



**OSPAR
COMMISSION**

Monitoring and Assessment Series

Comprehensive Atmospheric Monitoring Programme

Deposition of air pollutants around the
North Sea and the North-East Atlantic
in 2011



2013

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.

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Contents

Executive summary.....	4
Récapitulatif	4
1. Introduction	5
2. The OSPAR CAMP Monitoring Programme.....	6
2.1 Geographical coverage and completeness.....	6
3. Observed concentrations in 2011	7
3.1. Metals in air and precipitation	8
3.2 Selected POPs in air	11
3.3 Nitrogen compounds in air and precipitation.....	12
4. Temporal trends	13
4.1 Time series in annual mean for the various nitrogen compounds	14
4.2 Time series in annual mean of heavy metals.....	17
4.3 Time series in annual mean for \square -HCH.....	19
References.....	20
Annex 1: Monitoring stations reporting to CAMP in 2011	22
Annex 2: Monthly and annual means of reported components.....	24
Annex 3: Methods in field and laboratory.....	55
Annex 4: Consequences of change in averaging procedure	58

Executive summary

This report presents the results of monitoring undertaken by OSPAR Contracting Parties for the Comprehensive Atmospheric Monitoring Programme (CAMP) during 2011. 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 2011.

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

All Contracting Parties except Portugal reported some data for 2011. 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 main source areas, though there is some variability with a few sites maybe more influenced by local or nearby sources.

Time trends show decrease in nitrogen, heavy metals and γ -HCH in accordance to the general emission reductions done in Europe the last decades.

Récapitulatif

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 de l'Arctique (Région I).

Toutes les Parties contractantes, à l'exception du Portugal, ont notifié des données pour 2011. Les données de la plupart des Parties contractantes comportent des lacunes, en effet l'absence de certains éléments ne leur permet pas de se conformer complètement aux impératifs de la surveillance déterminés par le CAMP.

La répartition régionale de divers polluants révèle dans l'ensemble des niveaux élevés à proximité des principales sources, bien qu'il existe une certaine variabilité car quelques sites 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 de dernières décennies.

Deposition of air pollutants around the North Sea and North-East Atlantic in 2011

1. 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.

The components of interest to the CAMP are divided into two groups, for measurement on a mandatory basis and 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) at least one station should be operating in each. 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.

Table 1.1 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, fluoranthene, 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, fluoranthene, pyrene, benzo(a)anthracene, chrysene, benzo(a)pyrene, benzo(ghi)perylene, indeno(1,2,3-cd)pyrene, NO

^a) total ammonium ($\text{NH}_3 + \text{NH}_4^+$) and total nitrate ($\text{HNO}_3 + \text{NO}_3^-$) is an alternative



Figure 1.1 OSPAR maritime area and regions.
Region I: Arctic Waters; Region II: Great North Sea;
Region III: Celtic Seas; Region IV: Bay of Biscay and Iberian Coast; Region V: Wider Atlantic.

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 Principle, which are harmonised with the reporting obligations under EMEP (European Monitoring

Comprehensive Atmospheric Monitoring Programme, 2011: Deposition of air pollutants around the North Sea and the North-East Atlantic

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 “*Pollutant depositions in the OSPAR region of the North-East Atlantic in 2011*” gives in Chapter 2 an overview of reported data, and a discussion if the Parties are in compliance with their monitoring obligations. In Chapter 3, the 2011 observed annual average concentrations are mapped. Chapter 4 provides overviews of temporal patterns in the observations in the two last decades, and indications of significant trends or not.

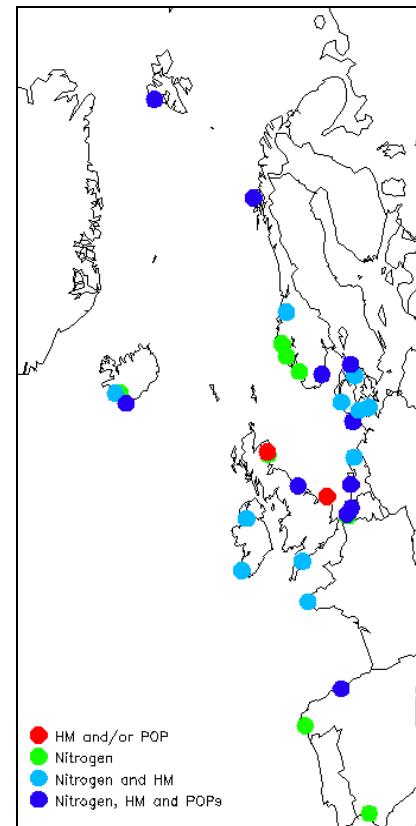
2. The OSPAR CAMP Monitoring Programme

2.1 Geographical coverage and completeness

Table 2.1 and Figure 2.1 illustrate what has been reported to CAMP for the year 2011. 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's 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).

Table 2.1 and Figure 2.1 Monitoring sites reporting, reduced and oxidised nitrogen compounds, heavy metals (HM), mercury and persistent organic pollutants (POPs) to CAMP in 2011.

region	Site	Sites Name	In precipitation					In air					
			NO3	NH4	HM	Hg	POP	NO2	Nox	Nred	HM	Hg	POP
I	IS0002R	Irafoss											
	IS0090R	Reykjavik											
	IS0091R	Storhofdi											
	NO0039R	Kårvatn											
	NO0042G	Zeppelin											
	NO0090R	Andoya											
II	BE0011R	Moerkerke											
	BE0013R	Houtem											
	BE0014R	Koksijde											
	DE0001R	Westerland											
	DK0005R	Keldsnor											
	DK0008R	Anholt											
	DK0022R	Sepstrup Sande											
	DK0031R	Ullborg											
	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											



It is mandatory for all the Parties to OSPAR to monitor in accordance to the CAMP programme at minimum one site as described in the introduction. Table 2.2 gives an overview of which Parties are in compliance and which are not. Dark green means data are reported as defined in Table 1.1; while red means no data. A light green colour is used when it is an incomplete programme, *i.e.* if only particulate nitrogen is included and not nitric acid (or sum of nitrate). As seen from the table, Portugal has not reported CAMP data for 2011. There are several Parties that don't measure γ -HCH or mercury in precipitation; however it should be noted that there are more sites measuring these compounds in air.

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.

Site	In precipitation										In air			
	NO_3^-	NH_4^+	As	Cd	Cr	Cu	Pb	Ni	Zn	Hg	$\gamma\text{-HCH}$	NO_2	Nox	Nred
Iceland														
Norway														
Belgium														
Germany														
Denmark														
France														
UK														
Netherlands														
Sweden														
Ireland														
Spain														
Portugal														

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 *i.e.* 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, for example 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/>.

3. Observed concentrations in 2011

This section describes the observed concentrations at coastal stations around the North-East Atlantic in 2011. 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 if the levels are higher than what is acceptable from a critical load perspective.

In the maps, volume weighted means are calculated in accordance to the defined EMEP procedure (see Annex 4 for discussion). To address the total load of pollutants, it is necessarily to look at the deposition, and the wet depositions are given in the annexes together with the concentrations. For pollutants in air, concentrations only are given. There is a large uncertainty in using dry deposition velocities to estimate the deposition from gases and particulate, and this is beyond the aim of this report to address this complicated issue. It is however recognised that dry deposition can be just as important as, or higher than the wet deposition, especially in dry regions.

3.1. 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) 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 Europe fairly well (see Pacyna *et al.*, 2007). The lowest concentrations are generally observed in northern Scandinavia and the westernmost part of Europe. The highest levels were for some elements (lead and cadmium) observed in the Benelux countries while for other; highest levels are seen In Spain (for Copper) or Denmark (for Arsenic). At Iceland there are very high levels of chromium, which may be due to local sources. The regional distribution in air and precipitation is not comparable for all elements. That is to say, 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 influence of regional sources which can give high air concentrations but are not necessarily scavenged by wet deposition.

The measurements of mercury are mainly performed in Northern Europe; except one site in Spain measuring mercury in precipitation, Figure 3.6. However, ES08 do also have measurements of total gaseous mercury; though due to technical troubles, 2011 data is not available. The spatial distribution of elemental Hg in air does not follow the same spatial pattern as the other heavy metals. The lowest annual average of Hg(g) was seen in Belgium while Scandinavia had highest concentrations. In precipitation, however the highest concentrations are in Belgium and Ireland. One should however notice that the detection limit in Ireland is high and the level shown is just an upper estimate. The reason why the spatial pattern of especially Hg air concentrations differs from the primary Hg emission pattern is that Hg has a long residence time in the atmosphere and also that re-emission from soil and ocean may affect more distant sites.

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 the Annex 2.

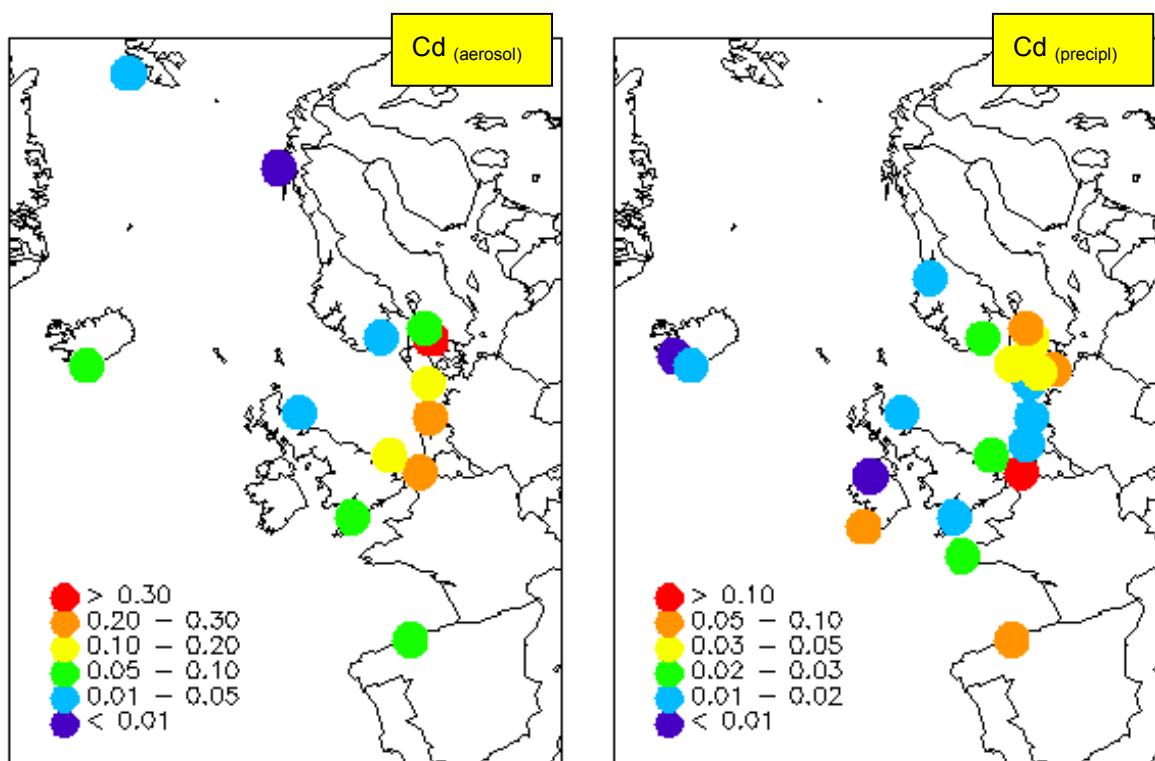


Figure 3.1 Annual concentrations of cadmium in air ($\mu\text{g}/\text{m}^3$) and precipitation ($\mu\text{g}/\text{L}$), 2011

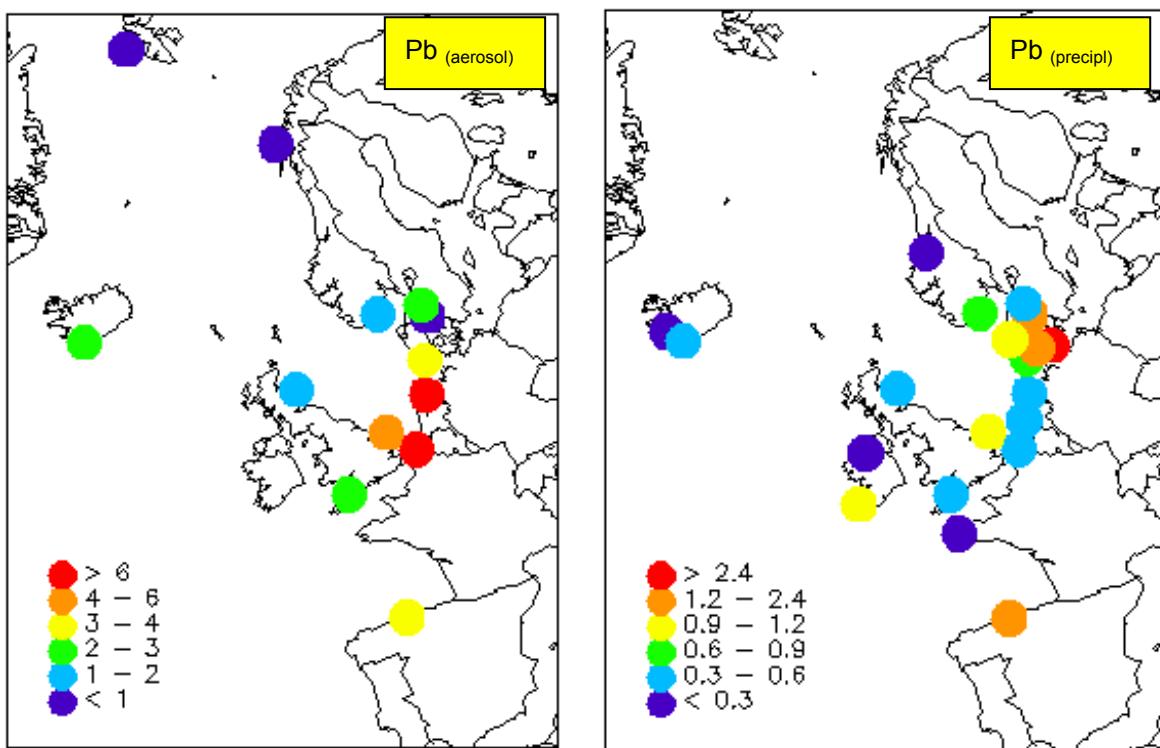


Figure 3.2 Annual concentrations of lead in air ($\mu\text{g}/\text{m}^3$) and precipitation ($\mu\text{g}/\text{L}$), 2011

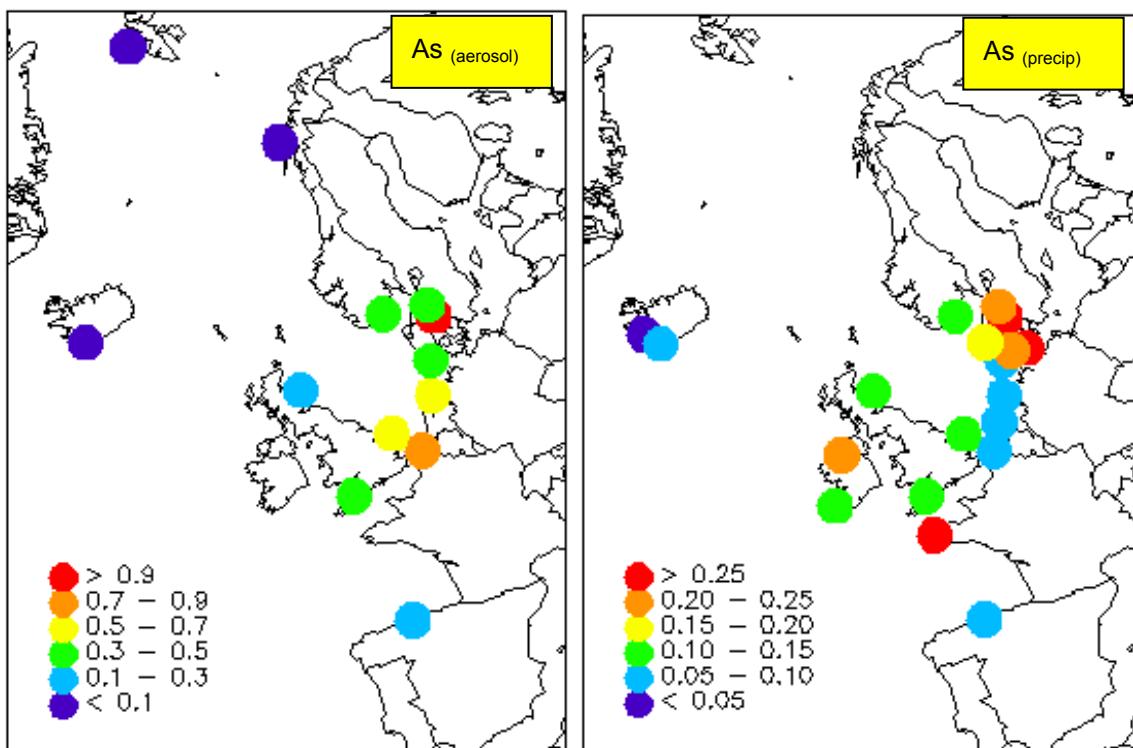


Figure 3.3 Annual concentrations of arsenic in air ($\mu\text{g}/\text{m}^3$) and precipitation ($\mu\text{g}/\text{L}$), 2011

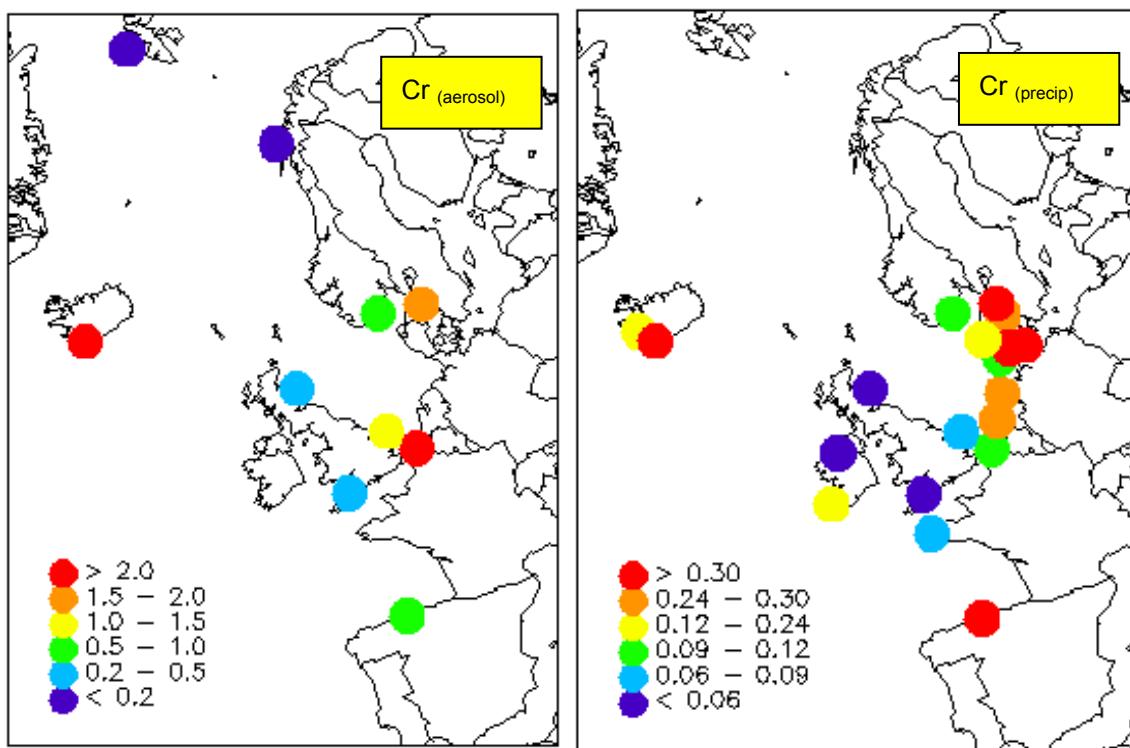


Figure 3.4 Annual concentrations of chromium in air ($\mu\text{g}/\text{m}^3$) and precipitation ($\mu\text{g}/\text{L}$), 2011

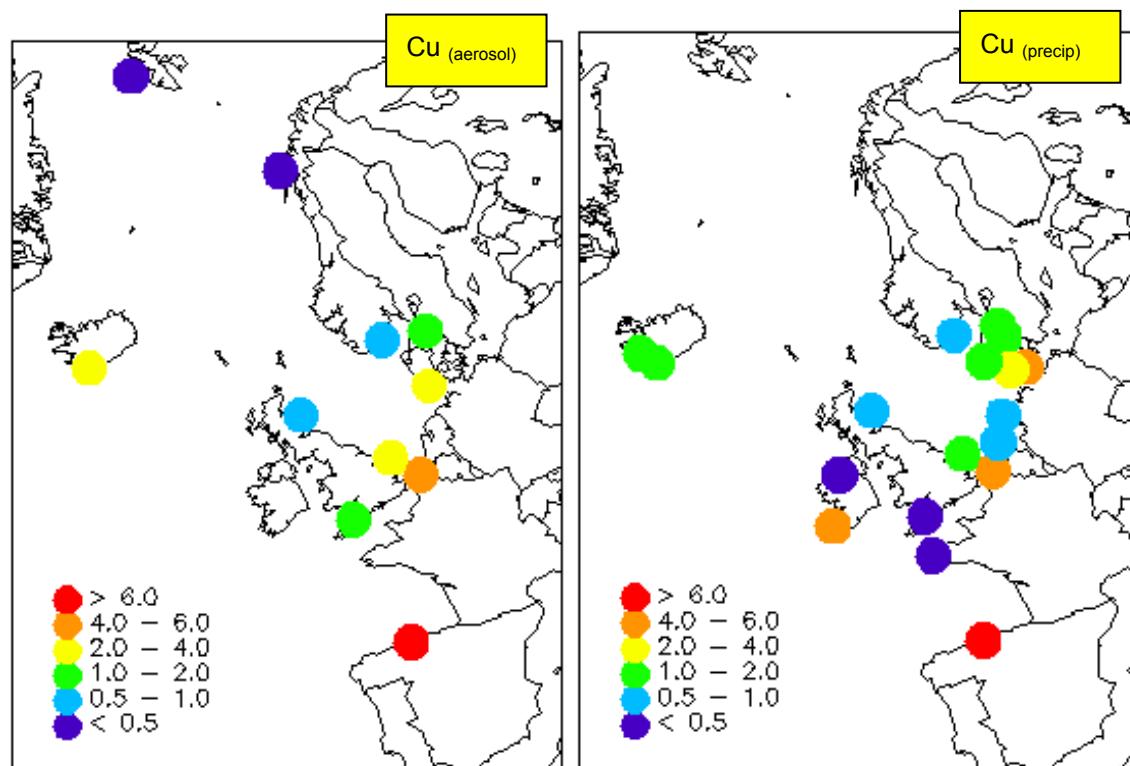


Figure 3.5 Annual concentrations of copper in air ($\mu\text{g}/\text{m}^3$) and precipitation ($\mu\text{g}/\text{L}$), 2011

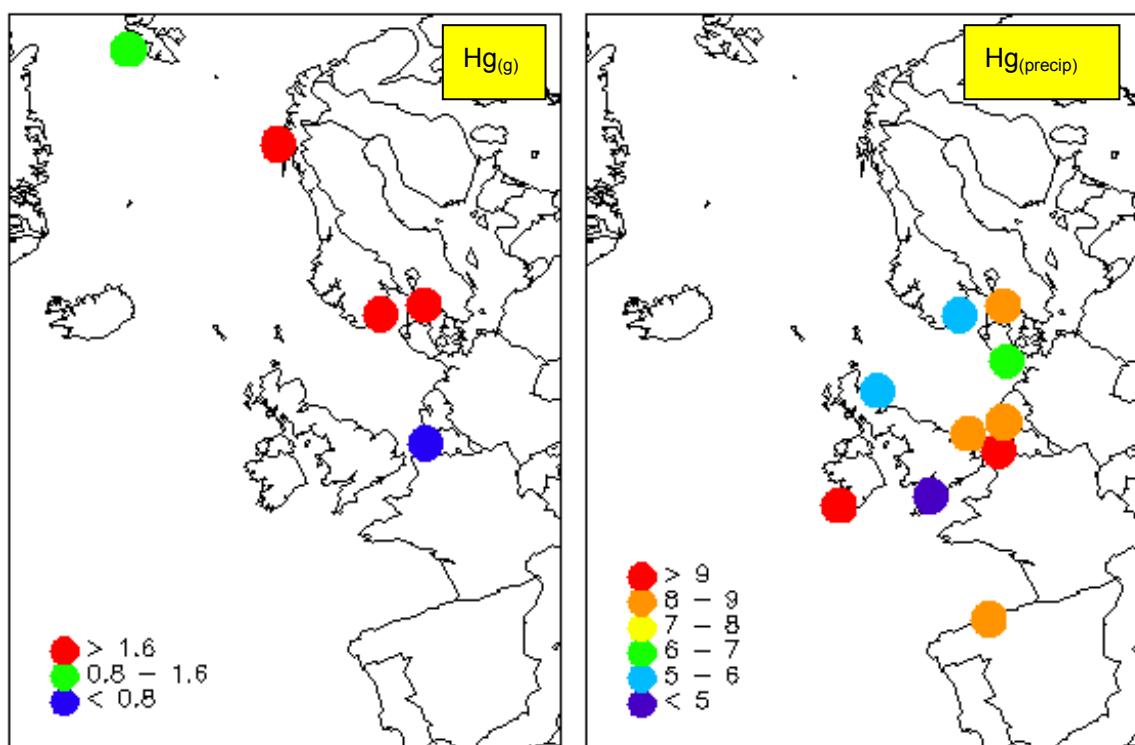


Figure 3.6 Annual concentrations of mercury in air (right, total gaseous mercury, ng/m³) and precipitation (ng/L), 2011

3.2 Selected POPs in air

POPs are organic chemicals identified as being toxic, bio-accumulative, persistent and prone to long-range transport, and several are regulate by international protocols. 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 caused by either 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. γ -HCH in air is only measured in Scandinavia, Germany 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 level are seen in the Benelux countries and Spain, while lowest the Arctic (at the station in Svalbard). For the PCBs the highest concentration in 2011 was seen in Sweden, though 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 is found in Annex 2.

Maps for measurements precipitation are not shown because the methods across the network differ and are not comparable, *i.e.* some sites measure deposition while others concentrations. The data are, however, given in the Annex2, and it shows that the site in the Netherlands (NL0091) has the highest level of γ -HCH.

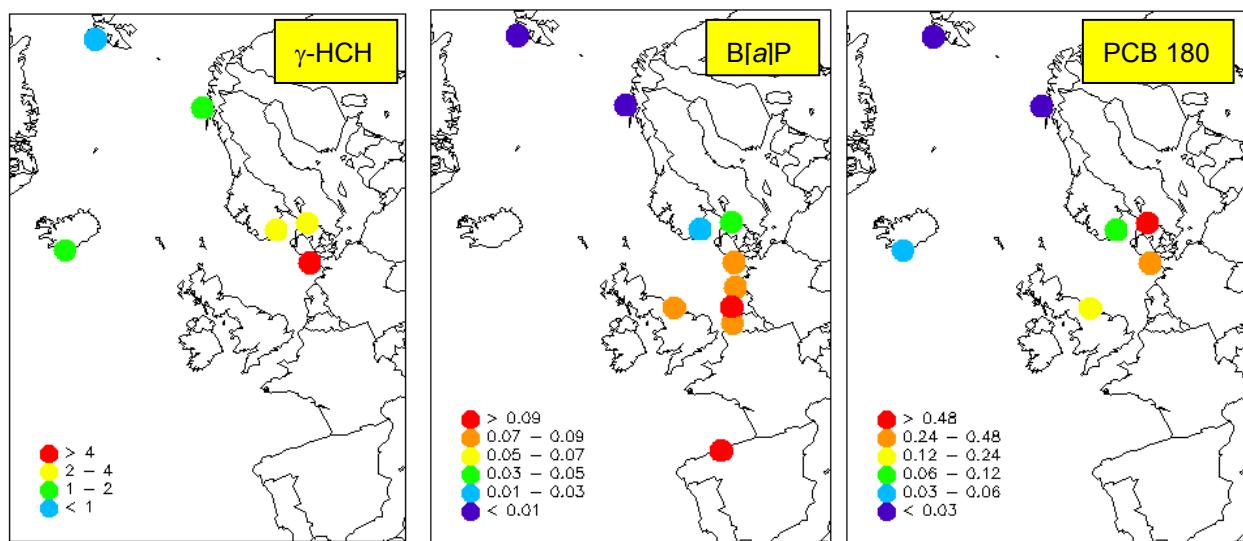


Figure 3. $\gamma\text{-HCH}$, Benzo-a-pyrene and PCB 180 in air (ng/m^3) 2011.

3.3 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, like from the ship traffic the North Sea in the English Channel. The highest concentrations of nitrate ions in precipitation as well as in air, resembles similar pattern, but in addition elevated concentrations in the Bay of Biscay and Kattegat.

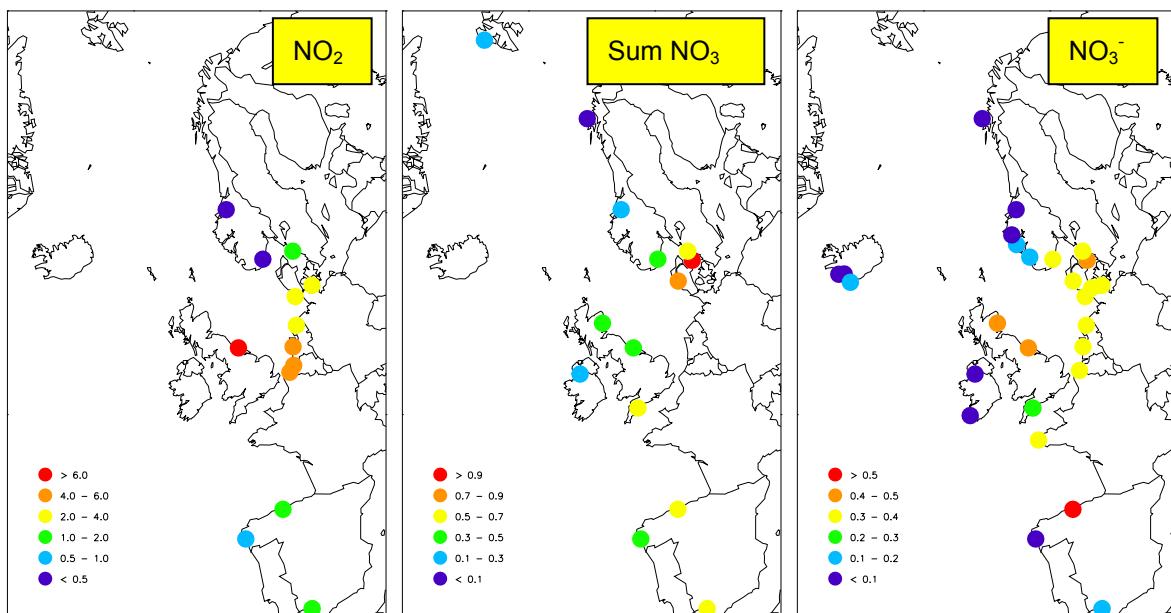


Figure 3.8 Volume weighted annual mean concentrations of oxidised nitrogen in 2011, in air (NO_2 and sum $(\text{NO}_3 + \text{HNO}_3)$ in $\mu\text{gN}/\text{m}^3$) and in precipitation (NO_3^- in mgN/L).

Concentrations of reduced nitrogen are shown in Figure 3.9. The highest concentrations of sum ammonium ($\text{NH}_4^+ + \text{NH}_3$) in air are not surprisingly highest in the quite intensive agricultural region in the Benelux area, but also Spain experience high level of reduced nitrogen air. In precipitation, high levels are seen also at one site at Iceland, maybe due to local sources.

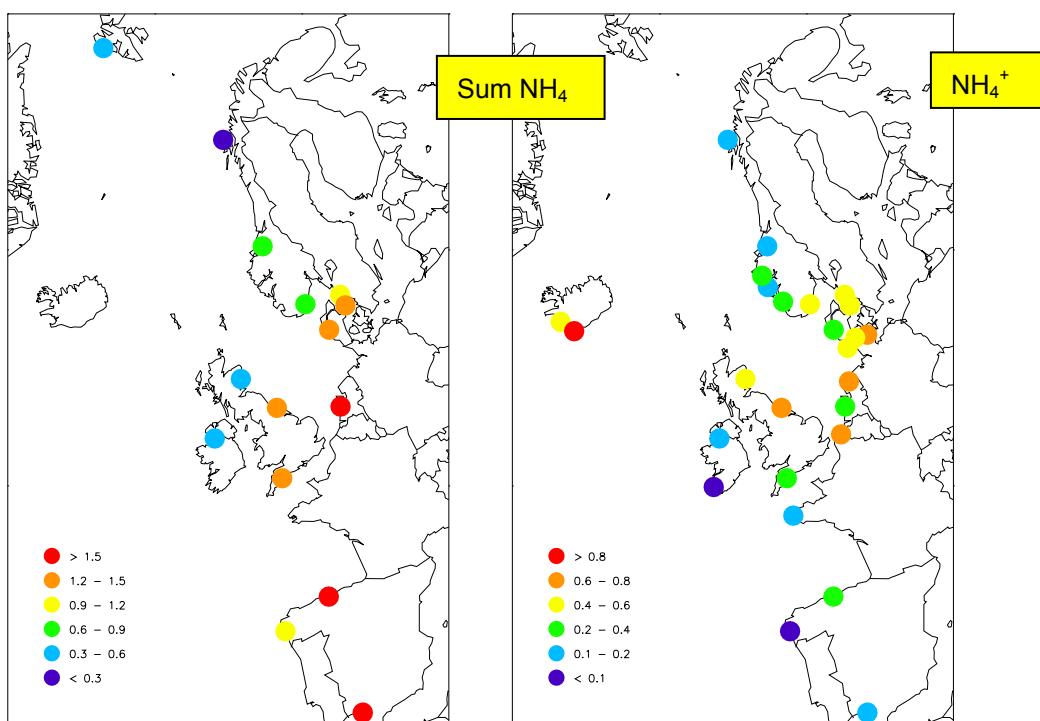


Figure 3.9 Volume weighted annual mean concentrations of reduced nitrogen in 2011, in air ($\mu\text{gN/m}^3$) and in precipitation (mgN/L).

Annual wet deposition of total nitrogen is between 200 and 1800 mgN/m² (equal 2-18 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).

4. Temporal trends

The temporal trends in the OSPAR CAMP data from 1990 to 2011 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 occurs 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 do have one daily sample pr week, which is accepted. The measurements are not normalised. The average per cent 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 use. In Table 4.1, trends 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 1990-2011 and 2000-2011.

Trends 1990 - 2011						Trends 2000 - 2011					
Comp	Nr of sites	Sites with sign. trend decrease	Sites with sign. trend increase	Trends in conc.		Comp	Nr of sites	Sites with sign. trend decrease	Sites with sign. trend increase	Trends in conc.	
				Avg.	SD					Avg.	SD
NO ₃ precip	10	70%	0%	-30%	15%	NO ₃ precip	13	54%	0%	-18%	26%
sum NO ₃ air	5	40%	0%	-10%	34%	sum NO ₃ air	5	20%	0%	12%	37%
NO ₂ air	6	50%	0%	-24%	22%	NO ₂ air	7	57%	14%	-19%	17%
NH ₄ precip	10	20%	10%	-10%	21%	NH ₄ precip	14	7%	0%	5%	39%
sum NH ₄ air	6	67%	33%	25%	110%	sum NH ₄ air	7	14%	14%	76%	132%
Hg precip	2	50%	0%	-32%	20%	Hg precip	4	25%	0%	-17%	13%
Hg _(g) air	1	0%	0%	3%	-	Hg _(g) air	2	0%	0%	-7%	8%
Pb precip	7	100%	0%	-88%	9%	Pb precip	10	70%	0%	-60%	26%
Pb air	3	100%	0%	-91%	5%	Pb air	6	67%	17%	105%	387%
Cd precip	6	83%	0%	-62%	45%	Cd precip	10	50%	10%	-26%	57%
Cd air	2	100%	0%	-80%	9%	Cd air	5	50%	0%	-22%	36%

4.1 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 2011, nitrogen dioxide in air and nitrate in precipitation decreased, on average, by 24% and 30%, respectively. The concentrations of total airborne nitrate decreased on average only 10%, 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. Loss of in 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 15% 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.

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 both in air and precipitation, on average 10% in precipitation. In air however it is an average increase of 25%, Table 4.1. Though it should be noted that some sites are, due to their location in rural districts, partly affected by local ammonia emissions and especially two sites in Norway show a large increase, which give substantial effect on the total average in the whole region, excluding these two Norwegian sites the remaining four sites show a significant decrease of 44%. Concentrations from 2000-2011 show no clear tendency (Table 4.1 and Figure 4.4 and 4.5)

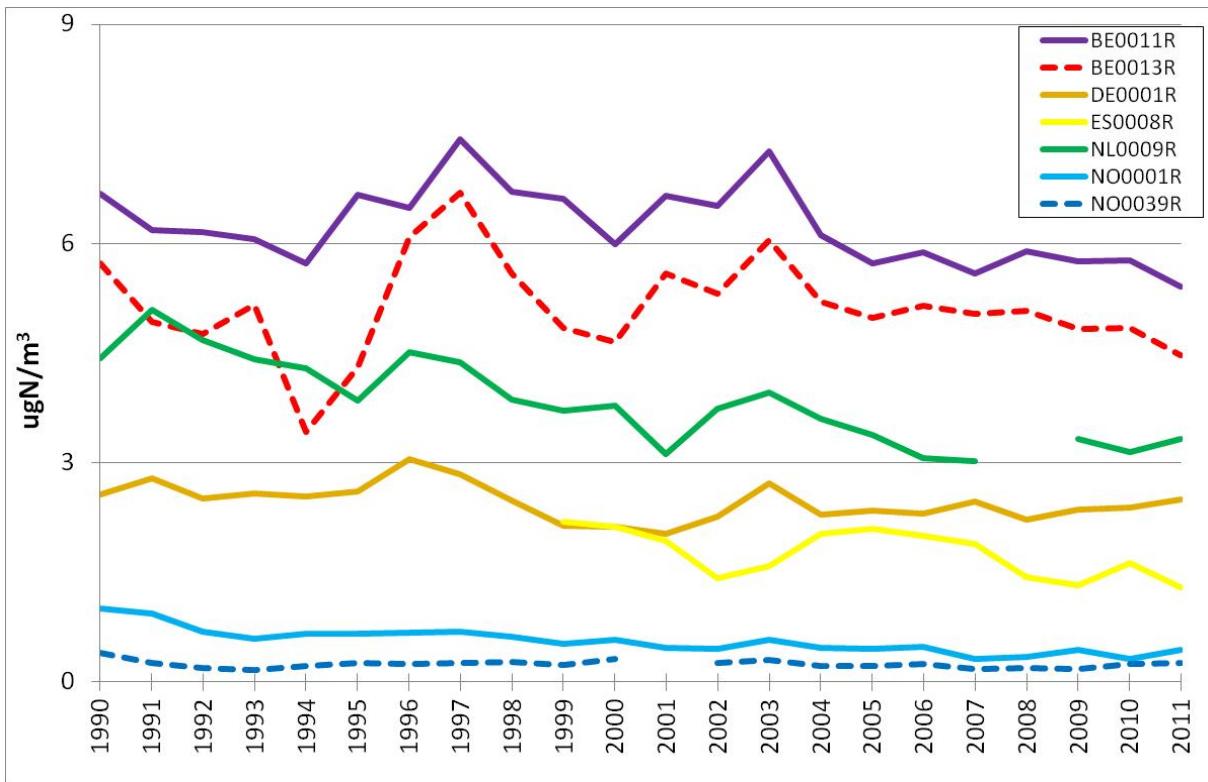


Figure 4.1 Time series of NO₂. Time series of Solid lines are sites with significant trends while dotted lines are not.

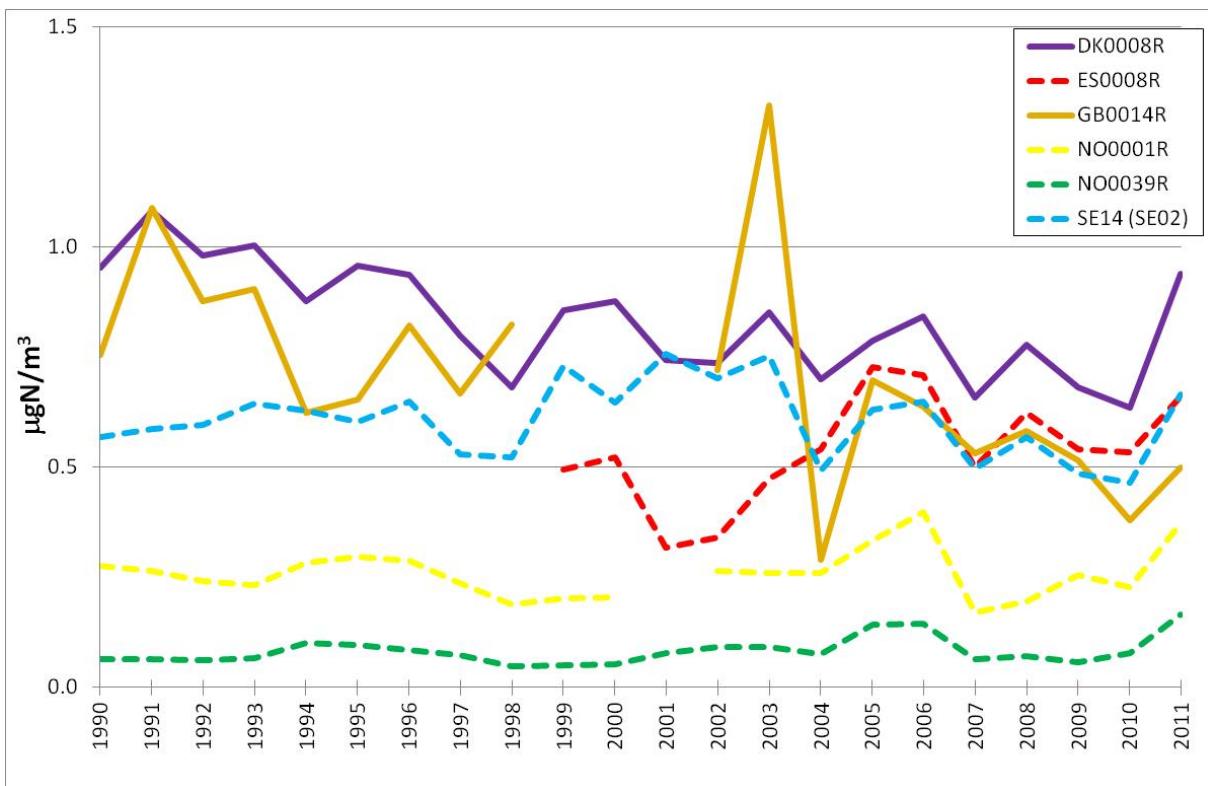


Figure 4.2 Time series of sum of nitrate (HNO₃+NO₃) in air. Solid lines are sites with significant trends while dotted lines are not.

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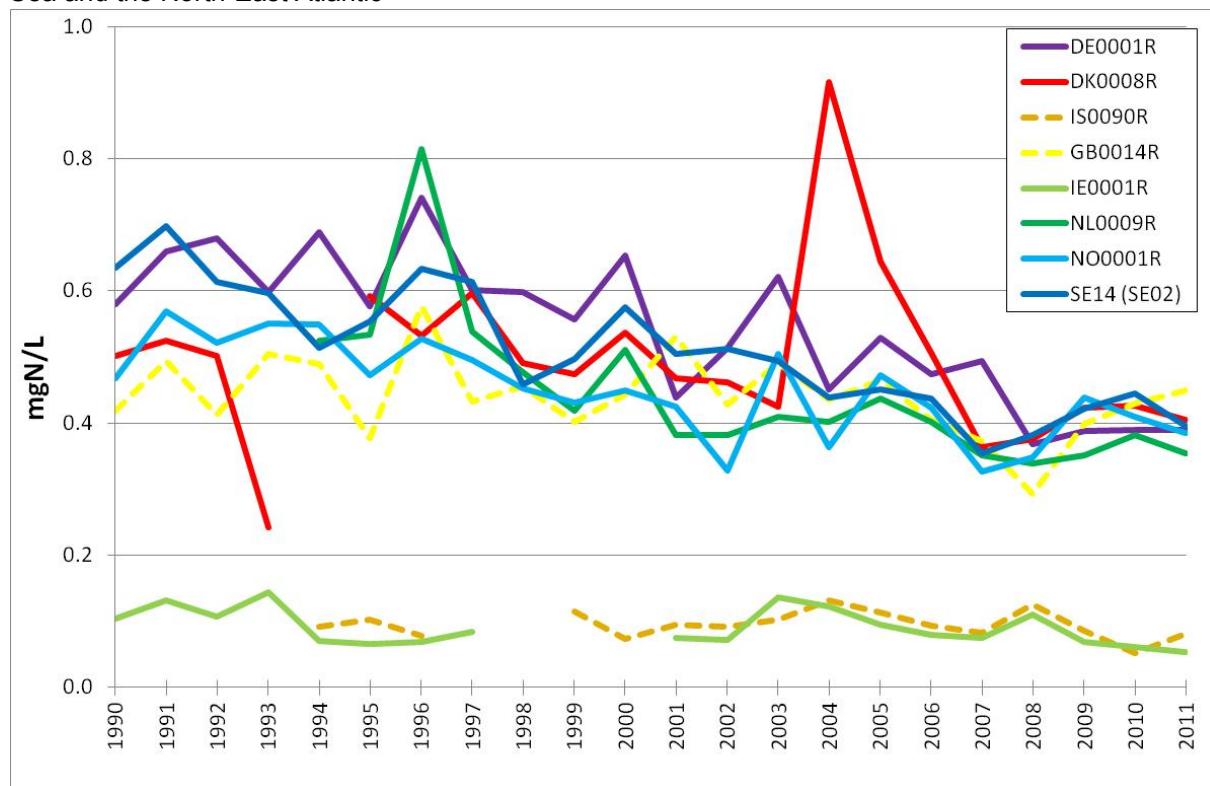


Figure 4.3 Time series of NO_3 in precipitation. Solid lines are sites with significant trends while dotted lines are not.

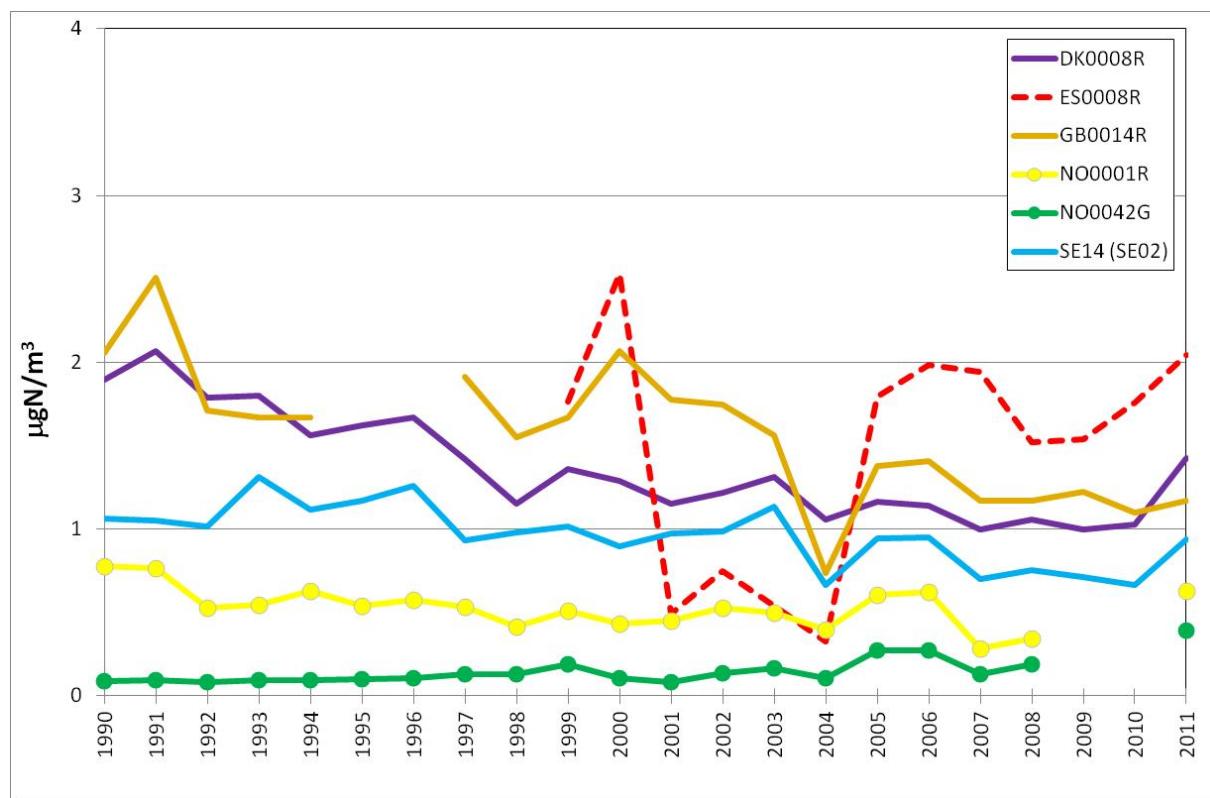


Figure 4.4 Time series of sum of ammonium ($\text{NH}_3 + \text{NH}_4$) in air. Solid lines are sites with significant trends while dotted lines are not.

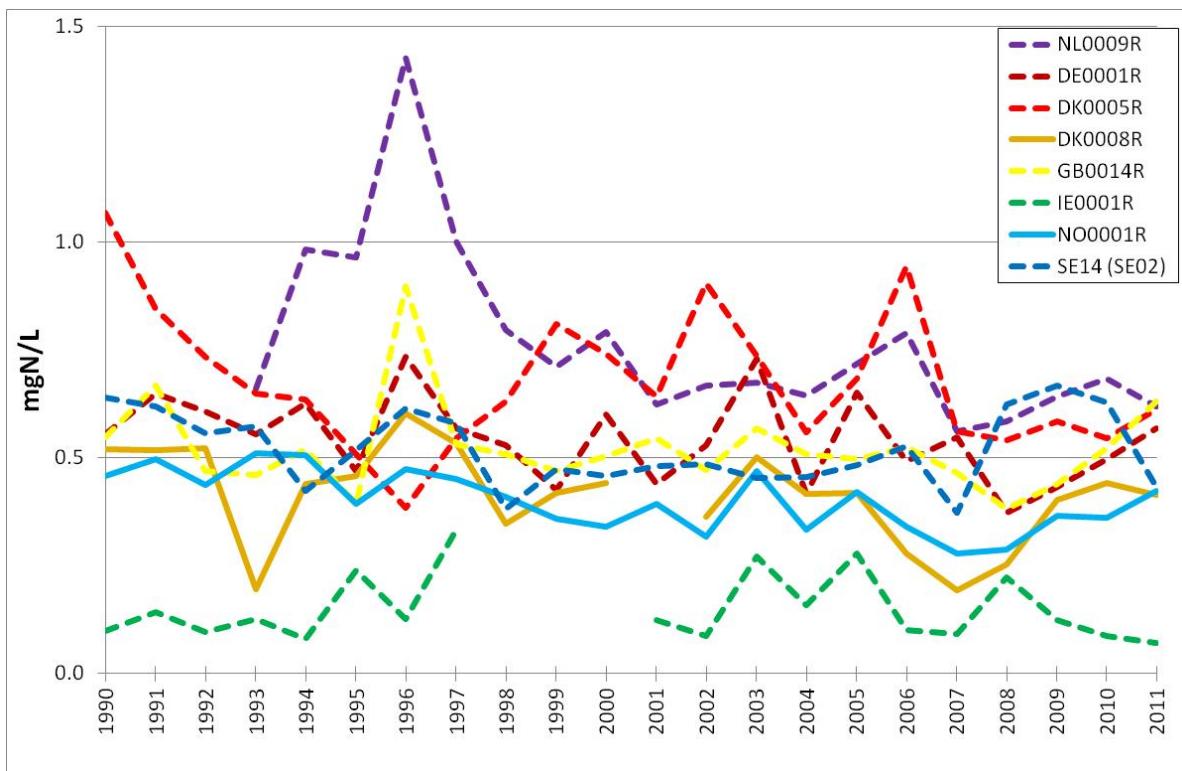


Figure 4.5 Time series of NH₄ in precipitation. Solid lines are sites with significant trends while dotted lines are not

4.2 Time series in annual mean of heavy metals

When looking at trends in heavy metals, one should keep in mind that the sites with long term monitoring are situated in central and Northern Europe, and that their average decrease may be different than for the EMEP domain as a whole. Nevertheless it is a very clear reduction in both lead and cadmium at the CAMP sites since 1990 as well as from 2000, Table 4.1 and Figure 4.6-4.9. This is in line what is reported of emission reduction in Europe (Pacyna *et al.*, 2009).

For mercury there are only Scandinavian and German sites which have long term measurements, Figure 4.10. There seems to be a reduction in the concentration in the earlier part of the period, but in the latest 10-15 years the level has not been some inter-annual variability, but not any 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).

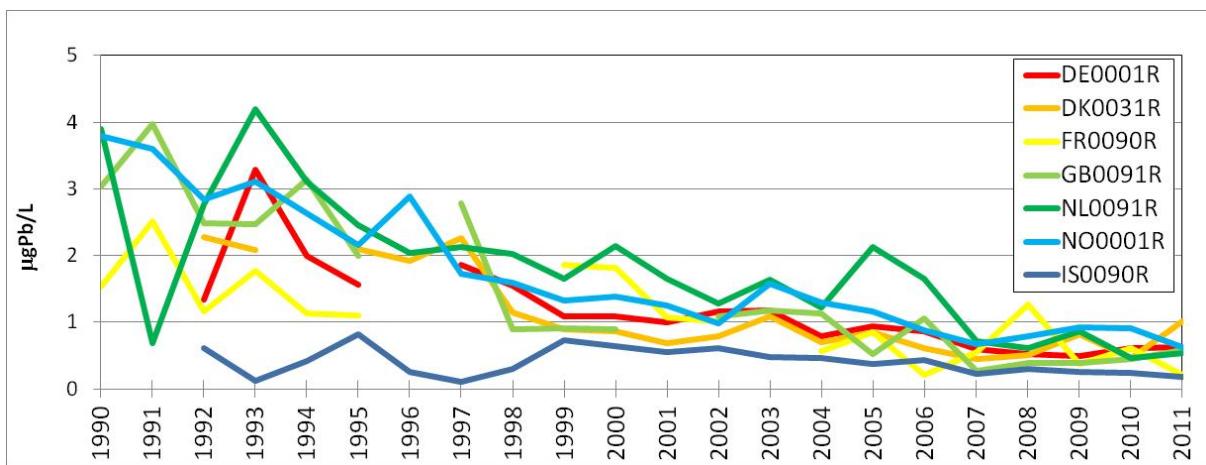


Figure 4.6 Time series of lead in precipitation. Solid lines are sites with significant trends while dotted lines are not.

Comprehensive Atmospheric Monitoring Programme, 2011: Deposition of air pollutants around the North Sea and the North-East Atlantic

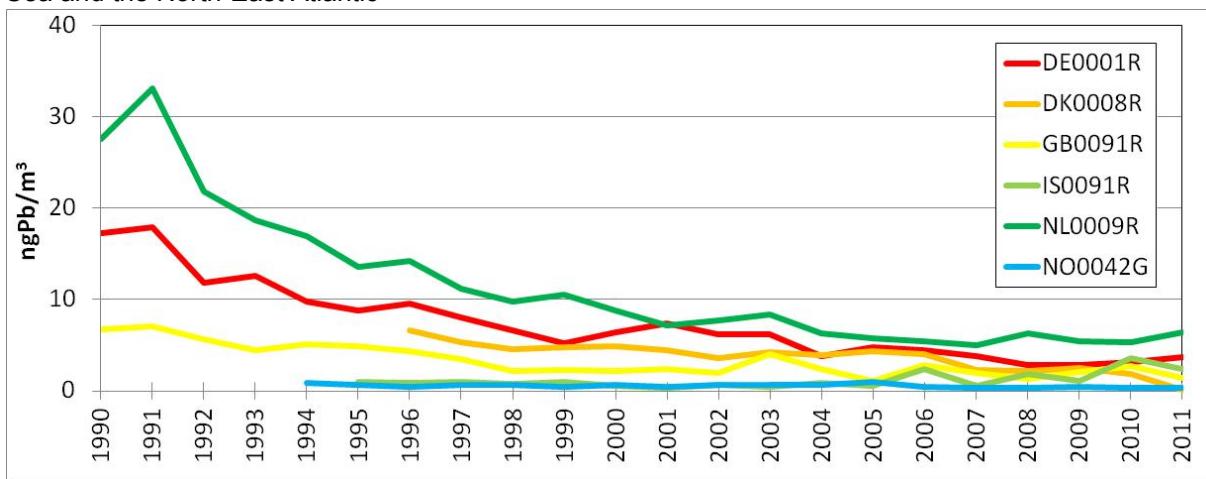


Figure 4.7 Time series of lead in air. Solid lines are sites with significant trends while dotted lines are not.

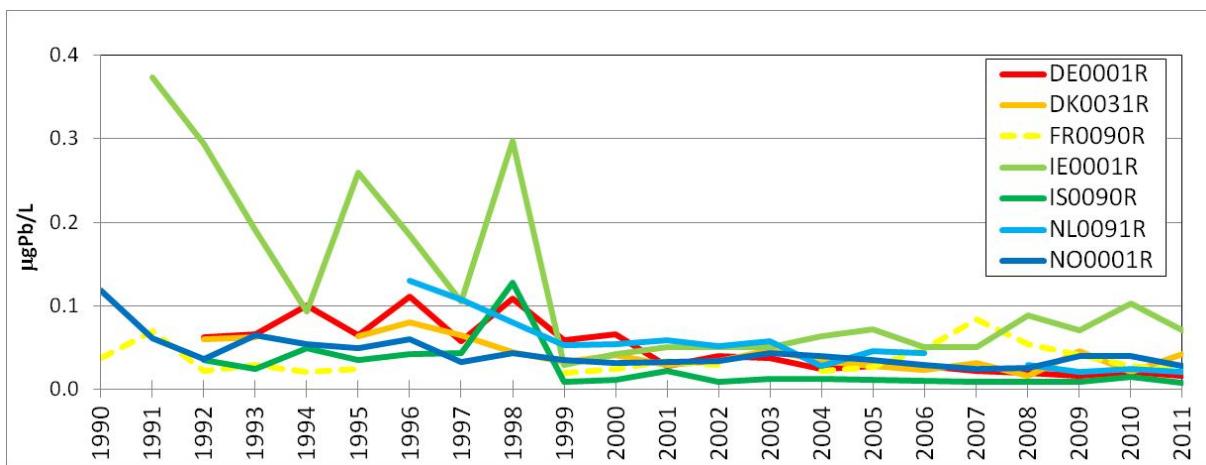


Figure 4.8 Time series of cadmium in precipitation. Solid lines are sites with significant trends while dotted lines are not.

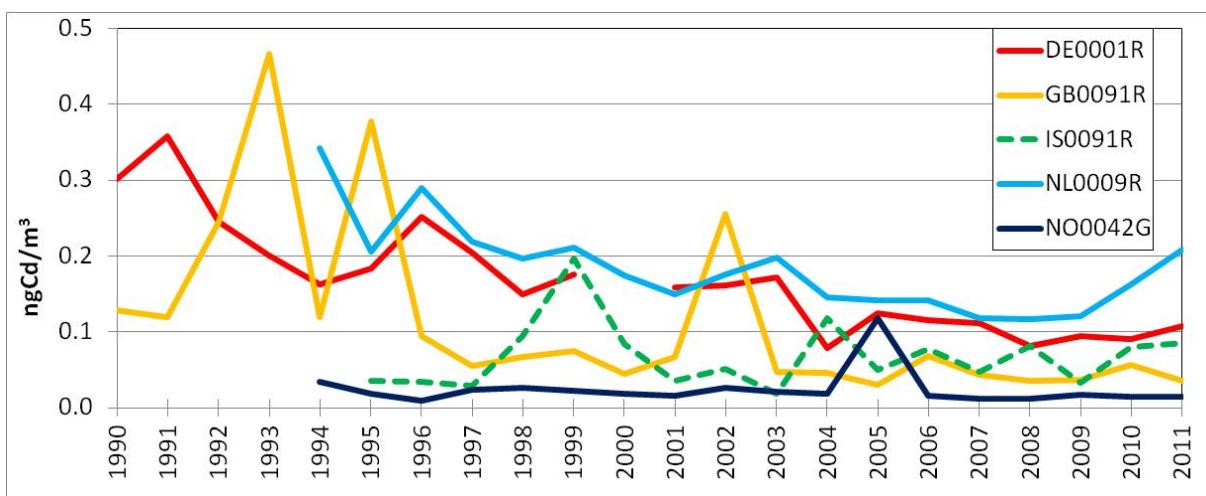
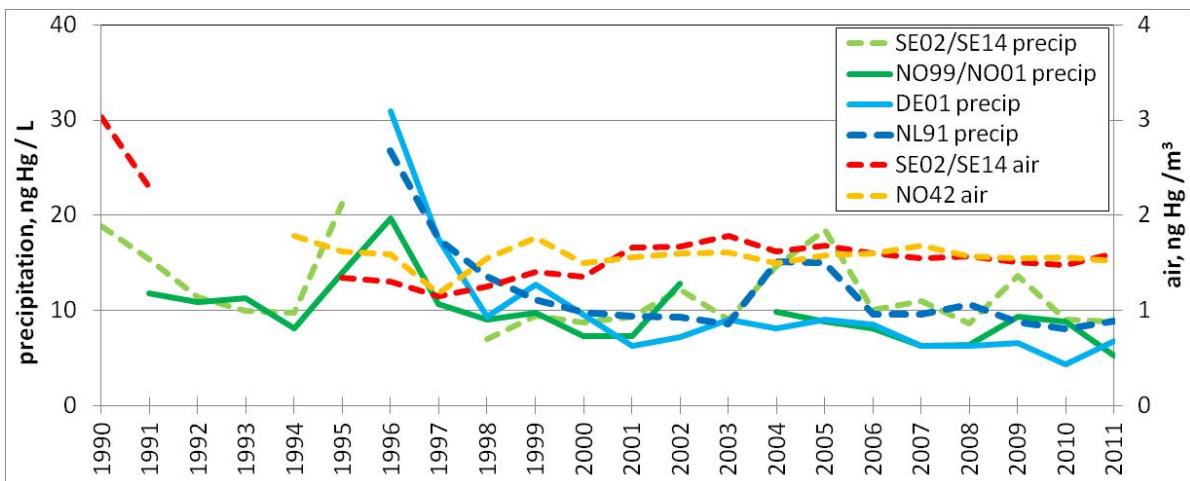
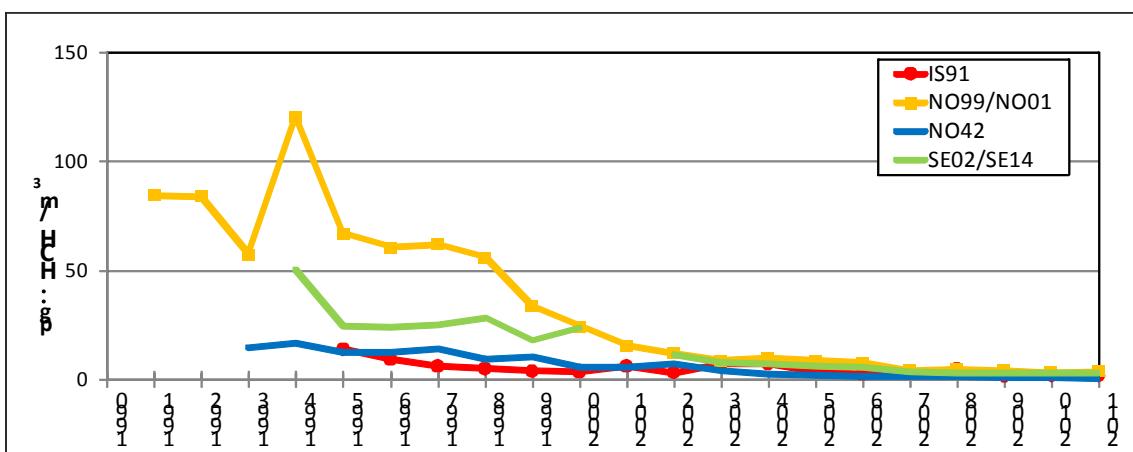
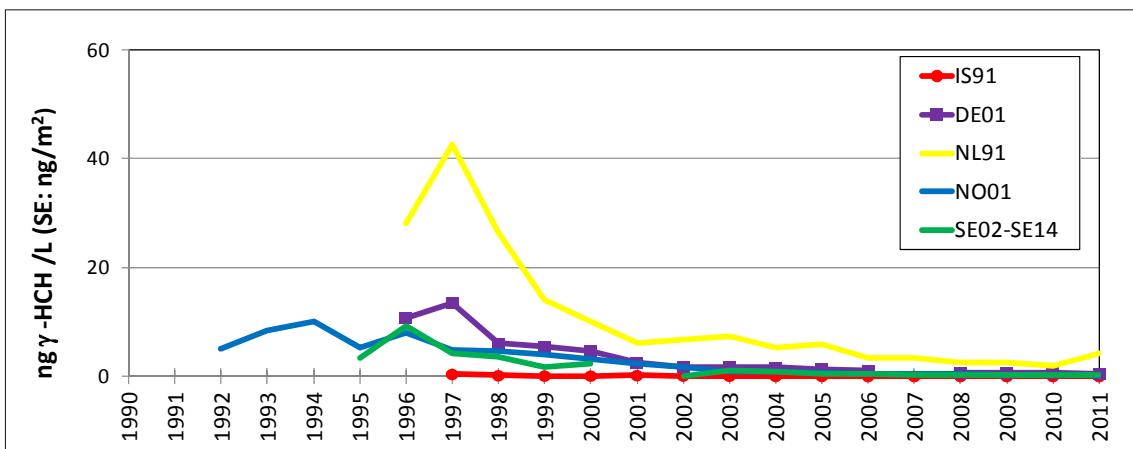


Figure 4.9 Time series of cadmium in air. Solid lines are sites with significant trends while dotted lines are not.

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

4.3 Time series in annual mean for γ -HCH

For γ -HCH it has been a significant decline at all the sites which have measured this compound, especially before 2000, 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 it 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 2011

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	64° 5' N	21°01' W	66 m
	IS0090R	Reykjavik		63° 8' N	20° 54' W	52 m
	IS0091R	Storhofdi		63° 24' N	20° 17' W	118 m
Norway	NO0001R	Birkenes	II	58° 23' N	8° 15' E	190 m
	NO0039R	Kårvatn		62° 47' N	8° 53' E	210 m
	NO0042G	Zeppelin	I	78°54' N	11°53' E	475 m
	NO0090R	Andøya	I	69°16' N	16°0' E	380 m
	NO0554R	Haukeland	II	60°49' N	5°35' E	190 m
	NO0572R	Vikedal		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		51°1" N	2°35"E	0 m
	BE0013R	Houtem		51°15" N	3°21"E	10 m
Netherlands	NL0009R	Kollumerwaard	II	53° 20' N	6° 17' E	1 m
	NL0091R	De Zilk		52° 18' N	4° 31' E	4 m
Germany	DE0001R	Westerland	II	54° 56' N	8 ° 19' E	12 m
Denmark	DK0005R	Keldsnor	II	54°44'N	10°44'E	19 m
	DK0008R	Anholt		56°43'N	11°31'E	40 m
	DK0022R	Sepstrup Sande		55°5'N	9°36'E	60 m
	DK0031R	Ulborg		56°17'N	8°26'E	10 m
Sweden	SE0014R	Råö	II	57°24' N	11°55' E	5 m
United Kingdom	GB0006R	Lough Navar	III	54°26' N	7°54 W	126 m
	GB0013R	Yarner Wood		50°36' N	3°43 W	119 m
	GB0014R	High Muffles	II	54°20' N	0°48' W	267 m
	GB0017R	Heigham Holmes	II	52°43' N	1°37' E	0 m
	GB0054R	Glen Saugh	II	56°54'N	2°34' W	85 m
	GB0091R	Banchory	II	57°05' N	2°32' W	120 m
Ireland	IE0001R	Valentia Observ.	III	51°56' N	10°15' W	11 m
France	FR0090R	Porspoder	II	48°31N	4°45'W	50 m
Spain	ES0005R	Noya	IV	42°44'N	8°55' W	683 m
	ES0008R	Niembro		43°27'N	4°51' W	134 m
	ES0017R	Doñana		37°2'N	6°20' 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	Jean Yves Cabon
Germany	Umweltbundesamt, Langen	Elke Bieber
Great Britain	AEA Technology and	Keith Vincent
Iceland	The Icelandic Meteorological Office	Arni Sigurdsson
Netherlands	National Institute for Public Health and Environmental Protection (RIVM)	Hans Berkhout
Norway	Norwegian Institute for Air Research (NILU)	Marit Vadset, Stein Manø
Spain	Ministerio de Agricultura, Alimentación y Medio Ambiente	Alberto Orío Hernández
Sweden	IVL Swedish Environmental Research Institute	Karin Sjöberg

Annex 2

Monthly and annual means of reported components

Table A.2.1: Nitrate and ammonium concentrations in precipitation, 2011.

Site	Comp	Unit	jan	febr	mar	apr	may	june	july	aug	sept	oct	nov	dec	year
BE0014R	ammonium	mgN/L	0.46	1.01	1.49	1.63	1.56	0.76	0.60	0.55	0.58	0.57	0.59	0.20	0.62
DE0001R	ammonium	mgN/L	0.76	1.88	1.65	1.59	0.71	0.61	0.58	0.58	0.45	0.29	0.66	0.38	0.57
DK0005R	ammonium	mgN/L	0.51	0.55	2.40	1.55	1.33	0.59	0.79	0.40	0.52	0.39	0.20	0.23	0.61
DK0008R	ammonium	mgN/L	0.23	0.39	1.42	0.97	0.98	0.29	0.26	0.27	0.37	0.40	0.40	0.28	0.41
DK0022R	ammonium	mgN/L	0.41	0.66	1.46	0.83	0.83	0.51	0.32	0.35	0.32	0.29	0.44	0.19	0.46
DK0031R	ammonium	mgN/L	0.20	0.33	1.05	0.64	0.62	0.38	0.33	0.36	0.21	0.18	0.50	0.18	0.34
ES0005R	ammonium	mgN/L	0.06	0.06	0.05	0.02	0.07	0.07	0.06	0.05	0.04	0.10	0.07	0.03	0.06
ES0008R	ammonium	mgN/L	0.40	0.46	0.80	0.75	0.28	0.67	0.35	0.36	0.58	0.17	0.19	0.04	0.38
ES0017R	ammonium	mgN/L	0.11	0.04	0.12	0.19	0.28	-	-	0.66	0.02	0.04	0.12	0.08	0.13
FR0090R	ammonium	mgN/L	0.19	0.04	0.28	0.04	0.15	0.16	0.16	0.23	0.10	0.40	0.12	0.19	0.19
GB0006R	ammonium	mgN/L	0.13	0.16	0.17	0.14	0.13	0.09	0.14	0.07	0.07	0.08	0.13	0.05	0.10
GB0013R	ammonium	mgN/L	-	0.35	1.39	1.40	1.27	0.33	0.22	0.19	0.14	0.35	0.41	0.11	0.32
GB0014R	ammonium	mgN/L	0.87	3.33	2.89	1.98	1.20	0.55	0.34	0.50	0.69	0.51	1.48	0.40	0.63
GB0054R	ammonium	mgN/L	0.33	0.33	0.45	1.08	1.04	0.42	0.35	0.19	0.36	0.75	1.00	0.22	0.50
IE0001R	ammonium	mgN/L	0.07	0.05	0.08	0.22	0.11	0.06	0.10	0.06	0.06	0.05	0.05	0.06	0.07
IS0090R	ammonium	mgN/L	-	0.54	0.67	0.83	0.77	0.50	0.37	0.39	0.37	0.26	0.30	0.35	0.53
IS0091R	ammonium	mgN/L	-	-	1.55	1.39	1.78	1.38	0.80	0.52	0.53	0.23	0.69	-	0.88
NL0009R	ammonium	mgN/L	0.62	1.33	2.06	1.14	1.31	0.80	0.54	0.94	0.43	0.29	1.05	0.32	0.62
NL0091R	ammonium	mgN/L	0.26	0.53	1.43	1.46	1.35	1.85	0.25	0.54	0.38	0.24	0.32	0.19	0.38
NO0001R	ammonium	mgN/L	0.49	0.43	0.80	0.74	0.71	0.40	0.51	0.31	0.31	0.51	0.98	0.16	0.42
NO0039R	ammonium	mgN/L	0.36	0.41	0.13	0.31	0.23	0.31	0.04	0.12	0.04	0.07	0.11	0.13	0.17
NO0090R	ammonium	mgN/L	0.04	0.02	0.49	0.28	0.42	0.10	0.07	0.02	0.11	0.07	0.10	0.04	0.16
NO0554R	ammonium	mgN/L	0.19	0.19	0.20	0.47	0.35	0.24	0.18	0.33	0.24	0.12	0.12	0.07	0.20
NO0572R	ammonium	mgN/L	0.34	0.62	0.71	0.63	0.44	0.58	0.40	0.39	0.21	0.20	0.29	0.22	0.37
NO0655R	ammonium	mgN/L	0.34	0.30	0.13	0.17	0.30	0.24	0.26	0.19	0.15	0.20	0.20	0.13	0.21
SE0014R	ammonium	mgN/L	0.45	0.41	1.37	1.52	0.80	0.60	0.21	0.27	0.31	0.27	0.67	0.25	0.43
BE0014R	nitrate	mgN/L	0.27	0.51	0.60	0.60	0.82	0.41	0.35	0.32	0.24	0.27	0.22	0.14	0.33
DE0001R	nitrate	mgN/L	0.97	1.18	0.88	1.00	0.43	0.51	0.35	0.36	0.34	0.20	0.43	0.35	0.39
DK0005R	nitrate	mgN/L	0.65	0.33	1.03	0.83	0.85	0.42	0.32	0.26	0.40	0.24	0.24	0.30	0.39
DK0008R	nitrate	mgN/L	0.34	0.49	0.96	0.54	0.64	0.32	0.27	0.28	0.36	0.43	0.63	0.58	0.40
DK0022R	nitrate	mgN/L	0.35	0.52	0.88	0.54	0.52	0.38	0.16	0.25	0.30	0.34	0.57	0.25	0.36
DK0031R	nitrate	mgN/L	0.33	0.45	0.82	0.57	0.64	0.39	0.25	0.25	0.22	0.28	0.72	0.33	0.34
ES0005R	nitrate	mgN/L	0.09	0.16	0.13	0.04	0.04	0.07	0.04	0.08	0.07	0.05	0.14	0.06	0.09
ES0008R	nitrate	mgN/L	1.53	0.90	1.21	1.03	0.58	0.93	0.56	0.54	0.73	0.59	0.25	0.10	0.73
ES0017R	nitrate	mgN/L	0.12	0.13	0.17	0.21	0.24	-	-	0.96	0.04	0.09	0.18	0.22	0.18
FR0090R	nitrate	mgN/L	0.25	0.14	0.48	0.26	0.20	0.22	0.48	0.43	0.14	0.54	0.16	0.26	0.30
GB0006R	nitrate	mgN/L	0.04	0.10	0.08	0.09	0.07	0.07	0.10	0.04	0.04	0.05	0.09	0.02	0.06
GB0013R	nitrate	mgN/L	-	0.31	1.23	1.02	0.93	0.15	0.25	0.16	0.19	0.27	0.38	0.07	0.27
GB0014R	nitrate	mgN/L	0.51	2.01	1.56	0.79	0.70	0.63	0.27	0.38	0.42	0.43	1.23	0.22	0.45
GB0054R	nitrate	mgN/L	0.18	0.42	0.30	0.59	0.59	0.45	0.26	0.20	0.28	0.68	1.05	0.15	0.42
IE0001R	nitrate	mgN/L	0.05	0.03	0.04	0.17	0.09	0.04	0.04	0.04	0.06	0.04	0.05	0.04	0.05
IS0002R	nitrate	mgN/L	0.04	0.05	0.04	0.12	0.08	0.07	0.06	0.06	0.03	0.02	0.05	0.07	0.05
IS0090R	nitrate	mgN/L	-	0.05	0.15	0.06	0.07	0.14	0.14	0.18	0.06	0.06	0.07	0.04	0.08

Table A.2.1, Cont.

IS0091R	nitrate	mgN/L	-	-	0.10	0.12	0.19	0.10	0.08	0.06	0.06	0.05	0.17	-	0.10
NL0009R	nitrate	mgN/L	0.39	0.59	1.01	0.61	0.62	0.51	0.29	0.53	0.23	0.12	0.94	0.24	0.35
NL0091R	nitrate	mgN/L	0.30	0.40	0.58	0.80	0.76	0.96	0.18	0.41	0.22	0.23	0.30	0.25	0.30
NO0001R	nitrate	mgN/L	0.60	0.52	0.53	0.45	0.46	0.24	0.30	0.26	0.31	0.62	1.05	0.18	0.39
NO0039R	nitrate	mgN/L	0.04	0.04	0.04	0.11	0.11	0.13	0.03	0.02	0.01	0.02	0.09	0.02	0.05
NO0090R	nitrate	mgN/L	0.03	0.05	0.04	0.11	0.32	0.05	0.06	0.07	0.06	0.06	0.08	0.07	0.08
NO0554R	nitrate	mgN/L	0.09	0.11	0.12	0.12	0.14	0.17	0.16	0.14	0.11	0.15	0.11	0.04	0.11
NO0572R	nitrate	mgN/L	0.17	0.17	0.35	0.30	0.24	0.23	0.14	0.18	0.24	0.16	0.19	0.06	0.18
NO0655R	nitrate	mgN/L	0.05	0.06	0.09	0.12	0.12	0.15	0.12	0.08	0.07	0.10	0.12	0.04	0.09
SE0014R	nitrate	mgN/L	0.80	0.52	0.93	0.90	0.44	0.35	0.24	0.24	0.31	0.33	0.89	0.47	0.40
BE0014R	precipitation_amount	mm'	75	42	15	17	33	73	84	105	47	46	27	144	708
DE0001R	precipitation_amount	mm'	10	26	10	11	49	37	118	176	78	76	20	105	717
DK0005R	precipitation_amount	mm'	29	27	17	6	33	95	115	127	22	37	8	68	586
DK0008R	precipitation_amount	mm'	27	20	14	26	38	59	92	102	59	39	9	48	534
DK0022R	precipitation_amount	mm'	6	30	25	28	72	79	72	157	112	71	31	98	780
DK0031R	precipitation_amount	mm'	65	50	21	27	48	60	79	126	119	62	13	27	698
ES0005R	precipitation_amount	mm'	267	267	129	69	34	29	76	154	69	353	379	227	2052
ES0008R	precipitation_amount	mm'	61	29	27	40	32	27	64	48	10	22	47	52	459
ES0017R	precipitation_amount	mm'	46	63	144	87	23	0	0	6	16	41	143	7	575
FR0090R	precipitation_amount	mm'	54	74	9	14	18	56	36	64	42	108	43	165	679
GB0006R	precipitation_amount	mm'	89	150	59	90	160	88	60	118	168	259	156	217	1613
GB0013R	precipitation_amount	mm'	0	90	3	11	14	8	35	66	51	57	123	110	569
GB0014R	precipitation_amount	mm'	8	4	4	11	16	17	107	69	42	68	27	64	436
GB0054R	precipitation_amount	mm'	3	102	76	38	73	101	151	123	89	64	80	46	948
IE0001R	precipitation_amount	mm'	108	182	67	66	162	120	81	92	158	192	295	196	1716
IS0002R	precipitation_amount	mm'	128	162	203	229	47	24	137	66	149	308	231	89	1770
IS0090R	precipitation_amount	mm'	0	78	120	212	88	16	66	31	125	129	105	40	1009
IS0091R	precipitation_amount	mm'	0	205	125	188	76	26	117	76	128	216	193	98	1448
NL0009R	precipitation_amount	mm'	30	26	4	6	37	96	97	95	70	79	6	133	679
NL0091R	precipitation_amount	mm'	73	67	9	14	22	2	144	135	77	56	27	120	745
NO0001R	precipitation_amount	mm'	118	147	42	10	111	123	178	243	400	100	86	226	1779
NO0039R	precipitation_amount	mm'	170	49	187	99	92	101	113	150	127	190	72	153	1500
NO0090R	precipitation_amount	mm'	118	60	161	83	74	78	47	38	69	258	261	97	1345
NO0554R	precipitation_amount	mm'	352	298	446	198	323	224	175	164	471	387	474	702	4208
NO0572R	precipitation_amount	mm'	329	175	152	200	285	271	199	143	373	377	281	538	3319
NO0655R	precipitation_amount	mm'	245	184	413	167	216	242	105	134	264	296	264	287	2818
SE0014R	precipitation_amount	mm'	18	39	27	22	55	67	113	111	113	74	15	81	736

Comprehensive Atmospheric Monitoring Programme, 2011: Deposition of air pollutants around the North Sea and the North-East Atlantic

Table A.2.2: Wet deposition of nitrogen, 2011.

Site	Comp	Unit	jan	febr	mar	apr	may	june	july	aug	sept	oct	nov	dec	year	Total N
BE0014R	ammonium	mg N m/2	34	42	22	28	51	55	50	58	27	26	16	29	440	
BE0014R	nitrate	mg N m/2	20	21	9	10	27	30	30	34	11	13	6	20	231	671
BE0014R	precipitation_amount	mm	75	42	15	17	33	73	84	105	47	46	27	144	708	
DE0001R	ammonium	mg N m/2	8	50	16	17	35	22	69	103	35	22	13	40	408	
DE0001R	nitrate	mg N m/2	10	31	9	11	21	19	42	64	26	15	9	37	280	688
DE0001R	precipitation_amount	mm	10	26	10	11	49	37	118	176	78	76	20	105	717	
DK0005R	ammonium	mg N m/2	15	15	42	10	44	56	91	51	12	15	2	16	358	
DK0005R	nitrate	mg N m/2	19	9	18	5	28	39	37	34	9	9	2	20	230	589
DK0005R	precipitation_amount	mm	29	27	17	6	33	95	115	127	22	37	8	68	586	
DK0008R	ammonium	mg N m/2	6	8	20	26	37	17	24	28	22	16	4	13	220	
DK0008R	nitrate	mg N m/2	9	10	13	14	24	19	25	29	21	17	6	28	216	436
DK0008R	precipitation_amount	mm	27	20	14	26	38	59	92	102	59	39	9	48	534	
DK0022R	ammonium	mg N m/2	3	20	36	23	60	40	23	54	36	20	13	18	355	
DK0022R	nitrate	mg N m/2	2	16	22	15	37	30	12	39	34	24	17	25	280	635
DK0022R	precipitation_amount	mm	6	30	25	28	72	79	72	157	112	71	31	98	780	
DK0031R	ammonium	mg N m/2	13	17	22	17	30	23	26	45	24	11	7	5	237	
DK0031R	nitrate	mg N m/2	21	23	17	15	30	24	20	31	26	17	10	9	240	477
DK0031R	precipitation_amount	mm	65	50	21	27	48	60	79	126	119	62	13	27	698	
ES0005R	ammonium	mg N m/2	17	16	6	1	2	2	5	7	3	36	28	6	131	
ES0005R	nitrate	mg N m/2	23	42	17	3	1	2	3	13	5	16	54	14	192	323
ES0005R	precipitation_amount	mm	267	267	129	69	34	29	76	154	69	353	379	227	2052	
ES0008R	ammonium	mg N m/2	24	13	22	30	9	18	22	17	6	4	9	2	174	
ES0008R	nitrate	mg N m/2	94	26	33	41	18	25	35	26	7	13	12	5	335	508
ES0008R	precipitation_amount	mm	61	29	27	40	32	27	64	48	10	22	47	52	459	
ES0017R	ammonium	mg N m/2	5	2	18	16	6	0	0	4	0	2	17	1	74	
ES0017R	nitrate	mg N m/2	5	8	25	18	5	0	0	6	1	4	25	1	101	175
ES0017R	precipitation_amount	mm	46	63	144	87	23	0	0	6	16	41	143	7	575	
FR0090R	ammonium	mg N m/2	10	3	3	1	3	9	6	15	4	43	5	31	132	
FR0090R	nitrate	mg N m/2	14	10	4	4	4	12	17	28	6	58	7	43	205	337
FR0090R	precipitation_amount	mm	54	74	9	14	18	56	36	64	42	108	43	165	679	
GB0006R	ammonium	mg N m/2	12	24	10	12	20	8	8	9	12	20	20	12	168	
GB0006R	nitrate	mg N m/2	3	15	5	8	12	6	6	5	7	12	13	3	94	261
GB0006R	precipitation_amount	mm	89	150	59	90	160	88	60	118	168	259	156	217	1613	
GB0013R	ammonium	mg N m/2	-	32	4	15	18	3	8	13	7	20	51	12	182	
GB0013R	nitrate	mg N m/2	-	28	4	11	13	1	9	11	10	15	47	7	156	338
GB0013R	precipitation_amount	mm	0	90	3	11	14	8	35	66	51	57	123	110	569	
GB0014R	ammonium	mg N m/2	7	13	13	21	19	9	36	35	29	35	39	25	275	

Table A.2.2, cont.

GB0014R	nitrate	mg N m/2	4	8	7	9	11	11	29	26	18	29	33	14	196	470
GB0014R	precipitation_amount	mm	8	4	4	11	16	17	107	69	42	68	27	64	436	
GB0054R	ammonium	mg N m/2	1	34	34	41	76	42	53	23	32	48	80	10	474	
GB0054R	nitrate	mg N m/2	1	43	23	22	43	45	39	25	25	44	84	7	399	873
GB0054R	precipitation_amount	mm	3	102	76	38	73	101	151	123	89	64	80	46	948	
IE0001R	ammonium	mg N m/2	8	9	5	14	18	7	8	6	9	10	15	12	121	
IE0001R	nitrate	mg N m/2	5	5	3	11	15	5	3	4	9	8	15	8	91	211
IE0001R	precipitation_amount	mm	108	182	67	66	162	120	81	92	158	192	295	196	1716	
IS0002R	nitrate	mg N m/2	5	8	8	28	4	2	9	4	4	5	11	6	91	
IS0002R	precipitation_amount	mm	128	162	203	229	47	24	137	66	149	308	231	89	1770	
IS0090R	ammonium	precip	-	42	80	176	68	8	25	12	46	33	32	14	536	
IS0090R	nitrate	precip	-	4	18	13	6	2	9	5	7	8	7	2	82	617
IS0090R	precipitation_amount	mm'	0	78	120	212	88	16	66	31	125	129	105	40	1009	
IS0091R	ammonium	precip	-	-	193	261	135	36	94	40	68	50	133	-	1277	
IS0091R	nitrate	precip	-	-	12	23	14	3	9	5	8	11	33	-	148	1426
IS0091R	precipitation_amount	mm'	0	205	125	188	76	26	117	76	128	216	193	98	1448	
NL0009R	ammonium	precip	19	35	8	7	49	77	52	89	30	23	7	43	420	
NL0009R	nitrate	precip	12	15	4	4	23	49	28	50	16	10	6	32	240	660
NL0009R	precipitation_amount	mm'	30	26	4	6	37	96	97	95	70	79	6	133	679	
NL0091R	ammonium	precip	19	35	13	20	29	3	36	72	29	13	9	23	282	
NL0091R	nitrate	precip	22	27	5	11	16	2	26	56	17	13	8	30	225	507
NL0091R	precipitation_amount	mm'	73	67	9	14	22	2	144	135	77	56	27	120	745	
NO0001R	ammonium	precip	57	63	33	7	79	49	90	76	124	51	84	37	752	
NO0001R	nitrate	precip	70	76	22	4	51	29	54	63	123	62	90	40	685	1438
NO0001R	precipitation_amount	mm'	118	147	42	10	111	123	178	243	400	100	86	226	1779	
NO0039R	ammonium	precip	62	20	25	31	21	32	4	17	5	14	8	20	259	
NO0039R	nitrate	precip	7	2	8	11	10	13	4	3	1	3	6	2	70	328
NO0039R	precipitation_amount	mm'	170	49	187	99	92	101	113	150	127	190	72	153	1500	
NO0090R	ammonium	precip	4	1	78	24	31	8	3	1	7	18	25	4	212	
NO0090R	nitrate	precip	3	3	7	9	24	4	3	3	4	14	21	7	102	314
NO0090R	precipitation_amount	mm'	118	60	161	83	74	78	47	38	69	258	261	97	1345	
NO0554R	ammonium	precip	66	56	88	93	114	53	32	55	112	46	58	51	824	
NO0554R	nitrate	precip	31	32	53	24	46	37	28	23	50	58	53	31	466	1290
NO0554R	precipitation_amount	mm'	352	298	446	198	323	224	175	164	471	387	474	702	4208	
NO0572R	ammonium	precip	111	108	107	126	126	158	79	56	78	74	82	121	1224	
NO0572R	nitrate	precip	54	29	54	61	67	61	27	26	88	62	52	31	612	1836
NO0572R	precipitation_amount	mm'	329	175	152	200	285	271	199	143	373	377	281	538	3319	
NO0655R	ammonium	precip	82	55	54	29	64	58	27	25	41	59	53	38	587	

Comprehensive Atmospheric Monitoring Programme, 2011: Deposition of air pollutants around the North Sea and the North-East Atlantic

Table A.2.2, cont.

NO0655R	nitrate	precip	12	12	38	20	26	35	13	10	18	30	30	11	255	841
NO0655R	precipitation_amount	mm'	245	184	413	167	216	242	105	134	264	296	264	287	2818	
SE0014R	ammonium	precip	8	16	36	34	44	40	24	30	35	20	10	21	318	
SE0014R	nitrate	precip	15	20	25	20	24	24	26	27	35	25	13	38	291	609
SE0014R	precipitation_amount	mm'	18	39	27	22	55	67	113	111	113	74	15	81	736	

Table A.2.3: Concentrations of nitrogen compounds in air, 2011

Site	Comp	matrix	Unit	jan	febr	mar	apr	may	june	july	aug	sept	oct	nov	dec	year
BE0011R	nitrogen_dioxide	air	µg N /m³	6.09	7.61	8.83	7.00	4.26	3.65	2.44	3.65	4.26	5.78	7.61	3.96	5.41
BE0013R	nitrogen_dioxide	air	µg N /m³	5.18	5.48	7.00	6.70	3.65	3.04	2.13	3.35	3.35	4.26	6.39	3.35	4.48
DE0001R	nitrogen_dioxide	air	µg N /m³	4.41	3.24	2.72	1.93	1.30	1.04	1.35	1.53	2.31	3.56	4.64	1.79	2.50
DK0005R	nitrogen_dioxide	air	µg N /m³	3.83	3.08	3.27	3.93	3.17	1.87	1.47	1.67	3.52	3.53	5.00	2.49	3.07
DK0008R	nitrogen_dioxide	air	µg N /m³	3.21	1.92	2.39	3.00	1.63	1.73	-	-	-	-	-	-	-
ES0005R	nitrogen_dioxide	air	µg N /m³	1.04	0.91	1.21	1.40	0.92	0.53	0.54	0.89	0.69	1.02	1.11	0.73	0.91
ES0008R	nitrogen_dioxide	air	µg N /m³	1.48	1.47	1.61	1.43	1.55	0.88	1.20	1.31	1.39	1.27	0.91	1.08	1.30
ES0017R	nitrogen_dioxide	air	µg N /m³	2.89	2.62	1.92	1.57	1.36	1.35	1.49	1.79	2.05	1.42	1.47	1.53	1.78
GB0014R	nitrogen_dioxide	air	µg N /m³	7.99	9.67	7.88	7.47	7.81	6.37	4.18	3.60	4.21	8.23	13.22	6.96	7.43
NL0009R	nitrogen_dioxide	air	µg N /m³	4.20	5.44	3.51	3.25	2.62	1.91	1.35	1.91	2.83	3.74	6.15	2.95	3.33
NL0091R	nitrogen_dioxide	air	µg N /m³	5.81	7.48	6.69	6.34	4.36	3.35	2.22	3.40	4.76	6.62	9.52	3.84	5.34
NO0002R	nitrogen_dioxide	air	µg N /m³	0.62	0.86	0.38	0.38	0.32	0.24	0.25	0.15	0.42	0.53	0.78	0.34	0.44
NO0039R	nitrogen_dioxide	air	µg N /m³	0.58	0.24	0.14	0.12	0.19	0.21	0.22	0.09	0.26	0.17	0.56	0.39	0.26
SE0014R	nitrogen_dioxide	air	µg N /m³	2.97	1.20	1.47	-	1.00	1.10	0.92	0.79	1.01	1.41	1.91	1.07	1.35
DK0008R	sum_ammonia_and_ammonium	air+aerosol	µg N /m³	1.04	1.09	2.07	2.65	1.27	1.07	0.86	0.77	1.42	1.83	2.35	0.47	1.43
DK0031R	sum_ammonia_and_ammonium	air+aerosol	µg N /m³	1.02	1.44	-	-	1.55	1.25	1.16	1.00	1.34	1.87	3.00	0.47	1.39
ES0005R	sum_ammonia_and_ammonium	air+aerosol	µg N /m³	0.92	1.03	1.47	0.89	1.39	0.85	0.93	1.05	1.55	1.57	0.77	0.56	1.08
ES0008R	sum_ammonia_and_ammonium	air+aerosol	µg N /m³	1.18	2.68	3.11	1.78	2.04	1.99	1.71	1.95	2.96	2.55	1.57	1.10	2.04
ES0017R	sum_ammonia_and_ammonium	air+aerosol	µg N /m³	1.79	2.21	1.48	1.53	1.64	1.53	1.75	1.75	2.14	2.07	1.13	0.95	1.67
GB0006R	sum_ammonia_and_ammonium	air+aerosol	µg N /m³	0.31	0.38	1.17	1.64	0.65	0.53	0.47	0.39	0.42	0.27	0.58	0.12	0.58
GB0013R	sum_ammonia_and_ammonium	air+aerosol	µg N /m³	0.68	2.25	2.94	1.97	0.73	0.77	1.02	2.47	2.40	0.52	0.80	0.34	1.20
GB0014R	sum_ammonia_and_ammonium	air+aerosol	µg N /m³	0.68	2.58	2.58	2.71	1.44	0.66	0.90	0.91	1.41	1.46	1.16	0.52	1.32
GB0054R	sum_ammonia_and_ammonium	air+aerosol	µg N /m³	0.23	0.48	0.35	0.98	0.52	0.46	0.27	0.39	0.10	0.48	0.78	0.12	0.43
NL0091R	sum_ammonia_and_ammonium	air+aerosol	µg N /m³	1.42	5.26	5.49	4.57	2.16	2.07	1.30	2.35	2.88	3.22	5.27	0.79	3.10
NO0002R	sum_ammonia_and_ammonium	air+aerosol	µg N /m³	0.37	0.67	0.95	1.07	0.45	0.48	0.45	0.40	0.45	0.99	0.74	0.56	0.63
NO0039R	sum_ammonia_and_ammonium	air+aerosol	µg N /m³	1.78	0.76	0.69	1.13	0.71	0.71	0.95	0.78	1.11	0.40	0.53	1.15	0.88
NO0042G	sum_ammonia_and_ammonium	air+aerosol	µg N /m³	0.47	0.58	0.57	0.26	0.83	0.63	0.23	0.39	0.22	0.17	0.21	0.16	0.39
NO0090R	sum_ammonia_and_ammonium	air+aerosol	µg N /m³	0.18	0.06	0.09	0.10	0.23	0.15	0.09	0.10	0.11	0.10	0.06	0.08	0.11
SE0014R	sum_ammonia_and_ammonium	air+aerosol	µg N /m³	0.65	0.72	1.40	1.78	0.96	0.70	0.82	0.60	0.90	1.06	1.34	0.27	0.94
DK0008R	sum_nitric_acid_and_nitrate	air+aerosol	µg N /m³	0.91	0.62	1.17	1.52	0.80	0.73	0.54	0.58	1.11	1.37	1.40	0.48	0.94
DK0031R	sum_nitric_acid_and_nitrate	air+aerosol	µg N /m³	0.71	1.30	1.01	1.27	0.86	0.59	0.46	0.41	0.99	1.10	1.67	0.34	0.87
ES0005R	sum_nitric_acid_and_nitrate	air+aerosol	µg N /m³	0.35	0.49	0.56	0.51	0.39	0.37	0.35	0.46	0.38	0.53	0.34	0.27	0.41
ES0008R	sum_nitric_acid_and_nitrate	air+aerosol	µg N /m³	0.49	0.66	1.24	0.96	0.67	0.62	0.56	0.46	0.66	0.69	0.50	0.42	0.66
ES0017R	sum_nitric_acid_and_nitrate	air+aerosol	µg N /m³	0.66	0.64	0.53	0.60	0.43	0.52	0.65	0.58	0.66	0.55	0.47	0.46	0.56
GB0006R	sum_nitric_acid_and_nitrate	air+aerosol	µg N /m³	0.16	0.16	0.33	0.44	0.15	0.07	0.11	0.09	0.10	0.16	0.31	-	0.19
GB0013R	sum_nitric_acid_and_nitrate	air+aerosol	µg N /m³	0.60	1.42	1.55	0.90	0.32	0.20	0.36	0.45	0.44	0.32	0.57	0.17	0.54
GB0014R	sum_nitric_acid_and_nitrate	air+aerosol	µg N /m³	0.46	0.85	0.85	0.75	0.39	0.44	0.31	0.21	0.40	0.74	0.77	0.18	0.50
GB0054R	sum_nitric_acid_and_nitrate	air+aerosol	µg N /m³	0.23	0.41	0.51	0.51	0.25	0.26	0.12	0.15	0.36	0.36	0.49	0.10	0.32
NO0002R	sum_nitric_acid_and_nitrate	air+aerosol	µg N /m³	0.21	0.35	0.39	0.79	0.10	0.24	0.18	0.15	0.34	0.86	0.39	0.49	0.37
NO0039R	sum_nitric_acid_and_nitrate	air+aerosol	µg N /m³	0.04	0.04	0.09	0.44	0.22	0.08	0.06	0.04	0.04	0.07	0.30	0.54	0.17
NO0042G	sum_nitric_acid_and_nitrate	air+aerosol	µg N /m³	0.25	0.24	0.10	0.14	0.08	0.08	0.07	0.12	0.06	0.05	0.05	0.10	0.11
NO0090R	sum_nitric_acid_and_nitrate	air+aerosol	µg N /m³	-	0.06	0.03	0.05	0.12	0.12	0.04	0.06	0.05	0.06	0.03	0.05	0.06
SE0014R	sum_nitric_acid_and_nitrate	air+aerosol	µg N /m³	0.67	0.41	0.89	1.14	0.65	0.54	0.61	0.43	0.71	0.78	0.80	0.31	0.66
BE0014R	ammonia	air	µg N /m³	1.07	2.43	4.23	4.60	2.52	1.80	1.84	1.86	2.44	3.15	3.55	1.10	2.54
DE0001R	ammonia	air	µg N /m³	0.52	1.23	1.51	2.44	1.48	0.93	1.15	0.83	0.47	0.57	1.39	0.70	1.12

Comprehensive Atmospheric Monitoring Programme, 2011: Deposition of air pollutants around the North Sea and the North-East Atlantic

Table A.2.3, Cont.

DK0008R	ammonia	air	µg N /m ³	0.05	0.04	0.59	0.82	0.31	0.26	0.17	0.20	0.20	0.13	0.03	0.05	0.24
DK0031R	ammonia	air	µg N /m ³	0.24	0.18	-	-	0.49	0.52	0.49	0.40	0.25	0.39	0.18	0.13	0.33
ES0008R	ammonia	air	µg N /m ³	0.38	1.23	0.90	0.56	0.51	0.11	1.03	0.27	1.42	1.33	1.55	0.69	0.83
GB0006R	ammonia	air	µg N /m ³	0.17	0.18	0.71	1.13	0.50	0.40	0.30	0.28	0.31	0.19	0.21	0.08	0.37
GB0013R	ammonia	air	µg N /m ³	0.24	0.22	0.95	1.08	0.45	0.55	0.63	0.38	0.38	0.27	0.28	0.21	0.48
GB0014R	ammonia	air	µg N /m ³	0.35	1.47	1.48	1.83	1.06	0.24	0.55	0.62	1.04	0.73	0.41	0.32	0.79
GB0054R	ammonia	air	µg N /m ³	0.11	0.14	0.18	0.41	0.24	0.24	0.03	0.16	0.06	0.16	0.17	0.07	0.16
NL0091R	ammonia	air	µg N /m ³	0.39	2.12	1.88	2.90	1.35	1.57	1.00	1.52	1.99	2.05	2.80	0.48	1.73
NO0002R	ammonia	air	µg N /m ³	0.21	0.16	0.36	0.74	0.38	0.31	0.25	0.28	0.21	0.34	0.20	0.31	0.31
NO0039R	ammonia	air	µg N /m ³	1.53	0.65	0.60	0.82	0.53	0.65	0.86	0.75	1.09	0.36	0.31	0.72	0.72
NO0042G	ammonia	air	µg N /m ³	0.15	0.42	0.46	0.19	0.78	0.61	0.19	0.38	0.21	0.15	0.19	0.10	0.32
NO0090R	ammonia	air	µg N /m ³	0.05	0.05	0.08	0.05	0.13	0.11	0.07	0.08	0.09	0.07	0.04	0.06	0.07
DE0001R	ammonium	aerosol	µg N /m ³	0.76	2.08	1.74	1.13	1.31	0.32	0.19	-	-	-	-	-	-
DE0001R	ammonium	pm25	µg N /m ³	-	-	-	-	-	-	0.27	0.42	0.94	1.49	3.54	0.30	-
DK0008R	ammonium	aerosol	µg N /m ³	0.99	1.05	1.48	1.83	0.97	0.81	0.68	0.57	1.22	1.69	2.32	0.42	1.18
DK0031R	ammonium	aerosol	µg N /m ³	0.78	1.26	-	-	1.06	0.73	0.68	0.60	1.09	1.47	2.82	0.34	1.06
GB0006R	ammonium	aerosol	µg N /m ³	0.14	0.20	0.46	0.52	0.16	0.13	0.17	0.10	0.11	0.07	0.37	0.04	0.21
GB0013R	ammonium	aerosol	µg N /m ³	0.44	2.03	2.00	0.89	0.28	0.23	0.39	2.09	2.02	0.25	0.52	0.13	0.72
GB0014R	ammonium	aerosol	µg N /m ³	0.33	1.11	1.11	0.88	0.37	0.42	0.35	0.29	0.37	0.72	0.75	0.20	0.53
GB0054R	ammonium	aerosol	µg N /m ³	0.12	0.33	0.17	0.57	0.28	0.22	0.24	0.24	0.05	0.33	0.61	0.06	0.27
NL0009R	ammonium	aerosol	µg N /m ³	1.12	3.24	2.93	2.03	1.21	0.79	0.50	1.01	1.11	1.63	2.90	0.46	1.55
NL0091R	ammonium	aerosol	µg N /m ³	1.03	3.14	3.62	1.67	0.81	0.50	0.31	0.83	0.89	1.18	2.47	0.31	1.38
NO0002R	ammonium	aerosol	µg N /m ³	0.16	0.50	0.59	0.36	0.12	0.17	0.20	0.12	0.24	0.65	0.54	0.25	0.32
NO0039R	ammonium	aerosol	µg N /m ³	0.25	0.11	0.09	0.31	0.18	0.06	0.09	0.03	0.02	0.04	0.23	0.43	0.15
NO0042G	ammonium	aerosol	µg N /m ³	0.32	0.16	0.11	0.07	0.05	0.02	0.04	0.01	0.01	0.01	0.01	0.06	0.07
NO0090R	ammonium	aerosol	µg N /m ³	0.14	0.01	0.02	0.04	0.10	0.04	0.03	0.02	0.02	0.03	0.02	0.02	0.04
DE0001R	nitrate	aerosol	µg N /m ³	0.73	1.44	1.37	1.20	0.74	0.55	0.39	-	-	-	-	-	-
DE0001R	nitrate	pm25	µg N /m ³	-	-	-	-	-	-	0.03	0.11	0.66	0.84	1.92	0.23	-
ES0005R	nitrate	pm10	µg N /m ³	0.22	0.22	0.35	0.39	0.31	0.24	0.19	0.23	0.19	0.29	0.28	0.09	0.25
ES0008R	nitrate	pm10	µg N /m ³	0.38	0.51	0.94	0.69	0.36	0.36	0.27	0.22	0.35	0.33	0.23	0.15	0.40
GB0006R	nitrate	aerosol	µg N /m ³	0.07	0.13	0.27	0.35	0.11	0.06	0.09	0.08	0.08	0.09	0.25	0.04	0.14
GB0013R	nitrate	aerosol	µg N /m ³	0.30	1.33	1.31	0.66	0.26	0.15	0.20	0.31	0.30	0.22	0.42	0.13	0.40
GB0014R	nitrate	aerosol	µg N /m ³	0.18	0.66	0.66	0.58	0.29	0.28	0.21	0.14	0.25	0.52	0.53	0.15	0.35
GB0054R	nitrate	aerosol	µg N /m ³	0.12	0.29	0.10	0.41	0.23	0.20	0.11	0.11	0.27	0.28	0.46	0.07	0.23
NL0009R	nitrate	aerosol	µg N /m ³	1.00	1.94	2.12	1.93	1.13	0.71	0.45	0.75	0.99	1.34	1.72	0.50	1.19
NL0091R	nitrate	aerosol	µg N /m ³	0.95	1.91	2.47	1.41	0.98	0.63	0.35	0.72	0.83	1.04	1.77	0.43	1.11
NO0002R	nitrate	aerosol	µg N /m ³	0.17	0.25	0.26	0.50	0.05	0.15	0.12	0.10	0.26	0.72	0.30	0.37	0.27
NO0039R	nitrate	aerosol	µg N /m ³	0.02	0.02	0.04	0.32	0.14	0.04	0.04	0.03	0.03	0.03	0.25	0.46	0.12
NO0042G	nitrate	aerosol	µg N /m ³	0.23	0.19	0.08	0.12	0.05	0.03	0.05	0.03	0.02	0.03	0.04	0.06	0.07
NO0090R	nitrate	aerosol	µg N /m ³	-	0.04	0.02	0.04	0.09	0.07	0.02	0.02	0.03	0.03	0.02	0.03	0.04
GB0006R	nitric_acid	air	µg N /m ³	0.09	0.04	0.07	0.09	0.04	0.02	0.02	0.02	0.06	0.06	-	0.05	
GB0013R	nitric_acid	air	µg N /m ³	0.30	0.09	0.24	0.23	0.06	0.06	0.15	0.14	0.14	0.11	0.14	0.04	0.14
GB0014R	nitric_acid	air	µg N /m ³	0.28	0.19	0.19	0.17	0.10	0.16	0.10	0.07	0.15	0.22	0.25	0.03	0.16
GB0054R	nitric_acid	air	µg N /m ³	0.11	0.12	0.41	0.09	0.02	0.06	0.01	0.04	0.09	0.08	0.04	0.03	0.09
NO0002R	nitric_acid	air	µg N /m ³	0.04	0.10	0.12	0.31	0.09	0.08	0.07	0.05	0.08	0.14	0.09	0.13	0.11
NO0039R	nitric_acid	air	µg N /m ³	0.01	0.02	0.05	0.12	0.07	0.04	0.02	0.01	0.01	0.03	0.05	0.08	0.04
NO0042G	nitric_acid	air	µg N /m ³	0.02	0.06	0.02	0.02	0.03	0.04	0.01	0.08	0.04	0.01	0.01	0.04	0.03
NO0090R	nitric_acid	air	µg N /m ³	-	0.03	0.01	0.01	0.04	0.05	0.02	0.03	0.02	0.01	0.02	0.02	0.02

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	mgL	0.08	0.14	0.14	0.18	0.13	0.10	0.08	0.08	0.06	0.07	0.05	0.06	0.09
DE0001R	arsenic	mgL	0.08	0.18	0.11	0.16	0.07	0.06	0.07	0.06	0.08	0.08	0.19	0.13	0.09
DK0005R	arsenic	mgL	0.08	0.27	0.27	0.11	0.33	0.34	0.30	0.39	0.34	0.10	0.05	0.08	0.27
DK0008R	arsenic	mgL	1.14	0.15	0.23	0.25	0.54	0.17	0.38	0.42	0.40	0.24	0.25	0.27	0.41
DK0022R	arsenic	mgL	0.13	0.16	0.16	0.20	0.58	0.18	0.16	0.43	0.22	0.17	0.14	0.14	0.25
DK0031R	arsenic	mgL	0.08	0.11	0.20	0.14	0.26	0.18	0.29	0.29	0.16	0.08	0.03	0.08	0.16
ES0008R	arsenic	mgL	0.07	0.13	0.15	0.10	0.13	0.08	0.08	0.09	0.19	0.09	0.07	0.08	0.09
FR0090R	arsenic	mgL	0.83	0.76	0.16	0.16	0.24	0.51	0.22	0.76	0.10	0.06	0.13	0.16	0.35
GB0006R	arsenic	mgL	0.25	0.15	0.17	0.21	0.19	0.21	0.36	0.63	0.35	0.09	0.11	0.11	0.22
GB0013R	arsenic	mgL	-	0.09	0.14	0.30	0.21	0.06	0.17	0.06	0.08	0.13	0.17	0.05	0.11
GB0017R	arsenic	mgL	0.16	0.20	0.24	0.25	0.45	0.09	0.13	0.11	0.11	0.14	0.12	0.12	0.15
GB0091R	arsenic	mgL	0.13	0.16	0.09	0.12	0.14	0.11	0.15	0.09	0.09	0.29	0.31	0.08	0.14
IE0001R	arsenic	mgL	0.13	0.13	0.13	-	-	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
IS0090R	arsenic	mgL	-	0.04	0.04	0.04	0.04	0.09	0.04	0.04	0.04	0.04	0.04	0.04	0.04
IS0091R	arsenic	mgL	-	-	0.04	0.04	0.35	0.13	0.04	0.04	0.04	0.04	0.04	-	0.06
NL0009R	arsenic	mgL	0.10	0.11	0.20	0.11	0.14	0.08	0.08	0.08	0.08	0.08	0.09	0.08	0.08
NL0091R	arsenic	mgL	0.08	0.08	0.09	0.22	0.17	0.12	0.08	0.08	0.08	0.08	0.08	0.08	0.09
NO0001R	arsenic	mgL	0.05	0.20	0.08	0.05	0.12	0.07	0.08	0.09	0.07	0.23	0.36	0.18	0.12
SE0014R	arsenic	mgL	0.09	0.19	0.23	0.20	1.57	0.17	0.05	0.14	0.17	0.06	0.18	0.07	0.22
BE0014R	cadmium	mgL	0.079	0.029	0.04	0.047	0.038	0.042	0.024	0.552	0.033	0.119	0.01	0.018	0.119
DE0001R	cadmium	mgL	0.042	0.054	0.025	0.033	0.014	0.013	0.015	0.014	0.012	0.009	0.024	0.012	0.016
DK0005R	cadmium	mgL	0.019	0.051	0.051	0.07	0.094	0.094	0.069	0.167	0.139	0.089	0.009	0.009	0.09
DK0008R	cadmium	mgL	0.036	0.016	0.019	0.015	0.054	0.067	0.055	0.077	0.028	0.028	0.018	0.034	0.047
DK0022R	cadmium	mgL	0.024	0.032	0.022	0.039	0.161	0.051	0.032	0.057	0.038	0.037	0.028	0.041	0.05
DK0031R	cadmium	mgL	0.029	0.024	0.027	0.025	0.044	0.117	0.055	0.046	0.024	0.031	0.039	0.032	0.042
ES0008R	cadmium	mgL	0.02	0.059	0.062	0.049	0.28	0.09	0.131	0.134	0.113	0.106	0.092	0.129	0.1
FR0090R	cadmium	mgL	0.04	0.01	0.06	0.02	0.05	0.01	0.02	0.02	0.01	0.02	0.03	0.03	0.023
GB0006R	cadmium	mgL	0.002	0.005	0.007	0.011	0.005	0.004	0.002	0.002	0.003	0.003	0.002	0.002	0.004
GB0013R	cadmium	mgL	-	0.01	0.022	0.042	0.03	0.007	0.005	0.004	0.005	0.014	0.023	0.002	0.012
GB0017R	cadmium	mgL	0.014	0.042	0.053	0.052	0.069	0.017	0.018	0.021	0.029	0.028	0.02	0.013	0.026
GB0091R	cadmium	mgL	0.002	0.028	0.012	0.019	0.03	0.01	0.011	0.004	0.008	0.026	0.048	0.006	0.017
IE0001R	cadmium	mgL	0.3	0.025	0.025	-	-	0.05	0.026	0.025	0.025	0.185	0.028	0.025	0.07
IS0090R	cadmium	mgL	-	0.005	0.01	0.01	0.01	0.02	0.01	0.01	0.005	0.005	0.005	0.005	0.007
IS0091R	cadmium	mgL	-	-	0.008	0.016	0.041	0.021	0.013	0.004	0.004	0.01	0.014	-	0.013
NL0009R	cadmium	mgL	0.017	0.024	0.027	0.017	0.036	0.021	0.019	0.021	0.017	0.017	0.022	0.017	0.02
NL0091R	cadmium	mgL	0.017	0.019	0.04	0.066	0.065	0.018	0.018	0.017	0.017	0.017	0.023	0.017	0.02
NO0001R	cadmium	mgL	0.028	0.056	0.032	0.027	0.016	0.03	0.022	0.02	0.016	0.054	0.071	0.007	0.027
NO0039R	cadmium	mgL	0.051	0.007	0.009	0.02	0.011	0.01	0.004	0.002	0.005	0.006	0.005	0.008	0.013
SE0014R	cadmium	mgL	0.03	0.02	0.048	0.1	0.191	0.047	0.02	0.09	0.098	0.02	0.066	0.02	0.062
BE0014R	chromium	mgL	0.066	0.08	0.05	0.074	0.395	0.223	0.104	0.121	0.122	0.066	0.096	0.088	0.118
DE0001R	chromium	mgL	0.3	0.24	0.286	0.323	0.123	0.101	0.104	0.049	0.094	0.069	0.135	0.091	0.1
DK0005R	chromium	mgL	3.812	1.62	1.614	0.81	0.925	0.924	0.926	1.53	1.327	0.265	0.15	-	1.3
DK0008R	chromium	mgL	0.001	0.114	0.309	0.322	0.756	0.202	0.315	0.061	0.444	0.19	0.106	0.25	0.248
DK0022R	chromium	mgL	1.261	0.146	0.22	0.193	0	0.28	0.297	0.394	0.175	0.16	0.124	0.225	0.304
DK0031R	chromium	mgL	0.105	0.097	0.239	0.199	0.015	0.222	0.294	0.359	0.22	0.2	0.083	0.165	0.207
ES0008R	chromium	mgL	0.577	1.044	2.556	2.324	0.95	3.099	1.054	0.924	0.934	0.701	0.553	0.37	1.238

Comprehensive Atmospheric Monitoring Programme, 2011: Deposition of air pollutants around the North Sea and the North-East Atlantic

Table A.2.4, Cont.

FR0090R	chromium	mgL	0.08	0.07	0.06	0.25	0.06	0.03	0.04	0.03	0.02	0.02	0.08	0.17	0.079
GB0006R	chromium	mgL	0.04	0.041	0.075	0.08	0.043	0.04	0.105	0.117	0.064	0.04	0.04	0.04	0.055
GB0013R	chromium	mgL	-	0.043	0.142	0.216	0.066	0.041	0.051	0.051	0.059	0.054	0.066	0.04	0.056
GB0017R	chromium	mgL	0.054	0.062	0.104	0.161	0.423	0.047	0.091	0.072	0.104	0.073	0.051	0.048	0.082
GB0091R	chromium	mgL	0.042	0.054	0.046	0.09	0.089	0.043	0.046	0.06	0.053	0.066	0.085	0.045	0.058
IE0001R	chromium	mgL	0.125	0.125	0.125	-	-	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125
IS0090R	chromium	mgL	-	0.06	0.22	0.15	0.285	0.9	0.49	0.472	0.23	0.145	0.075	0.06	0.192
IS0091R	chromium	mgL	-	-	0.2	0.06	4.51	1.95	0.14	0.13	0.29	0.06	0.06	-	0.468
NL0009R	chromium	mgL	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
NL0091R	chromium	mgL	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	mgL	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.108	0.1	0.1	0.1	0.1
SE0014R	chromium	mgL	0.226	0.538	1.517	0.73	0.199	0.176	0.43	0.088	0.319	0.292	0.5	0.11	0.303
BE0014R	copper	mgL	1.43	1.78	2.70	5.37	4.39	4.46	4.79	7.00	4.12	9.02	5.85	5.51	4.91
DK0005R	copper	mgL	1.19	1.83	1.83	1.94	3.87	2.79	3.01	11.42	9.37	1.95	1.28	1.28	4.81
DK0008R	copper	mgL	1.21	0.41	0.76	0.91	2.70	1.12	1.74	4.87	1.02	0.91	0.47	1.05	1.94
DK0022R	copper	mgL	4.00	0.94	1.12	1.61	6.05	1.86	1.45	2.10	1.37	1.39	0.80	1.12	2.06
DK0031R	copper	mgL	0.46	0.41	0.92	1.14	1.89	1.24	1.55	2.19	2.07	1.51	0.75	0.84	1.43
ES0008R	copper	mgL	23.96	23.95	17.77	19.72	33.97	17.86	14.87	7.34	21.95	14.47	9.74	9.47	16.35
FR0090R	copper	mgL	0.82	0.37	0.57	2.46	2.05	0.61	0.45	0.34	0.31	0.31	0.42	0.29	0.49
GB0006R	copper	mgL	0.07	0.31	0.42	0.38	0.23	0.25	0.23	0.25	0.34	0.12	0.16	0.16	0.22
GB0013R	copper	mgL	-	0.37	1.37	2.51	0.88	0.34	0.48	0.35	0.34	0.40	0.64	0.32	0.49
GB0017R	copper	mgL	1.22	1.44	1.86	4.93	5.09	0.87	0.86	0.92	0.97	1.28	1.18	0.83	1.28
GB0091R	copper	mgL	0.10	0.53	1.92	0.86	1.01	0.54	1.13	0.33	0.35	0.64	0.78	0.96	0.73
IE0001R	copper	mgL	27.50	8.50	8.50	-	-	2.10	4.10	2.26	2.49	4.35	2.83	1.57	5.43
IS0090R	copper	mgL	-	0.92	1.47	0.98	1.79	5.94	2.31	3.48	1.45	1.35	1.34	1.33	1.47
IS0091R	copper	mgL	-	-	0.57	0.19	12.33	5.68	0.76	0.60	0.97	0.42	0.57	-	1.48
NL0009R	copper	mgL	0.45	2.85	2.20	1.06	1.77	0.80	0.52	0.65	0.41	0.28	0.88	0.19	0.61
NL0091R	copper	mgL	0.40	0.64	1.82	2.45	2.75	0.81	0.26	0.61	0.48	0.48	0.54	0.36	0.59
NO0001R	copper	mgL	0.61	0.60	0.47	0.92	0.64	0.23	0.51	1.23	0.36	0.72	0.87	0.29	0.58
SE0014R	copper	mgL	0.38	0.88	0.65	1.23	7.10	2.06	0.31	1.48	0.88	0.59	1.84	0.56	1.36
BE0014R	lead	mgL	0.53	0.56	0.30	1.34	1.34	0.68	0.58	0.61	0.66	0.62	0.27	0.42	0.59
DE0001R	lead	mgL	2.20	2.51	0.74	1.05	0.44	0.56	0.67	0.48	0.66	0.28	0.68	0.37	0.62
DK0005R	lead	mgL	12.07	7.26	7.24	4.48	6.18	4.97	4.04	5.24	4.61	0.73	2.99	8.40	5.53
DK0008R	lead	mgL	1.49	0.48	0.73	0.81	2.33	1.28	1.62	2.02	0.90	0.90	0.53	0.94	1.39
DK0022R	lead	mgL	1.23	1.38	1.92	1.35	3.20	1.59	0.95	1.67	1.12	1.10	0.92	1.18	1.46
DK0031R	lead	mgL	0.65	0.43	1.08	1.13	1.48	1.06	1.03	1.71	1.21	0.75	0.46	0.31	1.01
ES0008R	lead	mgL	0.98	1.89	1.60	2.27	2.31	2.81	1.77	0.83	0.94	0.87	0.66	0.59	1.41
FR0090R	lead	mgL	0.13	0.17	0.28	0.22	0.19	0.16	0.36	0.33	0.42	0.17	0.11	0.19	0.21
GB0006R	lead	mgL	0.07	0.20	0.18	0.29	0.09	0.09	0.30	0.15	0.10	0.07	0.13	0.13	0.13
GB0013R	lead	mgL	-	0.44	0.79	1.07	0.89	0.16	0.23	0.16	0.12	0.36	0.73	0.09	0.38
GB0017R	lead	mgL	0.68	1.20	1.94	2.35	5.02	0.94	1.19	0.91	0.88	0.98	0.86	0.70	1.18
GB0091R	lead	mgL	0.06	1.11	0.37	0.72	1.00	0.53	0.46	0.19	0.27	0.76	1.42	0.17	0.59
IE0001R	lead	mgL	7.69	1.96	1.96	-	-	0.13	0.13	0.30	0.13	0.30	0.49	1.05	
IS0090R	lead	mgL	-	0.05	0.21	0.30	0.35	0.54	0.22	0.32	0.16	0.12	0.11	0.09	0.19
IS0091R	lead	mgL	-	-	0.19	0.22	2.89	0.46	0.11	0.14	0.11	0.20	0.36	-	0.41
NL0009R	lead	mgL	0.32	0.53	1.02	0.78	2.24	0.76	0.43	0.56	0.28	0.22	0.34	0.38	0.54
NL0091R	lead	mgL	0.34	0.66	1.26	2.00	2.14	0.82	0.25	0.56	0.22	0.21	0.44	0.40	0.52
NO0001R	lead	mgL	0.82	1.12	0.70	0.61	0.53	0.41	0.62	0.32	0.39	1.41	1.67	0.28	0.63
NO0039R	lead	mgL	0.09	0.05	0.09	0.22	0.27	0.20	0.13	0.08	0.07	0.07	0.12	0.06	0.11

Table A.2.4, Cont.

SE0014R	Lead	mg/L	0.59	0.31	0.39	0.43	0.59	0.29	0.32	0.28	0.34	0.26	0.71	0.30	0.36
BE0014R	mercury	ng/L	10.8	9.5	9.3	15.6	10.7	12.0	10.2	15.5	12.5	5.9	7.8	4.1	10.7
DE0001R	mercury	ng/L	8.2	8.6	8.1	7.7	7.5	10.2	10.2	8.6	6.6	2.3	2.6	2.6	6.8
ES0008R	mercury	ng/L	7.9	11.4	5.5	8.3	11.2	8.2	10.1	14.2	17.5	2.9	3.0	10.7	8.7
GB0013R	mercury	ng/L	2.5	2.5	4.0	10.1	17.0	4.9	5.4	6.8	4.7	3.1	2.3	3.2	4.2
GB0017R	mercury	ng/L	5.4	6.6	11.1	13.5	19.5	14.1	9.1	6.8	8.8	7.3	4.4	3.8	8.5
GB0091R	mercury	ng/L	2.4	4.6	2.7	7.7	7.6	7.5	4.8	5.3	6.9	6.2	6.1	5.5	5.4
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	4.7	5.5	14.7	20.2	27.0	9.2	8.4	13.2	9.8	7.0	6.4	3.5	8.8
NO0002R	mercury	ng/L	6.5	5.8	9.6	13.0	12.0	7.5	6.9	3.6	3.9	4.3	5.2	2.1	5.3
SE0014R	mercury	ng/L	8.4	8.6	12.3	16.4	15.5	8.9	6.0	9.5	8.7	5.4	23.6	5.8	8.9
BE0014R	nickel	mg/L	0.59	1.18	0.31	0.25	0.47	0.35	0.29	0.44	0.31	0.26	0.22	0.05	0.36
DE0001R	nickel	mg/L	0.61	1.54	1.23	1.09	0.47	0.82	0.80	0.45	0.32	0.26	1.07	0.32	0.54
DK0005R	nickel	mg/L	0.47	0.57	0.56	0.27	0.73	0.64	0.63	1.12	0.94	0.24	0.49	0.49	0.70
DK0008R	nickel	mg/L	0.23	0.13	0.21	0.24	0.58	0.30	0.46	1.12	0.44	0.29	0.19	0.34	0.49
DK0022R	nickel	mg/L	0.36	0.37	0.29	0.76	0.76	0.39	0.48	0.71	0.51	0.33	0.30	0.49	0.50
DK0031R	nickel	mg/L	0.30	0.27	0.37	2.58	0.48	0.42	0.36	0.68	0.70	0.70	0.31	0.36	0.57
ES0008R	nickel	mg/L	0.52	0.63	1.80	2.44	1.77	1.49	0.58	0.57	1.09	0.52	0.54	0.53	0.96
FR0090R	nickel	mg/L	0.55	0.31	0.73	1.14	0.78	0.15	0.91	0.07	0.06	0.18	0.30	0.31	0.32
GB0006R	nickel	mg/L	0.04	0.08	0.05	0.10	0.08	0.07	0.03	0.02	0.04	0.03	0.04	0.04	0.05
GB0013R	nickel	mg/L	-	0.52	0.32	0.40	0.33	0.16	0.20	0.19	0.26	0.16	0.35	0.13	0.28
GB0017R	nickel	mg/L	0.26	0.29	2.85	4.54	0.83	0.18	0.15	0.21	0.16	0.23	0.23	0.18	0.53
GB0091R	nickel	mg/L	0.11	0.13	0.17	0.63	0.24	0.17	0.14	0.09	0.11	0.15	0.32	0.13	0.16
IE0001R	nickel	mg/L	1.68	47.32	47.32	-	-	0.13	0.13	0.13	0.13	0.13	0.88	1.12	6.80
IS0090R	nickel	mg/L	-	0.19	0.43	0.37	0.60	1.40	0.56	0.98	0.29	0.35	0.29	0.36	0.39
IS0091R	nickel	mg/L	-	-	0.29	0.11	4.44	2.36	0.29	0.29	0.50	0.12	0.10	-	0.55
NL0090R	nickel	mg/L	0.23	0.21	0.21	0.29	0.60	0.22	0.21	0.21	0.21	0.21	0.21	0.21	0.23
NL0091R	nickel	mg/L	0.32	0.21	0.32	0.36	0.42	0.21	0.21	0.21	0.22	0.21	0.40	0.21	0.23
NO0001R	nickel	mg/L	0.10	0.20	0.26	0.42	0.22	0.10	0.11	0.10	0.12	0.38	0.22	0.10	0.15
SE0014R	nickel	mg/L	0.69	0.29	0.31	0.31	0.44	0.16	0.12	0.08	0.17	0.17	0.47	0.13	0.22
BE0014R	zinc	mg/L	9.2	4.9	5.4	7.3	8.4	9.1	5.8	8.0	8.3	5.3	4.7	6.4	7.2
DE0001R	zinc	mg/L	18.6	36.6	20.7	19.8	6.8	5.3	5.1	5.0	7.3	6.8	10.1	1.9	7.2
DK0005R	zinc	mg/L	17.2	25.8	25.7	9.0	24.8	20.6	26.1	25.2	21.6	20.0	8.7	17.9	22.4
DK0008R	zinc	mg/L	12.7	26.0	11.3	9.7	18.1	12.8	16.2	17.7	15.1	13.0	16.8	29.3	16.6
DK0022R	zinc	mg/L	7.4	7.2	8.3	10.3	29.3	9.1	15.7	14.6	10.0	9.0	7.1	9.1	12.1
DK0031R	zinc	mg/L	10.2	8.5	7.4	10.3	23.8	44.8	12.5	13.3	11.3	34.7	16.9	20.3	18.0
ES0008R	zinc	mg/L	24.2	40.0	45.7	124.8	45.6	95.8	46.4	30.7	300.1	114.1	71.3	26.5	61.9
FR0090R	zinc	mg/L	2.4	1.5	9.0	4.6	3.8	1.2	3.0	1.8	2.4	1.6	2.3	2.2	2.2
GB0006R	zinc	mg/L	1.0	2.0	1.1	1.5	1.0	1.0	1.0	1.0	1.0	1.1	1.0	1.0	1.1
GB0013R	zinc	mg/L	-	2.0	4.4	7.0	5.4	1.1	2.1	2.3	3.3	2.4	4.5	1.6	2.7
GB0017R	zinc	mg/L	4.8	9.0	10.0	13.4	21.5	6.4	14.3	5.4	10.9	10.9	6.0	4.4	8.9
GB0091R	zinc	mg/L	1.1	3.8	2.6	4.3	5.2	1.9	2.0	1.8	2.8	4.4	6.6	2.4	3.2
IE0001R	zinc	mg/L	73.2	83.3	83.3	-	-	49.5	90.4	54.0	52.1	34.6	29.1	124.9	62.7
IS0090R	zinc	mg/L	-	5.7	6.2	3.9	5.9	16.1	4.4	10.3	2.9	5.0	4.4	4.4	5.0
IS0091R	zinc	mg/L	-	-	7.9	5.6	24.9	12.4	10.4	3.3	6.4	7.0	7.9	-	8.3
NL0090R	zinc	mg/L	2.5	5.6	4.9	6.0	7.9	3.0	2.5	4.0	2.8	2.4	4.3	2.0	3.1
NL0091R	zinc	mg/L	2.0	2.3	12.4	11.4	13.4	2.9	2.3	2.0	2.1	2.1	3.5	2.0	2.8
NO0001R	zinc	mg/L	6.6	5.8	3.1	7.0	2.5	1.4	2.8	1.7	4.0	6.3	5.1	1.3	3.5

Comprehensive Atmospheric Monitoring Programme, 2011: Deposition of air pollutants around the North Sea and the North-East Atlantic

Table A.2.4, Cont.

NO0039R	Zinc	mgL	2.4	1.3	1.2	2.7	1.8	0.8	0.6	0.7	2.1	0.8	1.4	0.9	1.4
SE0014R	zinc	mgL	4.5	6.8	6.0	8.0	10.4	4.6	2.3	7.8	7.2	3.2	9.7	4.2	5.7
BE0014R	precipitation_amount	mm'	74	43	14	17	24	82	79	105	42	44	19	149	691
BE0014R	precipitation_amount_Hg	mm'	79	44	16	18	25	87	85	109	44	45	22	67	641
DE0001R	precipitation_amount	mm'	14	25	10	11	48	37	102	177	78	74	20	98	694
DE0001R	precipitation_amount_Hg	mm'	16	26	11	11	50	41	105	183	83	82	22	112	741
DK0005R	precipitation_amount	mm'	32	23	25	6	31	98	109	116	65	37	7	69	618
DK0008R	precipitation_amount	mm'	51	19	13	27	38	57	94	102	60	43	8	49	560
DK0022R	precipitation_amount	mm'	64	44	23	30	71	74	73	145	112	68	25	121	851
DK0031R	precipitation_amount	mm'	73	51	23	29	49	71	80	125	142	64	18	97	822
ES0008R	precipitation_amount	mm'	51	20	41	36	21	36	66	48	10	24	49	43	445
ES0008R	precipitation_amount_Hg	mm'	51	20	41	36	21	36	66	47	9	24	48	43	442
FR0090R	precipitation_amount	mm'	54	74	9	14	18	56	36	64	42	108	43	165	679
GB0006R	precipitation_amount	mm'	130	134	60	78	201	139	100	110	184	335	164	273	1907
GB0013R	precipitation_amount	mm'	0	106	16	10	36	85	44	64	58	84	89	56	647
GB0013R	precipitation_amount_Hg	mm'	41	95	51	9	30	67	65	54	56	95	151	129	840
GB0017R	precipitation_amount	mm'	16	29	30	8	10	59	52	56	29	28	28	39	384
GB0017R	precipitation_amount_Hg	mm'	17	27	27	7	10	57	45	57	36	30	33	42	388
GB0091R	precipitation_amount	mm'	27	71	51	7	63	113	98	78	67	53	39	45	711
GB0091R	precipitation_amount_Hg	mm'	41	93	63	16	71	48	36	101	33	3	41	47	593
IE0001R	precipitation_amount	mm'	108	182	67	66	162	120	81	92	158	192	295	196	1716
IS0090R	precipitation_amount	mm'	0	88	74	108	45	9	46	15	75	84	89	19	651
IS0091R	precipitation_amount	mm'	0	183	128	227	86	22	101	81	121	229	191	55	1423
NL0009R	precipitation_amount	mm'	27	19	5	6	37	99	97	103	67	84	9	159	710
NL0091R	precipitation_amount	mm'	70	68	6	11	24	96	143	118	35	67	11	137	785
NL0091R	precipitation_amount_Hg	mm'	67	62	12	11	24	91	85	109	66	62	9	104	704
NO0001R	precipitation_amount	mm'	115	135	38	8	110	130	168	198	353	91	81	162	1590
NO0002R	precipitation_amount_Hg	mm'	118	147	42	10	111	123	178	243	400	100	86	226	1783
NO0039R	precipitation_amount	mm'	166	34	126	117	91	99	104	133	138	219	100	174	1499
SE0014R	precipitation_amount	mm'	46	27	15	28	45	62	90	95	95	57	10	77	645
SE0014R	precipitation_amount_Hg	mm'	30	24	10	17	60	73	93	110	104	70	6	51	645

Table A.2.5: Wet deposition of heavy metals.

Site	Comp	Unit	jan	febr	mar	apr	may	june	july	aug	sept	oct	nov	dec	year
BE0014R	arsenic	µg /m2	6	6	2	3	3	8	6	9	3	3	1	9	58
DE0001R	arsenic	µg /m2	1	4	1	2	3	2	7	11	6	6	4	12	60
DK0005R	arsenic	µg /m2	3	6	7	1	10	34	33	45	22	4	0	5	169
DK0008R	arsenic	µg /m2	58	3	3	7	21	10	36	42	24	10	2	13	228
DK0022R	arsenic	µg /m2	8	7	4	6	41	14	12	62	25	12	3	17	210
DK0031R	arsenic	µg /m2	5	5	5	4	13	12	23	36	23	5	1	7	130
ES0008R	arsenic	µg /m2	3	3	6	4	3	3	5	4	2	2	3	3	41
FR0090R	arsenic	µg /m2	45	56	1	2	4	28	8	49	4	6	6	26	236
GB0006R	arsenic	µg /m2	32	20	10	17	39	29	36	70	65	29	18	30	424
GB0013R	arsenic	µg /m2	-	9	2	3	8	5	8	4	5	11	15	3	72
GB0017R	arsenic	µg /m2	3	6	7	2	4	5	7	6	3	4	3	5	56
GB0091R	arsenic	µg /m2	3	11	4	1	9	12	15	7	6	16	12	4	97
IE0001R	arsenic	µg /m2	14	23	8	-	-	15	10	11	20	24	37	24	215
IS0090R	arsenic	µg /m2	-	3	3	4	2	1	2	1	3	3	3	1	23
IS0091R	arsenic	µg /m2	-	-	4	8	30	3	4	3	4	8	7	-	85
NL0009R	arsenic	µg /m2	3	2	1	1	5	8	7	8	5	6	1	12	58
NL0091R	arsenic	µg /m2	5	5	1	2	4	12	11	9	3	5	1	10	67
NO0001R	arsenic	µg /m2	6	28	3	0	13	9	13	17	24	21	29	29	192
SE0014R	arsenic	µg /m2	4	5	3	6	71	10	5	13	16	3	2	5	144
BE0014R	cadmium	µg /m2	5.9	1.3	0.6	0.8	0.9	3.5	1.9	57.8	1.4	5.3	0.2	2.7	82
DE0001R	cadmium	µg /m2	0.6	1.3	0.2	0.3	0.7	0.5	1.5	2.4	1.0	0.7	0.5	1.2	11
DK0005R	cadmium	µg /m2	0.6	1.2	1.3	0.4	2.9	9.2	7.4	19.3	9.0	3.3	0.1	0.6	55
DK0008R	cadmium	µg /m2	1.8	0.3	0.2	0.4	2.1	3.8	5.1	7.9	1.7	1.2	0.1	1.7	26
DK0022R	cadmium	µg /m2	1.6	1.4	0.5	1.2	11.4	3.8	2.3	8.3	4.3	2.5	0.7	5.0	43
DK0031R	cadmium	µg /m2	2.1	1.2	0.6	0.7	2.1	8.3	4.3	5.8	3.4	2.0	0.7	3.1	34
ES0008R	cadmium	µg /m2	1.0	1.2	2.5	1.7	5.9	3.2	8.7	6.5	1.1	2.6	4.5	5.6	44
FR0090R	cadmium	µg /m2	2.2	0.7	0.6	0.3	0.9	0.6	0.7	1.3	0.4	2.2	1.3	5.0	16
GB0006R	cadmium	µg /m2	0.3	0.7	0.4	0.9	1.1	0.6	0.2	0.2	0.6	1.0	0.3	0.5	7
GB0013R	cadmium	µg /m2	-	1.0	0.3	0.4	1.1	0.6	0.2	0.3	0.3	1.2	2.0	0.1	8
GB0017R	cadmium	µg /m2	0.2	1.2	1.6	0.4	0.7	1.0	0.9	1.1	0.9	0.8	0.6	0.5	10
GB0091R	cadmium	µg /m2	0.1	2.0	0.6	0.1	1.9	1.1	1.1	0.3	0.6	1.4	1.9	0.3	12
IE0001R	cadmium	µg /m2	32.4	4.6	1.7	-	-	6.0	2.1	2.3	3.9	35.6	8.4	4.9	121
IS0090R	cadmium	µg /m2	-	0.4	0.7	1.1	0.4	0.2	0.5	0.1	0.4	0.4	0.4	0.1	5
IS0091R	cadmium	µg /m2	-	-	1.0	3.6	3.5	0.5	1.3	0.3	0.4	2.3	2.7	-	19
NL0009R	cadmium	µg /m2	0.5	0.4	0.1	0.1	1.3	2.1	1.8	2.2	1.1	1.4	0.2	2.7	14
NL0091R	cadmium	µg /m2	1.2	1.3	0.3	0.7	1.6	1.7	2.5	2.0	0.6	1.1	0.2	2.3	16
NO0001R	cadmium	µg /m2	3.3	7.6	1.2	0.2	1.8	3.9	3.8	4.0	5.8	4.9	5.7	1.2	43
NO0039R	cadmium	µg /m2	8.4	0.2	1.2	2.4	1.0	1.0	0.4	0.3	0.6	1.4	0.5	1.3	19
SE0014R	cadmium	µg /m2	1.4	0.6	0.7	2.8	8.6	2.9	1.8	8.6	9.4	1.2	0.7	1.5	40
BE0014R	chromium	µg /m2	5	3	1	1	10	18	8	13	5	3	2	13	82
DE0001R	chromium	µg /m2	4	6	3	3	6	4	11	9	7	5	3	9	70
DK0005R	chromium	µg /m2	123	37	40	5	29	91	101	177	86	10	1	-	803
DK0008R	chromium	µg /m2	0	2	4	9	29	12	30	6	27	8	1	12	139
DK0022R	chromium	µg /m2	81	7	5	6	0	21	22	57	20	11	3	27	259
DK0031R	chromium	µg /m2	8	5	5	6	1	16	23	45	31	13	1	16	170
ES0008R	chromium	µg /m2	30	21	104	83	20	110	69	44	9	17	27	16	551
FR0090R	chromium	µg /m2	4	5	1	3	1	2	1	2	1	2	3	28	54

Comprehensive Atmospheric Monitoring Programme, 2011: Deposition of air pollutants around the North Sea and the North-East Atlantic

Table A.2.5, cont.

GB0006R	chromium	µg /m ²	5	6	4	6	9	6	11	13	12	13	7	11	106
GB0013R	chromium	µg /m ²	-	5	2	2	2	3	2	3	3	5	6	2	36
GB0017R	chromium	µg /m ²	1	2	3	1	4	3	5	4	3	2	1	2	32
GB0091R	chromium	µg /m ²	1	4	2	1	6	5	5	5	4	4	3	2	41
IE0001R	chromium	µg /m ²	14	23	8	-	-	15	10	11	20	24	37	24	215
IS0090R	chromium	µg /m ²	-	5	16	16	13	8	22	7	17	12	7	1	125
IS0091R	chromium	µg /m ²	-	-	26	14	389	42	14	10	35	14	11	-	667
NL0009R	chromium	µg /m ²	7	5	1	1	10	26	25	27	17	22	2	41	185
NL0091R	chromium	µg /m ²	18	18	2	3	6	25	37	31	9	17	3	36	204
NO0001R	chromium	µg /m ²	12	14	4	1	11	13	17	20	35	10	8	16	160
SE0014R	chromium	µg /m ²	10	15	22	20	9	11	39	8	30	17	5	8	195
BE0014R	copper	µg /m ²	106	77	39	91	107	366	378	734	171	401	112	819	3394
DK0005R	copper	µg /m ²	38	42	46	12	121	274	327	1322	606	71	9	88	2974
DK0008R	copper	µg /m ²	62	8	10	24	104	64	163	497	61	39	4	51	1086
DK0022R	copper	µg /m ²	257	42	26	48	430	138	106	304	154	94	20	135	1754
DK0031R	copper	µg /m ²	34	21	21	33	92	88	123	274	294	97	13	82	1171
ES0008R	copper	µg /m ²	1232	484	721	701	717	637	980	353	209	351	480	411	7276
FR0090R	copper	µg /m ²	44	27	5	33	36	34	16	22	13	33	18	48	329
GB0006R	copper	µg /m ²	9	42	25	30	47	35	23	28	62	41	26	43	426
GB0013R	copper	µg /m ²	-	39	21	24	32	29	21	22	20	34	56	18	317
GB0017R	copper	µg /m ²	20	42	56	42	50	52	44	52	28	35	33	32	491
GB0091R	copper	µg /m ²	3	37	98	6	64	61	111	26	23	34	30	43	516
IE0001R	copper	µg /m ²	2970	1551	565	-	-	253	333	207	393	835	837	307	9317
IS0090R	copper	µg /m ²	-	81	109	106	80	55	105	51	108	113	119	25	953
IS0091R	copper	µg /m ²	-	-	73	43	1063	122	77	48	118	96	109	-	2101
NL0009R	copper	µg /m ²	12	53	11	6	65	79	50	67	27	23	8	30	433
NL0091R	copper	µg /m ²	28	44	11	26	67	77	37	72	17	32	6	49	466
NO0001R	copper	µg /m ²	70	81	18	8	70	30	86	242	128	66	71	48	917
SE0014R	copper	µg /m ²	17	24	10	34	318	127	28	140	84	33	19	43	878
BE0014R	lead	µg /m ²	39	24	4	23	32	56	46	64	28	28	5	62	410
DE0001R	lead	µg /m ²	32	63	7	11	21	21	69	84	52	20	13	36	430
DK0005R	lead	µg /m ²	390	168	181	27	194	488	439	607	298	27	22	579	3418
DK0008R	lead	µg /m ²	76	9	9	22	89	73	152	206	54	39	4	45	778
DK0022R	lead	µg /m ²	79	61	45	40	228	118	69	241	125	74	23	142	1247
DK0031R	lead	µg /m ²	47	22	25	33	72	75	82	214	173	48	8	30	829
ES0008R	lead	µg /m ²	51	38	65	81	49	100	117	40	9	21	33	25	628
FR0090R	lead	µg /m ²	7	13	3	3	3	9	13	21	17	18	5	31	143
GB0006R	lead	µg /m ²	9	27	11	23	17	13	30	16	18	24	22	36	244
GB0013R	lead	µg /m ²	-	47	12	10	32	14	10	10	7	30	65	5	246
GB0017R	lead	µg /m ²	11	35	58	20	49	55	61	51	26	27	24	27	451
GB0091R	lead	µg /m ²	2	78	19	5	63	59	45	15	18	41	55	8	417
IE0001R	lead	µg /m ²	831	358	130	-	-	15	10	11	47	25	87	96	1798
IS0090R	lead	µg /m ²	-	5	16	33	16	5	10	5	12	10	10	2	121
IS0091R	lead	µg /m ²	-	-	24	49	249	10	11	11	14	47	69	-	581
NL0009R	lead	µg /m ²	9	10	5	4	83	75	42	58	19	18	3	61	386
NL0091R	lead	µg /m ²	24	45	8	21	52	78	36	66	7	14	5	55	411
NO0001R	lead	µg /m ²	94	151	26	5	58	54	104	64	138	128	136	45	1004
NO0039R	lead	µg /m ²	14	2	11	25	24	19	13	10	9	15	12	11	166
SE0014R	lead	µg /m ²	27	8	6	12	27	18	29	27	32	15	7	23	231

Table A.2.5, cont.

BE0014R	mercury	ng /m ²	859	423	152	279	271	1045	859	1692	543	261	173	273	6826
DE0001R	mercury	ng /m ²	129	226	89	88	377	414	1071	1586	544	187	57	285	5050
ES0008R	mercury	ng /m ²	406	231	225	296	236	291	664	664	165	69	144	467	3857
GB0013R	mercury	ng /m ²	102	242	202	92	513	327	348	369	262	295	344	407	3500
GB0017R	mercury	ng /m ²	89	180	302	89	188	801	414	391	317	219	149	158	3296
GB0091R	mercury	ng /m ²	97	426	172	128	539	359	174	537	226	16	247	259	3181
IE0001R	mercury	ng /m ²	1350	2281	831	823	2023	1504	1017	1145	1970	2401	3691	2447	21456
NL0091R	mercury	ng /m ²	318	346	182	220	660	843	716	1438	647	435	55	367	6227
NO0002R	mercury	ng /m ²	769	850	401	125	1331	921	1225	882	1570	429	448	478	9429
SE0014R	mercury	ng /m ²	252	210	118	271	925	651	559	1038	905	379	130	295	5730
BE0014R	nickel	µg /m ²	44	51	4	4	11	28	23	46	13	11	4	7	248
DE0001R	nickel	µg /m ²	9	39	12	11	23	30	82	80	25	19	21	31	377
DK0005R	nickel	µg /m ²	15	13	14	2	23	63	68	130	61	9	3	33	435
DK0008R	nickel	µg /m ²	12	2	3	6	22	17	43	114	26	13	2	16	276
DK0022R	nickel	µg /m ²	23	17	7	23	54	29	35	103	57	22	8	59	428
DK0031R	nickel	µg /m ²	22	14	9	75	23	30	29	85	100	45	5	35	470
ES0008R	nickel	µg /m ²	27	13	73	87	37	53	38	28	10	13	27	23	428
FR0090R	nickel	µg /m ²	30	23	7	15	14	8	32	4	2	19	13	51	219
GB0006R	nickel	µg /m ²	5	11	3	8	15	10	3	2	8	10	6	10	93
GB0013R	nickel	µg /m ²	-	55	5	4	12	14	9	12	15	14	31	7	178
GB0017R	nickel	µg /m ²	4	8	85	39	8	10	8	11	5	6	6	7	203
GB0091R	nickel	µg /m ²	3	9	9	5	15	19	14	7	7	8	13	6	115
IE0001R	nickel	µg /m ²	181	8635	3148	-	-	15	10	11	20	24	261	219	11675
IS0090R	nickel	µg /m ²	-	17	32	40	27	13	26	15	22	29	26	7	252
IS0091R	nickel	µg /m ²	-	-	38	25	382	51	30	23	61	28	18	-	788
NL0009R	nickel	µg /m ²	6	4	1	2	22	22	20	21	14	17	2	33	164
NL0091R	nickel	µg /m ²	22	14	2	4	10	20	29	24	7	14	4	28	179
NO0001R	nickel	µg /m ²	12	27	10	3	24	13	18	20	42	34	18	16	238
SE0014R	nickel	µg /m ²	32	8	5	9	20	10	11	8	16	10	5	10	142
BE0014R	zinc	µg /m ²	684	212	77	125	204	748	461	843	344	237	89	947	4969
DE0001R	zinc	µg /m ²	269	915	204	208	330	197	520	879	568	508	197	182	4969
DK0005R	zinc	µg /m ²	554	597	640	54	778	2025	2832	2917	1398	731	62	1235	13824
DK0008R	zinc	µg /m ²	648	488	143	260	694	732	1519	1810	903	558	136	1421	9313
DK0022R	zinc	µg /m ²	476	321	193	309	2083	674	1150	2110	1126	609	177	1099	10327
DK0031R	zinc	µg /m ²	740	433	171	299	1159	3185	997	1666	1604	2230	301	1974	14760
ES0008R	zinc	µg /m ²	1243	808	1854	4435	963	3416	3055	1475	2856	2772	3511	1152	27540
FR0090R	zinc	µg /m ²	129	110	83	62	67	68	105	113	98	175	96	364	1462
GB0006R	zinc	µg /m ²	130	275	63	114	207	139	100	110	184	358	164	273	2149
GB0013R	zinc	µg /m ²	-	210	69	67	196	96	93	150	195	199	398	91	1756
GB0017R	zinc	µg /m ²	79	264	298	114	211	378	741	301	318	301	167	173	3400
GB0091R	zinc	µg /m ²	30	271	134	31	325	218	201	141	186	237	258	106	2252
IE0001R	zinc	µg /m ²	7906	15201	5541	-	-	5958	7358	4949	8215	6647	8594	24444	107618
IS0090R	zinc	µg /m ²	-	498	462	425	265	149	199	153	216	421	391	84	3262
IS0091R	zinc	µg /m ²	-	1016	1262	2145	267	1049	263	772	1607	1503	-	11875	
NL0009R	zinc	µg /m ²	68	105	25	34	292	300	240	415	186	198	39	310	2209
NL0091R	zinc	µg /m ²	137	160	78	122	326	277	331	230	74	142	38	268	2183
NO0001R	zinc	µg /m ²	756	790	117	57	279	184	466	346	1422	572	411	210	5609

Comprehensive Atmospheric Monitoring Programme, 2011: Deposition of air pollutants around the North Sea and the North-East Atlantic

Table A.2.5, cont.

NO0039R	zinc	µg /m ²	397	44	155	315	168	80	58	92	295	168	138	158	2068
SE0014R	zinc	µg /m ²	204	185	90	225	467	284	209	741	685	180	101	322	3689

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	0.67	1.11	1.09	0.95	0.57	0.63	0.56	0.46	0.67	0.73	1.25	0.46	0.76
DE0001R	arsenic	aerosol	ng/m3	0.25	1.67	0.49	0.45	0.27	0.16	0.16	0.20	0.31	0.42	1.14	0.12	0.47
DK0008R	arsenic	aerosol	ng/m3	2.20	0.57	1.62	5.96	1.45	0.46	0.92	1.80	1.65	1.96	3.61	6.18	2.47
ES0008R	arsenic	pm10	ng/m3	0.22	0.14	0.48	0.38	0.14	0.16	0.13	0.21	0.27	0.19	0.20	0.10	0.21
GB0013R	arsenic	pm10	ng/m3	0.56	0.31	0.73	0.61	0.27	0.21	0.24	0.23	0.36	0.57	0.88	0.25	0.43
GB0017R	arsenic	pm10	ng/m3	0.67	0.85	0.76	0.60	0.37	0.34	0.37	0.37	0.51	0.53	0.85	0.44	0.57
GB0091R	arsenic	pm10	ng/m3	0.24	0.27	0.14	0.31	0.17	0.15	0.15	0.16	0.13	0.21	0.51	0.31	0.23
IS0091R	arsenic	aerosol	ng/m3	0.08	0.03	0.06	0.05	0.17	0.11	0.04	0.07	0.08	0.04	0.07	0.02	0.07
NL0009R	arsenic	aerosol	ng/m3	0.30	0.94	0.59	0.73	0.44	0.25	0.27	0.42	0.68	0.80	1.26	0.24	0.57
NO0002R	arsenic	pm10	ng/m3	0.13	0.44	0.25	0.50	0.53	0.23	0.24	0.18	0.27	0.43	0.59	0.06	0.33
NO0042G	arsenic	aerosol	ng/m3	0.05	0.13	0.13	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.04	0.27	0.07
NO0090R	arsenic	aerosol	ng/m3	0.04	0.08	0.05	0.04	0.08	0.10	0.04	0.05	0.04	0.11	0.05	0.06	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	0.181	0.314	0.350	0.290	0.148	0.121	0.123	0.377	0.259	0.225	0.400	0.107	0.240
DE0001R	cadmium	aerosol	ng/m3	0.093	0.326	0.135	0.077	0.049	0.029	0.029	0.029	0.059	0.104	0.345	0.032	0.108
DK0008R	cadmium	aerosol	ng/m3	0.308	0.565	0.451	0.527	0.246	0.213	0.244	0.422	0.403	0.653	1.144	0.163	0.463
ES0008R	cadmium	pm10	ng/m3	0.078	0.040	0.210	0.115	0.057	0.057	0.035	0.065	0.070	0.087	0.083	0.037	0.075
GB0013R	cadmium	pm10	ng/m3	0.053	0.036	0.137	0.118	0.043	0.024	0.031	0.037	0.047	0.072	0.057	0.014	0.057
GB0017R	cadmium	pm10	ng/m3	0.082	0.196	0.165	0.186	0.094	0.058	0.067	0.079	0.106	0.172	0.235	0.060	0.128
GB0091R	cadmium	pm10	ng/m3	0.029	0.048	0.021	0.050	0.046	0.022	0.016	0.033	0.019	0.033	0.084	0.027	0.036
IS0091R	cadmium	aerosol	ng/m3	0.124	0.219	0.077	0.070	0.117	0.073	0.154	0.013	0.018	0.015	0.045	0.111	0.085
NL0009R	cadmium	aerosol	ng/m3	0.118	0.328	0.318	0.392	0.228	0.116	0.082	0.127	0.123	0.210	0.377	0.082	0.208
NO0002R	cadmium	pm10	ng/m3	0.039	0.091	0.038	0.068	0.053	0.021	0.028	0.018	0.035	0.081	0.102	0.012	0.050
NO0042G	cadmium	aerosol	ng/m3	0.011	0.026	0.042	0.007	0.009	0.011	0.020	0.004	0.004	0.002	0.005	0.029	0.015
NO0090R	cadmium	aerosol	ng/m3	0.007	0.017	0.007	0.006	0.014	0.010	0.004	0.008	0.005	0.021	0.006	0.012	0.010
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	0.066
BE0014R	chromium	pm10	ng/m3	2.41	3.59	3.68	3.92	2.74	1.46	1.88	2.17	3.38	3.12	3.22	1.47	2.75
ES0008R	chromium	pm10	ng/m3	0.69	0.67	1.19	0.31	0.31	0.31	0.31	0.39	1.85	0.58	0.44	0.50	0.63
GB0013R	chromium	pm10	ng/m3	0.24	0.24	0.79	0.51	0.53	0.26	0.34	0.66	0.54	0.39	0.80	0.77	0.49
GB0017R	chromium	pm10	ng/m3	0.24	0.81	0.81	1.25	4.27	0.82	0.62	0.25	0.52	0.50	1.43	0.77	1.07
GB0091R	chromium	pm10	ng/m3	0.32	0.25	0.24	0.24	0.25	1.40	0.69	0.24	0.52	0.28	0.31	0.40	0.43
IS0091R	chromium	aerosol	ng/m3	2.11	3.84	7.76	2.58	10.71	3.81	15.07	5.37	5.84	8.71	10.85	2.61	6.65
NO0002R	chromium	pm10	ng/m3	0.46	1.48	0.44	0.43	0.40	0.20	0.67	0.34	0.86	1.25	1.73	0.11	0.71
NO0042G	chromium	aerosol	ng/m3	0.04	0.06	0.23	0.08	0.07	0.04	0.19	0.06	0.02	0.10	0.23	0.19	0.11
NO0090R	chromium	aerosol	ng/m3	0.17	0.17	0.15	0.21	0.17	0.17	0.18	0.17	0.17	0.18	0.17	0.17	0.17
SE0014R	chromium	aerosol	ng/m3	1.86	1.84	1.88	1.86	1.90	1.88	1.88	1.86	1.82	2.00	2.08	1.90	
BE0014R	copper	pm10	ng/m3	4.45	7.08	8.33	7.54	4.09	2.96	2.83	4.44	5.52	6.49	8.59	2.52	5.38
DE0001R	copper	aerosol	ng/m3	1.76	4.06	3.04	2.69	1.81	1.66	1.64	1.71	2.24	3.80	3.97	1.04	2.44
ES0008R	copper	pm10	ng/m3	34.2	24.4	26.8	40.8	16.7	29.7	40.8	48.3	22.1	18.9	24.5	6.2	27.8
GB0013R	copper	pm10	ng/m3	0.77	0.66	2.81	2.50	1.92	3.81	0.95	0.91	1.25	1.31	1.26	0.29	1.58
GB0017R	copper	pm10	ng/m3	1.42	2.99	2.18	3.12	2.50	2.91	1.64	1.75	2.80	2.77	4.43	1.91	2.55
GB0091R	copper	pm10	ng/m3	0.30	0.61	0.30	1.17	0.71	0.19	0.57	0.65	0.60	0.74	1.20	0.19	0.62
IS0091R	copper	aerosol	ng/m3	1.78	0.72	1.37	0.77	11.62	5.64	0.98	1.68	2.90	0.77	0.81	0.76	2.50
NO0002R	copper	pm10	ng/m3	0.44	1.14	0.82	1.09	1.02	0.66	0.71	0.66	1.29	1.27	1.34	0.61	0.93
NO0042G	copper	aerosol	ng/m3	0.10	0.09	0.31	0.10	0.06	0.07	0.24	0.08	0.15	0.22	0.23	0.19	0.16
NO0090R	copper	aerosol	ng/m3	0.15	0.33	0.51	0.18	0.24	0.50	0.15	0.22	0.16	0.21	0.29	0.11	0.27

Comprehensive Atmospheric Monitoring Programme, 2011: Deposition of air pollutants around the North Sea and the North-East Atlantic

Table A.2.6, cont.

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	1.25
BE0014R	lead	pm10	ng/m3	6.78	13.01	13.18	9.06	5.12	3.80	3.50	3.74	6.57	8.39	16.81	3.72	7.75
DE0001R	lead	aerosol	ng/m3	3.79	11.85	4.69	2.85	1.97	1.30	1.48	1.39	2.07	3.48	8.48	1.31	3.66
DK0008R	lead	aerosol	ng/m3	0.04	0.13	0.08	0.08	0.05	0.02	0.03	0.07	0.06	0.12	0.24	0.04	0.08
ES0008R	lead	pm10	ng/m3	4.63	1.44	12.18	4.61	2.64	3.50	3.23	2.96	4.57	2.50	3.22	1.33	3.74
GB0013R	lead	pm10	ng/m3	3.17	1.81	5.26	4.66	1.64	1.05	1.87	1.28	1.76	3.14	2.11	0.49	2.41
GB0017R	lead	pm10	ng/m3	4.94	7.84	6.40	6.04	4.29	3.69	4.72	4.84	4.61	4.87	8.48	3.48	5.44
GB0091R	lead	pm10	ng/m3	0.84	2.01	0.95	1.89	1.58	0.87	0.87	0.83	0.87	1.44	4.05	1.06	1.45
IS0091R	lead	aerosol	ng/m3	2.34	6.37	2.16	3.91	2.52	1.32	4.97	0.19	0.20	0.19	1.96	3.70	2.46
NL0009R	lead	aerosol	ng/m3	4.73	11.50	6.81	10.33	5.33	2.13	1.88	4.00	4.93	7.50	14.13	4.33	6.42
NO0002R	lead	pm10	ng/m3	1.06	5.42	1.57	2.13	2.06	0.77	1.15	0.53	1.00	1.92	2.28	0.22	1.70
NO0042G	lead	aerosol	ng/m3	0.33	1.25	0.99	0.16	0.19	0.04	0.04	0.03	0.07	0.08	0.15	0.95	0.38
NO0090R	lead	aerosol	ng/m3	0.15	0.44	0.28	0.18	0.41	0.26	0.16	0.22	0.18	0.84	0.19	0.25	0.30
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	2.26
BE0013R	mercury (TGM)	air	ng/m3	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
NO0002R	mercury (TGM)	air	ng/m3	1.7	1.9	1.7	1.7	1.7	1.6	1.5	1.4	-	1.6	1.8	1.7	1.7
NO0042G	mercury (TGM)	air	ng/m3	1.5	1.5	1.4	1.6	1.2	1.5	1.8	1.7	1.7	1.6	1.3	1.6	1.5
NO0090R	mercury (TGM)	air	ng/m3	1.7	1.7	1.7	1.6	1.4	1.5	1.6	1.5	1.6	1.6	1.6	1.7	1.6
SE0014R	mercury (TGM)	air	ng/m3	1.5	1.5	1.6	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.5	1.6
GB0013R	mercury	pm10	pg/m3	-	2.1	3.6	4.4	5.9	4.9	3.7	4.2	2.0	2.9	3.6	3.1	3.8
GB0017R	mercury	pm10	pg/m3	-	2.3	4.3	3.6	3.3	2.7	2.9	1.2	2.4	5.2	3.3	1.5	3.1
GB0091R	mercury	pm10	pg/m3	-	-	1.9	3.1	3.4	1.8	2.0	4.7	4.1	3.3	2.5	2.2	3.1
IS0091R	mercury	aerosol	pg/m3	20.5	4.6	5.6	5.2	18.9	10.1	2.8	4.1	4.5	2.1	2.8	2.9	7.1
SE0014R	mercury	aerosol	pg/m3	9.0	7.4	9.7	8.1	11.3	7.4	7.7	6.4	7.7	10.7	16.3	4.7	8.9
BE0014R	nickel	pm10	ng/m3	2.91	5.64	6.75	8.47	4.08	2.17	2.96	3.50	3.17	3.65	2.70	1.55	3.96
DE0001R	nickel	aerosol	ng/m3	1.77	1.43	1.67	2.96	1.25	1.09	0.72	0.87	1.86	1.61	1.45	0.52	1.41
DK0008R	nickel	aerosol	ng/m3	1.49	5.28	2.81	2.25	2.01	1.12	1.89	2.46	2.05	4.25	9.36	1.15	3.15
ES0008R	nickel	pm10	ng/m3	2.92	0.73	2.04	1.86	1.00	0.70	0.43	1.01	2.10	0.86	1.70	0.85	1.34
GB0013R	nickel	pm10	ng/m3	0.36	0.73	1.65	1.56	0.87	0.61	0.73	0.54	1.57	0.41	0.52	0.06	0.83
GB0017R	nickel	pm10	ng/m3	0.90	1.84	1.84	3.52	3.18	0.73	1.27	0.96	2.16	1.08	1.36	0.29	1.73
GB0091R	nickel	pm10	ng/m3	0.14	0.29	0.14	0.40	0.37	0.17	0.21	0.23	0.14	0.09	0.16	0.06	0.20
IS0091R	nickel	aerosol	ng/m3	1.88	3.34	6.88	2.66	7.78	2.86	8.62	3.68	4.17	5.25	7.20	2.13	4.73
NL0009R	nickel	aerosol	ng/m3	1.38	1.53	1.70	2.02	1.60	1.00	0.87	1.90	1.91	1.23	1.28	0.91	1.44
NO0002R	nickel	pm10	ng/m3	0.36	0.84	0.42	0.65	0.58	0.60	0.61	0.44	0.77	0.76	0.96	0.23	0.61
NO0042G	nickel	aerosol	ng/m3	0.04	0.07	0.18	0.05	0.04	0.05	0.22	0.04	0.12	0.06	0.06	0.07	0.09
NO0090R	nickel	aerosol	ng/m3	0.09	0.13	0.06	0.07	0.14	0.42	0.06	0.10	0.05	0.09	0.06	0.08	0.12
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	1.01
BE0014R	zinc	pm10	ng/m3	23.5	41.9	49.2	34.9	28.6	28.9	17.3	12.1	39.7	32.1	46.1	13.8	30.5
DE0001R	zinc	aerosol	ng/m3	9.5	32.3	17.2	8.2	8.3	2.7	6.4	3.7	6.7	12.9	26.5	4.4	11.5
ES0008R	zinc	pm10	ng/m3	26.7	6.0	32.5	20.4	11.4	9.8	6.5	14.4	17.4	14.4	14.4	5.2	14.7
GB0013R	zinc	pm10	ng/m3	6.0	6.2	13.4	11.8	7.6	6.0	6.0	6.1	8.2	8.0	8.2	6.0	7.9
GB0017R	zinc	pm10	ng/m3	6.1	18.6	12.9	14.2	9.7	8.4	8.4	14.5	14.2	11.7	21.6	6.4	12.4
GB0091R	zinc	pm10	ng/m3	8.0	6.5	4.8	6.7	6.7	6.5	6.0	6.0	6.1	8.1	6.2	6.5	
IS0091R	zinc	aerosol	ng/m3	27.4	42.7	22.7	22.3	20.5	19.8	94.5	2.8	4.4	2.9	9.4	17.2	23.8
NL0009R	zinc	aerosol	ng/m3	19.6	37.2	29.5	40.1	21.7	10.9	13.9	13.2	17.3	25.4	38.0	11.9	23.1
NO0002R	zinc	pm10	ng/m3	7.0	10.3	5.6	8.2	7.3	2.8	4.1	2.4	5.2	8.2	9.1	1.3	6.1
NO0042G	zinc	aerosol	ng/m3	0.6	1.4	2.4	0.7	0.6	0.6	2.5	0.4	0.5	0.4	0.6	1.4	1.0

Table A.2.6, cont.

NO0090R	zinc	aerosol	ng/m3	0.5	1.3	1.0	0.5	1.2	1.0	0.6	0.8	0.6	1.7	0.5	0.7	0.9
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

Comprehensive Atmospheric Monitoring Programme, 2011: Deposition of air pollutants around the North Sea and the North-East Atlantic

Table A.2.7: Total deposition 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	-
NO0001R	acenaphthene	precip	ng/L	1.306	1.16	1.715	1.622	0.75	0.631	0.383	0.565	0.426	0.596	0.716	0.435	0.661
ES0008R	acenaphthylene	precip+dry_dep	ng/m ²	-	-	-	-	-	-	-	-	0.07	-	0.07	0.07	-
NO0001R	acenaphthylene	precip	ng/L	1.274	4.448	2.883	0.86	0.398	0.348	0.203	0.255	0.193	1.413	0.887	0.471	0.829
NO0001R	anthanthrene	precip	ng/L	7.285	25.23	27.92	4.73	1.57	1.321	0.802	1.007	0.762	5.431	1.715	1.333	4.288
DE0001R	anthracene	precip	ng/L	0.42	1.79	8.24	1	1	0.923	0.712	0.285	0.445	0.14	0.811	0.69	0.645
ES0008R	anthracene	precip+dry_dep	ng/m ²	-	-	-	-	-	-	-	-	0.01	-	0.01	0.01	-
NO0001R	anthracene	precip	ng/L	2.951	1.04	1.021	0.598	0.855	0.231	0.308	1.821	0.482	1.51	0.841	0.466	0.951
SE0014R	anthracene	precip+dry_dep	ng/m ²	1	0.964	0	0	0	0	0	0.097	0.833	0	0.1	1	0.325
NO0001R	benz_a_anthracene	precip	ng/L	5.047	5.542	5.624	1.06	0.672	0.297	0.255	0.319	0.466	6.147	3.073	3.289	2.044
DE0001R	benzo_a_anthracene	precip	ng/L	2.7	5.07	9.908	5.73	5.73	5.228	2.291	0.833	1.401	1.15	2.944	1.77	2.118
ES0008R	benzo_a_anthracene	precip+dry_dep	ng/m ²	-	-	-	-	-	-	-	-	0.02	-	0.02	0.02	-
NO0001R	benzo_a_fluoranthene	precip	ng/L	2.224	2.839	3.287	1.003	1.481	0.448	0.329	0.74	0.599	4.005	1.411	1.188	1.348
NO0001R	benzo_a_fluorene	precip	ng/L	0.442	0.442	1.044	0.948	0.345	0.285	0.348	0.239	0.258	0.405	-	-	0.31
DE0001R	benzo_a_pyrene	precip	ng/L	3.77	6.59	12.854	8.13	8.13	7.452	2.695	1.159	1.921	1.32	3.979	2.49	2.807
ES0008R	benzo_a_pyrene	precip+dry_dep	ng/m ²	-	-	-	-	-	-	-	-	0.02	-	0.02	0.02	-
NO0001R	benzo_a_pyrene	precip	ng/L	5.685	10.127	11.271	1.199	0.847	0.483	0.36	0.378	0.578	9.43	3.163	2.533	2.539
SE0014R	benzo_a_pyrene	precip+dry_dep	ng/m ²	3.034	3.893	1.258	3	3.194	6	6	2.097	2.667	1.032	2.3	5	3.283
NO0001R	benzo_b_fluorene	precip	ng/L	0.58	0.58	-	1.238	1.142	0.373	0.378	0.285	0.254	0.531	-	0.57	0.338
DE0001R	benzo_bjk_fluoranthenes	precip	ng/L	21.6	20.7	31.145	19.7	19.7	18.168	8.825	4.25	6.088	5.1	14.064	9.1	8.904
NO0001R	benzo_bjk_fluoranthenes	precip	ng/L	34.692	39.597	42.452	5.912	2.689	1.947	1.503	1.746	2.425	31.041	18.035	15.523	12.508
NO0001R	benzo_e_pyrene	precip	ng/L	14.189	15.649	17.707	4.702	1.632	0.878	0.505	0.718	-	-	-	-	6.953
NO0001R	benzo_ghi_fluoranthene	precip	ng/L	11.411	14.574	16.511	7.185	3.32	2.752	1.672	2.098	1.726	3.644	-	7.373	5.198
DE0001R	benzo_ghi_perlylene	precip	ng/L	10.68	7.86	12.911	7.67	7.67	7.064	2.976	1.576	2.091	1.05	3.934	3.37	3.209
ES0008R	benzo_ghi_perlylene	precip+dry_dep	ng/m ²	-	-	-	-	-	-	-	-	0.02	-	0.02	0.02	-
NO0001R	benzo_ghi_perlylene	precip	ng/L	6.31	9.899	8.326	0.81	0.359	0.205	0.201	0.174	0.415	6.724	4.745	3.441	2.645
SE0014R	benzo_ghi_perlylene	precip+dry_dep	ng/m ²	7	6.857	3.387	6	2.968	1.533	5	3.194	4.833	4.032	5.5	10	5.002
ES0008R	benzo_k_fluoranthene	precip+dry_dep	ng/m ²	-	-	-	-	-	-	-	-	0.02	-	0.02	0.02	-
NO0001R	biphenyl	precip	ng/L	4.24	4.454	4.241	3.357	1.551	1.305	0.792	0.999	0.759	1.755	1.746	1.049	1.66
ES0008R	chrysene	precip+dry_dep	ng/m ²	-	-	-	-	-	-	-	-	0.02	-	0.02	0.02	-
SE0014R	chrysene	precip+dry_dep	ng/m ²	16.724	8.786	3.129	4	4.71	1.533	5	4.097	4.833	4.065	6.9	15	6.509
DE0001R	chrysene_triphenylene	precip	ng/L	12.3	16	17.389	15.3	15.3	14.129	6.734	2.949	3.62	3.8	6.916	4.3	6.035
NO0001R	chrysene_triphenylene	precip	ng/L	26.235	30.623	30.63	5.924	2.199	0.706	1.077	2.106	2.773	16.865	11.378	10.929	9.055
NO0001R	coronene	precip	ng/L	4.425	7.823	8.121	3.196	1.476	1.241	0.754	0.946	0.767	9.453	3.873	2.587	2.755
NO0001R	cyclopenta_cd_pyrene	precip	ng/L	1.281	2.067	2.153	0.68	0.295	0.291	0.136	0.169	0.241	4.136	1.198	1.316	0.887
NO0001R	dibenzo_ac_ah_anthracenes	precip	ng/L	1.873	1.754	3.167	2	1.087	0.715	0.434	0.545	0.413	1.494	0.742	0.776	0.879
NO0001R	dibenzo_ae_pyrene	precip	ng/L	2.708	2.367	5.567	7.055	3.26	2.741	1.665	2.09	1.582	2.512	2.442	1.645	2.238
DE0001R	dibenzo_ah_anthracene	precip	ng/L	1.36	1.32	1.83	1.53	1.53	1.405	0.741	0.304	0.468	0.27	0.822	0.58	0.639
ES0008R	dibenzo_ah_anthracene	precip+dry_dep	ng/m ²	-	-	-	-	-	-	-	-	0.02	-	0.02	0.02	-
NO0001R	dibenzo_ah_pyrene	precip	ng/L	6.659	5.821	13.691	17.361	8.016	5.47	4.094	5.139	3.891	6.176	6.005	4.044	5.413
NO0001R	dibenzo_ai_pyrene	precip	ng/L	6.709	5.865	13.795	17.467	8.077	6.792	4.125	5.178	3.921	6.223	6.051	4.075	5.544
NO0001R	dibenzofuran	precip	ng/L	4.065	7.119	7.431	4.257	1.451	1.22	0.821	0.932	0.717	2.714	2.569	1.865	2.108
NO0001R	dibenzothiophene	precip	ng/L	0.712	1.582	1.45	0.507	0.335	0.139	0.246	0.154	0.12	0.418	0.296	0.187	0.374
BE0014R	dieldrin	precip	ng/L	0.2	0.2	0.193	0.166	0.198	0.2	0.186	0.086	0.05	0.123	0.2	0.2	0.164
DE0001R	dieldrin	precip	ng/L	0.429	0.203	0.152	0.154	0.154	0.145	0.058	0.06	0.118	0.162	0.137	0.273	0.126
IS0091R	dieldrin	precip	ng/L	0.021	0.017	0.023	0.023	0.018	0.017	0.008	0.007	0.007	0.017	0.026	0.029	0.019

Table A.2.6, cont.

BE0014R endrin	precip	ng/L	0.55	0.55	0.55	0.15	0.45	0.107	0.55	0.55	0.55	0.416	0.438	0.55	0.462
DE0001R endrin	precip	ng/L	0.029	0.022	0.065	0.009	0.009	0.01	0.025	0.011	0.02	0.018	0.076	0.012	0.019
DE0001R fluoranthene	precip	ng/L	15.2	26.3	28.129	18.5	18.5	17.143	13.798	6.17	7.624	5.2	7.813	5.8	9.981
ES0008R fluoranthene	precip+dry_dep	ng/m ²	-	-	-	-	-	-	-	-	0.04	-	0.04	0.04	-
NO0001R fluoranthene	precip	ng/L	41.787	65.682	50.204	8.477	4.136	1.529	2.781	1.287	2.366	29.582	24.787	12.654	15.107
SE0014R fluoranthene	precip+dry_dep	ng/m ²	60.897	29.214	8.387	11	7.903	5.8	11	8.29	10.833	10.065	13.1	23	16.343
ES0008R fluorene	precip+dry_dep	ng/m ²	-	-	-	-	-	-	-	-	0.02	-	0.02	0.02	-
NO0001R fluorene	precip	ng/L	3.219	7.682	6.345	2.54	0.878	0.706	0.534	0.547	0.541	2.748	2.662	2.012	1.878
BE0014R heptachlor	precip	ng/L	1	1	1	1	1	1	1	1	1	1	1	1	1
DE0001R heptachlor	precip	ng/L	0.01	0.007	0.02	0.005	0.005	0.005	0.009	0.003	0.007	0.006	0.023	0.004	0.006
DE0001R inden_123cd_pyrene	precip	ng/L	7.68	6.93	9.49	7.41	7.41	6.82	3.262	1.551	2.134	1.03	3.474	2.89	3.047
ES0008R inden_123cd_pyrene	precip+dry_dep	ng/m ²	-	-	-	-	-	-	-	-	0.02	-	0.02	0.02	-
NO0001R inden_123cd_pyrene	precip	ng/L	10.975	14.437	16.014	1.846	0.95	0.477	0.403	0.421	0.856	16.778	6.88	5.119	4.648
SE0014R inden_123cd_pyrene	precip+dry_dep	ng/m ²	6.931	4.893	2	2	1.935	1.267	3	3	3	3	3.7	10	3.709
NO0001R N1methylnaphthalene	precip	ng/L	5.88	5.138	6.267	5.024	2.322	1.953	1.186	1.728	1.23	2.387	2.864	1.31	2.353
NO0001R N1methylphenanthrene	precip	ng/L	2.871	5.869	5.062	1.051	0.521	0.274	0.585	0.25	0.291	2.823	2.568	1.655	1.489
NO0001R N2methylnaphthalene	precip	ng/L	0.181	0.274	0.457	0.429	0.197	0.166	0.111	0.127	0.096	0.363	0.182	0.155	0.172
NO0001R N2methylphenanthrene	precip	ng/L	8.616	6.372	8.233	4.773	2.206	1.855	1.127	2.398	1.485	3.349	4.345	1.643	2.986
NO0001R N2methylphenanthrene	precip	ng/L	3.916	6.765	6.507	1.59	0.714	0.359	0.952	0.444	0.492	2.957	2.838	2.521	1.932
NO0001R N3methylphenanthrene	precip	ng/L	2.903	4.796	4.748	1.093	0.576	0.269	0.772	0.327	0.347	2.346	2.199	1.919	1.44
NO0001R N9methylphenanthrene	precip	ng/L	2.166	3.577	3.583	0.848	0.455	0.277	0.614	0.253	0.242	2.396	2.074	1.391	1.137
NO0001R naphthalene	precip	ng/L	16.053	9.8	17.24	16.934	8.341	6.587	4	5.021	3.802	7.145	6.772	4.388	6.673
NO0001R perylene	precip	ng/L	2.385	2.234	4.942	5.463	2.525	2.124	1.29	1.619	1.226	3.011	1.892	1.433	1.884
DE0001R phenanthrene	precip	ng/L	32.9	46.2	17.561	14.2	14.2	13.237	12.259	6.073	7.03	2.9	7.396	2.7	9.359
ES0008R phenanthrene	precip+dry_dep	ng/m ²	-	-	-	-	-	-	-	-	0.02	-	0.02	0.02	-
NO0001R phenanthrene	precip	ng/L	22.939	59.813	42.103	8.424	4.111	1.7	3.739	1.992	2.318	17.153	16.81	11.945	12.067
SE0014R phenanthrene	precip+dry_dep	ng/m ²	49.31	29.179	7.645	12	5.226	6.067	13	8.194	9.333	5.903	4	13	13.309
DE0001R pyrene	precip	ng/L	5.9	13.4	20.042	15.5	15.5	14.186	9.75	4.228	5.355	3.2	4.675	3.4	6.824
ES0008R pyrene	precip+dry_dep	ng/m ²	-	-	-	-	-	-	-	-	0.04	-	0.04	0.04	-
NO0001R pyrene	precip	ng/L	26.605	35.795	28.762	4.633	3.322	1.028	1.806	1.084	1.836	23.511	16.448	10.504	9.874
SE0014R pyrene	precip+dry_dep	ng/m ²	27.586	15.571	4.387	7	4.032	3.667	8	5.29	7.667	6.065	8.8	16	9.381
NO0001R retene	precip	ng/L	4.238	7.314	5.382	2.857	1.321	1.111	1.334	0.847	0.657	4.056	2.705	2.188	2.206
BE0014R alpha_HCH	precip	ng/L	0.325	0.394	0.38	0.333	0.304	0.187	0.155	0.179	0.281	0.419	0.403	0.325	0.277
DE0001R alpha_HCH	precip	ng/L	0.384	0.149	0.197	0.134	0.134	0.13	0.105	0.118	0.152	0.211	0.209	0.202	0.149
IS0091R alpha_HCH	precip	ng/L	0.05	0.044	0.046	0.034	0.057	0.052	0.033	0.032	0.046	0.043	0.045	0.059	0.044
NO0001R alpha_HCH	precip	ng/L	0.047	0.059	0.075	0.134	0.123	0.151	0.271	0.136	0.166	0.186	0.136	0.13	0.138
SE0014R alpha_HCH	precip+dry_dep	ng/m ²	0.012	0.068	0.023	0.04	0.043	0.091	0.1	0.203	0.193	0.011	0.034	0.07	0.074
BE0014R beta_HCH	precip	ng/L	0.2	0.156	0.517	0.31	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.214
IS0091R beta_HCH	precip	ng/L	0.002	0.005	0.004	0.003	0.004	0.005	0.003	0.002	0.002	0.004	0.004	0.005	0.004
BE0014R gamma_HCH	precip	ng/L	1.36	1.086	1.117	0.835	0.752	0.643	0.396	0.402	0.391	0.973	0.648	0.202	0.613
DE0001R gamma_HCH	precip	ng/L	1.898	0.326	1.002	0.755	0.755	0.727	0.575	0.619	0.358	0.355	0.437	0.489	0.562
IS0091R gamma_HCH	precip	ng/L	0.007	0.009	0.011	0.02	0.076	0.015	0.008	0.018	0.005	0.014	0.017	0.014	0.015
NL0091R gamma_HCH	precip	ng/L	3.4	1.763	7.019	4.386	7.7	-	6.8	5.694	5.316	5.307	3.474	3.022	4.279
NO0001R gamma_HCH	precip	ng/L	0.073	0.087	0.174	0.369	0.339	0.415	0.72	0.343	0.368	0.264	0.485	0.263	0.319
SE0014R gamma_HCH	precip+dry_dep	ng/m ²	0.047	0.243	0.08	0.28	0.143	0.503	0.26	0.605	0.55	0.051	0.083	0.11	0.246
DE0001R HCB	precip	ng/L	0.05	0.16	0.222	0.04	0.04	0.037	0.04	0.031	0.03	0.03	0.137	0.07	0.047

Comprehensive Atmospheric Monitoring Programme, 2011: Deposition of air pollutants around the North Sea and the North-East Atlantic

Table A.2.7, cont.

IS0091R	HCB	precip	ng/L	0.11	0.01	0.028	0.018	0.021	0.016	0.006	0.005	0.013	0.011	0.012	0.013	0.019
NO0001R	HCB	precip	ng/L	0.08	0.042	0.165	0.142	0.065	0.049	0.12	0.049	0.062	0.108	0.179	0.115	0.082
BE0014R	PCB_101	precip	ng/L	1	1	1	1	1	1	0.855	0.388	1	1	0.376	0.17	0.744
DE0001R	PCB_101	precip	ng/L	0.63	0.418	1.2	0.047	0.047	0.05	0.125	0.091	0.031	0.09	0.397	0.065	0.123
IS0091R	PCB_101	precip	ng/L	0.002	0.001	0.002	0.001	0.004	0.005	0.003	0.002	0.002	0.001	0.001	0.002	0.002
NO0001R	PCB_101	precip	ng/L	0.008	0.009	0.016	0.017	0.007	0.006	0.009	0.003	0.005	0.005	0.006	0.003	0.006
SE0014R	PCB_101	precip+dry_dep	ng/m ²	0.054	0.156	0.05	-	0.076	0.028	0.11	0.116	0.072	0.03	0.04	-	0.073
IS0091R	PCB_105	precip	ng/L	0.002	0.001	0.002	0.001	0.004	0.005	0.003	0.002	0.002	0.001	0.001	0.002	0.002
BE0014R	PCB_118	precip	ng/L	0.5	0.5	0.5	0.194	0.431	0.265	0.132	0.305	0.5	0.414	0.428	0.5	0.377
DE0001R	PCB_118	precip	ng/L	0.227	0.151	0.433	0.02	0.02	0.021	0.104	0.035	0.026	0.087	0.387	0.064	0.076
IS0091R	PCB_118	precip	ng/L	0.006	0.009	0.005	0.001	0.004	0.005	0.003	0.002	0.002	0.001	0.001	0.002	0.003
NO0001R	PCB_118	precip	ng/L	0.005	0.006	0.011	0.013	0.007	0.008	0.006	0.002	0.003	0.005	0.005	0.002	0.004
SE0014R	PCB_118	precip+dry_dep	ng/m ²	0.052	0.109	0.07	-	0.038	0.02	0.05	0.085	0.111	0.016	0.05	-	0.06
BE0014R	PCB_138	precip	ng/L	0.5	0.5	0.5	0.5	0.5	0.465	0.138	0.259	0.5	0.5	0.5	0.5	0.419
DE0001R	PCB_138	precip	ng/L	0.56	0.371	1.066	0.058	0.058	0.064	0.266	0.099	0.086	0.066	0.293	0.051	0.152
IS0091R	PCB_138	precip	ng/L	0.009	0.006	0.015	0.005	0.004	0.005	0.003	0.005	0.004	0.004	0.004	0.006	0.006
NO0001R	PCB_138	precip	ng/L	0.009	0.013	0.014	0.014	0.006	0.005	0.007	0.002	0.003	0.004	0.007	0.004	0.005
SE0014R	PCB_138	precip+dry_dep	ng/m ²	0.245	0.371	0.14	-	0.261	0.159	0.28	0.34	0.308	0.152	0.2	-	0.246
BE0014R	PCB_153	precip	ng/L	0.5	0.188	0.355	0.5	0.5	0.5	0.5	0.5	0.5	0.363	0.063	0.411	0.427
DE0001R	PCB_153	precip	ng/L	0.434	0.288	0.832	0.088	0.088	0.093	0.197	0.132	0.076	0.122	0.538	0.089	0.157
IS0091R	PCB_153	precip	ng/L	0.002	0.006	0.01	0.001	0.004	0.005	0.003	0.002	0.002	0.001	0.001	0.004	0.003
NO0001R	PCB_153	precip		0.01	0.014	0.017	0.015	0.008	0.007	0.008	0.003	0.004	0.005	0.008	0.004	0.006
SE0014R	PCB_153	precip+dry_dep	ng/m ²	0.163	0.255	0.12	-	0.222	0.123	0.21	0.301	0.28	0.131	0.16	-	0.198
IS0091R	PCB_156	precip	ng/L	0.002	0.001	0.002	0.001	0.004	0.005	0.003	0.002	0.002	0.001	0.001	0.002	0.002
BE0014R	PCB_180	precip	ng/L	0.213	0.385	0.5	0.147	0.479	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.462
DE0001R	PCB_180	precip	ng/L	0.221	0.146	0.422	0.035	0.035	0.037	0.144	0.079	0.076	0.074	0.326	0.054	0.099
IS0091R	PCB_180	precip	ng/L	0.002	0.001	0.007	0.001	0.004	0.005	0.003	0.002	0.002	0.001	0.001	0.002	0.002
NO0001R	PCB_180	precip	ng/L	0.01	0.015	0.012	0.003	0.003	0.003	0.005	0.001	0.001	0.004	0.006	0.003	0.005
SE0014R	PCB_180	precip+dry_dep	ng/m ²	0.173	0.264	0.11	-	0.166	0.122	0.2	0.225	0.247	0.13	0.14	-	0.178
BE0014R	PCB_28	precip	ng/L	2.101	1.966	2.075	1.653	0.553	0.516	1.121	0.398	0.443	1.461	1.468	1.5	1.14
DE0001R	PCB_28	precip	ng/L	0.128	3.642	1.631	0.019	0.019	0.02	0.055	0.03	0.027	0.044	0.196	0.032	0.17
IS0091R	PCB_28	precip	ng/L	0.017	0.009	0.011	0.009	0.028	0.035	0.019	0.013	0.013	0.007	0.008	0.011	0.012
NO0001R	PCB_28	precip	ng/L	0.01	0.009	0.013	0.013	0.007	0.005	0.009	0.004	0.004	0.005	0.007	0.005	0.006
SE0014R	PCB_28	precip+dry_dep	ng/m ²	0.015	0.015	0.015	-	0.015	0.015	0.015	0.015	0.015	0.015	0.015	-	0.015
IS0091R	PCB_31	precip	ng/L	0.009	0.005	0.006	0.005	0.016	0.02	0.011	0.007	0.007	0.004	0.004	0.006	0.007
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	0.242	3.523	1.388	0.024	0.024	0.025	0.053	0.043	0.025	0.032	0.141	0.023	0.165
IS0091R	PCB_52	precip	ng/L	0.002	0.001	0.002	0.001	0.004	0.005	0.003	0.002	0.002	0.003	0.001	0.005	0.002
NO0001R	PCB_52	precip	ng/L	0.01	0.009	0.013	0.016	0.007	0.006	0.01	0.004	0.004	0.007	0.005	0.005	0.006
SE0014R	PCB_52	precip+dry_dep	ng/m ²	0.015	0.015	0.015	-	0.015	0.015	0.015	0.015	0.015	0.015	0.015	-	0.015
NO0001R	PCB_99	precip	ng/L	0.002	0.002	0.004	0.003	0.002	0.002	0.002	0.001	0.001	0.002	0.002	0.001	0.002
IS0091R	trans_CD	precip	ng/L	0.002	0.001	0.002	0.001	0.004	0.005	0.003	0.002	0.002	0.001	0.001	0.002	0.002
IS0091R	trans_NO	precip	ng/L	0.002	0.01	0.004	0.004	0.004	0.005	0.003	0.002	0.002	0.001	0.001	0.009	0.004
IS0091R	cis_CD	precip	ng/L	0.002	0.001	0.002	0.001	0.004	0.005	0.003	0.002	0.002	0.002	0.002	0.004	0.002
BE0014R	op_DDD	precip	ng/L	0.5	0.449	0.311	0.431	0.499	0.5	0.529	0.669	0.679	0.76	0.5	0.5	0.542
DE0001R	op_DDD	precip	ng/L	0.025	0.017	0.049	0.004	0.004	0.004	0.007	0.006	0.035	0.013	0.06	0.01	0.013
BE0014R	op_DDE	precip	ng/L	0.399	0.367	0.817	1	1	1	1	1	1	1	1	0.231	0.787
DE0001R	op_DDE	precip	ng/L	0.03	0.02	0.058	0.016	0.016	0.015	0.003	0.001	0.002	0.005	0.022	0.004	0.006
BE0014R	op_DDT	precip	ng/L	1	1	1	1	1	1	1	1	1	1	1	1	1

Table A.2.7, cont.

DE0001R op_DDT	precip	ng/L	0.14	0.048	0.143	0.021	0.021	0.02	0.104	0.061	0.035	0.01	0.043	0.007	0.053
IS0091R op_DDT	precip	ng/L	0.002	0.001	0.002	0.001	0.004	0.005	0.003	0.002	0.002	0.001	0.001	0.002	0.002
BE0014R pp_DDD	precip	ng/L	0.5	0.5	0.5	0.186	0.414	0.111	0.432	0.214	0.5	0.5	0.5	0.5	0.393
DE0001R pp_DDD	precip	ng/L	0.083	0.045	0.125	0.02	0.02	0.023	0.024	0.013	0.065	0.008	0.039	0.011	0.026
IS0091R pp_DDD	precip	ng/L	0.007	0.006	0.006	0.004	0.004	0.005	0.005	0.002	0.006	0.004	0.003	0.006	0.005
SE0014R pp_DDD	precip+dry_dep	ng/m ²	0.017	0.057	0.013	0.016	0.012	0.021	0.019	0.026	0.018	0.016	0.002	0.009	0.018
BE0014R pp_DDE	precip	ng/L	0.675	0.675	0.675	0.675	0.675	0.675	0.675	0.675	0.675	0.675	0.675	0.675	0.675
DE0001R pp_DDE	precip	ng/L	0.043	0.028	0.086	0.051	0.051	0.055	0.036	0.017	0.033	0.023	0.049	0.021	0.03
IS0091R pp_DDE	precip	ng/L	0.002	0.004	0.004	0.003	0.004	0.005	0.003	0.002	0.002	0.002	0.003	0.006	0.003
SE0014R pp_DDE	precip+dry_dep	ng/m ²	0.046	0.127	0.047	0.003	0.083	0.003	0.003	0.066	0.09	0.043	0.116	0.17	0.066
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
DE0001R pp_DDT	precip	ng/L	0.108	0.071	0.213	0.091	0.091	0.084	0.032	0.036	0.082	0.042	0.059	0.038	0.051
IS0091R pp_DDT	precip	ng/L	0.002	0.001	0.002	0.001	0.004	0.005	0.003	0.002	0.002	0.001	0.001	0.005	0.002
SE0014R pp_DDT	precip+dry_dep	ng/m ²	0.039	0.062	0.019	0.06	0.046	0.038	0.11	0.073	0.088	0.03	0.046	0.068	0.057
BE0014R precipitation_amount	precip	mm'	54	45	32	17	22	102	96	83	77	35	42	114	718
DE0001R precipitation_amount	precip	mm'	14	24	8	8	10	59	163	204	93	74	20	101	776
IS0091R precipitation_amount	precip	mm'	42	85	58	87	25	20	38	53	54	102	95	64	721
NL0091R precipitation_amount	precip	mm'	84	83	14	15	9	0	39	111	91	55	59	117	677
NO0001R precipitation_amount	precip	mm'	128	125	48	14	93	124	81	238	388	103	83	227	1652
NO0001R precipitation_amount	precip	mm'	128	125	48	15	107	124	181	221	388	103	83	227	1750

Comprehensive Atmospheric Monitoring Programme, 2011: Deposition of air pollutants around the North Sea and the North-East Atlantic

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	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	-	0.09
NO0002R	acenaphthene	air+aerosol	ng/m ³	0.18	0.117	0.11	0.289	0.06	0.062	0.056	0.044	0.38	0.051	0.081	0.158	0.123
NO0042G	acenaphthene	air+aerosol	ng/m ³	0.013	0.011	0.014	0.013	0.013	0.02	0.028	0.012	0.012	0.012	0.013	0.027	0.015
NO0090R	acenaphthene	air+aerosol	ng/m ³	0.024	0.012	0.015	0.011	0.011	0.013	0.011	0.011	0.011	0.011	0.012	0.013	0.013
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
NO0002R	acenaphthylene	air+aerosol	ng/m ³	0.054	0.026	0.03	0.014	0.01	0.009	0.007	0.009	-	0.024	0.042	0.02	0.022
NO0042G	acenaphthylene	air+aerosol	ng/m ³	0.011	0.007	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.006	0.006
NO0090R	acenaphthylene	air+aerosol	ng/m ³	0.009	0.006	0.006	0.004	0.005	0.005	0.004	0.005	0.005	0.005	0.005	0.005	0.005
GB0014R	anthanthrene	pm10	ng/m ³	0.025	0.026	0.018	0	0	0.002	0.003	0	0	0.013	0	0	0.007
NO0002R	anthanthrene	air+aerosol	ng/m ³	0.043	0.142	0.039	0.007	0.017	0.004	0.002	0.003	0.002	0.017	0.016	0.003	0.024
NO0042G	anthanthrene	air+aerosol	ng/m ³	0.056	0.014	0.002	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.002	0.006
NO0090R	anthanthrene	air+aerosol	ng/m ³	0.016	0.029	0.007	0.002	0.004	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.006
DE0001R	anthracene	air+aerosol	ng/m ³	0.12	0.114	0.038	0.029	0.024	0.024	0.054	0.028	0.048	0.142	0.106	0.061	0.065
ES0008R	anthracene	pm10	ng/m ³	0.008	0.022	0.106	0.045	0.073	0.009	0.005	0.012	0.007	0.008	0.008	-	0.028
NO0002R	anthracene	air+aerosol	ng/m ³	0.023	0.013	0.008	0.009	0.01	0.004	0.003	0.051	0.006	0.012	0.039	0.01	0.015
NO0042G	anthracene	air+aerosol	ng/m ³	0.008	0.003	0.001	0.002	0.001	0.001	0.002	0.002	0.001	0.001	0.001	0.002	0.002
NO0090R	anthracene	air+aerosol	ng/m ³	0.035	0.003	0.003	0.024	0.002	0.003	0.008	0.002	0.003	0.004	0.004	0.003	0.007
SE0014R	anthracene	air+aerosol	ng/m ³	0.057	0.025	0.01	0.007	0.002	0.002	0.003	0.003	0.004	0.012	0.03	0.009	0.013
BE0013R	benz_a_anthracene	air+aerosol	ng/m ³	0.078	0.116	0.055	0.019	0.09	0.013	0.014	0.011	0.002	0.045	0.163	0.049	0.049
NL0009R	benz_a_anthracene	pm10	ng/m ³	0.051	0.22	0.049	0.011	0.009	0.006	0.011	0.006	0.01	0.071	0.27	0.016	0.063
NL0091R	benz_a_anthracene	pm10	ng/m ³	0.075	0.22	0.092	0.035	0.012	0.012	0.012	0.015	0.016	0.056	0.276	0.031	0.07
NO0002R	benz_a_anthracene	air+aerosol	ng/m ³	0.058	0.041	0.016	0.008	0.004	0.006	0.002	0.008	0.012	0.024	0.051	0.015	0.02
NO0042G	benz_a_anthracene	air+aerosol	ng/m ³	0.02	0.007	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.005	0.003
NO0090R	benz_a_anthracene	air+aerosol	ng/m ³	0.024	0.005	0.002	0.001	0.001	0.001	0.002	0.002	0.001	0.002	0.002	0.001	0.004
SE0014R	benz_a_anthracene	air+aerosol	ng/m ³	0.128	0.06	0.047	0.023	0.007	0.005	0.003	0.006	0.009	0.063	0.112	0.04	0.042
DE0001R	benzo_a_anthracene	air+aerosol	ng/m ³	0.112	0.446	0.03	0.01	0.013	0.005	0.009	0.004	0.026	0.095	0.132	0.021	0.072
ES0008R	benzo_a_anthracene	pm10	ng/m ³	0.035	0.085	0.338	0.278	0.23	0.069	0.07	0.06	0.02	0.028	0.024	0.223	0.122
GB0014R	benzo_a_anthracene	pm10	ng/m ³	0.017	0.033	0.017	0.01	0.008	0.003	0.012	0.008	-0.008	0.051	0.078	0.054	0.024
NO0002R	benzo_a_fluoranthene	air+aerosol	ng/m ³	0.023	0.018	0.008	0.003	0.003	0.003	0.002	-	-	0.019	0.025	0.005	0.011
NO0042G	benzo_a_fluoranthene	air+aerosol	ng/m ³	0.004	0.002	0.001	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002
NO0090R	benzo_a_fluoranthene	air+aerosol	ng/m ³	0.008	0.002	0.001	0.001	0.001	0.002	0.001	0.001	0.002	0.002	0.001	0.001	0.002
NO0002R	benzo_a_fluorene	air+aerosol	ng/m ³	-	-	0.019	0.003	0.003	0.003	0.003	-	-	0.003	-	0.003	0.005
NO0042G	benzo_a_fluorene	air+aerosol	ng/m ³	-	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.001
NO0090R	benzo_a_fluorene	air+aerosol	ng/m ³	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.001	0.002	0.001	0.002	-	0.002
BE0013R	benzo_a_pyrene	air+aerosol	ng/m ³	0.12	0.147	0.075	0.033	0.04	0.023	0.021	0.021	0.004	0.085	0.297	0.067	0.076
DE0001R	benzo_a_pyrene	air+aerosol	ng/m ³	0.11	0.439	0.026	0.013	0.022	0.006	0.004	0.005	0.029	0.127	0.15	0.008	0.076
ES0008R	benzo_a_pyrene	pm10	ng/m ³	0.02	0.037	0.17	0.065	0.188	0.035	0.082	0.064	0.027	0.028	0.02	0.395	0.093
GB0014R	benzo_a_pyrene	pm10	ng/m ³	0.156	0.166	0.103	0.029	0.028	0.025	0.036	0.018	0.029	0.07	0.142	0.081	0.073
NL0009R	benzo_a_pyrene	pm10	ng/m ³	0.071	0.266	0.075	0.012	0.009	0.007	0.011	0.008	0.014	0.105	0.375	0.024	0.085
NL0091R	benzo_a_pyrene	pm10	ng/m ³	0.095	0.262	0.136	0.048	0.023	0.016	0.014	0.015	0.02	0.095	0.413	0.043	0.097
NO0002R	benzo_a_pyrene	air+aerosol	ng/m ³	0.074	0.062	0.026	0.009	0.005	0.023	0.007	0.001	0.013	0.053	0.059	0.01	0.029
NO0042G	benzo_a_pyrene	air+aerosol	ng/m ³	-	-	0.012	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.006	0.002	
NO0090R	benzo_a_pyrene	air+aerosol	ng/m ³	0.031	0.01	0.001	0.001	0.006	0.001	0.001	0.002	0.002	0.004	0.001	0.001	0.006
SE0014R	benzo_a_pyrene	air+aerosol	ng/m ³	0.118	0.06	0.046	0.022	0.003	0.001	0.001	0.004	0.006	0.063	0.13	0.04	0.041
ES0008R	benzo_b_fluoranthene	pm10	ng/m ³	0.11	0.205	0.69	0.33	0.253	0.555	0.5	0.452	0.02	0.038	0.028	-	0.3
GB0014R	benzo_b_fluoranthene	pm10	ng/m ³	0.29	0.362	0.242	0.092	0.066	0.052	0.087	0.041	0.069	0.174	0.342	0.135	0.161
SE0014R	benzo_b_fluoranthene	air+aerosol	ng/m ³	0.284	0.13	0.122	0.065	0.018	0.011	0.008	0.012	0.017	0.146	0.289	0.1	0.1
NO0002R	benzo_b_fluorene	air+aerosol	ng/m ³	-	0.002	0.009	0.002	0.001	0.001	0.001	-	-	-	-	-	0.002

Table A.2.8, cont.

NO0042G	benzo_b_fluorene	air+aerosol	ng/m ³	-	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
NO0090R	benzo_b_fluorene	air+aerosol	ng/m ³	-	-	0.002	-	-	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
DE0001R	benzo_bjk_fluoranthenes	air+aerosol	ng/m ³	0.45	1.413	0.114	0.055	0.078	0.028	0.026	0.025	0.092	0.415	0.63	0.067	0.274
ES0008R	benzo_bjk_fluoranthenes	pm10	ng/m ³	-	-	-	-	-	-	-	-	-	-	-	1.82	1.82
NL0009R	benzo_bjk_fluoranthenes	pm10	ng/m ³	0.302	0.895	0.251	0.069	0.048	0.033	0.036	0.033	0.063	0.435	1.363	0.151	0.318
NL0091R	benzo_bjk_fluoranthenes	pm10	ng/m ³	0.505	0.934	0.582	0.225	0.086	0.075	0.078	0.069	0.09	0.379	1.297	0.223	0.374
NO0002R	benzo_bjk_fluoranthenes	air+aerosol	ng/m ³	0.306	0.231	0.096	0.053	0.036	0.171	0.028	0.04	0.131	0.148	0.227	0.088	0.127
NO0042G	benzo_bjk_fluoranthenes	air+aerosol	ng/m ³	0.071	0.034	0.02	0.004	0.002	0.002	0.003	0.002	0.003	0.004	0.028	0.014	
NO0090R	benzo_bjk_fluoranthenes	air+aerosol	ng/m ³	0.079	0.033	0.009	0.003	0.006	0.003	0.004	0.006	0.008	0.012	0.01	0.006	0.015
GB0014R	benzo_e_pyrene	pm10	ng/m ³	0.173	0.212	0.131	0.061	0.049	0.035	0.057	0.02	0.039	0.109	0.221	0.163	0.105
NO0002R	benzo_e_pyrene	air+aerosol	ng/m ³	0.218	0.087	0.038	0.054	0.018	0.025	-	-	-	0.072	0.136	0.115	0.086
NO0042G	benzo_e_pyrene	air+aerosol	ng/m ³	0.026	0.012	0.005	0.002	0.001	0.001	0.001	-	-	-	0.002	0.011	0.009
NO0090R	benzo_e_pyrene	air+aerosol	ng/m ³	0.028	0.013	0.003	0.001	0.002	0.002	-	-	-	0.005	0.003	-	0.009
NO0002R	benzo_ghi_fluoranthene	air+aerosol	ng/m ³	0.144	0.123	0.042	0.042	0.019	0.064	0.012	0.016	-	0.051	-	-	0.061
NO0042G	benzo_ghi_fluoranthene	air+aerosol	ng/m ³	0.017	0.009	0.005	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.006	0.004
NO0090R	benzo_ghi_fluoranthene	air+aerosol	ng/m ³	0.018	0.009	0.002	0.001	0.002	0.001	0.002	0.001	0.002	0.004	0.002	0.002	0.004
BE0013R	benzo_ghi_perlylene	air+aerosol	ng/m ³	0.138	0.166	0.145	0.053	0.057	0.032	0.022	0.017	0.006	0.079	0.212	0.074	0.079
DE0001R	benzo_ghi_perlylene	air+aerosol	ng/m ³	0.157	0.437	0.043	0.02	0.028	0.012	0.009	0.009	0.046	0.137	0.197	0.022	0.09
ES0008R	benzo_ghi_perlylene	pm10	ng/m ³	0.038	0.08	0.268	0.177	0.21	0.125	0.128	0.121	0.02	0.02	0.015	0.667	0.154
GB0014R	benzo_ghi_perlylene	pm10	ng/m ³	0.164	0.176	0.113	0.041	0.035	0.029	0.043	0.021	0.037	0.09	0.193	0.131	0.089
NL0009R	benzo_ghi_perlylene	aerosol	ng/m ³	0.123	0.338	0.103	0.022	0.016	0.011	0.014	0.014	0.024	0.159	0.475	0.056	0.118
NL0091R	benzo_ghi_perlylene	aerosol	ng/m ³	0.183	0.337	0.205	0.076	0.055	0.033	0.032	0.029	0.035	0.142	0.455	0.084	0.137
NO0002R	benzo_ghi_perlylene	air+aerosol	ng/m ³	0.048	0.05	0.021	0.007	0.007	0.005	0.003	0.01	0.006	0.023	0.047	0.015	0.02
NO0042G	benzo_ghi_perlylene	air+aerosol	ng/m ³	0.028	0.014	0.008	0.003	0.002	0.002	0.002	0.001	0.001	0.002	0.003	0.008	0.006
NO0090R	benzo_ghi_perlylene	air+aerosol	ng/m ³	0.03	0.016	0.005	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.002	-	0.008
SE0014R	benzo_ghi_perlylene	air+aerosol	ng/m ³	0.226	0.1	0.091	0.051	0.012	0.007	0.004	0.008	0.011	0.105	0.231	0.06	0.075
ES0008R	benzo_k_fluoranthene	pm10	ng/m ³	0.028	0.047	0.242	0.145	0.12	0.08	0.06	0.054	0.02	0.026	0.024	0.315	0.097
GB0014R	benzo_k_fluoranthene	pm10	ng/m ³	0.092	0.145	0.063	0.029	0.022	0.034	0.052	0.013	0.021	0.061	0.115	0.077	0.06
SE0014R	benzo_k_fluoranthene	air+aerosol	ng/m ³	0.118	0.052	0.051	0.023	0.006	0.004	0.002	0.004	0.006	0.053	0.121	0.04	0.04
NO0002R	biphenyl	air+aerosol	ng/m ³	0.745	0.879	0.513	0.159	0.078	0.056	0.039	0.036	0.07	0.152	0.23	0.242	0.263
NO0042G	biphenyl	air+aerosol	ng/m ³	1.86	1.307	0.817	0.104	0.043	0.033	0.029	0.021	0.038	0.142	0.33	0.798	0.447
NO0090R	biphenyl	air+aerosol	ng/m ³	0.452	0.196	0.115	0.017	0.023	0.02	0.016	0.018	0.019	0.051	0.098	0.177	0.099
BE0013R	chrysene	air+aerosol	ng/m ³	0.153	0.227	0.15	0.053	0.06	0.032	0.024	0.029	0.012	0.109	0.253	0.083	0.095
ES0008R	chrysene	pm10	ng/m ³	0.074	0.165	0.544	0.31	0.253	0.183	0.167	0.153	0.025	0.024	0.018	0.453	0.199
GB0014R	chrysene	pm10	ng/m ³	0.091	0.125	0.076	0.012	0.02	0.017	0.031	0.03	0.108	0.076	0.179	0.131	0.074
NL0009R	chrysene	aerosol	ng/m ³	0.156	0.51	0.146	0.038	0.023	0.018	0.025	0.017	0.033	0.188	0.632	0.057	0.16
NL0091R	chrysene	aerosol	ng/m ³	0.228	0.54	0.287	0.121	0.044	0.035	0.034	0.038	0.044	0.144	0.567	0.09	0.178
SE0014R	chrysene	air+aerosol	ng/m ³	0.314	0.159	0.133	0.083	0.029	0.024	0.026	0.016	0.021	0.117	0.28	0.1	0.108
DE0001R	chrysene_triphenylene	air+aerosol	ng/m ³	0.299	0.806	0.122	0.04	0.047	0.024	0.03	0.024	0.056	0.245	0.366	0.092	0.175
NO0002R	chrysene_triphenylene	air+aerosol	ng/m ³	0.27	0.133	0.059	0.064	0.028	0.131	0.031	0.027	0.089	0.062	0.114	0.065	0.087
NO0042G	chrysene_triphenylene	air+aerosol	ng/m ³	0.05	0.022	0.013	0.002	0.001	0.001	0.002	0.001	0.001	0.001	0.004	0.018	0.009
NO0090R	chrysene_triphenylene	air+aerosol	ng/m ³	0.044	0.022	0.006	0.002	0.006	0.003	0.004	0.005	0.006	0.008	0.006	0.005	0.01
GB0014R	coronene	pm10	ng/m ³	0.05	0.053	0.039	0.013	0.012	0.008	0.012	0.007	0.015	0.037	0.078	0.054	0.031
NO0002R	coronene	air+aerosol	ng/m ³	0.053	0.059	0.021	0.007	0.005	0.011	0.003	0.004	0.007	0.032	0.058	0.012	0.022
NO0042G	coronene	air+aerosol	ng/m ³	0.012	0.008	0.004	0.002	0.001	0.001	0.002	0.001	0.001	0.001	0.002	0.005	0.003
NO0090R	coronene	air+aerosol	ng/m ³	0.017	0.013	0.004	0.002	0.002	0.001	0.001	0.002	0.001	0.003	0.002	0.002	0.004

Comprehensive Atmospheric Monitoring Programme, 2011: Deposition of air pollutants around the North Sea and the North-East Atlantic

Table A.2.8, cont.

Site	Comp	matrix	unit	jan	febr	mar	apr	may	june	july	aug	sept	oct	nov	dec	year
GB0014R	cyclopenta_cd_pyrene	pm10	ng/m ³	0.188	0.197	0.179	0.051	0.042	0.037	0.051	-0.007	0.006	0.011	0.033	0.009	0.066
NO0002R	cyclopenta_cd_pyrene	air+aerosol	ng/m ³	0.017	0.021	0.008	0.003	0.003	0.003	0.001	0.002	0.001	0.017	0.024	0.003	0.008
NO0042G	cyclopenta_cd_pyrene	air+aerosol	ng/m ³	0.008	0.004	0.003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002
NO0090R	cyclopenta_cd_pyrene	air+aerosol	ng/m ³	0.013	0.004	0.002	0.002	0.081	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.009
GB0014R	dibeno_ac_ah_anthracenes	pm10	ng/m ³	0.008	0.008	0.003	0	0	0	0	0	0	0	0	0	0.002
NO0002R	dibeno_ac_ah_anthracenes	air+aerosol	ng/m ³	0.029	0.008	0.006	0.008	0.004	0.007	0.002	0.002	0.005	0.005	0.009	0.005	0.007
NO0042G	dibeno_ac_ah_anthracenes	air+aerosol	ng/m ³	0.004	0.002	0.002	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001
NO0090R	dibeno_ac_ah_anthracenes	air+aerosol	ng/m ³	0.006	0.003	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002
NO0002R	dibeno_ae_pyrene	air+aerosol	ng/m ³	0.011	0.004	0.003	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.006	0.002	0.003
NO0042G	dibeno_ae_pyrene	air+aerosol	ng/m ³	0.002	-	0.002	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001
NO0090R	dibeno_ae_pyrene	air+aerosol	ng/m ³	0.009	0.007	0.005	-	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002
DE0001R	dibeno_ah_anthracene	air+aerosol	ng/m ³	0.024	0.068	0.006	0.002	0.004	0.001	0.001	0.001	0.004	0.028	0.038	0.004	0.015
ES0008R	dibeno_ah_anthracene	pm10	ng/m ³	0.015	0.024	0.214	0.215	0.064	0.044	0.02	0.083	0.015	0.018	0.015	0.15	0.074
NL0009R	dibeno_ah_anthracene	pm10	ng/m ³	0.016	0.048	0.013	0.004	0.003	0.001	0.001	0.002	0.003	0.02	0.062	0.008	0.016
NL0091R	dibeno_ah_anthracene	pm10	ng/m ³	0.028	0.053	0.033	0.012	0.003	0.005	0.007	0.003	0.004	0.016	0.056	0.011	0.019
GB0014R	dibeno_ah_pyrene	pm10	ng/m ³	0.041	0.04	0.026	0.009	0.007	0.006	0.01	0.004	0.006	0.016	0.037	0.023	0.019
NO0002R	dibeno_ah_pyrene	air+aerosol	ng/m ³	0.003	0.002	0.002	0.003	0.002	0.001	0.001	0.002	0.002	0.001	0.002	0.002	0.002
NO0042G	dibeno_ah_pyrene	air+aerosol	ng/m ³	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001
NO0090R	dibeno_ah_pyrene	air+aerosol	ng/m ³	-	-	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
NO0002R	dibenzo_ai_pyrene	air+aerosol	ng/m ³	0.004	0.004	0.003	0.003	0.002	0.002	0.001	0.002	0.002	0.002	0.003	0.004	0.003
NO0042G	dibenzo_ai_pyrene	air+aerosol	ng/m ³	0.002	0.002	0.002	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.002	0.001
NO0090R	dibenzo_ai_pyrene	air+aerosol	ng/m ³	0.006	0.005	0.003	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.002	0.002
NO0002R	dibenzofuran	air+aerosol	ng/m ³	2.12	2.47	1.713	0.726	0.388	0.352	0.249	0.179	0.3	0.594	1.246	0.704	0.907
NO0042G	dibenzofuran	air+aerosol	ng/m ³	1.89	1.701	1.055	0.207	0.062	0.04	0.031	0.045	0.106	0.204	0.483	0.895	0.537
NO0090R	dibenzofuran	air+aerosol	ng/m ³	1.669	0.934	0.398	0.077	0.122	0.066	0.036	0.055	0.064	0.166	0.306	0.431	0.363
NO0002R	dibenzothiophene	air+aerosol	ng/m ³	0.127	0.041	0.041	0.153	0.029	0.06	0.047	0.027	0.052	0.015	0.026	0.008	0.05
NO0042G	dibenzothiophene	air+aerosol	ng/m ³	0.018	0.017	0.007	0.002	0.002	0.002	0.002	0.001	0.002	0.002	0.006	0.012	0.006
NO0090R	dibenzothiophene	air+aerosol	ng/m ³	0.031	0.014	0.009	0.003	0.01	0.009	0.005	0.008	0.009	0.007	0.014	0.007	0.011
DE0001R	dieldrin	air+aerosol	ng/m ³	1.2	1.9	1.8	2.4	2.1	4.7	3.6	5.5	4.3	2.8	2.4	3.1	2.987
IS0091R	dieldrin	air+aerosol	ng/m ³	0.55	0.7	0.43	0.556	0.64	0.49	0.5	0.53	0.54	0.38	0.38	0.26	0.495
DE0001R	endrin	air+aerosol	ng/m ³	0.09	0.187	0.181	0.142	0.189	0.204	0.039	0.051	0.22	0.371	0.381	0.108	0.18
BE0013R	fluoranthene	air+aerosol	ng/m ³	0.292	0.59	0.43	0.118	0.11	0.05	0.04	0.041	0.014	0.125	0.503	0.092	0.177
DE0001R	fluoranthene	air+aerosol	ng/m ³	0.82	2.1	0.45	0.34	0.34	0.26	1.01	0.55	0.36	0.91	0.87	0.32	0.685
ES0008R	fluoranthene	pm10	ng/m ³	0.07	0.163	0.728	0.46	0.214	0.13	0.09	0.079	0.053	0.046	0.051	-	0.193
NO0002R	fluoranthene	air+aerosol	ng/m ³	0.495	0.424	0.249	0.144	0.105	0.124	0.071	0.107	0.154	0.185	0.354	0.144	0.208
NO0042G	fluoranthene	air+aerosol	ng/m ³	0.145	0.061	0.041	0.011	0.007	0.008	0.007	0.008	0.007	0.007	0.019	0.056	0.031
NO0090R	fluoranthene	air+aerosol	ng/m ³	0.18	0.097	0.026	0.02	0.035	0.023	0.022	0.027	0.039	0.037	0.033	0.052	0.049
SE0014R	fluoranthene	air+aerosol	ng/m ³	1.179	0.588	0.498	0.35	0.098	0.079	0.07	0.091	0.1	0.379	0.85	0.4	0.389
ES0008R	fluorene	pm10	ng/m ³	0.02	0.02	0.034	0.042	0.033	0.02	0.02	0.02	0.02	0.028	0.02	-	0.025
NO0002R	fluorene	air+aerosol	ng/m ³	1.49	1.139	0.815	0.508	0.223	0.358	0.203	0.185	0.37	0.356	0.915	0.444	0.571
NO0042G	fluorene	air+aerosol	ng/m ³	0.817	0.494	0.15	0.033	0.022	0.02	0.023	0.021	0.034	0.046	0.157	0.393	0.172
NO0090R	fluorene	air+aerosol	ng/m ³	1.002	0.415	0.113	0.035	0.076	0.052	0.031	0.043	0.047	0.094	0.157	0.25	0.193
DE0001R	heptachlor	air+aerosol	ng/m ³	0.083	0.106	0.044	0.081	0.051	0.014	0.054	0.068	0.042	0.078	0.158	0.144	0.077
BE0013R	inden_123cd_pyrene	air+aerosol	ng/m ³	0.198	0.227	0.185	0.05	0.047	0.02	0.016	0.034	0.012	0.103	0.322	0.076	0.102
DE0001R	inden_123cd_pyrene	air+aerosol	ng/m ³	0.16	0.517	0.038	0.021	0.032	0.011	0.009	0.01	0.042	0.159	0.24	0.023	0.102

Table A.2.8, cont.

ES0008R	inden_123cd_pyrene	pm10	ng/m ³	0.065	0.135	0.496	0.218	0.208	0.263	0.3	0.238	0.02	0.028	0.024	0.975	0.249
GB0014R	inden_123cd_pyrene	pm10	ng/m ³	0.14	0.164	0.108	0.04	0.034	0.027	0.048	0.022	0.03	0.09	0.208	0.167	0.089
NL0009R	inden_123cd_pyrene	pm10	ng/m ³	0.14	0.399	0.116	0.026	0.017	0.012	0.017	0.016	0.029	0.2	0.566	0.07	0.139
NL0091R	inden_123cd_pyrene	pm10	ng/m ³	0.182	0.358	0.21	0.079	0.034	0.028	0.028	0.027	0.035	0.141	0.458	0.09	0.137
NO0002R	inden_123cd_pyrene	air+aerosol	ng/m ³	0.115	0.098	0.042	0.017	0.012	0.048	0.009	0.01	0.038	0.056	0.104	0.03	0.047
NO0042G	inden_123cd_pyrene	air+aerosol	ng/m ³	0.025	0.011	0.008	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.002	0.01	0.005
NO0090R	inden_123cd_pyrene	air+aerosol	ng/m ³	0.033	0.014	0.004	0.002	0.002	0.002	0.001	0.002	0.003	0.005	0.005	0.002	0.006
SE0014R	inden_123cd_pyrene	air+aerosol	ng/m ³	0.196	0.087	0.086	0.047	0.012	0.006	0.004	0.007	0.011	0.105	0.231	0.06	0.071
NO0002R	N1methylnaphthalene	air+aerosol	ng/m ³	0.356	0.216	0.175	0.076	0.038	0.052	0.035	0.021	0.074	0.055	0.117	0.074	0.106
NO0042G	N1methylnaphthalene	air+aerosol	ng/m ³	0.427	0.235	0.102	0.084	0.079	0.039	0.033	0.044	0.032	0.037	0.096	0.321	0.129
NO0090R	N1methylnaphthalene	air+aerosol	ng/m ³	0.131	0.088	0.036	0.027	0.027	0.028	0.027	0.028	0.028	0.028	0.03	0.053	0.044
NO0002R	N1methylphenanthrene	air+aerosol	ng/m ³	0.132	0.058	0.039	0.054	0.025	0.037	0.025	0.054	0.034	0.042	0.083	0.039	0.051
NO0042G	N1methylphenanthrene	air+aerosol	ng/m ³	0.014	0.005	0.003	0.003	0.002	0.004	0.008	0.004	0.002	0.002	0.003	0.003	0.004
NO0090R	N1methylphenanthrene	air+aerosol	ng/m ³	0.017	0.012	0.008	0.006	0.006	0.011	0.015	0.009	0.012	0.013	0.01	0.01	0.011
NO0002R	N2methylanthracene	air+aerosol	ng/m ³	0.009	0.003	0.002	0.002	0.002	0.001	0.002	0.008	0.002	0.003	0.009	0.002	0.004
NO0042G	N2methylanthracene	air+aerosol	ng/m ³	0.002	0.001	0.001	0.001	0.001	0.001	0.004	0.002	0.001	0.001	0.003	0.002	0.002
NO0090R	N2methylanthracene	air+aerosol	ng/m ³	0.002	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001
NO0002R	N2methylnaphthalene	air+aerosol	ng/m ³	0.549	0.314	0.279	0.134	0.068	0.096	0.062	0.037	0.068	0.094	0.19	0.122	0.165
NO0042G	N2methylnaphthalene	air+aerosol	ng/m ³	0.501	0.265	0.151	0.172	0.165	0.075	0.062	0.098	0.069	0.068	0.138	0.4	0.177
NO0090R	N2methylnaphthalene	air+aerosol	ng/m ³	0.208	0.069	0.065	0.047	0.048	0.048	0.048	0.049	0.049	0.048	0.052	0.087	0.068
NO0002R	N2methylphenanthrene	air+aerosol	ng/m ³	0.266	0.086	0.056	0.116	0.032	0.099	0.046	0.053	0.066	0.048	0.109	0.056	0.084
NO0042G	N2methylphenanthrene	air+aerosol	ng/m ³	0.016	0.007	0.004	0.003	0.004	0.007	0.014	0.008	0.004	0.003	0.004	0.008	0.007
NO0090R	N2methylphenanthrene	air+aerosol	ng/m ³	0.026	0.019	0.014	0.009	0.01	0.018	0.02	0.016	0.02	0.024	0.018	0.018	0.018
NO0002R	N3methylphenanthrene	air+aerosol	ng/m ³	0.201	0.06	0.037	0.082	0.023	0.078	0.038	0.039	0.055	0.036	0.085	0.043	0.063
NO0042G	N3methylphenanthrene	air+aerosol	ng/m ³	0.012	0.005	0.003	0.003	0.003	0.005	0.012	0.006	0.003	0.003	0.003	0.006	0.005
NO0090R	N3methylphenanthrene	air+aerosol	ng/m ³	0.018	0.013	0.011	0.006	0.008	0.015	0.016	0.013	0.017	0.02	0.015	0.013	0.014
NO0002R	N9methylphenanthrene	air+aerosol	ng/m ³	0.087	0.029	0.021	0.033	0.015	0.033	0.024	0.013	0.025	0.024	0.057	0.022	0.034
NO0042G	N9methylphenanthrene	air+aerosol	ng/m ³	0.01	0.004	0.003	0.002	0.003	0.005	0.009	0.006	0.003	0.003	0.003	0.005	0.004
NO0090R	N9methylphenanthrene	air+aerosol	ng/m ³	0.012	0.008	0.009	0.005	0.006	0.011	0.014	0.01	0.012	0.015	0.01	0.008	0.01
NO0002R	naphtalene	air+aerosol	ng/m ³	0.883	0.653	0.376	0.149	0.083	0.117	0.078	0.031	0.059	0.156	0.242	0.214	0.249
NO0042G	naphtalene	air+aerosol	ng/m ³	1.776	1.203	0.524	0.325	0.361	0.259	0.18	0.205	0.165	0.114	0.318	1.06	0.522
NO0090R	naphtalene	air+aerosol	ng/m ³	0.578	0.152	0.084	0.063	0.063	0.064	0.063	0.064	0.064	0.071	0.081	0.222	0.129
GB0014R	perylene	pm10	ng/m ³	0.03	0.028	0.02	0.006	0.006	0.005	0.008	-0.001	0.01	0.016	0.027	0.02	0.014
NO0002R	perylene	air+aerosol	ng/m ³	0.016	0.012	0.006	0.003	0.002	0.002	0.001	0.001	-	0.007	0.009	0.004	0.005
NO0042G	perylene	air+aerosol	ng/m ³	0.013	0.011	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.003
NO0090R	perylene	air+aerosol	ng/m ³	0.006	0.002	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002
DE0001R	phenanthrene	air+aerosol	ng/m ³	2.4	3.6	1.2	1.1	1.4	1	1.9	1	1	3.1	3.2	1.3	1.838
ES0008R	phenanthrene	pm10	ng/m ³	0.025	0.054	0.506	0.167	0.235	0.045	0.03	0.046	0.02	0.021	0.018	-	0.11
NO0002R	phenanthrene	air+aerosol	ng/m ³	1.958	1.31	0.723	1.002	0.436	0.825	0.543	0.685	0.824	0.624	1.229	0.602	0.877
NO0042G	phenanthrene	air+aerosol	ng/m ³	0.199	0.094	0.065	0.022	0.022	0.025	0.049	0.036	0.023	0.018	0.043	0.104	0.056
NO0090R	phenanthrene	air+aerosol	ng/m ³	0.426	0.25	0.092	0.068	0.118	0.124	0.125	0.133	0.179	0.195	0.144	0.243	0.173
SE0014R	phenanthrene	air+aerosol	ng/m ³	2.755	1.486	1.1	1.1	0.347	0.354	0.38	0.393	0.33	0.789	1.54	1	0.961
BE0013R	pyrene	air+aerosol	ng/m ³	0.218	0.44	0.31	0.062	0.077	0.037	0.028	0.028	0.012	0.105	0.447	0.092	0.136
DE0001R	pyrene	air+aerosol	ng/m ³	0.52	1.39	0.22	0.13	0.14	0.11	0.39	0.2	0.24	0.51	0.58	0.2	0.379
ES0008R	pyrene	pm10	ng/m ³	0.046	0.109	0.658	0.355	0.261	0.083	0.06	0.053	0.05	0.049	0.042	-	0.164

Comprehensive Atmospheric Monitoring Programme, 2011: Deposition of air pollutants around the North Sea and the North-East Atlantic

Table A.2.8, cont.

Site	Comp	matrix	unit	jan	febr	mar	apr	may	june	july	aug	sept	oct	nov	dec	year
NO0002R	pyrene	air+aerosol	ng/m ³	0.391	0.25	0.124	0.083	0.062	0.102	0.043	0.08	0.103	0.127	0.232	0.109	0.139
NO0042G	pyrene	air+aerosol	ng/m ³	0.1	0.05	0.025	0.012	0.006	0.007	0.008	0.007	0.007	0.007	0.014	0.034	0.022
NO0090R	pyrene	air+aerosol	ng/m ³	0.089	0.049	0.021	0.011	0.02	0.015	0.017	0.022	0.022	0.019	0.016	0.02	0.027
SE0014R	pyrene	air+aerosol	ng/m ³	0.728	0.387	0.285	0.18	0.054	0.04	0.04	0.051	0.06	0.241	0.534	0.3	0.241
NO0002R	retene	air+aerosol	ng/m ³	0.158	0.066	0.056	0.059	0.046	0.026	0.031	0.144	0.055	0.107	0.113	0.075	0.077
NO0042G	retene	air+aerosol	ng/m ³	0.015	0.006	0.005	0.006	0.005	0.005	0.004	0.005	0.005	0.005	0.008	0.006	0.006
NO0090R	retene	air+aerosol	ng/m ³	0.013	0.007	0.007	0.005	0.005	0.014	0.021	0.006	0.007	0.008	0.006	0.005	0.009
NO0002R	PCB_18	air+aerosol	pg/m ³	1.137	2.406	1.325	1.685	1.229	0.576	1.154	1.735	1.416	1.603	1.8	0.894	1.358
NO0042G	PCB_18	air+aerosol	pg/m ³	1.611	1.75	1.605	1.538	1.59	1.852	1.386	1.434	1.223	1.171	1.363	1.481	1.501
NO0090R	PCB_18	air+aerosol	pg/m ³	1.358	1.236	1.042	0.77	0.75	0.537	0.385	0.352	0.621	0.79	0.983	1.127	0.811
DE0001R	PCB_28	air+aerosol	pg/m ³	1.2	1.8	1.3	0.7	0.3	0.2	2.3	2.8	1.8	3.3	4.4	2.7	1.902
IS0091R	PCB_28	air+aerosol	pg/m ³	1.37	1.16	1.1	1.67	2.17	1.74	2.31	2.22	1.82	1.61	0.99	0.98	1.6
NO0002R	PCB_28	air+aerosol	pg/m ³	0.587	0.996	0.632	0.989	0.778	0.497	1.024	1.194	0.901	0.973	1.115	0.47	0.826
NO0042G	PCB_28	air+aerosol	pg/m ³	1.285	1.188	0.963	1.027	1.215	1.702	1.37	1.374	1.024	0.807	0.971	0.933	1.16
NO0090R	PCB_28	air+aerosol	pg/m ³	0.713	0.602	0.482	0.433	0.521	0.515	0.378	0.349	0.527	0.522	0.618	0.596	0.519
SE0014R	PCB_28	air+aerosol	pg/m ³	2.441	0.818	1.506	2.9	1.997	1.673	2.8	2.723	2	1.231	2.01	1.2	1.95
IS0091R	PCB_31	air+aerosol	pg/m ³	1.72	1.53	1.25	1.762	2.06	1.62	1.87	2.12	1.85	1.84	1.06	1.08	1.649
NO0002R	PCB_31	air+aerosol	pg/m ³	0.596	1.009	0.636	0.962	0.738	0.451	0.909	1.101	0.854	0.899	1.021	0.436	0.783
NO0042G	PCB_31	air+aerosol	pg/m ³	1.204	1.124	0.903	0.957	1.124	1.566	1.246	1.244	0.917	0.726	0.876	0.855	1.066
NO0090R	PCB_31	air+aerosol	pg/m ³	0.681	0.607	0.49	0.417	0.485	0.478	0.351	0.312	0.459	0.478	0.57	0.553	0.487
NO0002R	PCB_33	air+aerosol	pg/m ³	0.352	0.639	0.381	0.542	0.42	0.241	0.491	0.616	0.487	0.53	0.613	0.264	0.454
NO0042G	PCB_33	air+aerosol	pg/m ³	1.007	0.801	0.604	0.644	0.836	1.239	0.971	0.964	0.666	0.515	0.681	0.626	0.802
NO0090R	PCB_33	air+aerosol	pg/m ³	0.393	0.346	0.301	0.228	0.271	0.283	0.204	0.176	0.263	0.285	0.347	0.333	0.284
NO0002R	PCB_37	air+aerosol	pg/m ³	0.052	0.139	0.053	0.053	0.064	0.052	0.094	0.093	0.073	0.084	0.097	0.037	0.071
NO0042G	PCB_37	air+aerosol	pg/m ³	0.271	0.135	0.075	0.076	0.127	0.195	0.164	0.158	0.098	0.075	0.119	0.094	0.134
NO0090R	PCB_37	air+aerosol	pg/m ³	0.057	0.04	0.041	0.025	0.035	0.048	0.034	0.032	0.041	0.043	0.051	0.045	0.041
NO0002R	PCB_47	air+aerosol	pg/m ³	0.373	0.421	0.633	1.494	1.563	2.728	2.997	2.139	1.672	1.225	1.108	0.495	1.429
NO0042G	PCB_47	air+aerosol	pg/m ³	0.426	0.336	0.276	0.244	0.266	0.287	0.258	0.24	0.215	0.193	0.279	0.258	0.276
NO0090R	PCB_47	air+aerosol	pg/m ³	1.019	0.708	0.401	1.108	1.02	2.23	2.186	1.185	1.195	1.815	1.325	0.548	1.293
DE0001R	PCB_52	air+aerosol	pg/m ³	1.3	2.3	1.6	2.9	2.2	1.8	2.9	3.5	2.4	3.4	4.3	3.3	2.659
GB0014R	PCB_52	air+aerosol	pg/m ³	2.235	2.235	2.194	0.963	0.963	0.96	0.863	0.863	0.855	0.611	0.611	0.611	1.148
IS0091R	PCB_52	air+aerosol	pg/m ³	2.35	2.47	2	2.483	3.4	3.77	5.08	4.62	3.61	3.4	2.49	1.91	3.139
NO0002R	PCB_52	air+aerosol	pg/m ³	0.588	0.499	0.538	0.835	0.825	0.667	1.205	1.474	1.139	1.009	1.026	0.525	0.85
NO0042G	PCB_52	air+aerosol	pg/m ³	0.755	0.77	0.668	0.639	0.63	0.622	0.541	0.575	0.559	0.513	0.614	0.619	0.627
NO0090R	PCB_52	air+aerosol	pg/m ³	0.647	0.572	0.532	0.48	0.533	0.512	0.419	0.354	0.626	0.538	0.613	0.561	0.528
SE0014R	PCB_52	air+aerosol	pg/m ³	1.897	1.804	2.055	3.1	2.868	3.98	5.8	4.823	4.1	2.817	3.16	1.9	3.197
NO0002R	PCB_66	air+aerosol	pg/m ³	0.128	0.105	0.129	0.201	0.189	0.161	0.324	0.357	0.261	0.251	0.251	0.109	0.203
NO0042G	PCB_66	air+aerosol	pg/m ³	0.289	0.218	0.142	0.121	0.136	0.144	0.134	0.142	0.127	0.112	0.156	0.143	0.157
NO0090R	PCB_66	air+aerosol	pg/m ³	0.128	0.114	0.1	0.084	0.124	0.135	0.107	0.099	0.158	0.122	0.141	0.115	0.119
NO0002R	PCB_74	air+aerosol	pg/m ³	0.081	0.067	0.076	0.115	0.116	0.091	0.193	0.212	0.161	0.153	0.156	0.069	0.123
NO0042G	PCB_74	air+aerosol	pg/m ³	0.158	0.137	0.096	0.088	0.091	0.09	0.084	0.087	0.083	0.076	0.102	0.096	0.1
NO0090R	PCB_74	air+aerosol	pg/m ³	0.084	0.077	0.071	0.057	0.083	0.083	0.065	0.063	0.101	0.078	0.09	0.078	0.078
NO0002R	PCB_99	air+aerosol	pg/m ³	0.109	0.085	0.114	0.195	0.15	0.122	0.251	0.288	0.185	0.186	0.194	0.115	0.164
NO0042G	PCB_99	air+aerosol	pg/m ³	0.152	0.164	0.117	0.102	0.087	0.059	0.059	0.073	0.097	0.09	0.108	0.123	0.102
NO0090R	PCB_99	air+aerosol	pg/m ³	0.134	0.113	0.106	0.087	0.117	0.112	0.092	0.091	0.124	0.109	0.117	0.116	0.11
DE0001R	PCB_101	air+aerosol	pg/m ³	1	1.6	1.2	2.4	1.6	1.5	2.9	4	2.5	3.4	3.1	2.5	2.314
IS0091R	PCB_101	air+aerosol	pg/m ³	1.02	1.02	0.82	1.033	1.71	1.75	2.26	2.17	1.8	1.96	1.18	1.19	1.498
NO0002R	PCB_101	air+aerosol	pg/m ³	0.298	0.228	0.313	0.655	0.473	0.387	0.849	1.033	0.68	0.593	0.605	0.302	0.525

Table A.2.8, cont.

NO0042G	PCB_101	air+aerosol	pg/m ³	0.376	0.383	0.268	0.245	0.239	0.185	0.184	0.213	0.243	0.216	0.265	0.278	0.257
NO0090R	PCB_101	air+aerosol	pg/m ³	0.322	0.279	0.243	0.23	0.307	0.299	0.261	0.246	0.317	0.284	0.32	0.279	0.284
SE0014R	PCB_101	air+aerosol	pg/m ³	1.287	0.913	1.219	2.7	1.81	3.393	6.6	4.245	2.8	1.714	2.01	1.2	2.509
IS0091R	PCB_105	air+aerosol	pg/m ³	0.06	0.085	0.055	0.065	0.06	0.055	0.1	0.05	0.055	-	0.055	0.11	0.068
NO0002R	PCB_105	air+aerosol	pg/m ³	0.022	0.039	0.022	0.038	0.033	0.026	0.054	0.058	0.037	0.036	0.042	0.026	0.035
NO0042G	PCB_105	air+aerosol	pg/m ³	0.032	0.037	0.023	0.02	0.015	0.011	0.012	0.015	0.02	0.019	0.024	0.027	0.021
NO0090R	PCB_105	air+aerosol	pg/m ³	0.025	0.022	0.019	0.016	0.024	0.024	0.019	0.018	0.025	0.019	0.022	0.02	0.021
NO0002R	PCB_114	air+aerosol	pg/m ³	0.01	0.01	0.01	0.011	0.01	0.01	0.01	0.011	0.01	0.01	0.01	0.01	0.01
NO0042G	PCB_114	air+aerosol	pg/m ³	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
NO0090R	PCB_114	air+aerosol	pg/m ³	0.01	0.01	0.013	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
DE0001R	PCB_118	air+aerosol	pg/m ³	0.29	0.44	0.31	0.53	0.45	0.38	0.62	0.8	0.52	0.65	0.56	0.47	0.502
GB0014R	PCB_118	air+aerosol	pg/m ³	0.391	0.391	0.387	0.262	0.262	0.264	0.316	0.316	0.315	0.281	0.281	0.281	0.311
IS0091R	PCB_118	air+aerosol	pg/m ³	0.34	0.38	0.23	0.317	0.29	0.3	0.41	0.46	0.34	-	0.26	0.45	0.343
NO0002R	PCB_118	air+aerosol	pg/m ³	0.072	0.061	0.078	0.149	0.111	0.095	0.2	0.224	0.144	0.137	0.15	0.094	0.124
NO0042G	PCB_118	air+aerosol	pg/m ³	0.109	0.119	0.077	0.066	0.051	0.034	0.04	0.047	0.066	0.063	0.081	0.093	0.07
NO0090R	PCB_118	air+aerosol	pg/m ³	0.09	0.079	0.061	0.063	0.081	0.078	0.062	0.066	0.087	0.072	0.079	0.077	0.075
SE0014R	PCB_118	air+aerosol	pg/m ³	0.354	0.203	0.361	0.91	0.502	1.069	2.3	1.246	0.74	0.352	0.384	0.24	0.73
NO0002R	PCB_122	air+aerosol	pg/m ³	0.01	0.01	0.01	0.011	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
NO0042G	PCB_122	air+aerosol	pg/m ³	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
NO0090R	PCB_122	air+aerosol	pg/m ³	0.01	0.01	0.013	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
NO0002R	PCB_123	air+aerosol	pg/m ³	0.01	0.01	0.016	0.012	0.01	0.01	0.012	0.01	0.019	0.013	0.015	0.011	0.012
NO0042G	PCB_123	air+aerosol	pg/m ³	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
NO0090R	PCB_123	air+aerosol	pg/m ³	0.01	0.01	0.013	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
NO0002R	PCB_128	air+aerosol	pg/m ³	0.014	0.03	0.012	0.025	0.024	0.021	0.042	0.05	0.028	0.026	0.029	0.015	0.026
NO0042G	PCB_128	air+aerosol	pg/m ³	0.014	0.017	0.012	0.013	0.011	0.01	0.01	0.011	0.012	0.01	0.011	0.012	0.012
NO0090R	PCB_128	air+aerosol	pg/m ³	0.013	0.013	0.012	0.01	0.018	0.019	0.017	0.012	0.015	0.012	0.014	0.012	0.014
DE0001R	PCB_138	air+aerosol	pg/m ³	0.8	1.1	0.7	1.1	0.9	0.8	2.3	3.3	1.6	2.5	2.1	1	1.522
GB0014R	PCB_138	air+aerosol	pg/m ³	1.022	1.022	1.006	0.525	0.525	0.52	0.36	0.36	0.356	0.243	0.243	0.243	0.528
IS0091R	PCB_138	air+aerosol	pg/m ³	0.06	0.085	0.055	0.065	0.06	0.13	0.13	0.15	0.16	-	0.15	0.23	0.116
NO0002R	PCB_138	air+aerosol	pg/m ³	0.102	0.088	0.115	0.244	0.174	0.145	0.312	0.374	0.218	0.194	0.211	0.102	0.186
NO0042G	PCB_138	air+aerosol	pg/m ³	0.103	0.105	0.073	0.077	0.057	0.034	0.036	0.048	0.063	0.056	0.063	0.072	0.065
NO0090R	PCB_138	air+aerosol	pg/m ³	0.106	0.096	0.074	0.073	0.108	0.105	0.095	0.089	0.103	0.082	0.095	0.078	0.093
SE0014R	PCB_138	air+aerosol	pg/m ³	0.878	0.554	0.837	2.1	1.197	2.58	5.7	3.035	1.5	0.917	1.056	0.66	1.774
NO0002R	PCB_141	air+aerosol	pg/m ³	0.027	0.019	0.027	0.073	0.047	0.046	0.098	0.123	0.073	0.059	0.064	0.026	0.055
NO0042G	PCB_141	air+aerosol	pg/m ³	0.024	0.025	0.018	0.017	0.015	0.01	0.011	0.013	0.016	0.015	0.017	0.02	0.016
NO0090R	PCB_141	air+aerosol	pg/m ³	0.024	0.018	0.016	0.017	0.03	0.029	0.028	0.027	0.027	0.021	0.026	0.019	0.024
NO0002R	PCB_149	air+aerosol	pg/m ³	0.174	0.121	0.189	0.443	0.29	0.278	0.599	0.792	0.46	0.393	0.402	0.178	0.35
NO0042G	PCB_149	air+aerosol	pg/m ³	0.18	0.166	0.12	0.12	0.113	0.073	0.074	0.104	0.121	0.104	0.123	0.121	0.118
NO0090R	PCB_149	air+aerosol	pg/m ³	0.182	0.154	0.132	0.143	0.18	0.182	0.179	0.174	0.199	0.168	0.188	0.15	0.171
DE0001R	PCB_153	air+aerosol	pg/m ³	0.8	1.2	0.9	2	1.4	0.9	2.5	3.7	1.9	2.3	1.9	1.4	1.747
IS0091R	PCB_153	air+aerosol	pg/m ³	0.06	0.085	0.055	0.065	0.18	0.17	0.16	0.24	0.16	-	0.11	0.19	0.134
NO0002R	PCB_153	air+aerosol	pg/m ³	0.158	0.116	0.166	0.366	0.247	0.234	0.503	0.635	0.361	0.327	0.358	0.164	0.295
NO0042G	PCB_153	air+aerosol	pg/m ³	0.154	0.146	0.11	0.108	0.083	0.054	0.057	0.073	0.093	0.083	0.098	0.111	0.097
NO0090R	PCB_153	air+aerosol	pg/m ³	0.158	0.138	0.115	0.119	0.152	0.148	0.138	0.138	0.159	0.133	0.163	0.131	0.142
SE0014R	PCB_153	air+aerosol	pg/m ³	0.988	0.644	0.954	2.4	1.406	2.893	6.1	3.516	1.8	1.21	1.437	0.87	2.043
IS0091R	PCB_156	air+aerosol	pg/m ³	0.06	0.085	0.055	0.065	0.06	0.055	0.05	0.05	0.055	0.05	0.055	0.05	0.057

Comprehensive Atmospheric Monitoring Programme, 2011: Deposition of air pollutants around the North Sea and the North-East Atlantic

Table A.2.8, cont.

Site	Comp	matrix	unit	jan	febr	mar	apr	may	june	july	aug	sept	oct	nov	dec	year
NO0002R	PCB_156	air+aerosol	pg/m ³	0.011	0.018	0.01	0.01	0.011	0.011	0.014	0.017	0.014	0.012	0.013	0.01	0.012
NO0042G	PCB_156	air+aerosol	pg/m ³	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
NO0090R	PCB_156	air+aerosol	pg/m ³	0.01	0.01	0.011	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
NO0002R	PCB_157	air+aerosol	pg/m ³	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
NO0042G	PCB_157	air+aerosol	pg/m ³	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
NO0090R	PCB_157	air+aerosol	pg/m ³	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
NO0002R	PCB_167	air+aerosol	pg/m ³	0.01	0.01	0.01	0.01	0.01	0.01	0.011	0.012	0.012	0.011	0.01	0.01	0.01
NO0042G	PCB_167	air+aerosol	pg/m ³	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
NO0090R	PCB_167	air+aerosol	pg/m ³	0.01	0.01	0.011	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
NO0002R	PCB_170	air+aerosol	pg/m ³	0.018	0.056	0.016	0.039	0.028	0.023	0.035	0.039	0.023	0.02	0.027	0.011	0.027
NO0042G	PCB_170	air+aerosol	pg/m ³	0.01	0.011	0.01	0.011	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
NO0090R	PCB_170	air+aerosol	pg/m ³	0.014	0.011	0.013	0.01	0.012	0.012	0.013	0.011	0.011	0.01	0.011	0.01	0.012
DE0001R	PCB_180	air+aerosol	pg/m ³	0.22	0.38	0.2	0.45	0.44	0.44	0.65	0.88	0.39	0.58	0.48	0.32	0.453
GB0014R	PCB_180	air+aerosol	pg/m ³	0.249	0.249	0.247	0.193	0.193	0.195	0.264	0.264	0.263	0.233	0.233	0.235	
IS0091R	PCB_180	air+aerosol	pg/m ³	0.06	0.085	0.055	0.065	0.06	0.055	0.05	0.05	0.055	0.05	0.055	0.05	0.057
NO0002R	PCB_180	air+aerosol	pg/m ³	0.045	0.111	0.046	0.112	0.071	0.06	0.108	0.135	0.081	0.058	0.077	0.03	0.075
NO0042G	PCB_180	air+aerosol	pg/m ³	0.026	0.025	0.022	0.022	0.015	0.011	0.013	0.013	0.015	0.014	0.016	0.018	0.017
NO0090R	PCB_180	air+aerosol	pg/m ³	0.034	0.027	0.024	0.019	0.034	0.03	0.032	0.023	0.026	0.022	0.031	0.022	0.028
SE0014R	PCB_180	air+aerosol	pg/m ³	0.423	0.24	0.312	0.73	0.389	0.786	1.8	1.034	0.42	0.309	0.544	0.31	0.617
NO0002R	PCB_183	air+aerosol	pg/m ³	0.016	0.027	0.014	0.039	0.022	0.021	0.042	0.054	0.029	0.026	0.03	0.013	0.027
NO0042G	PCB_183	air+aerosol	pg/m ³	0.013	0.013	0.011	0.012	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.011
NO0090R	PCB_183	air+aerosol	pg/m ³	0.015	0.013	0.01	0.011	0.012	0.013	0.014	0.012	0.013	0.011	0.014	0.01	0.013
NO0002R	PCB_187	air+aerosol	pg/m ³	0.04	0.069	0.046	0.101	0.064	0.058	0.111	0.146	0.081	0.075	0.086	0.04	0.074
NO0042G	PCB_187	air+aerosol	pg/m ³	0.037	0.033	0.029	0.027	0.022	0.012	0.012	0.018	0.02	0.017	0.021	0.022	0.023
NO0090R	PCB_187	air+aerosol	pg/m ³	0.04	0.037	0.031	0.03	0.035	0.031	0.033	0.033	0.035	0.031	0.04	0.03	0.034
NO0002R	PCB_189	air+aerosol	pg/m ³	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
NO0042G	PCB_189	air+aerosol	pg/m ³	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
NO0090R	PCB_189	air+aerosol	pg/m ³	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
NO0002R	PCB_194	air+aerosol	pg/m ³	0.01	0.017	0.01	0.01	0.01	0.01	0.01	0.011	0.011	0.01	0.01	0.01	0.011
NO0042G	PCB_194	air+aerosol	pg/m ³	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
NO0090R	PCB_194	air+aerosol	pg/m ³	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
NO0002R	PCB_206	air+aerosol	pg/m ³	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.011	0.01	0.01	0.01	0.01
NO0042G	PCB_206	air+aerosol	pg/m ³	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
NO0090R	PCB_206	air+aerosol	pg/m ³	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
NO0002R	PCB_209	air+aerosol	pg/m ³	0.01	0.012	0.01	0.01	0.01	0.01	0.01	0.01	0.011	0.01	0.01	0.01	0.01
NO0042G	PCB_209	air+aerosol	pg/m ³	0.013	0.018	0.012	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.011
NO0090R	PCB_209	air+aerosol	pg/m ³	0.012	0.011	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
DE0001R	op_DDD	air+aerosol	pg/m ³	0.06	0.16	0.1	0.21	0.14	0.16	0.17	0.29	0.22	0.24	0.21	0.12	0.173
NO0002R	op_DDD	air+aerosol	pg/m ³	0.02	0.013	0.02	0.026	0.023	0.032	0.057	0.043	0.024	0.037	0.055	0.026	0.032
NO0042G	op_DDD	air+aerosol	pg/m ³	0.016	0.014	0.013	0.012	0.01	0.01	0.01	0.012	0.015	0.022	0.018	0.013	
NO0090R	op_DDD	air+aerosol	pg/m ³	0.023	0.015	0.015	0.015	0.014	0.01	0.01	0.013	0.017	0.024	0.06	0.03	0.021
DE0001R	op_DDE	air+aerosol	pg/m ³	0.1	0.23	0.13	0.23	0.17	0.1	0.12	0.28	0.15	0.42	0.43	0.29	0.221
NO0002R	op_DDE	air+aerosol	pg/m ³	0.079	0.08	0.089	0.075	0.056	0.027	0.047	0.054	0.042	0.092	0.136	0.067	0.068
NO0042G	op_DDE	air+aerosol	pg/m ³	0.108	0.109	0.074	0.054	0.021	0.013	0.011	0.01	0.021	0.028	0.057	0.069	0.051
NO0090R	op_DDE	air+aerosol	pg/m ³	0.104	0.099	0.087	0.063	0.04	0.035	0.022	0.011	0.019	0.043	0.074	0.074	0.056
DE0001R	op_DDT	air+aerosol	pg/m ³	0.15	0.41	0.28	0.77	0.71	0.32	0.63	1.84	0.45	0.92	0.84	0.22	0.631
IS0091R	op_DDT	air+aerosol	pg/m ³	0.16	0.23	0.055	0.065	0.06	0.055	0.05	0.05	0.055	0.05	0.055	0.05	0.077
NO0002R	op_DDT	air+aerosol	pg/m ³	-	-	0.174	0.313	0.24	0.282	0.502	0.425	0.215	0.436	0.382	0.111	0.335

Table A.2.8, cont.

NO0042G	op_DDT	air+aerosol	pg/m ³	0.194	0.17	0.145	-	0.015	0.01	0.023	-	0.089	-	0.119	0.105	0.116
NO0090R	op_DDT	air+aerosol	pg/m ³	0.151	0.148	0.114	0.088	0.065	0.087	0.15	0.102	0.196	0.133	0.165	0.123	0.133
DE0001R	pp_DDD	air+aerosol	pg/m ³	0.07	0.25	0.1	0.17	0.12	0.13	0.16	0.32	0.18	0.23	0.18	0.11	0.168
IS0091R	pp_DDD	air+aerosol	pg/m ³	0.06	0.085	0.055	0.065	0.06	0.055	0.11	0.11	0.11	0.17	0.27	0.24	0.116
NO0002R	pp_DDD	air+aerosol	pg/m ³	0.022	-	-	0.029	-	0.03	0.052	0.048	0.014	0.032	0.071	0.014	0.037
NO0042G	pp_DDD	air+aerosol	pg/m ³	0.01	0.01	0.01	0.01	0.01	0.012	0.01	0.01	0.01	0.01	0.018	0.024	0.012
NO0090R	pp_DDD	air+aerosol	pg/m ³	0.022	0.01	0.01	0.01	0.01	-	0.01	0.01	0.013	0.021	0.094	0.03	0.02
SE0014R	pp_DDD	air+aerosol	pg/m ³	0.473	0.832	0.55	0.01	0.194	0.199	0.19	0.102	0.49	0.301	0.317	0.29	0.323
DE0001R	pp_DDE	air+aerosol	pg/m ³	1.1	3.7	1.8	3.1	2.2	1.4	1.8	6	2.6	8.7	8.1	3.1	3.631
IS0091R	pp_DDE	air+aerosol	pg/m ³	0.28	0.24	0.16	0.068	0.17	0.055	0.15	0.11	0.12	0.15	0.18	0.05	0.144
NO0002R	pp_DDE	air+aerosol	pg/m ³	0.584	0.501	0.619	0.959	0.611	0.521	1.022	1.179	0.724	1.967	2.38	0.754	0.959
NO0042G	pp_DDE	air+aerosol	pg/m ³	0.669	0.656	0.278	0.214	0.089	0.059	0.06	0.059	0.138	0.194	0.349	0.484	0.266
NO0090R	pp_DDE	air+aerosol	pg/m ³	0.677	0.63	0.397	0.332	0.191	0.164	0.138	0.175	0.294	0.509	0.855	0.651	0.403
SE0014R	pp_DDE	air+aerosol	pg/m ³	2.262	1.214	1.884	3.8	1.568	1.52	2.3	2.958	3.5	3.586	5.73	3.3	2.794
DE0001R	pp_DDT	air+aerosol	pg/m ³	0.24	0.95	0.37	0.96	0.97	0.46	0.75	2.09	0.46	1.18	1.02	0.34	0.816
IS0091R	pp_DDT	air+aerosol	pg/m ³	0.06	0.085	0.055	0.065	0.06	0.055	0.05	0.05	0.055	0.28	0.64	0.42	0.156
NO0002R	pp_DDT	air+aerosol	pg/m ³	0.099	0.07	0.11	0.243	0.223	0.239	0.638	0.434	0.26	0.292	0.35	0.112	0.262
NO0042G	pp_DDT	air+aerosol	pg/m ³	0.098	0.091	0.044	0.037	0.026	0.013	0.013	0.023	0.043	0.039	0.055	0.054	0.046
NO0090R	pp_DDT	air+aerosol	pg/m ³	0.1	0.07	0.038	0.035	0.05	0.054	0.051	0.055	0.075	0.078	0.11	0.07	0.066
SE0014R	pp_DDT	air+aerosol	pg/m ³	0.346	0.248	0.914	0.33	0.673	0.65	0.91	0.751	0.85	0.586	0.458	0.26	0.582
DE0001R	alpha_HCH	air+aerosol	pg/m ³	2.30	3.40	2.80	3.80	4.40	3.10	4.10	4.30	4.90	6.80	8.00	4.00	4.33
IS0091R	alpha_HCH	air+aerosol	pg/m ³	2.20	2.52	1.88	1.90	2.08	1.40	1.28	1.36	1.86	1.70	1.56	1.38	1.75
NO0002R	alpha_HCH	air+aerosol	pg/m ³	3.45	3.33	4.11	5.29	5.89	5.15	9.36	7.68	7.76	6.74	5.93	3.68	5.76
NO0042G	alpha_HCH	air+aerosol	pg/m ³	5.28	5.39	5.60	5.42	6.25	5.87	6.13	7.62	8.13	7.70	7.35	4.48	6.32
NO0090R	alpha_HCH	air+aerosol	pg/m ³	4.41	3.80	4.70	4.29	4.77	4.33	4.90	4.60	5.64	5.53	4.69	3.79	4.69
SE0014R	alpha_HCH	air+aerosol	pg/m ³	3.00	3.11	5.74	4.00	4.00	4.27	6.00	4.90	4.00	5.00	4.90	4.00	4.43
IS0091R	beta_HCH	air+aerosol	pg/m ³	0.13	0.23	0.28	0.43	0.49	0.29	0.34	0.26	0.16	0.12	0.11	0.05	0.24
DE0001R	gamma_HCH	air+aerosol	pg/m ³	3.90	7.70	4.30	10.40	11.50	12.30	12.90	17.80	7.50	12.30	17.30	10.70	10.73
IS0091R	gamma_HCH	air+aerosol	pg/m ³	1.24	1.32	1.10	1.34	2.25	2.31	2.57	2.54	2.49	-	1.71	2.70	1.97
NO0002R	gamma_HCH	air+aerosol	pg/m ³	0.92	0.86	1.01	5.31	4.08	3.48	7.35	7.03	5.47	3.95	4.29	1.30	3.82
NO0042G	gamma_HCH	air+aerosol	pg/m ³	0.78	0.88	0.87	0.86	1.07	0.65	0.71	0.89	1.19	1.02	1.01	0.66	0.89
NO0090R	gamma_HCH	air+aerosol	pg/m ³	0.82	0.71	0.63	0.79	1.36	1.01	1.25	1.48	1.75	1.35	1.66	0.92	1.16
SE0014R	gamma_HCH	air+aerosol	pg/m ³	2.00	2.00	2.26	4.00	3.03	3.40	6.00	3.00	3.00	2.07	3.80	2.00	3.06
IS0091R	HCB	air+aerosol	pg/m ³	4.42	5.80	4.91	4.19	3.52	2.12	1.99	2.03	2.99	2.90	3.26	3.07	3.42
NO0002R	HCB	air+aerosol	pg/m ³	61.2	65.5	40.4	27.8	54.6	37.1	31.0	37.7	40.9	51.0	60.0	62.4	47.2
NO0042G	HCB	air+aerosol	pg/m ³	73.0	72.6	79.2	83.3	86.6	85.2	82.3	78.9	82.4	87.0	85.3	73.9	80.9
NO0090R	HCB	air+aerosol	pg/m ³	36.1	34.0	40.9	22.7	20.9	16.6	17.3	15.6	15.7	19.8	28.0	27.7	24.2
IS0091R	cis_CD	air+aerosol	pg/m ³	0.45	0.46	0.27	0.328	0.27	0.19	0.22	0.21	0.15	0.05	0.055	0.05	0.224
NO0002R	cis_CD	air+aerosol	pg/m ³	0.387	0.248	0.383	0.557	0.544	0.49	0.668	0.627	0.559	0.481	0.491	0.452	0.492
NO0042G	cis_CD	air+aerosol	pg/m ³	0.466	0.351	0.42	0.477	0.476	0.358	0.331	0.386	0.421	0.413	0.491	0.436	0.422
NO0090R	cis_CD	air+aerosol	pg/m ³	0.491	0.447	0.517	0.524	0.463	0.456	0.448	0.47	0.533	0.56	0.517	0.454	0.492
NO0002R	cis_NO	air+aerosol	pg/m ³	0.182	0.016	0.02	0.043	0.048	0.043	0.071	0.064	0.071	0.048	0.03	0.029	0.056
NO0042G	cis_NO	air+aerosol	pg/m ³	0.027	0.014	0.028	0.037	0.062	0.051	0.049	0.06	0.067	0.043	0.027	0.015	0.04
NO0090R	cis_NO	air+aerosol	pg/m ³	0.031	0.028	0.028	0.044	0.034	0.051	0.043	0.061	0.07	0.053	0.041	0.029	0.043
IS0091R	trans_CD	air+aerosol	pg/m ³	0.16	0.17	0.14	0.14	0.2	0.13	0.17	0.11	0.055	0.05	0.055	0.05	0.119

Comprehensive Atmospheric Monitoring Programme, 2011: Deposition of air pollutants around the North Sea and the North-East Atlantic

Table A.2.8, cont.

Site	Comp	matrix	unit	jan	febr	mar	apr	may	june	july	aug	sept	oct	nov	dec	year
NO0002R	trans_CD	air+aerosol	pg/m ³	0.234	0.142	0.208	0.3	0.201	0.159	0.257	0.215	0.168	0.192	0.227	0.247	0.216
NO0042G	trans_CD	air+aerosol	pg/m ³	0.272	0.189	0.224	0.218	0.134	0.065	0.067	0.062	0.083	0.101	0.213	0.226	0.156
NO0090R	trans_CD	air+aerosol	pg/m ³	0.305	0.263	0.288	0.274	0.16	0.136	0.096	0.079	0.115	0.205	0.294	0.268	0.2
IS0091R	trans_NO	air+aerosol	pg/m ³	0.37	0.41	0.24	0.288	0.18	0.11	0.17	0.15	0.055	0.05	0.055	0.05	0.176
NO0002R	trans_NO	air+aerosol	pg/m ³	0.322	0.254	0.33	0.531	0.476	0.438	0.602	0.463	0.489	0.475	0.415	0.37	0.443
NO0042G	trans_NO	air+aerosol	pg/m ³	0.437	0.287	0.371	0.459	0.454	0.261	0.254	0.321	0.347	0.341	0.429	0.336	0.364
NO0090R	trans_NO	air+aerosol	pg/m ³	0.421	0.383	0.457	0.49	0.449	0.379	0.345	0.371	0.45	0.466	0.497	0.405	0.425

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 m ³ /day	24h, once every 4 days	UPLC with Fluorescence detection (PAHs). Dual column GC- ECD (PCBs/OCPs (lindane))
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.5m ³ /h	biweekly sampling, 3 monthly analysis	GC-MS
Iceland	bulk, (Steel funnel 1m ² /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. 20m ³ /h	NO01: 24h a week NO42: 48h a week	GC-MS
Sweden	Bulk (precip + dry dep)	monthly	High vol (filter + PU foam)	Biweekly 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

Comprehensive Atmospheric Monitoring Programme, 2011: Deposition of air pollutants around the North Sea and the North-East Atlantic

Table A.3.2: Measurements methods for HM.

Country	Precipitation		Air and aerosols		Laboratory method
	Field method	Frequency	Field method	Frequency	
Belgium	wet only	weekly	Low volume sampler Mercury Ultratracer UT 3000 (monitor)	daily continuously	ICP-MS CV-AFS (precipitation)
Germany	wet only	Weekly	Low volume sampler	weekly	ICP-MS
Hg	wet only	Weekly	TGM : monitor (Tekran)	daily (reported)	
Denmark	Bulk	Monthly	Low volume sampler, Millipore RAWP 1.2 mm, 58 m ³ /day TGM: monitor (Tekran)	daily continuously	GF-AAS
Hg					
Spain	wet only	Weekly	High-vol, PM10	24h a week	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)	continuously	ICP-MS
Iceland	Bulk	Weekly	High vol. High vol.	Biweekly Biweekly	ICP-MS CV-AAS
Hg					
Netherlands	Wet-only	weekly	Low volume sampler	24h every 2 days	ICP-MS
Hg	Wet-only	Weekly			CV-AFS
Norway	Bulk	Weekly	NO42: High Vol, 20 l/h, W41 NO01: PM10 KFG 2,3 l/h, quartz	48h a week Weekly	ICP-MS
Hg	Bulk (Hg)	Monthly	TGM: monitor (Tekran)	continuously	CV-AFS
Sweden	Bulk	Monthly	Low volume sampler, teflon filter	monthly	ICP-MS
Hg	Bulk (Hg)	Monthly	Hg: gold traps (TGM) Hg: mini traps (TPM)	2 X 24 h a week 2 X 24 h a week	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		
Belgium	wet only	biweekly	NO2: Chemiluminisence monitor NH3: passive sampler	half hourly biweekly	IC
Germany	wet only	weekly	NO2: Nal 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 mm + KOH-impregnated Whatman 41, 58 m ³ /day (filterpack) sumNH4. Millipore RAWP, 1.2 mm + Oxalic acid impregnated Whatman 41, 58 m ³ /day (filterpack)	hourly 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		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: Nal 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
Sweden	wet only	daily	NO2: Nal-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 analysis

Annex 4

Consequences of change in averaging procedure

INPUT agreed (INPUT 12/7/1-E) that in future CAMP data reports, NILU should utilise the EMEP formula for calculating monthly values, but that the implications of the difference with the method should be illustrated and discussed in this first year of application.

The difference between the two methods is how they allocate samples that cover part of two different months, e.g. that a sample represents two days in one month and five in another. For daily or higher resolution measurements there are no differences between methods. If weekly sampling is used the CAMP principle define that if a week includes two adjacent months, the measured data should be allocated to the month which comprises the largest number of days in the week in question. This is different from the EMEP procedure, here the sample is weighted given the number of days it represent the month. For precipitation measurements neither of the methods will give the correct estimate since it is crucial to know which days it has been raining and how much. Ideally one should use precipitation measurements from *i.e.* a met station nearby with daily measurements to weight the sample.

Both methods have been applied on the CAMP measurements for 2011, and in table 5.1 the average differences and max/min difference between each data series are compiled, using CAMP as the reference average. As seen, there is in general a negligible difference, less than 1%. Somewhat higher difference for precipitation than air measurements as expected. The highest difference of 9% was seen for the heavy metal measurements at GB0013 in precipitation.

The average percent difference in all the CAMP measurements, comparing the CAMP and EMEP methods for calculating average concentrations.

		Average	max	min
POPs	air	-0.002	1.3	-0.4
	precip	0.040	2.3	0.0
N	air	-0.026	0.0	-0.9
	precip	-0.166	0.5	-2.2
HM	air	0.004	1.2	-0.6
	precip	-0.356	2.3	-9.1

With these small differences it will make no problem to compare the CAMP data presented here with earlier reporting so NILU recommends to continue to report CAMP data with similar method as done in EMEP.

Germany has however an intervention that they prefer to use the old CAMP procedure and not EMEP, since they use this approach in their national reporting and they would like that these are giving the same average data. The data presented in this report has been changed in accordance to the wish from Germany, but the problem will be presented at the INPU 2013 and discussed further.



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