OSPAR COMMISSION

Comprehensive Atmospheric Monitoring Programme

Deposition of air pollutants around the North Sea and the North-East Atlantic in 2012

Monitoring and Assessment Series

2014

OSPAR Convention

The Convention for the Protection of the Marine Environment of the North-East Atlantic (the "OSPAR Convention") was opened for signature at the Ministerial Meeting of the former Oslo and Paris Commissions in Paris on 22 September 1992. The Convention entered into force on 25 March 1998. The Contracting Parties are Belgium, Denmark, the European Union, Finland, France, Germany, Iceland, Ireland, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom of Great Britain and Northern Ireland.

Convention OSPAR

La Convention pour la protection du milieu marin de l'Atlantique du Nord-Est, dite Convention OSPAR, a été ouverte à la signature à la réunion ministérielle des anciennes Commissions d'Oslo et de Paris, à Paris le 22 septembre 1992. La Convention est entrée en vigueur le 25 mars 1998. Les parties contractantes sont : l'Allemagne, la Belgique, le Danemark, l'Espagne, la Finlande, la France, l'Irlande, l'Islande, le Luxembourg, la Norvège, les Pays-Bas, le Portugal, le Royaume-Uni de Grande Bretagne et d'Irlande du Nord, la Suède, la Suisse et l'Union européenne.

Acknowledgement

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Contents

Executive Summary

This report presents the results of monitoring undertaken by OSPAR Contracting Parties for the Comprehensive Atmospheric Monitoring Programme (CAMP) during 2012. Under the CAMP, OSPAR Contracting Parties are committed to monitoring, on a mandatory basis, the concentrations of a range of metals, organic compounds and nutrients in precipitation and air. The CAMP also encourages OSPAR Contracting Parties to monitor, on a voluntary basis, additional compounds (such as certain persistent organic pollutants). The report gives detailed information on observed atmospheric inputs of selected contaminants to the OSPAR maritime area and its regions during 2012.

Region II, the Greater North Sea, remains the most intensely observed sub-region. Sub-regional coasts that are most under-represented are the Irish Sea (Region III), the Bay of Biscay (Region IV) and the far north-east (Region I).

All Contracting Parties reported data for 2012. For most Parties some elements are missing to comply completely with the monitoring obligation defined by CAMP.

The regional distribution of the various pollutants show in general elevated levels closest to the main source areas, although there is variability at some sites, which may be (relatively) more influenced by local or nearby sources.

Time trends show decreases in nitrogen, heavy metals and γ-HCH in line with the general emission reductions achieved in Europe over recent decades.

The OSPAR CAMP data are accessible online at http://ebas.nilu.no.

Récapitulatif

Ce rapport présente les résultats de la surveillance continue mise en oeuvre par les Parties contractantes à OSPAR dans le cadre du Programme exhaustif de surveillance continue de l'atmosphère (CAMP) en 2012. Aux termes du programme CAMP, les Parties contractantes à OSPAR s'engagent à mettre en oeuvre une surveillance continue obligatoire des concentrations d'un ensemble de métaux, de composés organiques et de nutriments dans les précipitations et dans l'atmosphère. Le programme CAMP encourage aussi les Parties contractantes à OSPAR à pratiquer une surveillance continue, sur la base du volontariat, de composés supplémentaires (tels que certains polluants organiques persistants). Le rapport présente des informations détaillées sur les apports atmosphériques observés de certains contaminants dans la zone maritime OSPAR et dans ses régions en 2012.

La Région II, la mer du Nord au sens large, demeure la sous-région la plus intensément observée. Les côtes sous-régionales les moins bien représentées sont la mer d’Irlande (Région III), le golfe de Gascogne (Région IV) et l’extrême nord-est (Région I).

Toutes les Parties contractantes ont notifié des données pour 2012. Toutefois, les données de la plupart des Parties contractantes comportent des lacunes, en effet elles ne répondent pas complètement aux impératifs de la surveillance déterminés par le CAMP.

En générale, la répartition régionale de divers polluants révèle dans l’ensemble des niveaux élevés à proximité des principales sources, bien qu’il existe une variabilité sur quelques sites qui pourraient être plus influencés par des sources locales ou proches.

Les tendances temporelles révèlent une diminution des teneurs en azote, en métaux lourds et en γ-HCH conformément aux réductions générales des émissions réalisées en Europe au cours des dernières décennies.

Les données CAMP d’OSPAR sont accessibles en ligne à l’adresse suivante: http://ebas.nilu.no.

Deposition of air pollutants around the North Sea and the North-East Atlantic in 2012

Introduction

This report collates and describes the observations from coastal monitoring stations across the OSPAR region (see Figure 1.1) under the Comprehensive Atmospheric Monitoring Programme (CAMP), this forming one element within the wider Joint Assessment and Monitoring Programme of OSPAR. The CAMP aims to assess, as accurately as appropriate, the atmospheric input of the selected contaminants to the maritime area and regions thereof (Figure 1.1) on an annual basis through monitoring the concentrations of selected contaminants in precipitation and air.

Figure1.1: OSPAR maritime area and regions. Region I: Arctic Waters; Region II: Greater North Sea; Region III: Celtic Seas; Region IV: Bay of Biscay and Iberian Coast; Region V: Wider Atlantic.

The components of interest to the CAMP are divided into two groups comprising those for measurement on a mandatory basis and those for measurement on a voluntary basis. These are listed in Table 1.1.

The CAMP Principles call for each Contracting Party bordering the OSPAR maritime area (excluding the EU) to operate at least one monitoring station on the coast and/or offshore as part of the CAMP. Where Parties border more than one region (see Figure 1.1) there should be at least one station in each region. The stations should be so-called “background stations”, i.e. not directly influenced by local emission sources. The stations should be located not more than 10 km from the coastline.

Table1.1: Components to be measured under CAMP.

	Mandatory	**Voluntary**
Precipitation	As, Cd, Cr, Cu, Pb, Hg, Ni, Zn, γ-HCH, NH_4^+, NO_3^-	PCB 28,52,101,118,138,153,180 PAHs: Phenanthrene, anthracene, flouranthene, pyrene, benzo(*a*)anthracene, chrysene, benzo(*a*)pyrene, benzo(*ghi*)perylene, indeno(*1,2,3-cd*)pyrene
Airborne	NO_2, HNO_3, NH_3, NH_4^{+a}, NO_3^{-a}	As, Cd, Cr, Cu, Pb, Hg, Ni, Zn, γ-HCH, PCB 28,52,101,118,138,153,180, PAHs: Phenanthrene, anthracene, flouranthene, pyrene, benzo(*a*)anthracene, chrysene, benzo(*a*)pyrene, benzo(*ghi*)perylene, indeno(*1,2,3-cd*)pyrene, NO

[a]) total ammonium (NH_3 + NH_4^+) and total nitrate (HNO_3 +NO_3^-) is an alternative

The data assembled by monitoring stations are reported by Contracting Parties to the Norwegian Institute for Air Research (NILU) on a yearly basis using a reporting format and according to the time schedule set out in the CAMP Principles, which are harmonised with the reporting obligations under EMEP (European Monitoring and Evaluation Programme). Data are stored in the international database http://ebas.nilu.no/, and NILU prepares a CAMP data report on an annual basis for OSPAR.

The present CAMP data report “*Deposition of air pollutants around the North Sea and North-East Atlantic in 2012* gives in Chapter 2 an overview of reported data, and a discussion on Contracting Parties’ compliance with their monitoring obligations. In Chapter 3, the 2012 observed annual average concentrations are mapped. Chapter 4 provides overviews of temporal patterns in the observations over the two last decades and indications of significant trends.

The OSPAR CAMP Monitoring Programme

Geographical coverage and completeness

Table 2.1 and Figure 2.1 illustrate what has been reported to CAMP for the year 2012. Their coordinates are given in the Annex, Table A.1.1. Dark green colour in the table indicates that the component measured is part of the mandatory and voluntary programme, while light green means that the component measured is not as defined in Table 1.1; i.e. if particulate mercury is measured in air and not elemental mercury; or various POPs are measured, but not γ-HCH. The maps show the regional distribution of sites and the colour code indicate the level of completeness at the individual site. It is recommended to have as complete monitoring programme as possible to better assess the pollution level and to study what is the main sources, and atmospheric processes. The dark blue colour indicates which sites include all component groups covered by CAMP (nitrogen, heavy metals and POPs).

Sites			In precipitation					In air					
region	Site	Name	NO3	NH4	HM	Hg	POP	NO2	Nox	Nred	HM	Hg	POP
I	IS0002R	Irafoss											
	IS0090R	Reykjavik											
	IS0091R	Storhofdi											
	NO0039R	Kårvatn											
	NO0090R	Andøya											
	NO0042G	Zeppelin											
II	BE0011R	Moerkerke											
	BE0013R	Houtem											
	BE0014R	Koksijde											
	DE0001R	Westerland											
	DK0005R	Keldsnor											
	DK0008R	Anholt											
	DK0022R	Sepstrup Sande											
	DK0031R	Ulborg											
	FR0090R	Porspoder											
	GB0006R	Lough Navar											
	GB0013R	Yarner Wood											
	GB0014R	High Muffles											
	GB0017R	Heigham Holmes											
	GB0054R	Glen Saugh											
	GB0091R	Banchory											
	NL0009R	Kollumerwaard											
	NL0091R	De Zilk											
	NO0001R	Birkenes											
	NO0554R	Haukeland											
	NO0572R	Vikedal											
	NO0655R	Nausta											
	SE0014R	Råö											
III	IE0001R	Valentia											
IV	ES0005R	Noya											
	ES0017R	Doñana											
	ES0008R	Niembro											
	PT0006R	Alfragide											
	PT0004R	Monte Velho											

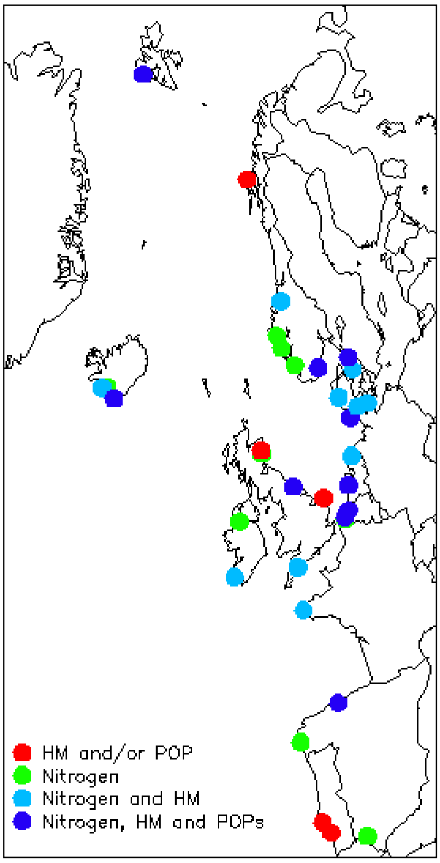

Table2.1 and Figure 2.1: Monitoring sites reporting reduced and oxidised nitrogen compounds, heavy metals (HM), mercury and persistent organic pollutants (POPs) to CAMP in 2012.

It is mandatory for all the Parties to OSPAR to monitor in accordance with the CAMP programme a minimum of one site as described in the introduction. Table 2.2 gives an overview of which Parties are in compliance and not. Dark green means data are reported as described in Table 1.1; while red means no data. A light green colour indicates an incomplete programme, i.e. if only particulate nitrogen is included and not nitric acid (or sum of nitrate). Several Parties do not measure γ-HCH or mercury in precipitation; however, it should be noted that there are more sites measuring these compounds in air.

	In precipitation											In air		
Site	NO_3^-	NH_4^+	As	Cd	Cr	Cu	Pb	Ni	Zn	Hg	γHCH	NO_2	Nox	Nred
Iceland	dark green	dark green	dark green	dark green	dark green	dark green	dark green	dark green	dark green	red	dark green	red	light green	red
Norway	dark green	dark green	dark green	dark green	dark green	dark green	dark green	dark green	dark green	dark green	dark green	dark green	dark green	dark green
Belgium	dark green	dark green	dark green	dark green	dark green	dark green	dark green	dark green	dark green	dark green	dark green	dark green	red	light green
Germany	dark green	dark green	dark green	dark green	dark green	dark green	dark green	dark green	dark green	dark green	dark green	dark green	light green	light green
Denmark	dark green	dark green	dark green	dark green	dark green	dark green	dark green	dark green	dark green	red	red	dark green	dark green	dark green
France	dark green	red	dark green	dark green	dark green	dark green	dark green	dark green	dark green	red	red	red	red	red
UK	dark green	dark green	dark green	dark green	dark green	dark green	dark green	dark green	dark green	dark green	red	dark green	dark green	dark green
Netherlands	dark green	dark green	dark green	dark green	dark green	dark green	dark green	dark green	dark green	dark green	dark green	dark green	light green	light green
Sweden	dark green	dark green	dark green	dark green	dark green	dark green	dark green	dark green	dark green	dark green	dark green	dark green	dark green	dark green
Ireland	dark green	dark green	dark green	dark green	dark green	dark green	dark green	dark green	dark green	dark green	red	red	red	red
Spain	dark green	dark green	dark green	dark green	dark green	dark green	dark green	dark green	dark green	dark green	light green	dark green	dark green	dark green
Portugal	red	red	dark green	dark green	dark green	dark green	dark green	dark green	dark green	dark green	light green	red	red	red

Table 2.2: Overview of reported data from mandatory monitoring of contaminants. Dark green means data reported, red means no data, while light green means an incomplete programme.

Parties report a wider range of components than is covered by CAMP. The main body of this report is a description of observations defined by the CAMP programme. Excluded are major ions which are reported to provide the potential for quality control and compounds which are a part of other international programmes but which may be expected to lie outside the core interest of OSPAR, e.g. sulphates, ozone, and PM measurements. Most of the sites are also part of the EMEP programme and the monitoring obligations in EMEP is more extensive (UNECE; 2009). All the components reported by Contracting Parties during 2012 are uploaded in the database and are accessible from http://ebas.nilu.no/.

Observed concentrations in 2012

This section describes the observed concentrations at coastal stations around the North-East Atlantic in 2012. Note that the colour codes are only used to show the spatial spread of the data, to indicate which regions have the highest and lowest levels compared to each other, and not necessarily whether the levels are higher than what is acceptable from a critical load perspective.

In the maps, volume weighted means are calculated in accordance with the defined EMEP procedures. To address the total load of pollutants, it is necessary to look at the deposition, and the wet depositions are given in the annexes together with the concentrations. For pollutants in air, only concentrations are given. There is a large uncertainty in using dry deposition velocities to estimate the deposition from gases and particulate, and this complex issue is beyond the scope of this report. It is however recognised that dry deposition can be just as important as, or higher than wet deposition, especially in dry regions.

Metals in air and precipitation

Heavy metals are of major environmental concern due to their persistence, ability to bio-accumulate and their negative effect on human health and the environment. Therefore regulation of these elements has been a priority both on a regional (OSPAR; HELCOM, CLRTAP, EEA) and global scale (UNEP).

The concentrations of heavy metals in air and precipitation shown in Figure 3.1 - 3.6 resemble the emission distribution in this region fairly well (see Pacyna et al., 2009). The lowest concentrations are generally observed in northern Scandinavia and the westernmost part of Europe. The highest levels were for some elements observed in the Benelux countries while for others highest levels are seen in Portugal and Denmark. One should notice that the detection limit for the Portuguese measurements are for some elements higher than the ambient concentration and these data should be looked upon as an upper concentration level. In Iceland there are very high levels of chromium which may be from local sources. The regional distribution in air and precipitation is not comparable for all elements, e.g. in the Benelux countries, the lead concentrations in aerosols are relatively high, but this is not the case in precipitation. This may be due to the influence of regional or more local sources, which can give high air concentrations, but these aerosols are not necessarily scavenged by wet deposition nearby.

The spatial distribution of elemental mercury in air (Figure 3.6) does not follow the same spatial pattern as the other heavy metals. The lowest annual average of gaseous mercury (Hg(g)) was seen in Belgium (not shown due to low data capture) and Spain while Scandinavia had highest concentrations. In precipitation, the highest concentrations are in Sweden and the Benelux. Also high levels are seen in Ireland and partly in Portugal, but this is due to high detection limits. The reason why the spatial pattern of especially mercury air concentrations differs from the primary emission pattern is that mercury has a long residence time in the atmosphere and that re-emission from soil and ocean may affect sites that are more distant.

In addition to mapping of the annual concentrations, corresponding tables of monthly and annual wet deposition and volume weighted means of concentrations both in air and precipitation are presented in Annex 2.

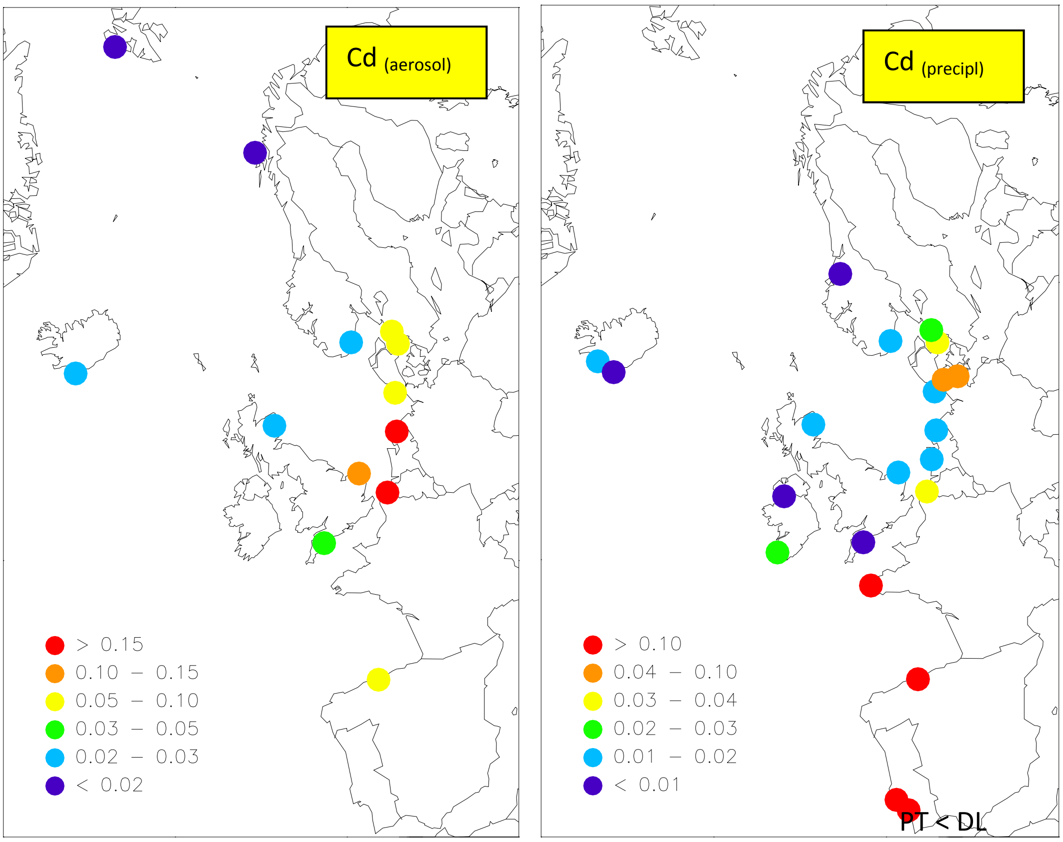

Figure 3.1: Annual concentrations of cadmium in air (µg/m³) and precipitation (µg/L), 2012

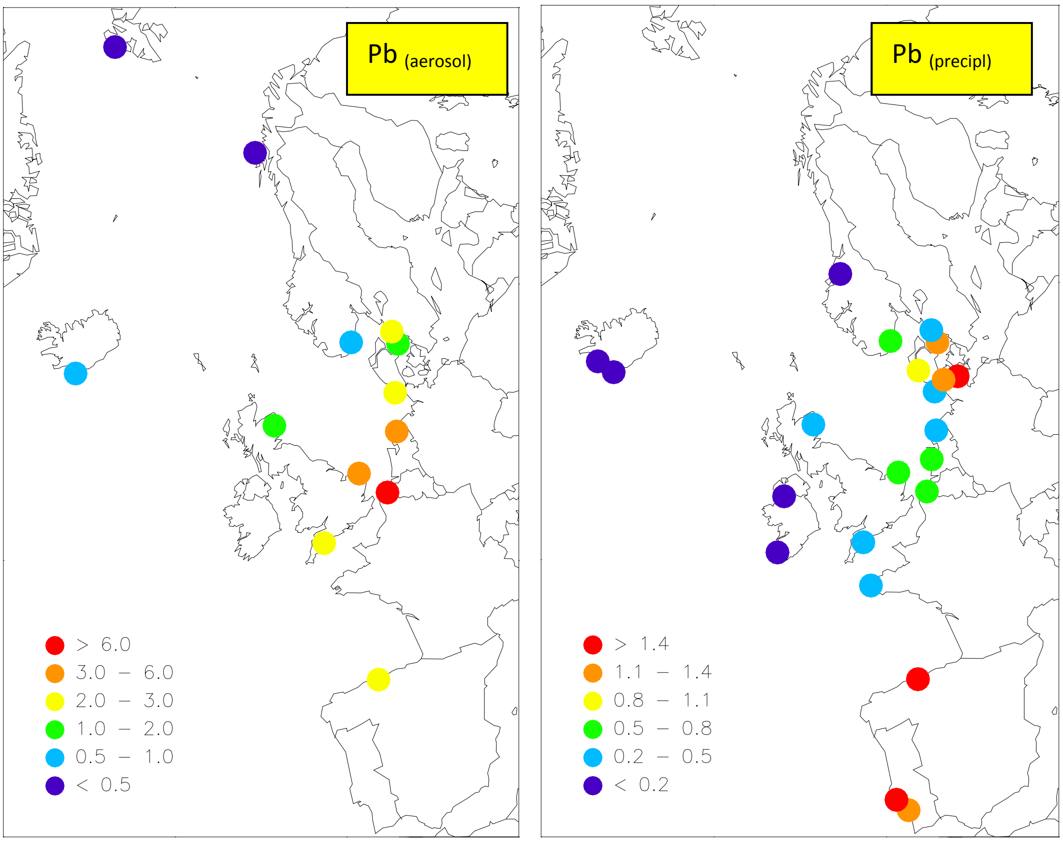

Figure 3.2: Annual concentrations of lead in air (µg/m³) and precipitation (µg/L), 2012

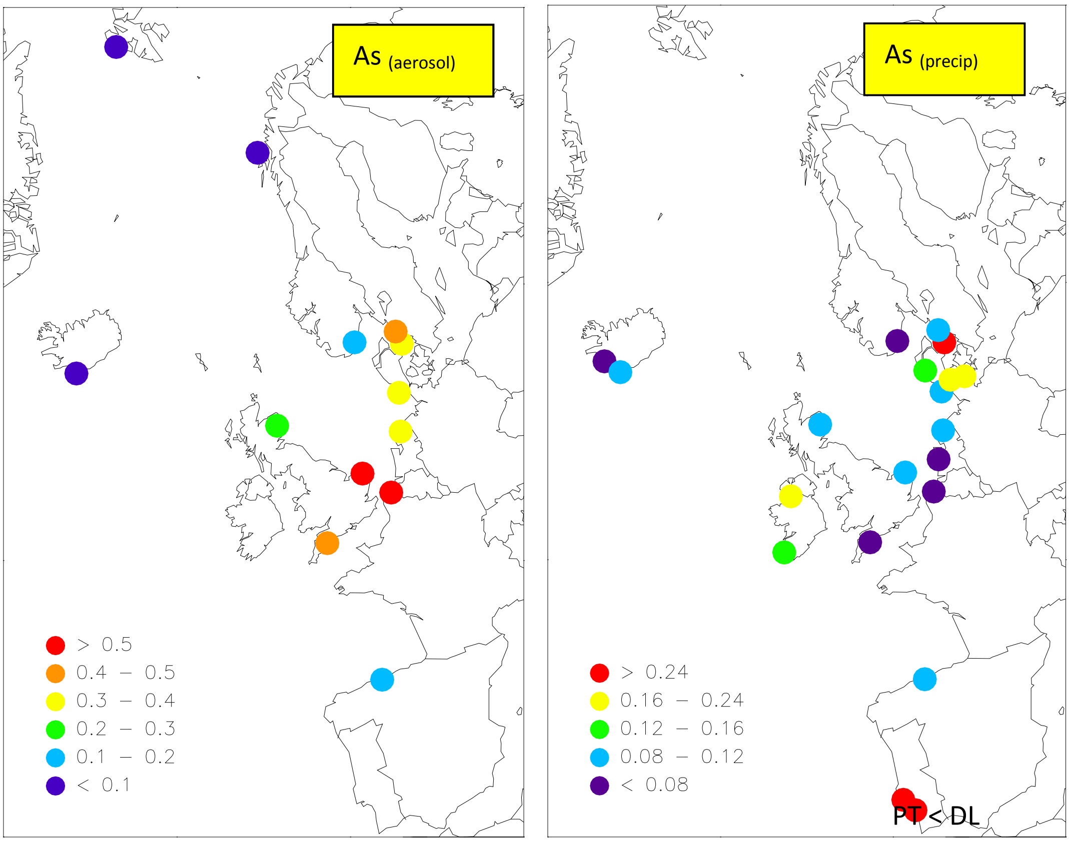

Figure 3.3: Annual concentrations of arsenic in air (µg/m^3) and precipitation (µg/L), 2012

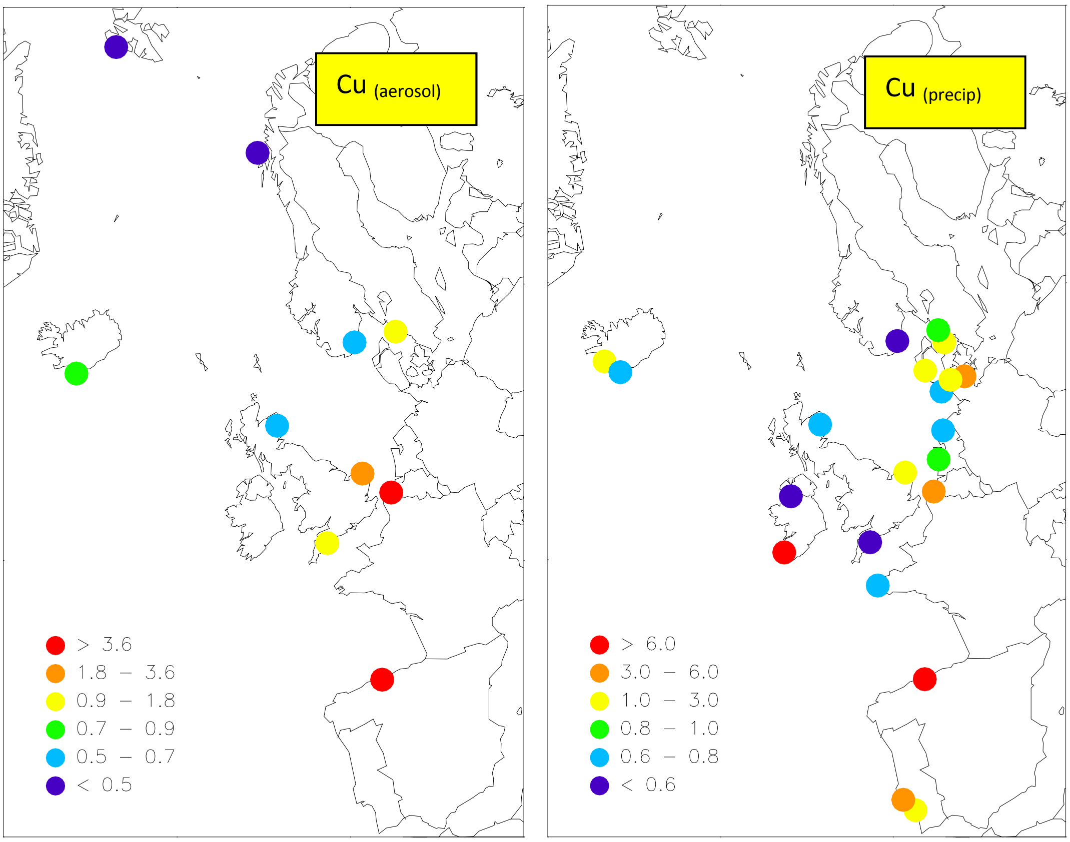

Figure 3.4: Annual concentrations of copper in air (µg/m^3) and precipitation (µg/L), 2012

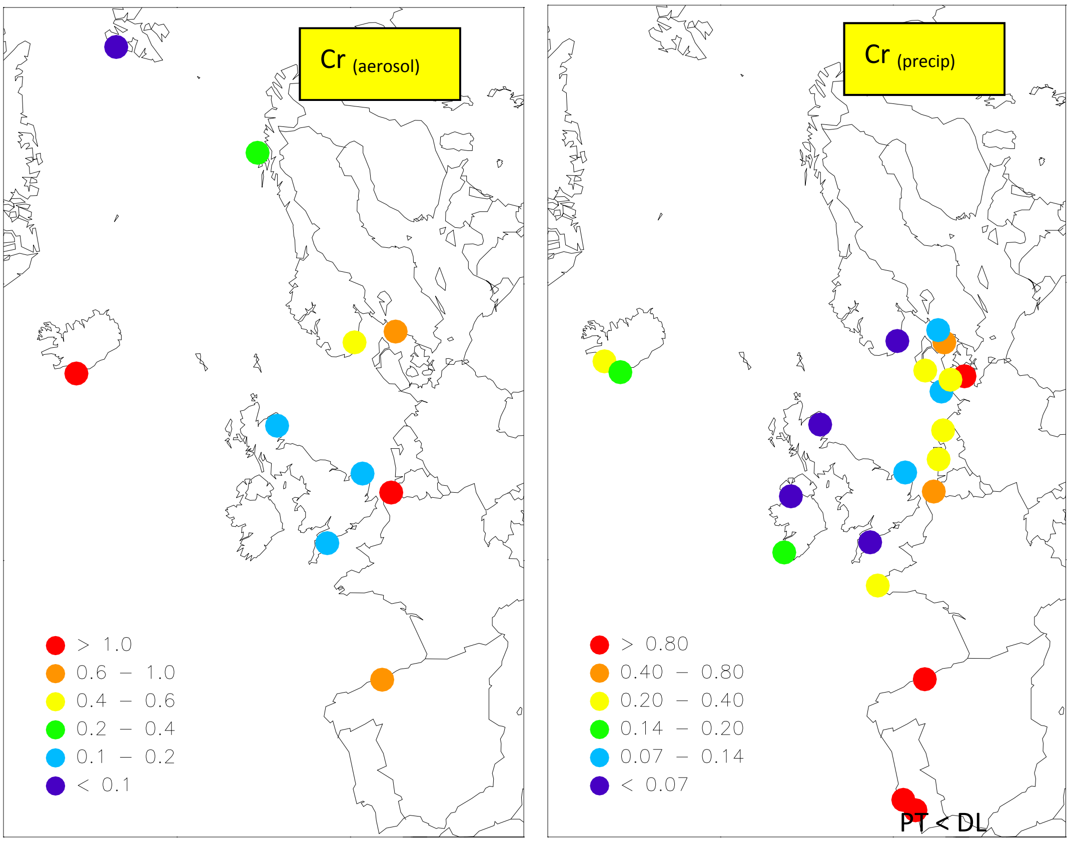

Figure 3.5: Annual concentrations of chromium in air (µg/m³) and precipitation (µg/L), 2012

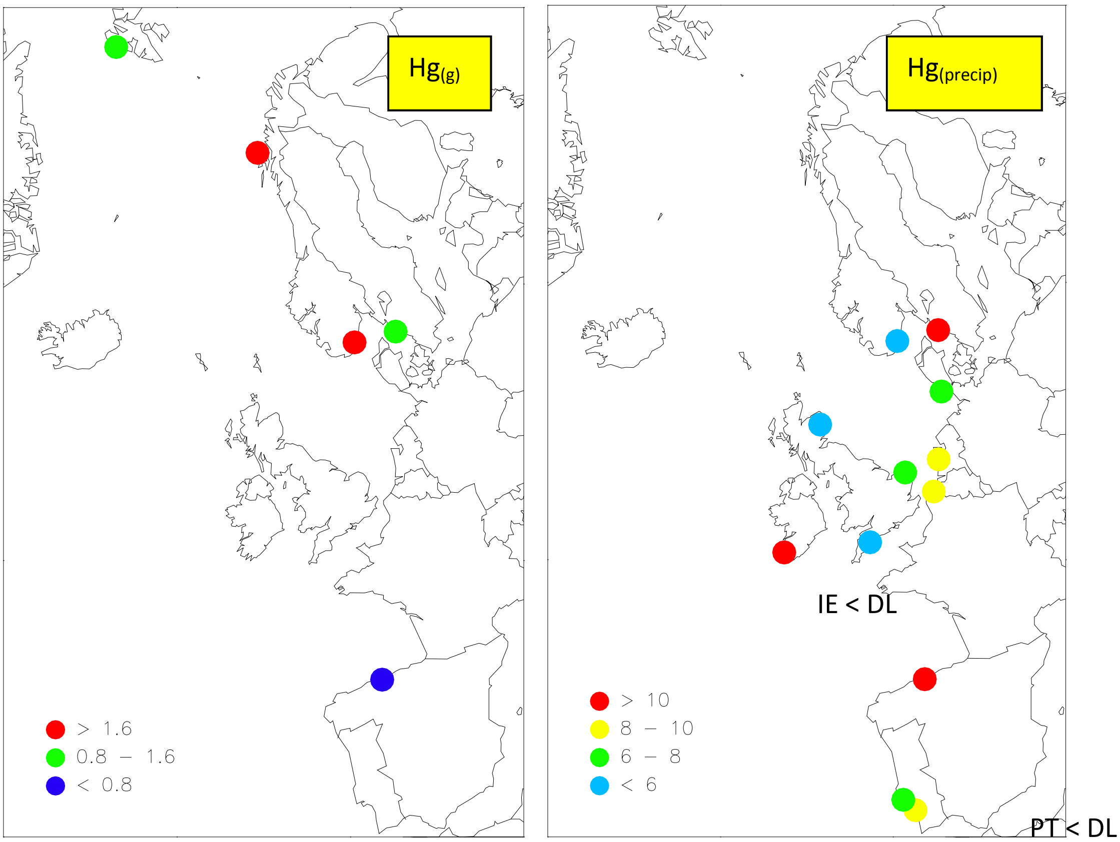

Figure 3.6: Annual concentrations of mercury in air (ng/m³) and precipitation (ng/L), 2012

Selected POPs in air

POPs are organic chemicals identified as being toxic, bio-accumulative, persistent and prone to long-range transport, and several are regulated by international law. Most other air pollutants tend to decline with distance from source regions due to dispersion, dilution, degradation and deposition. However, for some POPs, relatively high concentrations have been measured far from major emission regions (Wania, 1999; Tørseth et al., 2012). A characteristic feature of many POPs, unlike most other air pollutants, is their potential to undergo reversible atmospheric deposition (e.g. Larsson, 1985; Nizzetto et al., 2010). Therefore, air concentrations measured today might be either caused by recent primary atmospheric emissions or attributed to re-volatilization of these persistent and semi-volatile substances from contaminated surface reservoirs (soil, water, vegetation, snow, etc.) in contact with the atmosphere.

In Figure 3.7, the annual mean concentrations of selected POPs (γ-HCH, Benzo-a-pyrene and PCB 180) in air are shown. The component γ-HCH in air is only measured in Scandinavia and Iceland, the highest concentration is seen in Germany. Benzo-a-pyrene is measured on a larger number of sites mainly due to the fact that PAH is regulated by the EU's air quality directive (EU, 2004). The highest levels are seen in the Benelux countries and Spain, while lowest levels are in the Arctic (at the station in Svalbard). For the PCBs, the highest concentration in 2012 was seen in Sweden. However, the relative importance of the various PCBs is changing between the sites, with the lighter PCBs relatively more important in the Arctic due to their higher potential for transport. Details of all the concentrations for all the different POPs measured at the sites in the CAMP programme are given in Annex 2.

Maps for measurements of precipitation are not shown because the methods across the network differ and are not comparable, i.e. some sites measure deposition while others measure concentrations. The data are, however, given in Annex 2, and it shows that the site in the Netherlands (NL0091) has the highest level of γ-HCH.

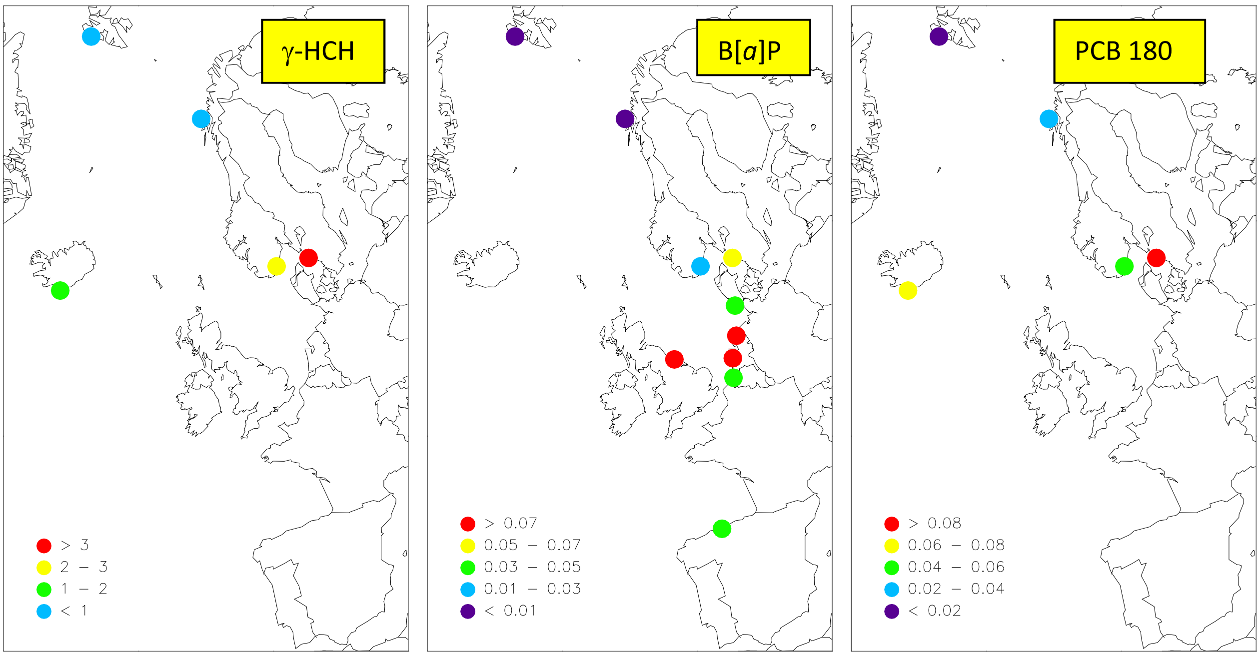

Figure 3.7: γ-HCH (pg/m^3), Benzo-a-pyrene (ng/m^3) and PCB 180 in air (pg/m^3) 2012.

Nitrogen compounds in air and precipitation

Concentrations of oxidised nitrogen in air and precipitation are illustrated in Figure 3.8. The air concentrations of NO_2 are highest around the major emission sources, such as ship traffic in the North Sea and in the English Channel. The highest concentrations of nitrate ions in precipitation as well as in air follow a similar pattern, but in addition there are elevated concentrations in the Bay of Biscay and Kattegat.

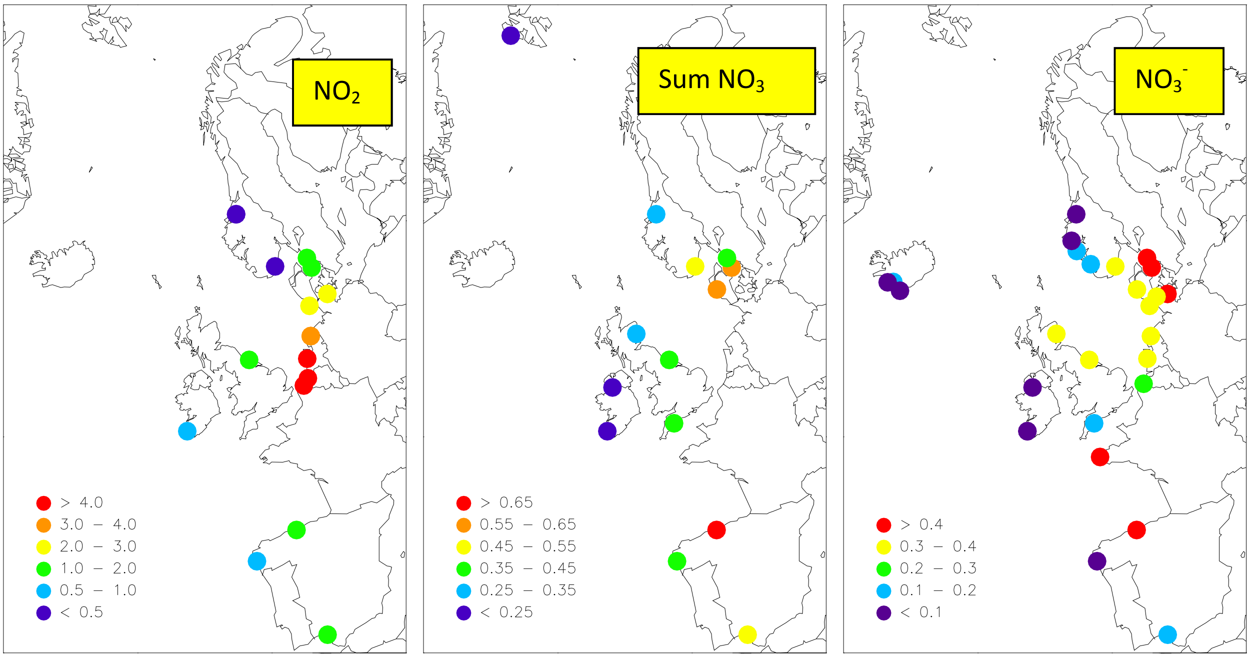

Figure 3.8: Volume weighted annual mean concentrations of oxidised nitrogen in 2012, in air (NO_2 and sum ($NO_3 + HNO_3$) in $\mu gN/m^3$) and in precipitation (NO_3^- in mgN/L).

Concentrations of reduced nitrogen are shown in Figure 3.9. The highest concentrations of sum ammonium (NH_4^++NH_3) in air are not surprisingly highest in the quite intensive agricultural region in the Benelux area.

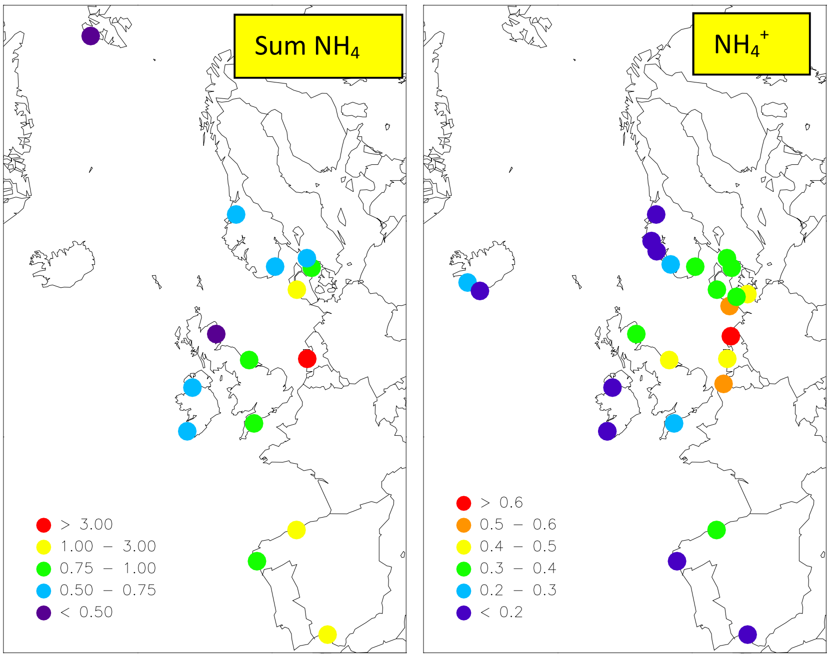

Figure 3.9: Volume weighted annual mean concentrations of reduced nitrogen in 2012, in air ($\mu gN/m^3$) and in precipitation (mgN/L).

Annual wet deposition of total nitrogen is between 200 and 1400 mgN/m^2 (equal 2-14 kg ha/year) with the highest deposition in the relatively wet region in Norway (see data in the annex). To estimate the total deposition it is important to also include dry deposition fluxes (Sutton et al., 2011). However, monitoring of dry deposition fluxes has so far mainly been made in relation to research projects, in particular, the European Union integrated project NitroEurope (Skiba et al, 2009; Flechard et al, 2011).

Temporal trends

The temporal trends in the OSPAR CAMP data from 1990 to 2012 have been evaluated. For the statistical analysis, the non-parametric "Mann-Kendall Test" has been used on annual means for detecting and estimating trends (Gilbert, 1987). The Mann-Kendall test has become a standard method in EMEP (Tørseth et al, 2012) for trend analysis when missing values occur and when data are not normally distributed. In parallel to this, the Sen's slope estimator has been used to quantify the scale of potential trends. Thus, the Sen's slope is used to estimate the percent reduction in the concentration level while the Mann-Kendall test is used to indicate the significance level of the trend. Statistical calculations have been carried out using the MAKESENS software (Salmi et al., 2002) which was developed to be used for the previous EMEP assessment (Lövblad et al., 2004). In MAKESENS the two-tailed test is used for four different significance levels (α: 0.1, 0.05, 0.01 and 0.001). In this work, we have included all these confidence levels when defining whether the trend is significant or not. For calculating trends, volume weighted annual concentration averages are used, and only sites with sufficient data coverage are included, i.e. 75% data capture for the year, except for heavy metals in air where some sites have one daily sample per week, which is accepted. The measurements are not normalised. The average percentage change in concentration and standard deviation are calculated for all the sites, and not only for those with a significant trend. In the figures a selection of sites are used. In Table 4.1, trend statistics for nitrogen and heavy metals for the last two decades of measurements at the CAMP sites are presented.

Table 4.1: Trend statistics for changes in annual concentrations of nitrogen compounds and contaminants at CAMP sites with long-term measurements, calculations for the two periods 1990-2012 and 2000-2012.

Trends 1990 - 2012					
		Sites with sign. trend		Trends in conc.	
Comp	Nr of sites	decrease	increase	Avg.	SD
NO_3 precip	10	80%	0%	-30%	14%
sum NO_3 air	5	40%	20%	-3%	46%
NO_2 air	6	67%	0%	-25%	18%
NH_4 precip	10	40%	10%	-12%	21%
sum NH_4 air	6	67%	33%	35%	133%
Hg precip	2	50%	0%	-34%	25%
$Hg_{(g)}$ air	1	0%	0%	-1%	-
Pb precip	7	100%	0%	-86%	9%
Pb air	3	100%	0%	-89%	4%
Cd precip	6	83%	0%	-57%	57%
Cd air	2	100%	0%	-79%	8%

Trends 2000 - 2012					
		Sites with sign. trend		Trends in conc.	
Comp	Nr of sites	decrease	increase	Avg.	SD
NO_3 precip	13	54%	8%	-14%	28%
sum NO_3 air	5	20%	20%	34%	55%
NO_2 air	7	71%	0%	-19%	14%
NH_4 precip	14	21%	0%	-1%	31%
sum NH_4 air	7	43%	14%	50%	104%
Hg precip	4	50%	0%	-19%	18%
$Hg_{(g)}$ air	2	0%	0%	-5%	3%
Pb precip	10	80%	0%	-54%	27%
Pb air	6	67%	17%	-6%	118%
Cd precip	10	40%	0%	-19%	62%
Cd air	5	75%	0%	-33%	24%

Time series in annual mean for the various nitrogen compounds

There have been quite substantial reductions in emissions of nitrogen oxides during the last decades in Europe (Vestreng et al., 2009; Tørseth et al, 2012). From 1990 to 2009 the NO_x emissions in Europe decreased by 31%. The reductions were in the first decade mainly caused by a change from burning of coal and gas to nuclear power (Lövblad et al., 2004). NO_x emissions from traffic especially in Western European have also decreased, even though fuel consumption increased (Vestreng et al., 2009). The European emission trends of NO_x are reflected in the measurements at the CAMP sites, Table 4.1. From 1990 to 2012, nitrogen dioxide in air and nitrate in precipitation decreased on average by 25% and 30% respectively. The concentrations of total airborne nitrate decreased on average only 3% and fewer sites show a significant change. These differences in trends can partly be explained by a shift in equilibrium towards more particulate ammonium nitrate relative to nitric acid caused by a reduction in sulphur dioxide emissions. Reduced sulphur dioxide concentrations make more ammonia available to bind with nitric acid (Fagerli and Aas, 2008). A more rapid oxidation of NO_x may also have contributed (Monks et al., 2009). The total reduction in observed concentrations of oxidized nitrogen compounds from 2000 is less significant than for the whole period, but a general decrease of about 20% is seen. The trend plots of oxidised nitrogen at some selected sites with measurements covering the two decades are shown in the Figures 4.1-4.3. The selections of sites are chosen to illustrate the spread of concentrations levels as well as showing the regional variations. Sites with measurements back to 1990 are prioritized.

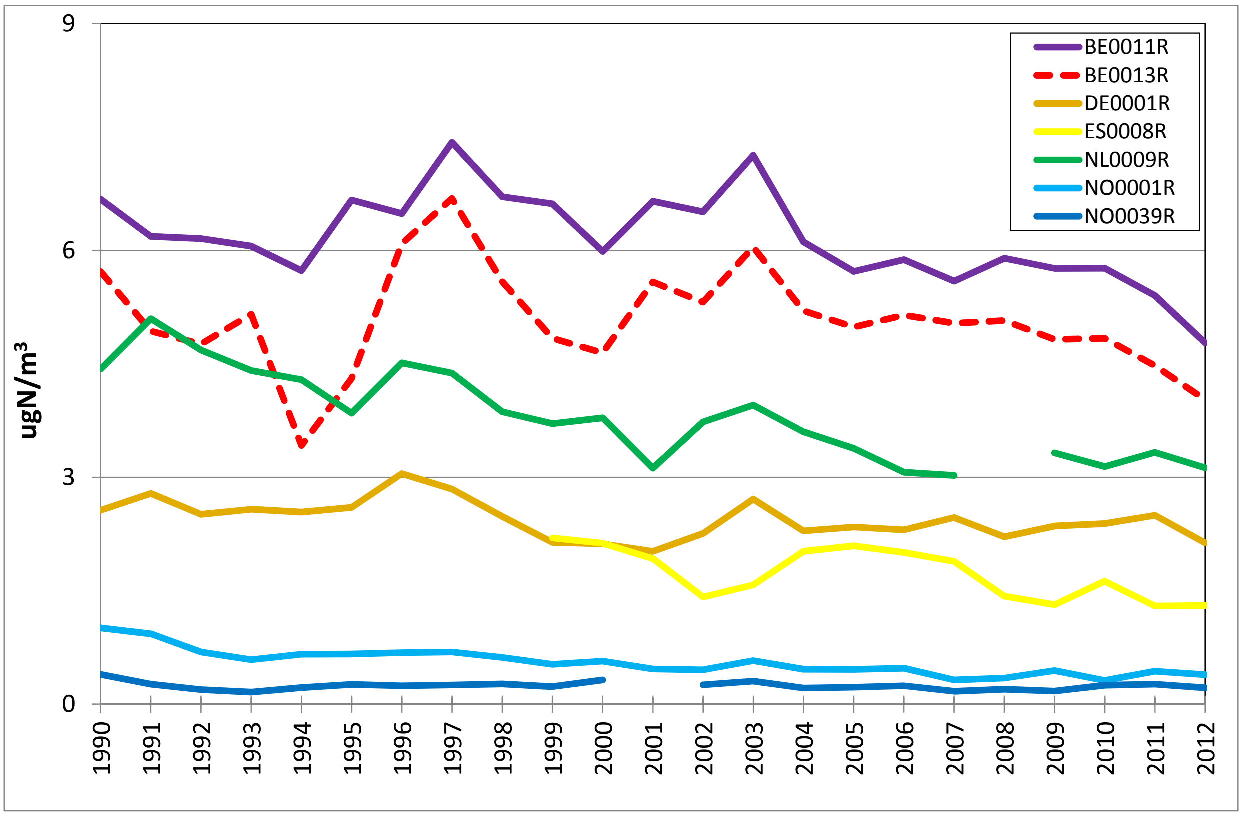

Figure 4.1: Time series of NO_2. Time series of solid lines are sites with significant trends while dotted lines are not.

The total European ammonia emissions decreased by 29% from 1990 to 2009 (Tørseth et al, 2012), though with large regional differences. A majority of the CAMP sites show a decreasing trend in both air and precipitation, on average 10% in precipitation. In air however, it is an average increase of 25%, Table 4.1. However, it should be noted that some sites are, due to their location in rural districts, partly affected by local ammonia emissions. This is especially the case for the two sites in Norway, which show a large increase, and excluding these two Norwegian sites, the remaining four sites show a significant decrease of 44%. Concentrations from 2000-2012 show no clear tendency (Table 4.1 and Figure 4.4 and 4.5).

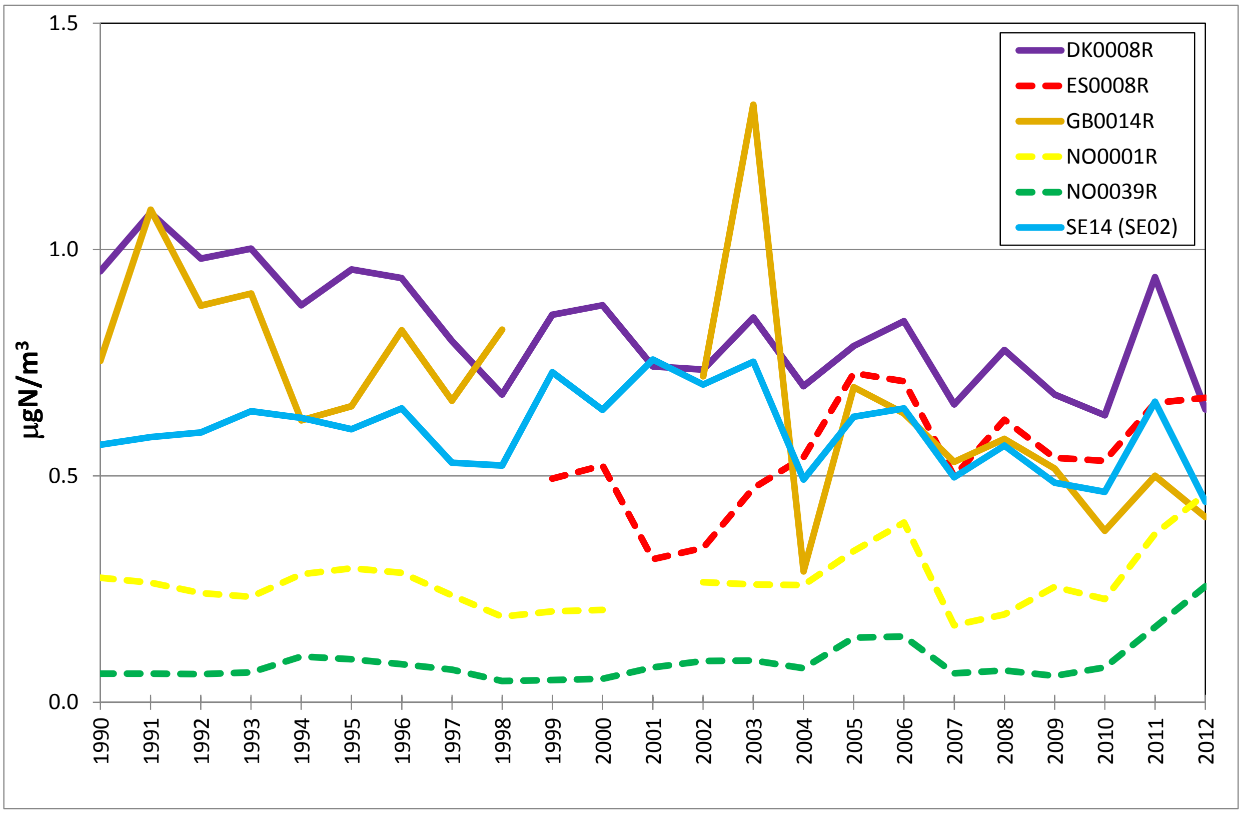

Figure 4.2: Time series of sum of nitrate (HNO_3+NO_3) in air. Solid lines are sites with significant trends while dotted lines are not.

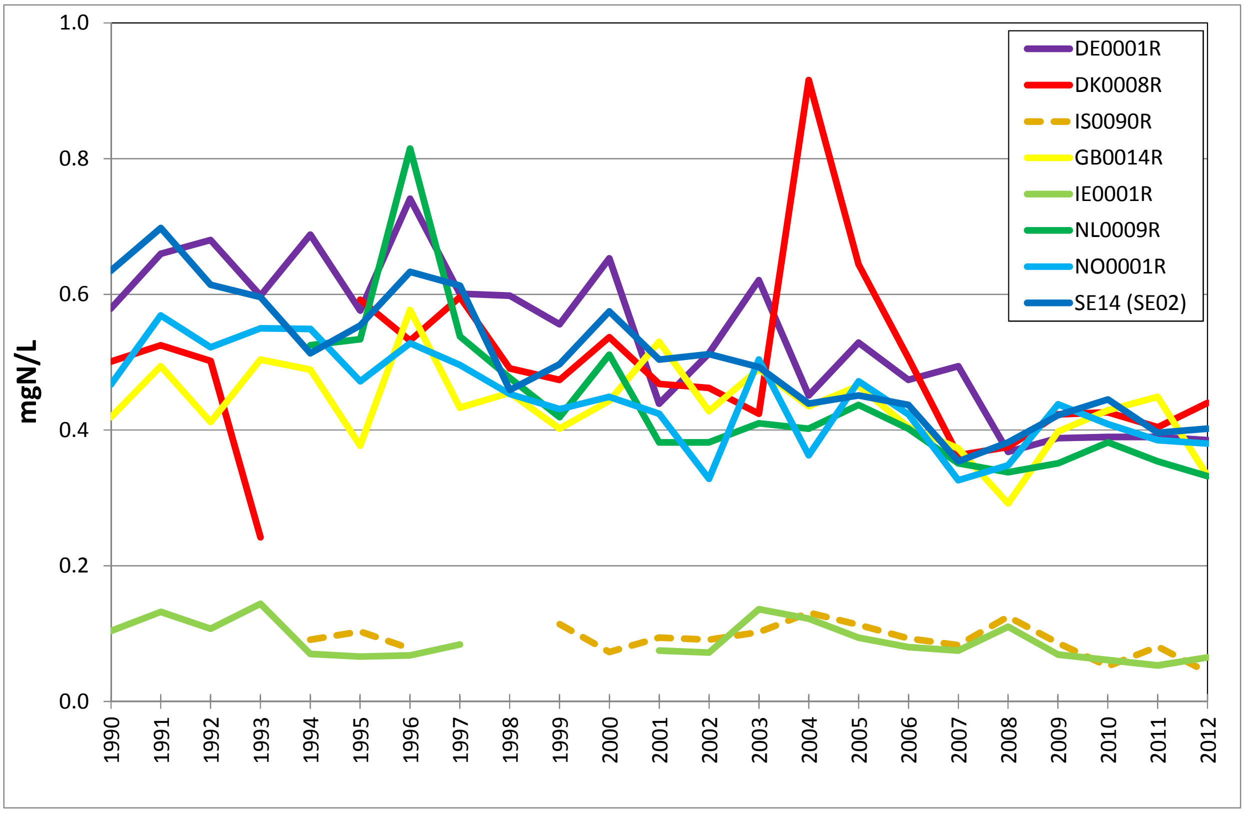

Figure 4.3: Time series of NO_3 in precipitation. Solid lines are sites with significant trends while dotted lines are not.

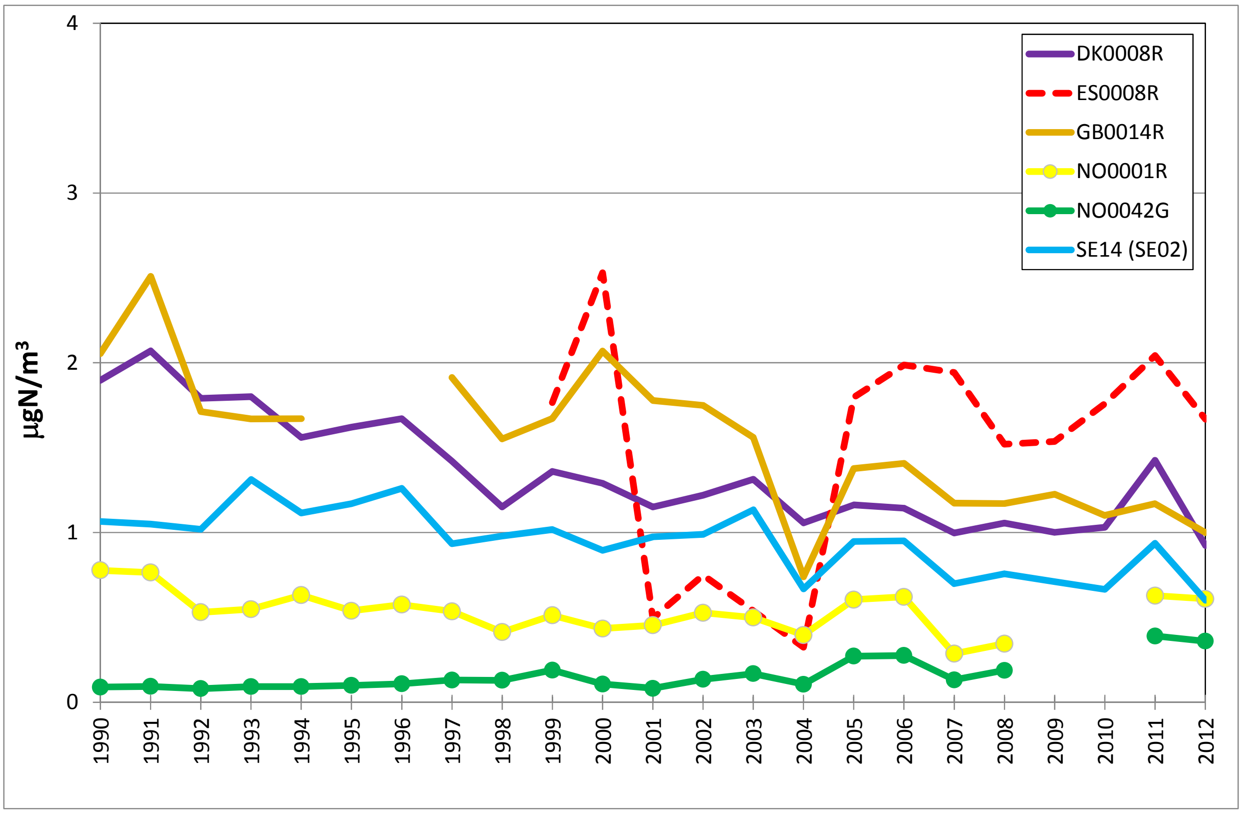

Figure 3.4: Time series of sum of ammonium (NH_3+NH_4) in air. Solid lines are sites with significant trends while dotted lines are not.

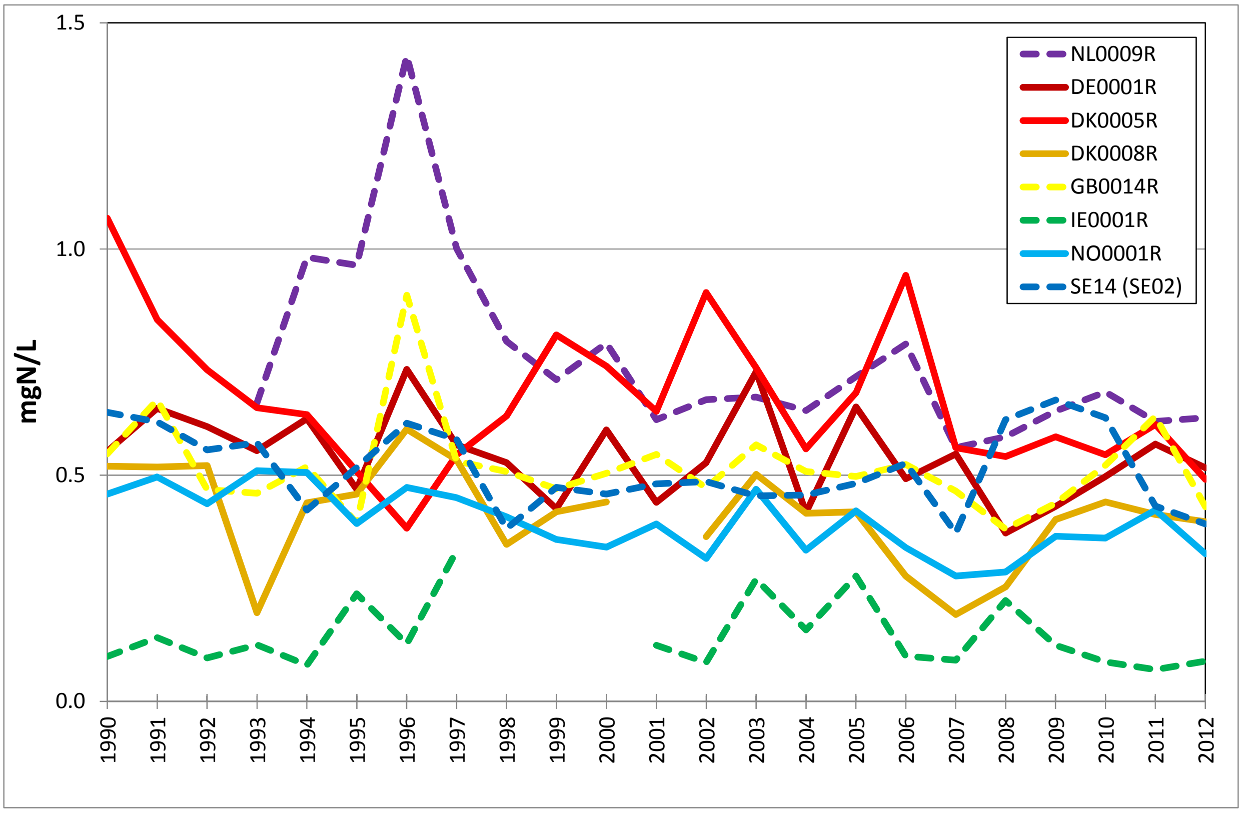

Figure 4.5: Time series of NH_4 in precipitation. Solid lines are sites with significant trends while dotted lines are not.

Time series in annual mean of heavy metals

When looking at trends in heavy metals, one should keep in mind the location of sites with long term monitoring and that their average decrease may be different from that for the OSPAR area as a whole. Nevertheless, there is a very clear reduction in both lead and cadmium at the CAMP sites since 1990 as well as from 2000 (see Table 4.1 and Figure 4.6-4.9). This is in line with reported emission reductions in Europe (Pacyna et al., 2009).

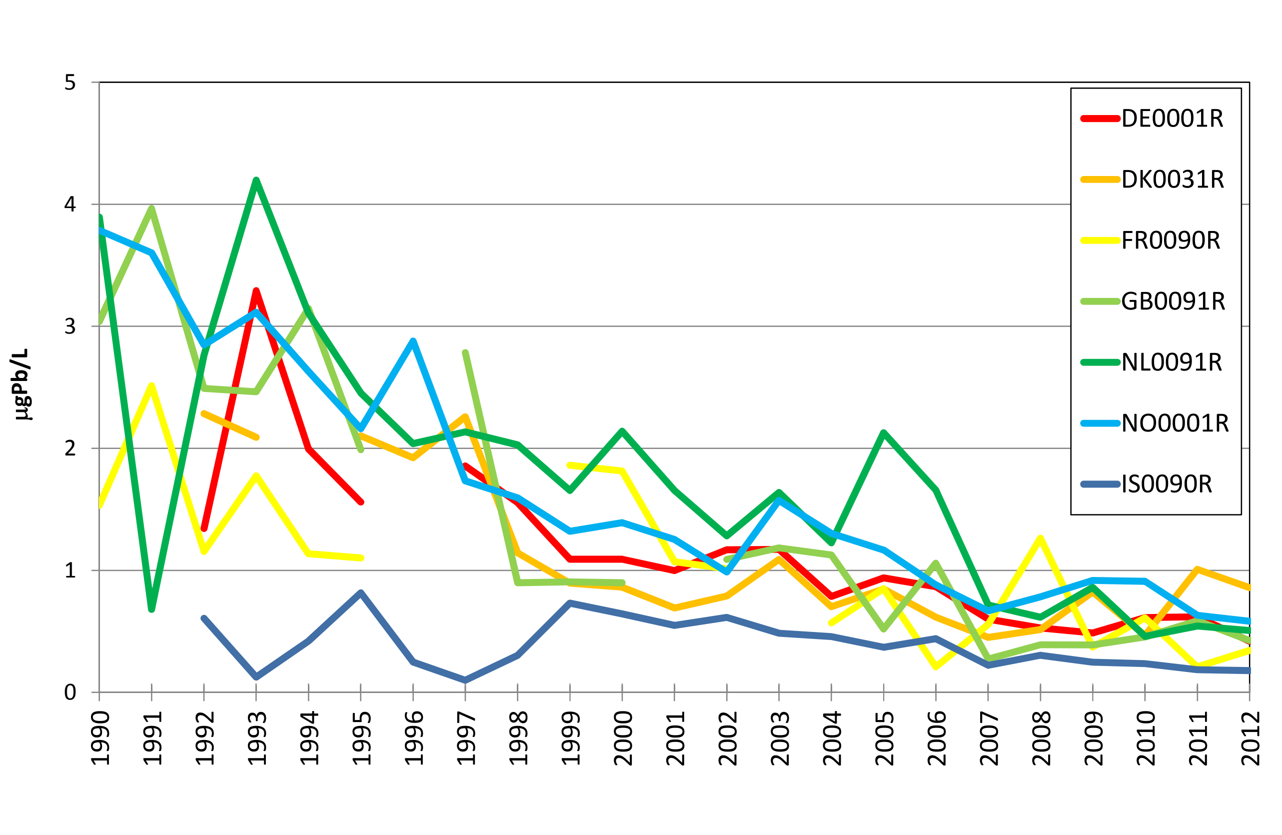

Figure 4.6: Time series of lead in precipitation. Solid lines are sites with significant trends while dotted lines are not.

For mercury, there are only Scandinavian and German sites which have long-term measurements, see Figure 4.10. There seems to be a reduction in the concentrations in the earlier part of the period, but in the last 10-15 years the level has not changed significantly. There is some inter-annual variability, but no clear tendency. This is in line with the fact that the major decline of the European Hg emissions occurred at the end of the 1980s and around 1990 (Pacyna et al., 2009).

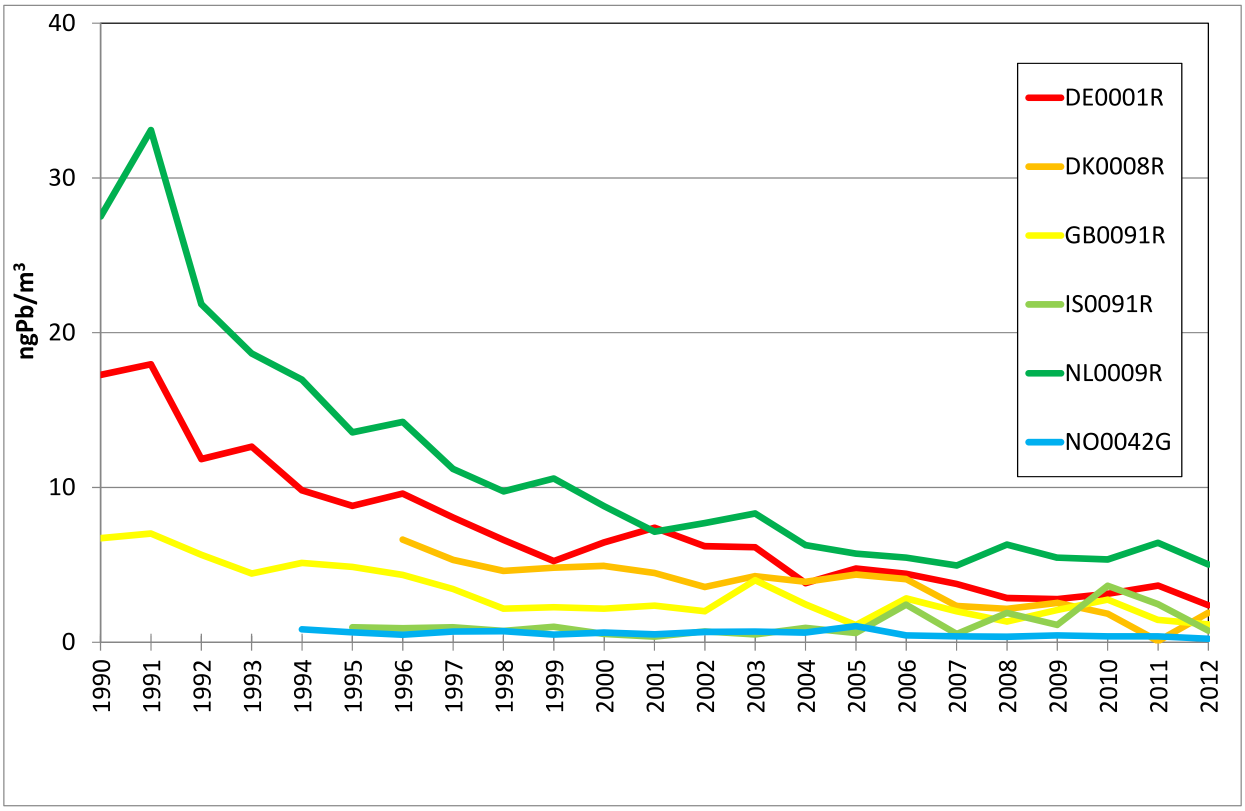

Figure 4.7: Time series of lead in air. Solid lines are sites with significant trends while dotted lines are not.

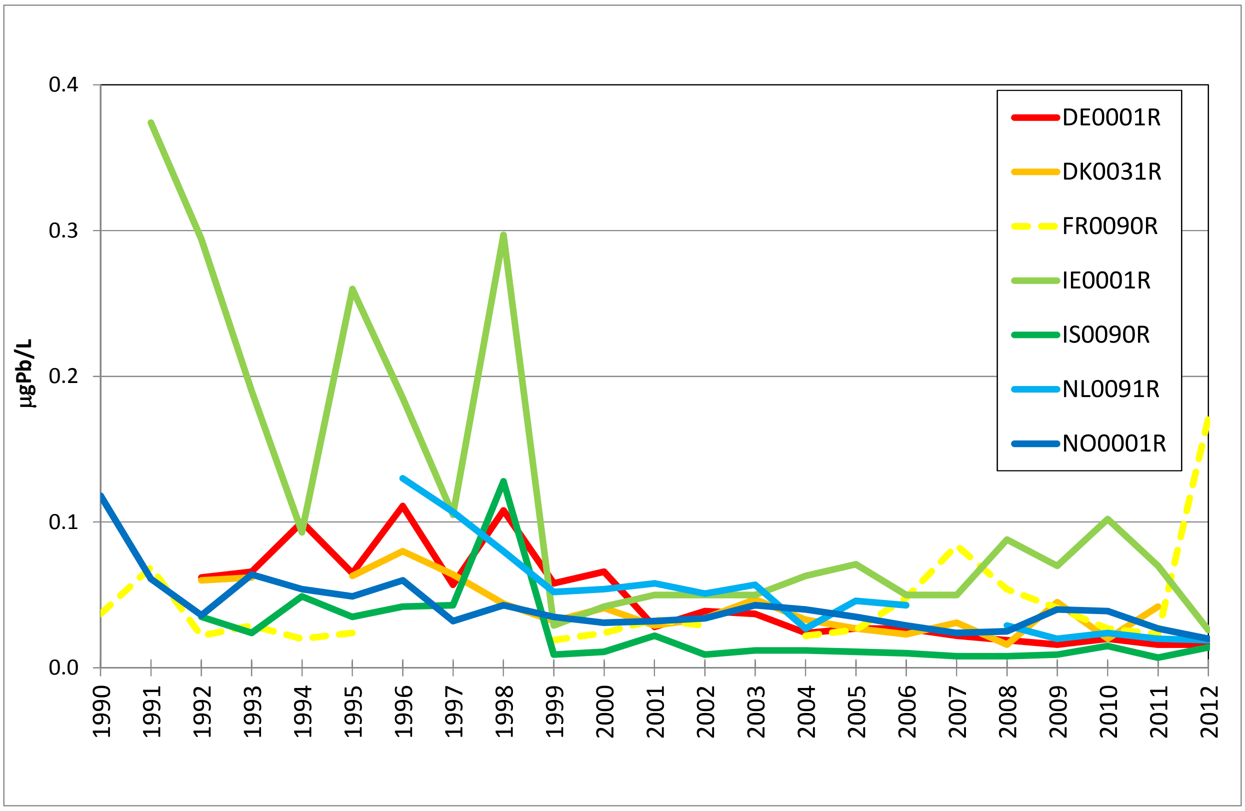

Figure 4.8: Time series of cadmium in precipitation. Solid lines are sites with significant trends while dotted lines are not.

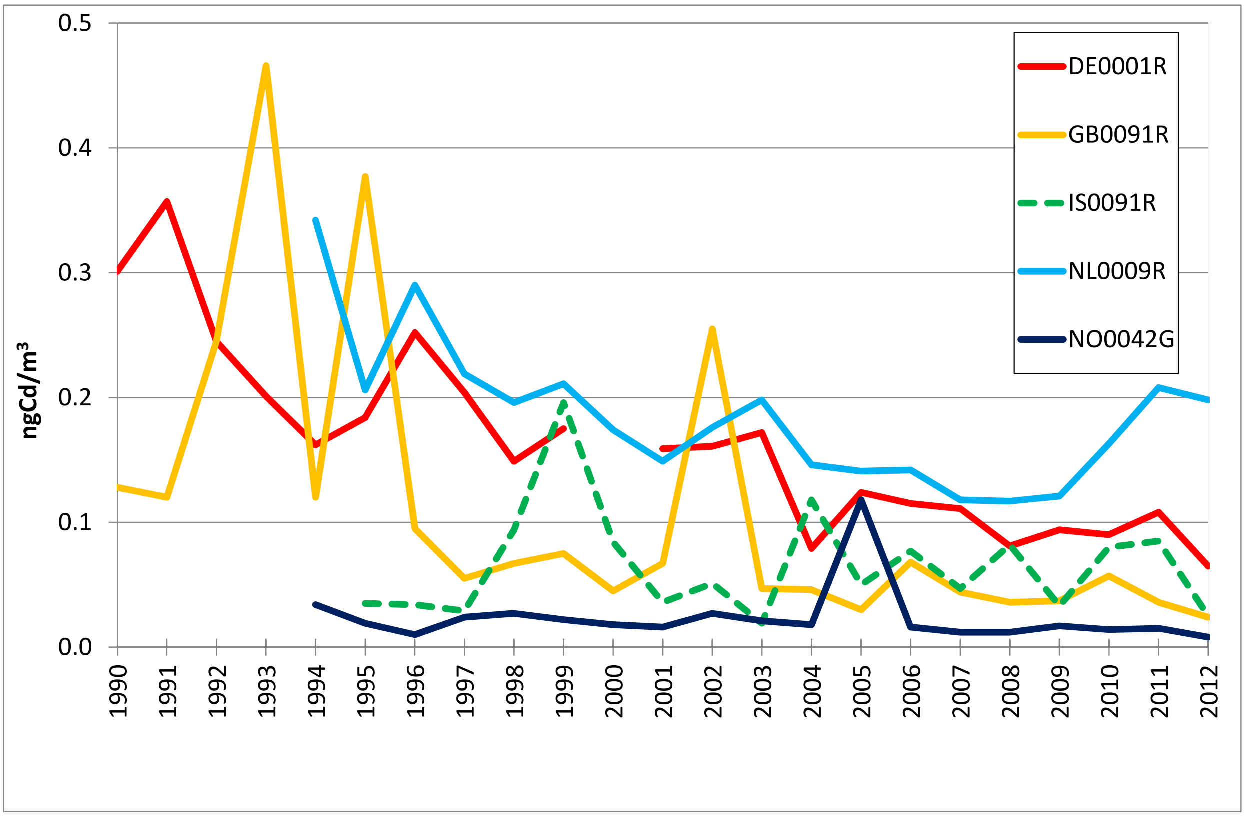

Figure 4.9: Time series of cadmium in air. Solid lines are sites with significant trends while dotted lines are not.

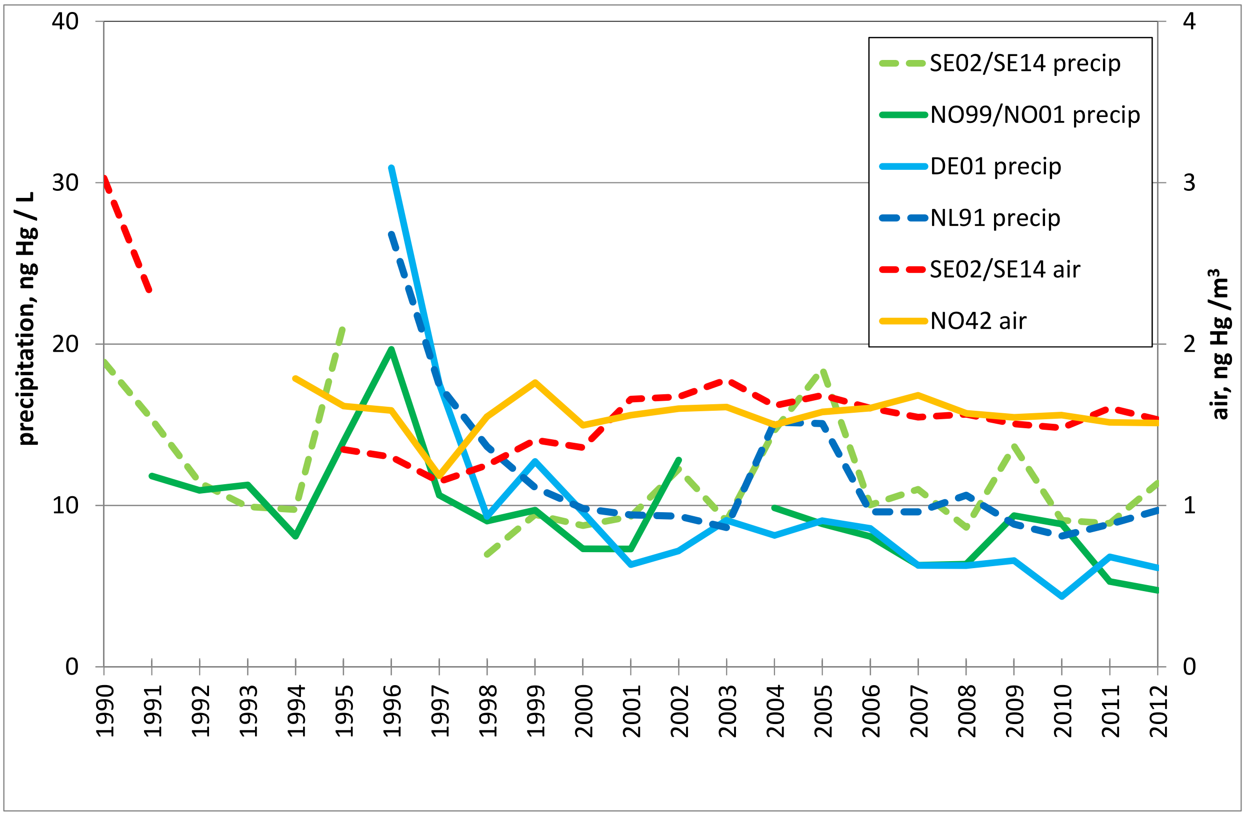

Figure 4.10: Time series of mercury. Solid lines are sites with significant trends while dotted lines are not.

Time series in annual mean for γ-HCH

For γ-HCH there has been a significant decline at all sites which have measured this compound especially before 2000, see Figure 4.11 and Figure 4.12. For most other POPs, there are few long-term measurements, but it is quite clear that for legacy POPs there is a general reduction in the observed concentration levels (Tørseth et al, 2012).

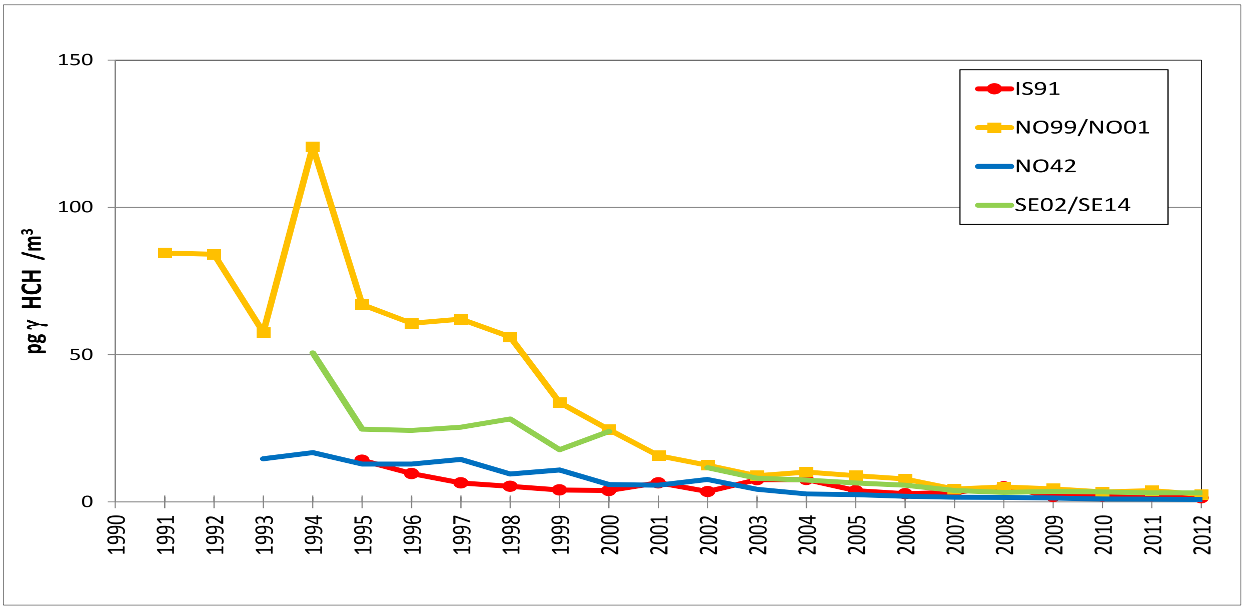

Figure 4.11: Time series of γ-HCH in air.

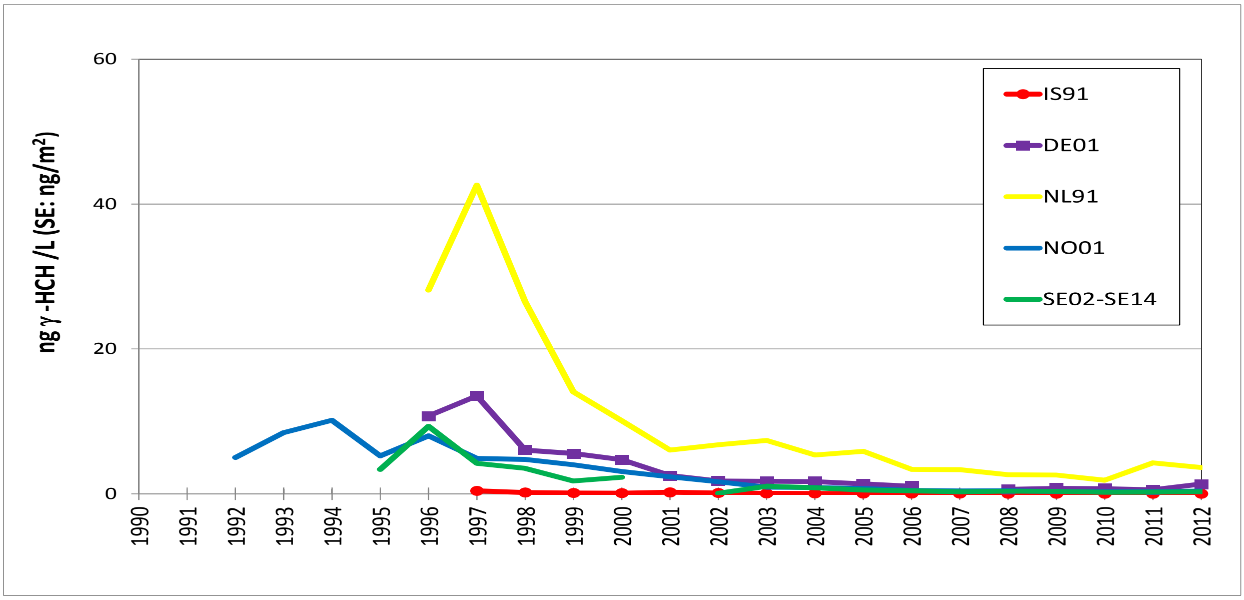

Figure 4.12: Time series of γ-HCH in precipitation (SE02-14 – total deposition).

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Annex 1: Monitoring stations reporting to CAMP in 2012

Table A.1.1: Details of locations of monitoring stations with coordinates and corresponding OSPAR region.

Country	Station number	Station name	OSPAR Region	Lat.	Long.	Masl
Iceland	IS0001R	Irafoss	I	64º 5' N	21º1' W	66 m
	IS0090R	Reykjavik	I	63º 8' N	20º 54' W	52 m
	IS0091R	Storhofdi	I	63º 24' N	20º 17' W	118 m
Norway	NO0001R	Birkenes	II	58º 23' N	8º 15' E	190 m
	NO0039R	Kårvatn	I	62º 47' N	8º 53' E	210 m
	NO0042G	Zeppelin	I	78º54' N	11º53' E	475 m
	NO0090R	Andøya	I	69º16' N	16º0' E	380 m
	NO0554R	Haukeland	II	60°49' N	5°35' E	190 m
	NO0572R	Vikedal	II	59°32'N	5°58' E	60 m
	NO0655R	Nausta	II	61°35' N	5°54' E	230 m
Belgium	BE0014R	Koksijde	II	51°7' N	2°39' E	4 m
	BE0011R	Moerkerke	II	51°1''N	2°35''E	0 m
	BE0013R	Houtem	II	51°15''N	3°21''E	10 m
Netherlands	NL0009R	Kollumerwaard	II	53º 20' N	6º 17' E	1 m
	NL0091R	De Zilk	II	52º 18' N	4º 31' E	4 m
Germany	DE0001R	Westerland	II	54º 56' N	8 º 19' E	12 m
Denmark	DK0005R	Keldsnor	II	54º44'N	10º44'E	19 m
	DK0008R	Anholt	II	56º43'N	11º31'E	40 m
	DK0022R	Sepstrup Sande	II	55º5'N	9º36'E	60 m
	DK0031R	Ulborg	II	56º17'N	8º26'E	10 m
Sweden	SE0014R	Råö	II	57º24' N	11º55' E	5 m
United Kingdom	GB0006R	Lough Navar	III	54º26' N	7º54 W	126 m
	GB0013R	Yarner Wood	II	50º36' N	3º43 W	119 m
	GB0014R	High Muffles	II	54º20' N	0º48' W	267 m
	GB0017R	Heigham Holmes	II	52º43' N	1º37' E	0 m
	GB0054R	Glen Saugh	II	56°54'N	2°34' W	85 m
	GB0091R	Banchory	II	57º05' N	2º32' W	120 m
Ireland	IE0001R	Valentia Observ.	III	51º56' N	10º15' W	11 m
France	FR0090R	Porspoder	II	48º31N	4º45'W	50 m
Portugal	PT00026	Alfragide	IV	38º44'N	9º12' W	109 m
	PT0004R	Monte Velho	IV	38º05'N	8º48' W	43 m
Spain	ES0005R	Noya	IV	42º44'N	8º55' W	683 m
	ES0008R	Niembro	IV	43º27'N	4º51' W	134 m
	ES0017R	Doñana	IV	37º2'N	6º20' W	5 m

Table A.1.2: Responsible CAMP institutes and contact persons.

Country	Institute	Data reporter
Belgium	Flemish Environment Agency	Elke Adriaenssens
Denmark	Department of Environmental Science, Aarhus University	Thomas Ellermann, Rune Keller
France	Université de Bretagne	Matthieu Waeles
Germany	Umweltbundesamt, Langen	Elke Bieber
Great Britain	AEA Technology and	Keith Vincent
	Centre for Ecology and Hydrology (CEH), Edinburgh	Heath M. Malcolm
Iceland	The Icelandic Meteorological Office	Arni Sigurdsson
Ireland	Environmental Protection Agency	Micheál O'Dwyer
Netherlands	National Institute for Public Health and Environmental Protection (RIVM)	Hans Berkhout
Norway	Norwegian Institute for Air Research (NILU)	Marit Vadset, Wenche Aas
Portugal	The Portugese Air Quality refernce Laboratory	Nuno Silva Oteda
Spain	Ministerio de Agrilcultura, Alimentación y Medio Ambiente	José A. Díaz Lázaro-Carrasco, Alberto Orío-Hernández
Sweden	IVL Swedish Environmental Research Institute	Karin Sjöberg, Ingvar Wängberg

Annex 2: Monthly and annual means of reported components

Table A.2.1: Nitrate and ammonium concentrations in precipitation, 2012

Site	Comp	Unit	jan	febr	mar	apr	may	june	july	aug	sept	oct	nov	dec	year
BE0014R	ammonium	mgN/L	0,53	0,51	0,79	0,99	1,04	0,66	0,45	0,86	0,49	0,30	0,28	0,29	0,52
DE0001R	ammonium	mgN/L	0,21	0,81	2,03	1,43	1,11	0,49	0,52	0,71	0,24	0,40	0,67	0,35	0,52
DK0005R	ammonium	mgN/L	0,15	1,40	1,81	1,67	0,86	0,50	0,33	0,68	0,53	0,36	0,43	0,38	0,49
DK0008R	ammonium	mgN/L	0,11	0,26	0,97	1,13	0,54	0,25	0,34	0,42	0,59	0,26	0,33	0,31	0,40
DK0022R	ammonium	mgN/L	0,18	0,39	0,84	0,92	0,80	0,52	0,32	0,34	0,22	0,29	0,31	0,26	0,40
DK0031R	ammonium	mgN/L	-	0,24	0,84	0,86	0,48	0,26	0,32	0,42	0,18	-	0,37	0,19	0,39
ES0005R	ammonium	mgN/L	0,07	-	0,09	0,12	0,04	0,03	0,02	0,04	0,02	0,04	0,07	0,05	0,06
ES0008R	ammonium	mgN/L	0,16	0,25	0,29	0,42	0,38	0,31	0,60	0,43	0,56	0,21	0,15	0,15	0,30
ES0017R	ammonium	mgN/L	0,02	-	0,36	0,20	0,03	-	-	-	0,30	0,06	0,06	0,05	0,11
GB0006R	ammonium	mgN/L	0,004	0,11	0,39	0,25	0,24	0,20	0,05	0,18	0,16	0,17	0,10	0,19	0,15
GB0013R	ammonium	mgN/L	0,25	0,73	1,12	0,37	0,35	0,22	0,12	0,23	0,17	0,24	0,25	0,13	0,24
GB0014R	ammonium	mgN/L	0,79	0,77	0,82	0,66	0,46	0,48	0,47	0,78	0,19	0,32	0,21	0,28	0,43
GB0054R	ammonium	mgN/L	0,35	0,81	0,89	0,53	0,29	0,30	0,21	0,52	0,12	0,29	0,18	0,35	0,36
IE0001R	ammonium	mgN/L	0,08	0,22	0,26	0,13	0,27	0,07	0,09	0,05	0,07	0,04	0,07	0,04	0,09
IS0090R	ammonium	mgN/L	0,17	0,25	0,24	0,09	1,61	0,45	1,31	0,23	0,12	0,20	0,16	0,10	0,24
IS0091R	ammonium	mgN/L	0,01	0,05	0,52	-	-	0,01	-	0,37	0,01	0,01	0,01	0,01	0,09
NL0009R	ammonium	mgN/L	0,26	0,94	1,76	1,12	1,25	0,76	0,57	1,03	0,35	0,43	0,53	0,43	0,63
NL0091R	ammonium	mgN/L	0,30	0,59	1,64	1,03	0,73	0,52	0,27	0,50	0,28	0,33	0,25	0,26	0,42
NO0001R	ammonium	mgN/L	0,21	0,45	0,72	0,76	0,41	0,25	0,22	0,53	0,15	0,14	0,50	0,14	0,33
NO0039R	ammonium	mgN/L	0,03	0,08	0,15	0,10	0,17	0,17	0,18	0,24	0,04	0,03	0,26	0,17	0,12
NO0554R	ammonium	mgN/L	0,04	0,08	0,12	0,22	0,13	0,13	0,06	0,10	0,12	0,02	0,08	0,08	0,09
NO0572R	ammonium	mgN/L	0,19	0,22	0,75	0,38	0,42	0,46	0,27	0,28	0,15	0,09	0,21	0,15	0,28
NO0655R	ammonium	mgN/L	0,18	0,14	0,24	0,66	0,17	0,26	0,05	0,07	0,06	0,24	0,15	0,18	0,17
SE0014R	ammonium	mgN/L	0,12	0,28	1,44	1,10	0,75	0,34	0,28	0,46	0,27	0,26	0,33	0,15	0,39
BE0014R	nitrate	mgN/L	0,38	0,39	0,31	0,55	0,54	0,27	0,28	0,34	0,20	0,19	0,29	0,22	0,29
DE0001R	nitrate	mgN/L	0,15	0,62	1,07	0,72	0,66	0,34	0,27	0,44	0,26	0,35	0,59	0,47	0,39
DK0005R	nitrate	mgN/L	0,22	1,91	1,84	0,87	0,39	0,39	0,33	0,44	0,40	0,39	0,54	0,63	0,43
DK0008R	nitrate	mgN/L	0,19	0,39	0,65	0,73	0,58	0,25	0,42	0,40	0,51	0,46	0,60	0,58	0,44
DK0022R	nitrate	mgN/L	0,23	0,44	0,56	0,52	0,61	0,37	0,27	0,31	0,25	0,38	0,49	0,37	0,37
DK0031R	nitrate	mgN/L	-	0,33	0,63	0,58	0,38	0,28	0,33	0,32	0,21	-	0,72	0,33	0,35
ES0005R	nitrate	mgN/L	0,12	-	0,16	0,07	0,07	0,05	0,04	0,07	0,06	0,05	0,07	0,10	0,07
ES0008R	nitrate	mgN/L	0,58	0,71	0,70	0,56	0,47	0,65	0,68	0,68	1,68	0,94	0,96	1,64	0,80
ES0017R	nitrate	mgN/L	0,14	-	0,27	0,29	0,04	-	-	-	1,29	0,10	0,10	0,12	0,18
FR0090R	nitrate	mgN/L	0,05	0,16	0,80	1,80	0,50	0,08	0,36	0,70	0,39	0,09	0,12	0,05	0,45
GB0006R	nitrate	mgN/L	0,004	0,06	0,17	0,15	0,18	0,11	0,08	0,10	0,01	0,04	0,00	0,09	0,07
GB0013R	nitrate	mgN/L	0,24	0,56	0,89	0,27	0,32	0,24	0,21	0,13	0,10	0,26	0,15	0,10	0,20
GB0014R	nitrate	mgN/L	0,47	0,40	0,37	0,38	0,37	0,32	0,41	0,46	0,20	0,38	0,25	0,30	0,33
GB0054R	nitrate	mgN/L	0,35	0,79	0,59	0,53	0,29	0,30	0,18	0,34	0,12	0,46	0,22	0,45	0,37
IE0001R	nitrate	mgN/L	0,08	0,13	0,17	0,10	0,23	0,06	0,05	0,04	0,05	0,04	0,03	0,03	0,07
IS0002R	nitrate	mgN/L	0,07	0,03	0,06	0,11	0,06	1,77	0,37	0,45	0,06	0,07	0,07	0,13	0,12
IS0090R	nitrate	mgN/L	0,03	0,02	0,05	0,06	0,13	0,13	0,11	0,07	0,03	0,04	0,03	0,02	0,04
IS0091R	nitrate	mgN/L	0,24	0,04	0,12	-	-	0,07	-	0,14	0,01	0,06	0,01	0,01	0,09
NL0009R	nitrate	mgN/L	0,15	0,53	0,77	0,61	0,52	0,32	0,33	0,42	0,25	0,27	0,32	0,35	0,33
NL0091R	nitrate	mgN/L	0,30	0,40	0,76	0,62	0,54	0,29	0,30	0,30	0,27	0,32	0,38	0,31	0,35
NO0001R	nitrate	mgN/L	0,24	0,77	0,40	0,73	0,61	0,31	0,27	0,41	0,22	0,22	0,58	0,28	0,38
NO0039R	nitrate	mgN/L	0,04	0,05	0,08	0,05	0,11	0,09	0,06	0,11	0,02	0,02	0,04	0,10	0,06
NO0554R	nitrate	mgN/L	0,07	0,07	0,10	0,29	0,10	0,16	0,08	0,13	0,07	0,06	0,10	0,20	0,10
NO0572R	nitrate	mgN/L	0,06	0,10	0,31	0,22	0,26	0,32	0,16	0,22	0,05	0,03	0,25	0,10	0,17
NO0655R	nitrate	mgN/L	0,04	0,05	0,11	0,27	0,06	0,13	0,08	0,10	0,04	0,09	0,09	0,05	0,08
SE0014R	nitrate	mgN/L	0,23	0,41	1,12	0,67	0,60	0,30	0,28	0,37	0,33	0,46	0,55	0,37	0,40
BE0014R	precipitation_amount	mm'	31	29	56	54	76	73	164	29	95	170	86	127	984
DE0001R	precipitation_amount	mm'	62	20	16	29	19	101	145	75	148	152	78	90	934
DK0005R	precipitation_amount	mm'	63	12	4	25	38	71	65	39	43	41	42	55	500
DK0008R	precipitation_amount	mm'	50	21	20	44	23	114	32	104	31	75	42	68	625
DK0022R	precipitation_amount	mm'	23	52	36	62	30	41	85	88	123	108	67	88	803
DK0031R	precipitation_amount	mm'	0,04	27	31	68	73	81	83	72	125	0	0,3	69	629
ES0005R	precipitation_amount	mm'	60	6	43	215	227	180	62	95	77	288	244	345	1841
ES0008R	precipitation_amount	mm'	61	103	36	230	27	75	39	31	39	136	122	50	948
ES0017R	precipitation_amount	mm'	2	0	49	24	37	0	0	0	14	101	110	24	361
FR0090R	precipitation_amount	mm'	78	32	44	193	81	131	95	82	57	139	173	232	1337
GB0006R	precipitation_amount	mm'	174	85	43	86	70	211	86	176	145	161	161	158	1553
GB0013R	precipitation_amount	mm'	35	12	17	140	88	187	77	158	123	130	195	247	1402
GB0014R	precipitation_amount	mm'	10	20	23	96	88	119	80	75	105	71	117	145	946
GB0054R	precipitation_amount	mm'	19	36	24	117	61	172	111	121	49	114	61	190	1070
IE0001R	precipitation_amount	mm'	154	68	42	120	53	130	174	154	76	141	198	175	1481
IS0002R	precipitation_amount	mm'	330	278	247	48	56	15	51	177	210	120	95	138	1765
IS0090R	precipitation_amount	mm'	103	118	89	55	15	14	24	76	84	71	74	88	809
IS0091R	precipitation_amount	mm'	292	194	147	39	42	44	38	68	142	84	108	152	1349
NL0009R	precipitation_amount	mm'	76	15	12	32	47	79	97	85	79	104	57	110	794
NL0091R	precipitation_amount	mm'	43	20	20	49	67	74	177	87	118	137	82	106	978
NO0001R	precipitation_amount	mm'	159	27	31	166	76	203	85	180	203	263	298	298	1989
NO0039R	precipitation_amount	mm'	118	180	315	104	142	89	108	110	143	158	38	17	1523
NO0554R	precipitation_amount	mm'	256	365	425	106	291	96	230	228	530	348	545	321	3707
NO0572R	precipitation_amount	mm'	323	358	200	103	165	197	216	91	197	80	343	315	2557
NO0655R	precipitation_amount	mm'	172	279	360	42	137	85	140	108	280	154	265	174	2180
SE0014R	precipitation_amount	mm'	62	30	12	60	53	106	110	93	115	83	59	51	833

Table A.2.2: Wet deposition of nitrogen, 2012

Site	Comp	Unit	jan	febr	mar	apr	may	june	july	aug	sept	oct	nov	dec	year	Total N
BE0014R	ammonium	mg N m/2	15	15	45	53	79	48	73	25	46	50	24	37	509	
BE0014R	nitrate	mg N m/2	11	11	17	29	40	20	45	10	19	32	25	27	287	796
BE0014R	precipitation_amount	mm	31	29	56	54	76	73	164	29	95	170	86	127	984	
DE0001R	ammonium	mg N m/2	13	16	33	42	21	49	75	53	35	60	52	31	482	
DE0001R	nitrate	mg N m/2	9	12	18	21	12	34	40	33	38	53	46	42	359	842
DE0001R	precipitation_amount	mm	62	20	16	29	19	101	145	75	148	152	78	90	934	
DK0005R	ammonium	mg N m/2	9	17	8	42	32	35	21	26	23	15	18	21	246	
DK0005R	nitrate	mg N m/2	14	24	8	22	15	28	21	17	17	16	23	34	217	462
DK0005R	precipitation_amount	mm	63	12	4	25	38	71	65	39	43	41	42	55	500	
DK0008R	ammonium	mg N m/2	5	5	19	49	13	28	11	44	18	20	14	21	248	
DK0008R	nitrate	mg N m/2	9	8	13	32	13	29	13	42	16	34	26	39	275	523
DK0008R	precipitation_amount	mm	50	21	20	44	23	114	32	104	31	75	42	68	625	
DK0022R	ammonium	mg N m/2	4	20	31	57	24	22	27	30	27	31	21	23	320	
DK0022R	nitrate	mg N m/2	5	23	20	32	18	15	23	27	30	41	33	33	300	620
DK0022R	precipitation_amount	mm	23	52	36	62	30	41	85	88	123	108	67	88	803	
DK0031R	ammonium	mg N m/2	0	7	26	59	35	21	27	30	23	0	0	13	242	
DK0031R	nitrate	mg N m/2	0	9	19	39	27	22	28	23	26	0	0	23	217	460
DK0031R	precipitation_amount	mm	0	27	31	68	73	81	83	72	125	0	0	69	629	
ES0005R	ammonium	mg N m/2	4	-	4	25	10	5	1	4	2	13	17	18	104	
ES0005R	nitrate	mg N m/2	7	-	7	15	16	8	2	6	5	15	18	33	133	237
ES0005R	precipitation_amount	mm'	60	6	43	215	227	180	62	95	77	288	244	345	1841	
ES0008R	ammonium	mg N m/2	10	25	11	96	10	23	23	13	22	28	18	8	287	
ES0008R	nitrate	mg N m/2	35	73	25	129	13	49	27	21	66	127	117	81	763	1050
ES0008R	precipitation_amount	mm'	61	103	36	230	27	75	39	31	39	136	122	50	948	
ES0017R	ammonium	mg N m/2	0,0	0	17	5	1	0	0	0	4	6	7	1	41	
ES0017R	nitrate	mg N m/2	0,3	0	13	7	1	0	0	0	18	10	11	3	63	104
ES0017R	precipitation_amount	mm'	2	0	49	24	37	0	0	0	14	101	110	24	361	
FR0090R	nitrate	mg N m/2	4	5	35	348	40	10	34	58	22	13	20	12	601	
FR0090R	precipitation_amount	mm	78	32	44	193	81	131	95	82	57	139	173	232	1337	
GB0006R	ammonium	mg N m/2	1	9	17	22	17	42	4	32	22	27	16	30	239	
GB0006R	nitrate	mg N m/2	1	5	7	13	13	22	6	18	2	7	0	15	108	347
GB0006R	precipitation_amount	mm'	174	85	43	86	70	211	86	176	145	161	161	158	1553	
GB0013R	ammonium	mg N m/2	9	9	19	51	31	42	9	37	21	31	49	32	338	
GB0013R	nitrate	mg N m/2	8	7	15	38	28	45	16	21	12	33	30	25	278	616
GB0013R	precipitation_amount	mm	35	12	17	140	88	187	77	158	123	130	195	247	1402	
GB0014R	ammonium	mg N m/2	8	15	19	64	40	57	37	59	20	22	25	40	406	
GB0014R	nitrate	mg N m/2	5	8	9	36	32	38	33	34	21	27	29	44	315	721
GB0014R	precipitation_amount	mm	10	20	23	96	88	119	80	75	105	71	117	145	946	
GB0054R	ammonium	mg N m/2	7	29	21	62	18	52	23	63	6	33	11	66	389	
GB0054R	nitrate	mg N m/2	7	28	14	62	18	51	21	42	6	53	14	85	397	786
GB0054R	precipitation_amount	mm	19	36	24	117	61	172	111	121	49	114	61	190	1070	
IE0001R	ammonium	mg N m/2	12	15	11	16	14	9	16	8	5	6	14	7	132	
IE0001R	nitrate	mg N m/2	12	9	7	12	12	8	9	6	4	6	6	5	96	228
IE0001R	precipitation_amount	mm	154	68	42	120	53	130	174	154	76	141	198	175	1481	
IS0002R	nitrate	mg N m/2	24	8	14	5	3	26	19	80	13	9	7	18	214	
IS0002R	precipitation_amount	mm'	330	278	247	48	56	15	51	177	210	120	95	138	1765	
IS0090R	ammonium	mg N m/2	17	29	21	5	24	6	31	18	10	14	12	9	197	
IS0090R	nitrate	mg N m/2	3	2	4	3	2	2	3	5	3	3	2	2	35	232
IS0090R	precipitation_amount	mm	103	118	89	55	15	14	24	76	84	71	74	88	809	
IS0091R	ammonium	mg N m/2	1	10	76	-	-	0	-	25	1	0	1	1	127	
IS0091R	nitrate	mg N m/2	70	8	18	-	-	3	-	10	1	5	1	1	127	253
IS0091R	precipitation_amount	mm	292	194	147	39	42	44	38	68	142	84	108	152	1349	
NL0009R	ammonium	mg N m/2	20	14	21	36	58	60	56	88	28	44	30	47	497	
NL0009R	nitrate	mg N m/2	11	8	9	20	24	25	32	35	20	28	18	38	263	761
NL0009R	precipitation_amount	mm	76	15	12	32	47	79	97	85	79	104	57	110	794	
NL0091R	ammonium	mg N m/2	13	12	32	50	49	38	47	44	33	45	20	28	263	
NL0091R	nitrate	mg N m/2	13	8	15	30	36	21	53	26	32	44	31	32	408	671
NL0091R	precipitation_amount	mm	43	20	20	49	67	74	177	87	118	137	82	106	978	
NO0001R	ammonium	mg N m/2	34	12	22	126	32	51	19	95	30	38	148	43	648	
NO0001R	nitrate	mg N m/2	39	21	12	121	46	64	23	74	44	57	172	83	756	1404
NO0001R	precipitation_amount	mm	159	27	31	166	76	203	85	180	203	263	298	298	1989	
NO0039R	ammonium	mg N m/2	3	14	46	11	25	15	19	26	5	5	10	3	179	
NO0039R	nitrate	mg N m/2	4	8	24	5	15	8	7	12	4	3	1	2	91	270
NO0039R	precipitation_amount	mm	118	180	315	104	142	89	108	110	143	158	38	17	1523	
NO0554R	ammonium	mg N m/2	11	28	52	23	37	12	14	23	62	8	41	26	336	
NO0554R	nitrate	mg N m/2	17	26	41	30	29	16	18	29	39	21	53	65	383	718
NO0554R	precipitation_amount	mm	256	365	425	106	291	96	230	228	530	348	545	321	3707	
NO0572R	ammonium	mg N m/2	63	78	149	39	70	90	58	26	29	7	73	46	724	
NO0572R	nitrate	mg N m/2	20	35	62	23	43	62	35	20	10	2	85	32	427	1151
NO0572R	precipitation_amount	mm	323	358	200	103	165	197	216	91	197	80	343	315	2557	
NO0655R	ammonium	mg N m/2	30	38	87	27	23	22	7	8	17	37	38	30	363	
NO0655R	nitrate	mg N m/2	7	14	40	11	9	11	12	11	12	13	25	9	174	537
NO0655R	precipitation_amount	mm	172	279	360	42	137	85	140	108	280	154	265	174	2180	
SE0014R	ammonium	mg N m/2	8	8	17	66	40	36	31	43	31	21	19	7	326	
SE0014R	nitrate	mg N m/2	15	12	13	40	32	32	31	34	38	38	32	19	335	661
SE0014R	precipitation_amount	mm	62	30	12	60	53	106	110	93	115	83	59	51	833	

Table A.2.3: Concentrations of nitrogen compounds in air, 2012

Site	Comp	Matrix	Unit	jan	febr	mar	apr	may	june	july	aug	sept	oct	nov	dec	year
BE0011R	nitrogen_dioxide	Air	µg N /m^3	-	7,92	7,92	3,96	3,96	2,44	2,74	3,65	3,65	5,18	6,09	5,18	4,78
BE0013R	nitrogen_dioxide	Air	µg N /m^3	4,87	6,70	7,00	3,65	3,65	1,83	2,13	2,74	3,04	4,57	4,26	3,96	4,03
DE0001R	nitrogen_dioxide	Air	µg N /m^3	2,38	2,46	2,25	1,97	1,42	1,23	1,15	1,45	0,96	2,47	3,99	3,94	2,13
DK0005R	nitrogen_dioxide	Air	µg N /m^3	2,16	2,03	2,85	2,61	2,72	1,64	1,93	2,19	1,59	2,46	3,92	3,09	2,44
DK0008R	nitrogen_dioxide	Air	µg N /m^3	-	-	2,58	1,59	2,08	1,18	1,15	1,24	0,83	1,70	2,20	1,56	1,55
ES0005R	nitrogen_dioxide	air	µg N /m^3	1,30	1,83	1,24	0,75	0,67	0,10	0,63	1,20	0,92	0,90	0,89	0,71	0,93
ES0008R	nitrogen_dioxide	air	µg N /m^3	1,37	1,62	1,78	1,09	0,99	0,88	1,00	0,95	1,57	1,73	1,39	1,26	1,30
ES0017R	nitrogen_dioxide	air	µg N /m^3	1,70	1,71	1,33	0,73	1,30	0,97	0,93	1,20	1,46	1,49	0,91	1,54	1,27
GB0014R	nitrogen_dioxide	air	µg N /m^3	2,22	2,33	3,49	1,29	1,18	1,20	1,08	1,36	1,15	1,86	2,76	2,44	1,87
GB0014R	nitrogen_dioxide	air	µg N /m^3	0,30	1,09	0,65	0.44	0,53	0.47	0,44	0,47	0,24	0,59	0,57	0,71	0,55
NL0009R	nitrogen_dioxide	air	µg N /m^3	4,06	3,76	3,86	2,51	2,33	1,44	1,48	1,82	1,97	3,20	5,55	5,60	3,13
NL0009R	nitrogen_dioxide	air	µg N /m^3	4,04	3,76	3,83	2,51	2,30	1,44	1,48	1,82	1,98	3,20	5,54	5,60	3,13
NL0091R	nitrogen_dioxide	air	µg N /m^3	5,69	7,55	6,40	4,17	3,97	2,85	2,92	3,74	3,25	5,90	7,82	6,77	5,03
NO0002R	nitrogen_dioxide	air	µg N /m^3	0,41	0,47	0,47	0,44	0,31	0,33	0,27	0,18	0,16	0,25	0,89	0,52	0,39
NO0039R	nitrogen_dioxide	air	µg N /m^3	0,61	0,26	0,26	0,25	0,23	0,19	0,19	0,08	0,09	0,10	0,23	0,20	0,22
SE0014R	nitrogen_dioxide	air	µg N /m^3	1,19	1,80	1,82	1,10	1,38	0,94	0,81	0,87	0,68	1,31	1,56	1,62	1,26
GB0006R	nitric_acid	air	µg N /m^3	0,04	0,05	-	0,02	0,11	0,05	0,07	0,04	0,02	0,02	0,01	0,04	0,04
GB0013R	nitric_acid	air	µg N /m^3	0,18	0,17	0,10	0,09	0,19	0,09	0,09	0,12	0,04	0,04	0,06	0,06	0,10
GB0014R	nitric_acid	air	µg N /m^3	0,19	0,19	0,09	0,10	0,23	0,22	0,11	0,16	0,06	0,08	0,06	0,14	0,14
GB0054R	nitric_acid	air	µg N /m^3	0,00	0,05	0,08	0,08	0,12	0,04	0,04	0,08	0,09	0,02	0,01	0,04	0,05
NO0002R	nitric_acid	air	µg N /m^3	0,16	0,22	0,08	0,14	0,28	0,13	0,26	0,23	0,05	0,16	0,12	0,05	0,15
NO0039R	nitric_acid	air	µg N /m^3	0,05	0,06	0,04	0,11	0,08	0,09	0,29	0,29	0,08	0,05	0,04	0,11	0,10
NO0042G	nitric_acid	air	µg N /m^3	0,06	0,05	0,03	0,10	0,06	0,10	0,06	0,04	0,12	0,09	0,07	0,04	0,07
DE0001R	nitrate	pm25	µg N /m^3	0,57	0,65	0,95	0,57	0,35	0,17	0,06	0,16	0,08	0,42	0,60	0,54	0,43
ES0005R	nitrate	pm10	µg N /m^3	0,22	0,40	0,39	0,26	0,20	0,14	0,13	0,09	0,08	0,13	0,07	0,08	0,18
ES0008R	nitrate	pm10	µg N /m^3	0,25	0,53	0,99	0,46	0,33	0,20	0,23	0,29	0,27	0,26	0,21	0,17	0,34
ES0008R	nitrate	pm25	µg N /m^3	-	-	-	-	-	-	-	0,002	0,004	0,010	0,010	0,014	-
ES0017R	nitrate	pm10	µg N /m^3	0,54	0,50	0,48	0,19	0,32	0,42	0,36	-	0,49	0,30	0,20	0,35	0,37
GB0006R	nitrate	aerosol	µg N /m^3	0,18	0,12	0,37	0,09	0,19	0,15	0,05	0,09	0,06	0,10	0,05	0,11	0,13
GB0013R	nitrate	aerosol	µg N /m^3	0,33	0,38	0,95	0,32	0,40	0,20	0,16	0,18	0,19	0,19	0,15	0,13	0,30
GB0014R	nitrate	aerosol	µg N /m^3	-	0,31	0,65	0,21	0,28	0,23	0,18	0,29	0,16	0,23	0,23	0,22	0,27
GB0054R	nitrate	aerosol	µg N /m^3	0,26	0,21	0,31	0,31	0,21	0,11	-	-	-	0,18	0,09	0,14	0,20
IS0091R	nitrate	aerosol	µg N /m^3	0,06	0,06	0,10	0,07	-	0,09	0,07	0,07	0,05	0,03	0,03	0,05	0,06
NL0009R	nitrate	aerosol	µg N /m^3	0,95	1,31	2,14	0,98	1,05	0,55	0,55	0,78	0,64	0,81	1,05	0,90	0,99
NL0091R	nitrate	aerosol	µg N /m^3	1,00	1,48	2,18	0,98	1,05	0,55	0,41	0,78	0,55	0,78	0,89	0,70	0,97
NO0002R	nitrate	aerosol	µg N /m^3	0,33	0,71	0,28	0,33	0,35	0,26	0,25	0,38	0,22	0,34	0,35	0,11	0,31
NO0039R	nitrate	aerosol	µg N /m^3	0,10	0,10	0,22	0,10	0,09	0,23	0,38	0,22	0,07	0,12	0,05	0,21	0,16
NO0042G	nitrate	aerosol	µg N /m^3	0,25	0,27	0,19	0,31	0,14	0,16	0,11	0,04	0,13	0,10	0,09	0,10	0,15
DK0008R	sum_nitric_acid_and_nitrate	air+aerosol	µg N /m^3	0,38	0,51	1,04	0,76	0,70	0,59	0,62	0,70	0,45	0,58	0,97	0,47	0,65
DK0031R	sum_nitric_acid_and_nitrate	air+aerosol	µg N /m^3	0,32	0,61	0,89	0,88	0,69	0,50	0,50	0,50	0,30	0,60	0,86	0,69	0,63
ES0005R	sum_nitric_acid_and_nitrate	air+aerosol	µg N /m^3	0,36	0,58	0,56	0,55	0,41	0,39	0,35	0,36	0,41	0,39	0,29	0,39	0,42
ES0008R	sum_nitric_acid_and_nitrate	air+aerosol	µg N /m^3	0,43	0,89	1,45	0,78	0,63	0,61	0,64	0,63	0,79	0,54	0,36	0,39	0,67
ES0017R	sum_nitric_acid_and_nitrate	air+aerosol	µg N /m^3	0,66	0,60	0,60	0,44	0,46	0,49	0,54	0,66	0,59	0,53	0,44	0,59	0,55
GB0006R	sum_nitric_acid_and_nitrate	air+aerosol	µg N /m^3	0,22	0,17	-	0,12	0,30	0,21	0,12	0,13	0,07	0,12	0,06	0,15	0,17
GB0013R	sum_nitric_acid_and_nitrate	air+aerosol	µg N /m^3	0,51	0,56	1,05	0,41	0,59	0,29	0,25	0,30	0,23	0,23	0,21	0,19	0,39
GB0014R	sum_nitric_acid_and_nitrate	air+aerosol	µg N /m^3	-	0,50	0,75	0,31	0,51	0,46	0,29	0,44	0,22	0,31	0,29	0,36	0,41
IE00001R	sum_nitric_acid_and_nitrate	air+aerosol	µg N /m^3	0,19	0.21	0,26	0,18	0,29	0,20	0,30	0,65	0,26	0,16	0,08	0,20	0,22
GB0054R	sum_nitric_acid_and_nitrate	air+aerosol	µg N /m^3	0,26	0,26	0,39	0,39	0,33	0,15	-	-	-	0,20	0,10	0,18	0,26
NO0002R	sum_nitric_acid_and_nitrate	air+aerosol	µg N /m^3	0,49	0,93	0,37	0,51	0,63	0,39	0,51	0,61	0,27	0,49	0,47	0,15	0,46
NO0039R	sum_nitric_acid_and_nitrate	air+aerosol	µg N /m^3	0,15	0,16	0,26	0,21	0,18	0,32	0,66	0,51	0,14	0,17	0,08	0,32	0,26
NO0042G	sum_nitric_acid_and_nitrate	air+aerosol	µg N /m^3	0,31	0,32	0,21	0,41	0,20	0,26	0,17	0,08	0,26	0,19	0,16	0,14	0,22
SE0014R	sum_nitric_acid_and_nitrate	air+aerosol	µg N /m^3	0,27	0,33	0,72	0,53	0,51	0,47	0,46	0,41	0,33	0,39	0,69	0,20	0,44
BE0014R	ammonia	air	µg N /m^3	1,15	1,39	3,11	1,93	1,58	1,55	1,90	2,78	2,42	1,89	1,45	1,37	1,94
DK0008R	ammonia	air	µg N /m^3	0,04	0,04	0,53	0,26	0,32	0,20	0,21	0,25	0,19	0,09	0,07	0,01	0,18
DK0031R	ammonia	air	µg N /m^3	0,15	0,19	0,62	0,69	0,91	0,26	0,79	-	0,29	0,24	0,15	0,09	0,39
ES0008R	ammonia	air	µg N /m^3	1,06	0,42	0,64	0,37	1,01	0,98	0,91	0,94	0,62	0,43	0,51	0,44	0,70
GB0006R	ammonia	Air	µg N /m^3	0,12	0,15	0,74	0,36	1,04	0,48	0,31	0,42	0,25	0,35	0,15	0,15	0,38
GB0013R	ammonia	Air	µg N /m^3	0,36	0,44	1,32	0,77	0,74	0,68	0,59	0,43	0,25	0,24	0,17	0,13	0,52
GB0014R	ammonia	Air	µg N /m^3	0,45	0,53	1,72	0,49	0,54	0,43	0,54	0,92	0,70	0,31	0,28	0,16	0,59
GB0054R	ammonia	Air	µg N /m^3	0,18	0,21	0,37	0,17	0,26	0,21	0,21	0,21	0,21	0,10	0,11	0,05	0,19
NL0091R	ammonia	Air	µg N /m^3	0,70	0,91	4,32	1,84	2,37	1,83	2,14	3,84	1,15	1,16	1,49	0,79	1,93
NO0002R	ammonia	Air	µg N /m^3	0,56	0,31	0,28	0,30	0,61	0,25	0,35	0,38	0,23	0,35	0,24	0,09	0,33
NO0039R	ammonia	Air	µg N /m^3	0,61	0,58	0,49	0,63	0,47	0,54	0,92	0,89	0,50	0,38	0,45	0,43	0,57
NO0042G	ammonia	Air	µg N /m^3	0,22	0,22	0,19	0,43	0,21	0,34	0,23	0,25	0,28	0,25	0,25	0,17	0,25
			µg N /m^3													
DE0001R	ammonium	pm25	µg N /m^3	0,46	1,17	1,51	0,82	0,77	0,57	0,42	0,53	0,09	0,62	0,93	0,85	0,74
DK0008R	ammonium	aerosol	µg N /m^3	0,42	0,66	1,17	0,97	0,87	0,68	0,67	0,72	0,44	0,61	1,16	0,53	0,74
DK0031R	ammonium	aerosol	µg N /m^3	0,26	0,79	1,42	1,08	0,97	0,65	0,62	0,61	0,36	0,70	1,13	1,01	0,83
ES0008R	ammonium	pm10	µg N /m^3	-	-	-	-	-	0,30	0,61	0,64	0,24	0,22	0,12	0,15	-
ES0008R	ammonium	pm25	µg N /m^3	-	-	-	-	-	0,15	0,25	0,40	0,10	0,14	0,06	0,10	-
GB0006R	ammonium	aerosol	µg N /m^3	0,23	0,17	0,61	0,17	0,30	0,13	0,13	0,16	0,15	0,16	0,07	0,15	0,20
GB0013R	ammonium	aerosol	µg N /m^3	0,51	0,58	1,36	0,47	0,57	0,16	0,20	0,41	0,26	0,26	0,28	0,12	0,42
GB0014R	ammonium	aerosol	µg N /m^3	-	0,48	1,17	0,36	0,40	0,26	0,28	0,41	0,24	0,30	0,31	0,27	0,41
GB0054R	ammonium	aerosol	µg N /m^3	0,29	0,27	0,51	0,34	0,27	0,12	-	0,38	0,38	0,22	0,13	0,09	0,26
NL0009R	ammonium	aerosol	µg N /m^3	1,46	2,24	3,09	1,50	1,73	0,73	0,83	0,98	0,56	1,09	1,60	1,28	1,44
NL0091R	ammonium	aerosol	µg N /m^3	1,52	2,36	3,16	1,23	1,65	0,56	0,43	0,85	0,29	1,06	1,29	0,86	1,30
NO0002R	ammonium	aerosol	µg N /m^3	0,29	0,82	0,29	0,32	0,38	0,24	0,21	0,34	0,13	0,16	0,27	0,21	0,28
NO0039R	ammonium	aerosol	µg N /m^3	0,09	0,07	0,19	0,13	0,09	0,23	0,43	0,14	0,34	0,08	0,03	0,22	0,16
NO0042G	ammonium	aerosol	µg N /m^3	0,19	0,21	0,17	0,26	0,14	0,10	0,09	0,01	0,11	0,04	0,05	0,06	0,11
DK0008R	sum_ammonia_and_ammonium	air+aerosol	µg N /m^3	0,47	0,69	1,70	1,23	1,20	0,88	0,88	0,96	0,62	0,71	1,22	0,54	0,92
DK0031R	sum_ammonia_and_ammonium	air+aerosol	µg N /m^3	0,41	0,98	2,04	1,77	1,88	0,92	1,41	-	0,65	0,94	1,28	1,10	1,22
ES0005R	sum_ammonia_and_ammonium	air+aerosol	µg N /m^3	0,47	0,95	1,51	0,74	0,83	0,72	0,90	0,69	1,00	0,89	0,74	0,96	0,87
ES0008R	sum_ammonia_and_ammonium	air+aerosol	µg N /m^3	1,31	1,61	2,70	1,78	1,51	1,58	1,79	2,02	2,23	1,59	1,08	0,92	1,67
ES0017R	sum_ammonia_and_ammonium	air+aerosol	µg N /m^3	1,28	1,60	1,76	1,06	1,51	1,35	1,62	1,51	1,92	1,57	1,02	1,60	1,48
GB0006R	sum_ammonia_and_ammonium	air+aerosol	µg N /m^3	0,35	0,32	1,35	0,53	1,33	0,61	0,44	0,58	0,39	0,50	0,21	0,30	0,58
GB0013R	sum_ammonia_and_ammonium	air+aerosol	µg N /m^3	0,87	1,01	2,67	1,24	1,31	0,84	0,79	0,84	0,50	0,50	0,45	0,25	0,95
GB0014R	sum_ammonia_and_ammonium	air+aerosol	µg N /m^3	-	1,01	2,89	0,85	0,94	0,69	0,82	1,33	0,94	0,61	0,59	0,43	1,00
GB0054R	sum_ammonia_and_ammonium	air+aerosol	µg N /m^3	0,47	0,48	0,88	0,50	0,53	0,34	-	0,59	0,59	0,32	0,24	0,14	0,45
IE00001R	sum_ammonia_and_ammonium	air+aerosol	µg N /m^3	0,41	0,54	0,53	0,71	0,72	0,64	0,66	0,95	0,52	0,68	0,50	0,49	0,57
NL0091R	sum_ammonia_and_ammonium	air+aerosol	µg N /m^3	2,22	3,27	7,48	3,08	4,01	2,39	2,57	4,69	1,44	2,21	2,79	1,65	3,23
NO0002R	sum_ammonia_and_ammonium	air+aerosol	µg N /m^3	0,85	1,12	0,58	0,63	0,99	0,49	0,56	0,72	0,36	0,51	0,51	0,30	0,61
NO0039R	sum_ammonia_and_ammonium	air+aerosol	µg N /m^3	0,69	0,65	0,68	0,76	0,56	0,77	1,17	1,03	0,83	0,46	0,48	0,65	0,71
NO0042G	sum_ammonia_and_ammonium	air+aerosol	µg N /m^3	0,41	0,43	0,36	0,69	0,35	0,44	0,31	0,25	0,39	0,29	0,30	0,23	0,36
SE0014R	sum_ammonia_and_ammonium	air+aerosol	µg N /m^3	0,37	0,40	1,05	0,82	0,84	0,60	0,62	0,66	0,36	0,39	0,71	0,37	0,60

Table A.2.4: Concentrations of heavy metals in precipitation.

Site	Comp	Unit	jan	febr	mar	apr	may	june	july	aug	sept	oct	nov	dec	year
BE0014R	arsenic	µg/L	0,16	0,10	0,07	0,11	0,12	0,07	0,07	0,11	0,11	0,05	0,07	0,07	0,08
DE0001R	arsenic	µg/L	0,15	0,15	0,15	0,15	0,10	0,06	0,05	0,05	0,07	0,09	0,11	0,08	0,08
DK0005R	arsenic	µg/L	0,03	0,08	0,04	0,10	0,10	0,27	0,27	0,06	0,51	0,50	0,17	0,35	0,23
DK0008R	arsenic	µg/L	0,32	0,21	0,17	0,26	0,21	0,44	0,19	0,35	0,19	0,32	0,25	0,47	0,32
DK0022R	arsenic	µg/L	0,08	0,21	0,14	0,19	0,13	0,29	0,09	0,12	0,19	0,49	0,36	0,36	0,22
DK0031R	arsenic	µg/L	0,04	0,12	0,08	0,36	0,23	0,23	0,13	0,11	0,11	-	-	-	0,15
ES0008R	arsenic	µg/L	0,05	0,09	0,11	0,05	0,11	0,10	0,16	0,13	0,13	0,09	0,08	0,08	0,08
GB0006R	arsenic	µg/L	0,17	0,14	0,18	0,28	0,48	0,20	0,23	0,15	0,10	0,08	0,11	0,11	0,19
GB0013R	arsenic	µg/L	0,12	0,15	0,19	0,04	0,08	0,07	0,07	0,05	0,05	0,08	0,10	0,05	0,06
GB0017R	arsenic	µg/L	0,27	0,18	0,16	0,12	0,11	0,09	0,08	0,17	0,16	0,15	0,09	0,07	0,11
GB0091R	arsenic	µg/L	0,35	0,11	0,10	0,07	0,08	0,11	0,09	0,10	0,07	0,08	0,10	0,13	0,10
IE0001R	arsenic	µg/L	0,13	0,13	0,13	0,13	0,13	0,13	0,13	0,13	0,27	0,13	0,13	0,13	0,13
IS0090R	arsenic	µg/L	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
IS0091R	arsenic	µg/L	0,09	0,09	0,09	-	-	0,09	-	0,09	0,09	0,09	0,09	0,09	0,09
NL0009R	arsenic	µg/L	0,24	0,08	0,12	0,08	0,10	0,08	0,08	0,09	0,25	0,08	0,08	0,09	0,11
NL0091R	arsenic	µg/L	0,08	0,08	0,09	0,08	0,08	0,08	0,08	0,08	0,08	0,08	0,08	0,08	0,08
NO0001R	arsenic	µg/L	0,14	0,23	0,15	0,07	0,07	0,05	0,07	0,05	0,05	0,05	0,13	0,06	0,08
PT0006R	arsenic	µg/L	-	-	0,1	0,1	0,1	1,5	0,1	0,1	1,0	1,0	1,0	0,7	0,7
PT0004R	arsenic	µg/L	0,1	0,1	0,1	0,1	0,1	0,1	0,9	1,0	0,1	1,0	1,0	0,9	0,6
SE0014R	arsenic	µg/L	0,03	0,03	0,17	0,27	0,16	0,22	0,03	0,03	0,03	0,03	0,10	0,03	0,08
BE0014R	cadmium	µg/L	0,112	0,040	0,046	0,051	0,037	0,024	0,027	0,019	0,023	0,025	0,053	0,013	0,033
DE0001R	cadmium	µg/L	0,037	0,015	0,044	0,029	0,021	0,010	0,010	0,015	0,008	0,011	0,019	0,020	0,016
DK0005R	cadmium	µg/L	0,010	0,015	0,016	0,028	0,044	0,134	0,133	0,049	0,052	0,052	0,035	0,060	0,064
DK0008R	cadmium	µg/L	0,012	0,014	0,028	0,061	0,027	0,037	0,018	0,028	0,033	0,038	0,032	0,078	0,035
DK0022R	cadmium	µg/L	0,015	0,032	0,019	0,034	0,060	0,047	0,025	0,036	0,045	0,059	0,049	0,128	0,047
ES0008R	cadmium	µg/L	0,305	0,231	0,137	0,069	0,107	0,158	0,142	0,212	0,114	0,172	0,062	0,229	0,145
FR0090R	cadmium	µg/L	0,030	0,100	0,199	0,704	0,272	0,129	0,069	0,050	0,058	0,032	0,069	0,040	0,171
GB0006R	cadmium	µg/L	0,001	0,001	0,003	0,005	0,012	0,003	0,002	0,001	0,001	0,001	0,001	0,001	0,003
GB0013R	cadmium	µg/L	0,009	0,016	0,04	0,01	0,014	0,007	0,005	0,003	0,007	0,011	0,005	0,001	0,008
GB0017R	cadmium	µg/L	0,032	0,013	0,014	0,022	0,022	0,02	0,013	0,015	0,021	0,02	0,017	0,009	0,017
GB0091R	cadmium	µg/L	0,065	0,003	0,003	0,012	0,014	0,009	0,055	0,006	0,008	0,01	0,031	0,016	0,017
IE0001R	cadmium	µg/L	0,025	0,025	0,060	0,025	0,025	0,025	0,025	0,025	0,025	0,025	0,025	0,025	0,026
IS0090R	cadmium	µg/L	0,005	0,003	0,004	0,013	0,022	0,033	0,023	0,012	0,005	0,004	0,068	0,015	0,014
IS0091R	cadmium	µg/L	0,005	0,008	0,012	-	-	0,018	-	0,010	0,008	0,006	0,009	0,018	0,009
NL0009R	cadmium	µg/L	0,017	0,018	0,021	0,017	0,017	0,017	0,017	0,020	0,024	0,017	0,022	0,017	0,019
NL0091R	cadmium	µg/L	0,021	0,022	0,023	0,033	0,020	0,017	0,017	0,017	0,017	0,020	0,017	0,017	0,019
NO0001R	cadmium	µg/L	0,026	0,139	0,022	0,016	0,015	0,006	0,011	0,008	0,008	0,009	0,039	0,021	0,020
NO0039R	cadmium	µg/L	0,002	0,002	0,006	0,004	0,007	0,004	0,005	0,004	0,002	0,005	0,021	0,005	0,005
PT0006R	cadmium	µg/L	-	-	0,1	0,1	0,1	0,1	0,1	0,1	0,3	0,3	0,3	0,2	0,2
PT0004R	cadmium	µg/L	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,2	0,3	0,3	0,2	0,2
SE0014R	cadmium	µg/L	0,005	0,011	0,040	0,089	0,040	0,040	0,011	0,013	0,050	0,020	0,030	0,020	0,030
BE0014R	chromium	µg/L	0,64	0,54	1,24	1,69	0,79	0,77	0,27	0,60	0,19	0,15	0,20	0,23	0,48
DE0001R	chromium	µg/L	0,14	0,62	0,15	0,22	0,14	0,09	0,07	0,13	0,05	0,07	0,06	0,08	0,10
DK0005R	chromium	µg/L	0,72	0,99	0,39	0,50	0,34	2,99	2,96	0,52	2,86	2,82	1,01	13,25	3,05
DK0008R	chromium	µg/L	0,35	0,21	0,20	0,34	0,35	0,86	0,26	0,41	0,22	0,32	0,24	0,23	0,40
DK0022R	chromium	µg/L	0,13	0,15	0,15	0,28	0,30	0,90	0,19	0,24	0,26	0,73	0,23	0,44	0,37
DK0031R	chromium	µg/L	0,12	0,11	0,12	0,50	0,53	0,52	0,23	0,24	0,16	-	-	-	0,27
ES0008R	chromium	µg/L	0,50	0,63	0,80	1,07	1,19	0,42	0,92	1,45	1,16	1,01	1,34	1,46	0,99
FR0090R	chromium	µg/L	0,55	0,28	0,52	0,25	0,39	0,27	0,30	0,23	0,43	0,26	0,40	0,30	0,33
GB0006R	chromium	µg/L	0,01	0,01	0,03	0,07	0,10	0,07	0,01	0,01	0,01	0,01	0,01	0,01	0,03
GB0013R	chromium	µg/L	0,04	0,06	0,11	0,04	0,04	0,03	0,04	0,03	0,02	0,04	0,08	0,03	0,03
GB0017R	chromium	µg/L	0,06	0,07	0,10	0,12	0,10	0,09	0,09	0,16	0,12	0,11	0,12	0,07	0,10
GB0091R	chromium	µg/L	0,13	0,02	0,01	0,04	0,03	0,04	0,04	0,11	0,02	0,03	0,07	0,02	0,04
IE0001R	chromium	µg/L	0,13	0,13	0,77	0,13	0,13	0,13	0,13	0,13	0,13	0,13	0,13	0,13	0,14
IS0090R	chromium	µg/L	0,11	0,05	0,13	0,28	1,02	0,97	0,53	0,24	0,15	0,10	0,39	0,38	0,23
IS0091R	chromium	µg/L	0,09	0,09	0,09	-	-	0,80	-	0,09	0,09	0,09	0,64	0,09	0,14
NL0009R	chromium	µg/L	0,45	0,26	0,26	0,26	0,26	0,26	0,26	0,26	0,33	0,26	0,26	0,26	0,28
NL0091R	chromium	µg/L	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
NO0001R	chromium	µg/L	0,09	0,10	0,07	0,05	0,07	0,06	0,07	0,05	0,05	0,05	0,05	0,07	0,06
PT0006R	chromium	µg/L	-	-	0,1	0,2	0,1	0,1	0,1	0,1	2,2	1,1	2,0	0,7	1,0
PT0004R	chromium	µg/L	0,1	0,1	0,4	0,1	0,1	0,3	0,6	0,6	1,0	1,0	2,6	0,9	1,1
SE0014R	chromium	µg/L	0,07	0,08	0,20	0,16	0,14	0,07	0,07	0,07	0,07	0,07	0,07	0,06	0,08
BE0014R	copper	µg/L	12,74	9,78	2,79	3,06	4,62	3,25	2,69	5,22	2,32	4,71	9,08	5,53	4,81
DE0001R	copper	µg/L	0,41	1,48	1,12	1,72	1,01	0,60	0,80	0,82	0,64	0,58	0,73	0,64	0,72
DK0005R	copper	µg/L	4,29	0,78	1,03	1,87	2,09	5,34	5,30	1,51	3,42	3,38	1,44	1,84	3,28
DK0008R	copper	µg/L	1,21	0,49	0,88	1,53	1,62	2,82	1,13	2,18	1,22	1,45	0,90	1,03	1,64
DK0022R	copper	µg/L	0,88	1,10	0,76	1,40	4,17	1,76	2,37	2,12	1,86	2,14	1,78	4,02	2,02
DK0031R	copper	µg/L	0,84	0,92	0,59	2,19	4,32	4,23	1,63	3,88	1,18	-	-	-	2,05
FR0090R	copper	µg/L	1,40	1,75	0,55	0,42	0,36	0,19	0,91	1,32	1,37	0,46	0,63	0,30	0,63
GB0006R	copper	µg/L	0,13	0,22	0,38	0,37	0,44	0,14	0,21	0,19	0,34	0,38	0,08	0,08	0,23
GB0013R	copper	µg/L	0,40	1,75	1,52	0,32	0,53	0,35	0,41	0,34	0,50	0,67	1,21	0,22	0,44
GB0017R	copper	µg/L	1,43	0,90	1,28	1,90	2,49	2,31	0,97	1,71	1,12	1,01	0,83	0,47	1,51
GB0091R	copper	µg/L	1,97	0,47	0,37	0,36	0,47	0,26	2,69	0,39	0,51	0,29	0,47	0,35	0,65
IE0001R	copper	µg/L	2,60	1,60	13,60	2,85	72,40	9,35	11,80	2,66	2,68	6,72	14,83	3,61	9,21
IS0090R	copper	µg/L	2,52	0,89	1,02	1,82	4,74	7,32	3,51	1,51	0,90	1,00	2,10	3,73	1,91
IS0091R	copper	µg/L	0,10	0,44	0,79	-	-	3,40	-	0,87	1,16	0,47	2,55	1,00	0,80
NL0009R	copper	µg/L	0,42	0,69	1,02	0,84	0,91	0,70	1,03	0,57	0,66	0,64	0,57	0,38	0,66
NL0091R	copper	µg/L	0,75	0,82	0,73	1,51	1,02	0,73	1,61	0,80	0,43	0,93	0,74	0,37	0,93
NO0001R	copper	µg/L	0,56	1,16	0,69	0,41	0,39	0,13	0,71	0,52	0,27	0,26	0,81	0,69	0,52
PT0006R	copper	µg/L	-	-	1,3	4,6	2,9	5,9	0,9	0,5	2,7	1,9	15,3	2,1	5,8
PT0004R	copper	µg/L	0,5	0,5	2,9	2,3	6,9	4,4	16,2	17,0	2,4	1,1	1,5	2,4	2,1
SE0014R	copper	µg/L	0,44	1,20	0,95	2,75	1,79	1,61	0,71	0,58	0,72	0,68	0,67	0,36	0,97
BE0014R	lead	µg/L	1,29	1,42	0,56	0,67	0,62	0,44	0,48	0,94	0,52	0,38	0,44	0,51	0,56
DE0001R	lead	µg/L	0,27	0,49	0,96	0,96	0,57	0,34	0,30	0,45	0,30	0,42	0,71	0,39	0,42
DK0005R	lead	µg/L	2,79	5,35	0,60	1,75	1,25	8,50	8,43	1,49	8,07	7,98	2,32	-	5,17
DK0008R	lead	µg/L	0,53	0,45	0,52	1,72	1,32	1,86	0,94	1,59	1,17	1,39	1,18	2,09	1,38
DK0022R	lead	µg/L	0,77	1,37	0,65	1,14	1,06	2,11	1,07	1,02	1,11	2,17	1,56	-	1,34
DK0031R	lead	µg/L	0,34	0,49	0,43	2,06	1,24	1,22	0,87	0,82	0,44	-	-	-	0,86
ES0008R	lead	µg/L	0,50	1,77	1,06	1,06	0,89	0,54	1,32	1,42	1,57	3,34	1,13	1,67	1,46
FR0090R	lead	µg/L	0,09	0,04	0,25	0,20	0,48	0,30	0,61	0,72	0,61	0,57	0,29	0,19	0,34
GB0006R	lead	µg/L	0,02	0,08	0,18	0,20	0,39	0,11	0,07	0,10	0,04	0,02	0,02	0,02	0,11
GB0013R	lead	µg/L	0,76	1,03	1,48	0,33	0,45	0,29	0,22	0,10	0,22	0,39	0,15	0,12	0,31
GB0017R	lead	µg/L	2,17	0,84	0,78	0,98	0,71	0,63	0,76	1,34	0,55	0,43	0,57	0,64	0,75

Site	Comp	Unit	jan	febr	mar	apr	may	june	july	aug	sept	oct	nov	dec	year
GB0091R	lead	�g/L	2,98	0,39	0,23	0,55	0,31	0,34	0,12	0,33	0,15	0,28	0,37	0,64	0,43
IE0001R	lead	�g/L	0,13	0,13	0,13	0,13	0,13	0,69	0,13	0,13	0,13	0,13	0,13	0,13	0,18
IS0090R	lead	�g/L	0,34	0,13	0,16	0,22	0,38	0,67	0,27	0,20	0,08	0,08	0,17	0,08	0,18
IS0091R	lead	�g/L	0,09	0,19	0,27	-	-	0,67	-	0,52	0,09	0,06	0,29	0,15	0,19
NL0009R	lead	�g/L	0,76	0,25	0,38	0,56	0,64	0,43	0,36	0,39	0,81	0,36	0,47	0,48	0,50
NL0091R	lead	�g/L	0,72	0,71	0,50	0,95	0,79	0,38	0,31	0,49	0,39	0,46	0,81	0,41	0,51
NO0001R	lead	�g/L	0,93	1,55	0,53	0,58	0,71	0,27	0,25	0,39	0,19	0,27	1,09	0,62	0,58
NO0039R	lead	�g/L	0,06	0,05	0,17	0,09	0,14	0,12	0,18	0,15	0,05	0,10	0,20	0,12	0,11
PT0006R	lead	�g/L	-	-	0,21	0,76	0,12	0,27	0,13	0,10	1,10	1,00	3,85	0,82	1,48
PT0004R	lead	�g/L	0,10	0,41	0,49	0,49	0,63	1,24	5,81	6,10	1,10	1,00	2,56	0,88	1,21
SE0014R	lead	�g/L	0,15	0,42	0,92	1,13	0,48	0,30	0,36	0,63	0,28	0,29	0,63	0,42	0,46
BE0014R	mercury	ng/L	10,8	4,3	6,2	14,8	12,4	9,5	14,1	12,8	9,5	6,4	4,4	4,2	8,7
DE0001R	mercury	ng/L	4,2	4,2	4,3	13,0	8,7	6,4	5,8	13,8	5,1	3,8	5,9	4,9	6,1
ES0008R	mercury	ng/L	10,4	15,3	10,3	13,7	20,6	14,0	9,3	20,3	18,6	5,6	4,7	2,5	10,9
GB0013R	mercury	ng/L	4,6	6,4	8,1	4,0	5,8	1,7	7,3	5,8	2,8	2,8	4,3	2,0	3,8
GB0017R	mercury	ng/L	5,1	5,4	5,0	9,0	8,0	6,0	7,7	10,6	10,9	7,9	4,5	3,2	6,8
GB0091R	mercury	ng/L	4,0	4,0	4,0	5,5	6,6	4,3	5,4	5,5	5,6	6,3	3,6	1,5	4,7
IE0001R	mercury	ng/L	12,5	12,5	12,5	12,5	12,5	12,5	12,5	12,5	12,5	12,5	12,5	12,5	12,5
NL0091R	mercury	ng/L	3,8	7,1	6,2	15,9	15,8	12,0	11,2	12,7	8,0	9,5	7,5	6,8	9,7
NO0001R	mercury	ng/L	2,2	4,8	7,7	5,7	10,8	7,4	8,0	6,5	2,5	1,1	5,4	3,0	4,7
PT0006R	mercury	ng/L	-	-	5	5	5	5	6	6	5	10	8	10	8
PT0004R	mercury	ng/L	5	-	5	5	5	5	17	17	5	10	10	10	8
SE0014R	mercury	ng/L	5,1	7,7	10,6	31,6	19,1	16,1	7,0	9,9	8,1	6,0	6,4	6,4	11,4
BE0014R	nickel	�g/L	0,90	0,76	0,68	0,65	0,64	0,47	0,32	0,43	0,40	0,21	0,28	0,21	0,40
DE0001R	nickel	�g/L	0,92	1,47	3,33	1,36	1,11	0,41	0,43	0,34	0,27	0,23	0,20	0,16	0,48
DK0005R	nickel	�g/L	0,40	0,23	0,42	0,28	0,35	1,01	1,00	0,34	1,07	1,06	0,31	0,54	0,66
DK0008R	nickel	�g/L	0,19	0,13	0,22	0,33	0,34	0,80	0,32	0,59	0,43	0,44	2,87	0,40	0,62
DK0022R	nickel	�g/L	0,22	0,44	0,19	0,29	0,33	0,86	0,38	0,47	0,44	0,75	0,44	0,76	0,50
DK0031R	nickel	�g/L	0,35	0,34	0,19	0,45	0,61	0,60	0,41	0,45	0,34	-	-	-	0,41
ES0008R	nickel	�g/L	0,52	0,52	0,98	0,52	0,65	0,67	1,71	1,75	1,58	0,78	0,52	0,64	0,73
FR0090R	nickel	�g/L	1,55	0,52	1,30	0,69	0,84	0,38	0,47	0,45	1,79	0,45	0,44	0,37	0,64
GB0006R	nickel	�g/L	0,00	0,03	0,07	0,41	0,07	0,04	0,00	0,03	0,03	0,03	0,01	0,01	0,05
GB0013R	nickel	�g/L	0,23	0,58	0,46	0,12	0,29	0,18	0,14	0,11	0,09	0,12	0,25	0,10	0,15
GB0017R	nickel	�g/L	0,32	0,22	0,27	0,37	0,42	0,38	0,18	0,22	0,13	0,09	0,19	0,10	0,26
GB0091R	nickel	�g/L	0,21	0,18	0,10	0,15	0,20	0,18	0,05	0,10	0,47	0,11	0,12	0,07	0,15
IE0001R	nickel	�g/L	0,13	0,13	0,13	0,13	0,13	0,13	0,13	0,13	0,13	0,13	0,13	0,13	0,13
IS0090R	nickel	�g/L	0,37	0,24	0,24	0,53	2,16	2,10	1,01	0,55	0,45	0,21	0,81	0,41	0,48
IS0091R	nickel	�g/L	0,13	0,21	0,27	-	-	1,84	-	0,35	0,66	0,22	1,48	0,46	0,42
NL0009R	nickel	�g/L	0,21	0,21	0,24	0,21	0,24	0,24	0,21	0,21	0,28	0,21	0,21	0,21	0,22
NL0091R	nickel	�g/L	0,21	0,24	0,24	0,21	0,21	0,21	0,21	0,21	0,21	0,26	0,21	0,25	0,22
NO0001R	nickel	�g/L	0,25	0,40	0,28	0,18	0,20	0,19	0,35	0,15	0,11	0,09	0,34	0,50	0,25
PT0006R	nickel	�g/L	-	-	0,2	0,6	0,7	0,6	0,1	0,1	1,7	1	1	1,5	1,0
PT0004R	nickel	�g/L	0,1	0,5	0,5	3,5	1,7	3,2	3,5	3,4	1,0	1	1	0,9	1,3
SE0014R	nickel	�g/L	0,14	0,25	0,33	0,30	0,27	0,19	0,19	0,13	0,19	0,21	0,16	0,12	0,19
BE0014R	zinc	�g/L	15,7	10,8	11,5	7,8	9,9	9,4	11,2	9,7	3,3	4,2	5,8	3,8	7,5
DE0001R	zinc	�g/L	2,5	8,0	9,0	7,2	6,2	2,6	3,1	7,2	2,2	3,3	4,2	3,9	3,8
DK0005R	zinc	�g/L	26,4	12,2	10,5	13,5	15,0	32,8	32,6	12,5	23,1	22,9	15,2	41,7	25,2
DK0008R	zinc	�g/L	9,9	7,6	15,0	13,1	10,0	13,5	8,2	9,9	15,5	15,4	19,6	21,0	13,5
DK0022R	zinc	�g/L	9,2	13,4	5,8	10,8	18,0	25,8	15,5	14,6	30,0	25,3	21,0	37,3	20,8
DK0031R	zinc	�g/L	26,7	26,8	10,2	15,3	25,7	25,4	16,4	19,9	17,3	-	-	-	19,7
ES0008R	zinc	�g/L	38	88	52	96	130	67	183	237	143	199	105	103	115
FR0090R	zinc	�g/L	7,1	1,9	2,9	1,7	8,0	2,3	4,4	3,9	2,1	3,2	3,0	2,5	3,3
GB0006R	zinc	�g/L	0,3	0,3	0,5	1,4	1,3	0,3	1,6	0,7	0,3	0,3	0,3	0,3	0,7
GB0013R	zinc	�g/L	3,1	6,9	13,0	1,8	3,3	5,5	4,6	4,1	2,5	2,1	5,3	0,5	3,2
GB0017R	zinc	�g/L	9,2	6,0	9,4	12,9	8,8	9,1	4,1	7,0	6,2	5,7	4,4	3,1	7,2
GB0091R	zinc	�g/L	12,2	2,7	2,2	2,4	3,4	2,2	8,1	3,4	4,7	3,6	3,0	3,7	3,9
IE0001R	zinc	�g/L	79	43	61	117	110	36	23	23	45	28	43	48	50
IS0090R	zinc	�g/L	5,7	1,3	2,0	9,9	17,3	31,5	15,1	6,2	3,7	3,3	5,1	3,6	5,2
IS0091R	zinc	�g/L	10,1	9,8	13,1	-	-	13,5	-	4,5	5,2	6,0	13,5	7,7	9,3
NL0009R	zinc	�g/L	2,1	2,6	3,7	4,8	4,1	3,1	2,2	2,5	2,8	4,1	2,6	2,0	2,9
NL0091R	zinc	�g/L	4,3	3,8	2,7	5,5	4,0	3,1	2,0	2,4	2,0	3,1	2,0	2,0	2,7
NO0001R	zinc	�g/L	5,2	6,9	5,8	2,9	3,7	1,6	4,1	2,5	1,2	1,1	4,7	11,9	4,4
NO0039R	zinc	�g/L	1,8	0,9	1,2	2,2	1,6	1,6	2,2	1,9	0,8	1,6	3,7	2,0	1,5
PT0006R	zinc	�g/L	-	-	14,8	11,7	4,4	7,1	6,7	6,5	12,0	5,7	3,4	3,7	6,0
PT0004R	zinc	�g/L	4,3	11,0	8,9	4,2	10,5	25,0	75,9	79,0	7,8	3,5	3,6	4,1	5,2
SE0014R	zinc	�g/L	1,8	4,4	8,1	12,5	7,3	4,7	3,0	3,7	8,9	4,2	3,9	2,6	5,2
BE0014R	precipitation_amount	mm'	33	34	48	68	54	96	158	28	72	184	88	136	997
BE0014R	precipitation_amount_Hg	mm'	35	34	48	72	56	100	132	30	77	191	93	139	1005
DE0001R	precipitation_amount	mm'	67	18	14	29	28	89	150	78	148	147	81	83	930
DE0001R	precipitation_amount_Hg	mm'	67	22	16	32	30	94	154	73	154	150	83	90	964
DK0005R	precipitation_amount	mm'	68	13	7	20	38	4	123	35	3	78	38	54	482
DK0008R	precipitation_amount	mm'	65	20	21	41	26	126	38	104	85	72	43	58	698
DK0022R	precipitation_amount	mm'	102	48	38	57	41	114	93	95	153	112	78	86	1018
DK0031R	precipitation_amount	mm'	73	40	35	78	3	83	83	73	130	-	-	-	-
ES0008R	precipitation_amount	mgL	67	91	32	254	39	66	48	24	41	136	100	72	970
ES0008R	precipitation_amount_Hg	mgL	57	81	20	193	31	35	38	20	33	133	81	55	777
FR0090R	precipitation_amount	mm'	78	32	44	193	81	131	95	82	57	139	173	232	1337
GB0006R	precipitation_amount	mm'	158	54	35	38	87	124	114	80	101	7	70	73	945
GB0013R	precipitation_amount	mm'	69	17	15	201	56	166	82	188	102	135	8	129	1165
GB0013R	precipitation_amount_Hg	mm'	80	40	13	198	76	213	123	141	156	166	190	285	1679
GB0017R	precipitation_amount	mm'	7	27	39	51	84	103	93	31	47	21	36	57	596
GB0017R	precipitation_amount_Hg	mm'	25	28	29	23	83	98	90	29	44	89	79	69	686
GB0091R	precipitation_amount	mm'	18	25	5	131	55	166	103	70	62	103	19	156	915
GB0091R	precipitation_amount_Hg	mm'	3	21	16	109	114	118	136	77	86	87	89	166	1020
IE0001R	precipitation_amount	mm'	154	68	42	120	53	130	174	154	76	141	198	175	1481
IS0090R	precipitation_amount	mm'	103	118	89	55	14	14	24	75	85	70	70	87	804
IS0091R	precipitation_amount	mm'	292	194	147	38	27	44	37	68	142	83	58	135	1265
NL0009R	precipitation_amount	mm'	66	16	12	44	43	92	95	79	85	116	55	99	802
NL0091R	precipitation_amount	mm'	20	18	20	61	52	79	181	92	96	137	86	110	952
NL0091R	precipitation_amount_Hg	mm'	52	15	22	54	49	77	99	83	104	124	75	116	871
NO0001R	precipitation_amount	mm'	114	20	33	117	41	153	56	161	172	240	339	255	1701
NO0001R	precipitation_amount_Hg	mm'	159	27	31	166	76	203	85	180	68	263	298	298	1855
NO0039R	precipitation_amount	mm'	112	223	283	51	98	88	109	92	150	134	51	64	1458
PT0006R	precipitation_amount	mm'	0	0	46	59	88	6	7	4	33	100	166	143	649
PT0004R	precipitation_amount	mm'	27	0	32	59	31	1	1	1	28	124	111	66	481
SE0014R	precipitation_amount	mm'	48	25	12	55	39	91	88	95	99	63	48	79	743
SE0014R	precipitation_amount_Hg	mm'	32	14	7	42	30	87	105	198	37	32	19	19	622

Table A.2.5: Wet deposition of heavy metals, 2012

Site	Comp	Unit	jan	febr	mar	apr	may	June	july	aug	sept	oct	nov	dec	year
BE0014R	arsenic	µg /m2	4	3	3	7	6	6	11	3	8	10	6	9	78
DE0001R	arsenic	µg /m2	10	3	2	4	3	5	7	4	10	13	9	7	77
DK0005R	arsenic	µg /m2	2	1	0,3	2	4	1	33	2	1	39	6	19	111
DK0008R	arsenic	µg /m2	21	4	4	11	5	55	7	37	16	23	11	27	220
DK0022R	arsenic	µg /m2	8	10	5	11	5	33	9	11	30	55	28	30	225
DK0031R	arsenic	µg /m2	3	5	3	28	1	19	11	8	14	-	-	-	-
ES0008R	arsenic	µg /m2	3	8	4	14	4	6	8	3	5	13	8	6	81
GB0006R	arsenic	µg /m2	26	8	6	10	42	24	26	12	10	1	7	8	183
GB0013R	arsenic	µg /m2	8	3	3	7	4	12	6	10	5	10	1	6	74
GB0017R	arsenic	µg /m2	2	5	6	6	9	9	7	5	8	3	3	4	68
GB0091R	arsenic	µg /m2	6	3	1	9	4	18	9	7	4	8	2	20	91
IE0001R	arsenic	µg /m2	19	8	5	15	7	16	22	19	21	18	25	22	196
IS0090R	arsenic	µg /m2	5	5	4	2	1	1	1	3	4	3	3	4	36
IS0091R	arsenic	µg /m2	26	17	13	-	-	4	-	6	13	7	5	12	114
NL0009R	arsenic	µg /m2	16	1	1	3	4	8	8	7	21	9	4	9	92
NL0091R	arsenic	µg /m2	2	1	2	5	4	6	14	7	7	10	6	8	72
NO0001R	arsenic	µg /m2	16	5	5	8	3	8	4	7	8	11	43	16	133
PT0006R	arsenic	µg /m2	-	-	5	6	9	9	1	0,4	33	100	166	105	434
PT0004R	arsenic	µg /m2	3	0,0	3	6	3	0,1	1	1	3	120	111	58	310
SE0014R	arsenic	µg /m2	1	1	2	15	6	20	3	2	2	2	5	2	61
BE0014R	cadmium	µg /m2	3,3	1,3	2,2	3,5	2,0	2,4	4,3	0,5	1,6	4,6	4,7	1,8	32,2
DE0001R	cadmium	µg /m2	2,5	0,3	0,6	0,9	0,6	0,9	1,5	1,1	1,3	1,6	1,5	1,7	14,4
DK0005R	cadmium	µg /m2	0,7	0,2	0,1	0,6	1,7	0,5	16,4	1,7	0,1	4,0	1,3	3,3	30,6
DK0008R	cadmium	µg /m2	0,8	0,3	0,6	2,5	0,7	4,6	0,7	2,9	2,8	2,7	1,4	4,5	24,5
DK0022R	cadmium	µg /m2	1,6	1,5	0,7	1,9	2,5	5,4	2,4	3,5	6,9	6,6	3,8	10,9	47,7
ES0008R	cadmium	µg /m2	21	21	4	18	4	10	7	5	5	23	6	16	141
FR0090R	cadmium	µg /m2	2,3	3,2	8,8	135,9	22,0	16,8	6,6	4,1	3,3	4,4	11,9	9,3	228,6
GB0006R	cadmium	µg /m2	0,1	0,0	0,1	0,2	1,0	0,3	0,2	0,1	0,1	0,0	0,0	0,0	2,5
GB0013R	cadmium	µg /m2	0,6	0,3	0,6	2,0	0,8	1,1	0,4	0,6	0,7	1,5	0,0	0,1	8,8
GB0017R	cadmium	µg /m2	0,2	0,4	0,5	1,1	1,8	2,1	1,2	0,5	1,0	0,4	0,6	0,5	10,3
GB0091R	cadmium	µg /m2	1,2	0,1	0,0	1,6	0,8	1,4	5,6	0,4	0,5	1,1	0,6	2,6	15,8
IE0001R	cadmium	µg /m2	3,8	1,7	2,5	3,0	1,3	3,2	4,3	3,8	1,9	3,5	5,0	4,4	38,5
IS0090R	cadmium	µg /m2	0,5	0,4	0,4	0,7	0,3	0,5	0,6	0,9	0,5	0,3	4,8	1,3	10,9
IS0091R	cadmium	µg /m2	1,5	1,6	1,8	-	-	0,8	-	0,7	1,1	0,5	0,5	2,4	11,8
NL0009R	cadmium	µg /m2	1,1	0,3	0,3	0,8	0,7	1,6	1,6	1,6	2,1	2,0	1,2	1,7	14,9
NL0091R	cadmium	µg /m2	0,4	0,4	0,5	2,0	1,1	1,4	3,1	1,6	1,6	2,7	1,5	1,9	18,0
NO0001R	cadmium	µg /m2	2,9	2,7	0,7	1,8	0,6	0,9	0,6	1,3	1,3	2,1	13,3	5,3	33,8
NO0039R	cadmium	µg /m2	0,3	0,4	1,6	0,2	0,7	0,4	0,6	0,4	0,3	0,7	1,0	0,3	6,8
PT0006R	cadmium	µg /m2	-	-	4,6	5,9	8,8	0,6	0,7	0,4	8,4	25,0	41,6	26,3	122,0
PT0004R	cadmium	µg /m2	2,7	0,0	3,2	5,9	3,1	0,1	0,1	0,1	6,8	31,1	27,7	14,6	95,5
SE0014R	cadmium	µg /m2	0,2	0,3	0,5	4,9	1,6	3,7	1,0	1,2	5,0	1,3	1,4	1,6	22,6
BE0014R	chromium	µg /m2	20	18	59	115	42	74	42	17	14	27	18	31	477
DE0001R	chromium	µg /m2	9	11	2	6	4	8	10	10	7	9	5	7	89
DK0005R	chromium	µg /m2	49	13	3	10	13	12	364	18	7	221	38	720	1468
DK0008R	chromium	µg /m2	23	4	4	14	9	109	10	43	19	23	11	13	281
DK0022R	chromium	µg /m2	13	7	6	16	12	102	18	22	40	81	18	37	374
DK0031R	chromium	µg /m2	9	5	4	39	1	43	19	18	21	-	-	-	-
ES0008R	chromium	µg /m2	34	57	26	271	46	27	44	34	48	137	135	105	964
FR0090R	chromium	µg /m2	43	9	23	49	32	35	28	18	25	36	68	70	436
GB0006R	chromium	µg /m2	2	1	1	2	9	8	1	1	1	0	1	1	30
GB0013R	chromium	µg /m2	3	1	2	7	2	5	3	5	2	5	1	4	39
GB0017R	chromium	µg /m2	0	2	4	6	8	10	8	5	6	2	4	4	59
GB0091R	chromium	µg /m2	2	1	0	5	2	6	4	8	1	3	1	3	35
IE0001R	chromium	µg /m2	19	8	33	15	7	16	22	19	10	18	25	22	212
IS0090R	chromium	µg /m2	11	5	11	15	15	13	13	18	12	7	27	33	182
IS0091R	chromium	µg /m2	26	17	13	-	-	35	-	6	13	7	37	12	183
NL0009R	chromium	µg /m2	30	4	3	12	11	24	25	21	28	30	14	26	227
NL0091R	chromium	µg /m2	5	5	5	16	13	21	47	24	25	36	22	28	248
NO0001R	chromium	µg /m2	10	2	2	6	3	9	4	7	8	11	15	18	95
PT0006R	chromium	µg /m2	-	-	5	12	9	1	1	0	74	105	337	105	648
PT0004R	chromium	µg /m2	3	0,02	13	8	3	0,4	1	1	27	124	284	58	522
SE0014R	chromium	µg /m2	3	2	2	9	5	6	6	7	7	4	3	5	61
BE0014R	copper	µg /m2	373	328	132	207	249	313	424	145	167	867	797	754	4754
DE0001R	copper	µg /m2	28	27	16	50	28	53	119	64	95	85	59	53	671
DK0005R	copper	µg /m2	293	10	8	37	78	22	652	53	9	265	55	100	1581
DK0008R	copper	µg /m2	79	10	18	63	42	354	43	227	104	104	39	60	1141
DK0022R	copper	µg /m2	90	52	29	81	173	200	221	201	285	239	139	343	2053
DK0031R	copper	µg /m2	61	37	21	171	12	350	136	284	153	-	-	-	-
GB0006R	copper	µg /m2	20	12	13	14	38	17	24	15	34	3	6	6	214
GB0013R	copper	µg /m2	28	30	23	64	30	57	34	63	51	91	10	29	509
GB0017R	copper	µg /m2	10	24	50	97	208	238	90	53	53	21	30	27	901
GB0091R	copper	µg /m2	35	12	2	47	26	43	277	27	31	30	9	55	590
FR0090R	copper	µg /m2	109	57	24	81	29	24	86	109	78	64	110	70	840
IE0001R	copper	µg /m2	399	108	575	341	3837	1214	2050	409	204	944	2941	630	13645
IS0090R	copper	µg /m2	259	105	91	101	67	101	84	114	76	70	147	325	1539
IS0091R	copper	µg /m2	29	86	115	-	-	150	-	59	164	39	148	135	1006
NL0009R	copper	µg /m2	28	11	12	37	39	64	97	45	56	74	31	38	531
NL0091R	copper	µg /m2	15	15	15	92	53	58	292	73	42	127	64	40	885
NO0001R	copper	µg /m2	64	23	23	48	16	20	40	84	47	63	275	177	877
PT0006R	copper	µg /m2	-	-	60	267	254	34	6	2	90	186	2542	305	3745
PT0004R	copper	µg /m2	13	0,1	95	136	212	6	19	20	66	133	169	157	1025
SE0014R	copper	µg /m2	21	30	12	152	70	147	62	55	72	42	32	29	723
BE0014R	lead	µg /m2	38	48	27	45	33	43	75	26	37	70	39	69	551
DE0001R	lead	µg /m2	18	9	13	28	16	31	44	35	45	62	57	32	390
DK0005R	lead	µg /m2	191	70	4	35	47	35	1037	52	21	624	88	-	2489
DK0008R	lead	µg /m2	35	9	11	71	34	234	35	166	99	100	51	121	965
DK0022R	lead	µg /m2	79	65	25	65	44	240	100	97	170	242	121	-	1362
DK0031R	lead	µg /m2	25	20	15	160	3	101	72	60	57	-	-	-	-
ES0008R	lead	µg /m2	34	162	34	268	34	35	63	34	65	453	113	120	1415
FR0090R	lead	µg /m2	7	1	11	39	39	39	58	59	34	79	49	44	460
GB0006R	lead	µg /m2	2	4	6	8	34	13	8	8	4	0	1	1	100
GB0013R	lead	µg /m2	52	18	23	65	25	48	18	19	22	52	1	16	359

Site	Comp	Unit	jan	febr	mar	apr	may	June	july	aug	sept	oct	nov	dec	year
GB0017R	lead	µg /m2	15	23	31	50	59	65	71	41	26	9	20	37	446
GB0091R	lead	µg /m2	53	10	1	73	17	55	12	23	9	29	7	99	389
IE0001R	lead	µg /m2	19	8	5	15	7	90	22	19	10	18	25	22	259
IS0090R	lead	µg /m2	35	16	14	12	5	9	6	15	7	6	12	7	143
IS0091R	lead	µg /m2	27	36	40	-	-	30	-	35	13	5	17	20	243
NL0009R	lead	µg /m2	50	4	5	25	27	39	34	31	69	42	26	47	399
NL0091R	lead	µg /m2	14	13	10	58	41	31	55	45	38	63	70	45	482
NO0001R	lead	µg /m2	106	30	17	68	29	41	14	63	33	64	371	158	994
NO0039R	lead	µg /m2	6	12	47	5	14	10	19	14	7	13	10	8	166
PT0006R	lead	µg /m2	-	-	10	44	11	2	1	0	37	101	639	117	961
PT0004R	lead	µg /m2	3	0	16	29	19	2	7	7	30	124	284	58	580
SE0014R	lead	µg /m2	7	10	11	62	19	27	32	60	28	18	30	33	338
BE0014R	mercury	ng /m2	342	145	296	1072	692	945	1859	383	737	1224	409	579	8682
DE0001R	mercury	ng /m2	279	92	68	415	265	602	899	1015	785	569	487	441	5912
ES0008R	mercury	µg /m2	597	1235	211	2632	634	490	352	406	622	746	380	137	8443
GB0013R	mercury	ng /m2	363	257	108	794	442	354	892	820	434	465	808	559	6297
GB0017R	mercury	ng /m2	125	154	143	209	664	586	695	307	479	702	357	219	4640
GB0091R	mercury	ng /m2	10	84	65	599	749	508	741	424	480	548	322	247	4779
IE0001R	mercury	ng /m2	1919	845	529	1495	663	1623	2171	1924	954	1756	2479	2183	18512
NL0091R	mercury	ng /m2	197	107	137	857	773	930	1112	1052	831	1182	566	791	8438
NO0001R	mercury	ng /m2	346	132	237	944	825	1511	680	1174	170	282	1601	906	8808
PT0006R	mercury	ng /m2	-	-	228	293	441	30	40	22	167	980	1400	1425	5060
PT0004R	mercury	ng /m2	133	-	162	295	154	7	20	20	144	1228	1109	660	3939
SE0014R	mercury	ng /m2	165	107	72	1321	572	1403	734	1959	303	192	121	121	7069
BE0014R	nickel	µg /m2	28	25	32	44	34	45	50	12	29	38	25	28	390
DE0001R	nickel	µg /m2	62	27	47	39	31	36	65	27	41	33	16	13	443
DK0005R	nickel	µg /m2	27	3	3	5	13	4	123	12	3	83	12	29	318
DK0008R	nickel	µg /m2	12	3	4	14	9	100	12	61	36	31	124	23	430
DK0022R	nickel	µg /m2	22	21	7	16	13	98	36	45	68	84	34	65	510
DK0031R	nickel	µg /m2	25	13	7	35	2	49	34	33	44	-	-	-	-
ES0008R	nickel	µg /m2	35	48	32	132	25	44	82	41	65	105	52	46	707
FR0090R	nickel	µg /m2	121	17	57	134	68	50	44	37	101	63	76	86	853
GB0006R	nickel	µg /m2	0,4	2	2	16	6	5	0,4	2,7	3,4	0,3	0,9	0,9	45
GB0013R	nickel	µg /m2	16	10	7	24	16	30	11	21	9	17	2	13	178
GB0017R	nickel	µg /m2	2	6	10	19	35	39	17	7	6	2	7	6	155
GB0091R	nickel	µg /m2	4	4	1	20	11	29	5	7	29	11	2	11	133
IE0001R	nickel	µg /m2	19	8	5	15	7	16	22	19	10	18	25	22	185
IS0090R	nickel	µg /m2	38	29	22	29	31	29	24	41	38	15	57	36	388
IS0091R	nickel	µg /m2	39	42	39	-	-	81	-	24	94	18	86	62	527
NL0009R	nickel	µg /m2	14	3	3	9	10	22	19	16	24	24	11	20	176
NL0091R	nickel	µg /m2	4	4	5	13	11	17	37	19	20	36	18	27	210
NO0001R	nickel	µg /m2	29	8	9	21	8	29	20	24	19	20	115	127	430
PT0006R	nickel	µg /m2	-	-	9	37	61	4	1	0,4	57	103	166	217	652
PT0004R	nickel	µg /m2	3	0,1	17	207	53	4	4	4	29	126	111	62	619
SE0014R	nickel	µg /m2	7	6	4	17	11	17	17	12	19	13	8	10	140
BE0014R	zinc	µg /m2	490	364	544	526	534	911	1764	268	238	767	510	519	7432
DE0001R	zinc	µg /m2	169	147	126	209	173	232	471	558	321	484	338	323	3542
DK0005R	zinc	µg /m2	1801	160	77	270	564	133	4009	440	59	1792	576	2264	12146
DK0008R	zinc	µg /m2	643	150	308	540	257	1701	309	1031	1319	1103	843	1218	9423
DK0022R	zinc	µg /m2	937	642	221	623	745	2929	1451	1385	4597	2827	1635	3186	21177
DK0031R	zinc	µg /m2	1943	1072	356	1191	71	2098	1359	1457	2253	-	-	-	-
ES0008R	zinc	µg /m2	2567	8043	1675	24284	5029	4384	8793	5602	5924	27044	10584	7373	111295
FR0090R	zinc	µg /m2	554	60	128	326	645	307	415	317	119	444	515	581	4409
GB0006R	zinc	µg /m2	40	14	17	55	111	31	179	53	35	2	17	18	615
GB0013R	zinc	µg /m2	215	119	198	357	187	908	380	768	254	286	43	70	3785
GB0017R	zinc	µg /m2	62	162	370	655	740	940	379	216	294	117	159	175	4272
GB0091R	zinc	µg /m2	218	67	12	311	190	360	829	239	293	376	57	582	3523
IE0001R	zinc	µg /m2	12142	2873	2563	13987	5827	4634	4056	3463	3434	3948	8448	8416	73688
IS0090R	zinc	µg /m2	583	153	174	548	246	436	360	463	317	229	357	316	4182
IS0091R	zinc	µg /m2	2955	1908	1932	-	-	592	-	308	740	498	784	1043	11702
NL0009R	zinc	µg /m2	142	41	44	213	177	287	204	199	234	472	142	193	2348
NL0091R	zinc	µg /m2	85	68	56	335	210	248	352	218	187	431	168	214	2571
NO0001R	zinc	µg /m2	596	135	192	338	151	252	231	410	205	272	1577	3043	7402
NO0039R	zinc	µg /m2	197	202	335	110	153	144	242	171	127	216	187	130	2203
PT0006R	zinc	µg /m2	-	-	675	683	393	42	44	23	401	566	564	525	3910
PT0004R	zinc	µg /m2	114	2	288	247	323	33	88	94	215	440	401	273	2518
SE0014R	zinc	µg /m2	86	108	100	690	286	430	264	353	881	265	186	207	3855

Table A.2.6: Concentrations of heavy metals in air.

Site	Comp	matrix	Unit	jan	febr	mar	apr	may	june	july	aug	sept	oct	nov	dec	year
BE0014R	arsenic	pm10	ng/m3	0.61	0.77	0.51	0.65	0.53	0.36	0.40	0.54	0.68	0.78	0.68	0.48	0.58
DE0001R	arsenic	pm10	ng/m3	0.61	1.15	0.39	0.29	0.29	0.13	0.27	0.19	0.14	0.21	0.31	0.57	0.37
DK0008R	arsenic	aerosol	ng/m3	0.43	0.48	0.34	0.30	0.52	0.26	0.27	0.22	0.16	0.22	0.50	0.37	0.34
ES0008R	arsenic	pm10	ng/m3	0.09	0.24	0.27	0.07	0.14	0.06	0.13	0.15	0.14	0.17	0.18	0.08	0.15
GB0013R	arsenic	pm10	ng/m3	0.50	0.57	0.62	0.28	0.40	0.23	0.26	0.43	0.26	0.42	0.50	0.36	0.40
GB0017R	arsenic	pm10	ng/m3	1.09	0.87	0.84	0.30	0.18	0.17	0.25	0.46	0.37	0.57	1.30	0.60	0.59
GB0091R	arsenic	pm10	ng/m3	0.39	0.30	0.12	0.13	0.18	0.12	0.11	0.19	0.09	0.38	0.93	0.22	0.26
IS0091R	arsenic	aerosol	ng/m3	0.02	0.02	0.04	0.06	-	0.03	0.05	0.05	0.04	0.06	0.02	0.03	0.04
NL0009R	arsenic	aerosol	ng/m3	0.65	0.51	0.67	-0.16	0.32	0.21	0.32	0.33	0.22	0.32	0.46	0.60	0.39
NO0002R	arsenic	pm10	ng/m3	0.16	0.16	0.13	0.33	0.21	0.07	0.06	0.15	0.11	0.11	0.15	0.18	0.15
NO0042G	arsenic	aerosol	ng/m3	0.01	0.03	0.13	0.08	0.04	0.01	0.01	0.01	0.02	0.01	0.02	0.05	0.04
NO0090R	arsenic	aerosol	ng/m3	0.12	0.14	0.04	0.06	0.03	0.07	0.01	0.03	0.09	0.04	0.02	0.14	0.06
SE0014R	arsenic	aerosol	ng/m3	0.35	0.66	0.45	0.51	0.37	0.24	0.21	0.24	0.34	0.69	1.04	0.22	0.44
BE0014R	cadmium	pm10	ng/m3	0.177	0.224	0.155	0.213	0.145	0.113	0.119	0.135	0.140	0.235	0.203	0.123	0.165
DE0001R	cadmium	pm10	ng/m3	0.132	0.087	0.079	0.044	0.055	0.032	0.044	0.033	0.028	0.053	0.091	0.108	0.065
DK0008R	cadmium	aerosol	ng/m3	0.070	0.080	0.095	0.255	0.073	0.026	0.018	0.019	0.018	0.048	0.086	0.096	0.073
ES0008R	cadmium	pm10	ng/m3	0.038	0.077	0.088	0.010	0.037	0.050	0.080	0.083	0.052	0.138	0.087	0.027	0.066
GB0013R	cadmium	pm10	ng/m3	0.033	0.104	0.105	0.034	0.060	0.024	0.024	0.028	0.025	0.049	0.044	0.029	0.047
GB0017R	cadmium	pm10	ng/m3	0.153	0.141	0.192	0.059	0.035	0.027	0.054	0.099	0.087	0.092	0.270	0.121	0.113
GB0091R	cadmium	pm10	ng/m3	0.046	0.030	0.020	0.014	0.028	0.011	0.010	0.034	0.009	0.024	0.041	0.028	0.024
IS0091R	cadmium	aerosol	ng/m3	0.038	0.011	0.020	0.015	-	0.063	0.035	0.006	0.019	0.007	0.018	0.041	0.025
NL0009R	cadmium	aerosol	ng/m3	0.216	0.144	0.272	0.450	0.109	0.103	0.164	0.188	0.198	0.205	0.250	0.216	0.198
NO0002R	cadmium	pm10	ng/m3	0.043	0.036	0.026	0.040	0.037	0.008	0.007	0.030	0.014	0.015	0.033	0.045	0.028
NO0042G	cadmium	aerosol	ng/m3	0.004	0.008	0.021	0.013	0.011	0.002	0.011	0.001	0.002	0.002	0.003	0.010	0.008
NO0090R	cadmium	aerosol	ng/m3	0.035	0.023	0.008	0.009	0.003	0.008	0.002	0.003	0.007	0.005	0.004	0.031	0.011
SE0014R	cadmium	aerosol	ng/m3	0.063	0.141	0.086	0.057	0.032	0.004	0.023	0.027	0.041	0.131	0.183	0.023	0.067
BE0014R	chromium	pm10	ng/m3	2.74	3.11	2.76	2.31	2.34	2.78	2.19	2.17	2.64	2.74	2.16	2.00	2.49
ES0008R	chromium	pm10	ng/m3	0.31	0.41	0.68	0.31	0.31	0.31	1.65	0.41	1.11	0.56	1.77	0.44	0.68
GB0013R	chromium	pm10	ng/m3	0.39	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.35	0.16
GB0017R	chromium	pm10	ng/m3	0.12	0.12	0.12	0.12	0.20	0.13	0.16	0.34	0.13	0.12	0.32	0.44	0.19
GB0091R	chromium	pm10	ng/m3	0.12	0.12	0.12	0.12	0.12	0.12	0.14	0.14	0.12	0.12	0.24	0.40	0.16
IS0091R	chromium	aerosol	ng/m3	5.25	6.58	6.77	4.32	-	0.48	0.96	6.74	4.14	5.90	6.08	4.15	4.46
NO0002R	chromium	pm10	ng/m3	0.30	0.17	0.18	0.35	0.22	0.17	0.17	0.25	0.18	0.23	1.58	2.77	0.55
NO0042G	chromium	aerosol	ng/m3	0.13	0.07	0.09	0.05	0.13	0.05	0.14	0.06	0.05	0.16	0.13	0.09	0.09
NO0090R	chromium	aerosol	ng/m3	0.23	0.18	0.10	0.12	1.05	0.15	0.12	0.16	0.12	0.10	0.21	0.25	0.24
SE0014R	chromium	aerosol	ng/m3	0.93	0.92	0.94	0.93	0.95	0.94	0.94	0.94	0.93	0.91	1.00	1.04	0.95
BE0014R	copper	pm10	ng/m3	4.86	5.51	5.13	3.30	3.78	3.49	4.59	4.34	5.77	6.82	5.24	3.90	4.73
ES0008R	copper	pm10	ng/m3	7.49	10.16	34.83	13.29	53.68	22.94	25.48	25.67	26.36	40.09	84.54	11.29	30.51
GB0013R	copper	pm10	ng/m3	0.57	1.14	2.09	0.67	1.49	0.56	0.71	0.66	0.61	0.94	0.95	0.72	0.93
GB0017R	copper	pm10	ng/m3	2.40	2.20	2.52	0.81	0.70	0.88	1.02	1.82	1.89	2.08	4.84	1.94	1.93
GB0091R	copper	pm10	ng/m3	0.79	0.44	0.41	0.29	0.78	0.94	0.26	0.76	0.24	0.55	0.79	0.31	0.54
IS0091R	copper	aerosol	ng/m3	0.52	0.61	0.60	0.97	-	0.44	0.68	0.70	0.85	1.14	0.50	0.84	0.74
NO0002R	copper	pm10	ng/m3	1.08	0.51	0.38	0.69	1.12	0.29	0.18	0.50	0.27	0.26	0.48	0.54	0.52
NO0042G	copper	aerosol	ng/m3	0.10	0.22	0.14	0.15	0.26	0.03	0.11	0.03	0.04	0.10	0.12	0.21	0.13
NO0090R	copper	aerosol	ng/m3	0.37	0.34	0.39	0.26	1.42	0.51	0.57	0.40	0.43	0.25	0.35	0.45	0.49
SE0014R	copper	aerosol	ng/m3	1.25	1.41	1.39	1.44	1.09	1.07	0.82	0.94	1.17	1.59	2.10	0.83	1.26
BE0014R	lead	pm10	ng/m3	9.04	11.18	8.58	4.09	5.15	3.44	3.42	5.25	5.49	7.65	7.24	5.96	6.35
DE0001R	lead	pm10	ng/m3	5.06	3.13	3.10	1.65	1.89	1.22	1.89	1.29	1.07	1.82	3.20	3.57	2.39
DK0008R	lead	aerosol	ng/m3	2.79	2.67	1.06	1.75	2.38	0.93	1.38	1.13	0.71	1.62	3.45	3.20	1.91
ES0008R	lead	pm10	ng/m3	2.15	4.63	5.97	0.36	1.65	0.86	4.25	1.91	2.16	3.31	2.38	0.85	2.59
GB0013R	lead	pm10	ng/m3	1.18	3.40	4.56	1.40	3.10	1.03	1.28	1.14	1.30	2.35	2.34	1.41	2.06
GB0017R	lead	pm10	ng/m3	7.62	6.89	7.64	2.46	1.38	1.36	2.13	5.00	3.57	4.35	14.02	5.17	5.21
GB0091R	lead	pm10	ng/m3	1.90	1.56	0.81	0.60	1.15	0.47	0.58	1.39	0.37	1.98	2.09	1.10	1.15
IS0091R	lead	aerosol	ng/m3	0.34	0.28	0.40	1.31	-	2.57	0.59	0.19	0.87	0.19	0.94	0.66	0.75
NL0009R	lead	aerosol	ng/m3	8.75	7.14	8.00	2.43	3.20	1.93	3.19	3.20	4.80	3.81	7.13	5.53	5.02
NO0002R	lead	pm10	ng/m3	1.45	1.07	0.80	1.13	1.20	0.26	0.22	0.65	0.37	0.39	0.95	1.24	0.80
NO0042G	lead	aerosol	ng/m3	0.12	0.19	0.80	0.44	0.27	0.04	0.02	0.05	0.07	0.09	0.13	0.32	0.22
NO0090R	lead	aerosol	ng/m3	1.03	0.73	0.36	0.42	0.15	0.17	0.04	0.11	0.16	0.15	0.10	0.85	0.34
SE0014R	lead	aerosol	ng/m3	1.97	4.22	2.76	2.15	1.63	1.06	1.26	1.22	1.57	3.87	4.89	0.95	2.28
BE0013R	mercury (TGM)	air	ng/m3	-	0.80	0.70	-	-	-	0.70	0.60	0.50	1.00	0.60	-	-
ES0008R	mercury (TGM)	air	ng/m3	-	0.85	0.85	0.72	0.58	0.58	0.54	0.33	0.34	0.34	0.32	0.35	0.51
NO0002R	mercury (TGM)	air	ng/m3	2.05	1.74	1.38	1.43	1.29	1.56	1.57	1.55	1.57	1.62	1.93	1.95	1.62
NO0042G	mercury (TGM)	air	ng/m3	1.62	1.59	1.48	1.31	1.39	1.52	1.68	1.70	1.58	1.38	1.40	1.45	1.51
NO0090R	mercury (TGM)	air	ng/m3	1.75	1.76	1.73	1.59	1.55	1.57	1.61	1.52	1.46	1.56	1.57	1.70	1.61
SE0014R	mercury (TGM)	air+aerosol	ng/m3	1.61	1.62	1.51	1.58	1.64	1.51	1.48	1.43	1.39	1.39	1.65	1.59	1.53
IS0091R	mercury	aerosol	ng/m3	4.25	3.20	3.43	4.07	-	2.93	2.84	1.38	1.71	1.42	0.67	1.15	2.50
SE0014R	mercury	aerosol	ng/m3	5.54	7.54	8.38	8.04	7.26	7.03	4.13	6.74	2.53	6.28	10.05	8.83	6.86
BE0014R	nickel	pm10	ng/m3	2.55	3.41	6.69	3.67	5.38	3.20	5.06	3.93	3.95	2.71	1.78	1.62	3.67
DE0001R	nickel	pm10	ng/m3	1.12	1.12	2.13	0.74	0.92	0.76	0.82	0.92	0.66	1.18	0.93	0.82	1.01
DK0008R	nickel	aerosol	ng/m3	0.66	0.95	1.98	1.45	2.58	2.19	1.28	3.30	0.71	2.26	0.98	1.29	1.62
ES0008R	nickel	pm10	ng/m3	0.61	0.58	1.23	0.60	0.98	0.90	1.54	1.46	1.51	0.99	0.99	0.54	1.00
GB0013R	nickel	pm10	ng/m3	0.20	0.52	1.24	0.33	0.84	0.72	0.61	0.73	0.43	0.45	0.34	0.21	0.55
GB0017R	nickel	pm10	ng/m3	0.83	1.09	1.99	0.55	1.01	0.78	0.92	1.92	0.60	0.75	1.11	0.76	1.03
GB0091R	nickel	pm10	ng/m3	0.20	0.20	0.17	0.17	0.34	0.24	0.19	0.37	0.07	0.15	0.12	0.15	0.20
IS0091R	nickel	aerosol	ng/m3	3.19	3.65	3.97	2.60	-	0.42	0.74	3.81	2.60	3.37	3.65	2.46	2.65
NL0009R	nickel	aerosol	ng/m3	1.30	1.74	3.20	0.62	2.01	1.00	1.42	1.27	0.82	0.70	0.84	0.78	1.32
NO0002R	nickel	pm10	ng/m3	0.25	0.26	0.26	0.49	0.37	0.25	0.17	0.45	0.26	0.13	0.27	0.32	0.29
NO0042G	nickel	aerosol	ng/m3	0.08	0.08	0.06	0.06	0.07	0.12	0.09	0.02	0.02	0.05	0.05	0.08	0.07
NO0090R	nickel	aerosol	ng/m3	0.19	0.14	0.07	0.18	0.49	0.41	0.07	0.09	0.16	0.07	0.07	0.16	0.17
SE0014R	nickel	aerosol	ng/m3	1.53	1.00	1.20	1.92	0.84	1.13	0.74	0.63	0.98	0.89	0.96	0.41	1.02
BE0014R	zinc	pm10	ng/m3	30.2	35.0	20.6	20.3	18.6	22.3	26.8	18.6	23.4	36.7	33.2	26.8	26.0
ES0008R	zinc	pm10	ng/m3	13.3	19.1	23.6	6.1	11.0	5.8	27.2	18.9	12.7	22.2	14.5	4.5	15.1
GB0013R	zinc	pm10	ng/m3	3.4	8.5	10.4	3.6	7.9	3.0	3.0	3.9	4.2	4.7	5.3	4.2	5.2
GB0017R	zinc	pm10	ng/m3	12.6	12.9	14.0	3.7	3.0	4.1	2.8	8.0	5.6	8.3	19.4	10.2	8.9
GB0091R	zinc	pm10	ng/m3	4.9	4.9	3.0	3.0	4.1	3.0	3.0	3.4	3.0	4.2	4.6	3.2	3.7
IS0091R	zinc	aerosol	ng/m3	4.4	3.0	5.1	5.0	-	13.4	5.3	1.9	6.4	2.9	4.1	5.8	5.2
NL0009R	zinc	aerosol	ng/m3	29.6	20.3	30.8	26.1	24.6	21.5	25.2	20.9	28.2	24.6	28.6	20.9	25.1
NO0002R	zinc	pm10	ng/m3	4.1	4.1	2.7	4.5	4.0	1.0	0.7	2.4	1.6	4.3	3.2	4.9	3.1
NO0042G	zinc	aerosol	ng/m3	1.5	1.4	1.4	1.0	2.0	0.4	2.8	0.3	0.3	0.9	0.7	1.2	1.2
NO0090R	zinc	aerosol	ng/m3	3.1	2.8	1.3	2.7	2.3	0.5	0.2	0.5	0.7	0.6	0.9	2.6	1.5
SE0014R	zinc	aerosol	ng/m3	15.9	13.9	10.5	8.4	5.5	3.7	5.2	4.5	6.2	11.4	14.0	5.9	8.7

Table A.2.7: Total depostion and concentrations of POPs in precipitation

Site	Comp	matrix	unit	jan	febr	mar	apr	may	june	july	aug	sept	oct	nov	dec	year
ES0008R	acenaphthene	precip+dry_dep	ng/m^2	-	-	-	-	0.09	0.09	0.09	0.09	-	-	-	-	-
NO0001R	acenaphthene	precip	ng/L	0.834	1.621	1.128	1.016	1.191	0.841	3.7	0.915	0.933	0.612	0.541	0.515	0.792
PT0002R	acenaphthene	precip	ng/L	-	-	5	5	5	5	-	-	5	5	5	5	-
PT0004R	acenaphthene	precip	ng/L	5	-	5	5	5	-	-	-	5	5	5	5	-
ES0008R	acenaphthylene	precip+dry_dep	ng/m^2	-	-	-	-	0.07	0.07	0.07	0.07	-	-	-	-	-
NO0001R	acenaphthylene	precip	ng/L	6.042	2.944	0.806	0.558	0.6	0.436	1.903	0.455	0.45	0.456	1.168	2.866	1.616
PT0002R	acenaphthylene	precip	ng/L	-	-	5	5	5	5	-	-	5	5	5	5	-
PT0004R	acenaphthylene	precip	ng/L	5	-	5	5	5	-	-	-	5	5	5	5	-
BE0014R	aldrin	precip	ng/L	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
PT0002R	aldrin	precip	ng/L	-	-	5	5	5	-	-	-	5	5	5	5	-
PT0004R	aldrin	precip	ng/L	-	-	-	5	5	-	-	-	5	5	5	5	-
NO0001R	anthanthrene	precip	ng/L	4.39	1.281	0.596	0.644	0.602	0.229	0.633	0.19	0.217	0.508	1.402	0.287	0.997
ES0008R	anthracene	precip+dry_dep	ng/m^2	-	-	-	-	0.01	0.01	0.01	0.01	-	-	-	-	-
NO0001R	anthracene	precip	ng/L	2.945	1.304	0.5	7.019	0.36	0.274	0.531	0.265	0.248	0.205	0.337	0.645	1.048
PT0002R	anthracene	precip	ng/L	-	-	5	5	5	5	-	-	5	5	5	5	-
PT0004R	anthracene	precip	ng/L	5	-	5	5	5	-	-	-	5	5	5	5	-
SE0014R	anthracene	precip+dry_dep	ng/m^2	0.933	0	0	0.933	0	0	0	0.161	1	0.097	1	1.935	0.503
ES0008R	benz_a_anthracene	precip+dry_dep	ng/m^2	-	-	-	-	0.02	0.02	0.02	0.02	-	-	-	-	-
NO0001R	benz_a_anthracene	precip	ng/L	16.838	3.523	1.922	1.043	0.688	0.315	0.535	0.287	0.323	1.646	6.228	8.221	4.537
PT0002R	benz_a_anthracene	precip	ng/L	-	-	5	5	5	5	-	-	5	5	5	5	-
PT0004R	benz_a_anthracene	precip	ng/L	5	-	5	5	5	-	-	-	5	5	5	5	-
NO0001R	benzo_a_fluoranthene	precip	ng/L	5.509	4.771	3.327	2.128	1.207	1.116	0.827	0.759	0.472	0.754	2.285	2.419	1.936
NO0001R	benzo_a_fluorene	precip	ng/L	1.26	-	-	1.63	2.254	0.567	1.804	0.843	0.895	0.584	-	-	1.029
DE0001R	benzo_a_pyrene	precip	ng/L	0.755	1.404	4.51	2.692	1.24	0.75	0.414	0.44	1.041	0.855	2.2	4.529	1.364
ES0008R	benzo_a_pyrene	precip+dry_dep	ng/m^2	-	-	-	-	0.02	0.02	0.08	0.06	-	-	-	-	-
NO0001R	benzo_a_pyrene	precip	ng/L	14.109	2.743	1.406	1.074	0.794	0.348	0.339	0.287	0.297	1.67	6.463	6.484	4.006
PT0002R	benzo_a_pyrene	precip	ng/L	-	-	5	5	5	5	-	-	5	5	5	5	-
PT0004R	benzo_a_pyrene	precip	ng/L	5	-	5	5	5	-	-	-	5	5	5	5	-
SE0014R	benzo_a_pyrene	precip+dry_dep	ng/m^2	2	2.103	3	4.833	2	2	2	1.839	1	5.484	10	10.935	3.938
PT0002R	benzo_b_fluoranthene	precip	ng/L	-	-	5	5	5	5	-	-	5	5	5	5	-
PT0004R	benzo_b_fluoranthene	precip	ng/L	5	-	5	5	5	-	-	-	5	5	5	5	-
NO0001R	benzo_b_fluorene	precip	ng/L	0.248	0.427	0.223	0.338	0.216	0.157	0.355	0.164	0.282	0.119	-	-	0.224
NO0001R	benzo_bjk_fluoranthenes	precip	ng/L	62.3	29.946	16.003	5.81	3.239	3.459	3.39	1.594	1.73	9.182	37.61	42.747	22.658
NO0001R	benzo_e_pyrene	precip	ng/L	22.999	11.763	6.595	3.49	1.931	0.992	1.145	0.577	0.994	4.081	15.061	15.516	8.751
NO0001R	benzo_ghi_fluoranthene	precip	ng/L	0.275	-	-	5.5	0.719	0.825	0.23	0.524	0.219	7.377	14.147	15.783	10.566
ES0008R	benzo_ghi_perylene	precip+dry_dep	ng/m^2	-	-	-	-	0.02	0.02	0.04	0.02	-	-	-	-	-
NO0001R	benzo_ghi_perylene	precip	ng/L	25.723	8.127	4.385	1.432	0.698	0.216	0.181	0.147	0.349	2.109	9.183	13.334	6.389
PT0002R	benzo_ghi_perylene	precip	ng/L	-	-	5	5	5	5	-	-	5	5	5	5	-
PT0004R	benzo_ghi_perylene	precip	ng/L	5	-	5	5	5	-	-	-	5	5	5	5	-
SE0014R	benzo_ghi_perylene	precip+dry_dep	ng/m^2	3.933	3.207	5	5.833	2	2	2	2	2	6.968	16	15.065	5.5
ES0008R	benzo_k_fluoranthene	precip+dry_dep	ng/m^2	-	-	-	-	0.02	0.02	0.06	0.05	-	-	-	-	-
PT0002R	benzo_k_fluoranthene	precip	ng/L	-	-	5	5	5	5	-	-	5	5	5	5	-
PT0004R	benzo_k_fluoranthene	precip	ng/L	5	-	5	5	5	-	-	-	5	5	5	5	-
NO0001R	biphenyl	precip	ng/L	1.656	4.085	2.46	1.571	0.919	0.815	0.691	0.584	0.418	0.522	1.598	2.577	1.372
ES0008R	chrysene	precip+dry_dep	ng/m^2	-	-	-	-	0.02	0.02	0.02	0.02	-	-	-	-	-
PT0002R	chrysene	precip	ng/L	-	-	5	5	5	5	-	-	5	5	5	5	-
PT0004R	chrysene	precip	ng/L	5	-	5	5	5	-	-	-	5	5	5	5	-
SE0014R	chrysene	precip+dry_dep	ng/m^2	15.267	5.207	7	12.5	4	4	4.839	4.29	11	10.839	28	31.742	11.542
NO0001R	chrysene_triphenylene	precip	ng/L	46.139	25.443	14.626	5.691	2.64	1.465	1.28	0.768	1.838	7.139	25.689	33.676	16.932
NO0001R	coronene	precip	ng/L	0.353	1.29	1.488	0.536	0.267	0.19	0.453	0.217	0.253	1.643	12.2	-	1.514
NO0001R	cyclopenta_cd_pyrene	precip	ng/L	7.873	0.888	0.334	0.31	0.163	0.203	0.187	0.241	0.255	0.749	2.027	2.984	1.802
NO0001R	dibenzo_ac_ah_anthracenes	precip	ng/L	0.547	0.791	0.402	0.511	0.798	0.518	1.597	0.644	0.708	0.789	2.256	-	0.948
NO0001R	dibenzo_ae_pyrene	precip	ng/L	0.277	0.672	0.466	0.515	0.17	0.175	0.046	0.14	0.118	0.277	3.21	-	0.423
ES0008R	dibenzo_ah_anthracene	precip+dry_dep	ng/m^2	-	-	-	-	0.02	0.02	0.02	0.02	-	-	-	-	-
PT0002R	dibenzo_ah_anthracene	precip	ng/L	-	-	5	5	5	5	-	-	5	5	5	5	-
PT0004R	dibenzo_ah_anthracene	precip	ng/L	5	-	5	5	5	-	-	-	5	5	5	5	-
NO0001R	dibenzo_ah_pyrene	precip	ng/L	0.456	1.553	1.084	1.35	0.36	0.393	0.041	0.29	0.175	0.111	0.188	0.119	0.315
NO0001R	dibenzo_ai_pyrene	precip	ng/L	0.699	1.038	0.702	1.588	0.271	0.346	0.314	0.37	0.424	0.285	0.454	0.196	0.454
NO0001R	dibenzofuran	precip	ng/L	4.756	5.925	2.521	2.665	1.126	0.953	2.159	0.766	0.672	0.996	2.824	5.326	2.626
NO0001R	dibenzothiophene	precip	ng/L	1.871	0.963	0.497	1.021	1.425	0.884	3.037	1.173	1.336	0.905	0.8	0.685	1.125
BE0014R	dieldrin	precip	ng/L	0.2	0.2	0.2	0.2	0.392	0.83	0.2	0.2	0.867	1	0.618	0.2	0.537
IS0091R	dieldrin	precip	ng/L	0.018	0.023	0.019	0.013	0.012	0.003	0.006	0.005	0.003	0.008	0.008	0.01	0.012
PT0002R	dieldrin	precip	ng/L	-	-	5	5	5	-	-	-	5	5	5	5	-
PT0004R	dieldrin	precip	ng/L	-	-	-	5	5	-	-	-	5	5	5	5	-
BE0014R	endrin	precip	ng/L	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
PT0002R	endrin	precip	ng/L	-	-	5	5	5	-	-	-	5	5	5	5	-
PT0004R	endrin	precip	ng/L	-	-	-	5	5	-	-	-	5	5	5	5	-
ES0008R	fluoranthene	precip+dry_dep	ng/m^2	-	-	-	-	0.03	0.03	0.11	0.08	-	-	-	-	-
NO0001R	fluoranthene	precip	ng/L	89.495	43.825	23.156	8.936	4.495	1.462	1.444	1.242	2.196	8.665	33.413	50.345	26.102
PT0002R	fluoranthene	precip	ng/L	-	-	5	6.712	5.162	5	-	-	5	5	5	5	-
PT0004R	fluoranthene	precip	ng/L	5	-	5	5	5	-	-	-	5	5	5	5	-
SE0014R	fluoranthene	precip+dry_dep	ng/m^2	15.667	11.207	13	26.833	7.871	7	5.258	7.516	5	17.452	31	59.065	17.244
ES0008R	fluorene	precip+dry_dep	ng/m^2	-	-	-	-	0.02	0.02	0.02	0.02	-	-	-	-	-
NO0001R	fluorene	precip	ng/L	7.648	4.734	2.368	2.296	0.719	0.527	0.816	0.474	0.559	1.262	4.16	6.416	3.23
PT0002R	fluorene	precip	ng/L	-	-	5	5	5	5	-	-	5	5	5	5	-
PT0004R	fluorene	precip	ng/L	5	-	5	5	5	-	-	-	5	5	5	5	-
BE0014R	heptachlor	precip	ng/L	1	1	1	1	1	1	1	1	1	1	1	1	1
PT0002R	heptachlor	precip	ng/L	-	-	5	5	5	-	-	-	5	5	5	5	-
PT0004R	heptachlor	precip	ng/L	-	-	-	5	5	-	-	-	5	5	5	5	-
PT0002R	heptachlorepoxide	precip	ng/L	-	-	5	5	5	-	-	-	5	5	5	5	-
PT0004R	heptachlorepoxide	precip	ng/L	-	-	-	5	5	-	-	-	5	5	5	5	-
PT0002R	hexachlorobenzene	precip	ng/L	-	-	5	5	5	-	-	-	5	5	5	5	-
PT0004R	hexachlorobenzene	precip	ng/L	-	-	-	5	5	-	-	-	5	5	5	5	-
ES0008R	inden_123cd_pyrene	precip+dry_dep	ng/m^2	-	-	-	-	0.02	0.02	0.02	0.02	-	-	-	-	-
NO0001R	inden_123cd_pyrene	precip	ng/L	27.475	8.405	4.842	1.992	1.054	0.395	0.472	0.267	0.437	3.459	16.729	19.765	9.754
PT0002R	inden_123cd_pyrene	precip	ng/L	-	-	5	5	5	5	-	-	5	5	5	5	-
PT0004R	inden_123cd_pyrene	precip	ng/L	5	-	5	5	5	-	-	-	5	5	5	5	-
SE0014R	inden_123cd_pyrene	precip+dry_dep	ng/m^2	3.933	3.103	4	5.8	2	2	2	1.839	1	8.258	20	19.065	6.084

Site	Comp	matrix	unit	jan	febr	mar	apr	may	june	july	aug	sept	oct	nov	dec	year
NO0001R	N1methylnaphtalene	precip	ng/L	4.336	4.238	2.306	1.862	1.518	1.174	2.561	1.102	1.007	0.636	1.159	2.755	1.789
NO0001R	N1methylphenanthrene	precip	ng/L	11.849	4.699	2.493	1.222	0.816	0.545	1.427	0.616	0.643	1.169	4.06	6.013	3.417
NO0001R	N2methylanthracene	precip	ng/L	1.124	0.483	0.271	0.308	0.297	0.215	0.543	0.235	0.245	0.181	0.208	0.197	0.323
NO0001R	N2methylnaphtalene	precip	ng/L	5.324	6.191	3.935	2.671	1.979	1.582	2.379	1.268	1.004	0.65	1.429	3.058	2.15
NO0001R	N2methylphenanthrene	precip	ng/L	11.33	5.07	2.931	1.425	0.693	0.346	0.661	0.286	0.42	1.304	4.603	6.115	3.425
NO0001R	N3methylphenanthrene	precip	ng/L	9.018	3.891	2.147	1.124	0.528	0.352	0.753	0.358	0.393	1.057	3.735	4.8	2.754
NO0001R	N9methylphenanthrene	precip	ng/L	8.33	2.764	1.536	0.767	0.432	0.314	0.63	0.291	0.282	0.895	3.311	4.112	2.397
NO0001R	naphtalene	precip	ng/L	5.401	18.85	13.192	8.436	4.826	4.451	4.083	3.052	2.088	1.939	5.696	12.199	6.033
PT0002R	naphtalene	precip	ng/L	-	-	16	16.346	25.735	6	-	-	29	33.788	35.694	29.591	-
PT0004R	naphtalene	precip	ng/L	100	-	27	28.562	17.154	-	-	-	6	53.654	24.532	46	-
ES0008R	naphthalene	precip+dry_dep	ng/m^2	-	-	-	-	0.09	0.09	0.09	0.09	-	-	-	-	-
NO0001R	perylene	precip	ng/L	1.901	0.574	0.391	0.279	0.301	0.18	0.272	0.154	0.132	0.264	0.993	1.039	0.665
ES0008R	phenanthrene	precip+dry_dep	ng/m^2	-	-	-	-	0.02	0.02	0.04	0.02	-	-	-	-	-
NO0001R	phenanthrene	precip	ng/L	70.308	48.12	22.334	9.944	4.206	1.538	2.675	1.767	2.637	6.456	22.906	40.529	20.802
PT0002R	phenanthrene	precip	ng/L	-	-	5	6.712	5.162	5	-	-	5	5	14.369	8.306	-
PT0004R	phenanthrene	precip	ng/L	5	-	6	5.663	5.217	-	-	-	5	5	5.121	10	-
SE0014R	phenanthrene	precip+dry_dep	ng/m^2	12.867	10.793	9	21.067	7	7	4.29	6.677	5	11.677	18	45.129	13.204
ES0008R	pyrene	precip+dry_dep	ng/m^2	-	-	-	-	0.04	0.04	0.04	0.08	-	-	-	-	-
NO0001R	pyrene	precip	ng/L	60.492	27.541	11.191	5.694	3.28	1.258	0.852	0.843	1.677	6.225	21.706	32.547	17.205
PT0002R	pyrene	precip	ng/L	-	-	5	6.141	5.108	5	-	-	5	5	5	5	-
PT0004R	pyrene	precip	ng/L	5	-	5	5	5	-	-	-	5	5	5	5	-
SE0014R	pyrene	precip+dry_dep	ng/m^2	9.733	6.31	9	16.367	5.871	5	3.194	4.677	3	12.161	23	34.226	11.049
NO0001R	retene	precip	ng/L	14.658	5.387	2.414	1.403	0.884	0.649	0.589	0.5	0.6	1.424	4.929	8.009	4.179
BE0014R	PCB_101	precip	ng/L	1	1	1	1	1	1	1	1	1	1	1	1	1
DE0001R	PCB_101	precip	ng/L	0.014	0.119	0.084	0.131	0.038	0.009	0.047	0.081	0.089	0.05	0.066	0.08	0.061
IS0091R	PCB_101	precip	ng/L	0.001	0.003	0.001	0.004	0.004	0.006	0.006	0.009	0.001	0.002	0.004	0.001	0.003
NO0001R	PCB_101	precip	ng/L	0.027	0.036	0.017	0.009	0.011	0.003	0.045	0.004	0.002	0.005	0.007	0.006	0.011
PT0002R	PCB_101	precip	ng/L	-	-	5	5	5	-	-	-	5	5	5	5	-
PT0004R	PCB_101	precip	ng/L	-	-	-	5	5	-	-	-	5	5	5	5	-
SE0014R	PCB_101	precip+dry_dep	ng/m^2	0.087	0.041	0.05	0.053	0.131	0.07	0.052	0.07	0.07	0.038	0.015	0.057	0.061
IS0091R	PCB_105	precip	ng/L	0.001	0.002	0.004	0.004	0.004	0.003	0.006	0.005	0.005	0.002	0.006	0.005	0.003
PT0002R	PCB_105	precip	ng/L	-	-	0.2	0.2	0.1	-	-	-	5	0.298	0.075	0.093	-
PT0004R	PCB_105	precip	ng/L	-	-	0.2	0.2	-	-	-	-	5	0.157	0.071	0.1	-
PT0002R	PCB_114	precip	ng/L	-	-	0.02	0.02	0.02	-	-	-	-	0.02	0.02	0.02	-
PT0004R	PCB_114	precip	ng/L	-	-	0.02	0.02	-	-	-	-	-	0.02	0.02	0.02	-
BE0014R	PCB_118	precip	ng/L	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
DE0001R	PCB_118	precip	ng/L	0.004	0.034	0.038	0.141	0.018	0.012	0.021	0.036	0.021	0.03	0.041	0.049	0.03
IS0091R	PCB_118	precip	ng/L	0.003	0.003	0.003	0.004	0.004	0.003	0.006	0.005	0.005	0.002	0.004	0.001	0.003
NO0001R	PCB_118	precip	ng/L	0.008	0.027	0.009	0.006	0.007	0.003	0.024	0.002	0.002	0.003	0.004	0.006	0.006
PT0002R	PCB_118	precip	ng/L	-	-	0.7	0.7	0.3	-	-	-	5	0.403	0.468	0.367	-
PT0004R	PCB_118	precip	ng/L	-	-	0.3	0.3	-	-	-	-	5	0.526	0.202	0.3	-
SE0014R	PCB_118	precip+dry_dep	ng/m^2	0.018	0.058	0.04	0.049	0.043	0.06	0.043	0.065	0.04	0.04	0.04	0.087	0.049
PT0002R	PCB_123	precip	ng/L	-	-	0.02	0.02	0.02	-	-	-	-	0.02	0.02	0.02	-
PT0004R	PCB_123	precip	ng/L	-	-	0.02	0.02	-	-	-	-	-	0.02	0.02	0.02	-
PT0002R	PCB_126	precip	ng/L	-	-	0.02	0.02	0.02	-	-	-	-	0.02	0.02	0.02	-
PT0004R	PCB_126	precip	ng/L	-	-	0.02	0.02	-	-	-	-	-	0.02	0.02	0.02	-
PT0002R	PCB_128	precip	ng/L	-	-	5	5	5	-	-	-	5	5	5	5	-
PT0004R	PCB_128	precip	ng/L	-	-	-	-	-	-	-	-	5	5	5	5	-
BE0014R	PCB_138	precip	ng/L	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
DE0001R	PCB_138	precip	ng/L	0.008	0.123	0.054	0.101	0.104	0.006	0.06	0.104	0.059	0.056	0.075	0.09	0.062
IS0091R	PCB_138	precip	ng/L	0.003	0.003	0.016	0.004	0.004	0.007	0.006	0.026	0.002	0.002	0.008	0.003	0.006
NO0001R	PCB_138	precip	ng/L	0.01	0.047	0.015	0.005	0.005	0.002	0.037	0.003	0.002	0.004	0.009	0.006	0.008
SE0014R	PCB_138	precip+dry_dep	ng/m^2	0.316	0.137	0.28	0.224	0.29	0.29	0.19	0.261	0.16	0.128	0.11	0.222	0.218
BE0014R	PCB_153	precip	ng/L	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
DE0001R	PCB_153	precip	ng/L	0.014	0.119	0.046	0.392	0.075	0.017	0.064	0.11	0.063	0.05	0.068	0.082	0.072
IS0091R	PCB_153	precip	ng/L	0.002	0.002	0.016	0.004	0.004	0.007	0.006	0.026	0.008	0.002	0.011	0.001	0.006
NO0001R	PCB_153	precip	ng/L	0.013	0.077	0.02	0.008	0.012	0.003	0.051	0.004	0.003	0.004	0.01	0.008	0.011
PT0002R	PCB_153	precip	ng/L	-	-	5	5	5	-	-	-	5	5	5	5	-
PT0004R	PCB_153	precip	ng/L	-	-	-	5	5	-	-	-	5	5	5	5	-
SE0014R	PCB_153	precip+dry_dep	ng/m^2	0.287	0.121	0.22	0.194	0.266	0.24	0.184	0.321	0.17	0.107	0.08	0.155	0.196
IS0091R	PCB_156	precip	ng/L	0.001	0.002	0.004	0.004	0.004	0.003	0.006	0.005	0.003	0.002	0.008	0.001	0.003
PT0002R	PCB_156	precip	ng/L	-	-	0.8	0.8	0.1	-	-	-	5	0.308	0.143	0.074	-
PT0004R	PCB_156	precip	ng/L	-	-	0.1	0.1	-	-	-	-	5	0.235	0.1	0.1	-
PT0002R	PCB_157	precip	ng/L	-	-	0.03	0.03	0.03	-	-	-	-	0.02	0.02	0.02	-
PT0004R	PCB_157	precip	ng/L	-	-	0.02	0.02	-	-	-	-	-	0.02	0.02	0.02	-
PT0002R	PCB_167	precip	ng/L	-	-	0.2	0.2	0.04	-	-	-	-	0.04	0.143	0.03	-
PT0004R	PCB_167	precip	ng/L	-	-	0.02	0.02	-	-	-	-	-	0.05	0.059	0.02	-
PT0002R	PCB_169	precip	ng/L	-	-	0.02	0.02	0.02	-	-	-	-	0.02	0.02	0.02	-
PT0004R	PCB_169	precip	ng/L	-	-	0.02	0.02	-	-	-	-	-	0.02	0.02	0.02	-
PT0002R	PCB_170	precip	ng/L	-	-	5	5	5	-	-	-	5	5	5	5	-
PT0004R	PCB_170	precip	ng/L	-	-	-	5	5	-	-	-	5	5	5	5	-
BE0014R	PCB_180	precip	ng/L	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
DE0001R	PCB_180	precip	ng/L	0.009	0.074	0.028	0.149	0.076	0.058	0.025	0.039	0.022	0.028	0.038	0.046	0.038
IS0091R	PCB_180	precip	ng/L	0.001	0.002	0.016	0.004	0.004	0.003	0.006	0.015	0.003	0.002	0.008	0.001	0.004
NO0001R	PCB_180	precip	ng/L	0.008	0.157	0.017	0.004	0.006	0.001	0.018	0.002	0.001	0.003	0.011	0.005	0.009
PT0002R	PCB_180	precip	ng/L	-	-	5	5	5	-	-	-	5	5	5	5	-
PT0004R	PCB_180	precip	ng/L	-	-	-	5	5	-	-	-	5	5	5	5	-
SE0014R	PCB_180	precip+dry_dep	ng/m^2	0.249	0.112	0.22	0.173	0.2	0.2	0.13	0.217	0.15	0.098	0.08	0.211	0.17
PT0002R	PCB_189	precip	ng/L	-	-	0.02	0.02	0.02	-	-	-	-	0.02	0.02	0.02	-
PT0004R	PCB_189	precip	ng/L	-	-	0.02	0.02	-	-	-	-	-	0.02	0.03	0.02	-
BE0014R	PCB_28	precip	ng/L	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
DE0001R	PCB_28	precip	ng/L	0.034	0.425	0.222	0.046	0.076	0.022	0.014	0.091	0.15	0.024	0.026	0.031	0.064
IS0091R	PCB_28	precip	ng/L	0.004	0.005	0.006	0.015	0.016	0.011	0.025	0.018	0.004	0.009	0.007	0.004	0.007
NO0001R	PCB_28	precip	ng/L	0.02	0.016	0.016	0.007	0.005	0.003	0.006	0.007	0.003	0.004	0.007	0.008	0.008
PT0002R	PCB_28	precip	ng/L	-	-	5	5	5	-	-	-	5	5	5	5	-
PT0004R	PCB_28	precip	ng/L	-	-	-	5	5	-	-	-	5	5	5	5	-
SE0014R	PCB_28	precip+dry_dep	ng/m^2	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
IS0091R	PCB_31	precip	ng/L	0.004	0.005	0.006	0.015	0.016	0.011	0.025	0.018	0.004	0.009	0.007	0.004	0.007
PT0002R	PCB_31	precip	ng/L	-	-	5	5	5	-	-	-	5	5	5	5	-
PT0004R	PCB_31	precip	ng/L	-	-	-	5	5	-	-	-	5	5	5	5	-
BE0014R	PCB_52	precip	ng/L	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
DE0001R	PCB_52	precip	ng/L	0.015	0.14	0.078	0.059	0.037	0.01	0.018	0.03	0.052	0.022	0.027	0.032	0.032
IS0091R	PCB_52	precip	ng/L	0.001	0.002	0.001	0.004	0.004	0.003	0.006	0.005	0.001	0.002	0.002	0.001	0.002
NO0001R	PCB_52	precip	ng/L	0.035	0.027	0.019	0.009	0.009	0.002	0.008	0.006	0.002	0.004	0.006	0.007	0.009
PT0002R	PCB_52	precip	ng/L	-	-	5	5	5	-	-	-	5	5	5	5	-

Site	Comp	matrix	unit	jan	febr	mar	apr	may	june	july	aug	sept	oct	nov	dec	year
PT0004R	PCB_52	precip	ng/L	-	-	-	5	5	-	-	-	5	5	5	5	-
SE0014R	PCB_52	precip+dry_dep	ng/m^2	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.03	0.025	0.03	0.026
PT0002R	PCB_77	precip	ng/L	-	-	0.02	0.02	0.08	-	-	-	-	0.02	0.02	0.02	-
PT0004R	PCB_77	precip	ng/L	-	-	0.02	0.02	-	-	-	-	-	0.02	0.02	0.02	-
PT0002R	PCB_81	precip	ng/L	-	-	0.02	0.02	0.02	-	-	-	-	0.02	0.02	0.02	-
PT0004R	PCB_81	precip	ng/L	-	-	0.02	0.02	-	-	-	-	-	0.02	0.02	0.02	-
NO0001R	PCB_99	precip	ng/L	0.005	0.009	0.005	0.002	0.003	0.001	0.009	0.001	0.001	0.002	0.002	0.002	0.003
BE0014R	pp_DDD	precip	ng/L	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
IS0091R	pp_DDD	precip	ng/L	0.003	0.002	0.004	0.004	0.004	0.003	0.006	0.005	0.003	0.002	0.004	0.003	0.003
PT0002R	pp_DDD	precip	ng/L	-	-	5	5	5	-	-	-	5	5	5	5	-
PT0004R	pp_DDD	precip	ng/L	-	-	-	5	5	-	-	-	5	5	5	5	-
SE0014R	pp_DDD	precip+dry_dep	ng/m^2	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.006	0.009	0.015	0.06	0.01
BE0014R	pp_DDE	precip	ng/L	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
IS0091R	pp_DDE	precip	ng/L	0.001	0.002	0.001	0.004	0.004	0.003	0.006	0.005	0.001	0.002	0.004	0.001	0.002
PT0002R	pp_DDE	precip	ng/L	-	-	5	5	5	-	-	-	5	5	5	5	-
PT0004R	pp_DDE	precip	ng/L	-	-	-	5	5	-	-	-	5	5	5	5	-
SE0014R	pp_DDE	precip+dry_dep	ng/m^2	0.087	0.037	0.057	0.277	0.119	0.11	0.045	0.064	0.051	0.085	0.26	0.091	0.107
BE0014R	pp_DDT	precip	ng/L	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
IS0091R	pp_DDT	precip	ng/L	0.003	0.004	0.004	0.008	0.004	0.003	0.006	0.01	0.003	0.008	0.004	0.004	0.004
SE0014R	pp_DDT	precip+dry_dep	ng/m^2	0.031	0.019	0.013	0.052	0.067	0.057	0.053	0.1	0.1	0.031	0.044	0.066	0.053
BE0014R	op_DDD	precip	ng/L	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
BE0014R	op_DDE	precip	ng/L	1	1	1	1	1	1	1	1	1	1	1	1	1
BE0014R	op_DDT	precip	ng/L	1	1	1	1	1	1	1	1	1	1	1	1	1
IS0091R	op_DDT	precip	ng/L	0.003	0.003	0.004	0.004	0.004	0.003	0.006	0.01	0.003	0.002	0.004	0.003	0.003
IS0091R	trans_CD	precip	ng/L	0.002	0.002	0.001	0.004	0.004	0.003	0.006	0.005	0.001	0.002	0.004	0.001	0.002
IS0091R	trans_NO	precip	ng/L	0.002	0.002	0.001	0.004	0.004	0.003	0.006	0.005	0.001	0.002	0.004	0.001	0.002
IS0091R	cis_CD	precip	ng/L	0.002	0.002	0.001	0.004	0.004	0.003	0.006	0.005	0.001	0.002	0.004	0.001	0.002
BE0014R	alpha_HCH	precip	ng/L	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
DE0001R	alpha_HCH	precip	ng/L	0.116	0.12	0.119	0.193	0.141	0.129	0.147	0.163	0.127	0.151	0.138	0.122	0.139
IS0091R	alpha_HCH	precip	ng/L	0.032	0.037	0.042	0.054	0.052	0.055	0.063	0.104	0.051	0.064	0.061	0.024	0.046
NO0001R	alpha_HCH	precip	ng/L	0.114	0.106	0.058	0.146	0.158	0.12	0.165	0.233	1.251	0.287	0.187	0.083	0.219
PT0002R	alpha_HCH	precip	ng/L	-	-	5	5	5	-	-	-	5	5	5	5	-
PT0004R	alpha_HCH	precip	ng/L	-	-	-	5	5	-	-	-	5	5	5	5	-
SE0014R	alpha_HCH	precip+dry_dep	ng/m^2	0.039	0.029	0.02	0.114	0.044	0.07	0.134	0.204	0.12	0.077	0.05	0.022	0.077
BE0014R	beta_HCH	precip	ng/L	0.2	0.2	0.2	0.987	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.253
IS0091R	beta_HCH	precip	ng/L	0.002	0.002	0.004	0.004	0.004	0.003	0.006	0.005	0.001	0.002	0.004	0.001	0.002
BE0014R	gamma_HCH	precip	ng/L	0.2	0.2	0.629	1	2.684	7.151	4	3.306	4.502	3.554	3.431	3.587	3.598
DE0001R	gamma_HCH	precip	ng/L	1.318	1.71	1.77	2.117	2.29	1.495	1.44	1.713	0.978	1.16	1.167	1.303	1.362
IS0091R	gamma_HCH	precip	ng/L	0.008	0.008	0.029	0.02	0.023	0.022	0.024	0.093	0.017	0.024	0.023	0.007	0.019
NL0091R	gamma_HCH	precip	ng/L	3.4	6.057	5.411	6.097	6.4	3.8	4.314	4.155	2.469	2.347	2.35	2.782	3.644
NO0001R	gamma_HCH	precip	ng/L	0.673	0.172	0.092	0.377	0.364	0.385	0.41	0.651	0.211	0.405	0.349	0.165	0.377
PT0002R	gamma_HCH	precip	ng/L	-	-	5	5	5	-	-	-	5	5	5	5	-
PT0004R	gamma_HCH	precip	ng/L	-	-	-	5	5	-	-	-	5	5	5	5	-
SE0014R	gamma_HCH	precip+dry_dep	ng/m^2	0.258	0.086	0.05	0.56	0.498	0.42	0.66	0.566	0.18	0.213	0.15	0.066	0.31
IS0091R	HCB	precip	ng/L	0.007	0.006	0.01	0.013	0.017	0.008	0.011	0.017	0.007	0.008	0.009	0.007	0.009
NO0001R	HCB	precip	ng/L	0.054	0.183	0.201	0.086	0.074	0.04	0.049	0.096	0.065	0.103	0.178	0.085	0.096
BE0014R	precipitation_amount	precip	ng/L	17	65	28	71	55	139	143	29	95	176	122	110	1050
DE0001R	precipitation_amount	precip	ng/L	66	20	17	33	29	92	156	77	160	151	87	89	974
IS0091R	precipitation_amount	precip	ng/L	105	78	62	28	25	38	16	22	87	45	61	86	652
NL0091R	precipitation_amount	precip	ng/L	44	20	35	45	53	83	126	88	103	129	52	119	896
NO0001R	precipitation_amount	precip	ng/L	161	27	29	137	76	128	86	159	86	245	293	307	1734
NO0001R	precipitation_amount	precip	ng/L	161	27	29	114	76	73	83	159	162	283	293	307	1767
PT0002R	precipitation_amount	precip	ng/L	-	-	46	59	88	6	7	4	33	100	166	143	651
PT0004R	precipitation_amount	precip	ng/L	27	0	32	59	31	1	1	1	28	124	111	66	482

Table A.2.8: Concentrations of POPs in air.

Site	Comp	matrix	unit	jan	febr	mar	apr	may	june	july	aug	sept	oct	nov	dec	year
ES0008R	acenaphthene	pm10	ng/m^3	0,086	0,085	0,085	0,085	0,085	0,085	0,085	0,085	0,085	0,085	0,085	0,085	0,085
NO0002R	acenaphthene	air+aerosol	ng/m^3	0,108	0,049	0,039	0,161	0,067	0,143	0,125	0,146	0,033	0,033	0,08	0,134	0,093
NO0042G	acenaphthene	air+aerosol	ng/m^3	0,013	0,006	0,006	0,006	0,007	0,008	0,007	0,072	0,006	0,012	0,008	0,016	0,014
NO0090R	acenaphthene	air+aerosol	ng/m^3	0,023	0,01	0,006	0,006	0,006	0,006	0,006	0,008	0,008	0,008	0,006	0,032	0,01
ES0008R	acenaphthylene	pm10	ng/m^3	0,065	0,065	0,065	0,065	0,065	0,065	0,065	0,065	0,065	0,065	0,065	0,065	0,065
NO0002R	acenaphthylene	air+aerosol	ng/m^3	0,171	0,087	0,021	0,019	0,026	0,012	0,012	0,014	0,012	0,017	0,031	0,254	0,057
NO0042G	acenaphthylene	air+aerosol	ng/m^3	0,007	0,008	0,007	0,007	0,007	0,007	0,007	0,01	0,007	0,01	0,007	0,022	0,009
NO0090R	acenaphthylene	air+aerosol	ng/m^3	0,007	0,007	0,007	0,007	0,007	0,007	0,007	0,007	0,007	0,007	0,007	0,008	0,007
GB0014R	anthanthrene	aerosol	ng/m^3	0,025	0,032	0,01	0,006	0,006	0,004	0,006	0,001	0,001	0,028	0,031	0,029	0,015
NO0002R	anthanthrene	air+aerosol	ng/m^3	0,017	0,023	0,029	0,023	0,019	0,013	0,008	0,007	0,015	0,013	0,01	0,019	0,016
NO0042G	anthanthrene	air+aerosol	ng/m^3	0,001	0,008	0,001	0,002	0,003	0,001	0,003	0,007	0,005	0,007	0,005	0,003	0,004
NO0090R	anthanthrene	air+aerosol	ng/m^3	0,003	0,006	0,006	0,005	0,006	0,001	0,007	0,004	0,007	0,006	0,005	0,015	0,006
ES0008R	anthracene	pm10	ng/m^3	0,004	0,007	0,018	0,04	0,013	0,009	0,005	0,005	0,005	0,005	0,005	0,005	0,009
NO0002R	anthracene	air+aerosol	ng/m^3	0,038	0,022	0,013	0,011	0,044	0,008	0,007	0,014	0,007	0,013	0,03	0,038	0,021
NO0042G	anthracene	air+aerosol	ng/m^3	0,001	0,003	0,001	0,001	0,003	0,002	0,004	0,006	0,005	0,006	0,012	0,003	0,004
NO0090R	anthracene	air+aerosol	ng/m^3	0,002	0,004	0,003	0,003	0,003	0,001	0,004	0,005	0,005	0,004	0,005	0,006	0,004
SE0014R	anthracene	air+aerosol	ng/m^3	0,028	0,049	0,008	0,01	0,003	0,001	0,001	0,002	0,005	0,018	0,031	0,09	0,02
BE0013R	benz_a_anthracene	air+aerosol	ng/m^3	0,09	0,12	0,03	0,003	0,028	0,002	0,004	0,01	0,01	0,053	0,015	0,062	0,029
ES0008R	benz_a_anthracene	pm10	ng/m^3	0,017	0,038	0,015	0,028	0,064	0,015	0,015	0,015	0,048	0,021	0,065	0,064	0,033
GB0014R	benz_a_anthracene	aerosol	ng/m^3	0,133	0,169	0,109	0,046	0,026	0,016	0,016	0,026	0,041	0,129	0,104	0,135	0,079
NL0009R	benz_a_anthracene	pm10	ng/m^3	0,288	0,108	0,016	0,012	0,006	0,003	0,003	0,005	0,011	0,019	0,055	0,162	0,059
NL0091R	benz_a_anthracene	pm10	ng/m^3	0,293	0,137	0,031	0,014	0,012	0,008	0,004	0,01	0,011	0,034	0,082	0,084	0,062
NO0002R	benz_a_anthracene	air+aerosol	ng/m^3	0,033	0,018	0,032	0,006	0,007	0,003	0,002	0,005	0,003	0,009	0,022	0,053	0,016
NO0042G	benz_a_anthracene	air+aerosol	ng/m^3	0,002	0,002	0,001	0,001	0,001	0,001	0,001	0,002	0,001	0,002	0,001	0,006	0,002
NO0090R	benz_a_anthracene	air+aerosol	ng/m^3	0,015	0,006	0,002	0,001	0,001	0,001	0,001	0,001	0,002	0,004	0,002	0,022	0,004
SE0014R	benz_a_anthracene	air+aerosol	ng/m^3	0,093	0,174	0,032	0,067	0,007	0,002	0,002	0,002	0,005	0,029	0,069	0,192	0,055
DE0001R	benzo_a_anthracene	air+pm10	ng/m^3	0,123	0,24	0,005	0,009	0,004	0,003	0,001	0,002	0,009	0,015	0,043	0,128	0,048
NO0002R	benzo_a_fluoranthene	air+aerosol	ng/m^3	0,007	0,006	0,01	0,004	0,003	0,003	0,002	0,002	0,003	0,004	0,004	0,017	0,005
NO0042G	benzo_a_fluoranthene	air+aerosol	ng/m^3	0,001	0,002	0,001	0,001	0,001	0,001	0,002	0,002	0,002	0,002	0,002	0,003	0,002
NO0090R	benzo_a_fluoranthene	air+aerosol	ng/m^3	0,003	0,002	0,002	0,002	0,001	0,001	0,002	0,002	0,001	0,002	0,002	0,009	0,002
NO0002R	benzo_a_fluorene	air+aerosol	ng/m^3	-	0,005	0,006	0,005	0,003	0,004	-	0,004	0,004	0,004	-	0,005	0,005
NO0042G	benzo_a_fluorene	air+aerosol	ng/m^3	0,001	0,002	0,001	0,001	0,002	0,001	0,002	0,004	0,003	0,004	0,003	-	0,002
NO0090R	benzo_a_fluorene	air+aerosol	ng/m^3	-	0,001	0,002	0,003	0,002	0,001	0,003	0,002	0,004	0,003	0,003	-	0,002
BE0013R	benzo_a_pyrene	air+aerosol	ng/m^3	0,145	0,21	0,052	0,013	0,013	0,006	0,01	0,021	0,022	0,034	0,04	0,141	0,045
DE0001R	benzo_a_pyrene	air+pm10	ng/m^3	0,12	0,181	0,014	0,015	0,004	0,003	0,001	0,003	0,004	0,007	0,066	0,157	0,047
ES0008R	benzo_a_pyrene	pm10	ng/m^3	0,02	0,028	0,024	0,05	0,06	0,054	0,034	0,02	0,113	0,03	0,02	0,085	0,044
GB0014R	benzo_a_pyrene	aerosol	ng/m^3	0,112	0,142	0,089	0,04	0,038	0,02	0,019	0,025	0,032	0,122	0,122	0,12	0,073
NL0009R	benzo_a_pyrene	pm10	ng/m^3	0,291	0,12	0,019	0,008	0,007	0,004	0,005	0,009	0,016	0,032	0,112	0,208	0,071
NL0091R	benzo_a_pyrene	pm10	ng/m^3	0,303	0,136	0,028	0,013	0,013	0,009	0,007	0,016	0,013	0,046	0,125	0,113	0,071
NO0002R	benzo_a_pyrene	air+aerosol	ng/m^3	0,045	0,022	0,033	0,003	0,013	0,005	0,003	0,006	0,003	0,008	0,014	0,053	0,017
NO0042G	benzo_a_pyrene	air+aerosol	ng/m^3	0,001	0,002	0,001	0,001	0,002	0,001	0,002	0,002	0,002	0,002	0,002	0,002	0,002
NO0090R	benzo_a_pyrene	air+aerosol	ng/m^3	0,018	0,007	0,002	0,002	0,001	0,001	0,001	0,002	0,002	0,005	0,003	0,027	0,005
SE0014R	benzo_a_pyrene	air+aerosol	ng/m^3	0,117	0,199	0,021	0,024	0,01	0,003	0,003	0,003	0,006	0,033	0,091	0,221	0,06
GB0014R	benzo_b_fluoranthene	aerosol	ng/m^3	0,267	0,329	0,306	0,124	0,085	0,042	0,049	0,076	0,173	0,28	0,383	0,327	0,203
SE0014R	benzo_b_fluoranthene	air+aerosol	ng/m^3	0,223	0,365	0,066	0,064	0,027	0,013	0,008	0,007	0,013	0,072	0,18	0,348	0,114
NO0002R	benzo_b_fluorene	air+aerosol	ng/m^3	-	0,002	0,004	0,005	0,001	0,002	0,002	0,002	0,003	0,004	-	0,002	0,003
NO0042G	benzo_b_fluorene	air+aerosol	ng/m^3	0,001	0,001	0,001	0,001	0,001	0,001	0,001	0,002	0,001	0,002	0,002	0,001	0,001
NO0090R	benzo_b_fluorene	air+aerosol	ng/m^3	-	0,001	0,001	0,001	0,001	0,001	0,002	0,002	0,002	0,003	0,003	-	0,002
NL0009R	benzo_bjk_fluoranthenes	pm10	ng/m^3	0,967	0,512	0,084	0,056	0,034	0,021	0,022	0,033	0,068	0,137	0,377	0,678	0,255
NL0091R	benzo_bjk_fluoranthenes	pm10	ng/m^3	1,32	0,775	0,188	0,097	0,089	0,046	0,03	0,065	0,064	0,196	0,519	0,491	0,335
NO0002R	benzo_bjk_fluoranthenes	air+aerosol	ng/m^3	0,195	0,083	0,158	0,046	0,056	0,054	0,035	0,075	0,015	0,042	0,094	0,199	0,088
NO0042G	benzo_bjk_fluoranthenes	air+aerosol	ng/m^3	0,008	0,008	0,007	0,004	0,004	0,004	0,004	0,004	0,004	0,004	0,004	0,025	0,006
NO0090R	benzo_bjk_fluoranthenes	air+aerosol	ng/m^3	0,065	0,026	0,007	0,004	0,004	0,003	0,003	0,003	0,006	0,024	0,009	0,07	0,017
GB0014R	benzo_e_pyrene	aerosol	ng/m^3	0,175	0,254	0,155	0,085	0,055	0,036	0,036	0,053	0,068	0,137	0,252	0,205	0,125
NO0002R	benzo_e_pyrene	air+aerosol	ng/m^3	0,086	0,036	0,122	0,014	0,031	0,027	0,017	0,037	0,007	0,028	0,039	0,078	0,043
NO0042G	benzo_e_pyrene	air+aerosol	ng/m^3	0,007	0,011	0,002	0,001	0,001	0,001	0,007	0,002	0,002	0,002	0,002	0,001	0,003
NO0090R	benzo_e_pyrene	air+aerosol	ng/m^3	0,036	0,014	0,01	0,002	0,001	0,001	0,001	0,002	0,002	0,014	0,004	0,033	0,009
NO0002R	benzo_ghi_fluoranthene	air+aerosol	ng/m^3	0,049	0,008	0,007	0,056	0,051	0,006	0,006	0,014	0,006	0,019	0,044	0,078	0,03
NO0042G	benzo_ghi_fluoranthene	air+aerosol	ng/m^3	0,002	0,003	0,002	0,001	0,001	0,001	0,001	0,002	0,002	0,002	0,012	0,007	0,003
NO0090R	benzo_ghi_fluoranthene	air+aerosol	ng/m^3	0,015	0,008	0,003	0,001	0,001	0,001	0,001	0,001	0,002	0,004	0,003	0,023	0,005
BE0013R	benzo_ghi_perylene	air+aerosol	ng/m^3	0,081	0,26	0,072	0,023	0,018	0,011	0,01	0,024	0,011	0,036	0,047	0,113	0,042
ES0008R	benzo_ghi_perylene	pm10	ng/m^3	0,137	0,275	0,225	0,19	0,46	0,217	0,096	0,065	0,304	0,136	0,128	0,198	0,202
GB0014R	benzo_ghi_perylene	aerosol	ng/m^3	0,142	0,17	0,109	0,061	0,045	0,029	0,026	0,042	0,05	0,1	0,179	0,138	0,091
NL0009R	benzo_ghi_perylene	aerosol	ng/m^3	0,364	0,201	0,033	0,02	0,011	0,008	0,01	0,015	0,03	0,062	0,169	0,278	0,102
NL0091R	benzo_ghi_perylene	aerosol	ng/m^3	0,416	0,265	0,064	0,042	0,035	0,018	0,012	0,023	0,026	0,087	0,209	0,185	0,119
NO0002R	benzo_ghi_perylene	air+aerosol	ng/m^3	0,043	0,025	0,035	0,01	0,011	0,004	0,003	0,004	0,003	0,011	0,03	0,059	0,019
NO0042G	benzo_ghi_perylene	air+aerosol	ng/m^3	0,003	0,005	0,004	0,003	0,003	0,003	0,003	0,003	0,003	0,003	0,024	0,01	0,005
NO0090R	benzo_ghi_perylene	air+aerosol	ng/m^3	-	0,004	0,006	0,003	0,003	0,003	0,003	0,003	0,004	0,01	0,006	0,042	0,007
SE0014R	benzo_ghi_perylene	air+aerosol	ng/m^3	0,148	0,237	0,04	0,037	0,013	0,005	0,003	0,004	0,007	0,042	0,12	0,251	0,075
DE0001R	benzo_k_fluoranthene	air+pm10	ng/m^3	0,088	0,137	0,011	0,013	0,004	0,013	0,004	0,016	0,029	0,026	0,044	0,157	0,045
ES0008R	benzo_k_fluoranthene	pm10	ng/m^3	0,043	0,115	0,116	0,105	0,186	0,098	0,044	0,04	0,173	0,085	0,065	0,078	0,095
GB0014R	benzo_k_fluoranthene	aerosol	ng/m^3	0,118	0,142	0,157	0,05	0,036	0,021	0,029	0,043	0,066	0,164	0,182	0,192	0,1
SE0014R	benzo_k_fluoranthene	air+aerosol	ng/m^3	0,092	0,155	0,023	0,023	0,01	0,003	0,002	0,002	0,005	0,028	0,072	0,154	0,047
NO0002R	biphenyl	air+aerosol	ng/m^3	0,634	0,521	0,228	0,127	0,085	0,048	0,038	0,053	0,053	0,1	0,239	1,698	0,312
NO0042G	biphenyl	air+aerosol	ng/m^3	0,6	0,66	0,405	0,142	0,064	0,037	0,085	0,061	0,16	0,166	0,436	0,941	0,281
NO0090R	biphenyl	air+aerosol	ng/m^3	0,655	0,152	0,055	0,03	0,021	0,021	0,021	0,018	0,025	0,038	0,087	0,56	0,124
BE0013R	chrysene	air+aerosol	ng/m^3	0,196	0,33	0,082	0,023	0,024	0,009	0,013	0,034	0,025	0,053	0,067	0,223	0,068
ES0008R	chrysene	pm10	ng/m^3	0,033	0,078	0,076	0,085	0,129	0,119	0,056	0,029	0,128	0,084	0,14	0,087	0,087
GB0014R	chrysene	aerosol	ng/m^3	0,273	0,32	0,177	0,077	0,059	0,041	0,032	0,051	0,067	0,154	0,172	0,19	0,134
NL0009R	chrysene	aerosol	ng/m^3	0,717	0,366	0,052	0,025	0,016	0,01	0,011	0,018	0,03	0,048	0,125	0,318	0,149
NL0091R	chrysene	aerosol	ng/m^3	0,682	0,439	0,09	0,037	0,038	0,022	0,015	0,034	0,028	0,081	0,199	0,209	0,162
SE0014R	chrysene	air+aerosol	ng/m^3	0,215	0,386	0,094	0,135	0,034	0,017	0,01	0,011	0,032	0,074	0,19	0,396	0,131
NO0002R	chrysene_triphenylene	air+aerosol	ng/m^3	0,117	0,053	0,153	0,045	0,047	0,036	0,025	0,054	0,012	0,059	0,087	0,141	0,069
NO0042G	chrysene_triphenylene	air+aerosol	ng/m^3	0,006	0,007	0,004	0,001	0,001	0,002	0,001	0,002	0,001	0,002	0,003	0,018	0,004
NO0090R	chrysene_triphenylene	air+aerosol	ng/m^3	0,034	0,016	0,007	0,002	0,002	0,001	0,002	0,002	0,003	0,021	0,006	0,053	0,011
GB0014R	coronene	aerosol	ng/m^3	0,069	0,087	0,04	0,026	0,015	0,009	0,009	0,01	0,021	0,023	0,06	0,044	0,034
NO0002R	coronene	air+aerosol	ng/m^3	0,011	0,026	0,042	0,009	0,01	0,005	0,005	0,003	0,006	0,004	-	0,074	0,015
NO0042G	coronene	air+aerosol	ng/m^3	0,002	0,004	0,002	0,002	0,002	0,002	0,002	0,003	0,002	0,002	0,01	0,003	0,003
NO0090R	coronene	air+aerosol	ng/m^3	-	0,003	0,003	0,003	0,002	0,002	0,003	0,002	0,002	0,003	0,002	0,021	0,004
GB0014R	cyclopenta_cd_pyrene	aerosol	ng/m^3	0,054	0,276	0,207	0,004	0,002	0,003	0,009	0,001	0,001	0,049	0,027	0,058	0,057
NO0002R	cyclopenta_cd_pyrene	air+aerosol	ng/m^3	0,02	0,977	1,518	0,004	0,006	0,004	0,003	0,003	0,004	0,004	0,004	0,023	0,203
NO0042G	cyclopenta_cd_pyrene	air+aerosol	ng/m^3	0,002	0,002	0,002	0,002	0,002	0,002	0,002	0,004	0,002	0,002	0,003	0,004	0,002
NO0090R	cyclopenta_cd_pyrene	air+aerosol	ng/m^3	0,006	0,002	0,002	0,002	0,002	0,002	0,003	0,002	0,002	0,002	0,002	0,012	0,003

Site	Comp	matrix	unit	jan	febr	mar	apr	may	june	july	aug	sept	oct	nov	dec	year
NO0002R	dibenzo_ac_ah_anthracenes	air+aerosol	ng/m^3	0,007	0,007	0,016	0,007	0,006	0,005	0,004	0,005	0,005	0,005	0,005	0,009	0,007
NO0042G	dibenzo_ac_ah_anthracenes	air+aerosol	ng/m^3	0,002	0,003	0,002	0,002	0,002	0,002	0,002	0,003	0,002	0,003	0,004	0,002	0,002
NO0090R	dibenzo_ac_ah_anthracenes	air+aerosol	ng/m^3	0,003	0,002	0,002	0,002	0,002	0,002	0,002	0,002	0,002	0,003	0,002	0,005	0,002
NO0002R	dibenzo_ae_pyrene	air+aerosol	ng/m^3	0,011	0,234	0,535	0,009	0,014	0,004	0,004	0,005	0,007	0,004	0,004	0,006	0,068
NO0042G	dibenzo_ae_pyrene	air+aerosol	ng/m^3	0,002	0,003	0,002	0,003	0,002	0,002	0,002	0,002	0,003	0,003	0,002	0,002	0,002
NO0090R	dibenzo_ae_pyrene	air+aerosol	ng/m^3	0,002	0,002	0,002	0,003	0,003	0,002	0,005	0,003	0,003	0,002	0,002	0,006	0,003
DE0001R	dibenzo_ah_anthracene	air+pm10	ng/m^3	0,017	0,022	0,004	0,002	0,001	0,001	0	0	0,001	0,004	0,013	0,031	0,008
ES0008R	dibenzo_ah_anthracene	pm10	ng/m^3	0,015	0,03	0,034	0,033	0,067	0,038	0,018	0,015	0,056	0,029	0,015	0,033	0,032
GB0014R	dibenzo_ah_anthracene	aerosol	ng/m^3	0,047	0,084	0,028	0,015	0,01	0,004	0,003	0,013	0,017	0,03	0,022	0,03	0,025
NL0009R	dibenzo_ah_anthracene	pm10	ng/m^3	0,069	0,033	0,008	0,004	0,002	0,002	0,001	0,002	0,005	0,01	0,026	0,045	0,018
NL0091R	dibenzo_ah_anthracene	pm10	ng/m^3	0,073	0,044	0,015	0,009	0,007	0,004	0,002	0,004	0,004	0,012	0,035	0,033	0,021
NO0002R	dibenzo_ah_pyrene	air+aerosol	ng/m^3	0,027	0,507	1,145	0,023	0,04	0,008	0,011	0,007	0,017	0,009	0,007	0,011	0,144
NO0042G	dibenzo_ah_pyrene	air+aerosol	ng/m^3	0,002	0,005	0,002	0,005	0,003	0,002	0,003	0,006	0,005	0,005	0,004	0,003	0,004
NO0090R	dibenzo_ah_pyrene	air+aerosol	ng/m^3	0,002	0,004	0,005	0,005	0,004	0,002	0,011	0,004	0,006	0,004	0,004	0,007	0,005
GB0014R	dibenzo_ai_pyrene	aerosol	ng/m^3	0,032	0,067	0,032	0,018	0,014	0,002	0,007	0	0	0,054	0,064	0,031	0,027
NO0002R	dibenzo_ai_pyrene	air+aerosol	ng/m^3	0,046	0,67	1,484	0,035	0,068	0,008	0,009	0,01	0,017	0,009	0,007	0,013	0,189
NO0042G	dibenzo_ai_pyrene	air+aerosol	ng/m^3	0,001	0,002	0,001	0,007	0,004	0,001	0,003	0,006	0,007	0,006	0,004	0,002	0,004
NO0090R	dibenzo_ai_pyrene	air+aerosol	ng/m^3	0,001	0,002	0,003	0,005	0,005	0,001	0,013	0,006	0,007	0,005	0,005	0,01	0,005
NO0002R	dibenzofuran	air+aerosol	ng/m^3	1,542	1,124	0,738	0,599	0,501	0,198	0,18	0,236	0,196	0,385	0,887	4,463	0,902
NO0042G	dibenzofuran	air+aerosol	ng/m^3	0,824	0,716	0,574	0,251	0,048	0,031	0,033	0,039	0,147	0,211	0,44	1,22	0,342
NO0090R	dibenzofuran	air+aerosol	ng/m^3	1,557	0,466	0,225	0,121	0,044	0,013	0,017	0,032	0,067	0,14	0,288	2,002	0,369
NO0002R	dibenzothiophene	air+aerosol	ng/m^3	0,033	0,017	0,029	0,034	0,016	0,016	0,023	0,027	0,014	0,056	0,024	0,041	0,028
NO0042G	dibenzothiophene	air+aerosol	ng/m^3	0,013	0,006	0,003	0,001	0,002	0,003	0,003	0,004	0,003	0,004	0,005	0,019	0,005
NO0090R	dibenzothiophene	air+aerosol	ng/m^3	0,032	0,008	0,006	0,004	0,004	0,001	0,003	0,004	0,005	0,012	0,008	0,027	0,009
IS0091R	dieldrin	air+aerosol	ng/m^3	0,055	0,065	0,5	0,49	0,7	0,75	1,12	1,033	0,66	0,53	0,63	0,47	0,586
BE0013R	fluoranthene	air+aerosol	ng/m^3	0,307	0,93	0,138	0,05	0,041	0,017	0,017	0,045	0,022	0,047	0,06	0,349	0,107
ES0008R	fluoranthene	pm10	ng/m^3	0,055	0,195	0,121	0,185	0,263	0,106	0,082	0,062	0,223	0,117	0,27	0,13	0,146
NO0002R	fluoranthene	air+aerosol	ng/m^3	0,32	0,225	0,281	0,165	0,127	0,06	0,072	0,089	0,061	0,118	0,296	0,586	0,195
NO0042G	fluoranthene	air+aerosol	ng/m^3	0,04	0,034	0,014	0,006	0,007	0,007	0,006	0,005	0,008	0,007	0,02	0,064	0,016
NO0090R	fluoranthene	air+aerosol	ng/m^3	0,136	0,058	0,03	0,012	0,013	0,006	0,012	0,014	0,018	0,073	0,031	0,238	0,048
SE0014R	fluoranthene	air+aerosol	ng/m^3	0,719	1,284	0,28	0,303	0,131	0,07	0,05	0,048	0,09	0,291	0,58	1,254	0,421
ES0008R	fluorene	pm10	ng/m^3	0,02	0,02	0,034	0,02	0,041	0,026	0,02	0,02	0,02	0,02	0,02	0,02	0,024
NO0002R	fluorene	air+aerosol	ng/m^3	0,878	0,512	0,446	0,404	0,383	0,176	0,182	0,264	0,158	0,275	0,712	2,992	0,601
NO0042G	fluorene	air+aerosol	ng/m^3	0,363	0,253	0,101	0,024	0,015	0,018	0,019	0,017	0,036	0,067	0,15	0,458	0,113
NO0090R	fluorene	air+aerosol	ng/m^3	0,917	0,198	0,097	0,049	0,024	0,011	0,013	0,026	0,04	0,084	0,176	1,328	0,215
BE0013R	inden_123cd_pyrene	air+aerosol	ng/m^3	0,531	0,09	0,052	0,013	0,006	0,027	0,001	0,01	0,025	0,059	0,07	0,15	0,08
DE0001R	inden_123cd_pyrene	air+pm10	ng/m^3	0,14	0,203	0,024	0,019	0,01	0,005	0,001	0,004	0,007	0,023	0,113	0,262	0,067
ES0008R	inden_123cd_pyrene	pm10	ng/m^3	0,265	0,533	0,376	0,28	0,508	0,336	0,116	0,085	0,315	0,247	0,365	0,518	0,327
GB0014R	inden_123cd_pyrene	aerosol	ng/m^3	0,159	0,173	0,096	0,063	0,044	0,03	0,026	0,059	0,052	0,099	0,253	0,226	0,106
NL0009R	inden_123cd_pyrene	pm10	ng/m^3	0,533	0,307	0,049	0,024	0,014	0,009	0,01	0,015	0,03	0,065	0,176	0,306	0,132
NL0091R	inden_123cd_pyrene	pm10	ng/m^3	0,52	0,32	0,082	0,046	0,037	0,02	0,013	0,026	0,029	0,087	0,217	0,194	0,137
NO0002R	inden_123cd_pyrene	air+aerosol	ng/m^3	0,09	0,042	0,073	0,018	0,027	0,017	0,014	0,025	0,009	0,016	0,042	0,1	0,039
NO0042G	inden_123cd_pyrene	air+aerosol	ng/m^3	0,003	0,004	0,003	0,003	0,003	0,003	0,003	0,003	0,003	0,004	0,005	0,01	0,004
NO0090R	inden_123cd_pyrene	air+aerosol	ng/m^3	0,029	0,013	0,005	0,003	0,003	0,002	0,003	0,002	0,004	0,011	0,005	0,051	0,01
SE0014R	inden_123cd_pyrene	air+aerosol	ng/m^3	0,159	0,255	0,039	0,042	0,015	0,005	0,004	0,004	0,008	0,052	0,14	0,28	0,083
NO0002R	N1methylnaphtalene	air+aerosol	ng/m^3	0,189	0,102	0,078	0,06	0,049	0,052	0,048	0,049	0,049	0,054	0,124	0,469	0,108
NO0042G	N1methylnaphtalene	air+aerosol	ng/m^3	0,152	0,162	0,04	0,037	0,034	0,033	0,052	0,031	0,031	0,059	0,071	0,206	0,07
NO0090R	N1methylnaphtalene	air+aerosol	ng/m^3	0,139	0,034	0,026	0,026	0,026	0,026	0,026	0,022	0,026	0,026	0,034	0,14	0,042
NO0002R	N1methylphenanthrene	air+aerosol	ng/m^3	0,069	0,038	0,049	0,045	0,038	0,013	0,019	0,022	0,018	0,041	0,072	0,09	0,042
NO0042G	N1methylphenanthrene	air+aerosol	ng/m^3	0,004	0,004	0,002	0,002	0,003	0,019	0,005	0,006	0,007	0,005	0,004	0,005	0,005
NO0090R	N1methylphenanthrene	air+aerosol	ng/m^3	0,016	0,008	0,009	0,004	0,004	0,007	0,004	0,009	0,01	0,01	0,008	0,018	0,009
NO0002R	N2methylanthracene	air+aerosol	ng/m^3	0,008	0,008	0,011	0,012	0,008	0,01	0,004	0,006	0,008	0,016	0,02	0,018	0,01
NO0042G	N2methylanthracene	air+aerosol	ng/m^3	0,001	0,004	0,001	0,001	0,003	0,001	0,003	0,007	0,005	0,006	0,004	0,004	0,003
NO0090R	N2methylanthracene	air+aerosol	ng/m^3	0,001	0,007	0,011	0,004	0,003	0,001	0,003	0,003	0,005	0,005	0,008	0,011	0,005
NO0002R	N2methylnaphtalene	air+aerosol	ng/m^3	0,28	0,145	0,11	0,099	0,076	0,082	0,074	0,077	0,076	0,086	0,2	0,64	0,159
NO0042G	N2methylnaphtalene	air+aerosol	ng/m^3	0,202	0,212	0,058	0,071	0,077	0,063	0,109	0,05	0,057	0,094	0,094	0,261	0,107
NO0090R	N2methylnaphtalene	air+aerosol	ng/m^3	0,22	0,055	0,04	0,04	0,04	0,04	0,04	0,034	0,04	0,042	0,053	0,229	0,067
NO0002R	N2methylphenanthrene	air+aerosol	ng/m^3	0,083	0,048	0,092	0,066	0,049	0,023	0,032	0,045	0,026	0,069	0,103	0,136	0,063
NO0042G	N2methylphenanthrene	air+aerosol	ng/m^3	0,006	0,004	0,003	0,002	0,004	0,035	0,008	0,007	0,011	0,005	0,004	0,008	0,006
NO0090R	N2methylphenanthrene	air+aerosol	ng/m^3	0,027	0,012	0,015	0,007	0,008	0,013	0,007	0,016	0,017	0,019	0,015	0,034	0,016
NO0002R	N3methylphenanthrene	air+aerosol	ng/m^3	0,062	0,034	0,067	0,05	0,038	0,019	0,028	0,039	0,023	0,054	0,082	0,092	0,048
NO0042G	N3methylphenanthrene	air+aerosol	ng/m^3	0,004	0,004	0,002	0,002	0,003	0,034	0,006	0,007	0,01	0,005	0,004	0,006	0,006
NO0090R	N3methylphenanthrene	air+aerosol	ng/m^3	0,02	0,009	0,011	0,005	0,006	0,01	0,006	0,013	0,015	0,015	0,012	0,021	0,012
NO0002R	N9methylphenanthrene	air+aerosol	ng/m^3	0,033	0,019	0,03	0,024	0,021	0,013	0,016	0,022	0,013	0,023	0,048	0,05	0,025
NO0042G	N9methylphenanthrene	air+aerosol	ng/m^3	0,003	0,003	0,002	0,002	0,003	0,024	0,005	0,006	0,009	0,004	0,003	0,004	0,005
NO0090R	N9methylphenanthrene	air+aerosol	ng/m^3	0,012	0,006	0,008	0,004	0,004	0,008	0,004	0,01	0,011	0,009	0,008	0,012	0,008
NO0002R	naphtalene	air+aerosol	ng/m^3	0,587	0,409	0,198	0,118	0,105	0,105	0,103	0,105	0,106	0,125	0,269	1,825	0,331
NO0042G	naphtalene	air+aerosol	ng/m^3	0,641	0,786	0,236	0,133	0,11	0,085	0,145	0,088	0,089	0,248	0,39	1,109	0,303
NO0090R	naphtalene	air+aerosol	ng/m^3	0,763	0,153	0,056	0,056	0,056	0,056	0,056	0,046	0,056	0,065	0,12	0,691	0,161
ES0008R	naphthalene	pm10	ng/m^3	0,083	0,085	0,085	0,085	0,085	0,085	0,085	0,085	0,085	0,085	0,085	0,085	0,085
BE0013R	pyrene	air+aerosol	ng/m^3	0,217	0,655	0,097	0,01	0,031	0,011	0,01	0,034	0,019	0,047	0,062	0,294	0,082
ES0008R	pyrene	pm10	ng/m^3	0,036	0,133	0,08	0,107	0,165	0,072	0,048	0,051	0,171	0,079	0,17	0,101	0,099
NO0002R	pyrene	air+aerosol	ng/m^3	0,21	0,127	0,185	0,092	0,078	0,049	0,039	0,054	0,037	0,091	0,174	0,25	0,114
NO0042G	pyrene	air+aerosol	ng/m^3	0,015	0,02	0,01	0,008	0,008	0,008	0,008	0,007	0,009	0,007	0,065	0,032	0,014
NO0090R	pyrene	air+aerosol	ng/m^3	0,065	0,037	0,018	0,007	0,009	0,007	0,013	0,011	0,013	0,041	0,014	0,08	0,025
SE0014R	pyrene	air+aerosol	ng/m^3	0,498	0,814	0,16	0,176	0,075	0,04	0,021	0,025	0,05	0,181	0,38	0,82	0,267
NO0002R	retene	air+aerosol	ng/m^3	0,081	0,04	0,054	0,067	0,03	0,013	0,04	0,026	0,031	0,053	0,089	0,078	0,049
NO0042G	retene	air+aerosol	ng/m^3	0,004	0,004	0,003	0,004	0,008	0,004	0,008	0,013	0,011	0,011	0,01	0,008	0,007
NO0090R	retene	air+aerosol	ng/m^3	0,009	0,006	0,006	0,006	0,004	0,003	0,01	0,009	0,011	0,009	0,011	0,014	0,008
GB0014R	perylene	aerosol	ng/m^3	0,026	0,033	0,021	0,012	0,011	0,005	0,007	0,008	0,008	0,023	0,028	0,023	0,017
NO0002R	perylene	air+aerosol	ng/m^3	0,006	0,004	0,006	0,003	0,003	0,003	0,002	0,003	0,003	0,003	0,003	0,007	0,004
NO0042G	perylene	air+aerosol	ng/m^3	0,001	0,002	0,001	0,001	0,001	0,001	0,002	0,002	0,002	0,002	0,002	0,001	0,002
NO0090R	perylene	air+aerosol	ng/m^3	0,002	0,002	0,002	0,002	0,001	0,001	0,001	0,001	0,001	0,002	0,002	0,004	0,002
ES0008R	phenanthrene	pm10	ng/m^3	0,015	0,042	0,053	0,015	0,029	0,015	0,015	0,026	0,043	0,019	0,082	0,028	0,032
NO0002R	phenanthrene	air+aerosol	ng/m^3	1,169	0,833	0,805	0,819	0,81	0,347	0,566	0,568	0,392	0,67	1,353	2,575	0,892
NO0042G	phenanthrene	air+aerosol	ng/m^3	0,086	0,077	0,03	0,012	0,014	0,034	0,03	0,021	0,027	0,026	0,028	0,084	0,036
NO0090R	phenanthrene	air+aerosol	ng/m^3	0,423	0,141	0,11	0,073	0,067	0,041	0,04	0,106	0,107	0,161	0,119	0,686	0,16
SE0014R	phenanthrene	air+aerosol	ng/m^3	2,247	2,686	0,83	0,816	0,385	0,28	0,217	0,164	0,29	0,75	1,5	3,184	1,103
IS0091R	PCB_101	air+aerosol	pg/m^3	0,91	1,09	2,92	1,68	2,48	4,17	6,25	4,373	2,35	2,11	1,5	1,71	2,641
NO0002R	PCB_101	air+aerosol	pg/m^3	0,285	0,282	0,362	0,35	0,623	0,595	0,69	0,59	0,271	0,361	0,514	0,377	0,454
NO0042G	PCB_101	air+aerosol	pg/m^3	0,264	0,336	0,346	0,346	0,185	0,172	0,186	0,246	0,259	0,378	0,313	0,336	0,284
NO0090R	PCB_101	air+aerosol	pg/m^3	0,413	0,25	0,224	0,307	0,223	0,209	0,239	0,161	0,239	0,316	0,324	0,347	0,266
SE0014R	PCB_101	air+aerosol	pg/m^3	0,843	0,764	0,89	1,153	2,771	1,9	2,365	2,084	2	2,877	3,6	1,823	1,929

Site	Comp	matrix	unit	jan	febr	mar	apr	may	june	july	aug	sept	oct	nov	dec	year
IS0091R	PCB_105	air+aerosol	pg/m^3	0,055	0,065	0,085	0,055	0,16	0,27	0,44	0,275	0,07	0,065	0,07	0,065	0,14
NO0002R	PCB_105	air+aerosol	pg/m^3	0,03	0,025	0,026	0,027	0,043	0,033	0,052	0,045	0,019	0,024	0,031	0,029	0,033
NO0042G	PCB_105	air+aerosol	pg/m^3	0,023	0,029	0,04	0,031	0,017	0,012	0,013	0,023	0,023	0,044	0,022	0,033	0,026
NO0090R	PCB_105	air+aerosol	pg/m^3	0,055	0,029	0,015	0,024	0,022	0,016	0,014	0,011	0,018	0,031	0,023	0,037	0,024
NO0002R	PCB_114	air+aerosol	pg/m^3	0,003	0,003	0,003	0,004	0,004	0,004	0,013	0,01	0,004	0,009	0,007	0,008	0,006
NO0042G	PCB_114	air+aerosol	pg/m^3	0,002	0,003	0,003	0,002	0,002	0,001	0,001	0,002	0,001	0,006	0,009	0,011	0,004
NO0090R	PCB_114	air+aerosol	pg/m^3	0,004	0,002	0,001	0,003	0,004	0,002	0,002	0,002	0,001	0,003	0,002	0,003	0,002
IS0091R	PCB_118	air+aerosol	pg/m^3	0,055	0,065	0,33	0,18	0,22	0,42	0,62	0,475	0,26	0,23	0,16	0,2	0,269
NO0002R	PCB_118	air+aerosol	pg/m^3	0,095	0,096	0,096	0,094	0,156	0,133	0,188	0,156	0,069	0,093	0,119	0,106	0,119
NO0042G	PCB_118	air+aerosol	pg/m^3	0,076	0,103	0,135	0,107	0,051	0,045	0,047	0,081	0,076	0,143	0,091	0,109	0,09
NO0090R	PCB_118	air+aerosol	pg/m^3	0,17	0,09	0,06	0,081	0,074	0,058	0,059	0,042	0,067	0,107	0,087	0,123	0,083
SE0014R	PCB_118	air+aerosol	pg/m^3	0,251	0,251	0,17	0,375	0,947	0,66	0,804	0,619	0,46	0,396	0,27	0,214	0,453
NO0002R	PCB_122	air+aerosol	pg/m^3	0,002	0,003	0,002	0,003	0,003	0,005	0,007	0,004	0,004	0,004	0,005	0,005	0,004
NO0042G	PCB_122	air+aerosol	pg/m^3	0,001	0,002	0,003	0,004	0,002	0,001	0,001	0,002	0,002	0,002	0,003	0,003	0,002
NO0090R	PCB_122	air+aerosol	pg/m^3	0,002	0,002	0,001	0,002	0,002	0,002	0,002	0,001	0,001	0,002	0,002	0,002	0,002
NO0002R	PCB_123	air+aerosol	pg/m^3	0,003	0,008	0,003	0,007	0,004	0,011	0,043	0,034	0,006	0,032	0,02	0,024	0,016
NO0042G	PCB_123	air+aerosol	pg/m^3	0,003	0,003	0,004	0,007	0,002	0,001	0,002	0,003	0,002	0,014	0,036	0,046	0,01
NO0090R	PCB_123	air+aerosol	pg/m^3	0,003	0,002	0,001	0,018	0,012	0,004	0,003	0,002	0,002	0,006	0,005	0,002	0,004
NO0002R	PCB_126	air+aerosol	pg/m^3	0,002	0,002	0,011	0,002	0,002	0,001	0,001	0,002	0,002	0,002	0,002	0,002	0,002
NO0002R	PCB_128	air+aerosol	pg/m^3	0,019	0,008	0,017	0,016	0,029	0,025	0,037	0,031	0,01	0,022	0,025	0,018	0,022
NO0042G	PCB_128	air+aerosol	pg/m^3	0,012	0,009	0,015	0,009	0,003	0,007	0,007	0,01	0,01	0,017	0,012	0,016	0,011
NO0090R	PCB_128	air+aerosol	pg/m^3	0,026	0,015	0,008	0,009	0,013	0,01	0,008	0,008	0,012	0,011	0,011	0,021	0,012
IS0091R	PCB_138	air+aerosol	pg/m^3	0,055	0,065	0,22	0,15	0,21	0,34	0,47	0,364	0,18	0,2	0,07	0,16	0,208
NO0002R	PCB_138	air+aerosol	pg/m^3	0,108	0,104	0,118	0,11	0,225	0,207	0,253	0,214	0,091	0,106	0,182	0,114	0,158
NO0042G	PCB_138	air+aerosol	pg/m^3	0,077	0,083	0,106	0,089	0,047	0,037	0,044	0,06	0,058	0,102	0,068	0,077	0,073
NO0090R	PCB_138	air+aerosol	pg/m^3	0,144	0,084	0,065	0,093	0,071	0,068	0,067	0,048	0,067	0,09	0,095	0,1	0,081
SE0014R	PCB_138	air+aerosol	pg/m^3	0,635	0,556	0,52	0,801	2,645	1,6	1,974	1,687	1,1	1,055	0,64	0,518	1,151
NO0002R	PCB_141	air+aerosol	pg/m^3	0,029	0,023	0,033	0,028	0,069	0,062	0,081	0,063	0,027	0,038	0,052	0,032	0,046
NO0042G	PCB_141	air+aerosol	pg/m^3	0,02	0,02	0,022	0,018	0,013	0,011	0,009	0,013	0,015	0,025	0,02	0,022	0,018
NO0090R	PCB_141	air+aerosol	pg/m^3	0,031	0,018	0,015	0,018	0,016	0,021	0,022	0,012	0,017	0,02	0,023	0,02	0,019
NO0002R	PCB_149	air+aerosol	pg/m^3	0,168	0,163	0,238	0,21	0,452	0,423	0,488	0,408	0,185	0,22	0,342	0,212	0,303
NO0042G	PCB_149	air+aerosol	pg/m^3	0,144	0,145	0,159	0,155	0,088	0,078	0,076	0,104	0,115	0,175	0,145	0,131	0,128
NO0090R	PCB_149	air+aerosol	pg/m^3	0,2	0,127	0,124	0,179	0,12	0,133	0,176	0,097	0,135	0,163	0,185	0,159	0,149
IS0091R	PCB_153	air+aerosol	pg/m^3	0,055	0,065	0,37	0,27	0,38	0,64	0,83	0,627	0,33	0,34	0,27	0,28	0,373
NO0002R	PCB_153	air+aerosol	pg/m^3	0,168	0,16	0,207	0,187	0,385	0,341	0,4	0,339	0,15	0,187	0,304	0,189	0,259
NO0042G	PCB_153	air+aerosol	pg/m^3	0,133	0,13	0,152	0,13	0,068	0,059	0,059	0,081	0,089	0,144	0,116	0,116	0,108
NO0090R	PCB_153	air+aerosol	pg/m^3	0,204	0,127	0,112	0,15	0,105	0,109	0,128	0,079	0,106	0,134	0,157	0,144	0,128
SE0014R	PCB_153	air+aerosol	pg/m^3	0,735	0,676	0,81	1,064	2,932	1,8	2,271	1,971	1,3	1,255	0,83	0,643	1,364
IS0091R	PCB_156	air+aerosol	pg/m^3	0,055	0,065	0,085	0,055	0,055	0,06	0,06	0,07	0,07	0,065	0,07	0,065	0,065
NO0002R	PCB_156	air+aerosol	pg/m^3	0,007	0,007	0,007	0,006	0,012	0,004	0,009	0,007	0,003	0,006	0,009	0,008	0,007
NO0042G	PCB_156	air+aerosol	pg/m^3	0,004	0,004	0,007	0,001	0,001	0,002	0,001	0,002	0,002	0,005	0,002	0,002	0,003
NO0090R	PCB_156	air+aerosol	pg/m^3	0,013	0,006	0,002	0,001	0,003	0,003	0,003	0,003	0,003	0,002	0,003	0,005	0,004
NO0002R	PCB_157	air+aerosol	pg/m^3	0,004	0,002	0,001	0,002	0,002	0,002	0,002	0,002	0,001	0,001	0,002	0,003	0,002
NO0042G	PCB_157	air+aerosol	pg/m^3	0,002	0,002	0,001	0,001	0,001	0,001	0,001	0,001	0,001	0,001	0,002	0,001	0,001
NO0090R	PCB_157	air+aerosol	pg/m^3	0,002	0,001	0,001	0,001	0,001	0,001	0,001	0,001	0,001	0,001	0,001	0,001	0,001
NO0002R	PCB_167	air+aerosol	pg/m^3	0,005	0,002	0,004	0,003	0,006	0,003	0,036	0,027	0,003	0,023	0,017	0,02	0,012
NO0042G	PCB_167	air+aerosol	pg/m^3	0,002	0,002	0,002	0,001	0,001	0,001	0,001	0,001	0,001	0,008	0,028	0,036	0,007
NO0090R	PCB_167	air+aerosol	pg/m^3	0,006	0,001	0,001	0,008	0,008	0,001	0,002	0,001	0,001	0,002	0,002	0,003	0,003
NO0002R	PCB_169	air+aerosol	pg/m^3	0,002	0,002	0,002	0,002									
NO0002R	PCB_170	air+aerosol	pg/m^3	0,02	0,007	0,014	0,01	0,03	0,018	0,027	0,022	0,008	0,009	0,019	0,014	0,017
NO0042G	PCB_170	air+aerosol	pg/m^3	0,01	0,006	0,009	0,003	0,002	0,003	0,001	0,001	0,003	0,004	0,004	0,002	0,004
NO0090R	PCB_170	air+aerosol	pg/m^3	0,014	0,004	0,003	0,005	0,008	0,004	0,005	0,003	0,005	0,005	0,006	0,009	0,006
NO0002R	PCB_18	air+aerosol	pg/m^3	1,112	1,044	1,122	1,471	1,161	1,187	1,229	0,862	0,587	1,093	1,442	2	1,187
NO0042G	PCB_18	air+aerosol	pg/m^3	1,327	1,936	1,853	1,791	0,697	2,345	2,054	2,455	1,872	1,731	2,055	2,589	1,886
NO0090R	PCB_18	air+aerosol	pg/m^3	1,992	1,049	0,938	1,041	0,662	0,461	0,38	0,282	0,577	1,264	1,344	1,954	0,932
IS0091R	PCB_180	air+aerosol	pg/m^3	0,055	0,065	0,085	0,055	0,055	0,06	0,06	0,07	0,07	0,065	0,07	0,065	0,065
NO0002R	PCB_180	air+aerosol	pg/m^3	0,061	0,035	0,055	0,044	0,089	0,067	0,085	0,069	0,03	0,037	0,06	0,043	0,057
NO0042G	PCB_180	air+aerosol	pg/m^3	0,044	0,022	0,023	0,017	0,008	0,012	0,009	0,011	0,012	0,02	0,015	0,012	0,018
NO0090R	PCB_180	air+aerosol	pg/m^3	0,038	0,024	0,018	0,033	0,021	0,019	0,021	0,016	0,022	0,019	0,026	0,022	0,023
SE0014R	PCB_180	air+aerosol	pg/m^3	0,278	0,247	0,22	0,371	1,032	0,57	0,711	0,616	0,39	0,485	0,25	0,222	0,452
NO0002R	PCB_183	air+aerosol	pg/m^3	0,018	0,012	0,017	0,014	0,033	0,027	0,036	0,027	0,011	0,016	0,021	0,014	0,021
NO0042G	PCB_183	air+aerosol	pg/m^3	0,014	0,006	0,009	0,006	0,002	0,005	0,005	0,005	0,006	0,01	0,008	0,007	0,007
NO0090R	PCB_183	air+aerosol	pg/m^3	0,012	0,007	0,007	0,007	0,007	0,008	0,008	0,007	0,01	0,01	0,013	0,01	0,009
NO0002R	PCB_187	air+aerosol	pg/m^3	0,05	0,034	0,057	0,047	0,096	0,085	0,094	0,08	0,035	0,042	0,075	0,045	0,064
NO0042G	PCB_187	air+aerosol	pg/m^3	0,046	0,028	0,023	0,021	0,01	0,014	0,013	0,016	0,017	0,027	0,025	0,025	0,023
NO0090R	PCB_187	air+aerosol	pg/m^3	0,035	0,027	0,026	0,032	0,021	0,025	0,027	0,024	0,027	0,03	0,042	0,029	0,029
NO0002R	PCB_189	air+aerosol	pg/m^3	0,002	0,002	0,002	0,002	0,002	0,002	0,011	0,009	0,002	0,007	0,006	0,007	0,004
NO0042G	PCB_189	air+aerosol	pg/m^3	0,001	0,001	0,001	0,001	0,001	0,001	0,001	0,001	0,001	0,003	0,009	0,011	0,003
NO0090R	PCB_189	air+aerosol	pg/m^3	0,001	0,001	0,001	0,003	0,003	0,001	0,001	0,001	0,001	0,001	0,001	0,001	0,001
NO0002R	PCB_194	air+aerosol	pg/m^3	0,011	0,002	0,007	0,003	0,007	0,002	0,004	0,003	0,002	0,002	0,006	0,005	0,004
NO0042G	PCB_194	air+aerosol	pg/m^3	0,01	0,002	0,001	0,001	0,001	0,001	0,001	0,001	0,001	0,001	0,002	0,001	0,002
NO0090R	PCB_194	air+aerosol	pg/m^3	0,004	0,001	0,001	0,001	0,001	0,001	0,001	0,001	0,002	0,001	0,001	0,001	0,001
NO0002R	PCB_206	air+aerosol	pg/m^3	0,013	0,002	0,004	0,002	0,003	0,002	0,004	0,003	0,002	0,004	0,004	0,004	0,004
NO0042G	PCB_206	air+aerosol	pg/m^3	0,005	0,001	0,001	0,001	0,001	0,001	0,001	0,001	0,001	0,001	0,003	0,004	0,002
NO0090R	PCB_206	air+aerosol	pg/m^3	0,003	0,002	0,001	0,001	0,002	0,001	0,001	0,001	0,001	0,001	0,001	0,001	0,001
NO0002R	PCB_209	air+aerosol	pg/m^3	0,008	0,009	0,007	0,007	0,006	0,006	0,006	0,006	0,006	0,007	0,007	0,007	0,007
NO0042G	PCB_209	air+aerosol	pg/m^3	0,004	0,005	0,009	0,004	0,004	0,004	0,004	0,003	0,004	0,004	0,003	0,004	0,004
NO0090R	PCB_209	air+aerosol	pg/m^3	0,006	0,006	0,003	0,003	0,002	0,003	0,003	0,003	0,003	0,003	0,003	0,006	0,004
IS0091R	PCB_28	air+aerosol	pg/m^3	0,85	0,96	2,75	1,35	1,78	2,38	3,5	3,829	1,94	1,58	1,23	1,31	1,964
NO0002R	PCB_28	air+aerosol	pg/m^3	0,608	0,546	0,632	0,839	0,85	0,825	0,937	0,733	0,375	0,678	0,824	1,004	0,741
NO0042G	PCB_28	air+aerosol	pg/m^3	0,866	1,652	1,199	1,328	0,728	1,797	1,598	1,886	1,371	1,23	1,311	1,533	1,376
NO0090R	PCB_28	air+aerosol	pg/m^3	1,051	0,521	0,447	0,687	0,393	0,321	0,309	0,22	0,434	0,742	0,763	1,063	0,548
SE0014R	PCB_28	air+aerosol	pg/m^3	0,944	0,805	0,33	1,194	1,797	1,1	1,175	0,834	0,7	0,83	1,2	1,2	1,01
IS0091R	PCB_31	air+aerosol	pg/m^3	0,85	0,96	2,33	0,9	1,08	1,1	1,75	1,847	1,04	1,12	1,02	1,12	1,265
NO0002R	PCB_31	air+aerosol	pg/m^3	0,578	0,525	0,608	0,783	0,78	0,785	0,845	0,654	0,337	0,606	0,771	0,951	0,688
NO0042G	PCB_31	air+aerosol	pg/m^3	0,802	1,561	1,135	1,266	0,675	1,763	1,586	1,811	1,252	1,132	1,226	1,481	1,307
NO0090R	PCB_31	air+aerosol	pg/m^3	0,971	0,501	0,44	0,634	0,382	0,306	0,285	0,208	0,41	0,632	0,672	0,93	0,504
NO0002R	PCB_33	air+aerosol	pg/m^3	0,356	0,321	0,356	0,479	0,418	0,447	0,477	0,379	0,192	0,351	0,449	0,594	0,402
NO0042G	PCB_33	air+aerosol	pg/m^3	0,567	1,19	0,82	0,942	0,573	1,353	1,171	1,382	0,92	0,811	0,866	1,022	0,968
NO0090R	PCB_33	air+aerosol	pg/m^3	0,621	0,298	0,248	0,378	0,21	0,169	0,167	0,123	0,251	0,35	0,379	0,584	0,297
NO0002R	PCB_37	air+aerosol	pg/m^3	0,053	0,033	0,056	0,033	0,063	0,072	0,293	0,214	0,022	0,185	0,141	0,153	0,112
NO0042G	PCB_37	air+aerosol	pg/m^3	0,087	0,214	0,097	0,148	0,124	0,176	0,174	0,163	0,111	0,141	0,246	0,264	0,16
NO0090R	PCB_37	air+aerosol	pg/m^3	0,099	0,035	0,023	0,111	0,077	0,021	0,02	0,022	0,04	0,037	0,047	0,07	0,045
NO0002R	PCB_47	air+aerosol	pg/m^3	0,421	0,462	0,841	0,574	2,29	1,159	1,685	1,62	1,037	0,679	0,848	0,462	1,043
NO0042G	PCB_47	air+aerosol	pg/m^3	0,261	0,46	0,339	0,39	0,244	0,309	0,249	0,344	0,243	0,268	0,329	0,355	0,316
NO0090R	PCB_47	air+aerosol	pg/m^3	0,518	0,386	0,403	1,339	0,558	0,835	1,095	1,208	1,806	0,663	0,597	0,675	0,854
IS0091R	PCB_52	air+aerosol	pg/m^3	2,45	2,89	6,58	3,03	3,89	5,62	8,06	7,083	4,01	3,62	2,73	3,29	4,456
NO0002R	PCB_52	air+aerosol	pg/m^3	0,546	0,526	0,675	0,727	1,014	0,939	0,999	0,87	0,449	0,664	0,884	0,803	0,772

Site	Comp	matrix	unit	jan	febr	mar	apr	may	june	july	aug	sept	oct	nov	dec	year
NO0042G	PCB_52	air+aerosol	pg/m^3	0,573	0,855	0,771	0,841	0,397	0,603	0,596	0,656	0,637	0,721	0,737	0,851	0,69
NO0090R	PCB_52	air+aerosol	pg/m^3	0,811	0,512	0,51	0,624	0,45	0,387	0,403	0,272	0,436	0,643	0,672	0,794	0,527
SE0014R	PCB_52	air+aerosol	pg/m^3	1,093	1,01	1,1	1,433	2,597	1,9	2,261	1,916	2	1,11	1,2	1,106	1,564
NO0002R	PCB_66	air+aerosol	pg/m^3	0,127	0,111	0,147	0,177	0,232	0,222	0,262	0,235	0,1	0,163	0,203	0,167	0,182
NO0042G	PCB_66	air+aerosol	pg/m^3	0,122	0,227	0,185	0,234	0,141	0,155	0,166	0,162	0,145	0,192	0,207	0,199	0,179
NO0090R	PCB_66	air+aerosol	pg/m^3	0,209	0,106	0,085	0,135	0,09	0,079	0,084	0,064	0,105	0,142	0,15	0,189	0,116
NO0002R	PCB_74	air+aerosol	pg/m^3	0,083	0,075	0,091	0,109	0,139	0,138	0,254	0,172	0,061	0,163	0,159	0,149	0,134
NO0042G	PCB_74	air+aerosol	pg/m^3	0,082	0,144	0,122	0,158	0,083	0,086	0,085	0,093	0,097	0,132	0,149	0,175	0,118
NO0090R	PCB_74	air+aerosol	pg/m^3	0,137	0,072	0,062	0,095	0,078	0,05	0,057	0,036	0,063	0,1	0,097	0,134	0,078
NO0002R	PCB_77	air+aerosol	pg/m^3	0,011	0,011	0,076	0,015	0,016	0,012	0,012	0,017	0,011	0,012	0,016	0,012	0,018
NO0002R	PCB_81	air+aerosol	pg/m^3	0,002	0,002	0,003	0,002	0,001	0,001	0,001	0,001	0,001	0,001	0,001	0,001	0,001
NO0002R	PCB_99	air+aerosol	pg/m^3	0,112	0,119	0,128	0,131	0,201	0,18	0,226	0,184	0,092	0,136	0,183	0,15	0,156
NO0042G	PCB_99	air+aerosol	pg/m^3	0,107	0,14	0,154	0,153	0,065	0,056	0,061	0,082	0,104	0,154	0,133	0,151	0,115
NO0090R	PCB_99	air+aerosol	pg/m^3	0,198	0,115	0,097	0,125	0,094	0,082	0,083	0,05	0,085	0,145	0,127	0,163	0,111
IS0091R	HCB	air+aerosol	pg/m^3	3	3	5	4	3	3	2	4	4	5	6	6	4
NO0002R	HCB	air+aerosol	pg/m^3	71	63	50	58	47	49	34	38	47	59	59	76	53
NO0042G	HCB	air+aerosol	pg/m^3	61	72	76	98	66	87	93	89	84	90	87	83	83
NO0090R	HCB	air+aerosol	pg/m^3	36	42	31	29	29	21	20	18	19	28	28	47	28
SE0014R	HCB	air+aerosol	pg/m^3	33	42	29	22	16	13	10	8	16	23	28	37	23
IS0091R	alpha_HCH	air+aerosol	pg/m^3	1,3	1,2	1,7	1,4	1,0	1,0	0,9	2,0	2,3	2,0	2,4	1,7	1,6
NO0002R	alpha_HCH	air+aerosol	pg/m^3	3,5	3,6	3,2	3,6	5,5	6,1	6,2	6,4	6,8	6,3	4,2	3,6	4,9
NO0042G	alpha_HCH	air+aerosol	pg/m^3	3,9	4,2	5,1	7,2	5,8	5,2	5,6	6,6	6,9	6,5	5,9	5,2	5,7
NO0090R	alpha_HCH	air+aerosol	pg/m^3	4,2	4,0	3,9	4,3	4,6	3,7	4,2	5,0	5,5	5,5	4,8	4,5	4,5
SE0014R	alpha_HCH	air+aerosol	pg/m^3	3,0	2,9	2,0	3,0	3,0	3,0	2,9	2,6	6,0	5,8	4,0	3,1	3,4
IS0091R	beta_HCH	air+aerosol	pg/m^3	0,1	0,1	0,2	0,2	0,4	0,5	0,7	0,4	0,3	0,2	0,1	0,1	0,3
IS0091R	gamma_HCH	air+aerosol	pg/m^3	1,1	1,3	2,4	1,1	0,6	1,1	1,6	2,2	1,5	1,3	1,2	1,2	1,4
NO0002R	gamma_HCH	air+aerosol	pg/m^3	1,0	0,7	2,1	1,6	3,3	5,1	3,6	4,2	1,7	2,2	2,4	1,2	2,5
NO0042G	gamma_HCH	air+aerosol	pg/m^3	0,7	0,6	0,9	1,1	0,8	0,6	0,7	0,7	0,9	0,9	0,9	0,8	0,8
NO0090R	gamma_HCH	air+aerosol	pg/m^3	1,0	0,5	0,5	1,1	0,7	0,9	1,3	0,9	1,0	1,0	1,1	0,8	0,9
SE0014R	gamma_HCH	air+aerosol	pg/m^3	1,0	1,3	4,0	3,1	4,9	4,0	3,9	3,0	3,0	3,0	3,0	2,1	3,0
IS0091R	pp_DDD	air+aerosol	pg/m^3	0,11	0,065	0,085	0,055	0,055	0,06	0,06	0,07	0,07	0,065	0,07	0,065	0,069
NO0002R	pp_DDD	air+aerosol	pg/m^3	0,071	-	0,018	-	0,031	0,023	0,053	0,031	0,033	0,01	0,021	0,023	0,031
NO0042G	pp_DDD	air+aerosol	pg/m^3	0,026	0,013	0,01	0,007	0,006	0,006	0,006	0,01	0,014	0,009	0,007	0,012	0,009
NO0090R	pp_DDD	air+aerosol	pg/m^3	0,023	0,013	0,004	0,007	0,008	0,007	0,006	0,008	0,01	0,012	0,021	0,06	0,014
SE0014R	pp_DDD	air+aerosol	pg/m^3	0,053	0,096	0,06	0,411	0,205	0,04	0,192	0,134	0,05	0,202	0,69	0,082	0,184
IS0091R	pp_DDE	air+aerosol	pg/m^3	0,055	0,065	0,085	0,15	0,16	0,17	0,21	0,2	0,07	0,15	0,17	0,28	0,147
NO0002R	pp_DDE	air+aerosol	pg/m^3	1,136	0,632	0,883	0,597	0,93	0,83	0,643	0,555	0,364	0,825	1,387	1,039	0,83
NO0042G	pp_DDE	air+aerosol	pg/m^3	0,908	0,481	0,481	0,209	0,085	0,055	0,054	0,056	0,107	0,326	0,655	1,05	0,364
NO0090R	pp_DDE	air+aerosol	pg/m^3	1,311	0,455	0,413	0,279	0,163	0,138	0,122	0,097	0,166	0,496	1,09	0,92	0,443
SE0014R	pp_DDE	air+aerosol	pg/m^3	1,487	1,241	0,73	1,884	2,419	1,2	1,093	1,111	2	2,877	3,6	1,823	1,788
IS0091R	pp_DDT	air+aerosol	pg/m^3	0,42	0,065	0,085	0,055	0,13	0,06	0,06	0,07	0,07	0,065	0,14	0,065	0,108
NO0002R	pp_DDT	air+aerosol	pg/m^3	0,197	0,1	0,18	0,189	0,328	0,292	0,366	0,298	0,076	0,18	0,193	0,125	0,216
NO0042G	pp_DDT	air+aerosol	pg/m^3	0,097	0,056	0,078	0,046	0,025	0,015	0,016	0,019	0,042	0,077	0,094	0,106	0,055
NO0090R	pp_DDT	air+aerosol	pg/m^3	0,141	0,061	0,035	0,05	0,032	0,028	0,044	0,023	0,04	0,091	0,115	0,102	0,063
SE0014R	pp_DDT	air+aerosol	pg/m^3	0,432	0,73	0,64	0,145	0,583	0,33	0,418	0,318	0,41	0,509	0,59	0,291	0,449
NO0002R	op_DDD	air+aerosol	pg/m^3	0,041	0,019	0,022	0,026	0,029	0,035	0,037	0,03	0,029	0,016	0,031	0,019	0,028
NO0042G	op_DDD	air+aerosol	pg/m^3	0,013	0,014	0,018	0,01	0,005	0,005	0,006	0,009	0,014	0,01	0,012	0,018	0,011
NO0090R	op_DDD	air+aerosol	pg/m^3	0,03	0,018	0,017	0,011	0,011	0,011	0,01	0,008	0,011	0,014	0,02	0,018	0,015
NO0002R	op_DDE	air+aerosol	pg/m^3	0,132	0,08	0,065	0,054	0,068	0,066	0,056	0,045	0,031	0,065	0,069	0,084	0,069
NO0042G	op_DDE	air+aerosol	pg/m^3	0,107	0,085	0,103	0,061	0,016	0,011	0,011	0,014	0,019	0,039	0,067	0,102	0,052
NO0090R	op_DDE	air+aerosol	pg/m^3	0,123	0,077	0,077	0,052	0,036	0,018	0,019	0,012	0,021	0,045	0,077	0,094	0,054
IS0091R	op_DDT	air+aerosol	pg/m^3	0,055	0,065	0,085	0,055	0,055	0,06	0,19	0,151	0,07	0,065	0,07	0,065	0,083
NO0002R	op_DDT	air+aerosol	pg/m^3	0,203	0,164	0,153	-	0,384	0,299	0,186	0,099	0,057	-	0,208	0,171	0,197
NO0042G	op_DDT	air+aerosol	pg/m^3	-	-	-	-	-	0,209	0,151	0,121	0,015	0,073	0,17	0,2	0,121
NO0090R	op_DDT	air+aerosol	pg/m^3	0,194	0,116	-	0,115	0,071	0,055	0,135	0,031	0,034	0,15	0,196	0,187	0,122
IS0091R	trans_CD	air+aerosol	pg/m^3	0,055	0,065	0,22	0,2	0,16	0,17	0,27	0,154	0,07	0,065	0,07	0,15	0,138
NO0002R	trans_CD	air+aerosol	pg/m^3	0,205	0,198	0,258	0,215	0,256	0,172	0,206	0,154	0,193	0,185	0,263	0,16	0,208
NO0042G	trans_CD	air+aerosol	pg/m^3	0,264	0,243	0,208	0,24	0,104	0,06	0,056	0,067	0,081	0,141	0,215	0,194	0,163
NO0090R	trans_CD	air+aerosol	pg/m^3	0,218	0,246	0,282	0,179	0,139	0,089	0,078	0,086	0,116	0,142	0,242	0,197	0,166
IS0091R	trans_NO	air+aerosol	pg/m^3	0,055	0,065	0,32	0,45	0,28	0,38	0,42	0,41	0,31	0,36	0,36	0,39	0,317
NO0002R	trans_NO	air+aerosol	pg/m^3	0,295	0,384	0,452	0,394	0,555	0,408	0,497	0,478	0,43	0,419	0,553	0,109	0,43
NO0042G	trans_NO	air+aerosol	pg/m^3	0,388	0,348	0,359	0,506	0,356	0,255	0,248	0,265	0,314	0,441	0,441	0,328	0,357
NO0090R	trans_NO	air+aerosol	pg/m^3	0,313	0,377	0,442	0,425	0,389	0,326	0,321	0,355	0,391	0,424	0,497	0,363	0,385
IS0091R	cis_CD	air+aerosol	pg/m^3	0,055	0,065	0,51	0,49	0,52	0,7	0,75	0,653	0,46	0,53	0,49	0,47	0,476
NO0002R	cis_CD	air+aerosol	pg/m^3	0,351	0,368	0,455	0,457	0,582	0,439	0,59	0,536	0,537	0,467	0,507	0,212	0,462
NO0042G	cis_CD	air+aerosol	pg/m^3	0,462	0,401	0,429	0,553	0,364	0,285	0,347	0,345	0,385	0,491	0,506	0,398	0,417
NO0090R	cis_CD	air+aerosol	pg/m^3	0,377	0,443	0,516	0,42	0,439	0,375	0,403	0,474	0,47	0,503	0,523	0,381	0,45
NO0002R	cis_NO	air+aerosol	pg/m^3	0,018	0,019	0,031	0,03	0,063	0,045	0,067	0,066	0,062	0,04	0,051	0,015	0,042
NO0042G	cis_NO	air+aerosol	pg/m^3	0,021	0,024	0,026	0,026	0,032	0,046	0,046	0,06	0,056	0,071	0,035	0,018	0,039
NO0090R	cis_NO	air+aerosol	pg/m^3	0,023	0,027	0,037	0,034	0,039	0,045	0,05	0,061	0,064	0,048	0,041	0,018	0,042

Annex 3: Methods in field and laboratory

Table A.3.1: Measurements methods for POPs.

Country	Precipitation		Air and aerosols		Laboratory method
	Sampling method	Frequency	Sampling method	Frequency	
Belgium	wet only	Monthly	High Vol, Digitel, 1296 m3/day	24h, once every 4 days	UPLC with Fluorescence detection (PAHs). Dual column GC-ECD (PCBs)
Germany	wet only	Monthly	High vol (filter + PU foam)	monthly	GC-MS
Spain	Bulk (precip + dry dep)	52 days	PM10, High vol	24h, once every 8 days	GC-MS
Great Britain			High Vol. Whatman GF filter + 2 PUR foams.5m3/h	biweekly sampling, 3 monthly analysis	GC-MS
Iceland	bulk, (Steel funnel 1m2/PUF foam)	Biweekly	PUF-foam 1000m^3/15days	Biweekly	GC-MS
Netherlands	bulk	4 weekly	PM10 LVS, Whatman quartz filter	Sampled every other day, analysis is pooled 3 samples in winter, 5 in summer time	GC-MS
Norway	bulk, funnel and bottle of glass	Weekly	High Vol.Gelman AE filter + 2 PUR foams. 20m3/h	NO01: 24h a week NO42: 48h a week	GC-MS
Portugal	wet only	2 week sampling			GC-HRMS,HPLC, GC-ECD
Sweden	Bulk (precip + dry dep)	monthly	High vol (filter + PU foam)	weekly sampling, monthly analyses	HPLC, GC-ECD

HPLC: High Performance Liquid Chromatography
GC -MS: Gas chromatograph with Mass Spectrometry
GC - ECD: Gas chromatograph with Electron Capture Detector
TLC: Thin Layer Chromatography
GC-HRMS: Gas chromatograph High Performance with Mass Spectrometry

Table A.3.2: Measurements methods for Heavy metals.

Country	Precipitation		Air and aerosols		Laboratory method
	Field method	Frequency	Field method	Frequency	
Belgium Hg	wet only wet only	weekly weekly	Low volume sampler Mercury Ultratracer UT 3000 (monitor)	Daily Continuously	ICP-MS CV-AFS (precipitation)
Germany Hg	wet only wet only	Weekly Weekly	Low volume sampler TGM : monitor (Tekran)	Weekly daily (reported)	ICP-MS
Denmark Hg	Bulk	Monthly	Low volume sampler, Millipore RAWP 1.2 µm, 58 m^3/day TGM: monitor (Tekran)	Daily Continuously	GF-AAS
Spain Hg	wet only	Weekly	High-vol, PM10 TGM: monitor (Tekran)	24h a week Hourly	ICP-MS (aerosol) GF-AAS for precip
France	Bulk	Monthly			GF-AAS
Great Britain	Bulk	GB06,17: monthly GB13,91: weekly	PM10, low volume sampler	Weekly	ICP-MS
Ireland	Bulk	Monthly	TGM: monitor (Tekran)	continously	ICP-MS
Iceland Hg	Bulk	Weekly	High vol. High vol.	Biweekly Biweekly	ICP-MS CV-AAS
Netherlands Hg	Wet-only Wet-only	weekly Weekly	Low volume sampler	24h every 2 days	ICP-MS CV-AFS
Norway Hg	Bulk Bulk (Hg)	Weekly Monthly	NO42: High Vol, 20 l/h, W41 NO01: PM10 KFG 2,3 l/h, quartz TGM: monitor (Tekran)	48h a week Weekly continously	ICP-MS CV-AFS
Portugal	wet only	Biweekly			ICP-MS;CV-AFS (Hg)
Sweden Hg	Bulk Bulk (Hg)	Monthly Monthly	Low volume sampler, teflon filter Hg: gold traps (TGM) Hg: mini traps (TPM)	monthly 2 X 24 h a week 1 X 24 h a week	ICP-MS CV-AFS CV-AFS

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 A.3.3: Measurement methods for nitrogen species.

Country	Precipitation		Air and aerosols		Laboratory method
	Field method	Frequency	Field methods	Frequency	
Belgium	wet only	biweekly	NO2: Chemiluminisence monitor NH3: passive sampler	half hourly biweekly	prec + NH3: IC
Germany	wet only	weekly	NO2: NaI imp. Glass filters, 0.7m3/day NH3: low-cost-denuder $NH4^{+}$: filterpack, teflon filter $NH4^{+}$: LVS, PM2.5, quartz filter $NO3^{-}$: filterpack, teflon filter $NO3^{-}$: LVS, PM2.5, quartz filter	daily weekly daily every 3rd day daily every 3rd day	NO2: FIA NH3: FIA $NH4^{+}$: IC $NO3^{-}$: IC
Denmark	wet only	biweekly	Monitor. Chemiluminisence sumNO3: Millipore RAWP, 1.2 µm + KOH-impregnated Whatman 41, 58 m^3/day (filterpack) sumNH4. Millipore RAWP, 1.2 µm + Oxalic acid impregnated Whatman 41, 58 m^3/day (filterpack)	hourly daily daily	NO3: IC NH4: Spect. (CFA)
Spain	wet onlt	daily	NO2: Chemiluminescence monitor sumNO3: NaOH impregnated Whatman 40 filter, 35 m^3/day sumNH4: Oxalic acid impregnated Whatman 40 filter, 35 m^3/day	Hourly Daily	NH4: AAS NO3: IC
France	bulk	monthly			IC
Great Britain	bulk	biweekly	NO2: Chemiluminescence monitor sumNo3 and NH4: Delta sampler (low volume denuder and filter pack)		IC
Ireland	bulk	daily			IC
Iceland	bulk	daily			IC
Netherlands	wet only	NL09: daily NL91: biweekly	NO2: Chemiluminescence monitor NH3: Absorption in $NaHSO_4$, membrane separation NO3 and NH4: Whatman QMA filter 47 mm, 55.2 m^3/day	hourly daily	NH3: conductivity NO3: IC, NH4: CFA
Norway	bulk	NO01: daily weekly	NO2: NaI imp. Glass filters, 0.7m3/day sumNO3. Teflon filter+ KOH-impregnated Whatman 40 filter, 25 m^3/day (Filterpack) sumNH4: Teflon filter + Oxalic acid-impregnated Whatman 40 filter, 25 m^3/day (Filterpack)	daily daily	NO2: Spect., Griess method NH4,NO3: IC
Portugal	wet only	biweekly			
Sweden	wet only	daily	NO2: NaI-impregnated glass sinters, ~0.7 m3/day Sum NO3: Mitex membrane + KOH-impregnated Whatman 40 filter, 20 m3/day (filterpack) sum NH4; Mitex membrane + Oxalic acid impregnated Whatman 40 filter, 20 m3/day (filterpack(	daily daily daily	Spectr. FIA IC Spectr. FIA

IC: ion chromatograph
CFA: continuous flow analysis
FIA. Flow injection analyisis

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