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International Co-operative Programme on Materials, including Historic and Cultural Monuments and Contract EVK4-CT-2001-00044 MULTI-ASSESS

Environmental data report November 2002 to December 2003

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Summary

The UN/ECE international co-operative programme of effects on materials is an international project that has been running for eight years at 39 test sites in 14 countries from 1987 to 1995. A second phase of the project started in 1997 with an adjusted number of test sites and countries participating. In the second phase 30 test sites and 19 countries have participated. During the interim period 1995 to 1997 trend analysis for metal corrosion and exposure of the two materials glass and polymer continued. For the year 2002-2003 the ICP materials programme was combined with the EU project MULTI-ASSESS that is using the same field test sites. Norwegian Institute for Air Research has been a sub-centre and responsible for the environmental data storing, reporting and evaluation during the whole programme and the report includes the environmental data reported in both research projects.

This report presents the environmental measurements for the combined test periods for the ECE-ICP on materials programme and the MULTI-ASSESS project, 2002 - 2003. All data from the test sites that are in the two projects are reported in this report. The exposure in most countries started late November or early December 2002. The yearly average values have been calculated according to the month where the exposure has started. The monthly values for the period are reported in four Appendixes A, B, C and D. Appendixes A and B report the data that are in the broad field ICP materials test sites. Appendixes C and D report the data in the extended field test belonging to the MULTI-ASESS project.

To obtain a good database for dose-response evaluation, it is important to have a wide range in the data for the most important parameters. The data obtained shows that we have a good spread in the data for all important gases as well as for the most important meteorological data.

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1 Introduction

Airborne acidifying pollutants are known to be one major cause of corrosion of different materials including the extensive damage that has been observed on historic and cultural monuments. In order to fill some important gaps of knowledge in this field the Executive Body for the Convention on Long-range Transboundary Air Pollution decided to launch an international co-operative programme ECE/ICP materials. The programme has been running since September 1987 and has involved exposure of materials at more than 30 test sites in Europe.

The aim of the programme has changed focus during the time past. In 1987 the focus was on the impact of SO_2 and climate. Later the programme was enlarged to perform a quantitative evaluation of the effect of NO_x and other pollutants like ozone and sulphur pollutants in combination with climatic parameters on the atmospheric corrosion of important materials. In 2002 an EU-project MULTI-ASSESS EVK4-CT-2001-00044 was founded to complete and extend the ECE/UN study. New parameters like HNO_3 and particulates were introduced and the study was expanded from corrosion to corrosion and soiling.

The whole programme was organised with Sweden as lead country and Swedish Corrosion Institute serving as the Main Research Centre. Sub-centres in different countries have been appointed, each responsible for their own materials group. The materials groups are:

Structural metals:

- Steel and zinc for trend analyses (Sub-centre responsible for evaluation: SVUOM Praha a.s., Prague, Czech Republic),
- Zinc for 4 years of exposure (EMPA Corrosion/Surface Protection, Dübendorf, Switzerland)
- Copper and cast bronze (Bayerisches Landesamt für Denkmalpflege, Munich, Germany).

Stone materials, Portland limestone (Building Research Establishment Ltd., Department of Environment, Waterford, United Kingdom).

Paint coatings, steel with silicon alkyd paint (Norwegian Institute for Air Research, Kjeller, Norway).

Glass materials, Two types of glass M1 and M3 (Institute of Chemistry, Academy of Fine Arts, Vienna, Austria)

Norwegian Institute for Air Research has been the sub-centre for the environmental database through the whole programme.

With the introduction of the MULTI-ASSESS project the number of partners were increased. Later in 2002 another extension to the project was made through the MULTI-ASSESS-NAS where also a sub-centre for concrete and more stone materials was established.

Stone and concrete materials,

- Standard Portland concrete, Latvian limestone (Riga Technical University, Riga, Latvia).
- Portland limestone, Carrara marble, Calcareous Baumberger sandstone (Building Research Establishment Ltd., Department of Environment, Waterford, United Kingdom).
- Gotland sandstone (Swedish Corrosion Institute, Stockholm, Sweden).

Extended environmental analyses, HNO_3 and passive particle deposition measurement was introduced in the MULTI-ASSESS project (IVL Swedish Environmental Research, Gothenburg, Sweden)

A complete list of participants and national contact centres is given in Appendix F.

2 The measuring programme

The measuring programme includes a normal environmental programme and the extended programme, as shown in Table 1.

Table 1: The measuring programme in ECE/ICP-materials.

Components to be measured		
Normal programme	Gas Precipitation Climate	SO_2, O_3, NO_2 mm, pH, SO_4-S, NO_3-N, Cl^-, conductivity Temperature, relative humidity and sun radiation
Extended programme	Gas Precipitation Particulates	HNO_3 NH_4-N, Na, Ca, Mg, K Total amount as PM_{10}

Table 2: The extended measuring programme for the MULTI-ASSESS project.

Component to be measured		
Extension to the field tests in ECE/ICP-Material programme	Gas Particles	HNO_3 Particle deposition
MULTI-ASSESS target field exposure	Gas Particles	HNO_3 Particle deposition
MULTI-ASSESS target field exposure	Soiling	Not included in this report

The data are to be reported to the environmental sub-centre as monthly mean values, except for sun radiation and mm precipitation, which are reported as the monthly sum. The data are presented as monthly and yearly values for the project period. In this report the mean and total amount values for the different exposure periods are reported.

The quality control of the reported data is the responsibility of the countries and partners that report the data. The environmental sub-centre shall control the data reported for outliers and create the joint database. They will perform an evaluation of the data files and look for trends in the data set.

The HNO_3 and particle deposition amount are two month mean values starting in November/December 2002. HNO_3 data is reported as the mean concentration during the exposure period in $\mu g/m^3$. The particle deposition is reported as $mg/m^2 \cdot month$

3 Data from the monitoring test sites

The data are sent to the environmental sub-centre as Excel data files on e-mail.

All data presented by the environmental sub-centre are given with the same accuracy as in the reporting forms agreed upon. For data series which include values "below the detection limit", these are, by convention, replaced with one half of the reported detection limits when calculating the mean values.

4 Monthly mean concentrations

The average monthly data reported are for the MULTI-ASSESS exposure period November 2002 to December 2003 and are given in Appendix A for the test sites belonging to the ICP materials programme and in Appendix C for the main test sites in the MULTI-ASSESS project. The extra parameters of particles and HNO_3 are measured at all sites in the ICP materials programme and the MULTI-ASSESS sites. These parameters are reported in Appendix B for the ICP materials programme and in Appendix D for MULTI_ASSESS. The participating countries are reporting data on a monthly base and are responsible for the quality control of

their own data. The particle deposition and HNO_3 data is analysed and reported from IVL, Sweden.

5 Calculation of monthly values

For their own test sites the participants shall calculate the mean values in accordance with the following equations.

- Mean temperature (T_M)

  T_i = measured values

$$T_M = \frac{\sum_1^i T_i}{i} \qquad i = number\ of\ records \qquad (1)$$

- Mean relative humidity (RH_M)

$$RH_M = \frac{\sum_1^i RH_i}{i} \qquad (2)$$

- Sun radiation (sun)

$$sh = \sum_1^i sh_i \qquad (3)$$

If sunshine hours are reported as a substitute for sun radiation, sunshine hours shall report the number of hours where the test panels have been exposed to sunlight. A special designed program has been developed for transferring yearly values for sunshine hour to sun radiation.

- Mean gas concentrations G_M

$$G_M = \frac{\sum_1^i G_i}{i} \qquad (4)$$

For some sites where complete information of the sampling period exists, another equation is used

$$G_M = \sum_1^i \frac{(n_i \cdot G_i)}{\sum_1^i n_i} \qquad (5)$$

n_i = *sampling period*

- Precipitation (for incomplete data sets, see chapter 6.2)

$$mm = \sum_1^i mm_i \qquad (6)$$

- Weighted mean pH (pH_M)

$$pH_M = \div \log \frac{\sum_1^i \left[mm_i \cdot \left(10^{-pH_i} \right) \right]}{\sum_1^i mm_i} \qquad (7)$$

- Weighted mean values for cations, anions and conductivity (C_M)

$$C_M = \frac{\sum_1^i (mm_i \cdot C_i)}{\sum_1^i mm_i} \quad (8)$$

6 Results

Environmental data for the ECE-ICP on materials programme has been collected since August 1987. For the first phase 1987 to 1995, data from 39 sites has been collected and reported (Henriksen et al., 1997). For the second exposure phase, the period 1997 to 2001, the programme was redefined and the number of sites with reporting data was 31 (Henriksen and Arnesen, 2003). In this report the data is reported divided between data for the broad field test and the target field test. The list of test sites for the different part of the project is given in Table 3 and 4.

Table 3: List of test sites of the exposure programme.

Test site no.	Test site name	Country	Location	Measuring period
1	Prague-Letnany	The Czech Republic	Urban	1987→
3	Kopisty	"	Industry	1987→
5	Ähtäri	Finland	Rural	1987→
7	Waldhof-Langenbrügge	Federal Republic of Germany	Rural	1987→
9	Langenfeld-Reusrath	"	Rural	1987→
10	Bottrop	"	Industry	1987→
13	Rome	Italy	Urban	1987→
14	Casaccia	"	Rural	1987→
15	Milan	"	Urban	1987→
16	Venice	"	Urban	1987→
21	Oslo	Norway	Urban	1987→
23	Birkenes	"	Rural	1987→
24	Stockholm South	Sweden	Urban	1987→
26	Aspvreten	"	Rural	1987→
27	Lincoln Cathedral	United Kingdom	Urban	1987→
31	Madrid	Spain	Urban	1987→
33	Toledo	"	Rural	1987→
34	Moscow	Russia	Urban	1987→
35	Lahemaa	Estonia	Rural	1987→
36	Lisbon-Jeronimo Monastery	Portugal	Urban	1987→
37	Dorset	Canada	Rural	1987→
40	Paris	France	Urban	1997→
41	Berlin	Germany	Urban	1997→
43	Tel Aviv	Israel	Urban	1997→
44	Svanvik	Norway	Rural, industry	1997→
45	Chaumont	Switzerland	Rural	1997→
46	London	United Kingdom	Urban	1997→
47	Los Angeles	USA (CA)	Urban	1997→
49	Antwerp	Belgium	Urban	1997→
50	Katowice	Poland	Urban, industry	1999→

Table 4: List of the test sites in the target field programme

Site number	Site	Country	Sub-site Numbers
T60	Athens	Greece	T61,T62,T63,…,T69
T70	Krakow	Poland	T71,T72,T73,…,T79
T80	London	United Kingdom	T81,T82,T83,…,T89
T90	Prague	Czech Rep	T91,T92,T93,…,T99
T100	Rome	Italy	T100,T101,…, T109
T110	Riga(1)	Latvia	-
T111	Riga(2)	Latvia	-

The data reported is divided into four monthly data tables in Appendixes A, B, C and D. and four yearly average data tables presented in Appendix E.

7 Regularity and quality of the reported data

The test sites represent areas from background level of pollutant to urban and industry levels. The background sites have had the best regularity for the data reported. Many of these sites belong to the EMEP monitoring programme and have long and good data records.

In urban and industrial areas it is generally more difficult to maintain the site. In programmes like ECE/ICP materials with long exposure periods, it is sometime necessary to move a test site due to local problems like new use of the property. In some countries the funding of the environmental measurements was limited in periods.

The solar radiation data has been reported in different ways from different countries. At the start of phase two of the ICP-materials programme it was agreed that solar radiation should be reported as MJ/m^2*month. However many of the instrument used are measuring in W/m^2 or kW/cm^2 . For data reported in W/m^2 the formulas for calculating the values in MJ/m^2*month are:

Months with 31 days 1 W/m^2 = 60x60x24x31/1000000=2.678 MJ/m^2*month
Months with 30 days 1 W/m^2 = 60x60x24x30/1000000=2.592 MJ/ m^2*month
Months with 28 days 1 W/m^2 = 60x60x24x28/1000000=2.419 MJ/ m^2*month

Four sites are still reporting hours with sun instead of solar radiation. These results are recalculated in accordance with the model described in a previous report (Henriksen et al., 1997).

To some extent missing data has been replaced with average data from previous years. Generated data is only used for parameters that are important for the dose-response studies and for parameters that either need complete data sets or where there are seasonal variations. Up to four missing data has been generated for a

yearly period. A brief review of the quality of the reported data for the different test sites are given in the following pages.

7.1 Review of reported data in the broad field test programme

Site 1 and 3 Czech Republic

The mandatory data has been reported through the broad field test period of the MULTI-ASSESS project. Both the regularity and the quality are good. Three month with data for precipitation quality is missing for Kopisty. The average yearly data for precipitation quality can be calculated for the existing data with sufficient accuracy. The solar radiation data reported seems to be too high compared to other test sites in Europe and compared to earlier data calculated from hours with sun. The use of solar radiation data should therefore be used with care and shall not be used if they seem to be outliers in the regression analyses.

Site 5 Finland (New information is expected)

Finland is not a partner in the MULTI-ASSESS project and has not reported data in the project. However they have exposed materials as usual. Ähtäri is an EMEP site with very good regularity and quality for all parameters and the EMEP data for 2003 is expected to be ready in 2004.

Site 7, 9, 10 and 41 Germany

Most of the German sites have had difficulties with reporting some data. The regularity is different for the different sites and the data missing is not the same.
Site 7 Waldhof - Langenbrügge is an EMEP site with complete data set except for solar radiation. A reasonable value can be generated from earlier years with data.
Site 9 Langenfeld - Reusrath has a complete data set only for Temp., RH, sun radiation and precipitation. Only seven monthly values for precipitation are reported. According to the established rule for data handling a yearly average data for precipitation quality can be formed with asterisk (*). The yearly gas concentrations have been fairly stable for the last years in the ICP-material project and no information about further reductions has been reported. An average value from previous years can therefore be used.
Site 10 Bottrop has almost a complete data set for the period. Only four months with precipitation quality data is missing. According to the established rule for data handling a yearly average data for precipitation quality can be calculated.
Site 41 Berlin has a complete data set for climatic and gas data. Berlin has no precipitation quality data later than April 2003. Berlin is a traffic site and the pH and conductivity in the precipitation is not reported. Both pH and conductivity are expected to have high values because of the local dust deposition. It is not possible to estimate the pH value for the site and the site has to be excluded in regression analyses when pH is included.

Site 13, 14, 15 and 16 Italy

Site 13 Rome has almost a complete and good data, but the SO_2 values are missing. The precipitation data is taken from the target field test programme and is expected to be representative for the Rome area.
Site 14 Casaccia is a rural site with high NO_2 concentrations. For the test period Casaccia has a complete data set for climate, gases and amount of precipitation. No precipitation quality data is reported. Since the data is lacking also from previous years no estimated data set is recommended.
Site 15 Milan has a complete data set for climate, gases and amount of precipitation for the test period. No precipitation quality data is reported. There has been a strong reduction in the pollution level during the previous years and to create new realistic data will be a problem.
Site 16 Venice has complete database for climate, data and amount of precipitation. The gas measurements are measured in Mestre and give a more regional result than local. In the situation of today the SO_2 and O_3 values will be fairly representative but NO_2 results in Mestre will be quite different from the car-free Venice. No precipitation quality data is reported and no estimation from earlier periods is recommended.

Site 21, 23 and 44 Norway

Site 21, 23 and 44 has complete data set for the test period. In Norway solar radiation is still calculated from yearly sun hours.

Site 24 and 26 Sweden

The Swedish sites site 24 Stockholm has a complete data set for the test period. At site 26 Aspreten SO_2 and NO_2 values are missing. Since Aspreten is a rural site with low values for SO_2 and NO_2, it will be possible to use average yearly values from previous years.

Site 27 and 46 United Kingdom

Most of the climate and gas data is reported for both site 27 Lincoln and site 46 London. No precipitation quality data is reported and no estimation from earlier periods is recommended.

Site 31 and 33 Spain

Site 31 Madrid and Site 33 Toledo has a complete data set for all parameters for the test period.

Site 34 Russia

Site 34 Moscow has an almost complete database for temperature, relative humidity, SO_2, NO_2, O_3 amount of precipitation and pH for the test period. Sun radiation is not reported but the data from previous years can be used. No precipitation quality data is reported in the test period. The precipitation quality

data for precious years has no particularly trend and an average of the previous years report could be used.

Site 35 Estonia

Site 35 Lahemaa has a complete data set for all data and average values for all parameters can be calculated.

Site 36 Portugal

Portugal is not a partner in MULTI-ASSESS, and they have only exposed materials during the test period. There are fairly large uncertainties in the previous reported values. Old yearly data can be used as an internal test, but are not recommended for dose-response correlation testing

Site 37 Canada

Site 37 Dorset is a rural site. The pollution levels are low for SO_2 and NO_2 and high for O_3 The quality control of the data has been slow, and very little data is reported. Average data from previous years will probably be acceptable since the changes at this rural site have been minor.

Site 40 France

Site 40 Paris has a complete data set up to January 2003. Precipitation data was not collected in 2003. Paris has a good database for precipitation from previous years and the data has probably sufficient quality to be used for 2003.

Site 43 Israel

For site 43 Tel Aviv has not returned the materials sent for exposure and no environmental data is reported.

Site 45 Switzerland

Site 45 Chaumont has a complete data set of very good quality.

Site 47 USA California

Site 47 Los Angeles has not exposed materials and not reported any environmental data for the test period.

Site 49 Belgium

Site 49 Antwerp has a complete data set for most of the data. The site should have sufficient data for forming acceptable yearly average values

Site 50 Poland

Site 50 Katowice has a complete data set of good quality.

7.2 Review of reported data in the target field test programme

The target field test has one main site with materials exposed in the same manner as in the broad field test programme. The sub-sites have only materials exposed in sheltered position. These sites are designed mainly for soiling and sheltered corrosion studies and do not need precipitation parameters for the interpretation of the results. For most of the sub-sites the precipitation quality results are expected to be more or less the same. Only the main site has freely exposed materials and the rain results are only listed for that site except for the Krakow sites (See clause Site T70).

Site T60 Athens Greece

Target site Athens has one main site and 5 sub-sites located on the same building. Environmental report has only been given from the main rack in the roof. The site has a complete date set for climate and gases. Amount of precipitation is missing from December 2002. To get a complete sum for one year December 2003 is set equal to November 2003 precipitation. Precipitation quality data is not reported. It is expected that the parameters measured will have a trend from the street level to the top of the building, but to predict the change has not been done.

Site T75 Krakow Poland

The target sites in Krakow are located in different distance from local sources and regional large industry sources. Site 75 is the main site, and the others are subsites. Site 71, 72, 74 and 76 are measuring some pollutants, while site 73 are expected to have the same pollution level as 71 and site 75 the same as 74. Climate date is expected to be the same for the whole area and is measured only on site 72. This site also has precipitation and pH measurements. All sites have a complete data set for the parameters that are measured.

Site T80 London UK

The target sites in London are located in different distances from traffic pollution. The main site 80 has the same environmental and pollution level as sub-site 81. The rest of the sites have complete data sets for particles, temperature and most of the gases.

Site T90 Prague Czech Republic

The target sites in Prague are designed to study the change in the environmental impact around a building. The main site 90 and the sub-site 91 are located close to each other. Sub-sites 92 to 95 are located on different parts of the facade and 86 in the courtyard. Environmental parameters are measured at site 90 and 96 and have complete data sets for the parameters measured.

Site T100 Rome Italy

The target sites in Rome are situated in areas with moderate traffic influence. Site 100 and sub-site 101 and 102 are situated at Montelibretti in the outskirt of Rome and all has the same general environmental impact. Sub-sites 103 and 104 are

located on the building where the broad field test site 13 is located and have the same environmental data. Sub-site 105 is in an area with higher traffic. The sun radiation and precipitation are expected to be the same for all sites. The sites have complete data sets for all reported parameters.

Sites T110 and T111 Riga Latvia

Both sites have an extensive exposure programme since it belong to the MULTI-ASSESS NAS project. The sites are located within a fairly short distance and have the same climate and precipitation impact but different gas concentrations. The two sites have a complete environmental data set for the period. The Riga sites are reporting sun hours and only the recalculated yearly value in MJ/m^2 is reported

8 Data for regression analyses

8.1 The data base

For regression analyses the database for material damage for one year has to been correlated with the environmental database for the same period. In Appendix E the yearly average environmental values for all sites are given. The values are given in four tables and follow the data given in Appendix A to D.

To include the sites into regression analyses yearly values for the parameter taken into the analyses are needed. In the yearly tables missing data is substituted with data from previous years with data if it is reasonable to expect that these values still are valid. These values are written in italics. The argument for including or not including the data is given for each test site in Chapter 6. Where the uncertainty is too large for estimating missing result, gaps in the database are found.

8.2 The data distribution

It is important for the evaluation of the dose-response correlation for materials with the environmental impact that we have as large spread as possible in the concentrations of the most important pollution parameters. In the following figures the yearly mean values for the exposure year 2002-2003 for the parameters that has been used earlier for dose-response correlation studies are given.

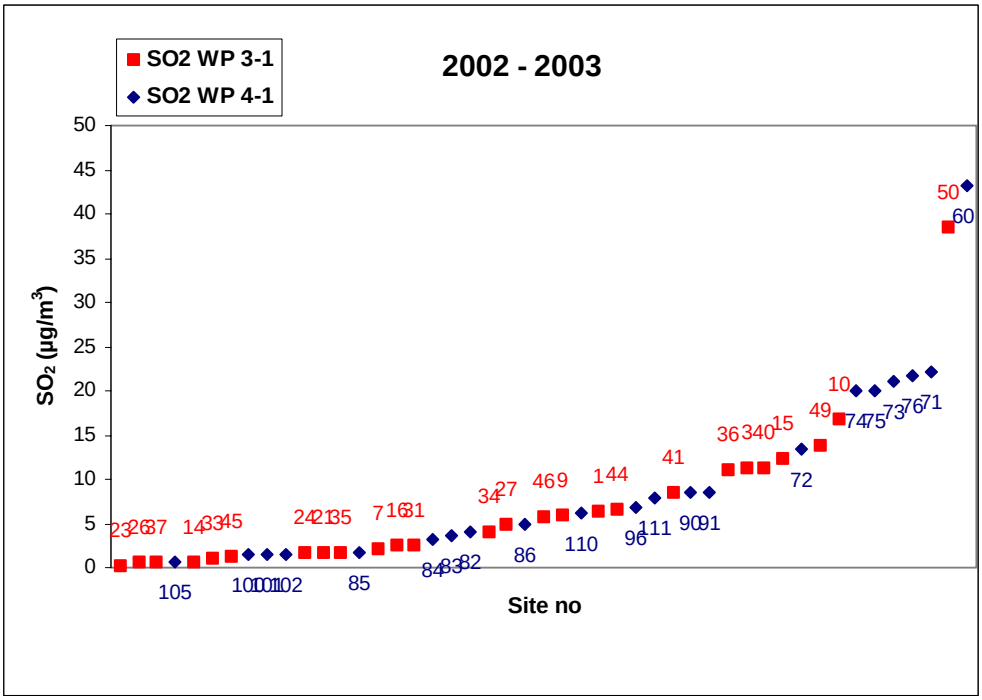

Figure 1: The spread in the yearly mean SO_2 concentrations at the test sites for the test period in MULTI-ASSESS.

In Figure 1 the spread in the SO_2 concentrations for the exposure year is shown. The numbering is in accordance with the numbers in Table 3 and Table 4. The values go from 43.2 µg/m^3 for Katowice down to 0.3 µg/m^3 at the Scandinavian EMEP stations. The distribution is fairly good. Low values are dominating in the base as expected since the total amount of sulphur emission in Europe has been reduced during the years.

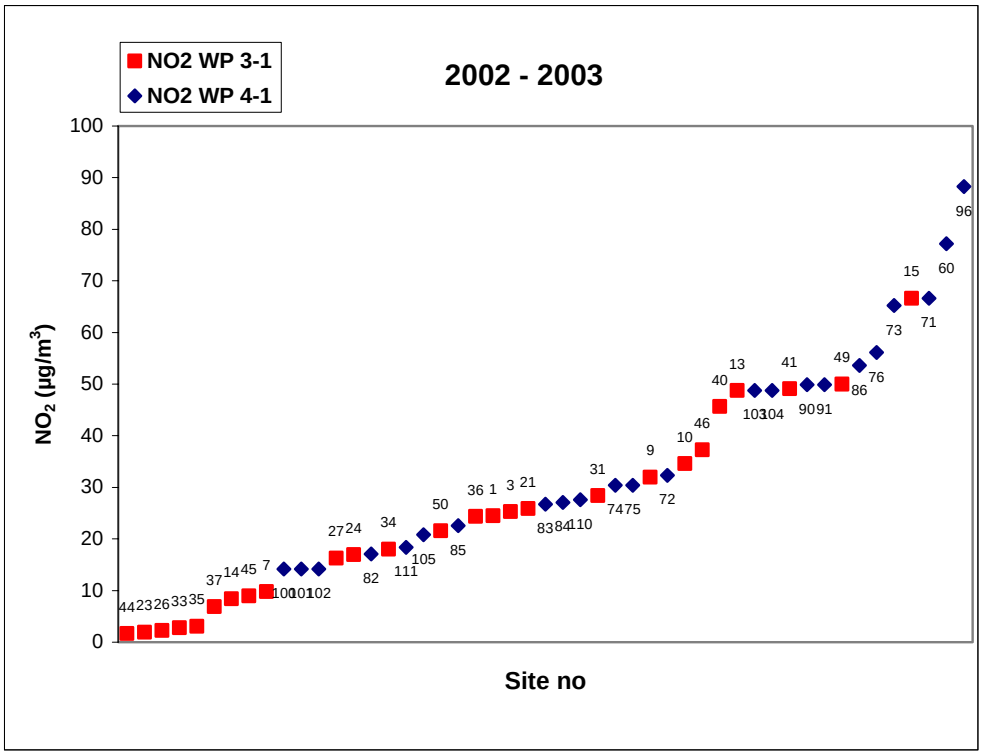

Figure 2: The spread in the yearly mean NO_2 concentrations at the test sites for the test period in MULTI-ASSESS

In Figure 2 the spread in the NO_2 concentrations for the test period year is shown. The values go from 88,3 µg/m^3 for Prague down to 1.7 µg/m^3 at Chaumont. The distribution is fairly good. Low values are dominating in the base because of the number of EMEP sites in the programme.

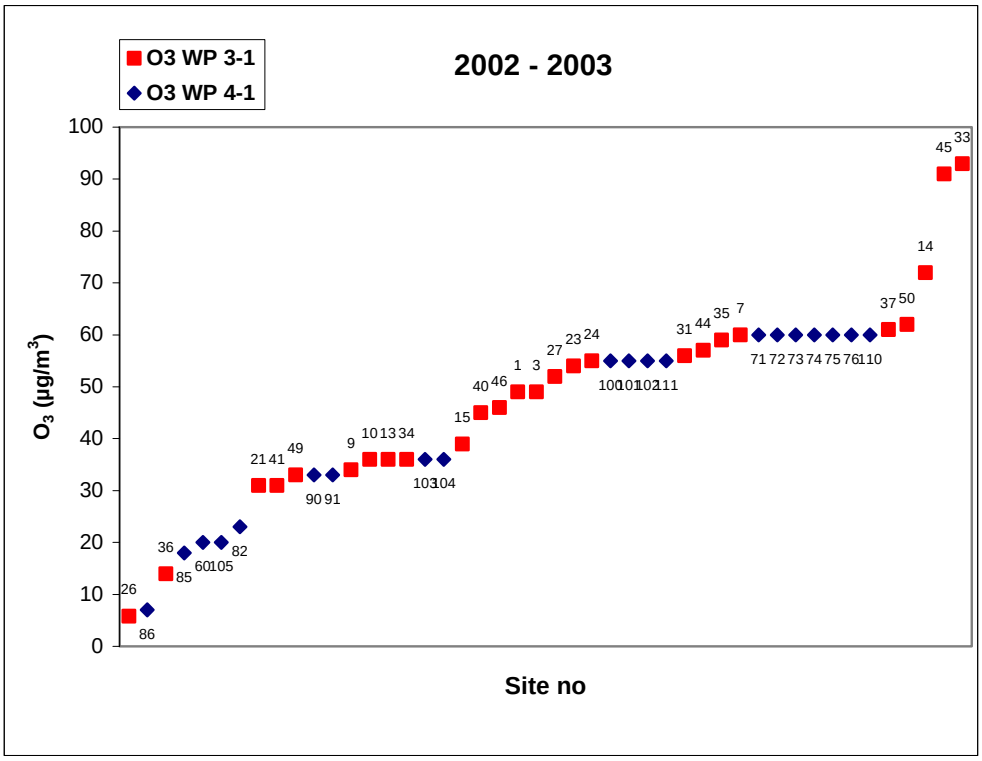

Figure 3: The spread in the yearly means O_3 concentrations at the test sites for the test period in MULTI-ASSESS

In Figure 3 the spread in the O_3 concentrations for the test period is shown. The values go from 93 µg/m^3 for the EMEP station outside Toledo down to 7 µg/m^3 in one of the traffic sites in London. The distribution is as expected. It is a clustering of values around 50 µg/m^3. The low values are observed in the big cities and high values in rural areas in the south and in the alpine area.

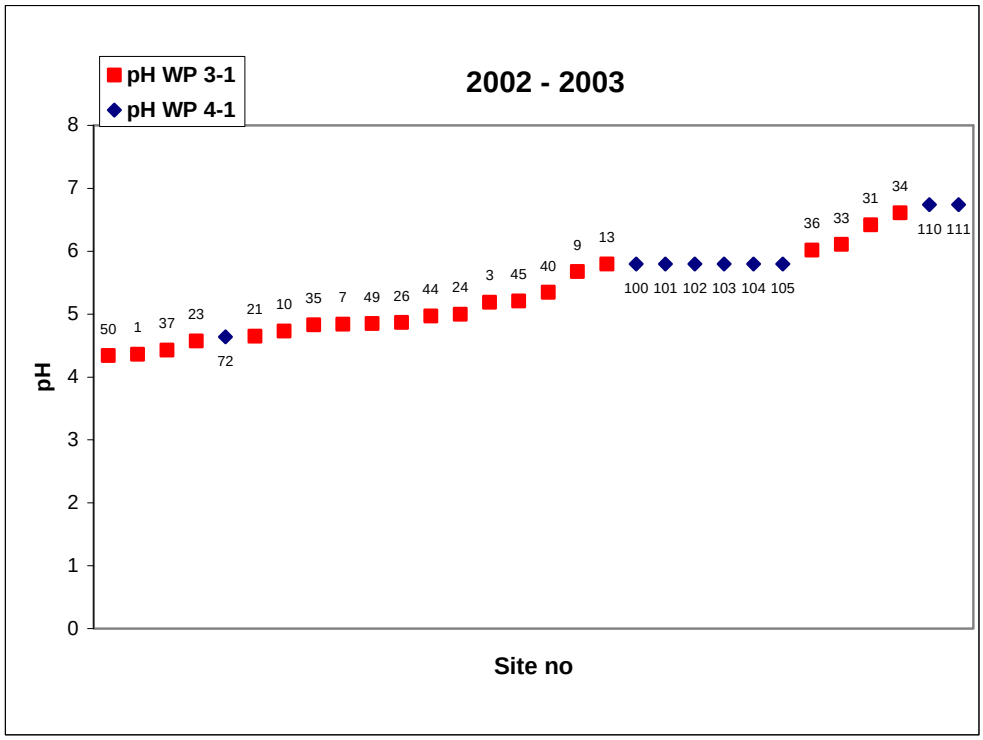

Figure 4: The spread in the yearly means pH values at the test sites for the test period in MULTI-ASSESS

In Figure 4 the spread for pH in the test period is shown. The pH values go from 6.74 for the Riga stations down to 4.34 in Katowice. The low values are observed in the cities with higher SO_2 concentrations like Katowice and Prague and high values in areas with alkaline dust.

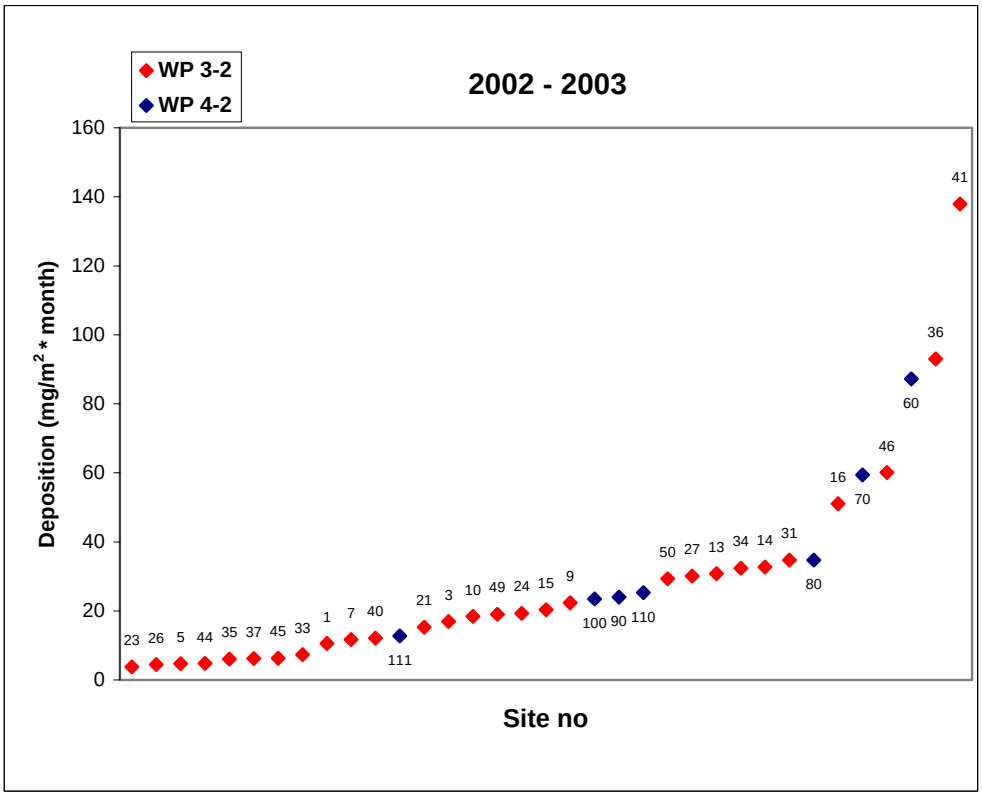

Figure 5: The spread in the yearly mean particle deposition at the test sites for the test period for MULTI-ASSESS

In Figure 5 the spread for particle deposition in the test period is shown. The particle deposition values go from 3.75 at the EMEP site in Norway to 137.89 in Berlin. The spread is good even with most of the site on the lower end. Berlin is a very typical highway site a city and can be too different from the other sites when dose-response function shall be established.

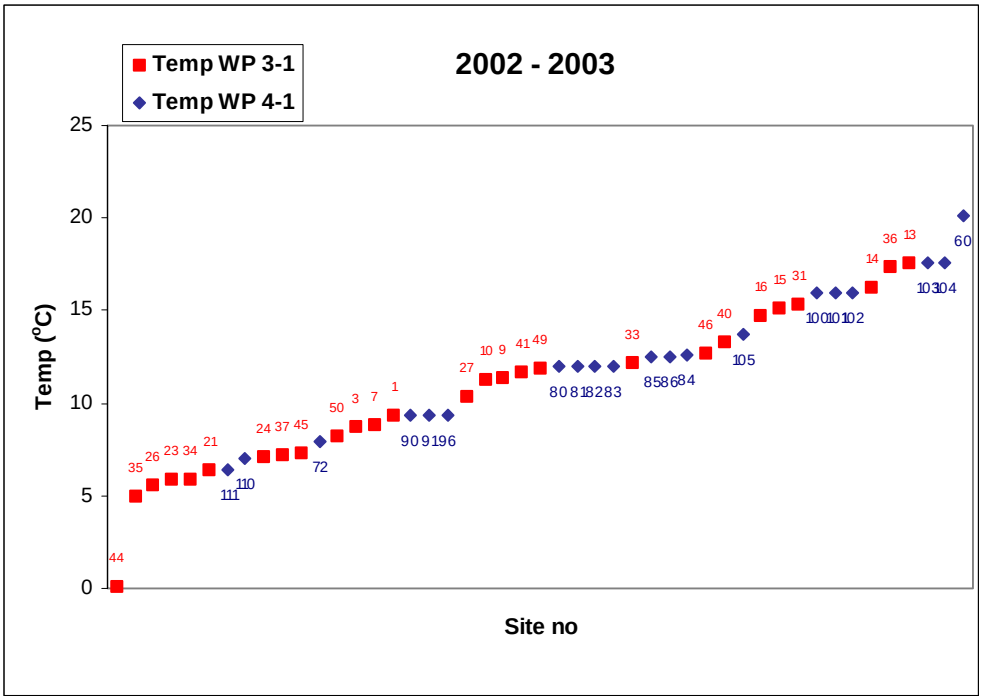

Figure 6: The spread in the yearly mean temperature at the test sites for the test period for MULTI-ASSESS

In Figure 6 the spread for temperature in the test period is shown. The yearly temperature goes from 0.1˚C for the Svanvik station up to 20.1˚C in Athens. The temperature database should cover the spread expected to find through out most of Europe.

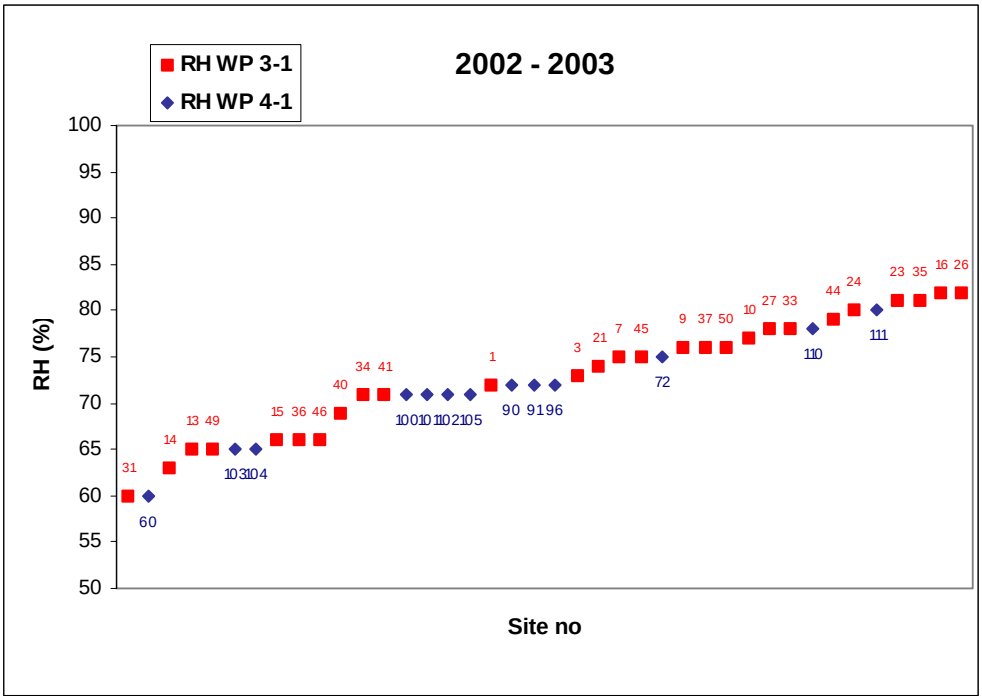

Figure 7: The spread in the yearly mean relative humidity at the test sites for the test period for MULTI-ASSESS

In Figure 7 the spread for Relative humidity in the test period is shown. The yearly average RH goes from 60% for the Toledo station in Spain up to 82% in Venice and Aspreten in Sweden. The RH database should cover the spread expected to find through out Europe, but the variation may be small for statistical treatment.

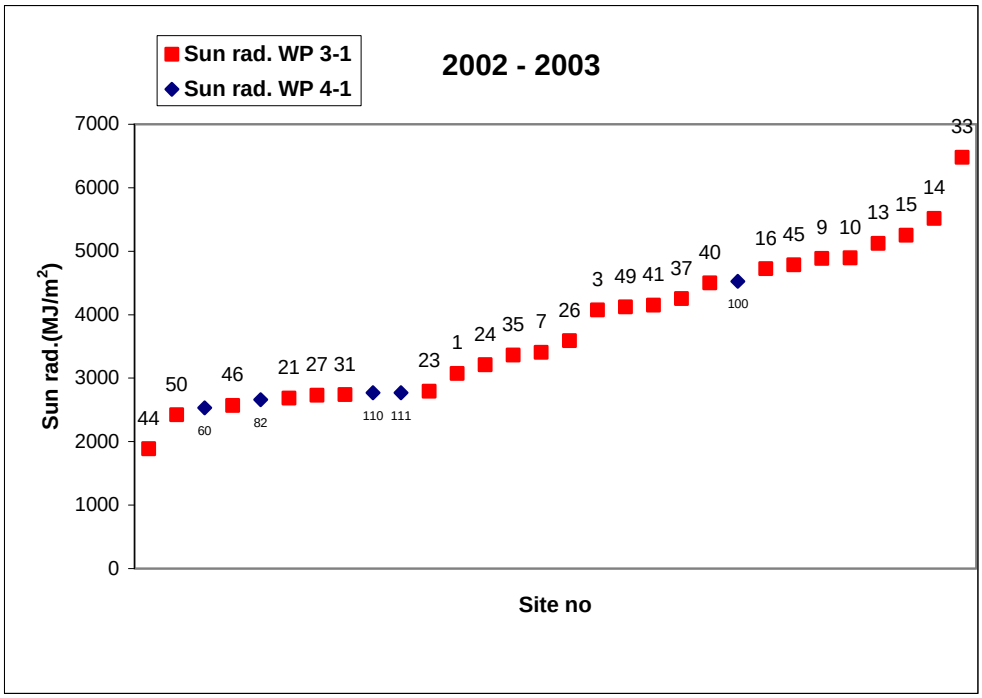

Figure 8: The spread in the yearly sum of solar radiation at the test sites for the test period for MULTI-ASSESS

In Figure 8 the spread for solar radiation in the test period is shown. The values have the highest uncertainty of the environmental data since the instruments used are different. For the Norwegian sites the values are calculated from hours with sun measurements. The solar radiation data will probably only be used for the evaluation of the paint deterioration.

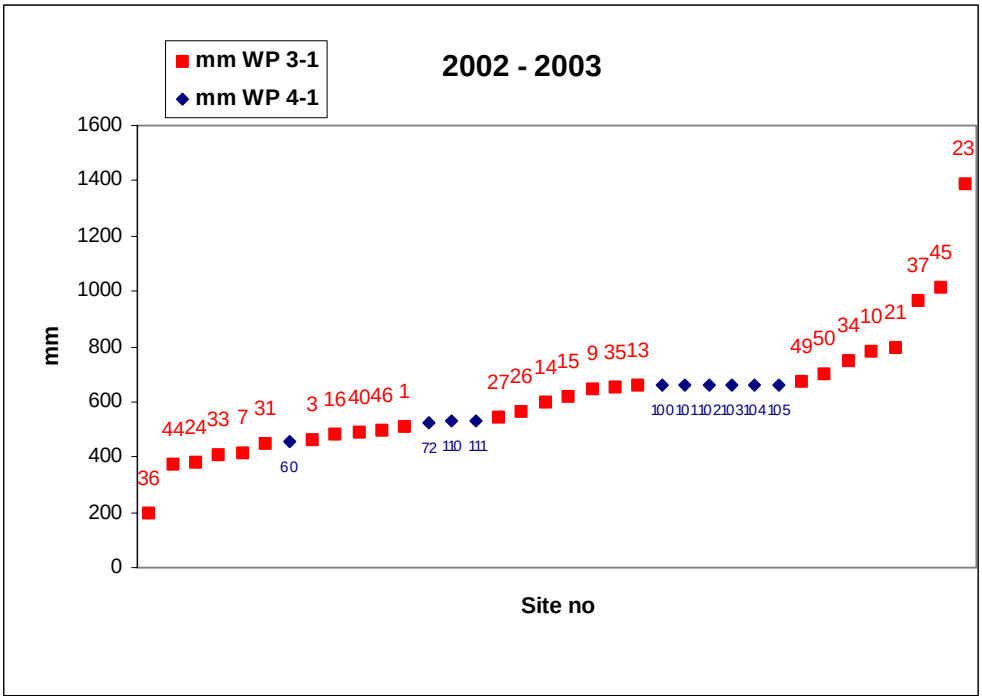

Figure 9: The spread in the yearly sum of precipitation at the test sites for the test period for MULTI-ASSESS

In Figure 9 the spread for mm precipitation in the test period is shown. The spread is from 195.9 mm in Lisbon to 1390.1 mm at Birkenes. The Lisbon data is an average data from previous years and is not recommended for statistical treatment if this value effects the dose-response function obtained.

9 Conclusions

The database obtained during the test period 2002-2003 has comparable regularity and quality with the previous years of the ICP-materials programme. Sites belonging to the national surveillance programme and EMEP have the best regularity. Some of the urban sites have a lower regularity and some have been moved during the test period. Three of the test sites in the broad field test, site 36, 43 and 47 has not reported data during the period, mainly because of lack of national funding. For the main site in the target field test precipitation data is missing from site 80 and 90.

The irregularity is highest for the precipitation measurements. Precipitation quality is often not measured in cities and background sites in surveillance programmes has normally a slow quality assurance procedure. Reductions in the surveillance programmes in different countries have also been a part of the problem. For rural sites the precipitation quality data are not expected to change drastically during the period and an average of existing data can be used.

The spread in the data for the different environmental parameters are sufficient for statistical dose response analyses. However data set for some of the important parameters are missing for different sites. The number of sites included in the statistical treatment will therefore change depending of the selection of parameters for the analyses.

10 References

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Appendix A

Monthly values for the test sites for the exposure period in the broad field exposure programme

	Sampling period		Mandatory													Option										
			Climate			Gases			Precipitation							Precipitation						Gases	Particles	Particles Deposition			
Site no	Year	Month	Temp °C	RH %	Sun MJ/m^2	SO_2 $\mu g/m^3$	NO_2 $\mu g/m^3$	O_3 $\mu g/m^3$	Rain mm	Acidity pH	SO_4-S mg/l	NO_3-N mg/l	Cl mg/l	Cond $\mu S/cm$	NH_4-N mg/l	Na mg/l	Ca mg/l	Mg mg/l	K mg/l	HNO_3 $\mu g/m^3$	Conc. $\mu g/m^3$	Cl mg/m^2d	SO_4-S mg/m^2d	NO_3-N mg/m^2d
01	2002	12	-1,6	89	117	7,4	23,7	18	40,6	5,00	4,10	1,40	0,90	14,0										
01	2003	1	-1,0	84	149	8,8	28,8	29	27,0	4,80	2,90	2,90	2,00	29,0										
01	2003	2	-2,8	78	289	9,2	26,3	37	5,8	5,00	12,30	14,10	9,30	81,0										
01	2003	3	5,2	68	576	7,2	32,4	51	5,5	7,40	16,10	12,60	11,20	177,0										
01	2003	4	8,5	60	596	5,7	20,5	72	22,4	5,10	6,90	6,00	2,40	38,0										
01	2003	5	16,0	67	1210	6,1	21,1	74	55,5	6,40	4,90	1,10	1,70	19,0										
01	2003	6	20,6	61	1349	5,4	19,6		24,4	7,40	4,70	8,50	2,90	88,0										
01	2003	7	19,8	65	1131	4,2	21,9	71	56,6	4,90	5,90	2,10	3,40	30,0										
01	2003	8	21,6	55	938	7,2	24,8	83	37,0	4,90	7,60	0,70	2,10	26,0										
01	2003	9	14,6	67	707	4,6	25,1	56	15,0	5,50	6,40	2,90	1,20	33,0										
01	2003	10	6,0	78	384	4,9	24,3	31	18,4	3,20	33,10	3,70	1,80	327,0										
01	2003	11	4,9	87	205	5,8	24,9	16	7,5	6,40	13,00	6,70	2,30	63,0										
01	2003	12	0,4	84	114	6,9	23,8	25	25,1	5,20	5,10	4,90	2,70	27,0										
03	2002	12	-2,6	88	92	14,1	35,7	12,2	58,6	4,60	5,60	3,00	1,50	31,0										
03	2003	1	-2,0	83	132	12,0	30,6	25,4	27,8	5,40	5,80	2,90	1,40	24,0										
03	2003	2	-3,8	79	305	16,2	39,5	33,3	9,9	4,70	6,60	10,00	7,10	57,0										
03	2003	3	4,7	70	521	15,5	30,0	47,2	6,6															
03	2003	4	8,4	60	710	15,7	19,7	61,9	16,5	8,60		6,00	13,70	867,0										
03	2003	5	15,7	67	875	11,6	21,4	70,9	37,8	7,30	13,60	3,70	4,90	104,0										
03	2003	6	20,8	61	1064	9,4	17,1	83,4	40,9	6,50	11,10	2,40	1,70	42,0										
03	2003	7	19,2	71	837	7,2	20,7	63	79,3	7,00	7,20	1,00	1,70	50,0										
03	2003	8	21,2	58	884	10,5	13,5	78	4,6															
03	2003	9	13,7	70	605	8,4	23,1	55	7,5															
03	2003	10	4,9	79	344	5,6	26,1		21,2															
03	2003	11	4,4	87	175	7,6	26,0	13	7,4	6,00	18,70	7,30	3,00	86,0										

	Sampling period		Mandatory													Option										
			Climate			Gases			Precipitation							Precipitation					Gases	Particles	Particles Deposition				
Site no	Year	Month	Temp °C	RH %	Sun MJ/m^2	SO_2 $\mu g/m^3$	NO_2 $\mu g/m^3$	O_3 $\mu g/m^3$	Rain mm	Acidity pH	SO_4-S mg/l	NO_3-N mg/l	Cl mg/l	Cond $\mu S/cm$	NH_4-N mg/l	Na mg/l	Ca mg/l	Mg mg/l	K mg/l	HNO_3 $\mu g/m^3$	Conc. $\mu g/m^3$	Cl mg/m^2d	SO_4-S mg/m^2d	NO_3-N mg/m^2d		
03	2003	12	-1,0	85	127	8,5	26,8	22	24,8																	
05	2002	12																								
05	2003	1																								
05	2003	2																								
05	2003	3																								
05	2003	4																								
05	2003	5																								
05	2003	6																								
05	2003	7																								
05	2003	8																								
05	2003	9																								
05	2003	10																								
05	2003	11																								
05	2003	12																								
07	2002	11	4,2	94		1,5	15,8	24	80,5	4,64	0,39	0,52	0,18	19,2	0,32	0,10	0,40	0,03	0,05		15,8					
07	2002	12	-1,7	88		6,5	14,4	26	37,7	4,74	0,28	0,34	0,11	12,5	0,23	0,05	0,09	0,02	0,04		32,0					
07	2003	1	0,2	89		2,7	15,9	39	51,9	4,70	0,35	0.40	0.94	16,6	0.33	0.58	0.06	0.08	0.05		22,4					
07	2003	2	-2,3	84		4,4	11,3	53	11,1	4,77	0.21	0.39	0.72	12,7	0.18	0.41	0.12	0.06	0.03		37,3					
07	2003	3	4,2	77		2,3	8,5	66	17,6	5,23	0.79	0.78	0.71	20,5	1.31	0.38	0.25	0.06	0.06		43,5					
07	2003	4	8,3	64		1,8	7,3	86	24,0	6,10	1.00	0.77	0.80	24,0	1.37	0.64	0.63	0.10	0.12		26,7					
07	2003	5	14,3	66		1,0	7,5	78	22,8	4,93	0.78	0.87	0.41	23,2	1.05	0.20	0.90	0.09	0.31		13,9					
07	2003	6	18,6	62		1,0	6,5	86	42,7	5,21	0.49	0.49	0.17	14,2	0.87	0.09	0.22	0.03	0.09		17,8					
07	2003	7	19,5	67		0,7	6,0	80	41,6	4,91	0.55	0.71	0.23	17,2	0.89	0.11	0.26	0.03	0.08		13,8					
07	2003	8	19,7	62		0,9	6,2	84	23,5	4,79	0.73	0.89	0.31	22,5	1.15	0.18	0.29	0.04	0.06		18,3					

	Sampling period		Mandatory												Option										
			Climate			Gases			Precipitation						Precipitation					Gases	Particles	Particles Deposition		
Site no	Year	Month	Temp °C	RH %	Sun MJ/m^2	SO_2 $\mu g/m^3$	NO_2 $\mu g/m^3$	O_3 $\mu g/m^3$	Rain mm	Acidity pH	SO_4-S mg/l	NO_3-N mg/l	Cl mg/l	Cond $\mu S/cm$	NH_4-N mg/l	Na mg/l	Ca mg/l	Mg mg/l	K mg/l	HNO_3 $\mu g/m^3$	Conc. $\mu g/m^3$	Cl mg/m^2d	SO_4-S mg/m^2d	NO_3-N mg/m^2d
07	2003	9	13,6	74		1,6	8,0	62	94,4	4,87	0.23	0.32	0.13	9,9	0.27	0.10	0.09	0.02	0.02		14,8			
07	2003	10	5,2	80		1,3	9,3	38	19,9	4,58	0.53	0.69	1.84	24,6	0.54	1.04	0.22	0.13	0.07		13,9			
07	2003	11	6,6	88		2,2	16,4	24	25,9	4,59	0.63	0.65	0.58	21,5	0.75	0.32	0.14	0.05	0.04		20,9			
07	2003	12	2,3	86		2,4	17,1	32	38,7	4,83	0.33	0.29	2.11	18,1	0.24	1.18	0.14	0.15	0.07		16,6			
09	2002	11	8,7	89	75		38,0	14	118,8												32,00			
09	2002	12	4,2	87	58		31,0	13	108,1												31,00			
09	2003	1	2,2	86	37				90,6	5,48	1,08	0,57	1,64	22,0	0,92	1,62	1,60	0,16	0,16					
09	2003	2	2,3	75	100				12,6	4,90	0,66	0,36	2,35	29,9	0,91	1,48	0,48	0,30	0,44					
09	2003	3	8,7	72	164				34,6	6,07	0,82	0,77	0,61	42,0	0,95	0,92	1,88	0,13	0,17					
09	2003	4	10,8	64	213				36,0	6,11	0,52	0,27	1,36	23,6	1,08	1,26	1,19	0,25	1,61					
09	2003	5	14,7	74	224				44,9	6,31	1,41	1,09	0,77	37,8	1,21	1,01	4,24	0,22	0,24					
09	2003	6	20,2	70	255				39,8	6,17	0,86	0,81	0,44	27,6	0,92	0,52	2,79	0,16	0,37					
09	2003	7	20,5	68	250				44,4	5,82	0,99	0,86	0,43	31,0	0,70	0,58	2,79	0,15	0,11					
09	2003	8	21,6	66	240				28,9															
09	2003	9	15,4	75	172				51,4															
09	2003	10	7,9	86	88				102,1															
09	2003	11	8,8	86	56				53,5															
10	2002	12	3,4	88	42	23,0	34,0	12	104,2	4,10	0,71	0,20	0,33	12,8	0,51	0,40	0,50	0,08	0,33					
10	2003	1	2,4	85	29	23,0	35,0	21	113,6	6,33	1,59	0,61	1,84	28,5	1,42	1,11	2,39	0,22	0,15		25,0			
10	2003	2	2,0	78	94	27,0	46,0	18	10,1	4,81	1,81	0,58	6,87	37,4	1,59	3,72	0,84	0,50	0,23		39,0			
10	2003	3	8,5	74	160	17,0	39,0	35	48,8		1,26	0,56	0,79		1,56	0,55	0,78	0,13	0,13		31,0			
10	2003	4	10,7	67	208	17,0	34,0	56	48,7	6,10	1,25	0,46	0,91	32,0	2,43	0,62	1,34	0,19	0,42		29,0			
10	2003	5	14,9	74	239	14,0	32,0	51	61,7	5,51	1,93	0,95	1,09	36,4	1,42	0,75	2,36	0,33	0,19		20,0			
10	2003	6	20,1	70	272	12,0	28,0	61	84,0	5,88	1,65	1,36	0,43	33,9	1,48	0,55	2,70	0,31	0,25		26,0			

	Sampling period		Mandatory													Option										
			Climate			Gases			Precipitation							Precipitation					Gases	Particles	Particles Deposition				
Site no	Year	Month	Temp °C	RH %	Sun MJ/m^2	SO_2 $\mu g/m^3$	NO_2 $\mu g/m^3$	O_3 $\mu g/m^3$	Rain mm	Acidity pH	SO_4-S mg/l	NO_3-N mg/l	Cl mg/l	Cond $\mu S/cm$	NH_4-N mg/l	Na mg/l	Ca mg/l	Mg mg/l	K mg/l	HNO_3 $\mu g/m^3$	Conc. $\mu g/m^3$	Cl mg/m^2d	SO_4-S mg/m^2d	NO_3-N mg/m^2d		
10	2003	7	20,2	71	260	13,0	28,0	54	55,2	5,52	1,40	0,81	0,59	31,5	1,31	0,66	1,37	0,19	0,20		20,0					
10	2003	8	21,2	69	236	11,0	31,0	64	38,3												25,0					
10	2003	9	15,2	76	180	12,0	37,0	33	68,1												25,0					
10	2003	10	7,7	86	93	16,0	35,0	16	92,3												23,0					
10	2003	11	8,9	86	46	18,0	36,0	12	54,9												26,0					
13	2002	11	13,8	87	303				139,6	5,06	1,94	1,77	2,39	32,15	0,18	1,02	2,52	0,19	0,19							
13	2002	12	8,9	93	212				76,6	5,11	1,22	1,86	0,77	16,7	0,23	0,39	0,43	0,06	0,22							
13	2003	1	9,1	74	158		51,5	16	95,0	5,26	0,63	0,52	5,75	31,8	0,31	3,43	0,68	0,42	0,29							
13	2003	2	6,3	61	283		58,2	23	9,4	5,40	1,12	0,51	16,76	68,3	0,39	9,73	0,78	1,05	0,38							
13	2003	3	11,6	65	461		60,3	33	15,6	5,97	1,00	1,34	2,51	32,95	0,88	2,52	3,85	0,30	1,61							
13	2003	4	14,8	63	537		45,7	48	63,8	5,82	1,14	0,74	3,41	36,45	1,26	1,80	1,93	0,29	0,80							
13	2003	5	21,5	60	629		45,8	49	2,6	6,40	1,12	0,95	2,29	37,7	1,26	2,20	4,97	0,47	1,34							
13	2003	6	27,4	58	713		40,0	59	0,0	6,08	5,66	3,17	1,70	87,58	5,57	0,73	9,38	1,19	1,27							
13	2003	7	28,0	59	715		37,8	67	2,8	6,47	3,88	8,07	7,57	149,3	2,20	4,48	19,73	1,45	2,99							
13	2003	8	29,1	55	592		33,1	58	1,8	6,66	1,10	1,12	1,83	43,35	1,19	1,23	5,20	0,18	0,43							
13	2003	9	21,9	64	438		51,5	37	77,4	6,30	0,62	0,69	1,82	33,83	0,19	0,96	3,62	0,20	0,27							
13	2003	10	17,2	73	276		47,3	27	95,6	6,26	0,55	0,20	4,78	31,05	0,97	2,55	1,87	1,59	1,23							
13	2003	11	14,2	80	176		56,3	11	58,2	6,31	1,89	1,90	9,62	77,45	0,48	6,21	9,61	1,09	1,34							
13	2003	12	9,8	71	134		57,6	8	40,0	7,09	1,95	1,35	39,4	154,4	0,54	6,3	5,97	0,89	4,46							
14	2003	1	7,5	73	167	0,0	5,0	43	92,4																	
14	2003	2	5,0	58	313	1,0	10,0	66	14,2																	
14	2003	3	10,2	64	482	0,0	10,0	75	26,0																	
14	2003	4	13,1	63	559	0,0	5,0	87	35,6																	
14	2003	5	20,1	58	662	1,0	2,0	91	13,8																	
14	2003	6	26,4	55	764	2,0	14,0	97	2,2																	

	Sampling period		Mandatory													Option										
			Climate			Gases			Precipitation							Precipitation						Gases	Particles	Particles Deposition		
Site no	Year	Month	Temp °C	RH %	Sun MJ/m^2	SO_2 $\mu g/m^3$	NO_2 $\mu g/m^3$	O_3 $\mu g/m^3$	Rain mm	Acidity pH	SO_4-S mg/l	NO_3-N mg/l	Cl mg/l	Cond $\mu S/cm$	NH_4-N mg/l	Na mg/l	Ca mg/l	Mg mg/l	K mg/l	HNO_3 $\mu g/m^3$	Conc. $\mu g/m^3$	Cl mg/m^2d	SO_4-S mg/m^2d	NO_3-N mg/m^2d
14	2003	7	26,8	55	783	3,0	3,0	93	5,0																	
14	2003	8	28,3	50	670	1,0	4,0	106	6,0																	
14	2003	9	20,8	60	483	0,0	1,0	82	65,6																	
14	2003	10	15,8	72	300	0,0	5,0	55	174,8																	
14	2003	11	12,8	79	189	0,0	7,0	36	104,0																	
14	2003	12	8,2	70	145	0,0	35,0	35	60,2																	
15	2003	1	4,0	85	161	29,4	62,4	4	43,4																	
15	2003	2	4,1	60	266	22,1	91,0	14	0,2																	
15	2003	3	11,2	63	431	15,6	98,2	25	6,8																	
15	2003	4	13,3	66	596	8,4	72,2	44	40,8																	
15	2003	5	21,0	54	686	4,6	70,5	55	29,8																	
15	2003	6	26,8	56	734	4,8	51,3	82	61,8																	
15	2003	7	26,1	54	758	4,2	47,9	81	28,8																	
15	2003	8	28,3	50	678	2,3	41,5	91	5,4																	
15	2003	9	19,8	58	461	6,4	72,6	39	27,6																	
15	2003	10	12,3	75	254	8,7	59,4	16	110,0																	
15	2003	11	9,0	90	114	16,6	63,4	5	140,6																	
15	2003	12	5,6	77	110	24,8	68,7	8	124,2																	
16	2003	1	4,1	89	133	3,0			29,8																	
16	2003	2	3,8	77	247	4,0			14,4																	
16	2003	3	9,6	80	367	3,0			4,0																	
16	2003	4	12,2	81	434	3,0			84,0																	
16	2003	5	20,1	78	644	2,0			21,8																	
16	2003	6	25,8	82	672				34,8																	

	Sampling period		Mandatory												Option										
			Climate			Gases			Precipitation						Precipitation					Gases	Particles	Particles Deposition		
Site no	Year	Month	Temp °C	RH %	Sun MJ/m^2	SO_2 $\mu g/m^3$	NO_2 $\mu g/m^3$	O_3 $\mu g/m^3$	Rain mm	Acidity pH	SO_4-S mg/l	NO_3-N mg/l	Cl mg/l	Cond $\mu S/cm$	NH_4-N mg/l	Na mg/l	Ca mg/l	Mg mg/l	K mg/l	HNO_3 $\mu g/m^3$	Conc. $\mu g/m^3$	Cl mg/m^2d	SO_4-S mg/m^2d	NO_3-N mg/m^2d
16	2003	7	25,6	79	689	2,0			22,8																
16	2003	8	27,4	79	589	2,0			20,6																
16	2003	9	19,2	81	421	2,0			44,4																
16	2003	10	12,6	85	253	2,0			51,6																
16	2003	11	10,5	91	148	2,0			93,4																
16	2003	12	5,9	85	128	2,0			60,0																
21	2002	11	-1,8	84		1,1	15,3		26,0	4,39	0,73	0,34	0,20	17,8	0,22	0,10	0,21	0,02	0,05						
21	2002	12	-6,1	86		1,5	42,9	17	29,8	4,77	0,44	0,33	0,31	14,5	0,22	0,20	0,27	0,05	0,11						
21	2003	1	-4,3	84		3,7	45,1	15	73,0	4,73	0,53	0,48	1,16	19,0	0,48	0,65	0,16	0,09	0,08		26,5				
21	2003	2	-2,9	83		3,1	45,0	20	29,1	4,23	0,85	0,78	2,09	37,3	0,60	1,42	0,15	0,15	0,11		35,6				
21	2003	3	1,8	75		2,6	42,8	33	31,9	4,21	1,46	1,22	1,69	48,4	1,55	1,10	0,26	0,12	0,10		46,0				
21	2003	4	6,0	58		1,6	23,2	53	44,8	4,95	0,42	0,35	0,23	12,5	0,49	0,16	0,18	0,04	0,07		31,3				
21	2003	5	10,3	72		0,7	21,0	50	81,0	5,02	0,43	0,41	0,38	13,4	0,49	0,26	0,19	0,06	0,22						
21	2003	6	16,5	63		1,2	6,9	47	99,9	4,99	0,32	0,20	0,26	8,7	0,22	0,17	0,19	0,05	0,18						
21	2003	7	19,1	70		1,0	19,1	46	130,5	4,77	0,30	0,24	0,25	11,0	0,15	0,19	0,13	0,03	0,05						
21	2003	8	17,4	64		0,7	20,1	38	62,0	4,67	0,32	0,31	0,49	13,7	0,09	0,33	0,21	0,05	0,14						
21	2003	9	12,7	72		1,1	13,4	29	76,2	4,52	0,52	0,51	1,08	22,8	0,38	0,81	0,29	0,11	0,08						
21	2003	10	3,7	76		1,2	16,9	15	43,5	4,70	0,28	0,36	0,59	15,1	0,28	0,43	0,19	0,06	0,10						
21	2003	11	2,6	91		1,7	14,2	6	92,2	4,48	0,57	0,62	0,69	23,4	0,42	0,38	0,20	0,06	0,07		20,6				
21	2003	12	0,2	80																	23,9				
23	2002	12	-4,8	88		0,4	2,0	47	119,3	4,41	0,67	0,41	2,20	29,6	0,27	1,26	0,08	0,15	0,10		4,4				
23	2003	1	-3,3	86		0,2	2,1	53	98,8	4,52	0,61	0,54	4,31	34,1	0,35	2,27	0,12	0,28	0,14		4,9				
23	2003	2	-2,6	89		0,4	3,0	49	65,8	4,34	0,73	0,53	2,23	31,2	0,38	1,28	0,06	0,16	0,07		8,4				

	Sampling period		Mandatory												Option										
			Climate			Gases			Precipitation						Precipitation					Gases	Particles	Particles Deposition		
Site no	Year	Month	Temp °C	RH %	Sun MJ/m^2	SO_2 $\mu g/m^3$	NO_2 $\mu g/m^3$	O_3 $\mu g/m^3$	Rain mm	Acidity pH	SO_4-S mg/l	NO_3-N mg/l	Cl mg/l	Cond $\mu S/cm$	NH_4-N mg/l	Na mg/l	Ca mg/l	Mg mg/l	K mg/l	HNO_3 $\mu g/m^3$	Conc. $\mu g/m^3$	Cl mg/m^2d	SO_4-S mg/m^2d	NO_3-N mg/m^2d
23	2003	3	1,5	79		0,7	2,7	62	80,5	4,44	1,14	0,91	1,09	32,1	1,23	0,63	0,23	0,08	0,09		11,1			
23	2003	4	5,0	67		0,4	1,5	71	107,4	4,69	0,56	0,51	1,46	20,8	0,50	0,82	0,17	0,10	0,10		8,5			
23	2003	5	8,8	79		0,3	1,6	65	222,6	4,77	0,44	0,51	0,62	17,1	0,52	0,39	0,07	0,05	0,08		7,1			
23	2003	6	14,7	68		0,3	1,1	64	81,7	4,82	0,34	0,28	0,43	13,2	0,38	0,32	0,11	0,06	0,14		7,9			
23	2003	7	17,2	75		0,3	1,0	56	167,7	4,74	0,38	0,33	0,42	14,2	0,35	0,27	0,10	0,04	0,04		7,6			
23	2003	8	15,9	71		0,2	1,1	53	50,1	4,78	0,28	0,22	0,70	13,1	0,14	0,48	0,10	0,05	0,14		5,0			
23	2003	9	11,7	85		0,2	1,4	50	118,6	4,55	0,76	0,67	1,01	24,6	0,74	0,63	0,23	0,09	0,07		6,0			
23	2003	10	3,2	87		0,1	2,0	42	66,2	4,40	0,55	0,75	2,72	32,7	0,49	1,48	0,13	0,19	0,05		1,7			
23	2003	11	3,3	97		0,2	3,6	31	211,4	4,48	0,47	0,55	1,85	26,9	0,37	1,10	0,07	0,14	0,06		6,0			
23	2003	12	1,1	78				48																
24	2002	11	1,0	89	26	2,4	20,0	33	46,0	6,04	0,40	0,19	0,90	17,8	0,004	0,37	0,16	0,16	3,90					
24	2002	12	-3,4	84	13	3,4	22,3	44	7,0	4,62	0,60	0,55	1,23	31,0	0,21	0,75	0,36	0,11	0,11					
24	2003	1	-3,1	85	27	2,2	22,7	45	12,0	4,42	0,94	0,90	2,20	39,90	0,62	1,30	0,41	0,17	0,24					
24	2003	2	-3,5	85	85	2,9	24,1	46	5,7	4,27	1,31	1,09	1,41	55,60	0,80	0,83	0,45	0,11	0,12					
24	2003	3	2,9	74	240	1,8	16,8	66	1,2	4,58	5,03	3,13	4,54	94,20	2,98									
24	2003	4	4,2	72	373	1,3	13,6	71	33,2	6,71	2,01	0,49	1,13	61,20	4,12	2,40	1,80	0,21	0,84					
24	2003	5	11,4	75	525	0,8	12,0	78	65,1	5,59	0,40	0,40	0,22	10,23	0,49	0,12	0,33	0,04	0,16					
24	2003	6	15,7	73	535	1,0	12,7	71	53,4	4,63	0,41	0,33	0,26	15,90	0,06	0,20	0,28	0,05	0,14					
24	2003	7	20,4	78	548	1,3	11,9	70	45,6	6,83	0,73	0,32	0,31	42,39	3,16	0,22	0,54	0,19	1,90					
24	2003	8	17,3	78	442	0,5	12,8	56	52,5	5,28	0,16	0,15	0,25	5,87	0,10	0,11	0,18	0,03	0,08					
24	2003	9	13,4	79	284	1,2	17,0	49	22,9	7,84	0,61	0,69	0,61		0,59	0,31	0,86	0,12	0,10					
24	2003	10	5,1	86	123	1,2	20,6	38	41,1	6,44	0,46	0,40	0,44	19,50	1,23	0,15	0,16	0,04	1,55					
24	2003	11	4,5	92	18	1,4	17,9	27	44,1	4,59	0,55	0,54	0,43	20,25	0,37	0,16	0,26	0,07	0,13					
26	2002	11	0,8	89	45			44	57,0	4,21	0,65	0,80	0,42	37,5	0,35	0,26	0,08	0,04	0,04		6,9			
26	2002	12	-4,4	84	21			56	26,0	4,31	0,92	0,68	1,23	37,2	0,41	0,75	0,23	0,10	0,14		8,5			

	Sampling period		Mandatory												Option										
			Climate			Gases			Precipitation						Precipitation					Gases	Particles	Particles Deposition		
Site no	Year	Month	Temp °C	RH %	Sun MJ/m^2	SO_2 $\mu g/m^3$	NO_2 $\mu g/m^3$	O_3 $\mu g/m^3$	Rain mm	Acidity pH	SO_4-S mg/l	NO_3-N mg/l	Cl mg/l	Cond $\mu S/cm$	NH_4-N mg/l	Na mg/l	Ca mg/l	Mg mg/l	K mg/l	HNO_3 $\mu g/m^3$	Conc. $\mu g/m^3$	Cl mg/m^2d	SO_4-S mg/m^2d	NO_3-N mg/m^2d
26	2003	1	-4,2	84	35			61	26,0	4,75	0,37	0,37	0,70	17,7	0,38	0,31	0,10	0,04	0,07		5,5			
26	2003	2	-4,7	85	80			66	23,0	4,29	0,70	0,78	1,66	34,6	0,43	0,93	0,15	0,11	0,15		11,4			
26	2003	3	1,3	75	260			86	4,0	4,31	1,56	0,96	0,82	43,1	1,11	0,62	0,39	0,10	0,06		13,1			
26	2003	4	2,8	74	411			83	136,0	5,13	0,92	0,49	0,77	18,7	0,49	0,76	0,42	0,13	0,11		10,3			
26	2003	5	9,2	79	584			84	57,0	5,65	0,57	0,59	0,32	15,4	0,82	0,17	0,26	0,08	0,22		10,5			
26	2003	6	14,3	75	607			78	65,0	5,44	0,51	0,33	0,29	12,8	0,77	0,22	0,10	0,05	0,22		11,2			
26	2003	7	18,3	83	588			71	63,0	5,23	0,32	0,24	0,08	9,1	0,36	0,09	0,19	0,05	0,10		14,0			
26	2003	8	16,0	79	493			59	68,0	5,49	0,17	0,13	0,17	5,4	0,26	0,10	0,07	0,02	0,09		9,5			
26	2003	9	11,9	81	330			61	6,0	6,67	0,89	0,80	0,72	31,0	1,96	0,40	0,95	0,17	0,74		11,6			
26	2003	10	3,1	88	148			46	32,0	4,74	0,28	0,26	0,21	12,2	0,19	0,10	0,07	0,03	0,03		8,8			
26	2003	11	3,7	94	35			35	56,0	4,46	0,54	0,56	0,56	23,3	0,46	0,26	0,14	0,09	0,09		11,0			
26	2003	12							87,0	4,61	0,39	0,34	0,93	18,5	0,19	0,59	0,06	0,08	0,05					
27	2002	11	7,4	93	103				84,3															
27	2002	12	5,0	89	723				89,3															
27	2003	1	4,7	85	115	7,8	24,2	31	56,6															
27	2003	2	3,9	84	167	3,4	21,6	41	18,0															
27	2003	3	7,0	77	254	9,8	21,8	55	16,8															
27	2003	4	9,3	68	253	2,8	10,9	60	20,4															
27	2003	5	12,5	74	334	4,6	12,0	65	49,8															
27	2003	6	16,3	72	319	6,6	14,4	64	87,4															
27	2003	7	17,5	74	296	5,3	14,4	68	95,4															
27	2003	8	17,8	73	292	5,8	14,7	50	11,4															
27	2003	9	14,6	69	288	0,8	20,5	53	24,2															
27	2003	10	8,9	76	244				33,7															
27	2003	11	7,6	89	99	6,1	4,8	30	45,0															
27	2003	12	4,9	87	63				57,3															

	Sampling period		Mandatory												Option										
			Climate			Gases			Precipitation						Precipitation					Gases	Particles	Particles Deposition		
Site no	Year	Month	Temp °C	RH %	Sun MJ/m^2	SO_2 $\mu g/m^3$	NO_2 $\mu g/m^3$	O_3 $\mu g/m^3$	Rain mm	Acidity pH	SO_4-S mg/l	NO_3-N mg/l	Cl mg/l	Cond $\mu S/cm$	NH_4-N mg/l	Na mg/l	Ca mg/l	Mg mg/l	K mg/l	HNO_3 $\mu g/m^3$	Conc. $\mu g/m^3$	Cl mg/m^2d	SO_4-S mg/m^2d	NO_3-N mg/m^2d
31	2002	12	8,0	88	78	10,0	15,0	63	12,0	6,28	0,33	0,19	1,18	11,2	0,26	0,48	0,47	0,10	0,06					
31	2003	1	6,0	73	120	3,0	9,0	38	30,0	6,49	0,75	0,30	1,53	16,8	0,55	0,5	0,73	0,17	0,11					
31	2003	2	6,0	71	164	2,0	37,0	39	38,0	6,70	0,77	0,37	1,04	19,2	0,65	0,3	1,61	0,11	0,13					
31	2003	3	12,0	63	237	2,0	25,0	48	43,0	6,41	0,77	0,37	1,01	20,3	0,59	0,3	1,53	0,09	0,12					
31	2003	4	12,0	65	277	1,0	17,0	66	27,0	6,82	0,71	0,42	1,26	23,7	0,75	0,4	1,65	0,12	0,14					
31	2003	5	18,0	52	337	1,0	26,0	69	16,0	6,70	0,66	0,50	1,01	21,4	0,59	0,20	1,69	0,13	0,14					
31	2003	6	25,0	42	326	2,0	31,0	78	5,0	7,10	2,57	1,64	2,06	89,1	2,24	1,00	5,05	0,40	0,59					
31	2003	7	26,0	35	354	1,0	20,0	86	0,0															
31	2003	8	27,0	36	302	1,0	36,0	83	7,0	7,55	2,64	1,76	2,53	86,1	1,86	1,10	12,6	0,52	0,80					
31	2003	9	21,0	45	269	1,0	49,0	55	38,0	6,79	0,54	0,30	2,37	24,3	0,40	0,20	2,30	0,35	0,12					
31	2003	10	13,0	73	157	1,0	39,0	24	154,0	6,31	0,42	0,23	1,29	11,2	0,34	0,34	0,48	0,16	0,07					
31	2003	11	10,0	79	122	6,0	37,0	19	77,0	6,30	0,42	0,27	0,76	9,5	0,33	0,20	0,52	0,06	0,06					
31	2003	12	7,0	80	123	4,0	51,0	14	61,0	6,57	0,75	0,43	1,33	29,9	0,14	0,61	6,69	0,21	0,16					
33	2002	11	7,1	94	231	0,8	1,7	76	52,4	5,99	0,47	0,28	1,61	13,0	0,18	0,81	0,33	0,13	0,14					
33	2002	12	5,6	98	207	0,9	1,8	76	105,4	5,83	0,62	0,29	2,00	17,0	0,33	1,07	0,42	0,15	0,14					
33	2003	1	2,3	91	289	1,0	3,4	76	54,6	5,98	0,46	0,22	1,72	11,9	0,26	1,13	0,31	0,13	0,13					
33	2003	2	3,4	94	321	1,1	4,1	78	41,2	6,24	0,52	0,27	0,82	10,8	0,47	0,37	0,24	0,07	0,12					
33	2003	3	8,8	83	502	1,4	3,7	93	41,8	6,611	0,887	0,42	1,053	18,86	0,63	0,4	1,04	0,10	0,12					
33	2003	4	8,7	87	581	1,0	2,9	99	24,2	6,42	0,67	0,37	1,15	17,1	0,71	0,65	0,53	0,08	0,13					
33	2003	5	15,0	70	839	1,0	2,3	103	0,0															
33	2003	6	22,5	80	874	1,3	1,9	108	0,0															
33	2003	7	22,9	68	938	1,2	2,0	113	0,0															
33	2003	8	23,5	39	757	1,3	1,9	116	10,8	6,79	1,51	1,04	1,17	43,1	1,20	0,55	3,99	0,39	0,54					
33	2003	9	17,9	49	639	1,0	2,5	102	0,0															
33	2003	10	9,4	85	311	0,9	3,2	80	46,6	6,55	0,45	0,28	1,14	14,4	0,61	0,51	0,58	0,09	0,19					

	Sampling period		Mandatory												Option										
			Climate			Gases			Precipitation						Precipitation					Gases	Particles	Particles Deposition		
Site no	Year	Month	Temp °C	RH %	Sun MJ/m^2	SO_2 $\mu g/m^3$	NO_2 $\mu g/m^3$	O_3 $\mu g/m^3$	Rain mm	Acidity pH	SO_4-S mg/l	NO_3-N mg/l	Cl mg/l	Cond $\mu S/cm$	NH_4-N mg/l	Na mg/l	Ca mg/l	Mg mg/l	K mg/l	HNO_3 $\mu g/m^3$	Conc. $\mu g/m^3$	Cl mg/m^2d	SO_4-S mg/m^2d	NO_3-N mg/m^2d
33	2003	11	6,7	92	220	1,0	3,3	70	86,8	6,27	0,56	0,49	0,89	14,4	0,57	0,48	0,53	0,11	0,15					
33	2003	12	4,3	85	246	1,5	2,8	74	62,6	6,37	0,68	0,25	0,91	16,8	0,30	0,48	0,90	0,10	0,13					
34	2003	1	-5,6	84		7,8	10,8	26	45,8	6,12														
34	2003	2	-8,3	72		7,8	10,8	26	14,2	6,57														
34	2003	3	-2,3	62		5,5	12,1	46	29,6	6,55										0,6				
34	2003	4	4,5	68		5,5	12,1	46	53,0	6,41										0,6				
34	2003	5	16,8	52			17,8	50	43,4	6,72														
34	2003	6	12,9	71			17,8	50	89,8	6,49														
34	2003	7	21,1	58		3,0	25,5	44	110,6	6,63										1,8				
34	2003	8				3,0	25,5	44	114,0											1,8				
34	2003	9	12,3	65		2,1	21,9	33	105,0	7,01										0,5				
34	2003	10	5,2	77		2,1	21,9	33	52,7	6,95										0,5				
34	2003	11	1,0	91		1,9	20,2	15	53,6	7,25										0,2				
34	2003	12	-2,3	77		1,9	20,2	15	38,4	6,70										0,2				
35	2002	11	-1,2	90	32	3,0	4,2	43	91,4	4,56	0,38	0,16	0,42	13,6	0,09	0,10	0,13	0,02	0,04					
35	2002	12	-8,1	85	32	3,6	5,0	54	12,7	4,50	0,72	0,54	1,43	20,2	0,13	0,77	0,81	0,15	0,13					
35	2003	1	-8,4	87	38	3,1	5,6	55	41,7	4,71	0,33	0,27	0,80	14,8	0,24	0,48	0,22	0,07	0,07					
35	2003	2	-5,5	87	92	2,5	5,6	64	11,6	4,40	0,47	0,42	0,50	18,5	0,13	0,11	0,24	0,02	0,03					
35	2003	3	-0,7	73	292	3,1	4,0	84	9,6	4,31	0,26	0,35	0,89	20,3	0,02	0,59	0,18	0,09	0,08					
35	2003	4	2,3	73	379	2,1	2,9	80	40,9	4,78	0,54	0,18	0,49	15,9	0,14	0,29	0,40	0,04	0,04					
35	2003	5	11,0	73	516	1,3	2,4	79	86,0	4,94	0,34	0,17	0,34	7,8	0,19	0,03	0,41	0,25	0,11					

	Sampling period		Mandatory												Option										
			Climate			Gases			Precipitation						Precipitation					Gases	Particles	Particles Deposition		
Site no	Year	Month	Temp °C	RH %	Sun MJ/m^2	SO_2 $\mu g/m^3$	NO_2 $\mu g/m^3$	O_3 $\mu g/m^3$	Rain mm	Acidity pH	SO_4-S mg/l	NO_3-N mg/l	Cl mg/l	Cond µS/cm	NH_4-N mg/l	Na mg/l	Ca mg/l	Mg mg/l	K mg/l	HNO_3 $\mu g/m^3$	Conc. $\mu g/m^3$	Cl mg/m^2d	SO_4-S mg/m^2d	NO_3-N mg/m^2d
35	2003	6	13,4	72	544	1,2	1,9	63	53,6	5,23	0,59	0,49	0,47	10,3	0,10	0,24	0,31	0,04	0,19					
35	2003	7	20,1	78	569	1,4	1,6	55	97,3	5,66	0,34	0,05	0,36	6,1	0,03	0,04	0,42	0,02	0,02					
35	2003	8	16,3	81	430	0,5	1,2	47	102,0	5,23	0,17	0,03	0,16	6,3	0,04	0,09	0,14	0,02	0,02					
35	2003	9	12,1	81	316	0,6	1,7	47	51,6	4,54	0,56	0,31	0,26	15,0	0,32	0,11	0,45	0,05	0,04					
35	2003	10	4,5	88	123	0,6	1,9	47	103,2	4,65	0,21	0,14	0,36	11,1	0,03	0,20	0,05	0,03	0,02					
35	2003	11	3,0	94	30	0,9	3,4	35	45,0	4,68	0,36	0,22	0,23	11,5	0,17	0,12	0,08	0,01	0,06					
36	2003	1																						
36	2003	2																						
36	2003	3																						
36	2003	4																						
36	2003	5																						
36	2003	6																						
36	2003	7																						
36	2003	8																						
36	2003	9																						
36	2003	10																						
36	2003	11																						
36	2003	12																						
37	2002	11							29,2	4,51														
37	2002	12							160,5	4,91														
37	2003	1								4,51														
37	2003	2								4,62														
37	2003	3								4,29														
37	2003	4								5,12														
37	2003	5								4,52														

	Sampling period		Mandatory												Option									
			Climate			Gases			Precipitation						Precipitation					Gases	Particles	Particles Deposition		
Site no	Year	Month	Temp °C	RH %	Sun MJ/m^2	SO_2 $\mu g/m^3$	NO_2 $\mu g/m^3$	O_3 $\mu g/m^3$	Rain mm	Acidity pH	SO_4-S mg/l	NO_3-N mg/l	Cl mg/l	Cond µS/cm	NH_4-N mg/l	Na mg/l	Ca mg/l	Mg mg/l	K mg/l	HNO_3 $\mu g/m^3$	Conc. $\mu g/m^3$	Cl mg/m^2d	SO_4-S mg/m^2d	NO_3-N mg/m^2d
37	2003	6								4,42														
37	2003	7								4,62														
37	2003	8								4,45														
37	2003	9								4,50														
37	2003	10																						
37	2003	11																						
37	2003	12																						
40	2002	11	9.7	85	92	10.5	45.1	18	38.5	6.17	0.75	0.18	1.70	19.0	0.00	0.93	2.20	0.13	0.30		19.8	13.5		
40	2002	12	7.3	84	50	10.9	34.4	17	76.7	6.65	1.45	0.52	2.86	46.9	2.66	1.70	2.03	0.28	1.23		20.5	14.5		
40	2003	1	3.6	80	95	13.7	46.4	24	43.4												20.1	14.1		
40	2003	2	4.5	70	190	21.8	57.8	23	20.8												28.5	22.0		
40	2003	3	11.2	61	395	17.7	58.6	37	19.6												32.1	22.4		
40	2003	4	12.6	57	504	12.9	48.3	56	33.8												25.6	13.6		
40	2003	5	15.5	67	547	11.6	38.4	63	61.7												21.2	11.7		
40	2003	6	21.8	63	663	5.5	35.3	71	24.0												25.9	15.6		
40	2003	7	21.7	60	640	4.6	33.3	68	40.2												22.9	12.7		
40	2003	8	24.3	56	621	5.7	37.1	84	43.8												35.0	18.9		
40	2003	9	17.4	62	442	7.9	58.7	38	15.2												29.6	16.7		
40	2003	10	10.5	76	233	10.7	47.8	19	62.0												24.1	15.1		
40	2003	11	9.3	87	119	11.4	52.4	38	48.4												25.2	16.6		
41	2002	11	6,1	88	89	9,6	49,1	14	34,4		4,01	5,15	1,49		1,01	0,28	1,91	0,13	0,42		48,2	0,77	4,23	9,16
41	2002	12	-0,6	83	68	17,4	45,6	12	5,7		2,19	3,98	1,97		1,41	0,93	3,99	0,13	0,28		64,7	1,98	7,70	8,54
41	2003	1	1,5	87	70	7,1	43,2	23	18,4		2,39	4,31	1,65		1,39	0,98	2,17	0,13	0,20		64,6	3,61	8,02	6,39
41	2003	2	0,1	78	170	16,0	61,5	19	2,6		6,65	7,48	7,13		2,58	4,27	4,25	0,21	0,27		59,2	2,12	8,78	7,98
41	2003	3	6,7	70	313	12,9	54,5		5,6		12,98	14,35	6,96		3,63	3,54	6,16	2,85	0,57		70,5	1,82	10,64	12,61

	Sampling period		Mandatory												Option										
			Climate			Gases			Precipitation						Precipitation					Gases	Particles	Particles Deposition		
Site no	Year	Month	Temp °C	RH %	Sun MJ/m^2	SO_2 $\mu g/m^3$	NO_2 $\mu g/m^3$	O_3 $\mu g/m^3$	Rain mm	Acidity pH	SO_4-S mg/l	NO_3-N mg/l	Cl mg/l	Cond $\mu S/cm$	NH_4-N mg/l	Na mg/l	Ca mg/l	Mg mg/l	K mg/l	HNO_3 $\mu g/m^3$	Conc. $\mu g/m^3$	Cl mg/m^2d	SO_4-S mg/m^2d	NO_3-N mg/m^2d
41	2003	4	11,1	58	455	8,7	49,3	46	14,8		4,56	5,16	3,05		1,57	1,75	4,92	0,21	0,22					
41	2003	5	17,9	61	589	5,5	52,3	50																
41	2003	6	22,8	57	662	6,0	53,6	47																
41	2003	7	23,1	66	577	5,0	43,6	48																
41	2003	8	23,4	60	560	5,0	47,9	40																
41	2003	9	17,7	69	374	5,0	53,9	27																
41	2003	10	8,5	79	216	6,0	48,0	15																
41	2003	11	8,1	89	95	8,0	35,9	10																
41	2003	12	4,3	81	76	7,0	34,9	18																
43	2003	1																						
43	2003	2																						
43	2003	3																						
43	2003	4																						
43	2003	5																						
43	2003	6																						
43	2003	7																						
43	2003	8																						
43	2003	9																						
43	2003	10																						
43	2003	11																						
43	2003	12																						
44	2002	11	-10,3	90		12,1	1,8	53	26,9	5,23	0,46	0,08	4,46	22,6	0,23	2,24	0,12	0,30	0,16					
44	2002	12	-13,7	86		9,8	3,3	60	39,8	5,14	0,49	0,06	5,87	27,7	0,18	3,10	0,16	0,40	0,20					
44	2003	1	-20,7	85		7,5	4,7	55	22,4	4,94	0,31	0,08	2,78	16,9	0,13	1,53	0,10	0,21	0,12					
44	2003	2	-5,4	82		3,7	2,0	67	3,9	5,51	0,59	0,30	4,38	17,4	0,68	2,50	0,25	0,37	0,28					

	Sampling period		Mandatory												Option										
			Climate			Gases			Precipitation						Precipitation					Gases	Particles	Particles Deposition		
Site no	Year	Month	Temp °C	RH %	Sun MJ/m^2	SO_2 $\mu g/m^3$	NO_2 $\mu g/m^3$	O_3 $\mu g/m^3$	Rain mm	Acidity pH	SO_4-S mg/l	NO_3-N mg/l	Cl mg/l	Cond $\mu S/cm$	NH_4-N mg/l	Na mg/l	Ca mg/l	Mg mg/l	K mg/l	HNO_3 $\mu g/m^3$	Conc. $\mu g/m^3$	Cl mg/m^2d	SO_4-S mg/m^2d	NO_3-N mg/m^2d
44	2003	3	-3,4	76		1,5	0,8	83	4,0	5,02	1,18	0,45	12,82	65,1	0,85	5,93	0,41	0,82	0,38					
44	2003	4	-1,0	71		10,8	0,7	76	5,2	4,33	1,38	0,41	4,89	48,3	0,46	2,93	0,29	0,42	0,19					
44	2003	5	5,4	70		14,6	1,2	64	29,9	4,91	0,98	0,33	0,93	20,7	0,67	0,54	0,20	0,10	0,14					
44	2003	6	8,1	65		16,5	0,8	55	7,5	5,56	1,12	0,23	6,08	34,5	0,63	3,34	0,49	0,50	0,35					
44	2003	7	15,9	72		3,3	1,1	48	51,6	4,54	0,71	0,18	0,19	18,3	0,17	0,16	0,24	0,04	0,14					
44	2003	8	11,1	84		4,3	0,6	50	63,5	5,31	0,25	0,06	1,19	9,5	0,19	0,72	0,12	0,11	0,11					
44	2003	9	6,5	83		1,3	1,6	44	51,3	5,02	0,23	0,07	0,41	7,8	0,20	0,26	0,07	0,05	0,07					
44	2003	10	0,7	90	1844	2,7	1,6	44	85,0	5,34	0,25	0,06	2,97	12,9	0,21	1,92	0,18	0,26	0,10					
44	2003	11	-2,7	89		1,4	2,5	38	12,8	5,12	0,42	0,26	1,31	11,9	1,28	0,66	0,26	0,15	0,27					
44	2003	12	-10,0	86		3,4																		
45	2002	11	3,2	92	92	0,66	7,0	64	207,0	5,00	0,10	0,15	0,19	6,7	0,08	0,10	0,04	0,01	0,01					
45	2002	12	1,0	91	79	0,77	8,9	55	141,6	5,05	0,13	0,12	0,22	6,4	0,10	0,11	0,05	0,01	0,02					
45	2003	1	-3,4	84	126	1,42	8,8	61	34,1	4,75	0,17	0,28	0,21	11,3	0,14	0,10	0,05	0,01	0,02		8,9			
45	2003	2	-3,9	71	227	2,40	13,8	82	38,5	4,89	0,14	0,21	0,22	8,6	0,11	0,12	0,10	0,01	0,05					
45	2003	3	4,5	62	456	1,96	14,1	97	17,6	5,88	0,43	0,55	0,32	15,8	0,88	0,20	0,82	0,06	0,10		14,7			
45	2003	4	5,6	68	511	1,27	11,4	101	54,3	5,55	0,52	0,53	0,50	18,0	0,67	0,22	1,22	0,10	0,10					
45	2003	5	10,5	76	542	0,69	7,0	95	38,7	5,88	0,41	0,37	0,46	12,6	0,61	0,29	0,46	0,06	0,14		18,6			
45	2003	6	18,6	66	761	1,59	6,2	120	88,4	5,76	0,43	0,33	0,16	10,6	0,55	0,11	0,43	0,03	0,04					
45	2003	7	16,3	67	650	1,15	6,1	117	84,0	6,01	0,49	0,36	0,12	11,3	0,50	0,09	0,70	0,05	0,04		16,1			
45	2003	8	19,7	58	648	1,56	7,1	138	103,6	5,71	0,38	0,33	0,11	10,1	0,61	0,07	0,29	0,02	0,05					
45	2003	9	11,4	74	452	1,54	8,2	99	103,2	5,49	0,19	0,20	0,08	7,2	0,26	0,06	0,42	0,03	0,02		16,9			
45	2003	10	3,6	86	241	0,98	9,4	63	100,2	5,06	0,11	0,17	0,10	6,2	0,14	0,06	0,05	0,01	0,02					
45	2003	11	4,6	76	155	0,88	6,7	63	46,3	4,92	0,11	0,24	0,07	7,6	0,13	0	0,08	0,01	0,01		13,2			
45	2003	12	0,5	69	135	0,90	6,4	66																

	Sampling period		Mandatory												Option										
			Climate			Gases			Precipitation						Precipitation					Gases	Particles	Particles Deposition		
Site no	Year	Month	Temp °C	RH %	Sun MJ/m^2	SO_2 $\mu g/m^3$	NO_2 $\mu g/m^3$	O_3 $\mu g/m^3$	Rain mm	Acidity pH	SO_4-S mg/l	NO_3-N mg/l	Cl mg/l	Cond $\mu S/cm$	NH_4-N mg/l	Na mg/l	Ca mg/l	Mg mg/l	K mg/l	HNO_3 $\mu g/m^3$	Conc. $\mu g/m^3$	Cl mg/m^2d	SO_4-S mg/m^2d	NO_3-N mg/m^2d
46	2002	11	10,6		89				141,8																
46	2002	12	7,6		41				114,6																
46	2003	1	6,1	77	90	8,3	48,0	30	71,9																
46	2003	2	5,9	70	151	8,9	54,2	22	26,4																
46	2003	3	9,4	64	237	6,8	40,7	39	14,8																
46	2003	4	11,2	60	251	5,9	33,4	56	18,2																
46	2003	5	14,3	65	303	3,8	29,3	61	35,8																
46	2003	6	18,8	61	296	5,4	37,8	54	37,2																
46	2003	7	19,7	64	310				34,2																
46	2003	8	21,0	59	275	6,3	35,0	57	5,6																
46	2003	9	16,6	61	286	4,7	50,3	36	16,8																
46	2003	10	10,8	68	232	1,2	39,3	24	30,8																
46	2003	11	10,4	79	98	6,8	4,7	68	87,6																
46	2003	12	7,2	78	63				51,8																
47	2003	1																							
47	2003	2																							
47	2003	3																							
47	2003	4																							
47	2003	5																							
47	2003	6																							
47	2003	7																							
47	2003	8																							
47	2003	9																							
47	2003	10																							
47	2003	11																							
47	2003	12																							

	Sampling period		Mandatory												Option									
			Climate			Gases			Precipitation						Precipitation					Gases	Particles	Particles Deposition		
Site no	Year	Month	Temp °C	RH %	Sun MJ/m^2	SO_2 $\mu g/m^3$	NO_2 $\mu g/m^3$	O_3 $\mu g/m^3$	Rain mm	Acidity pH	SO_4-S mg/l	NO_3-N mg/l	Cl mg/l	Cond $\mu S/cm$	NH_4-N mg/l	Na mg/l	Ca mg/l	Mg mg/l	K mg/l	HNO_3 $\mu g/m^3$	Conc. $\mu g/m^3$	Cl mg/m^2d	SO_4-S mg/m^2d	NO_3-N mg/m^2d
49	2002	11	9,4	75	98	13,0	55,0		98,5	5,18	0,80	0,36	3,89	29,7							26,0			
49	2002	12	4,7	75	49	14,0	46,0	8	110,1	4,65	0,48	0,27	0,36	11,4							29,0			
49	2003	1	3,4	71	76	14,0	50,0	19	43,3	4,72	0,87	0,44	2,08	22,4							25,0			
49	2003	2	3,8		194	19,0	62,0	13	31,1	4,83	1,27	0,38	10,38	47,7							38,0			
49	2003	3	9,2	60	359	18,0	61,0		32,6	5,65	0,97	0,36	0,74	17,2							39,0			
49	2003	4	11,3	52	473	12,0	47,0	50	42,7	5,38	1,00	0,38	1,58	19,5							28,0			
49	2003	5	14,6	62	505	12,0	46,0	48	50,5	4,58	1,35	0,58	0,93	23,4							21,0			
49	2003	6	19,5	58	627				41,8	5,78	0,58	0,41	0,19	13,6										
49	2003	7	20,4	58	608	9,0	38,0	51	47,1	5,57	0,71	0,39	0,56	15,8							21,0			
49	2003	8	20,9	60	533	14,0	45,0	60	65,9	5,03	0,75	0,42	1,61	19,2							31,0			
49	2003	9	16,3	63	390				52,8	4,50	1,02	0,59	1,75	27,7							28,0			
49	2003	10	8,9	69	211	13,0	50,0	14	57,4	4,76	1,20	0,48	7,06	42,7							30,0			
50	2002	11	5,6	83	80	28,0	20,0	25	40,0	4,18	7,67	3,30	2,29	28,0	1,28	0,33	2,02							
50	2002	12	-4,7	86	56	79,0	20,0	16	23,0	4,08	8,50	2,75	5,23	67,0	0,92	2,16	2,72				67.00			
50	2003	1	-2,2	82	43	81,0	25,0	30	47,0	4,44	4,44	2,62	3,38	55,0	1,14	0,70	1,15				55,00			
50	2003	2	-4,0	70	68	51,0	22,0	49	53,0	4,68	4,20	2,07	1,80	73,0	1,42	0,40	1,21				73,00			
50	2003	3	2,8	70	110	47,0	19,0	66	21,0	4,56	15,20	8,51	6,15	68,0	3,08	1,26	5,53				68,00			
50	2003	4	7,7	67	138	34,0	18,0	79	18,0	4,87	16,10	5,89	3,52	46,0	2,36	0,91	7,28				46,00			
50	2003	5	16,0	70	156	18,0	22,0	92	149,0	4,23	4,37	2,15	0,58	34,0	0,93	0,22	1,61				34,00			
50	2003	6	19,0	75	169	19,0	23,0	89	98,0	4,44	8,87	4,73	1,55	35,0	2,11	0,39	3,73				35,00			
50	2003	7	18,9	72	276	22,0	21,0	95	69,0	4,49	4,76	2,26	0,66	26,0	1,13	0,19	1,82				26,00			
50	2003	8	19,5	78	298	24,0	23,0	99	51,0	4,31	7,05	2,83	0,95	33,0	2,41	0,39	1,59				33,00			
50	2003	9	14,0	81	197	28,0	27,0	61	57,0	4,18	5,83	2,66	1,22	47,0	1,82	0,25	1,48				47,00			
50	2003	10	5,6	83	128	32,0	19,0	39	76,0	4,38	4,18	1,85	1,30	47,0	1,24	0,41	1,28				47,00			

	Sampling period		Mandatory													Option										
			Climate			Gases			Precipitation							Precipitation						Gases	Particles	Particles Deposition			
Site no	Year	Month	Temp °C	RH %	Sun MJ/m^2	SO_2 $\mu g/m^3$	NO_2 $\mu g/m^3$	O_3 $\mu g/m^3$	Rain mm	Acidity pH	SO_4-S mg/l	NO_3-N mg/l	Cl mg/l	Cond µS/cm	NH_4-N mg/l	Na mg/l	Ca mg/l	Mg mg/l	K mg/l	HNO_3 $\mu g/m^3$	Conc. $\mu g/m^3$	Cl mg/m^2d	SO_4-S mg/m^2d	NO_3-N mg/m^2d
50	2003	11	5,5	83	80	28,0	20,0	25	40,0	4,18	7,67	3,30	2,29	63,0	1,28	0,33	2,02				63,00			
50	2003	12	0,6	86	56	79,0	20,0	16	23,0	4,08	8,50	2,75	5,23	59,0	0,92	2,16	2,72				59,00			

Appendix B

Monthly values for the test sites for the exposure period in the target field exposure programme

			Mandatory													Option									
	Sampling		Climate			Gases			Precipitation							Precipitation					Gases	Particles	Particles Deposition		
	period		Temp	RH	Sun	SO_2	NO_2	O_3	Rain	Acidity	SO_4-S	NO_3-N	Cl	Cond	NH_4-N	Na	Ca	Mg	K	HNO_3	Conc.	Cl	SO_4-S	NO_3-N
Site no	Year	Month	°C	%	MJ/m2	µg/m^3	µg/m^3	µg/m^3	mm	pH	mg/l	mg/l	mg/l	µS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	µg/m^3	µg/m^3	mg/m^{2}d	mg/m^{2}d	mg/m^{2}d
60	2003	1	14,1	74	60	53,3	75,5	10	76,7															
60	2003	2	7,6	72	93	45,9	77,5	17	73,7															
60	2003	3	11,8	61	166	54,1	92,4	24	22,7															
60	2003	4	15,6	62	223	42,1	92,8	22	38,8															
60	2003	5	24,6	48	348	29,9	91,7	26	17,6															
60	2003	6	28,9	42	391	33,9	110,9	37	0,0															
60	2003	7	30,2	44	410	38,4	87,4	25	0,0															
60	2003	8	30,8	43	319	53,3	77,2	30	3,4															
60	2003	9	25,0	55	242	92,5	37,0	20	20,2															
60	2003	10	22,2	65	143	11,4	65,5	11	38,8															
60	2003	11	17,4	78	77	23,5	60,5	7	82,9															
60	2003	12	12,8	75	60	40,1	58,0	7																
71	2002	11				21,0	54,0	49													104,0			
71	2002	12				39,0	55,0	49													156,0			
71	2003	1				32.0	55.0	30													100.0			
71	2003	2				37.0	77.0	48													154.0			
71	2003	3				26.0	75.0	65													121.0			
71	2003	4				16.0	65.0	64													62.0			
71	2003	5				14.0	71.0	68													52.0			
71	2003	6				10.0	73.0	78													49.0			
71	2003	7				10.0	52.0	98													46.0			
71	2003	8				12.0	70.0	87													47.0			
71	2003	9				13.0	70.0	58													55.0			
71	2003	10				22.0	61.0	45													70.0			
71	2003	11				22.0	59.0	32													104.0			
71	2003	12				34.0	62.0	28													104.0			

			Mandatory													Option									
	Sampling		Climate			Gases			Precipitation							Precipitation					Gases	Particles	Particles Deposition		
	period		Temp	RH	Sun	SO_2	NO_2	O_3	Rain	Acidity	SO_4-S	NO_3-N	Cl	Cond	NH_4-N	Na	Ca	Mg	K	HNO_3	Conc.	Cl	SO_4-S	NO_3-N
Site no	Year	Month	°C	%	MJ/m2	µg/m^3	µg/m^3	µg/m^3	mm	pH	mg/l	mg/l	mg/l	µS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	µg/m^3	µg/m^3	mg/m^{2}d	mg/m^{2}d	mg/m^{2}d
72	2002	11	4,1	83		83,0	27,0	49	51,0	4,50											64,0			
72	2002	12	-6,0	87		17,0	36,0	49	6,0	4,50											100,0			
72	2003	1	-2,6	87		22,0	34,0	30	58,0	4,60											62,0			
72	2003	2	-5,3	75		26,0	44,0	48	10,0	4,50											77,0			
72	2003	3	2,8	71		19,0	37,0	65	32,0	4,50											56,0			
72	2003	4	7,5	64		14,0	30,0	64	37,0	4,70											51,0			
72	2003	5	15,5	70		7,0	28,0	68	89,0	4,80											40,0			
72	2003	6	18,4	64		9,0	30,0	78	35,0	4,70											34,0			
72	2003	7	19,3	75		7,0	27,0	98	78,0	4,70											30,0			
72	2003	8	19,8	66		9,0	31,0	87	27,0	4,50											39,0			
72	2003	9	13,8	70		9,0	34,0	58	42,0	4,60											54,0			
72	2003	10	6,1	80		11,0	29,0	45	85,0	4,70											42,0			
72	2003	11	5,5	87		12,0	28,0	32	25,0	4,40											75,0			
72	2003	12	1,0	85		17,0	33,0	28	79,0	4,40											79,0			
73	2002	11				21,0	54,0	49													100,0			
73	2002	12				39,0	55,0	49													100,0			
73	2003	1				32,0	55,0	30													100,0			
73	2003	2				37,0	77,0	48													154,0			
73	2003	3				26,0	75,0	65													121,0			
73	2003	4				16,0	65,0	64													62,0			
73	2003	5				14,0	71,0	68													52,0			
73	2003	6				10,0	73,0	78													49,0			
73	2003	7				10,0	52,0	98													46,0			
73	2003	8				12,0	70,0	87													47,0			
73	2003	9				13,0	70,0	58													55,0			
73	2003	10				22,0	61,0	45													70,0			
73	2003	11				22,0	59,0	32													104,0			

			Mandatory													Option									
	Sampling		Climate			Gases			Precipitation							Precipitation					Gases	Particles	Particles Deposition		
	period		Temp	RH	Sun	SO_2	NO_2	O_3	Rain	Acidity	SO_4-S	NO_3-N	Cl	Cond	NH_4-N	Na	Ca	Mg	K	HNO_3	Conc.	Cl	SO_4-S	NO_3-N
Site no	Year	Month	°C	%	MJ/m2	µg/m^3	µg/m^3	µg/m^3	mm	pH	mg/l	mg/l	mg/l	µS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	µg/m^3	µg/m^3	mg/m^{2}d	mg/m^{2}d	mg/m^{2}d
73	2003	12				34,0	62,0	28													104,0			
74	2002	11				14,0	33,0	49													57,0			
74	2002	12				29,0	39,0	49													100,0			
74	2003	1				29,0	34,0	30													61,0			
74	2003	2				37,0	32,0	48													92,0			
74	2003	3				25,0	36,0	65													72,0			
74	2003	4				16,0	28,0	64													45,0			
74	2003	5				14,0	23,0	68													36,0			
74	2003	6				10,0	24,0	78													32,0			
74	2003	7				10,0	22,0	98													28,0			
74	2003	8				12,0	26,0	87													32,0			
74	2003	9				13,0	32,0	58													39,0			
74	2003	10				22,0	32,0	45													38,0			
74	2003	11				22,0	37,0	32													60,0			
74	2003	12				34,0	39,0	28													65,0			
75	2002	11				14,0	33,0	49													57,0			
75	2002	12				29,0	39,0	49													100,0			
75	2003	1				29,0	34,0	30													61,0			
75	2003	2				37,0	32,0	48													92,0			
75	2003	3				25,0	36,0	65													72,0			
75	2003	4				16,0	28,0	64													45,0			
75	2003	5				14,0	23,0	68													36,0			
75	2003	6				10,0	24,0	78													32,0			
75	2003	7				10,0	22,0	98													28,0			
75	2003	8				12,0	26,0	87													32,0			
75	2003	9				13,0	32,0	58													39,0			

			Mandatory													Option									
	Sampling		Climate			Gases			Precipitation							Precipitation					Gases	Particles	Particles Deposition		
	period		Temp	RH	Sun	SO_2	NO_2	O_3	Rain	Acidity	SO_4-S	NO_3-N	Cl	Cond	NH_4-N	Na	Ca	Mg	K	HNO_3	Conc.	Cl	SO_4-S	NO_3-N
Site no	Year	Month	°C	%	MJ/m2	µg/m^3	µg/m^3	µg/m^3	mm	pH	mg/l	mg/l	mg/l	µS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	µg/m^3	µg/m^3	mg/m^{2}d	mg/m^{2}d	mg/m^{2}d
75	2003	10				22,0	32,0	45													38,0			
75	2003	11				22,0	37,0	32													60,0			
75	2003	12				34,0	39,0	28													65,0			
76	2002	11				19,8	50,6	49													49,3			
76	2002	12				21,0	69,0	49													56,0			
76	2003	1				25,0	67,0	30													34,0			
76	2003	2				35,0	80,0	48													118,0			
76	2003	3				34,0	83,0	65													65,0			
76	2003	4				25,0	63,0	64													38,0			
76	2003	5				21,0	54,0	68													26,0			
76	2003	6				17,0	48,0	78													20,0			
76	2003	7				12,0	34,0	98													15,0			
76	2003	8				16,0	38,0	87													14,0			
76	2003	9				18,0	47,0	58													27,0			
76	2003	10				17,0	47,0	45													41,0			
76	2003	11				19,0	43,0	32													88,0			
76	2003	12				24,0	47,0	28													87,0			
80	2002	12	7,1																					
80	2003	1	5,4																					
80	2003	2	5,0																					
80	2003	3	9,1																					
80	2003	4	10,1																					
80	2003	5	13,7																					
80	2003	6	18,3																					
80	2003	7	19,4																					
80	2003	8	20,6																					

			Mandatory													Option									
	Sampling		Climate			Gases			Precipitation							Precipitation					Gases	Particles	Particles Deposition		
	period		Temp	RH	Sun	SO_2	NO_2	O_3	Rain	Acidity	SO_4-S	NO_3-N	Cl	Cond	NH_4-N	Na	Ca	Mg	K	HNO_3	Conc.	Cl	SO_4-S	NO_3-N
Site no	Year	Month	°C	%	MJ/m2	µg/m^3	µg/m^3	µg/m^3	mm	pH	mg/l	mg/l	mg/l	µS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	µg/m^3	µg/m^3	mg/m^{2}d	mg/m^{2}d	mg/m^{2}d
80	2003	9	15,9																					
80	2003	10	9,8																					
80	2003	11	9,3																					
81	2002	12	7,1																					
81	2003	1	5,4																					
81	2003	2	5,0																					
81	2003	3	9,1																					
81	2003	4	10,1																					
81	2003	5	13,7																					
81	2003	6	18,3																					
81	2003	7	19,4																					
81	2003	8	20,6																					
81	2003	9	15,9																					
81	2003	10	9,8																					
81	2003	11	9,3																					
82	2002	12	7,1		48	3,4	18,2	11														28,5			
82	2003	1	5,4		71	4,8	19,8	16														22,3			
82	2003	2	5,0		108	8,1	24,6	12														40,4			
82	2003	3	9,1		205	3,9	20,5	27														48,5			
82	2003	4	10,1		283	3,0	16,8	38														31,5			
82	2003	5	13,7		348	2,0	11,4	32														21,3			
82	2003	6	18,3		396	2,9	12,8	33														28,4			
82	2003	7	19,4		376	2,3	12,3	28														26,2			
82	2003	8	20,6		354	2,1	12,4	33														35,4			
82	2003	9	15,9		245	4,4	20,8	18														31,8			
82	2003	10	9,8		147	4,6	16,5	15														22,3			

			Mandatory													Option									
	Sampling		Climate			Gases			Precipitation							Precipitation					Gases	Particles	Particles Deposition		
	period		Temp	RH	Sun	SO_2	NO_2	O_3	Rain	Acidity	SO_4-S	NO_3-N	Cl	Cond	NH_4-N	Na	Ca	Mg	K	HNO_3	Conc.	Cl	SO_4-S	NO_3-N
Site no	Year	Month	°C	%	MJ/m2	µg/m^3	µg/m^3	µg/m^3	mm	pH	mg/l	mg/l	mg/l	µS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	µg/m^3	µg/m^3	mg/m^{2}d	mg/m^{2}d	mg/m^{2}d
82	2003	11	9,3		79	6,0	19,7	10													26,4			
83	2002	12	7,1			4,6	25,7														21,4			
83	2003	1	5,4			2,2	27,4														16,6			
83	2003	2	5,0			3,2	37,2														28,4			
83	2003	3	9,1			3,0	31,7														29,0			
83	2003	4	10,1			3,6	27,0														24,8			
83	2003	5	13,7			3,0	22,8														16,6			
83	2003	6	18,3			3,6	21,9														20,4			
83	2003	7	19,4			2,9	20,0														18,7			
83	2003	8	20,6			3,2	27,5														25,7			
83	2003	9	15,9			4,9	26,9														24,3			
83	2003	10	9,8			4,8	23,8														18,4			
83	2003	11	9,3			3,9	28,6														22,5			
84	2003	2	5,4			5,4	34,1														63,7			
84	2003	3	9,1			4,4	32,2														72,5			
84	2003	4	11,0			2,9	27,3														58,5			
84	2003	5	14,5			1,5	23,6														39,8			
84	2003	6	19,1			2,7	23,5														46,3			
84	2003	7	20,3			1,7	21,7														45,7			
84	2003	8	21,1			2,8	21,7														57,4			
84	2003	9	16,6			3,6	32,0														51,7			
84	2003	10	10,6			3,5	26,0														45,3			
84	2003	11	10,1			2,8	27,9														46,3			
84	2003	12	6,6			3,3	28,7														48,1			
84	2004	1	6,5			2,4	26,0														33,8			

			Mandatory													Option									
	Sampling		Climate			Gases			Precipitation							Precipitation					Gases	Particles	Particles Deposition		
	period		Temp	RH	Sun	SO_2	NO_2	O_3	Rain	Acidity	SO_4-S	NO_3-N	Cl	Cond	NH_4-N	Na	Ca	Mg	K	HNO_3	Conc.	Cl	SO_4-S	NO_3-N
Site no	Year	Month	°C	%	MJ/m2	µg/m^3	µg/m^3	µg/m^3	mm	pH	mg/l	mg/l	mg/l	µS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	µg/m^3	µg/m^3	mg/m^{2}d	mg/m^{2}d	mg/m^{2}d
85	2002	12	7,0			2,0	22,5	8													20,6			
85	2003	1	5,3			1,9	22,1	12													16,0			
85	2003	2	5,4			2,3	30,1	9													26,5			
85	2003	3	9,1			2,4	28,3	17													29,8			
85	2003	4	11,0			2,4	22,9	25													25,1			
85	2003	5	14,5			1,3	14,7	28													17,7			
85	2003	6	19,1			1,2	18,6	30													19,7			
85	2003	7	20,3			1,3	15,5	25													19,0			
85	2003	8	21,1			1,9	20,5	28													28,3			
85	2003	9	16,6			1,3	25,5	18													24,0			
85	2002	10	10,6			1,0	25,0	12													18,7			
85	2003	11	10,1			1,8	26,0	9													19,8			
86	2002	12	7,0			4,4	37,8	4													30,6			
86	2003	1	5,3			4,4	44,5	6													30,2			
86	2003	2	5,4			5,5	54,5	3													44,9			
86	2003	3	9,1			5,2	57,6	7													42,6			
86	2003	4	11,0			4,6	50,8	13													37,5			
86	2003	5	14,5			3,8	64,7	9													35,4			
86	2003	6	19,1			5,1	61,7	10													39,3			
86	2003	7	20,3			4,5	51,4	8													37,5			
86	2003	8	21,1			3,2	40,1	13													38,2			
86	2003	9	16,6			4,9	67,7	6													40,1			
86	2003	10	10,6			6,7	50,3	6													30,6			
86	2003	11	10,1			7,4	62,0	4													37,8			
90	2002	12	-1,6	89		13,8	87,1	8													48,0			
90	2003	1	-1,0	84		8,7	51,1	14													48,0			

			Mandatory												Option									
	Sampling		Climate			Gases			Precipitation						Precipitation					Gases	Particles	Particles Deposition		
	period		Temp	RH	Sun	SO_2	NO_2	O_3	Rain	Acidity	SO_4-S	NO_3-N	Cl	Cond	NH_4-N	Na	Ca	Mg	K	HNO_3	Conc.	Cl	SO_4-S	NO_3-N
Site no	Year	Month	°C	%	MJ/m2	µg/m^3	µg/m^3	µg/m^3	mm	pH	mg/l	mg/l	mg/l	µS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	µg/m^3	µg/m^3	mg/m^{2}d	mg/m^{2}d	mg/m^{2}d
90	2003	2	-2,8	78		15,5	61,2	15													48,0			
90	2003	3	5,2	68		9,2	49,9	31													48,0			
90	2003	4	8,5	60		8,0	49,8	47													48,0			
90	2003	5	16,0	67		7,7	45,1	54													48,0			
90	2003	6	20,6	61		5,8	35,5	61													32,0			
90	2003	7	19,8	65		5,1	35,9	50													27,0			
90	2003	8	21,6	55		6,9	41,2	57													37,0			
90	2003	9	14,6	67		5,3	49,2	34													39,0			
90	2003	10	6,0	78		9,7	48,8	20													38,0			
90	2003	11	4,9	87		7,3	44,2	7													54,0			
90	2003	12	0,4	84		10,3	44,1																	
91	2002	12	-1,6	89		13,8	87,1	8													48,0			
91	2003	1	-1,0	84		8,7	51,1	14													48,0			
91	2003	2	-2,8	78		15,5	61,2	15													48,0			
91	2003	3	5,2	68		9,2	49,9	31													48,0			
91	2003	4	8,5	60		8,0	49,8	47													48,0			
91	2003	5	16,0	67		7,7	45,1	54													48,0			
91	2003	6	20,6	61		5,8	35,5	61													32,0			
91	2003	7	19,8	65		5,1	35,9	50													27,0			
91	2003	8	21,6	55		6,9	41,2	57													37,0			
91	2003	9	14,6	67		5,3	49,2	34													39,0			
91	2003	10	6,0	78		9,7	48,8	20													38,0			
91	2003	11	4,9	87		7,3	44,2	7													54,0			
91	2003	12	0,4	84		10,3	44,1																	
96	2002	12	-1,6	89		6,8	114,1														32,0			
96	2003	1	-1,0	84		9,6	115,3														28,3			

			Mandatory													Option									
	Sampling		Climate			Gases			Precipitation							Precipitation					Gases	Particles	Particles Deposition		
	period		Temp	RH	Sun	SO_2	NO_2	O_3	Rain	Acidity	SO_4-S	NO_3-N	Cl	Cond	NH_4-N	Na	Ca	Mg	K	HNO_3	Conc.	Cl	SO_4-S	NO_3-N
Site no	Year	Month	°C	%	MJ/m2	µg/m^3	µg/m^3	µg/m^3	mm	pH	mg/l	mg/l	mg/l	µS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	µg/m^3	µg/m^3	mg/m^{2}d	mg/m^{2}d	mg/m^{2}d
96	2003	2	-2,8	78		17,6	142,5														52,1			
96	2003	3	5,2	68		7,3	119,5														44,7			
96	2003	4	8,5	60			58,4														34,9			
96	2003	5	16,0	67			48,8														27,8			
96	2003	6	20,6	61			52,7														28,2			
96	2003	7	19,8	65			55,7														22,0			
96	2003	8	21,6	55			52,8														26,9			
96	2003	9	14,6	67		2,1	110,3														29,7			
96	2003	10	6,0	78		2,3	70,1														21,8			
96	2003	11	4,9	87		2,2	119,7														38,4			
96	2003	12	0,4	84		2,8	95,4														30,9			
100	2002	11	13,8	87	303	0,8	16,9	27	139,6	5,06	1,94	1,77	2,39	32,2	0,18	1,02	2,52	0,19	0,19	0,21	26,6			
100	2002	12	8,9	93	212	0,5	19,0	16	76,6	5,11	1,22	1,86	0,77	16,7	0,23	0,39	0,43	0,06	0,22	0,15	25,1			
100	2003	1	7,2	82	206	1,1	19,0	32	123,1	5,26	0,63	0,52	5,75	31,8	0,31	3,43	0,68	0,42	0,29	0,19	25,5			
100	2003	2	4,5	66	254	1,8	19,2	48	14,8	5,40	1,12	0,51	16,76	68,3	0,39	9,73	0,78	1,05	0,38	0,43	36,1			
100	2003	3	9,9	68	392	1,5	17,3	59	30,5	5,97	1,00	1,34	2,51	33,0	0,88	2,52	3,85	0,30	1,61	0,58	34,4			
100	2003	4	13,2	70	419	1,2	11,9	67	63,9	5,82	1,14	0,74	3,41	36,5	1,26	1,80	1,93	0,29	0,80	0,70	26,2			
100	2003	5	19,8	67	440	1,6	12,5	69	73,0	6,40	1,12	0,95	2,29	37,7	1,26	2,20	4,97	0,47	1,34	1,39	32,9			
100	2003	6	25,9	63	555	1,6	11,3	78	1,2	6,08	5,66	3,17	1,70	87,6	5,57	0,73	9,38	1,19	1,27	1,62	31,8			
100	2003	7	26,7	55	777	2,0	9,6	85	3,0	6,47	3,88	8,07	7,57	149,3	2,20	4,48	19,73	1,45	2,99	1,63	31,7			
100	2003	8	27,7	52	560	1,9	11,9	82	36,9	6,66	1,10	1,12	1,83	43,4	1,19	1,23	5,20	0,18	0,43	1,58	29,3			
100	2003	9	20,7	63	327	1,5	9,6	62	36,7	6,30	0,62	0,69	1,82	33,8	0,19	0,96	3,62	0,20	0,27	1,32	17,9			
100	2003	10	15,8	79	246	1,0	13,6	42	149,7	6,26	0,55	0,20	4,78	31,1	0,97	2,55	1,87	1,59	1,23	0,52	18,3			
100	2003	11	11,9	91	173	0,8	15,7	19	101,4	6,31	1,89	1,90	9,62	77,5	0,48	6,21	9,61	1,09	1,34	0,19	28,2			
100	2003	12	7,2	75	174	0,9	15,4	11,5	25,8	7,09	1,95	1,35	39,4	154,4	0,54	6,34	5,97	0,89	4,46	0,21	30,6			

			Mandatory													Option										
	Sampling		Climate			Gases			Precipitation							Precipitation					Gases	Particles	Particles Deposition		
	period		Temp	RH	Sun	SO_2	NO_2	O_3	Rain	Acidity	SO_4-S	NO_3-N	Cl	Cond	NH_4-N	Na	Ca	Mg	K	HNO_3	Conc.	Cl	SO_4-S	NO_3-N
Site no	Year	Month	°C	%	MJ/m2	µg/m^3	µg/m^3	µg/m^3	mm	pH	mg/l	mg/l	mg/l	µS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	µg/m^3	µg/m^3	mg/m^{2}d	mg/m^{2}d	mg/m^{2}d
101	2002	11	13,8	87		0,8	16,9	27	139,6	5,06	1,94	1,77	2,39	32,2	0,18	1,02	2,52	0,19	0,19	0,21	26,6			
101	2002	12	8,9	93		0,5	19,0	16	76,6	5,11	1,22	1,86	0,77	16,7	0,23	0,39	0,43	0,06	0,22	0,15	25,1			
101	2003	1	7,2	82		1,1	19,0	32	123,1	5,26	0,63	0,52	5,75	31,8	0,31	3,43	0,68	0,42	0,29	0,19	25,5			
101	2003	2	4,5	66		1,8	19,2	48	14,8	5,40	1,12	0,51	16,76	68,3	0,39	9,73	0,78	1,05	0,38	0,43	36,1			
101	2003	3	9,9	68		1,5	17,3	59	30,5	5,97	1,00	1,34	2,51	33,0	0,88	2,52	3,85	0,30	1,61	0,58	34,4			
101	2003	4	13,2	70		1,2	11,9	67	63,9	5,82	1,14	0,74	3,41	36,5	1,26	1,80	1,93	0,29	0,80	0,70	26,2			
101	2003	5	19,8	67		1,6	12,5	69	73,0	6,40	1,12	0,95	2,29	37,7	1,26	2,20	4,97	0,47	1,34	1,39	32,9			
101	2003	6	25,9	63		1,6	11,3	78	1,2	6,08	5,66	3,17	1,70	87,6	5,57	0,73	9,38	1,19	1,27	1,62	31,8			
101	2003	7	26,7	55		2,0	9,6	85	3,0	6,47	3,88	8,07	7,57	149,3	2,20	4,48	19,73	1,45	2,99	1,63	31,7			
101	2003	8	27,7	52		1,9	11,9	82	36,9	6,66	1,10	1,12	1,83	43,4	1,19	1,23	5,20	0,18	0,43	1,58	29,3			
101	2003	9	20,7	63		1,5	9,6	62	36,7	6,30	0,62	0,69	1,82	33,8	0,19	0,96	3,62	0,20	0,27	1,32	17,9			
101	2003	10	15,8	79		1,0	13,6	42	149,7	6,26	0,55	0,20	4,78	31,1	0,97	2,55	1,87	1,59	1,23	0,52	18,3			
101	2003	11	11,9	91		0,8	15,7	19	101,4	6,31	1,89	1,90	9,62	77,5	0,48	6,21	9,61	1,09	1,34	0,19	28,2			
101	2003	12	7,2	75		0,9	15,4	11,5	25,8	7,09	1,95	1,35	39,4	154,4	0,54	6,34	5,97	0,89	4,46	0,21	30,6			
102	2002	11	13,8	87		0,8	16,9	27	139,6	5,06	1,94	1,77	2,39	32,2	0,18	1,02	2,52	0,19	0,19	0,21	26,6			
102	2002	12	8,9	93		0,5	19,0	16	76,6	5,11	1,22	1,86	0,77	16,7	0,23	0,39	0,43	0,06	0,22	0,15	25,1			
102	2003	1	7,2	82		1,1	19,0	32	123,1	5,26	0,63	0,52	5,75	31,8	0,31	3,43	0,68	0,42	0,29	0,19	25,5			
102	2003	2	4,5	66		1,8	19,2	48	14,8	5,40	1,12	0,51	16,76	68,3	0,39	9,73	0,78	1,05	0,38	0,43	36,1			
102	2003	3	9,9	68		1,5	17,3	59	30,5	5,97	1,00	1,34	2,51	33,0	0,88	2,52	3,85	0,30	1,61	0,58	34,4			
102	2003	4	13,2	70		1,2	11,9	67	63,9	5,82	1,14	0,74	3,41	36,5	1,26	1,80	1,93	0,29	0,80	0,70	26,2			
102	2003	5	19,8	67		1,6	12,5	69	73,0	6,40	1,12	0,95	2,29	37,7	1,26	2,20	4,97	0,47	1,34	1,39	32,9			
102	2003	6	25,9	63		1,6	11,3	78	1,2	6,08	5,66	3,17	1,70	87,6	5,57	0,73	9,38	1,19	1,27	1,62	31,8			
102	2003	7	26,7	55		2,0	9,6	85	3,0	6,47	3,88	8,07	7,57	149,3	2,20	4,48	19,73	1,45	2,99	1,63	31,7			
102	2003	8	27,7	52		1,9	11,9	82	36,9	6,66	1,10	1,12	1,83	43,4	1,19	1,23	5,20	0,18	0,43	1,58	29,3			
102	2003	9	20,7	63		1,5	9,6	62	36,7	6,30	0,62	0,69	1,82	33,8	0,19	0,96	3,62	0,20	0,27	1,32	17,9			
102	2003	10	15,8	79		1,0	13,6	42	149,7	6,26	0,55	0,20	4,78	31,1	0,97	2,55	1,87	1,59	1,23	0,52	18,3			
102	2003	11	11,9	91		0,8	15,7	19	101,4	6,31	1,89	1,90	9,62	77,5	0,48	6,21	9,61	1,09	1,34	0,19	28,2			

			Mandatory													Option										
	Sampling		Climate			Gases			Precipitation							Precipitation					Gases	Particles	Particles Deposition		
	period		Temp	RH	Sun	SO_2	NO_2	O_3	Rain	Acidity	SO_4-S	NO_3-N	Cl	Cond	NH_4-N	Na	Ca	Mg	K	HNO_3	Conc.	Cl	SO_4-S	NO_3-N
Site no	Year	Month	°C	%	MJ/m2	µg/m^3	µg/m^3	µg/m^3	mm	pH	mg/l	mg/l	mg/l	µS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	µg/m^3	µg/m^3	mg/m^{2}d	mg/m^{2}d	mg/m^{2}d
102	2003	12	7,2	75		0,9	15,4	11,5	25,8	7,09	1,95	1,35	39,4	154,4	0,54	6,34	5,97	0,89	4,46	0,21	30,6			
105	2002	11							139,6	5,06	1,94	1,77	2,39	32,2	0,18	1,02	2,52	0,19	0,19	0,21	39,9			
105	2002	12	7,1	85		0,9	23,4	6	76,6	5,11	1,22	1,86	0,77	16,7	0,23	0,39	0,43	0,06	0,22	0,15	27,4			
105	2003	1	5,3	77		1,0	28,3	8	123,1	5,26	0,63	0,52	5,75	31,8	0,31	3,43	0,68	0,42	0,29	0,19	30,4			
105	2003	2	5,8	72		0,8	26,7	13	14,8	5,40	1,12	0,51	16,76	68,3	0,39	9,73	0,78	1,05	0,38	0,43	29,6			
105	2003	3	9,9	69		0,9	23,5	18	30,5	5,97	1,00	1,34	2,51	33,0	0,88	2,52	3,85	0,30	1,61	0,58	28,1			
105	2003	4	11,6	72		0,5	17,6	23	63,9	5,82	1,14	0,74	3,41	36,5	1,26	1,80	1,93	0,29	0,80	0,70	28,9			
105	2003	5	16,8	70		0,4	17,4	22	73,0	6,40	1,12	0,95	2,29	37,7	1,26	2,20	4,97	0,47	1,34	1,39	29,8			
105	2003	6	20,5	60		0,6	16,9	31	1,2	6,08	5,66	3,17	1,70	87,6	5,57	0,73	9,38	1,19	1,27	1,62	35,4			
105	2003	7	21,8	60		0,6	15,9	34	3,0	6,47	3,88	8,07	7,57	149,3	2,20	4,48	19,73	1,45	2,99	1,63	32,5			
105	2003	8	22,3	62		0,5	16,4	33	36,9	6,66	1,10	1,12	1,83	43,4	1,19	1,23	5,20	0,18	0,43	1,58	30,0			
105	2003	9	17,3	68		0,4	18,3	24	36,7	6,30	0,62	0,69	1,82	33,8	0,19	0,96	3,62	0,20	0,27	1,32	27,7			
105	2003	10	14,9	78		0,4	22,8	15	149,7	6,26	0,55	0,20	4,78	31,1	0,97	2,55	1,87	1,59	1,23	0,52	28,8			
105	2003	11	10,6	78		0,6	22,9	10	101,4	6,31	1,89	1,90	9,62	77,5	0,48	6,21	9,61	1,09	1,34	0,19	29,7			
105	2003	12	6,2	79		0,9	25,2	7	25,8	7,09	1,95	1,35	39,4	154,4	0,54	6,34	5,97	0,89	4,46	0,21	22,5			
110	2002	11	1,3	89	25	9,0	38,0		40,8															
110	2002	12	-6,7	82	46	10,0	49,0	53	34,3	6,68	8,90	0,40	6,90	0,2		11,00								
110	2003	1	-4,4	87	35	9,0	33,0	53	15,2	7,00	14,00	0,88	12,00	0,2		9,20								
110	2003	2	-4,3	85	55	7,0	37,0	62	7,4	7,15	5,60	0,14	8,00	0,1		5,70								
110	2003	3	1,2	71	200	8,0	32,0	88	8,1	6,62	16,30	1,45	17,50	0,2		14,80								
110	2003	4	4,8	69	195	7,0	31,0	75	36,4	7,18	7,40	1,25	5,30	0,2		4,10								
110	2003	5	13,2	67	236	5,0	25,0	72	38,5	7,30	2,90	1,10	2,00	0,1		2,20								
110	2003	6	16,3	66	287	4,0	17,0	71	30,6	7,05	7,40	1,55	3,20	0,1		2,20								
110	2003	7	22,6	68	281	4,0	24,0	59	36,9	7,13	4,60	0,80	2,20	0,1		1,60								
110	2003	8	17,9	75	231	4,0	17,0	55	125,8	7,00	3,90	0,71	2,50	0,1		1,70								
110	2003	9	14,1	79	203	5,0	22,0	46	40,1	6,68	3,30	0,84	1,40	0,1		1,20								

			Mandatory												Option										
	Sampling		Climate			Gases			Precipitation						Precipitation					Gases	Particles	Particles Deposition		
	period		Temp	RH	Sun	SO_2	NO_2	O_3	Rain	Acidity	SO_4-S	NO_3-N	Cl	Cond	NH_4-N	Na	Ca	Mg	K	HNO_3	Conc.	Cl	SO_4-S	NO_3-N
Site no	Year	Month	°C	%	MJ/m2	µg/m^3	µg/m^3	µg/m^3	mm	pH	mg/l	mg/l	mg/l	µS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	µg/m^3	µg/m^3	mg/m^{2}d	mg/m^{2}d	mg/m^{2}d
110	2003	10	5,4	87	77	5,0	22,0	44	94,9	6,25	3,30	0,10	5,36	0,1		2,77								
110	2003	11	3,7	99	7	5,0	22,0	44	60,1	7,95	2,80	0,56	8,50	0,1		3,79								
110	2003	12	1,5	94	31,5	6,0	27,0	51	44,6	7,25	4,80	0,86	4,10	0,1		4,00								
110	2004	1	-5,8	94	38,9	7,0	42,0	52	11,8	7,30	4,70	0,82	4,70	0,1		3,00								
110	2004	2	-1,7	93	39,6	7,0	37,0	56	29,7	7,30	4,70	0,82	4,70	0,1		3,00								
111	2002	11	1,3	89	25	3,0	20,0		40,8															
111	2002	12	-6,7	82	46	18,0	24,0	48	34,3	6,68	8,90	0,40	6,90	0,2		11,00								
111	2003	1	-4,4	87	35	7,0	22,0	51	15,2	7,00	14,00	0,88	12,00	0,2		9,20								
111	2003	2	-5,2	89	55	10,0	23,0	63	7,4	7,15	5,60	0,14	8,00	0,1		5,70								
111	2003	3	0,7	76	200	11,0	20,0	78	8,1	6,62	16,30	1,45	17,50	0,2		14,80								
111	2003	4	4,6	71	195	11,0	19,0	74	36,4	7,18	7,40	1,25	5,30	0,2		4,10								
111	2003	5	13,0	70	236	6,0	17,0	68	38,5	7,30	2,90	1,10	2,00	0,1		2,20								
111	2003	6	16,3	67	287	7,0	14,0	59	30,6	7,05	7,40	1,55	3,20	0,1		2,20								
111	2003	7	22,5	71	281	6,0	11,0	53	36,9	7,13	4,60	0,80	2,20	0,1		1,60								
111	2003	8	17,8	78	231	5,0	13,0	48	125,8	7,00	3,90	0,71	2,50	0,1		1,70								
111	2003	9	13,5	82	203	4,0	18,0	41	40,1	6,68	3,30	0,84	1,40	0,1		1,20								
111	2003	10	0,8	90	77,1	4,0	20,0	40	94,9	6,25	3,30	0,10	5,36	0,1		2,77								
111	2003	11	3,6	100	6,5	4,0	20,0	40	60,1	7,95	2,80	0,56	8,50	0,1		3,79								
111	2003	12	1,3	96	31,5	7	25	35	44,6	7,25	4,80	0,86	4,10	0,1		4,00								
111	2004	1	-2,5	96	38,9	6	25	47	11,8	7,30	4,70	0,82	4,70	0,1		3,00								
111	2004	2	-2,2	95	39,6	10	27	54	29,7	7,30	4,70	0,82	4,70	0,1		3,00								

Appendix C

Two month's mean values for particle deposition and HNO_3 concentration in the broad field programme in MULTI-ASSESS

	Sampling		Total		Particles Deposition										Gass-pass.	Gass denud.		
	period		deposition		Soot	Cl	SO4-S	NO3-N	NH4	Na	Ca	K	Mg	Insol amount	HNO3	HNO3	NO3-	PM10
Sie no	Year	Month	mg/m^2 * month	Sampling period	mg/m^2* month	µg/m^2* month	mg/m^2*month	mg/m^2* month	mg/m^2* month	mg/m^2* month	mg/m^2* month	mg/m^2* month	mg/m^2* month	mg/m^2* month	µg/m^3	µg/m^3	µg/m^3	µg/m^3
1	2003	1	5.6	67		0.21	0.38	0.21	0.00	0.17	0.11	0.02	0.03	4.54	0.38			
1	2003	4	5.4	61		0.06	0.29	0.56	0.03	0.11	0.11	0.02	0.02	4.22	0.73			
1	2003	6	27.6	65		0.09	0.50	1.15	0.03	0.11	0.34	0.05	0.06	25.27	1.00			
1	2003	8	9.6	58		0.06	0.19	0.37	0.00	0.05	0.15	0.08	0.02	8.68	0.82			
1	2003	10	4.4	58		0.06	0.18	0.49	0.04	0.06	0.15	0.05	0.02	3.37	0.93			
1	2003	12	10.8	63		0.11	0.43	0.41	0.01	0.11	0.22	0.02	0.01	9.44	0.24			
3	2003	2	18.3	61		0.23	1.08	0.59	0.13	0.23	0.33	0.09	0.05	15.54	0.72			
3	2003	4	24.2	57		0.09	1.03	0.65	0.08	0.16	0.25	0.04	0.05	21.87	0.93			
3	2003	6	17.6	63		0.03	0.52	0.42	0.03	0.06	0.15	0.03	0.04	16.37	1.10			
3	2003	8	14.9	64		0.05	0.38	0.36	0.03	0.06	0.14	0.05	0.02	13.82	0.96			
3	2003	9	17.0	48		0.12	0.41	0.81	0.05	0.18	0.39	0.11	0.03	14.85	1.05			
3	2003	12	9.3	70		0.13	0.36	0.48	0.04	0.17	0.14	0.05	0.02	7.96	0.31			
5	2003	1	1.6	61		0.02	0.06	0.06	0.00	0.00	0.04	0.02	0.03	1.39	0.18			
5	2003	3	-1.5	59		0.07	0.16	0.67	0.12	0.03	0.10	0.02	0.00	-2.60	0.41			
5	2003	5	4.3	61		0.03	0.08	0.12	0.00	0.01	0.06	0.02	0.01	3.99	0.19			
5	2003	7	10.7	61		0.11	0.15	0.31	0.00	0.08	0.19	0.03	0.02	9.83	0.12			
5	2003	9	8.9	63		0.03	0.07	0.23	0.02	0.04	0.07	0.03	0.02	8.42	0.08			
5	2003	11	4.3	60		0.02	0.09	0.13	0.00	0.02	0.04	0.02	0.00	3.96	0.10			
7	2003	1	6.7	61		0.13	0.89	0.51	0.00	0.24	0.17	0.07	0.04	4.62	0.33			29.30
7	2003	3	7.5	59		0.13	0.58	0.46	0.04	0.16	0.17	0.03	0.02	5.92	0.39			36.00
7	2003	5	15.0	61		0.14	0.42	0.91	0.00	0.21	0.33	0.03	0.08	12.90	0.55			25.40
7	2003	7	9.9	64		0.11	0.27	0.93	0.00	0.22	0.18	0.06	0.04	8.10	0.87			15.70
7	2003	9	10.3	62		0.15	0.24	1.12	0.00	0.33	0.14	0.03	0.04	8.26	0.81			16.70

	Sampling		Total		Particles Deposition										Gass-pass.	Gass denud.		
	period		deposition		Soot	Cl	SO4-S	NO3-N	NH4	Na	Ca	K	Mg	Insol amount	HNO3	HNO3	NO3-	PM10
Sie no	Year	Month	mg/m^2 * month	Sampling period	mg/m^2 * month	µg/m^2 * month	mg/m^2 *month	mg/m^2 * month	mg/m^2 * month	mg/m^2 * month	mg/m^2 * month	mg/m^2 * month	mg/m^2 * month	mg/m^2 * month	µg/m^3	µg/m^3	µg/m^3	µg/m^3
7	2003	11	21.0	58		0.71	0.66	0.70	0.00	0.50	0.33	0.03	0.06	17.97	0.17			15.70
9	2003	1	15.7	60		0.43	1.07	0.57	0.00	0.35	0.38	0.02	0.07	12.88	0.22			
9	2003	3	16.0	61		0.48	0.82	0.85	0.08	0.36	0.38	0.03	0.06	12.97	0.29			
9	2003	5	31.9	59		0.51	1.03	1.42	0.00	0.45	0.64	0.03	0.10	27.77	0.82			
9	2003	7	16.9	63		0.08	0.38	0.98	0.00	0.15	0.46	0.06	0.03	14.77	1.62			
9	2003	9	30.8	63		0.11	0.67	1.46	0.05	0.16	0.70	0.04	0.05	27.60	1.76			
9	2003	11	22.5	63		0.80	0.99	0.69	0.02	0.46	0.71	0.06	0.07	18.67	0.21			
10	2003	1	18.3	59		0.49	1.89	0.48	0.11	0.56	0.41	0.11	0.11	14.16	0.29			
10	2003	3	17.7	60		0.47	1.73	1.02	0.22	0.48	0.50	0.05	0.10	13.12	0.43			30.20
10	2003	5	19.3	60		0.20	1.05	1.14	0.04	0.30	0.35	0.04	0.09	16.09	0.91			29.70
10	2003	7	21.1	63		0.14	0.66	0.85	0.04	0.12	0.47	0.18	0.06	18.64	1.43			22.50
10	2003	9	14.3	64		0.18	0.88	1.51	0.10	0.15	0.49	0.59	0.06	10.35	1.63			23.40
10	2003	11	19.8	60		0.37	1.36	0.60	0.18	0.32	0.37	0.05	0.06	16.48	0.25			23.40
13	2003	3	41.8	38		0.88	0.84	2.09	0.01	0.55	1.11	0.03	0.12	36.23	0.81			
13	2003	5	30.3	62		0.93	0.57	2.00	0.00	0.69	0.60	0.03	0.11	25.39	1.35			
13	2003	7	17.9	62		0.23	0.35	1.94	0.00	0.26	0.86	0.07	0.05	14.13	2.73			
13	2003	9	39.4	70		0.41	0.48	2.28	0.00	0.28	1.11	0.13	0.07	34.62	2.30			
13	2003	12	19.9	70		3.41	1.50	0.85	0.08	2.18	0.73	0.12	0.23	10.77	0.30			
13	2004	2	35.4	64		4.83	2.38	0.59	0.19	3.07	1.20	0.17	0.39	22.53	0.25			
14	2003	2	32.4	35		4.79	1.05	1.48	0.01	3.15	0.48	0.06	0.30	21.08	0.54			
14	2003	4	21.2	62		0.57	0.43	1.78	0.00	0.61	0.43	0.05	0.09	17.21	0.89			
14	2003	6	24.4	71		0.10	0.25	1.52	0.04	0.19	0.42	0.16	0.04	21.64	1.44			
14	2003	9	23.2	79		0.40	0.50	2.16	0.00	0.41	0.79	0.10	0.08	18.75	2.04			
14	2003	11	37.3	77		3.90	1.02	1.27	0.05	2.58	0.59	0.19	0.19	27.51	0.20			

	Sampling		Total		Particles Deposition										Gass-pass.	Gass denud.		
	period		deposition		Soot	Cl	SO4-S	NO3-N	NH4	Na	Ca	K	Mg	Insol amount	HNO3	HNO3	NO3-	PM10
Sie no	Year	Month	mg/m^2 * month	Sampling period	mg/m^2 * month	µg/m^2 * month	mg/m^2 *month	mg/m^2 * month	mg/m^2 * month	mg/m^2 * month	mg/m^2 * month	mg/m^2 * month	mg/m^2 * month	mg/m^2 * month	µg/m^3	µg/m^3	µg/m^3	µg/m^3
14	2004	1	57.8	61		11.90	2.58	1.34	0.17	12.00	1.02	0.36	0.85	27.58	0.36			
15	2003	2	22.6	32		0.67	1.15	1.01	0.06	0.55	0.48	0.04	0.08	18.57	0.55			
15	2003	4	27.3	70		0.14	0.96	2.08	0.09	0.21	0.72	0.05	0.10	22.99	1.17			
15	2003	6	29.0	61		0.26	0.72	2.03	0.01	0.18	0.97	0.08	0.07	24.68	4.10			
15	2003	9	17.5	74		0.12	0.15	0.29	0.00	0.08	0.18	0.04	0.02	16.59	3.58			
15	2003	11		62		0.20	1.00	5.34	1.21	0.21	0.80	0.09	0.06		1.36			
15	2004	1	25.7	61		0.37	2.07	0.77	0.26	0.35	0.91	0.08	0.07	20.77	0.34			
16	2003	2	44.2	30		3.90	2.26	1.76	0.01	2.79	0.78	0.22	0.33	32.21	0.61			
16	2003	4	77.6	69		16.76	3.32	2.58	0.00	11.28	1.12	0.38	1.09	41.04	0.68			
16	2003	7	31.9	79		3.43	1.42	2.40	0.00	2.71	0.70	0.25	0.25	20.72	1.07			
16	2003	9	41.2	61		4.69	1.41	2.64	0.03	3.83	0.75	0.24	0.34	27.30	1.03			
16	2003	11	76.2	73		5.70	1.66	0.86	0.48	4.38	0.40	0.50	0.28	61.93	0.48			
16	2004	1	34.9	61		7.23	3.43	0.59	0.49	4.61	0.90	0.22	0.62	16.77	0.21			
21	2003	1	11.0	52		0.26	0.68	0.33	0.01	0.22	0.18	0.03	0.04	9.28	0.31			
21	2003	3	18.9	60		1.49	0.92	0.49	0.12	1.03	0.20	0.03	0.06	14.55	0.37			
21	2003	4	39.2	58		0.77	0.83	1.26	0.00	0.70	0.38	0.03	0.07	35.17	0.36			
21	2003	7	5.7	62		0.07	0.27			0.14	0.47	0.09	0.04	4.63	0.38			
21	2003	9	6.1	63		0.04	0.07	0.33	0.02	0.05	0.10	0.03	0.02	5.41	0.48			
21	2003	10	10.8	59		0.60	0.25	0.33	0.08	0.36	0.18	0.43	0.03	8.51	0.17			
23	2003	1	4.9	50		0.12	0.13	0.16	0.01	0.09	0.06	0.02	0.04	4.35	0.20			
23	2003	3	0.1	60		0.11	0.15	0.47	0.02	0.13	0.07	0.02	0.01	-0.89	0.29			
23	2003	5	2.7	60		0.10	0.08	0.13	0.00	0.07	0.07	0.02	0.02	2.26	0.24			
23	2003	7	10.8	61		0.11	0.15	0.31	0.02	0.11	0.11	0.04	0.02	9.92	0.16			
23	2003	8	1.0	61		0.06	0.05	0.18	0.00	0.05	0.05	0.01	0.01	0.61	0.15			

	Sampling period		Total deposition		Particles Deposition										Gass-pass.	Gass denud.		
					Soot	Cl	SO4-S	NO3-N	NH4	Na	Ca	K	Mg	Insol amount	HNO3	HNO3	NO3-	PM10
Sie no	Year	Month	mg/m^2 * month	Sampling period	mg/m^2 * month	µg/m^2 * month	mg/m^2 *month	mg/m^2 * month	mg/m^2 * month	mg/m^2 * month	mg/m^2 * month	mg/m^2 * month	mg/m^2 * month	mg/m^2 * month	µg/m^3	µg/m^3	µg/m^3	µg/m^3
23	2003	11	2.9	72		0.11	0.08	0.22	0.00	0.09	0.07	0.01	0.01	2.28	0.07			
24	2003	1	39.4	49		1.46	1.42	1.05	0.01	1.17	0.42	0.06	0.09	33.77	0.40			
24	2003	2	27.5	57		3.23	1.18			2.44	0.29	0.06	0.05	17.54	0.53			
24	2003	4	12.2	61		0.04	0.07	0.08	0.00	0.02	0.06	0.02	0.01	11.88	0.88			
24	2003	7	20.4	62		0.11	0.22	0.54	0.00	0.12	0.16	0.03	0.02	19.19	1.06			
24	2003	9	8.0	62		0.08	0.13	0.20	0.00	0.06	0.10	0.01	0.02	7.36	0.68			
24	2003	11	8.1	74		0.14	0.25	0.48	0.04	0.14	0.14	0.03	0.02	6.89	0.43			
26	2003	1	6.4	49		0.05	0.12	0.63	0.01	0.02	0.19	0.02	0.04	5.40	0.10			
26	2003	2	3.7	57		0.21	0.22	0.40	0.03	0.18	0.09	0.01	0.00	2.53	0.28			
26	2003	4	5.1	61		0.04	0.16	0.27	0.02	0.06	0.07	0.02	0.02	4.44	0.35			
26	2003	7	5.1	62		0.04	0.07	0.20	0.00	0.04	0.07	0.03	0.01	4.63	0.15			
26	2003	9		62		0.05	0.16	0.42	0.15	0.38	0.13	0.03	0.02		0.08			
26	2003	11	6.5	74		0.06	0.09	0.26	0.00	0.06	0.08	0.01	0.01	5.98	0.11			
27	2003	1	19.5	64		2.31	1.53	0.37	0.00	1.58	0.46	0.05	0.17	13.00	0.39			
27	2003	2													0.17			
27	2003	4	49.6	74		5.64	4.11	1.78	0.00	3.66	1.64	0.11	0.42	32.21				
27	2003	6	36.2	71		2.33	2.57	1.99	0.00	1.79	1.46	0.09	0.23	25.71	1.52			
27	2003	8	26.6	63		0.23	1.57	2.75	0.08	0.42	1.12	0.13	0.10	20.21	1.41			
27	2003	11	48.9	96		4.45	2.44	1.14	0.08	2.83	1.07	1.52	0.27	35.13	1.17			
31	2003	2	66.0	62		0.99	2.19	0.98	0.03	1.00	0.95	0.22	0.10	59.49	0.23			
31	2003	4	35.6	64		0.30	1.29	1.67	0.00	0.15	1.15	0.02	0.07	30.96	0.77			
31	2003	6	21.7	62		0.11	0.36	1.12	0.00	0.12	0.71	0.04	0.04	19.22	1.84			
31	2003	8	23.1	63		0.24	0.36	0.98	0.00	0.16	0.99	0.03	0.04	20.26	2.48			
31	2003	10	30.1	65		0.20	0.67	1.41	0.00	0.16	1.06	0.04	0.04	26.53	1.02			

	Sampling period		Total deposition		Particles Deposition										Gass-pass.	Gass denud.		
					Soot	Cl	SO4-S	NO3-N	NH4	Na	Ca	K	Mg	Insol amount	HNO3	HNO3	NO3-	PM10
Sie no	Year	Month	mg/m^2 * month	Sampling period	mg/m^2 * month	µg/m^2 * month	mg/m^2 *month	mg/m^2 * month	mg/m^2 * month	mg/m^2 * month	mg/m^2 * month	mg/m^2 * month	mg/m^2 * month	mg/m^2 * month	µg/m^3	µg/m^3	µg/m^3	µg/m^3
31	2003	12	31.9	58		0.29	1.77	1.13	0.05	0.19	1.64	0.07	0.05	26.72	0.41			
33	2003	2	5.9	62		0.22	0.17	0.31	0.00	0.18	0.11	0.02	0.02	4.85	0.36			
33	2003	4	10.7	58		0.11	0.27	0.78	0.02	0.13	0.19	0.02	0.04	9.15	0.77			
33	2003	6		60		0.02	0.06	0.16	0.01	0.04	0.08	0.03	0.01		0.83			
33	2003	8	5.8	62		0.05	0.12	0.27	0.00	0.06	0.23	0.02	0.02	5.00	1.23			
33	2003	10	11.0	64		0.17	0.17	0.70	0.00	0.18	0.20	0.03	0.03	9.49	0.64			
33	2003	12	10.5	59		0.13	0.24	0.43	0.02	0.10	0.27	0.04	0.02	9.26	0.35			
34	2003	2		62		4.50	7.04	1.15	0.05	0.69	4.65	0.30	0.41					
34	2003	4	31.7	58		0.30	1.59	0.95	0.03	0.30	0.81	0.02	0.08	27.68	0.68			
34	2003	6	43.5	63		0.19	0.32	0.40	0.02	0.05	0.97	0.04	0.03	41.51				
34	2003	9	31.1	66		0.22	0.49	0.65	0.02	0.08	1.03	0.06	0.04	28.54	1.75			
34	2003	10	45.1	56		1.41	1.48	1.11	0.05	0.25	1.97	0.10	0.12	38.58	0.53			
34	2003	12	42.8	60		2.06	1.52	0.97	0.10	0.37	2.03	0.06	0.24	35.44	0.22			
35	2003	1	4.5	63		0.05	0.31	0.25	0.00	0.05	0.11	0.02	0.03	3.66	0.35			
35	2003	3	5.2	57		0.14	0.43	0.57	0.04	0.15	0.17	0.04	0.02	3.64	1.01			
35	2003	5	5.7	71		0.02	0.16	0.21	0.01	0.03	0.07	0.02	0.02	5.17	0.51			
35	2003	7	12.5	70		0.18	0.30	0.51	0.00	0.15	0.23	0.04	0.03	11.00	0.21			
35	2003	9	6.2	43		0.12	0.26	0.44	0.01	0.08	0.23	0.03	0.03	5.01	0.14			
35	2003	11	2.0	70		0.10	0.20	0.32	0.02	0.10	0.11	0.02	0.02	1.12	0.21			
36	2003	1													0.29			
36	2003	3	72.4	62		8.21	7.30	0.99	0.00	6.72	3.42	0.22	0.51	44.99	0.68			
36	2003	5	218.3	60		24.93	9.39	4.42	0.00	18.12	5.93	0.58	1.63	153.33				
36	2003	8	95.3	65		4.61	5.57	4.57	0.00	2.70	5.23	0.19	0.39	72.06	1.08			
36	2003	9	114.4	54		8.19	7.92	7.21	0.00	5.65	7.06	0.44	0.71	77.22	1.15			

	Sampling		Total		Particles Deposition										Gass-pass.	Gass denud.		
	period		deposition		Soot	Cl	SO4-S	NO3-N	NH4	Na	Ca	K	Mg	Insol amount	HNO3	HNO3	NO3-	PM10
Sie no	Year	Month	mg/m^2 * month	Sampling period	mg/m^2 * month	µg/m^2 * month	mg/m^2 *month	mg/m^2 * month	mg/m^2 * month	mg/m^2 * month	mg/m^2 * month	mg/m^2 * month	mg/m^2 * month	mg/m^2 * month	µg/m^3	µg/m^3	µg/m^3	µg/m^3
36	2003	12	57.5	80		7.45	5.30	0.63	0.20	4.64	3.19	0.19	0.51	35.42	0.64			
37	2003	2	2.2	93		0.03	0.20	0.21	0.01	0.03	0.08	0.01	0.00	1.71	0.74			
37	2003	3	3.5	29		0.21	0.23	0.71	0.05	0.11	0.17	0.02	0.00	2.03	1.34			
37	2003	5	6.8	62		0.06	0.27	0.32	0.00	0.05	0.17	0.02	0.03	5.88	0.66			
37	2003	7	13.7	62		0.18	0.36	0.45	0.03	0.16	0.32	0.07	0.03	12.07	0.36			
37	2003	9	8.3	65		0.05	0.28	0.33	0.02	0.03	0.15	0.05	0.03	7.41	0.36			
37	2003	11	2.8	54		0.04	0.29	0.78	0.04	0.06	0.25	0.04	0.02	1.27	0.28			
40	2003	1	25.8	65		1.75	1.50	0.28	0.00	1.44	0.60	0.05	0.07	20.10				
40	2003	3		62											0.55			
40	2003	5	46.7	59		2.44	2.86	2.74	0.00	1.57	2.28	0.04	0.21	34.59				
40	2003	7		61											3.25			
40	2003	9		58											3.45			
40	2003	11		64														
41	2003	1	206.4	61		29.37	8.65	0.53	0.00	23.03	5.21	0.14	0.15	139.34	0.23			54.60
41	2003	3	417.1	63		56.91	13.75	1.69	0.68	40.02	6.73	0.33	0.18	296.82	0.36			68.00
41	2003	5	109.4	57		12.63	1.62	2.22	0.00	10.95	1.73	0.09	0.12	80.02	0.54			55.00
41	2003	7	31.5	61		0.16	0.34	0.94	0.00	0.12	1.07	0.04	0.03	28.83	0.83			40.20
41	2003	9	23.6	63		0.13	0.25	1.12	0.03	0.10	0.51	0.07	0.03	21.36	0.93			40.60
41	2003	11	39.3	65		0.33	1.79	0.70	0.00	0.16	1.86	0.07	0.04	34.32	0.30			30.00
44	2003	1		47		0.28	0.18	0.15	0.01	0.24	0.03	0.02	0.02	-0.93	0.10			
44	2003	3	3.7	59		0.60	0.22	0.31	0.04	0.34	0.09	0.02	0.03	2.06	0.22			
44	2003	5	3.0	61		0.59	0.20	0.11	0.00	0.31	0.10	0.02	0.04	1.67	0.32			
44	2003	7	12.6	61		0.27	0.35	0.32	0.03	0.21	0.14	0.03	0.03	11.26	0.19			
44	2003	9	5.5	62		0.19	0.19	0.12	0.02	0.10	0.07	0.07	0.02	4.75	0.07			

	Sampling		Total		Particles Deposition										Gass-pass.	Gass denud.		
	period		deposition		Soot	Cl	SO4-S	NO3-N	NH4	Na	Ca	K	Mg	Insol amount	HNO3	HNO3	NO3-	PM10
Sie no	Year	Month	mg/m^2 * month	Sampling period	mg/m^2 * month	µg/m^2 * month	mg/m^2 *month	mg/m^2 * month	mg/m^2 * month	mg/m^2 * month	mg/m^2 * month	mg/m^2 * month	mg/m^2 * month	mg/m^2 * month	µg/m^3	µg/m^3	µg/m^3	µg/m^3
44	2003	11	4.0	72		0.19	0.13	0.12	0.00	0.14	0.05	0.01	0.01	3.31	0.05			
45	2003	1	5.1	59		0.07	0.17	0.21	0.00	0.04	0.06	0.02	0.03	4.52	0.36			8.89
45	2003	3	3.9	61		0.04	0.21	0.53	0.06	0.03	0.14	0.02	0.01	2.91	1.00			14.75
45	2003	5	13.0	61		0.10	0.30	0.83	0.03	0.09	0.25	0.04	0.05	11.34	0.96			18.56
45	2003	7	6.9	60		0.06	0.17	0.42	0.02	0.06	0.15	0.03	0.02	6.03	0.72			16.11
45	2003	9	3.4	61		0.03	0.18	0.46	0.02	0.05	0.18	0.02	0.02	2.46	0.87			16.86
45	2003	11	5.4	71		0.12	0.20	0.34	0.03	0.11	0.11	0.06	0.02	4.40	0.36			13.23
46	2003	1	30.6	62		2.84	1.57	0.38	0.00	1.90	0.64	0.04	0.17	468.64	0.25			
46	2003	4	112.9	68		10.06	9.74	2.66	0.00	7.62	5.10	0.21	0.68	76.87	0.68			
46	2003	6	78.3	72		3.67	3.57	6.18	0.07	2.82	3.26	0.20	0.35	58.13	2.14			
46	2003	8	93.9	70		1.94	3.60	9.90	0.09	1.89	4.57	0.28	0.32	71.33	2.69			
46	2003	11	44.9	90		2.41	3.48	0.54	0.01	1.55	1.74	0.09	0.17	34.95	1.27			
47	2003	1		72											1.10			
49	2003	1	20.3	61		1.11	1.40	0.73	0.19	0.74	0.41	0.11	0.09	15.48	0.16			
49	2003	3	21.6	58		1.39	1.76	1.06	0.22	1.04	0.50	0.08	0.12	15.39	0.31			
49	2003	5	17.8	61		0.44	0.78	0.97	0.00	0.38	0.32	0.03	0.08	14.79	0.85			
49	2003	7	22.4	57		0.11	0.68	1.05	0.07	0.12	0.38	0.23	0.05	19.67	1.92			
49	2003	9	14.9	62		0.13	0.71	1.29	0.16	0.20	0.39	0.09	0.04	11.91	1.50			
49	2003	11	17.1	50		0.95	1.05	0.63	0.03	0.68	0.43	0.09	0.09	13.11	0.44			
50	2003	2	20.4	69		2.96	2.76	0.64	0.16	1.13	1.07	0.11	0.22	11.32	1.39			
50	2003	4	48.6	58		1.98	3.05	2.25	0.21	1.25	1.14	0.11	0.23	38.38	1.39			
50	2003	6	34.0	68		0.19	1.26	1.23	0.16	0.20	0.59	0.11	0.09	30.16	1.77			
50	2003	8	28.9	58		0.20	0.83	1.15	0.05	0.09	0.54	0.18	0.08	25.78	1.02			

	Sampling period		Total deposition		Particles Deposition										Gass-pass.	Gass denud.		
					Soot	Cl	SO4-S	NO3-N	NH4	Na	Ca	K	Mg	Insol amount	HNO3	HNO3	NO3-	PM10
Sie no	Year	Month	mg/m^2 * month	Sampling period	mg/m^2 * month	µg/m^2 * month	mg/m^2 *month	mg/m^2 * month	mg/m^2 * month	mg/m^2 * month	mg/m^2 * month	mg/m^2 * month	mg/m^2 * month	mg/m^2 * month	µg/m^3	µg/m^3	µg/m^3	µg/m^3
50	2003	10	20.1	62		0.17	0.75	0.88	0.03	0.07	0.53	0.03	0.07	17.55	0.76			
50	2003	12	24.0	71		1.47	2.59	0.47	0.45	0.27	0.97	0.06	0.12	17.55	0.66			

Appendix D

Two month's mean values for particle deposition and HNO_3 concentration in the target field programme in MULTI-ASSESS

	Sampling period		Total deposition		Gass-pass.														
					Soot	Cl	SO_4-S	NO_3-N	NH_4	Na	Ca	K	Mg	Insol. amount	HNO_3	HNO_3	NO_3-	PM10
Site no	Year	Month	mg/m^2 * day	Sampling period	mg/m^2 * day	$\mu g/m^2$ * day	mg/m^2 * day	mg/m^2 * day	mg/m^2 * day	mg/m^2 * day	mg/m^2 * day	mg/m^2 * day	mg/m^2 * day	mg/m^2 * day	$\mu g/m^3$	$\mu g/m^3$	$\mu g/m^3$	$\mu g/m^3$
T60	2003	3	31.1	61		1.88	2.42	0.70	0.004	1.09	1.53	0.03	0.15	23.36	0.63			52,0
T60	2003	5	104.8	63		3.79	6.06	7.06	0.004	3.41	5.25	0.12	0.42	78.71	1.79			67,2
T60	2003	7	157.3	59		1.23	2.72	11.03	0.068	1.31	5.64	0.23	0.30	134.78	3.58			49,8
T60	2003	9	113.1	63		4.66	3.06	5.03	0.076	3.16	3.33	0.62	0.46	92.72	1.91			53,3
T60	2003	11	61.9	63		0.36	0.55	0.37	0.004	0.24	1.12	0.06	0.04	59.16	0.95			
T60	2004	1	54.9	53		0.97	2.18	0.80	0.025	0.66	2.10	0.06	0.10	48.05	0.40			
T75	2003	2	77.5	69		6.02	10.77	1.59	0.201	3.85	4.55	0.11	0.56	49.85	0.57			
T75	2003	4	69.9	59		4.18	5.51	1.77	0.161	2.29	2.61	0.09	0.40	52.87	1.12			
T75	2003	6	43.1	65		0.34	1.36	1.66	0.004	0.25	1.50	0.07	0.14	37.75	1.24			
T75	2003	8	23.6	58		0.26	0.93	1.39	0.091	0.16	0.93	0.18	0.12	19.58	1.21			
T75	2003	10	46.0	63		0.83	1.86	2.09	0.004	0.20	1.88	0.19	0.33	38.60	0.77			
T75	2003	12	96.2	71		1.60	10.29	0.41	0.114	0.66	4.37	0.11	0.60	78.06	0.32			
T80	2003	2	26.0	69		4.56	1.87	1.08	0.128	3.18	0.61	0.09	0.19	14.34	0.55			
T80	2003	4	79.5	30		6.44	2.97	3.61	0.009	4.32	1.83	0.13	0.42	59.73	1.02			
T80	2003	6	35.8	64		0.90	1.31	3.32	0.004	1.06	1.07	0.12	0.16	27.86	1.95			
T80	2003	8	35.5	63		0.60	0.87	2.74	0.020	0.60	0.99	0.94	0.11	28.59	3.36			
T80	2003	11	31.7	84		5.02	1.89	0.95	0.249	2.68	1.07	0.14	0.30	19.43	1.34			
T80	2003	12													0.18			
T90	2003	2	25.9	59		2.91	2.09	2.26	0.509	2.08	0.89	0.14	0.08	14.90	0.45			
T90	2003	4	18.5	56		1.60	1.32	1.14	0.131	1.30	0.37	0.05	0.04	12.55	0.85			
T90	2003	6	44.9	61		0.15	1.09	1.69	0.103	0.19	0.69	0.11	0.09	40.76	1.37			
T90	2003	8	17.2	62		0.07	0.50	1.12	0.033	0.09	0.49	0.07	0.04	14.79	2.34			
T90	2003	10	19.7	64		0.11	0.49	1.34	0.044	0.13	0.55	0.05	0.04	16.92	1.60			
T90	2003	12	18.0	60		0.31	0.87	1.58	0.299	0.26	0.62	0.06	0.03	13.97	0.39			
T100	2003	2	18.3	81		1.51	0,53	0,88	0,012	1,04	0,39	0,08	0,12	13,74	0.22			

	Sampling period		Total deposition		Gass-pass.														
					Soot	Cl	SO_4-S	NO_3-N	NH_4	Na	Ca	K	Mg	Insol. amount	HNO_3	HNO_3	NO_3-	PM10
Site no	Year	Month	mg/m^2 * day	Sampling period	mg/m^2 * day	$\mu g/m^2$ * day	mg/m^2 * day	mg/m^2 * day	mg/m^2 * day	mg/m^2 * day	mg/m^2 * day	mg/m^2 * day	mg/m^2 * day	mg/m^2 * day	$\mu g/m^3$	$\mu g/m^3$	$\mu g/m^3$	$\mu g/m^3$
T100	2003	4	26.5	59		0.19	0.29	2.25	0.004	0.26	0.42	0.05	0.08	23.00	0.66			
T100	2003	6	22.8	61		0.02	0.14	0.62	0.004	0.05	0.24	0.03	0.03	21.65	1.54			
T100	2003	7	4.8	40		0.10	0.19	0.70	0.006	0.16	0.50	0.04	0.03	3.13	2.78			
T100	2003	10	26.0	67		0.15	0.33	1.22	0.022	0.16	0.73	0.05	0.04	23.32	0.77			
T100	2003	12	15.4	59		1.19	0.73	0.72	0.024	0.78	0.60	0.05	0.10	11.25	0.36			
T100	2004	2	26.8	62		1.68	2.29	0.77	0.636	1.14	0.65	0.10	0.14	19.39	0.26			
T110	2003	1	40.9	39		2.83	2.30	0.44	0.007	2.15	0.79	0.07	0.19	32.09	0.41			
T110	2003	5	38.4	61		0.56	0.84	1.11	0.004	0.21	0.73	0.03	0.13	32.60				
T110	2003	7		57											0.83			
T110	2003	11		57		0.89	1.57	1.88	0.019	0.59	1.96	0.18	0.20		1.02			
T110	2004	1	72.6	61		2.15	3.53	0.64	0.020	1.34	2.43	0.11	0.19	62.19	0.29			
T111	2003	1	10.9	39		0.36	0.56	0.29	0.007	0.29	0.17	0.03	0.05	9.21	0.25			
T111	2003	5	30.0	61		0.19	0.54	0.63	0.036	0.14	0.38	0.03	0.13	25.83				
T111	2003	7	12.8	61		0.07	0.21	0.53	0.028	0.08	0.26	0.04	0.05	11.51	0.62			
T111	2003	11		57		0.27	0.58	0.91	0.073	0.19	0.63	0.08	0.09		0.78			
T111	2004	1	22.8	61		0.69	1.10	0.53	0.033	0.42	0.77	0.06	0.09	19.11	0.27			

Appendix E

Yearly mean values for all environmental parameters reported in the ICP materials programme and in the MULTI-ASSESS project

Table E1: Yearly environmental values based on month data in the broad field programme

		Mandatory												Option									
	Sampling	Climate			Gases			Precipitation						Precipitation					Gases	Particles	Particles Deposition		
	period	Temp	RH	Sun	SO_2	NO_2	O_3	Rain	Acidity	SO_4-S	NO_3-N	Cl	Cond	NH_4-N	Na	Ca	Mg	K	HNO_3	Conc.	Cl	SO_4-S	NO_3-N
Site no	Year	°C	%	MJ/m2	µg/m^3	µg/m^3	µg/m^3	mm	pH	mg/l	mg/l	mg/l	µS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	µg/m^3	µg/m^3	mg/m^{2}d	mg/m^{2}d	mg/m^{2}d
1	02/03	9.3	72	*3072*	6.4	24.5	49	*513.3*	4.36	7.49	3.15	2.42	52.2										
3	02/03	8.7	73	*4073*	11.2	25.3	49	*463.2*	5.19	8.53	2.97	3.00	99.2										
5	02/03																						
7	02/03	8.8	75	*3405*	2.2	9.8	60	413.1	4.84	0.48	0.54	0.46	16.4	0.64	0.28	0.22	0.05	0.07		22.9			
9	02/03	11.4	76	4887	*6.0*	*32.0*	*34*	646.9	*5.68	*0.97	*0.70	*1.05	*29.2	*0.95	*1.10	*2.26	*0.18	*0.38					
10	02/03	11.3	77	4896	16.9	34.6	36	779.9	4.73	1.39	0.69	1.01	27.9	1.35	0.74	1.68	0.21	0.24		26.3			
13	02/03	17.6	65	5122		48.8	36	660.0	5.80	1.04	0.88	6.49	46.8	0.78	3.32	3.79	0.79	1.08					
14	02/03	16.3	63	5517	0.7	8.4	72	599.8															
15	02/03	15.1	66	5249	12.3	66.6	39	619.4															
16	02/03	14.7	82	4725	2.5			481.6															
21	02/03	6.4	74	2683	1.7	25.9	31	793.9	4.65	0.47	0.43	0.64	17.4	0.37	0.42	0.19	0.06	0.11					
23	02/03	5.9	81	2791	0.3	1.9	54	1390.1	4.57	0.55	0.51	1.47	23.4	0.47	0.85	0.11	0.11	0.08		6.5			
24	02/03	7.1	80	3213	1.6	17.0	55	383.8	5.00	0.63	0.42	0.50	23.9	1.09	0.42	0.47	0.09	0.56		45.0			
26	02/03	5.6	82	3592	*0.6*	*2.3*	*6*	562.0	4.87	0.57	0.43	0.52	16.9	0.50	0.38	0.22	0.08	0.13		10.4			
27	02/03	10.4	78	2733	4.9	16.3	52	548.0															
31	02/03	15.3	60	2743	2.6	28.4	56	447.0	6.42	0.60	0.33	1.27	17.1	0.48	0.32	1.21	0.15	0.11					
33	02/03	12.2	78	6478	1.1	2.8	93	411.4	6.11	0.61	0.36	1.34	15.7	0.49	0.71	0.59	0.12	0.15					
34	02/03	5.9	71		4.1	18.0	36	750.1	6.61										0.8				
35	02/03	5.0	81	3361	1.7	3.1	59	655.2	4.83	0.35	0.19	0.39	10.4	0.11	0.17	0.27	0.06	0.06					
36	02/03	*17.4*	*66*		*11.0*	*24.4*	*14*	*195.9*	*6.02*	*14.43*	*5.54*	*13.06*	*98.7*	*1.05*	*6.70*	*10.86*	*1.01*	*0.68*					
37	02/03	*7.2*	*76*	*4252*	*0.6*	*6.9*	*61*	*964.0*	*4.43*	*0.67*	*0.49*	*0.10*	*24.2*	*0.30*	*0.06*	*0.15*	*0.03*	*0.03*					
40	02/03	13.3	69	4499	11.2	45.7	45	489.6	*5.35*	*1.47*	*0.97*	*2.01*	*38.4*	*0.84*	*1.20*	*3.80*	*0.15*	*0.50*		25.9	15.3		
41	02/03	11.7	71	4149	8.6	49.1	31																
44	02/03	0.1	79	1888	6.5	1.7	57	376.9	4.97	0.45	0.12	2.23	16.3	0.29	1.29	0.17	0.19	0.13					
45	02/03	7.3	75	4785	1.3	9.0	91	1011.2	5.21	0.25	0.25	0.19	8.9	0.31	0.11	0.29	0.03	0.04					
46	02/03	12.7	66	2570	5.8	37.3	46	493.9															

		Mandatory												Option									
	Sampling	Climate			Gases			Precipitation						Precipitation					Gases	Particles	Particles Deposition		
	period	Temp	RH	Sun	SO_2	NO_2	O_3	Rain	Acidity	SO_4-S	NO_3-N	Cl	Cond	NH_4-N	Na	Ca	Mg	K	HNO_3	Conc.	Cl	SO_4-S	NO_3-N
Site no	Year	°C	%	MJ/m2	µg/m^3	µg/m^3	µg/m^3	mm	pH	mg/l	mg/l	mg/l	µS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	µg/m^3	µg/m^3	mg/m^{2}d	mg/m^{2}d	mg/m^{2}d
49	02/03	11.9	65	4123	13.8	50.0	33	673.8	4.85	0.86	0.41	2.39	23.3							28.7			
50	02/03	8.2	76	2424	38.6	21.6	62	702.0	4.34	6.27	2.98	1.65	30.1	1.50	0.44	2.14				49.5			

Table E2: Yearly environmental values based on monthly data for the main rack in the target field programme.

		Mandatory												Option									
	Sampling	Climate			Gases			Precipitation						Precipitation					Gases	Particles	Particles Deposition		
	period	Temp	RH	Sun	SO_2	NO_2	O_3	Rain	Acidity	SO_4-S	NO_3-N	Cl	Cond	NH_4-N	Na	Ca	Mg	K	HNO_3	Conc.	Cl	SO_4-S	NO_3-N
Site no	Year	°C	%	MJ/m2	µg/m^3	µg/m^3	µg/m^3	mm	pH	mg/l	mg/l	mg/l	µS/cm	mg/l	mg/l	mg/l	mg/l	mg/l	µg/m^3	µg/m^3	mg/m^{2}d	mg/m^2 d	mg/m^{2}d
60	02/03	20.1	60	2532	43.2	77.2	20	457.7															
71	02/03				21.1	65.2	60													84.7			
72	02/03	7.9	75		13.5	32.3	60	524.0	4.64											55.0			
73	02/03				21.1	65.2	60													80.0			
74	02/03				19.9	30.4	60													52.9			
75	02/03				19.9	30.4	60													52.9			
76	02/03				21.7	56.1	60													45.2			
80	02/03	12.0																					
81	02/03	12.0																					
82	02/03	12.0		2660	4.0	17.1	23													30.2			
83	02/03	12.0			3.6	26.7														22.2			
84	02/03	12.6			3.1	27.1														50.8			
85	02/03	12.5			1.7	22.6	18													22.1			
86	02/03	12.5			5.0	53.6	7													37.1			
90	02/03	9.3	72		8.6	49.9	33													42.9			
91	02/03	9.3	72		8.6	49.9	33													42.9			
96	02/03	9.3	72		6.8	88.3														32.2			
100	02/03	15.9	69	4561	1.4	14.2	55	710.8	5.63	1.02	0.97	4.68	39.7	0.73	2.89	3.35	0.71	0.86	0.9	28.1			
101	02/03	15.9	69		1.4	14.2	55	710.8	5.63	1.02	0.97	4.68	39.7	0.73	2.89	3.35	0.71	0.86	0.9	28.1			
102	02/03	15.9	69		1.4	14.2	55	710.8	5.63	1.02	0.97	4.68	39.7	0.73	2.89	3.35	0.71	0.86	0.9	28.1			
103	02/03	17.6	65																				
104	02/03	17.6	65																				
105	02/03	13.6	71		0.6	20.8	20													29.9			
110	02/03	7.0	78		6.1	27.6	60	528.3	6.74	4.87	0.70	4.65	0.1		3.39								
111	02/03	6.4	80	1853	7.8	18.4	55	528.3	6.74	4.87	0.70	4.65	0.1		3.39								

Table E3: Yearly average values for particle deposition and HNO_3 in the broad field programme.

	Sampling	Total			Particles Deposition									Gass-pass.	Gass denud.		
	period	deposition		Soot	Cl	SO4-S	NO3-N	NH4	Na	Ca	K	Mg	Insol.amount	HNO3	HNO3	NO3-	PM10
Site	Year	mg/m2 * month	Sampling period	mg/m2 * month	µg/m2 * month	mg/m2 * month	mg/m2 * month	mg/m2 * month	mg/m2 * month	mg/m2 * month	mg/m2 * month	mg/m2 * month	mg/m2 * month	µg/m^3	µg/m^3	µg/m^3	µg/m^3
01	2002/03	10,57	373		0,10	0,33	0,53	0,02	0,10	0,18	0,04	0,03	9,25	0,68			
01sh	2002/03	3,45	373		0,02	0,13	0,14	0,02	0,02	0,07	0,01	0,00	3,04				
03	2002/03	16,89	393		0,11	0,63	0,55	0,06	0,14	0,23	0,06	0,03	15,07	0,85			
03sh	2002/03	5,70	393		0,02	0,31	0,18	0,04	0,02	0,13	0,01	0,01	4,97				
05	2002/03	4,72	365		0,04	0,10	0,25	0,03	0,03	0,08	0,02	0,01	4,17	0,18			
05sh	2002/03	1,41	365		0,01	0,07	0,07	0,00	0,01	0,04	0,01	0,00	1,21				
07	2002/03	11,73	365		0,23	0,51	0,77	0,01	0,28	0,22	0,04	0,05	9,63	0,52			23,13
07sh	2002/03	2,87	365		0,02	0,09	0,12	0,01	0,03	0,04	0,01	0,00	2,54				
09	2002/03	22,32	369		0,40	0,83	0,99	0,03	0,32	0,54	0,04	0,06	19,11	0,82			
09sh	2002/03	7,25	369		0,03	0,17	0,29	0,01	0,03	0,15	0,04	0,01	6,53				
10	2002/03	18,42	366		0,31	1,26	0,93	0,11	0,32	0,43	0,17	0,08	14,80	0,83			25,84
10sh	2002/03	1,65	366		0,02	0,28	0,15	0,04	0,03	0,09	0,01	0,01	1,02				
13	2002/03	30,77	372		1,78	1,02	1,62	0,05	1,17	0,94	0,09	0,16	23,94	1,29			
13sh	2002/03	5,20	372		0,08	0,18	0,34	0,02	0,07	0,23	0,02	0,01	4,26				
14	2002/03	32,71	385		3,61	0,97	1,59	0,04	3,16	0,62	0,15	0,26	22,30	0,91			
14sh	2002/03	5,75	385		0,14	0,12	0,35	0,02	0,11	0,14	0,02	0,02	4,82				
15	2002/03	24,40	362		0,29	1,01	1,92	0,27	0,26	0,68	0,06	0,07	20,72	1,85			
15sh	2002/03	17,20	362		0,04	0,44	0,37	0,13	0,05	0,19	0,01	0,01	15,96				
16	2002/03	51,00	379		6,95	2,25	1,80	0,17	4,93	0,77	0,30	0,49	33,33	0,68			
16sh	2002/03	10,16	379		1,21	0,89	0,80	0,11	1,02	0,23	0,05	0,13	5,71				

	Sampling	Total			Particles Deposition									Gass-pass.	Gass denud.		
	period	deposition		Soot	Cl	SO4-S	NO3-N	NH4	Na	Ca	K	Mg	Insol.amount	HNO3	HNO3	NO3-	PM10
Site	Year	mg/m2 * month	Sampling period	mg/m2 * month	µg/m2 * month	mg/m2 * month	mg/m2 * month	mg/m2 * month	mg/m2 * month	mg/m2 * month	mg/m2 * month	mg/m2 * month	mg/m2 * month	µg/m^3	µg/m^3	µg/m^3	µg/m^3
21	2002/03	15,27	364		0,54	0,50	0,55	0,05	0,41	0,25	0,11	0,04	12,93	0,35			
21sh	2002/03	3,23	364		0,03	0,23	0,12	0,01	0,03	0,09	0,05	0,01	1,08				
23	2002/03	3,75	364		0,10	0,11	0,25	0,01	0,09	0,07	0,02	0,02	3,09	0,19			
23sh	2002/03	0,66	364		0,02	0,04	0,05	0,00	0,01	0,02	0,01	0,00	0,51				
24	2002/03	19,27	365		0,84	0,55	0,47	0,01	0,66	0,19	0,03	0,04	16,10	0,66			
24sh	2002/03	5,20	365		0,03	0,15	0,24	0,02	0,07	0,07	0,01	0,01	4,60				
26	2002/03	5,36	366		0,07	0,14	0,36	0,03	0,12	0,10	0,02	0,02	4,60	0,18			
26sh	2002/03	0,95	366		0,01	0,04	0,08	0,00	0,01	0,02	0,01	0,00	0,79				
27	2002/03	36,14	329		2,99	2,44	1,61	0,03	2,05	1,15	0,38	0,24	25,25	0,93			
27sh	2002/03	10,59	329		0,27	0,80	0,72	0,04	0,28	0,43	0,03	0,04	7,97				
31	2002/03	34,72	374		0,35	1,11	1,22	0,02	0,30	1,08	0,07	0,06	30,53	1,13			
31sh	2002/03	8,82	374		0,03	0,34	0,42	0,02	0,02	0,39	0,02	0,01	7,56				
33	2002/03	8,76	365		0,12	0,17	0,44	0,01	0,12	0,18	0,03	0,02	7,55	0,70			
33sh	2002/03	2,44	365		0,01	0,05	0,14	0,01	0,02	0,07	0,03	0,01	2,10				
34	2002/03	38,85	366		1,45	2,07	0,87	0,05	0,29	1,91	0,10	0,15	34,35	0,79			
34sh	2002/03	7,00	366		0,05	0,39	0,31	0,07	0,04	0,26	0,02	0,01	5,85				
35	2002/03	5,99	373		0,10	0,28	0,38	0,01	0,09	0,15	0,03	0,02	4,94	0,40			
35sh	2002/03	2,41	373		0,03	0,17	0,14	0,00	0,02	0,09	0,02	0,00	1,93				
36	2002/03	111,59	386		10,68	7,10	3,56	0,04	7,57	4,97	0,32	0,75	76,60	0,77			
36sh	2002/03	29,06	386		2,28	3,84	1,65	0,06	1,87	1,96	0,22	0,23	16,95				
37	2002/03	6,22	364		0,09	0,27	0,47	0,03	0,07	0,19	0,03	0,02	5,06	0,62			

	Sampling	Total			Particles Deposition									Gass-pass.	Gass denud.		
	period	deposition		Soot	Cl	SO4-S	NO3-N	NH4	Na	Ca	K	Mg	Insol.amount	HNO3	HNO3	NO3-	PM10
Site	Year	mg/m2 * month	Sampling period	mg/m2 * month	µg/m2 * month	mg/m2 * month	mg/m2 * month	mg/m2 * month	mg/m2 * month	mg/m2 * month	mg/m2 * month	mg/m2 * month	mg/m2 * month	µg/m^3	µg/m^3	µg/m^3	µg/m^3
37sh	2002/03	1,40	364		0,01	0,08	0,11	0,00	0,01	0,05	0,01	0,00	1,12				
40	2002/03	36,26	366		2,10	2,18	1,51	0,00	1,50	1,44	0,05	0,14	27,34	2,42			
40sh	2002/03	6,87	366		0,07	0,42	0,81	0,03	0,09	0,47	0,02	0,02	4,95				
41	2002/03	137,89	370		16,59	4,40	1,20	0,12	12,40	2,85	0,12	0,09	100,12	0,53			48,07
41sh	2002/03	27,99	370		1,45	1,47	0,46	0,03	1,69	1,02	0,03	0,02	21,83				
44	2002/03	5,77	361		0,35	0,21	0,19	0,02	0,22	0,08	0,03	0,03	3,69	0,16			
44sh	2002/03		361		0,02	0,10	0,05	0,01	0,03	0,03	0,01	0,00					
45	2002/03	6,29	373		0,07	0,20	0,46	0,03	0,06	0,15	0,03	0,02	5,28	0,71			14,73
45sh	2002/03	1,18	373		0,03	0,09	0,12	0,00	0,02	0,05	0,02	0,00	0,84				
46	2002/03	72,13	366		4,19	4,39	3,93	0,04	3,16	3,07	0,16	0,34	141,98	1,41			
46sh	2002/03	19,51	366		0,50	1,13	1,95	0,04	0,75	0,79	0,04	0,08	14,23				
47	2002/03		72											1,10			
47sh	2002/03																
49	2002/03	18,99	350		0,69	1,06	0,96	0,11	0,53	0,40	0,10	0,08	15,06	0,86			
49sh	2002/03	3,29	350		0,02	0,33	0,21	0,07	0,05	0,09	0,02	0,01	2,49				
50	2002/03	29,32	315		1,16	1,87	1,10	0,18	0,51	0,81	0,10	0,13	15,35	1,16			
50sh	2002/03	9,57	315		0,38	0,73	0,16	0,06	0,19	0,35	0,02	0,03	7,63				

Table E4: Yearly average values for particle deposition and HNO_3 in the target field programme

			Particles Deposition											Gass-pass.	Gass denud.		
	Sampling period	Total deposition		Soot	Cl	SO4-S	NO3-N	NH4	Na	Ca	K	Mg	Insol. amount	HNO3	HNO3	NO3-	PM10
Site	Year	mg/m2 * month	Sampling period	mg/m2 * month	µg/m2 * month	mg/m2 * month	mg/m2 * month	mg/m2 * month	mg/m2 * month	mg/m2 * month	mg/m2 * month	mg/m2 * month	mg/m2 * month	µg/m^3	µg/m^3	µg/m^3	µg/m^3
T60	2002/03	87.20	365		2.15	2.83	4.16	0.03	1.64	3.16	0.19	0.25	72.80	1.54			55,58
T60sh	2002/03	21.00	365		0.41	1.79	1.39	0.03	0.44	1.26	0.04	0.08	15.56				
T61sh	2002/03	24.00	367		0.19	0.61	0.34	0.00	0.11	0.66	0.02	0.02	22.05				
T62sh	2002/03	18.19	367		0.49	1.37	0.52	0.08	0.32	1.04	0.04	0.04	14.27				
T63sh	2002/03	19.50	367		0.22	1.11	0.18	0.04	0.17	0.70	0.02	0.02	17.05				
T64sh	2002/03	13.74	367		0.24	0.53	0.11	0.03	0.13	0.54	0.02	0.02	12.12				
T65sh	2002/03	17.48	367		0.99	2.02	0.30	0.26	0.70	0.96	0.04	0.09	12.12				
T66sh	2002/03	20.70	367		0.32	0.86	0.14	0.05	0.21	0.59	0.02	0.03	18.47				
T75	2002/03	59.38	385		2.21	5.12	1.49	0.10	1.24	2.64	0.12	0.36	46.12	0.87			
T80	2002/03	41.70	346		3.50	1.78	2.34	0.08	2.37	1.11	0.29	0.24	29.99	1.40			
T80sh	2002/03	5.80	346		0.18	0.36	0.64	0.03	0.26	0.18	0.02	0.03	4.09				
T81sh	2002/03	21.49	381		2.07	1.46	1.07	0.06	1.55	0.69	0.07	0.13	14.39				
T82sh	2002/03	14.88	383		0.32	0.28	0.35	0.03	0.24	0.16	0.02	0.02	13.45				
T83sh	2002/03	27.02	383		1.47	1.66	0.97	0.05	0.87	0.90	0.13	0.08	20.88				
T84sh	2002/03	23.59	380		0.99	1.48	0.90	0.04	0.66	0.96	0.04	0.04	18.48				
T86sh	2002/03	43.39	384		4.54	2.84	0.48	0.09	3.22	3.06	0.08	0.11	28.96				
T90	2002/03	24.02	362		0.86	1.06	1.52	0.19	0.68	0.60	0.08	0.05	18.98	1.17			
T91sh	2002/03	47.12	365		0.54	1.01	0.76	0.13	0.42	0.50	0.11	0.04	43.63				
T92sh	2002/03	51.27	365		0.29	0.68	0.41	0.08	0.21	0.38	0.06	0.02	49.15				
T93sh	2002/03	16.42	365		0.23	0.53	1.51	0.17	0.21	0.38	0.16	0.03	13.21				
T94sh	2002/03	7.33	365		0.10	0.33	0.45	0.07	0.11	0.27	0.02	0.01	5.97				

			Particles Deposition											Gass-pass.	Gass denud.		
	Sampling period	Total deposition		Soot	Cl	SO4-S	NO3-N	NH4	Na	Ca	K	Mg	Insol. amount	HNO3	HNO3	NO3-	PM10
Site	Year	mg/m2 * month	Sampling period	mg/m2 * month	µg/m2 * month	mg/m2 * month	mg/m2 * month	mg/m2 * month	mg/m2 * month	mg/m2 * month	mg/m2 * month	mg/m2 * month	mg/m2 * month	µg/m^3	µg/m^3	µg/m^3	µg/m^3
T95sh	2002/03	51.23	365		0.11	0.28	0.38	0.08	0.13	0.17	0.02	0.01	50.05				
T96sh	2002/03		365		0.05	0.15	0.23	0.05	0.05	0.10	0.02	0.00					
T100	2002/03	20.10	365		0.69	0.64	1.02	0.10	0.51	0.50	0.06	0.08	16.50	0.94			
T100sh	2002/03	7.87	365		0.06	0.05	0.10	0.01	0.04	0.15	0.03	0.01	7.43				
T101sh	2002/03	6.38	365		0.25	0.20	0.46	0.03	0.20	0.23	0.03	0.03	4.95				
T102sh	2002/03	7.96	365		0.24	0.21	0.61	0.06	0.16	0.31	0.05	0.03	6.31				
T103sh	2002/03	12.91	365		0.64	0.54	0.57	0.03	0.40	0.44	0.04	0.05	10.20				
T104sh	2002/03	33.90	365		2.33	1.90	1.24	0.07	1.72	1.18	0.13	0.20	25.12				
T105sh	2002/03	2.63	365		0.08	0.12	0.26	0.01	0.06	0.16	0.02	0.01	1.92				
T110	2002/03	50.61	275		1.61	2.06	1.02	0.01	1.07	1.48	0.10	0.18	42.30	0.64			
T111	2002/03	19.13	279		0.32	0.60	0.58	0.03	0.22	0.44	0.05	0.08	16.41	0.48			

Appendix F

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Jan F. Henriksen

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ABSTRACT
This report presents the database for the period November 2002-December 2003. It includes the environmental data in the ICP-material broad field test as well as the extension made by the EU MULTI-ASSESS project. The database consists of meteorological data, pollution data as gasses and in precipitation. From the MULTI-ASSESS project it is also reported HNO_3 and particle deposits for soiling.

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