.129	7.847	8.21
NL0091R	zinc	precip	4.283	7.977	9.295	8.919	8.633	9.39	13.844	3.98	2.215	11.384	11.93	5.5	6.635
NO0001R	zinc	precip	5.601	2.547	11.933	4.632	4.674	2.914	4.047	2.125	4.13	4.147	2.354	8.703	4.673
NO0039R	zinc	precip	1.494	0.601	0.54	2.914	1.303	1.168	2.083	2.231	2.387	2.536	0.356	1.207	1.351
NO0041R	zinc	precip	3.495	1.333	6.475	3.693	2.318	3.491	1.808	3.041	5.674	2.417	2.844	4.369	3.343
NO0047R	zinc	precip	7.163	8.574	2.278	12.332	15.715	12.953	11.401	7.525	4.792	7.568	3.489	3.002	8.544
NO0055R	zinc	precip	14.715	3.528	1.431	7.338	11.326	5.524	2.504	6.368	3.328	5.127	3.846	8.294	4.791
NO0056R	zinc	precip	4.322	2.121	4.433	4.706	2.252	4.047	7.325	2.984	3.878	6.063	9.424	8.434	4.76
NO0099R	zinc	precip	7.309	11.428	24.241	10.638	15.313	4.909	8.148	5.621	3.447	4.992	14.57	3.692	7.44
PL0004R	zinc	precip	6.400	3.170	6.580	9.370	8.360	3.370	4.820	6.310	4.190	10.260	5.250	6.110	5.390
PL0005R	zinc	precip	-999.000	-999.000	-999.000	-999.000	9.360	9.295	7.132	62.524	17.383	16.888	-999.000	-999.000	-999.000
PT0001R	zinc	precip	283	-9999.99	-9999.99	5	197.438	-9999.99	14.6	-9999.99	134.15	5.556	-9999.99	10	79.17
PT0003R	zinc	precip	2	-9999.99	-9999.99	55.473	10.742	73	48.952	15.538	58	11.708	-9999.99	14.874	18.57
PT0004R	zinc	precip	-9999.99	-9999.99	-9999.99	-9999.99	13.524	13	-9999.99	-9999.99	9.707	8.116	-9999.99	1.851	8.082
PT0010R	zinc	precip	11	-9999.99	-9999.99	73	42.315	6.036	37.532	12.176	8.694	19.232	13.171	22.157	22.859
SE0005R	zinc	precip	26.852	1.745	3.33	9.126	36.298	-9999.99	1.482	8.24	15.954	6.277	2.26	3.842	7.714
SE0051R	zinc	precip	15.36	6.21	15.43	31.36	24.5	27.06	21.52	14.77	8.22	9.29	3.86	13.21	12.136
SE0097R	zinc	precip	8.07	5.467	6.902	3.981	6.879	25.79	16.094	15.962	20.274	6.826	5.439	9.15	11.537
SK0002R	zinc	precip	-9999.99	35	130	18	28	56	24	34	63	-9999.99	34	-9999.99	46.483
SK0004R	zinc	precip	11	35	-9999.99	4	17	15	11	8	4	21	17	38	12.172
SK0005R	zinc	precip	22	28	32	16	21	15	14	19	9	23	22	85	19.273
SK0006R	zinc	precip	17	33	13	8	18	15	13	9	5	18	15	83	15.82
SK0007R	zinc	precip	129	18	8	11	15	27	11	10	4	10	6	63	15.601

				jan	feb	mar	apr	may	june	jul	aug	sept	oct	nov	des	year
BE0004R	mm	wet only	precip	83.534	63.89	70.866	51.992	49.366	59.106	52.556	87.604	74.534	43.352	64.178	48.856	749.834
BE0004R	mm	bulk	precip	157.536	106.171	99.112	66.513	51.251	67.817	0	141.8	143	0	0	91.8	925
CZ0001R	mm		precip	48.329	33.986	41.814	57.014	112.571	84.443	173.843	84.357	108.843	24.914	18.957	61.429	850.5
CZ0003R	mm		precip	38.029	20.3	52.057	67.629	79.743	74.257	101.286	77.743	84.357	15.186	49.771	67.743	728.1
DE0001R	mm	HM	precip	32.5	38.167	24.267	27.067	21.8	48.883	77.417	88.2	106.4	56.867	69.367	65.667	656.6
DE0001R	mm	Hg	precip	37.933	38.367	27.983	29.917	24.3	49.75	78.5	93.55	112.3	62.833	73.233	63.633	692.3
DE0002R	mm		precip	36.8	43.1	46	38	27.8	82.3	62.8	56.2	146.1	28.8	32.8	68.9	669.6
DE0004R	mm		precip	84.883	43.2	113.517	78.117	9.8	104.233	96.817	51.05	96.8	35.5	74.533	34.367	822.989
DE0009R	mm		precip	16.633	24.533	25.333	63.2	39.25	67.783	49.45	106.15	133.567	22.5	45	61.5	654.9
DK0008R	mm		precip	55.406	28.425	36.546	38.376	40.756	69.947	29.492	65.325	83.059	37.764	48.164	36.043	569.303
DK0020R	mm		precip	27.122	34.904	30.12	36.293	31.827	47.068	34.121	96.558	127.472	32.614	51.952	0	550.05
DK0031R	mm		precip	101.146	39.778	44.356	99.348	40.414	76.857	86.868	78.675	168.242	133.009	95.327	53.231	1017.25
EE0009R	mm		precip	42.8	57.7	34.7	77	3.4	181.8	41.4	53.9	29.9	59.5	49.2	29	660.3
EE0011R	mm		precip	51.1	33.3	20.3	32.8	5.4	49.7	47.7	65	155.1	5	29.7	56.8	551.9
FI0008R	mm		precip	15.4	23.7	5.8	14.7	15.2	20.4	130.4	69.4	39.7	11.3	23.5	11.7	381.2
FI0009R	mm		precip	14.2	5	5.4	31.5	6.6	28.6	52.1	74.8	120.6	11.7	11	1.4	362.9
FI0017R	mm		precip	27.9	22.8	13.7	65.6	47.2	54.6	80.5	45.4	128.9	58.8	24.3	12.5	582.2
FI0022R	mm		precip	25.3	25.6	12	23.5	47.7	52.9	74.6	38.8	44.5	33.6	30.2	12.1	420.8
FI0036R	mm		precip	15.4	27.3	7.7	34.6	43.1	47.9	108.5	89.3	36.8	46.6	39.2	17.7	514.1
FI0053R	mm		precip	20.7	15.9	5.7	45.4	29.1	52.2	58.6	36.8	54.6	35.1	5.6	4.5	364.2
FI0092R	mm		precip	29.3	48	24.2	15.5	33.9	34.4	72.8	49.4	51.2	93.2	40.3	18.7	510.9
FI0093R	mm		precip	39	45.9	42.7	22.6	36.3	117.3	96.7	32.6	93.7	74.9	26.3	34.4	662.4
FI0096R	mm		precip	13.5	10.8	2.4	24	15.8	28.6	74.7	59	17.1	18.9	10.2	0	275
FR0090R	mm		precip	184	164	205	51	40	80	71	44	74	123	44	88	1168
IE0001R	mm		precip	151.3	122.8	130.1	119	33.9	71.9	72.1	120.6	62.4	196.7	93.4	86.5	1260.7
IE0002R	mm		precip	142.2	152.5	162.4	119.1	39.9	80.6	92.3	126.2	101	243	83.5	91.6	1434.3
IS0002R	mm		precip	154.33	183.28	32.803	86.437	224.42	0	0	0	0	0	0	0	681.27
IS0090R	mm		precip	80.328	73.194	15.72	31.63	84.15	32.066	118.884	100.92	124.29	69.74	56.984	50.476	836.28
LT0015R	mm		precip	39.136	38.723	25.373	35.23	14.694	105.666	93.867	51.704	129.079	58.721	96.051	35.957	725.163
LV0010R	mm		precip	38.1	81	43	27.1	23.5	61.6	77.4	96	193.2	67.8	119.5	51.3	879.5
LV0016R	mm		precip	25	49	26.1	126.2	53.7	97.4	77	59.6	52.7	80.1	90	46.2	783
NL0009R	mm		precip	22.271	18.067	39.701	47.875	68.186	55.304	63.093	136.899	174.576	24.871	90.643	51.236	792.721
NL0091R	mm	Hg	precip	93.286	67.464	65.164	64.786	48.975	30.071	46.754	160.8	187.071	50.986	69.464	41.979	926.915
NL0091R	mm	HM	precip	59.043	62.686	55.986	66.271	34.757	32.471	39.3	133.429	141.843	27.143	82.729	61.257	797.083
NO0001R	mm		precip	281.05	52.39	76.06	140.87	53.27	78.85	91.76	168.84	120.93	308.53	106.53	100.7	1579.78
NO0039R	mm		precip	74.3	142.42	46.784	87.803	116.88	81.879	107.357	143.535	111.528	79.108	372.675	180.573	1544.842
NO0041R	mm		precip	57.42	25.733	38.314	78.311	27.516	71.657	105.032	82.579	73.502	98.005	51.673	43.28	753.022
NO0047R	mm		precip	14.714	20.223	21.688	22.774	14.013	26.529	80.445	42.453	25.574	48.917	15.477	23.407	356.214
NO0055R	mm		precip	17.134	18.852	5.255	24.043	11.944	28.122	158.375	59.474	27.543	13.409	16.051	9.523	389.725
NO0056R	mm		precip	119.141	35.637	48.535	106.943	49.459	76.178	74.651	149.875	126.912	132.612	41.784	44.331	1006.058
NO0099R	mm		precip	171.14	55.67	52.24	82.25	21.88	53.22	62.64	116.78	103.98	186.4	72.89	231.24	1210.33
PL0004R	mm		precip	31.100	59.900	35.300	47.800	23.700	118.000	47.000	68.800	178.900	38.800	80.300	57.000	786.6
PL0005R	mm		precip	-999.900	-999.900	-999.900	-999.900	61.300	53.100	146.500	80.800	117.400	48.800	-999.900	-999.900	-999.000
PT0001R	mm		precip	199.1	107.5	309.1	15.9	56.2	4.3	37.7	9	19.8	127.5	3.2	9.2	898.5
PT0003R	mm		precip	355.4	157.7	629.2	84.7	126.9	10.9	59.1	58.4	17.9	312.8	2.4	34.5	1849.9
PT0004R	mm		precip	132	75.1	66.9	2.2	28	9.5	1	0	40.9	101.1	4.6	39.8	501.1
PT0010R	mm		precip	158.957	74.014	128.2	43	195.686	95.271	21.343	41.486	143.386	54.614	25.414	243.3	1226.016
SE0002R	mm		precip	60.1	28.1	27.1	42	71	48.8	47.4	75.5	70.5	38.3	40.7	29.5	579

		jan	feb	mar	apr	may	june	jul	aug	sept	oct	nov	des	year	
SE0005R	mm	precip	18.464	33.457	29.229	68.506	25.065	36.857	121.914	76.171	81.621	104.064	79.714	30.552	705.674
SE0005R	mm	precip	11.1	13.8	9.8	34.7	27.8	48.7	102.9	109.8	99.6	46.3	38.3	6.8	549.6
SE0011R	mm	precip	9.3	18.3	19.9	47.5	35	54	65.9	102.9	28.1	46.1	41.5	31.1	499.6
SE0051R	mm	precip	39	55	58	45	23	33	38	78	114	19	211	48	761
SE0097R	mm	precip	63.724	63.026	62.321	57.129	32.8	49.231	54.943	94.326	72.038	36.362	36.663	53.438	676
SK0002R	mm	precip	66.8	83.6	98.9	97.4	43.6	179.6	259.5	99.3	173.4	24.3	97.7	88.6	1312.7
SK0004R	mm	precip	41.9	28.6	46.4	87.3	35.7	136.5	254.5	84.3	103.6	16.2	39.2	27.7	901.9
SK0005R	mm	precip	40.7	37.3	46.7	97	50.9	152.6	279.2	77.6	98.1	18.8	48.5	32.7	980.1
SK0006R	mm	precip	53	35.8	119.6	40.1	25.9	114.6	226.9	48.8	112.4	55.3	85.7	32	950.1
SK0007R	mm	precip	13.9	20.5	58.3	10.7	38.6	21.5	105	52.6	111	12.6	33.2	23.2	501.1



## **Annex 6**

### **Monthly and annual mean values for heavy metals in air**



			jan	feb	mar	apr	may	june	jul	aug	sept	oct	nov	des	year
IS0091R	aluminium	aerosol	138.590	808.400	413.874	235.450	439.584	423.750	79.681	234.884	77.400	638.713	120.600	119.971	309.385
DE0001R	arsenic	pm10	1.480	0.880	0.815	1.507	1.001	1.215	1.270	0.506	0.210	0.927	0.467	0.447	0.866
DE0002R	arsenic	pm10	0.472	0.848	1.487	0.443	0.492	0.247	0.553	0.922	0.523	2.419	0.697	1.335	0.886
DE0007R	arsenic	pm10	1.461	0.452	2.090	1.933	1.561	1.430	1.701	2.120	1.077	0.971	1.173	0.506	1.404
DE0009R	arsenic	pm10	2.437	0.591	0.914	0.543	0.640	0.587	0.849	0.684	0.833	0.244	0.090	0.552	0.747
DK0003R	arsenic	aerosol	1.069	0.672	1.167	0.575	0.506	0.397	0.071	0.026	0.471	0.684	0.594	0.974	0.615
DK0005R	arsenic	aerosol	1.463	0.686	0.854	0.361	0.258	0.382	0.244	0.471	0.555	0.928	0.408	0.989	0.643
DK0008R	arsenic	aerosol	0.699	0.464	0.741	0.351	0.202	0.290	0.167	0.253	0.332	0.807	0.215	0.497	0.420
DK0010G	arsenic	aerosol	0.239	0.094	0.130	0.158	0.035	0.018	0.017	0.021	0.050	0.013	0.042	0.151	0.081
DK0011G	arsenic	aerosol	-9999.99	-9999.99	-9999.99	-0.027	0.013	-9999.99	0.007	-0.008	-0.005	0.013	-9999.99	-9999.99	0.001
DK0031R	arsenic	aerosol	0.859	0.406	0.618	0.319	0.187	0.146	0.206	0.227	0.246	0.445	0.122	0.327	0.343
FI0036R	arsenic	aerosol	0.258	1.383	0.767	0.148	0.269	0.369	0.068	0.069	0.110	0.080	0.156	0.265	0.320
GB0014R	arsenic	aerosol	0.400	0.400	0.400	0.210	0.287	0.200	0.200	0.500	0.300	0.490	0.400	0.307	0.341
GB0090R	arsenic	aerosol	0.400	1.064	0.600	0.300	0.300	0.393	0.400	0.574	0.600	1.314	-9999.99	1.000	0.624
GB0091R	arsenic	aerosol	1.042	0.500	0.406	0.233	0.200	0.103	0.200	0.203	0.293	0.206	0.317	0.800	0.376
IS0091R	arsenic	aerosol	0.026	0.069	0.066	0.056	0.114	0.033	0.014	0.049	0.030	0.051	0.008	0.036	0.046
NL0009R	arsenic	aerosol	1.081	0.614	0.900	0.340	0.375	0.340	0.367	0.500	0.327	0.900	0.427	0.275	0.533
NO0042G	arsenic	aerosol	0.569	0.498	0.690	0.472	0.227	0.210	0.125	0.147	0.228	0.398	0.528	0.741	0.399
NO0099R	arsenic	pm10_pm25	0.139	0.137	0.123	0.108	0.108	0.119	0.125	0.149	0.120	0.485	0.289	0.148	0.174
NO0099R	arsenic	pm25	0.537	0.531	0.475	0.417	0.423	0.461	0.478	0.557	0.462	0.480	0.492	0.550	0.490
AT0002R	cadmium	pm10	0.940	0.240	0.540	0.280	0.420	0.260	0.200	0.260	0.260	0.600	0.720	0.280	0.420
AT0004R	cadmium	pm10	0.100	0.220	0.100	0.120	0.180	0.120	0.100	0.140	0.100	0.100	0.120	0.160	0.130
AT0005R	cadmium	pm10	0.160	0.160	0.100	0.220	0.140	0.180	0.100	0.140	0.100	0.217	0.180	0.100	0.151
BE0004R	cadmium	aerosol	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000
CZ0001R	cadmium	aerosol	0.780	0.220	0.336	0.108	0.385	0.272	0.152	0.282	0.188	0.390	0.222	0.363	0.302
CZ0003R	cadmium	aerosol	0.553	0.280	0.208	0.134	0.317	0.244	0.202	0.544	0.154	0.372	0.284	0.350	0.308
DE0001R	cadmium	pm10	0.380	0.115	0.180	0.208	0.030	0.033	0.050	0.108	0.115	0.334	0.179	0.127	0.159
DE0002R	cadmium	pm10	0.111	0.150	0.245	0.154	0.108	0.068	0.131	0.184	0.143	0.626	0.182	0.331	0.207
DE0003R	cadmium	pm10	0.135	0.126	0.083	0.043	0.111	0.060	0.210	0.179	0.079	0.070	0.027	0.078	0.097
DE0004R	cadmium	pm10	0.100	0.085	0.097	0.079	0.145	0.114	0.146	0.171	0.183	0.200	0.146	0.186	0.138
DE0005R	cadmium	pm10	0.174	0.126	0.078	0.108	0.186	0.087	0.090	0.098	0.082	0.091	0.100	0.116	0.111
DE0007R	cadmium	pm10	0.298	0.090	0.362	0.193	0.171	0.092	0.122	0.154	0.216	0.377	0.321	0.408	0.234
DE0008R	cadmium	pm10	0.314	0.153	0.267	0.075	0.171	0.152	0.186	0.091	0.050	0.077	0.030	0.132	0.142
DE0009R	cadmium	pm10	0.183	0.106	0.321	0.113	0.160	0.030	0.097	0.095	0.103	0.385	0.114	0.215	0.160
DK0003R	cadmium	aerosol	0.396	0.226	0.335	0.138	0.108	0.044	0.004	0.007	0.080	0.219	0.103	0.219	0.161
DK0005R	cadmium	aerosol	0.386	0.135	0.230	0.117	0.113	0.038	0.043	0.159	0.104	0.385	0.170	0.092	0.168
DK0008R	cadmium	aerosol	0.235	0.160	0.208	0.094	0.059	0.122	0.116	0.157	0.108	0.147	0.191	0.180	0.147
DK0031R	cadmium	aerosol	0.462	0.101	0.119	0.154	0.054	0.053	0.136	0.129	0.053	0.163	0.050	0.072	0.130
ES0008R	cadmium	pm10	-9999.99	-9999.99	0.100	0.055	0.112	0.044	0.022	0.190	0.240	0.248	0.133	0.200	0.138
ES0009R	cadmium	pm10	-9999.99	-9999.99	0.052	0.049	0.020	0.035	0.033	0.110	0.105	0.160	0.063	0.085	0.074
FI0036R	cadmium	aerosol	0.055	0.170	0.112	0.027	0.020	0.050	0.016	0.017	0.040	0.007	0.024	0.054	0.048
GB0014R	cadmium	aerosol	0.101	0.100	0.100	0.007	0.100	0.100	0.971	0.200	0.200	0.290	0.200	0.107	0.208
GB0090R	cadmium	aerosol	0.000	0.418	0.200	0.100	0.100	0.100	0.190	0.287	0.217	0.438	-9999.99	0.300	0.211
GB0091R	cadmium	aerosol	0.000	0.000	0.000	0.000	0.000	0.003	0.100	0.100	0.100	0.113	0.293	0.100	0.068
IS0091R	cadmium	aerosol	0.018	0.026	0.024	0.039	0.081	0.010	0.005	0.164	0.007	0.028	0.006	0.020	0.036
LT0015R	cadmium	aerosol	0.203	0.251	0.228	0.197	0.194	0.175	0.157	0.166	0.212	0.257	0.232	0.271	0.211

			jan	feb	mar	apr	may	june	jul	aug	sept	oct	nov	des	year
LV0010R	cadmium	aerosol	0.858	0.783	0.508	0.548	0.319	0.249	0.630	0.471	0.379	0.331	0.219	0.415	0.479
LV0016R	cadmium	aerosol	0.305	0.295	0.256	0.290	0.106	0.078	0.122	0.234	0.266	0.266	0.122	0.180	0.215
NL0009R	cadmium	aerosol	0.363	0.150	0.254	0.087	0.069	0.080	0.093	0.100	0.093	0.240	0.120	0.075	0.143
NO0042G	cadmium	aerosol	0.015	0.024	0.044	0.028	0.012	0.013	0.001	0.004	0.001	0.003	0.011	0.039	0.016
NO0099R	cadmium	pm10_pm25	0.024	0.017	0.016	0.005	0.004	0.007	0.009	0.006	0.000	0.014	0.004	0.015	0.011
NO0099R	cadmium	pm25	0.100	0.064	0.115	0.057	0.044	0.036	0.017	0.021	0.017	0.072	0.030	0.068	0.055
SK0002R	cadmium	aerosol	0.027	0.011	0.034	0.017	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.010
SK0004R	cadmium	aerosol	0.400	0.362	0.293	0.036	0.036	0.052	0.022	0.032	0.007	0.021	0.025	0.050	0.108
SK0005R	cadmium	aerosol	0.539	0.493	0.339	0.057	0.039	0.049	0.135	0.038	0.005	0.013	0.005	0.050	0.149
SK0006R	cadmium	aerosol	0.712	0.413	0.220	0.005	0.005	0.005	0.008	0.005	0.005	0.016	0.005	0.014	0.080
SK0007R	cadmium	aerosol	0.913	0.384	0.307	0.013	0.022	0.008	0.012	0.027	0.021	0.029	0.026	0.012	0.124
DK0003R	chromium	aerosol	0.315	0.475	0.239	0.261	0.745	-0.067	0.027	0.020	0.127	0.618	0.056	0.263	0.263
DK0005R	chromium	aerosol	0.759	0.526	0.173	0.419	0.295	0.391	0.232	0.306	0.229	0.863	0.272	0.816	0.446
DK0008R	chromium	aerosol	0.091	0.202	0.354	0.130	0.286	0.091	0.220	0.129	0.290	0.533	-0.097	0.302	0.215
DK0010G	chromium	aerosol	0.033	-0.010	-0.018	0.141	0.101	0.058	0.048	0.038	0.207	0.021	0.036	0.060	0.059
DK0011G	chromium	aerosol	-9999.99	-9999.99	-9999.99	0.026	0.244	-9999.99	0.096	0.073	0.090	0.030	-9999.99	-9999.99	0.090
DK0031R	chromium	aerosol	0.414	0.539	0.206	0.000	0.074	-0.176	-0.006	0.136	0.339	0.650	0.087	0.094	0.194
FI0036R	chromium	aerosol	0.135	0.311	0.167	0.150	0.176	0.175	0.076	0.047	0.096	0.003	0.077	0.154	0.129
GB0014R	chromium	aerosol	1.024	1.392	1.080	0.888	0.926	0.900	1.897	1.180	0.680	1.563	0.840	0.868	1.104
GB0090R	chromium	aerosol	0.710	1.083	1.030	0.620	0.649	0.902	0.550	0.641	0.693	2.857	-9999.99	0.820	0.949
GB0091R	chromium	aerosol	0.265	0.220	0.285	0.373	0.250	0.172	0.265	1.031	1.284	0.393	0.850	0.270	0.471
IS0091R	chromium	aerosol	11.066	3.935	3.269	3.035	10.351	7.730	4.745	7.522	8.760	5.692	2.175	8.755	6.460
NO0042G	chromium	aerosol	0.078	0.039	0.042	0.016	0.014	0.015	0.019	0.046	0.040	0.017	0.022	0.098	0.037
NO0099R	chromium	pm10_pm25	0.360	0.357	0.320	0.469	0.283	0.309	1.118	0.517	0.728	0.943	0.630	1.611	0.638
NO0099R	chromium	pm25	0.269	0.540	0.261	0.140	0.142	0.154	0.161	0.188	0.155	1.920	0.231	0.185	0.371
SK0002R	chromium	aerosol	1.372	2.181	2.188	2.592	0.404	0.158	0.163	0.739	0.243	0.471	1.141	2.929	1.099
SK0004R	chromium	aerosol	1.953	1.432	1.134	0.251	0.399	0.298	0.225	0.335	0.100	0.363	0.564	1.228	0.678
SK0005R	chromium	aerosol	2.005	2.527	2.367	4.469	1.348	0.395	1.342	0.772	0.258	0.833	1.718	3.149	1.642
SK0006R	chromium	aerosol	1.195	0.941	0.808	2.090	1.713	1.601	1.368	1.124	2.630	1.826	1.644	1.563	1.561
SK0007R	chromium	aerosol	4.459	1.960	1.724	4.055	4.476	3.208	3.075	3.275	3.496	4.217	4.754	4.250	3.569
NO0042G	cobalt	aerosol	0.009	0.003	0.015	0.010	0.008	0.005	0.003	0.012	0.006	0.003	0.008	0.016	0.008
NO0099R	cobalt	pm10_pm25	0.016	0.018	0.019	0.008	0.015	0.002	0.008	0.011	0.000	0.007	0.023	0.009	0.012
NO0099R	cobalt	pm25	0.050	0.015	0.027	0.006	0.016	0.012	0.005	0.006	0.006	0.047	0.002	0.011	0.018
BE0004R	copper	aerosol	41.000	34.000	38.839	33.200	33.968	35.933	33.097	33.968	34.000	33.032	33.000	36.871	35.101
DE0001R	copper	pm10	4.286	3.888	0.885	1.800	0.485	0.675	0.584	1.661	4.050	4.089	2.183	2.263	2.267
DE0002R	copper	pm10	4.955	2.476	3.143	2.260	2.176	1.193	2.640	3.854	2.630	6.131	3.587	2.831	3.171
DE0003R	copper	pm10	-9999.99	-9999.99	-9999.99	1.223	2.917	1.827	5.140	1.836	0.567	0.674	0.107	0.389	1.511
DE0004R	copper	pm10	2.645	2.904	2.806	2.397	2.716	3.093	3.178	3.500	3.637	3.928	3.440	3.600	3.145
DE0005R	copper	pm10	1.443	0.939	1.568	1.647	2.325	1.265	2.460	1.779	0.967	0.991	0.867	0.746	1.428
DE0007R	copper	pm10	2.483	0.964	2.647	2.490	2.254	1.083	1.834	1.537	1.627	2.284	1.303	1.467	1.824
DE0008R	copper	pm10	1.960	1.328	1.448	1.407	2.190	1.490	3.102	1.312	0.820	0.959	0.350	0.690	1.440
DE0009R	copper	pm10	6.340	1.292	3.129	1.593	2.049	1.423	2.077	0.953	1.490	2.853	0.987	1.066	2.002
DK0003R	copper	aerosol	2.331	1.255	2.051	1.345	1.274	0.944	0.205	0.094	1.160	1.899	1.050	2.344	1.361
DK0005R	copper	aerosol	3.168	1.365	1.967	1.176	0.893	0.904	1.037	1.697	1.184	3.286	0.958	1.739	1.629
DK0008R	copper	aerosol	1.577	0.848	1.480	0.922	0.624	0.589	0.829	0.977	0.761	2.007	0.402	1.047	1.018

		jan	feb	mar	apr	may	june	jul	aug	sept	oct	nov	des	year	
DK0010G	copper	aerosol	0.299	0.081	0.073	0.166	0.056	0.011	-0.009	0.080	0.122	0.048	0.146	0.222	0.108
DK0011G	copper	aerosol	-9999.99	-9999.99	-9999.99	0.129	2.340	-9999.99	5.687	0.192	0.149	0.112	-9999.99	-9999.99	0.981
DK0031R	copper	aerosol	1.680	1.238	1.247	0.673	0.730	0.458	0.647	0.944	0.615	1.461	0.338	0.615	0.888
ES0008R	copper	pm10	-9999.99	-9999.99	-9999.99	8.675	81.000	41.250	31.000	29.000	49.375	64.175	21.700	19.450	37.842
ES0009R	copper	pm10	-9999.99	-9999.99	-9999.99	8.322	25.000	20.250	105.667	29.250	39.175	31.550	12.900	40.875	33.588
FI0036R	copper	aerosol	0.316	1.229	1.210	0.422	0.395	1.322	0.208	0.199	0.254	0.115	0.154	0.479	0.517
GB0014R	copper	aerosol	1.239	1.568	1.300	2.417	1.187	1.100	1.971	1.900	1.200	2.094	1.100	6.793	1.985
GB0090R	copper	aerosol	1.900	3.561	2.400	1.200	1.200	2.133	1.839	2.235	1.967	4.121	-9999.99	2.100	2.223
GB0091R	copper	aerosol	0.952	0.500	0.874	0.650	0.900	0.500	0.506	0.703	0.833	1.261	0.700	0.700	0.760
IS0091R	copper	aerosol	0.446	0.725	0.614	0.375	0.908	0.530	0.185	0.622	0.280	0.721	0.335	0.443	0.517
LT0015R	copper	aerosol	1.594	1.871	1.484	1.713	2.736	1.911	2.101	1.421	1.551	2.263	1.656	1.796	1.843
LV0010R	copper	aerosol	1.715	2.437	2.532	1.973	1.707	2.020	2.411	1.331	3.593	4.749	0.824	0.893	2.174
LV0016R	copper	aerosol	0.526	0.826	1.214	1.263	0.809	0.955	0.587	0.698	4.461	2.687	1.058	0.662	1.325
NO0042G	copper	aerosol	0.314	0.220	0.388	0.351	0.500	0.310	0.188	0.212	0.242	0.194	0.321	0.522	0.314
NO0099R	copper	pm10_pm25	0.314	0.463	0.472	0.257	0.453	0.237	0.314	0.358	0.120	0.353	0.165	0.248	0.319
NO0099R	copper	pm25	0.442	0.610	0.686	0.201	0.251	0.221	0.121	0.162	0.081	0.483	0.193	0.352	0.323
SK0002R	copper	aerosol	0.948	0.922	0.807	0.956	1.074	1.458	1.130	1.729	0.577	0.448	0.227	0.675	0.916
SK0004R	copper	aerosol	3.791	2.770	4.542	1.907	1.751	1.618	1.801	2.390	1.580	2.536	2.254	4.325	2.607
SK0005R	copper	aerosol	5.754	12.132	17.692	18.097	17.378	7.790	6.997	14.781	20.752	15.483	23.269	25.642	15.253
SK0006R	copper	aerosol	3.010	6.009	2.608	3.460	3.510	5.072	3.835	4.392	2.094	2.982	2.394	3.380	3.604
SK0007R	copper	aerosol	5.581	3.718	3.250	3.633	3.479	4.619	3.400	5.343	5.422	5.246	4.447	4.096	4.344
DE0002R	iron	pm10	144.857	98.560	74.500	94.667	141.536	52.000	95.286	140.821	70.000	161.526	75.667	69.929	100.312
DE0004R	iron	pm10	89.500	124.280	102.036	4.333	36.643	4.000	63.107	150.607	86.667	114.179	38.667	40.321	71.170
DK0003R	iron	aerosol	71.079	46.374	86.697	82.139	214.282	96.401	49.168	6.980	40.248	103.372	32.670	39.780	74.819
DK0005R	iron	aerosol	82.269	40.893	68.134	60.243	101.613	52.942	72.370	82.112	39.034	172.511	25.705	37.732	70.010
DK0008R	iron	aerosol	45.680	32.183	56.145	46.888	72.641	38.008	60.214	46.377	33.129	79.766	13.877	23.801	46.680
DK0031R	iron	aerosol	49.241	33.744	52.800	45.898	88.238	34.393	62.898	55.486	27.329	76.806	11.341	17.240	46.569
FI0036R	iron	aerosol	19.646	28.684	28.422	28.004	36.729	42.965	22.972	22.486	28.299	9.845	12.262	23.722	25.284
IS0091R	iron	aerosol	246.819	682.300	406.797	231.950	648.352	330.300	81.042	368.565	115.300	423.432	66.250	123.458	311.675
AT0002R	lead	pm10	33.800	9.640	15.480	10.320	14.780	8.840	5.120	9.020	8.740	23.333	21.320	12.500	14.554
AT0004R	lead	pm10	1.820	3.680	2.600	3.240	7.520	2.640	2.220	3.860	1.000	3.033	3.950	1.000	3.177
AT0005R	lead	pm10	4.980	5.360	5.880	9.260	7.080	7.100	6.120	6.180	2.440	7.667	5.300	1.360	5.759
BE0004R	lead	aerosol	43.000	25.000	26.935	21.200	22.935	22.033	21.032	21.968	24.900	25.000	20.167	20.968	24.609
CZ0001R	lead	aerosol	20.720	6.847	6.698	3.548	4.282	4.584	4.810	10.610	6.924	9.432	7.400	8.507	7.587
CZ0003R	lead	aerosol	13.902	5.897	7.110	2.498	4.518	3.604	2.770	4.012	2.632	6.294	6.096	8.407	5.714
DE0001R	lead	pm10	10.815	10.979	10.205	7.683	1.279	1.360	1.821	5.722	6.663	15.334	9.363	7.107	7.403
DE0002R	lead	pm10	8.223	9.086	13.009	5.753	3.939	2.353	4.128	5.521	4.583	16.848	6.680	12.912	7.764
DE0003R	lead	pm10	7.433	9.242	7.377	0.160	2.163	1.207	9.402	2.747	2.310	1.910	0.173	1.459	3.625
DE0004R	lead	pm10	8.033	10.563	8.688	7.480	8.640	7.687	7.424	11.378	11.603	14.559	10.830	10.505	9.780
DE0005R	lead	pm10	2.917	4.405	4.876	3.080	7.166	3.323	3.556	4.463	4.543	5.363	5.557	5.955	4.655
DE0007R	lead	pm10	18.806	6.921	19.808	7.613	4.153	2.503	3.226	5.491	9.657	14.010	12.870	13.908	9.714
DE0008R	lead	pm10	16.636	8.625	13.886	2.673	6.295	3.957	4.226	3.373	2.250	5.015	3.710	7.023	6.493
DE0009R	lead	pm10	26.330	9.024	19.460	5.340	2.550	1.073	2.874	3.199	4.270	15.471	5.903	9.999	8.297
DK0003R	lead	aerosol	13.551	4.959	8.175	5.100	2.550	2.739	0.386	0.216	3.813	7.837	2.725	6.651	5.024
DK0005R	lead	aerosol	18.474	6.079	9.062	4.730	2.694	2.897	4.064	5.013	4.175	12.929	3.290	6.501	6.712
DK0008R	lead	aerosol	10.462	4.086	7.873	4.442	1.805	2.220	2.476	3.196	3.025	7.747	1.075	4.625	4.482

		jan	feb	mar	apr	may	june	jul	aug	sept	oct	nov	des	year	
DK0010G	lead	aerosol	1.589	0.591	0.917	1.217	0.310	0.098	0.018	0.045	0.087	0.110	0.319	1.440	0.561
DK0011G	lead	aerosol	-9999.99	-9999.99	-9999.99	0.435	0.668	-9999.99	0.297	0.439	0.338	0.279	-9999.99	-9999.99	0.396
DK0031R	lead	aerosol	11.610	4.361	5.925	3.866	1.642	1.798	2.509	2.982	2.770	6.748	2.153	3.414	4.163
ES0008R	lead	pm10	-9999.99	-9999.99	4.225	2.775	7.033	2.400	5.133	11.575	13.677	13.438	8.200	14.810	8.451
ES0009R	lead	pm10	-9999.99	-9999.99	1.850	1.875	4.467	4.725	3.733	6.550	6.037	7.850	6.760	6.927	5.085
FI0036R	lead	aerosol	1.473	5.358	3.116	0.753	0.559	1.394	0.468	0.488	1.032	0.216	0.728	1.536	1.391
GB0014R	lead	aerosol	5.445	6.671	5.600	3.277	3.255	4.300	3.623	8.400	3.600	10.055	5.900	5.713	5.490
GB0090R	lead	aerosol	6.400	16.993	8.600	3.600	3.890	5.207	4.487	7.623	6.267	14.545	-9999.99	12.200	8.063
GB0091R	lead	aerosol	3.135	1.600	2.348	1.733	1.700	1.013	1.394	1.239	2.473	3.513	3.723	4.400	2.364
IS0091R	lead	aerosol	0.349	0.250	0.484	0.420	0.513	0.240	0.120	0.497	0.150	0.411	0.180	0.682	0.360
LT0015R	lead	aerosol	8.177	7.843	5.535	5.570	7.490	6.893	6.503	4.990	6.117	7.042	5.303	6.623	6.502
LV0010R	lead	aerosol	8.979	14.386	7.530	7.336	7.851	8.739	12.794	7.402	5.744	4.949	2.683	9.768	8.156
LV0016R	lead	aerosol	3.192	5.118	3.763	3.739	1.539	1.375	2.412	2.049	2.598	2.705	1.410	3.860	2.872
NL0009R	lead	aerosol	16.294	7.457	10.685	3.933	4.344	5.080	4.407	7.075	4.707	11.373	5.747	4.913	7.149
NO0042G	lead	aerosol	0.558	0.772	1.467	0.867	0.332	0.376	0.051	0.125	0.042	0.081	0.340	1.254	0.504
NO0099R	lead	pm10_pm25	0.566	0.585	0.553	0.385	0.564	0.231	0.321	0.342	0.066	0.517	0.443	0.645	0.443
NO0099R	lead	pm25	2.941	2.382	3.712	1.852	1.311	1.474	0.778	0.867	0.527	2.745	1.515	3.349	1.976
SK0002R	lead	aerosol	1.055	1.670	1.996	4.169	4.656	2.771	3.471	7.039	1.512	2.022	0.703	1.095	2.861
SK0004R	lead	aerosol	11.912	7.528	10.629	7.864	6.660	5.847	4.942	7.905	5.259	9.039	6.497	10.069	7.799
SK0005R	lead	aerosol	14.390	11.764	12.479	10.405	9.054	6.653	6.460	12.454	6.356	11.564	9.020	16.486	10.463
SK0006R	lead	aerosol	24.300	13.834	7.592	9.675	8.703	5.546	9.137	10.345	9.698	22.297	12.449	20.276	11.875
SK0007R	lead	aerosol	31.354	13.302	10.423	11.968	12.285	6.134	25.039	15.712	12.390	23.052	15.985	23.863	16.529
DE0001R	manganese	pm10	4.229	3.124	1.561	2.270	0.665	0.440	0.895	2.869	4.780	6.154	3.250	2.384	2.779
DE0002R	manganese	pm10	3.736	2.494	3.498	1.800	3.464	0.520	1.461	3.077	0.633	3.901	0.783	1.259	2.232
DE0003R	manganese	pm10	4.081	5.390	3.871	0.060	1.649	0.953	5.386	1.490	0.723	3.621	0.063	0.262	2.203
DE0004R	manganese	pm10	4.105	5.631	5.937	2.537	5.561	4.437	4.717	6.892	5.547	6.355	3.927	4.381	5.007
DE0005R	manganese	pm10	2.612	1.973	3.266	1.727	4.384	2.083	2.353	2.119	1.203	0.749	1.733	2.355	2.263
DE0007R	manganese	pm10	0.981	1.036	3.919	2.517	4.206	1.830	2.953	2.177	2.890	4.039	1.930	1.740	2.578
DE0008R	manganese	pm10	3.228	2.034	2.902	1.007	4.652	2.617	3.710	5.019	0.653	3.435	1.697	2.049	2.772
DE0009R	manganese	pm10	6.820	3.107	6.101	2.970	4.562	2.507	3.585	2.261	2.390	6.167	3.430	1.790	3.732
DK0003R	manganese	aerosol	3.165	2.335	4.096	3.378	7.588	3.413	1.580	0.273	1.758	3.450	2.032	2.057	3.018
DK0005R	manganese	aerosol	2.955	1.548	2.426	1.907	3.223	1.865	2.490	2.835	1.511	4.322	1.018	1.479	2.298
DK0008R	manganese	aerosol	2.033	1.800	2.349	1.650	2.424	1.517	2.267	1.959	1.641	2.584	0.734	1.513	1.897
DK0010G	manganese	aerosol	0.682	0.259	0.437	0.941	0.701	0.390	0.253	0.260	1.267	0.279	0.349	0.414	0.516
DK0011G	manganese	aerosol	-9999.99	-9999.99	-9999.99	0.076	1.252	-9999.99	0.558	0.653	0.472	0.412	-9999.99	-9999.99	0.601
DK0031R	manganese	aerosol	2.420	1.759	2.148	1.700	2.749	1.229	2.006	1.834	1.362	2.398	0.626	1.329	1.801
FI0036R	manganese	aerosol	0.493	1.471	0.975	0.570	0.661	1.224	0.717	0.626	1.103	0.172	0.273	0.659	0.740
IS0091R	manganese	aerosol	3.554	12.155	7.452	4.425	10.738	5.770	1.510	6.160	2.205	7.624	1.150	2.315	5.421
NO0042G	manganese	aerosol	0.156	0.195	0.552	0.414	0.282	0.116	0.071	0.267	0.178	0.053	0.144	0.434	0.235
SK0002R	manganese	aerosol	0.538	0.737	0.735	1.494	2.496	1.483	1.408	2.958	0.388	1.592	1.263	0.868	1.406
SK0004R	manganese	aerosol	5.052	4.950	3.319	3.240	5.592	2.914	3.935	5.217	2.458	5.972	4.009	3.378	4.157
SK0005R	manganese	aerosol	18.481	20.569	14.580	11.075	11.482	7.951	12.202	25.958	18.454	35.913	27.428	41.184	20.173
SK0006R	manganese	aerosol	2.632	5.063	3.052	4.410	7.489	3.253	3.906	4.563	2.628	5.673	4.882	7.383	4.627
SK0007R	manganese	aerosol	6.989	4.487	4.407	9.349	11.239	8.676	7.392	10.279	6.258	10.393	6.501	5.602	7.730

			jan	feb	mar	apr	may	june	jul	aug	sept	oct	nov	des	year
DK0010G	mercury	air	-9999.99	1.638	1.271	1.394	0.837	1.204	1.710	1.536	-9999.99	-9999.99	-9999.99	-9999.99	1.352
DK0011G	mercury	air	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	1.374	1.420	1.318	
DK0015G	mercury	air	1.754	1.506	1.618	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	
FI0096R	mercury	air+aerosol	1.525	1.425	1.478	1.487	1.333	1.289	1.250	1.100	1.133	1.157	1.375	1.444	1.319
IS0091R	mercury	aerosol	2.091	5.150	3.755	2.700	6.955	5.700	5.932	4.471	3.750	4.219	5.000	7.771	4.783
NO0042G	mercury	aerosol	0.950	1.265	5.418	3.220	2.102	0.936	1.213	1.295	0.869	0.375	0.533	1.579	1.623
NO0042G	mercury	air	1.718	1.664	1.452	1.350	1.634	1.524	1.652	1.597	1.438	1.504	1.602	1.614	1.561
NO0099R	mercury	air	-9999.99	1.695	1.730	1.645	1.470	1.580	1.733	-9999.99	1.780	-9999.99	1.430	1.593	1.645
NO0042G	reactive_gaseous_mercury	air	-9999.99	-9999.99	-9999.99	5.986	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	-9999.99	
SE0002R	mercury	air+aerosol	1.478	1.537	1.767	1.837	1.800	1.589	1.512	1.600	1.544	1.756	1.712	1.745	1.659
BE0004R	nickel	aerosol	14.000	11.000	11.968	10.067	14.839	10.167	12.903	12.032	10.067	10.000	10.967	14.871	11.940
DE0001R	nickel	pm10	2.055	2.016	2.074	1.777	1.130	1.820	1.329	1.342	1.047	2.236	0.897	0.668	1.505
DE0002R	nickel	pm10	1.855	2.397	1.591	1.390	1.664	1.030	1.318	0.442	0.480	0.750	0.680	1.043	1.213
DE0003R	nickel	pm10	1.157	1.545	1.271	0.453	0.592	0.443	1.185	0.292	0.613	0.659	0.173	0.282	0.686
DE0004R	nickel	pm10	0.660	1.339	1.300	0.447	0.811	0.653	0.895	0.860	0.770	0.604	0.590	0.804	0.813
DE0005R	nickel	pm10	1.797	1.206	1.523	0.160	0.204	0.433	0.787	0.373	0.520	0.308	0.497	0.118	0.659
DE0007R	nickel	pm10	1.314	1.233	2.035	0.503	1.063	0.200	1.013	1.358	0.580	1.194	1.030	1.202	1.058
DE0008R	nickel	pm10	1.417	0.673	1.199	0.613	1.615	0.923	1.593	1.317	0.653	0.436	0.453	1.527	1.025
DE0009R	nickel	pm10	2.697	2.117	2.637	1.753	2.940	1.703	2.092	1.259	0.663	1.300	0.930	0.901	1.752
DK0003R	nickel	aerosol	1.726	1.151	1.585	3.303	1.091	1.026	0.207	0.078	0.572	1.551	0.387	1.009	1.170
DK0005R	nickel	aerosol	1.740	1.374	2.023	2.207	2.208	1.460	2.443	2.866	1.419	2.603	0.979	1.251	1.860
DK0008R	nickel	aerosol	1.766	1.378	1.832	2.043	2.069	1.415	1.990	1.574	0.895	1.818	0.525	1.421	1.581
DK0010G	nickel	aerosol	0.156	0.040	0.044	0.110	0.087	0.070	0.042	0.056	0.095	0.035	0.067	7.294	0.673
DK0011G	nickel	aerosol	-9999.99	-9999.99	-9999.99	0.074	3.275	-9999.99	2.405	0.044	0.046	0.045	-9999.99	-9999.99	0.704
DK0031R	nickel	aerosol	1.134	1.397	1.451	1.021	1.678	1.173	0.966	1.024	0.565	1.296	0.265	0.579	1.046
FI0036R	nickel	aerosol	0.422	1.399	1.208	0.498	0.337	1.187	0.138	0.129	0.173	0.099	0.196	0.604	0.521
GB0014R	nickel	aerosol	1.181	1.680	1.100	0.773	1.083	0.970	1.522	1.460	1.040	1.429	0.580	0.972	1.149
GB0090R	nickel	aerosol	1.140	4.147	2.770	1.250	2.266	2.412	1.914	2.548	1.517	3.312	-9999.99	1.760	2.259
GB0091R	nickel	aerosol	0.520	0.330	0.508	0.528	0.430	0.388	0.339	0.619	0.589	0.553	0.306	0.470	0.466
IS0091R	nickel	aerosol	6.216	2.645	1.986	1.965	5.554	4.460	2.824	4.141	4.675	3.636	1.330	4.736	3.701
LV0010R	nickel	aerosol	1.483	0.810	1.133	1.554	5.855	3.540	1.565	1.506	2.150	2.413	0.874	1.448	2.118
LV0016R	nickel	aerosol	0.825	0.390	0.674	1.644	8.115	2.632	0.502	0.752	0.311	1.899	0.633	0.893	1.790
NO0042G	nickel	aerosol	0.081	0.090	0.158	0.074	0.087	0.146	0.041	0.046	0.024	0.019	0.072	0.133	0.078
NO0099R	nickel	pm10_pm25	0.140	0.169	0.205	0.106	0.162	0.123	0.123	0.184	0.071	0.133	0.040	0.060	0.128
NO0099R	nickel	pm25	0.585	0.550	1.050	0.505	0.822	0.701	0.415	0.459	0.220	1.369	0.165	0.351	0.617
SK0002R	nickel	aerosol	0.897	0.945	0.966	2.012	0.334	0.107	0.394	0.438	0.390	0.129	0.278	1.022	0.606
SK0004R	nickel	aerosol	0.459	0.881	0.706	1.332	1.229	0.357	0.337	0.413	0.219	0.484	0.443	0.735	0.645
SK0005R	nickel	aerosol	1.235	1.104	1.126	2.768	0.528	0.291	0.640	0.646	0.198	0.440	0.758	4.391	1.075
SK0006R	nickel	aerosol	0.671	0.379	0.431	1.826	1.623	1.362	1.308	1.015	1.634	1.149	1.289	1.472	1.204
SK0007R	nickel	aerosol	4.376	7.936	1.739	3.243	2.275	1.603	2.184	2.093	2.256	2.743	3.775	3.048	3.135
GB0014R	titanium	aerosol	2.084	3.650	2.400	4.500	6.355	4.700	5.861	3.400	1.300	3.084	2.000	2.187	3.466
GB0090R	titanium	aerosol	2.400	5.471	3.300	3.200	6.200	5.553	2.519	2.984	4.850	16.700	-9999.99	1.900	4.946
GB0091R	titanium	aerosol	1.190	1.100	2.035	3.767	7.800	3.443	1.868	4.071	8.673	1.494	4.213	1.700	3.448

			jan	feb	mar	apr	may	june	jul	aug	sept	oct	nov	des	year
FI0036R	vanadium	aerosol	0.649	1.710	1.328	0.404	0.195	0.423	0.200	0.194	0.332	0.087	0.264	0.751	0.532
IS0091R	vanadium	aerosol	0.657	2.665	1.767	0.990	2.081	1.020	0.451	1.224	0.485	1.495	0.305	0.574	1.140
NO0042G	vanadium	aerosol	0.227	0.226	0.269	0.121	0.040	0.079	0.061	0.043	0.030	0.022	0.104	0.212	0.116
NO0099R	vanadium	pm10_pm25	1.387	1.371	1.228	1.077	1.090	1.190	1.235	1.501	1.194	4.560	2.653	1.421	1.685
NO0099R	vanadium	pm25	7.634	17.427	6.241	4.411	4.461	4.869	5.051	5.888	4.889	5.071	5.203	5.815	6.399
BE0004R	zinc	aerosol	80.000	40.000	52.581	28.833	44.452	35.333	37.903	28.323	31.867	54.258	33.733	36.871	42.120
DK0003R	zinc	aerosol	27.118	11.995	20.338	13.354	8.860	8.215	1.364	0.741	8.932	17.383	8.868	17.033	12.328
DK0005R	zinc	aerosol	29.918	13.062	18.141	12.097	7.448	7.082	9.849	10.861	9.315	27.989	7.069	12.001	13.838
DK0008R	zinc	aerosol	17.612	9.649	15.771	10.171	5.383	6.305	6.985	8.126	7.650	15.498	4.210	12.877	10.091
DK0010G	zinc	aerosol	1.911	0.837	1.120	1.546	0.398	0.109	-0.034	0.102	0.304	0.154	0.411	1.486	0.694
DK0011G	zinc	aerosol	-9999.99	-9999.99	-9999.99	0.400	10.247	-9999.99	20.481	2.469	1.816	1.325	-9999.99	-9999.99	4.754
DK0031R	zinc	aerosol	21.153	10.095	13.908	9.615	5.017	3.826	5.964	6.709	8.345	14.710	3.964	7.424	9.251
FI0036R	zinc	aerosol	3.013	7.832	4.817	1.419	1.014	2.158	1.283	1.472	2.413	0.538	1.353	2.786	2.460
GB0014R	zinc	aerosol	17.094	23.804	18.000	39.357	25.281	2.200	39.265	42.500	71.700	59.284	33.000	39.347	34.282
GB0090R	zinc	aerosol	3.800	101.979	22.700	8.500	7.339	7.113	85.319	51.545	24.967	73.007	-9999.99	37.900	38.008
GB0091R	zinc	aerosol	0.500	0.500	1.529	1.600	4.300	0.907	4.226	11.623	31.127	40.913	15.303	24.100	13.240
IS0091R	zinc	aerosol	2.232	2.580	3.406	3.560	3.370	2.610	1.216	3.709	1.185	1.974	3.650	2.937	2.710
LT0015R	zinc	aerosol	17.332	20.675	20.445	21.727	31.139	27.867	23.990	24.426	22.550	34.942	25.457	34.127	25.415
LV0010R	zinc	aerosol	39.285	66.411	41.755	37.690	57.865	64.944	91.932	53.623	17.750	33.903	19.143	40.571	46.858
LV0016R	zinc	aerosol	10.229	15.121	13.175	11.520	9.677	7.274	8.670	10.311	9.096	15.705	8.399	21.028	11.781
NL0009R	zinc	aerosol	37.719	24.650	43.185	11.813	16.706	14.767	14.960	22.919	13.853	32.427	13.013	19.844	21.956
NO0042G	zinc	aerosol	1.225	1.463	2.651	1.758	1.062	0.909	0.634	0.613	0.556	0.869	0.845	3.151	1.285
NO0099R	zinc	pm10_pm25	1.918	2.424	1.888	1.166	1.090	0.824	1.079	1.477	0.502	2.661	2.400	1.280	1.599
NO0099R	zinc	pm25	8.673	5.777	12.484	5.587	3.553	3.927	2.013	1.955	2.469	5.396	4.919	6.327	5.363
SK0002R	zinc	aerosol	0.910	0.910	0.910	6.337	7.962	6.197	6.788	14.080	1.426	3.005	4.959	2.674	4.995
SK0004R	zinc	aerosol	29.755	21.475	11.682	17.983	15.261	11.444	19.136	24.669	17.474	28.824	31.974	48.006	22.722
SK0005R	zinc	aerosol	24.935	16.078	6.604	21.455	18.860	16.177	16.188	26.373	16.298	28.595	29.281	45.802	21.727
SK0006R	zinc	aerosol	4.738	11.425	3.220	20.570	22.591	12.559	10.892	16.280	11.736	25.570	20.259	34.451	16.416
SK0007R	zinc	aerosol	36.437	21.687	9.369	24.943	24.403	13.869	15.502	27.026	29.828	41.688	41.578	33.992	27.151

## **Annex 7**

### **Monthly mean values on data for POPs in precipitation**



		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
BE0004R alpha_HCH	precip	0.500	0.500	0.500	0.500	0.500	0.500	0.500	0.500	0.500	0.500	0.500	0.500
BE0004R dieldrin	precip	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.678	0.800
BE0004R endrin	precip	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.500	1.178	1.300
BE0004R gamma_HCH	precip	5.457	2.330	11.403	37.413	73.755	25.866	3.927	1.000	1.000	6.000	2.461	0.800
BE0004R heptachlor	precip	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
BE0004R pp_DDD	precip	0.500	0.500	0.500	0.500	0.500	0.500	0.500	0.500	0.500	0.500	0.500	0.500
BE0004R pp_DDE	precip	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
BE0004R pp_DDT	precip	0.500	0.500	0.500	0.500	0.500	0.500	0.500	0.500	0.500	0.500	0.500	0.500
DE0001R HCB	precip	0.460	0.290	0.240	0.340	0.080	0.110	0.290	0.180	0.500	0.210	0.120	0.140
DE0001R PCB_101	precip	1.850	1.160	1.800	2.970	0.340	0.460	0.050	0.330	0.140	0.890	1.450	1.680
DE0001R PCB_118	precip	1.280	0.940	0.880	1.370	0.250	0.170	0.090	0.230	0.210	0.440	0.580	0.500
DE0001R PCB_138	precip	2.070	1.450	1.770	2.310	0.500	0.300	0.270	0.630	0.380	1.430	4.620	3.690
DE0001R PCB_153	precip	1.630	1.120	1.330	1.720	0.280	0.230	0.240	0.470	0.300	1.010	2.700	1.990
DE0001R PCB_180	precip	0.470	0.360	0.520	0.470	0.550	0.020	0.140	0.240	0.230	0.370	1.830	1.670
DE0001R PCB_28	precip	4.920	3.070	3.760	5.320	0.700	0.350	0.270	0.890	0.260	2.870	0.320	0.980
DE0001R PCB_52	precip	2.100	1.230	1.540	2.970	0.230	0.240	0.060	0.450	0.150	1.050	0.500	1.530
DE0001R alpha_HCH	precip	0.570	0.450	0.410	0.640	0.300	0.420	0.510	0.530	0.580	0.530	0.590	0.490
DE0001R anthracene	precip	24.500	24.500	24.600	24.700	9.400	4.200	7.200	8.200	4.100	12.000	9.000	19.000
DE0001R benz_a_anthracene	precip	16.800	4.100	4.300	3.600	0.350	0.500	0.800	1.700	0.500	1.500	3.700	2.100
DE0001R benzo_a_pyrene	precip	1.300	3.200	3.400	3.300	0.300	0.700	1.300	1.000	1.000	2.700	3.300	2.200
DE0001R benzo_ghi_perlylene	precip	5.200	9.800	8.600	5.700	0.600	1.400	1.300	0.900	1.100	3.400	4.400	3.000
DE0001R dibenzo_ah_anthracene	precip	0.560	1.030	0.630	0.205	0.315	0.125	0.050	0.060	0.280	0.125	0.430	0.105
DE0001R dieldrin	precip	0.026	0.068	0.030	0.115	0.242	0.137	0.051	0.052	0.053	0.090	0.112	0.114
DE0001R endrin	precip	0.018	0.014	0.020	0.017	0.039	0.010	0.006	0.007	0.007	0.010	0.005	0.076
DE0001R fluoranthene	precip	29.400	33.700	43.800	-9999.990	14.100	7.000	7.900	6.700	6.800	16.700	15.500	16.400
DE0001R gamma_HCH	precip	3.150	2.860	4.120	8.800	11.920	3.180	4.040	3.430	1.680	3.770	1.910	1.690
DE0001R heptachlor	precip	0.007	0.005	0.008	0.007	0.015	0.004	0.002	0.003	0.002	0.004	0.002	0.004
DE0001R inden_123cd_pyrene	precip	3.100	8.700	7.000	12.500	1.150	1.500	1.200	0.600	1.000	3.000	5.200	3.500
DE0001R op_DDD	precip	0.018	0.014	0.020	0.017	0.039	0.010	0.006	0.007	0.007	0.010	0.005	0.009
DE0001R op_DDE	precip	0.010	0.005	0.008	0.115	0.015	0.004	0.002	0.003	0.002	0.004	0.002	0.004
DE0001R op_DDT	precip	0.514	0.372	0.020	1.314	0.039	0.010	0.006	0.007	0.075	0.010	0.163	0.009
DE0001R phenanthrene	precip	91.500	70.800	78.800	151.300	23.200	13.600	20.500	29.500	14.200	46.800	18.000	38.300
DE0001R pp_DDD	precip	0.018	0.014	0.020	0.017	0.039	0.010	0.006	0.007	0.007	0.010	0.422	0.121
DE0001R pp_DDE	precip	0.755	0.587	0.945	1.520	0.023	0.007	0.002	0.083	0.071	0.280	0.600	0.873
DE0001R pp_DDT	precip	1.220	0.760	1.580	2.120	0.040	0.350	0.140	0.180	0.220	0.470	0.560	0.510
DE0001R pyrene	precip	28.700	32.900	35.200	-9999.990	12.500	5.700	8.800	7.900	6.200	16.400	14.600	18.700
DE0009R HCB	precip	0.910	0.820	1.160	0.400	0.390	0.300	0.290	0.360	0.280	1.660	1.470	0.490
DE0009R PCB_101	precip	1.090	2.110	4.630	1.330	0.640	0.500	0.210	0.320	0.730	2.750	1.680	1.040
DE0009R PCB_138	precip	0.470	0.850	1.280	0.290	0.180	0.200	0.330	0.390	0.540	2.050	2.570	0.910
DE0009R PCB_153	precip	0.530	0.880	1.390	0.290	0.180	0.190	0.290	0.330	0.420	1.890	2.210	0.860
DE0009R PCB_180	precip	0.075	0.120	0.260	0.030	0.020	0.080	0.190	0.140	0.160	0.790	1.810	0.390
DE0009R PCB_28	precip	1.910	2.660	1.930	1.990	1.110	0.600	0.600	0.590	0.690	3.300	1.590	0.980
DE0009R PCB_52	precip	1.140	3.350	2.180	2.630	0.710	0.490	0.360	0.430	0.950	3.140	1.220	0.990
DE0009R alpha_HCH	precip	0.740	0.680	0.520	0.740	0.440	0.350	0.460	0.520	0.660	0.640	0.570	0.270
DE0009R anthracene	precip	73.500	50.700	45.100	11.000	5.100	4.200	9.500	8.500	11.300	33.100	20.600	28.600
DE0009R benz_a_anthracene	precip	27.300	23.100	5.700	1.100	0.100	0.050	2.100	0.800	1.900	5.900	7.000	6.500
DE0009R benzo_a_pyrene	precip	26.500	3.400	3.400	0.150	0.100	0.050	2.400	1.400	2.900	7.200	7.000	5.700
DE0009R benzo_ghi_perlylene	precip	48.500	9.700	4.100	0.200	0.700	0.150	2.600	1.500	4.300	10.200	8.900	8.700
DE0009R dibenzo_ah_anthracene	precip	4.400	0.200	0.200	0.100	0.050	0.050	0.100	0.050	0.300	0.200	1.000	1.000
DE0009R dieldrin	precip	0.055	0.030	0.320	0.220	0.120	0.060	0.060	0.070	0.130	0.220	0.080	0.130
DE0009R endrin	precip	0.038	0.019	0.016	0.014	0.009	0.009	0.009	0.005	0.004	0.017	0.010	0.007
DE0009R fluoranthene	precip	96.200	49.600	53.300	14.600	7.400	3.900	10.600	6.200	12.200	34.400	34.900	42.000
DE0009R gamma_HCH	precip	11.800	30.500	58.200	29.000	17.200	4.800	5.200	10.600	20.100	34.800	5.000	8.000
DE0009R heptachlor	precip	0.015	0.007	0.007	0.005	0.004	0.004	0.004	0.002	0.002	0.007	0.004	0.002
DE0009R inden_123cd_pyrene	precip	47.000	8.600	4.600	0.400	0.250	0.200	2.600	1.500	4.200	11.700	10.600	10.000
DE0009R op_DDD	precip	0.038	0.019	0.299	0.171	0.009	0.009	0.009	0.007	0.104	0.017	0.010	0.007

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
DE0009R op_DDE	precip	0.015	0.231	0.461	0.140	0.004	0.004	0.005	0.026	0.125	0.527	0.004	0.123
DE0009R op_DDT	precip	0.930	2.260	2.960	1.040	0.410	0.320	0.340	0.370	0.980	2.210	0.210	0.700
DE0009R phenanthrene	precip	103.600	158.100	217.300	45.100	18.400	19.100	25.700	31.900	41.300	154.700	127.800	103.800
DE0009R pp_DDD	precip	0.038	0.019	0.444	0.222	0.009	0.009	0.009	0.089	0.239	0.017	0.267	0.007
DE0009R pp_DDE	precip	1.110	2.620	4.550	1.700	0.780	0.680	0.240	0.320	0.930	2.720	1.020	1.080
DE0009R pp_DDT	precip	2.030	4.650	5.110	2.250	1.310	0.790	0.960	1.010	3.480	2.260	0.560	1.350
DE0009R pyrene	precip	93.200	50.700	47.700	13.800	7.300	4.600	11.700	9.100	15.200	50.000	35.300	41.900
FI0096R PCB_101	(ng/m <sup>2</sup> day) precip+dry_dep	0.050	0.020	0.020	0.040	0.005	0.040	0.040	-9999.990	0.040	0.030	0.030	-9999.990
FI0096R PCB_118	(ng/m <sup>2</sup> day) precip+dry_dep	0.030	0.010	0.010	0.040	0.020	0.005	0.020	-9999.990	0.030	0.010	0.010	-9999.990
FI0096R PCB_138	(ng/m <sup>2</sup> day) precip+dry_dep	0.040	0.030	0.021	0.050	0.010	0.030	0.030	-9999.990	0.080	0.030	0.040	-9999.990
FI0096R PCB_153	(ng/m <sup>2</sup> day) precip+dry_dep	0.040	0.020	0.020	0.050	0.010	0.030	0.040	-9999.990	0.030	0.040	0.050	-9999.990
FI0096R PCB_180	(ng/m <sup>2</sup> day) precip+dry_dep	0.030	0.010	0.010	0.030	0.010	0.030	0.030	-9999.990	0.040	0.020	0.030	-9999.990
FI0096R PCB_28	(ng/m <sup>2</sup> day) precip+dry_dep	0.040	0.030	0.030	0.050	0.040	0.100	0.040	-9999.990	0.060	0.060	0.040	-9999.990
FI0096R PCB_52	(ng/m <sup>2</sup> day) precip+dry_dep	0.090	0.090	0.073	0.110	0.030	0.210	0.110	-9999.990	0.110	0.110	0.060	-9999.990
FI0096R anthracene	(ng/m <sup>2</sup> day) precip+dry_dep	1.000	0.500	0.500	0.500	0.500	1.000	0.500	0.500	0.500	1.000	1.000	0.500
FI0096R benz_a_anthracene	(ng/m <sup>2</sup> day) precip+dry_dep	7.000	1.000	0.562	3.000	1.000	13.000	1.000	29.000	1.000	25.000	35.000	3.000
FI0096R benzo_a_pyrene	(ng/m <sup>2</sup> day) precip+dry_dep	8.000	1.000	0.562	6.000	0.500	5.000	1.000	12.000	1.000	10.000	17.000	1.000
FI0096R benzo_g_h_perylene	(ng/m <sup>2</sup> day) precip+dry_dep	6.000	2.000	0.688	7.000	0.500	0.500	2.000	1.000	0.500	0.500	9.000	0.500
FI0096R chrysene_triphenylenne	(ng/m <sup>2</sup> day) precip+dry_dep	18.000	4.000	0.938	15.000	1.000	6.000	3.000	18.000	4.000	14.000	28.000	11.000
FI0096R fluoranthene	(ng/m <sup>2</sup> day) precip+dry_dep	31.000	8.000	1.875	20.000	3.000	1.000	6.000	2.000	3.000	2.000	31.000	4.000
FI0096R inden_123cd_pyrene	(ng/m <sup>2</sup> day) precip+dry_dep	13.000	2.000	1.125	8.000	1.000	1.000	2.000	1.000	1.000	1.000	15.000	1.000
FI0096R phenanthrene	(ng/m <sup>2</sup> day) precip+dry_dep	23.000	7.000	2.625	15.000	4.000	38.000	12.000	4.000	4.000	5.000	23.000	10.000
FI0096R pyrene	(ng/m <sup>2</sup> day) precip+dry_dep	20.000	5.000	1.500	14.000	1.000	2.000	4.000	2.000	3.000	2.000	21.000	4.000
IE0002R PCB_101	precip	1.250	0.800	0.850	-9999.990	-9999.990	-9999.990	-9999.990	-9999.990	0.950	0.800	0.600	0.750
IE0002R PCB_118	precip	1.250	0.800	0.700	-9999.990	-9999.990	-9999.990	-9999.990	-9999.990	0.950	0.800	0.600	0.750
IE0002R PCB_138	precip	1.250	0.800	0.700	-9999.990	-9999.990	-9999.990	-9999.990	-9999.990	0.950	0.800	0.600	0.750
IE0002R PCB_153	precip	1.250	0.800	0.700	-9999.990	-9999.990	-9999.990	-9999.990	-9999.990	0.950	0.800	0.600	0.750
IE0002R PCB_180	precip	1.250	0.800	0.700	-9999.990	-9999.990	-9999.990	-9999.990	-9999.990	0.950	0.800	1.200	1.450
IE0002R PCB_52	precip	1.250	0.800	1.400	-9999.990	-9999.990	-9999.990	-9999.990	-9999.990	0.950	0.800	0.600	0.750
IE0002R alpha_HCH	precip	1.250	0.800	0.700	-9999.990	-9999.990	-9999.990	-9999.990	-9999.990	0.950	0.800	0.600	0.750
IE0002R dieldrin	precip	1.250	0.800	0.700	-9999.990	-9999.990	-9999.990	-9999.990	-9999.990	0.950	0.800	0.600	0.750
IE0002R endrin	precip	1.250	0.800	0.700	-9999.990	-9999.990	-9999.990	-9999.990	-9999.990	0.950	0.800	0.600	0.750
IE0002R gamma_HCH	precip	1.250	0.800	0.700	-9999.990	-9999.990	-9999.990	-9999.990	-9999.990	0.950	0.800	0.600	0.750
IE0002R heptachlor	precip	1.250	0.800	0.700	-9999.990	-9999.990	-9999.990	-9999.990	-9999.990	0.950	0.800	0.600	0.750
IE0002R op_DDD	precip	1.250	0.800	0.700	-9999.990	-9999.990	-9999.990	-9999.990	-9999.990	0.950	0.800	-9999.990	-9999.990
IE0002R op_DDT	precip	1.250	0.800	0.700	-9999.990	-9999.990	-9999.990	-9999.990	-9999.990	0.950	0.800	-9999.990	-9999.990
IE0002R pp_DDD	precip	1.250	0.800	0.700	-9999.990	-9999.990	-9999.990	-9999.990	-9999.990	0.950	0.800	-9999.990	-9999.990
IE0002R pp_DDE	precip	1.250	0.800	0.700	-9999.990	-9999.990	-9999.990	-9999.990	-9999.990	0.950	0.800	-9999.990	-9999.990
IE0002R pp_DDT	precip	1.250	0.800	0.700	-9999.990	-9999.990	-9999.990	-9999.990	-9999.990	0.950	0.800	0.600	0.750
IS0091R HCB	precip	0.009	0.018	0.032	0.017	0.022	0.040	0.005	0.006	0.005	0.011	0.017	0.012
IS0091R PCB_101	precip	0.005	0.027	0.027	0.005	0.002	0.046	0.011	0.026	0.011	0.006	0.024	0.022
IS0091R PCB_105	precip	0.008	0.009	0.013	0.006	0.012	0.030	0.003	0.011	0.009	0.006	0.011	0.016
IS0091R PCB_118	precip	0.011	0.013	0.019	0.009	0.012	0.031	0.004	0.010	0.004	0.002	0.004	0.009
IS0091R PCB_138	precip	0.011	0.023	0.042	0.021	0.019	0.037	0.007	0.019	0.011	0.003	0.012	0.027
IS0091R PCB_153	precip	0.012	0.024	0.030	0.009	0.012	0.031	0.006	0.019	0.008	0.001	0.009	0.013
IS0091R PCB_156	precip	0.006	0.007	0.010	0.004	0.006	0.015	0.003	0.006	0.004	0.001	0.003	0.006
IS0091R PCB_180	precip	0.006	0.007	0.010	0.004	0.006	0.015	0.003	0.006	0.006	0.001	0.003	0.008
IS0091R PCB_28	precip	0.121	0.142	0.202	0.091	0.125	0.321	0.064	0.093	0.098	0.045	0.314	0.123
IS0091R PCB_31	precip	0.107	0.126	0.179	0.081	0.111	0.285	0.056	0.084	0.080	0.038	0.209	0.067
IS0091R PCB_52	precip	0.033	0.038	0.100	0.025	0.034	0.086	0.022	0.060	0.041	0.018	0.059	0.028
IS0091R alpha_HCH	precip	0.145	0.223	0.228	0.180	0.224	0.368	0.165	0.147	0.200	0.178	0.386	0.337
IS0091R beta_HCH	precip	0.012	0.020	0.032	0.014	0.018	0.025	0.003	0.003	0.003	0.001	0.003	0.006
IS0091R cis_CD	precip	0.003	0.002	0.003	0.003	0.002	0.022	0.007	0.006	0.006	0.008	0.011	0.014
IS0091R dieldrin	precip	0.068	0.052	0.036	0.037	0.028	0.010	0.025	0.026	0.026	0.051	0.076	0.126
IS0091R gamma_HCH	precip	0.089	0.095	0.153	0.159	0.960	0.335	0.087	0.063	0.073	0.297	0.166	0.159
IS0091R op_DDT	precip	0.019	0.016	0.005	0.011	0.009	0.026	0.004	0.005	0.004	0.004	0.004	0.028

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
IS0091R pp_DDD	precip	0.004	0.005	0.006	0.003	0.003	0.010	0.005	0.006	0.006	0.003	0.005	0.011
IS0091R pp_DDE	precip	0.002	0.004	0.003	0.007	0.004	0.013	0.007	0.006	0.003	0.001	0.003	0.006
IS0091R pp_DDT	precip	0.015	0.018	0.009	0.001	0.002	0.005	0.004	0.006	0.003	0.001	0.006	0.018
IS0091R trans_CD	precip	0.002	0.002	0.005	0.007	0.006	0.030	0.002	0.002	0.002	0.003	0.004	0.003
IS0091R trans_NO	precip	0.003	0.004	0.003	0.005	0.002	0.005	0.001	0.002	0.001	0.002	0.004	0.005
LT0015R benzo_a_pyrene	(ng/m <sup>2</sup> month) wetdep	-9999.990	37.900	31.900	32.700	41.300	47.300	29.700	31.900	40.300	53.500	73.700	75.200
NL0091R gamma_HCH	precip	5.000	5.000	5.000	8.195	16.654	8.619	5.000	5.000	5.000	5.000	5.000	5.000
NO0099R HCB	precip	0.046	0.122	0.372	0.079	0.134	0.682	0.417	0.255	0.260	0.565	0.293	3.081
NO0099R alpha_HCH	precip	0.471	0.445	0.386	0.396	0.438	0.327	0.495	0.549	0.601	0.619	1.715	0.602
NO0099R gamma_HCH	precip	1.055	0.760	1.310	7.512	6.461	1.682	0.883	1.120	1.580	2.653	1.083	3.476
SE0002R PCB_101	(ng/m <sup>2</sup> day) precip+dry_dep	0.138	0.042	0.062	0.072	0.111	0.050	0.040	0.038	0.030	0.048	0.043	0.130
SE0002R PCB_118	(ng/m <sup>2</sup> day) precip+dry_dep	0.061	0.040	0.040	0.041	0.056	0.030	0.021	0.030	0.030	0.039	0.034	0.060
SE0002R PCB_138	(ng/m <sup>2</sup> day) precip+dry_dep	0.169	0.119	0.118	0.152	0.202	0.080	0.072	0.085	0.060	0.108	0.105	0.200
SE0002R PCB_153	(ng/m <sup>2</sup> day) precip+dry_dep	0.187	0.109	0.108	0.142	0.175	0.070	0.052	0.067	0.050	0.116	0.095	0.190
SE0002R PCB_180	(ng/m <sup>2</sup> day) precip+dry_dep	0.167	0.089	0.088	0.119	0.077	0.060	0.078	0.058	0.050	0.052	0.075	0.110
SE0002R PCB_28	(ng/m <sup>2</sup> day) precip+dry_dep	0.113	0.045	0.008	0.040	0.047	0.030	0.029	0.013	0.030	0.039	0.037	0.080
SE0002R PCB_52	(ng/m <sup>2</sup> day) precip+dry_dep	0.135	0.096	0.060	0.062	0.104	0.060	0.050	0.038	0.030	0.039	0.035	0.070
SE0002R anthracene	(ng/m <sup>2</sup> day) precip+dry_dep	3.100	1.000	1.000	0.983	0.500	0.500	0.500	0.581	1.000	0.500	1.100	5.000
SE0002R benz_a_anthracene	(ng/m <sup>2</sup> day) precip+dry_dep	20.800	3.893	3.194	3.967	2.742	1.000	1.000	1.161	2.000	2.290	7.400	23.000
SE0002R benzo_a_pyrene	(ng/m <sup>2</sup> day) precip+dry_dep	19.000	4.893	4.194	4.967	3.613	1.000	1.000	1.323	3.000	3.387	9.000	22.000
SE0002R benzo_ghi_perlylene	(ng/m <sup>2</sup> day) precip+dry_dep	30.200	4.786	3.194	3.933	1.871	1.000	1.000	1.323	3.000	3.581	11.533	28.000
SE0002R chrysene_triphenylene	(ng/m <sup>2</sup> day) precip+dry_dep	64.900	17.357	11.806	10.867	6.613	4.000	2.258	5.323	7.000	7.677	19.867	58.000
SE0002R fluoranthene	(ng/m <sup>2</sup> day) precip+dry_dep	108.100	28.464	23.613	21.500	6.742	5.000	3.129	5.613	14.000	8.677	19.933	52.000
SE0002R inden_123cd_pyrene	(ng/m <sup>2</sup> day) precip+dry_dep	32.900	6.893	6.194	6.867	2.742	1.000	1.871	1.065	4.000	4.871	17.400	46.000
SE0002R phenanthrene	(ng/m <sup>2</sup> day) precip+dry_dep	75.300	20.107	20.613	18.667	8.484	5.000	3.194	5.645	9.000	6.290	15.400	57.000
SE0012R pyrene	(ng/m <sup>2</sup> day) precip+dry_dep	65.600	17.571	14.000	13.733	5.742	4.000	3.032	4.129	10.000	6.581	15.600	39.000
SE0012R PCB_101	(ng/m <sup>2</sup> day) precip+dry_dep	0.180	-9999.990	0.050	0.060	0.080	0.080	0.050	0.050	0.060	0.010	0.200	0.070
SE0012R PCB_118	(ng/m <sup>2</sup> day) precip+dry_dep	0.220	-9999.990	0.040	0.060	0.060	0.040	0.040	0.040	0.050	0.010	0.090	0.030
SE0012R PCB_138	(ng/m <sup>2</sup> day) precip+dry_dep	0.380	-9999.990	0.080	0.070	0.090	0.120	0.070	0.070	0.070	0.015	0.270	0.050
SE0012R PCB_153	(ng/m <sup>2</sup> day) precip+dry_dep	0.340	-9999.990	0.080	0.070	0.100	0.120	0.070	0.090	0.080	0.015	0.310	0.070
SE0012R PCB_180	(ng/m <sup>2</sup> day) precip+dry_dep	0.280	-9999.990	0.060	0.040	0.050	0.090	0.040	0.060	0.040	0.010	0.170	0.030
SE0012R PCB_28	(ng/m <sup>2</sup> day) precip+dry_dep	0.130	-9999.990	0.020	0.025	0.100	0.070	0.060	0.005	0.050	0.005	0.070	0.005
SE0012R PCB_52	(ng/m <sup>2</sup> day) precip+dry_dep	0.060	-9999.990	0.050	0.015	0.045	0.010	0.015	0.010	0.040	0.010	0.030	0.005
SE0012R anthracene	(ng/m <sup>2</sup> day) precip+dry_dep	26.000	-9999.990	0.000	5.000	0.000	0.000	0.000	1.000	0.000	1.000	1.000	0.000
SE0012R benz_a_Anthracene	(ng/m <sup>2</sup> day) precip+dry_dep	19.000	-9999.990	1.000	4.000	1.000	1.000	1.000	0.000	3.000	0.000	1.000	1.000
SE0012R benzo_a_pyrene	(ng/m <sup>2</sup> day) precip+dry_dep	149.000	-9999.990	1.000	7.000	0.500	1.000	0.500	1.000	6.000	1.000	3.000	0.000
SE0012R benzo_ghi_perlylene	(ng/m <sup>2</sup> day) precip+dry_dep	198.000	-9999.990	0.000	12.000	0.000	0.000	0.000	3.000	6.000	1.000	5.000	0.000
SE0012R fluoranthene	(ng/m <sup>2</sup> day) precip+dry_dep	410.000	-9999.990	7.000	24.000	5.000	4.000	2.000	8.000	22.000	3.000	10.000	2.000
SE0012R inden_123cd_pyrene	(ng/m <sup>2</sup> day) precip+dry_dep	314.000	-9999.990	1.000	13.000	1.000	0.000	0.000	4.000	9.000	1.000	3.000	0.000
SE0012R phenanthrene	(ng/m <sup>2</sup> day) precip+dry_dep	281.000	-9999.990	2.000	15.000	4.000	2.000	2.000	5.000	2.000	2.000	9.000	2.000
SE0012R pyrene	(ng/m <sup>2</sup> day) precip+dry_dep	306.000	-9999.990	6.000	14.000	4.000	4.000	2.000	4.000	15.000	3.000	15.000	5.000



## **Annex 8**

### **Monthly mean values on data for POPs in air**



		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CZ0003R PCB_101	air+aerosol	29.000	49.000	47.000	56.250	44.200	56.000	41.500	31.200	21.125	27.000	31.500	34.000
CZ0003R PCB_118	air+aerosol	3.200	5.000	5.750	5.750	5.400	7.750	7.000	9.400	6.125	6.200	6.500	6.000
CZ0003R PCB_138	air+aerosol	10.800	14.000	20.250	14.500	13.400	15.000	12.000	11.200	6.562	9.000	12.500	19.500
CZ0003R PCB_180	air+aerosol	4.400	6.000	10.500	5.500	4.200	4.000	2.000	3.000	1.812	2.800	4.500	9.250
CZ0003R PCB_28	air+aerosol	21.000	27.750	25.500	31.250	32.000	34.500	31.500	32.400	19.375	18.800	21.000	20.500
CZ0003R PCB_52	air+aerosol	34.200	52.750	49.000	58.000	51.600	58.750	43.000	43.600	27.125	27.200	30.750	36.500
CZ0003R acenaphthene	air+aerosol	0.435	0.217	0.231	0.101	0.057	0.056	0.041	0.045	0.059	0.118	0.566	0.504
CZ0003R alpha_HCH	air+aerosol	17.800	17.750	28.750	29.500	34.000	15.750	5.750	11.400	9.500	15.600	8.750	9.500
CZ0003R anthracene	air+aerosol	0.191	0.166	0.183	0.092	0.028	0.039	0.082	0.079	0.067	0.114	0.310	0.605
CZ0003R benz_a_anthracene	air+aerosol	0.535	0.260	0.206	0.070	0.025	0.023	0.022	0.009	0.054	0.171	0.790	0.613
CZ0003R benzo_a_pyrene	air+aerosol	0.347	0.233	0.211	0.085	0.045	0.070	0.044	0.012	0.054	0.210	0.834	0.561
CZ0003R fluoranthene	air+aerosol	4.729	2.452	2.024	1.311	0.565	0.365	0.378	0.311	0.596	1.143	3.059	3.986
CZ0003R fluorene	air+aerosol	7.106	3.326	3.145	1.554	0.839	0.627	0.535	0.479	1.124	1.488	4.189	5.087
CZ0003R gamma_HCH	air+aerosol	11.600	16.750	18.500	25.000	30.600	45.750	15.000	14.200	11.250	25.800	12.000	14.000
CZ0003R inden_123cd_pyrene	air+aerosol	0.372	0.251	0.275	0.098	0.027	0.040	0.048	0.019	0.085	0.457	1.102	0.601
CZ0003R naphthalene	air+aerosol	2.348	0.961	0.899	0.363	0.243	0.276	0.149	0.197	0.444	0.928	3.012	2.481
CZ0003R phenanthrene	air+aerosol	12.606	6.634	5.441	3.997	1.910	1.598	1.805	1.812	2.739	3.920	8.351	12.265
CZ0003R pp_DDD	air+aerosol	0.800	0.875	1.375	1.375	5.000	2.750	3.000	4.400	2.500	3.000	2.000	1.750
CZ0003R pp_DDE	air+aerosol	10.000	14.250	12.500	21.500	29.400	17.500	16.000	23.600	11.375	25.200	19.500	15.500
CZ0003R pp_DDT	air+aerosol	3.600	3.750	3.750	4.250	10.800	3.500	3.500	5.200	3.750	8.600	8.000	7.000
CZ0003R pyrene	air+aerosol	2.533	1.343	1.110	0.722	0.287	0.202	0.241	0.144	0.343	0.741	2.195	2.609
FI0096R PCB_101	air+aerosol	0.632	0.428	0.428	1.307	0.507	1.527	0.978	1.350	1.382	0.488	0.560	0.574
FI0096R PCB_118	air+aerosol	0.235	0.200	0.158	0.410	0.132	0.435	0.204	0.396	0.404	0.131	0.180	0.137
FI0096R PCB_138	air+aerosol	0.262	0.172	0.147	0.456	0.247	0.471	0.274	0.355	0.479	0.143	0.192	0.165
FI0096R PCB_153	air+aerosol	0.306	0.167	0.168	0.528	0.159	0.557	0.326	0.405	0.536	0.169	0.217	0.226
FI0096R PCB_180	air+aerosol	0.081	0.052	0.028	0.093	0.031	0.159	0.082	0.073	0.138	0.027	0.041	0.087
FI0096R PCB_28	air+aerosol	1.083	0.867	0.763	2.579	0.840	3.964	1.872	2.869	2.371	0.938	1.312	1.410
FI0096R PCB_52	air+aerosol	1.217	0.909	0.849	2.260	0.904	4.399	2.962	2.833	2.766	0.942	1.195	1.226
FI0096R anthracene	air+aerosol	0.008	0.004	0.002	0.001	0.001	0.001	0.003	0.002	0.002	0.002	0.007	0.002
FI0096R benz_a_anthracene	air+aerosol	0.056	0.024	0.006	0.002	0.003	0.001	0.004	0.140	0.028	0.004	0.027	0.003
FI0096R benzo_a_pyrene	air+aerosol	0.073	0.028	0.007	0.001	0.001	0.002	0.004	0.060	0.020	0.004	0.033	0.003
FI0096R benzo_ghi_perlylene	air+aerosol	0.059	0.029	0.009	0.002	0.001	0.003	0.004	0.004	0.006	0.004	0.035	0.004
FI0096R chrysene_triphenylene	air+aerosol	0.135	0.080	0.020	0.026	0.003	0.007	0.011	0.100	0.027	0.016	0.068	0.017
FI0096R fluoranthene	air+aerosol	0.390	0.230	0.081	0.070	0.030	0.040	0.050	0.050	0.040	0.060	0.290	0.070
FI0096R inden_123cd_pyrene	air+aerosol	0.086	0.048	0.010	0.004	0.002	0.004	0.004	0.011	0.002	0.002	0.047	0.002
FI0096R phenanthrene	air+aerosol	0.580	0.350	0.193	0.280	0.110	0.220	0.240	0.190	0.160	0.180	0.640	0.210
FI0096R pyrene	air+aerosol	0.220	0.130	0.051	0.040	0.010	0.020	0.030	0.030	0.030	0.040	0.150	0.030
IS0091R HCB	air+aerosol	4.551	12.490	6.654	7.450	8.309	4.650	4.991	5.212	7.140	10.947	4.810	3.662
IS0091R PCB_101	air+aerosol	0.403	0.057	0.131	0.222	1.253	0.580	0.491	1.384	1.377	1.698	0.897	0.643
IS0091R PCB_105	air+aerosol	0.194	0.230	0.214	0.237	0.355	0.285	0.120	0.125	0.145	0.464	0.197	0.189
IS0091R PCB_118	air+aerosol	0.290	0.343	0.321	0.358	0.531	0.425	0.184	0.190	0.370	0.760	0.310	0.227
IS0091R PCB_138	air+aerosol	0.153	0.172	0.162	0.180	0.267	0.213	0.119	0.125	0.270	0.985	0.332	0.325
IS0091R PCB_153	air+aerosol	0.293	0.343	0.321	0.358	0.531	0.425	0.123	0.125	0.310	0.923	0.328	0.242
IS0091R PCB_156	air+aerosol	0.150	0.172	0.162	0.180	0.267	0.213	0.119	0.125	0.145	0.177	0.147	0.095
IS0091R PCB_180	air+aerosol	0.150	0.172	0.162	0.180	0.267	0.213	0.119	0.125	0.145	0.412	0.147	0.095
IS0091R PCB_28	air+aerosol	3.051	3.615	3.377	3.762	5.594	4.465	1.608	1.635	3.285	7.607	2.940	3.566
IS0091R PCB_31	air+aerosol	2.712	3.215	3.003	3.342	4.975	3.970	1.480	1.510	2.680	6.621	3.043	2.803
IS0091R PCB_52	air+aerosol	0.833	0.975	0.911	1.015	1.509	1.205	0.983	0.629	2.317	3.942	2.060	1.630
IS0091R alpha_HCH	air+aerosol	5.224	10.705	10.889	8.565	11.562	8.510	7.854	8.352	12.740	19.276	9.700	7.480
IS0091R beta_HCH	air+aerosol	0.052	0.057	0.052	0.060	0.089	0.070	0.060	0.062	0.072	0.087	0.072	0.050
IS0091R cis_CD	air+aerosol	0.856	0.685	0.899	0.900	0.982	0.905	1.128	1.508	1.315	0.906	0.875	0.875
IS0091R dieldrin	air+aerosol	0.999	0.460	0.895	1.030	1.345	1.620	0.960	1.755	1.860	1.460	1.120	1.308
IS0091R gamma_HCH	air+aerosol	4.035	2.765	4.230	5.395	13.975	7.500	4.150	4.459	6.125	13.728	7.285	3.662
IS0091R op_DDT	air+aerosol	0.052	0.057	0.052	0.060	0.556	0.070	0.115	0.125	0.145	0.177	0.147	0.095
IS0091R pp_DDD	air+aerosol	0.101	0.115	0.107	0.120	0.178	0.143	0.117	0.125	0.145	0.177	0.147	0.095
IS0091R pp_DDE	air+aerosol	0.354	0.280	0.324	0.240	0.481	0.070	0.060	0.062	0.072	0.087	0.230	0.244

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
IS0091R pp_DDT	air+aerosol	0.197	0.150	0.841	0.092	0.860	0.095	0.061	0.062	0.165	0.338	0.200	0.236
IS0091R trans_CD	air+aerosol	0.545	0.460	0.483	0.475	0.449	0.335	0.478	0.483	0.350	0.287	0.300	0.417
IS0091R trans_NO	air+aerosol	0.451	0.345	0.425	0.475	0.449	0.385	0.741	0.601	0.765	0.633	0.475	0.636
LT0015R benzo_a_pyrene	air+aerosol	0.950	0.580	0.620	0.180	0.120	0.200	0.150	0.180	0.380	0.680	0.960	1.350
N00042G HCB	air+aerosol	48.660	46.672	49.575	48.280	51.380	63.097	56.893	59.518	53.365	66.046	66.192	51.041
N00042G NiMethylphenanthrene	air+aerosol	0.007	0.007	0.003	0.005	0.006	0.004	0.005	0.005	0.004	0.007	0.011	0.011
N00042G N2methylanthracene	air+aerosol	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.001
N00042G N2methylphenanthrene	air+aerosol	0.014	0.011	0.007	0.008	0.010	0.008	0.010	0.009	0.007	0.022	0.033	0.021
N00042G PCB_101	air+aerosol	0.680	0.550	0.600	0.580	0.376	0.635	0.510	0.450	0.612	0.394	0.617	0.699
N00042G PCB_105	air+aerosol	0.072	0.067	0.058	0.058	0.172	0.055	0.050	0.044	0.065	0.039	0.072	0.106
N00042G PCB_114	air+aerosol	0.010	0.010	0.010	0.022	0.017	0.010	0.010	0.010	0.020	0.012	0.010	0.010
N00042G PCB_118	air+aerosol	0.260	0.241	0.221	0.233	0.622	0.167	0.160	0.148	0.193	0.134	0.239	0.332
N00042G PCB_122	air+aerosol	0.012	0.010	0.010	0.012	0.036	0.021	0.009	0.009	0.022	0.012	0.010	0.012
N00042G PCB_123	air+aerosol	0.010	0.012	0.010	0.010	0.018	0.020	0.010	0.010	0.022	0.012	0.010	0.013
N00042G PCB_128	air+aerosol	0.035	0.036	0.027	0.042	0.162	0.040	0.040	0.028	0.067	0.026	0.046	0.054
N00042G PCB_138	air+aerosol	0.243	0.236	0.168	0.258	0.962	0.192	0.163	0.160	0.203	0.133	0.208	0.262
N00042G PCB_141	air+aerosol	0.047	0.036	0.034	0.037	0.026	0.047	0.033	0.026	0.043	0.023	0.033	0.057
N00042G PCB_149	air+aerosol	0.315	0.210	0.226	0.268	0.212	0.305	0.190	0.188	0.258	0.160	0.252	0.299
N00042G PCB_153	air+aerosol	0.427	0.447	0.290	0.407	1.444	0.240	0.200	0.226	0.243	0.213	0.283	0.399
N00042G PCB_156	air+aerosol	0.017	0.017	0.013	0.017	0.092	0.022	0.020	0.018	0.045	0.019	0.028	0.034
N00042G PCB_157	air+aerosol	0.010	0.012	0.012	0.012	0.014	0.025	0.010	0.014	0.027	0.016	0.010	0.012
N00042G PCB_167	air+aerosol	0.012	0.010	0.012	0.012	0.052	0.017	0.010	0.010	0.025	0.013	0.010	0.012
N00042G PCB_170	air+aerosol	0.032	0.022	0.018	0.020	0.134	0.035	0.027	0.022	0.072	0.021	0.034	0.040
N00042G PCB_18	air+aerosol	5.875	5.511	5.325	9.815	5.108	8.660	14.940	7.764	4.788	6.427	2.627	2.473
N00042G PCB_180	air+aerosol	0.103	0.064	0.053	0.078	0.382	0.062	0.060	0.052	0.098	0.044	0.079	0.069
N00042G PCB_183	air+aerosol	0.037	0.027	0.023	0.027	0.094	0.030	0.020	0.020	0.032	0.016	0.027	0.028
N00042G PCB_187	air+aerosol	0.080	0.053	0.048	0.060	0.212	0.050	0.040	0.040	0.052	0.036	0.048	0.063
N00042G PCB_189	air+aerosol	0.010	0.014	0.012	0.015	0.024	0.029	0.007	0.016	0.045	0.016	0.009	0.011
N00042G PCB_194	air+aerosol	0.012	0.017	0.016	0.025	0.062	0.049	0.010	0.026	0.057	0.021	0.010	0.010
N00042G PCB_206	air+aerosol	0.010	0.021	0.018	0.017	0.036	0.068	0.007	0.031	2.312	0.030	0.010	0.010
N00042G PCB_209	air+aerosol	0.017	0.017	0.014	0.012	0.024	0.034	0.010	0.020	0.045	0.019	0.010	0.010
N00042G PCB_28	air+aerosol	2.662	2.692	2.534	4.562	2.808	5.535	8.103	4.774	3.865	3.819	1.696	1.686
N00042G PCB_31	air+aerosol	2.490	2.510	2.337	4.322	2.552	5.033	7.813	4.380	3.455	3.529	1.553	1.510
N00042G PCB_33	air+aerosol	2.095	2.140	1.986	3.550	2.174	4.755	6.573	3.796	3.065	2.966	1.299	1.314
N00042G PCB_37	air+aerosol	0.282	0.230	0.216	0.342	0.236	0.723	0.767	0.458	0.390	0.366	0.181	0.226
N00042G PCB_47	air+aerosol	0.975	0.763	0.743	0.965	0.600	1.193	1.447	0.878	0.915	0.839	0.633	0.659
N00042G PCB_52	air+aerosol	1.232	1.131	1.221	1.577	0.992	1.872	2.180	1.486	1.490	1.263	1.269	1.236
N00042G PCB_60	air+aerosol	0.075	0.052	0.053	0.100	0.072	0.138	0.127	0.064	0.128	0.054	0.070	0.110
N00042G PCB_66	air+aerosol	0.427	0.348	0.377	0.465	0.404	0.777	0.707	0.518	0.610	0.454	0.520	0.832
N00042G PCB_74	air+aerosol	0.220	0.181	0.201	0.235	0.198	0.368	0.357	0.262	0.315	0.240	0.287	0.326
N00042G PCB_99	air+aerosol	0.262	0.216	0.227	0.218	0.332	0.183	0.173	0.146	0.223	0.163	0.286	0.420
N00042G acenaphthene	air+aerosol	0.021	0.012	0.005	0.006	0.003	0.002	0.002	0.003	0.003	0.011	0.071	0.019
N00042G acenaphthylene	air+aerosol	0.003	0.004	0.002	0.013	0.004	0.002	0.002	0.002	0.003	0.009	0.009	0.009
N00042G alpha_HCH	air+aerosol	13.268	12.970	18.485	19.108	19.698	24.335	22.410	27.500	29.485	27.574	26.912	16.780
N00042G anthanthrene	air+aerosol	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.003
N00042G anthracene	air+aerosol	0.003	0.003	0.002	0.003	0.002	0.001	0.001	0.001	0.006	0.013	0.006	0.006
N00042G benz_a_anthracene	air+aerosol	0.005	0.009	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.004	0.004	0.017
N00042G benzo_a_pyrene	air+aerosol	0.003	0.008	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.003	0.014
N00042G benzo_e_pyrene	air+aerosol	0.010	0.018	0.008	0.003	0.001	0.001	0.001	0.001	0.001	0.007	0.022	0.022
N00042G benzo_ghi_perlylene	air+aerosol	0.007	0.015	0.006	0.002	0.001	0.002	0.001	0.001	0.001	0.001	0.006	0.020
N00042G biphenyl	air+aerosol	1788.500	1639.143	1286.250	0.269	0.041	0.022	0.015	0.021	0.047	0.244	1119.878	931.332
N00042G chrysene_triphenylene	air+aerosol	0.021	0.034	0.015	0.005	0.001	0.002	0.001	0.002	0.002	0.002	0.016	0.046
N00042G cis_CD	air+aerosol	0.668	0.563	0.607	0.975	0.828	0.875	0.787	0.910	0.763	0.873	1.181	1.058
N00042G cis_NO	air+aerosol	0.042	0.023	0.025	0.068	0.124	0.125	0.117	0.142	0.097	0.077	0.072	0.090
N00042G coronene	air+aerosol	0.003	0.009	0.003	0.002	0.001	0.002	0.001	0.001	0.001	0.001	0.003	0.010
N00042G dibenzo_ac_ah_anthracenes	air+aerosol	0.001	0.003	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.003

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
NO0042G dibenzofuran	air+aerosol	2349.750	1983.571	1827.625	297.783	0.070	0.079	0.038	0.056	0.123	0.383	693.778	1107.453
NO0042G dibenzothiophene	air+aerosol	0.026	0.016	0.011	0.003	0.004	0.003	0.004	0.004	0.004	0.010	0.028	0.020
NO0042G fluoranthene	air+aerosol	0.089	0.093	0.034	0.018	0.006	0.008	0.011	0.008	0.009	0.031	0.073	0.127
NO0042G fluorene	air+aerosol	584.478	337.449	0.367	0.067	0.024	0.022	0.026	0.028	0.040	0.113	0.593	0.608
NO0042G gamma_HCH	air+aerosol	3.993	3.400	5.722	6.602	6.154	7.817	3.710	5.268	7.210	6.009	7.215	4.224
NO0042G inden_123cd_pyrene	air+aerosol	0.007	0.014	0.006	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.006	0.021
NO0042G naphthalene	air+aerosol	2963.750	2831.286	670.193	0.343	0.267	0.067	0.051	0.072	0.109	0.165	661.451	2334.411
NO0042G op_DDD	air+aerosol	0.047	0.043	0.063	0.017	0.010	0.010	0.010	0.010	0.033	0.010	0.037	0.094
NO0042G op_DDE	air+aerosol	0.190	0.156	0.235	0.133	0.046	0.033	0.010	0.010	0.083	0.074	0.200	0.233
NO0042G op_DDT	air+aerosol	0.322	0.249	0.254	0.318	0.120	0.225	0.100	0.102	0.453	0.200	0.430	0.389
NO0042G perylene	air+aerosol	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.003
NO0042G phenanthrene	air+aerosol	0.167	0.142	0.079	0.056	0.045	0.035	0.044	0.046	0.036	0.146	229.447	0.207
NO0042G pp_DDD	air+aerosol	0.045	0.060	0.078	0.012	0.028	0.010	0.010	0.010	0.055	0.064	0.010	0.094
NO0042G pp_DDE	air+aerosol	1.373	0.779	0.744	0.515	1.240	0.225	0.167	0.160	0.800	0.400	1.200	2.367
NO0042G pp_DDT	air+aerosol	0.130	0.090	0.108	0.098	0.102	0.175	0.100	0.082	0.277	0.100	0.170	0.200
NO0042G pyrene	air+aerosol	0.036	0.052	0.018	0.012	0.005	0.005	0.007	0.005	0.006	0.015	0.037	0.077
NO0042G trans_CD	air+aerosol	0.405	0.400	0.372	0.498	0.246	0.197	0.157	0.156	0.160	0.230	0.508	0.621
NO0042G trans_NO	air+aerosol	0.555	0.474	0.485	0.897	0.864	0.738	0.573	0.694	0.583	0.647	0.922	1.034
NO0099R HCB	air+aerosol	49.625	44.767	55.901	44.900	52.375	48.460	47.033	49.100	49.625	57.275	60.285	45.325
NO0099R alpha_HCH	air+aerosol	9.895	10.870	11.339	11.130	20.000	15.340	25.533	24.560	20.575	23.250	19.007	11.050
NO0099R gamma_HCH	air+aerosol	9.075	5.560	8.958	10.207	15.413	17.254	27.833	25.380	20.720	27.225	12.213	5.597
SE0002R PCB_101	air+aerosol	1.038	1.077	1.131	1.617	1.847	1.668	3.216	2.566	2.066	2.078	1.044	1.327
SE0002R PCB_118	air+aerosol	0.355	0.342	0.350	0.460	0.676	0.680	1.233	0.908	0.627	0.564	0.339	0.371
SE0002R PCB_138	air+aerosol	0.983	0.826	0.821	1.074	1.244	1.042	1.945	1.622	1.371	1.243	0.800	1.194
SE0002R PCB_153	air+aerosol	0.951	0.880	0.913	1.219	1.388	1.165	2.159	1.822	1.572	1.545	0.859	1.201
SE0002R PCB_180	air+aerosol	0.542	0.403	0.441	0.471	0.415	0.322	0.567	0.477	0.453	0.444	0.394	0.782
SE0002R PCB_28	air+aerosol	1.273	0.993	1.053	1.443	1.474	0.939	1.819	2.406	1.211	1.365	0.741	1.726
SE0002R PCB_52	air+aerosol	1.339	1.440	1.521	1.936	1.984	1.946	3.205	2.729	2.265	2.983	1.215	1.523
SE0002R anthracene	air+aerosol	0.067	0.042	0.042	0.030	0.007	0.008	0.004	0.003	0.019	0.015	0.039	0.142
SE0002R benz_a_anthracene	air+aerosol	0.109	0.075	0.150	0.030	0.021	0.029	0.021	0.059	0.030	0.031	0.086	0.218
SE0002R benzo_a_pyrene	air+aerosol	0.133	0.111	0.189	0.042	0.011	0.005	0.007	0.025	0.025	0.034	0.090	0.171
SE0002R benzo_ghi_perylene	air+aerosol	0.136	0.117	0.197	0.043	0.014	0.007	0.006	0.007	0.024	0.036	0.098	0.214
SE0002R chrysene_triphenylene	air+aerosol	0.248	0.207	0.310	0.101	0.037	0.020	0.019	0.065	0.053	0.064	0.179	0.406
SE0002R fluoranthene	air+aerosol	0.940	0.830	1.025	0.444	0.203	0.108	0.096	0.080	0.194	0.246	0.575	1.308
SE0002R inden_123cd_pyrene	air+aerosol	0.142	0.126	0.225	0.055	0.016	0.009	0.006	0.008	0.026	0.043	0.116	0.256
SE0002R phenanthrene	air+aerosol	2.240	1.721	1.866	1.204	0.653	0.377	0.389	0.278	0.616	0.558	1.313	3.142
SE0002R pyrene	air+aerosol	0.630	0.526	0.676	0.274	0.111	0.063	0.046	0.043	0.134	0.166	0.395	0.910
SE0012R PCB_101	air+aerosol	1.270	0.530	0.520	1.810	2.450	1.190	0.830	0.970	1.300	1.340	0.800	0.790
SE0012R PCB_118	air+aerosol	0.530	0.200	0.180	0.560	0.970	0.360	0.300	0.340	0.530	0.410	0.300	0.280
SE0012R PCB_138	air+aerosol	0.640	0.310	0.260	0.870	1.180	0.560	0.420	0.490	0.660	0.650	0.420	0.400
SE0012R PCB_153	air+aerosol	0.800	0.380	0.320	1.150	1.500	0.750	0.550	0.620	0.830	0.880	0.530	0.500
SE0012R PCB_180	air+aerosol	0.270	0.150	0.130	0.300	0.330	0.190	0.180	0.190	0.270	0.220	0.180	0.160
SE0012R PCB_28	air+aerosol	2.560	0.920	1.050	3.040	4.920	1.690	1.330	1.520	2.480	1.870	1.870	1.870
SE0012R PCB_52	air+aerosol	1.920	0.820	0.900	2.750	3.620	1.620	1.180	1.380	1.980	1.800	1.150	1.140
SE0012R anthracene	air+aerosol	0.088	0.000	0.000	0.000	0.000	0.000	0.002	0.003	0.026	0.026	0.006	0.005
SE0012R benz_a_anthracene	air+aerosol	0.196	0.015	0.014	0.007	0.005	0.003	0.001	0.000	0.005	0.029	0.005	0.005
SE0012R benzo_a_pyrene	air+aerosol	0.255	0.000	0.026	0.010	0.009	0.005	0.005	0.005	0.037	0.054	0.032	0.032
SE0012R benzo_ghi_perylene	air+aerosol	0.114	0.003	0.029	0.014	0.004	0.005	0.005	0.004	0.044	0.066	0.056	0.067
SE0012R fluoranthene	air+aerosol	1.450	1.180	0.160	0.220	0.410	0.100	0.130	0.230	0.190	0.360	0.290	0.370
SE0012R inden_123cd_pyrene	air+aerosol	0.160	0.006	0.033	0.014	0.006	0.007	0.005	0.005	0.069	0.110	0.069	0.083
SE0012R phenanthrene	air+aerosol	1.360	0.640	0.360	0.630	0.340	0.330	0.300	0.300	0.330	0.530	0.630	0.780
SE0012R pyrene	air+aerosol	1.000	0.500	0.070	0.060	0.150	0.020	0.040	0.030	0.100	0.180	0.160	0.200



## **Annex 9**

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