BALTIC SEA ENVIRONMENT PROCEEDINGS

No. 69

AIRBORNE POLLUTION LOAD TO THE BALTIC SEA 1991 - 1995

HELSINKI COMMISSION
Baltic Marine Environment Protection Commission

1997

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For bibliographic purposes this document should be cited as:
HELCOM, 1997
Airborne Pollution Load to the Baltic Sea 1991-1995
Balt. Sea Environ. Proc. No. 69

ISSN 0357-2994

Bratts Tryckeri AB, Jönköping 1997

Preface

Monitoring data on airborne pollution have been collected since 1983 by the former group "Experts on Air Pollution of of the Baltic Sea Area" (EC EGAP) according to the programme adopted by the Commision. There have been two earlier assessments reports, one covering the period 1983 - 1986 (HELCOM 1989) and one covering the period 1986 - 1990 (HELCOM 1991).

According to the decision of the Commission a third pollution load compilation for the Baltic Sea should be performed and to be published during 1997. The work has been performed by the new INPUT-group within TC.

The report has been prepared by a small group with Sweden acting as a leading country and Finland as an assisting country. This group consist of:

Carl-Elis Boström, Swedish Environmental Protection Agency, Sweden

Tuija Ruoho-Airola, Finnish Meteorological Institute, Finland

In this work we have been supported by

Meteorological Synthesing Centre West, (MSC-W), Erik Berge och Kevin Barrett, Leonid Tarrasón, Norwegian Meteorological Institute, Norway, concerning model calculations of the input of nitrogen compounds from air to the Baltic Sea.

Meteorological Synthesing Centre East (MSC-E), L. Erdman and A.Gusev, about model calculations as above for heavy metals (Pb, Cd).

Terje Krognes, Norwegian Institute for Air Research, Norway concerning database.

Eva Brorström-Lundén, Institute of Environmental Research, Göteborg, Sweden concerning organic compounds.

Juha-Pekka Tuovinen, Finnish Meteorological Institute, FMI, Finland concerning planning of the calculation part of the report.

The HELCOM-countries Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland, Russian Federation and Sweden to carry out measurements of air pollutants at HELCOM-stations and reporting data.

In agreement with MSC-W and MSC-E parts of their reports concerning emissions, models and model calculations to ECE/EMEP for 1997 have been taken into this report.

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Baltic Sea environment proceedings

Summary

Monitoring data on airborne pollution around the Baltic Sea have been collected since 1983 by the former group "Experts on Air Pollution of of the Baltic Sea Area" (EC-EGAP) according to the programme adopted by the Commision. There have been two earlier HELCOM assessments reports, one covering the period 1983 - 1986 and one covering the period 1986 - 1990. According to the decision of the Commission a third pollution load compilation for the Baltic Sea should be performed and be published during 1997. The work has been performed by the new TC-INPUT-group within HELCOM.

The atmospheric load of phosphorus is assumed to be negligible compared to the load via the rivers, therefore only nitrogen load will be discussed within the airborne pollution of nutrients.

Concerning load of air pollutants to the Baltic Sea there are two sources to be taken into account: the deposition on the sea area and the deposition on the catchment area. Recent estimations performed by MSC-E show that around 10 % of the deposited nitrogen on the catchment area can be transported to the Baltic Sea by rivers. This load is about 126 000 t/yr (mean value 1987 - 1991) compared to 315 000 t/yr directly deposition to the sea area (mean value for the same period).

At present it is not possible to give any results concerning changes in deposition for persistent organic compounds as the measurements have started during the latest years and the models for calculating deposition are still incomplete and under development. The changes in airborne pollution load will therefore be given for nitrogen and some heavy metals (Cd and Pb).

The airborne pollution load of nitrogen to the Baltic Sea increased gradually during the twentieth century and was on its highest in the middle of 1980s. From the middle of the 1980s to 1995 there have been a decrease with about 10 - 25 % in the catchment area around the Baltic Sea. The deposition on the proper Baltic Sea is estimated to have decreased with 20 - 30%. Some of this decrease can depend on favourable weather conditions during late years. According to the estimates of the Norwegian Meteorological Institute the meteorological variability, change from year to year, can be responsible for one third to half of this reduction.

Model calculations performed by MSC-W show that the anual depositions of total nitrogen to the Baltic Sea during the years 1985 - 1995 have decreased with about 30 % (e g the trend is a 30 % reduction during this decade). The decrease in pollution load of nitrogen to the Baltic Sea seems to be roughly the same for ammonia and nitrogen oxides.

There are of course uncertainties in these calculations depending on emission estimations and their trends and the capability of the models to describe the deposition on open sea.

Official EMEP-emission data show about 20 % reduction of nitrogen dioxide and ammonia emissions for the period 1985 - 1995 in the five largest contributors (Denmark, Germany, Poland, Sweden and United Kingdom) to nitrogen deposition over the Baltic Sea. For the total EMEP area the reduction of nitrogen dioxide emission is about 10 % and ammonia emission

about 15 %. Emission reduction of nitrogen oxides and ammonia can account one half to two third of reduction of the atmospheric nitrogen load.

The 30 % reduction of nitrogen deposition seems to be a little high compared to the emission reductions. 25 % seems to be more realistic. The reduction was only 5 % in 1986 - 1990 and 17 % for the period 1991 - 1995. Anyhow, a clear improvement can be seen concerning the pollution load of nutrients to the Baltic Sea during this decade.

Data from model calculations about deposition of heavy metals are not so complete as for nutrients and the rate of uncertainties is larger. Realistic deposition calculations are only available primary for lead and also for cadmium. The latest European emission values for heavy metals from the ESQUAD project for the year 1990 were used in these calculations. According to MSC-E estimates, averaged yearly depositions to the Baltic Sea during the period 1991- 1995 amount to 637 tonnes Pb and 27 tonnes Cd. Inter-annual variation coefficients were estimated to 6 % for lead and 7 % for cadmium. These variation coefficients were calculated for constant emission values and variable meteorological conditions. Consequently, they provide a quantification of the expected variability of lead and cadmium depositions over the Baltic Sea due to changes in the meteorological conditions of the first half of the 1990s.

The largest uncertainty, however, is related to the estimates of lead and cadmium emissions. The upper and lower limits of expert emission estimates used by MSC-E in their calculations differ by a factor of 3 in the case of lead, and over a factor of 10 in the case of cadmium. Although comparison of expert estimates of lead emissions suggest a decreasing trend in the emissions since the mid eighties, the reduction remains within the uncertainty ranges, and no conclusions can be drawn to this respect.

Previous model estimates of lead and cadmium depositions for the period 1986 - 1990 were based on emission estimates almost a factor of 2 larger than the emission estimates presently used by MSC-E. Model intercomparisons have shown that, indepently of the emission totals used, the fraction of European emission deposited on the Baltic Sea area is similar for most models. This implies that although the different models may manage a reasonable simulation of atmospheric transport for both metals, the large uncertainty in emission estimates limits their potential for environmental assessment. Consequently, no conclusions can be derived on temporal trends by comparing present estimates with former assessment of heavy metal deposition to the Baltic Sea.

1. Introduction

This report aims to describe the load of air pollutants to the Baltic Sea of nutrients (nitrogen oxides and ammonia) by help of measurements and model calculations and to drew conclusions about trends in concentrations and deposition during the years 1986 - 1995. In some cases the trend has been calculated by comparing the periods 1986 - 1990 with the period 1991 - 1995. A rough calculation has been made about the importance of the deposition on the Baltic Sea Catchment area for nutrients and this load to the Baltic Sea. The atmospheric load of phosphorus is assumed to be negligible compared to the load via the rivers, so only nitrogen load will be discussed within the airborne pollution of nutrients.

2. Material and methods

Measurements and model calculations have been used to estimate the load of pollutants to the Baltic Sea and comparisons of the two methods have been done. Data for estimation of the load by measurements has been possible by support of measurement data from the different HELCOM-countries. Emission data has in principle been taken from the work done within UN/ECE/EMEP (EMEP, 1997).

2.1 Baltic Sea, geographical and climatological information

Baltic Sea area is the Baltic Sea Proper, the Gulf of Bothnia, the Gulf of Finland and the entrance to the Baltic Sea bounded by the parallel of the Skaw (Skagen) in the Skagerrak. The Baltic Sea is bounded by the coastline of Sweden, Finland, Russia, Estonia, Latvia, Lithuania, Poland, Germany and Denmark.

The Baltic Sea covers an area of about 415 000 km^2. The total Baltic Sea drainage area comprises 1 720 270 km^2, with nearly 93 % belonging to the Contracting Parties and 7 % (104 500 km^2) belonging to non-Contracting Parties. The Baltic Sea is in this report devided in five sub-basins Gulf of Bothnia, Gulf of Finland, North Baltic Proper, South Baltic Proper, Belt Sea and Kattegat.

In connection with deposition of air pollutants on the Baltic Sea catchment area it can be interesting to mention that the total long term mean riverine run-off to the Baltic Sea is 15 190 m^3/s (479 km^3/yr), of which nearly 50 % drains via the seven biggest rivers River Neva, River Vistula, River Daugava, River Nemunas, River Kemijoki, River Oder and River Göta älv.

2.2 Monitoring programme and network, sampling and analytical methods

The monitoring programme for the HELCOM/EGAP stations has been described in detail in the HELCOM Recommendation 14/1 concerning monitoring of airborne pollution load, adopted 3 February 1993.
Figure 2.2.1. and Table 2.2.1 show and list the stations of the EGAP network in 1986 - 1995 or part of this period. Only a few stations have run measurements for the whole period 1986 - 1995.

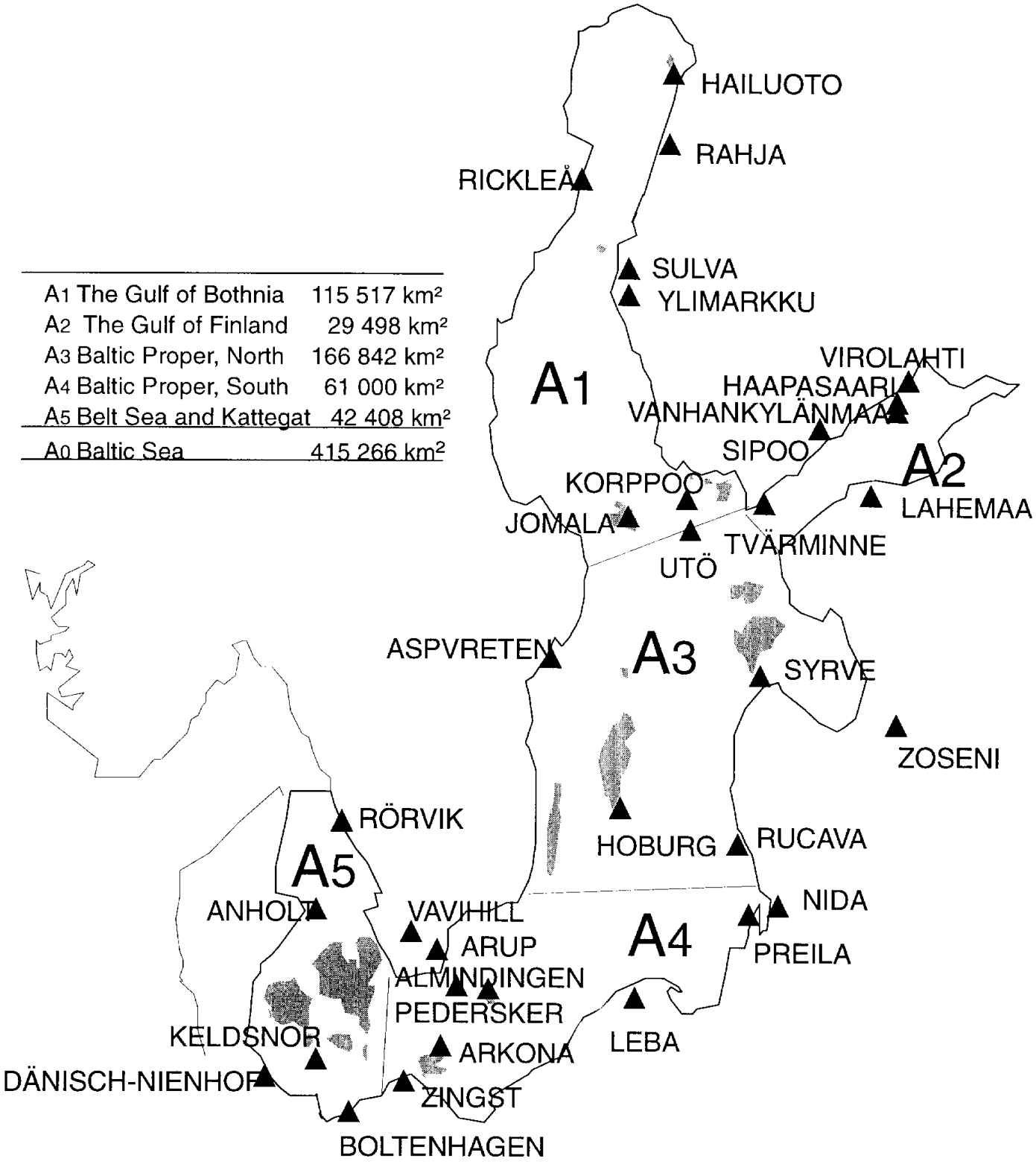

Figure 2.2.1. The HELCOM/EGAP network stations 1986 - 1995

Table 2.2.1. The HELCOM/EGAP network stations 1986 - 1995.

Sub-basin	Station	Country	Period	Surrounding area
Gulf of Bothnia	Hailuoto	FI	1986-1995	open sandy seashore
	Rahja	FI	1986-1993	forest land
	Rickleå	SE	1986-1994	forest, open rocky terrain
	Sulva	FI	1986-1991	agricultural land
	Ylimarkku	FI	1986-1993	agricultural and forest land
	Korppoo	FI	1986-1993	forest land
	Jomala	FI	1986-1993	agricultural land
Gulf of Finland	Virolahti*	FI	1986-1995	agricultural land
	Haapasaari	FI	1989-1995	rocky terrain, forest, island
	Vanhankylänmaa	FI	1986-1988	rocky terrain, island
	Sipoo	FI	1986-1993	agricultural land
	Lahemaa*	EE	1986-1990	forest land
	Tvärminne	FI	1986-1993	forest land
Baltic Proper, North	Utö*	FI	1986-1995	rocky terrain, island
	Aspvreten*	SE	1986-1995	forest land
	Syrve*	EE	1986-1990	land, sea
	Zoseni*	LV	1994-1995	forest
	Rucava*	LV	1986-1995	cultivated land
	Hoburgen*	SE	1986-1995	cultivated land
Baltic Proper, South	Nida*	LT	1986-1990	sea, forest
	Arup	SE	1990-1995	forest land
	Leba*	PL	1988-1995	meadow
	Arkona*	DE	1986-1991	grassland
	Preila*	LT	1991-1995	
	Zingst*	DE	1991-1994	agricultural area, nearby the sea
	Almindingen	DK	1991-1993	forest
	Pedersker	DK	1994-1995	forest, agricultural area
Belt Sea and Kattegat	Vavihill*	SE	1986-1995	forest, acricultural area
	Rörvik*	SE	1986-1995	cultivated land, forest, water
	Anholt*	DK	1991-1995	bog, grassland
	Keldsnor*	DK	1986-1995	cultivated land, beach
	Dänish-Nienhof	DE	1987-1990	forest, cultivated land
	Boltenhagen	DE	1990-1991	agricultural area, nearby the sea

* EMEP stations

The HELCOM member countries frequently report technical details about measurements. All the reports concerning e.g. the organisation running the measurement, the surrounding of the station, methods used for sampling, monitoring and analysis of components are collected by the HELCOM consult in Data Manager, the Norwegian Institute for Air Research, NILU. Most countries use today methods described in the EC/EMEP Manual for sampling and analysis (EMEP/CCC, 1996). Detailed information about methods used in different times of the monitoring period is available from the Data Manager. A list of coverage of measurements as well as some information about methods is as Appendix 1 of this report.

Most results for the years 1991 - 1995 are supplied to this report, however some measured data could not be taken into this report because of late reporting of data from the country to the Data Manager or changes in the database, which delayed reporting to the Project Managers of the PLC AIR/91-95.

2.3 Numerical models

All calculations presented in this report concerning nitrogen have been prepared at EMEP /MSC-W with the one-layer Lagrangian trajectory acid deposition model with 150 km resolution. This model has been used at MSC-W to quantify the depositions and air concentrations of acidifying and eutrophying compounds over Europe and to produce allocation matrices. Detailed descriptions of the model as well as extensive evaluations of its performance can be found in Iversen (1993) and Barrett et al. (1995).

Calculations on atmospheric dispersion and deposition of lead and cadmium have been carried out at EMEP/MSC-E. The results on lead and cadmium presented in this report have been calculated by the MSC-E ASIMD model. This model is a four layer Eulerian model with 50 km horizontal resolution that uses an assymetric advection scheme. The model has participated in the intercomparison study of long range transport of lead carried out under EMEP (WMO/TD No 86, 1997 and reported by Sofiev et al (1996). Model results have also been compaired with lead and cadmium measurements of the PARCOM network and conclusions from that intercomparation are reported in Pekar (1996).

3. Results

3.1 Precipitation

Experimental estimates of the deposition of pollutants to the sea surface has to be based on extrapolation out over the sea of measurements performed at locations on the coast or on islands. If estimates for atmospheric wet deposition are to be obtained information on occurence, magnitude and distribution of precipitation is necessary. Methods for calculation of the distribution of precipitation is necessary. The amount of precipitation is very important to get correct estimates of the wet deposition of pollutants. Sometimes discussions arise wether it is best to use the precipitation amount got at the measurement stations or data from official meterological stations. The methods to calculate precipitation is more excatly described in a HELCOM-report (HELCOM 1991).

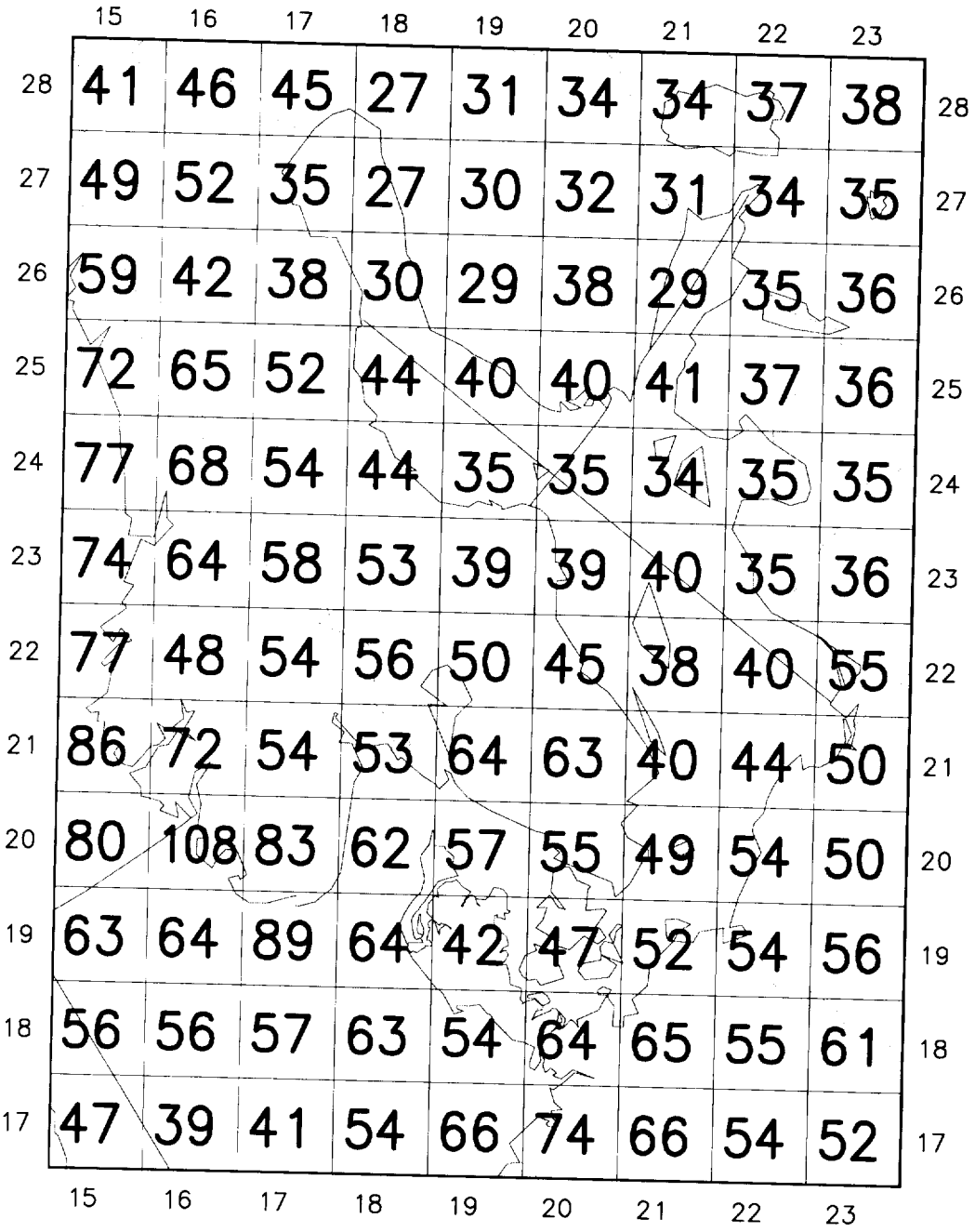

Figure 3.1. Annual Precipitation (cm), 1993. Hybrid modell estimates.

3.2 Nitrogen concentration and deposition

The measurements of nitrogen compounds has been an obligatory part of the HELCOM/EGAP monitoring programme from the beginning. According to the HELCOM Recommendation 14/1 each Baltic Sea State should have at least one station on the sea or on the coast monitoring nitrogen dioxide (NO_2), total nitrate [(HNO_3+NO_3^-)–N] and ammonia+ammonium [(NH_3+NH_4^+)–N] in the air, as well as nitrate (NO_3^-–N) and ammonium (NH_4^+–N) in precipitation.

Appendix 2 and 3 of this report is from the HELCOM database at the Data Manager NILU and contains all the measured and reported data ready for publication by September 1997.

3.2.1. Nitrogen dioxide

NO_2 has been measured at 16 stations around the Baltic Sea. At four stations measurements cover the whole period 1986 - 1995. Figure 3.2.1.1. shows the variation in annual NO_2–N concentration at these four stations. Most of the annual mean values at the stations are 1 - 2.5 $\mu g/m^3$.

No clear trend can be seen in the time series of the NO_2 concentration measurements. When comparing the mean concentration of 1986 - 1990 to that of 1991 - 1995 the results were different at the various stations: a small increase (10 - 20 %) could be detected at Rörvik and Hoburg, while at Vavihill the level remained constant and at Rucava a small decrease was seen. It is difficult to say if these marginal changes are real: because of the very low NO_2 concentrations at the Baltic stations the errors in measurements might be large enough to cover a change of ± 10 %.

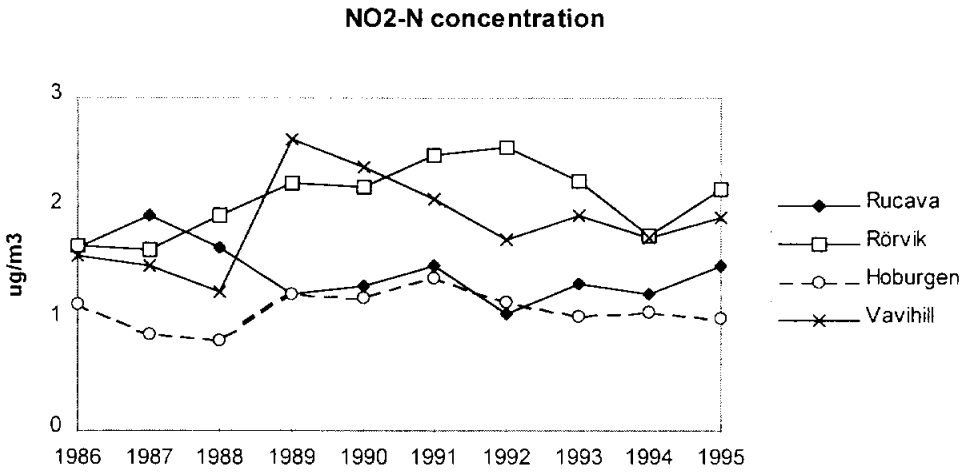

Figure 3.2.1.1. Annual mean NO_2–N concentration at some Baltic measuring stations

The quality of the NO_2 measurements of countries using the absorption solution method have been tested by the EMEP/CCC in interlaboratory comparisons. In the years 1995 - 1997 three tests have been made and 6-8 HELCOM countries participated in them. Only once the accuracy of a laboratory was in the group "need improvement", which meens a relative deviation of 10 - 20 %. All other results were better than 10 % relative deviation from the expected value (EMEP/CCC 1995,1996,1997 and Hanssen, 1997).

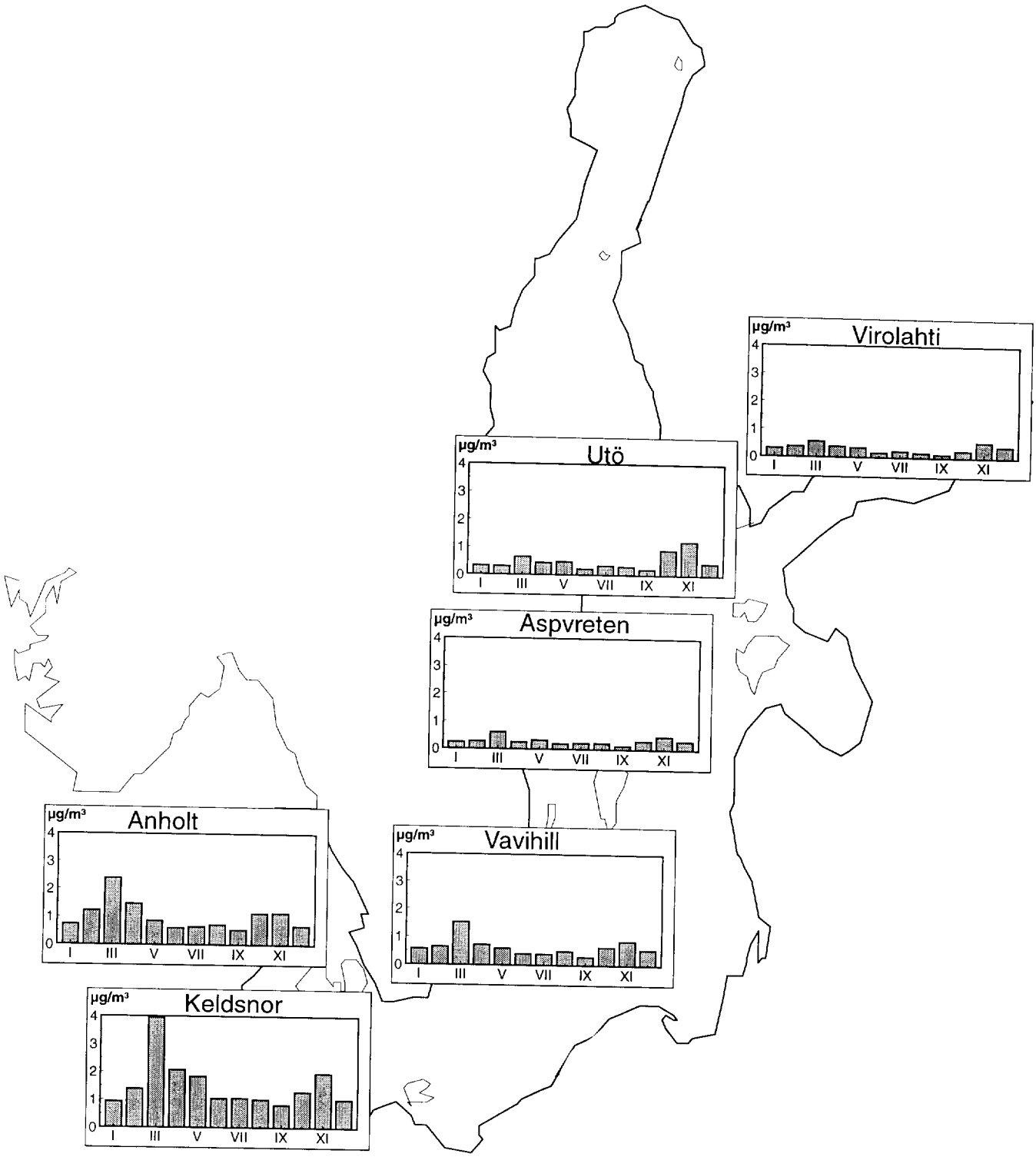

Figure 3.2.2.1. Monthly mean values of [$HNO_3 + NO_3^-$] - N at some Baltic measuring stations in 1993, unit µg/m^3

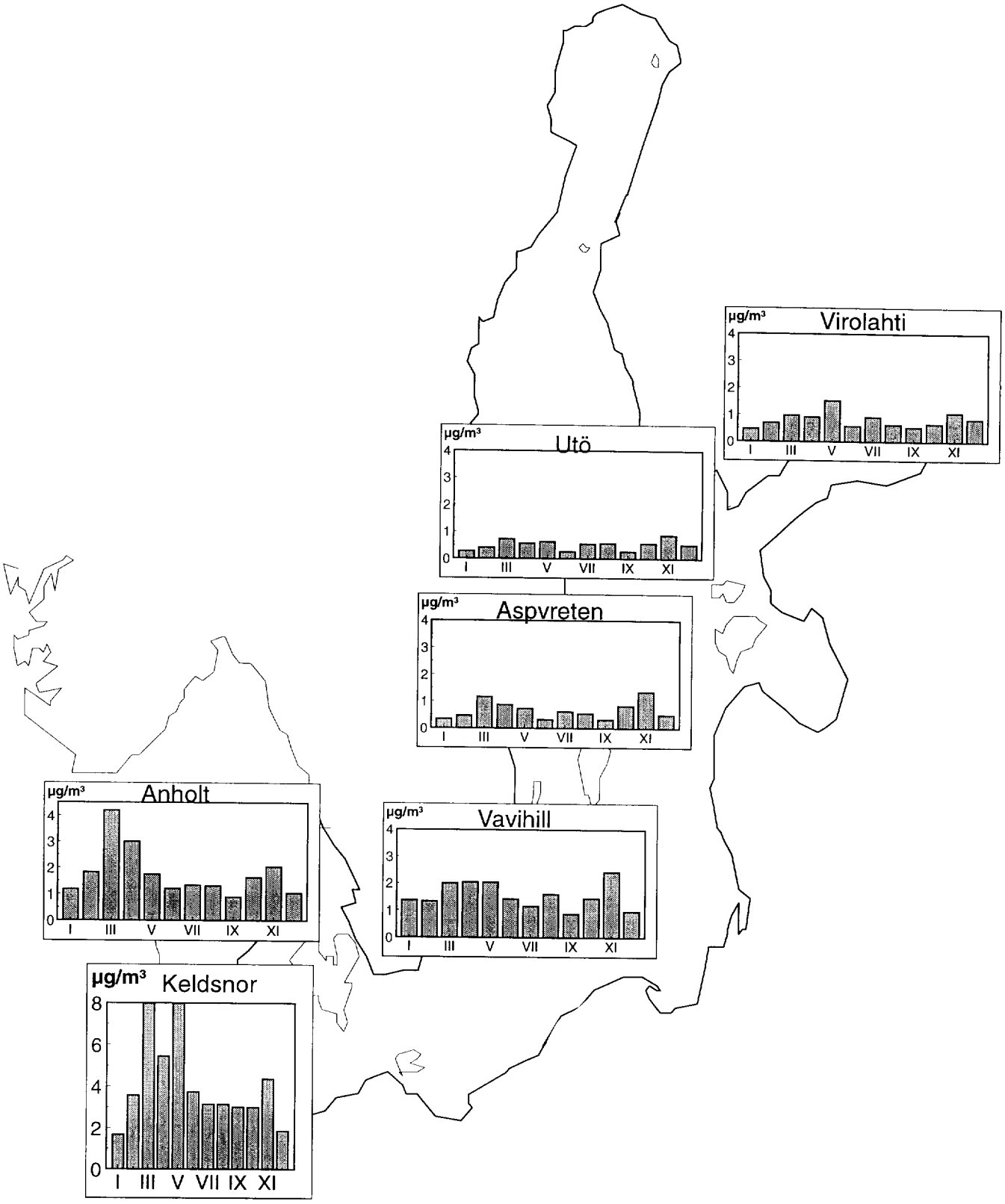

Figure 3.2.2.2. Monthly mean values of [NH_3 + NH_4^+] -N at some Baltic measuring stations in 1993, unit µg/m^3

3.2.2. Total nitrate and ammonium+ammonia in the air

Total nitrate (HNO_3+NO_3^-)–N and ammonium+ammonia (NH_3+NH_4^+)–N in the air have been measured at 14 stations during the period 1986 - 1995. Furthermore, separate concentrations of the gaseous and particulate compounds are available at 8 stations. The data series of these measurements are usually short covering only a few years. Therefore only regional and seasonal variations can be detected from the data.

Figure 3.2.2.1. shows total nitrate concentrations in 1993 at some Baltic measuring stations, Figure 3.2.2.2. the same for ammonium+ammonia concentration. In 1993, in the middle of the PLC 91-95 reporting period, six stations carried out total nitrate and seven stations ammonia+ammonium measurements.

The concentration of total nitrate in the air is highest at the south-western stations and decreases slowly northwards besides at Aspvreten where the concentrations were surprisingly low. High monthly concentrations have been measured in February-May and October-November.

In 1993, in addition to the total nitrate monitoring, particulate nitrate was measured at Preila and Rucava stations and gaseous nitrate at Preila station on the eastern coast of the Baltic Proper. The annual mean concentration of nitrate-nitrogen at these stations is 0.3 $\mu g/m^3$, well compatible with the results of the other stations.

The regional variation of ammonia+ammonium in the air resembles greatly that of total nitrate. The concentration is highest in the south-western part of the Baltic Sea and the monthly mean value peaks at all stations in March-May and again in November. The relatively high concentrations at Virolahti may partly be due to the vicinity of animal husbandry. The concentration of the nitrogen in ammonia+ammonium concentration is slightly higher compared to the level of nitrate nitrogen in the total nitrate.

Monthly means of ammonia+ammonium in the air at Zingst were 25 - 100 % higher than those at Keldsnor in 1993. Annual average at Zingst was 5 $\mu g /m^3$, and maximum monthly mean 16 $\mu gN/m^3$ was measured in March.

Results of the separate measurements of ammonia and ammonium at Zingst, Keldsnor, Anholt and Preila are compatible with results shown in Figure 3.2.2.2.

In the database there is no complete data series of total nitrate and ammonia+ammonium concentrations in the air over the whole reporting period 1986 - 1995 of any of the Baltic stations. Calculations of the trend in the concentration of these elements can be made first when longer time series are available. Anyway, annual concentrations of total nitrate and ammonia+ammonium in the air at Vavihill and Aspvreten were lower in 1993 - 1995 than in 1986 - 1990, the same can not be detected in the Rörvik data.

3.2.3. Nitrate and ammonium in precipitation

Nitrate and ammonium in precipitation has been monitored at almost 30 Baltic stations.

Stations situated in various parts of the coast of the Baltic Sea and covering a long sampling period were chosen to show the geographical variation and the trends.
Figure 3.2.3.1. presents the annual mean of ammonium and nitrate concentrations in precipitation in 1986 - 95 and Figure 3.2.3.2. presents the annual deposition of ammonium and nitrate in the same years.

The annual mean concentrations of the compounds are below 0.5 mg/l at stations in the northern part of the Baltic Sea, and 0.5 - 1 mg/l at the stations of the Baltic Proper as well as Belt Sea and Kattegat. The highest concentrations are measured at Preila. The proportion of nitrate and ammonium to the total nitrogen concentration in precipitation are almost equal at all stations.

The annual deposition of ammonium-nitrogen and nitrate-nitrogen is about 200 mg/m^2 at the stations of the Gulf of Bothnia, 200 - 500 mg/m^2 at all the other stations shown in the Figure 3.2.3.2. except Preila and Arup, where especially the deposition of ammonium-nitrogen often exceeds 500 mg/m^2.

Part of the precipitation data in the database is bulk deposition, while the other part represent wet-only deposition. The wet-only deposition is preferred in the HELCOM Recommendation. The sampling time at different stations may also differ from each other. Consequently, the illustrations of the situation around the Baltic Sea in Figures 3.2.3.1. and 3.2.3.2. should be considered as preliminary.

Similarly to the intercomparison of nitrogen dioxide measurements, the EMEP/CCC tests also show the quality of nitrogen analysis in the deposition of the laboratories. In the EMEP interlaboratory tests during 1995 - 1997 nine to twelve HELCOM country laboratories participated yearly. Most nitrate and ammonium analyses were reported to be in class very good, relative error <5%, alltogether 8 times during 3 years the result of a laboratory had relative error between 10 - 20 % either for nitrate or ammonium (EMEP/CCC 95, 96, 97, Hanssen, 1997).

The relative difference in yearly deposition of nitrate and ammonium in three parallel samplers was mostly under 25 % in a Finnish field test. The limit of 25 % was exceeded once for nitrate deposition and three times for ammonium deposition during the 7 year long period at four stations (Ruoho-Airola and Leinonen, 1996).

For those stations with measurements over the whole reporting period, mean values of the first five-year period 1986 - 1990 (mean 80) and the later period 1991 - 1995 (mean 90) have been calculated. Figures 3.2.3.3. and 3.2.3.4. show relative changes [=100*(mean90 - mean80)/mean80] in the mean values of the both compounds, both in concentrations as well as in depositions. These changes might describe fairly well the trend of airborne nitrogen pollution to the Baltic Sea within the period 1986 - 1995.

The mean concentration of nitrate-nitrogen in precipitation in 1991 - 1995 has decreased compared to the mean value of 1986 - 1990 at all stations, Figure 3.2.3.3. The decline is largest at the stations of the Gulf of Bothnia and the Gulf of Finland as well as Belt Sea and Kattegat: about 20 %. The mean concentration of ammonium-nitrogen in precipitation in 1991

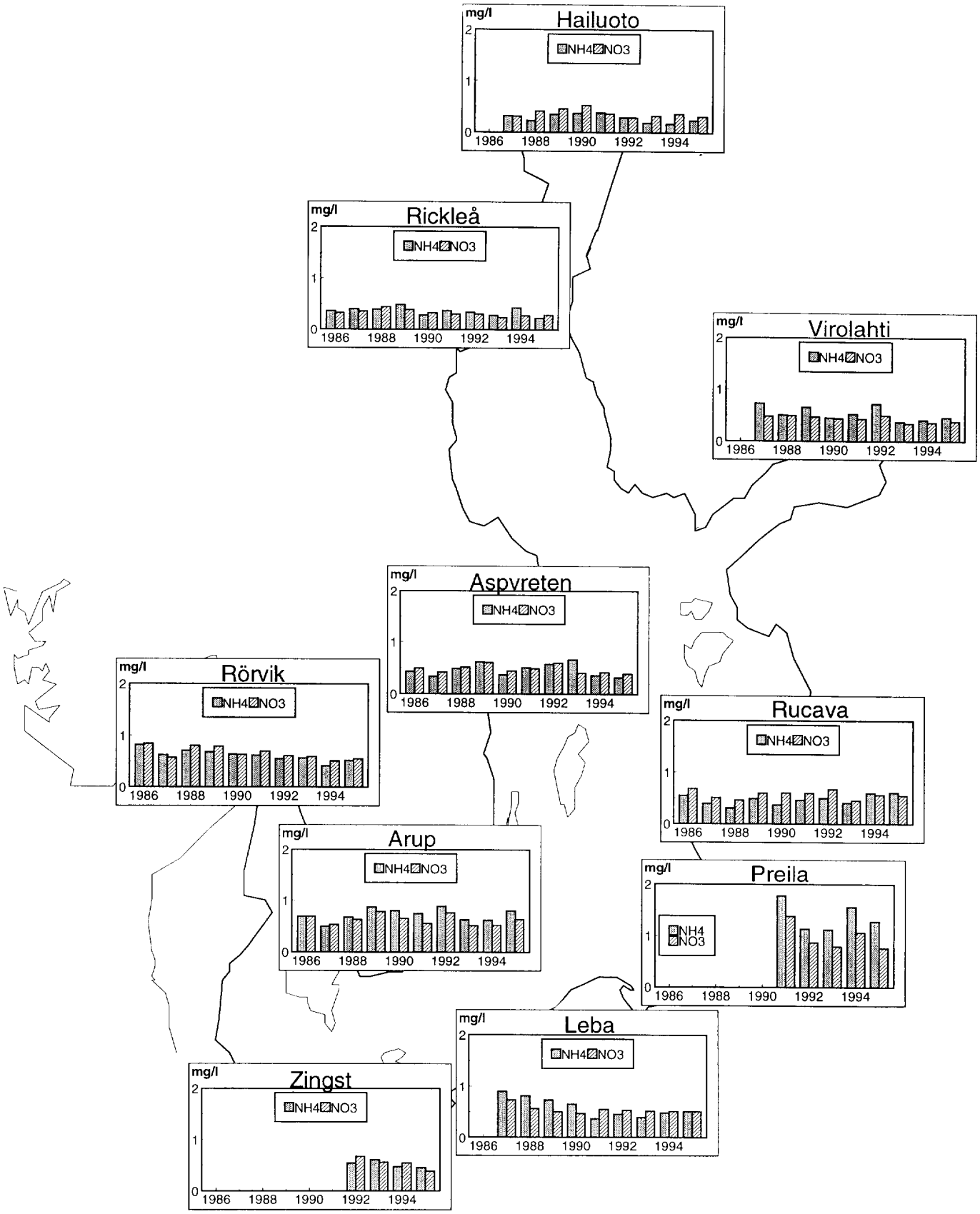

Figure 3.2.3.1. Annual mean NH_4^+ -N and NO_3^- -N concentrations in precipitation at some Baltic measuring stations 1986 - 1995, unit mg/l

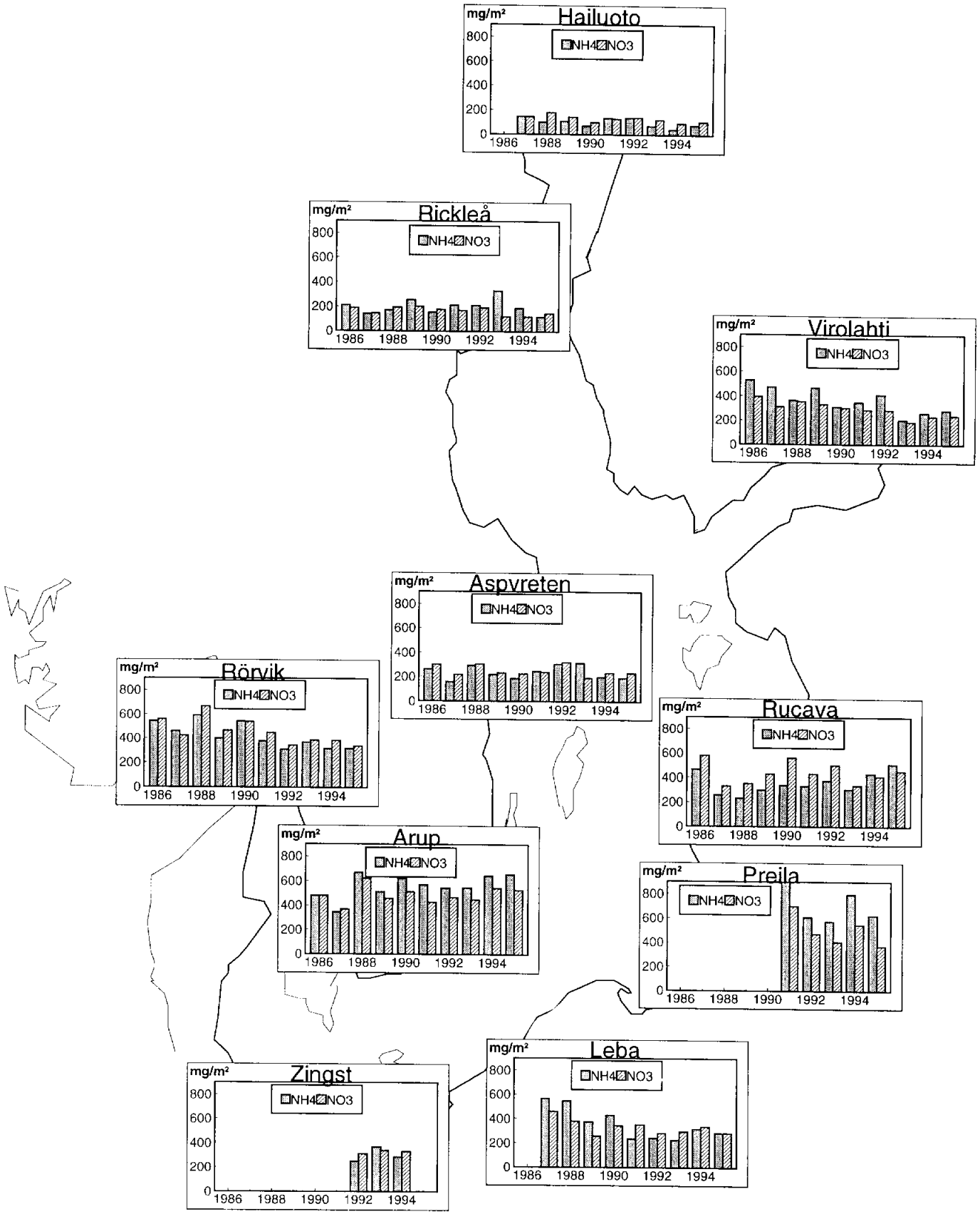

Figure 3.2.3.2. Annual NH_4^+ -N and NO_3^- -N deposition at some Baltic measuring stations 1986 - 1995, unit mg/m^2

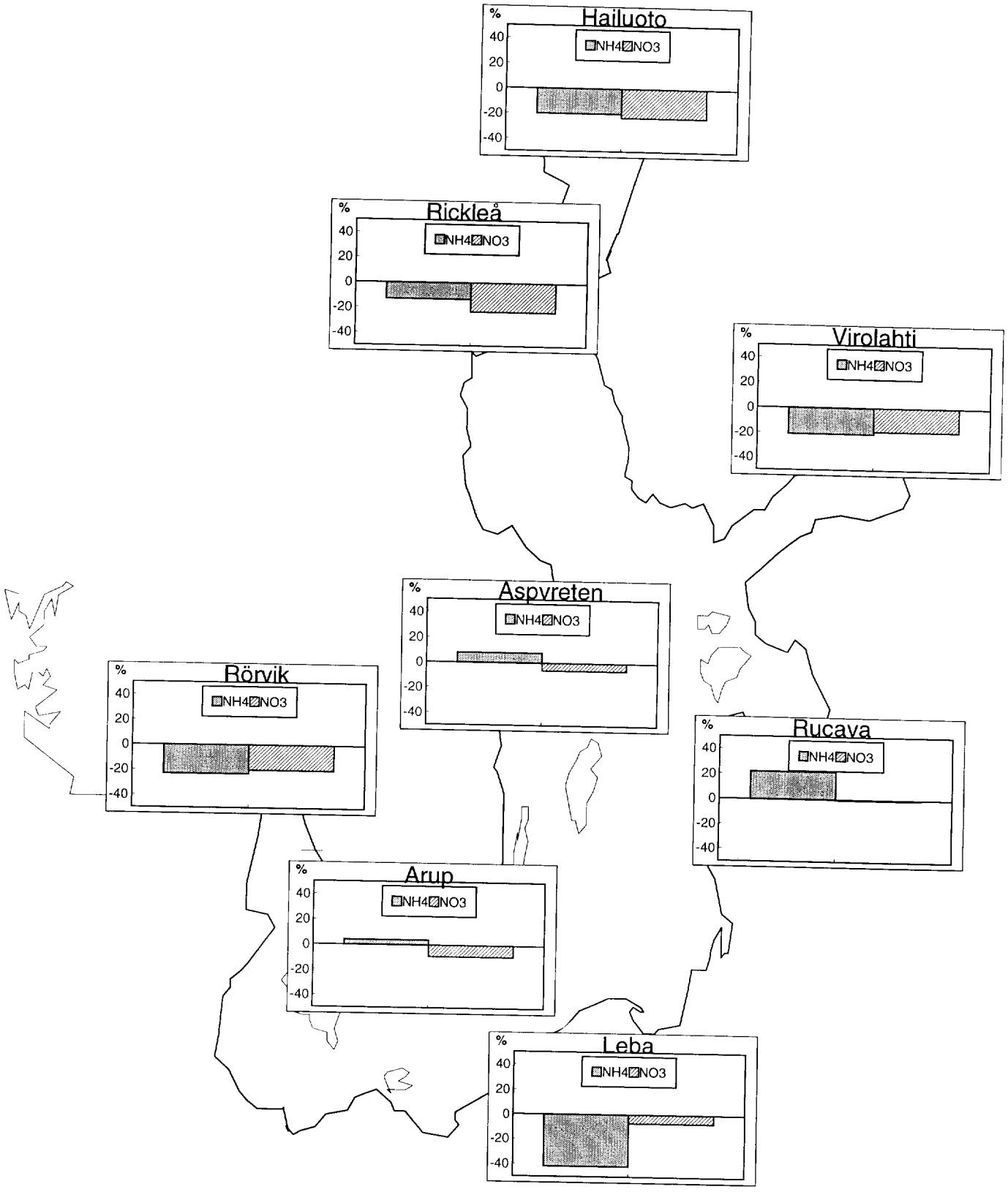

Figure 3.2.3.3. Relative changes of NH_4^+ -N and NO_3^- -N concentration in rainwater, mean value 1991 - 1995 compared to mean value 1986 - 1990 at some Baltic measuring stations

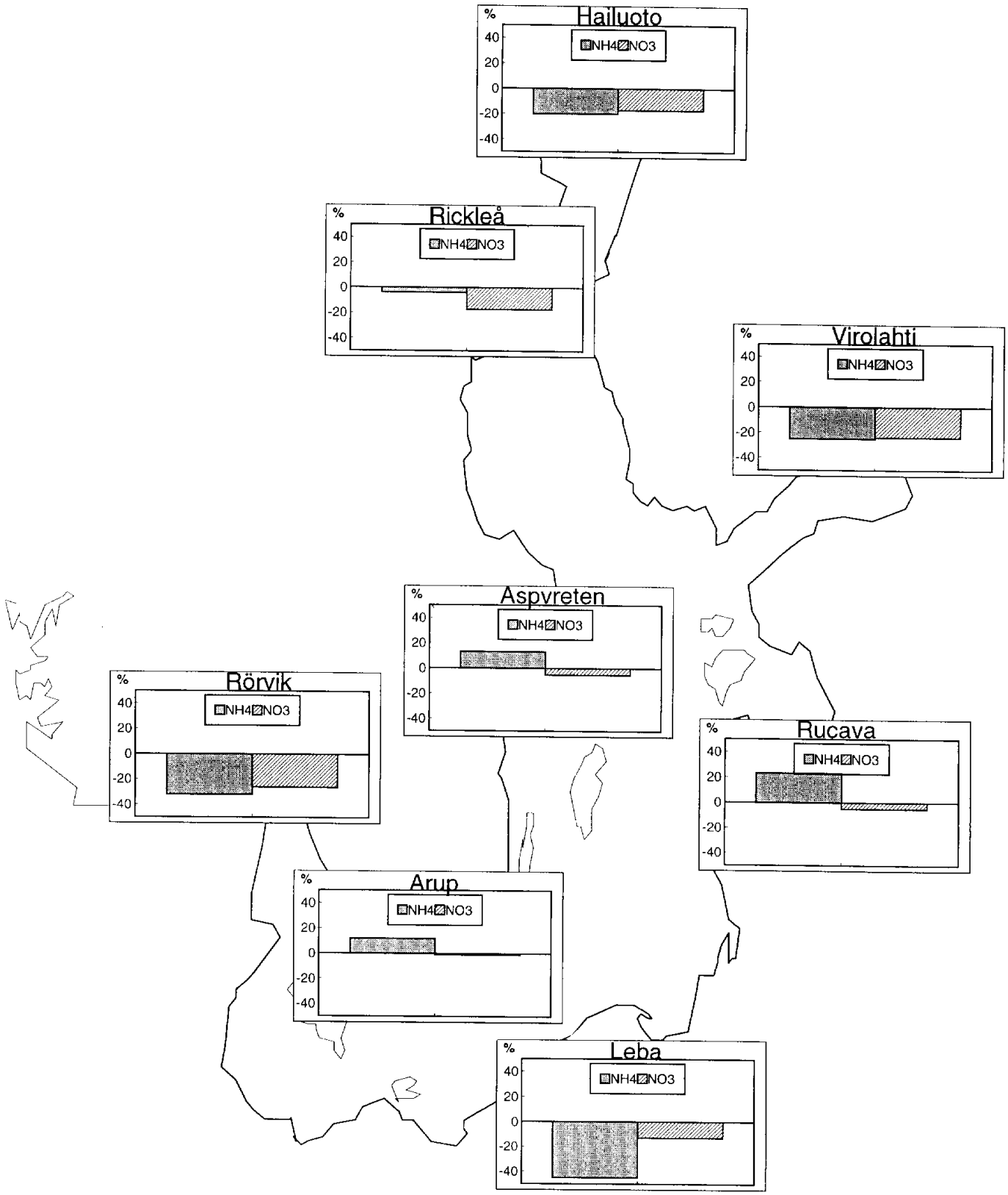

Figure 3.2.3.4 Relative changes of NH_4^+ -N and NO_3^- -N depositions, mean value 1991 - 1995 compared to mean value 1986 - 1990 at some Baltic measuring stations

- 1995 has decreased compared to the mean value of 1986 - 1990 at all other stations except Arup, Aspvreten and Rucava. A decrease of 40 % in the mean concentration was calculated for Leba, while the reduction at Hailuoto, Virolahti and Rörvik was less significant: 20 %. The rise of mean concentration was about 10 % at Aspvreten and 20 % at Rucava.

Finally, the changes in nitrate-nitrogen and ammonium-nitrogen deposition from 1986 - 1990 to 1991 - 1995 are shown in Figure 3.2.3.4. The nitrate-nitrogen deposition has decreased at all stations: about 25 % at Virolahti and Rörvik, about 15 % at Rickleå, Leba and Hailuoto. The changes in ammonium-nitrogen deposition are similar to the changes in concentration. A decline of 20 - 50 % has been calculated at the stations Leba, Hailuoto, Virolahti and Rörvik, a minor decrease at Rickleå and an increase of 10 - 20 % at the other stations.

3.3 Nitrogen, model calculations, emissions, fluxes, depositions, origin of the load.

Most parts ot texts, tables and figures in this section have been taken from the report Atmospheric supply of nitrogen, lead and cadmium to the Baltic Sea (EMEP/MSC-W, 1997).

Concerning load of air pollutants to the Baltic Sea there are two sources to be taken into account: the deposition on the sea area and the deposition on the catchment area. Recent estimations performed by MSC-E (MSC-E, 1996) show that about 10 % of the deposited nitrogen on the catchment area can be transported to the Baltic Sea by rivers. This load is about 126 000 t/a (mean value 1987 - 1991) compared to 315 000 t/a directly deposition to the sea area (mean value for the same period).

3.3.1 Atmospheric supply of nitrogen to the Baltic Sea, 1991 - 1995

All calculations presented in this chapter have been prepared at EMEP /MSC-W with the one-layer Lagrangian trajectory acid deposition model with 150 km resolution. This model has been used at MSC-W to quantify the depositions and air concentrations of acidifying and eutrophying compounds over Europe and to produce allocation matrices. Detailed descriptions of the model as well as extensive evaluations of its performance can be found in Iversen (1993) and Barrett et al. (1995).

Following the distinction commonly used by HELCOM, the Baltic Sea has been divided here in five different sub-basins. For each sub-basin, differences in the spatial distribution and seasonal variations of nitrogen deposition are studied and country-to-sub-basin allocation matrices are calculated. Inter-annual variations both of emissions and depositions of nitrogen are studied. Temporal deposition trends are compared to those of the previous period of HELCOM assessment, 1986 - 1990, and they are related to emission reductions inside the Baltic Sea influence area.

3.3.2 Emissions of nitrogen oxides and ammonia

The nitrogen deposition estimates presented in this chapter are based on the 1997 update of nitrogen oxides and ammonia emissions from the EMEP/MSC-W database. This emission database consists of official emission data reported to the ECE Secretariat from the Parties under the Convention on Long Range Transboundary Air Pollution (LRTAP) and qualified

estimates over other regions within the EMEP modelling area. The present status of the emission database is documented in the MSC-W Status Report 1997 (Barrett, 1997).

Emissions are also subject to spatial and seasonal variations. For nitrogen oxides, country specific monthly variations are prescribed. Over northern european countries, this generally implies maximum emissions during the winter and minimum in summer. Ammonia emissions are considered to peak in summer with a factor of 1.3 falling to 0.7 in winter.

Emission totals of nitrogen oxides are summarized in Table 3.3.1, for countries of relevance for the Baltic Sea area. The upper part of the table contents emission totals from all the Contracting Parties to the Helsinki Commission. The central panel includes emissions from other countries contributing significantly to nitrogen deposition to the Baltic Sea. The countries added in the central panel are determined from the allocation. The lower panel in Table 3.3.1 considers the total emission inside the EMEP modelling domain. Analogously, Table 3.3.2 summarizes the country totals of ammonia emissions.

Note here that the latest official national emission data in the 1997 update refers to 1995. National official emissions are reported one year in arrears. This is the reason why the annual summary EMEP report to HELCOM will normally report depositions from two years before.

Table 3.3.1. Emissions of nitrogen oxides (1000 tonnes of NO_2 per year)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Denmark	320	312	302	282	279	321	276	274	272	250
Estonia	93	93	93	93	93	78	59	48	50	50
Finland	277	288	293	301	300	290	283	282	282	259
Germany	2546	2427	2306	2146	1962	1954	1862	1810	1766	1766
Germany, former GDR	740	750	743	746	678	555	495	464	444	444
Latvia	90	90	90	90	90	52	43	37	45	29
Lithuania	169	171	172	173	158	166	98	78	77	67
Poland	1590	1530	1550	1480	1279	1205	1130	1120	1105	1120
Russian Federation[1]	1871	2653	2358	2553	2675	2571	2298	2269	1995	1995
Sweden	432	437	432	418	411	410	383	378	372	362
HELCOM PARTIES	8128	8751	8339	8282	7925	7602	6927	6760	6408	6342
Belgium	317	331	345	357	352	354	354	340	345	345
Czech Republic	826	816	858	920	742	725	698	574	435	412
France	1618	1630	1615	1772	1585	1632	1597	1544	1682	1666
Netherlands	587	599	602	584	575	575	566	552	542	518
Slovak Republic	197	197	212	227	227	212	192	184	173	173
United Kingdom	2535	2659	2744	2919	2897	2805	2720	2548	2422	2295
The Baltic Sea	80	80	80	80	80	80	80	80	80	80
"Baltic Influence Area"	14288	15063	14795	15141	14383	13985	13134	12582	12087	11831
EMEP total	23616	24595	24442	25025	24480	23783	22604	21686	21199	20903

(1) The part inside the EMEP domain of calculation.

Tables 3.3.1 and 3.3.2 show how every country has a different emission trend. Some countries, like Finland, experienced an increase of nitrogen emissions during the second half of the eighties, while other countries, like Lithuania, reported a steady decrease during the last half of the eighties followed by a steep decline thereafter.

Independently of the group of countries considered, emissions of NOx are characterised by a stable peak in the late 1980s and a gentle decrease in the 1990s. For ammonia, emission reduction occurs more evenly through the considered period, in the countries where emissions had been reported.

Table 3.3.2. Emissions of ammonia (1000 tonnes of NH_3 per year)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Denmark	122	117	115	113	109	110	114	119	113	114
Estonia	29	29	29	29	29	29	29	29	29	29
Finland	35	35	35	35	35	34	33	33	32	31
Germany	580	572	560	556	516	456	441	431	423	423
Germany, former GDR	266	265	270	262	243	214	208	203	199	199
Latvia	44	44	44	44	44	42	33	20	17	17
Lithuania	89	90	89	86	84	85	81	80	80	44
Poland	550	550	550	550	508	450	342	382	384	380
Russian Federation[1]	1286	1277	1269	1258	1191	1161	1084	903	772	772
Sweden	61	61	61	61	61	60	59	58	58	61
HELCOM PARTIES	3062	3040	3022	2994	2820	2641	2424	2258	2107	2070
Belgium	90	91	93	94	95	93	92	95	96	96
Czech Republic	105	105	105	105	105	88	77	97	92	86
France	700	700	700	700	700	690	676	666	668	668
Netherlands	258	258	237	232	236	237	188	197	171	155
Slovak Republic	62	62	62	62	62	62	61	54	47	47
United Kingdom	320	320	320	320	320	320	320	320	320	320
The Baltic Sea	0	0	0	0	0	0	0	0	0	0
"Baltic Influence Area"	4597	4576	4539	4507	4338	4131	3838	3687	3501	3442
EMEP total	8541	8480	8465	8430	8203	7877	7498	7293	7040	6973

(1) The part inside the EMEP domain of calculation.

The relative contribution of nitrogen oxides to total nitrogen emissions is very similar to the contribution of reduced nitrogen. For the Parties in HELCOM, the averaged NO_x emission in tonnes of nitrogen is comparable to ammonia emissions when expressed as only nitrogen. In the countries influencing nitrogen deposition over the Baltic Sea, 55 % of the total nitrogen emissions averaged for the 10-year period, occurs as NO_x, 45 % as ammonia. In the EMEP area, NO_x emissions represent 52 % of the total nitrogen emissions.

Quantification of the decreasing trends is given in Table 3.3.3 as percentage reduction from the total nitrogen emission. It is noteworthy that for the considered periods, the Contracting

Parties to the Helsinki Commission have reported a stronger reduction in their nitrogen emissions than the total EMEP area.

Table 3.3.3. Percentage reduction of total (reduced+oxidized) nitrogen emissions

	HELCOM Parties	Influence area for the Baltic Sea	EMEP total
1986-1990	5%	2%	0.1%
1991-1995	19%	16%	12%
1986-1995	27%	21%	15%

3.3.3 Inter-annual variations and trends of nitrogen deposition

Nitrogen depositions to the Baltic Sea and its sub-basins are given in Table 3.3.4 for the period 1986 - 1995. Mean annual deposition of nitrogen on the Baltic Sea during the period 1991 - 1995 are estimated to be 274 000 tonnes N yr-1. For the previous period, 1986 - 1990, mean annual deposition estimates the amount to 324 000 tonnes N yr-1. Similarly to nitrogen emissions, modelled nitrogen depositions also show a decreasing trend in the analysed period 1986 - 1995, and the decrease is again larger at the beginning of the nineties than during the second half of the eighties.

Table 3.3.4. Annual deposition of total (reduced +oxidized) nitrogen to the Baltic Sea and its sub-basins 1986 - 1995. (Units: 1000 tonnes N/ yr^{-1})

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Gulf of Bothnia	45	45	45	45	43	42	39	38	37	34
Gulf of Finland	22	23	22	22	22	21	19	18	18	16
North Baltic Proper	131	131	131	129	124	119	110	106	104	93
South Baltic Proper	75	74	74	73	69	66	62	61	60	57
Kattegat/Belt Sea	56	56	55	55	53	52	50	50	49	48
Total Baltic Sea	329	329	327	324	311	300	280	273	268	248

Averaged over the Baltic Sea, nitrogen deposition is reduced by 5 % during the period 1986 - 1990, while the corresponding reduction for the first half of the 1990s is 17 %. The overall reduction of nitrogen deposition on the Baltic Sea during the ten year period represents a 25 % reduction of the deposition levels in 1986. The largest reductions (29 %) are estimated over the North Baltic Proper, minimum reductions over the Kattegat/Belt Sea (14 %).
The annual variations of modelled nitrogen deposition may be related to two different factors:

1) Variations of nitrogen emissions, both in strength and spatial distribution.

2) Variations on the meteorological conditions determining the physical and chemical removal of nitrogen from the atmosphere.

The effect of meteorological inter-annual variations on nitrogen deposition can be estimated by means of a simple model experiment. The EMEP MSC-W model has been run with the same emission distribution and strength over a series of years, using actual meteorological conditions. The coefficients of variation (the ratio of the standard deviation to the mean) of the modelled nitrogen deposition fields are a good measure of the inter-annual meteorological variability. The use of coefficient of variation as a measure of the meteorological variability is discussed in the next chapters. Here we note that they are only valid for a certain deposition area if the emission distribution and strength is kept unchanged. For nitrogen, over the Baltic Sea, the coefficients of variation were estimated to about 10 % (Barrett et al., 1995).

The effect of emission reductions on the nitrogen deposition is a straightforward result from the EMEP models. Table 3.3.5 summarizes the modelled reduction of nitrogen deposition resulting from the emission reduction reported in Table 3.3.5.

Table 3.3.5. Percentage reductions of total (reduced+oxidized) nitrogen deposition

	Gulf of Bothnia	Gulf of Finland	North Baltic Proper	South Baltic Proper	Kattegat/ Belt Sea	Baltic Sea
1986-1990	5%	0%	5%	8%	5%	5%
1991-1995	19%	24%	22%	14%	7%	17%
1986-1995	24%	27%	29%	24%	14%	25%

Reductions of nitrogen emissions in the EMEP area by 15 % result in a 25 % reduction of the nitrogen deposition to the Baltic Sea between the years 1986 and 1995. However, not all emissions in the EMEP area will equally affect nitrogen deposition to the Baltic Sea. The relevant question is to define the principal source area within EMEP that contributes to deposition of nitrogen to the Baltic Sea.

3.3.4 Spatial variations of nitrogen deposition in the Baltic Sea

Nitrogen depositions show a marked north-to-south increasing gradient, which is derived from the particular distribution of nitrogen sources and the predominant transport pathways. Calculated nitrogen deposition densities for the period 1991 - 1995 are as follows:

Table 3.3.6. Nitrogen deposition over different basins, mg N m^{-2} yr^{-1}

Gulf of Bothnia	307
Gulf of Finland	496
Baltic Proper, North	591
Baltic Proper, South	1007
Belt Sea/Kattegat	1150
Total Baltic Sea	624

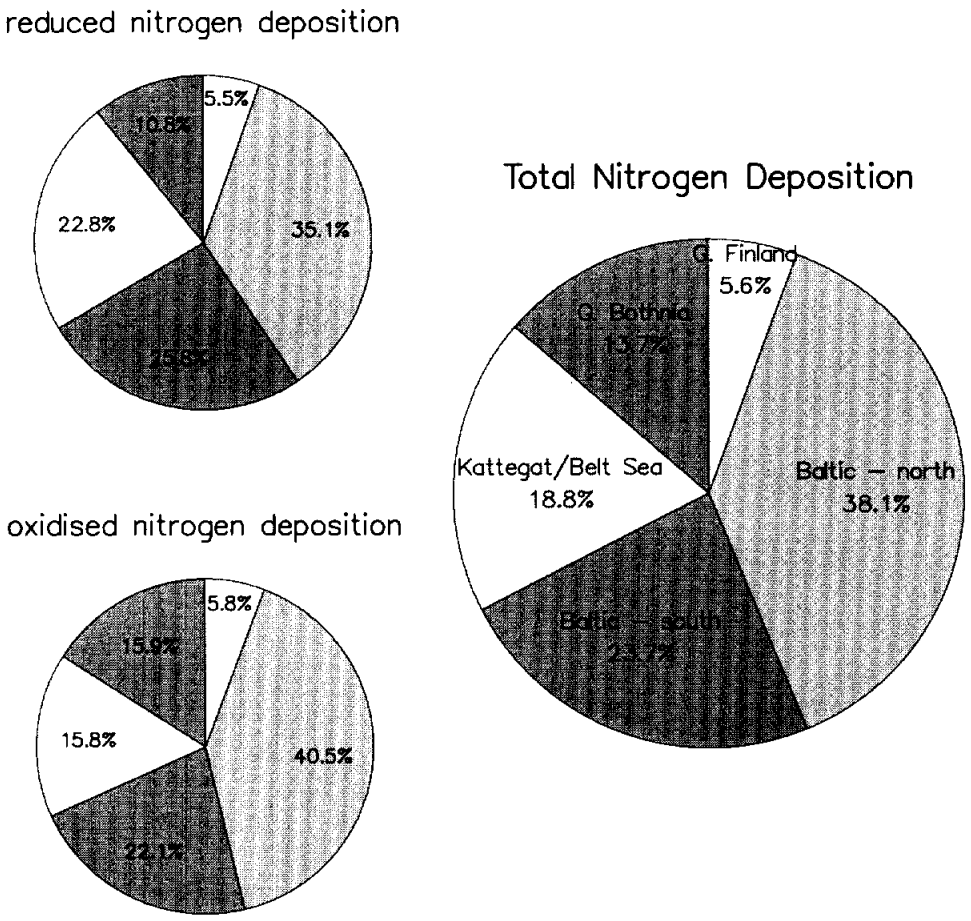

Figure 3.3.3. Sub-basin contribution to Baltic Sea deposition of airborne nitrogen. Averaged percentage values for 1991 - 1995

The relative contributions of the different sub-basins to total deposition to the Baltic Sea which is depicted in Figure 3.3.3 are determined by the above mentioned deposition densities and the area of the sub-basin.

The gradient of nitrogen deposition to the Baltic Sea is more pronounced for reduced than for oxidized nitrogen (Figure 3.3.3). This is a consequence of the shorter atmospheric lifetime of ammonia, which is more readily deposited by dry and wet deposition. Over the southern sub-basins, deposition of reduced nitrogen is similar in amount to the deposition of oxidized nitrogen but as we move northwards, the fraction of oxidized nitrogen becomes more important. The gradient in of nitrogen deposition to the Baltic Sea is more pronounced for reduced than for oxidized nitrogen (Figure 3.3.3). This is a consequence of the shorter atmospheric lifetime of ammonia, which is more readily deposited by dry and wet deposition. Over the southern sub-basins, deposition of reduced nitrogen is similar in amount to the deposition of oxidized nitrogen but as we move northwards, the fraction of oxidized nitrogen becomes more important. Averaged over the Baltic Sea, 52 % of total deposition is due to oxidized nitrogen. Table 3.3.7 summarizes the partition between wet and dry deposition both for reduced and oxidized nitrogen. Averaged for the Baltic Sea, wet deposition is the dominant and accounts for 65 % of the total nitrogen deposition.

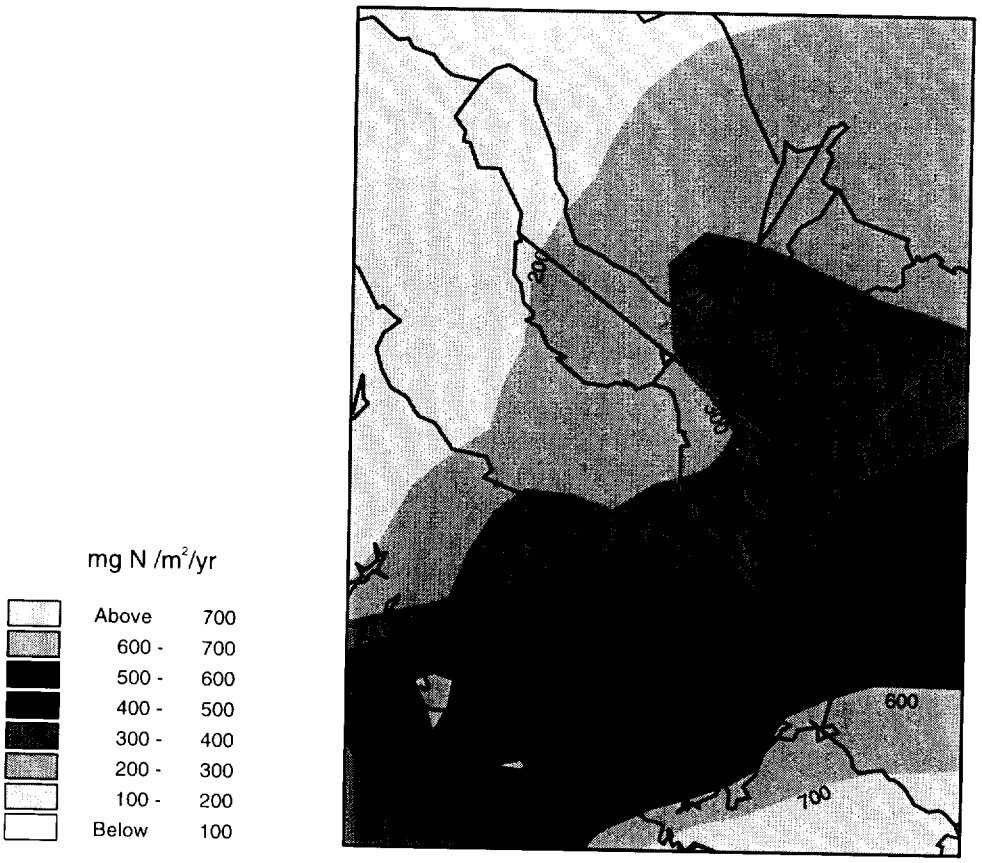

Figure 3.3.4. Total deposition of reduced and oxidised nitrogen to the Baltic Sea. Annual mean values for 1991 - 1995. (Units: mg N m^{-2} yr^{-1})

Table 3.3.7 : Type of nitrogen deposition to the Baltic Sea, averaged for 1991 - 1995. (Units: 1000 tonnes N/ yr)

	1991			1992			1993			1994			1995		
	Red	Ox.	Total	Red.	Ox.	Total	Red.	Ox.	Total	Red.	Ox.	Total	Red.	Ox.	Total
Dry Dep.	52	51	103	50	47	97	50	45	95	49	44	93	45	40	85
Wet Dep.	90	107	197	84	99	183	83	95	178	82	93	175	75	88	163
Total	142	158	300	134	146	280	133	140	273	131	137	268	120	128	248

3.3.5 Seasonal variations

Following previous HELCOM practice (HELCOM, 1991) the year has been divided in four periods: January to March, April to June, July to September and October to December. This division is different from the seasonal analysis in the next chapters and should be kept in mind when interpreting the results.

Seasonal variations in nitrogen deposition are given in daily rates. The daily rates are averages over the whole defined season and should not be confused with episodic values. For a study of the episodicity of nitrogen supply to the Baltic Sea, the reader is referred to Barrett (1996). At present, there is no common understanding on the effect of nitrogen episodes to marine biological ecosystems and consequently we limit our analysis to the average seasonal cycle of deposition from airborne pollution.

The seasonal patterns of nitrogen emissions are opposite to nitrogen oxides and ammonia. Emissions of nitrogen oxides tend to peak during the winter, while ammonia emissions are largest in the summer. This behaviour determines to a great extent the modelled seasonal variations over the different sub-basins. In southern areas, where ammonia deposition is largest, the seasonal cycles of reduced and oxidised nitrogen emissions nearly compensate each other and there is little overall seasonal variation on the depositions. As we move northwards and nitrogen deposition is dominated by wet deposition of nitrate, depositions show a winter maximum. In general, however, there is little seasonality in the supply of nitrogen to the Baltic Sea.

Table 3.3.8. Average daily rates of total (reduced + oxidized) nitrogen deposition. (Units: mg N m^{-2} day^{-1})

	1986-1990	1991 - 1995				
	whole year	whole year	Jan - March	April-June	July-Sept	Oct-Dec
Gulf of Bothnia	1.14	0.84	0.91	0.77	0.78	1.02
Gulf of Finland	1.82	1.36	1.50	1.40	1.41	1.80
Baltic Proper, North	2.09	1.62	1.78	1.47	1.63	2.20
Baltic Proper, South	3.31	2.76	2.83	2.77	3.04	2.98
Belt Sea / Kattegat	3.75	3.15	3.21	3.56	3.61	3.42
Baltic Sea	2.15	1.71	1.82	1.65	1.79	2.08

3.3.6 Source allocation to sub-basin deposition

The lagrangian acid deposition model simulates the long-range transport of nitrogen compounds by tracking emissions from different emission sources. In this way contributions of each country to the depositions in another country can be evaluated. As a part of the present collaboration with HELCOM, a refinement of the traditional country-to-country attribution matrices has been implemented in order to allow for the allocation of depositions to the different Baltic Sea sub-basins.

Country-to-sub-basin matrices are a useful interpretation tool to determine source areas contributing significantly to deposition to the Baltic Sea. They have been used to determine a "Baltic influence area" where emission reductions have been calculated. It should be stressed, however, that the definition of a "Baltic influence area" from the allocation matrices is rather arbitrary. The "Baltic influence area" used in the emission section 3.3.2, involves the ten largest individual country contributions to oxidized nitrogen deposition over the whole Baltic. But other criteria could have been used in this definition.

Table 3.3.9. Ten largest country contributions to whole Baltic oxidized nitrogen deposition averaged for two different periods. (Units: tonnes N)

	Gulf of Bothnia	Gulf of Finland	Baltic Proper North	Baltic Proper South	Belt Sea Kattegat	Whole Baltic	% of whole Baltic deposition
1986-90							
German Federal Republic	2588	862	9493	7781	5487	**26209**	**14.0**
United Kingdom	2176	624	7227	4728	5631	**20386**	**10.9**
Poland	2665	1013	9656	4355	1123	**18812**	**10.0**
Union of Soviet Socialist Republics	4461	2805	7860	1082	360	**16568**	**8.9**
Sweden	3973	707	6595	1428	921	**13623**	**7.3**
German Democratic Republic	1012	414	4545	3592	1494	**11057**	**5.9**
Denmark	1109	283	3671	2136	2702	**9901**	**5.3**
Czechoslovakia	916	357	3664	1945	810	**7691**	**4.1**
the Netherlands	747	234	2614	1997	1883	**7474**	**4.0**
France	650	234	2481	1838	1407	**6610**	**3.5**
1991-95							
German Federal Republic	2666	806	9801	7475	4235	**24981**	**17.1**
United Kingdom	2093	555	6556	4392	4924	**18521**	**12.7**
Poland	1518	682	5749	3718	1186	**12852**	**8.8**
Sweden	3372	608	5743	1327	809	**11860**	**8.1**
Denmark	979	286	3648	2212	2573	**9698**	**6.6**
the Netherlands	652	171	2249	1719	1468	**6259**	**4.3**
France	591	160	2305	1461	953	**5469**	**3.7**
Finland	2479	1109	1391	155	49	**5184**	**3.5**
the Czech Republic	460	226	1728	1022	541	**3976**	**2.7**
Russian Federation	693	684	1258	208	83	**2927**	**2.0**

Source areas contributing significantly to deposition over the Baltic Sea sub-basins depend on the pollutant physical and chemical properties, the particular meteorological conditions, and more relevantly, the emission strength and distribution. Comparison of Tables 3.3.10 suggests that oxidized nitrogen deposition is affected by sources more remote than those affecting reduced nitrogen. This is equivalent to say that oxidized nitrogen experiences longer transport distances than ammonia. On the other hand, meteorological conditions will naturally influence the source contributions from year to year.

Table 3.3.10. Ten largest country contributions to whole Baltic reduced nitrogen deposition averaged for two different periods. (Units: tonnes N)

	Gulf of Bothnia	Gulf of Finland	Baltic Proper North	Baltic Proper South	Belt Sea Kattegat	Whole Baltic	% of whole Baltic deposition
1986-90							
Union of Soviet Socialist Republics	4149	3961	15098	1319	418	**24945**	**17.9**
Poland	1829	757	8893	10351	1023	**22854**	**16.4**
Denmark	494	119	2302	2596	11398	**16909**	**12.1**
German Federal Republic	860	295	3477	4070	6455	**15156**	**10.9**
German Democratic Republic	650	265	3190	6988	2819	**13911**	**10.0**
Sweden	1341	143	4073	1751	1669	**8978**	**6.4**
the Netherlands	391	141	1523	1378	1531	**4964**	**3.6**
Finland	2860	501	422	39	11	**3834**	**2.8**
France	232	97	1119	858	770	**3076**	**2.2**
United Kingdom	231	83	914	647	888	**2762**	**2.0**
1991- 95							
German Federal Republic	1043	318	4554	8653	6895	**21463**	**19.0**
Denmark	479	113	2351	2854	11388	**17186**	**15.2**
Poland	940	428	5355	8365	900	**15988**	**14.2**
Sweden	1253	130	4214	1934	1745	**9277**	**8.2**
Estonia	317	938	2790	37	12	**4094**	**3.6**
Lithuania	313	221	2794	257	68	**3653**	**3.2**
Finland	2467	463	329	26	7	**3291**	**2.9**
the Netherlands	245	65	947	1026	974	**3257**	**2.9**
Russian Federation	471	1118	1434	166	55	**3245**	**2.8**
Latvia	151	162	2298	59	16	**2686**	**2.4**

3.3.7 Comparison of models and measurements

In this report no advanced work has been done concerning comparison of models and measurements. The results from this study indicate that models and measurements give good agreement in the question of trends for nutrients (see Summary and Conclusions) but not so good for the metals cadmium and lead. The reasons for this is that emission data for metals are uncertain and that the concentrations of metals in precipitation at northly latitudes are low. Comparision of models and measurements are given in one EMEP-report (Barrett 1996).

3.4. Trace element concentrations and deposition

Measuring of the trace elements lead (Pb), cadmium (Cd), copper (Cu) and zinc (Zn) in precipitation have been an obligatory part of the HELCOM/EGAP monitoring programme from the beginning. At least one station in every Baltic Sea station should make these measurements. Measuring of the same elements in particles is recommended.

In the database there are only very few data series of trace elements in precipitation or particles. Data of Pb and Cd in year 1993 has been chosen as an example of seasonal and regional variation. The Figures 3.4.1. and 3.4.2. show concentrations of Cd and Pb at the stations around the Baltic Sea.

Highest concentrations have been measured at Leba station on the eastern coast of Baltic Proper. The monthly mean concentration is 0.1 - 0.5 µg/l at the other stations. No clear seasonal variation can be detected from the data.

The regional variation of Pb concentration is shown in Figure 3.4.2. The level is not changing much around the Baltic Sea, high monthly concentrations have been measured at all stations. Maximum concentrations appear in February-May and October-November, the level is usually lower during the summer months.

The concentration and rain amount data has been combined in the Figures 3.4.3. and 3.4.4. to show the monitored deposition of Cd and Pb to the Baltic Sea.

The monthly deposition of cadmium (Figure 3.4.3.) is usually 0 - 10 µg/m^2, except at Preila and Leba. There are missing monthly values at many stations, but as an order of magnitude it can be said that the monitored annual deposition of cadmium in 1993 to the Baltic Sea was: 20 - 30 µg/m^2 at stations Hailuoto, Haapasaari, and Aspvreten; 30 - 40 µg/m^2 at stations Arup and Zingst; 80 -100 at station Preila; and 200 µg/m^2 at station Leba.

The deposition of lead (Figure 3.4.4.) is more even divided around the Baltic Sea, monthly depositions over 200 µg/m^2 have been measured at all stations. Monthly mean values are missing from 1993 data, but as an order of magnitude it can be said that the monitored annual deposition of lead in 1993 to the Baltic Sea was: 1 000 - 1 300 µg/m^2 at stations Hailuoto, Haapasaari, Aspvreten and Arup; and 1 500 - 1 900 µg/m^2 at stations Leba, Zingst and Preila.

These trace element values reported to the HELCOM/EGAP database are well compatible with results published in the report Heavy metals and POPs within the ECE region (Berg et al. 1996)

A HELCOM-EMEP-PARCOM-AMAP project Field Intercomparison of Heavy Metals in Precipitation 1995 was performed to get information about the quality of heavy metal measurements. All the HELCOM countries took part in the intercomparison. According to the results of the project the analysis of the heavy metals do not seem to be problematic to the participants, but the different sampling shape and handing procedures of the samples caused difference in results (Winkler and Roider, 1997).

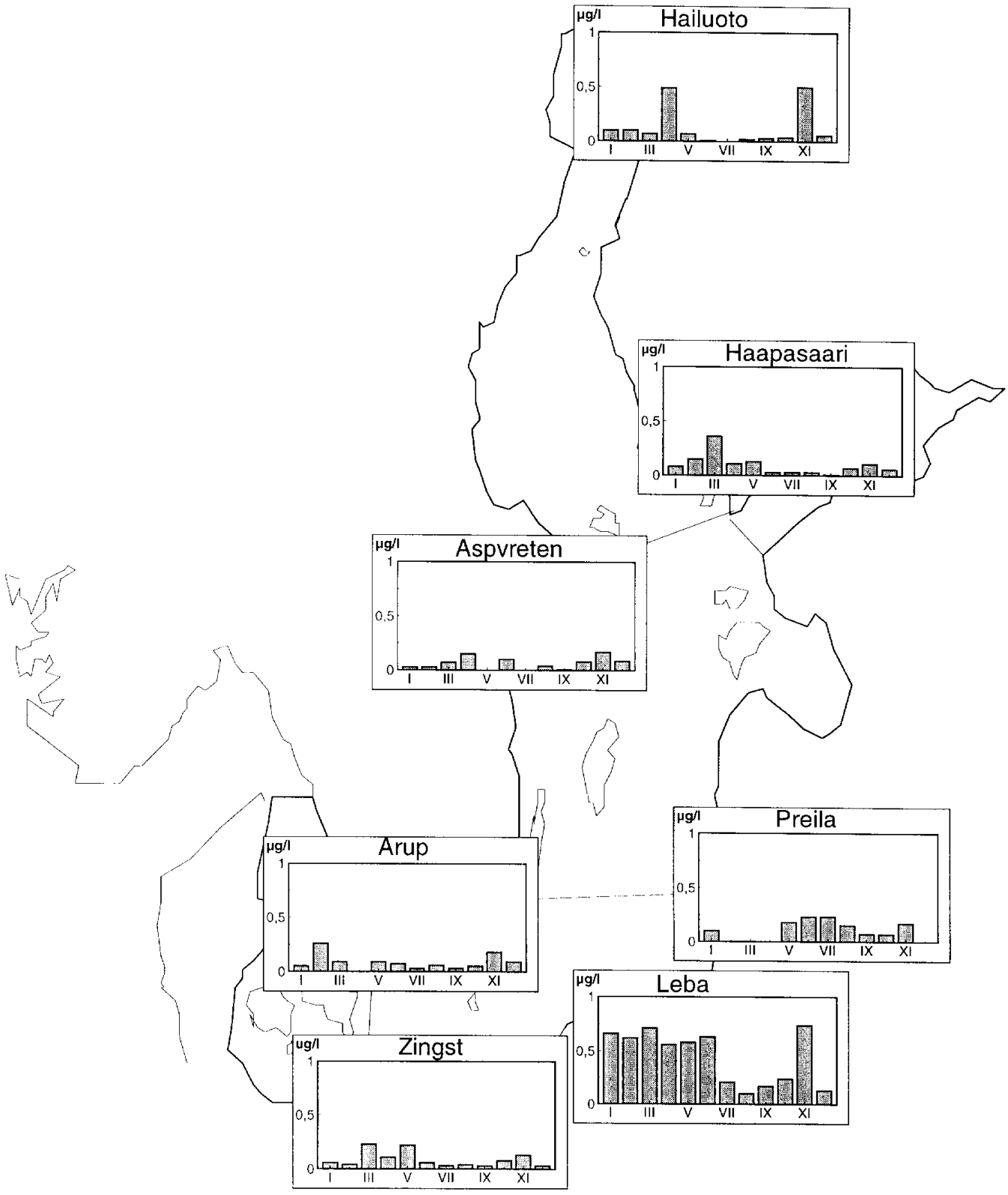

Figure 3.4.1. Monthly concentration of Cd in rainwater at some Baltic measuring stations in 1993, unit µg/l

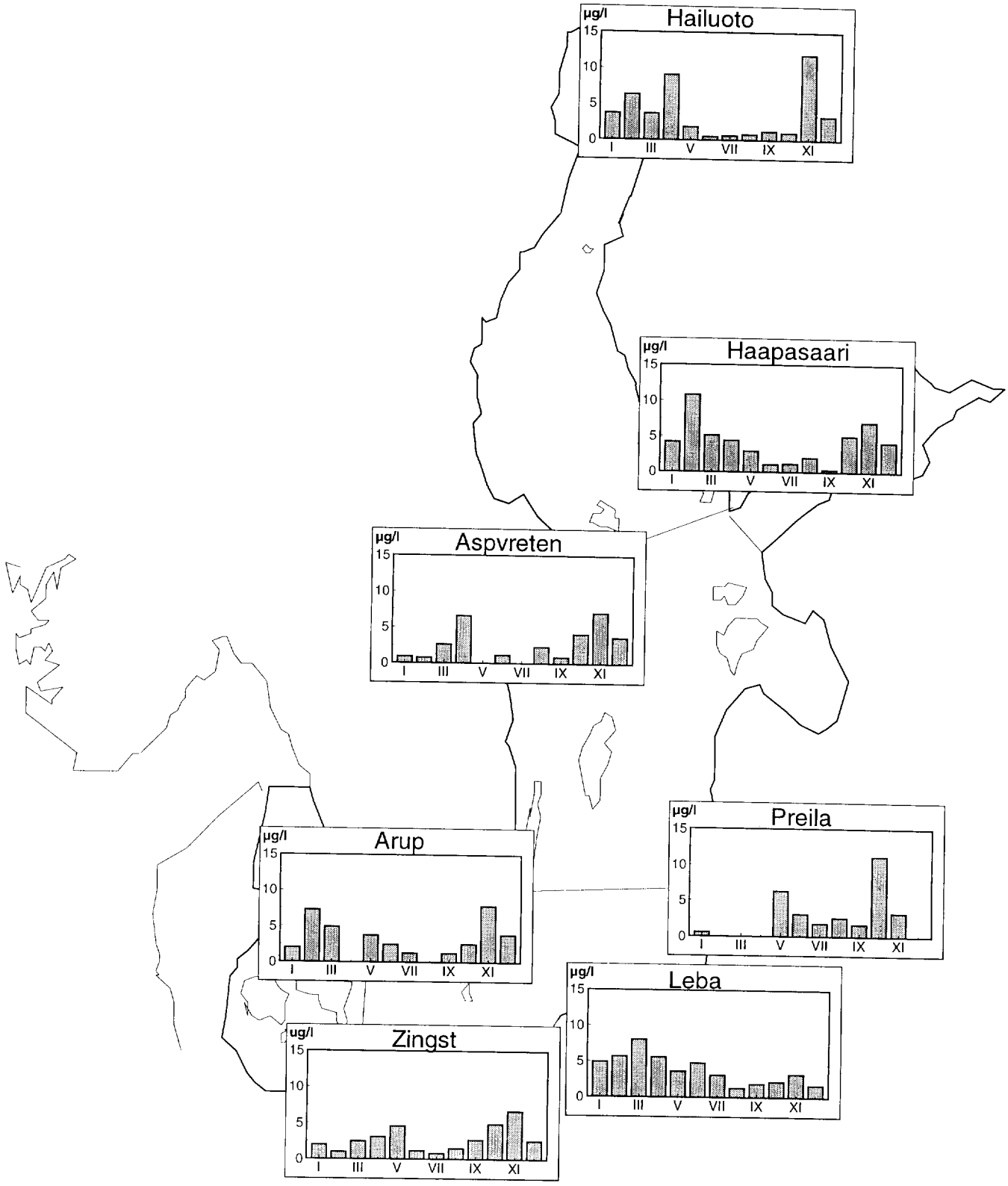

Figure 3.4.2. Monthly concentration of Pb in rainwater at some Baltic measuring stations in 1993, unit µg/l

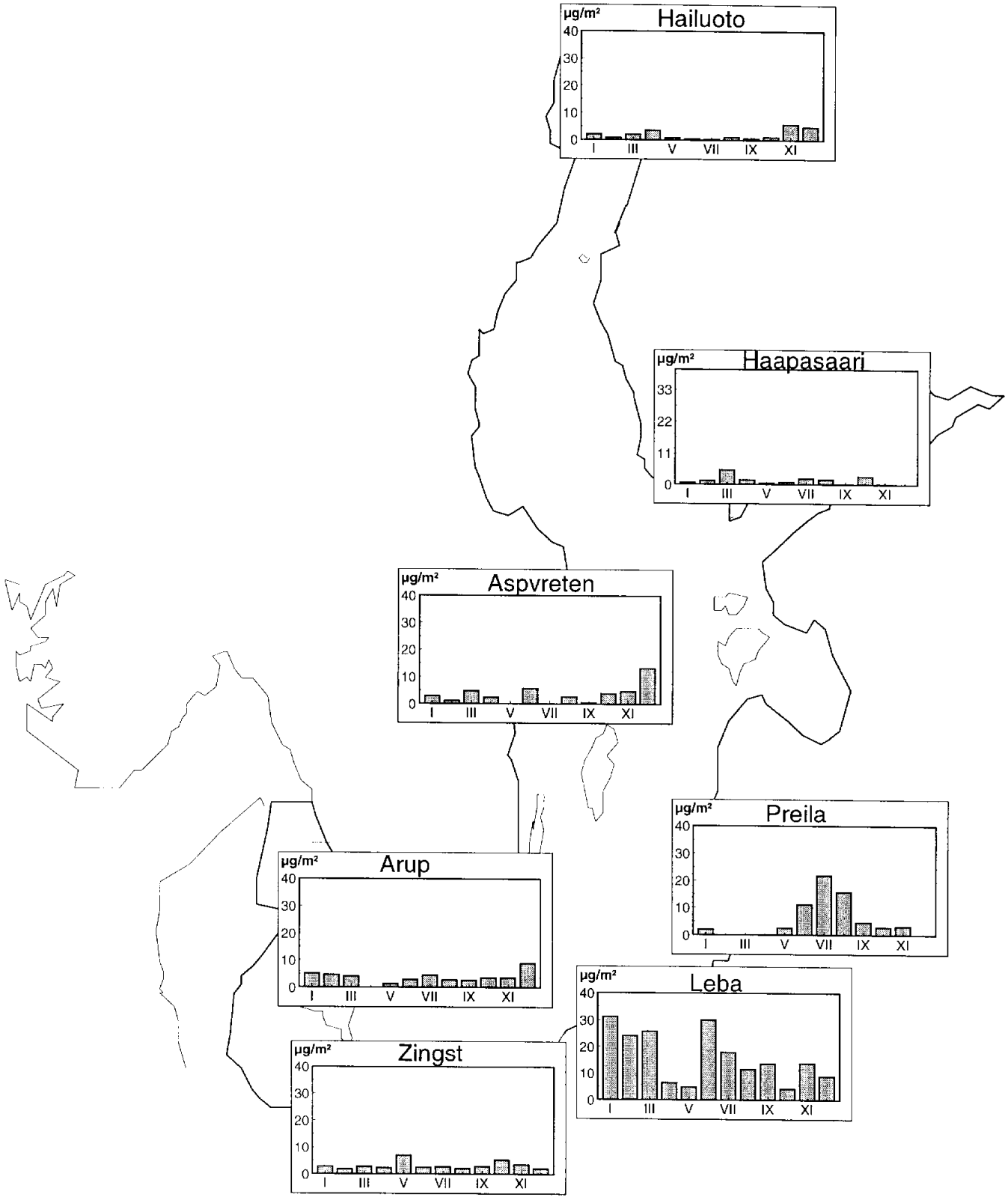

Figure 3.4.3. Monthly deposition of Cd in rainwater at some Baltic measuring stations in 1993, unit µg/m^2

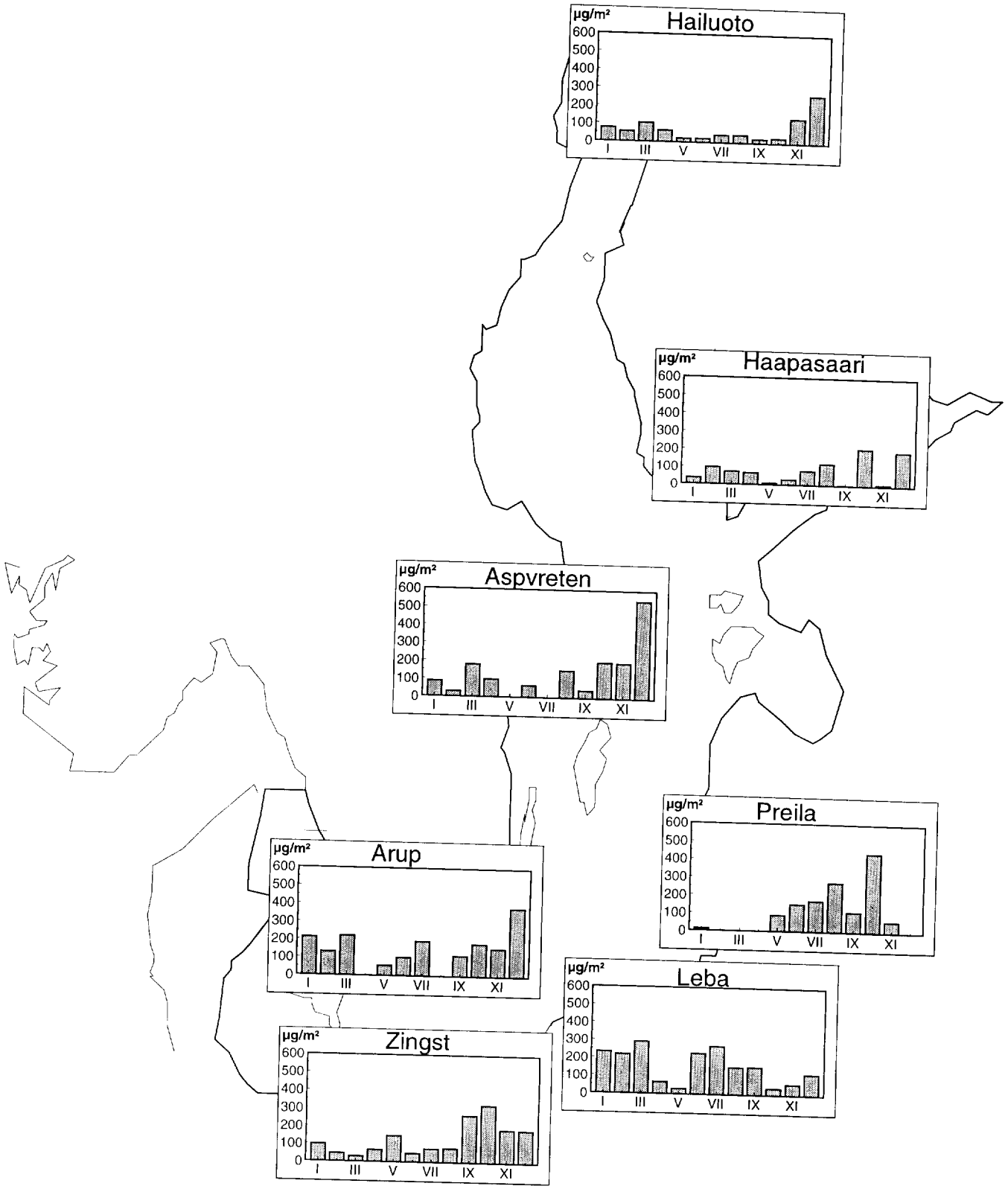

Figure 3.4.4. Monthly deposition of Pb in rainwater at some Baltic measuring stations in 1993, unit µg/m^2

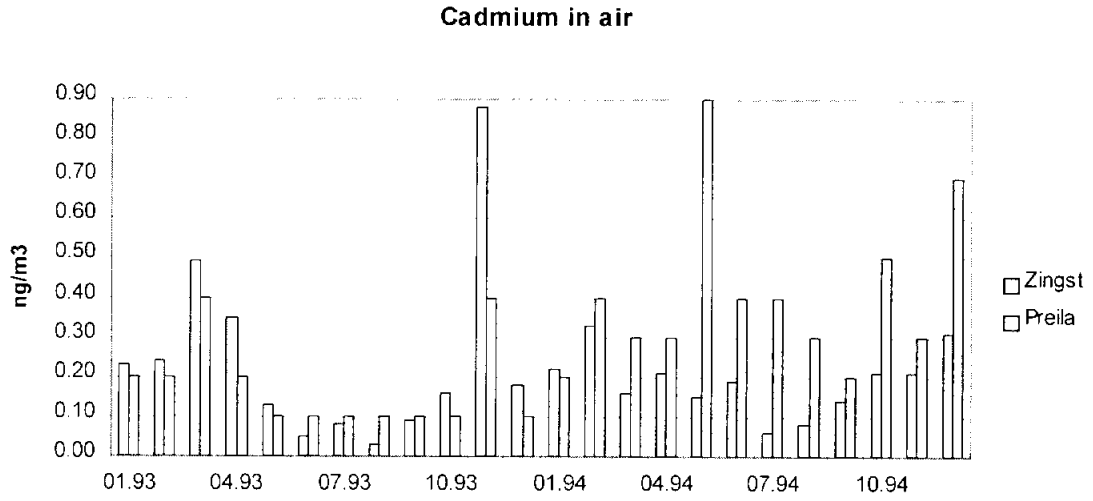

Figure 3.4.5. Monthly mean concentration of cadmium in particles at two Baltic stations

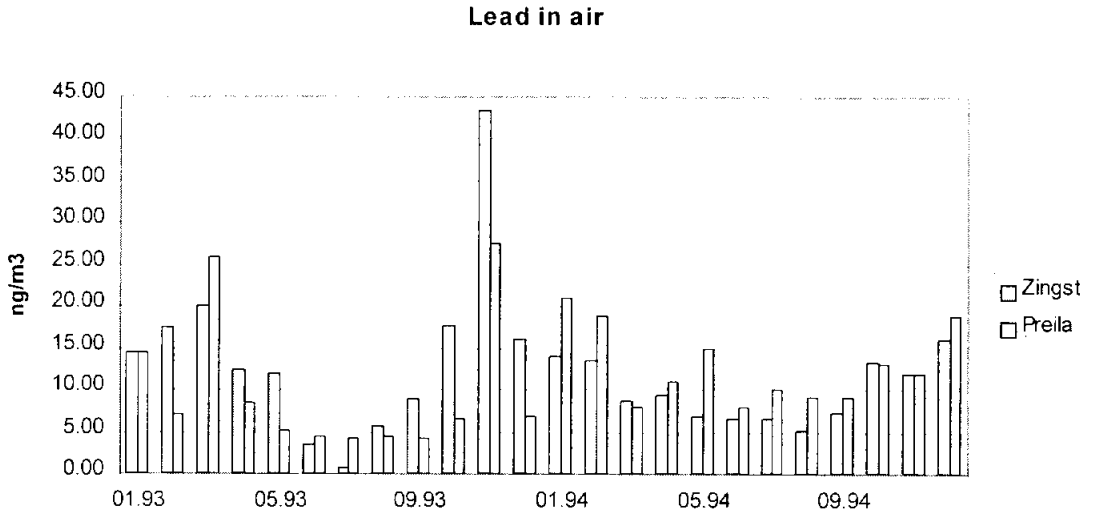

Figure 3.4.6. Monthly mean concentration of lead in particles at two Baltic stations

Very few data of trace elements in air have been reported to the database. Monthly mean concentrations of cadmium and lead shown in Figures 3.4.5. and 3.4.6. are examples of the level of these compounds at stations around the Baltic Sea.

Most of the high concentrations of these two compounds have been measured during winter months.

The change of cadmium and lead deposition to the Baltic Sea has been estimated by calculating the relative change of concentration and deposition of mean value 1987-1990 compared to mean value 1991 - 1994. These values have been taken from the report Heavy metals and POP within the ECE region (Berg et al., 1996), where longer time series of trace

element results are available. When the HELCOM/EGAP database has been completed, it will be possible to calculate changes to other stations too.

Figure 3.4.7. shows annual cadmium and lead depositions at HELCOM/EGAP stations Arup and Aspvreten.

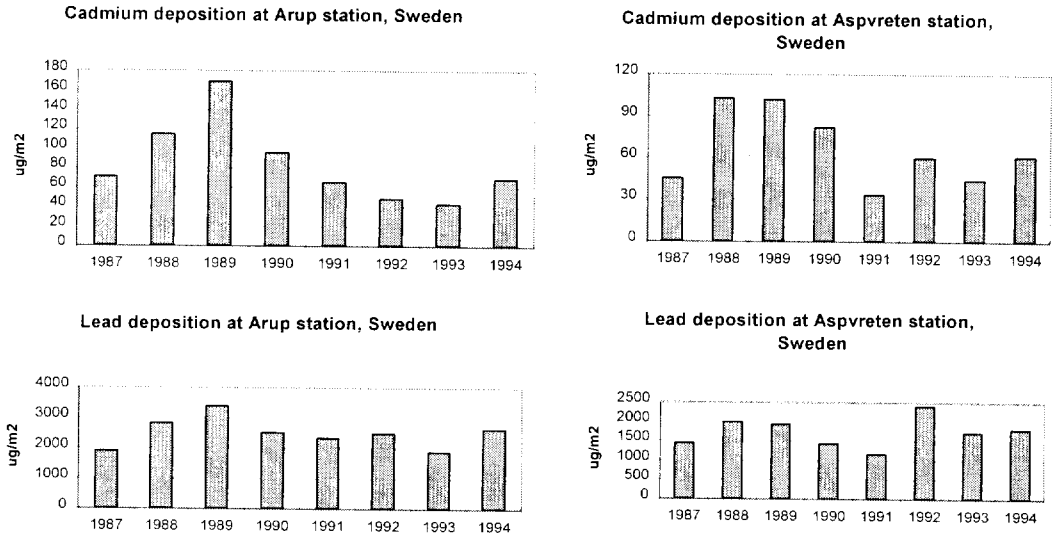

Figure 3.4.7. Deposition of cadmium and lead at stations Arup and Aspvreten (Berg et al., 1996).

The decrease of the annual mean concentration and deposition of cadmium from 1987 -1990 to 1991 - 1995 is 40 -50 % at these stations. The mean concentration of lead has decreased 10 - 20 % from 1987 - 1990 to 1991 - 1994. At Arup also the mean deposition of lead has decreased slightly: 10 %. At Aspvreten the mean deposition of lead has remained unchanged.

The monitoring of trace elements is difficult because of low concentrations and easy contamination of the samples. Results especially of the early years of monitoring might be uncertain. The calculations above should therefore be taken as preliminary. They show the level of concentration and deposition as well as the direction and level of the change. As a conclusion from the measurements it can be said that the cadmium load has decreased at these stations, whereas for the load of lead no clear change can be seen.

3.5 Trace metal deposition, model calculations, emissions, fluxes, depositions, origin of the load

This part of the PLC-Rapport consists of text and tables presented in: Atmospheric supply of nitrogen, lead and cadmium to the Baltic Sea, EMEP Centres Summary Modelling Report for 1991 - 1995 for Helsinki Comission, 1997 by L.Tarrason, K. Barrett, L. Erdman and A. Gusev.

Calculations on atmospheric dispersion and deposition of heavy metals are carried out at EMEP/MSC-E, Moscow. At present, heavy metals modelled at MSC-E are lead and

cadmium, and the development of a physio-chemical routine for modelling mercury is well under progress. A short report on the development of the mercury model together with a model unit for POP can be found in Erdman and Gusev (1997).

The results on lead and cadmium presented in the following chapters have been calculated by MSC-E ASIMD model. The ASIMD model is a four layer eulerian model with 50 km horizontal resolution that uses an asymmetric advection scheme. The model has participated in the intercomparison study of Long-range transport of lead carried out under EMEP (WMO/TD No.806, 1997) and reported by Sofiev et al. (1996). Model results have also been compared with Pb and Cd measurements of PARCOM network and conclusions from that comparison are reported alongside model description in Pekar (1996).

By the time of the calculations included in this chapter, no official emission data from the EMEP countries had been reported and expert estimates had to be used instead. For lead, emission estimates may differ over a factor of 3, depending on the source inventory used. Therefore, results in this section are only preliminary.

Table 3.5.1. Lead emission estimates

	ESQUAD estimates for 1990 (tonnes Pb /year)			**UN/ECE reported official emission data 1997 update (tonnes Pb /year)**					
	Avg	**Low**	**High**	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**
Denmark	168	146	207					46	
Estonia			85[a]						
Finland	217	159	305	313	259	150	99	60	67
Germany	2859	2023	4161	2315					624[c]
Latvia			165[a]	20[b]	10[b]	8[b]	6[b]	10[b]	5[b]
Lithuania			258[a]	47	49	32	28	33	17
Poland	2057	1557	2388	1372					937
Russia			8967[a]						
Sweden	448	339	579	540		365		34	
HELCOM Parties			17115						
United Kingdom	3165	2614	4046	2703	2454	2254	2040	1755	1492
Baltic Influence Area (see section 3.5)			21161						
Europe	41249	31999	48825						

a) Estimates at MSC-E based on ESQUAD values.
b) Emissions from gasoline are not included.
c) Totals for both Germany and former GDR; 1995 data are preliminary.

Lead deposition over the five year period 1991 - 1995 has been calculated with the same emission data and the actual variable meteorological conditions. Consequently, temporal trends can not be determined from these results. Instead, information on the meteorological variability over the Baltic Sea and its sub-basins can be derived.

The emission data used in this work are elaborated within the framework of the ESQUAD project. They are described in [van den Hout (ed.), 1994]. Emission data are expert estimates. They should not be considered as official ones.

Table 3.5.2. Cadmium emission estimates

	ESQUAD estimates for 1990 (tonnes Cd /year)			UN/ECE reported official emission data 1997 update (tonnes Cd /year)					
	Avg	Low	High	1990	1991	1992	1993	1994	1995
Denmark	2	1	6					1	
Estonia			2[a]						
Finland	5	2	23	6	3	2	3	3	3
Germany	74	37	204	30					11[b]
Latvia			4[a]	2	2	2	2	12	1
Lithuania			8[a]	4	3	3	2	2	1
Poland	46	21	132	92					83
Russia			297[a]						
Sweden	8	4	31	2		1		1	
HELCOM Parties			707						
United Kingdom	52	26	121	25	25	26	25	24	24
Baltic Influence Area			828						
Europe	629	258	1634						

a) Estimates at MSC-E based on ESQUAD values.
b) Totals for both Germany and former GDR; 1995 data are preliminary

The inventory are based on the calculations of emissions from statistics of activity data in 1990 and emission factors. The emission factors can vary within a wide range. Tables 3.5.1 and 3.5.2 give national emission of lead and cadmium correspondingly. These tables are extracted from [van den Hout (ed), 1994] with some corrections concerning the countries located within the territory of the former USSR. The minimum, maximum and average emission values demonstrate ranges of emission factor. Tables 3.5.1. and 3.5.2. show lead and cadmium emissions for countries of relevance for the Baltic Sea area. The upper part of the table contains emission totals from all the Contracting Parties to the Helsinki Commission. The central part includes emissions from other countries contributing significantly to deposition to the Baltic Sea. The lower part considers the total emission inside the EMEP modelling domain. For comparison, available national emission estimates reported to the UN/ECE Secretariat are also included in the table. Although the official estimates are incomplete, it is worth noting that for lead a) the UN/ECE 1990 estimates lie within the

ranges of the ESQUAD estimates, and b) the UN/ECE estimates shows a significant decrease of the reported lead emission in the period 1990 - 1995. Table 3.5.2. evidences the large uncertainties on cadmium emission estimates. Low and high values from the ESQUAD emission project vary over a factor of 10 for some countries. The reported emission national totals are within these broad ranges of uncertainty, and at difference with lead emissions, there is no clear temporal trend on the yearly reported value.

Mean annual estimates of lead depositions on the Baltic Sea during the 1991 - 1995 period amount to 637 tonnes Pb (Table 3.5.3.). The inter-annual variability of lead deposition is conditioned only by the meteorological situation observed in the region during this period since emission data used were the same. Maximum annual depositions of lead refer to 1993 and amount to 700 tonnes Pb. Minimum depositions of 580 tonnes Pb were calculated for 1995. Thus, the annual deposition irregularity (ratio of the maximum deviation to mathematical mean) is 10 % for lead. The irregularity is very dependant on the particular meteorological conditions of one particular year and has little value for extrapolation to different periods. Variation coefficients (the ratio of standard deviation to mathematical mean) are a better measure of the expected meteorological variability but should be interpreted carefully.

Variation coefficients over the Baltic Sea and its sub-basins are included in Table 3.5.3. For the whole Baltic Sea, the variation coefficient for lead deposition due to meteorological variations is calculated to be 7 %. This value gives us a range of the expected variations of lead deposition due to inter-annual changes in the meteorological conditions. We can expect, with reasonable degree of certainty, that lead deposition over the Baltic Sea will experience changes of 7 % due solely to the effect of variable meteorological conditions. This 'reasonable degree of certainty' is statistically at 66 %, which means that larger deposition changes due to meteorology can also take place. The statement is valid only with the present spatial distribution of lead sources. If the source distribution of lead changes, also may the effect of varying meteorological conditions change.

Table 3.5.3. Total annual deposition of lead on the Baltic Sea and its sub-basins. (Units: 100 kg Pb /yr)

	Gulf of Bothnia	Gulf of Finland	North Baltic Proper	South Baltic Proper	Kattegat/ Belt Sea	Baltic Sea
1991	1094	462	2144	1626	951	6280
1992	863	476	1965	1692	1028	6024
1993	1129	615	2305	1907	1070	7026
1994	782	459	1988	2366	1180	6774
1995	758	499	1709	1888	915	5769
1991-1995 Mean	925	502	2022	1896	1029	6375
Variation Coeff.	17 %	12 %	10 %	14 %	9 %	7 %

Table 3.5.4. Total annual deposition of cadmium on the Baltic Sea and its sub-basins. (Units: 10 kg Cd/ yr)

	Gulf of Bothnia	Gulf of Finland	North Baltic Proper	South Baltic Proper	Kattegat/ Belt Sea	Baltic Sea
1991	638	187	805	651	323	2605
1992	555	196	764	698	360	2572
1993	668	231	844	749	387	2880
1994	498	195	776	968	438	2875
1995	523	197	682	779	335	2516
1991-95 Mean	577	201	774	769	369	2690
Variation Coeff.	11 %	8 %	7 %	14 %	11 %	6 %

The variability of calculated lead depositions due to meteorological conditions is largest for the Gulf of Bothnia (17 %) and smallest for Kattegat/Belt Sea (9 %). This is a consequence of the atmospheric transport distances for lead. Close to source areas in the south, lead is effectively deposited by dry and wet deposition, so that the total deposition pattern is greatly determined by the emission distribution. Away from source regions, long-range transport becomes more important, and the deposition of lead is then more exposed to variations in the meteorological processes. The longer the transport distances are, the more susceptible deposition is to changes in the meteorological conditions, the larger is the meteorological variability.

Another factor affecting the meteorological variability is area average. Smaller areas are more subject to changes in the deposition pattern due to meteorological synoptic changes. This is the reason why the meteorological variation coefficient is smaller for the whole Baltic Sea than when averaged over its different sub-basins.

Expected cadmium deposition changes due to meteorological variability are largest for the South Baltic Proper (14 %) and smallest for the North Baltic Proper (7 %). This considerable difference in the central part of the Baltic Sea is again a consequence of the distribution of sources and the atmospheric transport distances for cadmium. The longer the transport distances, the more susceptible deposition is to changes in the meteorological conditions, the larger is the meteorological variability.

The vulnerability of lead deposition in the Baltic Sea due to meteorological conditions can also be derived from the relative weight of dry and wet depositions in the Baltic region. Table 3.5.5 shows that the main input to the total deposition is wet deposition. The contribution of dry deposition is 8 % of the total deposition on the Baltic Sea. In individual regions this contribution amounts from 6 % to 18 %. Lead being a particulate is effectively removed by wet scavenging. Dry deposition of lead becomes more important close to source regions, therefore we can expect that over the catchment area the share of dry deposition is greater.

Table 3.5.5. Wet and dry deposition of lead on the Baltic Sea and its sub-basins
Averages for 1991 - 1995
(Units: 100 kg Pb/yr)

	Gulf of Bothnia	Gulf of Finland	North Baltic Proper	South Baltic Proper	Kattegat/ Belt Sea	Baltic Sea
Wet deposition	837	437	1904	1762	917	5857
Dry deposition	88	65	118	134	112	517
Total deposition	925	502	2022	1896	1029	6375

Calculations reported by Erdman and Gusev (1997) have shown that dry deposition over the Baltic Sea Catchment area amounts to 22 % of the total lead deposition. This difference in calculated fractions of dry deposition on the sea and land is explained by the lack of lead sources over the sea and the lower dry deposition velocities experienced by lead particulate over sea than over the land.

Table 3.5.6. Wet and dry deposition of cadmium on the Baltic Sea and its sub-basins
Averages for 1991 - 1995
(Units: 10 kg Cd/yr)

	Gulf of Bothnia	Gulf of Finland	North Baltic Proper	South Baltic Proper	Kattegat/ Belt Sea	Baltic Sea
Wet deposition	487	165	707	687	308	2354
Dry deposition	89	36	67	83	61	336
Total deposition	577	201	774	769	369	2690

As given in Table 3.5.6., wet deposition is the dominant deposition form over the Baltic Sea, also for cadmium. The relative contribution of dry deposition is 12 % of the total deposition on the Baltic Sea, larger than for the case of lead deposition. Over the Baltic Sea catchment area Erdman and Gusev (1997) calculated the relative contribution of dry deposition to be 30 %, also larger than the 22 % calculated over the same area for lead. In comparison with lead, cadmium has a larger mass median particulate diameter which results in larger dry deposition velocity and thus cadmium is more effectively removed by dry deposition. Still, as these numbers indicate, wet deposition is the dominant form of deposition over the Baltic Sea for both metals.

Averaged for 1991 - 1995, the different sub-basins of the Baltic Sea contribute to lead deposition in the following way: the northern and southern areas of the Baltic Sea receive 30% each, Gulf of Bothnia and Kattegat/Belt Sea 15 % each and the remaining 10 % fall on Gulf of Finland. The contribution from the Gulf of Finland to the Baltic Sea total is more considerable than in the case of nitrogen and this is probably due to large lead emissions around St. Petersburg. The relative importance of deposition to the different sub-basins is determined to a great extent also by the size of the sub-basins. Therefore, mean deposition density is an important feature to show spatial variations over different sub-basins. Calculated lead and cadmium deposition densities are:

Calculated lead and cadmium deposition densities

Pb, mg m^{-2} y^{-1}	
Bothnian Bay	0.8 +/- 0.1
Gulf of Finland	1.6 +/- 0.2
North Baltic Proper	1.6 +/- 0.1
South Baltic Proper	2.2 +/- 0.3
Kattegat/Belt Sea	2.8 +/- 0.3
Baltic Sea	1.6 +/- 0.1

Cd, mg m^{-2} y^{-1}	
Bothnian Bay	50 +/- 10
Gulf of Finland	65 +/- 5
North Baltic Proper	60 +/- 5
South Baltic Proper	85 +/- 10
Kattegat/Belt Sea	100 +/- 10
Baltic Sea	70 +/- 5

Averaged for 1991 - 1995, the different sub-basins of the Baltic Sea contribute to cadmium deposition in the following way: the northern and southern areas of the Baltic Sea receive 30% each, the Gulf of Bothnia, 20 % and Kattegat/Belt Sea and the Gulf of Finland receive 10 % each. The relative importance of deposition to the different sub-basins is determined to a great extent also by the size of the sub-basins. When considering instead mean deposition densities from the different sub-basins we find again a north-to-south increasing gradient in the deposition of cadmium.

Table 3.5.7. presents Pb deposition on the Baltic Sea and its sub-basins from the main contributing countries. It was assumed that a country belongs to one of main emitters if its input exceeds 5 % of the total deposition on the Baltic Sea or more than 10 % of the total deposition on any of its sub-basins. For the majority of the considered countries both conditions are concurrently met. Almost all countries but Great Britain are members of HELCOM. Their input is more than 80 % of the total deposition of both metals on the Baltic Sea. Here again, the definition of the source area that influences deposition of lead to the Baltic Sea is rather arbitrary.

Table 3.5.7. Total annual deposition of lead on the Baltic Sea and its sub-basins from main countries-emitters in 1995. (Units: 100 kg Pb /yr)

	Gulf of Bothnia	Gulf of Finland	North Baltic Proper	South Baltic Proper	Kattegat/ Belt Sea	Baltic Sea
Great Britain	59	32	137	171	145	542
Germany	60	48	369	732	289	1498
Denmark	18	8	74	129	206	435
Finland	113	87	35	5	0	240
Estonia	4	86	23	1	0	115
Poland	30	31	184	341	18	604
Russia	14	72	29	16	1	130
Sweden	339	50	495	223	82	1190
Other countries	122	84	363	272	174	1015
Total	758	499	1709	1888	915	5769

The most significant pollution by lead originates from Germany (26 %), Sweden (21 %) and Poland (10 %). The input of the rest of the countries listed in the table, excluding Russia and Estonia amounts only to not less than 5 % of the total deposition of lead.

The input of a country to the total deposition is determined by the fraction of the country emission deposited on the Baltic region. This fraction is varied within wide ranges. For Denmark and Sweden this fraction is 20 %, for Finland and Estonia around 10 %, for Germany and Poland between 2 and 4 %. Great Britain (around 1 %) and Russia (around 0.1 %) are the countries in this selection with smallest contribution.

Inputs of individual countries to the depositions on sub-basins are specified by the location and the strength of their sources. For example, Gulf of Bothnia is mainly polluted by Sweden and Finland (45 % and 15 % of the total deposition on this sub-basin respectively). Main sources of lead pollution on the Gulf of Finland are Finland (15 %), Estonia (15 %), Russia (10 %) and Germany and Sweden (10 % each). Sweden (30 %), Germany (20 %) and Poland (10 %) make the main contribution to the pollution of the North Baltic Proper. The same countries are responsible for the pollution of the South Baltic Proper: Sweden with 10 %, Germany - 40 % and Poland - 20 %. Kattegat/Belt Sea are mainly polluted by sources from Great Britain (10%), Denmark (20 %), Germany (30 %) and Sweden (about 10 %).
It is worth reminding that the calculated lead data considered in this chapter are of a preliminary character because emission data used are based on expert estimates.

Table 3.5.8. presents Cd deposition on the Baltic Sea and its sub-basins from the main contributing countries. It was assumed that a country belongs to one of main emitters if its input exceeds 5 % of the total deposition on the Baltic Sea or more than 10 % of the total deposition on any of its sub-basins. For the majority of the considered countries both conditions are concurrently met. Almost all countries but Great Britain are members of HELCOM. Their input is more than 80 % of the total deposition of both metals on the Baltic Sea.

The most significant pollution by cadmium originates from Germany (28 %), Sweden (28 %) and Poland (11 %). The input of the rest of the countries listed in the table, excluding Russia and Estonia amounts only to less than 5 % of the total deposition.

Cadmium deposition to the different sub-basins is mostly dominated by neighbouring countries. The Gulf of Bothnia is mainly polluted by Sweden and Finland (65 % and 20 % of the total deposition on this sub-basin respectively). Main sources to the Gulf of Finland are Finland (30%), Estonia (20 %), Russia (15 %), Germany (10 %) and Sweden (10 %). Sweden (30 %), Germany (25 %) and Poland (15 %) make the main contribution to the North Baltic Proper. The same countries are responsible for the pollution of the South Baltic Proper. Kattegat/Belt Sea are mainly polluted by sources from Great Britain (15 %), Denmark (25 %), Germany (40%) and Sweden (10 %).

Table 3.5.8. Total annual deposition of cadmium on the Baltic Sea and its sub-basins from main countries-emitters in 1995. (Units: 10 kg Cd / yr)

	Gulf of Bothnia	Gulf of Finland	North Baltic Proper	South Baltic Proper	Kattegat/ Belt Sea	Baltic Sea
Great Britain	14	8	36	43	39	141
Germany	30	23	174	342	138	707
Denmark	4	2	21	39	63	129
Finland	91	59	26	3	0	180
Estonia	1	23	5	0	0	28
Poland	16	16	91	157	9	288
Russia	3	19	7	4	0	33
Sweden	335	24	213	98	38	708
Other countries	29	22	96	74	49	270
Total	523	197	682	779	335	2516

It is worth reminding again that the calculated data considered in this chapter are of a preliminary character because emission data used are based on expert estimates.

3.5.1 Comparison of modelled results with measurement data

Given the large uncertainty related to the estimated emissions of lead, comparison of modelled results with observations are particularly relevant. To a certain level, this comparison can establish the degree of reliability of present assumptions on lead emissions to the atmosphere and their further dispersion.
Measurement values from Berg et al. (1996) are used for verification of MSC-E estimates with the ASIMD model. Only data referring to 1991 - 1994 were used, since no measurement data over the area of the northern and southern Baltic and Kattegat/Belt Sea were available for 1995. A detailed description of the comparison of modelled results with measured data is given in the report Atmospheric supply of nitrogen, lead and cadmium to the Baltic Sea, EMEP Centres Summary Modelling Report for 1991-1995 for Helsinki Comission, 1997 by L.Tarrason,, K. Barrett, L. Erdman and A. Gusev, from where also text to this chapter has been taken.

The discrepancy between calculated and measured data on lead is not more than 40 % for individual years and about 10 % for the whole period. Hence, it may be concluded that measurement and calculated data are in a satisfactory agreement. Nevertheless correlation coefficients for a number of years are close to zero or even negative. This may be connected with input data uncertainties, the emission in particular, where expert estimates can differ by a factor of 3.

As in the case of lead, the large uncertainty related to estimated cadmium emissions advise comparison of modelled results with observations in order to qualify model estimates.
The same station network as for lead is used here to validate MSC-E estimates of wet deposition of cadmium with the ASIMD model. Only data referring to 1991 - 1994 were used,

since no measurement data over the area of the northern and southern Baltic and Kattegat/Belt Sea were available for 1995.

Measured data has been compared directly with calculated values from the grid-cell where the station is located. In addition, area averages for the different sub-basins have been derived by directly averaging results from stations located in the considered sub-basin.

The discrepancy between calculated and measured data on cadmium is worse than for lead. For some years, this discrepancy exceeds a factor of 2. This is not surprising as cadmium emissions estimates presented large uncertainties with estimates varying by a factor of 10. It is noteworthy, however, that cadmium seems to be overestimated by model calculations based on the high estimate of emissions by the ESQUAD project.

3.6 Organic compounds, deposition, measured concentrations

Atmospheric transport and deposition is an important pathway for persistent organic pollutants (POP) and atmospheric fluxes have been shown to be important for the occurrence of these organic contaminants in aquatic ecosystems both far away from and near source areas (Eisenreich et al 1981, Barrie et al 1992). Warmenhoven et al 1989 calculated the relative contribution of atmospheric deposition to total loading of the North Sea and found that more than 90% of the input of PCB and HCH was due to atmospheric deposition.

Baltic Sea, an intercontinental sea surrounded by countries with different anthropogenic activities, may receive significant amounts of POP via air transport and deposition. Due to its limited water exchange to other seas, atmospheric processes may play an important roll for the occurrence of POP in the Baltic Sea.

POP frequently present in the marine atmosphere are such as polychlorinated biphenyls, (PCB), hexachlorocyclohexanes, (HCH), DDT and polycyclic aromatic hydrocarbons, (PAH).

3.6.1 Deposition processes

POP exist at a wide range of vapour pressures and many of them are semivolatile which means that they are transported in the atmosphere both in the vapour- and particle phases (Bidleman 1988). The distribution of the compounds between the phases, which depends on factors such as the vapour pressure of the compound, the ambient temperature and the particle concentration in the air, will affect the deposition processes of the POP.

There are some POP that may participate in atmospheric reactions, but the major removal mechanism for these compounds from the air is through deposition. The deposition of POP takes place either as wet or dry deposition and includes scavenging of the compounds in both the vapour- and particle phases. The deposition fluxes are controlled by the chemical and physical properties of the compound, the particle concentration in the air and the meteorological parameters (Bidleman 1988).

Unlike wet and dry deposition via particles, the vapour exchange takes place in two directions (Bidleman and McConnel 1995). Due to the vapour exchange across the air-water interface,

which occurs in the marine atmosphere, water bodies may act both as sources and sinks of POP. A cycle of deposition to and volatilisation from water surfaces may contribute to the global circulation of POP (Wania and Mackay 1993).

The importance of atmospheric fluxes for the occurrence of PCB and HCH in aquatic ecosystems have become particularly evident in investigations performed in the Great Lakes where a seasonal dependence of deposition and re-emission was found (Achman et al., 1993). The factors that influenced the volatilisation of the compounds from the water surface was the water temperature and wind speed as well as the atmospheric concentrations. The importance of volatilisation of HCH from sea surfaces was also shown in the Arctic (Bidleman et al 1995). Recently Bidleman et al 1995 showed that the decline in the atmospheric concentration of alpha-HCH in the Arctic had reversed the net direction of air sea exchange. Thus some northern waters are new sources for alpha HCH.

3.6.2 Atmospheric deposition of POP to the Baltic Sea region

The importance of the atmospheric deposition of POPs to the sea surface has been investigated in a study carried out within the research program Large Scale and Environmental Effects and Ecological Processes in Skagerrak and Kattegat. The measurements of POP were carried out at sea-based and coastal stations at the Swedish west coast and included parallel sampling of POP in air and deposition. The sampling was undertaken in campaigns during 1989 - 1994.

The results from this study showed that substantial amounts of organic toxic compounds are contributed to Kattegat and Skagerrak via atmospheric transport and deposition (Brorström-Lundén et al 1994, Brorström-Lundén 1996). The deposition of PAH, PCB and HCH was found to be in the same order of magnitude at coastal and sea-based stations. A continual deposition of POP takes place, however the greatest amounts were deposited in connection with long range air transport and/or together with heavy precipitation. Substantial amounts of PAH and HCH could be deposited during short episodes which significantly contributed to the yearly deposition. The measured deposition of PAH and PCB was mostly associated with particle deposition, while HCH was dissolved in the precipitation.

During 1994 measurements of POP at two coastal stations, Rörvik an EMEP station located in the northern part of Kattegat and Aspvreten located at the Baltic Sea were included in the Swedish monitoring program for air pollutants. The sampling program included parallel sampling of POP in air and deposition with a sampling frequency of one week per month. The deposition fluxes and the yearly deposition estimates for Rörvik and Aspvreten are summarized in Table 3.6.1 and 3.6.2.

The deposition of PAH at Rörvik was estimated to be in the order of 100 - 200 $\mu g/m^2$year. Only minor variations in deposition fluxes of PCB, 0.5 - 0.8 $\mu g/m^2$ year, was found among the different years. The yearly deposition of HCH (sum of alpha and gamma) varied between 1 - 4 $\mu g/m^2$ year. The deposition fluxes at Aspvreten have up to now only been reported for the first measurements, which were carried out during 1994.

Table 3.6.1. Deposition fluxes at the Swedish west coast

Rörvik coastal station
Daily deposition fluxes

	PAH (sum 11) $\mu g/m^2$ day	PCB* (sum 7) ng/m^2 day	PCB** (tot) ng/m^2 day	HCH (alpha+gamma) ng/m^2 day
1989-1992	0.64	2.4	12	11
1994	0.31	2.3	11	6.7
1995	0.28	1.3	6.5	3.9
1996	0.35	1.8	8.8	12

* Sum 7 congens = 28, 52, 101, 118, 153, 138, 180
** Tot PCB estimated from the 7 determined PCB in comparison to a mixture of 1242:1254:1260 (1:1:1)

Table 3.6.2. Yearly deposition fluxes, estimated from the average values of the daily deposition

Deposition estimate

	PAH (sum 11) $\mu g/m^2$ year	PCB (sum 7) $\mu g/m^2$ year	PCB (tot) $\mu g/m^2$ year	HCH (alpha+gamma) $\mu g/m^2$ year
Rörvik				
1989-1994	200	0.90	4	4
1994	100	0.80	4	2
1995	100	0.50	4	1
1996	100	0.60	4	4
Aspvreten				
April-October 1994	-	0.2	1	3

However, in spite of the minor variations which were shown in the yearly deposition flux estimates, great variations in the atmospheric concentrations and deposition fluxes were found for the different sampling occasions at Rörvik 1994 - 1996 which shown in Figures 3.6.1 - 3.6.3.

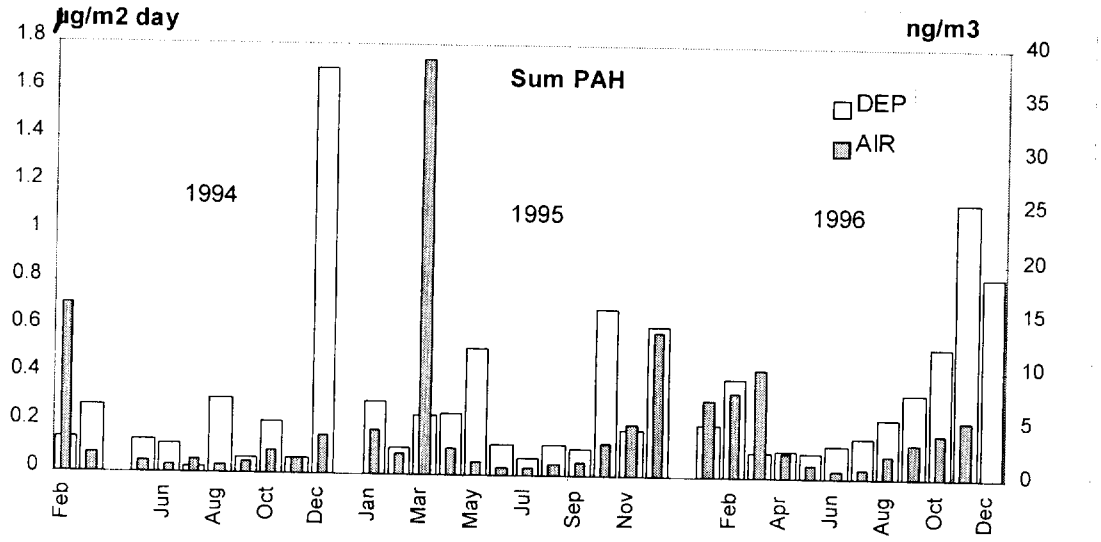

Figure 3.6.1. The variation of PAH in air and deposition

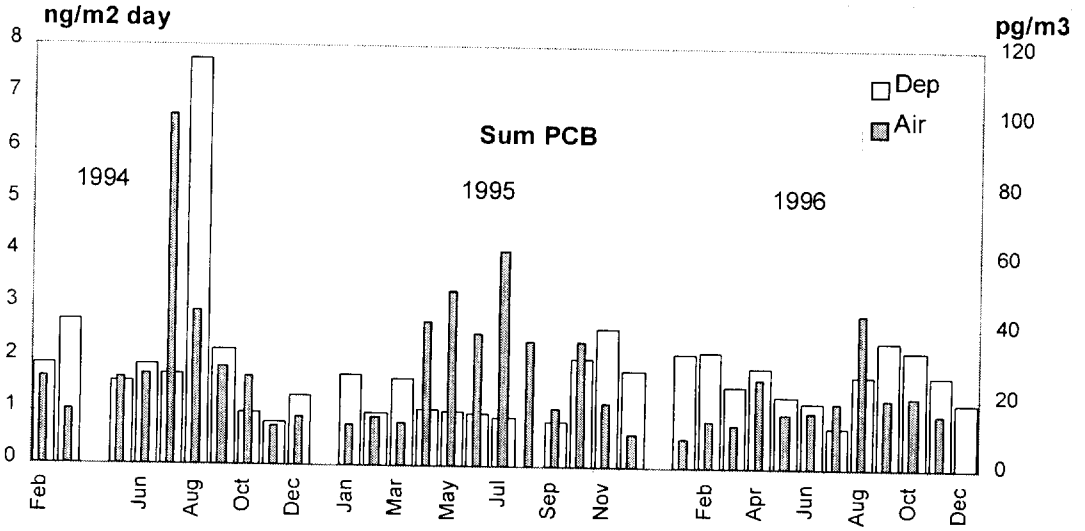

Figure 3.6.2. the variations of PCB in air and deposition

The highest PAH concentrations in air and the greatest amounts in deposition were found during winter periods while the highest atmospheric concentrations of PCB and HCH were measured during spring and summer periods. The increased PCB concentrations during the summer periods indicate that re-emission of PCB is important during periods with high

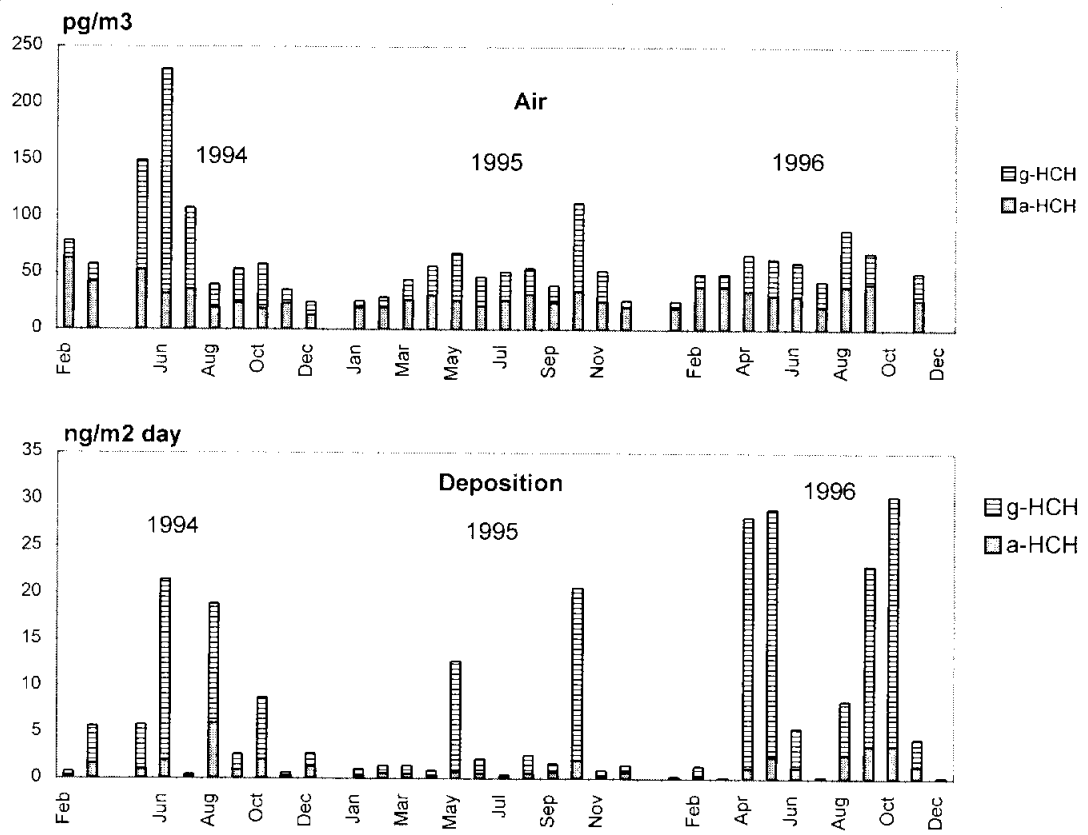

Figure 3.6.3. The variation of alpha and gamma-HCH in air and deposition

ambient air temperatures. In the atmosphere, a seasonal variation was also found in distribution of alpha- and gamma HCH. The deposition fluxes of HCH varied between different sampling occasions which mainly was due to the amounts of precipitation but also the atmospheric concentrations.

Investigations of the atmospheric transport and deposition were also included in the research program "Large Scale and Environmental Effects and Ecological Processes in the Baltic Sea", in which measurements of selected POPs in air and precipitation were carried out during more than one year at stations around the Baltic Sea (Larsson et al 1994).

A great variation of the PCB concentrations in the precipitation was measured at diffrent sampling stations, both temporally and spatially, while the yearly deposition estimates for the different sampling stations only varied within a factor of two. No gradient in the deposition of PCB was found over the Baltic Sea while the deposition of DDT decreased from south to north. The deposition of HCH showed as for PCB an even distribution over the Baltic Sea area.

For the whole measuring period the input of PCB, DDT and HCH to the Baltic Sea via precipitation was estimated to be in the order of magnitude of 700 kg, 40 kg and 90 kg respectively.

4. Changes in airborne pollution load

4.1 Nutrients

The airborne pollution load of nitrogen to the Baltic Sea increased gradually during the twentieth century and was on its highest in the middle of 1980s. From the middle of the 1980s to 1995 there have been a decrease with about 10 - 25 % in the catchment area around the Baltic Sea. The deposition on the proper Baltic Sea is estimated to have decreased with 20 - 30 %. Some of this decrease can depend on favourable weather conditions during late years. According to the estimates of the Norwegian Meteorological Institute the meteorological variability, change from year to year, can be responsible for one third to half of this reduction.

These calculations made by EMEP/MSC-W give a trend of a 30 % reduction. The decrease in pollution load of nitrogen to the Baltic Sea seems to be roughly the same for ammonia and nitrogen oxides.

There are of course uncertainties in these calculations depending on emission estimations and their trends and the capability of the models to describe the deposition on open sea.

Official EMEP (UN-ECE) emission data show about 20 % reduction of nitrogen oxides and ammonia emissions for the period 1985 - 1995 in the five largest contributors (Denmark, Germany, Poland, Sweden and United Kingdom) to nitrogen deposition over the Baltic Sea. For the total EMEP area the reduction of nitrogen oxides emission is about 10 % and ammonia emission about 15 %. Emission reduction of nitrogen oxides and ammonia can account one half to two third of reduction of the atmospheric nitrogen load.

The 30 % reduction of nitrogen deposition seems to be a little high compared to the emission reductions, a range of 20 - 30 % seems to be more realistic. Anyhow, an improvement can be seen concerning the pollution load of nutrients to the Baltic Sea during this decade.

4.2 Heavy metals, cadmium and lead

Data from model calculations about deposition of heavy metals are not so complete as for nutrients and the rate of uncertainties is larger. Realistic deposition calculations are only available primary for lead and also for cadmium The latest European emission values for heavy metals from the ESQUAD project for the year 1990 were used in these calculations. According to different expert estimates of emission values there has been a decrease in lead emission from 1985 to 1990 by about 40 %, the emission of cadmium has increased the same amount in the corresponding time period. Preliminary model calculations by the Meteorological Synthesizing Centre-East for the period 1991 - 1995 show a decrease of about 60 % in lead deposition to the Baltic Sea in comparison with estimates for the period of 1986 - 1990. Available information on cadmium is more limited and uncertain. It does not allow us to make any conclusions about trends.

The total deposition of lead to the Baltic Sea can be given as 600 tonnes per year and the same for cadmium as 25 tonnes per year as mean values for the period 1991 - 1994. These calculated values are still of preliminary character.
Heavy metals are monitored at few a stations around the Baltic Sea. Very low concentrations cause high uncertainties in the measured values, especially in data before 1990. The monitored data with complete measurement years does not show any trends. The highest yearly depositions for cadmium were measured in 1988 - 1990.

5. Conclusions

Deposition of air pollutants on catchment areas

The Baltic Sea area is about 415 000 km^2 and the catchment area comprises over 1 700 000 km^2. For the load of air pollutants to the Baltic Sea it is not enough to look at the deposition on the sea area but also to the deposition on the catchment area. Recent estimations performed by MSC-E, 1996 show that around 10 % of the deposited amount of nutrients on the catchment area can be transported to the Baltic Sea by rivers. This figure differs of course from area to area which has recently been shown in a work performed in Sweden. This load is about 126 000 tonnes per year (mean value 1987 - 1991) compared to 315 000 tonnes per year for the same period direct to the sea area. The trend since 1985 may be estimated by looking at changes in deposition on the catchment area but such calculations have not been done yet. In a first approximation it can be possible to use the change in deposition from the Baltic Sea (see changes in airborne load of nutrients below).

Input of nutrients (nitrates and ammonia) from air

The mean annual deposition of total (reduced + oxidized) nitrogen to the Baltic Sea during the period 1991-1995 is estimated to be 274 000 tonnes N per year. For the previous period, 1986- 1990, this amount was estimated to 324 000 tonnes per year.

The air borne pollution load of nutrients to the Baltic Sea increased gradually during the twentieth-century and was its highest in the middle of 1980s. After that and to 1995 it has been a decrease with about 10 - 25 % in the catchment area around the Baltic Sea. The deposition on the proper Baltic Sea is estimated to have decresed with 20 - 30 %. Some of this decrease can depend on favourable weather conditions during the late years. The decrease in pollution load of nutrients to the Baltic Sea seems to be roughly the same for ammonia and nitrogen oxides.

There are of cause some uncertainties in these calculations depending on emissions estimations and their trends and how good the models can describe the deposition on open sea. Regarding the reduction of emissions of nitrogen oxides and ammonia which has been done in the countries around the Baltic Sea and Europe the figure of 30 % seems to be a little high. A range of 20 - 30 % seems to be more realistic. Anyhow, an improvement can be seen concerning the pollution load of nutrients to the Baltic Sea during this decade.

Input of heavy metals

Data from model calculations about deposition of heavy metals are not so complete as for nutrients. Realistic values are only available for lead and cadmium and mostly for lead.

The wet deposition is about 80 - 85 per cent of the total one. There is a slight seasonal non-uniformity of deposition. Maximum deposition is observed in autumn, minimum - in summer. Main contributors of both metals are Sweden, Germany and Poland, Germany and Sweden giving the greatest contributions. The analysis indicates that the main source of uncertainties of results are emission and precipitation data.

Data from model calculations about deposition of heavy metals are not so complete as for nutrients and the rate of uncertainties is larger. For cadmium no trend can be given. The total deposition of lead to the Baltic Sea is as a mean value for the period 1991 - 1994 about 637 tonnes per year and for cadmium 27 tonnes per year.

Heavy metals are monitored at few stations around Baltic Sea. Very low concentrations cause high uncertainties in the measured values, especially in data before 1990. So trends in the concentrations and deposition can not be seen easily in time series. For cadmium the highest yearly mean concentrations were measured in 1986 - 1990. For lead there is not such a trend visible.

Persistent organic pollutants, POP

Substantial amounts of POP, such as PAH, PCB, DDT and HCH, are deposited from the air into the Baltic sea and adjacent sea areas. However there is also a re-emission back to the atmosphere and model calculations have shown that this is an important process for many POP and that the Baltic Sea may act as a source for POP. Measurements of gas-water exchange processes of POP at the sea surface of Baltic Sea have so far not been studied but knowledge of these processes is essential for calculations of net pollutant fluxes.

Work is going on within UN/ECE/EMEP to develop better models for calculation of POP-deposition. Up to day these models are incomplete and there is a lack of good emission data.

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Appendix 1

Coverage of measurements and information of methods

APPENDIX 1

DE0006R Arkona Germany

Component	Matrix	Regime	Unit	Method	Instrument	Platform	Org.	Setkey	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
sulphate_total	aerosol	IMG	ug S/m3	AD	UK	DE0006S	DE02L	238	11	12	12	12						
nitrogen_dioxide	air	IMG	ug N/m3	AD	UK	DE0006S	DE02L	326			12	12						
sulphur_dioxide	air	IMG	ug S/m3	AD	UK	DE0006S	DE02L	239	12	12	12	12	10					
ammonium	precip	IMG	mg N/l	WW	UK	DE0006S	DE02L	234	12	11	12	12	12	3				
calcium	precip	IMG	mg/l	WW	UK	DE0006S	DE02L	427					12	3				
chloride	precip	IMG	mg/l	WW	UK	DE0006S	DE02L	237	12	11	12	12	12	3				
magnesium	precip	IMG	mg/l	WW	UK	DE0006S	DE02L	236	12	11	12	12	12	3				
nitrate	precip	IMG	mg N/l	WW	UK	DE0006S	DE02L	233	12	11	12	12	12	3				
potassium	precip	IMG	mg/l	WW	UK	DE0006S	DE02L	428					12	3				
precipitation_amount	precip	IMG	mm	WW	UK	DE0006S	DE02L	231	12	12	12	12	12	3				
sodium	precip	IMG	mg/l	WW	UK	DE0006S	DE02L	235	12	11	12	12	12	3				
sulphate_corrected	precip	IMG	mg S/l	WW	UK	DE0006S	DE02L	232	12	11	12	12	12					
sulphate_total	precip	IMG	mg S/l	WW	UK	DE0006S	DE02L	240	12	11	12	12	12	3				

DE0009R Zingst Germany

Component	Matrix	Regime	Unit	Method	Instrument	Platform	Org.	Setkey	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
ammonium	aerosol	IMG	ug N/m3	AD	DHA80_9	DE0009S	DE02L	665								12		
cadmium	aerosol	IMG	ng/m3	AD	DHA80_9	DE0009S	DE02L	663								12	12	
copper	aerosol	IMG	ng/m3	AD	DHA80_9	DE0009S	DE02L	667								12	12	
lead	aerosol	IMG	ng/m3	AD	DHA80_9	DE0009S	DE02L	668								12	12	
vanadium	aerosol	IMG	ng/m3	AD	DHA80_9	DE0009S	DE02L	669								12		
ammonia	air	IMG	ug N/m3	AD	DHA80_9	DE0009S	DE02L	664								12		
nitrogen_dioxide	air	IMG	ug N/m3	AD	UK	DE0009S	DE02L	648						4	12	12	12	
sum_ammonia_and_ammonium	air+aerosol	IMG	ug N/m3	AD	DHA80_9	DE0009S	DE02L	666								12		
ammonium	precip	IMG	mg N/l	WW	ANTAS_9	DE0009S	DE02L	527						1	11			
calcium	precip	IMG	mg/l	WW	ANTAS_9	DE0009S	DE02L	530						1	11			
chloride	precip	IMG	mg/l	WW	ANTAS_9	DE0009S	DE02L	532						1	11			
magnesium	precip	IMG	mg/l	WW	ANTAS_9	DE0009S	DE02L	531						1	11			
nitrate	precip	IMG	mg N/l	WW	ANTAS_9	DE0009S	DE02L	526						1	11			
potassium	precip	IMG	mg/l	WW	ANTAS_9	DE0009S	DE02L	529						1	11			
precipitation_amount	precip	IMG	mm	WW	ANTAS_9	DE0009S	DE02L	525						1	11			
sodium	precip	IMG	mg/l	WW	ANTAS_9	DE0009S	DE02L	528						1	11			
sulphate_total	precip	IMG	mg S/l	WW	ANTAS_9	DE0009S	DE02L	533						1	11			
aluminium	precip	IMG	ug/l	WW	Runge_9A	DE0009S	DE02L	630									11	
ammonium	precip	IMG	mg N/l	WW	Runge_9A	DE0009S	DE02L	604								12	11	
arsenic	precip	IMG	ug/l	WW	Runge_9A	DE0009S	DE02L	629									12	
calcium	precip	IMG	mg/l	WW	Runge_9A	DE0009S	DE02L	611								12	11	

chloride	precip	IMG	mg/l	WW	Runge_9A	DE0009S	DE02L	612			12	11
magnesium	precip	IMG	mg/l	WW	Runge_9A	DE0009S	DE02L	610			12	11
nitrate	precip	IMG	mg N/l	WW	Runge_9A	DE0009S	DE02L	603			12	11
potassium	precip	IMG	mg/l	WW	Runge_9A	DE0009S	DE02L	609			12	11
precipitation_amount	precip	IMG	mm	WW	Runge_9A	DE0009S	DE02L	600			12	12
sodium	precip	IMG	mg/l	WW	Runge_9A	DE0009S	DE02L	608			12	11
sulphate_total	precip	IMG	mg S/l	WW	Runge_9A	DE0009S	DE02L	613			12	11
vanadium	precip	IMG	ug/l	WW	Runge_9A	DE0009S	DE02L	631				12
aluminium	precip	IMG	ug/l	WW	Runge_9B	DE0009S	DE02L	615			12	
arsenic	precip	IMG	ug/l	WW	Runge_9B	DE0009S	DE02L	614			12	
cadmium	precip	IMG	ug/l	WW	Runge_9B	DE0009S	DE02L	606			12	12
chromium	precip	IMG	ug/l	WW	Runge_9B	DE0009S	DE02L	616			12	12
lead	precip	IMG	ug/l	WW	Runge_9B	DE0009S	DE02L	605			12	12
nickel	precip	IMG	ug/l	WW	Runge_9B	DE0009S	DE02L	617			12	12
precipitation_amount	precip	IMG	mm	WW	Runge_9B	DE0009S	DE02L	601			12	12
zinc	precip	IMG	ug/l	WW	Runge_9B	DE0009S	DE02L	607			12	12
mercury	precip	IMG	ug/l	WW	Runge_9C	DE0009S	DE02L	618			8	11
precipitation_amount	precip	IMG	mm	WW	Runge_9C	DE0009S	DE02L	602			8	11

DE0051R Boltenhagen Germany

Component	Matrix	Regime	Unit	Method	Instrument	Platform	Org.	Setkey	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
ammonium	precip	IMG	mg N/l	WW	UK	DE0051S	DE02L	432					12	3				
calcium	precip	IMG	mg/l	WW	UK	DE0051S	DE02L	435					12	3				
chloride	precip	IMG	mg/l	WW	UK	DE0051S	DE02L	436					12	3				
magnesium	precip	IMG	mg/l	WW	UK	DE0051S	DE02L	434					12	3				
nitrate	precip	IMG	mg N/l	WW	UK	DE0051S	DE02L	431					12	3				
potassium	precip	IMG	mg/l	WW	UK	DE0051S	DE02L	438					12	3				
precipitation_amount	precip	IMG	mm	WW	UK	DE0051S	DE02L	429					12	3				
sodium	precip	IMG	mg/l	WW	UK	DE0051S	DE02L	433					12	3				
sulphate_corrected	precip	IMG	mg S/l	WW	UK	DE0051S	DE02L	430					12					
sulphate_total	precip	IMG	mg S/l	WW	UK	DE0051S	DE02L	437					12	3				

DE0053R Danisch-Nienhof Germany

Component	Matrix	Regime	Unit	Method	Instrument	Platform	Org.	Setkey	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
ammonium	precip	IMG	mg N/l	WW	UK	DE0053S	DE02L	276		8	12	12	2					
cadmium	precip	IMG	ug/l	WW	UK	DE0053S	DE02L	280		8	12	12	2					
chloride	precip	IMG	mg/l	WW	UK	DE0053S	DE02L	277		8	12	12	2					
lead	precip	IMG	ug/l	WW	UK	DE0053S	DE02L	279		8	12	12	2					
nitrate	precip	IMG	mg N/l	WW	UK	DE0053S	DE02L	275		8	12	12	2					

precipitation_amount	precip	IMG	mm	WW	UK	DE0053S	DE02L	274		8	12	12	2				
sulphate_corrected	precip	IMG	mg S/l	WW	UK	DE0053S	DE02L	327			12	12	2				
sulphate_total	precip	IMG	mg S/l	WW	UK	DE0053S	DE02L	278		8	12	12	2				
zinc	precip	IMG	ug/l	WW	UK	DE0053S	DE02L	281		8	12	12	2				

DK0005R Keldsnor Denmark

Component	Matrix	Regime	Unit	Method	Instrument	Platform	Org.	Setkey	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
ammonium	aerosol	IMG	ug N/m3	AD	UK	DK0005S	DK01L	283		12				10	12	12		
copper	aerosol	IMG	ng/m3	DK01L_PIXE_AD	DK01L_FP4N	DK0005S	DK01L	500029									12	12
lead	aerosol	IMG	ng/m3	DK01L_PIXE_AD	DK01L_FP4N	DK0005S	DK01L	500033									12	12
nickel	aerosol	IMG	ng/m3	DK01L_PIXE_AD	DK01L_FP4N	DK0005S	DK01L	500031									12	9
sulphate_total	aerosol	IMG	ug S/m3	DK01L_PIXE_AD	DK01L_FP4N	DK0005S	DK01L	500035	11	12	12	12		10	12	12	12	12
zinc	aerosol	IMG	ng/m3	DK01L_PIXE_AD	DK01L_FP4N	DK0005S	DK01L	500036									12	12
ammonia	air	IMG	ug N/m3	AD	UK	DK0005S	DK01L	638						10	12	12		
nitrogen_dioxide	air	IMG	ug N/m3	AD	UK	DK0005S	DK01L	636						3				
sulphur_dioxide	air	IMG	ug S/m3	DK01L_ICan_AD	DK01L_FP4N	DK0005S	DK01L	500034	11	12	12	12		10	12	12	12	8
sum_ammonia_and_ammonium	air+aerosol	IMG	ug N/m3	DK01L_ICan_AD	DK01L_FP4N	DK0005S	DK01L	500030	11					10	12	12	12	12
sum_nitric_acid_and_nitrate	air+aerosol	IMG	ug N/m3	DK01L_ICan_AD	DK01L_FP4N	DK0005S	DK01L	500032						10	12	12	12	12
calcium	precip	IMG	mg/l	DK01L_AAS_WD	DK01L_WO2	DK0005S	DK01L	500037		12		12	12	9	9	12	12	12
magnesium	precip	IMG	mg/l	DK01L_AAS_WD	DK01L_WO2	DK0005S	DK01L	500040			12	12	12	9	9	12	12	12
potassium	precip	IMG	mg/l	DK01L_AAS_WD	DK01L_WO2	DK0005S	DK01L	500039				12	12	9	9	12	12	12
sodium	precip	IMG	mg/l	DK01L_AAS_WD	DK01L_WO2	DK0005S	DK01L	500042			12	12	12	9	9	12	12	12
ammonium	precip	IMG	mg N/l	DK01L_ICan_WD	DK01L_WO2	DK0005S	DK01L	500043	12	12	11	11	12	9	9	12	12	12
chloride	precip	IMG	mg/l	DK01L_ICan_WD	DK01L_WO2	DK0005S	DK01L	500038	12	12	11	12	12	9	9	12	12	12
nitrate	precip	IMG	mg N/l	DK01L_ICan_WD	DK01L_WO2	DK0005S	DK01L	500044	12	12	11	11	12	9	9	12	12	12
sulphate_total	precip	IMG	mg S/l	DK01L_ICan_WD	DK01L_WO2	DK0005S	DK01L	500046	12	12	11		12	9	9	12	12	12
precipitation_amount	precip	IMG	mm	DK01L_Precip_weighing_WD	DK01L_WO2	DK0005S	DK01L	500041	12	12	12	12	12	9	9	12	12	12
pH	precip	IMG	pH units	DK01L_pH_WD	DK01L_WO2	DK0005S	DK01L	500045						9	9	12	12	12
acidity	precip	IMG	ue H/l	WD	UK	DK0005S	DK01L	440						9	9	12		
sulphate_corrected	precip	IMG	mg S/l	WD	UK	DK0005S	DK01L	250	12	12	11	11	12	9	9	12		

DK0008R Anholt Denmark

Component	Matrix	Regime	Unit	Method	Instrument	Platform	Org.	Setkey	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
ammonium	aerosol	IMG	ug N/m3	AD	UK	DK0008S	DK01L	644						12	12	12		
copper	aerosol	IMG	ng/m3	DK01L_PIXE_AD	DK01L_FP5N	DK0008S	DK01L	500047									12	11
lead	aerosol	IMG	ng/m3	DK01L_PIXE_AD	DK01L_FP5N	DK0008S	DK01L	500051									12	12
nickel	aerosol	IMG	ng/m3	DK01L_PIXE_AD	DK01L_FP5N	DK0008S	DK01L	500049									12	9
sulphate_total	aerosol	IMG	ug S/m3	DK01L_PIXE_AD	DK01L_FP5N	DK0008S	DK01L	500053						12	12	12	12	12
zinc	aerosol	IMG	ng/m3	DK01L_PIXE_AD	DK01L_FP5N	DK0008S	DK01L	500054									11	12

ammonia	air	IMG	ug N/m3	AD	UK	DK0008S	DK01L	643				12	12	12	
nitrogen_dioxide	air	IMG	ug N/m3	AD	UK	DK0008S	DK01L	640				10		4	
sulphur_dioxide	air	IMG	ug S/m3	DK01L_ICan_AD	DK01L_FP5N	DK0008S	DK01L	500052				12	12	12	8	6
sum_ammonia_and_ammonium	air+aerosol	IMG	ug N/m3	DK01L_ICan_AD	DK01L_FP5N	DK0008S	DK01L	500048				12	12	12	12	12
sum_nitric_acid_and_nitrate	air+aerosol	IMG	ug N/m3	DK01L_ICan_AD	DK01L_FP5N	DK0008S	DK01L	500050				12	12	12	12	12
acidity	precip	IMG	ue H/l	BB	UK	DK0008S	DK01L	452				12	11	12		
sulphate_corrected	precip	IMG	mg S/l	BB	UK	DK0008S	DK01L	451				12	11	12		
calcium	precip	IMG	mg/l	DK01L_AAS_BB	DK01L_BS2_4	DK0008S	DK01L	500055				12	11	12	11	12
magnesium	precip	IMG	mg/l	DK01L_AAS_BB	DK01L_BS2_4	DK0008S	DK01L	500058				12	11	12	11	12
potassium	precip	IMG	mg/l	DK01L_AAS_BB	DK01L_BS2_4	DK0008S	DK01L	500057				12	11	12	11	12
sodium	precip	IMG	mg/l	DK01L_AAS_BB	DK01L_BS2_4	DK0008S	DK01L	500060				12	11	12	11	12
ammonium	precip	IMG	mg N/l	DK01L_ICan_BB	DK01L_BS2_4	DK0008S	DK01L	500061				12	11	12	11	12
chloride	precip	IMG	mg/l	DK01L_ICan_BB	DK01L_BS2_4	DK0008S	DK01L	500056				12	11	12	11	12
nitrate	precip	IMG	mg N/l	DK01L_ICan_BB	DK01L_BS2_4	DK0008S	DK01L	500062				12	11	12	11	12
sulphate_total	precip	IMG	mg S/l	DK01L_ICan_BB	DK01L_BS2_4	DK0008S	DK01L	500064				12	11	12	11	12
precipitation_amount	precip	IMG	mm	DK01L_Precip_weighing_BB	DK01L_BS2_4	DK0008S	DK01L	500059				12	11	12	12	12
pH	precip	IMG	pH units	DK01L_pH_BB	DK01L_BS2_4	DK0008S	DK01L	500063				12	11	12	11	12
cadmium	precip	IMG	ug/l	WM	UK	DK0008S	DK01L	570					10			
chromium	precip	IMG	ug/l	WM	UK	DK0008S	DK01L	564					10			
copper	precip	IMG	ug/l	WM	UK	DK0008S	DK01L	568					10			
iron	precip	IMG	ug/l	WM	UK	DK0008S	DK01L	566					10			
lead	precip	IMG	ug/l	WM	UK	DK0008S	DK01L	571					10			
manganese	precip	IMG	ug/l	WM	UK	DK0008S	DK01L	565					10			
nickel	precip	IMG	ug/l	WM	UK	DK0008S	DK01L	567					10			
precipitation_amount	precip	IMG	mm	WM	UK	DK0008S	DK01L	563					12			
zinc	precip	IMG	ug/l	WM	UK	DK0008S	DK01L	569					10			

DK0020R Pedersker Denmark

Component	Matrix	Regime	Unit	Method	Instrument	Platform	Org.	Setkey	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
calcium	precip	IMG	mg/l	DK01L_AAS_BB	DK01L_BS1_2	DK0020S	DK01L	500065									12	12
magnesium	precip	IMG	mg/l	DK01L_AAS_BB	DK01L_BS1_2	DK0020S	DK01L	500068									12	12
potassium	precip	IMG	mg/l	DK01L_AAS_BB	DK01L_BS1_2	DK0020S	DK01L	500067									12	10
sodium	precip	IMG	mg/l	DK01L_AAS_BB	DK01L_BS1_2	DK0020S	DK01L	500070									12	12
ammonium	precip	IMG	mg N/l	DK01L_ICan_BB	DK01L_BS1_2	DK0020S	DK01L	500071									12	10
chloride	precip	IMG	mg/l	DK01L_ICan_BB	DK01L_BS1_2	DK0020S	DK01L	500066									12	12
nitrate	precip	IMG	mg N/l	DK01L_ICan_BB	DK01L_BS1_2	DK0020S	DK01L	500072									12	10
sulphate_total	precip	IMG	mg S/l	DK01L_ICan_BB	DK01L_BS1_2	DK0020S	DK01L	500074									12	12
precipitation_amount	precip	IMG	mm	DK01L_Precip_weighing_BB	DK01L_BS1_2	DK0020S	DK01L	500069									12	12
pH	precip	IMG	pH units	DK01L_pH_BB	DK01L_BS1_2	DK0020S	DK01L	500073									12	12

DK0021R Almindingen Denmark

Component	Matrix	Regime	Unit	Method	Instrument	Platform	Org.	Setkey	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
acidity	precip	IMG	ue H/l	BB	UK	DK0021S	DK01L	464						12	11	12		
ammonium	precip	IMG	mg N/l	BB	UK	DK0021S	DK01L	456						12	11	12		
calcium	precip	IMG	mg/l	BB	UK	DK0021S	DK01L	460						12	11	12		
chloride	precip	IMG	mg/l	BB	UK	DK0021S	DK01L	459						12	11	12		
magnesium	precip	IMG	mg/l	BB	UK	DK0021S	DK01L	458						12	12	12		
nitrate	precip	IMG	mg N/l	BB	UK	DK0021S	DK01L	455						12	11	12		
pH	precip	IMG	pH units	BB	UK	DK0021S	DK01L	462						12	12	12		
potassium	precip	IMG	mg/l	BB	UK	DK0021S	DK01L	461						12	12	12		
precipitation_amount	precip	IMG	mm	BB	UK	DK0021S	DK01L	453						12	12	12		
sodium	precip	IMG	mg/l	BB	UK	DK0021S	DK01L	457						12	12	12		
sulphate_corrected	precip	IMG	mg S/l	BB	UK	DK0021S	DK01L	463						12	11	12		
sulphate_total	precip	IMG	mg S/l	BB	UK	DK0021S	DK01L	454						12	11	12		

EE0002R Syrve Estonia

Component	Matrix	Regime	Unit	Method	Instrument	Platform	Org.	Setkey	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
sulphate_total	aerosol	IMG	ug S/m3	AD	UK	EE0002S	EE01L	204	5	11	10							
nitrogen_dioxide	air	IMG	ug N/m3	AD	UK	EE0002S	EE01L	206	11	10	9							
sulphur_dioxide	air	IMG	ug S/m3	AD	UK	EE0002S	EE01L	205	2	10	6							
sum_ammonia_and_ammonium	air+aerosol	IMG	ug N/m3	AD	UK	EE0002S	EE01L	209	5	11	10							
sum_nitric_acid_and_nitrate	air+aerosol	IMG	ug N/m3	AD	UK	EE0002S	EE01L	208	5	11	4							
ammonium	precip	IMG	mg N/l	BD	UK	EE0002S	EE01L	202	11	10		12	9					
calcium	precip	IMG	mg/l	BD	UK	EE0002S	EE01L	404				7	8					
chloride	precip	IMG	mg/l	BD	UK	EE0002S	EE01L	420					10					
magnesium	precip	IMG	mg/l	BD	UK	EE0002S	EE01L	419					7					
nitrate	precip	IMG	mg N/l	BD	UK	EE0002S	EE01L	201	11	10		12	10					
potassium	precip	IMG	mg/l	BD	UK	EE0002S	EE01L	421					10					
precipitation_amount	precip	IMG	mm	BD	UK	EE0002S	EE01L	199	11	10		12	10					
sodium	precip	IMG	mg/l	BD	UK	EE0002S	EE01L	203	11	10		12	10					
sulphate_corrected	precip	IMG	mg S/l	BD	UK	EE0002S	EE01L	200	10	10		12	10					
sulphate_total	precip	IMG	mg S/l	BD	UK	EE0002S	EE01L	207	11	10		12	10					
ammonium	precip	IMG	mg N/l	WD	UK	EE0002S	EE01L	298			12							
nitrate	precip	IMG	mg N/l	WD	UK	EE0002S	EE01L	297			12							
precipitation_amount	precip	IMG	mm	WD	UK	EE0002S	EE01L	295			12							
sodium	precip	IMG	mg/l	WD	UK	EE0002S	EE01L	299			12							
sulphate_corrected	precip	IMG	mg S/l	WD	UK	EE0002S	EE01L	296			12							
sulphate_total	precip	IMG	mg S/l	WD	UK	EE0002S	EE01L	300			12							

EE0009R Lahemaa Estonia

Component	Matrix	Regime	Unit	Method	Instrument	Platform	Org.	Setkey	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
sulphate_total	aerosol	IMG	ug S/m3	AD	UK	EE0009S	EE01L	225	5	8	12							
nitrogen_dioxide	air	IMG	ug N/m3	AD	UK	EE0009S	EE01L	227	8	10	11	11	9					
sulphur_dioxide	air	IMG	ug S/m3	AD	UK	EE0009S	EE01L	226	8	10	12							
sum_ammonia_and_ammonium	air+aerosol	IMG	ug N/m3	AD	UK	EE0009S	EE01L	230	5	7	12	12	9					
sum_nitric_acid_and_nitrate	air+aerosol	IMG	ug N/m3	AD	UK	EE0009S	EE01L	229	5	7	9	11	8					
ammonium	precip	IMG	mg N/l	BD	UK	EE0009S	EE01L	223	8	10		11	9					
calcium	precip	IMG	mg/l	BD	UK	EE0009S	EE01L	406				7	10					
chloride	precip	IMG	mg/l	BD	UK	EE0009S	EE01L	423					12					
magnesium	precip	IMG	mg/l	BD	UK	EE0009S	EE01L	422					7					
nitrate	precip	IMG	mg N/l	BD	UK	EE0009S	EE01L	222	8	10		12	12					
potassium	precip	IMG	mg/l	BD	UK	EE0009S	EE01L	424					12					
precipitation_amount	precip	IMG	mm	BD	UK	EE0009S	EE01L	221	8	10		12	12					
sodium	precip	IMG	mg/l	BD	UK	EE0009S	EE01L	224	8	10		12	12					
sulphate_corrected	precip	IMG	mg S/l	BD	UK	EE0009S	EE01L	266		10		11	12					
sulphate_total	precip	IMG	mg S/l	BD	UK	EE0009S	EE01L	228	8	10		12	12					
ammonium	precip	IMG	mg N/l	WD	UK	EE0009S	EE01L	310			10							
nitrate	precip	IMG	mg N/l	WD	UK	EE0009S	EE01L	309			12							
precipitation_amount	precip	IMG	mm	WD	UK	EE0009S	EE01L	307			12							
sodium	precip	IMG	mg/l	WD	UK	EE0009S	EE01L	311			12							
sulphate_corrected	precip	IMG	mg S/l	WD	UK	EE0009S	EE01L	308			12							
sulphate_total	precip	IMG	mg S/l	WD	UK	EE0009S	EE01L	312			12							

FI0007R Virolahti Finland

Component	Matrix	Regime	Unit	Method	Instrument	Platform	Org.	Setkey	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
sulphate_total	aerosol	IMG	ug S/m3	AD	UK	FI0007S	FI01L	31	12	12	12							
nitrogen_dioxide	air	IMG	ug N/m3	AD	UK	FI0007S	FI01L	286			3							
sulphur_dioxide	air	IMG	ug S/m3	AD	UK	FI0007S	FI01L	32	12	12	12							
ammonium	precip	IMG	mg N/l	BD	UK	FI0007S	FI01L	28	12	12	12							
chloride	precip	IMG	mg/l	BD	UK	FI0007S	FI01L	30	8	12	12							
magnesium	precip	IMG	mg/l	BD	UK	FI0007S	FI01L	29	12	9	12							
nitrate	precip	IMG	mg N/l	BD	UK	FI0007S	FI01L	27	12	12	12							
precipitation_amount	precip	IMG	mm	BD	UK	FI0007S	FI01L	25	12	12	12							
sodium	precip	IMG	mg/l	BD	UK	FI0007S	FI01L	285			12							
sulphate_corrected	precip	IMG	mg S/l	BD	UK	FI0007S	FI01L	26	12	12	12							
sulphate_total	precip	IMG	mg S/l	BD	UK	FI0007S	FI01L	33	12	12	12							
ammonium	precip	IMG	mg N/l	BM	UK	FI0007S	FI01L	37	11	10	12							
chloride	precip	IMG	mg/l	BM	UK	FI0007S	FI01L	40	8	12	12							
magnesium	precip	IMG	mg/l	BM	UK	FI0007S	FI01L	39	9	11	12							

nitrate	precip	IMG	mg N/l	BM	UK	FI0007S	FI01L	36	11	12	12
precipitation_amount	precip	IMG	mm	BM	UK	FI0007S	FI01L	34	12	12	12
sodium	precip	IMG	mg/l	BM	UK	FI0007S	FI01L	38	9	11	12
sulphate_corrected	precip	IMG	mg S/l	BM	UK	FI0007S	FI01L	35	10	12	12
sulphate_total	precip	IMG	mg S/l	BM	UK	FI0007S	FI01L	41	10	12	12

FI0009R Utö Finland

Component	Matrix	Regime	Unit	Method	Instrument	Platform	Org.	Setkey	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
sulphate_total	aerosol	IMG	ug S/m3	AD	UK	FI0009S	FI01L	48	10	11	11							
nitrogen_dioxide	air	IMG	ug N/m3	AD	UK	FI0009S	FI01L	50	4		12	11	10	7				
sulphur_dioxide	air	IMG	ug S/m3	AD	UK	FI0009S	FI01L	49	12	11	12							
sum_ammonia_and_ammonium	air+aerosol	IMG	ug N/m3	AD	UK	FI0009S	FI01L	367				6	12	12				
sum_nitric_acid_and_nitrate	air+aerosol	IMG	ug N/m3	AD	UK	FI0009S	FI01L	366				6	12	12				
acidity	precip	IMG	ue H/l	BD	FI01L_NILU09	FI0009S	FI01L	1001									12	11
ammonium	precip	IMG	mg N/l	BD	FI01L_NILU09	FI0009S	FI01L	45	12	12	12	11	12	12			11	11
calcium	precip	IMG	mg/l	BD	FI01L_NILU09	FI0009S	FI01L	364				11	12	12			11	11
chloride	precip	IMG	mg/l	BD	FI01L_NILU09	FI0009S	FI01L	47	12	12	12	11	12	12			11	11
conductivity	precip	IMG	uS/cm	BD	FI01L_NILU09	FI0009S	FI01L	1008										
magnesium	precip	IMG	mg/l	BD	FI01L_NILU09	FI0009S	FI01L	46	11	11	12	11	12	12			11	11
nitrate	precip	IMG	mg N/l	BD	FI01L_NILU09	FI0009S	FI01L	44	12	12	12	11	12	12			11	11
pH	precip	IMG	pH units	BD	FI01L_NILU09	FI0009S	FI01L	1013									12	11
potassium	precip	IMG	mg/l	BD	FI01L_NILU09	FI0009S	FI01L	365				11	12	12			11	11
precipitation_amount	precip	IMG	mm	BD	FI01L_NILU09	FI0009S	FI01L	42	12	12	12	12	12	12			12	12
sodium	precip	IMG	mg/l	BD	FI01L_NILU09	FI0009S	FI01L	287			12	11	12	12			11	11
sulphate_corrected	precip	IMG	mg S/l	BD	FI01L_NILU09	FI0009S	FI01L	43	12	12	12	11	12					
sulphate_total	precip	IMG	mg S/l	BD	FI01L_NILU09	FI0009S	FI01L	51	12	12	12	11	12	12			11	11
precipitation_amount_off	precip	IMG	mm	offgauge	UK	FI0009S	FI01L	1012									12	12

FI0017R Virolahti II Finland

Component	Matrix	Regime	Unit	Method	Instrument	Platform	Org.	Setkey	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
nitrogen_dioxide	air	IMG	ug N/m3	AD	UK	FI0017S	FI01L	349				12	12	7				
sum_ammonia_and_ammonium	air+aerosol	IMG	ug N/m3	AD	UK	FI0017S	FI01L	353				11	12	12				
sum_nitric_acid_and_nitrate	air+aerosol	IMG	ug N/m3	AD	UK	FI0017S	FI01L	352				11	12	12				
acidity	precip	IMG	ue H/l	BD	FI01L_NILU17	FI0017S	FI01L	500009									12	12
ammonium	precip	IMG	mg N/l	BD	FI01L_NILU17	FI0017S	FI01L	500015									12	12
calcium	precip	IMG	mg/l	BD	FI01L_NILU17	FI0017S	FI01L	500014									12	12
chloride	precip	IMG	mg/l	BD	FI01L_NILU17	FI0017S	FI01L	500010									12	12
magnesium	precip	IMG	mg/l	BD	FI01L_NILU17	FI0017S	FI01L	500013									12	12
nitrate	precip	IMG	mg N/l	BD	FI01L_NILU17	FI0017S	FI01L	500011									12	12

pH	precip	IMG	pH units	BD	FI01L_NILU17	FI0017S	FI01L	500008				12	12
potassium	precip	IMG	mg/l	BD	FI01L_NILU17	FI0017S	FI01L	500017				12	12
precipitation_amount	precip	IMG	mm	BD	FI01L_NILU17	FI0017S	FI01L	500007				12	12
sodium	precip	IMG	mg/l	BD	FI01L_NILU17	FI0017S	FI01L	500016				12	12
sulphate_total	precip	IMG	mg S/l	BD	FI01L_NILU17	FI0017S	FI01L	500012				12	12
arsenic	precip	IMG	ug/l	BD	FI01L_NILU17m	FI0017S	FI01L	500028					12
cadmium	precip	IMG	ug/l	BD	FI01L_NILU17m	FI0017S	FI01L	500022					12
chromium	precip	IMG	ug/l	BD	FI01L_NILU17m	FI0017S	FI01L	500023					12
copper	precip	IMG	ug/l	BD	FI01L_NILU17m	FI0017S	FI01L	500021					12
iron	precip	IMG	ug/l	BD	FI01L_NILU17m	FI0017S	FI01L	500024					12
lead	precip	IMG	ug/l	BD	FI01L_NILU17m	FI0017S	FI01L	500019					12
manganese	precip	IMG	ug/l	BD	FI01L_NILU17m	FI0017S	FI01L	500026					12
nickel	precip	IMG	ug/l	BD	FI01L_NILU17m	FI0017S	FI01L	500025					12
precipitation_amount	precip	IMG	mm	BD	FI01L_NILU17m	FI0017S	FI01L	500020					12
vanadium	precip	IMG	ug/l	BD	FI01L_NILU17m	FI0017S	FI01L	500027					12
zinc	precip	IMG	ug/l	BD	FI01L_NILU17m	FI0017S	FI01L	500018					12
ammonium	precip	IMG	mg N/l	BD	UK	FI0017S	FI01L	344	12	12	12		
calcium	precip	IMG	mg/l	BD	UK	FI0017S	FI01L	347	12	12	12		
chloride	precip	IMG	mg/l	BD	UK	FI0017S	FI01L	348	12	12	12		
magnesium	precip	IMG	mg/l	BD	UK	FI0017S	FI01L	346	12	12	12		
nitrate	precip	IMG	mg N/l	BD	UK	FI0017S	FI01L	343	12	12	12		
potassium	precip	IMG	mg/l	BD	UK	FI0017S	FI01L	351	12	12	12		
precipitation_amount	precip	IMG	mm	BD	UK	FI0017S	FI01L	341	12	12	12		
sodium	precip	IMG	mg/l	BD	UK	FI0017S	FI01L	345	12	12	12		
sulphate_corrected	precip	IMG	mg S/l	BD	UK	FI0017S	FI01L	342	12	12			
sulphate_total	precip	IMG	mg S/l	BD	UK	FI0017S	FI01L	350	12	12	12		
ammonium	precip	IMG	mg N/l	BM	UK	FI0017S	FI01L	357	12	12	10		
calcium	precip	IMG	mg/l	BM	UK	FI0017S	FI01L	360	12	12	12		
chloride	precip	IMG	mg/l	BM	UK	FI0017S	FI01L	361	12	12	12		
magnesium	precip	IMG	mg/l	BM	UK	FI0017S	FI01L	359	12	12	12		
nitrate	precip	IMG	mg N/l	BM	UK	FI0017S	FI01L	356	12	12	12		
potassium	precip	IMG	mg/l	BM	UK	FI0017S	FI01L	363	12	12	12		
precipitation_amount	precip	IMG	mm	BM	UK	FI0017S	FI01L	354	12	12	12		
sodium	precip	IMG	mg/l	BM	UK	FI0017S	FI01L	358	12	12	12		
sulphate_corrected	precip	IMG	mg S/l	BM	UK	FI0017S	FI01L	355	12	12			
sulphate_total	precip	IMG	mg S/l	BM	UK	FI0017S	FI01L	362	12	12	12		
precipitation_amount_off	precip	IMG	mm	offgauge	UK	FI0017S	FI01L	500006				12	12

FI0051R Vanhankylänmaa Finland

Component	Matrix	Regime	Unit	Method	Instrument	Platform	Org.	Setkey	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
ammonium	precip	IMG	mg N/l	BM	UK	FI0051S	FI01L	4	12	10	12							
cadmium	precip	IMG	ug/l	BM	UK	FI0051S	FI01L	8	12	11	12							
lead	precip	IMG	ug/l	BM	UK	FI0051S	FI01L	7	12	11	12							
magnesium	precip	IMG	mg/l	BM	UK	FI0051S	FI01L	5	12	11	12							
nitrate	precip	IMG	mg N/l	BM	UK	FI0051S	FI01L	3	12	11	12							
precipitation_amount	precip	IMG	mm	BM	UK	FI0051S	FI01L	1	12	11	12							
sulphate_corrected	precip	IMG	mg S/l	BM	UK	FI0051S	FI01L	2	12	11	12							
sulphate_total	precip	IMG	mg S/l	BM	UK	FI0051S	FI01L	6	12	11	12							
zinc	precip	IMG	ug/l	BM	UK	FI0051S	FI01L	9	12	11	11							

FI0052R Hailuoto Finland

Component	Matrix	Regime	Unit	Method	Instrument	Platform	Org.	Setkey	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
ammonium	precip	IMG	mg N/l	BM	UK	FI0052S	FI01L	12	10	11	12	12	12	12				
calcium	precip	IMG	mg/l	BM	UK	FI0052S	FI01L	330				12	11	10				
chloride	precip	IMG	mg/l	BM	UK	FI0052S	FI01L	15	10	11	12	12	12	12				
magnesium	precip	IMG	mg/l	BM	UK	FI0052S	FI01L	14	9	10	12	12	11	10				
nitrate	precip	IMG	mg N/l	BM	UK	FI0052S	FI01L	11	11	11	12	12	12	12				
potassium	precip	IMG	mg/l	BM	UK	FI0052S	FI01L	331				12	10	10				
precipitation_amount	precip	IMG	mm	BM	UK	FI0052S	FI01L	10	12	12	12	12	12	12				
sodium	precip	IMG	mg/l	BM	UK	FI0052S	FI01L	13	9	10	12	12	11	10				
sulphate_corrected	precip	IMG	mg S/l	BM	UK	FI0052S	FI01L	284			12	12	12					
sulphate_total	precip	IMG	mg S/l	BM	UK	FI0052S	FI01L	16	10	11	12	12	12	12				
acidity	precip	IMG	ue H/l	BW	UK	FI0052S	FI01L	540							12	12	12	
ammonium	precip	IMG	mg N/l	BW	UK	FI0052S	FI01L	335				12	11	12	12	12	12	
cadmium	precip	IMG	ug/l	BW	UK	FI0052S	FI01L	339				12	11	12	12	11	12	
calcium	precip	IMG	mg/l	BW	UK	FI0052S	FI01L	536							12	12	12	
chloride	precip	IMG	mg/l	BW	UK	FI0052S	FI01L	537							12	12	12	
conductivity	precip	IMG	uS/cm	BW	UK	FI0052S	FI01L	539							12	12	12	
copper	precip	IMG	ug/l	BW	UK	FI0052S	FI01L	467						12	12	12	12	
lead	precip	IMG	ug/l	BW	UK	FI0052S	FI01L	338				12	11	12	12	12	12	
magnesium	precip	IMG	mg/l	BW	UK	FI0052S	FI01L	336				12	11	12	12	12	12	
nitrate	precip	IMG	mg N/l	BW	UK	FI0052S	FI01L	334				12	11	12	12	12	12	
pH	precip	IMG	pH units	BW	UK	FI0052S	FI01L	538							12	12	12	
potassium	precip	IMG	mg/l	BW	UK	FI0052S	FI01L	535							12	12	12	
precipitation_amount	precip	IMG	mm	BW	UK	FI0052S	FI01L	332				12	11	12	12	12	12	
sodium	precip	IMG	mg/l	BW	UK	FI0052S	FI01L	534							12	12	12	
sulphate_corrected	precip	IMG	mg S/l	BW	UK	FI0052S	FI01L	333				12	11					
sulphate_total	precip	IMG	mg S/l	BW	UK	FI0052S	FI01L	337				12	11	12	12	12	12	

zinc	precip	IMG	ug/l	BW	UK	FI0052S	FI01L	340				12	11	12	12	12	12
ammonium	precip	IMG	mg N/l	WM	UK	FI0052S	FI01L	19	4	12	12						
cadmium	precip	IMG	ug/l	WM	UK	FI0052S	FI01L	23	4	11	12						
lead	precip	IMG	ug/l	WM	UK	FI0052S	FI01L	22	4	11	12						
magnesium	precip	IMG	mg/l	WM	UK	FI0052S	FI01L	20	5	12	12						
nitrate	precip	IMG	mg N/l	WM	UK	FI0052S	FI01L	18	5	12	12						
precipitation_amount	precip	IMG	mm	WM	UK	FI0052S	FI01L	17	5	12	12						
sulphate_corrected	precip	IMG	mg S/l	WM	UK	FI0052S	FI01L	258		12	12						
sulphate_total	precip	IMG	mg S/l	WM	UK	FI0052S	FI01L	21	5	12	12						
zinc	precip	IMG	ug/l	WM	UK	FI0052S	FI01L	24	5	10	11						

FI0053R Hailuoto II Finland

Component	Matrix	Regime	Unit	Method	Instrument	Platform	Org.	Setkey	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
acidity	precip	IMG	ue H/l	BW	UK	FI0053S	FI01L	1000012										12
ammonium	precip	IMG	mg N/l	BW	UK	FI0053S	FI01L	1000018										12
arsenic	precip	IMG	ug/l	BW	UK	FI0053S	FI01L	1000030										12
cadmium	precip	IMG	ug/l	BW	UK	FI0053S	FI01L	1000024										12
calcium	precip	IMG	mg/l	BW	UK	FI0053S	FI01L	1000017										12
chloride	precip	IMG	mg/l	BW	UK	FI0053S	FI01L	1000013										12
chromium	precip	IMG	ug/l	BW	UK	FI0053S	FI01L	1000025										11
conductivity	precip	IMG	uS/cm	BW	UK	FI0053S	FI01L	1000010										12
copper	precip	IMG	ug/l	BW	UK	FI0053S	FI01L	1000023										12
iron	precip	IMG	ug/l	BW	UK	FI0053S	FI01L	1000026										12
lead	precip	IMG	ug/l	BW	UK	FI0053S	FI01L	1000022										12
magnesium	precip	IMG	mg/l	BW	UK	FI0053S	FI01L	1000016										12
manganese	precip	IMG	ug/l	BW	UK	FI0053S	FI01L	1000028										12
nickel	precip	IMG	ug/l	BW	UK	FI0053S	FI01L	1000027										12
nitrate	precip	IMG	mg N/l	BW	UK	FI0053S	FI01L	1000014										12
pH	precip	IMG	pH units	BW	UK	FI0053S	FI01L	1000011										12
potassium	precip	IMG	mg/l	BW	UK	FI0053S	FI01L	1000020										12
precipitation_amount	precip	IMG	mm	BW	UK	FI0053S	FI01L	1000009										12
sodium	precip	IMG	mg/l	BW	UK	FI0053S	FI01L	1000019										12
sulphate_total	precip	IMG	mg S/l	BW	UK	FI0053S	FI01L	1000015										12
vanadium	precip	IMG	ug/l	BW	UK	FI0053S	FI01L	1000029										12
zinc	precip	IMG	ug/l	BW	UK	FI0053S	FI01L	1000021										12

FI0055R Haapasaari Finland

Component	Matrix	Regime	Unit	Method	Instrument	Platform	Org.	Setkey	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
acidity	precip	IMG	ue H/l	BW	UK	FI0055S	FI01L	547							11	12	12	12
ammonium	precip	IMG	mg N/l	BW	UK	FI0055S	FI01L	371				12	11	12	12	12	11	12
arsenic	precip	IMG	ug/l	BW	UK	FI0055S	FI01L	1000008										12

cadmium	precip	IMG	ug/l	BW	UK	FI0055S	FI01L	375				12	11	12	12	11	12	12
calcium	precip	IMG	mg/l	BW	UK	FI0055S	FI01L	543							12	12	11	12
chloride	precip	IMG	mg/l	BW	UK	FI0055S	FI01L	544							12	12	11	12
chromium	precip	IMG	ug/l	BW	UK	FI0055S	FI01L	1000003										12
conductivity	precip	IMG	uS/cm	BW	UK	FI0055S	FI01L	546							12	12	12	12
copper	precip	IMG	ug/l	BW	UK	FI0055S	FI01L	466						12	12	12	12	12
iron	precip	IMG	ug/l	BW	UK	FI0055S	FI01L	1000004										12
lead	precip	IMG	ug/l	BW	UK	FI0055S	FI01L	374				12	11	12	12	12	12	12
magnesium	precip	IMG	mg/l	BW	UK	FI0055S	FI01L	372				12	11	12	12	12	11	12
manganese	precip	IMG	ug/l	BW	UK	FI0055S	FI01L	1000006										12
nickel	precip	IMG	ug/l	BW	UK	FI0055S	FI01L	1000005										12
nitrate	precip	IMG	mg N/l	BW	UK	FI0055S	FI01L	370				12	11	12	12	12	11	12
pH	precip	IMG	pH units	BW	UK	FI0055S	FI01L	545							12	12	12	12
potassium	precip	IMG	mg/l	BW	UK	FI0055S	FI01L	542							12	12	11	12
precipitation_amount	precip	IMG	mm	BW	UK	FI0055S	FI01L	368				12	12	12	12	12	12	12
sodium	precip	IMG	mg/l	BW	UK	FI0055S	FI01L	541							12	12	11	12
sulphate_corrected	precip	IMG	mg S/l	BW	UK	FI0055S	FI01L	369				12	11					
sulphate_total	precip	IMG	mg S/l	BW	UK	FI0055S	FI01L	373				12	11	12	12	12	11	12
vanadium	precip	IMG	ug/l	BW	UK	FI0055S	FI01L	1000007										12
zinc	precip	IMG	ug/l	BW	UK	FI0055S	FI01L	376				12	11	12	12	12	12	12
ammonium	precip	IMG	mg N/l	WM	UK	FI0055S	FI01L	54	8	5	9							
cadmium	precip	IMG	ug/l	WM	UK	FI0055S	FI01L	58	8	5	10							
lead	precip	IMG	ug/l	WM	UK	FI0055S	FI01L	57	7	5	10							
magnesium	precip	IMG	mg/l	WM	UK	FI0055S	FI01L	55	8	5	10							
nitrate	precip	IMG	mg N/l	WM	UK	FI0055S	FI01L	53	8	5	10							
precipitation_amount	precip	IMG	mm	WM	UK	FI0055S	FI01L	52	8	5	10							
sulphate_corrected	precip	IMG	mg S/l	WM	UK	FI0055S	FI01L	288			10							
sulphate_total	precip	IMG	mg S/l	WM	UK	FI0055S	FI01L	56	8	5	10							
zinc	precip	IMG	ug/l	WM	UK	FI0055S	FI01L	59	7	5	10							

FI0056R Tvärminne Finland

Component	Matrix	Regime	Unit	Method	Instrument	Platform	Org.	Setkey	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
ammonium	precip	IMG	mg N/l	BM	UK	FI0056S	FI02L	63	10	11	12	12	12	11	12	10		
calcium	precip	IMG	mg/l	BM	UK	FI0056S	FI02L	377				12	11	10	10	8		
chloride	precip	IMG	mg/l	BM	UK	FI0056S	FI02L	66	10	11	12	12	12	12	12	10		
conductivity	precip	IMG	uS/cm	BM	UK	FI0056S	FI02L	553							12	12		
magnesium	precip	IMG	mg/l	BM	UK	FI0056S	FI02L	65	9	11	11	12	11	10	10	9		
nitrate	precip	IMG	mg N/l	BM	UK	FI0056S	FI02L	62	10	11	12	12	12	11	12	10		
pH	precip	IMG	pH units	BM	UK	FI0056S	FI02L	552							12	11		
potassium	precip	IMG	mg/l	BM	UK	FI0056S	FI02L	378				12	11	10	10	9		

precipitation_amount	precip	IMG	mm	BM	UK	FI0056S	FI02L	60	12	12	12	12	12	12	12	12	
sodium	precip	IMG	mg/l	BM	UK	FI0056S	FI02L	64	9	11	11	12	11	10	10	9	
sulphate_corrected	precip	IMG	mg S/l	BM	UK	FI0056S	FI02L	61	10	11	12	12	12				
sulphate_total	precip	IMG	mg S/l	BM	UK	FI0056S	FI02L	67	10	11	12	12	12	12	12	10	

FI0057R Jomala Finland

Component	Matrix	Regime	Unit	Method	Instrument	Platform	Org.	Setkey	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
ammonium	precip	IMG	mg N/l	BM	UK	FI0057S	FI02L	71	10	9	12	12	12	12	12	11		
calcium	precip	IMG	mg/l	BM	UK	FI0057S	FI02L	379				12	12	11	10	10		
chloride	precip	IMG	mg/l	BM	UK	FI0057S	FI02L	74	10	9	12	12	12	12	12	12		
conductivity	precip	IMG	uS/cm	BM	UK	FI0057S	FI02L	549							12	10		
magnesium	precip	IMG	mg/l	BM	UK	FI0057S	FI02L	73	9	10	12	12	12	11	11	10		
nitrate	precip	IMG	mg N/l	BM	UK	FI0057S	FI02L	70	10	8	12	12	12	12	12	12		
pH	precip	IMG	pH units	BM	UK	FI0057S	FI02L	548							12	10		
potassium	precip	IMG	mg/l	BM	UK	FI0057S	FI02L	380				12	12	11	11	10		
precipitation_amount	precip	IMG	mm	BM	UK	FI0057S	FI02L	68	12	12	12	12	12	12	12	12		
sodium	precip	IMG	mg/l	BM	UK	FI0057S	FI02L	72	9	10	12	12	12	11	11	10		
sulphate_corrected	precip	IMG	mg S/l	BM	UK	FI0057S	FI02L	69	10		12	12	12					
sulphate_total	precip	IMG	mg S/l	BM	UK	FI0057S	FI02L	75	10	9	12	12	12	12	12	12		

FI0058R Rahja Finland

Component	Matrix	Regime	Unit	Method	Instrument	Platform	Org.	Setkey	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
ammonium	precip	IMG	mg N/l	BM	UK	FI0058S	FI02L	79	9	11		12	12	12	11	10		
calcium	precip	IMG	mg/l	BM	UK	FI0058S	FI02L	381				12	10	9	10	9		
chloride	precip	IMG	mg/l	BM	UK	FI0058S	FI02L	82	10	11		12	12	12	11	11		
conductivity	precip	IMG	uS/cm	BM	UK	FI0058S	FI02L	559							11	12		
magnesium	precip	IMG	mg/l	BM	UK	FI0058S	FI02L	81	9	11		12	10	9	10	9		
nitrate	precip	IMG	mg N/l	BM	UK	FI0058S	FI02L	78	9	11		12	11	10	11	11		
pH	precip	IMG	pH units	BM	UK	FI0058S	FI02L	558							11	12		
potassium	precip	IMG	mg/l	BM	UK	FI0058S	FI02L	382				12	10	9	10	9		
precipitation_amount	precip	IMG	mm	BM	UK	FI0058S	FI02L	76	12	12		12	12	12	11	12		
sodium	precip	IMG	mg/l	BM	UK	FI0058S	FI02L	80	9	11		12	10	9	10	9		
sulphate_corrected	precip	IMG	mg S/l	BM	UK	FI0058S	FI02L	77	10	10		12	12					
sulphate_total	precip	IMG	mg S/l	BM	UK	FI0058S	FI02L	83	10	10		12	12	12	11	11		

FI0059R Ylimarkku Finland

Component	Matrix	Regime	Unit	Method	Instrument	Platform	Org.	Setkey	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
ammonium	precip	IMG	mg N/l	BM	UK	FI0059S	FI02L	87	10	12	11	12	12	11	11	11		
calcium	precip	IMG	mg/l	BM	UK	FI0059S	FI02L	383				12	12	10	11	7		
chloride	precip	IMG	mg/l	BM	UK	FI0059S	FI02L	90	10	11	12	12	12	11	11	11		

conductivity	precip	IMG	uS/cm	BM	UK	FI0059S	FI02L	557							11	12
magnesium	precip	IMG	mg/l	BM	UK	FI0059S	FI02L	89	8	12	12	12	12	11	11	8
nitrate	precip	IMG	mg N/l	BM	UK	FI0059S	FI02L	86	8	11	12	12	12	11	11	12
pH	precip	IMG	pH units	BM	UK	FI0059S	FI02L	556							11	12
potassium	precip	IMG	mg/l	BM	UK	FI0059S	FI02L	384				12	11	11	11	8
precipitation_amount	precip	IMG	mm	BM	UK	FI0059S	FI02L	84	12	12	12	12	12	12	11	12
sodium	precip	IMG	mg/l	BM	UK	FI0059S	FI02L	88	8	12	12	12	12	11	11	8
sulphate_corrected	precip	IMG	mg S/l	BM	UK	FI0059S	FI02L	85	9	12	12	12	12			
sulphate_total	precip	IMG	mg S/l	BM	UK	FI0059S	FI02L	91	9	12	12	12	12	11	11	12

FI0060R Sipoo Finland

Component	Matrix	Regime	Unit	Method	Instrument	Platform	Org.	Setkey	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
ammonium	precip	IMG	mg N/l	BM	UK	FI0060S	FI02L	95	10	11	12	11	12	12	11	10		
calcium	precip	IMG	mg/l	BM	UK	FI0060S	FI02L	385				11	12	11	10	9		
chloride	precip	IMG	mg/l	BM	UK	FI0060S	FI02L	98	10	11	11	11	12	12	11	11		
conductivity	precip	IMG	uS/cm	BM	UK	FI0060S	FI02L	555							11	12		
magnesium	precip	IMG	mg/l	BM	UK	FI0060S	FI02L	97	10	11	9	11	12	11	10	9		
nitrate	precip	IMG	mg N/l	BM	UK	FI0060S	FI02L	94	10	11	11	11	12	12	11	11		
pH	precip	IMG	pH units	BM	UK	FI0060S	FI02L	554							11	12		
potassium	precip	IMG	mg/l	BM	UK	FI0060S	FI02L	386				11	12	11	10	9		
precipitation_amount	precip	IMG	mm	BM	UK	FI0060S	FI02L	92	12	12	12	12	12	12	11	12		
sodium	precip	IMG	mg/l	BM	UK	FI0060S	FI02L	96	10	11	9	11	12	11	10	9		
sulphate_corrected	precip	IMG	mg S/l	BM	UK	FI0060S	FI02L	93	10	11	12	11	12					
sulphate_total	precip	IMG	mg S/l	BM	UK	FI0060S	FI02L	99	10	11	12	11	12	12	11	11		

FI0061R Sulva Finland

Component	Matrix	Regime	Unit	Method	Instrument	Platform	Org.	Setkey	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
ammonium	precip	IMG	mg N/l	BM	UK	FI0061S	FI02L	103	10	11	12	8	12	11				
calcium	precip	IMG	mg/l	BM	UK	FI0061S	FI02L	387				8	12	10				
chloride	precip	IMG	mg/l	BM	UK	FI0061S	FI02L	106	10	10	12	8	12	12				
magnesium	precip	IMG	mg/l	BM	UK	FI0061S	FI02L	105	9	11	12	8	12	10				
nitrate	precip	IMG	mg N/l	BM	UK	FI0061S	FI02L	102	10	11	11	8	12	11				
potassium	precip	IMG	mg/l	BM	UK	FI0061S	FI02L	388				8	12	10				
precipitation_amount	precip	IMG	mm	BM	UK	FI0061S	FI02L	100	12	12	12	12	12	12				
sodium	precip	IMG	mg/l	BM	UK	FI0061S	FI02L	104	9	11	12	8	12	10				
sulphate_corrected	precip	IMG	mg S/l	BM	UK	FI0061S	FI02L	101	10	11	12		12					
sulphate_total	precip	IMG	mg S/l	BM	UK	FI0061S	FI02L	107	10	11	12	8	12	12				

FI0062R Korppoo Finland

Component	Matrix	Regime	Unit	Method	Instrument	Platform	Org.	Setkey	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
ammonium	precip	IMG	mg N/l	BM	UK	FI0062S	FI02L	111	10	11	10	12	12	12	11	11		
calcium	precip	IMG	mg/l	BM	UK	FI0062S	FI02L	389				12	12	11	8	8		
chloride	precip	IMG	mg/l	BM	UK	FI0062S	FI02L	114	10	11	11	12	12	12	11	12		
conductivity	precip	IMG	uS/cm	BM	UK	FI0062S	FI02L	551							12	12		
magnesium	precip	IMG	mg/l	BM	UK	FI0062S	FI02L	113	9		11	12	12	11	8	8		
nitrate	precip	IMG	mg N/l	BM	UK	FI0062S	FI02L	110	10	11	11	12	12	11	11	12		
pH	precip	IMG	pH units	BM	UK	FI0062S	FI02L	550							12	11		
potassium	precip	IMG	mg/l	BM	UK	FI0062S	FI02L	390				12	12	11	8	8		
precipitation_amount	precip	IMG	mm	BM	UK	FI0062S	FI02L	108	12	12	12	12	12	12	12	12		
sodium	precip	IMG	mg/l	BM	UK	FI0062S	FI02L	112	9	11	11	12	12	11	8	8		
sulphate_corrected	precip	IMG	mg S/l	BM	UK	FI0062S	FI02L	109	10	11	11	12	12					
sulphate_total	precip	IMG	mg S/l	BM	UK	FI0062S	FI02L	115	10	11	11	12	12	12	11	12		

LT0003R Nida Lithuania

Component	Matrix	Regime	Unit	Method	Instrument	Platform	Org.	Setkey	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
sulphate_total	aerosol	IMG	ug S/m3	AD	UK	LT0003S	LT01L	193	4		12							
nitrogen_dioxide	air	IMG	ug N/m3	AD	UK	LT0003S	LT01L	195	9	11	12	9	12					
sulphur_dioxide	air	IMG	ug S/m3	AD	UK	LT0003S	LT01L	194	9	11	11							
sum_ammonia_and_ammonium	air+aerosol	IMG	ug N/m3	AD	UK	LT0003S	LT01L	198	4		12	12	12					
sum_nitric_acid_and_nitrate	air+aerosol	IMG	ug N/m3	AD	UK	LT0003S	LT01L	197	4		12	11	10					
ammonium	precip	IMG	mg N/l	BD	UK	LT0003S	LT01L	191	10	10		4	10					
calcium	precip	IMG	mg/l	BD	UK	LT0003S	LT01L	403				3	11					
nitrate	precip	IMG	mg N/l	BD	UK	LT0003S	LT01L	190	10	11		5	11					
precipitation_amount	precip	IMG	mm	BD	UK	LT0003S	LT01L	188	10	10		6	11					
sodium	precip	IMG	mg/l	BD	UK	LT0003S	LT01L	192	10	11		6	11					
sulphate_corrected	precip	IMG	mg S/l	BD	UK	LT0003S	LT01L	189	10	11			10					
sulphate_total	precip	IMG	mg S/l	BD	UK	LT0003S	LT01L	196	10	11		6	11					
ammonium	precip	IMG	mg N/l	WD	UK	LT0003S	LT01L	292			12							
nitrate	precip	IMG	mg N/l	WD	UK	LT0003S	LT01L	291			11							
precipitation_amount	precip	IMG	mm	WD	UK	LT0003S	LT01L	289			12							
sodium	precip	IMG	mg/l	WD	UK	LT0003S	LT01L	293			12							
sulphate_corrected	precip	IMG	mg S/l	WD	UK	LT0003S	LT01L	290			11							
sulphate_total	precip	IMG	mg S/l	WD	UK	LT0003S	LT01L	294			12							

LT0015R Preila Lithuania

Component	Matrix	Regime	Unit	Method	Instrument	Platform	Org.	Setkey	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
ammonium	aerosol	IMG	ug N/m3	AD	LT01L_FP15a1	LT0015S	LT01L	656						12	12	11	12	12
cadmium	aerosol	IMG	ng/m3	AD	LT01L_FP15a1	LT0015S	LT01L	661							12	12	12	12
lead	aerosol	IMG	ng/m3	AD	LT01L_FP15a1	LT0015S	LT01L	657						12	12	12	12	12
nitrate	aerosol	IMG	ug N/m3	AD	LT01L_FP15a1	LT0015S	LT01L	654						12	12	11	12	12
zinc	aerosol	IMG	ng/m3	AD	LT01L_FP15a1	LT0015S	LT01L	660							12	12	12	12
nitrogen_dioxide	air	IMG	ug N/m3	AD	LT01L_AS15a	LT0015S	LT01L	653						12	12	11	11	12
ammonia	air	IMG	ug N/m3	AD	LT01L_TD15a	LT0015S	LT01L	655						12	12	11	12	8
nitric_acid	air	IMG	ug N/m3	AD	UK	LT0015S	LT01L	659							11	11	12	
benzo_a_pyrene	air+aerosol	IMG	ng/m3	AD	LT01L_FP15a1	LT0015S	LT01L	662							12	12	12	10
ammonium	precip	IMG	mg N/l	BM	UK	LT0015S	LT01L	585								12	11	12
cadmium	precip	IMG	ug/l	BM	UK	LT0015S	LT01L	587								8	10	9
calcium	precip	IMG	mg/l	BM	UK	LT0015S	LT01L	592								12	11	12
chloride	precip	IMG	mg/l	BM	UK	LT0015S	LT01L	593								12	11	12
chromium	precip	IMG	ug/l	BM	UK	LT0015S	LT01L	626									7	9
conductivity	precip	IMG	uS/cm	BM	UK	LT0015S	LT01L	597								8	11	11
copper	precip	IMG	ug/l	BM	UK	LT0015S	LT01L	589								7	8	9
lead	precip	IMG	ug/l	BM	UK	LT0015S	LT01L	586								8	10	9
nickel	precip	IMG	ug/l	BM	UK	LT0015S	LT01L	595								7	8	9
nitrate	precip	IMG	mg N/l	BM	UK	LT0015S	LT01L	584								12	11	12
pH	precip	IMG	pH units	BM	UK	LT0015S	LT01L	596								12	11	12
potassium	precip	IMG	mg/l	BM	UK	LT0015S	LT01L	591								11	11	12
precipitation_amount	precip	IMG	mm	BM	UK	LT0015S	LT01L	583								12	11	12
sodium	precip	IMG	mg/l	BM	UK	LT0015S	LT01L	590								12	11	12
sulphate_total	precip	IMG	mg S/l	BM	UK	LT0015S	LT01L	594								12	11	12
zinc	precip	IMG	ug/l	BM	UK	LT0015S	LT01L	588								6	9	9
ammonium	precip	IMG	mg N/l	BW	UK	LT0015S	LT01L	516						12	12			
cadmium	precip	IMG	ug/l	BW	UK	LT0015S	LT01L	561							10			
calcium	precip	IMG	mg/l	BW	UK	LT0015S	LT01L	520						10	4			
chloride	precip	IMG	mg/l	BW	UK	LT0015S	LT01L	521						12	12			
conductivity	precip	IMG	uS/cm	BW	UK	LT0015S	LT01L	524						12	12			
copper	precip	IMG	ug/l	BW	UK	LT0015S	LT01L	562							10			
lead	precip	IMG	ug/l	BW	UK	LT0015S	LT01L	560							10			
magnesium	precip	IMG	mg/l	BW	UK	LT0015S	LT01L	519						12	4			
nitrate	precip	IMG	mg N/l	BW	UK	LT0015S	LT01L	515						12	12			
pH	precip	IMG	pH units	BW	UK	LT0015S	LT01L	523						12	12			
potassium	precip	IMG	mg/l	BW	UK	LT0015S	LT01L	518						12	12			
precipitation_amount	precip	IMG	mm	BW	UK	LT0015S	LT01L	514						12	12			
sodium	precip	IMG	mg/l	BW	UK	LT0015S	LT01L	517						12	12			
sulphate_total	precip	IMG	mg S/l	BW	UK	LT0015S	LT01L	522						12	12			

LV0010R Rucava Latvia

Component	Matrix	Regime	Unit	Method	Instrument	Platform	Org.	Setkey	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
ammonium	aerosol	IMG	ug N/m3	AD	UK	LV0010S	LV01L	647						12	12	12	12	12
nitrate	aerosol	IMG	ug N/m3	AD	UK	LV0010S	LV01L	646						12	12	12	12	12
sulphate_total	aerosol	IMG	ug S/m3	AD	UK	LV0010S	LV01L	215	4	9	12			12	12	12	12	12
cadmium	aerosol	IMG	ng/m3	AW	UK	LV0010S	LV01L	1000058									10	12
copper	aerosol	IMG	ng/m3	AW	UK	LV0010S	LV01L	1000059									10	12
lead	aerosol	IMG	ng/m3	AW	UK	LV0010S	LV01L	1000060									10	12
zinc	aerosol	IMG	ng/m3	AW	UK	LV0010S	LV01L	1000061									10	12
nitrogen_dioxide	air	IMG	ug N/m3	AD	UK	LV0010S	LV01L	217	10	8	12	12	12	12	12	12	12	12
sulphur_dioxide	air	IMG	ug S/m3	AD	UK	LV0010S	LV01L	216	10	8	12			12	12	12	12	12
sum_ammonia_and_ammonium	air+aerosol	IMG	ug N/m3	AD	UK	LV0010S	LV01L	220	4	9	12	11	12				11	12
sum_nitric_acid_and_nitrate	air+aerosol	IMG	ug N/m3	AD	UK	LV0010S	LV01L	219	4	9	12	11	12				11	12
ammonium	precip	IMG	mg N/l	BD	LV01L_bd10	LV0010S	LV01L	213	12	11	12	12	12	12	11	12	11	12
calcium	precip	IMG	mg/l	BD	LV01L_bd10	LV0010S	LV01L	405				8	12	11	11	12	11	12
nitrate	precip	IMG	mg N/l	BD	LV01L_bd10	LV0010S	LV01L	212	12	11	11	12	12	12	11	12	11	12
pH	precip	IMG	pH units	BD	LV01L_bd10	LV0010S	LV01L	1000036										12
potassium	precip	IMG	mg/l	BD	LV01L_bd10	LV0010S	LV01L	465						11	11	12	11	12
sodium	precip	IMG	mg/l	BD	LV01L_bd10	LV0010S	LV01L	214	12	2	12	12	12	12	11	12	11	12
sulphate_corrected	precip	IMG	mg S/l	BD	LV01L_bd10	LV0010S	LV01L	211	12		12	12	12					12
sulphate_total	precip	IMG	mg S/l	BD	LV01L_bd10	LV0010S	LV01L	218	12	11	12	12	12	12	11	12	11	
cadmium	precip	IMG	ug/l	BM	LV01L_bm10m	LV0010S	LV01L	1000031									11	12
chloride	precip	IMG	mg/l	BM	LV01L_bm10m	LV0010S	LV01L	1000032										12
conductivity	precip	IMG	uS/cm	BM	LV01L_bm10m	LV0010S	LV01L	1000034										12
copper	precip	IMG	ug/l	BM	LV01L_bm10m	LV0010S	LV01L	1000033									9	12
lead	precip	IMG	ug/l	BM	LV01L_bm10m	LV0010S	LV01L	1000035									11	12
zinc	precip	IMG	ug/l	BM	LV01L_bm10m	LV0010S	LV01L	1000037									8	12
precipitation_amount_off	precip	IMG	mm	offgauge	UK	LV0010S	LV01L	210	12	11	12	12	12	12	11	12	11	12

LV0016R Zoseni Latvia

Component	Matrix	Regime	Unit	Method	Instrument	Platform	Org.	Setkey	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
ammonium	aerosol	IMG	ug N/m3	AD	UK	LV0016S	LV01L	672									5	9
nitrate	aerosol	IMG	ug N/m3	AD	UK	LV0016S	LV01L	671									6	9
sulphate_total	aerosol	IMG	ug S/m3	AD	UK	LV0016S	LV01L	674									6	9
cadmium	aerosol	IMG	ng/m3	AW	UK	LV0016S	LV01L	1000062									7	9
copper	aerosol	IMG	ng/m3	AW	UK	LV0016S	LV01L	1000063									7	9
lead	aerosol	IMG	ng/m3	AW	UK	LV0016S	LV01L	1000064									7	9
zinc	aerosol	IMG	ng/m3	AW	UK	LV0016S	LV01L	1000065									7	9
nitrogen_dioxide	air	IMG	ug N/m3	AD	UK	LV0016S	LV01L	670									5	9
sulphur_dioxide	air	IMG	ug S/m3	AD	UK	LV0016S	LV01L	673									6	9

ammonium	precip	IMG	mg N/l	BM	LV01L_bm16	LV0016S	LV01L	621		11	
calcium	precip	IMG	mg/l	BM	LV01L_bm16	LV0016S	LV01L	624		10	
nitrate	precip	IMG	mg N/l	BM	LV01L_bm16	LV0016S	LV01L	620		11	
potassium	precip	IMG	mg/l	BM	LV01L_bm16	LV0016S	LV01L	623		10	
sodium	precip	IMG	mg/l	BM	LV01L_bm16	LV0016S	LV01L	622		10	
sulphate_total	precip	IMG	mg S/l	BM	LV01L_bm16	LV0016S	LV01L	625		11	
cadmium	precip	IMG	ug/l	BM	LV01L_bm16m	LV0016S	LV01L	1000040			12
chloride	precip	IMG	mg/l	BM	LV01L_bm16m	LV0016S	LV01L	1000041			12
conductivity	precip	IMG	uS/cm	BM	LV01L_bm16m	LV0016S	LV01L	1000043			12
copper	precip	IMG	ug/l	BM	LV01L_bm16m	LV0016S	LV01L	1000042			12
lead	precip	IMG	ug/l	BM	LV01L_bm16m	LV0016S	LV01L	1000044			12
zinc	precip	IMG	ug/l	BM	LV01L_bm16m	LV0016S	LV01L	1000051			12
ammonium	precip	IMG	mg N/l	BW	LV01L_bw16	LV0016S	LV01L	1000038			12
calcium	precip	IMG	mg/l	BW	LV01L_bw16	LV0016S	LV01L	1000039			11
nitrate	precip	IMG	mg N/l	BW	LV01L_bw16	LV0016S	LV01L	1000046			12
pH	precip	IMG	pH units	BW	LV01L_bw16	LV0016S	LV01L	1000047			12
potassium	precip	IMG	mg/l	BW	LV01L_bw16	LV0016S	LV01L	1000048			11
sodium	precip	IMG	mg/l	BW	LV01L_bw16	LV0016S	LV01L	1000049			11
sulphate_corrected	precip	IMG	mg S/l	BW	LV01L_bw16	LV0016S	LV01L	1000050			12
precipitation_amount_off	precip	IMG	mm	offgauge	UK	LV0016S	LV01L	619		11	12

PL0004R Leba Poland

Component	Matrix	Regime	Unit	Method	Instrument	Platform	Org.	Setkey	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
sulphate_total	aerosol	IMG	ug S/m3	AD	UK	PL0004S	PL03L	320			9			10		9	12	12
nitrogen_dioxide	air	IMG	ug N/m3	AD	UK	PL0004S	PL03L	322			9					9	10	12
sulphur_dioxide	air	IMG	ug S/m3	AD	UK	PL0004S	PL03L	321			9			9		9	12	12
sum_ammonia_and_ammonium	air+aerosol	IMG	ug N/m3	AD	UK	PL0004S	PL03L	678									5	12
sum_nitric_acid_and_nitrate	air+aerosol	IMG	ug N/m3	AD	UK	PL0004S	PL03L	677									5	12
ammonium	precip	IMG	mg N/l	BD	UK	PL0004S	PL03L	316			12	12	12	12	12	12	12	12
calcium	precip	IMG	mg/l	BD	UK	PL0004S	PL03L	425					9	12	12	12	12	
chloride	precip	IMG	mg/l	BD	UK	PL0004S	PL03L	319			12	12	12	12	12	12	12	12
magnesium	precip	IMG	mg/l	BD	UK	PL0004S	PL03L	318			12	12	12	12	12	12	12	12
nitrate	precip	IMG	mg N/l	BD	UK	PL0004S	PL03L	315			12	12	12	12	12	12	12	12
pH	precip	IMG	pH units	BD	UK	PL0004S	PL03L	598								12		
potassium	precip	IMG	mg/l	BD	UK	PL0004S	PL03L	426					9	12	12	12	12	12
precipitation_amount	precip	IMG	mm	BD	UK	PL0004S	PL03L	313			12	12	12	12	12	12	12	12
sodium	precip	IMG	mg/l	BD	UK	PL0004S	PL03L	317			12	12	12	12	12	12	12	12
sulphate_corrected	precip	IMG	mg S/l	BD	UK	PL0004S	PL03L	314			12	12	12					
sulphate_total	precip	IMG	mg S/l	BD	UK	PL0004S	PL03L	323			12	12	12	12	12	11	12	12
cadmium	precip	IMG	ug/l	PL03L_ASV_BD	UK	PL0004S	PL03L	407				12	11					

lead	precip	IMG	ug/l	PL03L_ASV_BD	UK	PL0004S	PL03L	324		12	12	11					
zinc	precip	IMG	ug/l	PL03L_ASV_BD	UK	PL0004S	PL03L	325		12	12	11					
cadmium	precip	IMG	ug/l	PL03L_ASV_WB	UK	PL0004S	PL03L	472					12	11	12		
copper	precip	IMG	ug/l	PL03L_ASV_WB	UK	PL0004S	PL03L	474					12	11	12		
lead	precip	IMG	ug/l	PL03L_ASV_WB	UK	PL0004S	PL03L	471					12	12	12		
zinc	precip	IMG	ug/l	PL03L_ASV_WB	UK	PL0004S	PL03L	473					12	10	12		
cadmium	precip	IMG	ug/l	PL03L_ASV_WM	UK	PL0004S	PL03L	633								12	
copper	precip	IMG	ug/l	PL03L_ASV_WM	UK	PL0004S	PL03L	635								12	
lead	precip	IMG	ug/l	PL03L_ASV_WM	UK	PL0004S	PL03L	632								12	
zinc	precip	IMG	ug/l	PL03L_ASV_WM	UK	PL0004S	PL03L	634								12	
cadmium	precip	IMG	ug/l	PL03L_GFAAS_WB	UK	PL0004S	PL03L	500076									12
copper	precip	IMG	ug/l	PL03L_GFAAS_WB	UK	PL0004S	PL03L	500077									12
lead	precip	IMG	ug/l	PL03L_GFAAS_WB	UK	PL0004S	PL03L	500078									12
zinc	precip	IMG	ug/l	PL03L_GFAAS_WB	UK	PL0004S	PL03L	500079									12
ammonium	precip	IMG	mg N/l	WB	UK	PL0004S	PL03L	470					12	12	12		
calcium	precip	IMG	mg/l	WB	UK	PL0004S	PL03L	478					12	12	12		
chloride	precip	IMG	mg/l	WB	UK	PL0004S	PL03L	479					12	11	12		
magnesium	precip	IMG	mg/l	WB	UK	PL0004S	PL03L	477					12	12	12		
nitrate	precip	IMG	mg N/l	WB	UK	PL0004S	PL03L	469					12	12	12		
pH	precip	IMG	pH units	WB	UK	PL0004S	PL03L	599							12		
potassium	precip	IMG	mg/l	WB	UK	PL0004S	PL03L	476					12	12	12		
precipitation_amount	precip	IMG	mm	WB	UK	PL0004S	PL03L	468					12	12	12		12
sodium	precip	IMG	mg/l	WB	UK	PL0004S	PL03L	475					12	12	12		
sulphate_total	precip	IMG	mg S/l	WB	UK	PL0004S	PL03L	480					12	12	12		
ammonium	precip	IMG	mg N/l	WD	UK	PL0004S	PL03L	269	10								
chloride	precip	IMG	mg/l	WD	UK	PL0004S	PL03L	272	10								
magnesium	precip	IMG	mg/l	WD	UK	PL0004S	PL03L	271	10								
nitrate	precip	IMG	mg N/l	WD	UK	PL0004S	PL03L	268	10								
precipitation_amount	precip	IMG	mm	WD	UK	PL0004S	PL03L	267	10								
sodium	precip	IMG	mg/l	WD	UK	PL0004S	PL03L	270	10								
sulphate_total	precip	IMG	mg S/l	WD	UK	PL0004S	PL03L	273	10								

SE0002R Rörvik Sweden

Component	Matrix	Regime	Unit	Method	Instrument	Platform	Org.	Setkey	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
nitrate	aerosol	IMG	ug N/m3	AD	UK	SE0002S	SE01L	649						12	12			
sulphate_total	aerosol	IMG	ug S/m3	AD	UK	SE0002S	SE01L	171	9		12							
ammonia	air	IMG	ug N/m3	AD	UK	SE0002S	SE01L	650						12	12			
nitrogen_dioxide	air	IMG	ug N/m3	AD	UK	SE0002S	SE01L	173	12	12	12	12	12	12	12	12	12	12
sulphur_dioxide	air	IMG	ug S/m3	AD	UK	SE0002S	SE01L	172	12	12	12							
sum_ammonia_and_ammonium	air+aerosol	IMG	ug N/m3	AD	UK	SE0002S	SE01L	176	12	12	12	12	12			12	12	12

sum_nitric_acid_and_nitrate	air+aerosol	IMG	ug N/m3	AD	UK	SE0002S	SE01L	175	12	12	12	12	12			12	12	12
ammonium	precip	IMG	mg N/l	WD	UK	SE0002S	SE01L	167	11	12	12	12	12	12	12	12	12	
calcium	precip	IMG	mg/l	WD	UK	SE0002S	SE01L	399				12	12	12	12	12	12	
chloride	precip	IMG	mg/l	WD	UK	SE0002S	SE01L	170	11	12	12	12	12	12	12	12	12	
magnesium	precip	IMG	mg/l	WD	UK	SE0002S	SE01L	169	11	12	12	12	12	12	12	12	12	
nitrate	precip	IMG	mg N/l	WD	UK	SE0002S	SE01L	166	11	12	12	12	12	12	12	12	12	
potassium	precip	IMG	mg/l	WD	UK	SE0002S	SE01L	400				12	12	12	12	12	12	
precipitation_amount	precip	IMG	mm	WD	UK	SE0002S	SE01L	164	11	12	12	12	12			12	12	
sodium	precip	IMG	mg/l	WD	UK	SE0002S	SE01L	168	11	12	12	12	12	12	12	12	12	
sulphate_corrected	precip	IMG	mg S/l	WD	UK	SE0002S	SE01L	165	11	12	12	12	12					
sulphate_total	precip	IMG	mg S/l	WD	UK	SE0002S	SE01L	174	11	12	12	12	12	12	12	12		

SE0008R Hoburgen Sweden

Component	Matrix	Regime	Unit	Method	Instrument	Platform	Org.	Setkey	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
nitrate	aerosol	IMG	ug N/m3	AD	UK	SE0008S	SE01L	658							1			
sulphate_total	aerosol	IMG	ug S/m3	AD	UK	SE0008S	SE01L	184	9		12							
nitrogen_dioxide	air	IMG	ug N/m3	AD	UK	SE0008S	SE01L	186	12	12	12	12	12	12	12	12	12	12
sulphur_dioxide	air	IMG	ug S/m3	AD	UK	SE0008S	SE01L	185	12	12	12							
sum_ammonia_and_ammonium	air+aerosol	IMG	ug N/m3	AD	UK	SE0008S	SE01L	675									10	6
sum_nitric_acid_and_nitrate	air+aerosol	IMG	ug N/m3	AD	UK	SE0008S	SE01L	676									10	6
ammonium	precip	IMG	mg N/l	BM	UK	SE0008S	SE01L	574								9	8	
calcium	precip	IMG	mg/l	BM	UK	SE0008S	SE01L	578								9	8	
chloride	precip	IMG	mg/l	BM	UK	SE0008S	SE01L	579								9	8	
magnesium	precip	IMG	mg/l	BM	UK	SE0008S	SE01L	577								9	8	
nitrate	precip	IMG	mg N/l	BM	UK	SE0008S	SE01L	573								9	8	
potassium	precip	IMG	mg/l	BM	UK	SE0008S	SE01L	576								9	8	
precipitation_amount	precip	IMG	mm	BM	UK	SE0008S	SE01L	572								9	8	
sodium	precip	IMG	mg/l	BM	UK	SE0008S	SE01L	575								9	8	
sulphate_total	precip	IMG	mg S/l	BM	UK	SE0008S	SE01L	580								9	8	
ammonium	precip	IMG	mg N/l	WD	UK	SE0008S	SE01L	180	12	12	12	11	12	10				
calcium	precip	IMG	mg/l	WD	UK	SE0008S	SE01L	401				11	12	8				
chloride	precip	IMG	mg/l	WD	UK	SE0008S	SE01L	183	12	12	12	11	12	10				
magnesium	precip	IMG	mg/l	WD	UK	SE0008S	SE01L	182	12	12	12	11	12	9				
nitrate	precip	IMG	mg N/l	WD	UK	SE0008S	SE01L	179	12	12	12	11	12	10				
potassium	precip	IMG	mg/l	WD	UK	SE0008S	SE01L	402				11	12	9				
precipitation_amount	precip	IMG	mm	WD	UK	SE0008S	SE01L	177	12	12	12	12	12					
sodium	precip	IMG	mg/l	WD	UK	SE0008S	SE01L	181	12	12	12	11	12	9				
sulphate_corrected	precip	IMG	mg S/l	WD	UK	SE0008S	SE01L	178	12	12	12	11	12					
sulphate_total	precip	IMG	mg S/l	WD	UK	SE0008S	SE01L	187	12	12	12	11	12	10				

SE0011R Vavihill Sweden

Component	Matrix	Regime	Unit	Method	Instrument	Platform	Org.	Setkey	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
nitrate	aerosol	IMG	ug N/m3	AD	UK	SE0011S	SE01L	651						12	12			
sulphate_total	aerosol	IMG	ug S/m3	AD	UK	SE0011S	SE01L	158	9		12							
ammonia	air	IMG	ug N/m3	AD	UK	SE0011S	SE01L	652						12	12			
nitrogen_dioxide	air	IMG	ug N/m3	AD	UK	SE0011S	SE01L	160	12	12	12	12	12	12	12	12	12	12
sulphur_dioxide	air	IMG	ug S/m3	AD	UK	SE0011S	SE01L	159	12	12	12							
sum_ammonia_and_ammonium	air+aerosol	IMG	ug N/m3	AD	UK	SE0011S	SE01L	163	11	12	12	12	12			12	12	12
sum_nitric_acid_and_nitrate	air+aerosol	IMG	ug N/m3	AD	UK	SE0011S	SE01L	162	11	12	12	12	12			12	12	12
mercury	precip	IMG	ug/l	BM	SE01L_bulk11hg	SE0011S	SE01L	628									12	
ammonium	precip	IMG	mg N/l	WD	UK	SE0011S	SE01L	154	11	12	12	12	12	12	11	12	12	
calcium	precip	IMG	mg/l	WD	UK	SE0011S	SE01L	397				12	12	12	10	12	12	
chloride	precip	IMG	mg/l	WD	UK	SE0011S	SE01L	157	11	12	12	12	12	12	11	12	12	
magnesium	precip	IMG	mg/l	WD	UK	SE0011S	SE01L	156	11	12	12	12	12	12	11	12	12	
nitrate	precip	IMG	mg N/l	WD	UK	SE0011S	SE01L	153	11	12	12	12	12	12	11	12	12	
potassium	precip	IMG	mg/l	WD	UK	SE0011S	SE01L	398				12	12	12	11	12	12	
precipitation_amount	precip	IMG	mm	WD	UK	SE0011S	SE01L	151	11	12	12	12	12			12	12	
sodium	precip	IMG	mg/l	WD	UK	SE0011S	SE01L	155	11	12	12	12	12	12	11	12	12	
sulphate_corrected	precip	IMG	mg S/l	WD	UK	SE0011S	SE01L	152	11	12	12	12	12					
sulphate_total	precip	IMG	mg S/l	WD	UK	SE0011S	SE01L	161	11	12	12	12	12	12	11	12	12	

SE0012R Aspvreten Sweden

Component	Matrix	Regime	Unit	Method	Instrument	Platform	Org.	Setkey	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
sulphate_total	aerosol	IMG	ug S/m3	AD	UK	SE0012S	SE01L	134	12	11	12							
nitrogen_dioxide	air	IMG	ug N/m3	AD	UK	SE0012S	SE01L	136	9	12	10	12	12			12	10	12
sulphur_dioxide	air	IMG	ug S/m3	AD	UK	SE0012S	SE01L	135	12	11	12							
sum_ammonia_and_ammonium	air+aerosol	IMG	ug N/m3	AD	UK	SE0012S	SE01L	139	11	11	12	12	12			12	12	12
sum_nitric_acid_and_nitrate	air+aerosol	IMG	ug N/m3	AD	UK	SE0012S	SE01L	138	11	11	12	12	12			12	12	12
mercury	precip	IMG	ug/l	BM	SE01L_bulk12hg	SE0012S	SE01L	627									12	12
arsenic	precip	IMG	ug/l	BM	SE01L_bulk12hm	SE0012S	SE01L	512						11	12	10	11	12
cadmium	precip	IMG	ug/l	BM	SE01L_bulk12hm	SE0012S	SE01L	503						12	12	10	11	12
chromium	precip	IMG	ug/l	BM	SE01L_bulk12hm	SE0012S	SE01L	509						12	12	10	11	12
cobalt	precip	IMG	ug/l	BM	SE01L_bulk12hm	SE0012S	SE01L	513						7	12	10	11	12
copper	precip	IMG	ug/l	BM	SE01L_bulk12hm	SE0012S	SE01L	504						12	12	10	11	
iron	precip	IMG	ug/l	BM	SE01L_bulk12hm	SE0012S	SE01L	505						11	12	10	11	12
lead	precip	IMG	ug/l	BM	SE01L_bulk12hm	SE0012S	SE01L	507						12	12	10	11	12
manganese	precip	IMG	ug/l	BM	SE01L_bulk12hm	SE0012S	SE01L	506						11	12	10	11	12
nickel	precip	IMG	ug/l	BM	SE01L_bulk12hm	SE0012S	SE01L	510						12	12	10	11	12
precipitation_amount	precip	IMG	mm	BM	SE01L_bulk12hm	SE0012S	SE01L	502						12	12	12	12	12
vanadium	precip	IMG	ug/l	BM	SE01L_bulk12hm	SE0012S	SE01L	511						11	12	10	11	12

zinc	precip	IMG	ug/l	BM	SE01L_bulk12hm	SE0012S	SE01L	508						11	12	10	11	12
ammonium	precip	IMG	mg N/l	BM	UK	SE0012S	SE01L	497						11	11	12	10	12
calcium	precip	IMG	mg/l	BM	UK	SE0012S	SE01L	501						11	11	12	10	12
chloride	precip	IMG	mg/l	BM	UK	SE0012S	SE01L	495						10	11	12	10	12
magnesium	precip	IMG	mg/l	BM	UK	SE0012S	SE01L	500						11	11	12	10	12
nitrate	precip	IMG	mg N/l	BM	UK	SE0012S	SE01L	496						11	11	12	10	12
potassium	precip	IMG	mg/l	BM	UK	SE0012S	SE01L	499						11	11	12	10	12
precipitation_amount	precip	IMG	mm	BM	UK	SE0012S	SE01L	493						11	11	12	10	12
sodium	precip	IMG	mg/l	BM	UK	SE0012S	SE01L	498						11	11	12	10	12
sulphate_total	precip	IMG	mg S/l	BM	UK	SE0012S	SE01L	494						11	11	12	10	12
ammonium	precip	IMG	mg N/l	WM	UK	SE0012S	SE01L	130	12	11	12	11	12					
cadmium	precip	IMG	ug/l	WM	UK	SE0012S	SE01L	141	11	12	12	10						
calcium	precip	IMG	mg/l	WM	UK	SE0012S	SE01L	393				12	12					
chloride	precip	IMG	mg/l	WM	UK	SE0012S	SE01L	133	12	12	12	11	12					
lead	precip	IMG	ug/l	WM	UK	SE0012S	SE01L	140	11	12	12	10						
magnesium	precip	IMG	mg/l	WM	UK	SE0012S	SE01L	132	12	12	12	12	12					
nitrate	precip	IMG	mg N/l	WM	UK	SE0012S	SE01L	129	12	12	12	12	12					
potassium	precip	IMG	mg/l	WM	UK	SE0012S	SE01L	394				10	12					
precipitation_amount	precip	IMG	mm	WM	UK	SE0012S	SE01L	127	12	12	12	12	12					
sodium	precip	IMG	mg/l	WM	UK	SE0012S	SE01L	131	12	12	12	12	12					
sulphate_corrected	precip	IMG	mg S/l	WM	UK	SE0012S	SE01L	128	12	12	12	12	12					
sulphate_total	precip	IMG	mg S/l	WM	UK	SE0012S	SE01L	137	12	12	12	12	12					
zinc	precip	IMG	ug/l	WM	UK	SE0012S	SE01L	142	11	12	12	9						

SE0051R Arup Sweden

Component	Matrix	Regime	Unit	Method	Instrument	Platform	Org.	Setkey	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
arsenic	precip	IMG	ug/l	BM	SE01L_bulk51hm	SE0051S	SE01L	491						12	11	11	11	12
cadmium	precip	IMG	ug/l	BM	SE01L_bulk51hm	SE0051S	SE01L	482						12	11	11	11	12
chromium	precip	IMG	ug/l	BM	SE01L_bulk51hm	SE0051S	SE01L	488						12	11	11	11	12
cobalt	precip	IMG	ug/l	BM	SE01L_bulk51hm	SE0051S	SE01L	492						7	11	11	11	12
copper	precip	IMG	ug/l	BM	SE01L_bulk51hm	SE0051S	SE01L	483						12	11	11	11	
iron	precip	IMG	ug/l	BM	SE01L_bulk51hm	SE0051S	SE01L	484						12	11	11	11	12
lead	precip	IMG	ug/l	BM	SE01L_bulk51hm	SE0051S	SE01L	486						12	11	10	11	12
manganese	precip	IMG	ug/l	BM	SE01L_bulk51hm	SE0051S	SE01L	485						12	11	11	11	12
nickel	precip	IMG	ug/l	BM	SE01L_bulk51hm	SE0051S	SE01L	489						12	11	11	11	12
precipitation_amount	precip	IMG	mm	BM	SE01L_bulk51hm	SE0051S	SE01L	481						12	11	12	11	12
vanadium	precip	IMG	ug/l	BM	SE01L_bulk51hm	SE0051S	SE01L	490						12	11	11	11	12
zinc	precip	IMG	ug/l	BM	SE01L_bulk51hm	SE0051S	SE01L	487						12	11	11	11	12
ammonium	precip	IMG	mg N/l	BM	UK	SE0051S	SE01L	412					12	12	12	12	11	12
calcium	precip	IMG	mg/l	BM	UK	SE0051S	SE01L	415					12	12	12	12	11	12

chloride	precip	IMG	mg/l	BM	UK	SE0051S	SE01L	416					12	12	12	12	11	12
magnesium	precip	IMG	mg/l	BM	UK	SE0051S	SE01L	414					12	12	12	12	11	12
nitrate	precip	IMG	mg N/l	BM	UK	SE0051S	SE01L	411					12	12	12	12	11	12
potassium	precip	IMG	mg/l	BM	UK	SE0051S	SE01L	418					12	12	12	12	11	12
precipitation_amount	precip	IMG	mm	BM	UK	SE0051S	SE01L	409					12	12	12	12	11	12
sodium	precip	IMG	mg/l	BM	UK	SE0051S	SE01L	413					12	12	12	12	11	12
sulphate_corrected	precip	IMG	mg S/l	BM	UK	SE0051S	SE01L	410					12					
sulphate_total	precip	IMG	mg S/l	BM	UK	SE0051S	SE01L	417					12	12	12	12	11	12
ammonium	precip	IMG	mg N/l	WM	UK	SE0051S	SE01L	119	12	12	12	12						
cadmium	precip	IMG	ug/l	WM	UK	SE0051S	SE01L	125	12	12	12	12						
calcium	precip	IMG	mg/l	WM	UK	SE0051S	SE01L	391				12						
chloride	precip	IMG	mg/l	WM	UK	SE0051S	SE01L	122	12	12	12	12						
lead	precip	IMG	ug/l	WM	UK	SE0051S	SE01L	124	12	12	12	12						
magnesium	precip	IMG	mg/l	WM	UK	SE0051S	SE01L	121	12	12	12	12						
nitrate	precip	IMG	mg N/l	WM	UK	SE0051S	SE01L	118	12	12	12	12						
potassium	precip	IMG	mg/l	WM	UK	SE0051S	SE01L	392				12						
precipitation_amount	precip	IMG	mm	WM	UK	SE0051S	SE01L	116	12	12	12	12						
sodium	precip	IMG	mg/l	WM	UK	SE0051S	SE01L	120	12	12	12	12						
sulphate_corrected	precip	IMG	mg S/l	WM	UK	SE0051S	SE01L	117	12	12	12	12						
sulphate_total	precip	IMG	mg S/l	WM	UK	SE0051S	SE01L	123	12	12	12	12						
zinc	precip	IMG	ug/l	WM	UK	SE0051S	SE01L	126	12	12	12	11						

SE0053R Rickleå Sweden

Component	Matrix	Regime	Unit	Method	Instrument	Platform	Org.	Setkey	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
ammonium	precip	IMG	mg N/l	BM	UK	SE0053S	SE01L	146	12		11	11	11	12	12	12	12	
calcium	precip	IMG	mg/l	BM	UK	SE0053S	SE01L	395				12	11	10	10	11	11	
chloride	precip	IMG	mg/l	BM	UK	SE0053S	SE01L	149	12		11	12	11	10	12	12	12	
magnesium	precip	IMG	mg/l	BM	UK	SE0053S	SE01L	148	11		11	12	11	12	11	12	12	
nitrate	precip	IMG	mg N/l	BM	UK	SE0053S	SE01L	145	12		11	11	11	11	12	12	12	
potassium	precip	IMG	mg/l	BM	UK	SE0053S	SE01L	396				12	11	12	11	12	12	
precipitation_amount	precip	IMG	mm	BM	UK	SE0053S	SE01L	143	12		11	12	11	12	12	12	12	
sodium	precip	IMG	mg/l	BM	UK	SE0053S	SE01L	147	11		11	12	11	12	11	12	12	
sulphate_corrected	precip	IMG	mg S/l	BM	UK	SE0053S	SE01L	144	12		11	12	11					
sulphate_total	precip	IMG	mg S/l	BM	UK	SE0053S	SE01L	150	12		11	12	11	12	12	12	12	
ammonium	precip	IMG	mg N/l	WM	UK	SE0053S	SE01L	261		9								
chloride	precip	IMG	mg/l	WM	UK	SE0053S	SE01L	264		10								
magnesium	precip	IMG	mg/l	WM	UK	SE0053S	SE01L	263		10								
nitrate	precip	IMG	mg N/l	WM	UK	SE0053S	SE01L	260		8								
precipitation_amount	precip	IMG	mm	WM	UK	SE0053S	SE01L	259		10								
sodium	precip	IMG	mg/l	WM	UK	SE0053S	SE01L	262		10								
sulphate_total	precip	IMG	mg S/l	WM	UK	SE0053S	SE01L	265		10								

Appendix 2

Measured and reported data

Concentrations at Zingst, DE0009R, 1991 Air sampler, Daily samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1991																
02-1991																
03-1991																
04-1991																
05-1991																
06-1991																
07-1991																
08-1991																
09-1991					3,30											
10-1991					6,00											
11-1991					16,70											
12-1991					15,30											
Max					16,70											
Min					3,30											
Average					10,33											
Sum																

Concentrations at Keldsnor, DK0005R, 1991 Air sampler, Daily samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1991					4,20		0,23			1,94						
02-1991					4,42		0,20			3,64						
03-1991					4,71		1,36			7,10						
04-1991																
05-1991																
06-1991							0,65			2,27						
07-1991							1,63			2,37						
08-1991							2,26			3,71						
09-1991							1,35			1,67						
10-1991							0,91			3,06						
11-1991							0,41			2,84						
12-1991							0,43			2,58						
Max					4,71		2,26			7,10						
Min					4,20		0,20			1,67						
Average					4,44		0,94			3,12						
Sum																

Concentrations at Keldsnor, DK0005R, 1991 Air sampler, Daily samples, from DK01L_FP4N

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1991									1,64							
02-1991									2,98							
03-1991									3,56							
04-1991																
05-1991																
06-1991									2,13							
07-1991									2,46							
08-1991									2,74							
09-1991									1,60							
10-1991									2,18							
11-1991									2,01							
12-1991									1,77							
Max									3,56							
Min									1,60							
Average									2,33							
Sum																

Concentrations at Keldsnor, DK0005R, 1991 Air sampler, Daily samples, from DK01L_FP4N

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1991		1,16	2,19	6,31												
02-1991		1,91	3,86	8,24												
03-1991		3,53	8,21	3,40												
04-1991																
05-1991																
06-1991		1,31	3,04	1,26												
07-1991		1,00	4,00	1,29												
08-1991		1,91	5,94	1,01												
09-1991		1,01	3,00	1,64												
10-1991		1,61	3,97	3,43												
11-1991		1,45	3,25	3,85												
12-1991		1,31	3,01	4,28												
Max		3,53	8,21	8,24												
Min		1,00	2,19	1,01												
Average		1,62	4,05	3,47												
Sum																

Concentrations at Anholt, DK0008R, 1991 Air sampler, Daily samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1991					2,88		0,06			1,38						
02-1991					2,57		0,02			2,19						
03-1991					2,27		0,12			3,78						
04-1991							0,17			3,29						
05-1991							0,13			0,98						
06-1991					1,31		0,11			1,53						
07-1991					1,14		0,34			1,83						
08-1991					1,18		0,37			1,63						
09-1991					1,28		0,40			1,24						
10-1991					1,80		0,13			1,74						
11-1991					6,64		0,09			1,93						
12-1991					3,44		0,08			1,37						
Max					6,64		0,40			3,78						
Min					1,14		0,02			0,98						
Average					2,45		0,17			1,91						
Sum																

Concentrations at Anholt, DK0008R, 1991 Air sampler, Daily samples, from DK01L_FP5N

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1991									1,41							
02-1991									2,21							
03-1991									2,22							
04-1991									2,71							
05-1991									1,24							
06-1991									1,96							
07-1991									2,67							
08-1991									2,16							
09-1991									1,40							
10-1991									1,65							
11-1991									1,53							
12-1991									1,23							
Max									2,71							
Min									1,23							
Average									1,87							
Sum																

Concentrations at Anholt, DK0008R, 1991 Air sampler, Daily samples, from DK01L_FP5N

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1991		1,04	1,45	4,30												
02-1991		1,24	1,88	3,90												
03-1991		1,91	3,79	2,29												
04-1991		1,62	3,47	2,44												
05-1991		0,62	1,12	0,73												
06-1991		0,86	1,64	1,23												
07-1991		0,92	2,17	1,13												
08-1991		1,03	1,99	1,28												
09-1991		0,89	1,63	1,31												
10-1991		0,99	1,93	1,88												
11-1991		1,08	2,02	3,27												
12-1991		0,93	1,44	2,34												
Max		1,91	3,79	4,30												
Min		0,62	1,12	0,73												
Average		1,09	2,04	2,18												
Sum																

Concentrations at Utö, FI0009R, 1991 Air sampler, Daily samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1991		0,33	0,27		2,40											
02-1991		0,64	0,84													
03-1991		0,67	1,09													
04-1991		0,63	0,86													
05-1991		0,23	0,31													
06-1991		0,51	0,80													
07-1991		0,33	0,53		0,80											
08-1991		0,42	0,83		0,80											
09-1991		0,28	0,42		0,70											
10-1991		0,56	0,80		0,80											
11-1991		0,51	0,39		1,70											
12-1991		0,27	0,22		1,00											
Max		0,67	1,09		2,40											
Min		0,23	0,22		0,70											
Average		0,45	0,61		1,17											
Sum																

Concentrations at Virolahti II, FI0017R, 1991 Air sampler, Daily samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1991		0,35	0,59		2,50											
02-1991		0,62	1,36		1,30											
03-1991		0,72	1,52													
04-1991		0,62	1,31													
05-1991		0,28	0,70													
06-1991		0,42	1,17													
07-1991		0,27	0,82		0,70											
08-1991		0,23	1,17		0,70											
09-1991		0,26	0,79		0,90											
10-1991		0,50	1,06		1,20											
11-1991		0,41	0,66													
12-1991		0,26	0,36		1,40											
Max		0,72	1,52		2,50											
Min		0,23	0,36		0,70											
Average		0,41	0,96		1,24											
Sum																

Concentrations at Preila, LT0015R, 1991 Air sampler, Daily samples, from LT01L_AS15a

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1991					3,07											
02-1991					3,43											
03-1991					3,20											
04-1991					2,54											
05-1991					3,00											
06-1991					6,10											
07-1991					2,84											
08-1991					4,06											
09-1991					5,71											
10-1991					3,56											
11-1991					5,21											
12-1991					4,16											
Max					6,10											
Min					2,54											
Average					3,91											
Sum																

Concentrations at Preila, LT0015R, 1991 Air sampler, Daily samples, from LT01L_TD15a

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1991							1,73									
02-1991							1,46									
03-1991							0,71									
04-1991							2,14									
05-1991							2,44									
06-1991							2,53									
07-1991							2,62									
08-1991							1,48									
09-1991							1,65									
10-1991							1,37									
11-1991							2,13									
12-1991							1,87									
Max							2,62									
Min							0,71									
Average							1,84									
Sum																

Concentrations at Preila, LT0015R, 1991 Air sampler, Daily samples, from LT01L_FP15a1

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1991								0,54		0,87			8,20			
02-1991								0,78		3,25			11,80			
03-1991								0,59		3,10			9,30			
04-1991								0,70		2,54			8,40			
05-1991								0,44		0,67			1,00			
06-1991								0,39		1,63			3,50			
07-1991								0,30		1,16			3,00			
08-1991								0,35		0,92			2,70			
09-1991								0,36		0,63			4,90			
10-1991								0,70		1,43			7,70			
11-1991								0,44		1,90			14,70			
12-1991								0,37		0,82			22,20			
Max								0,78		3,25			22,20			
Min								0,30		0,63			1,00			
Average								0,50		1,58			8,12			
Sum																

Concentrations at Rucava, LV0010R, 1991 Air sampler, Daily samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1991				0,90	1,90			0,20	0,90	1,00						
02-1991				2,70	1,40			0,30	2,00	1,80						
03-1991				0,90	1,20			0,60	2,50	2,30						
04-1991				0,80	1,40			0,30	1,50	1,70						
05-1991				0,40	3,00			0,20	0,60	0,50						
06-1991				0,50	0,90			0,20	1,30	0,70						
07-1991				0,50	1,30			0,20	1,00	0,40						
08-1991				0,50	1,60			0,20	0,80	0,80						
09-1991				0,30	1,20			0,20	0,80	0,40						
10-1991				0,50	0,90			0,20	0,80	0,60						
11-1991				1,80	1,50			0,30	1,00	0,90						
12-1991				0,90	1,60			0,20	1,00	0,60						
Max				2,70	3,00			0,60	2,50	2,30						
Min				0,30	0,90			0,20	0,60	0,40						
Average				0,89	1,49			0,26	1,18	0,97						
Sum																

Concentrations at Leba, PL0004R, 1991 Air sampler, Daily samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1991																
02-1991									2,40							
03-1991				2,74					1,74							
04-1991				2,70					2,09							
05-1991				0,82					0,27							
06-1991																
07-1991				0,59					0,86							
08-1991				1,70					1,31							
09-1991				1,37					0,78							
10-1991				2,10					3,00							
11-1991				2,61					2,12							
12-1991				3,32					1,66							
Max				3,32					3,00							
Min				0,59					0,27							
Average				1,99					1,62							
Sum																

Concentrations at Rörvik, SE0002R, 1991 Air sampler, Daily samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1991					3,60		0,76	0,62								
02-1991					3,20		1,17	0,67								
03-1991					3,30		1,63	1,11								
04-1991					1,90		1,82	0,86								
05-1991					1,30		0,55	0,30								
06-1991					1,00		0,90	0,50								
07-1991					1,30		1,17	0,51								
08-1991					1,30		1,03	0,59								
09-1991					1,50		0,91	0,38								
10-1991					2,40		1,02	0,43								
11-1991					4,60		0,96	0,59								
12-1991					4,40		0,80	0,59								
Max					4,60		1,82	1,11								
Min					1,00		0,55	0,30								
Average					2,48		1,06	0,60								
Sum																

Concentrations at Hoburgen, SE0008R, 1991 Air sampler, Daily samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1991					1,70											
02-1991					1,80											
03-1991					1,30											
04-1991					1,30											
05-1991					0,80											
06-1991					1,20											
07-1991					1,20											
08-1991					0,90											
09-1991					1,00											
10-1991					1,20											
11-1991					2,60											
12-1991					1,50											
Max					2,60											
Min					0,80											
Average					1,37											
Sum																

Concentrations at Vavihill, SE0011R, 1991 Air sampler, Daily samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1991					4,20		1,31	0,77								
02-1991					3,30		1,88	1,06								
03-1991					2,10		3,02	1,54								
04-1991					1,40		2,61	1,21								
05-1991					0,90		1,23	0,41								
06-1991					1,20		1,52	0,63								
07-1991					0,70		2,72	0,44								
08-1991					1,30		2,12	0,65								
09-1991					1,40		1,86	0,56								
10-1991					1,60		1,90	0,81								
11-1991					3,50		1,47	0,84								
12-1991					3,30		1,46	0,69								
Max					4,20		3,02	1,54								
Min					0,70		1,23	0,41								
Average					2,07		1,92	0,80								
Sum																

Concentrations at Zingst, DE0009R, 1992 Air sampler, Daily samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1992					4,90											
02-1992					3,40											
03-1992					2,40											
04-1992					1,90											
05-1992					1,50											
06-1992					1,40											
07-1992					1,60											
08-1992					1,80											
09-1992					1,70											
10-1992					2,50											
11-1992					3,40											
12-1992					4,50											
Max					4,90											
Min					1,40											
Average					2,58											
Sum																

Concentrations at Keldsnor, DK0005R, 1992 Air sampler, Daily samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1992							0,38			2,61						
02-1992							0,39			4,77						
03-1992							0,61			4,34						
04-1992							1,23			4,19						
05-1992							0,96			2,12						
06-1992							1,70			1,87						
07-1992							2,18			2,17						
08-1992							1,75			1,71						
09-1992							1,31			2,77						
10-1992							1,07			1,92						
11-1992							0,35			1,62						
12-1992							0,47			2,66						
Max							2,18			4,77						
Min							0,35			1,62						
Average							1,03			2,73						
Sum																

Concentrations at Keldsnor, DK0005R, 1992 Air sampler, Daily samples, from DK01L_FP4N

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1992									2,05							
02-1992									2,31							
03-1992									2,31							
04-1992									2,05							
05-1992									2,07							
06-1992									2,51							
07-1992									2,09							
08-1992									1,67							
09-1992									2,38							
10-1992									1,43							
11-1992									1,25							
12-1992									2,32							
Max									2,51							
Min									1,25							
Average									2,04							
Sum																

Concentrations at Keldsnor, DK0005R, 1992 Air sampler, Daily samples, from DK01L_FP4N

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1992		1,25	2,69	4,78												
02-1992		2,49	5,55	2,35												
03-1992		2,32	4,73	2,18												
04-1992		2,78	5,42	1,56												
05-1992		1,15	3,08	1,43												
06-1992		0,86	3,56	1,27												
07-1992		1,23	4,35	1,39												
08-1992		1,15	3,46	0,96												
09-1992		1,34	4,08	1,93												
10-1992		1,17	3,00	2,01												
11-1992		1,05	1,98	2,98												
12-1992		1,30	3,13	5,45												
Max		2,78	5,55	5,45												
Min		0,86	1,98	0,96												
Average		1,51	3,75	2,36												
Sum																

Concentrations at Anholt, DK0008R, 1992 Air sampler, Daily samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1992							0,08			1,10						
02-1992							0,06			2,53						
03-1992							0,07			3,00						
04-1992							0,15			2,33						
05-1992							0,24			1,46						
06-1992							0,41			1,16						
07-1992							0,46			1,42						
08-1992							0,42			1,15						
09-1992							0,14			1,70						
10-1992							0,08			0,74						
11-1992							0,11			1,03						
12-1992							0,02			1,55						
Max							0,46			3,00						
Min							0,02			0,74						
Average							0,19			1,60						
Sum																

Concentrations at Anholt, DK0008R, 1992 Air sampler, Daily samples, from DK01L_FP5N

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1992									1,35							
02-1992									1,71							
03-1992									1,66							
04-1992									1,65							
05-1992									1,66							
06-1992									1,90							
07-1992									1,77							
08-1992									1,41							
09-1992									1,71							
10-1992									1,01							
11-1992									0,98							
12-1992									2,12							
Max									2,12							
Min									0,98							
Average									1,58							
Sum																

Concentrations at Anholt, DK0008R, 1992 Air sampler, Daily samples, from DK01L_FP5N

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1992		0,65	1,17	2,56												
02-1992		1,46	2,59	1,57												
03-1992		1,81	3,07	1,99												
04-1992		1,50	2,47	1,10												
05-1992		1,01	1,70	1,54												
06-1992		0,70	1,57	1,03												
07-1992		0,91	1,88	1,08												
08-1992		0,88	1,57	0,99												
09-1992		0,99	1,84	1,65												
10-1992		0,41	0,76	0,87												
11-1992		0,68	1,14	1,94												
12-1992		1,01	1,62	4,86												
Max		1,81	3,07	4,86												
Min		0,41	0,76	0,87												
Average		1,00	1,78	1,77												
Sum																

Concentrations at Preila, LT0015R, 1992 Air sampler, Daily samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1992																
02-1992						0,11										
03-1992						0,05										
04-1992						0,06										
05-1992						0,05										
06-1992						0,04										
07-1992						0,05										
08-1992						0,12										
09-1992						0,15										
10-1992						0,05										
11-1992						0,07										
12-1992						0,04										
Max						0,15										
Min						0,04										
Average						0,07										
Sum																

Concentrations at Preila, LT0015R, 1992 Air sampler, Daily samples, from LT01L_AS15a

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1992					1,80											
02-1992					3,33											
03-1992					2,34											
04-1992					2,34											
05-1992					2,90											
06-1992					1,72											
07-1992					2,28											
08-1992					3,07											
09-1992					2,14											
10-1992					2,64											
11-1992					2,14											
12-1992					4,16											
Max					4,16											
Min					1,72											
Average					2,57											
Sum																

Concentrations at Preila, LT0015R, 1992 Air sampler, Daily samples, from LT01L_TD15a

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1992							1,34									
02-1992							0,81									
03-1992							1,37									
04-1992							0,90									
05-1992							1,66									
06-1992							1,16									
07-1992							0,80									
08-1992							1,34									
09-1992							1,18									
10-1992							0,32									
11-1992							1,12									
12-1992							0,40									
Max							1,66									
Min							0,32									
Average							1,03									
Sum																

Concentrations at Preila, LT0015R, 1992 Air sampler, Daily samples, from LT01L_FP15a1

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1992	1,26							0,40		1,02	0,40		26,40	136,00		
02-1992	0,80							0,95		2,12	0,20		18,40	47,30		
03-1992	1,03							0,42		2,57	0,30		21,60	55,20		
04-1992	0,80							0,36		1,16	0,10		12,60	28,40		
05-1992	0,70							0,24		0,71	0,10		8,90	19,50		
06-1992	0,26							0,20		0,69	0,10		6,80	23,80		
07-1992	0,30							0,30		0,95	0,10		8,40	20,10		
08-1992	0,58							0,35		0,90	0,10		6,80	19,80		
09-1992	0,51							0,26		1,04	0,10		10,80	25,00		
10-1992	0,75							0,46		1,25	0,10		20,20	26,60		
11-1992	0,46							0,35		0,87	0,10		13,70	64,10		
12-1992	0,66							0,14		0,39	0,20		8,30	31,90		
Max	1,26							0,95		2,57	0,40		26,40	136,00		
Min	0,26							0,14		0,39	0,10		6,80	19,50		
Average	0,68							0,37		1,14	0,16		13,58	41,47		
Sum																

Concentrations at Rucava, LV0010R, 1992 Air sampler, Daily samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1992				0,40	1,50			0,20	1,20	1,10						
02-1992				0,30	1,30			0,40	1,00	1,10						
03-1992				0,80	0,90			0,40	0,30	1,60						
04-1992				0,50	0,70			0,30	0,90	1,10						
05-1992				0,20	0,90			0,20	0,90	0,50						
06-1992				0,50	0,80			0,20	0,70	0,30						
07-1992				1,10	0,90			0,20	2,00	0,60						
08-1992				0,60	1,20			0,20	0,90	0,70						
09-1992				0,90	1,10			0,10	0,20	0,70						
10-1992				0,90	0,90			0,30	3,00	0,70						
11-1992				0,80	1,15			0,30	1,10	0,60						
12-1992				1,10	2,44			0,30	1,30	1,10						
Max				1,10	2,44			0,40	3,00	1,60						
Min				0,20	0,70			0,10	0,70	0,30						
Average				0,68	1,30			0,26	1,30	0,84						
Sum																

Concentrations at Rörvik, SE0002R, 1992 Air sampler, Daily samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1992					3,40		0,75	0,49								
02-1992					3,60		1,48	1,03								
03-1992					2,80		1,91	1,05								
04-1992					2,10		1,29	0,81								
05-1992					1,70		0,97	0,48								
06-1992					1,30		0,60	0,36								
07-1992					1,10		1,12	0,52								
08-1992					1,10		0,79	0,52								
09-1992					1,50		1,07	0,51								
10-1992					2,30		0,56	0,22								
11-1992					4,20		0,57	0,44								
12-1992					5,50		1,09	0,73								
Max					5,50		1,91	1,05								
Min					1,10		0,56	0,22								
Average					2,55		1,02	0,60								
Sum																

Concentrations at Hoburgen, SE0008R, 1992 Air sampler, Daily samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1992					1,50											
02-1992					1,80											
03-1992					1,60											
04-1992					1,00											
05-1992					1,20											
06-1992					0,70											
07-1992					0,60											
08-1992					0,80											
09-1992					0,70											
10-1992					0,80											
11-1992					1,30											
12-1992					1,80			0,51								
Max					1,80			0,51								
Min					0,60			0,51								
Average					1,15			0,51								
Sum																

Concentrations at Vavihill, SE0011R, 1992 Air sampler, Daily samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1992					2,70		1,21	0,68								
02-1992					2,90		2,11	1,33								
03-1992					2,00		2,20	1,37								
04-1992					1,40		2,26	1,24								
05-1992					0,80		1,81	0,69								
06-1992					0,70		2,16	0,37								
07-1992					1,00		2,53	0,62								
08-1992					1,40		1,87	0,69								
09-1992					1,30		2,06	0,67								
10-1992					1,50		1,12	0,53								
11-1992					2,20		1,14	0,64								
12-1992					2,70		1,37	0,76								
Max					2,90		2,53	1,37								
Min					0,70		1,12	0,37								
Average					1,72		1,82	0,80								
Sum																

Concentrations at Zingst, DE0009R, 1993 Air sampler, Daily samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1993					3,30											
02-1993					5,40											
03-1993					3,90											
04-1993					2,10											
05-1993					1,90											
06-1993					1,40											
07-1993					1,10											
08-1993					1,30											
09-1993					1,50											
10-1993					3,00											
11-1993					4,80											
12-1993					3,70											
Max					5,40											
Min					1,10											
Average					2,78											
Sum																

Concentrations at Zingst, DE0009R, 1993 Air sampler, Daily samples, from DHA80_9

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1993			3,26				2,38			0,88	0,23	2,20	14,40			5,80
02-1993			4,67				2,57			2,10	0,24	3,40	17,50			5,80
03-1993			16,30				11,11			5,19	0,49	4,30	20,10			11,20
04-1993			4,57				2,93			1,64	0,35	2,80	12,40			7,50
05-1993			4,22				3,03			1,19	0,13	2,30	12,00			12,80
06-1993			1,95				1,68			0,27	0,05	1,50	3,40			5,90
07-1993			2,02				1,61			0,41	0,08	1,60	0,60			4,50
08-1993			2,11				1,34			0,77	0,03	2,00	5,50			4,00
09-1993			1,94				1,26			0,68	0,09	2,20	8,80			4,10
10-1993			5,39				3,67			1,72	0,16	2,90	17,70			5,00
11-1993			9,40				4,82			4,58	0,88	4,60	43,30			10,50
12-1993			4,45				2,92			1,53	0,18	1,90	16,10			3,30
Max			16,30				11,11			5,19	0,88	4,60	43,30			12,80
Min			1,94				1,26			0,27	0,03	1,50	0,60			3,30
Average			5,02				3,28			1,75	0,24	2,64	14,32			6,70
Sum																

Concentrations at Keldsnor, DK0005R, 1993 Air sampler, Daily samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1993							0,26			1,61						
02-1993							0,33			3,25						
03-1993							1,69			6,30						
04-1993							1,28			4,17						
05-1993							4,17			3,78						
06-1993							1,92			1,83						
07-1993							1,21			1,96						
08-1993							1,46			1,68						
09-1993							1,38			1,65						
10-1993							0,90			2,10						
11-1993							0,28			4,09						
12-1993							0,15			1,72						
Max							4,17			6,30						
Min							0,15			1,61						
Average							1,25			2,85						
Sum																

Concentrations at Keldsnor, DK0005R, 1993 Air sampler, Daily samples, from DK01L_FP4N

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1993									1,84							
02-1993									2,12							
03-1993									2,89							
04-1993									3,09							
05-1993									2,99							
06-1993									1,69							
07-1993									1,90							
08-1993									1,42							
09-1993									1,24							
10-1993									1,56							
11-1993									3,67							
12-1993									1,20							
Max									3,67							
Min									1,20							
Average									2,15							
Sum																

Concentrations at Keldsnor, DK0005R, 1993 Air sampler, Daily samples, from DK01L_FP4N

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1993		0,93	1,68	4,57												
02-1993		1,39	3,58	4,01												
03-1993		3,96	7,99	2,50												
04-1993		2,08	5,45	2,09												
05-1993		1,84	7,97	1,21												
06-1993		1,05	3,75	1,27												
07-1993		1,06	3,16	0,84												
08-1993		1,01	3,15	1,08												
09-1993		0,82	3,02	1,19												
10-1993		1,29	3,01	2,23												
11-1993		1,96	4,37	10,17												
12-1993		1,02	1,87	2,70												
Max		3,96	7,99	10,17												
Min		0,82	1,68	0,84												
Average		1,53	4,08	2,82												
Sum																

Concentrations at Anholt, DK0008R, 1993 Air sampler, Daily samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1993							0,08			1,10						
02-1993							0,04			1,79						
03-1993							0,13			4,07						
04-1993							0,20			2,81						
05-1993							0,33			1,42						
06-1993							0,31			0,99						
07-1993							0,24			1,10						
08-1993							0,17			1,14						
09-1993					0,56		0,09			0,80						
10-1993					2,30		0,09			1,57						
11-1993					2,77		0,03			2,05						
12-1993					2,80		0,05			1,01						
Max					2,80		0,33			4,07						
Min					0,56		0,03			0,80						
Average					2,11		0,15			1,65						
Sum																

Concentrations at Anholt, DK0008R, 1993 Air sampler, Daily samples, from DK01L_FP5N

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1993									1,20							
02-1993									1,59							
03-1993									2,04							
04-1993									2,54							
05-1993									1,68							
06-1993									1,45							
07-1993									1,53							
08-1993									1,53							
09-1993									0,95							
10-1993									1,11							
11-1993									2,82							
12-1993									1,14							
Max									2,82							
Min									0,95							
Average									1,63							
Sum																

Concentrations at Anholt, DK0008R, 1993 Air sampler, Daily samples, from DK01L_FP5N

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1993		0,73	1,18	3,96												
02-1993		1,22	1,83	2,29												
03-1993		2,40	4,20	1,38												
04-1993		1,47	3,01	2,21												
05-1993		0,87	1,75	1,01												
06-1993		0,61	1,21	0,65												
07-1993		0,65	1,34	0,47												
08-1993		0,72	1,31	0,84												
09-1993		0,54	0,89	0,75												
10-1993		1,13	1,64	1,67												
11-1993		1,15	2,05	4,70												
12-1993		0,69	1,05	2,14												
Max		2,40	4,20	4,70												
Min		0,54	0,89	0,47												
Average		1,02	1,79	1,84												
Sum																

Concentrations at Preila, LT0015R, 1993 Air sampler, Daily samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1993						0,03										
02-1993						0,03										
03-1993						0,04										
04-1993						0,04										
05-1993						0,04										
06-1993						0,03										
07-1993						0,03										
08-1993						0,04										
09-1993						0,03										
10-1993						0,02										
11-1993						0,02										
12-1993																
Max						0,04										
Min						0,02										
Average						0,03										
Sum																

Concentrations at Preila, LT0015R, 1993 Air sampler, Daily samples, from LT01L_AS15a

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1993					3,30											
02-1993					2,80											
03-1993					1,90											
04-1993					3,70											
05-1993					2,00											
06-1993					2,40											
07-1993					3,60											
08-1993					5,40											
09-1993					2,60											
10-1993					3,30											
11-1993					2,60											
12-1993																
Max					5,40											
Min					1,90											
Average					3,05											
Sum																

Concentrations at Preila, LT0015R, 1993 Air sampler, Daily samples, from LT01L_TD15a

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1993							0,65									
02-1993							0,88									
03-1993							1,49									
04-1993							0,98									
05-1993							0,65									
06-1993							1,48									
07-1993							1,18									
08-1993							0,87									
09-1993							0,56									
10-1993							1,15									
11-1993							0,73									
12-1993																
Max							1,49									
Min							0,56									
Average							0,97									
Sum																

Concentrations at Preila, LT0015R, 1993 Air sampler, Daily samples, from LT01L_FP15a1

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1993	1,02							0,58		0,98	0,20		14,40	30,20		
02-1993	0,63							0,85		2,93	0,20		7,10	26,00		
03-1993	0,96							0,17		1,13	0,40		25,90	40,30		
04-1993	0,57							0,27		0,57	0,20		8,50	51,20		
05-1993	0,40							0,24		0,44	0,10		5,20	33,40		
06-1993	0,31							0,24		1,07	0,10		4,50	26,80		
07-1993	0,28							0,27		0,72	0,10		4,10	22,50		
08-1993	0,14							0,42		0,57	0,10		4,50	26,90		
09-1993	0,25							0,22		1,03	0,10		4,30	18,40		
10-1993	0,61							0,33		2,28	0,10		6,50	30,40		
11-1993	1,11							0,31		0,95	0,40		27,60	64,80		
12-1993	1,10										0,10		6,80	26,80		
Max	1,11							0,85		2,93	0,40		27,60	64,80		
Min	0,14							0,17		0,44	0,10		4,10	18,40		
Average	0,62							0,35		1,15	0,18		9,95	33,14		
Sum																

Concentrations at Rucava, LV0010R, 1993 Air sampler, Daily samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1993				0,90	1,20			0,20	1,30	1,20						
02-1993				0,70	1,30			0,30	1,30	1,60						
03-1993				1,30	1,10			0,80	1,70	2,30						
04-1993				0,70	1,40			0,40	0,80	1,30						
05-1993				0,40	1,00			0,20	0,80	0,80						
06-1993				0,30	1,10			0,10	0,60	0,60						
07-1993				1,30	1,20			0,20	1,50	0,50						
08-1993				0,90	1,50			0,20	1,10	0,50						
09-1993				0,40	0,70			0,20	1,30	1,30						
10-1993				0,20	1,20			0,20	0,70	1,10						
11-1993				0,70	2,20			0,60	1,50	1,90						
12-1993				0,70	2,90			0,40	0,70	1,20						
Max				1,30	2,90			0,80	1,70	2,30						
Min				0,20	0,70			0,10	0,60	0,50						
Average				0,71	1,40			0,32	1,11	1,19						
Sum																

Concentrations at Leba, PL0004R, 1993 Air sampler, Daily samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1993																
02-1993																
03-1993																
04-1993				1,74	1,63				1,68							
05-1993				2,20	1,28				1,63							
06-1993				3,30	0,90				2,39							
07-1993				1,00	0,85				1,29							
08-1993				2,15	1,05				1,80							
09-1993				2,11	1,51				2,28							
10-1993				2,72	1,80				1,51							
11-1993				8,03	3,95				4,20							
12-1993				3,88	3,06				1,88							
Max				8,03	3,95				4,20							
Min				1,00	0,85				1,29							
Average				3,01	1,78				2,07							
Sum																

Concentrations at Rörvik, SE0002R, 1993 Air sampler, Daily samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1993		0,56	1,86		3,31											
02-1993		0,94	1,49		6,16											
03-1993		1,44	1,91		2,76											
04-1993		0,68	2,19		1,81											
05-1993		0,53	1,35		1,15											
06-1993		0,39	0,82		0,93											
07-1993		0,48	0,88		0,96											
08-1993		0,44	0,79		0,87											
09-1993		0,34	0,81		1,20											
10-1993		0,68	1,23		2,36											
11-1993		0,76	2,12		2,63											
12-1993		0,57	0,79		2,85											
Max		1,44	2,19		6,16											
Min		0,34	0,79		0,87											
Average		0,65	1,35		2,25											
Sum																

Concentrations at Hoburgen, SE0008R, 1993 Air sampler, Daily samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1993					1,39											
02-1993					1,41											
03-1993					1,05											
04-1993					1,01											
05-1993					0,87											
06-1993					0,89											
07-1993					0,78											
08-1993					0,71											
09-1993					0,57											
10-1993					0,94											
11-1993					1,10											
12-1993					1,60											
Max					1,60											
Min					0,57											
Average					1,03											
Sum																

Concentrations at Vavihill, SE0011R, 1993 Air sampler, Daily samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1993		0,57	1,37		2,54											
02-1993		0,65	1,33		3,46											
03-1993		1,54	2,01		2,26											
04-1993		0,73	2,05		1,03											
05-1993		0,60	2,04		0,89											
06-1993		0,41	1,42		1,23											
07-1993		0,40	1,15		1,37											
08-1993		0,51	1,60		1,35											
09-1993		0,30	0,87		0,87											
10-1993		0,65	1,45		2,49											
11-1993		0,87	2,43		2,46											
12-1993		0,57	0,97		3,30											
Max		1,54	2,43		3,46											
Min		0,30	0,87		0,87											
Average		0,65	1,56		1,94											
Sum																

Concentrations at Aspvreten, SE0012R, 1993 Air sampler, Daily samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1993		0,24	0,35		1,11											
02-1993		0,28	0,47		1,59											
03-1993		0,61	1,16		1,21											
04-1993		0,26	0,87		0,80											
05-1993		0,33	0,74		0,58											
06-1993		0,21	0,33		0,55											
07-1993		0,23	0,62		0,50											
08-1993		0,23	0,55		0,47											
09-1993		0,14	0,33		0,58											
10-1993		0,31	0,84		0,97											
11-1993		0,48	1,36		1,82											
12-1993		0,32	0,51		1,62											
Max		0,61	1,36		1,82											
Min		0,14	0,33		0,47											
Average		0,30	0,68		0,98											
Sum																

Concentrations at Zingst, DE0009R, 1994 Air sampler, Daily samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1994					3,60											
02-1994					2,20											
03-1994					2,30											
04-1994					1,80											
05-1994					1,10											
06-1994					1,40											
07-1994					1,40											
08-1994					1,50											
09-1994					1,50											
10-1994					2,20											
11-1994					2,20											
12-1994					3,10											
Max					3,60											
Min					1,10											
Average					2,02											
Sum																

Concentrations at Zingst, DE0009R, 1994 Air sampler, Daily samples, from DHA80_9

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1994											0,22	1,30	14,10			
02-1994											0,33	3,50	13,50			
03-1994											0,16	1,60	8,60			
04-1994											0,21	3,10	9,40			
05-1994											0,15	2,00	6,70			
06-1994											0,19	1,70	6,50			
07-1994											0,06	3,40	6,50			
08-1994											0,08	2,30	5,10			
09-1994											0,14	1,30	7,30			
10-1994											0,21	2,10	13,30			
11-1994											0,21	1,80	11,90			
12-1994											0,31	3,20	16,10			
Max											0,33	3,50	16,10			
Min											0,06	1,30	5,10			
Average											0,19	2,27	9,92			
Sum																

Concentrations at Keldsnor, DK0005R, 1994 Air sampler, Daily samples, from DK01L_FP4N

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1994									1,03			1,97	15,50	24,40	1,81	
02-1994									3,03			2,91	30,00	45,00	3,53	
03-1994									1,09			1,55	9,24	14,20	1,82	
04-1994									1,84			1,86	13,30	20,90	2,97	
05-1994									1,44			1,62	9,07	18,90	2,86	
06-1994									1,93			1,52	9,24	18,70	1,99	
07-1994									2,50			1,60	8,31	17,60	4,09	
08-1994									1,58			1,48	8,30	14,80	1,66	
09-1994									1,74			1,92	9,03	23,50	2,05	
10-1994									1,32			2,94	15,70	30,30	1,54	
11-1994									1,37			2,28	14,40	39,80	1,87	
12-1994									1,04			2,87	18,50	30,60	1,34	
Max									3,03			2,94	30,00	45,00	4,09	
Min									1,03			1,48	8,30	14,20	1,34	
Average									1,66			2,04	13,38	24,89	2,29	
Sum																

Concentrations at Keldsnor, DK0005R, 1994 Air sampler, Daily samples, from DK01L_FP4N

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1994		1,02	2,05	1,75												
02-1994		1,87	4,05	5,93												
03-1994		1,38	2,50	1,17												
04-1994		2,62	5,52	1,50												
05-1994		1,26	3,29	1,18												
06-1994		1,37	3,80	1,09												
07-1994		1,10	5,42	1,50												
08-1994		1,03	3,67	1,09												
09-1994		1,11	2,96	1,08												
10-1994		1,56	3,51	2,03												
11-1994		0,95	2,46	1,78												
12-1994		1,28	2,12	2,35												
Max		2,62	5,52	5,93												
Min		0,95	2,05	1,08												
Average		1,38	3,45	1,87												
Sum																

Concentrations at Anholt, DK0008R, 1994 Air sampler, Daily samples, from DK01L_FP5N

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1994									0,87			1,85	7,49	20,40	1,38	
02-1994									1,94			1,35	9,29	17,10	2,66	
03-1994									1,13			1,36	7,50	13,60	3,67	
04-1994									1,69			1,58	9,37	18,30	2,49	
05-1994									1,13			1,55	5,85	18,10	2,16	
06-1994									1,32			1,69	4,43		1,68	
07-1994									2,19			1,48	6,32	14,00	2,84	
08-1994									1,22			1,02	7,76	11,90	1,24	
09-1994									1,12			0,96	4,05	9,44	1,47	
10-1994									1,29			2,39	14,10	26,20	1,83	
11-1994									1,13			1,46	9,84	11,50	1,37	
12-1994									0,86			1,81	10,60	15,30	1,56	
Max									2,19			2,39	14,10	26,20	3,67	
Min									0,86			0,96	4,05	9,44	1,24	
Average									1,32			1,54	8,05	15,99	2,05	
Sum																

Concentrations at Anholt, DK0008R, 1994 Air sampler, Daily samples, from DK01L_FP5N

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1994		0,60	0,93	1,09												
02-1994		0,61	1,14	2,57												
03-1994		0,88	1,33	1,43												
04-1994		1,90	3,58	1,67												
05-1994		0,76	1,28													
06-1994		0,71	1,32													
07-1994		1,02	2,01	1,16												
08-1994		0,62	1,23													
09-1994		0,65	1,21													
10-1994		1,24	2,13	1,59												
11-1994		0,55	1,13	1,27												
12-1994		0,97	1,38	2,03												
Max		1,90	3,58	2,57												
Min		0,55	0,93	1,09												
Average		0,88	1,56	1,60												
Sum																

Concentrations at Preila, LT0015R, 1994 Air sampler, Daily samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1994						0,05										
02-1994						0,05										
03-1994						0,04										
04-1994						0,04										
05-1994						0,02										
06-1994						0,24										
07-1994						0,07										
08-1994						0,05										
09-1994						0,04										
10-1994						0,05										
11-1994						0,02										
12-1994						0,02										
Max						0,24										
Min						0,02										
Average						0,06										
Sum																

Concentrations at Preila, LT0015R, 1994 Air sampler, Daily samples, from LT01L_AS15a

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1994					2,79											
02-1994					2,08											
03-1994					3,48											
04-1994					2,08											
05-1994					1,89											
06-1994					2,23											
07-1994					4,20											
08-1994					2,80											
09-1994					3,79											
10-1994					9,33											
11-1994					5,46											
12-1994																
Max					9,33											
Min					1,89											
Average					3,65											
Sum																

Concentrations at Preila, LT0015R, 1994 Air sampler, Daily samples, from LT01L_TD15a

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1994							0,50									
02-1994							0,39									
03-1994							0,44									
04-1994							0,71									
05-1994							1,39									
06-1994							0,99									
07-1994							2,16									
08-1994							1,71									
09-1994							1,06									
10-1994							1,10									
11-1994							0,76									
12-1994							0,46									
Max							2,16									
Min							0,39									
Average							0,97									
Sum																

Concentrations at Preila, LT0015R, 1994 Air sampler, Daily samples, from LT01L_FP15a1

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1994	0,80							0,35		0,81	0,20		21,00	41,00		
02-1994	1,06							0,14		1,76	0,40		19,00	50,00		
03-1994	0,81							0,51		0,73	0,30		8,00	32,00		
04-1994	0,43							0,12		0,78	0,30		11,00	24,00		
05-1994	0,04							0,13		0,42	0,90		15,00	41,00		
06-1994	0,05							0,27		0,49	0,40		8,00	35,00		
07-1994	0,06							0,06		0,60	0,40		10,00	23,00		
08-1994	0,11							0,12		0,37	0,30		9,00	23,00		
09-1994	0,15							0,13		0,59	0,20		9,00	42,00		
10-1994	0,55							0,14		0,32	0,50		13,00	69,00		
11-1994	1,52							0,11		0,25	0,30		12,00	22,00		
12-1994	3,45							0,17		0,99	0,70		19,00	99,00		
Max	3,45							0,51		1,76	0,90		21,00	99,00		
Min	0,04							0,06		0,25	0,20		8,00	22,00		
Average	0,75							0,19		0,68	0,41		12,83	41,75		
Sum																

Concentrations at Rucava, LV0010R, 1994 Air sampler, Daily samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1994				0,21	1,56			0,30	0,22	1,03						
02-1994		2,46	0,38	3,24	1,51			0,65	2,09	1,92						
03-1994		0,66	1,25	1,50	1,04			0,73	1,05	1,39						
04-1994		0,95	2,13	1,21	0,91			0,76	1,57	1,60						
05-1994		0,37	1,10	0,39	0,74			0,29	0,57	0,95						
06-1994		0,50	1,03	0,55	0,77			0,50	0,87	1,21						
07-1994		0,56	0,94	0,77	0,92			0,44	0,68	0,91						
08-1994		0,48	1,80	0,85	1,40			0,44	1,45	0,84						
09-1994		0,43	1,19	0,96	1,02			0,52	1,22	1,11						
10-1994		0,46	1,08	1,23	1,23			0,59	1,42	1,09						
11-1994		0,42	1,46	0,56	1,73			0,48	0,61	0,98						
12-1994		0,71	1,13	2,21	2,05			0,75	1,80	1,04						
Max		2,46	2,13	3,24	2,05			0,76	2,09	1,92						
Min		0,37	0,38	0,21	0,74			0,29	0,22	0,84						
Average		0,73	1,23	1,14	1,23			0,54	1,13	1,17						
Sum																

Concentrations at Rucava, LV0010R, 1994 Air sampler, Weekly samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1994																
02-1994																
03-1994											0,20	10,00	3,00	10,00		
04-1994											0,30	1,00	8,00	28,00		
05-1994											0,07	0,20	15,00	13,00		
06-1994											0,80	2,20	2,50	12,00		
07-1994											0,51	5,20	38,40	77,00		
08-1994											0,18	1,20	5,10	8,00		
09-1994											0,24	1,50	0,50	13,00		
10-1994											0,60	2,20	10,90	17,00		
11-1994											0,15	2,50	7,50	20,00		
12-1994											0,77	7,10	6,90	43,00		
Max											0,80	10,00	38,40	77,00		
Min											0,07	0,20	0,50	8,00		
Average											0,38	3,31	9,78	24,10		
Sum																

Concentrations at Zoseni, LV0016R, 1994 Air sampler, Daily samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1994																
02-1994																
03-1994																
04-1994																
05-1994																
06-1994				0,22	0,62			0,20	1,55							
07-1994				2,10	0,51			0,08	1,56	0,83						
08-1994				1,31	0,74			0,14	1,47	0,74						
09-1994				0,91	0,43			0,18	2,22	0,75						
10-1994				0,68				0,19	1,70	0,55						
11-1994																
12-1994				1,66	1,98			0,47	2,35	1,40						
Max				2,10	1,98			0,47	2,35	1,40						
Min				0,22	0,43			0,08	1,47	0,55						
Average				1,15	0,86			0,21	1,81	0,85						
Sum																

Concentrations at Zoseni, LV0016R, 1994 Air sampler, Weekly samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1994																
02-1994																
03-1994																
04-1994																
05-1994											0,07	4,00	0,10	8,00		
06-1994											0,50	3,30	2,10	12,00		
07-1994											0,40	4,20	6,40	40,00		
08-1994											0,15	2,20	4,30	10,00		
09-1994											0,28	6,20	1,20	25,00		
10-1994											1,53	18,70	11,80	81,00		
11-1994																
12-1994											0,32	3,80	3,40	63,00		
Max											1,53	18,70	11,80	81,00		
Min											0,07	2,20	0,10	8,00		
Average											0,46	6,06	4,19	34,14		
Sum																

Concentrations at Leba, PL0004R, 1994 Air sampler, Daily samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1994				3,55					1,02							
02-1994				6,61					2,66							
03-1994				3,25	1,36				1,78							
04-1994				1,73	1,38				1,63							
05-1994				1,83	1,15				1,73							
06-1994				2,40	0,96				3,02							
07-1994				1,63	0,79				2,39							
08-1994		0,38	1,78	1,16	1,51				1,30							
09-1994		0,42	1,63	1,88	1,50				1,93							
10-1994		0,78	1,53	2,37	1,76				1,59							
11-1994		0,59	1,63	4,46	2,12				2,38							
12-1994		0,78	1,44	3,72	3,11				1,12							
Max		0,78	1,78	6,61	3,11				3,02							
Min		0,38	1,44	1,16	0,79				1,02							
Average		0,57	1,60	2,88	1,56				1,88							
Sum																

Concentrations at Rörvik, SE0002R, 1994 Air sampler, Daily samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1994		0,42	0,62		2,19											
02-1994		0,43	1,06		2,12											
03-1994		0,71	0,94		1,98											
04-1994		1,54	2,57		1,79											
05-1994		0,39	0,96		1,34											
06-1994		0,56	1,00		1,18											
07-1994		0,63	1,66		1,21											
08-1994		0,38	0,83		1,00											
09-1994		0,40	0,74		0,84											
10-1994		0,87	1,31		1,73											
11-1994		0,40	0,81		2,37											
12-1994		0,78	0,86		3,23											
Max		1,54	2,57		3,23											
Min		0,38	0,62		0,84											
Average		0,63	1,11		1,75											
Sum																

Concentrations at Hoburgen, SE0008R, 1994 Air sampler, Daily samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1994					1,84											
02-1994					0,97											
03-1994		1,08	1,32		1,31											
04-1994		1,19	2,24		1,12											
05-1994		0,36	0,70		0,93											
06-1994		0,58	0,95		0,91											
07-1994		0,53	1,35		0,84											
08-1994		0,41	1,04		0,54											
09-1994		0,47	0,84		0,74											
10-1994		0,64	1,06		0,94											
11-1994		0,38	0,61		1,07											
12-1994		0,66	0,82		1,64											
Max		1,19	2,24		1,84											
Min		0,36	0,61		0,54											
Average		0,63	1,09		1,07											
Sum																

Concentrations at Vavihill, SE0011R, 1994 Air sampler, Daily samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1994		0,50	0,79		2,68											
02-1994		0,50	1,25		1,57											
03-1994		0,75	1,09		2,37											
04-1994		1,35	2,73		1,58											
05-1994		0,40	1,52		0,78											
06-1994		0,52	1,49		1,18											
07-1994		0,48	1,95		0,87											
08-1994		0,42	1,46		1,04											
09-1994		0,48	1,10		1,34											
10-1994		0,97	1,75		2,18											
11-1994		0,42	0,82		1,84											
12-1994		0,75	1,00		3,39											
Max		1,35	2,73		3,39											
Min		0,40	0,79		0,78											
Average		0,63	1,41		1,74											
Sum																

Concentrations at Aspvreten, SE0012R, 1994 Air sampler, Daily samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1994		0,26	0,43		1,13											
02-1994		0,40	0,79		1,84											
03-1994		0,38	0,55		0,87											
04-1994		0,60	1,38		0,68											
05-1994		0,21	0,38		0,70											
06-1994		0,23	0,56		0,64											
07-1994		0,24	0,71													
08-1994		0,21	0,59													
09-1994		0,22	0,40		0,67											
10-1994		0,40	0,84		1,00											
11-1994		0,20	0,39		1,23											
12-1994		0,41	0,60		1,81											
Max		0,60	1,38		1,84											
Min		0,20	0,38		0,64											
Average		0,31	0,63		1,06											
Sum																

Concentrations at Keldsnor, DK0005R, 1995 Air sampler, Daily samples, from DK01L_FP4N

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1995									1,29			2,20	20,70	31,60	1,74	
02-1995									0,79			1,53	9,90	16,70	1,20	
03-1995									1,55			2,11	12,30	22,80	1,86	
04-1995									1,32			1,38	5,74	11,30	2,09	
05-1995									1,67			1,98	8,49	14,70	2,32	
06-1995									1,51			1,46	6,42	12,10	1,83	
07-1995									2,40			2,71	7,71	16,40	3,23	
08-1995									1,44			1,46	5,10	12,50	2,27	
09-1995									1,61			2,58	12,50	17,40		
10-1995									1,72			4,12	19,80	29,80		
11-1995									1,47			3,70	20,30	28,40		
12-1995									1,98			2,47	20,40	28,70	2,29	
Max									2,40			4,12	20,70	31,60	3,23	
Min									0,79			1,38	5,10	11,30	1,20	
Average									1,56			2,30	12,45	20,20	2,09	
Sum																

Concentrations at Keldsnor, DK0005R, 1995 Air sampler, Daily samples, from DK01L_FP4N

Month	Benzo(a)pyrene air+aerosol	HNO3 + NO3- air+aerosol	NH3 + NH4+ air+aerosol	SO2 air	NO2 air	HNO3 air	NH3 air	NO3- aerosol	SO4-- aerosol	NH4+ aerosol	Cd aerosol	Cu aerosol	Pb aerosol	Zn aerosol	Ni aerosol	V aerosol
	ng/m3	ug N/m3	ug N/m3	ug S/m3	ug N/m3	ug N/m3	ug N/m3	ug N/m3	ug S/m3	ug N/m3	ng/m3	ng/m3	ng/m3	ng/m3	ng/m3	ng/m3
01-1995		1,11	2,13	4,30												
02-1995		0,96	1,64	1,10												
03-1995		1,41	3,23	1,26												
04-1995		1,03	2,85													
05-1995		1,48	4,07													
06-1995		0,92	2,81													
07-1995		1,24	3,83													
08-1995		0,85	3,69	1,06												
09-1995		1,05	3,05	1,02												
10-1995		2,30	4,96	1,37												
11-1995		1,23	3,02	2,16												
12-1995		1,28	2,76	4,58												
Max		2,30	4,96	4,58												
Min		0,85	1,64	1,02												
Average		1,24	3,17	2,11												
Sum																

Concentrations at Anholt, DK0008R, 1995 Air sampler, Daily samples, from DK01L_FP5N

Month	Benzo(a)pyrene air+aerosol	HNO3 + NO3- air+aerosol	NH3 + NH4+ air+aerosol	SO2 air	NO2 air	HNO3 air	NH3 air	NO3- aerosol	SO4-- aerosol	NH4+ aerosol	Cd aerosol	Cu aerosol	Pb aerosol	Zn aerosol	Ni aerosol	V aerosol
	ng/m3	ug N/m3	ug N/m3	ug S/m3	ug N/m3	ug N/m3	ug N/m3	ug N/m3	ug S/m3	ug N/m3	ng/m3	ng/m3	ng/m3	ng/m3	ng/m3	ng/m3
01-1995									1,25			2,47	17,60	23,80	1,83	
02-1995									0,69			1,03	5,92	13,70	1,18	
03-1995									1,36			1,48	9,19	14,70	1,40	
04-1995									1,17			1,24	4,10	9,41		
05-1995									1,47			1,44	6,13	9,97		
06-1995									1,51			1,03	4,16	7,43		
07-1995									1,75			1,11	5,61	10,40	3,79	
08-1995									1,06			1,03	3,53	8,24	2,72	
09-1995									1,16			1,16	6,59	11,50	1,68	
10-1995									1,58			3,49	17,30	26,90	3,41	
11-1995									0,99			2,08	14,00	18,50	1,82	
12-1995									1,25				7,68	13,10	2,33	
Max									1,75			3,49	17,60	26,90	3,79	
Min									0,69			1,03	3,53	7,43	1,18	
Average									1,27			1,60	8,48	13,89	2,24	
Sum																

Concentrations at Anholt, DK0008R, 1995 Air sampler, Daily samples, from DK01L_FP5N

Month	Benzo(a)pyrene air+aerosol	HNO3 + NO3- air+aerosol	NH3 + NH4+ air+aerosol	SO2 air	NO2 air	HNO3 air	NH3 air	NO3- aerosol	SO4-- aerosol	NH4+ aerosol	Cd aerosol	Cu aerosol	Pb aerosol	Zn aerosol	Ni aerosol	V aerosol
	ng/m3	ug N/m3	ug N/m3	ug S/m3	ug N/m3	ug N/m3	ug N/m3	ug N/m3	ug S/m3	ug N/m3	ng/m3	ng/m3	ng/m3	ng/m3	ng/m3	ng/m3
01-1995		0,80	1,34	4,11												
02-1995		0,73	1,05													
03-1995		1,12	1,72	1,56												
04-1995		0,74	1,36													
05-1995		1,15	2,06													
06-1995		0,87	1,36	1,03												
07-1995		0,92	1,84													
08-1995		0,68	1,29													
09-1995		0,65	1,35													
10-1995		2,10	3,41	1,44												
11-1995		0,89	1,46	1,48												
12-1995		0,80	1,15	2,14												
Max		2,10	3,41	4,11												
Min		0,65	1,05	1,03												
Average		0,95	1,62	1,96												
Sum																

Concentrations at Preila, LT0015R, 1995 Air sampler, Daily samples, from LT01L_AS15a

Month	Benzo(a)pyrene air+aerosol	HNO3 + NO3- air+aerosol	NH3 + NH4+ air+aerosol	SO2 air	NO2 air	HNO3 air	NH3 air	NO3- aerosol	SO4-- aerosol	NH4+ aerosol	Cd aerosol	Cu aerosol	Pb aerosol	Zn aerosol	Ni aerosol	V aerosol
	ng/m3	ug N/m3	ug N/m3	ug S/m3	ug N/m3	ug N/m3	ug N/m3	ug N/m3	ug S/m3	ug N/m3	ng/m3	ng/m3	ng/m3	ng/m3	ng/m3	ng/m3
01-1995					2,86											
02-1995					3,68											
03-1995					3,04											
04-1995					3,23											
05-1995					3,01											
06-1995					3,96											
07-1995					3,84											
08-1995					7,13											
09-1995					2,01											
10-1995					2,56											
11-1995					2,77											
12-1995					1,74											
Max					7,13											
Min					1,74											
Average					3,32											
Sum																

Concentrations at Preila, LT0015R, 1995 Air sampler, Daily samples, from LT01L_TD15a

Month	Benzo(a)pyrene air+aerosol	HNO3 + NO3- air+aerosol	NH3 + NH4+ air+aerosol	SO2 air	NO2 air	HNO3 air	NH3 air	NO3- aerosol	SO4-- aerosol	NH4+ aerosol	Cd aerosol	Cu aerosol	Pb aerosol	Zn aerosol	Ni aerosol	V aerosol
	ng/m3	ug N/m3	ug N/m3	ug S/m3	ug N/m3	ug N/m3	ug N/m3	ug N/m3	ug S/m3	ug N/m3	ng/m3	ng/m3	ng/m3	ng/m3	ng/m3	ng/m3
01-1995							0,39									
02-1995							0,61									
03-1995							1,10									
04-1995							1,68									
05-1995							1,31									
06-1995							0,89									
07-1995							0,72									
08-1995																
09-1995																
10-1995																
11-1995																
12-1995							1,00									
Max							1,68									
Min							0,39									
Average							0,96									
Sum																

Concentrations at Preila, LT0015R, 1995 Air sampler, Daily samples, from LT01L_FP15a1

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1995	2,97							0,10		0,68	0,50		15,50	15,60		
02-1995	1,85							0,37		0,39	0,20		13,70	35,70		
03-1995	1,43							0,17		0,45	0,10		9,60	19,10		
04-1995	0,64							0,10		0,23	0,20		8,70	13,20		
05-1995	0,21							0,11		0,63	0,10		4,40	5,60		
06-1995	0,23							0,14		0,33	0,10		7,80	9,30		
07-1995	0,29							0,16		0,30	0,10		4,90	4,60		
08-1995								0,02		0,22	0,10		9,00	9,70		
09-1995	0,30							0,10		0,32	0,10		6,10	11,30		
10-1995								0,16		0,40	0,40		22,70	30,40		
11-1995	1,11							0,11		0,72	0,30		19,10	37,00		
12-1995	2,55							0,29		1,08	0,20		9,60	42,40		
Max	2,97							0,37		1,08	0,50		22,70	42,40		
Min	0,21							0,02		0,22	0,10		4,00	4,60		
Average	1,16							0,15		0,48	0,20		10,85	19,41		
Sum																

Concentrations at Rucava, LV0010R, 1995 Air sampler, Daily samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1995		1,04	0,58	2,32	1,92			0,55	1,24	1,13						
02-1995		0,69	0,73	1,61	2,04			0,72	1,05	0,86						
03-1995		1,08	0,57	0,85	1,21			0,61	0,87	1,10						
04-1995		0,96	0,63	0,65	0,81			0,55	0,71	0,70						
05-1995		1,33	0,52	0,69	0,77			0,49	1,24	1,34						
06-1995		1,13	0,37	0,69	0,97			0,37	1,30	1,04						
07-1995		1,28	0,41	0,64	0,87			0,44	1,08	0,85						
08-1995		1,28	0,41	0,54	1,51			0,21	0,74	0,46						
09-1995		0,90	0,34	0,78	1,46			0,37	1,37	0,82						
10-1995		1,38	0,67	1,19	1,90			0,84	1,77	1,40						
11-1995		1,26	1,51	1,55	2,44			1,26	1,59	1,54						
12-1995		1,28	1,21	1,38	1,82			1,06	1,49	1,34						
Max		1,38	1,51	2,32	2,44			1,26	1,77	1,54						
Min		0,69	0,34	0,54	0,77			0,21	0,71	0,46						
Average		1,13	0,66	1,07	1,48			0,62	1,20	1,05						
Sum																

Concentrations at Rucava, LV0010R, 1995 Air sampler, Weekly samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1995											0,23	2,44	9,32	24,10		
02-1995											0,52	2,13	16,40	12,95		
03-1995											0,21	1,68	5,96	16,20		
04-1995											0,46	1,33	8,73	24,23		
05-1995											0,24	3,43	5,38	26,20		
06-1995											0,32	2,84	11,04	24,06		
07-1995											0,25	2,48	8,08	14,13		
08-1995											0,28	4,84	1,12	26,42		
09-1995											0,32	5,38	3,25	20,28		
10-1995											0,21	11,70	5,08	45,40		
11-1995											0,15	7,44	6,46	39,02		
12-1995											0,19	8,08	6,28	43,18		
Max											0,52	11,70	16,40	45,40		
Min											0,15	1,33	1,12	12,95		
Average											0,28	4,48	7,34	26,35		
Sum																

Concentrations at Zoseni, LV0016R, 1995 Air sampler, Daily samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1995																
02-1995				0,95	1,03			0,48	0,87	1,06						
03-1995				1,06	0,69			0,42	1,04	0,93						
04-1995																
05-1995																
06-1995				1,22	0,39			0,24	2,01	1,13						
07-1995				0,59	0,44			0,16	1,00	0,42						
08-1995				0,69	0,57			0,15	0,64	0,49						
09-1995				0,75	0,88			0,16	0,76	0,66						
10-1995				1,05	0,84			0,44	1,11	1,24						
11-1995				1,15	0,70			0,28	0,85	1,12						
12-1995				1,33	0,71			0,26	0,71	0,47						
Max				1,33	1,03			0,48	2,01	1,24						
Min				0,59	0,39			0,15	0,64	0,42						
Average				0,98	0,69			0,29	1,00	0,84						
Sum																

Concentrations at Zoseni, LV0016R, 1995 Air sampler, Weekly samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1995																
02-1995											1,00	1,43	15,40	21,97		
03-1995											0,34	1,16	8,16	21,61		
04-1995																
05-1995																
06-1995											0,22	3,98	7,40	24,48		
07-1995											0,16	1,56	7,06	15,58		
08-1995											0,07	2,55	0,38	14,98		
09-1995											0,20	1,70	2,82	26,72		
10-1995											0,20	2,33	5,13	77,55		
11-1995											0,12	6,00	3,88	84,73		
12-1995											0,15	5,73	2,45	49,88		
Max											1,00	6,00	15,40	84,73		
Min											0,07	1,16	0,38	14,98		
Average											0,27	2,94	5,85	37,50		
Sum																

Concentrations at Leba, PL0004R, 1995 Air sampler, Daily samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1995		0,59	1,01	6,40	3,10				1,58							
02-1995		0,70	0,90	2,90	1,90				1,12							
03-1995		0,95	1,59	3,30	1,60				2,10							
04-1995		0,53	1,32	3,20	1,10				1,04							
05-1995		0,61	1,61	2,40	1,10				2,42							
06-1995		0,49	1,23	2,00	0,90				3,20							
07-1995		0,53	2,18	1,30	1,20				1,72							
08-1995		0,32	1,16	1,50	1,60				1,55							
09-1995		0,39	1,71	0,60	1,20				0,79							
10-1995		1,05	2,39	2,40	1,90				2,26							
11-1995		0,72	1,70	4,20	3,00				1,58							
12-1995		0,80	2,09	6,60	3,00				2,29							
Max		1,05	2,39	6,60	3,10				3,20							
Min		0,32	0,90	0,60	0,90				0,79							
Average		0,64	1,57	3,07	1,80				1,80							
Sum																

Concentrations at Rörvik, SE0002R, 1995 Air sampler, Daily samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1995		0,55	0,96		3,51											
02-1995		0,45	0,52		2,16											
03-1995		0,53	1,24		1,58											
04-1995		0,38	0,86		1,44											
05-1995		0,62	1,41		1,50											
06-1995		0,53	1,11		1,39											
07-1995		0,51	1,40		1,31											
08-1995		0,48	1,06		1,53											
09-1995		0,32	0,86		1,27											
10-1995		1,70	2,57		3,16											
11-1995		0,82	1,24		3,79											
12-1995		0,54	0,85		3,28											
Max		1,70	2,57		3,79											
Min		0,32	0,52		1,27											
Average		0,62	1,17		2,16											
Sum																

Concentrations at Hoburgen, SE0008R, 1995 Air sampler, Daily samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1995		0,51	0,71		1,65											
02-1995		0,69	0,61		1,47											
03-1995		0,60	0,99		0,85											
04-1995		0,31	0,80		0,84											
05-1995		0,54	1,25		1,10											
06-1995		0,38	0,75		0,92											
07-1995					0,80											
08-1995					0,56											
09-1995					0,56											
10-1995					1,19											
11-1995					1,43											
12-1995					0,76											
Max		0,69	1,25		1,65											
Min		0,31	0,61		0,56											
Average		0,51	0,85		1,01											
Sum																

Concentrations at Vavihill, SE0011R, 1995 Air sampler, Daily samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1995		0,60	1,12		3,17											
02-1995		0,68	0,74		2,78											
03-1995		0,85	1,51		1,63											
04-1995		0,43	0,97		1,22											
05-1995		0,68	1,71		1,10											
06-1995		0,49	1,25		1,21											
07-1995		0,48	1,80		0,94											
08-1995		0,39	1,61		1,15											
09-1995		0,45	1,26		1,16											
10-1995		1,48	2,71		2,86											
11-1995		0,61	1,09		3,15											
12-1995		0,59	1,12		2,72											
Max		1,48	2,71		3,17											
Min		0,39	0,74		0,94											
Average		0,64	1,41		1,92											
Sum																

Concentrations at Aspvreten, SE0012R, 1995 Air sampler, Daily samples

Month	Benzo(a)pyrene air+aerosol ng/m3	HNO3 + NO3- air+aerosol ug N/m3	NH3 + NH4+ air+aerosol ug N/m3	SO2 air ug S/m3	NO2 air ug N/m3	HNO3 air ug N/m3	NH3 air ug N/m3	NO3- aerosol ug N/m3	SO4-- aerosol ug S/m3	NH4+ aerosol ug N/m3	Cd aerosol ng/m3	Cu aerosol ng/m3	Pb aerosol ng/m3	Zn aerosol ng/m3	Ni aerosol ng/m3	V aerosol ng/m3
01-1995		0,33	0,62		1,50											
02-1995		0,30	0,29		1,05											
03-1995		0,31	0,62		0,65											
04-1995		0,22	0,50		0,66											
05-1995		0,24	0,73		0,56											
06-1995		0,24	0,71		0,54											
07-1995		0,19	0,55		0,46											
08-1995		0,20	0,59		0,46											
09-1995		0,18	0,55		0,56											
10-1995		0,40	1,09		0,80											
11-1995		0,33	0,53		1,79											
12-1995		0,25	0,53		1,72											
Max		0,40	1,09		1,79											
Min		0,18	0,29		0,46											
Average		0,27	0,61		0,90											
Sum																

Appendix 3

Measured and reported data deposition

Concentrations at Arkona, DE0006R, 1991 Wet only sampler, Weekly samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1991		49,40			5,95			1,33	2,27	9,37	1,60	26,10	9,60	0,62													
02-1991		21,70			5,15			1,33	2,56	2,95	0,64	5,50	9,10	0,31													
03-1991		29,60			2,20			2,28	1,11	0,77	0,17	1,30	1,00	0,07													
04-1991																											
05-1991																											
06-1991																											
07-1991																											
08-1991																											
09-1991																											
10-1991																											
11-1991																											
12-1991																											
Max		49,40			5,95			2,28	2,56	9,37	1,60	26,10	9,60	0,62													
Min		20,60			2,20			1,33	1,11	0,77	0,17	1,30	1,00	0,07													
W.Aver.		30,57			4,92			1,54	2,08	5,92	1,05	15,65	7,55	0,42													
Sum		91,70																									

Concentrations at Zingst, DE0009R, 1991 Wet only sampler, Weekly samples, from ANTAS_9

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1991																											
02-1991																											
03-1991																											
04-1991																											
05-1991																											
06-1991																											
07-1991																											
08-1991																											
09-1991																											
10-1991																											
11-1991																											
12-1991		32,10			1,78			0,57	1,47	3,68	0,08	5,28	0,10	0,17													
Max		32,10			1,78			0,57	1,47	3,68	0,08	5,28	0,10	0,17													
Min		32,10			1,78			0,57	1,47	3,68	0,08	5,28	0,10	0,17													
W.Aver.		32,10			1,78			0,57	1,47	3,68	0,08	5,28	0,10	0,17													
Sum		32,10																									

Concentrations at Boltenhagen, DE0051R, 1991 Wet only sampler, Weekly samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1991		42,60			23,86			13,38	5,60	8,08	1,63	18,30	6,50	1,19													
02-1991		57,30			11,27			3,33	1,61	29,16	3,99	62,20	4,30	1,35													
03-1991		17,90			1,54			0,67	0,42	2,36	0,41	5,40	0,40	0,14													
04-1991																											
05-1991																											
06-1991																											
07-1991																											
08-1991																											
09-1991																											
10-1991																											
11-1991																											
12-1991																											
Max		57,30			23,86			13,38	5,60	29,16	3,99	62,20	6,50	1,35													
Min		17,90			1,54			0,67	0,42	2,36	0,41	5,40	0,40	0,14													
W.Aver.		39,27			14,34			6,56	2,94	17,46	2,59	37,69	4,50	1,11													
Sum		117,80																									

Concentrations at Keldsnor, DK0005R, 1991 Wet only sampler, , from DK01L_WO2

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1991										6,58	1,04		0,60	0,36													
02-1991										6,79	1,07		1,20	0,63													
03-1991										2,60	0,44		0,70	0,24													
04-1991																											
05-1991																											
06-1991										0,59	0,09		0,10	0,04													
07-1991										1,71	0,25		0,30	0,28													
08-1991										1,19	0,14		0,60	0,32													
09-1991										3,05	0,35		1,20	0,41													
10-1991										6,37	0,82		1,10	0,56													
11-1991										12,43	1,43		1,90	1,63													
12-1991																											
Max										12,43	1,43		1,90	1,63													
Min										0,59	0,09		0,10	0,04													
W.Aver.																											
Sum																											

Concentrations at Keldsnor, DK0005R, 1991 Wet only sampler, , from DK01L_WO2

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1991					0,88			0,55	0,49			11,90															
02-1991					2,21			0,91	1,41			12,00															
03-1991					1,80			1,15	1,33			5,30															
04-1991																											
05-1991																											
06-1991					0,66			0,29	0,37			1,30															
07-1991					1,61			1,20	0,84			3,20															
08-1991					1,27			1,40	0,64			2,50															
09-1991					0,97			1,55	0,59			5,80															
10-1991					2,08			1,65	0,46			11,90															
11-1991					2,67			1,98	0,75			22,20															
12-1991																											
Max					2,67			1,98	1,41			22,20															
Min					0,66			0,29	0,37			1,30															
W.Aver.																											
Sum																											

Concentrations at Keldsnor, DK0005R, 1991 Wet only sampler, , from DK01L_WO2

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1991			5,35																								
02-1991			4,40																								
03-1991			4,19																								
04-1991																											
05-1991																											
06-1991			4,37																								
07-1991			4,22																								
08-1991			5,41																								
09-1991			5,90																								
10-1991			5,23																								
11-1991			5,89																								
12-1991																											
Max			5,90																								
Min			4,19																								
W.Aver.																											
Sum																											

Concentrations at Keldsnor, DK0005R, 1991 Wet only sampler, , from DK01L_WO2

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1991		39,60																									
02-1991		26,30																									
03-1991		21,30																									
04-1991																											
05-1991																											
06-1991		64,70																									
07-1991		23,80																									
08-1991		30,90																									
09-1991		11,90																									
10-1991		4,90																									
11-1991		11,70																									
12-1991																											
Max		64,70																									
Min		4,90																									
W.Aver.		26,12																									
Sum		235,10																									

Concentrations at Keldsnor, DK0005R, 1991 Wet only sampler, Daily samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1991						0,26	5,00																				
02-1991						1,58	40,00																				
03-1991						1,54	65,00																				
04-1991																											
05-1991																											
06-1991						0,60	43,00																				
07-1991						1,45	61,00																				
08-1991						1,16	4,00																				
09-1991						0,71	1,00																				
10-1991						1,54	6,00																				
11-1991						1,64	1,00																				
12-1991																											
Max						1,64	65,00																				
Min						0,26	1,00																				
W.Aver.						0,97	29,97																				
Sum																											

Concentrations at Anholt, DK0008R, 1991 Bulk sampler, Biweekly samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1991						0,34	24,00																				
02-1991						0,55	46,00																				
03-1991						1,25	55,00																				
04-1991						1,01	24,00																				
05-1991						0,95	28,00																				
06-1991						0,71	49,00																				
07-1991						1,13	73,00																				
08-1991						0,98	50,00																				
09-1991						0,63	26,00																				
10-1991						0,65	29,00																				
11-1991						0,64	61,00																				
12-1991						0,36	29,00																				
Max						1,25	73,00																				
Min						0,34	24,00																				
W.Aver.						0,75	46,57																				
Sum																											

Concentrations at Anholt, DK0008R, 1991 Bulk sampler, , from DK01L_BS2_4

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1991										9,40	1,11		0,40	0,42													
02-1991										1,45	0,18		0,20	0,11													
03-1991										0,79	0,11		0,30	0,12													
04-1991										1,27	0,19		0,30	0,10													
05-1991										0,56	0,11		0,10	0,07													
06-1991										0,74	0,10		0,10	0,05													
07-1991										0,69	0,10		0,10	0,09													
08-1991										1,12	0,15		0,20	0,09													
09-1991										1,96	0,24		0,10	0,14													
10-1991										7,22	0,84		0,30	0,33													
11-1991										3,30	0,44		0,20	0,15													
12-1991										2,92	0,35		0,10	0,12													
Max										9,40	1,11		0,40	0,42													
Min										0,56	0,10		0,10	0,05													
W.Aver.										2,65	0,33		0,20	0,15													
Sum																											

Concentrations at Anholt, DK0008R, 1991 Bulk sampler, , from DK01L_BS2_4

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1991					1,13			0,24	0,37			16,80															
02-1991					0,67			0,28	0,48			2,60															
03-1991					1,32			1,08	0,96			1,60															
04-1991					1,12			1,05	0,79			2,20															
05-1991					1,01			0,53	0,28			1,10															
06-1991					0,78			0,45	0,54			1,50															
07-1991					1,20			0,47	0,59			1,40															
08-1991					1,09			0,80	0,74			2,20															
09-1991					0,77			0,55	0,47			1,80															
10-1991					1,25			0,48	0,49			12,90															
11-1991					0,92			0,41	0,67			5,90															
12-1991					0,61			0,20	0,27			5,30															
Max					1,32			1,08	0,96			16,80															
Min					0,61			0,20	0,27			1,10															
W.Aver.					0,98			0,50	0,58			4,76															
Sum																											

Concentrations at Anholt, DK0008R, 1991 Bulk sampler, , from DK01L_BS2_4

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1991			4,61																								
02-1991			4,34																								
03-1991			4,26																								
04-1991			4,63																								
05-1991			4,55																								
06-1991			4,31																								
07-1991			4,13																								
08-1991			4,30																								
09-1991			4,58																								
10-1991			4,53																								
11-1991			4,22																								
12-1991			4,54																								
Max			4,63																								
Min			4,13																								
W.Aver.			4,35																								
Sum																											

Concentrations at Anholt, DK0008R, 1991 Bulk sampler, , from DK01L_BS2_4

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1991		40,50																									
02-1991		10,50																									
03-1991		18,50																									
04-1991		14,80																									
05-1991		53,40																									
06-1991		72,50																									
07-1991		14,30																									
08-1991		34,70																									
09-1991		34,40																									
10-1991		29,40																									
11-1991		48,20																									
12-1991		31,30																									
Max		72,50																									
Min		10,50																									
W.Aver.		33,55																									
Sum		402,60																									

Concentrations at Almindingen, DK0021R, 1991 Bulk sampler, Biweekly samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1991		46,40	4,34		0,93	0,76	46,00	0,48	0,65	2,01	0,26	3,70	0,30	0,18													
02-1991		24,80	3,87		2,90	2,78	136,00	1,68	1,54	1,42	0,21	2,30	0,30	0,18													
03-1991		42,00	4,19		2,26	2,20	64,00	4,09	1,85	0,71	0,11	1,40	0,30	0,04													
04-1991		121,50	4,42		1,29	1,27	38,00	0,56	0,45	0,20	0,05	0,40	0,20	0,08													
05-1991		18,10	4,00		2,39	2,35	100,00	0,99	0,75	0,37	0,08	0,70	0,40	0,10													
06-1991		102,50	4,51		0,83	0,80	31,00	0,60	0,43	0,33	0,06	0,70	0,10	0,16													
07-1991		36,50	4,19		1,64	1,57	65,00	1,12	0,57	0,58	0,13	1,20	0,30	0,36													
08-1991		59,40	4,63		1,05	1,00	23,00	2,12	0,70	0,44	0,12	0,70	0,40	0,31													
09-1991		40,90	5,72		1,63	0,52	2,00	4,48	1,03	1,27	0,18	2,10	0,30	0,59													
10-1991		50,70	4,79		0,94	0,75	16,00	0,77	0,71	2,20	0,30	3,90	0,30	0,76													
11-1991		75,50	4,67		0,95	0,81	21,00	0,49	0,65	1,44	0,24	2,70	0,80	0,54													
12-1991		86,00	4,19		1,13	0,98	64,00	0,64	0,61	1,78	0,21	3,20	0,20	0,10													
Max		121,50	5,72		2,90	2,78	136,00	4,48	1,85	2,20	0,30	3,90	0,80	0,76													
Min		18,10	3,87		0,83	0,52	2,00	0,48	0,43	0,20	0,05	0,40	0,10	0,04													
W.Aver.		58,69	4,49		1,28	1,13	41,99	1,25	0,71	0,99	0,15	1,80	0,31	0,26													
Sum		704,30																									

Concentrations at Utö, FI0009R, 1991 Bulk sampler, Daily samples, from FI01L_NILU09

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1991		56,40			0,72			0,18	0,55	3,74	0,41	6,30	0,20	0,35													
02-1991		34,90			1,00			0,41	1,01	1,99	0,21	3,10	0,20	0,56													
03-1991		35,10			1,97			1,25	1,33	2,51	0,25	4,20	0,40	0,85													
04-1991		9,20			2,60			1,65	1,53	3,19	0,40	5,00	1,60	1,83													
05-1991		31,10			1,06			0,65	0,40	0,92	0,10	1,50	0,30	0,40													
06-1991		83,80			1,07			0,46	0,39	0,66	0,10	1,10	0,20	0,17													
07-1991		17,30			1,06			0,46	0,66	0,51	0,26	4,10	0,80	0,34													
08-1991		64,60			0,74			0,48	0,33	0,91	0,11	1,50	0,10	0,22													
09-1991		96,20			1,04			0,49	0,42	1,73	0,19	3,00	0,20	0,46													
10-1991		46,50			0,85			0,38	0,59	2,79	0,29	4,30	0,30	0,61													
11-1991		73,20			1,44			0,44	1,00	8,00	0,90	11,90	0,50	0,61													
12-1991		51,40			1,27			0,33	0,77	6,04	0,66	9,20	0,50	0,71													
Max		96,20			2,60			1,65	1,53	8,00	0,90	11,90	1,60	1,83													
Min		9,20			0,72			0,18	0,33	0,51	0,10	1,10	0,10	0,17													
W.Aver.		49,97			1,11			0,49	0,64	2,90	0,33	4,66	0,31	0,48													
Sum		599,70																									

Concentrations at Virolahti II, FI0017R, 1991 Bulk sampler, Daily samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1991		66,20			0,76			0,34	0,45	0,46	0,08	0,70	0,40	0,17													
02-1991		28,50			1,06			0,69	0,75	0,20	0,07	0,40	0,70	0,27													
03-1991		40,90			1,94			1,16	0,64	0,24	0,09	0,50	1,00	0,32													
04-1991		23,40			2,32			1,39	0,82	0,24	0,13	0,40	1,40	0,29													
05-1991		42,70			1,11			0,63	0,34	0,13	0,07	0,20	0,70	0,15													
06-1991		103,50			0,84			0,35	0,25	0,10	0,05	0,10	0,40	0,15													
07-1991		30,40			1,33			0,29	0,32	0,18	0,12	0,40	1,10	0,15													
08-1991		77,20			0,69			0,34	0,21	0,15	0,05	0,30	0,40	0,13													
09-1991		80,50			1,17			0,50	0,36	0,38	0,09	0,80	0,60	0,79													
10-1991		53,20			1,25			0,41	0,52	0,26	0,11	0,60	0,90	0,34													
11-1991		97,60			1,17			0,59	0,54	0,88	0,14	1,50	0,70	0,31													
12-1991		24,00			1,13			0,36	0,65	1,16	0,18	2,10	0,80	0,45													
Max		103,50			2,32			1,39	0,82	1,16	0,18	2,10	1,40	0,79													
Min		23,40			0,69			0,29	0,21	0,10	0,05	0,10	0,40	0,13													
W.Aver.		55,67			1,11			0,52	0,43	0,36	0,09	0,65	0,66	0,30													
Sum		668,10																									

Concentrations at Virolahti II, FI0017R, 1991 Bulk sampler, Monthly samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1991		74,30			0,80			0,43	0,50	0,42	0,08	0,80	0,50	0,17													
02-1991		36,50			1,30			1,00	0,94	0,19	0,05	0,40	0,60	0,22													
03-1991		64,70			2,60				0,82	0,22	0,11	0,60	0,10	0,33													
04-1991		55,20			1,70			0,88	0,60	0,29	0,08	0,50	0,90	0,30													
05-1991		72,00			0,90			0,41	0,29	0,18	0,06	0,40	0,70	0,32													
06-1991		123,40			1,10			0,22	0,27	0,15	0,05	0,30	0,50	0,39													
07-1991		62,40			0,50			0,34	0,05	0,31	0,05	0,40	0,30	0,41													
08-1991		140,90			0,70			0,22	0,19	0,08	0,04	0,20	0,40	0,11													
09-1991		104,10			1,30			0,41	0,38	0,32	0,09	0,70	0,60	0,27													
10-1991		86,10			1,40			0,67	0,64	0,42	0,25	1,20	2,00	1,09													
11-1991		105,30			1,10			0,48	0,50	0,67	0,12	1,20	0,70	0,23													
12-1991		49,40			1,00				0,54	0,80	0,12	1,50	0,40	0,20													
Max		140,90			2,60			1,00	0,94	0,80	0,25	1,50	2,00	1,09													
Min		36,50			0,50			0,22	0,05	0,08	0,04	0,20	0,10	0,11													
W.Aver.		81,19			1,15			0,39	0,43	0,32	0,09	0,65	0,65	0,34													
Sum		974,30																									

Concentrations at Hailuoto, FI0052R, 1991 Bulk sampler, Monthly samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1991		5,70			1,10			0,60	0,89			2,70															
02-1991		12,90			1,30			0,69	0,92	0,37	0,25	0,60	0,70	0,16													
03-1991		27,60			1,30			0,64	0,70	0,24	0,03	0,30	0,30	0,14													
04-1991		10,20			1,60			0,84	0,57			0,70															
05-1991		55,90			0,60			0,20	0,17	0,17	0,02	0,20	0,10	0,23													
06-1991		83,30			0,70			0,13	0,17	0,08	0,04	0,10	0,10	0,19													
07-1991		19,60			0,80			0,85	0,12	0,39	0,10	0,60	0,20	0,49													
08-1991		45,40			0,70			0,26	0,20	0,16	0,03	0,30	0,10	0,17													
09-1991		76,20			0,30			0,14	0,13	0,22	0,03	0,40	0,10	0,15													
10-1991		42,50			0,90			0,39	0,45	0,24	0,03	0,40	0,20	0,23													
11-1991		98,20			0,40			0,19	0,33	0,69	0,09	1,20	0,10	0,06													
12-1991		45,80			0,60			0,38	0,58	0,66	0,07	1,10	0,20	0,27													
Max		98,20			1,60			0,85	0,92	0,69	0,25	2,70	0,70	0,49													
Min		5,70			0,30			0,13	0,12	0,08	0,02	0,10	0,10	0,06													
W.Aver.		43,61			0,65			0,29	0,32	0,32	0,05	0,57	0,14	0,17													
Sum		523,30																									

Concentrations at Hailuoto, FI0052R, 1991 Bulk sampler, Weekly samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1991		17,60			0,37			0,12	0,57		0,10				0,34	2,00	3,10		8,04								
02-1991		16,20			0,94			0,40	0,62		0,06				0,27	4,00	121,40		445,97								
03-1991		30,30			0,93			0,44	0,58		0,04				0,08	2,10	3,60		13,20								
04-1991		4,40			1,92			0,67	0,81		0,11				0,32	7,60	11,00		282,27								
05-1991		35,90			1,05			0,47	0,27		0,09				0,13	3,70	2,60		11,34								
06-1991		55,20			1,11			0,85	0,26		0,06				0,05	2,80	3,60		11,11								
07-1991		10,60			1,51			0,52	0,44		0,09				0,08	9,20	5,70		11,16								
08-1991		53,70			0,61			0,34	0,14		0,01				0,05	1,60	1,50		3,25								
09-1991		34,30			0,54			0,13	0,19		0,08				0,04	3,90	3,00		19,21								
10-1991		35,50			0,83			0,24	0,45		0,04				0,13	4,20	3,00		24,45								
11-1991		48,10			0,57			0,18	0,43		0,11				0,06	2,70	2,30		31,15								
12-1991		15,20			0,53			0,15	0,46		0,11				0,12	4,30	7,30		49,11								
Max		55,20			1,92			0,85	0,81		0,11				0,34	9,20	121,40		445,97								
Min		4,40			0,37			0,12	0,14		0,01				0,04	1,60	1,50		3,25								
W.Aver.		29,75			0,81			0,38	0,36		0,07				0,10	3,21	8,51		39,48								
Sum		357,00																									

Concentrations at Haapasaari, FI0055R, 1991 Bulk sampler, Weekly samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1991		41,40			1,16			0,27	0,62		0,20				0,06	2,90	4,40		8,60								
02-1991		9,30			2,57			0,60	1,41		0,21				0,19	5,30	10,60		35,46								
03-1991		28,80			2,73			1,33	1,05		0,09				0,33	3,80	45,10		166,00								
04-1991		9,50			5,58			1,54	2,19		0,48				0,57	9,90	105,20		414,70								
05-1991		15,90			3,11			1,17	0,79		0,30				0,84	14,70	237,60		623,48								
06-1991		66,70			2,35			0,91	0,64		0,15				0,18	3,30	24,00		47,70								
07-1991		14,50			0,55			0,22	0,21		0,05				0,04	1,80	2,20		7,72								
08-1991		40,70			1,11			0,86	0,35		0,11				0,10	4,20	2,30		18,61								
09-1991		56,30			2,07			0,40	0,46		0,19				0,15	4,40	4,50		13,95								
10-1991		16,20			2,56			0,76	1,23		0,34				0,29	6,50	6,40		54,66								
11-1991		41,40			1,46			0,49	0,75		0,32				0,09	2,30	4,70		21,47								
12-1991		16,70			1,90			0,36	1,06		0,63				0,19	6,60	7,70		88,21								
Max		66,70			5,58			1,54	2,19		0,63				0,84	14,70	237,60		623,48								
Min		9,30			0,55			0,22	0,21		0,05				0,04	1,80	2,20		7,72								
W.Aver.		29,78			2,00			0,69	0,72		0,22				0,19	4,43	24,52		76,67								
Sum		357,40																									

Concentrations at Tvärminne, FI0056R, 1991 Bulk sampler, Monthly samples

Month	mm off	mm	pH	k	SO4--	SO4-- corr	H+	NH4+	NO3-	Na+	Mg++	Cl-	Ca++	K+	Cd	Cu	Pb	Hg	Zn	Cr	Co	Ni	As	Fe	Mn	V	Al
	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip
	mm	mm	pH units	uS/cm	mg S/l	mg S/l	ue H/l	mg N/l	mg N/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
01-1991		104,10			0,70			0,15	0,48	1,36	0,20	2,70	0,30	0,13													
02-1991		25,40			1,60			0,58	1,36	0,69	0,13	1,20	1,00	0,14													
03-1991		51,00			2,30			1,53	0,61	0,57	0,09	1,00	0,40	0,14													
04-1991		13,60			3,80			2,25	1,65			0,90															
05-1991		38,10			1,50			0,75	0,47	0,27	0,09	0,50	0,50	0,13													
06-1991		103,50			1,30			0,42	0,37	0,36	0,09	0,60	0,50	0,22													
07-1991		30,50			0,70			0,03	0,01	0,16	0,04	0,20	0,30	0,06													
08-1991		71,20			0,50			0,15	0,24	0,21	0,05	0,40	0,20	0,12													
09-1991		53,80			1,30				0,50			1,10															
10-1991		38,90			0,90			0,19	0,54	1,08	0,19	1,90	0,60	0,41													
11-1991		108,70			0,90			0,34	0,58	1,74	0,23	3,10	0,20	0,16													
12-1991		42,30			1,00			0,22	0,44	2,03	0,28	3,80	0,50	0,13													
Max		108,70			3,80			2,25	1,65	2,03	0,28	3,80	1,00	0,41													
Min		13,60			0,50			0,03	0,01	0,16	0,04	0,20	0,20	0,06													
W.Aver.		56,76			1,14			0,41	0,50	0,84	0,13	1,65	0,35	0,15													
Sum		681,10																									

Concentrations at Jomala, FI0057R, 1991 Bulk sampler, Monthly samples

Month	mm off	mm	pH	k	SO4--	SO4-- corr	H+	NH4+	NO3-	Na+	Mg++	Cl-	Ca++	K+	Cd	Cu	Pb	Hg	Zn	Cr	Co	Ni	As	Fe	Mn	V	Al
	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip
	mm	mm	pH units	uS/cm	mg S/l	mg S/l	ue H/l	mg N/l	mg N/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
01-1991		106,80			0,70			0,42	0,51	0,97	0,13	1,70	0,20	0,14													
02-1991		39,40			1,20			1,03	1,35	0,80	0,10	1,30	0,30	0,13													
03-1991		52,70			3,50			2,96	2,29	0,59	0,09	1,10	0,50	0,25													
04-1991		11,00			3,90			3,65	2,38			1,60															
05-1991		97,80			1,10			0,91	0,47	0,21	0,03	0,30	0,20	0,11													
06-1991		90,20			1,40			0,65	0,58	0,37	0,07	0,60	0,40	0,16													
07-1991		23,50			0,80			0,30	0,20	0,61	0,08	1,00	0,60	0,32													
08-1991		151,50			0,50			0,19	0,23	0,11	0,03	0,30	0,10	0,05													
09-1991		148,60			1,30			0,62	0,61	0,67	0,08	1,30	0,20	0,14													
10-1991		53,20			0,80			0,46	0,59	1,03	0,13	1,90	0,30	0,12													
11-1991		43,30			1,00			0,76	0,78	1,71	0,21	3,10	0,20	0,14													
12-1991		74,20			0,90			0,59	0,63	1,62	0,19	2,90	0,20	0,21													
Max		151,50			3,90			3,65	2,38	1,71	0,21	3,10	0,60	0,32													
Min		11,00			0,50			0,19	0,20	0,11	0,03	0,30	0,10	0,05													
W.Aver.		74,35			1,15			0,74	0,67	0,67	0,09	1,24	0,24	0,14													
Sum		892,20																									

Concentrations at Rahja, FI0058R, 1991 Bulk sampler, Monthly samples

Month	mm off	mm	pH	k	SO4--	SO4-- corr	H+	NH4+	NO3-	Na+	Mg++	Cl-	Ca++	K+	Cd	Cu	Pb	Hg	Zn	Cr	Co	Ni	As	Fe	Mn	V	Al
	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip
	mm	mm	pH units	uS/cm	mg S/l	mg S/l	ue H/l	mg N/l	mg N/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
01-1991		18,30			0,60			0,13	0,57	0,98	0,14	1,60	0,30	0,41													
02-1991		14,50			0,70			0,28	0,62			0,90															
03-1991		37,00			1,90			1,09	0,85	0,43	0,11	0,50	0,30	0,50													
04-1991		9,10			2,50			2,20	1,57			1,20															
05-1991		70,00			0,50			0,17	0,20			0,40															
06-1991		66,20			0,60			0,09	0,22	0,18	0,04	0,30	0,10	0,33													
07-1991		31,80			0,60			0,04	0,01	0,30	0,10	0,40	0,20	1,12													
08-1991		37,10			0,70			0,37	0,01	0,33	0,09	0,40	0,30	0,32													
09-1991		72,60			0,50			0,60	0,17	0,74	0,22	1,50	0,30	2,23													
10-1991		42,10			0,70			0,07	0,34	0,47	0,28	1,00	0,40	2,12													
11-1991		58,60			0,50			0,18	0,42	0,72	0,19	1,10	0,20	0,32													
12-1991		23,30			0,70			0,26	0,63	1,23	0,16	1,90	0,30	0,76													
Max		72,60			2,50			2,20	1,57	1,23	0,28	1,90	0,40	2,23													
Min		9,10			0,50			0,04	0,01	0,18	0,04	0,30	0,10	0,32													
W.Aver.		40,05			0,72			0,34	0,33	0,44	0,12	0,85	0,20	0,80													
Sum		480,60																									

Concentrations at Ylimarkku, FI0059R, 1991 Bulk sampler, Monthly samples

Month	mm off	mm	pH	k	SO4--	SO4-- corr	H+	NH4+	NO3-	Na+	Mg++	Cl-	Ca++	K+	Cd	Cu	Pb	Hg	Zn	Cr	Co	Ni	As	Fe	Mn	V	Al
	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip
	mm	mm	pH units	uS/cm	mg S/l	mg S/l	ue H/l	mg N/l	mg N/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
01-1991		24,30			0,80			0,84	0,73	0,83	0,12	1,50	0,20	0,19													
02-1991		20,50			1,50			1,33	1,29	0,41	0,07	0,90	0,30	0,20													
03-1991		52,80			1,80			1,10	0,75	0,25	0,04	0,30	0,20	0,09													
04-1991		6,10																									
05-1991		57,70			0,90			0,43	0,22	0,09	0,02	0,20	0,10	0,06													
06-1991		85,90			1,30			0,22	0,32	0,16	0,04	0,20	0,10	0,17													
07-1991		19,90			0,80			0,37	0,17	0,28	0,07	0,40	0,30	0,28													
08-1991		29,90			1,60			0,97	0,44	0,39	0,13	0,40	0,60	0,43													
09-1991		85,10			1,00			1,23	0,22	0,15	0,04	0,30		0,09													
10-1991		41,20			2,10			1,65	0,99	0,42	0,07	0,80	0,30	0,14													
11-1991		114,60			0,70			0,70	0,51	0,78	0,10	1,40	0,10	0,06													
12-1991		80,70			1,10			0,66	0,67	0,87	0,11	1,60	0,10	0,07													
Max		114,60			2,10			1,65	1,29	0,87	0,13	1,60	0,60	0,43													
Min		6,10			0,70			0,22	0,17	0,09	0,02	0,20	0,10	0,06													
W.Aver.		51,48			1,15			0,80	0,51	0,43	0,07	0,76	0,15	0,12													
Sum		617,80																									

Concentrations at Sipoo, FI0060R, 1991 Bulk sampler, Monthly samples

Month	mm off	mm	pH	k	SO4--	SO4-- corr	H+	NH4+	NO3-	Na+	Mg++	Cl-	Ca++	K+	Cd	Cu	Pb	Hg	Zn	Cr	Co	Ni	As	Fe	Mn	V	Al
	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip
	mm	mm	pH units	uS/cm	mg S/l	mg S/l	ue H/l	mg N/l	mg N/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
01-1991		59,70			0,80			0,28	0,47	0,48	0,07	0,90	0,40	0,22													
02-1991		9,90			3,40			0,96	1,59	1,09	0,25	2,20	2,50	1,00													
03-1991		30,50			2,30			1,18	0,95	0,37	0,08	0,80	0,70	0,27													
04-1991		16,60			2,10			1,24	0,81			1,50															
05-1991		37,60			1,20			0,56	0,41	0,40	0,10	0,70	0,80	0,50													
06-1991		78,80			1,40			0,08	0,25	0,18	0,07	0,40	0,50	0,29													
07-1991		55,30			0,60			1,39	0,21	0,28	0,14	0,60	0,20	0,64													
08-1991		20,20			0,90			0,12	0,15	0,34	0,08	0,60	0,40	0,49													
09-1991		63,60			1,30			0,42	0,53	0,35	0,13	0,80	0,50	0,99													
10-1991		43,60			1,30			0,61	0,68	0,49	0,10	0,90	0,70	0,53													
11-1991		129,50			0,90			0,49	0,52	0,60	0,08	1,00	0,20	0,22													
12-1991		66,00			0,90			0,43	0,49	0,92	0,12	1,70	0,20	0,25													
Max		129,50			3,40			1,39	1,59	1,09	0,25	2,20	2,50	1,00													
Min		9,90			0,60			0,08	0,15	0,18	0,07	0,40	0,20	0,22													
W.Aver.		50,94			1,16			0,55	0,49	0,47	0,10	0,92	0,43	0,41													
Sum		611,30																									

Concentrations at Leba, PL0004R, 1991 Bulk sampler, Daily samples

Month	mm off	mm	pH	k	SO4--	SO4-- corr	H+	NH4+	NO3-	Na+	Mg++	Cl-	Ca++	K+	Cd	Cu	Pb	Hg	Zn	Cr	Co	Ni	As	Fe	Mn	V	Al
	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip
	mm	mm	pH units	uS/cm	mg S/l	mg S/l	ue H/l	mg N/l	mg N/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
01-1991		36,60			1,05			0,45	0,82	1,40	0,16	2,30	0,20	0,16													
02-1991		33,00			3,27			0,58	1,25	0,95	0,11	1,10	0,20	0,18													
03-1991		25,40			1,55			1,64	1,06	0,60	0,08	0,90	0,30	0,26													
04-1991		21,20			2,48			0,91	1,27	0,91	0,12	1,80	0,40	0,22													
05-1991		49,70			2,01			0,50	0,48	0,62	0,08	0,90	0,20	0,25													
06-1991		114,70			1,35			0,41	0,52	0,28	0,06	0,70	0,20	0,27													
07-1991		38,70			1,95			0,45	0,75	0,48	0,07	0,70	0,20	0,14													
08-1991		35,10			1,80			0,71	0,58	0,59	0,11	0,90	0,40	0,20													
09-1991		44,60			1,53			0,40	0,74	1,07	0,13	1,70	0,20	0,13													
10-1991		110,10			1,16			0,29	0,20	0,90	0,11	1,20	0,20	0,13													
11-1991		75,50			0,69			0,10	0,48	1,24	0,10	1,30	0,10	0,14													
12-1991		59,90			0,93			0,27	0,46	2,28	0,28	3,70	0,10	0,15													
Max		114,70			3,27			1,64	1,27	2,28	0,28	3,70	0,40	0,27													
Min		21,20			0,69			0,10	0,20	0,28	0,06	0,70	0,10	0,13													
W.Aver.		53,71			1,45			0,44	0,58	0,93	0,11	1,39	0,20	0,16													
Sum		644,50																									

Concentrations at Leba, PL0004R, 1991 Wet only sampler,

Month	mm off	mm	pH	k	SO4--	SO4-- corr	H+	NH4+	NO3-	Na+	Mg++	Cl-	Ca++	K+	Cd	Cu	Pb	Hg	Zn	Cr	Co	Ni	As	Fe	Mn	V	Al
	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip
	mm	mm	pH units	uS/cm	mg S/l	mg S/l	ue H/l	mg N/l	mg N/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
01-1991															0,70	4,28	2,90		15,10								
02-1991															1,10	3,50	9,28		18,37								
03-1991															0,92	1,90	3,77		8,11								
04-1991															0,97	1,75	13,61		23,61								
05-1991															1,38	4,53	6,12		52,02								
06-1991															0,28	2,26	3,01		18,81								
07-1991															0,30	3,96	4,19		16,33								
08-1991															0,29	2,40	2,18		39,16								
09-1991															0,27	2,73	4,36		36,85								
10-1991															0,20	2,00	2,78		8,92								
11-1991															0,36	2,91	5,97		24,65								
12-1991															0,34	1,97	3,35		22,74								
Max															1,38	4,53	13,61		52,02								
Min															0,20	1,75	2,18		8,11								
W.Aver.															0,48	2,73	4,40		22,44								
Sum																											

Concentrations at Leba, PL0004R, 1991 Wet only sampler, Biweekly samples

Month	mm off	mm	pH	k	SO4--	SO4-- corr	H+	NH4+	NO3-	Na+	Mg++	Cl-	Ca++	K+	Cd	Cu	Pb	Hg	Zn	Cr	Co	Ni	As	Fe	Mn	V	Al
	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip
	mm	mm	pH units	uS/cm	mg S/l	mg S/l	ue H/l	mg N/l	mg N/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
01-1991		36,60			0,96			0,34	0,77	1,05	0,13	2,20	0,20	0,12													
02-1991		33,00			1,44			0,58	1,07	0,84	0,08	0,90	0,20	0,15													
03-1991		25,40			1,41			1,35	1,04	0,59	0,08	0,80	0,20	0,20													
04-1991		21,20			2,15			0,85	1,25	0,69	0,10	1,40	0,30	0,21													
05-1991		49,70			1,47			0,35	0,41	0,43	0,05	0,60	0,20	0,20													
06-1991		114,70			1,42			0,39	0,51	0,23	0,06	0,50	0,10	0,23													
07-1991		38,70			1,67			0,36	0,68	0,45	0,07	0,50	0,20	0,10													
08-1991		35,10			1,54			0,38	0,56	0,52	0,08	0,80	0,30	0,12													
09-1991		44,60			1,35			0,40	0,73	1,03	0,13	1,70	0,20	0,12													
10-1991		110,10			0,99			0,24	0,19	0,82	0,10	1,10	0,10	0,13													
11-1991		75,50			0,57			0,09	0,42	0,46	0,07	0,70	0,10	0,10													
12-1991		59,90			0,88			0,20	0,45	2,07	0,27	3,50	0,10	0,15													
Max		114,70			2,15			1,35	1,25	2,07	0,27	3,50	0,30	0,23													
Min		21,20			0,57			0,09	0,19	0,23	0,05	0,50	0,10	0,10													
W.Aver.		53,71			1,22			0,37	0,55	0,74	0,10	1,19	0,15	0,15													
Sum		644,50																									

Concentrations at Rörvik, SE0002R, 1991 Wet only sampler, Daily samples

Month	mm off	mm	pH	k	SO4--	SO4-- corr	H+	NH4+	NO3-	Na+	Mg++	Cl-	Ca++	K+	Cd	Cu	Pb	Hg	Zn	Cr	Co	Ni	As	Fe	Mn	V	Al
	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip
	mm	mm	pH units	uS/cm	mg S/l	mg S/l	ue H/l	mg N/l	mg N/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
01-1991					1,17			0,28	0,49	8,65	1,14	16,90	0,50	0,33													
02-1991					1,97			0,91	1,46	2,59	0,31	4,50	0,30	0,15													
03-1991					1,89			1,67	1,54	0,99	0,12	1,80	0,20	0,04													
04-1991					2,15			2,03	1,87	1,10	0,18	2,50	0,50	0,13													
05-1991					0,63			0,24	0,18	0,31	0,04	0,50	0,30	0,03													
06-1991					0,99			0,49	0,70	1,29	0,16	2,30	0,20	0,16													
07-1991					0,60			0,37	0,31	1,05	0,13	2,10	0,20	0,17													
08-1991					0,84			0,66	0,48	1,65	0,20	3,00	0,10	0,29													
09-1991					1,00			0,59	0,54	2,18	0,27	4,30	0,20	0,14													
10-1991					1,32			0,59	0,76	6,57	0,61	11,50	0,40	0,29													
11-1991					1,01			0,47	0,67	3,93	0,50	7,60	0,30	0,18													
12-1991					1,09			0,34	0,48	5,89	0,69	11,10	0,30	0,28													
Max		0,00			2,15			2,03	1,87	8,65	1,14	16,90	0,50	0,33													
Min		0,00			0,60			0,24	0,18	0,31	0,04	0,50	0,10	0,03													
W.Aver.																											
Sum		0,00																									

Concentrations at Hoburgen, SE0008R, 1991 Wet only sampler, Daily samples

Month	mm off	mm	pH	k	SO4--	SO4-- corr	H+	NH4+	NO3-	Na+	Mg++	Cl-	Ca++	K+	Cd	Cu	Pb	Hg	Zn	Cr	Co	Ni	As	Fe	Mn	V	Al
	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip
	mm	mm	pH units	uS/cm	mg S/l	mg S/l	ue H/l	mg N/l	mg N/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
01-1991					1,12			0,33	0,88	6,01	0,70	10,70	0,50	0,23													
02-1991					3,71			1,50	2,75	2,35	0,33	3,00	1,70	0,61													
03-1991					4,58			3,94	3,72	3,14	0,50	4,00	1,70	0,24													
04-1991					1,97			1,47	1,34	1,41	0,20	1,50	1,10	0,14													
05-1991					1,30			1,83	0,46	0,82	0,19	1,20	0,70	0,46													
06-1991					1,49			1,90	0,52	0,73	0,12	1,10	0,50	0,63													
07-1991					1,82			6,17	0,25	1,35	0,42	2,40		2,40													
08-1991					0,40			2,07	0,15	0,44	0,12	0,80	0,30	0,54													
09-1991					1,06			1,56	0,65	2,15	0,31	3,90	1,80	0,36													
10-1991					1,16			0,25	0,46			11,00															
11-1991																											
12-1991																											
Max		0,00			4,58			6,17	3,72	6,01	0,70	11,00	1,80	2,40													
Min		0,00			0,40			0,25	0,15	0,44	0,12	0,80	0,30	0,14													
W.Aver.																											
Sum		0,00																									

Concentrations at Sulva, FI0061R, 1991 Bulk sampler, Monthly samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1991		21,90			1,20			1,20	1,09	1,24	0,22	2,50	1,00	0,38													
02-1991		12,70			4,30			0,46	2,07			1,60															
03-1991		28,30			2,30			2,19	1,25	0,35	0,06	0,60	0,30	0,20													
04-1991		13,90			1,80			1,47	1,02			1,10															
05-1991		68,20			0,50			0,32	0,18	0,14	0,01	0,30	0,10	0,05													
06-1991		76,90			0,70			0,09	0,15	0,13	0,07	0,20	0,30	0,58													
07-1991		32,30			0,30			0,18	0,01	0,37	0,08	0,70	0,40	0,70													
08-1991		63,60			0,60			0,01	0,03	0,14	0,13	0,40	0,30	2,43													
09-1991		111,70			0,40			0,12	0,09	0,18	0,08	0,50	0,20	1,49													
10-1991		40,10			1,30			0,80	0,66	0,79	0,20	1,60	0,40	1,82													
11-1991		65,30			0,80			0,75	0,71	0,99	0,16	2,10	0,30	0,54													
12-1991		32,10			1,20			0,94	0,87	1,91	0,33	4,00	0,40	0,63													
Max		111,70			4,30			2,19	2,07	1,91	0,33	4,00	1,00	2,43													
Min		12,70			0,30			0,01	0,01	0,13	0,01	0,20	0,10	0,05													
W.Aver.		47,25			0,87			0,48	0,42	0,45	0,11	1,02	0,29	0,94													
Sum		567,00																									

Concentrations at Korppoo, FI0062R, 1991 Bulk sampler, Monthly samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1991		20,20			0,30			0,09	0,33	0,51	0,11	0,90	0,30	0,09													
02-1991		34,70			0,90			0,43	0,74	0,45	0,07	0,80	0,30	0,14													
03-1991		31,80			1,70			1,14	0,86	0,27	0,04	0,50	0,20	0,10													
04-1991		8,50			2,40			1,39	1,27			1,10															
05-1991		21,70			0,60			0,10	0,28	0,27	0,06	0,50	0,30	0,15													
06-1991		95,40			1,40			1,21	0,43	0,56	0,11	0,90	0,30	0,50													
07-1991		20,00			0,70			0,49	0,01	1,12	0,33	2,10	0,50	0,75													
08-1991		119,60			0,70			0,12	0,27	0,23	0,05	0,40	0,20	0,15													
09-1991		146,60			1,10			0,47	0,46	0,46	0,08	0,90	0,20	0,25													
10-1991		80,90			0,70			0,30	0,60	0,54	0,10	1,00	0,30	0,20													
11-1991		113,70			0,80			0,30	0,55	1,59	0,21	2,90	0,10	0,10													
12-1991		56,60			0,60			0,26	0,44	1,28	0,16	2,40	0,10	0,11													
Max		146,60			2,40			1,39	1,27	1,59	0,33	2,90	0,50	0,75													
Min		8,50			0,30			0,09	0,01	0,23	0,04	0,40	0,10	0,09													
W.Aver.		62,48			0,93			0,46	0,47	0,69	0,11	1,25	0,22	0,22													
Sum		749,70																									

Concentrations at Preila, LT0015R, 1991 Bulk sampler, Weekly samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1991		33,50	4,44	108,00	3,09			1,99	1,58	14,38	1,46	13,60		0,69													
02-1991		10,90	4,08	57,80	2,56			1,82	0,99	3,60	0,39	6,60		0,15													
03-1991		30,40	3,99	68,80	4,34			4,10	2,53	1,46	0,21	2,80	0,80	0,48													
04-1991		24,20	4,03	84,40	2,17			1,84	1,63	5,72	0,61	11,00	1,20	0,36													
05-1991		42,00	4,01	110,10	3,13			3,16	1,49	6,80	1,09	11,50	1,80	0,89													
06-1991		77,40	3,90	49,30	2,83			1,23	0,80	1,38	0,22	3,00	0,50	0,31													
07-1991		32,50	4,20	107,70	4,32			2,76	1,31	9,00	1,24	19,70	1,50	0,79													
08-1991		40,80	4,83	79,40	3,34			2,25	1,23	6,88	1,01	13,20	1,00	1,21													
09-1991		50,70	3,89	110,90	4,79			0,97	1,30	10,14	1,50	19,30	1,90	0,91													
10-1991		30,40	4,26	58,00	2,97			0,87	1,30	8,39	0,93	15,60	1,90	0,58													
11-1991		72,40	3,90	62,60	2,54			1,00	1,00	5,68	0,57	8,90	0,80	0,40													
12-1991		61,00	3,74	137,60	8,29			1,43	2,05	37,00	7,61	62,00	2,30	3,34													
Max		77,40	4,83	137,60	8,29			4,10	2,53	37,00	7,61	62,00	2,30	3,34													
Min		10,90	3,74	49,30	2,17			0,87	0,80	1,38	0,21	2,80	0,50	0,15													
W.Aver.		42,18	4,06	86,67	3,88			1,78	1,38	10,09	1,64	17,09	1,20	0,95													
Sum		506,20																									

Concentrations at Rucava, LV0010R, 1991 Official rain gauge,

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1991	59,70																										
02-1991	34,20																										
03-1991	52,00																										
04-1991	31,60																										
05-1991	54,30																										
06-1991	62,00																										
07-1991	24,30																										
08-1991	106,80																										
09-1991	98,10																										
10-1991	65,00																										
11-1991	88,30																										
12-1991	55,40																										
Max	106,80																										
Min	24,30																										
W.Aver.	60,23																										
Sum																											

Concentrations at Rucava, LV0010R, 1991 Bulk sampler, Daily samples, from LV01L_bd10

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1991					1,40			0,57	1,12	2,30			0,40	0,30													
02-1991					1,30			0,67	1,19	1,10			0,40	0,30													
03-1991					3,50			1,42	1,49	0,50			0,20	0,06													
04-1991					3,10			1,84	1,24	0,30			1,20	0,40													
05-1991					2,10			1,11	0,61	0,10			0,80	0,20													
06-1991					1,10			0,27	0,28	0,20			2,70	0,10													
07-1991					1,80			0,11	0,46	0,10			0,60	0,06													
08-1991					0,50			0,13	0,30	0,30																	
09-1991					0,40			0,08	0,16	0,80			0,80	0,05													
10-1991					0,60			0,33	0,57	1,30			0,50	0,05													
11-1991					1,50			0,20	0,44	1,20			0,40	0,03													
12-1991					1,60			0,16	0,55	2,00			0,30	0,11													
Max					3,50			1,84	1,49	2,30			2,70	0,40													
Min					0,40			0,08	0,16	0,10			0,20	0,03													
W.Aver.					1,35			0,46	0,59	0,86			0,65	0,11													
Sum																											

Concentrations at Rickleå, SE0053R, 1991 Bulk sampler, Monthly samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1991		43,00			0,75			0,27	0,34	0,47	0,05	0,80	0,10	0,05													
02-1991		22,00			0,63			0,28	0,51	0,28	0,04	0,50	0,10	0,10													
03-1991		54,00			1,68			0,82	0,68	0,24	0,04	0,20	0,20	0,10													
04-1991		36,00			0,67			0,37	0,19	0,10	0,02		0,10	0,06													
05-1991		53,00			0,50			0,25	0,13	0,13	0,04		0,10	0,06													
06-1991		90,64			0,60			0,53	0,18	0,13	0,03	0,20		0,19													
07-1991		23,00			0,34			0,38		0,09	0,05	0,10	0,10	0,09													
08-1991		55,41			0,83			0,36	0,28	0,09	0,03	0,20	0,10	0,09													
09-1991		56,00			0,27			0,07	0,10	0,13	0,04	0,50	0,10	0,38													
10-1991		59,77			0,79			0,59	0,48	0,40	0,06	0,80	0,10	0,08													
11-1991		56,23			0,38			0,13	0,32	0,39	0,06	0,70		0,04													
12-1991		32,88			0,41			0,15	0,34	0,55	0,07	1,00	0,10	0,04													
Max		90,64			1,68			0,82	0,68	0,55	0,07	1,00	0,20	0,38													
Min		22,00			0,27			0,07	0,10	0,09	0,02	0,10	0,10	0,04													
W.Aver.		48,49			0,68			0,37	0,29	0,24	0,04	0,41	0,08	0,12													
Sum		581,93																									

Concentrations at Zingst, DE0009R, 1992 Wet only sampler, Weekly samples, from ANTAS_9

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1992		28,20			0,19			0,24	0,38	1,19	0,05	1,38	0,03	0,08													
02-1992		20,30			0,37			0,34	0,75	1,36	0,05	1,94	0,07	0,08													
03-1992		33,30			0,30			0,73	0,73	1,42	0,04	3,23	0,05	0,10													
04-1992		45,20			0,84			1,16	1,05	0,89	0,05	1,34	0,17	0,16													
05-1992		26,90			1,47			0,88	0,76	1,18	0,05	1,74	0,08	0,16													
06-1992																											
07-1992		47,20			1,01			0,23	0,65	0,85	0,14	1,46	0,40	0,25													
08-1992		66,60			0,92			0,60	0,66	0,63	0,12	1,24	0,38	0,09													
09-1992		49,70			0,58			0,34	0,52	0,59	0,09	1,26	0,18	0,07													
10-1992		58,00			0,88			0,73	0,80	1,15	0,16	2,00	0,22	0,07													
11-1992		63,30			0,95			0,26	0,56	3,05	0,37	4,71	0,43	0,18													
12-1992		27,70			0,63			0,31	0,39	0,21	0,06	0,46	0,22	0,05													
Max		66,60			1,47			1,16	1,05	3,05	0,37	4,71	0,43	0,25													
Min		20,30			0,19			0,23	0,38	0,21	0,04	0,46	0,03	0,05													
W.Aver.		42,40			0,79			0,53	0,67	1,20	0,13	2,00	0,24	0,12													
Sum		466,40																									

Concentrations at Keldsnor, DK0005R, 1992 Wet only sampler, , from DK01L_WO2

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1992																											
02-1992																											
03-1992																											
04-1992										1,05	0,14		0,30	0,17													
05-1992										2,90	0,35		0,30	0,30													
06-1992										1,48	0,49		1,70	1,30													
07-1992										0,69	0,11		0,40	0,30													
08-1992										1,14	0,14		0,40	0,27													
09-1992										1,48	0,20		0,20	0,13													
10-1992										2,83	0,50		1,00	0,57													
11-1992										3,97	0,47		0,30	0,23													
12-1992										4,28	0,46		0,60	0,19													
Max										4,28	0,50		1,70	1,30													
Min										0,69	0,11		0,20	0,13													
W.Aver.																											
Sum																											

Concentrations at Keldsnor, DK0005R, 1992 Wet only sampler, , from DK01L_WO2

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1992																											
02-1992																											
03-1992																											
04-1992					1,24			1,08	0,93			1,90															
05-1992					1,41			0,68	0,81			5,20															
06-1992					3,42			2,35	1,15			2,60															
07-1992					1,56			0,94	0,89			1,60															
08-1992					1,07			1,07	0,62			2,30															
09-1992					1,03			0,97	0,88			2,90															
10-1992					1,23			0,61	0,56			5,50															
11-1992					0,91			0,31	0,51			7,60															
12-1992					0,93			0,35	0,48			7,90															
Max					3,42			2,35	1,15			7,90															
Min					0,91			0,31	0,48			1,60															
W.Aver.																											
Sum																											

Concentrations at Keldsnor, DK0005R, 1992 Wet only sampler, , from DK01L_WO2

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1992																											
02-1992																											
03-1992																											
04-1992			4,43																								
05-1992			4,18																								
06-1992			5,68																								
07-1992			4,26																								
08-1992			4,84																								
09-1992			4,35																								
10-1992			4,85																								
11-1992			4,44																								
12-1992			4,46																								
Max			5,68																								
Min			4,18																								
W.Aver.																											
Sum																											

Concentrations at Keldsnor, DK0005R, 1992 Wet only sampler, , from DK01L_WO2

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1992																											
02-1992																											
03-1992																											
04-1992		49,40																									
05-1992		16,80																									
06-1992		2,60																									
07-1992		53,30																									
08-1992		50,20																									
09-1992		45,20																									
10-1992		46,60																									
11-1992		96,80																									
12-1992		24,60																									
Max		96,80																									
Min		2,60																									
W.Aver.		42,83																									
Sum		385,50																									

Concentrations at Keldsnor, DK0005R, 1992 Wet only sampler, Daily samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1992																											
02-1992																											
03-1992																											
04-1992						1,15	37,00																				
05-1992						1,16	66,00																				
06-1992						3,22	2,00																				
07-1992						1,49	56,00																				
08-1992						0,97	15,00																				
09-1992						0,90	45,00																				
10-1992						0,95	14,00																				
11-1992						0,57	37,00																				
12-1992						0,57	34,00																				
Max						3,22	66,00																				
Min						0,57	2,00																				
W.Aver.						0,95	35,76																				
Sum																											

Concentrations at Anholt, DK0008R, 1992 Bulk sampler, Biweekly samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1992						0,37	22,00																				
02-1992						0,67	39,00																				
03-1992						0,58	33,00																				
04-1992						0,73	37,00																				
05-1992						0,47	17,00																				
06-1992																											
07-1992						1,00	48,00																				
08-1992						0,67	29,00																				
09-1992						0,73	34,00																				
10-1992						0,46	43,00																				
11-1992						0,50	39,00																				
12-1992						0,34	39,00																				
Max						1,00	48,00																				
Min						0,34	17,00																				
W.Aver.						0,63	37,36																				
Sum																											

Concentrations at Anholt, DK0008R, 1992 Bulk sampler, , from DK01L_BS2_4

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1992										3,22	0,38		0,20	0,16													
02-1992										1,42	0,19		0,20	0,09													
03-1992										1,94	0,23		0,20	0,10													
04-1992										1,31	0,16		0,10	0,08													
05-1992										2,51	0,30		0,20	0,13													
06-1992																											
07-1992										0,88	0,10		0,10	0,12													
08-1992										2,98	0,18		0,10	0,14													
09-1992										1,76	0,20		0,10	0,09													
10-1992										2,65	0,29		0,10	0,12													
11-1992										3,75	0,43		0,10	0,16													
12-1992										3,93	0,42		0,10	0,15													
Max										3,93	0,43		0,20	0,16													
Min										0,88	0,10		0,10	0,08													
W.Aver.										2,51	0,26		0,10	0,13													
Sum																											

Concentrations at Anholt, DK0008R, 1992 Bulk sampler, , from DK01L_BS2_4

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1992					0,64			0,21	0,38			5,80															
02-1992					0,80			0,55	0,59			2,70															
03-1992					0,75			0,56	0,52			3,80															
04-1992					0,84			0,69	0,64			2,40															
05-1992					0,69			0,47	0,40			4,80															
06-1992																											
07-1992					1,07			0,90	0,74			1,60															
08-1992					0,84			0,59	0,40			3,00															
09-1992					0,88			0,69	0,55			3,20															
10-1992					0,68			0,26	0,42			4,90															
11-1992					0,81			0,36	0,45			6,90															
12-1992					0,65			0,27	0,39			6,80															
Max					1,07			0,90	0,74			6,90															
Min					0,64			0,21	0,38			1,60															
W.Aver.					0,83			0,53	0,51			4,26															
Sum																											

Concentrations at Anholt, DK0008R, 1992 Bulk sampler, , from DK01L_BS2_4

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1992			4,66																								
02-1992			4,41																								
03-1992			4,48																								
04-1992			4,44																								
05-1992			4,78																								
06-1992																											
07-1992			4,32																								
08-1992			4,53																								
09-1992			4,47																								
10-1992			4,37																								
11-1992			4,40																								
12-1992			4,41																								
Max			4,78																								
Min			4,32																								
W.Aver.			4,40																								
Sum																											

Concentrations at Anholt, DK0008R, 1992 Bulk sampler, , from DK01L_BS2_4

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1992		25,10																									
02-1992		20,50																									
03-1992		49,20																									
04-1992		79,30																									
05-1992		23,20																									
06-1992																											
07-1992		48,70																									
08-1992		87,10																									
09-1992		35,40																									
10-1992		71,80																									
11-1992		69,10																									
12-1992		25,70																									
Max		87,10																									
Min		20,50																									
W.Aver.		48,65																									
Sum		535,10																									

Concentrations at Anholt, DK0008R, 1992 Wet only sampler, Monthly samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1992		33,00																									
02-1992		24,00													0,15	8,16	5,92		0,92	0,08		1,13		0,54	10,33		
03-1992		59,00													0,10	1,61	4,10		1,19	0,05		0,76		0,19	5,58		
04-1992		77,00													0,07	1,82	6,01		1,19	0,04		0,56		0,13	4,62		
05-1992		24,00													0,08	1,56	3,00		0,71	0,08		1,58		0,50	10,79		
06-1992		1,00																									
07-1992		48,00													0,08	2,93	5,06		0,98	0,08		0,90		0,42	20,79		
08-1992		115,00													0,05	1,16	2,49		1,20	0,03		0,40		0,14	4,74		
09-1992		36,00													0,06	1,11	3,14		0,76	0,03		0,44		0,08	4,42		
10-1992		78,00													0,04	1,06	2,63		0,74	0,03		0,32		0,09	2,49		
11-1992		78,00													0,06	0,91	3,10		1,40	0,03		0,38		0,04	3,41		
12-1992		27,00													0,08	1,44	2,96		1,07	0,07		0,48		0,15	3,81		
Max		115,00													0,15	8,16	6,01		1,40	0,08		1,58		0,54	20,79		
Min		1,00													0,04	0,91	2,49		0,71	0,03		0,32		0,04	2,49		
W.Aver.		50,00													0,06	1,63	3,48		1,02	0,04		0,54		0,17	5,76		
Sum		600,00																									

Concentrations at Almindingen, DK0021R, 1992 Bulk sampler, Biweekly samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1992		24,80	4,06		1,60	1,42	88,00	1,40	1,21	2,01	0,27	3,70	0,30	0,20													
02-1992		58,20	4,23		1,15	1,05	59,00	1,00	0,96	1,10	0,19	2,20	0,10	0,09													
03-1992		86,50	4,18		1,23	1,14	66,00	1,02	0,96	1,09	0,12	2,20	0,10	0,06													
04-1992		58,10	4,32		1,05	1,02	48,00	0,69	0,66	0,31	0,05	0,60	0,20	0,04													
05-1992		25,00	4,16		1,45	1,37	69,00	1,18	1,00	0,84	0,12	1,60	0,30	0,20													
06-1992		0,90	7,26							3,85	2,37		7,70	13,40													
07-1992		43,70	4,57		1,08	1,04	27,00	0,92	0,79	0,30	0,10	0,70	0,40	0,17													
08-1992		68,30	4,69		0,90	0,85	20,00	0,97	0,69	0,68	0,09	1,00	0,30	0,15													
09-1992		92,10	4,58		0,70	0,64	26,00	0,68	0,42	0,72	0,08	1,30		0,15													
10-1992		122,30	4,35		0,78	0,71	45,00	0,58	0,69	0,69	0,11	1,30	0,10	0,18													
11-1992		128,30	4,21		0,90	0,75	62,00	0,51	0,57	1,98	0,19	3,00	0,10	0,12													
12-1992		48,80	4,28		0,95	0,89	52,00	0,66	0,58	0,79	0,08	1,20	0,10	0,07													
Max		128,30	7,26		1,60	1,42	88,00	1,40	1,21	3,85	2,37	3,70	7,70	13,40													
Min		0,90	4,06		0,70	0,64	20,00	0,51	0,42	0,30	0,05	0,60	0,10	0,04													
W.Aver.		63,25	4,35		0,98	0,90	48,63	0,78	0,71	1,00	0,13	1,73	0,15	0,14													
Sum		759,00																									

Concentrations at Hailuoto, FI0052R, 1992 Bulk sampler, Weekly samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1992		19,10	5,27	9,80	0,26		5,00	0,12	0,20	0,59	0,07	0,90	0,20	0,21	0,07	3,48	6,50		59,05								
02-1992		10,30	4,50	26,20	0,89		32,00	0,25	0,58	0,95	0,12	1,20	0,40	0,13	0,10	7,33	16,43		54,68								
03-1992		28,40	4,25	33,60	1,03		56,00	0,48	0,71	0,32	0,04	0,40	0,20	0,08	0,10	3,29	6,50		23,56								
04-1992		5,50	4,08	53,50	2,37		84,00	0,63	0,70	0,48	0,10	0,50	0,60	0,12	0,23	8,17	9,85		50,69								
05-1992		36,40	4,53	19,20	0,66		30,00	0,26	0,30	0,23	0,03	0,30	0,10	0,03	0,04	10,94	2,00		35,43								
06-1992		30,40	5,00	14,30	0,56		10,00	0,37	0,16	0,49	0,10	0,70	0,30	0,36	0,04	2,80	1,64		26,91								
07-1992		86,60	4,64	14,90	0,62		23,00	0,24	0,15	0,26	0,04	0,40	0,10	0,06	0,03	1,48	1,75		6,18								
08-1992		95,00	4,79	10,70	0,45		16,00	0,24	0,17	0,15	0,03	0,20	0,10	0,04	0,04	1,35	1,49		5,10								
09-1992		72,00	4,62	19,10	0,84		24,00	0,54	0,32	0,17	0,05	0,20	0,20	0,07	0,05	1,48	2,93		6,13								
10-1992		35,00	4,90	11,90	0,39		13,00	0,11	0,15	0,49	0,05	0,70	0,10	0,13	0,07	5,84	1,81		23,06								
11-1992		42,00	4,43	20,40	0,51		37,00	0,14	0,38	0,23	0,03	0,30	0,10	0,03	0,32	5,27	3,41		23,46								
12-1992		22,40	4,21	39,70	0,88		61,00	0,26	0,74	1,39	0,16	2,10	0,20	0,08	0,06	3,06	2,20		106,25								
Max		95,00	5,27	53,50	2,37		84,00	0,63	0,74	1,39	0,16	2,10	0,60	0,36	0,32	10,94	16,43		106,25								
Min		5,50	4,08	9,80	0,26		5,00	0,11	0,15	0,15	0,03	0,20	0,10	0,03	0,03	1,35	1,49		5,10								
W.Aver.		40,26	4,65	17,98	0,64		25,85	0,29	0,29	0,34	0,05	0,47	0,15	0,09	0,08	3,43	2,93		21,49								
Sum		483,10																									

Concentrations at Haapasaari, FI0055R, 1992 Bulk sampler, Weekly samples

Month	mm off precip	mm precip	pH precip	k precip	SO4-- precip	SO4-- corr precip	H+ precip	NH4+ precip	NO3- precip	Na+ precip	Mg++ precip	Cl- precip	Ca++ precip	K+ precip	Cd precip	Cu precip	Pb precip	Hg precip	Zn precip	Cr precip	Co precip	Ni precip	As precip	Fe precip	Mn precip	V precip	Al precip
	mm	mm	pH units	uS/cm	mg S/l	mg S/l	ue H/l	mg N/l	mg N/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
01-1992		12,90	4,70	32,90	1,17		20,00	0,11	0,53	1,95	0,26	3,10	1,20	0,31	0,30	8,68	3,88		25,63								
02-1992		10,00	4,45	63,10	3,47		35,00	0,76	1,77	1,90	0,41	2,80	3,50	0,53	0,76	11,75	12,31		164,77								
03-1992		28,30	4,52	46,10	2,71		30,00	0,71	1,25	0,95	0,27	1,80	2,50	0,40	0,08	4,47	5,53		26,90								
04-1992		28,20	4,59	36,40	2,25		26,00	1,18	0,86	0,43	0,14	0,70	1,60	0,40	0,13	3,76	7,13		15,23								
05-1992		11,50	4,41	33,90	1,58		39,00	0,46	0,65	0,72	0,14	0,90	0,90	0,12	0,08	3,51	4,78		32,49								
06-1992		4,40	6,45	15,00	0,69			0,10	0,23	0,78	0,14	0,80	1,30	0,35	0,06	3,93	5,46		23,98								
07-1992		31,20	4,49	24,60	1,15		32,00	0,04	0,21	0,43	0,13	0,70	1,00	0,05	0,05	3,23	2,33		10,46								
08-1992		27,70	5,69	25,20	1,54		2,00	1,25	0,54	0,59	0,18	1,00	1,10	0,31	0,09	4,36	3,36		10,45								
09-1992		41,80	4,77	25,70	1,24		17,00	0,99	0,47	0,24	0,20	0,40	0,50	0,39	0,88	2,56	4,39		9,35								
10-1992		67,50	4,37	35,00	1,07		43,00	0,40	0,61	1,09	0,17	1,90	0,50	0,23	0,13	2,26	4,30		23,02								
11-1992		39,40	4,34	42,30	1,47		46,00	0,37	0,78	1,58	0,29	2,70	0,90	0,29	0,08	3,05	8,02		26,95								
12-1992		7,50	4,19	94,20	3,59		64,00	0,76	2,05	4,98	0,89	8,00	3,00	0,85	0,13	5,83	14,84		74,67								
Max		67,50	6,45	94,20	3,59		64,00	1,25	2,05	4,98	0,89	8,00	3,50	0,85	0,88	11,75	14,84		164,77								
Min		4,40	4,19	15,00	0,69		2,00	0,04	0,21	0,24	0,13	0,40	0,50	0,05	0,05	2,26	2,33		9,35								
W.Aver.		25,20	4,63	35,55	1,58		30,95	0,62	0,70	0,99	0,22	1,65	1,11	0,30	0,24	3,73	5,40		25,18								
Sum		302,40																									

Concentrations at Tvärminne, FI0056R, 1992 Bulk sampler, Monthly samples

Month	mm off precip	mm precip	pH precip	k precip	SO4-- precip	SO4-- corr precip	H+ precip	NH4+ precip	NO3- precip	Na+ precip	Mg++ precip	Cl- precip	Ca++ precip	K+ precip	Cd precip	Cu precip	Pb precip	Hg precip	Zn precip	Cr precip	Co precip	Ni precip	As precip	Fe precip	Mn precip	V precip	Al precip
	mm	mm	pH units	uS/cm	mg S/l	mg S/l	ue H/l	mg N/l	mg N/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
01-1992		39,90	4,90	17,00	0,53			0,09	0,28	0,91	0,15	1,70	0,60	0,06													
02-1992		50,50	4,40	36,00	0,90			0,37	0,76	0,81	0,11	1,40	0,40	0,05													
03-1992		67,20	4,40	38,00	1,07			0,42	0,63	1,26	0,18	2,20	0,40	0,13													
04-1992		41,70	4,30	42,00	1,80			1,10	0,79	0,27	0,08	0,80	0,50	0,11													
05-1992		15,60	4,50	28,00	1,17			0,39	0,61			1,00															
06-1992		13,90	5,10	30,00	2,27			0,30	0,31			1,00															
07-1992		42,30	4,50	31,00	1,20			0,65	0,51	0,54	0,15	0,90	0,60	0,54													
08-1992		149,70	4,50	21,00	0,87			0,38	0,30	0,27	0,05	0,50	0,20	0,09													
09-1992		91,30	4,40	26,00	0,87			0,30	0,40	0,28	0,05	0,60	0,20	0,03													
10-1992		141,80	4,50	32,00	0,90			0,35	0,63	0,89	0,17	1,80	0,40	0,48													
11-1992		115,50	4,30	39,00	0,90			0,30	0,67	1,18	0,19	2,50	0,40	0,14													
12-1992		50,60	4,30	46,00	1,27			0,35	0,71	2,40	0,33	4,90	0,40	0,18													
Max		149,70	5,10	46,00	2,27			1,10	0,79	2,40	0,33	4,90	0,60	0,54													
Min		13,90	4,30	17,00	0,53			0,09	0,28	0,27	0,05	0,50	0,20	0,03													
W.Aver.		58,33	4,45	31,53	1,00			0,39	0,54	0,79	0,13	1,60	0,35	0,18													
Sum		820,00																									

Concentrations at Jomala, FI0057R, 1992 Bulk sampler, Monthly samples

Month	mm off precip	mm precip	pH precip	k precip	SO4-- precip	SO4-- corr precip	H+ precip	NH4+ precip	NO3- precip	Na+ precip	Mg++ precip	Cl- precip	Ca++ precip	K+ precip	Cd precip	Cu precip	Pb precip	Hg precip	Zn precip	Cr precip	Co precip	Ni precip	As precip	Fe precip	Mn precip	V precip	Al precip
	mm	mm	pH units	uS/cm	mg S/l	mg S/l	ue H/l	mg N/l	mg N/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
01-1992		21,10	4,80	30,00	0,80			0,72	0,56	1,88	0,25	3,60	0,30	0,15													
02-1992		84,60	4,20	46,00	1,27			0,87	0,99	0,67	0,10	1,30	0,20	0,07													
03-1992		76,50	4,40	37,00	1,00			0,83	0,90	1,32	0,17	2,30	0,30	0,11													
04-1992		113,40	4,30	42,00	1,60			1,10	0,81	0,53	0,08	0,90	0,30	0,11													
05-1992		12,80	4,30	50,00	2,10			1,30	1,25			1,30															
06-1992		17,20	5,00	28,00	1,40			0,64	0,44	0,39	0,18	0,60	1,50	0,66													
07-1992		144,00	4,50	33,00	0,70			0,45	0,41	0,33	0,05	0,60	0,20	0,08													
08-1992		109,90	4,40	28,00	1,07			0,59	0,54	0,27	0,05	0,50	0,20	0,06													
09-1992		58,50	4,50	30,00	1,17			0,65	0,64	0,32	0,06	0,60	0,40	0,05													
10-1992		21,20	5,50	3,00	0,10			0,12	0,04	0,04	0,01	0,30		0,03													
11-1992		148,90	4,40	34,00	0,93			0,42	0,58	1,00	0,13	1,90	0,10	0,13													
12-1992		37,20	4,30	56,00	1,57			1,10	1,22	2,41	0,32	4,80	0,40	0,26													
Max		148,90	5,50	56,00	2,10			1,30	1,25	2,41	0,32	4,80	1,50	0,66													
Min		12,80	4,20	3,00	0,10			0,12	0,04	0,04	0,01	0,30	0,10	0,03													
W.Aver.		70,44	4,43	35,53	1,07			0,68	0,67	0,71	0,10	1,34	0,25	0,11													
Sum		845,30																									

Concentrations at Rahja, FI0058R, 1992 Bulk sampler, Monthly samples

Month	mm off precip	mm precip	pH precip	k precip	SO4-- precip	SO4-- corr precip	H+ precip	NH4+ precip	NO3- precip	Na+ precip	Mg++ precip	Cl- precip	Ca++ precip	K+ precip	Cd precip	Cu precip	Pb precip	Hg precip	Zn precip	Cr precip	Co precip	Ni precip	As precip	Fe precip	Mn precip	V precip	Al precip
	mm	mm	pH units	uS/cm	mg S/l	mg S/l	ue H/l	mg N/l	mg N/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
01-1992		45,50	4,90	31,00	0,53			0,07	0,21	3,34	0,43	6,40	0,20	0,25													
02-1992		35,00	4,50	41,00	1,17			0,82	0,97	1,67	0,23	2,40	0,40	0,32													
03-1992		14,60	4,70	22,00	0,77			0,36	0,48			0,90															
04-1992																											
05-1992		29,20	4,40	31,00	0,93			0,24	0,51	0,98	0,23	1,90	0,30	0,38													
06-1992		21,70	6,00	12,00	0,53			0,31	0,03	0,42	0,13	0,60	0,30	0,97													
07-1992		93,50	5,00	13,00	0,40			0,06	0,03	0,53	0,06	0,80	0,20	0,26													
08-1992		111,40	4,80	13,00	0,57			0,20	0,18	0,18	0,05	0,40	0,20	0,24													
09-1992		67,90	4,80	16,00	0,70			0,13	0,22	0,22	0,11	0,60	0,30	0,52													
10-1992		52,90	6,00	16,00	0,30			0,03	0,03	0,53	0,44	1,30	0,50	2,03													
11-1992		44,30	4,70	15,00	0,37			0,10	0,34	0,20	0,10	0,40	0,10	0,08													
12-1992		67,50	4,40	43,00	1,10			0,29	0,60	2,30	0,36	4,90	0,20	0,21													
Max		111,40	6,00	43,00	1,17			0,82	0,97	3,34	0,44	6,40	0,50	2,03													
Min		14,60	4,40	12,00	0,30			0,03	0,03	0,18	0,05	0,40	0,10	0,08													
W.Aver.		53,05	4,90	21,42	0,63			0,19	0,28	0,90	0,18	1,77	0,25	0,46													
Sum		583,50																									

Concentrations at Ylimarkku, FI0059R, 1992 Bulk sampler, Monthly samples

Month	mm off precip	mm precip	pH precip	k precip	SO4-- precip	SO4-- corr precip	H+ precip	NH4+ precip	NO3- precip	Na+ precip	Mg++ precip	Cl- precip	Ca++ precip	K+ precip	Cd precip	Cu precip	Pb precip	Hg precip	Zn precip	Cr precip	Co precip	Ni precip	As precip	Fe precip	Mn precip	V precip	Al precip
	mm	mm	pH units	uS/cm	mg S/l	mg S/l	ue H/l	mg N/l	mg N/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
01-1992		20,50	5,00	18,00	0,90			0,75	0,22	0,75	0,11	1,20	0,10	0,08													
02-1992		36,50	4,30	45,00	1,67			1,00	0,81	0,46	0,08	0,80	0,30	0,10													
03-1992		84,80	4,10	60,00	1,73			1,42	1,37	0,54	0,08	0,90	0,20	0,09													
04-1992		28,10	4,20	52,00	2,27			1,70	1,03	0,34	0,08	0,70	0,40	0,19													
05-1992																											
06-1992		18,40	4,90	36,00	2,67			1,12	0,46	0,63	0,26	0,70	1,10	1,25													
07-1992		78,80	4,50	25,00	1,03			0,47	0,26	0,10	0,04	0,20	0,10	0,08													
08-1992		74,80	4,50	23,00	1,07			0,54	0,28	0,16	0,04	0,20	0,10	0,05													
09-1992		66,40	4,70	23,00	1,13			0,77	0,46	0,17	0,04	0,30	0,20	0,06													
10-1992		57,70	4,80	13,00	0,43			0,34	0,27	0,17	0,04	0,40	0,10	0,06													
11-1992		31,30	4,10	72,00	2,13			1,40	1,47	2,33	0,22	2,90	0,30	0,25													
12-1992		49,70	4,30	44,00	1,37			0,86	0,78	1,51	0,21	3,30	0,20	0,14													
Max		84,80	5,00	72,00	2,67			1,70	1,47	2,33	0,26	3,30	1,10	1,25													
Min		18,40	4,10	13,00	0,43			0,34	0,22	0,10	0,04	0,20	0,10	0,05													
W.Aver.		49,73	4,45	35,89	1,34			0,87	0,56	0,53	0,09	0,90	0,21	0,13													
Sum		547,00																									

Concentrations at Sipoo, FI0060R, 1992 Bulk sampler, Monthly samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1992		41,10	4,90	17,00	0,50			0,13	0,30	0,62	0,10	1,20	0,40	0,27													
02-1992		41,70	4,30	33,00	0,90			0,45	0,64	0,41	0,04	0,80	0,20	0,19													
03-1992		72,10	4,40	38,00	1,33			0,79	0,87	0,50	0,08	0,90	0,50	0,27													
04-1992		59,70	4,60	30,00	1,50			0,91	0,64	0,30	0,08	0,60	0,70	0,27													
05-1992		17,30	6,20	27,00	1,03			0,41	0,64			1,80															
06-1992		25,80	6,20	26,00	0,70			0,44	0,06	0,37	0,23	0,60	0,90	1,26													
07-1992		41,40	4,80	25,00	1,23			0,48	0,49	0,28	0,17	0,50	1,00	0,38													
08-1992		96,00	4,50	20,00	0,93			0,32	0,31	0,22	0,07	0,50	0,30	0,27													
09-1992		103,80	5,40	17,00	1,03			0,75	0,35	0,12	0,05	0,40	0,50	0,13													
10-1992		120,10	4,70	16,00	0,57			0,09	0,38	0,18	0,11	0,40	0,30	0,05													
11-1992																											
12-1992		32,40	4,40	32,00	1,00			0,52	0,65	0,70	0,11	1,30	0,30	0,27													
Max		120,10	6,20	38,00	1,50			0,91	0,87	0,70	0,23	1,80	1,00	1,26													
Min		17,30	4,30	16,00	0,50			0,09	0,06	0,12	0,04	0,40	0,20	0,05													
W.Aver.		59,22	4,82	23,67	0,96			0,48	0,47	0,30	0,09	0,66	0,45	0,24													
Sum		651,40																									

Concentrations at Korppoo, FI0062R, 1992 Bulk sampler, Monthly samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1992		18,30	4,80	20,00	0,33			0,08	0,31			2,10															
02-1992		62,90	4,30	37,00	0,87			0,44	0,70	0,57	0,07	1,00	0,10	0,07													
03-1992		41,80	4,60	30,00	0,70			0,38	0,48	1,54	0,18	2,70	0,20	0,12													
04-1992		10,70	4,30	43,00	1,80			1,20	0,81			1,20															
05-1992		2,10	6,00	17,00																							
06-1992		20,80	4,90	26,00	1,73			0,15	0,14	0,47	0,25	0,70	1,20	1,67													
07-1992		53,50	4,80	16,00	0,67			0,03	0,03	0,30	0,08	0,50	0,30	0,51													
08-1992		105,80	4,30	27,00	1,07			0,38	0,39	0,20	0,05	0,40	0,20	0,12													
09-1992		30,70	4,40	36,00	1,53			0,75	0,56	0,33	0,06	0,70	0,40	0,51													
10-1992		59,80	4,60	21,00	0,63			0,20	0,41	0,57	0,08	1,00	0,20	0,55													
11-1992		71,00	4,40	35,00	0,83			0,36	0,52	1,32	0,17	2,50	0,10	0,21													
12-1992		8,50	5,00	45,00	1,90			0,58	0,89			6,20															
Max		105,80	6,00	45,00	1,90			1,20	0,89	1,54	0,25	6,20	1,20	1,67													
Min		2,10	4,30	16,00	0,33			0,03	0,03	0,20	0,05	0,40	0,10	0,07													
W.Aver.		40,49	4,50	28,66	0,93			0,35	0,43	0,59	0,09	1,28	0,22	0,30													
Sum		485,90																									

Concentrations at Preila, LT0015R, 1992 Bulk sampler, Weekly samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1992		18,50	4,35	574,00	13,38			0,62	1,02	76,78	9,32	106,70	4,00	4,49	0,83	13,80	20,40										
02-1992		33,60	3,64	129,00	3,61			1,71	1,73	17,16	1,64	25,70	2,00	0,72	0,20	6,20	3,70										
03-1992		43,70	3,97	75,00	2,27			1,09	0,96	7,66	0,71	12,80	1,10	0,41	0,19	7,40	4,90										
04-1992		30,70	4,16	53,00	3,47			1,84	0,90	5,08	0,45	7,80	0,30	1,09	0,43	23,10	4,50										
05-1992		32,30	4,26	48,00	2,46			0,90	0,77	3,14		4,70		0,37	0,18	23,50	3,60										
06-1992		2,00	7,22	94,00	6,23			3,00	1,09	6,10		11,30		1,60													
07-1992		30,00	4,38	34,00	3,03			1,79	0,94	8,37		15,50		0,76	0,08	7,90	1,20										
08-1992		40,30	4,51	63,00	3,08			1,73	1,02	5,09		7,90		0,56	0,09	12,40	4,90										
09-1992		48,80	4,47	60,00	1,22			0,96	1,00	7,18		11,50		0,43	0,16	5,60	4,90										
10-1992		104,60	4,38	36,00	1,68			0,86	0,60	2,36		4,00		0,31	0,16	5,70	3,50										
11-1992		116,60	4,22	65,00	1,84			0,77	0,75	5,94		10,10		0,43	0,07	4,90	3,00										
12-1992		37,20	4,27	39,00	1,65			1,38	0,75	2,57		4,00		0,24													
Max		116,60	7,22	574,00	13,38			3,00	1,73	76,78	9,32	106,70	4,00	4,49	0,83	23,50	20,40										
Min		2,00	3,64	34,00	1,22			0,62	0,60	2,36	0,45	4,00	0,30	0,24	0,07	4,90	1,20										
W.Aver.		44,86	4,27	76,51	2,60			1,13	0,87	8,25	0,51	12,82	0,37	0,62	0,16	8,23	4,01										
Sum		538,30																									

Concentrations at Rucava, LV0010R, 1992 Official rain gauge,

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1992	64,50																										
02-1992	63,80																										
03-1992	50,00																										
04-1992	70,50																										
05-1992	29,60																										
06-1992																											
07-1992	45,30																										
08-1992	65,20																										
09-1992	95,60																										
10-1992	59,30																										
11-1992	146,00																										
12-1992	59,20																										
Max	146,00																										
Min	29,60																										
W.Aver.	68,15																										
Sum																											

Concentrations at Rucava, LV0010R, 1992 Bulk sampler, Daily samples, from LV01L_bd10

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1992					1,50			0,53	1,15	3,00			0,50	0,20													
02-1992					1,30			0,66	1,05	0,80			0,50	0,19													
03-1992					1,80			0,96	1,14	0,70			0,50	0,04													
04-1992					1,50			0,77	1,05	0,60			0,80	0,51													
05-1992					2,00			1,03	0,53	0,70			1,00	0,51													
06-1992																											
07-1992					2,10			0,96	0,27	1,50			1,50	1,16													
08-1992					2,10			0,40	0,42	0,50			1,60	0,07													
09-1992					0,80			0,16	0,29	0,60			0,80	0,16													
10-1992					0,70			0,58	0,77	1,50			1,20	0,56													
11-1992					1,10			0,15	0,49	1,20			0,70	0,15													
12-1992					0,90			0,22	0,48	0,80			0,20	0,21													
Max					2,10			1,03	1,15	3,00			1,60	1,16													
Min					0,70			0,15	0,27	0,50			0,20	0,04													
W.Aver.					1,33			0,50	0,67	1,08			0,81	0,30													
Sum																											

Concentrations at Leba, PL0004R, 1992 Bulk sampler, Daily samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1992		12,60			1,61			0,68	1,09	1,52	0,20	2,40	0,20	0,17													
02-1992		33,80			1,15			0,39	0,80	1,07	0,14	1,70	0,10	0,10													
03-1992		86,90			0,95			0,23	0,36	0,82	0,06	1,30	0,10	0,06													
04-1992		24,10			2,76			1,84	1,96	0,77	0,16	1,20	0,60	0,20													
05-1992		23,80			2,07			0,99	1,15	0,61	0,09	0,90	0,20	0,14													
06-1992		2,20			1,90			4,30	1,50	1,00	0,26	1,40	1,00	0,39													
07-1992		37,10			2,15			0,79	1,02	0,66	0,08	1,00	0,40	0,04													
08-1992		73,40			1,85			0,81	0,62	0,51	0,07	0,70	0,20	0,07													
09-1992		65,70			2,61			0,42	0,63	0,69	0,09	1,10	0,10	0,10													
10-1992		43,50			1,72			0,28	0,20	0,70	0,11	1,10	0,20	0,14													
11-1992		103,50			1,61			0,13	0,17	1,49	0,21	2,00	0,10	0,11													
12-1992		27,80			1,88			0,15	0,11	1,97	0,27	2,50	0,10	0,19													
Max		103,50			2,76			4,30	1,96	1,97	0,27	2,50	1,00	0,39													
Min		2,20			0,95			0,13	0,11	0,51	0,06	0,70	0,10	0,04													
W.Aver.		44,53			1,76			0,50	0,57	0,95	0,13	1,38	0,18	0,10													
Sum		534,40																									

Concentrations at Leba, PL0004R, 1992 Wet only sampler,

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1992															0,33	8,51	10,18										
02-1992															0,83	1,43	2,66		11,75								
03-1992															0,40	1,17	3,25		11,36								
04-1992															0,60	2,36	4,83		23,09								
05-1992															0,47	1,64	4,06		24,98								
06-1992																	3,98										
07-1992															0,32	0,75	2,95		7,03								
08-1992															0,45	1,63	2,47		11,18								
09-1992															1,06	0,52	5,64		5,03								
10-1992															0,93	0,70	4,21		11,51								
11-1992															0,32	1,06	4,55		5,64								
12-1992															0,85	1,54	4,47		6,67								
Max															1,06	8,51	10,18		24,98								
Min															0,32	0,52	2,47		5,03								
W.Aver.															0,57	1,34	4,05		9,96								
Sum																											

Concentrations at Leba, PL0004R, 1992 Wet only sampler, Biweekly samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1992		12,60			1,62			0,60	1,09	1,52	0,20	2,40	0,20	0,11													
02-1992		33,80			1,14			0,35	0,81	0,73	0,09	1,20	0,10	0,06													
03-1992		86,90			0,95			0,21	0,37	0,75	0,09	1,10	0,10	0,05													
04-1992		24,10			2,55			1,60	1,47	0,46	0,12	0,70	0,50	0,11													
05-1992		23,80			1,96			0,84	1,09	0,43	0,07	0,70	0,20	0,09													
06-1992		2,20			1,46			4,24	1,49	0,97	0,23		1,10	0,35													
07-1992		37,10			2,00			0,79	0,89	0,48	0,07	0,70	0,30	0,04													
08-1992		73,40			1,68			0,81	0,63	0,41	0,06	0,70	0,20	0,06													
09-1992		65,70			2,50			0,36	0,59	0,68	0,06	1,10	0,10	0,07													
10-1992		43,50			1,96			0,24	0,21	0,69	0,11	1,00	0,10	0,06													
11-1992		103,50			1,60			0,11	0,16	1,16	0,19	1,90	0,10	0,06													
12-1992		27,80			1,67			0,11	0,09	1,64	0,24	2,50	0,10	0,14													
Max		103,50			2,55			4,24	1,49	1,64	0,24	2,50	1,10	0,35													
Min		2,20			0,95			0,11	0,09	0,41	0,06	0,70	0,10	0,04													
W.Aver.		44,53			1,71			0,45	0,53	0,79	0,11	1,23	0,16	0,07													
Sum		534,40																									

Concentrations at Rörvik, SE0002R, 1992 Wet only sampler, Daily samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1992					1,36			0,50	0,74	6,54	0,82	12,50	0,50	0,28													
02-1992					0,74			0,46	0,59	1,25	0,16	2,20	0,10	0,05													
03-1992					1,19			1,01	0,90	2,34	0,29	4,30	0,20	0,11													
04-1992					0,89			0,77	0,79	0,58	0,08	1,20	0,20	0,03													
05-1992					1,11			0,77	0,93	1,41	0,22	3,10	0,30	0,07													
06-1992					2,76			0,58	0,87	1,91	1,41	11,00	4,50	2,24													
07-1992					0,88			0,69	0,58	0,56	0,09	1,10	0,10	0,04													
08-1992					0,74			0,51	0,44	1,09	0,14	2,00	0,10	0,05													
09-1992					0,82			0,55	0,57	1,24	0,16	2,30	0,10	0,08													
10-1992					0,57			0,30	0,44	1,32	0,16	2,40	0,10	0,07													
11-1992					0,73			0,38	0,63	2,10	0,25	4,00	0,10	0,09													
12-1992					0,85			0,43	0,68	3,64	0,45	6,70	0,20	0,15													
Max		0,00			2,76			1,01	0,93	6,54	1,41	12,50	4,50	2,24													
Min		0,00			0,57			0,30	0,44	0,56	0,08	1,10	0,10	0,03													
W.Aver.																											
Sum		0,00																									

Concentrations at Vavihill, SE0011R, 1992 Wet only sampler, Daily samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1992					1,62			1,28	1,07	3,05	0,39	5,40	0,20	0,24													
02-1992					1,31			0,89	0,92	1,53	0,20	2,30	0,30	0,14													
03-1992					1,20			1,04	0,95	1,65	0,21	2,90	0,10	0,10													
04-1992					1,49			1,32	1,11	0,38	0,09	0,90	0,20	0,07													
05-1992					1,09			0,79	0,62	0,96	0,18	2,00	0,30	0,14													
06-1992																											
07-1992					0,64			0,54	0,46	0,19	0,03	0,40		0,03													
08-1992					0,79			0,68	0,53	0,29	0,04	0,60	0,10	0,03													
09-1992					0,78			0,56	0,65	0,47	0,07	0,90	0,10	0,03													
10-1992					0,85			0,70	0,95	0,55	0,07	1,20	0,10	0,06													
11-1992					0,57			0,36	0,43	1,14	0,14	2,20	0,20	0,07													
12-1992					0,64			0,33	0,48	0,29	0,04	0,60	0,10	0,03													
Max		0,00			1,62			1,32	1,11	3,05	0,39	5,40	0,30	0,24													
Min		0,00			0,57			0,33	0,43	0,19	0,03	0,40	0,10	0,03													
W.Aver.																											
Sum		0,00																									

Concentrations at Aspvreten, SE0012R, 1992 Bulk sampler, Monthly samples, from SE01L_bulk12hm

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1992		20,10													0,05	0,78	3,17		2,21	0,26	0,02	0,46	0,12	65,96	2,69	0,87	
02-1992		30,30													0,09	1,26	2,65		7,26	0,23	0,03	0,78	0,52	29,17	2,82	0,77	
03-1992		236,40													0,13	1,01	4,77		11,51	0,46	0,04	0,52	0,76	41,58	4,64	1,43	
04-1992		50,00													0,10	1,09	3,65		8,25	0,38	0,03	0,38	0,21	27,78	2,11	0,85	
05-1992		9,00													0,08	2,18	3,47		10,84	0,47	0,05	0,35	0,26	73,61	10,39	0,71	
06-1992		17,20													0,10	1,62	3,10		13,52	1,08	0,12	0,63	0,39	140,58	20,49	1,10	
07-1992		33,50													0,05	0,93	1,06		5,01	0,38	0,02	0,23	0,09	20,92	4,70	0,29	
08-1992		80,70													0,03	0,43	0,54		2,98	0,25	0,01	0,11	0,04	5,73	1,20	0,13	
09-1992		12,40													0,04	1,92	1,55		9,88	0,67	0,03	0,37	0,23	33,09	4,78	0,44	
10-1992		54,00													0,06	0,85	3,28		6,44	0,24	0,03	0,35	0,45	22,48	2,30	0,66	
11-1992		97,70													0,05	0,45	2,89		5,50	0,10	0,01	0,25	0,36	6,50	0,80	0,70	
12-1992		100,90													0,05	1,15	2,98		7,45	0,58	0,03	0,39	0,25	31,15	4,01	0,68	
Max		236,40													0,13	2,18	4,77		13,52	1,08	0,12	0,78	0,76	140,58	20,49	1,43	
Min		9,00													0,03	0,43	0,54		2,21	0,10	0,01	0,11	0,04	5,73	0,80	0,13	
W.Aver.		61,85													0,08	0,93	3,23		7,94	0,39	0,03	0,39	0,42	31,09	3,65	0,87	
Sum		742,20																									

Concentrations at Aspvreten, SE0012R, 1992 Bulk sampler, Monthly samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1992		40,30			0,73			0,26	0,52	0,79	0,13	1,40	0,40	0,11													
02-1992		32,00			0,57			0,25	0,44	0,21	0,05	0,50	0,10	0,05													
03-1992		44,70			1,30			0,79	0,74	0,60	0,11	1,30	0,30	0,09													
04-1992		86,40			1,29			0,95	0,73	0,48	0,08	0,90	0,20	0,12													
05-1992		15,60			1,08			1,21	0,49	0,64	0,15	1,00	0,40	0,42													
06-1992		22,30			1,64			1,60	0,69	0,13	0,16	0,40	0,70	0,60													
07-1992																											
08-1992		62,70			0,82			0,48	0,42	0,22	0,05	0,40	0,20	0,08													
09-1992		7,30			0,83			0,39	0,63	0,73	0,13	0,90	0,30	0,13													
10-1992		80,90			0,90			0,44	0,61	0,33	0,05	0,70	0,10	0,06													
11-1992		118,50			0,76			0,32	0,59	0,63	0,09	1,20	0,10	0,05													
12-1992		23,70			0,92			0,44	0,74	1,42	0,20	2,40	0,40	0,26													
Max		118,50			1,64			1,60	0,74	1,42	0,20	2,40	0,70	0,60													
Min		7,30			0,57			0,25	0,42	0,13	0,05	0,40	0,10	0,05													
W.Aver.		48,58			0,96			0,58	0,60	0,51	0,09	0,97	0,22	0,12													
Sum		534,40																									

Concentrations at Arup, SE0051R, 1992 Bulk sampler, Monthly samples, from SE01L_bulk51hm

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1992		41,10													0,16	2,54	6,80		4,48	0,60	0,05	0,81	0,45	49,85	9,56	1,72	
02-1992		50,40													0,07	0,98	3,74		6,71	0,36	0,03	0,54	0,21	21,20	4,41	1,57	
03-1992		229,10													0,04	0,78	3,52		7,02	0,45	0,02	0,38	0,32	20,62	8,83	1,03	
04-1992		39,70													0,15	4,28	4,14		11,96	0,34	0,05	0,51	0,30	49,61	7,08	1,04	
05-1992		15,00													0,18	3,37	4,37		17,56	0,60	0,05	0,45	0,33	51,44	13,87	1,05	
06-1992																											
07-1992		44,30													0,05	1,02	2,73		6,64	0,22	0,04	0,27	0,25	55,51	9,63	0,57	
08-1992		50,70													0,05	0,90	1,82		5,56	0,54	0,03	0,29	0,36	46,97	4,71	0,51	
09-1992		29,80													0,06	1,38	2,95		8,97	0,35	0,03	0,37	0,22	29,65	4,12	0,64	
10-1992		62,10													0,05	0,75	3,75		7,91	0,29	0,02	0,36	0,41	15,69	2,13	0,91	
11-1992		101,00													0,04	0,51	2,01		4,37	0,17	0,03	0,17	0,20	6,14	1,94	0,52	
12-1992		83,20													0,07	1,27	3,12		10,14	0,32	0,02	0,55	0,23	6,74	3,07	0,86	
Max		229,10													0,18	4,28	6,80		17,56	0,60	0,05	0,81	0,45	55,51	13,87	1,72	
Min		15,00													0,04	0,51	1,82		4,37	0,17	0,02	0,17	0,20	6,14	1,94	0,51	
W.Aver.		67,85													0,06	1,19	3,35		7,35	0,37	0,03	0,40	0,29	24,73	6,03	0,93	
Sum		746,40																									

Concentrations at Arup, SE0051R, 1992 Bulk sampler, Monthly samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1992		61,90			1,44			1,28	0,90	2,53	0,31	4,60	0,30	0,22													
02-1992		57,60			1,01			0,89	0,78	0,98	0,14	2,20	0,10	0,07													
03-1992		104,00			0,99			0,83	0,74	1,10	0,18	2,10	0,60	0,12													
04-1992		54,20			1,38			1,49	0,93	0,61	0,12	1,10	0,40	0,20													
05-1992		20,40			1,54			1,92	0,77	1,04	0,15	2,00	0,20	0,39													
06-1992		2,50			1,69			2,07	0,84	1,07	0,36	2,20	0,80	1,96													
07-1992		57,20			1,10			0,93	0,66	0,32	0,07	0,70	0,20	0,16													
08-1992		80,90			0,73			0,60	0,54	0,38	0,05	0,70	0,20	0,11													
09-1992		45,90			1,01			0,80	0,84	0,58	0,08	1,00	0,10	0,17													
10-1992		89,50			0,80			0,49	0,89	0,43	0,09	0,90	0,20	0,34													
11-1992		12,10			0,51			0,28	0,39	0,78	0,10	1,50	0,10	0,08													
12-1992		28,80			0,96			0,64	0,58	0,70	0,08	1,20	0,20	0,17													
Max		104,00			1,69			2,07	0,93	2,53	0,36	4,60	0,80	1,96													
Min		2,50			0,51			0,28	0,39	0,32	0,05	0,70	0,10	0,07													
W.Aver.		51,25			1,03			0,89	0,76	0,86	0,13	1,64	0,28	0,19													
Sum		615,00																									

Concentrations at Rickleå, SE0053R, 1992 Bulk sampler, Monthly samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1992		44,50			0,14			0,07	0,12	0,31	0,04	0,60		0,08													
02-1992		21,30			0,62			0,23	0,37	0,51	0,06	1,10	0,20	0,09													
03-1992		55,50			0,11			0,56	0,70	0,40	0,06	0,80	0,10	0,04													
04-1992		68,70			0,70			0,35	0,33	0,11	0,03	0,20	0,10														
05-1992		15,40			0,93			0,88	0,27	0,24	0,04	0,40	0,20	0,18													
06-1992		19,40			0,50			0,20	0,11	0,18	0,13	0,40	0,30	0,86													
07-1992		44,30			0,76			0,26	0,29	0,17	0,03	0,30	0,10	0,15													
08-1992		111,50			0,78			0,61	0,28	0,34	0,05	0,60	0,10	0,22													
09-1992		71,70			0,58			0,22	0,18			0,10	0,10	0,04													
10-1992		58,60			0,33			0,13	0,26	0,30	0,02	0,50	0,10	0,20													
11-1992		96,00			0,50			0,19	0,28	0,18	0,03	0,40		0,04													
12-1992		22,50			1,22			0,54	0,61	0,92	0,12	1,70	0,10	0,14													
Max		111,50			1,22			0,88	0,70	0,92	0,13	1,70	0,30	0,86													
Min		15,40			0,11			0,07	0,11	0,11	0,02	0,10	0,10	0,04													
W.Aver.		52,45			0,55			0,34	0,31	0,26	0,04	0,50	0,09	0,13													
Sum		629,40																									

Concentrations at Zingst, DE0009R, 1993 Wet only sampler, Weekly samples, from Runge_9A

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1993		48,50			0,60			0,43	0,55	2,20	0,26	4,20	0,17	0,12													
02-1993		45,80			0,63			0,28	0,23	2,80	0,34	5,50	0,17	0,17													
03-1993		12,10			1,65			2,00	1,70	1,20	0,11	1,00	0,26	0,21													
04-1993		21,50			1,42			1,77	1,22	0,63	0,11	1,60	0,48	0,09													
05-1993		32,00			1,39			1,23	0,92	0,25	0,10	0,65	0,58	0,16													
06-1993		41,10			0,63			0,53	0,41	0,57	0,08	0,97	0,11	0,10													
07-1993		94,10			0,56			0,48	0,55	1,00	0,13	2,30	0,13	0,09													
08-1993		52,80			1,48			1,08	0,60	0,62	0,10	0,68	0,20	0,18													
09-1993		98,00			0,66			0,41	0,34	0,28	0,04	0,85	0,10	0,09													
10-1993		68,20			0,53			0,52	0,32	0,53	0,08	0,92	0,09	0,11													
11-1993		27,80			0,49			0,52	0,83	0,33	0,04	0,77	0,10	0,07													
12-1993		72,20			0,53			0,28	0,67	0,82	0,10	1,70	0,08	0,07													
Max		98,00			1,65			2,00	1,70	2,80	0,34	5,50	0,58	0,21													
Min		12,10			0,49			0,28	0,23	0,25	0,04	0,65	0,08	0,07													
W.Aver.		51,17			0,75			0,60	0,55	0,90	0,12	1,80	0,16	0,11													
Sum		614,10																									

Concentrations at Zingst, DE0009R, 1993 Wet only sampler, Weekly samples, from Runge_9B

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1993		48,50													0,06		2,00		4,80	0,03		0,50	0,10				10,00
02-1993		45,80													0,04		1,00		2,30	0,03		0,30	0,10				10,00
03-1993		12,10													0,23		2,50		8,20	0,04		0,50	0,10				25,00
04-1993		21,50													0,11		3,10		1,60	0,06		0,50	0,50				38,00
05-1993		32,00													0,22		4,60		5,50	0,12		0,70	0,10				84,00
06-1993		41,10													0,06		1,20		4,10	0,03		0,30	0,10				17,00
07-1993		94,10													0,03		0,80		9,50	0,03		0,30	0,10				20,00
08-1993		52,80													0,04		1,50		3,50	0,06		0,60	0,10				13,00
09-1993		98,00													0,03		2,70		1,50	0,05		0,30	0,20				12,00
10-1993		65,70													0,08		4,90		5,10	0,14		0,40	0,60				9,00
11-1993		27,80													0,13		6,70		5,10	0,18		0,50	0,80				18,00
12-1993		70,90													0,03		2,60		4,40	0,03		0,40	0,80				12,00
Max		98,00													0,23		6,70		9,50	0,18		0,70	0,80				84,00
Min		12,10													0,03		0,80		1,50	0,03		0,30	0,10				9,00
W.Aver.		50,66													0,06		2,54		4,64	0,06		0,41	0,30				18,25
Sum		610,30																									

Concentrations at Zingst, DE0009R, 1993 Wet only sampler, Weekly samples, from Runge_9C

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1993																											
02-1993		45,80																0,02									
03-1993																											
04-1993		21,50																0,04									
05-1993																											
06-1993		41,10																0,02									
07-1993																											
08-1993		52,80																0,04									
09-1993		98,00																0,01									
10-1993		48,40																0,01									
11-1993		27,80																0,02									
12-1993		63,20																0,01									
Max		98,00																0,04									
Min		21,50																0,01									
W.Aver.		49,82																0,02									
Sum		398,60																									

Concentrations at Keldsnor, DK0005R, 1993 Wet only sampler, , from DK01L_WO2

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1993										5,83	0,88		0,30	0,42													
02-1993										4,39	0,49		0,20	0,25													
03-1993										6,73	0,81		1,30	0,45													
04-1993										1,57	0,16		0,60	0,20													
05-1993										1,13	0,16		0,50	0,18													
06-1993										1,29	0,15		0,30	0,37													
07-1993										0,95	0,10		0,20	0,26													
08-1993										1,18	0,16		0,30	0,44													
09-1993										0,65	0,09		0,20	0,15													
10-1993										1,44	0,24		0,60	0,41													
11-1993										6,01	0,89		1,60	0,87													
12-1993										3,08	0,40		0,30	0,16													
Max										6,73	0,89		1,60	0,87													
Min										0,65	0,09		0,20	0,15													
W.Aver.																											
Sum																											

Concentrations at Keldsnor, DK0005R, 1993 Wet only sampler, , from DK01L_WO2

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1993					1,10			0,43	0,42			10,60															
02-1993					1,24			0,88	0,49			7,90															
03-1993					3,28			3,50	1,83			14,40															
04-1993					1,33			1,35	0,96			2,00															
05-1993					1,98			1,84	0,82			1,80															
06-1993					0,93			0,69	0,62			1,70															
07-1993					0,70			0,67	0,50			1,30															
08-1993					0,99			0,91	0,54			2,10															
09-1993					0,74			0,38	0,48			1,30															
10-1993					1,22			0,69	0,76			2,90															
11-1993					1,93			0,62	1,03			11,20															
12-1993					0,89			0,29	0,66			5,90															
Max					3,28			3,50	1,83			14,40															
Min					0,70			0,29	0,42			1,30															
W.Aver.																											
Sum																											

Concentrations at Keldsnor, DK0005R, 1993 Wet only sampler, , from DK01L_WO2

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1993			4,72																								
02-1993			4,78																								
03-1993			5,44																								
04-1993			5,05																								
05-1993			4,23																								
06-1993			4,50																								
07-1993			4,59																								
08-1993			4,58																								
09-1993			4,50																								
10-1993			4,35																								
11-1993			4,57																								
12-1993			4,42																								
Max			5,44																								
Min			4,23																								
W.Aver.																											
Sum																											

Concentrations at Keldsnor, DK0005R, 1993 Wet only sampler, , from DK01L_WO2

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1993		57,30																									
02-1993		10,20																									
03-1993		6,60																									
04-1993		18,30																									
05-1993		24,10																									
06-1993		31,90																									
07-1993		53,10																									
08-1993		68,60																									
09-1993		105,40																									
10-1993		56,60																									
11-1993		40,90																									
12-1993		85,70																									
Max		105,40																									
Min		6,60																									
W.Aver.		46,56																									
Sum		558,70																									

Concentrations at Keldsnor, DK0005R, 1993 Wet only sampler, Daily samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1993						0,57	19,00																				
02-1993						0,88	17,00																				
03-1993						2,59	4,00																				
04-1993						1,22	9,00																				
05-1993						1,88	59,00																				
06-1993						0,83	31,00																				
07-1993						0,62	26,00																				
08-1993						0,89	26,00																				
09-1993						0,68	32,00																				
10-1993						1,08	44,00																				
11-1993						1,37	27,00																				
12-1993						0,61	38,00																				
Max						2,59	59,00																				
Min						0,57	4,00																				
W.Aver.						0,87	30,88																				
Sum																											

Concentrations at Anholt, DK0008R, 1993 Bulk sampler, Biweekly samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1993						0,43	30,00																				
02-1993						1,10	50,00																				
03-1993						1,23	39,00																				
04-1993						2,65	111,00																				
05-1993						2,78	26,00																				
06-1993						0,90	19,00																				
07-1993						0,55	21,00																				
08-1993						0,57	25,00																				
09-1993						0,95	30,00																				
10-1993						0,65	31,00																				
11-1993						1,65	93,00																				
12-1993						0,59	46,00																				
Max						2,78	111,00																				
Min						0,43	19,00																				
W.Aver.						0,92	38,02																				
Sum																											

Concentrations at Anholt, DK0008R, 1993 Bulk sampler, , from DK01L_BS2_4

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1993										14,31	1,69		0,60	0,57													
02-1993										6,87	0,87		0,40	0,32													
03-1993										6,72	0,77		0,30	0,27													
04-1993										4,76	0,62		0,90	0,34													
05-1993										4,04	0,69		1,80	2,63													
06-1993										2,37	0,26		0,30	0,17													
07-1993										3,43	0,40		0,30	0,20													
08-1993										2,01	0,25		0,10	0,12													
09-1993										3,56	0,44		0,40	0,23													
10-1993										2,18	0,26		0,20	0,22													
11-1993										3,72	0,45		0,40	0,26													
12-1993										5,45	0,67		0,30	0,24													
Max										14,31	1,69		1,80	2,63													
Min										2,01	0,25		0,10	0,12													
W.Aver.										4,71	0,58		0,41	0,36													
Sum																											

Concentrations at Anholt, DK0008R, 1993 Bulk sampler, , from DK01L_BS2_4

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1993					1,64			0,33	0,39			26,20															
02-1993					1,69			0,99	1,08			11,80															
03-1993					1,77			1,30	1,07			11,40															
04-1993					3,04			1,84	2,19			6,70															
05-1993					3,14			1,91	1,93			5,40															
06-1993					1,09			1,00	0,54			3,90															
07-1993					0,84			0,38	0,46			5,20															
08-1993					0,74			0,47	0,48			3,70															
09-1993					1,26			0,50	0,43			6,40															
10-1993					0,83			0,43	0,51			3,90															
11-1993					1,96			1,14	1,54			6,30															
12-1993					1,06			0,36	0,70			10,30															
Max					3,14			1,91	2,19			26,20															
Min					0,74			0,33	0,39			3,70															
W.Aver.					1,32			0,64	0,71			8,40															
Sum																											

Concentrations at Anholt, DK0008R, 1993 Bulk sampler, , from DK01L_BS2_4

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1993			4,53																								
02-1993			4,30																								
03-1993			4,41																								
04-1993			3,95																								
05-1993			4,59																								
06-1993			4,72																								
07-1993			4,68																								
08-1993			4,60																								
09-1993			4,52																								
10-1993			4,50																								
11-1993			4,03																								
12-1993			4,34																								
Max			4,72																								
Min			3,95																								
W.Aver.			4,47																								
Sum																											

Concentrations at Anholt, DK0008R, 1993 Bulk sampler, , from DK01L_BS2_4

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1993		79,20																									
02-1993		17,00																									
03-1993		16,70																									
04-1993		10,80																									
05-1993		12,40																									
06-1993		52,60																									
07-1993		71,80																									
08-1993		93,20																									
09-1993		68,50																									
10-1993		54,90																									
11-1993		32,30																									
12-1993		77,60																									
Max		93,20																									
Min		10,80																									
W.Aver.		48,83																									
Sum		586,00																									

Concentrations at Almindingen, DK0021R, 1993 Bulk sampler, Biweekly samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1993		91,80	4,30		0,92	0,70	50,00	0,62	0,67	2,53	0,31	4,70	0,20	0,12													
02-1993		55,80	4,16		1,41	1,29	70,00	1,09	0,92	1,46	0,18	2,60	0,10	0,12													
03-1993		35,90	4,23		1,68	1,57	59,00	1,54	1,04	1,42	0,16	2,10	0,20	0,11													
04-1993		20,80	4,24		1,78	1,74	58,00	1,31	0,80	0,61	0,07	0,60	0,30	0,07													
05-1993		22,70	5,13		1,55	1,46	7,00	1,33	0,77	0,81	0,19	1,10	0,80	1,10													
06-1993		34,30	4,35		0,97	0,92	44,00	0,64	0,65	0,78	0,06	0,80	0,20	0,06													
07-1993		83,00	4,41		0,84	0,79	39,00	0,33	0,33	0,62	0,06	1,00	0,10	0,05													
08-1993		67,50	4,42		0,86	0,81	38,00	0,58	0,55	0,57	0,08	1,10	0,10	0,11													
09-1993		118,70	4,50		0,86	0,81	32,00	0,42	0,35	0,60	0,08	1,10	0,20	0,09													
10-1993		94,70	4,59		0,70	0,63	26,00	0,33	0,40	0,71	0,10	1,30	0,30	0,10													
11-1993		52,90	4,03		2,02	1,95	94,00	1,16	1,12	0,83	0,10	1,40	0,40	0,26													
12-1993		111,70	4,26		0,98	0,85	55,00	0,61	0,87	1,51	0,19	2,90	0,10	0,09													
Max		118,70	5,13		2,02	1,95	94,00	1,54	1,12	2,53	0,31	4,70	0,80	1,10													
Min		20,80	4,03		0,70	0,63	7,00	0,33	0,33	0,57	0,06	0,60	0,10	0,05													
W.Aver.		65,82	4,37		1,07	0,97	46,43	0,67	0,64	1,09	0,14	1,93	0,21	0,13													
Sum		789,80																									

Concentrations at Hailuoto, FI0052R, 1993 Bulk sampler, Weekly samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1993		20,80	4,61	26,60	0,58		25,00	0,19	0,47	1,73	0,21	2,50	0,20	0,10	0,10	3,58	3,70		49,70								
02-1993		9,00	4,67	30,60	0,84		22,00	0,19	0,49	2,21	0,28	3,30	0,50	0,17	0,10	11,30	6,33		24,31								
03-1993		28,50	4,49	39,00	0,80		33,00	0,23	0,42	3,00	0,41	5,20	0,30	0,14	0,07	2,87	3,66		36,47								
04-1993		7,10	3,77	104,60	4,36		172,00	2,01	1,84	0,71	0,12	0,90	0,80	0,15	0,49	6,12	9,08		844,18								
05-1993		12,50	4,84	19,70	1,09		14,00	0,29	0,39	0,49	0,12	0,30	0,90	0,16	0,07	5,67	1,83		38,28								
06-1993		43,70	4,74	10,80	0,35		18,00	0,10	0,12	0,17	0,02	0,10	0,10	0,04	0,01	1,79	0,50		2,67								
07-1993		65,50	4,85	8,20	0,23		14,00	0,06	0,08	0,09	0,01	0,10	0,10	0,04	0,00	2,81	0,66		3,45								
08-1993		56,80	4,62	13,40	0,46		24,00	0,12	0,15	0,10	0,02	0,10	0,10	0,03	0,02	8,36	0,80		3,85								
09-1993		19,60	4,42	20,10	0,69		38,00	0,19	0,19	0,15	0,02	0,20	0,10	0,17	0,03	1,41	1,24		3,96								
10-1993		26,90	4,57	18,20	0,55		27,00	0,18	0,27	0,57	0,09	1,00	0,10	0,07	0,04	0,89	1,06		49,97								
11-1993		11,70	3,77	105,50	3,32		171,00	1,07	1,58	1,15	0,20	1,50	0,60	0,18	0,50	5,65	11,91		176,10								
12-1993		80,30	4,49	16,00	0,27		32,00	0,09	0,40	0,16	0,02	0,20	0,10	0,04	0,05	2,65	3,32		14,27								
Max		80,30	4,85	105,50	4,36		172,00	2,01	1,84	3,00	0,41	5,20	0,90	0,18	0,50	11,30	11,91		844,18								
Min		7,10	3,77	8,20	0,23		14,00	0,06	0,08	0,09	0,01	0,10	0,10	0,03	0,00	0,89	0,50		2,67								
W.Aver.		31,87	4,59	21,19	0,61		31,81	0,19	0,33	0,57	0,08	0,84	0,18	0,07	0,06	3,77	2,34		36,49								
Sum		382,40																									

Concentrations at Haapasaari, FI0055R, 1993 Bulk sampler, Weekly samples

Month	mm off	mm	pH	k	SO4--	SO4-- corr	H+	NH4+	NO3-	Na+	Mg++	Cl-	Ca++	K+	Cd	Cu	Pb	Hg	Zn	Cr	Co	Ni	As	Fe	Mn	V	Al
	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip
	mm	mm	pH units	uS/cm	mg S/l	mg S/l	ue H/l	mg N/l	mg N/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
01-1993		8,50	4,36	41,40	0,95		44,00	0,26	0,83	2,62	0,38	4,10	0,50	0,18	0,08	4,98	4,22		34,59								
02-1993		9,00	4,21	56,90	2,13		61,00	0,42	1,15	2,16	0,33	3,20	1,40	0,22	0,15	3,61	10,80		191,46								
03-1993		14,20	4,21	41,40	1,65		62,00	0,67	0,80	0,56	0,09	0,90	0,70	0,10	0,36	3,12	5,16		54,23								
04-1993		15,00	4,17	44,20	2,05		68,00	0,75	0,79	0,21	0,09	0,40	1,00	0,12	0,11	2,77	4,43		9,77								
05-1993		3,60	5,70	41,70	2,05		2,00	0,92	1,23	0,95	0,49	1,30	3,10	1,36	0,13	6,01	2,91		59,31								
06-1993		28,40	4,59	17,00	0,71		26,00	0,06	0,18	0,28	0,07	0,30	0,40	0,04	0,03	1,46	1,07		12,49								
07-1993		69,50	4,82	12,60	0,48		15,00	0,12	0,09	0,36	0,06	0,60	0,30	0,07	0,03	1,10	1,18		7,99								
08-1993		60,80	4,85	17,00	0,78		14,00	0,33	0,30	0,41	0,08	0,60	0,40	0,40	0,03	6,58	2,03		11,45								
09-1993		10,00	4,87	9,80	0,30		13,00	0,03	0,17	0,22	0,04	0,30	0,20	0,03	0,01	3,10	0,35		3,50								
10-1993		41,40	4,37	31,30	1,19		43,00	0,15	0,46	0,88	0,21	1,40	0,80	0,30	0,07	0,85	5,06		19,79								
11-1993		1,40	4,51	47,50	1,86		31,00	0,46	1,18	1,53	0,40	3,00	2,40	0,30	0,11	1,85	7,02		22,32								
12-1993		46,40	4,52	31,50	1,14		30,00	0,27	0,73	0,93	0,22	1,70	1,20	0,17		8,07	4,20		15,69								
Max		69,50	5,70	56,90	2,13		68,00	0,92	1,23	2,62	0,49	4,10	3,10	1,36	0,36	8,07	10,80		191,46								
Min		1,40	4,17	9,80	0,30		2,00	0,03	0,09	0,21	0,04	0,30	0,20	0,03	0,01	0,85	0,35		3,50								
W.Aver.		25,68	4,62	24,59	0,97		28,58	0,26	0,42	0,64	0,13	1,03	0,66	0,20	0,06	3,71	3,04		20,66								
Sum		308,20																									

Concentrations at Tvärminne, FI0056R, 1993 Bulk sampler, Monthly samples

Month	mm off	mm	pH	k	SO4--	SO4-- corr	H+	NH4+	NO3-	Na+	Mg++	Cl-	Ca++	K+	Cd	Cu	Pb	Hg	Zn	Cr	Co	Ni	As	Fe	Mn	V	Al
	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip
	mm	mm	pH units	uS/cm	mg S/l	mg S/l	ue H/l	mg N/l	mg N/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
01-1993		53,20	4,46	36,00	0,80			0,21	0,53	2,97	0,28	4,40	0,20	0,26													
02-1993		26,60	4,40	44,00	1,50			0,36	0,94			2,00															
03-1993		48,20	4,40	46,00	1,60			1,10	0,95	0,86	0,14	1,50	0,40	0,09													
04-1993		21,30	4,10	59,00	2,30			1,05	0,93	0,47	0,10	0,80	0,60	0,11													
05-1993		5,80		71,00																							
06-1993		39,60	4,60	23,00	1,00			0,19	0,36	0,47	0,08	0,70	0,60	0,32													
07-1993		54,60	5,20	11,00	0,60			0,14	0,14	0,43	0,09	0,70	0,40	0,16													
08-1993		141,50	4,50	24,00	0,90			0,20	0,26	0,32	0,07	0,60	0,20	0,18													
09-1993		47,50	4,90	30,00	1,00			0,21	0,30	2,40	0,34	4,50	0,60	0,69													
10-1993		65,80	4,60	25,00	0,90			0,43	0,39	0,55	0,09	0,90	0,30	0,60													
11-1993		6,80	4,10	92,00																							
12-1993		94,10	4,90	9,00	0,20			0,12	0,16	0,17	0,02	0,40		0,04													
Max		141,50	5,20	92,00	2,30			1,10	0,95	2,97	0,34	4,50	0,60	0,69													
Min		5,80	4,10	9,00	0,20			0,12	0,14	0,17	0,02	0,40	0,20	0,04													
W.Aver.		50,42	4,60	27,14	0,88			0,31	0,39	0,77	0,11	1,39	0,27	0,24													
Sum		605,00																									

Concentrations at Jomala, FI0057R, 1993 Bulk sampler, Monthly samples

Month	mm off	mm	pH	k	SO4--	SO4-- corr	H+	NH4+	NO3-	Na+	Mg++	Cl-	Ca++	K+	Cd	Cu	Pb	Hg	Zn	Cr	Co	Ni	As	Fe	Mn	V	Al
	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip
	mm	mm	pH units	uS/cm	mg S/l	mg S/l	ue H/l	mg N/l	mg N/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
01-1993		39,80	4,14	32,00	0,70			0,43	0,65	1,74	0,23	3,40	0,30	0,13													
02-1993		28,20	4,80	39,00	1,60			1,20	0,91			2,90															
03-1993		30,90	4,80	24,00	0,90			0,95	0,76	0,45	0,06	0,60	0,20	0,12													
04-1993		18,20	4,20	54,00	2,00			1,10	0,92	0,29	0,05	0,60	0,30	0,17													
05-1993		7,20			2,30				0,87			1,80															
06-1993		56,70	5,10	11,00	0,40			0,36	0,26	0,17	0,03	0,30	0,20	0,06													
07-1993		47,30	5,00	13,00	0,60			0,28	0,23	0,29	0,05	0,40	0,30	0,12													
08-1993		110,80	4,60	23,00	0,90			0,48	0,37	0,33	0,05	0,60	0,20	0,18													
09-1993		30,60	5,70	11,00	0,50			0,57	0,28	0,30	0,06	0,50	0,20	0,24													
10-1993		71,90	4,60	24,00	0,90			0,54	0,42	0,40	0,05	0,70	0,20	0,10													
11-1993		25,90			4,00			2,10	2,47	2,30	0,36	3,70	1,00	0,47													
12-1993		92,90	4,30	38,00	0,80			0,50	0,75	0,81	0,10	1,30	0,10	0,07													
Max		110,80	5,70	54,00	4,00			2,10	2,47	2,30	0,36	3,70	1,00	0,47													
Min		7,20	4,14	11,00	0,40			0,28	0,23	0,17	0,03	0,30	0,10	0,06													
W.Aver.		46,87	4,40	24,00	1,00			0,61	0,60	0,57	0,08	1,15	0,23	0,13													
Sum		562,40																									

Concentrations at Rahja, FI0058R, 1993 Bulk sampler, Monthly samples

Month	mm off	mm	pH	k	SO4--	SO4-- corr	H+	NH4+	NO3-	Na+	Mg++	Cl-	Ca++	K+	Cd	Cu	Pb	Hg	Zn	Cr	Co	Ni	As	Fe	Mn	V	Al
	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip
	mm	mm	pH units	uS/cm	mg S/l	mg S/l	ue H/l	mg N/l	mg N/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
01-1993		42,60	4,36	35,00	0,60			0,24	0,59	1,72	0,23	3,30	0,20	0,28													
02-1993		10,50	4,50	42,00	1,10			0,24	0,78			4,80															
03-1993		18,60	4,50	39,00	1,10			0,43	0,71	3,79	0,31	3,40	0,40	0,27													
04-1993		22,30	4,50	27,00	1,00			0,56	0,55	0,49	0,04	0,60	0,10	0,21													
05-1993		15,70	6,20	46,00	2,40				0,86			1,70															
06-1993		26,70	5,20	10,00	0,40			0,01	0,02	0,21	0,09	0,40	0,20	0,53													
07-1993		78,00	5,80	6,00	0,30			0,01	0,02	0,12	0,10	0,30	0,10	0,49													
08-1993		45,90	4,80	13,00	0,50			0,13	0,14	0,15	0,04	0,20	0,20	0,17													
09-1993		15,50	5,90	18,00	1,10			0,78	0,26	0,31	0,17	0,40	0,20	1,70													
10-1993		65,80	5,50	9,00	0,40			0,06	0,12	0,28	0,12	0,50	0,20	0,98													
11-1993		3,20	5,20	64,00																							
12-1993		29,70	4,50	22,00	0,50			0,19	0,53	0,33	0,07	0,40	0,10	0,17													
Max		78,00	6,20	64,00	2,40			0,78	0,86	3,79	0,31	4,80	0,40	1,70													
Min		3,20	4,36	6,00	0,30			0,01	0,02	0,12	0,04	0,20	0,10	0,17													
W.Aver.		31,21	5,15	18,81	0,62			0,17	0,29	0,56	0,11	1,04	0,16	0,46													
Sum		374,50																									

Concentrations at Ylimarkku, FI0059R, 1993 Bulk sampler, Monthly samples

Month	mm off	mm	pH	k	SO4--	SO4-- corr	H+	NH4+	NO3-	Na+	Mg++	Cl-	Ca++	K+	Cd	Cu	Pb	Hg	Zn	Cr	Co	Ni	As	Fe	Mn	V	Al
	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip
	mm	mm	pH units	uS/cm	mg S/l	mg S/l	ue H/l	mg N/l	mg N/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
01-1993		50,30	4,65	24,00	0,70			0,50	0,45	0,89	0,11	1,70	0,10	0,10													
02-1993		9,40	4,20	73,00	3,50			1,70	1,19			2,40															
03-1993		24,40	4,30	48,00	2,20			1,20	0,62			0,80															
04-1993		46,40	4,30	37,00	1,30			0,81	0,58	0,28	0,06	0,50	0,20	0,11													
05-1993		12,20	5,00	51,00	3,60				0,76			0,70															
06-1993		49,30	4,50	27,00	1,10			0,73	0,27	0,17	0,05	0,30	0,20	0,15													
07-1993		87,00	4,40	27,00	0,90			0,33	0,22	0,11	0,04	0,20	0,30	0,07													
08-1993		108,00	4,60	19,00	0,80			0,39	0,20	0,29	0,04	0,50	0,10	0,17													
09-1993		30,60	4,70	26,00	1,60			1,30	0,33	0,27	0,05	0,50	0,20	0,21													
10-1993		72,40	4,60	23,00	0,90			0,68	0,40	0,20	0,03	0,40	0,10	0,14													
11-1993		12,30	4,30	72,00	2,40			2,90	2,24																		
12-1993		122,70	5,50	4,00	0,10			0,13	0,09	0,03	0,01	0,20		0,01													
Max		122,70	5,50	73,00	3,50			2,90	2,24	0,89	0,11	2,40	0,30	0,21													
Min		9,40	4,20	4,00	0,10			0,13	0,09	0,03	0,01	0,20	0,10	0,01													
W.Aver.		52,08	4,71	23,96	0,96			0,57	0,35	0,21	0,04	0,50	0,12	0,10													
Sum		625,00																									

Concentrations at Sipoo, FI0060R, 1993 Bulk sampler, Monthly samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1993		66,20	4,20	29,00	0,70			0,25	0,51	0,75	0,10	1,50	0,20	0,13													
02-1993		23,50	4,40	37,00	1,30			0,32	0,81	0,88	0,14	1,50	0,70	0,60													
03-1993		35,60	4,30	51,00	2,20			0,95	1,03	1,05	0,16	1,60	0,90	0,78													
04-1993		19,80	4,50	43,00	2,20			1,19	0,75			1,40															
05-1993		10,70	5,10	36,00	1,40				0,02			1,20															
06-1993		55,60	5,10	11,00	0,60			0,12	0,02	0,24	0,06	0,40	0,30	0,38													
07-1993		105,80	5,00	10,00	0,50			0,07	0,09	0,12	0,04	0,20	0,30	0,17													
08-1993		128,30	4,70	16,00	0,70			0,16	0,27	0,15	0,04	0,30	0,20	0,27													
09-1993		16,40	5,70	6,00	0,40			0,08	0,02	0,16	0,04	0,30	0,20	0,54													
10-1993		63,10	4,50	27,00	1,10			0,56	0,52	0,18	0,06	0,30	0,30	0,35													
11-1993		4,70	5,40	61,00																							
12-1993		76,00	5,70	19,00	1,00			0,40	0,61	0,41	0,09	0,60	1,40	0,22													
Max		128,30	6,10	61,00	2,20			1,19	1,03	1,05	0,16	1,60	1,40	0,78													
Min		4,70	4,20	6,00	0,40			0,07	0,02	0,12	0,04	0,20	0,20	0,13													
W.Aver.		50,47	4,85	21,62	0,89			0,30	0,38	0,33	0,07	0,63	0,44	0,28													
Sum		605,70																									

Concentrations at Korppoo, FI0062R, 1993 Bulk sampler, Monthly samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1993		44,70	4,31	35,00	0,90			0,40	0,77			3,30															
02-1993		29,10	4,60	23,00	0,80			0,24	0,51	0,62	0,13	1,00	0,60	0,11													
03-1993		39,90	4,60	25,00	0,90			0,64	0,61	0,30	0,05	0,50	0,30	0,06													
04-1993		17,70	4,10	67,00	2,60			1,34	1,17			1,10															
05-1993		7,30	5,50	57,00	3,40				1,59			1,40															
06-1993		49,90	4,90	18,00	0,50			0,08	0,21	0,43	0,05	0,70	0,20	0,47													
07-1993		66,50	5,80	11,00	0,70			0,04	0,02	0,34	0,08	0,50	0,30	1,55													
08-1993		110,80	5,00	11,00	0,60			0,01	0,02	0,45	0,09	0,80	0,30	0,30													
09-1993		37,80	5,60	6,00	0,30			0,01	0,02	0,35	0,05	0,50	0,20	0,14													
10-1993		81,40	4,50	24,00	0,80			0,37	0,37	0,33	0,05	0,50	0,20	0,09													
11-1993		12,80		98,00	2,80			1,30	2,02			2,70															
12-1993		97,90	4,30	38,00	0,90			0,47	0,74	0,53	0,07	0,90	0,10	0,06													
Max		110,80	5,80	98,00	3,40			1,34	2,02	0,62	0,13	3,30	0,60	1,55													
Min		7,30	4,10	6,00	0,30			0,01	0,02	0,30	0,05	0,50	0,10	0,06													
W.Aver.		49,65	4,71	24,90	0,85			0,29	0,42	0,36	0,06	0,95	0,21	0,31													
Sum		595,80																									

Concentrations at Preila, LT0015R, 1993 Bulk sampler, Monthly samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1993		19,80	4,52		4,00			1,93	0,65	27,30		41,90	1,90	1,61	0,10	6,30	0,60		15,30			3,00					
02-1993		6,70	5,38	380,00	7,91			0,26	2,19	53,00		82,80	6,40	2,90													
03-1993		38,00	4,81	93,00	2,54			1,51	1,44	10,00		16,40	1,60	0,60													
04-1993		2,70	4,30		4,66			2,37	1,82	4,90		9,00	12,00														
05-1993		14,20	4,11		2,42			1,66	1,31	1,90		3,20	1,70	0,27	0,18		6,30					6,40					
06-1993		48,30	4,33		0,63			0,30	0,40	1,14		1,70	0,50	0,10	0,23	13,60	3,10					24,00					
07-1993		94,70	5,96	50,00	1,11			1,56	0,48	5,30		9,30	0,60	0,70	0,23	8,60	1,80		26,30			4,20					
08-1993		105,30	4,22	59,00	2,25			0,79	0,82	4,20		6,40	1,20	0,55	0,15	9,50	2,60		16,30			36,70					
09-1993		66,00	4,39	17,00	1,28			0,77	0,24	0,75		1,80	0,20	0,21	0,07	3,90	1,70		10,00			3,00					
10-1993		39,30	3,91	160,00	4,32			2,05	1,53	21,00		33,10	2,00	1,30	0,07	20,40	11,20		35,00			2,80					
11-1993		18,80	4,28	42,00	0,90			1,06	0,88	1,97		3,50	0,70	0,25	0,17	34,00	3,30		15,40								
12-1993		59,40	4,26	81,00	2,02			0,85	0,95	8,34		13,90	1,60	0,63													
Max		105,30	5,96	380,00	7,91			2,37	2,19	53,00		82,80	12,00	2,90	0,23	34,00	11,20		35,00			36,70					
Min		2,70	3,91	17,00	0,63			0,26	0,24	0,75		1,70	0,20	0,10	0,07	3,90	0,60		10,00			2,80					
W.Aver.		42,77	4,62	58,53	2,03			1,12	0,79	7,25		11,74	1,18	0,61	0,12	8,37	2,55		13,32			11,46					
Sum		513,20																									

Concentrations at Rucava, LV0010R, 1993 Official rain gauge,

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1993	82,90																										
02-1993	41,20																										
03-1993	40,10																										
04-1993	18,20																										
05-1993	11,90																										
06-1993	83,50																										
07-1993	127,00																										
08-1993	152,30																										
09-1993	68,90																										
10-1993	31,80																										
11-1993	11,40																										
12-1993	75,70																										
Max	152,30																										
Min	11,40																										
W.Aver.	62,08																										
Sum																											

Concentrations at Rucava, LV0010R, 1993 Bulk sampler, Daily samples, from LV01L_bd10

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1993					1,70			0,31	0,59	8,10			1,20	0,61													
02-1993					0,50			0,39	0,39	0,90			0,80	1,33													
03-1993					1,30			0,97	0,80	2,50			0,70	1,73													
04-1993					1,60			2,64	0,68	0,50			1,50	2,34													
05-1993					1,30			1,70	0,85	0,50			8,90	5,83													
06-1993					0,50			0,42	0,26	0,40			0,70	0,08													
07-1993					0,50			0,26	0,67	0,30			0,20	0,17													
08-1993					0,80			0,18	0,18	0,20			0,40	0,28													
09-1993					0,40			0,32	0,37	0,10			0,50	0,07													
10-1993					0,80			0,32	0,36	0,50			0,70	0,21													
11-1993					1,00			0,88	0,61	1,00			1,30	0,79													
12-1993					0,50			0,27	0,53	1,00			0,60	0,38													
Max					1,70			2,64	0,85	8,10			8,90	5,83													
Min					0,40			0,18	0,18	0,10			0,20	0,07													
W.Aver.					0,79			0,41	0,45	1,39			0,75	0,55													
Sum																											

Concentrations at Leba, PL0004R, 1993 Bulk sampler, Daily samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1993		47,30	4,50					0,26	0,68	2,57	0,43	4,10	0,30	0,44													
02-1993		38,80	4,48		0,66			0,29	0,47	1,73	0,20	3,30	0,20	0,30													
03-1993		36,40	4,61		1,08			0,69	0,59	1,57	0,22	3,30	0,40	0,31													
04-1993		11,60	4,18		2,32			1,04	1,03	1,41	0,17	2,70	0,70	0,33													
05-1993		8,40	4,35		1,32			0,73	0,58	0,76	0,06	1,60	0,30	0,27													
06-1993		47,70	4,34		0,56			0,34	0,46	0,37	0,05	1,10	0,10	0,15													
07-1993		85,80	4,35		0,88			0,41	0,41	0,42	0,05	1,00	0,20	0,15													
08-1993		115,40	4,45		0,77			0,47	0,43	0,42	0,05	0,70	0,10	0,09													
09-1993		80,50	4,37		1,00			0,26	0,45	0,43	0,07	0,70	0,20	0,13													
10-1993		17,70	4,10		1,30			0,33	0,78	0,80	0,12	1,70	0,30	0,07													
11-1993		18,80	4,15		1,01			0,46	0,71	0,30	0,05	0,80	0,20	0,10													
12-1993		69,20	4,28		0,72			0,30	0,59	1,85	0,20	3,40	0,20	0,11													
Max		115,40	4,61		2,32			1,04	1,03	2,57	0,43	4,10	0,70	0,44													
Min		8,40	4,10		0,56			0,26	0,41	0,30	0,05	0,70	0,10	0,07													
W.Aver.		48,13	4,38		0,81			0,40	0,52	0,96	0,13	1,81	0,21	0,18													
Sum		577,60																									

Concentrations at Leba, PL0004R, 1993 Wet only sampler,

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1993															0,66	0,85	4,92		6,58								
02-1993															0,62	1,51	5,68		8,08								
03-1993															0,71	0,96	8,03		14,86								
04-1993															0,56	4,41	5,61		15,51								
05-1993															0,58	2,44	3,63		17,95								
06-1993															0,63	0,53	4,80		13,05								
07-1993															0,21	0,28	3,15		9,51								
08-1993															0,10	0,53	1,32		7,06								
09-1993															0,17	1,04	1,91		7,10								
10-1993															0,24	4,67	2,21		13,59								
11-1993															0,74	5,86	3,25		15,17								
12-1993															0,13	1,35	1,72		6,11								
Max															0,74	5,86	8,03		17,95								
Min															0,10	0,28	1,32		6,11								
W.Aver.															0,33	1,19	3,23		9,29								
Sum																											

Concentrations at Leba, PL0004R, 1993 Wet only sampler, Biweekly samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1993		47,30	4,44		0,75			0,25	0,60	2,25	0,28	3,70	0,20	0,21													
02-1993		38,80	4,42		0,62			0,28	0,55	1,62	0,15	2,90	0,10	0,22													
03-1993		36,40	4,49		0,97			0,70	0,67	0,99	0,18	1,90	0,30	0,28													
04-1993		11,60	4,23		1,89			1,04	1,02	0,51	0,10	0,70	0,50	0,20													
05-1993		8,40	4,15		1,00			0,50	0,58	0,50	0,07	0,90	0,20	0,22													
06-1993		47,70	4,40		0,55			0,40	0,46	0,36	0,05	0,60	0,10	0,15													
07-1993		85,80	4,32		0,90			0,48	0,40	0,32	0,06	0,70	0,20	0,13													
08-1993		115,40	4,39		0,70			0,44	0,42	0,33	0,05	0,60	0,10	0,06													
09-1993		80,50	4,36		1,05			0,28	0,44	0,36	0,06	0,70	0,20	0,07													
10-1993		17,70	4,13		1,39			0,28	0,79	0,75	0,13	1,60	0,30	0,07													
11-1993		18,80	4,12		0,87			0,36	0,62	0,27	0,04	0,50	0,20	0,05													
12-1993		69,20	4,22		0,64			0,24	0,58	1,55	0,17	2,80	0,10	0,09													
Max		115,40	4,49		1,89			1,04	1,02	2,25	0,28	3,70	0,50	0,28													
Min		8,40	4,12		0,55			0,24	0,40	0,27	0,04	0,50	0,10	0,05													
W.Aver.		48,13	4,34		0,83			0,39	0,51	0,78	0,10	1,42	0,17	0,12													
Sum		577,60																									

Concentrations at Rörvik, SE0002R, 1993 Wet only sampler, Daily samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1993		100,80			1,24			0,28	0,37	10,10	1,16	17,80	0,50	0,36													
02-1993		21,10			1,44			1,24	1,14	2,04	0,25	3,50	0,10	0,12													
03-1993		11,50			1,68			2,11	1,68	1,38	0,18	2,20	0,20	0,09													
04-1993		18,40			3,24			2,80	2,81	1,37	0,22	2,30	0,50	0,11													
05-1993		57,80			0,64			0,59	0,32	0,52	0,11	0,90	0,30	0,27													
06-1993		23,70			1,09			0,53	0,38	1,20	0,17	2,40	0,10	0,06													
07-1993		122,60			0,68			0,30	0,31	1,81	0,23	3,40	0,10	0,08													
08-1993		80,40			0,61			0,41	0,40	0,97	0,13	1,60	0,10	0,07													
09-1993		39,60			1,56			0,74	0,64	0,20	0,08	0,50	0,60	0,09													
10-1993		53,60			0,53			0,27	0,44	0,44	0,10	0,90	0,10	0,13													
11-1993		36,30			1,39			0,94	1,12	2,04	0,28	3,50	0,20	0,15													
12-1993		86,30			1,02			0,55	0,79	2,23	0,30	4,10	0,10	0,10													
Max		122,60			3,24			2,80	2,81	10,10	1,16	17,80	0,60	0,36													
Min		11,50			0,53			0,27	0,31	0,20	0,08	0,50	0,10	0,06													
W.Aver.		54,34			1,01			0,57	0,59	2,70	0,34	4,84	0,23	0,15													
Sum		652,10																									

Concentrations at Hoburgen, SE0008R, 1993 Bulk sampler, Monthly samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1993		37,10			2,07			0,47	0,98	15,42	2,10	27,90	1,40	0,79													
02-1993		20,50			1,13			0,59	1,03	2,90	0,40	4,40	0,60	0,26													
03-1993		29,60			1,75			1,52	1,55	3,03	0,43	4,60	1,10	0,38													
04-1993		8,60			4,06			2,13	2,84	2,39	0,38	2,40	1,50	0,24													
05-1993																											
06-1993																											
07-1993																											
08-1993		63,70			1,00			3,28	0,61	0,72	0,16	1,20	1,00	0,70													
09-1993		106,40			0,58			1,37	0,21	0,72	0,14	1,30	0,50	0,26													
10-1993		57,60			0,87			0,91	0,67	0,96	0,17	1,90	0,30	0,24													
11-1993		29,90			2,83			1,39	1,81	1,20	0,22	1,80	0,40	0,27													
12-1993		45,70			1,10			0,60	1,03	1,88	0,23	2,90	0,20	0,18													
Max		106,40			4,06			3,28	2,84	15,42	2,10	27,90	1,50	0,79													
Min		8,60			0,58			0,47	0,21	0,72	0,14	1,20	0,20	0,18													
W.Aver.		44,37			1,25			1,43	0,82	2,61	0,39	4,49	0,67	0,38													
Sum		399,30																									

Concentrations at Vavihill, SE0011R, 1993 Wet only sampler, Daily samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1993		88,50			0,71			0,41	0,43	2,46	0,30	4,40	0,20	0,12													
02-1993		37,80			1,25			0,98	0,72	1,22	0,16	2,30	0,10	0,11													
03-1993		18,70			1,49			1,73	1,11	0,99	0,15	2,10	0,40	0,09													
04-1993		17,50			1,56			1,54	1,21	0,43	0,10	0,90	0,40	0,07													
05-1993		21,50			1,62			1,84	1,11	0,76	0,13	1,30	0,50	0,12													
06-1993		48,90			0,87			0,52	0,43	0,54	0,10	1,30	0,10	0,07													
07-1993		175,10			0,58			0,32	0,27	1,07	0,14	2,10	0,30	0,07													
08-1993		106,80			0,71			0,60	0,51	0,34	0,05	0,70	0,10	0,04													
09-1993		81,90			0,46			0,24	0,21	0,15	0,03	0,40	0,10	0,03													
10-1993		60,60			0,65			0,36	0,39	0,35	0,06	0,70	0,10	0,08													
11-1993		37,90			1,27			0,97	0,78	0,30	0,06	0,60	0,10	0,17													
12-1993		95,40			0,77			0,57	0,68	0,70	0,10	1,20	0,10	0,06													
Max		175,10			1,62			1,84	1,21	2,46	0,30	4,40	0,50	0,17													
Min		17,50			0,46			0,24	0,21	0,15	0,03	0,40	0,10	0,03													
W.Aver.		65,88			0,78			0,57	0,49	0,84	0,12	1,62	0,18	0,08													
Sum		790,60																									

Concentrations at Aspvreten, SE0012R, 1993 Bulk sampler, Monthly samples, from SE01L_bulk12hm

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1993		92,00													0,03	0,34	0,94		4,44	0,27	0,02	0,24	0,15	20,06	3,13	0,63	
02-1993		37,00													0,03	0,45	0,77		3,18	0,29	0,03	0,85	0,10	14,43	3,00	0,46	
03-1993		69,00													0,07	1,02	2,61		7,98	0,34	0,04	0,61	0,29	28,77	4,26	1,55	
04-1993		15,00													0,15	1,16	6,58		11,82	0,50	0,05	0,58	1,12	39,25	3,37	1,64	
05-1993		1,00																									
06-1993		57,00													0,10	3,67	1,14		14,09	0,21	0,04	0,19	0,11	21,34	7,68	0,68	
07-1993		42,00																									
08-1993		66,00													0,04	0,72	2,29		4,84	0,15	0,02	0,24	0,27	23,16	2,90	0,96	
09-1993		46,00													0,01	6,44	0,91		3,38	0,15	0,01	0,21	0,11	12,39	2,40	0,87	
10-1993		49,00													0,08	6,61	4,13		7,33	0,23	0,03	0,39	0,56	25,09	3,51	2,11	
11-1993		28,00													0,17	3,25	7,09		12,81	0,29	0,04	1,75	1,57	35,21	3,42	5,67	
12-1993		148,00													0,09	5,34	3,68		8,70	0,18	0,03	0,42	0,63	9,32	1,44	0,88	
Max		148,00													0,17	6,61	7,09		14,09	0,50	0,05	1,75	1,57	39,25	7,68	5,67	
Min		1,00													0,01	0,34	0,77		3,18	0,15	0,01	0,19	0,10	9,32	1,44	0,46	
W.Aver.		54,17													0,06	2,91	2,46		6,98	0,22	0,03	0,42	0,38	18,25	3,02	1,14	
Sum		650,00																									

Concentrations at Aspvreten, SE0012R, 1993 Bulk sampler, Monthly samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1993		32,50			0,36			0,10	0,24	0,77	0,11	1,30	0,20	0,06													
02-1993		21,10			0,29			0,17	0,20	0,41	0,05	0,60	0,10	0,11													
03-1993		15,70			0,87			0,40	0,73	0,30	0,06	0,40	0,30	0,07													
04-1993		20,70			2,69			0,99	0,99	0,36	0,07	0,60	0,30	0,08													
05-1993		3,00			1,89			0,35	1,35	0,50	0,74	1,30	2,60	5,30													
06-1993		74,50			0,67			2,07	0,22	0,22	0,13	0,40	0,30	0,46													
07-1993		42,00			0,97			0,67	0,47	0,20	0,08	0,60	0,50	0,26													
08-1993		52,90			0,68			0,50	0,37	0,20	0,05	0,50	0,10	0,15													
09-1993		56,70			0,58			0,07	0,16	0,47	0,09	0,90	0,20	0,14													
10-1993		59,90			1,08			0,61	0,48	0,40	0,13	0,70	0,40	0,26													
11-1993		29,90			1,00			0,48	0,45	0,62	0,09	1,10	0,10	0,09													
12-1993		63,40			0,83			0,26	0,59	0,39	0,06	0,80	0,10	0,05													
Max		74,50			2,69			2,07	1,35	0,77	0,74	1,30	2,60	5,30													
Min		3,00			0,29			0,07	0,16	0,20	0,05	0,40	0,10	0,05													
W.Aver.		39,36			0,85			0,67	0,41	0,37	0,09	0,71	0,26	0,22													
Sum		472,30																									

Concentrations at Arup, SE0051R, 1993 Bulk sampler, Monthly samples, from SE01L_bulk51hm

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1993		104,00													0,05	0,60	2,04		5,59	0,33	0,02	0,51	0,22	15,83	6,04	0,86	
02-1993		18,00													0,26	1,52	7,28		13,10	0,19	0,04	0,71	0,66	35,56	3,37	1,74	
03-1993		45,00													0,09	1,23	4,93		8,63	0,21	0,04	0,51	0,35	22,70	4,67	1,54	
04-1993		5,00																									
05-1993		15,00													0,09	1,76	3,78		14,14	0,65	0,07	0,42	0,39	98,77	32,92	1,87	
06-1993		41,00													0,07	1,22	2,49		13,23	0,23	0,04	0,31	0,26	39,15	18,40	1,19	
07-1993		150,00													0,03	0,76	1,29		3,75	0,08	0,01	0,14	0,10	9,73	2,01	0,44	
08-1993		46,00													0,06	1,38			7,88	0,20	0,03	0,35	0,32	25,78	6,41	1,37	
09-1993		89,00													0,03	1,64	1,28		2,96	0,19	0,01	0,19	0,13	7,45	3,01	0,78	
10-1993		71,00													0,05	2,61	2,55		5,69	0,18	0,02	0,27	0,33	16,93	3,29	1,31	
11-1993		20,00													0,18	1,36	7,83		18,14	0,37	0,04	1,34	1,02	27,21	3,56	5,03	
12-1993		99,00													0,09	1,31	3,86		7,48	0,16	0,02	0,36	0,45	10,25	1,38	1,02	
Max		150,00													0,26	2,61	7,83		18,14	0,65	0,07	1,34	1,02	98,77	32,92	5,03	
Min		5,00													0,03	0,60	1,28		2,96	0,08	0,01	0,14	0,10	7,45	1,38	0,44	
W.Aver.		58,58													0,06	1,26	2,49		6,62	0,20	0,02	0,35	0,28	17,73	4,91	1,08	
Sum		703,00																									

Concentrations at Arup, SE0051R, 1993 Bulk sampler, Monthly samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1993		139,90			0,69			0,38	0,40	2,34	0,28	4,40	0,20	0,19													
02-1993		57,60			1,42			1,06	0,87	0,94	0,13	1,60	0,50	0,14													
03-1993		37,10			1,82			2,19	1,15	1,85	0,21	3,20	0,50	0,22													
04-1993		8,50			3,34			2,87	2,07	1,55	0,18	3,10	1,00	2,30													
05-1993		22,00			1,47			2,15	0,86	0,90	0,23	1,30	0,40	3,00													
06-1993		54,10			1,11			0,66	0,56	0,55	0,12	1,00	0,30	0,25													
07-1993		149,70			0,55			0,33	0,29	0,26	0,05	0,70	0,10	0,05													
08-1993		68,50			0,78			0,50	0,57	0,28	0,05	0,60	0,10	0,10													
09-1993		111,50			0,60			0,22	0,22	0,29	0,07	0,50	0,30	0,11													
10-1993		93,00			0,71			0,44	0,38	0,19	0,03	0,40	0,10	0,07													
11-1993		27,40			1,37			0,97	0,70	0,50	0,06	0,70	0,30	0,25													
12-1993		104,00			0,95			0,67	0,69	0,67	0,12	1,60	0,20	0,12													
Max		149,70			3,34			2,87	2,07	2,34	0,28	4,40	1,00	3,00													
Min		8,50			0,55			0,22	0,22	0,19	0,03	0,40	0,10	0,05													
W.Aver.		72,77			0,88			0,63	0,51	0,83	0,12	1,56	0,23	0,22													
Sum		873,30																									

Concentrations at Rickleå, SE0053R, 1993 Bulk sampler, Monthly samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1993		16,60			0,13			0,01	0,15	0,26	0,03	0,40		0,02													
02-1993		5,00			0,91			0,27	0,62	1,19	0,13	1,80	0,50	0,43													
03-1993		19,90			0,56			0,24	0,29	0,35	0,06	0,50	0,10	0,08													
04-1993		7,90			1,20			0,41	0,52	0,78	0,11	0,90	0,30	0,36													
05-1993		27,10			0,96			0,83	0,40	0,22	0,01	0,30	0,50	0,34													
06-1993		48,40			0,89				0,14	2,12	0,27	3,20	0,10	0,60													
07-1993		95,20			0,59			0,20	0,13	0,07	0,02	0,20	0,10	0,06													
08-1993		65,90			0,65			0,15	0,17	0,09	0,02	0,20	0,10	0,05													
09-1993		35,70			0,76			0,54	0,22	0,13	0,06	0,20	0,40	0,12													
10-1993		77,20			0,41			0,40	0,13	0,22	0,06	0,40	0,10	0,21													
11-1993		26,50			1,99			0,61	0,83	0,94	0,14	1,50	0,20	0,20													
12-1993		84,30			0,46			0,22	0,34	0,18	0,03	0,40	0,10	0,05													
Max		95,20			1,99			0,83	0,83	2,12	0,27	3,20	0,50	0,60													
Min		5,00			0,13			0,01	0,13	0,07	0,01	0,20	0,10	0,02													
W.Aver.		42,48			0,68			0,28	0,25	0,40	0,06	0,67	0,15	0,17													
Sum		509,70																									

Concentrations at Zingst, DE0009R, 1994 Wet only sampler, Weekly samples, from Runge_9A

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1994		62,50			0,67			0,46	0,60	0,89	0,13	2,60	0,45	0,10									0,10			0,60	8,60
02-1994		9,40			2,53			0,77	1,59	0,92	0,15	2,40	1,23	0,10									0,80			1,60	31,00
03-1994		80,70			0,80			0,42	0,37	0,39	0,06	1,50	0,40	0,06									0,10			0,30	10,00
04-1994		48,80			0,80			0,61	0,37	0,45	0,08	1,00	0,63	0,07									1,00			0,50	13,00
05-1994		23,30			1,27			0,25	1,01	0,11	0,05	0,23	0,96	0,13									0,50			0,80	25,00
06-1994		69,50			0,60			0,56	0,55	0,61	0,11	0,88	0,71	0,16									0,10			0,60	14,00
07-1994		0,80																					1,50			2,00	
08-1994		61,10			1,13			0,55	0,74	1,40	0,21	4,00	0,80	0,18									0,10			0,40	22,00
09-1994		94,10			1,07			0,52	0,69	0,57	0,09	0,80	0,48	0,14									0,20			0,60	10,00
10-1994		44,30			0,50			0,35	0,48	1,20	0,21	2,60	0,64	0,16									0,10			0,40	16,00
11-1994		36,00			1,00			0,43	0,53	1,00	0,14	1,80	0,12	0,08									0,10			0,60	17,00
12-1994		83,00			0,43			0,34	0,25	1,10	0,14	2,10	0,10	0,05									0,10			0,50	9,60
Max		94,10			2,53			0,77	1,59	1,40	0,21	4,00	1,23	0,18									1,50			2,00	31,00
Min		0,80			0,43			0,25	0,25	0,11	0,05	0,23	0,10	0,05									0,10			0,30	8,60
W.Aver		51,12			0,82			0,47	0,54	0,79	0,12	1,79	0,50	0,11									0,21			0,53	13,41
Sum		613,50																									

Concentrations at Zingst, DE0009R, 1994 Wet only sampler, Weekly samples, from Runge_9B

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1994		62,50													0,04		1,60		2,90	0,05		0,40					
02-1994		8,70													0,23		4,20		14,00	0,17		0,90					
03-1994		80,30													0,03		0,70		3,90	0,04		0,30					
04-1994		46,30													0,04		0,90		4,50	0,07		0,30					
05-1994		23,30													0,04		3,30		4,50	0,09		0,40					
06-1994		69,70													0,05		1,40		2,60	0,05		0,30					
07-1994		0,80													0,18		4,60		34,00	0,71		2,40					
08-1994		61,40													0,07		1,50		5,00	0,06		0,40					
09-1994		87,10													0,05		0,90		3,40	0,05		0,30					
10-1994		44,30													0,03		0,30		4,10	0,12		0,40					
11-1994		36,00													0,04		1,90		4,00	0,08		0,30					
12-1994		82,40													0,03		1,50		5,70	0,03		0,50					
Max		87,10													0,23		4,60		34,00	0,71		2,40					
Min		0,80													0,03		0,30		2,60	0,03		0,30					
W.Aver.		50,23													0,05		1,31		4,21	0,06		0,37					
Sum		602,80																									

Concentrations at Zingst, DE0009R, 1994 Wet only sampler, Weekly samples, from Runge_9C

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1994		62,70																3,60									
02-1994		9,40																18,00									
03-1994		80,70																5,40									
04-1994		39,30																11,00									
05-1994		22,50																10,00									
06-1994		69,60																16,00									
07-1994																											
08-1994		55,60																10,00									
09-1994		83,90																7,60									
10-1994		41,80																21,00									
11-1994		36,00																11,00									
12-1994		83,00																15,00									
Max		83,90																21,00									
Min		9,40																3,60									
W.Aver.		53,14																10,80									
Sum		584,50																									

Concentrations at Keldsnor, DK0005R, 1994 Wet only sampler, , from DK01L_WO2

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1994										6,05	0,69		0,31	0,23													
02-1994										2,84	0,34		0,37	0,18													
03-1994										1,72	0,24		0,16	0,09													
04-1994										1,32	0,17		0,27	0,11													
05-1994										0,87	0,06		0,38	0,11													
06-1994										1,04	0,14		0,37	0,09													
07-1994										1,06	0,18		1,44	0,54													
08-1994										0,98	0,09		0,14	0,07													
09-1994										1,86	0,18		0,21	0,10													
10-1994										1,32	0,18		0,34	0,15													
11-1994										2,79	0,32		0,20	0,14													
12-1994										2,22	0,25		0,12	0,09													
Max										6,05	0,69		1,44	0,54													
Min										0,87	0,06		0,12	0,07													
W.Aver.																											
Sum																											

Concentrations at Keldsnor, DK0005R, 1994 Wet only sampler, , from DK01L_WO2

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1994					1,08			0,43	0,50			10,30															
02-1994					1,81			1,29	1,45			4,47															
03-1994					0,69			0,46	0,56			3,03															
04-1994					1,24			1,13	0,66			2,40															
05-1994					1,45			1,03	0,81			1,47															
06-1994					1,24			1,00	0,75			1,93															
07-1994					3,02			2,18	1,16			1,63															
08-1994					1,07			0,72	0,48			1,48															
09-1994					0,62			0,51	0,43			3,28															
10-1994					0,48			0,41	0,56			2,27															
11-1994					0,98			0,41	0,50			5,40															
12-1994					0,53			0,28	0,38			4,02															
Max					3,02			2,18	1,45			10,30															
Min					0,48			0,28	0,38			1,47															
W.Aver.																											
Sum																											

Concentrations at Keldsnor, DK0005R, 1994 Wet only sampler, , from DK01L_WO2

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1994			4,45																								
02-1994			4,01																								
03-1994			4,44																								
04-1994			4,54																								
05-1994			4,26																								
06-1994			4,41																								
07-1994			4,37																								
08-1994			4,46																								
09-1994			4,51																								
10-1994			4,75																								
11-1994			4,44																								
12-1994			4,61																								
Max			4,75																								
Min			4,01																								
W.Aver.																											
Sum																											

Concentrations at Keldsnor, DK0005R, 1994 Wet only sampler, , from DK01L_WO2

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1994		54,90																									
02-1994		25,10																									
03-1994		84,70																									
04-1994		32,00																									
05-1994		33,60																									
06-1994		26,40																									
07-1994		7,09																									
08-1994		127,00																									
09-1994		122,00																									
10-1994		35,80																									
11-1994		34,30																									
12-1994		67,70																									
Max		127,00																									
Min		7,09																									
W.Aver.		54,22																									
Sum		650,59																									

Concentrations at Anholt, DK0008R, 1994 Bulk sampler, , from DK01L_BS2_4

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1994										4,32	0,55		0,18	0,18													
02-1994										4,51	0,61		0,30	0,24													
03-1994										5,03	0,60		0,28	0,20													
04-1994										4,26	0,55		0,42	0,19													
05-1994																											
06-1994										5,70	0,70		0,78	0,35													
07-1994										1,65	0,25		0,86	0,61													
08-1994										1,83	0,20		0,16	0,12													
09-1994										4,66	0,47		0,21	0,20													
10-1994										6,10	0,76		0,37	1,92													
11-1994										4,71	0,60		0,26	0,17													
12-1994										6,20	0,74		0,26	0,20													
Max										6,20	0,76		0,86	1,92													
Min										1,65	0,20		0,16	0,12													
W.Aver.										4,11	0,48		0,26	0,28													
Sum																											

Concentrations at Anholt, DK0008R, 1994 Bulk sampler, , from DK01L_BS2_4

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1994					0,93			0,31	0,62			8,23															
02-1994					1,58			0,63	1,12			7,75															
03-1994					0,99			0,46	0,67			9,03															
04-1994					1,45			0,85	0,87			7,53															
05-1994																											
06-1994					1,76			0,56	0,71			9,58															
07-1994					1,90			0,71	1,11			1,80															
08-1994					1,24			0,84	0,55			2,96															
09-1994					0,82			0,37	0,28			8,10															
10-1994					1,27			0,83	0,65			11,00															
11-1994					1,04			0,41	0,45			6,82															
12-1994					0,98			0,46	0,67			11,00															
Max					1,90			0,85	1,12			11,00															
Min					0,82			0,31	0,28			1,80															
W.Aver.					1,05			0,54	0,56			7,26															
Sum																											

Concentrations at Anholt, DK0008R, 1994 Bulk sampler, , from DK01L_BS2_4

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1994			4,36																								
02-1994			4,09																								
03-1994			4,35																								
04-1994			4,42																								
05-1994																											
06-1994			4,28																								
07-1994			4,33																								
08-1994			4,45																								
09-1994			4,74																								
10-1994			4,91																								
11-1994			4,45																								
12-1994			4,41																								
Max			4,91																								
Min			4,09																								
W.Aver.			4,25																								
Sum																											

Concentrations at Anholt, DK0008R, 1994 Bulk sampler, , from DK01L_BS2_4

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1994		80,80																									
02-1994		22,50																									
03-1994		59,60																									
04-1994		29,90																									
05-1994		8,59																									
06-1994		56,80																									
07-1994		20,70																									
08-1994		102,00																									
09-1994		144,00																									
10-1994		34,90																									
11-1994		42,30																									
12-1994		59,50																									
Max		144,00																									
Min		8,59																									
W.Aver.		55,13																									
Sum		661,59																									

Concentrations at Pedersker, DK0020R, 1994 Bulk sampler, , from DK01L_BS1_2

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1994										1,55	0,19		0,11	0,08													
02-1994										1,37	0,20		0,25	0,18													
03-1994										1,24	0,15		0,11	0,08													
04-1994										0,52	0,10		0,42	0,10													
05-1994										0,64	0,19		1,08	0,44													
06-1994										0,86	0,16		0,27	0,69													
07-1994										3,70	1,25		7,45	4,38													
08-1994										2,04	0,27		0,30	0,26													
09-1994										0,99	0,12		0,16	0,23													
10-1994										1,81	0,23		0,18	0,16													
11-1994										1,85	0,34		0,14	0,12													
12-1994										1,40	0,18		0,46	0,08													
Max										3,70	1,25		7,45	4,38													
Min										0,52	0,10		0,11	0,08													
W.Aver.																											
Sum																											

Concentrations at Pedersker, DK0020R, 1994 Bulk sampler, , from DK01L_BS1_2

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1994					0,75			0,34	0,63			2,97															
02-1994					2,48			1,37	1,82			2,30															
03-1994					0,82			0,56	0,73			2,19															
04-1994					1,57			1,13	0,76			0,86															
05-1994					2,24			1,44	1,13			0,97															
06-1994					1,60			0,99	0,86			1,39															
07-1994					9,42			9,05	2,36			3,08															
08-1994					1,05			0,97	0,68			3,17															
09-1994					0,88			1,19	0,52			1,75															
10-1994					0,62			0,66	0,47			3,25															
11-1994					1,02			0,51	0,58			3,06															
12-1994					0,65			0,27	0,53			2,41															
Max					9,42			9,05	2,36			3,25															
Min					0,62			0,27	0,47			0,86															
W.Aver.																											
Sum																											

Concentrations at Pedersker, DK0020R, 1994 Bulk sampler, , from DK01L_BS1_2

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1994			4,33																								
02-1994			3,75																								
03-1994			4,23																								
04-1994			4,39																								
05-1994			4,28																								
06-1994			4,22																								
07-1994			5,52																								
08-1994			4,80																								
09-1994			5,33																								
10-1994			4,83																								
11-1994			4,25																								
12-1994			4,44																								
Max			5,52																								
Min			3,75																								
W.Aver.																											
Sum																											

Concentrations at Pedersker, DK0020R, 1994 Bulk sampler, , from DK01L_BS1_2

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1994		91,00																									
02-1994		21,50																									
03-1994		84,60																									
04-1994		22,90																									
05-1994		25,80																									
06-1994		34,20																									
07-1994		0,84																									
08-1994		49,60																									
09-1994		108,00																									
10-1994		44,80																									
11-1994		40,40																									
12-1994		75,10																									
Max		108,00																									
Min		0,84																									
W.Aver.		49,90																									
Sum		598,74																									

Concentrations at Utö, FI0009R, 1994 Official rain gauge,

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1994	43,70																										
02-1994	3,40																										
03-1994	62,90																										
04-1994	52,60																										
05-1994	17,40																										
06-1994	67,00																										
07-1994	3,30																										
08-1994	44,90																										
09-1994	101,80																										
10-1994	82,30																										
11-1994	27,10																										
12-1994	81,20																										
Max	101,80																										
Min	3,30																										
W.Aver.	48,97																										
Sum																											

Concentrations at Utö, FI0009R, 1994 Bulk sampler, Daily samples, from FI01L_NILU09

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1994		6,40	4,34				45,50																				
02-1994		0,20	4,01		2,46		98,20	2,06	1,68	3,00	0,15	4,95	0,62	2,59													
03-1994		18,60	4,55		1,09		28,40	0,56	0,85	3,54	0,37	6,34	0,37	1,50													
04-1994		38,00	4,71		0,69		19,60	0,38	0,32	0,50	0,05	0,77	0,32	0,38													
05-1994		11,50	4,55		0,44		28,40	0,20	0,36	0,84	0,10	1,40	0,15	0,17													
06-1994		47,80	4,58		0,56		26,10	0,21	0,24	0,69	0,08	1,15	0,15	0,19													
07-1994		2,30	4,25		1,13		56,20	0,52	0,57	0,44	0,04	0,59	0,13	0,31													
08-1994		25,40	4,71		0,36		19,70	0,18	0,27	0,86	0,11	1,53	0,11	0,12													
09-1994		67,80	4,48		0,68		33,00	0,27	0,28	1,06	0,13	1,84	0,15	0,11													
10-1994		47,80	4,45		0,82		35,50	0,27	0,40	3,01	0,39	5,85	0,23	0,22													
11-1994		7,80	4,39		1,19		40,40	0,47	0,46	5,52	0,70	11,02	0,41	1,29													
12-1994		35,10	4,10		1,10		78,60	0,43	0,83	2,63	0,34	4,91	0,17	0,18													
Max		67,80	4,71		2,46		98,20	2,06	1,68	5,52	0,70	11,02	0,62	2,59													
Min		0,20	4,01		0,36		19,60	0,18	0,24	0,44	0,04	0,59	0,11	0,11													
W.Aver.		26,73	4,49		0,72		34,97	0,30	0,40	1,63	0,20	2,99	0,20	0,30													
Sum		308,70																									

Concentrations at Virolahti II, FI0017R, 1994 Official rain gauge,

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1994	60,80																										
02-1994	1,90																										
03-1994	72,70																										
04-1994	60,10																										
05-1994	34,20																										
06-1994	64,50																										
07-1994	3,70																										
08-1994	49,00																										
09-1994	130,00																										
10-1994	61,80																										
11-1994	32,90																										
12-1994	71,90																										
Max	130,00																										
Min	1,90																										
W.Aver.	53,63																										
Sum																											

Concentrations at Virolahti II, FI0017R, 1994 Bulk sampler, Daily samples, from FI01L_NILU17

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1994		49,00	4,61		1,02		24,70	0,31	0,50	0,37	0,10	0,71	0,82	0,29													
02-1994		1,50	4,39		1,26		40,60	0,59	0,75	0,35	0,08	0,54	0,76	0,46													
03-1994		61,20	4,56		0,72		27,80	0,24	0,43	0,27	0,06	0,47	0,45	0,19													
04-1994		56,70	4,49		1,49		32,20	0,88	0,56	0,13	0,06	0,23	0,64	0,10													
05-1994		28,60	5,22		0,45		6,00	0,34	0,21	0,07	0,04	0,06	0,37	0,04													
06-1994		54,90	4,59		0,57		26,00	0,19	0,20	0,11	0,03	0,18	0,19	0,11													
07-1994		2,80	5,12		0,22		7,60	0,16	0,08	0,05	0,01	0,08	0,07	0,03													
08-1994		43,70	4,94		0,66		11,40	0,38	0,27	0,33	0,09	0,63	0,36	0,43													
09-1994		117,60	4,82		0,74		15,30	0,56	0,26	0,21	0,07	0,35	0,23	0,25													
10-1994		53,70	4,51		0,98		30,90	0,40	0,38	0,62	0,10	1,17	0,45	0,37													
11-1994		23,30	4,65		0,61		22,50	0,21	0,34	0,54	0,08	1,01	0,32	0,22													
12-1994		56,60	4,48		0,97		33,30	0,31	0,46	0,46	0,09	0,83	0,59	0,15													
Max		117,60	5,22		1,49		40,60	0,88	0,75	0,62	0,10	1,17	0,82	0,46													
Min		1,50	4,39		0,22		6,00	0,16	0,08	0,05	0,01	0,08	0,07	0,03													
W.Aver.		45,72	4,67		0,84		23,24	0,41	0,36	0,29	0,07	0,53	0,43	0,22													
Sum		548,60																									

Concentrations at Hailuoto, FI0052R, 1994 Bulk sampler, Weekly samples

Month	mm off	mm	pH	k	SO4--	SO4-- corr	H+	NH4+	NO3-	Na+	Mg++	Cl-	Ca++	K+	Cd	Cu	Pb	Hg	Zn	Cr	Co	Ni	As	Fe	Mn	V	Al
	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip
	mm	mm	pH units	uS/cm	mg S/l	mg S/l	ue H/l	mg N/l	mg N/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
01-1994		27,60	4,35	24,30	0,50		44,60	0,13	0,47	0,34	0,03	0,39	0,11	0,04	0,13	1,79	3,29		115,29								
02-1994		15,30	4,22	37,80	0,70		60,40	0,31	0,86	1,17	0,18	2,00	0,40	0,18	0,05	4,87	2,22		11,92								
03-1994		16,30	4,44	19,70	0,36		36,60	0,10	0,44	0,26	0,05	0,38	0,16	0,04	0,05	3,05	2,50		13,37								
04-1994		14,70	4,26	34,50	1,52		55,00	0,51	0,58	0,28	0,07	0,30	0,47	0,08	0,23	3,06	8,96		196,66								
05-1994		9,30	4,74	12,10	0,44		18,30	0,15	0,24	0,19	0,04	0,23	0,24	0,08	0,09	2,36	1,10		89,12								
06-1994		26,60	4,63	17,00	0,56		23,30	0,15	0,33	0,38	0,06	0,27	0,33	0,17	0,02	1,59	0,38		2,51								
07-1994		2,60	4,47	24,40	1,02		34,00	0,23	0,31	0,39	0,10	0,41	0,59	0,28	0,13	5,34	2,52		57,61								
08-1994		21,70	4,96	10,30	0,35		10,90	0,19	0,21	0,27	0,05	0,44	0,16	0,09	0,04	1,57	0,95		21,99								
09-1994		36,60	4,79	10,50	0,27		16,20	0,06	0,16	0,15	0,03	0,23	0,07	0,04	0,02	1,45	0,94		4,51								
10-1994		45,20	4,50	23,50	0,57		31,40	0,19	0,31	1,01	0,12	1,73	0,14	0,09	0,17	2,77	12,49		47,70								
11-1994		25,20	4,62	19,60	0,47		23,70	0,14	0,28	1,00	0,14	1,86	0,16	0,07	0,19	4,68	5,16		18,19								
12-1994		25,40	4,31	26,00	0,53		48,50	0,14	0,46	0,39	0,05	0,62	0,11	0,04	0,06	9,52	2,17		48,69								
Max		45,20	4,96	37,80	1,52		60,40	0,51	0,86	1,17	0,18	2,00	0,59	0,28	0,23	9,52	12,49		196,66								
Min		2,60	4,22	10,30	0,27		10,90	0,06	0,16	0,15	0,03	0,23	0,07	0,04	0,02	1,45	0,38		2,51								
W.Aver.		22,21	4,54	20,75	0,54		31,96	0,17	0,36	0,53	0,08	0,83	0,19	0,08	0,10	3,26	4,24		45,07								
Sum		266,50																									

Concentrations at Haapasaari, FI0055R, 1994 Bulk sampler, Weekly samples

Month	mm off	mm	pH	k	SO4--	SO4-- corr	H+	NH4+	NO3-	Na+	Mg++	Cl-	Ca++	K+	Cd	Cu	Pb	Hg	Zn	Cr	Co	Ni	As	Fe	Mn	V	Al
	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip
	mm	mm	pH units	uS/cm	mg S/l	mg S/l	ue H/l	mg N/l	mg N/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
01-1994		29,50	4,40	31,60	0,98		39,80	0,26	0,72	0,66	0,13	1,02	0,74	0,15	0,06	1,65	4,01		22,33								
02-1994		1,60	4,04	81,00			90,90								0,18	20,37	12,24		56,57								
03-1994		33,70	4,53	24,50	0,89		29,20	0,16	0,57	0,41	0,11	0,70	0,85	0,10	0,04	4,66	2,18		9,20								
04-1994		50,30	4,62	31,50	1,84		24,00	0,77	0,67	0,21	0,14	0,39	1,68	0,13	0,10	1,72	4,14		12,80								
05-1994		23,60	4,59	17,10	0,63		25,50	0,12	0,30	0,27	0,08	0,45	0,50	0,07	0,03	1,31	1,25		4,17								
06-1994		38,40	4,77	28,30	1,80		17,10	0,34	0,51	0,60	0,21	0,82	1,74	0,49	0,06	13,56	1,24		14,43								
07-1994		15,30	5,11	17,30	0,85		7,80	0,39	0,43	0,36	0,12	0,52	0,78	0,33	0,08	2,56	1,68		7,50								
08-1994		39,70	6,03	15,00	0,68		0,90	0,48	0,25	0,56	0,12	0,92	0,65	0,45	0,03	1,39	1,39		6,06								
09-1994		96,30	4,74	18,90	0,75		18,30	0,30	0,30	0,48	0,09	0,84	0,44	0,11	0,14	1,10	4,61		8,28								
10-1994		16,70	4,23	77,40	3,05		58,50	0,81	1,28	3,88	0,84	7,50	2,52	1,02	0,14	4,52	7,25		135,28								
11-1994		12,40	4,69	51,00	1,90		20,30	0,25	1,02	3,19	0,78	5,81	1,99	0,96	0,06	4,08	7,26		85,94								
12-1994		36,20	4,38	40,40	1,19		42,10	0,31	0,78	1,86	0,25	3,11	0,87	0,20	0,08	7,39	3,50		75,41								
Max		96,30	6,03	81,00	3,05		90,90	0,81	1,28	3,88	0,84	7,50	2,52	1,02	0,18	20,37	12,24		135,28								
Min		1,60	4,04	15,00	0,63		0,90	0,12	0,25	0,21	0,08	0,39	0,44	0,07	0,03	1,10	1,24		4,17								
W.Aver.		32,81	4,76	28,02	1,18		23,98	0,38	0,53	0,81	0,18	1,40	1,00	0,26	0,08	3,73	3,45		24,29								
Sum		393,70																									

Concentrations at Preila, LT0015R, 1994 Bulk sampler, Monthly samples

Month	mm off	mm	pH	k	SO4--	SO4-- corr	H+	NH4+	NO3-	Na+	Mg++	Cl-	Ca++	K+	Cd	Cu	Pb	Hg	Zn	Cr	Co	Ni	As	Fe	Mn	V	Al
	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip
	mm	mm	pH units	uS/cm	mg S/l	mg S/l	ue H/l	mg N/l	mg N/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
01-1994		44,30	4,28	81,00	1,93			0,65	0,96	10,90		17,30	1,20	0,50	1,68	39,50	31,60			1,00		9,50					
02-1994		23,30	4,26	72,00	3,08			1,74	2,13	3,20		4,10	1,60	0,30	0,22	2,70	7,10		32,40	0,30		1,30					
03-1994		49,40	4,28	76,00	2,42			0,81	1,25	7,70		13,00	1,50	0,50	0,07	36,20	12,40		60,80	0,80		2,10					
04-1994		47,30	4,35	66,00	2,10			2,89	1,30	3,70		10,00	1,10	0,80	0,22	10,90	3,20		30,50	1,80		4,30					
05-1994		22,70	4,42	90,00	2,43			1,61	1,23	6,70		15,00	2,80	0,80	0,30	23,00	23,10		52,20			17,50					
06-1994		23,30	4,57	180,00	3,00			1,38	2,37	20,50		32,60	1,80	1,20	0,10		5,80		39,60								
07-1994																				1,40							
08-1994		75,00	6,06	60,00	1,18			2,45	0,58	6,20		14,10	0,40	0,90	0,16		1,50		16,60	1,40		2,00					
09-1994		64,30	6,02	96,00	2,58			3,10	1,14	10,60		21,50	1,30	1,20	0,10	8,60	2,20		23,90	1,50		3,30					
10-1994		72,30	4,72	55,00	1,67			0,48	0,53	7,00		10,60	1,10	0,40	0,12	1,70	0,90		6,80			3,80					
11-1994		39,70	4,36	310,00	6,10			0,68	1,16	50,00		59,60	3,60	2,20	0,20	6,80	5,00		15,60								
12-1994		51,00	4,03	61,00	0,94			0,76	0,89	5,60		9,30	0,60	0,40													
Max		75,00	6,06	310,00	6,10			3,10	2,37	50,00		59,60	3,60	2,20	1,68	39,50	31,60		60,80	1,80		17,50					
Min		22,70	4,03	55,00	0,94			0,48	0,53	3,20		4,10	0,40	0,30	0,07	1,70	0,90		6,80	0,30		1,30					
W.Aver		46,60	4,83	94,51	2,28			1,56	1,06	11,05		17,80	1,34	0,82	0,27	10,92	6,84		21,85	0,74		3,50					
Sum		512,60																									

Concentrations at Rucava, LV0010R, 1994 Official rain gauge,

Month	mm off	mm	pH	k	SO4--	SO4-- corr	H+	NH4+	NO3-	Na+	Mg++	Cl-	Ca++	K+	Cd	Cu	Pb	Hg	Zn	Cr	Co	Ni	As	Fe	Mn	V	Al
	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip
	mm	mm	pH units	uS/cm	mg S/l	mg S/l	ue H/l	mg N/l	mg N/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
01-1994	70,40																										
02-1994	14,50																										
03-1994	81,20																										
04-1994	49,50																										
05-1994	22,80																										
06-1994	45,80																										
07-1994																											
08-1994	96,60																										
09-1994	89,40																										
10-1994	119,80																										
11-1994	47,10																										
12-1994	88,00																										
Max	119,80																										
Min	14,50																										
W.Aver.	65,83																										
Sum																											

Concentrations at Rucava, LV0010R, 1994 Bulk sampler, Daily samples, from LV01L_bd10

Month	mm off	mm	pH	k	SO4--	SO4-- corr	H+	NH4+	NO3-	Na+	Mg++	Cl-	Ca++	K+	Cd	Cu	Pb	Hg	Zn	Cr	Co	Ni	As	Fe	Mn	V	Al
	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip
	mm	mm	pH units	uS/cm	mg S/l	mg S/l	ue H/l	mg N/l	mg N/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
01-1994					0,75			0,28	0,53	1,03			1,10	0,37													
02-1994					2,17			1,17	0,85	1,12			5,30	2,42													
03-1994					0,59			1,08	0,84	0,75			0,40	0,35													
04-1994					1,16			0,59	0,63	1,40			0,70	0,47													
05-1994					0,72			1,17	0,41	1,25			0,20	0,60													
06-1994					1,68			1,06	0,65	0,33			0,60	0,48													
07-1994																											
08-1994					0,32			0,40	0,30	1,33			0,50	1,09													
09-1994					0,87			0,59	0,57	1,32			0,80	0,38													
10-1994					0,86			0,38	0,58	0,88			0,60	0,13													
11-1994					0,90			0,61	0,44	0,89			1,80	0,21													
12-1994					0,64			0,45	0,60	1,16			1,20	0,46													
Max					2,17			1,17	0,85	1,40			5,30	2,42													
Min					0,32			0,28	0,30	0,33			0,20	0,13													
W.Aver.					0,82			0,60	0,57	1,05			0,88	0,49													
Sum																											

Concentrations at Rucava, LV0010R, 1994 Bulk sampler, Monthly samples, from LV01L_bm10m

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1994															0,50		1,00										
02-1994															1,00		4,20										
03-1994															0,30	1,00	2,40										
04-1994															0,30	10,00	14,00		31,50								
05-1994															0,20	10,40	21,00		40,00								
06-1994															0,20	3,00	11,00		11,00								
07-1994																											
08-1994															0,10	4,10	1,60		35,40								
09-1994															0,10	1,30	2,30		16,50								
10-1994															0,01	0,70	0,80		5,60								
11-1994															0,10	0,50	3,40		8,40								
12-1994															0,40	1,00	3,30		9,10								
Max															1,00	10,40	21,00		40,00								
Min															0,01	0,50	0,80		5,60								
W.Aver.															0,22	2,28	4,01		13,40								
Sum																											

Concentrations at Zoseni, LV0016R, 1994 Official rain gauge,

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1994	65,90																										
02-1994	14,30																										
03-1994	96,10																										
04-1994	65,20																										
05-1994	71,30																										
06-1994	84,30																										
07-1994																											
08-1994	62,30																										
09-1994	90,10																										
10-1994	73,40																										
11-1994	78,30																										
12-1994	64,10																										
Max	96,10																										
Min	14,30																										
W.Aver.	69,67																										
Sum																											

Concentrations at Zoseni, LV0016R, 1994 Bulk sampler, Monthly samples, from LV01L_bm16

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1994					4,91			2,07	1,60	3,00			14,00	2,00													
02-1994					2,98			2,20	1,63																		
03-1994					1,11			0,91	1,42	0,60			1,00	0,40													
04-1994					4,98			1,07	0,65	0,80			2,80	0,60													
05-1994					4,48			1,45	0,49	0,60			4,60	0,20													
06-1994					4,28			0,92	0,56	0,20			2,00	0,20													
07-1994																											
08-1994					0,82			1,25	0,28	0,20			3,60	0,60													
09-1994					1,05			0,78	0,31	0,40			2,50	0,20													
10-1994					1,30			0,96	0,61	0,40			1,00	0,20													
11-1994					2,88			1,27	0,53	1,40			3,10	0,70													
12-1994					0,29			0,75	0,40	0,40			0,60	0,20													
Max					4,98			2,20	1,63	3,00			14,00	2,00													
Min					0,29			0,75	0,28	0,20			0,60	0,20													
W.Aver.					2,56			1,14	0,71	0,76			3,27	0,49													
Sum																											

Concentrations at Leba, PL0004R, 1994 Bulk sampler, Daily samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1994		87,50			0,69			0,37	0,57	1,23	0,14	2,10	0,10	0,08													
02-1994		28,10			1,17			0,63	1,50	0,75	0,15	1,40	0,30	0,11													
03-1994		69,20			0,60			0,32	0,53	0,65	0,09	1,20	0,20	0,07													
04-1994		12,30			1,12			0,89	0,68	0,80	0,17	1,50	0,50	0,11													
05-1994		38,20			1,16			0,71	0,56	0,36	0,08	0,60	0,20	0,11													
06-1994		35,70			1,02			0,84	0,67	0,46	0,12	1,10	0,30	0,13													
07-1994		3,20			6,96			5,56	2,58	0,68	0,72	2,30	3,00	1,05													
08-1994		81,80			0,63			0,46	0,31	0,58	0,10	1,20	0,10	0,07													
09-1994		78,10			1,07			0,55	0,40	0,45	0,10	0,90	0,20	0,09													
10-1994		110,70			0,77			0,39	0,36	0,80	0,14	1,70	0,20	0,05													
11-1994		54,00			0,66			0,32	0,44	1,12	0,24	2,40	0,20	0,14													
12-1994		62,10			0,70			0,32	0,44	0,93	0,20	2,00	0,30	0,08													
Max		110,70			6,96			5,56	2,58	1,23	0,72	2,40	3,00	1,05													
Min		3,20			0,60			0,32	0,31	0,36	0,08	0,60	0,10	0,05													
W.Aver.		55,07			0,83			0,48	0,51	0,76	0,14	1,52	0,21	0,09													
Sum		660,90																									

Concentrations at Leba, PL0004R, 1994 Wet only sampler,

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1994															0,53	1,89	3,43		6,65								
02-1994															0,41	2,42	6,74		18,25								
03-1994															0,56	0,63	2,99		2,97								
04-1994															0,39	1,21	4,08		26,61								
05-1994															0,30	1,29	5,23		14,18								
06-1994															0,43	0,50	2,36		9,18								
07-1994															0,49	0,61	2,40		19,60								
08-1994															0,45	1,18	4,02		6,90								
09-1994															0,46	2,07	4,34		7,13								
10-1994															0,14	1,03	7,53		19,87								
11-1994															0,27	2,45	6,24		15,00								
12-1994															0,17	3,30	7,70		11,00								
Max															0,56	3,30	7,70		26,61								
Min															0,14	0,50	2,36		2,97								
W.Aver.															0,37	1,62	5,08		11,16								
Sum																											

Concentrations at Rörvik, SE0002R, 1994 Wet only sampler, Daily samples

Month	mm off	mm	pH	k	SO4--	SO4-- corr	H+	NH4+	NO3-	Na+	Mg++	Cl-	Ca++	K+	Cd	Cu	Pb	Hg	Zn	Cr	Co	Ni	As	Fe	Mn	V	Al
	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip
	mm	mm	pH units	uS/cm	mg S/l	mg S/l	ue H/l	mg N/l	mg N/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
01-1994		82,00						0,26	0,47	2,20	0,31	4,00	0,10	0,09													
02-1994		24,40						0,37	0,71	0,78	0,11	1,50	0,10	0,05													
03-1994		71,50						0,59	0,80	1,41	0,18	2,60	0,10	0,07													
04-1994		22,60						0,63	0,54	2,10	0,26	3,70	0,20	0,08													
05-1994		12,60						0,87	0,85	1,19	0,16	2,90	0,10	0,07													
06-1994		60,60						0,66	0,64	0,73	0,11	1,50	0,10	0,04													
07-1994		9,40						1,16	0,86	0,35	0,09	0,70	0,30	0,10													
08-1994		85,40						0,56	0,46	1,12	0,14	2,00	0,10	0,09													
09-1994		169,30						0,14	0,20	1,09	0,16	2,20	0,10	0,07													
10-1994		66,40						0,49	0,64	1,26	0,16	2,30	0,10	0,06													
11-1994		39,70						0,26	0,35	2,57	0,38	5,40	0,20	0,13													
12-1994		111,60						0,50	0,67	2,54	0,37	5,50	0,20	0,15													
Max		169,30						1,16	0,86	2,57	0,38	5,50	0,30	0,15													
Min		9,40						0,14	0,20	0,35	0,09	0,70	0,10	0,04													
W.Aver.		62,96						0,42	0,51	1,53	0,21	3,02	0,13	0,09													
Sum		755,50																									

Concentrations at Hoburgen, SE0008R, 1994 Bulk sampler, Monthly samples

Month	mm off	mm	pH	k	SO4--	SO4-- corr	H+	NH4+	NO3-	Na+	Mg++	Cl-	Ca++	K+	Cd	Cu	Pb	Hg	Zn	Cr	Co	Ni	As	Fe	Mn	V	Al
	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip
	mm	mm	pH units	uS/cm	mg S/l	mg S/l	ue H/l	mg N/l	mg N/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
01-1994		42,40			1,01			0,42	0,68	4,49	0,56	8,30	0,90	0,29													
02-1994		30,00			1,75			0,82	1,07	0,59	0,13	0,90	0,70	0,10													
03-1994		57,60			1,55			0,91	1,32	4,09	0,55	7,90	1,00	0,28													
04-1994		29,90			1,40			0,95	0,82	0,48	0,18	0,80	1,20	0,12													
05-1994		29,30			1,91			1,98	0,69	0,36	0,22	0,70	0,90	1,06													
06-1994																											
07-1994																											
08-1994																											
09-1994		75,80			0,65			0,57	0,42	1,21	0,14	1,70	0,30	0,15													
10-1994																											
11-1994		34,10			0,78			0,48	0,61	1,69	0,21	2,90	0,30	0,16													
12-1994		67,60			0,72			0,43	0,83	2,26	0,29	4,00	0,30	0,21													
Max		75,80			1,91			1,98	1,32	4,49	0,56	8,30	1,20	1,06													
Min		29,30			0,65			0,42	0,42	0,36	0,13	0,70	0,30	0,10													
W.Aver.		45,84			1,11			0,74	0,79	2,10	0,30	3,75	0,63	0,26													
Sum		366,70																									

Concentrations at Vavihill, SE0011R, 1994 Bulk sampler, Monthly samples, from SE01L_bulk11hg

Month	mm off	mm	pH	k	SO4--	SO4-- corr	H+	NH4+	NO3-	Na+	Mg++	Cl-	Ca++	K+	Cd	Cu	Pb	Hg	Zn	Cr	Co	Ni	As	Fe	Mn	V	Al
	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip
	mm	mm	pH units	uS/cm	mg S/l	mg S/l	ue H/l	mg N/l	mg N/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
01-1994																		0,01									
02-1994																		0,02									
03-1994																		0,02									
04-1994																		0,01									
05-1994																		0,04									
06-1994																		0,01									
07-1994																		0,06									
08-1994																		0,02									
09-1994																		0,01									
10-1994																		0,01									
11-1994																		0,01									
12-1994																		0,01									
Max																		0,06									
Min																		0,01									
W.Aver.																											
Sum																											

Concentrations at Vavihill, SE0011R, 1994 Wet only sampler, Daily samples

Month	mm off	mm	pH	k	SO4--	SO4-- corr	H+	NH4+	NO3-	Na+	Mg++	Cl-	Ca++	K+	Cd	Cu	Pb	Hg	Zn	Cr	Co	Ni	As	Fe	Mn	V	Al
	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip
	mm	mm	pH units	uS/cm	mg S/l	mg S/l	ue H/l	mg N/l	mg N/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
01-1994		91,70			0,67			0,42	0,53	1,37	0,16	2,50	0,10	0,11													
02-1994		39,10			1,59			1,07	1,08	0,97	0,14	1,50	0,20	0,10													
03-1994		100,10			1,02			0,77	0,74	1,30	0,16	2,00	0,10	0,07													
04-1994		46,30			0,92			0,80	0,49	0,70	0,09	1,40	0,10	0,05													
05-1994		31,40			1,33			0,84	0,56	0,24	0,05	0,50	0,10	0,04													
06-1994		98,20			1,04			0,76	0,54	0,94	0,14	1,90	0,30	0,05													
07-1994		1,50			5,22			3,30	1,45	0,23	0,10	0,90	0,50	0,17													
08-1994		65,20			1,28			1,00	0,58	1,03	0,15	1,90	0,40	0,11													
09-1994		68,00			0,84			0,57	0,45	0,50	0,09	1,10	0,10	0,06													
10-1994		101,60			0,58			0,40	0,41	0,90	0,11	1,60	0,10	0,04													
11-1994		61,20			0,75			0,43	0,40	0,91	0,13	2,00	0,10	0,09													
12-1994		128,20			0,55			0,47	0,59	0,69	0,10	1,50	0,10	0,15													
Max		128,20			5,22			3,30	1,45	1,37	0,18	2,50	0,50	0,17													
Min		1,50			0,55			0,40	0,40	0,23	0,05	0,50	0,10	0,04													
W.Aver.		69,37			0,88			0,64	0,57	0,92	0,13	1,71	0,15	0,08													
Sum		832,50																									

Concentrations at Aspvreten, SE0012R, 1994 Bulk sampler, Monthly samples, from SE01L_bulk12hg

Month	mm off	mm	pH	k	SO4--	SO4-- corr	H+	NH4+	NO3-	Na+	Mg++	Cl-	Ca++	K+	Cd	Cu	Pb	Hg	Zn	Cr	Co	Ni	As	Fe	Mn	V	Al
	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip	precip
	mm	mm	pH units	uS/cm	mg S/l	mg S/l	ue H/l	mg N/l	mg N/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
01-1994																		0,00									
02-1994																		0,01									
03-1994																		0,02									
04-1994																		0,00									
05-1994																		0,02									
06-1994																		0,00									
07-1994																		0,03									
08-1994																		0,01									
09-1994																		4,64									
10-1994																		6,91									
11-1994																		8,94									
12-1994																		8,71									
Max																		8,94									
Min																		0,00									
W.Aver.																		3,23									
Sum																											

Concentrations at Aspvreten, SE0012R, 1994 Bulk sampler, Monthly samples, from SE01L_bulk12hm

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1994		121,80													0,11	4,72	3,72		9,96	0,32	0,06	0,62	0,28	68,26	13,64	1,25	
02-1994		4,60																									
03-1994		64,70																									
04-1994		25,80													0,07	4,55	2,03		6,18	0,43	0,02	0,44	0,31	30,74	2,51	1,07	
05-1994		14,70													0,07	1,50	2,60		5,84	0,15	0,03	0,32	0,40	22,67	3,02	0,72	
06-1994		43,70													0,04	5,18	1,76		6,68	0,30	0,04	0,28	0,18	53,22	5,70	0,68	
07-1994		9,30													0,03	0,68	1,48		6,89	0,15	0,02	0,14	0,06	20,67	5,07	0,39	
08-1994		78,30													0,03	0,68	1,48		6,89	0,15	0,02	0,14	0,06	20,67	5,07	0,39	
09-1994		153,00													0,12	3,23	1,39		3,42	0,13	0,03	0,34	0,16	19,71	8,36	0,67	
10-1994		38,50													0,09	2,21	2,77		4,52	0,11	0,01	0,22	0,18	11,98	2,07	0,51	
11-1994		62,70													0,07	3,38	1,88		4,24	0,07	0,01	0,19	0,45	9,45	2,11	0,63	
12-1994		100,40													0,11	1,97	3,16		7,55	0,25	0,02	0,40	0,37	8,81	1,57	1,09	
Max		153,00													0,07	1,22	2,29		5,47	0,10	0,01	0,38	0,48	5,98	1,49	0,69	
Min		4,60													0,12	5,18	3,72		9,96	0,43	0,06	0,62	0,48	68,26	13,64	1,25	
W.Aver.		59,79													0,03	0,68	1,39		3,42	0,07	0,01	0,14	0,06	5,98	1,49	0,39	
Sum		717,50													0,09	2,77	2,49		6,09	0,19	0,02	0,35	0,26	24,61	4,95	0,78	

Concentrations at Aspvreten, SE0012R, 1994 Bulk sampler, Monthly samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1994		53,80			0,80			0,34	0,52	0,54	0,08	1,00	0,10	0,05													
02-1994		18,90			1,45			0,66	0,76	0,19	0,04	0,40	0,10	0,06													
03-1994		64,50			0,58			0,32	0,49	0,48	0,07	0,80	0,20	0,04													
04-1994		31,90			0,92			0,58	0,38	0,15	0,06	0,30	0,40	0,08													
05-1994		25,20			0,79			0,58	0,46	0,27	0,10	0,50	0,30	0,26													
06-1994		55,70			0,67			0,36	0,31	0,09	0,04	0,30	0,10	0,13													
07-1994																											
08-1994																											
09-1994		152,90			0,59			0,36	0,27	0,33	0,06	0,60	0,10	0,07													
10-1994		45,50			0,58			0,25	0,36	0,24	0,05	0,50	0,10	0,05													
11-1994		37,40			1,03			0,29	0,45	0,91	0,14	1,60	0,20	0,12													
12-1994		69,40			0,58			0,27	0,64	0,54	0,08	1,30	0,10	0,12													
Max		152,90			1,45			0,66	0,76	0,91	0,14	1,60	0,40	0,26													
Min		18,90			0,58			0,25	0,27	0,09	0,04	0,30	0,10	0,04													
W.Aver.		55,52			0,70			0,36	0,42	0,38	0,07	0,75	0,14	0,09													
Sum		555,20																									

Concentrations at Arup, SE0051R, 1994 Bulk sampler, Monthly samples, from SE01L_bulk51hm

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1994		72,30													0,05	6,10	2,74		6,69	0,14	0,02	0,41	0,34	10,29	1,83	1,01	
02-1994		43,80													0,13	26,84	5,41		22,68	0,20	0,06	0,95	0,80	31,04	3,06	2,92	
03-1994		86,60													0,09	16,45	3,38		10,77	0,59	0,04	0,66	0,25	35,07	4,32	0,96	
04-1994		38,00													0,09	16,45	3,38		10,77	0,59	0,04	0,66	0,25	35,07	4,32	0,96	
05-1994		17,70													0,11	4,72	3,72		9,96	0,32	0,06	0,62	0,28	68,26	13,64	0,77	
06-1994		67,90													0,07	3,62	2,99		8,03	0,37	0,05	0,34	0,32	56,80	43,47	0,80	
07-1994																											
08-1994		83,50													0,09	2,11	3,48		6,21	0,18	0,04	0,28	0,46	38,58	7,60	0,66	
09-1994		210,00													0,07	2,23	2,31		4,07	0,15	0,01	0,22	0,14	9,73	2,76	0,43	
10-1994		23,10													0,09	4,69	3,44		9,07	0,18	0,02	0,49	0,26	11,59	4,00	0,99	
11-1994		54,80													0,08	1,12	3,36		6,57	0,26	0,02	0,36	0,35	15,06	5,73	1,07	
12-1994		177,80													0,08	1,54	2,68		7,65	0,16	0,02	0,66	0,20	9,26	2,55	0,75	
Max		210,00													0,13	26,84	5,41		22,68	0,59	0,06	0,95	0,80	68,26	43,47	2,92	
Min		17,70													0,05	1,12	2,31		0,69	0,14	0,01	0,22	0,14	9,26	1,83	0,43	
W.Aver.		79,59													0,08	5,81	3,02		7,32	0,25	0,03	0,46	0,28	22,32	6,94	0,86	
Sum		875,50																									

Concentrations at Arup, SE0051R, 1994 Bulk sampler, Monthly samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1994		63,90			0,96			0,54	0,68	2,21	0,26	4,00	0,10	0,13													
02-1994		80,10			1,21			0,81	0,87	0,42	0,08	0,80	0,40	0,09													
03-1994		145,70			1,03			0,82	0,67	1,68	0,21	3,10	0,20	0,14													
04-1994		44,00			1,12			0,67	0,46	0,52	0,08	1,30	0,40	0,24													
05-1994		38,10			1,47			1,04	0,58	1,26	0,09	1,20	0,30	0,22													
06-1994		80,90			1,13			0,90	0,52	0,72	0,12	1,80	0,30	0,10													
07-1994																											
08-1994		105,10			1,04			0,97	0,44	0,37	0,09	0,90	0,30	0,21													
09-1994		201,30			0,63			0,40	0,33	0,41	0,06	0,90	0,10	0,10													
10-1994		47,10			0,77			0,52	0,66	0,70	0,09	1,40	0,10	0,12													
11-1994		66,90			0,85			0,38	0,41	1,47	0,18	2,70	0,20	0,13													
12-1994		168,90			0,47			0,31	0,46	0,54	0,11	1,40	0,10	0,10													
Max		201,30			1,47			1,04	0,87	2,21	0,26	4,00	0,40	0,24													
Min		38,10			0,47			0,31	0,33	0,37	0,06	0,80	0,10	0,09													
W.Aver.		94,73			0,88			0,62	0,52	0,86	0,12	1,71	0,20	0,13													
Sum		1042,00																									

Concentrations at Rickleå, SE0053R, 1994 Bulk sampler, Monthly samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1994		47,00			0,34			0,11	0,31	0,40	0,09	0,80	0,10	0,07													
02-1994		4,00			0,66			0,35	0,56	0,27	0,04	0,60	0,10	0,10													
03-1994		49,00			0,75			0,29	0,48	0,55	0,09	0,70	0,20	0,09													
04-1994		22,50			1,34			0,86	0,66	0,33	0,05	0,40	0,90	0,17													
05-1994		29,00			0,73			1,07	0,24	0,19	0,05	0,40	0,20	0,22													
06-1994		73,30			0,33			0,99	0,13	0,12	0,04	0,20		0,28													
07-1994		15,90			0,55			1,15	0,32	0,18	0,02	0,40	0,10	0,41													
08-1994		14,50			0,56			0,62	0,35	0,22	0,08	0,50	0,20	0,38													
09-1994		79,30			0,28			0,08	0,13	0,31	0,05	0,50	0,10	0,08													
10-1994		16,60			0,24			0,11	0,16	0,09	0,05	0,20	0,10	0,18													
11-1994		43,10			0,25			0,04	0,20	0,14	0,03	0,30	0,10	0,10													
12-1994		43,70			0,63			0,23	0,44	0,86	0,12	1,50	0,10	0,09													
Max		79,30			1,34			1,15	0,66	0,86	0,12	1,50	0,90	0,41													
Min		4,00			0,24			0,04	0,13	0,09	0,02	0,20	0,10	0,07													
W.Aver.		36,49			0,48			0,44	0,28	0,33	0,06	0,56	0,15	0,16													
Sum		437,90																									

Concentrations at Keldsnor, DK0005R, 1995 Wet only sampler, , from DK01L_WO2

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1995										2,25	0,23		0,16	0,14													
02-1995										2,48	0,25		0,12	0,12													
03-1995										4,20	0,53		0,20	0,16													
04-1995										0,79	0,09		0,07	0,03													
05-1995										0,61	0,11		0,22	0,47													
06-1995										0,29	0,13		0,53	0,53													
07-1995										0,41	0,05		0,09	0,06													
08-1995										0,92	0,13		0,25	0,10													
09-1995										1,81	0,19		0,15	0,11													
10-1995										1,33	0,19		0,25	0,24													
11-1995										2,30	0,28		0,45	0,23													
12-1995										2,57	0,33		0,66	0,23													
Max										4,20	0,53		0,66	0,53													
Min										0,29	0,05		0,07	0,03													
W.Aver.																											
Sum																											

Concentrations at Keldsnor, DK0005R, 1995 Wet only sampler, , from DK01L_WO2

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1995					0,49			0,16	0,33			3,67															
02-1995					0,60			0,36	0,49			4,09															
03-1995					1,04			0,79	0,52			8,24															
04-1995					0,74			0,56	0,64			1,27															
05-1995					1,36			0,57	0,52			0,95															
06-1995					0,77			0,60	1,19			0,74															
07-1995					0,70			0,83	0,66			0,76															
08-1995					1,51			1,02	0,64			1,99															
09-1995					0,68			0,34	0,40			3,42															
10-1995					0,76			0,74	0,68			2,63															
11-1995					0,78			0,52	0,47			4,33															
12-1995					1,15			0,82	0,91			4,52															
Max					1,51			1,02	1,19			8,24															
Min					0,49			0,16	0,33			0,74															
W.Aver.																											
Sum																											

Concentrations at Keldsnor, DK0005R, 1995 Wet only sampler, , from DK01L_WO2

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1995			4,65																								
02-1995			4,61																								
03-1995			4,88																								
04-1995			4,49																								
05-1995			4,40																								
06-1995			4,29																								
07-1995			4,75																								
08-1995			4,33																								
09-1995			4,67																								
10-1995			4,78																								
11-1995			5,38																								
12-1995			4,70																								
Max			5,38																								
Min			4,29																								
W.Aver.																											
Sum																											

Concentrations at Keldsnor, DK0005R, 1995 Wet only sampler, , from DK01L_WO2

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1995		106,00																									
02-1995		41,20																									
03-1995		37,20																									
04-1995		33,50																									
05-1995		46,60																									
06-1995		8,61																									
07-1995		42,30																									
08-1995		24,90																									
09-1995		59,10																									
10-1995		23,10																									
11-1995		24,90																									
12-1995		27,20																									
Max		106,00																									
Min		8,61																									
W.Aver.		40,38																									
Sum		484,61																									

Concentrations at Anholt, DK0008R, 1995 Bulk sampler, , from DK01L_BS2_4

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1995										5,00	0,66		0,26	0,22													
02-1995										7,48	0,91		0,32	0,25													
03-1995										6,10	0,82		0,34	0,28													
04-1995										6,48	0,86		0,56	0,75													
05-1995										2,34	0,31		0,36	0,24													
06-1995										1,37	0,18		0,16	0,31													
07-1995										2,56	0,30		0,41	0,17													
08-1995										4,30	0,55		1,13	0,38													
09-1995										5,43	0,63		0,26	0,30													
10-1995										3,43	0,42		0,23	0,21													
11-1995										11,10	1,26		0,47	0,46													
12-1995										6,79	0,89		0,39	0,30													
Max										11,10	1,26		1,13	0,75													
Min										1,37	0,18		0,16	0,17													
W.Aver.										5,45	0,66		0,37	0,30													
Sum																											

Concentrations at Anholt, DK0008R, 1995 Bulk sampler, , from DK01L_BS2_4

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1995					1,04			0,38	0,69			10,10															
02-1995					1,12			0,39	0,55			13,60															
03-1995					1,14			0,65	0,67			11,60															
04-1995					1,30			0,79	0,52			11,60															
05-1995					1,52			0,72	0,68			3,75															
06-1995					0,94			0,29	0,67			2,37															
07-1995					1,48			0,70	0,63			3,91															
08-1995					2,18			1,10	1,21			5,70															
09-1995					1,04			0,34	0,26			10,00															
10-1995					1,12			0,76	0,75			6,27															
11-1995					1,43			0,26	0,59			20,10															
12-1995					1,71			0,70	1,58			11,00															
Max					2,18			1,10	1,58			20,10															
Min					0,94			0,26	0,26			2,37															
W.Aver.					1,28			0,55	0,67			9,47															
Sum																											

Concentrations at Anholt, DK0008R, 1995 Bulk sampler, , from DK01L_BS2_4

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1995			4,28																								
02-1995			4,44																								
03-1995			4,52																								
04-1995			4,83																								
05-1995			4,27																								
06-1995			4,28																								
07-1995			4,39																								
08-1995			4,74																								
09-1995			4,90																								
10-1995			4,52																								
11-1995			4,37																								
12-1995			4,15																								
Max			4,90																								
Min			4,15																								
W.Aver.			4,48																								
Sum																											

Concentrations at Anholt, DK0008R, 1995 Bulk sampler, , from DK01L_BS2_4

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1995		57,00																									
02-1995		64,80																									
03-1995		46,70																									
04-1995		36,40																									
05-1995		66,60																									
06-1995		49,20																									
07-1995		41,20																									
08-1995		17,50																									
09-1995		87,60																									
10-1995		59,10																									
11-1995		57,50																									
12-1995		9,41																									
Max		87,60																									
Min		9,41																									
W.Aver.		49,33																									
Sum		592,01																									

Concentrations at Pedersker, DK0020R, 1995 Bulk sampler, , from DK01L_BS1_2

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1995										1,85	0,22		0,19	0,10													
02-1995										2,32	0,29		0,17	0,11													
03-1995										2,41	0,31		0,25	0,13													
04-1995										0,96	0,15		0,23	0,08													
05-1995										0,77	0,10		0,21	0,13													
06-1995										3,58	0,14		0,29	1,14													
07-1995										0,39	0,06		0,16	0,55													
08-1995										1,13	0,14		0,23														
09-1995										3,77	0,49		0,46														
10-1995										2,43	0,33		0,30	0,20													
11-1995										2,84	0,34		0,21	0,15													
12-1995										1,04	0,18		0,29	0,12													
Max										3,77	0,49		0,46	1,14													
Min										0,39	0,06		0,16	0,08													
W.Aver.																											
Sum																											

Concentrations at Pedersker, DK0020R, 1995 Bulk sampler, , from DK01L_BS1_2

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1995					0,58			0,27	0,45			2,59															
02-1995					0,82			0,35	0,64			4,07															
03-1995					1,03			0,90	0,90			4,09															
04-1995					0,87			0,75	0,65			1,60															
05-1995					1,09			0,79	0,54			1,07															
06-1995					1,68			1,68	1,26			1,70															
07-1995					1,16			1,35	0,59			0,60															
08-1995					0,71							1,37															
09-1995					1,77							6,84															
10-1995					1,33			1,10	1,27			4,15															
11-1995					0,95			0,92	0,66			5,18															
12-1995					1,95			1,15	1,18			2,02															
Max					1,95			1,68	1,27			6,84															
Min					0,58			0,27	0,45			0,60															
W.Aver.																											
Sum																											

Concentrations at Pedersker, DK0020R, 1995 Bulk sampler, , from DK01L_BS1_2

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1995			4,37																								
02-1995			4,32																								
03-1995			4,41																								
04-1995			4,54																								
05-1995			4,49																								
06-1995			5,78																								
07-1995			5,12																								
08-1995			6,51																								
09-1995			4,75																								
10-1995			4,33																								
11-1995			4,41																								
12-1995			4,01																								
Max			6,51																								
Min			4,01																								
W.Aver.																											
Sum																											

Concentrations at Pedersker, DK0020R, 1995 Bulk sampler, , from DK01L_BS1_2

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1995		78,50																									
02-1995		45,50																									
03-1995		30,90																									
04-1995		32,90																									
05-1995		42,30																									
06-1995		39,80																									
07-1995		56,00																									
08-1995		44,40																									
09-1995		55,50																									
10-1995		22,10																									
11-1995		38,30																									
12-1995		11,20																									
Max		78,50																									
Min		11,20																									
W.Aver.		41,45																									
Sum		497,40																									

Concentrations at Utö, FI0009R, 1995 Official rain gauge,

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1995	56,10																										
02-1995	49,90																										
03-1995	46,10																										
04-1995	22,50																										
05-1995	20,50																										
06-1995	38,30																										
07-1995	13,00																										
08-1995	34,60																										
09-1995	32,20																										
10-1995	51,50																										
11-1995	62,10																										
12-1995	21,50																										
Max	62,10																										
Min	13,00																										
W.Aver.	37,36																										
Sum																											

Concentrations at Utö, FI0009R, 1995 Bulk sampler, Daily samples, from FI01L_NILU09

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1995		7,70	4,02		2,20		96,30	0,73	1,17	8,74	1,12	16,01	0,57	0,50													
02-1995		12,10	4,63		0,69		23,60	0,53	0,64	4,68	0,49	8,52	0,32	1,32													
03-1995		12,00	4,50		0,74		31,30	0,38	0,62	2,86	0,28	4,44	0,29	0,52													
04-1995		16,60	4,38		1,04		41,80	0,43	0,65	1,35	0,15	2,01	0,31	0,46													
05-1995		29,30	4,21		1,36		62,20	0,62	0,56	0,53	0,07	0,85	0,21	0,19													
06-1995		33,20	4,63		0,70		23,40	0,42	0,35	0,33	0,07	0,54	0,33	0,14													
07-1995		8,10	4,71		0,51		19,70	0,21	0,25	1,20	0,16	2,12	0,29	0,12													
08-1995		26,30	4,71		0,51		19,50	0,27	0,33	0,85	0,10	1,41	0,18	0,26													
09-1995		17,30																									
10-1995		23,60	4,35		1,06		45,10	0,70	1,02	2,99	0,39	5,34	0,36	0,54													
11-1995		11,50	4,34		0,73		45,70	0,38	1,16	4,06	0,49	6,21	0,35	0,62													
12-1995		5,90	4,34		0,76		45,40	0,60	0,72	2,77	0,28	4,40	0,30	0,95													
Max		33,20	4,71		2,20		96,30	0,73	1,17	8,74	1,12	16,01	0,57	1,32													
Min		5,90	4,02		0,51		19,50	0,21	0,25	0,33	0,07	0,54	0,18	0,12													
W.Aver.		16,97	4,08		0,85		35,49	0,44	0,57	1,83	0,22	3,11	0,27	0,38													
Sum		203,60																									

Concentrations at Virolahti II, FI0017R, 1995 Official rain gauge,

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1995	38,20																										
02-1995	53,00																										
03-1995	78,30																										
04-1995	25,80																										
05-1995	72,30																										
06-1995	30,30																										
07-1995	45,10																										
08-1995	46,60																										
09-1995	93,20																										
10-1995	52,50																										
11-1995	66,20																										
12-1995	30,60																										
Max	93,20																										
Min	25,80																										
W.Aver.	52,68																										
Sum																											

Concentrations at Rucava, LV0010R, 1995 Official rain gauge,

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1995	76,60																										
02-1995	64,40																										
03-1995	56,40																										
04-1995	35,20																										
05-1995	142,97																										
06-1995	106,70																										
07-1995	50,20																										
08-1995	50,40																										
09-1995	105,10																										
10-1995	44,80																										
11-1995	68,75																										
12-1995	29,40																										
Max	142,97																										
Min	29,40																										
W.Aver.	69,24																										
Sum																											

Concentrations at Rucava, LV0010R, 1995 Bulk sampler, Daily samples, from LV01L_bd10

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1995			4,70			0,54		0,38	0,51	1,08			0,85	0,24													
02-1995			4,36			0,90		0,72	0,80	0,71			2,15	0,17													
03-1995			5,17			0,51		0,74	0,53	0,75			1,34	0,51													
04-1995			4,75			0,86		0,51	0,53	0,59			0,42	0,07													
05-1995			4,41			0,48		0,60	0,41	0,76			0,07	0,18													
06-1995			4,95			0,80		0,72	0,34	0,78			0,21	0,21													
07-1995			4,79			1,32		1,08	0,54	1,30			0,20	0,30													
08-1995			5,77			0,44		0,41	0,18	0,82			0,26	0,31													
09-1995			5,06			0,31		0,23	0,63	0,51			1,80	0,18													
10-1995			4,26			0,87		0,76	0,60	0,45			1,30	0,22													
11-1995			4,23			2,01		0,84	0,98	1,06			0,95	0,24													
12-1995			4,86			0,82		0,72	0,76	1,07			1,51	0,64													
Max			5,77			2,01		1,08	0,98	1,30			2,15	0,64													
Min			4,23			0,31		0,23	0,18	0,45			0,07	0,07													
W.Aver.			4,75			0,76		0,61	0,55	0,81			0,85	0,24													
Sum																											

Concentrations at Rucava, LV0010R, 1995 Bulk sampler, Monthly samples, from LV01L_bm10m

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1995				34,00								4,00			0,11	0,50	3,17		10,40								
02-1995				70,00								3,50			0,25	2,50	9,00		10,20								
03-1995				74,00								6,40			0,23	1,40	6,33		18,90								
04-1995				22,00								1,80			0,09	1,30	6,00		21,70								
05-1995				17,00								1,40			0,09	1,10	3,20		14,10								
06-1995				14,00								1,40			0,08	1,10	4,80		9,50								
07-1995				40,00								1,80			0,13	1,50	7,41		28,40								
08-1995				14,00								1,40			1,00	1,30	2,16		18,00								
09-1995				25,00								3,90			0,23	0,60	2,88		29,60								
10-1995				39,00								3,20			0,09	0,40	3,68		27,00								
11-1995				41,00								3,00			0,10	1,20	6,64		23,00								
12-1995				54,00								4,00			0,24	3,30	12,00		29,00								
Max				74,00								6,40			1,00	3,30	12,00		29,60								
Min				14,00								1,40			0,08	0,40	2,16		9,50								
W.Aver.				33,07								2,82			0,19	1,20	4,96		18,53								
Sum																											

Concentrations at Zoseni, LV0016R, 1995 Official rain gauge,

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1995	85,90																										
02-1995	89,60																										
03-1995	71,80																										
04-1995	50,10																										
05-1995	84,40																										
06-1995	86,10																										
07-1995	32,70																										
08-1995	64,60																										
09-1995	34,60																										
10-1995	98,30																										
11-1995	27,30																										
12-1995	42,80																										
Max	98,30																										
Min	27,30																										
W.Aver.	64,02																										
Sum																											

Concentrations at Zoseni, LV0016R, 1995 Bulk sampler, Monthly samples, from LV01L_bm16m

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1995				16,00								2,10			0,12	2,30	10,67		5,30								
02-1995				31,00								2,10			0,10	1,00	1,51		4,60								
03-1995				29,00								2,50			0,12	4,00	6,33		7,30								
04-1995				80,00								2,50			0,75	30,00	26,40		95,00								
05-1995				28,00								1,40			0,12	1,20	4,20		12,00								
06-1995				45,00								1,80			0,03	2,10	1,00		9,50								
07-1995				38,00								2,17			0,33	3,80	3,69		28,40								
08-1995				18,00								1,60			0,07	1,20	0,80		10,00								
09-1995				7,00								1,40			0,01	1,80	0,58		7,40								
10-1995				13,00								1,30			0,10	2,00	4,16		13,00								
11-1995				14,00								1,60			0,14	1,30	12,00		26,00								
12-1995				23,00								1,70			0,08	2,00	4,96		20,00								
Max				80,00								2,50			0,75	30,00	26,40		95,00								
Min				7,00								1,30			0,01	1,00	0,58		4,60								
W.Aver.				28,34								1,84			0,14	3,83	5,75		16,48								
Sum																											

Concentrations at Zoseni, LV0016R, 1995 Bulk sampler, Weekly samples, from LV01L_bw16

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1995			6,26			0,82		0,90	0,60	0,40			0,30	0,20													
02-1995			4,35			1,60		1,21	1,60	0,20			0,60	0,10													
03-1995			4,71			3,12		0,92	3,12	0,40			0,40	0,20													
04-1995			6,38			3,84		2,02	3,84	3,90			2,60	1,60													
05-1995			5,70			2,51		1,30	2,51	1,80			0,20	0,20													
06-1995			6,05			0,58		1,99	0,58	0,80			0,40	0,30													
07-1995			6,31			0,64		1,09	0,64																		
08-1995			5,40			0,57		0,46	0,57	2,60			0,20	0,10													
09-1995			5,67			0,23		0,19	0,23	0,40			0,20	0,10													
10-1995			5,04			0,47		0,89	0,47	0,20			0,60	0,20													
11-1995			4,61			0,88		1,04	0,88	0,50			0,40	0,20													
12-1995			5,84			1,13		1,26	1,13	0,60			0,30	0,10													
Max			6,40			3,84		2,02	3,84	3,90			2,60	1,60													
Min			4,35			0,23		0,19	0,23	0,20			0,20	0,10													
W.Aver.			5,56			1,40		1,14	1,38	0,96			0,51	0,26													
Sum																											

Concentrations at Leba, PL0004R, 1995 Bulk sampler, Daily samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1995		63,00			1,00			0,36	0,56	1,21	0,15	2,16		0,22													
02-1995		26,00			1,13			0,65	0,82	2,09	0,21	3,80		0,26													
03-1995		27,00			1,19			0,98	0,97	3,06	0,22	5,65		0,23													
04-1995		41,00			1,01			0,53	0,50	1,83	0,14	3,20		0,05													
05-1995		62,20			1,13			0,77	0,73	0,24	0,16	0,65		0,07													
06-1995		51,50			1,30			0,64	0,42	0,24	0,20	0,50		0,17													
07-1995		28,40			1,24			0,85	0,65	0,49	0,33	0,75		0,23													
08-1995		48,80			0,55			0,34	0,29	1,44	0,23	2,91		0,20													
09-1995		115,10			0,41			0,20	0,15	1,85	0,18	3,72		0,12													
10-1995		27,50			0,94			0,59	0,85	0,69	0,21	1,37		0,09													
11-1995		32,30			0,58			0,24	0,29	2,04	0,21	3,82		0,13													
12-1995		37,70			1,05			0,77	0,87	0,92	0,21	1,80		0,07													
Max		115,10			1,30			0,98	0,97	3,06	0,33	5,65		0,26													
Min		26,00			0,41			0,20	0,15	0,24	0,14	0,50		0,05													
W.Aver.		46,71			0,89			0,51	0,51	1,31	0,19	2,51		0,15													
Sum		560,50																									

Concentrations at Leba, PL0004R, 1995 Wet only sampler,

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1995															0,15	2,18	1,12		9,25								
02-1995															0,39	3,08	3,42		12,37								
03-1995															0,30	3,10	3,15		15,60								
04-1995															0,31	2,07	1,10		11,10								
05-1995															0,26	2,47	1,50		12,71								
06-1995															0,13	1,93	3,20		11,68								
07-1995															0,08	2,40	2,76		10,48								
08-1995															0,04	1,19	0,86		7,01								
09-1995															0,02	0,89	0,56		4,86								
10-1995															0,07	1,86	1,81		12,00								
11-1995															0,13	2,50	1,66		12,02								
12-1995															0,15	2,12	2,50		15,70								
Max															0,39	3,10	3,42		15,70								
Min															0,02	0,89	0,56		4,86								
W.Aver.															0,15	1,93	1,66		10,14								
Sum																											

Concentrations at Leba, PL0004R, 1995 Wet only sampler, Biweekly samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1995		63,00																									
02-1995		26,00																									
03-1995		27,00																									
04-1995		41,00																									
05-1995		62,20																									
06-1995		51,50																									
07-1995		28,40																									
08-1995		48,80																									
09-1995		115,10																									
10-1995		27,50																									
11-1995		32,40																									
12-1995		37,70																									
Max		115,10																									
Min		26,00																									
W.Aver.		46,72																									
Sum		560,60																									

Concentrations at Aspvreten, SE0012R, 1995 Bulk sampler, Monthly samples, from SE01L_bulk12hg

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1995																		0,01									
02-1995																		0,02									
03-1995																		0,02									
04-1995																		0,01									
05-1995																		0,01									
06-1995																		0,01									
07-1995																		0,05									
08-1995																		0,01									
09-1995																		0,01									
10-1995																		0,03									
11-1995																		0,01									
12-1995																		0,04									
Max																		0,05									
Min																		0,01									
W.Aver.																											
Sum																											

Concentrations at Aspvreten, SE0012R, 1995 Bulk sampler, Monthly samples, from SE01L_bulk12hm

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1995		61,00													0,13		5,15		10,50	0,30	0,03	0,50	0,95	23,10	3,40	1,68	
02-1995		61,00													0,06		2,27		6,80	0,17	0,01	0,21	0,40	11,40	1,30	0,53	
03-1995		39,00													0,13		4,15		17,00	0,40	0,05	0,53	1,01	26,70	3,20	1,22	
04-1995		80,00													0,06		1,48		7,20	0,18	0,02	0,21	0,23	19,70	1,50	0,48	
05-1995		39,00													0,05		2,14		6,50	0,14	0,02	0,21	0,15	23,80	2,20	0,58	
06-1995		29,00													0,08		2,81		20,60	0,14	0,02	0,22	0,20	24,90	6,50	0,41	
07-1995		58,00													0,05		1,81		10,00	0,11	0,02	0,20	0,16	24,40	3,70	0,36	
08-1995		7,00													0,06		2,05		8,80	0,34	0,07	0,49	0,17	98,60	19,50	1,20	
09-1995		65,00													0,04		2,24		4,60	0,09	0,02	0,20	0,16	19,30	2,90	0,49	
10-1995		14,00													0,12		4,58		22,60	0,21	0,04	0,43	0,51	37,10	7,60	1,30	
11-1995		22,00													0,04		1,44		7,10	0,31	0,03	0,28	0,17	22,80	2,40	0,60	
12-1995		8,00													0,11		3,89		18,90	1,49	0,04	1,17	0,41	26,60	3,10	2,25	
Max		80,00													0,13		5,15		22,60	1,49	0,07	1,17	1,01	98,60	19,50	2,25	
Min		7,00													0,04		1,44		4,60	0,09	0,01	0,20	0,15	11,40	1,30	0,36	
W.Aver.		40,25													0,07		2,67		9,75	0,22	0,02	0,30	0,39	22,56	3,17	0,76	
Sum		483,00																									

Concentrations at Aspvreten, SE0012R, 1995 Bulk sampler, Monthly samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1995		54,00			0,82			0,30	0,61	0,71	0,11	1,33	0,31	0,12													
02-1995		62,00			0,41			0,18	0,39	0,46	0,06	0,86	0,06	0,07													
03-1995		40,00			1,02			0,53	0,78	1,00	0,15	1,60	0,48	0,12													
04-1995		89,00			0,53			0,26	0,28	0,17	0,04	0,33	0,13	0,03													
05-1995		74,00			0,68			0,42	0,36	0,05	0,02	0,17	0,12	0,04													
06-1995		61,00			0,60			0,47	0,30	0,06	0,05	0,19	0,16	0,35													
07-1995		57,00			0,58			0,28	0,21	0,16	0,05	0,30	0,22	0,18													
08-1995		13,00			0,82			0,32	0,36	0,15	0,11	0,28	0,46	0,21													
09-1995		75,00			0,58			0,28	0,25	0,35	0,07	0,66	0,22	0,06													
10-1995		25,00			1,03			0,60	0,75	0,42	0,11	0,76	0,36	0,10													
11-1995		42,00			0,29			0,11	0,33	0,28	0,04	0,51	0,17	0,06													
12-1995		11,00			0,82			0,29	0,63	0,73	0,09	1,12	0,23	0,08													
Max		89,00			1,03			0,60	0,78	1,00	0,15	1,60	0,48	0,35													
Min		11,00			0,29			0,11	0,21	0,05	0,02	0,17	0,06	0,03													
W.Aver.		50,25			0,63			0,32	0,39	0,33	0,07	0,61	0,20	0,11													
Sum		603,00																									

Concentrations at Arup, SE0051R, 1995 Bulk sampler, Monthly samples, from SE01L_bulk51hm

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1995		112,00													0,06		2,90		5,60	0,22	0,02	0,39	0,32	13,60	3,40	0,89	
02-1995		84,00													0,07		2,90		6,80	0,25	0,03	0,37	0,17	15,50	3,30	0,92	
03-1995		39,00													0,14		10,67		23,10	0,72	0,07	0,79	0,74	49,40	11,20	1,65	
04-1995		43,00													0,08		1,17		9,30	0,12	0,03	0,57	0,11	24,00	2,60	0,49	
05-1995		32,00													0,05		2,02		11,40	0,24	0,07	0,32	0,19	36,30	9,10	0,63	
06-1995		38,00													0,07		2,83		19,30	0,18	0,03	0,31	0,27	17,50	30,70	0,71	
07-1995		44,00													0,07		3,70		17,80	0,16	0,04	0,36	0,43	46,10	8,90	0,69	
08-1995		13,00													0,12		4,68		17,80	0,40	0,10	0,54	0,51	153,50	13,30	1,00	
09-1995		115,00													0,05		2,89		6,40	0,09	0,02	0,22	0,24	12,70	2,60	0,54	
10-1995		34,00													0,09		4,00		17,60	0,16	0,04	0,48	0,26	25,00	9,60	1,05	
11-1995		73,00													0,14		5,78		14,00	0,28	0,05	0,85	0,48	19,20	3,20	1,63	
12-1995		27,00													0,19		6,85		22,40	0,46	0,07	2,12	0,90	30,50	4,00	2,38	
Max		115,00													0,19		10,67		23,10	0,72	0,10	2,12	0,90	153,50	30,70	2,38	
Min		13,00													0,05		1,17		5,60	0,09	0,02	0,22	0,11	12,70	2,60	0,49	
W.Aver.		54,50													0,08		3,83		11,58	0,24	0,04	0,51	0,34	24,72	6,42	0,97	
Sum		654,00																									

Concentrations at Arup, SE0051R, 1995 Bulk sampler, Monthly samples

Month	mm off precip mm	mm precip mm	pH precip pH units	k precip uS/cm	SO4-- precip mg S/l	SO4-- corr precip mg S/l	H+ precip ue H/l	NH4+ precip mg N/l	NO3- precip mg N/l	Na+ precip mg/l	Mg++ precip mg/l	Cl- precip mg/l	Ca++ precip mg/l	K+ precip mg/l	Cd precip ug/l	Cu precip ug/l	Pb precip ug/l	Hg precip ug/l	Zn precip ug/l	Cr precip ug/l	Co precip ug/l	Ni precip ug/l	As precip ug/l	Fe precip ug/l	Mn precip ug/l	V precip ug/l	Al precip ug/l
01-1995		116,00			0,73			0,39	0,48	1,04	0,15	1,97	0,32	0,13													
02-1995		132,00			0,79			0,59	0,70	1,38	0,18	2,72	0,14	0,13													
03-1995		77,00			1,43			1,35	0,89	3,80	0,45	6,67	0,42	0,22													
04-1995		78,00			0,60			0,60	0,44	0,50	0,09	0,86	0,31	0,08													
05-1995		38,00			1,00			2,04	0,65	0,38	0,12	0,68	0,30	0,72													
06-1995		52,00			1,23			0,59	0,63	0,19	0,06	0,40	0,23	0,16													
07-1995		59,00			1,23			0,81	0,53	0,26	0,06	0,53	0,20	0,14													
08-1995		11,00			1,96			1,74	1,00	0,63	0,11	0,97	0,62	0,54													
09-1995		126,00			0,88			0,69	0,45	0,56	0,08	1,02	0,17	0,11													
10-1995		42,00			1,19			1,08	0,88	0,97	0,12	1,49	0,27	0,22													
11-1995		62,00			0,93			0,88	1,04	0,76	0,09	1,31	0,18	0,13													
12-1995		22,00			1,08			0,63	0,71	0,79	0,08	1,32	0,20	0,15													
Max		132,00			1,96			2,04	1,04	3,80	0,45	6,67	0,62	0,72													
Min		11,00			0,60			0,39	0,44	0,19	0,06	0,40	0,14	0,08													
W.Aver.		68,75			0,97			0,80	0,64	1,04	0,14	1,90	0,25	0,17													
Sum		825,00																									

BALTIC SEA ENVIRONMENT PROCEEDINGS

No. 1 JOINT ACTIVITIES OF THE BALTIC SEA STATES WITHIN THE FRAMEWORK OF THE CONVENTION ON THE PROTECTION OF THE MARINE ENVIRONMENT OF THE BALTIC SEA AREA 1974-1978
(1979)*

No. 2 REPORT OF THE INTERIM COMMISSION (IC) TO THE BALTIC MARINE ENVIRONMENT PROTECTION COMMISSION
(1981)*

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- Report on the activities of the Baltic Marine Environment Protection Commission during 1980
- HELCOM Recommendations passed during 1980
(1981)*

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PART A-1: OVERALL CONCLUSIONS
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- HELCOM Recommendations passed during 1981 and 1982
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- Report of the activities of the Baltic Marine Environment Protection Commission during 1982 including the Fourth Meeting of the Commission held in Helsinki 1-3 February 1983
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National Statements by the Contracting Parties on the Achievements in Implementing the Goals of the Convention on the Protection of the Marine Environment of the Baltic Sea Area
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(1984)

No. 12 GUIDELINES FOR THE BALTIC MONITORING PROGRAMME FOR THE SECOND STAGE
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- HELCOM Recommendations passed during 1983 and 1984
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- Report of the activities of the Baltic Marine Environment Protection Commission during 1984 including the Sixth Meeting of the Commission held in Helsinki 12-15 March 1985
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International Summary Report
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No. 23 ACTIVITIES OF THE COMMISSION 1986
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- HELCOM Recommendations passed during 1989
(1989)

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- Report of the activities of the Baltic Marine Environment Protection Commission during 1991 including the 13th meeting of the Commission held in Helsinki 3-7 February 1992
- HELCOM Recommendations passed during 1992
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